2024 日本免疫学会総会・学術集会記録 第53巻 出島メッセ長崎 プログラム

2024

日本免疫学会総会・学術集会記録

The 53rd Annual Meeting of The Japanese Society for Immunology

第 53 巻

Program

DEJIMA MESSE NAGASAKI

December 3 (Tue.)
4 (Wed.)
5 (Thu.)

特定非営利活動法人 日本免疫学会

Proceedings of the Japanese Society for Immunology (JSI)
Vol. 53, 2024
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The 53rd Annual Meeting of The Japanese Society for Immunology

December 3-5, 2024

DEJIMA MESSE NAGASAKI

※ The 61st Annual Meeting of the Japanese Society for Mucosal Immunology (JSMI) will be held at the same venue on Thursday, December 5-6.
For the program of JSMI, please visit the website: https://www2.aeplan.co.jp/jsmi2024/

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Program of The Japanese Society for Immunology (JSI)

Vol. 53

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The 53rd Annual Meeting of the Japanese Society for Immunology
Program at a glance

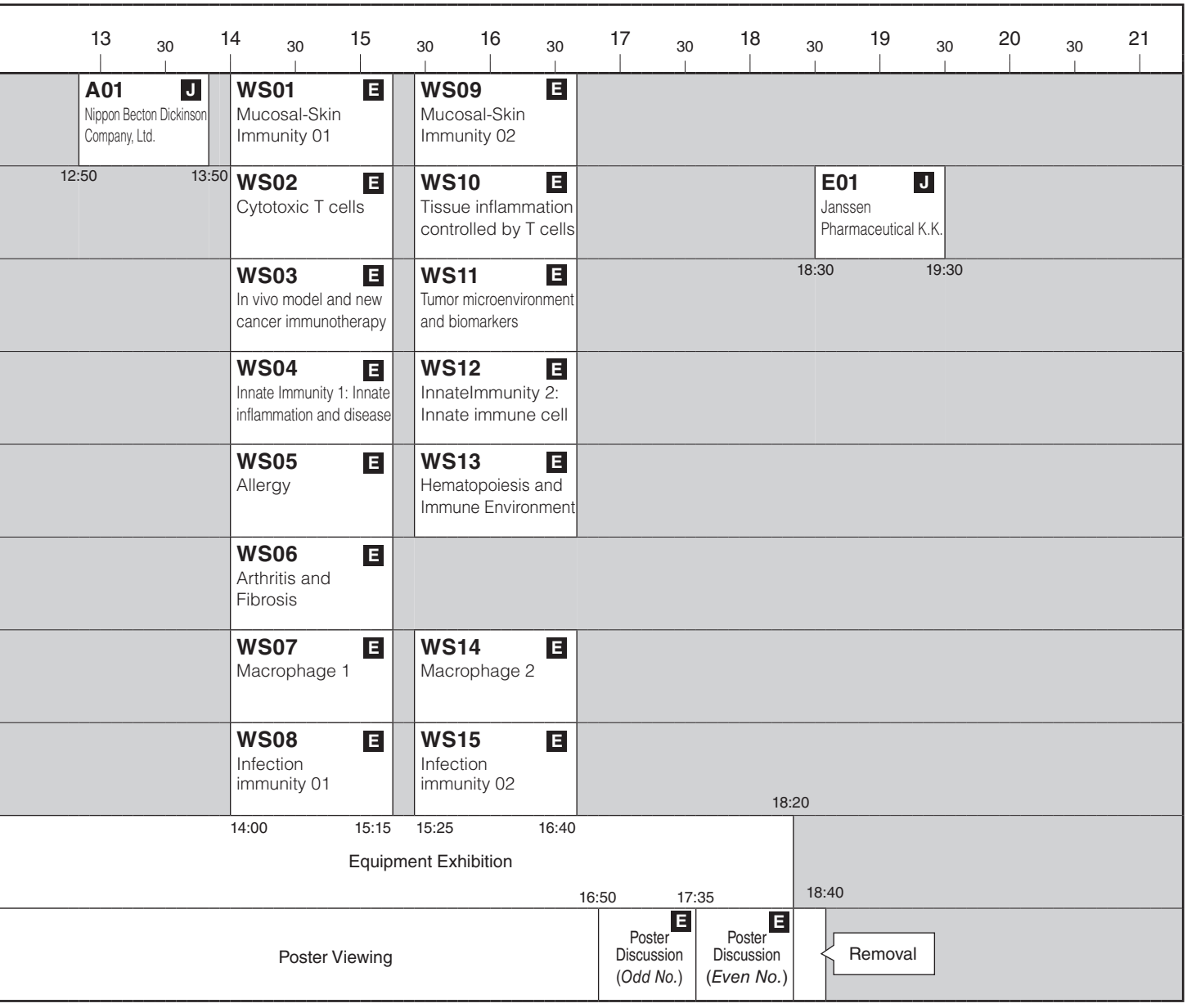
December 3 (Tue.), 2024

Building	Room	Program Room Number	8:30 – 12:40
2F	Convention Hall 1/4	*Room A*	OT01 (J) **S01** (E) Neuro-immune crosstalks AMED-CREST/PRIME "MultiSensing", "Microbiome",and "Stress" Sponsored Session — **C01** (J) Takeda Pharmaceutical Co., Ltd.
1F	101A	*Room B*	OT02 (J) **S02** (E) Immunometabolism US-Japan Cooperative Medical Sciences Program Co-organized Session Oxford University Press — **C02** (J) ASAHI KASEI PHARMA CORP.
	101B	*Room C*	OT03 (J) **S03** (E) Epigenetic regulation of antitumor immune response US-Japan Cooperative Medical Sciences Program Co-organized Session — **T01** (J) Cytek Japan Corp.
	101C	*Room D*	OT04 (J) **S04** (E) The front line of innate lymphoid cells research SFI-JSI Joint Session — **T02** (J) TOMY DIGITAL BIOLOGY CO., LTD.
	102	*Room E*	OT05 (J) **S05** (E) Recent advances in allergic research JSI-JSA Joint Session — **T03** (E) Miltenyi Biotec K.K.
	103	*Room F*	8:30 9:00 – 11:30 — **C03** (E) Moderna Japan
	107	*Room G*	**C04** (J) Sanofi K.K. / Regeneron Pharmaceuticals Inc.
	108	*Room H*	9:00 – 11:40 / 12:40
2F	Convention Hall 3/4	*Equipment Exhibition*	8:30 Equipment Exhibition
		Poster	Installation — Poster Viewing

OT | Overview Talk
T | Technical Seminar
E in English

S | Symposium
WS | Workshop
J in Japanese

C | Clinical Seminar
A | Afternoon Seminar
E | Evening Seminar



The 53rd Annual Meeting of the Japanese Society for Immunology
Program at a glance

December 4 (Wed.), 2024

Building / Room		Program Room Number	8 30 9 30 10 30 11 30 12 30
2F	Convention Hall 1/4	*Room A*	OT06 J **S06** E Human Immunology in 2024 US-Japan Cooperative Medical Sciences Program Co-organized Session **C05** J AstraZeneca K.K
1F	101A	*Room B*	OT07 J **S07** E Self-referential Immune Perception ASI-JSI Joint Session/ Self-referential Immune Perception co-organized session **C06** E MIYARISAN Pharmaceutical Co., Ltd.
	101B	*Room C*	OT08 J **S08** E Material symbiosis: From immune regulation to emerging modality DGFI-JSI Joint Session/ Grant-in-Aid for Transformative Research Areas(A) "Biophysical Chemistry for Material Symbiosis" co-organized session **T04** J Standard BioTools K.K.
	101C	*Room D*	OT09 J **S09** E Immunological mechanism and future design of vaccine AMED SCARDA Co-organized Session **T05** J Nippon Becton Dickinson Company, Ltd.
	102	*Room E*	OT10 J **S10** E Nervous System and Immune Tolerance US-Japan Cooperative Medical Sciences Program Co-organized Session **C07** J MSD K.K.
	103	*Room F*	8:30 9:00 11:30 11:40 **T06** J 10x Genomics 12:40
	107	*Room G*	Young Researchers' Forum: Let's Talk Together about Careers of Researchers
	108	*Room H*	9:00 11:30 12:50
2F	Convention Hall 3/4	*Equipment Exhibition*	8:30 Equipment Exhibition
		Poster	Installation Poster Viewing

OT | Overview Talk
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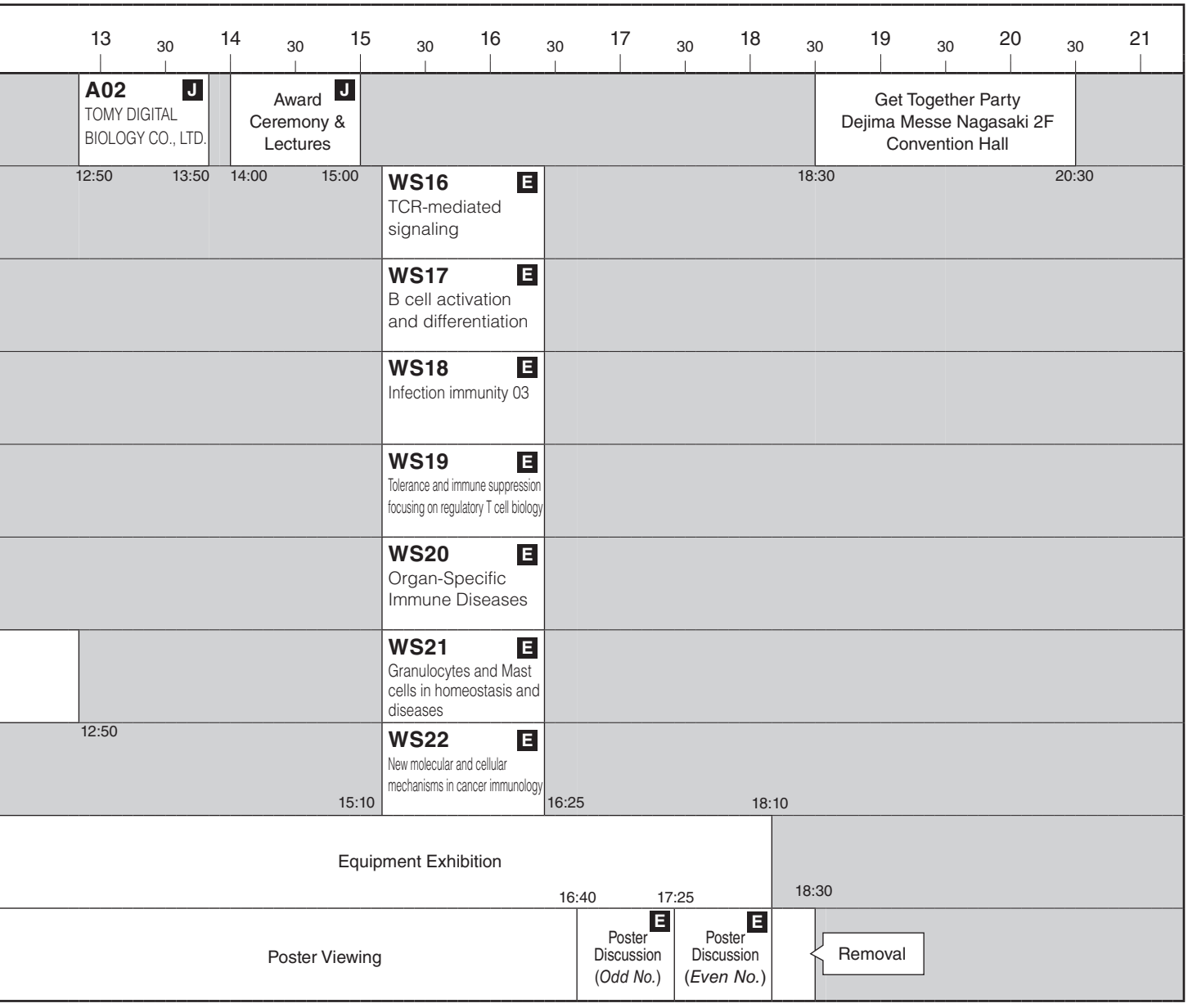

The 53rd Annual Meeting of the Japanese Society for Immunology
Program at a glance

December 5 (Thu.), 2024

Building	Room	Program Room Number	8:30 – 12:30
2F	Convention Hall 1/4	*Room A*	OT11 J; S11 E Microbiota-Host Immunity Interactions in Disease SMI/ JSMI Co-organized Session; OT16 J
1F	101A	*Room B*	OT12 J; S12 E New directions of T cell receptor research ~ beyond classical views ~ US-Japan Cooperative Medical Sciences Program Co-organized Session; C08 J Otsuka Pharmaceutical Co., Ltd.
1F	101B	*Room C*	OT13 J; S13 E Functional diversity of various myeloid cells in disease pathogenesis US-Japan Cooperative Medical Sciences Program Co-organized Session; T07 J Thermo Fisher Scientific
1F	101C	*Room D*	OT14 J; S14 E Immunological memory AMED-CREST "Immune Memory" Sponsored Session; T08 J Leica Microsystems K.K.
1F	102	*Room E*	OT15 J; S15 E The forefront of autoimmune research JSI-JCR Joint Session; JSMI Luncheon Seminar (12:40)
1F	103	*Room F*	8:30 – 11:30; JSMI Luncheon Seminar
1F	107	*Room G*	JSMI Luncheon Seminar
1F	108	*Room H*	9:00 – 11:40; 12:30
2F	Convention Hall 3/4	*Equipment Exhibition*	8:30 – Equipment Exhibition
2F	Convention Hall 3/4	*Poster*	Installation; Poster Viewing

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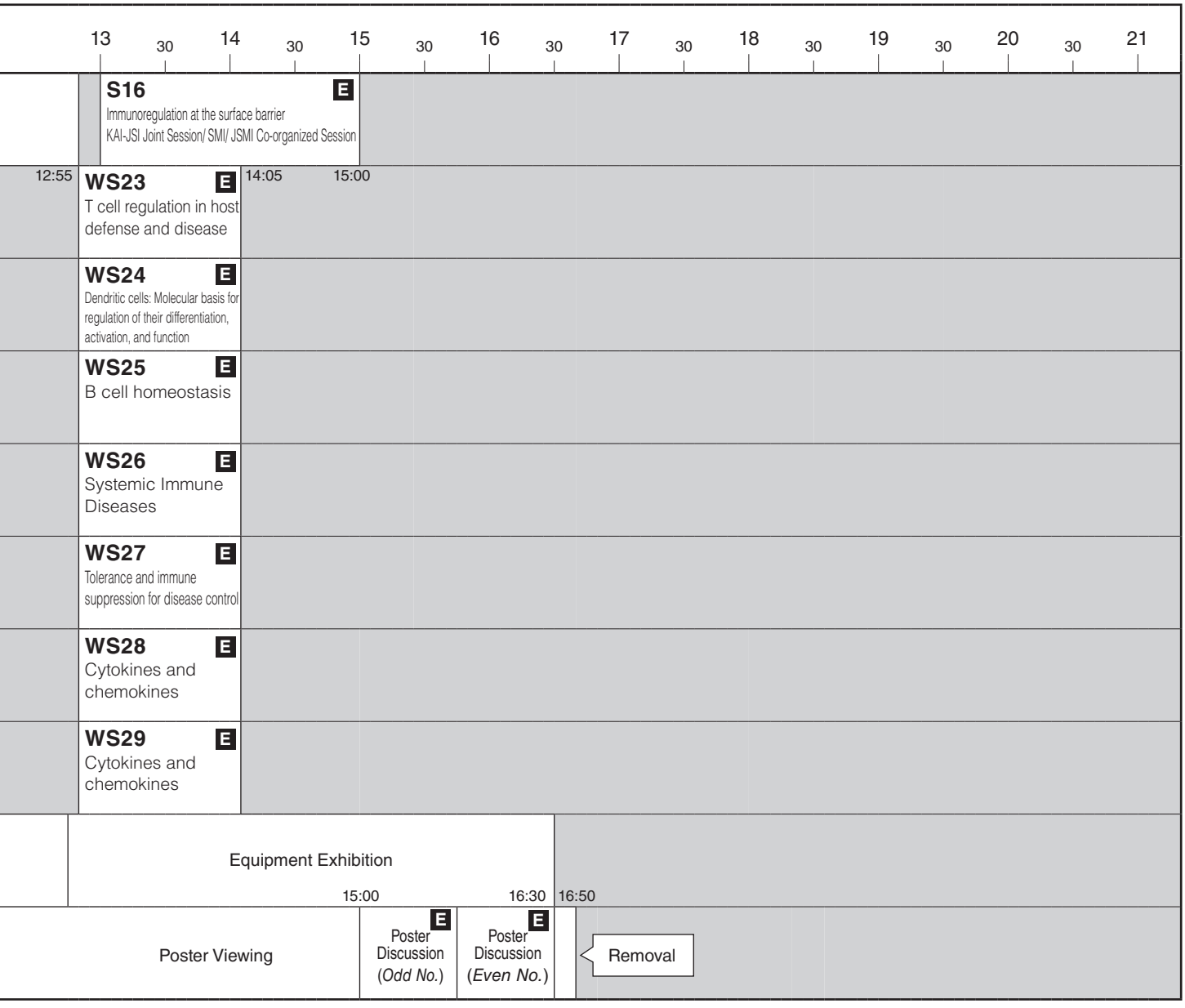
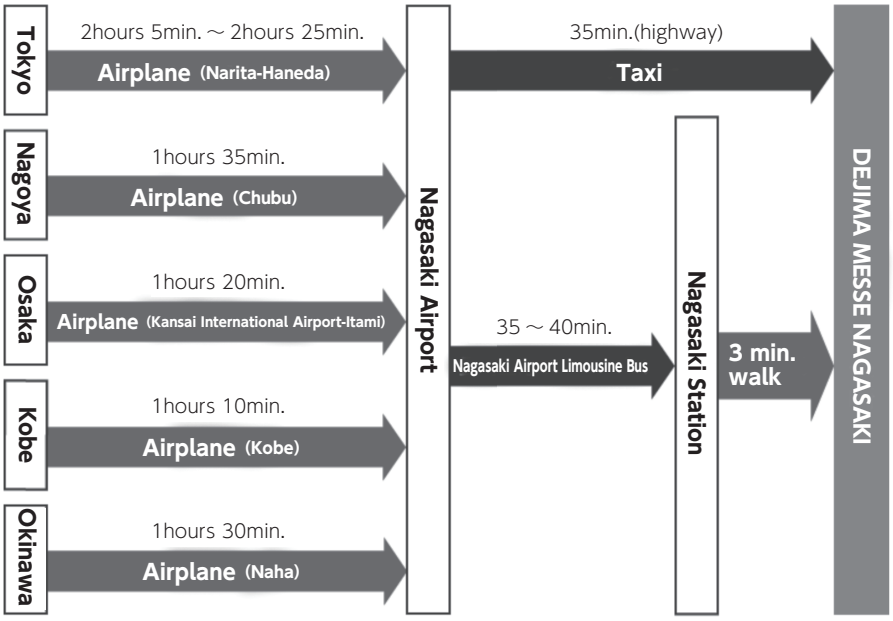
OT | Overview Talk **S** | Symposium **C** | Clinical Seminar
T | Technical Seminar **WS** | Workshop **A** | Afternoon Seminar
E in English **J** in Japanese **E** | Evening Seminar

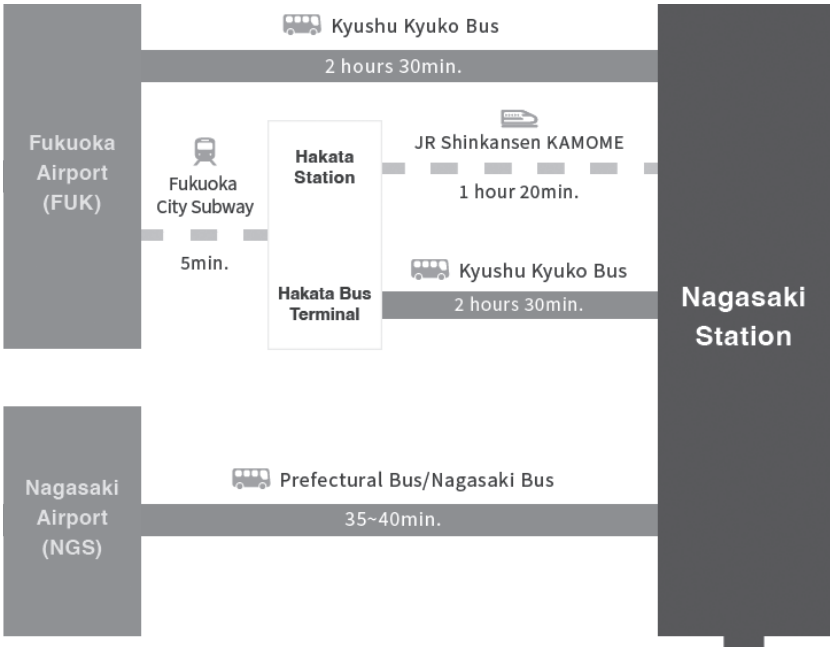


Access to NAGASAKI

From all parts of Japan (Airplane)



Train, Bus Information

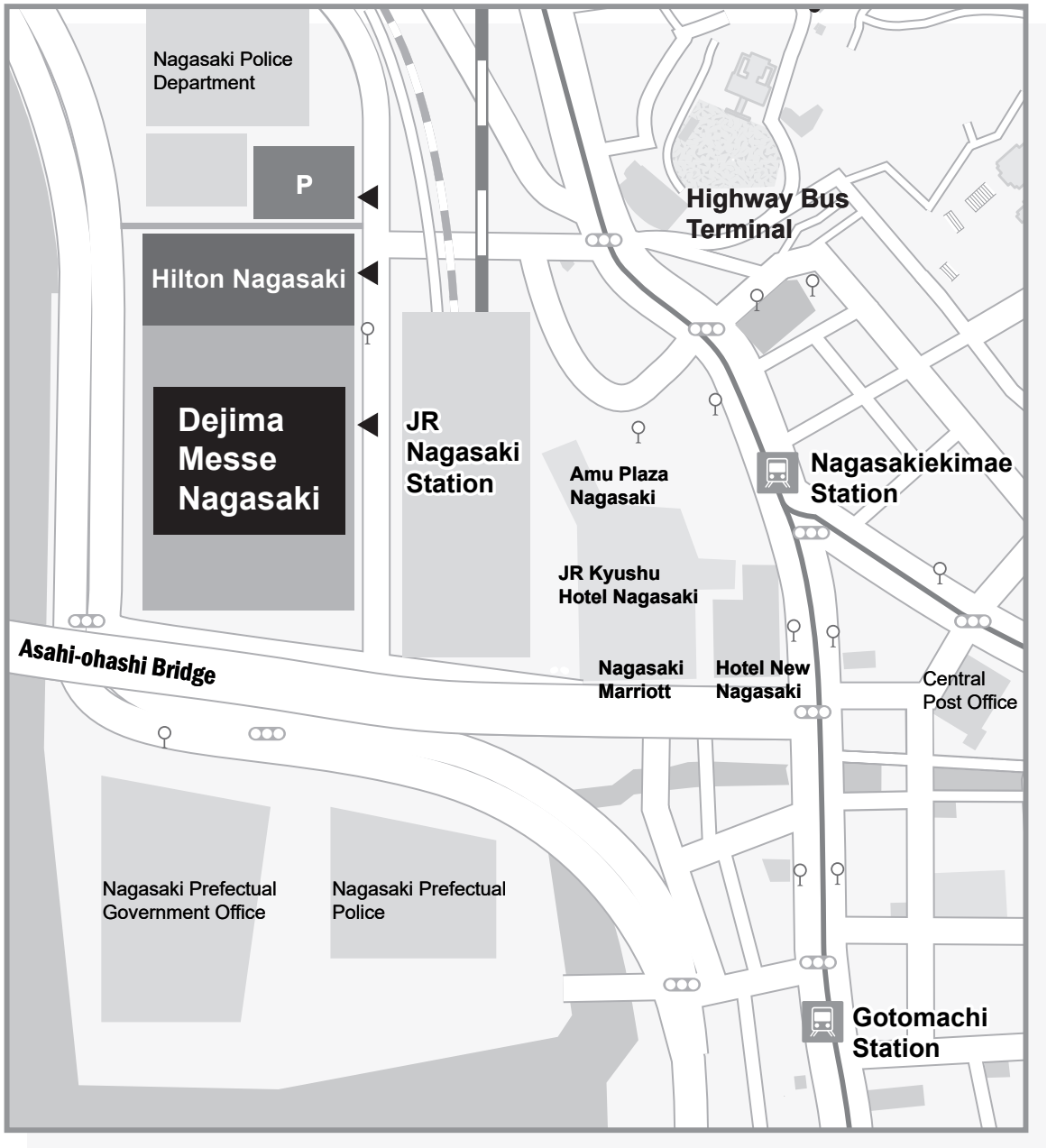


About a 1 minute walk,directly connected,from **west exit(inasa exit)** of Nagasaki Station.

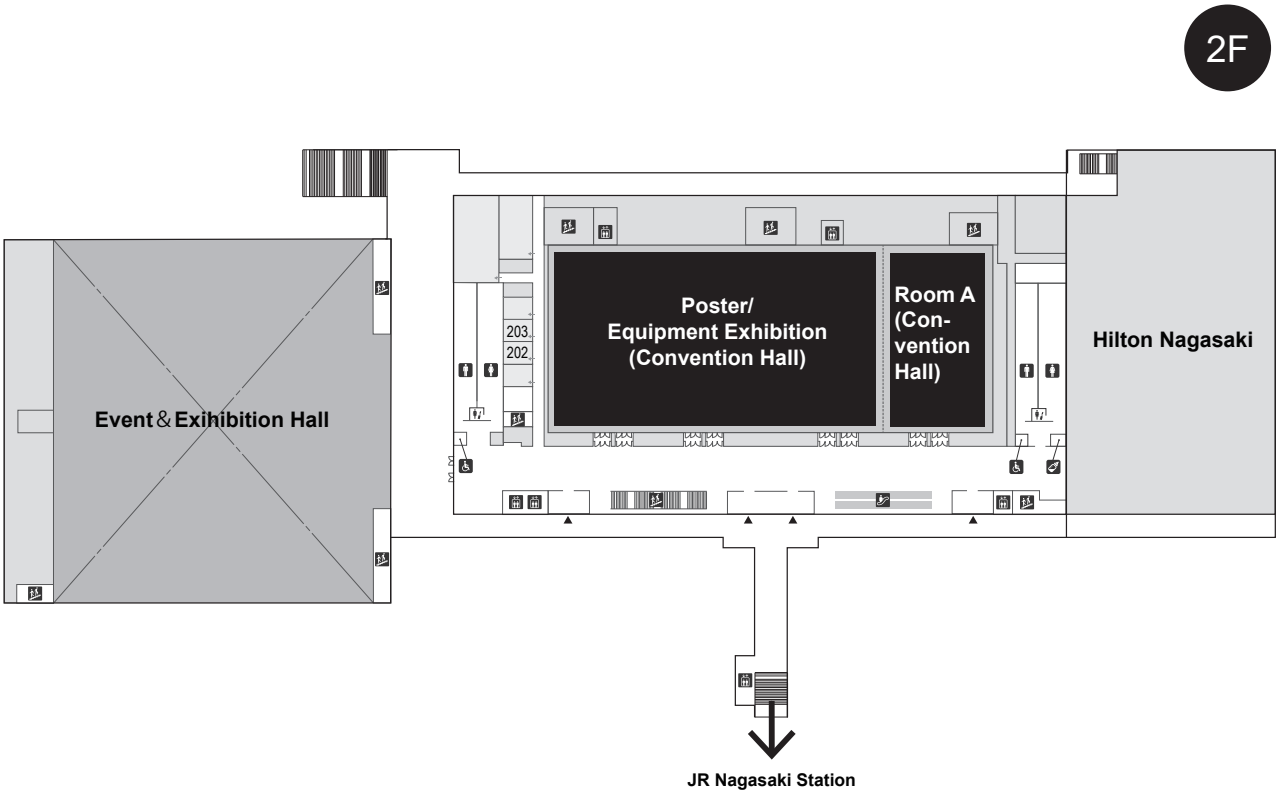
DEJIMA MESSE NAGASAKI

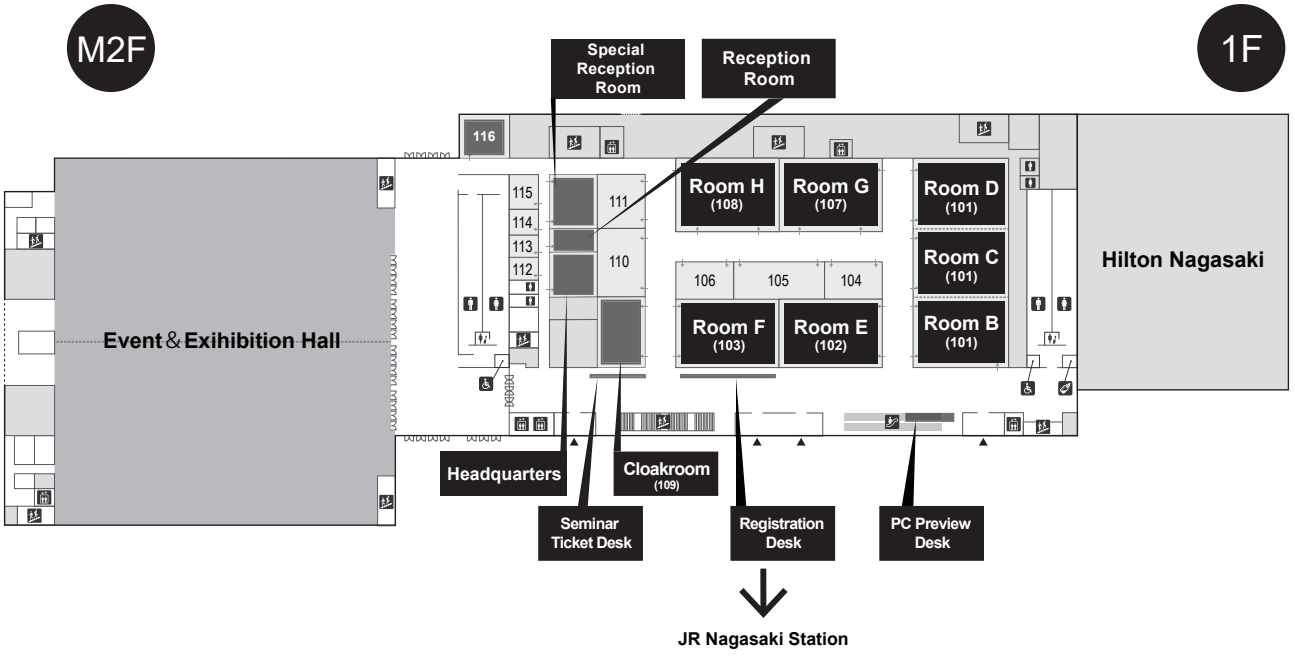
Access

Access Map

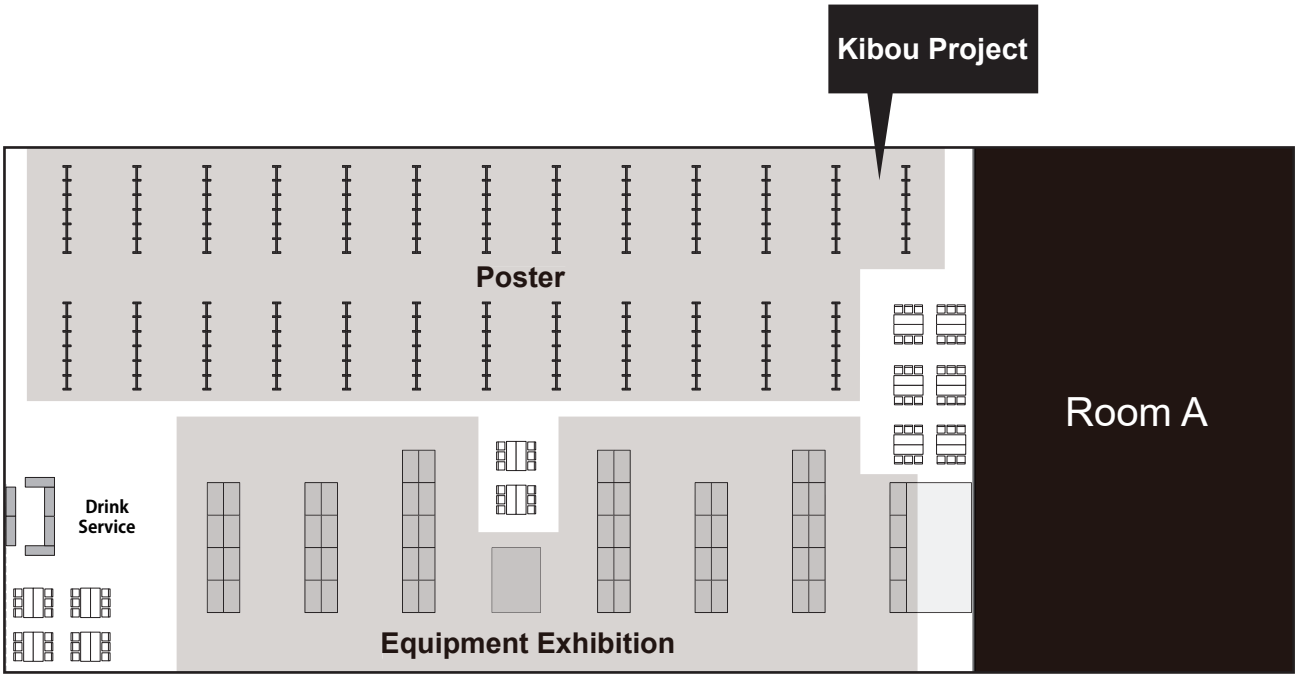


Conference Hall





Exhibition Hall



Exhibitiors List			
1	Standard BioTools K.K.	20	ABclonal Biotechnology Co., Ltd.
2	Thermo Fisher Scientific	21	RIKEN BioResource Research Center
3	Iwai Chemicals Co.,Ltd.	22	PharmaCo-Cell Co., Ltd. / Sano Co., Ltd.
4	VERITAS Corporation	23	ThinkCyte K.K.
5	CellSeed Inc.	24	TOYO Corporation
6	TECHNO SUZUTA CO., LTD.	25	MedChemExpress Japan
7	IVIM Technology	26	TissueGnostics
8	QIAGEN K.K.	27	GenScript Japan
9	Mirxes Japan Co. Ltd.	28	GemPharmatech Co., Ltd.
10	Toyobo engineering Co., Ltd.	29	Sino Biological JAPAN Inc.
11	Azenta Life Sciences	30	NACALAI TESQUE,INC.
12	Bioengineering Lab. Co., Ltd.	31	Proteintech Japan Co., Ltd.
13	Revvity Inc.	32	COSMO BIO CO., LTD.
14	SOPHIA Co.,Ltd.	33	Nippon Becton Dickinson Company, Ltd.
15	ASONE CORPORATION	34	Miltenyi Biotec K.K.
16	Bio-Techne(Proteinsimple, ACD, R&D Systems, NOVUS,TOCRIS)	35	10x Genomics
17	Beckman Coulter K.K	36	Cytek Japan Corporation
18	Sony Corporation	37	TOMY DIGITAL BIOLOGY CO., LTD.
19	FUJIFILM Wako Pure Chemical Corporation		

ご案内

本学術集会は、現地開催となります。オンライン配信および事後配信はありませんのでご注意ください。
12月5日（木）-6日（金）に第61回日本消化器免疫学会総会（JSMI）が同会場で開催されます。
本学術集会の参加費をお支払いされた方は、第61回日本消化器免疫学会総会のプログラムもすべて参加可能となります。JSMIのプログラムは、ホームページをご覧ください。
https://www2.aeplan.co.jp/jsmi2024/

1．参加方法

◆ オンラインで参加登録をされた方

参加証（ネームカード）や領収書、参加証明書は、学術集会オンラインシステム「Confit」へログインのうえダウンロードしてください。ログインにはご自身で登録したメールアドレスとパスワードをお使いください。
ネームホルダーは、現地の受付付近でお受け取りください。

◆ 現地で当日参加申込をされる方

参加受付にて学術集会参加費（下記参照）をお支払いのうえ、ネームカードをお受け取りください。
ネームカードをご着用でない方の入場はお断りいたします。
〈当日参加費（後期登録）〉

正会員	15,000円
学生会員 *	3,000円
学部学生会員 *	無　料
非会員	19,000円
非会員学生 *	7,000円
非会員学部学生 *	無　料

* 学部・大学院生は学生証の提示が必要です。
* 当日参加費のお支払いは現金のみです。
* 参加費にランチョンセミナー等のお弁当代は含まれておりません。
* 適格請求書発行事業者の登録番号：T9010005008442

〈参加受付開設時間〉

12月3日（火）	7：45 ～ 17：00
12月4日（水）	8：00 ～ 17：00
12月5日（木）	8：00 ～ 13：00

◆ 名誉会員・功労会員

1階　ホワイエの学会事務局デスクにお越しください。

2. 入会手続きおよび年会費の納入

日本免疫学会に未入会の方は、学会事務局デスク（現地会場）にて入会できます。2025 年度会費および未納年会費の納入も同所で受け付けます。

【年会費】		【入会金】
国内正会員	11,000 円	国内正会員、国内学生会員（博士）、
国内学生会員 (博士)*	3,000 円	海外正会員、海外学生会員（博士）：1,000 円
国内学生会員 (学部・修士)*	0 円	国内学生会員（学部・修士）*、
海外正会員	12,000 円	海外学生会員（学部・修士）*：0 円
海外学生会員 (博士)*	4,000 円	* 学生会員（博士・学部・修士）の方は
海外学生会員 (学部・修士)*	0 円	学生証をご提示ください。

※一般演題の筆頭著者（発表者）は、2024 年度の会員（正会員、学生会員、功労会員、名誉会員に限ります）であることが義務付けられております。

3. プログラム、抄録集（プロシーディングス）

プログラムは、学術集会ホームページで公開し、また現地会場でも冊子を配布いたします。
会員は、抄録集（プロシーディングス）を PDF データ形式で学会ホームページの会員専用ページにて閲覧できます。閲覧にはご自身の会員番号（ID）とパスワードが必要です。

2024 年度会費を最近納入されたにもかかわらず、会員専用ページで閲覧できない際には学会事務局へお問い合わせください。
非会員の方には 5,000 円（税込）にて Web 抄録集の閲覧 URL とパスワードを販売いたします。
必要な方は参加登録の際にお申込みください。現地会場で参加申込をする方は、学会事務局デスクへお越しください。

4. 授賞式・受賞講演

授賞式：12 月 4 日（水）14:00 ～ 14:10　Room A（コンベンションホール）にて行います。
・日本免疫学会 功労会員表彰式
・日本免疫学会賞 授賞式
・日本免疫学会ヒト免疫研究賞 授賞式
・日本免疫学会女性免疫研究者賞 授賞式
・日本免疫学会研究奨励賞 授賞式
・International Immunology Outstanding Merit Award 授賞式

受賞講演：12 月 4 日（水）14:10 ～ 15:00　※授賞式に引き続き行います。
日本免疫学会賞、日本免疫学会ヒト免疫研究賞、日本免疫学会女性免疫研究者賞 受賞講演

5. 学術集会プログラム

本大会では以下のプログラムを実施します。

オーバービュートーク

各領域の基礎知識、歴史と発展を系統的に紹介する入門者向けの教育講演です。オーバービュー

トーク終了後、休憩時間をはさまずシンポジウムに移ります。

シンポジウム

国内外の免疫の研究者による 16 テーマ（S01 ～ S16）の国際シンポジウムを開催します。
演者の選考および形式については、プログラム委員会で指名した座長に一任いたしました。
それぞれのシンポジウムが同時進行する形をとります。シンポジウム進行方法、各演者の講演時間などは全て座長に一任しております。

JSI-JSA Joint Session

日本アレルギー学会とのジョイントセッションです。詳細はプログラムページをご確認ください。

JSI-JCR Joint Session

日本リウマチ学会とのジョイントセッションです。詳細はプログラムページをご確認ください。

アフタヌーンセミナー

協力企業との密な連携のもと、次世代を担う免疫学研究者を育成するプラットホームの構築をめざし、企業ならではの趣向を取り入れたセミナーです。

ポスター、ワークショップ（口頭発表）

一般演題は、すべての演題のポスター発表と一部の演題による口頭発表が行われます。口頭発表と共にポスターでの活発な討論をお願いいたします。

若手研究者フォーラム「共に語る研究者キャリアの道」

日時：12 月 4 日（水）11 時 30 分～ 12 時 50 分
場所：Room G（50 名程度）
※昼食（お弁当）を無料でご用意します。
※お子様連れでのご参加も歓迎します（昼食はご持参いただくか、お子様用にお弁当を予約してください）。
※会場に空きがあれば当日の飛び込み参加も可能ですが、昼食がご用意できない可能性がありますことご了承ください。

サテライトワークショップ

日時：12 月 4 日（水）20 時 30 分～
場所：TBD（長崎駅周辺を予定）
定員：40 名程度（要事前予約、会費制（3000 円～ 5000 円程度を予定、学生無料））
『若手研究者フォーラム「共に語る研究者キャリアの道」』での議論を受け、さらに踏み込んだ議論を行えるようにサテライトのワークショップの実施を 2 日目の学術集会後に予定。スケジュールコンフリクトのためにフォーラムには参加できなかった方も是非サテライトワークショップへの参加をご検討ください。また、お子様連れでの参加も可能です。
※フォーラムでの昼食の事前準備及びサテライトワークショップ会場への参加人数の確認のため、11 月 15 日（金曜日）を目途にご回答をいただけますと幸いです。
（本フォーム回答目安時間：3 分）
〈アンケート URL〉
https://forms.gle/Zcp8MXvtNuXAL8EQA
お問い合わせ：「研究者の未来をみんなで創る会」
担当：鈴木忍（京都大学）
お問い合わせ先：menneki.wakate.mirai@gmail.com

テクニカルセミナー、クリニカルセミナー、イブニングセミナー

テクニカルセミナー、クリニカルセミナーはお昼の時間帯に、イブニングセミナーは夜の時間帯に行います。お弁当の入手方法については、次項の「6. セミナー整理券」をご参照ください。
講演の言語は「At a Glance」ページでご確認ください。

▶ テクニカルセミナー・イブニングセミナー

最新の医学･生命科学関連試薬･技術･機材･器機等を使った実験法などや、アレルギー･免疫疾患･癌・感染症研究に関連する最新の器機紹介を通じて、基礎研究・応用研究・開発研究の融合の場となるセミナーです。

▶ クリニカルセミナー

医薬品・生物学的製剤等による免疫疾患や感染症の診断や治療・予防の進展などをご紹介いただくセミナーです。

6. セミナー整理券（テクニカルセミナー、クリニカルセミナー、イブニングセミナー）

テクニカルセミナー、クリニカルセミナー、イブニングセミナーで配布されるお弁当は、「セミナー整理券」と引き換えにてお渡しいたします。「セミナー整理券」は以下のように配布いたします。
なお、お弁当の数には限りがあります。予めご了承ください。

◆ セミナー整理券発券デスク

各日お一人につき一枚、セミナー整理券を配布します。複数枚のお渡しはできませんのでご了承ください。
場　　所：1 階　ホワイエ
配布時間：各日 OPEN ～ 11:00　※ 11:00 以降は各セミナー会場前で配布いたします

◆ お弁当の引換開始時刻

セミナー開始 10 分前より、各セミナー会場前でセミナー整理券とお弁当を引き換えのうえ、会場への入場を開始いたします。
※会場の状況、直前セッションの進行状況等により前後することがございます。

〈ご注意〉
・セミナー開始時刻までに来られない場合にはセミナー整理券は無効となり、整理券をお持ちでない方にご提供しますことをご了承ください。
・整理券をお持ちでなくてもセミナーを聴講することはできますが、お弁当の配布はございませんのでご了承ください。

7. 機器・試薬等展示

会期中、大会会場内で機器・試薬展示を行います。休憩コーナー、ドリンクコーナーもご用意いたしますので、是非ご来場ください。
また、出展企業より提供される景品が当たるスタンプラリーも実施します。豪華景品もご用意しておりますので、是非ご参加ください。

8. 会員懇親会

日　　時：12 月 4 日（木）18:30-20:30
場　　所：出島メッセ長崎 2 階　コンベンションホール
参 加 費：会員・非会員 5,000 円　学生会員・非会員学生・学部生 2,000 円
受　　付：出島メッセ長崎 1 階　ホワイエ

参加人数には限りがございますので、お早めにお申し込みをお願いします。

9. インターネット接続

会場内では Wi-Fi をご利用いただけます（無料）。接続するための SSID とパスワードは、会場内で掲示します。

10. 学術集会講演会場における撮影・録音行為の規制について

学術集会講演会場（シンポジウム会場、口頭発表会場、ポスター会場など、学会発表内容のある場所）における撮影、録音行為を禁止いたします。ただし、学会が承認したものはその限りではありません。これは、発表者の許可無く学会発表の撮影・録音がおこなわれることにより、論文未掲載の最新データの発表が差し控えられるという現状を鑑みたものです。
会員の皆様の積極的かつ、活発な研究発表と討議がなされることを期待いたします。

General Information

This meeting will be held on-site. No online distribution of any programs during and after the meeting will be available.
The 61st Annual Meeting of the Japanese Society for Mucosal Immunology (JSMI) will be held at the same venue on Thursday, December 5 - 6.
Those who have paid the registration fee for this meeting will also be able to attend the entire program of the 61st Annual Meeting of the Japanese Society for Mucosal Immunology (JSMI).
For the program of JSMI, please visit the website: https://www2.aeplan.co.jp/jsmi2024/

1. On-site Participation

◆ Participants who registered online

Log into your account of Confit, the online conference system, and download your meeting badge and the receipt of the registration fee. You can log into the system with your email address and password you set.
Badge holders are available near the Registration Desk.

◆ Participants who register on-site

Please come to the registration desk, pay the registration fee below and receive a meeting badge.
Participants without wearing their meeting badges will not be allowed to enter the meeting site.

〈On-Site Registration Fee (Late Registration)〉

Member	JPY 15,000
Doctoral Student*	JPY 3,000
Undergraduate and Master's Degree Student*	Free
Non-Member	JPY 19,000
Doctoral Student Non-Member*	JPY 7,000
Undergraduate and Master's Student Non-Member Student*	Free

*All of students are required to show their student ID.
*We accept cash only.

〈Registration Desk opening hours〉

December 3 (Tue)	7:45 - 17:00
December 4 (Wed)	8:00 - 17:00
December 5 (Thu)	8:00 - 13:00

◆ Honorary members / Meritorious members

Please come to the JSI Secretariat Desk at Foyer, 1F.

2. Application and Annual Membership Fee

You can join the JSI (the Japanese Society for Immunology) at the JSI desk on the meeting site. You can also pay your membership fees at the JSI desk.

Annual Membership Fee

(Domestic)

Member	JPY 11,000
Doctoral Student*	JPY 3,000
Undergraduate and Master's Degree Student*	Free

(Overseas)

Member	JPY 12,000
Doctoral Student*	JPY 4,000
Undergraduate and Master's Degree Student*	Free

Application Fee

Member, Doctoral Student	JPY1,000
Undergraduate and Master's Degree Student*	Free

*All of students are required to show thieir student ID.

***First Authors (Presenting authors) must be JSI members: Regular, Student, Meritorious or Honorary members. However, foreign-registered authors residing outside Japan are excluded.**

3. Meeting Program / Proceedings (Abstracts)

The digital version of Meeting Program will be available on the meeting website and the printed version of Meeting Program will be distributed to all participants on the meeting site.
Proceedings (abstracts) as a PDF file will be available on the website for JSI members. You need your membership ID and password to login to this website.

If you completed the payment of 2024 annual membership fee, but cannot login to the website for JSI members, please contact the JSI secretariat.
If you are not a JSI member, you can purchase ID and password to login to the website for JPY 5,000 through the meeting website in advance or the JSI Secretariat Desk on the meeting site..

4. Awards Ceremony & Lectures

Ceremonies: Wednesday, December 4, 14:00-14:10, Room A (Convention Hall)

- Commendation Ceremony of JSI Meritorious Member
- JSI Award Ceremony
- JSI Human Immunology Research Award Ceremony
- JSI Women Immunologist Award Ceremony
- JSI Young Investigator Award Ceremony
- International Immunology Outstanding Merit Award Ceremony

Lectures: Wednesday, December 4, 14:10-15:00, Room A (Convention Hall A)
Lectures below will be held after the above Ceremonies.

- JSI Award Lecture
- JSI Human Immunology Research Award Lecture
- JSI Women Immunologist Award Lecture

5. Programs

The 53rd JSI meeting will have following programs.

Overview Talk

Overview talks held prior to each symposium are kind of educational lectures and especially for students or those who are not specialized in the topics.

Symposia

International symposia on 16 topics (S01-S16) will be held by both domestic and overseas immunologists. The program committee appointed chairs of symposia and left selection of speakers to the discretion of those chairs.

Some symposia will be conducted concurrently. Chairs decide how they lead their sessions and presentation time of each speaker.

JSI-JSA Joint Session

The symposium will be held jointly with Japanese Society of Allergology. Refer to the program page for detailed information.

JSI-JCR Joint Session

The symposium will be held jointly with Japan College of Rheumatology. Refer to the program page for detailed information.

Afternoon Seminars

Those seminars are held aimed at building platforms for developing Immunologists who are responsible for the next generation in close collaborations with cooperative companies. Those are elaborate seminars unique to the companies.

Workshop (Oral presentations and Poster)

All regular papers are to be presented at Poster session. Some of selected regular papers are to be presented at Workshop as well.

Young Researchers' Forum: "Discussing Career Paths for Researchers Together"

Date and Time: Wednesday, December 4th ,11:30 AM - 12:50 PM

Venue: Room G (Around 50 participants)

*A complimentary lunch (bento box) will be provided.

*We welcome participants with children (please bring your child's lunch or ask us additional bento boxes for them from a below form).

*Walk-in Participation: If space is available, walk-ins will be accepted on the day of the event, but we may not be able to provide lunch.

Satellite Workshop

Date and Time: Wednesday, December 4th , 8:30 PM ～

Venue: TBD (Planned to be near Nagasaki Station)

Capacity: Around 40 participants (advance registration required; participation fee would be 3,000 to 5000 yen. Free for Students.)

Following the discussions held at the Young Researchers' Forum "Discussing Career Paths for Researchers Together," we will host a more in-depth discussion at the satellite workshop on the evening of the second day of the meeting. Even if you are unable to attend the Forum due to schedule conflicts, we encourage you to consider participating in the Satellite Workshop.

※ To help us prepare lunches for the Forum and confirm the number of participants for the Satellite Workshop, we kindly ask you to respond by Friday, November 15th.

(Estimated time to complete this form: 3 minutes)

〈Questionnaire〉
https://forms.gle/Zcp8MXvtNuXAL8EQA
For inquiries, contact:
Email: menneki.wakate.mirai@gmail.com
(Shinobu Suzuki, Kyoto University)

Technical Seminars, Clinical Seminars, Evening Seminar

Technical Seminars and Clinical Seminars will be held during the lunch time. And, Evening Seminar will be held during the evening time.
Please refer to "6. Seminar Ticket" for more information regarding Technical/Evening/Clinical Seminars.
Language of each seminar can be found on "At a Glance" of the program page of our website.

◆ **Technical Seminars, Evening Seminar**

Those seminars aim to promote interaction between basic research, application research and development research through introducing experimental methods with latest life science related regents, technologies, machines and equipment, or latest equipment for researching allergy, immunological diseases, cancer, and infectious disease.

◆ **Clinical Seminars**

Those seminars aim to introduce developments of diagnosis, treatment and prevention of immunological and infectious diseases caused by pharmaceutical and biological products.

6. Seminar Ticket (Technical, Evening, Clinical, Seminars)

A box lunch will be served for those has a Seminar Ticket at, Technical/Evening/Clinical Seminars. Please kindly note that number of tickets are limited. Tickets will be distributed as below:

◆ **Seminar Ticket Desk**

One ticket for one person on a day (except Evening Seminar). Ticket distribution is on the first come, first served basis. We are not able to distribute more than one ticket to one person on a day.
Location: Foyer, 1F
Time: OPEN-11:00 (After 11:00, you may receive a ticket in front of each session room if tickets are still available)

◆ **Receiving a box lunch**

Redeem a ticket to receive a box lunch. You can receive it from 10 minutes before seminars begin in front of each seminar room.
*Starting time for receiving may be changed depending on previous seminar's ending time.

〈IMPORTANT〉

- Please arrive at the seminar rooms before the start time. If you do not show up in the room by the start time, your box lunch will be provided to another attendee who does not have a ticket.
- You can attend those seminars without tickets, however, a box lunch will not be served.

7. Commercial Exhibition – Exhibition of Machineries and Reagents

Exhibitions of machineries and reagents will be held. There will be a resting space and drink service in the exhibition space.
If you collect stamps by visiting exhibition booths, you can get gifts provided by exhibitors. You have a chance to win a special gift. Look forward to your participation in the stamp tally.

8. Get Together Party

Date and Time: December 4, 18:30-20:30
Venue: Dejima Messe Nagasaki
Fee: Member and Non-member JPY5,000 Student and Student Non-member JPY2,000
Registration desk: Foyer, 1F
The number of participants is limited. We recommend you register as early as possible.

9. Internet access

Free Wi-Fi is available in the venue. The SSID and password to use Wi-Fi will be displayed in the venue.

10. Photographing and recording

Photographing and recording are prohibited in all sessions. However, photographing and recording by those who have obtained permission from the JSI may be granted.

Overview Talk

Program for Overview Talks

8:30 ~ 9:00, Tuesday, December 3

OT01 Overview Talk 01 Room A: Convention Hall

Chairpersons: Takanori Kanai (Keio University)
Naoko Ohtani (Graduate School of Medicine, Osaka Metropolitan University)

Neuro-immune crosstalks and clinical practice

Yohei Mikami Division of Gastroenterology and Hepatology, Department of Internal Medicine, Keio University School of Medicine

8:30 ~ 9:00, Tuesday, December 3

OT02 Overview Talk 02 Room B: 101A

Chairpersons: Makoto Murakami (The University of Tokyo Graduate School of Medicine)
Noriko Toyama-Sorimachi (The Institute of Medical Science, The University of Tokyo (IMSUT))

Overview: Immunometabolism

Takehiko Yokomizo Department of Biochemistry, Juntendo University Graduate School of Medicine

8:30 ~ 9:00, Tuesday, December 3

OT03 Overview Talk 03 Room C: 101B

Chairpersons: Yuki Kagoya (Keio University)
Akiko Ogawa (Institute of Development, Aging and Cancer, Tohoku University)

Epigenetics in cancer immunology and immunotherapy

Yuki Kagoya Keio University

8:30 ~ 8:42, Tuesday, December 3

OT04 Overview Talk 04 Room D: 101C

Chairpersons: Naoko Satoh-Takayama (RIKEN Center for Integrative Medical Sciences)
Hiroki Kabata (Division of Pulmonary Medicine, Department of Internal Medicine, Keio University School of Medicine)

An overview of the frontiers of innate lymphocyte research, especially ILC2 research

Hiroki Kabata Keio University School of Medicine, Department of Pulmonary Medicine

8:30 ~ 9:00, Tuesday, December 3

OT05 Overview Talk 05 Room E: 102

Chairpersons: Saeko Nakajima (Kyoto University)
Yosuke Kurashima (Department of Innovative Medicine, Chiba University, Graduate School of Medicine)

Recent Advances in Allergic Research

Saeko Nakajima Kyoto University

8:30 ~ 9:00, Wednesday, December 4

OT06 Overview Talk 06 Room A: Convention Hall

Chairpersons: Hideki Ueno (Department of Immunology, Graduate School of Medicine, Kyoto University)
Ignacio Sanz (Emory University School of Medicine)

Human Immunology in 2024 – Overview Talk –

Hiroyuki Yoshitomi Department of Immunology, Graduate School of medicine, Kyoto University

8:30 ~ 9:00, Wednesday, December 4

OT07 Overview Talk 07 Room B: 101A

Chairpersons: Sho Yamasaki (RIMD/IFReC, Osaka University)
Motoko Kimura (Chiba University, Graduate School of Medicine)

What is the immune self?

Takeshi Nitta Division of Molecular Pathology, Research Institute for Biomedical Sciences, Tokyo University of Science

8:30 ~ 9:00, Wednesday, December 4

OT08 Overview Talk 08 Room C: 101B

Chairpersons: Asako Yamayoshi (Tokyo Institute of Technology/ Nagasaki University)
Osamu Takeuchi (Graduate School of Medicine, Kyoto University)

Material symbiosis: From immune regulation to emerging modality

Asako Yamayoshi Tokyo Institute of Technology / Nagasaki Univ.

8:30 ~ 9:00, Wednesday, December 4

OT09 Overview Talk 09 Room D: 101C

Chairpersons: Ken Ishii (The Institute of Medical Science, The University of Tokyo)
Sophie Valkenburg (The University of Melbourne)

Advances in Vaccine Science: Mechanisms and Future Directions

Kouji Kobiyama Division of Vaccine Science, The Institute of Medical Science, The University of Tokyo / International Vaccine Design Center, The Institute of Medical Science, The University of Tokyo

8:30 ~ 9:00, Wednesday, December 4

OT10 Overview Talk 10 Room E: 102

Chairpersons: Minako Ito (Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University)

Tomohisa Sujino (Center for Diagnostic and Therapeutic Endoscopy, Keio University School of Medicine)

Memory-like regulatory T cells and oxytocin protect brain tissue from damage

Minako Ito Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University

8:30 ~ 9:00, Thursday, December 5

OT11 Overview Talk 11 Room A: Convention Hall

Chairpersons: Hiroko Nagao-Kitamoto (Osaka University Immunology Frontier Research Center)
Yun-Gi Kim (Kitasato University School of Pharmacy)

Intestinal Microbiota and host diseases

Hisako Kayama Osaka University

8:30 ~ 9:00, Thursday, December 5

OT12 Overview Talk 12 Room B: 101A

Chairpersons: Kazuyoshi Ishigaki (RIKEN Center for Integrative Medical Sciences, Laboratory for Human Immunogenetics)
Kanako Shimizu (RIKEN Center for Integrative Medical Sciences, Laboratory for Immunotherapy)

New directions of T cell receptor research

Kazuyoshi Ishigaki Department of Microbiology and Immunology, Keio University School of Medicine / Keio University Human Biology-Microbiome-Quantum Research Center (WPI-Bio2Q) / Laboratory for Human Immunogenetics, RIKEN Center for Integrative Medical Sciences

8:30 ~ 9:00, Thursday, December 5

OT13 Overview Talk 13 Room C: 101B

Chairpersons: Takashi Satoh (Graduate School and Faculty of Medicine, Institute of Science Tokyo)
Yumiko Oishi (Department of Medical Biochemistry, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University)

Diversity of myeloid cells and their functions

Takashi Satoh Graduate School and Faculty of Medicine, Institute of Science Tokyo

8:30 ~ 9:00, Thursday, December 5

OT14 Overview Talk 14 Room D: 101C

Chairpersons: Takeda Kiyoshi (Immunology Frontier Research Center, Osaka University)
Yoshihiro Baba (Division of Immunology and Genome Biology, Medical Institute of Bioregulation, Kyushu University)

Understanding of Immunological memory in health and disease

Motoko Y. Kimura Graduate School of Medicine, Chiba University

8:30 ~ 9:00, Thursday, December 5

OT15 Overview Talk 15 Room E: 102

Chairpersons: Sachiko Miyake (Department of Immunology, Juntendo University Graduate School of Medicine)
Keishi Fujio (The University of Tokyo)

Overview of autoimmune disease research

Kimito Kawahata St. Marianna University School of Medicine

12:30 ~ 12:55, Thursday, December 5

OT16 Overview Talk 16 Room A: Convention Hall

Chairpersons: Reiko Shinkura (University of Tokyo)
William Agace (Department of Immunology and Microbiology, Medical Faculty, Copenhagen University)

Overview of the immunoregulation at the surface barrier

Hiroshi Ohno Laboratoty for Intestinal Ecosystem, RIKEN Center for Integrative Medical Sciences

Symposium

Program for Symposia

Symposium 01 Room A 9:00 ~ 11:30 December 3

S01. Neuro-immune crosstalks
AMED-CREST/PRIME "MultiSensing", "Microbiome", and "Stress" Sponsored Session

Chairpersons: Takanori Kanai (Keio University)
Naoko Ohtani (Graduate School of Medicine, Osaka Metropolitan University)

S01-01
9:00-9:30
The Role of the gut-brain axis in maintaining gut homeostasis and regulating nutritional preferences
Toshiaki Teratani Gastroenterology and Hepatology, School of Medicine, Keio University

S01-02
9:30-10:00
Toward Understanding Mechanisms for Gut Microbiota-Nervous System Interactions
Takahiro Ohara University of California Los Angeles

S01-03
10:00-10:30
Gut-liver axis-mediated mechanism of liver cancer development
Naoko Ohtani Graduate School of Medicine, Osaka Metropolitan University

S01-04
10:30-11:00
Regulation of pain chronicity by neuro-immune crosstalk
Makoto Tsuda Department of Molecular and System Pharmacology, Graduate School of Pharmaceutical Sciences, Kyushu University

S01-05
11:00-11:30
Brain control of peripheral immunity
Wenfei Han Max-Planck Institute for Biological Cybernetics, Germany

Symposium 02 Room B 9:00 ~ 11:30 December 3

S02. Immunometabolism
US-Japan Cooperative Medical Sciences Program Co-organized Session Oxford University Press

Chairpersons: Makoto Murakami (The University of Tokyo Graduate School of Medicine)
Noriko Toyama-Sorimachi (The Institute of Medical Science, The University of Tokyo (IMSUT))

S02-01
9:00-9:25
Sphingosine 1-phosphate (S1P) receptor modulator FTY-720 accesses a dual mechanism for EAE amelioration through both immune cells, and CNS astrocytes involving B_{12}-TCN2-CD320
Jerold Chun Sanford Burnham Prebys Medical Discovery Institute

S02-02
9:25-9:50
Novel mechanisms regulating macrophage metabolic properties and their impact on disease states
Noriko Toyama-Sorimachi The Institute of Medical Science, The University of Tokyo

S02-03
9:50-10:15
Immune metabolism in lymphoma
Ai Kotani Research Institute of Microbial Diseases, Osaka University

S02-04
10:15-10:40

Manipulating Lipid Metabolism to Improve Tumor Immunotherapy

Jessica Thaxton Immunotherapy Program, Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel / Department of Cell Biology & Physiology, University of North Carolina at Chapel Hill

S02-05
10:40-11:05

The novel function of lipid flux on RORγt-mediated Th17 cell pathogenicity

Yusuke Endo Laboratory of Medical Omics Research, KAZUSA DNA RESEARCH INSTITUTE

S02-06
11:05-11:30

Lipid-orchestrated paracrine circuit via $sPLA_2$-driven hydrolysis of extracellular phospholipids coordinates allergy, autoimmunity, and cancer

Makoto Murakami The University of Tokyo Graduate School of Medicine

Oxford University Press

Symposium 03 Room C 9:00 ~ 11:30 December 3

S03. Epigenetic regulation of antitumor immune response US-Japan Cooperative Medical Sciences Program Co-organized Session

Chairpersons: Yuki Kagoya (Keio University)
Akiko Ogawa (Institute of Development, Aging and Cancer, Tohoku University)

S03-01
9:00-9:30

Epigenetic regulation of mucosal immune cells and beyond

Yohei Mikami Division of Gastroenterology and Hepatology, Department of Internal Medicine, Keio University School of Medicine

S03-02
9:30-10:00

Epigenetic Mechanisms of Immune Evasion in Cancer

Marian Burr Australian National University / Canberra Hospital, Australia

S03-03
10:00-10:30

Role of Regnase-1-related RNases in regulating inflammation and tumor immunity

Osamu Takeuchi Graduate School of Medicine, Kyoto University

S03-04
10:30-11:00

Metabolic regulation of modified RNA in immunity and disease

Akiko Ogawa IDAC, Tohoku University

S03-05
11:00-11:30

Dissecting the crosstalk of nutrient sensing, stress response signalling and immune evasion

Thales Papagiannakopoulos NYU Grossman School of Medicine

Symposium 04 Room D 8:42 ~ 11:30 December 3

S04. The front line of innate lymphoid cells research SFI-JSI Joint Session

Chairpersons: Naoko Satoh-Takayama (RIKEN Center for Integrative Medical Sciences)
Hiroki Kabata (Division of Pulmonary Medicine,Department of Internal Medicine, Keio University School of Medicine)

S04-01
8:42-9:10

Themis2 regulates natural killer cell memory function and formation

Tsukasa Nabekura Division of Immune Response, Aichi Cancer Center Research Institute / Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance (TARA), University of Tsukuba / R&D Center for Innovative Drug Discovery, University of Tsukuba / R&D Center for Innovative Drug Discovery, University of Tsukuba

S04-02
9:10-9:38

Development and heterogeneity of group 1 innate lymphoid cells

Koichi Ikuta Kyoto Univ.

S04-03
9:38-10:06

Amplification of autoimmune organ damage by NKp46-activated innate lymphoid cells

Andreas Diefenbach The Berlin Centre for the Biology of Health, Germany

S04-04
10:06-10:34

Stomach controlled by its unique immunity and work for mucosal defense

Naoko Satoh-Takayama Precision Immune Regulation RIKEN ECL Research Unit, IMS, RIKEN / Immunobiology Laboratory, Graduate School of Medical Life Science, Yokohama City University

S04-05
10:34-11:02

Inflammation triggers ILC3 patrolling of the intestinal barrier

Nicolas Serafini Innate Immunity Unit, Institut Pasteur, Inserm U1223

S04-06
11:02-11:30

Innate immune determinants of intestinal physiology, tolerance, and inflammation

Gregory F Sonnenberg Joan and Sanford I. Weill Department of Medicine, Division of Gastroenterology & Hepatology, Weill Cornell Medicine, Cornell University, New York, NY, USA / Jill Roberts Institute for Research in Inflammatory Bowel Disease, Weill Cornell Medicine, Cornell University, New York, NY, USA

Symposium 05 Room E 9:00 ~ 11:30 December 3

S05. Recent advances in allergic research JSI-JSA Joint Session

Chairpersons: Saeko Nakajima (Kyoto University)
Yosuke Kurashima (Department of Innovative Medicine, Chiba University, Graduate School of Medicine)

S05-01
9:00-9:30

Maternal antibodies shape the development of the neonatal microbiota and immune response

Timothy Hand University of Pittsburgh/UPMC Children's Hospital of Pittsburgh

S05-02
9:30-10:00

Neuroimmune Regulation of Tissue Injury and Repair

Michel Enamorado Icahn School of Medicine at Mount Sinai

S05-03
10:00-10:30

How IL-33 state determines ILC2-driven inflammation

Kazuyo Moro Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University / Laboratory for Innate Immune Systems, RIKEN-IMS / Laboratory for Innate Immune Systems, iFReC, Osaka University

S05-04
10:30-11:00

Novel Pathogenic Mechanisms in Allergic Diseases: lessons from Monogenic Allergic Disorders and Novel Environmental Triggers

Hideaki Morita Department of Allergy and Clinical Immunology, National Research Institute for Child Health and Development / Allergy Center, National Center for Child Health and Development

S05-05
11:00-11:30

Targeting $\alpha_V\beta_3$ integrin to inhibit allergic inflammation

Kenji Izuhara Division of Allergy, Department of Biomolecular Sciences, Saga Medical School

Symposium 06 Room A 9:00 ~ 11:30 December 4

S06. Human Immunology in 2024
US-Japan Cooperative Medical Sciences Program Co-organized Session

Chairpersons: Hideki Ueno (Department of Immunology, Graduate School of Medicine, Kyoto University)
Ignacio Sanz (Emory University School of Medicine, USA)

S06-01 9:00-9:25
Designing original transcriptome technologies to dissect human immune-mediated diseases
Yasuhiro Murakawa Kyoto University / RIKEN

S06-02 9:25-9:50
Identification of immunological pathways associated with prognosis of autoimmune diseases
Keishi Fujio Department of Allergy and Rheumatology, Graduate School of Medicine, The University of Tokyho

S06-03 9:50-10:15
Regulation of pathogenic and protective B cell responses in SLE and infection
Ignacio Sanz Emory University School of Medicine, USA

S06-04 10:15-10:40
The Absence of Long-lived Plasma Cells after the COVID mRNA Vaccine
Lee F. Eun-Hyung Emory University, USA

S06-05 10:40-11:05
T cells in in synucleinopathies
Sachiko Miyake Department of Immunology, Juntendo University Graduate School of Medicine

S06-06 11:05-11:30
Human Liver Immunology Research Using Liver Specimens
Hideki Ueno Department of Immunology, Graduate School of Medicine, Kyoto University

Symposium 07 Room B 9:00 ~ 11:30 December 4

S07. Self-referential Immune Perception
ASI-JSI Joint Session/ Self-referential Immune Perception co-organized session

Chairpersons: Sho Yamasaki (RIMD/IFReC, Osaka University)
Motoko Kimura (Chiba University, Graduate School of Medicine)

S07-01 9:00-9:30
Immune regulation by LAG-3, an inhibitory co-receptor of a unique target selectivity
Takumi Maruhashi Laboratory of Molecular Immunology, Institute for Quantitative Biosciences, The University of Tokyo

S07-02 9:30-10:00
Unveiling HLA's diverse roles through drug-induced immunotoxicity
Shigeki Aoki Chiba Univ.

S07-03 10:00-10:30
Unconventional T cell receptor recognition of unconventional ligands
Jamie Rossjohn Monash University, Australia

S07-04 10:30-11:00
The immune-mesenchyal interaction in autoimmune diseases
Noriko Komatsu The Medical and Dental University

S07-05
11:00-11:30

Regulatory T cells as purveyors of immune tolerance to self and non-self

Alexander Rudensky Howard Hughes Medical Institute and Sloan Kettering Institute

Symposium 08 Room C 9:00 ~ 11:30 December 4

S08. Material symbiosis: From immune regulation to emerging modality
DGFI-JSI Joint Session/ Grant-in-Aid for Transformative Research Areas(A)
"Biophysical Chemistry for Material Symbiosis" co-organized session

Chairpersons: Asako Yamayoshi (Tokyo Institute of Technology/ Nagasaki University)
Osamu Takeuchi (Graduate School of Medicine, Kyoto University)

S08-01
9:00-9:30

Dissecting the Roles of Nucleases in Innate Immunity

Wen Zhou Department of Immunology and Microbiology, Southern University of Science and Technology

S08-02
9:30-10:00

mRNA Decay as a Novel Therapeutic Target in T-Cell Immunity

Takuya Uehata Graduate School of Medicine, Kyoto University

S08-03
10:00-10:30

Escape from recognition by nucleic acid-binding proteins to improve the performance of nucleic acid drugs

Yukiko Kamiya Kobe Pharmaceutical University / Nagoya University

S08-04
10:30-11:00

Nanoparticle formulations for safe and effective immune tolerance induction for allergy immunotherapy

Takeshi Mori Kyushu University

S08-05
11:00-11:30

Nucleic acid immunity and therapeutics

Gunther Hartmann University of Bonn/University Hospital Bonn, Germany

Symposium 09 Room D 9:00 ~ 11:30 December 4

S09. Immunological mechanism and future design of vaccine
AMED SCARDA Co-organized Session

Chairpersons: Ken Ishii (The Institute of Medical Science, The University of Tokyo)
Sophie Valkenburg (The University of Melbourne)

S09-01
9:00-9:30

Inflammasomes and interferons in vaccine adjuvant efficacy

Ed Lavelle Trinity College Dublin, Ireland

S09-02
9:30-10:00

Science and design of nucleic acid-based vaccines/adjuvants

Ken Ishii The Institute of Medical Science, The University of Tokyo

S09-03
10:00-10:30

Role of Alveolar Macrophages in Promoting CD8+ T Cell Expansion in the Lung

Taro Kawai Laboratory of Molecular Immunobiology, Nara Institute of Science and Technology (NAIST)

S09-04
10:30-11:00

Adjuvant advantage in a longitudinal randomized control trial of alternating enhanced influenza vaccines in older adults

Sophie Valkenburg The University of Melbourne, Australia

S09-05
11:00-11:30

Adenovirus and Gene Therapy: A Long and Winding Road

David Curiel Washington University St. Louis, USA

Symposium 10 Room E 9:00 ~ 11:30 December 4

S10. Nervous System and Immune Tolerance
US-Japan Cooperative Medical Sciences Program Co-organized Session

Chairpersons: Minako Ito (Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University)
Tomohisa Sujino (Center for Diagnostic and Therapeutic Endoscopy, Keio University School of Medicine)

S10-01
9:00-9:20

Nervous System and Immune Tolerance

Minako Ito Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University

S10-02
9:20-9:55

Endogenous self-peptides guard CNS immune privilege

Min Woo Kim Washington University in St. Louis

S10-03
9:55-10:20

Gut-Brain Axis and neurotransmitters from the gut influence extraintestinal diseases

Tomohisa Sujino Keio University, Center for Diagnosis and Therapeutic Endoscopy / Keio Global Research Institute

S10-04
10:20-10:55

Circadian control of regulatory T cells by enteric neurons and eosinophils

Daniel Mucida The Rockefeller University / Howard Hughes Medical Institute

S10-05
10:55-11:30

Runx3/Cbfb regulates Rorgt^{+} ^{p}Treg differentiation in the gut throught regulating development and function of Rorγt^{+} Thetis cells

Ichiro Taniuchi RIKEN IMS

Symposium 11 Room A 9:00 ~ 11:30 December 5

S11. Microbiota-Host Immunity Interactions in Disease
SMI/ JSMI Co-organized Session

Chairpersons: Hiroko Nagao-Kitamoto (Osaka University Immunology Frontier Research Center)
Yun-Gi Kim (Kitasato University School of Pharmacy)

S11-01
9:00-9:30

Immune regulation by the gut microbiome in early development

Melody Y Zeng Weill Cornell Medicine

S11-02
9:30-10:00

Sucrose Associated Microbiota and Immunity

Yoshinaga Kawano Keio University School of Medicine, JPN, Division of Endocrinology, Metabolism, Nephrology

S11-03
10:00-10:30

Gut complement induced by the microbiota combats pathogens and spares commensals

Meng Wu Washington University in St. Louis / Harvard Medical School

S11-04
10:30-11:00

Immune phenotype-guided identification of disease-associated pathobionts in IBD

Hiroko Nagao-Kitamoto Osaka University, IFReC

S11-05
11:00-11:30

Mapping the T cell repertoire to a model system of the human gut microbiome

Kazuki Nagashima Department of Molecular and Cellular Biology, Harvard University

Symposium 12 Room B 9:00 ~ 11:30 December 5

S12. New directions of T cell receptor research ~ beyond classical views ~ US-Japan Cooperative Medical Sciences Program Co-organized Session

Chairpersons: Kazuyoshi Ishigaki (RIKEN Center for Integrative Medical Sciences, Laboratory for Human Immunogenetics)
Kanako Shimizu (RIKEN Center for Integrative Medical Sciences, Laboratory for Immunotherapy)

S12-01
9:00-9:30

Identification of Immunogenic Neoantigens from ARID1A-Deficient Tumors During the Development of Resistance to Targeted Therapy

Shin-ichiro Fujii RIKEN IMS, Lab for Immunotherapy / RIKEN IMS, aAVC Drug Tranlational Unit / RIKEN Drug discovery and medical technology platforms (DMP)

S12-02
9:30-10:00

Deciphering clonotypic responses of human T cells against infection

Sho Yamasaki Research Institute for Microbial Diseases/Immunology Frontier Research Center, Osaka University

S12-03
10:00-10:30

Groundbreaking Insights into T-Cell Receptor Signatures of Cancer-Associated Biomarkers and Their Clinical Implications

Stephanie Bien Adaptive Biotechnologies

S12-04
10:30-11:00

Machine learning for T-cell repertoire analysis

Tetsuya J Kobayashi Institute of Industrial Science, the University of Tokyo

S12-05
11:00-11:30

Spying on the Immune System: What we can learn from decoding the specificity of T cell and B cell receptors

Stephen J. Elledge HHMI and Brigham and Women's Hospital, Harvard Medical School

Symposium 13 Room C 9:00 ~ 11:30 December 5

S13. Functional diversity of various myeloid cells in disease pathogenesis US-Japan Cooperative Medical Sciences Program Co-organized Session

Chairpersons: Takashi Satoh (Graduate School and Faculty of Medicine, Institute of Science Tokyo)
Yumiko Oishi (Department of Medical Biochemistry, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University)

S13-01
9:00-9:30

Sustaining microglial reparative function enhances stroke recovery

Takashi Shichita Institute of Science Tokyo

S13-02
9:30-10:00

Neutrophils: The Power of More Than One

Lai Guan Ng Shanghai Immune Therapy Institute,China

S13-03
10:00-10:30

Hematopoietic-innate immune memory in heart failure and multimorbidity

Ichiro Manabe Chiba University

S13-04
10:30-11:00

The role of read-through transcription based on genetic polymorphisms in alveolar macrophages

Yuichi Mitsui Institute of Science Tokyo

S13-05
11:00-11:30

The TREM2-DAP12 pathway

Marco Colonna Washington University School of Medicine

Symposium 14 Room D 9:00 ~ 11:30 December 5

S14. Immunological memory AMED-CREST "Immune Memory" Sponsored Session

Chairpersons: Kiyoshi Takeda (Immunology Frontier Research Center, Osaka University)
Yoshihiro Baba (Division of Immunology and Genome Biology, Medical Institute of Bioregulation, Kyushu University)

S14-01
9:00-9:30

Essential role of constitutive BCR signaling in the generation of age-associated B cells

Yoshihiro Baba Medical Institute of Bioregulation, Kyushu University

S14-02
9:30-10:00

Balancing tolerance and immunity at the BCR

Julie Zikherman University of California San Francisco

S14-03
10:00-10:30

Atypical and non-classical CD45RBlo memory B-cells are the majority of circulating SARS-CoV-2 specific B-cells following mRNA vaccination or COVID-19

James Badger Wing Human Single Cell Immunology Team, CiDER, Osaka University / IFReC, Osaka University / CAMaD, Osaka University

S14-04
10:30-11:00

The response of B cells to repeated and chronic antigen exposures: lessons from HIV and SARS-CoV-2

Susan Moir National Institute of Allergy and Infectious Diseases, National Institutes of Health

S14-05
11:00-11:30

Tissue inflammatory memory causes intractable inflammatory disease

Kiyoshi Hirahara Department of Immunology, Graduate School of Medicine, Chiba University / AMED-CREST, AMED

Symposium 15 Room E 9:00 ~ 11:30 December 5

S15. The forefront of autoimmune research JSI-JCR Joint Session

Chairpersons: Sachiko Miyake (Department of Immunology, Juntendo University Graduate School of Medicine)
Keishi Fujio (The University of Tokyo)

S15-01
9:00-9:30

T cell redirecting therapies for autoimmune disease

Ricardo Grieshaber-Bouyer Friedrich-Alexander-Universität (FAU) Erlangen-Nürnberg

S15-02
9:30-9:54

T Follicular Helper Cells as a Therapeutic Target in Systemic Lupus Erythematosus

Shingo Nakayamada The First Department of Internal Medicine, School of Medicine, University of Occupational and Environmental Health, Japan

S15-03
9:54-10:18

The role of age-associated ThA cells in autoimmune diseases

Tomohisa Okamura Department of Functional Genomics and Immunological Diseases, Graduate School of Medicine, the University of Tokyo / Department of Allergy and Rheumatology, Graduate School of Medicine, the University of Tokyo

S15-04
10:18-10:48

Identifying Molecular Endotypes in Rheumatoid Arthritis through Deep Synovial Phenotyping: A Path towards Personalized Treatment

Felice Rivellese Centre for Experimental Medicine and Rheumatology (EMR), Queen Mary University of London, London, United Kingdom / Barts Health NHS Trust and Barts Biomedical Research Centre, National Institute for Health and Care Research (NIHR), London, United Kingdom

S15-05
10:48-11:12

Immune-bone cell crosstalk in autoimmune arthritis and stromal immunology

Hiroshi Takayanagi Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo

S15-06
11:12-11:30

The crucial role of self and neoself discrimination by T cells in the pathogenesis of autoimmune diseases

Shunsuke Mori Laboratory of Immunochemistry, World Premier International Immunology Frontier Research Centre, Osaka University

Symposium 16 Room A 13:00 ~ 15:00 December 5

S16. Immunoregulation at the surface barrier KAI-JSI Joint Session/ SMI/ JSMI Co-organized Session

Chairpersons: Reiko Shinkura (University of Tokyo)
William Agace (Department of Immunology and Microbiology, Medical Faculty, Copenhagen University)

S16-01
12:55-13:20

Characterizing human intestinal immune compartments

William W Agace Copenhagen University

S16-02
13:20-13:45

Interactions between host and pathogens at the barriers

Cevayir Coban University of Tokyo

S16-03
13:45-14:10

Microbiome Therapeutics for Inflammatory Disorders and Cancer

Sin-Hyeog IM Pohang University of Science and Technology (POSTECH) / ImmunoBiome Inc.

S16-04
14:10-14:35

Patient-donor microbial similarity and donor-derived species contribute to the outcome of FMT in ulcerative colitis

Dai Ishikawa Department of Gastroenterology, Juntendo University School of Medicine / Department of Regenerative Microbiology, Juntendo University School of Medicine

S16-05
14:35-15:00

Mucosal protection by IgA antibodies

Reiko Shinkura The University of Tokyo, IQB

Workshop

◯ : Presenter

December 3

WS01 Mucosal-Skin Immunity 1

14:00 ~ 15:15 Room A

Chairpersons: Yoshiyuki Goto, Yumi Matsuoka-Nakamura

This workshop will explore the intricate dynamics of mucosal-skin immunity, focusing on the crosstalk between immune and non-immune cells and its crucial role in maintaining homeostasis at barrier sites. We will delve into the interactions between tissue-resident immune cells, the microbiota, and environmental factors, all of which are essential for preserving the delicate balance within these environments. Discussions will also cover how dysbiosis-disruptions in the microbial community-alongside environmental influences, can lead to pathophysiological conditions. By deepening our understanding of these processes, we aim to gain further insights into the mechanisms that regulate immunity and contribute to diseases linked to barrier dysfunction.

WS01-01-O/P

Cytotoxic CD4$^+$ T cells eliminate senescent cells by targeting cytomegalovirus antigen

◯ Tatsuya Hasegawa[1,2,3], Tomonori Oka[2,3], Heehwa G. Son[2,3], Valeria S. Oliver-Garcia[2,3], Marjan Azin[2,3], Thomas M. Eisenhaure[4], David J. Lieb[4], Nir Hacohen[2,4], Shadmehr Demehri[2,3]

[1]MIRAI Technology Institute, Shiseido Co., Ltd. , [2]Center for Cancer Research, Massachusetts General Hospital and Harvard Medical School, [3]Department of Dermatology, Massachusetts General Hospital and Harvard Medical School, [4]Broad Institute of MIT and Harvard

WS01-02-O/P

"Tyzzerella nexilis" strains enriched in mobile genetic elements accelerate multiple sclerosis progression

◯ Daiki Takewaki[1,2], Yuya Kiguchi[2,3], Hiroaki Masuoka[2], Mallahalli Manu[1], Ben J E Raveney[1], Seiko Narushima[4], Rina Kurokawa[2], Yusuke Ogata[2], Sachiko Miyake[5], Wakiro Sato[1], Wataru Suda[2], Takashi Yamamura[1]

[1]Department of Immunology, National Center of Neurology and Psychiatry, [2]Laboratory for Symbiotic Microbiome Sciences, RIKEN Center for Integrative Medical Sciences, [3]Department of Computational Biology and Medical Sciences, The University of Tokyo, [4]Laboratory for Mucosal Immunity, RIKEN Center for Integrative Medical Sciences, [5]Department of Immunology, Juntendo University

WS01-03-O/P

Maternal gut microbiota induces γδT cells at the maternal-fetal interface for immunosurveillance

◯ Koichiro Suzuki[1], Takahiro Yamada[1,2], Yusuke Kinashi[1], Seiga Komiyama[1], Yuyo Ka[3], Kayo Tomiyama[3], Nanako Ushio-Watanabe[4], Yoshifumi Nishikawa[4], Koji Hase[1]

[1]Division of Biochemistry, Faculty of Pharmacy and Graduate School of Pharmaceutical Science, Keio University, [2]Department of Immunobiology, Yale School of Medicine, [3]Central Institute for Experimental Medicine and Life Science (CIEM), [4]National Research Center for Protozoan Diseases, Obihiro University of Agriculture and Veterinary Medicine

WS01-04-O/P

Unraveling the transcriptional Regulation of CD4$^+$ T_{RM} in Crohn's Disease

◯ Mitsuru Arase[1], Mari Murakami[1,2], Kiyoshi Takeda[1,2]

[1]Department of Microbiology and Immunology, Graduate School of Medicine, Osaka University, [2]WPI Immunology Frontier Research Center, Osaka University

WS01-05-O/P

C. albicans*-Induced a1, 2-fucosylation Manipulates Morphogenesis of *C. albicans

◯ Daichi Mori[1], Yoshiyuki Goto[1,2,3,4]

[1]Project for Host Microbial interactions in Symbiosis and Pathogenesis, Division of Molecular Immunology, Medical Mycology Research Center, Chiba University, [2]Division of Pandemic and Post-disaster Infectious Diseases, Research Institute of Disaster Medicine, Chiba University, Chiba, [3]Division of Infectious Disease Vaccine R&D, Research Institute of Disaster Medicine, Chiba University, Chiba, [4]Chiba University, Synergy Institute for Futuristic Mucosal Vaccine Research and Development (cSIMVa), Chiba

WS01-06-O/P

Mouse IgA modulates human gut microbiota with inflammatory bowel disease patients

◯ Keishu Takahashi[1], Naoki Morita[1], Ryutaro Tamano[1], Peng Gao[1], Noriho Iida[2], Akira Andoh[3], Hirotsugu Imaeda[4], Ken Kurokawa[5], Mayo Tsuboi[5], Yoku Hayakawa[5], Mitsuhiro Fujishiro[5], Reiko Shinkura[1]

[1]Laboratory of Immunology and Infection Control, Institute for Quantitative Biosciences, The University of Tokyo , [2]Department of Gastroenterology, Graduate School of Medical Sciences, Kanazawa University, [3]Department of Medicine, Shiga University of Medical Science, [4]Department of Gastroenterology, Nagahama City Hospital, [5]Department of Gastroenterology, Graduate School of Medicine, The University of Tokyo

WS01-07-O/P

The Impact of Microbial Lipid Metabolism on Skin Barrier pH Homeostasis

◯ Yoshihiro Ito[1)], Keitaro Fukuda[1,2)], Michiko Koizumi-Kitajima[1)], Masayuki Amagai[1,2)]
[1)]Keio University, School of Medicine, Department of Dermatology, [2)]Laboratory for Skin Homeostasis, IMS, RIKEN

WS01-08-O/P

The interaction between tongue ILC2s and IL-33$^+$ duct cells of von Ebner's gland accommodates barrier function against oro-mechanical damage

◯ Satoshi Koga[1)], Kazuyo Moro[1,2,3)]
[1)]Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University, [2)]Laboratory for Innate Immune Systems, RIKEN-IMS, [3)]Laboratory for Innate Immune Systems, iFReC, Osaka University

WS02 Cytotoxic T cells

14:00 ~ 15:15 Room B

Chairpersons: Ruka Setoguchi, Kensuke Takada

Cytotoxic T cells are important for host defense against intracellular pathogens and tumors. In acute infections, a part of cytotoxic effector T cells develop into memory T cells and they persist for long periods to respond to secondary infection. In chronic infections or tumors, sustained TCR signaling leads to the development of heterogeneous exhausted T cells. These developmental processes are orchestrated by transcription factors and chromatin remodeling molecules. Here, 7 topics will provide new insights into the development and function of cytotoxic T cells. Active discussion is encouraged.

WS02-03-O/P

The transcription factor BATF pioneers the effector differentiation of CD8$^+$ T cells through direct interaction with IRF4

◯ Sotaro Fujisawa[1)], Yamato Tanabe[1)], Toshikatsu Tamai[1)], Junko Kurachi[1)], Miki Koura[1)], Yusuke Miyanari[2)], Makoto Kurachi[1)]
[1)]Department of Molecular genetics, Faculty of Medical Sciences, Kanazawa University, [2)]WPI Nano Life Science Institute, Kanazawa University

WS02-04-O/P

Fate inflexibility of virtual memory CD8 T cells during chronic infection

◯ Yamato Sajiki[1)], Koichi Araki[1,2)]
[1)]Division of Infectious Diseases, Center for Inflammation and Tolerance, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, USA, [2)]Department of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, Ohio, USA

WS02-06-O/P

Efficient inhibition of DNAM-1 clustering via sequestrating CD155 from DNAM-1-TCR microclusters by CD96 with height

◯ Ei Wakamatsu, Ann Hattori, Hiroaki Machiyama, Hiroko Toyota, Masae Furuhata, Ryuji Hashimoto, Hitoshi Nishijima, Arata Takeuchi, Tadashi Yokosuka
Tokyo Medical Univ.

WS02-09-O/P

Dysfunctional Mitochondria Promote DNA Damage and T Cell Exhaustion in CD8$^+$ T Cells

◯ Kung-Chi Kao[1,2)], Yu-Ming Chuang[1,2)], Yi-Ru Yu[3)], Bugi Ratno Budiarto[4)], Shih-Yu Chen[4)], Ping-Chih Ho[1,2)]
[1)]University of Lausanne, [2)]Ludwig Institute for Cancer Research, [3)]Pilatus Biosciences, [4)]Academia Sinica

WS02-12-O/P

Vitamin C treatment enhances the immune responses of CD8$^+$ T cells by upregulation of *Batf3*

◯ Kenta Kondo[1)], Mina Kumode[1,2)], Koji Terada[1)], Yasutoshi Agata[1)]
[1)]Department of Biochemistry and Molecular Biology, Shiga University of Medical Science, [2)]Department of Hepatology, Shiga University of Medical Science

WS02-13-O/P

Identification of human CD8$^+$ T cells recognizing viral lipopeptides

◯ Minori Asa[1,2)], Sho Yamasaki[1,2,3)]
[1)]Department of Molecular Immunology, Research Institute for Microbial Diseases, Osaka University, [2)]Laboratory of Molecular Immunology, Immunology Frontier Research Center (iFReC), Osaka University, [3)]Center for Infectious Disease Education and Research (CiDER), Osaka University

WS02-16-O/P

Histone deacetylase 1 controls the generation and maintenance of effector-like CD8+ T cells during chronic viral infection

Ramona Rica[1)], Monika Waldherr[1)], Marlene Schülein[1)], Emi Miyakoda[1)], Thomas Krausgruber[2)], Christoph Bock[2,3)], Nicole Boucheron[1)], Wilfried Ellmeier[1)], ◯ Shinya Sakaguchi[1)]

[1)]Medical University of Vienna, Center for Pathophysiology, Infectiology and Immunology, Institute of Immunology, Division of Immunobiology, [2)]CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences, [3)]Medical University of Vienna, Center for Medical Data Science, Institute of Artificial Intelligence

WS03 In vivo model and new cancer immunotherapy

14:00 ~ 15:15 Room C

Chairpersons: Yuki Kagoya, Keiko Udaka

This session aims to delve into innovative advancements in cancer immunotherapy, with a particular focus on research utilizing mouse models. By presenting both therapeutic strategies and the creation of novel in vivo systems, the session aspires to uncover methods that could improve the effectiveness of therapy evaluation.

WS03-01-O/P

LAG-3 blockade reactivates the CD8+ T cell expansion program to re-expand contracted clones in the tumor

◯ Munetomo Takahashi[1)], Mikiya Tsunoda[2)], Shigeyuki Shichino[2)], Shumpei Ishikawa[1)], Kouji Matsushima[2)], Satoshi Ueha[2)]

[1)]Department of Molecular Preventive Medicine, Graduate School of Medicine, The University of Tokyo, [2)]Division of Molecular Regulation of Inflammatory and Immune Diseases, Research Institute for Biomedical Sciences, Tokyo University of Science

WS03-06-O/P

PQDN improves CD8+ T cell metabolism by mitochondrial tuning resulting in improved cancer immunotherapy

◯ Huimin Sun[1)], Yosuke Dotsu[1)], Daisuke Muraoka[1,2)], Daisuke Kato[4)], Naohisa Ogo[3)], Yudai Sonoda[3)], Situo Deng[1)], Kiyoshi Yasui[1)], Mitsuhiro Yoneda[1)], Hiromu Kondo[4)], Akira Asai[3)], Hiroaki Ikeda[1)]

[1)]Department of Oncology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan, [2)]Division of Translational Oncoimmunology, Aichi Cancer Research Institute, Nagoya, Japan, [3)]Center for Drug Discovery, Graduate School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan, [4)]Department of Pharmaceutical Engineering and Drug Delivery Science, School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan

WS03-08-O/P

Cystatin A enhances CD4+ T cells and M1 macrophages antitumor activity in murine models of pancreatic cancer

◯ Alessandro Nasti[1)], Shingo Inagaki[2)], Tuyen Thuy Bich Ho[1)], Akihiro Seki[3)], Keiko Yoshida[2)], Kosuke Satomura[2)], Taro Yamashita[2,3)], Yoshio Sakai[2)], Shuichi Kaneko[1,2,3)]

[1)]Information-Based Medicine Development, Graduate School of Medical Sciences, Kanazawa University, Kanazawa, Japan., [2)]System biology, Graduate School of Advanced Preventive Medical Sciences, Kanazawa University, Kanazawa, Japan., [3)]Department of Gastroenterology, Kanazawa University Hospital, Kanazawa, Japan.

WS03-10-O/P

Synergistic Effects of Immune Checkpoint Inhibition Therapy with Lactobacillus Metabolites

◯ Takumi Iwasawa[1,2,3)], Suguru Yamauchi[4)], Tomoaki Ito[3,5)], Kazunori Kato[1,2)]

[1)]Inst. of Life Innova. Stu., Toyo Univ., [2)]Grad. Sch Heal. & Sports Sci., Toyo Univ., [3)]Shizuoka Med. Res. Center for Disast., Juntendo Univ., [4)]Dept. Surg., Johns Hopkins Univ., [5)]Dept. Surg., Shizuoka Hospital, Juntendo Univ.

WS03-11-O/P

Complete humanization of MHC region in mouse

◯ Teruhiko Suzuki[1)], Mana Yamakawa[1)], Saki An[1)], Hiroko Yanagisawa[1)], Yasuhiro Kazuki[2,3,4,5)], Mitsuo Oshimura[2)], Eiji Mizutani[6)], Takahiko Hara[1,7,8)]

[1)]Stem Cell Proj., Tokyo Metropol. Inst. Med. Sci., [2)]CERC, Tottori Univ., [3)]Div. of Chr. Biomed. Eng., Grad. Sch. of Med. Sci., Tottori Univ., [4)]Chr. Eng. Group, ExCELLS., [5)]Sch. of Life Sci., Facul. of Med., Tottori Univ., [6)]Institute of Medicine, University of Tsukuba, [7)]Grad. Sch., Tokyo Med. Dent. Univ., [8)]Grad. Sch., Tokyo Metropol. Univ.

WS03-13-O/P

Anti-tumor effect of a human SIRPα antibody targeting human macrophages in a humanized mouse model

◯ Tania Afroj[1)], Satomi Komori[1)], Ikumi Katano[2)], Takeshi Takahashi[2)], Takenori Kotani[1)], Yoji Murata[1)], Takashi Matozaki[1)], Yasuyuki Saito[1)]

[1)]Kobe University Graduate School of Medicine, [2)]Central Institute for Experimental Animals, Kawasaki, Japan

WS04 Innate Immunity 1: Innate inflammation and disease

14:00 ~ 15:15 Room D

Chairpersons: Shinichiro Sawa, Minako Ito

Recent studies of innate immunity revealed that a variety of pattern recognition receptors sense pathogen associated molecular patterns (PAMPs) such as LPS or viral RNA followed by induction of innate immune response against bacterial and viral infection. Also immune response against danger-associated molecular patterns (DAMPs) are involved in induction of acute or chronic inflammation. Such inflammation is associated with homeostasis or development of various diseases including exacerbated viral infection and neuronal disorders. In this workshop, we will focus on inflammation and disease related to innate immunity and look forward to active participation and discussion.

WS04-02-O/P

Nucleolar dysfunction leads to the XPG-dependent generation of RNA-DNA hybrids, which prime the innate immune response underlying ribosomal diseases via the cGAS-STING pathway

◯ Ken Takashima, Hiroyuki Oshiumi

Department of Immunology, Graduate School of Medical Sciences, Faculty of Life Science, Kumamoto University

WS04-07-O/P

The role of small neutral amino acid transport in macrophage metabolic reprogramming during inflammation

◯ Shota Yasukura[1)], Masanori Yoshinaga[1)], Michael C Bassik[2)], Osamu Takeuchi[1)]

[1)]Department of Medical Chemistry Graduate School of Medicine, Kyoto University, [2)]Department of Genetics, Bassik Lab, Stanford University School of Medicine, Stanford CA, USA

WS04-09-O/P

Low-level Endotoxin Preconditioning after Burn Injury Significantly Improves Survival Rate in Mouse Sepsis Model

◯ Bradley M. Kearney[1,2)], Hiroyuki Nakashima[1)], Masahiro Nakashima[1)], Hiromi Miyazaki[1)], Kohei Yamada[1)], Kazuma Mori[1)], Azusa Kato[1)], Takeshi Ono[1)], Hiroyasu Goto[1)], Ryohei Suematsu[1)], Manabu Kinoshita[1)]

[1)]National Defense Medical College, [2)]US Army Japan Engineer and Scientist Exchange Program

WS04-14-O/P

K3-SPG-mediated long-term protection against viral infection

◯ Asuka Joy Tobuse[1)], Kouji Kobiyama[1,2)], Jun Tsuchida[1)], Teppei Hara[1)], Yaeko Nakajima-Takagi[4)], Motohiko Oshima[4)], Tomoya Hayashi[1)], Burcu Temizoz[1)], Hideo Negishi[1)], Yasuhiro Yasutomi[3)], Atsushi Iwama[4)], Ken J Ishii[1,2)]

[1)]Division of Vaccine Science, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo, [2)]International Vaccine Design Center, The Institute of Medical Science, The University of Tokyo, [3)]Laboratory of Immunoregulation and Vaccine Research, Tsukuba Primate Research Center, National Institutes of Biomedical Innovation, Health and Nutrition, [4)]Division of Stem Cell and Molecular Medicine, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, University of Tokyo, Tokyo, Japan

WS04-15-O/P

Structural insights into the IgM-CD5L complex and its impact on resolution of inflammation through DAMPs recognition

◯ Satoko Arai, Toru Miyazaki

The Institute for AIM Medicine

WS04-16-O/P

Tissue-specialized alveolar fibroblasts adopt multiple molecular states to regulate innate immunity after lung injury

◯ Tatsuya Tsukui, Paul J Wolters, Dean Sheppard

Division of Pulmonary, Critical Care, Allergy and Sleep Medicine, Department of Medicine, University of California, San Francisco

WS04-17-O/P

Myd88/Trif signaling is necessary for neurological recovery after stroke

◯ Ryuki Koyama, Takashi Shichita, Jun Tsuyama

Tokyo Medical and Dental University Medical Research Institute Department of Neuroinflammation and Repair

WS04-18-O/P

Anti-amyloid-beta antibody restores the post-stroke neural reparative function impaired by amyloid-beta pathology

◯ Kento Otani[1,2)], Eri Tanaka[1,2)], Koji Hase[2)], Takashi Saito[3)], Takashi Shichita[1)]

[1)]Department of Neuroinflammation and Repair, Medical Research Institute, Tokyo Medical and Dental University, [2)]Department of Biochemistry, Graduate School of Pharmaceutical Sciences, Keio University, [3)]Department of Neurocognitive Science, Institute of Brain Science, Graduate School of Medical Sciences, Nagoya City University

WS05 Allergy

14:00 ~ 15:15 Room E

Chairpersons: Saeko Nakajima, Kiyoshi Hirahara

Allergy is one of the research fields that has shown remarkable progress in both basic studies and clinical applications recent years. The interaction between so-called "tissue-resident" cell populations such as ILC2, mast cells, and tissue-resident memory T cells with epithelial cells is crucial in shaping the pathologies of allergic diseases. The interaction between the tissue-resident cell populations and neurons are also involved in the pathogenesis of various allergic conditions, including "pathological itching." The difference between tissue repair and fibrosis is another topic of interest in allergy research. This session will be helpful in extending our knowledge and understanding of cellular and molecular mechanisms for shaping the pathology of allergic diseases. We would like to encourage all participants to be in active discussion.

WS05-07-O/P

Role of Sox4 in IL-10-producing lung regulatory T cells

◯ Yuki Hayashi[1)], Akira Suto[1)], Kensuke Suga[1,2)], Takahiro Kageyama[1)], Takashi Ito[1)], Kazuyuki Meguro[1)], Shigeru Tanaka[1)], Taro Iwamoto[1)], Arifumi Iwata[1)], Shunsuke Furuta[1)], Kotaro Suzuki[1)], Hiroshi Nakajima[1)]

[1)]Department of Allergy and Clinical Immunology, Chiba University, [2)]Cedars-Sinai Medical Center

WS05-08-O/P

Crosstalk of innate and adaptive immune responses in laundry detergents-induced antigen-specific eosinophilic airway inflammation

◯ Naoko Nagano[1)], Kyoko Saito[1)], Keisuke Orimo[1)], Masato Tamari[1)], Kenichiro Motomura[1)], Susumu Nakae[2)], Hideaki Morita[1,3)], Kenji Matsumoto[1)]

[1)]Department of Allergy and Clinical Immunology, National Research Institute for Child Health and Development, [2)]Graduate School of Integrated Science for Life, Hiroshima University, [3)]Allergy Center, National Center for Child Health and Development

WS05-09-O/P

Serotonin-producing mast cells suppress ILC2 activation in asthmatic inflammation

◯ Naoki Okada[1,2)], Koichiro Asano[2)], Kazuyo Moro[1,3,4)]

[1)]Laboratory for Innate Immune Systems, RIKEN-IMS, [2)]Division of Pulmonary Medicine, Department of Medicine, Tokai University School of Medicine, [3)]Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University, [4)]Laboratory for Innate Immune Systems, iFReC, Osaka University

WS05-10-O/P

Efficacy of anti-IL-4Rα in modulating cellular responses in asthma of various endotypes

◯ Hinami Kawahata[1)], Takuya Yashiro[1)], Yasutaka Motomura[1)], Kazuyo Moro[1,2,3)]

[1)]Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University, [2)]Laboratory for Innate Immune Systems, RIKEN-IMS, [3)]Laboratory for Innate Immune Systems, IFReC, Osaka University

WS05-11-O/P

TRPV1-positive vagal sensory neurons suppress eosinophilic lung inflammation through the neuron-intrinsic JAK1-CGRP beta axis

◯ Masato Tamari[1)], Kenichiro Motomura[1)], Hideaki Morita[1,2)], Kenji Matsumoto[1)]

[1)]Department of Allergy and Clinical Immunology, National Research Institute for Child Health and Development, [2)]Allergy Center, National Center for Child Health and Development

WS05-18-O/P

Pathogenic memory T_H2 cells exacerbate esophageal fibrosis of eosinophilic esophagitis by amphiregulin production

◯ Chiaki Iwamura, Tatsuya Kaneko, Kiyoshi Hirahara

Dept of Immunology, Graduate School of Medicine, Chiba University

WS05-19-O/P

Antigen-presenting cell function of mucosal mast cells is involved in the development of intestinal mast cell hyperplasia in IgE-mediated food allergy

◯ Nobuhiro Nakano[1)], Kenji Oishi[2)], Toshiyuki Yoneyama[2)], Eisuke Inage[2)], Takahiro Kudo[2)], Yoshikazu Ohtsuka[2)], Jiro Kitaura[1)], Toshiaki Shimizu[1,2)], Ko Okumura[1)]

[1)]Atopy (Allergy) Research Center, Juntendo Univ., [2)]Department of Pediatrics and Adolescent Medicine, Juntendo Univ.

WS05-24-O/P

IL-33 primes mast cells to respond to Piezo1 stimulation, leading to degranulation

◯ Yoshiaki Kobayashi[1,2)], Kent Sakai[3)], Daiki Nakagomi[2)], Atsuhito Nakao[1,3)]

[1)]Department of Immunology, University of Yamanashi, [2)]Department of Rheumatology, University of Yamanashi, [3)]Yamanashi GLIA Center, University of Yamanashi

WS06 Arthritis and Fibrosis

14:00 ~ 15:15 Room F

Chairpersons: Kimito Kawahata, Haruka Tsuchiya

In this session, studies related to arthritis and fibrosis will be presented. These will reveal the specific cell populations and molecular mechanisms that shape the immunopathogenesis using human specimens and animal models. We hope that all participants have an active discussion in both oral and poster presentation and that this session will provide insights into understanding disease mechanisms.

WS06-01-O/P

Distinct proliferative and spatial properties of peripheral helper T cells in rheumatoid arthritis synovium

◯ Yuki Masuo[1)], Akinori Murakami[1,2)], Rinko Akamine[1)], Osamu Iri[1)], Koichi Murata[2,3)], Takayuki Fujii[2,3)], Yasuhiro Murakawa[4,5)], Chikashi Terao[6)], Yukinori Okada[7,8,9)], Motomu Hashimoto[10)], Hideki Ueno[1,5)], Hiroyuki Yoshitomi[1,5)]

[1)]Department of Immunology, Graduate School of Medicine, Kyoto University, [2)]Department of Orthopaedic Surgery, Graduate School of Medicine, Kyoto University, [3)]Advanced Medicine for Rheumatic Disease, Graduate School of Medicine, Kyoto University, [4)]RIKEN-IFOM Joint Laboratory for Cancer Genomics, RIKEN Center for Integrative Medical Sciences, [5)]Institute for the Advanced Study of Human Biology, Kyoto University, [6)]Laboratory for Statistical and Translational Genetics, RIKEN Center for Integrative Medical Sciences, [7)]Department of Genome Informatics, Graduate School of Medicine, the University of Tokyo, [8)]Department of Statistical Genetics, Graduate School of Medicine, Osaka University, [9)]Laboratory for Systems Genetics, RIKEN Center for Integrative Medical Sciences, [10)]Department of Clinical Immunology, Graduate School of Medicine, Osaka Metropolitan University

WS06-02-O/P

Human synovial Tph cells are involved in synovial inflammation in rheumatoid arthritis via a novel inflammatory humoral factor

◯ Akinori Murakami[1,2,3)], Rinko Akamine[2,3)], Yuki Masuo[2,3)], Osamu Iri[2)], Yasuhiro Murakawa[4,5)], Chikashi Terao[6)], Yukinori Okada[7,8,9)], Motomu Hashimoto[10)], Shuichi Matsuda[1)], Hideki Ueno[2,3,5)], Hiroyuki Yoshitomi[2,3,5)]

[1)]Department of Orthopaedic Surgery, Graduate School of Medicine, Kyoto University, Japan, [2)]Department of Immunology, Graduate School of Medicine, Kyoto University, Japan, [3)]Kyoto University Immunomonitoring Center, Kyoto University, Japan, [4)]RIKEN-IFOM Joint Laboratory for Cancer Genomics, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, [5)]Institute for the Advanced Study of Human Biology, Kyoto University, Japan, [6)]Laboratory for Statistical and Translational Genetics, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, [7)]Department of Genome Informatics, Graduate School of Medicine, the University of Tokyo, Japan, [8)]Department of Statistical Genetics, Graduate School of Medicine, Osaka University, Japan, [9)]Laboratory for Systems Genetics, RIKEN Center for Integrative Medical Sciences, Japan, [10)]Department of Clinical Immunology, Graduate School of Medicine, Osaka Metropolitan University, Japan

WS06-03-O/P

Expression of CD103 and CD200 define functionally distinct arthritogenic Th17 cells

◯ Yusuke Takeuchi[1,2)], Daiya Ohara[1)], Hitomi Watanabe[1)], Gen Kondoh[1)], Akio Morinobu[2)], Keiji Hirota[1)]

[1)]Laboratory of Integrative Biological Science, Institute for Life and Medical Sciences, Kyoto University, [2)]Department of Rheumatology and Clinical Immunology, Graduate School of Medicine, Kyoto University

WS06-04-O/P

GM-CSF-dependent Macrophage Subpopulation Derived from Ly6C^{hi} Monocytes Causes Development and Enhancement of Joint Inflammation in Autoimmune Arthritis

◯ Hiroki Mukoyama[1,2)], Yusuke Takeuchi[1,2)], Daiya Ohara[1)], Yoonha Lee[1)], Hitomi Watanabe[1)], Gen Kondoh[1)], Akio Morinobu[2)], Keiji Hirota[1)]

[1)]Laboratory of Integrative Biological Science, Institute for Life and Medical Sciences, Kyoto University, Kyoto, Japan., [2)]Department of Rheumatology and Clinical Immunology, Graduate School of Medicine, Kyoto University, Kyoto, Japan

WS06-05-O/P

The critical involvement of RasGRP4 in synovial resident cells in inflammatory arthritis

◯ Rihan Da, Tetsuya Saito, Natsuka Umezawa, Hiroyuki Baba, Wen Shi Lee, Shinsuke Yasuda

Department of Rheumatology, Tokyo Medical and Dental University

WS06-06-O/P

Identification of the oncostatin M-driven macrophage-fibroblast interaction as a drug target in autoimmune arthritis

◯ Rui Ling[1)], Nam Cong Nhat Huynh[1)], Masatsugu Komagamine[1)], Tianshu Shi[1)], Masayuki Tsukasaki[2)], Noriko Komatsu[1,3)], Hiroshi Takayanagi[1)]

[1)]Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, Tokyo, Japan., [2)]Department of Osteoimmunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, Tokyo, Japan., [3)]Department of Immune Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU), Tokyo, Japan.

WS06-15-O/P

Attenuated Lung Fibrosis in Myeloid-Specific Ezh2 Deficient Mice: Insights from a Systemic Sclerosis Model

◯ Sita Virakul[1)], Benjawan Saechue[2)], Rajit Chompoowong[3)], Patipark Kueanjinda[8)], Haruhiko Koseki[4)], Nattiya Hirankarn[5)], Wijit Banlunara[6)], Benchaphorn Limcharoen[7)], Tanapat Palaga[1)]

[1)]Department of Microbiology, Faculty of Science, Chulalongkorn University, Bangkok, Thailand, [2)]Faculty of Veterinary Science, Mahasarakham University, Mahasarakham, Thailand, [3)]Medical Microbiology, Interdisciplinary Program, Graduate School, Chulalongkorn University, Bangkok, Thailand, [4)]Center for Integrative Medical Sciences, RIKEN, Japan , [5)]Center of Excellence in Immunology and Immune mediated Disease, Department of Microbiology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, [6)]Department of Pathology, Faculty of Veterinary Science, Chulalongkorn University, Bangkok, Thailand, [7)]Department of Anatomy, Faculty of Veterinary Science, Chulalongkorn University, Bangkok, Thailand, [8)]Department of Pathology, University of Massachusetts Medical School, MA, USA

WS06-18-O/P

rW27 alleviates *E. faecalis*-promoted, CDAHFD-induced NASH disease in mice by attenuating liver fibrosis

◯ Chen Xiu Jie[1,2,3)]

[1)]Graduate School of Frontier Sciences, The University of Tokyo, [2)]Institute for Quantitative Biosciences, The University of Tokyo, [3)]Laboratory of Immunology and Infection Control, The University of Tokyo

WS07 Macrophage 1

14:00 ~ 15:15 Room G

Chairpersons: Masako Kohyama , Eiji Umemoto

Macrophages were originally identified as cells that attack and eliminate invaded pathogens. Although inflammation is important for host defense, excessive inflammation sometimes causes serious consequences. Macrophage express surface receptors and sensors and have a unique machinery known as the inflammasome, which regulates various stimuli for inflammation. In this session, we would like to discuss the mechanisms of inflammasome activation and regulation of fibrosis development.

WS07-01-O/P

Withdrawn

WS07-04-O/P

The differential pyrin inflammasome responses between resident peritoneal and bone marrow-derived macrophages

◯ Izumi Sasaki[1)], Shiori Kaji[2)], Yuri Fukuda-Ohta[1)], Daisuke Okuzaki[3)], Takashi Kato[1)], Tsuneyasu Kaisho[1)]

[1)]Department of Immunology, Institute of Advanced Medicine, Wakayama Medical University, [2)] Second Department of Internal Medicine, Wakayama Medical University, [3)]WPI-Immunology Frontier Research Center, Osaka University

WS07-05-O/P

Clathrin heavy chain: a regulatory key for NLRP3 inflammasome activation via endocytosis in macrophages

◯ Hung Hiep Huynh[1)], Eri Koike[1)], Masumi Shimizu[1)], Akihiko Yoshimura[2)], Rimpei Morita[1)]

[1)]Department of Microbiology and Immunology, Nippon Medical School, [2)]Graduate School of Medicine, Keio University

WS07-08-O/P

TAK1-binding protein 2 (TAB2) suppresses aberrant activation of NLRP3 inflammasome mediated by autocrine TNF-α

◯ Giichi Takaesu[1,2,3)], Tanveer Ali[2)], Goro Matsuzaki[1,2,3)]

[1)]Tropical Biosphere Research Center, University of the Ryukyus, [2)]Department of Host Defense, Graduate School of Medicine, University of the Ryukyus, [3)]Advanced Medical Research Center, University of the Ryukyus

WS07-10-O/P

A critical role of protein cross-linking enzyme transglutaminase 2 in M2 macrophage polarization and fibrosis

◯ Hideki Tatsukawa, Kiyotaka Hitomi
Graduate School of Pharmaceutical Sciences, Nagoya University

WS07-11-O/P

Autologous Macrophages induced by IL-34-based condition Suppress Hepatic Fibrosis with CD8+ T Cell Inhibition

◯ Yuichi Igarashi, Haruka Wada, Ken-ichiro Seino
Division of Immunobiology, Institute for Genetic Medicine, Hokkaido University

WS07-12-O/P

Dual-wield pathway of macrophages drives myofibroblast transition via dysregulation of iron metabolism

◯ Hiroshi Nabeshima[1,2], Kiyoharu Fukushima[2,3,4], Shizuo Akira[2,3,5]
[1]Host Defense Laboratory, Immunology Unit, Osaka Research Center for Drug Discovery, Otsuka Pharmaceutical Co., Ltd., [2]Laboratory of Host Defense, World Premier Institute Immunology Frontier Research Center (WPI-IFReC), Osaka University, [3]Department of Host Defense, Research Institute for Microbial Diseases (RIMD), Osaka University, [4]Department of Respiratory Medicine and Clinical Immunology, Osaka University Graduate School of Medicine, [5]Center for Advanced Modalities and DDS (CAMaD), Osaka University

WS08 Infection immunity 1

14:00 ~ 15:15 Room H

Chairpersons: Kosuke Miyauchi, Saya Moriyama

Understanding the interaction between virus-host immune responses and developing vaccines and therapeutics are essential for protection against viral infection. This workshop will focus on SARS-CoV-2 infections and dengue virus interaction with the host immune system. Active participation and constructive discussions would be highly appreciated.

WS08-01-O/P

Regnase-4 protects mice against HSV-1 infection by reinforcing type I interferon production

◯ Keiko Yasuda[1,2], Junichi Aoki[1], Kotaro Tanaka[1], Daiya Ohara[3], Keiji Hirota[3], Osamu Takeuchi[1]
[1]Department of Medical Chemistry, Graduate School of Medicine, Kyoto University, [2]Department of Immunology, Nagoya City University Graduate School of Medical Sciences, [3]Laboratory of Integrative Biological Science, Institute for Life and Medical Sciences, Kyoto University

WS08-02-O/P

Transcription factor FOXO1 critically regulates viral replication and inflammatory reaction during SARS-CoV-2 infection both in *in vitro* and *in vivo* models

◯ Ryutaro Furukawa[1], Noriko Ouji-Sageshima[1], Masahiro Kitabatake[1], Atsushi Hara[1], Shigeyuki Shichino[2], Satoshi Ueha[2], Kouji Matsushima[2], Toshihiro Ito[1]
[1]Department of Immunology, Nara Medical University, [2]Division of Molecular Regulation of Inflammatory and Immune Diseases, Research Institute for Biomedical Sciences, Tokyo University of Science

WS08-03-O/P

Immune profiling of less reactogenic mRNA vaccine revealed the pathways associated with adverse reaction

◯ Tomohiro Takano[1], Keigo Kumagai[2], Hitoshi Iuchi[3], Aya Mizuike[2,4], Tomoharu Mizukami[2], Eita Sasaki[1], Koji Kobiyama[5], Ken Ishii[5], Michiaki Hamada[3], Masayoshi Fukasawa[2], Takayuki Matsumura[1], Yoshimasa Takahashi[1]
[1]Research Center for Drug and Vaccine Development, National Institute of Infectious Diseases, [2]Department of Biochemistry and Cell Biology, National Institute of Infectious Diseases, [3]Faculty of Science and Engineering, Waseda University, [4]Center for Quality Management Systems, National Institute of Infectious Diseases, [5]The Institute of Medical Science, The University of Tokyo

WS08-07-O/P

History of infection and vaccination affects the quality of T cell responses in humans

◯ Dongyun Lu[1], Celine Chua[1], Xinxin Xue[1], Naila Shinwari[1], Isao Ito[2], Takao Hashiguchi[3], Ryutaro Kotaki[4], Yoshimasa Takahashi[4], Hideki Ueno[1]
[1]Department of Immunology, Graduate School of Medicine, Kyoto University , [2]Department of Respiratory Medicine, Kyoto University Hospital, [3]Institute for Frontier Life and Medical Sciences, Kyoto University, [4]Research Center for Drug and Vaccine Development, National Institute of Infectious Diseases

WS08-08-O/P

Differential potency of memory T cells and memory B cells in older adults following COVID-19 mRNA vaccination

◯ Kohei Kometani[1)], Takaaki Yorimitsu[1,2)], Norihide Jo[1,3)], Yoko Hamazaki[1,4,5)]

[1)]Department of Life Science Frontiers, Center for iPS Cell Research and Application (CiRA), Kyoto University, [2)]Department of Human Health Sciences, Graduate School of Medicine, Kyoto University, [3)]Alliance Laboratory for Advanced Medical Research, Graduate School of Medicine, Kyoto University, [4)]Laboratory of Immunobiology, Graduate School of Medicine, Kyoto University, [5)]Kyoto University Immunomonitoring Center (KIC)

WS08-10-O/P

HLA-C-restricted nucleocapsid-specific CTLs show potent antiviral activity and long-lived memory phenotype

◯ Chihiro Motozono[1)], Mako Toyoda[1)], Hiroshi Hamana[2)], Hiroyuki Kishi[2)], Takamasa Ueno[1)]

[1)]Kumamoto University, Joint Research Center for Human Retrovirus infection, [2)]University of Toyama, Department of Immunology, Faculty of Medicine, Academic Assembly

WS08-16-O/P

Predictive Biomarkers of COVID-19 Prognosis Identified in Bangladesh Patients and Validated in Japanese Cohorts

◯ Kazuko Uno[1)], Abu Hasan[2)], Rummana Rahim[2)], Toshio Tanaka[3)], Mizanur Rahman[2)], Kazuyuki Yoshizaki[4)]

[1)]IFN & Host-defense Research Laboratory, Louis Pasteur Center for Medical Research, [2)]Evercare Hospital Dhaka, [3)]Kinki Central Hospital, [4)]Department of Organic Fine Chemicals, Institute of Scientific and Industry Research, Osaka University

WS08-18-O/P

T cell repertoire and transcriptome profiling of CD8⁺ T cells in the peripheral blood of dengue virus infection during acute, early, and late recovery phases

Eleonor F Avenido-Cervantes[1,2)], Akiko Baba[1)], Jiun-Yu Jian[3)], Archival M Cervantes[2)], Blanca R Jarilla-Nagataki[2)], Mario Antonio L Jiz II[2)], Arthur Dessi E Roman[4)], Yu-Chen James Liu[5)], Daisuke Okuzaki[5)], Shusaku Mizukami[3)], Katsuyuki Yui[3)], ◯ Kenji Hirayama[1)]

[1)]School of Tropical medicine and Global Health and NEKKEN, Nagasaki University, [2)]Immunology Department, Research Institute for Tropical Medicine, Philippines, [3)]Department of Immune regulation, Institute of Tropical Medicine (NEKKEN), Nagasaki University, [4)]Clinical Research Division, Research Institute for Tropical Medicine, Philippines, [5)]Human Immunology (Single Cell Genomics), Immunology Frontier Research Center: IFReC, Osaka University

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WS09 Mucosal-Skin Immunity 2

15:25 ~ 16:40 Room A

Chairpersons: Tetsuro Kobayashi , Hiroko Nagao-Kitamoto

This workshop will explore the intricate dynamics of mucosal-skin immunity, focusing on the crosstalk between immune and non-immune cells and its crucial role in maintaining homeostasis at barrier sites. We will delve into the interactions between tissue-resident immune cells, the microbiota, and environmental factors, all of which are essential for preserving the delicate balance within these environments. Discussions will also cover how dysbiosis-disruptions in the microbial community-alongside environmental influences, can lead to pathophysiological conditions. By deepening our understanding of these processes, we aim to gain further insights into the mechanisms that regulate immunity and contribute to diseases linked to barrier dysfunction.

WS09-01-O/P

Sulfated glycans in intestinal homeostasis and disease

◯ Shota Okamoto[1)], Ryu Okumura[1,2)], Kiyoshi Takeda[1,2)]

[1)]Department of Microbiology and Immunology, Graduate School of Medicine, Osaka University, [2)]WPI Immunology Frontier Research Center, Osaka University

WS09-02-O/P

Novel Metabolites Altered by Appendectomy Lead to Tuft Cell Hyperplasia and Play an Important Role in the Amelioration of Ulcerative Colitis

◯ Shunya Hatai[1,2)], Yasutaka Motomura[2,3,4)], Koji Hosomi[5)], Taiki Sakaguchi[6)], Ryu Okumura[6)], Takayuki Ogino[7)], Daisuke Motooka[8)], Eiichi Morii[9)], Shota Nakamura[8)], Kiyoshi Takeda[6)], Jun Kunisawa[5)], Kazuyo Moro[1,2,3)]

[1)]Laboratory for Innate Immune Systems, RIKEN-IMS, [2)]Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University, [3)]Laboratory for Innate Immune Systems, iFReC, Osaka University, [4)]Division of Immunology and Allergy, Research Institute for Biomedical Science, Tokyo University of Science, [5)]Laboratory of Vaccine Materials, Center for Vaccine and Adjuvant Research, and Laboratory of Gut Environmental System, National Institutes of Biomedical Innovation, Health, and Nutrition (NIBIOHN), [6)]Laboratory of Immune Regulation, Department of Microbiology and Immunology, Graduate School of Medicine, Osaka University, [7)]Department of Gastroenterological Surgery, Graduate School of Medicine, Osaka University, [8)]Genome Information Research Center, Research Institute for Microbial Diseases, Osaka University, [9)]Department of Pathology, Graduate School of Medicine, Osaka University

WS09-03-O/P

Crucial Role of Pancreatic GP2 in Regulating Bacterial Translocation and Organ Failure

◯ Yosuke Kurashima[1,2,3], Zhongwei Zhang[1], Yun-Gi Kim[4], Nozomu Obana[5], Shinji Fukuda[5,6], Ryutarou Fukui[7], Kensuke Miyake[7], Koji Hase[8], Hiroshi Ohno[9], Satoshi Uematsu[10], Peter B Ernst[3], Hiroshi Kiyono[1,2,3]

[1]Department of Innovative Medicine, Graduate School of Medicine, Institute for Advanced Academic Research/ Research Institute of Disaster Medicine, Chiba University, Chiba, Japan, [2]Chiba University Synergy Institute for Futuristic Mucosal Vaccine Research and Development (cSIMVa), Department of Human Mucosal Vaccinology, Chiba University Hospital, Chiba, Japan., [3]Division of Comparative Pathology and Medicine, Chiba University-University of California San Diego Center for Mucosal Immunology, Allergy and Vaccine, School of Medicine, San Diego, CA, USA., [4]Department of Microbiology, School of Pharmacy, Kitasato University, Tokyo, Japan, [5]Transborder Medical Research Center, Institute of Medicine, University of Tsukuba, Ibaraki, Japan, [6]Institute for Advanced Biosciences, Keio University, Yamagata, Japan, [7]Division of Innate Immunity, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, [8]Division of Biochemistry, Department of Pharmaceutical Sciences, Faculty of Pharmacy, and Graduate School of Pharmaceutical Sciences, Keio University, Minato-ku, Tokyo, Japan. , [9]Laboratory for Microbiome Sciences and Intestinal Ecosystem, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan., [10]Department of Immunology and Genomics, Graduate School of Medicine, Osaka Metropolitan University, Osaka, Japan

WS09-04-O/P

Loss of claudin-1 in keratinocytes induces itch transmitted by multiple types of sensory nerves

◯ Susumu Toshima[1,2], Sonoko Takahashi[1], Ayako Matsuyama[1], Akiharu Kubo[2,3], Masayuki Amagai[2,4], Takaharu Okada[1]

[1]Laboratory for Tissue Dynamics, Center for Integrative Medical Science, RIKEN, [2]Department of Dermatology, Keio University School of Medicine, [3]Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, [4]Laboratory for Skin Homeostasis, Center for Integrative Medical Science, RIKEN

WS09-05-O/P

Epithelial barrier dysfunction by intestine-specific AP-1B deficiency causes renal IgA deposition

◯ Yusuke Kinashi[1], Keisuke Tanaka[1], Shunsuke Kimura[1], Daisuke Takahashi[1], Hiroshi Ohno[2], Koji Hase[1]

[1]Division of Biochemistry, Faculty of Pharmacy and Graduate School of Pharmaceutical Science, Keio University , [2]Laboratory for Intestinal Ecosystem, RIKEN Center for Integrative Medical Sciences

WS09-06-O/P

Reactive persulfide controls intestinal inflammation by suppressing CD4$^+$ T lymphocyte proliferation

◯ Shunichi Tayama[1], Yuya Kitamura[1], Kyoga Hiraide[2], Hibiki Suzuki, Jing Li[1], Ziying Yang[1], Kosuke Sato[1], Akihisa Kawajiri[3], Yuko Okuyama[1], Takeshi Kawabe[1], Takaaki Akaike[4], Naoto Ishii[1]

[1]Tohoku University Graduate School of Medicine, Department of Microbiology and Immunology, [2]Tohoku University Graduate School of Medicine, Department of AI and Innovative Medicine, [3]Sendai City Hospital, [4]Tohoku University Graduate School of Medicine, Department of Environmental Medicine and Molecular Toxicology

WS09-07-O/P

M cells in the tear duct-associated lymphoid tissue contribute to the development of allergic conjunctivitis by facilitating germinal-center reaction

◯ Yuki Oya[1], Shunsuke Kimura[1,2], Koji Hase[1,3,4]

[1]Keio Univ., [2]Precursory Research for Embryonic Science and Technology (PRESTO), [3]The Institute of Medical Science, [4]Fukushima Univ.

WS09-08-O/P

Identification of staphylococcus aureus genes affecting response to bleach bath therapy in patients with atopic dermatitis

◯ Hiroshi Kawasaki[1,2], Ayano Fukushima-Nomura[2], Yoshihiro Ito[2], Eiryo Kawakami[1], Masayuki Amagai[2]

[1]RIKEN, [2]Keio Univ.

WS10 Tissue inflammation controlled by T cells

15:25 ~ 16:40 Room B

Chairpersons: Keiji Hirota, Keiko Yasuda

Tissue inflammation is regulated by the interplay between inflammatory T helper cells and regulatory T cells. Various intrinsic factors within T cells, including nuclear receptors, transcription factors, and cytokine signaling, in combination with external environmental cues, govern the differentiation and effector functions of these cells, thereby determining the balance between tissue protection and destruction. For this session, we have selected seven outstanding abstracts for presentation. Each speaker will give a 7-minute talk, followed by a 3-minute discussion. We encourage active participation and discussion from the audience.

WS10-02-O/P

SH-2251 functions as an antagonist of retinoic acid receptor alpha, suppressing IL-5-producing Th2 cell differentiation and function and chronic Th2-type airway inflammation

◯ Shunsuke Nomura[1)], Makoto Kuwahara[2)], Junpei Suzuki[2)], Masakatsu Yamashita[1,2)]

[1)]Department of Infection and Host Defense, Graduate School of Medicine, Ehime University, [2)]Department of immunology, Graduate School of Medicine, Ehime University

WS10-03-O/P

Agonization of *Nr4a1* Inhibits Th17 Differentiation and Mitigates Experimental Arthritis in SKG mice

◯ Yoichi Nakayama[1)], Ryosuke Hiwa[1)], Ayaka Okubo[1)], Mikihito Shoji[1)], Mirei Shirakashi[1)], Hideaki Tsuji[1)], Koji Kitagori[2)], Ran Nakashima[1)], Shuji Akizuki[1)], Hajime Yoshifuji[1)], Akio Morinobu[1)]

[1)]Department of Rheumatology and Clinical Immunology, Kyoto University Graduate School of Medicine, [2)]Occupational Welfare Division, Agency for Health, Safety and Environment, Kyoto University

WS10-04-O/P

Dual Function of α-Synuclein as Antigen and Adjuvant Orchestrate Th17 Responses in Parkinson's Disease

◯ Emi Furusawa Nishii[1)], Asako Chiba[1)], Ayami Okuzumi[2)], Shinichi Ueno[2)], Yasunobu Hoshino[2)], Taku Hatano[2)], Nobutaka Hattori[2,3)], Sachiko Miyake[1)]

[1)]Juntendo University Faculty of Medicine Department of Immunology, [2)]Juntendo University Faculty of Medicine Department of Neurology, [3)] Neurodegenerative Disorders Collaborative Laboratory, RIKEN Center for Brain Science

WS10-07-O/P

The T cell receptor specificity contributes to Th1-type effector regulatory T cell differentiation

◯ Shun Yuasa, Ryuichi Murakami, Shohei Hori

Laboratory of Immunology and Microbiology, Graduate School of Pharmaceutical Sciences, The University of Tokyo

WS10-11-O/P

Type I interferon drives T cell cytotoxicity by upregulation of interferon regulatory factor 7 in autoimmune kidney diseases

◯ Nariaki Asada, Huiying Wang, Jonas Engesser, Anett Peters, Anna Kaffke, Hans-Joachim Paust, Ulf Panzer

University Medical Center Hamburg-Eppendorf

WS10-13-O/P

Functional Dynamics of Children's T follicular helper Cells in the context of Cryptosporidiosis

◯ Dana Marie Van Fossen[1)], Zannatun Noor[2)], Lisa Wagar[3)], Rashidul Haque[2)], Carol A Gilchrist[1)], William A Petri[1)]

[1)]University of Virginia, [2)]International Centre for Diarrhoeal Disease Research, Bangladesh (Icddr,b), [3)]University of California, Irvine

WS10-14-O/P

Analysis of the formation mechanism of ATL-specific *CCR4* super-enhancer

◯ Shengyi Liu[1)], Hiroaki Hiramatsu[1)], Takashi Ishida[1)], Takuma Kato[1)], Hiroyoshi Nishikawa[1,2)]

[1)]Nagoya University Graduate School of Medicine, [2)]Exploratory Oncology Research and Clinical Trial Center, National Cancer Center

WS11 Tumor microenvironment and biomarkers

15:25 ~ 16:40 Room C

Chairpersons: Yosuke Togashi, Tomoko Hirano

This session aims to investigate the complex interactions within the tumor microenvironment and peripheral blood, emphasizing the identification of promising biomarkers and cellular targets. Through exploring these factors, the session seeks to inspire new therapeutic approaches and enhance predictive capabilities in the treatment of cancer.

WS11-01-O/P

Sympathetic Nerve Ablation Impact on Angiogenesis and Antitumor Immunity in Hepatocellular Carcinoma

◯ Chen Sun[1)], Yuqing Shen[1)], Fuhua Wang[1)], Tian Lu[1)], Jianqiong Zhang[1,2)]

[1)]Department of Microbiology and Immunology, Medical School, Southeast University, Jiangsu Province, China, [2)]Nurturing Center of Jiangsu Province for State Laboratory of AI Imaging & Interventional Radiology (Southeast University), Zhongda Hospital, Southeast University, Nanjing, China

WS11-02-O/P

Single cell immunoprofiling of tumor infiltrating T cells in renal cell carcinoma

◯ Taku Kouro[1,2)], Mitsuru Komahashi[1,3)], Shun Horaguchi[1,3)], Kayoko Tsuji[1)], Rika Kasajima[4)], Tetsuro Sasada[1,2)]

[1)]Div. Cancer Immunotherapy, Kanagawa Cancer Center Research Institute, [2)]Cancer Vaccine and Immunotherapy Center, Kanagawa Cancer Center, [3)]Department of Pediatric Surgery, Nihon University School of Medicine, [4)]Molecular Pathology and Genetics Division, Kanagawa Cancer Center Research Institute

WS11-03-O/P

Elucidating the Immune Microenvironment of Multiple Myeloma Through Advanced Multi-Omics Analysis

◯ Shangru Jia[1)], Alok Sharma[2,3,4)], Artem Lysenko[2,3)], Keith Boroevich[3)], Tatsuhiko Tsunoda[1,2,3)]

[1)]Tsunoda Lab, Department of Computational Biology and Medical Sciences, Graduate School of Frontier Sciences, The University of Tokyo, Japan, [2)]Laboratory for Medical Science Mathematics, Department of Biological Sciences,School of Science, The University of Tokyo, Japan, [3)]Laboratory for Medical Science Mathematics, RIKEN Center for Integrative Medical Sciences, Japan, [4)]Institute for Integrated and Intelligent Systems, Griffith University, Nathan, Brisbane, QLD4111, Australia

WS11-05-O/P

ADAM9 drives immune suppression in the lung cancer microenvironment

◯ Yuh Pyng Sher[1)], Jing Pei Liu[1)], Shih Jen Liu[2)]

[1)]China Medical University, [2)]National Health Research Institutes

WS11-07-O/P

Combination of plasma MMPs and PD-1-binding soluble PD-L1 as a non-invasive tool to predict recurrence in gastric cancer and the efficacy of immune checkpoint inhibitors in non-small cell lung cancer

◯ Fumihiko Ando[1,2)], Takeru Kashiwada[3)], Shoko Kuroda[1)], Ryotaro Takano[1,2)], Yoshishige Miyabe[1,4)], Tomoko Asatsuma-Okumura[1)], Masahiro Seike[3)], Yoshiko Iwai[1)]

[1)]Department of Cell Biology, Institute of Advanced Medical Sciences, Nippon Medical School, [2)]Department of Gastroenterological Surgery, Nippon Medical School, [3)]Department of Pulmonary Medicine and Oncology, Nippon Medical School, [4)]Department of Immunology and Parasitology, St. Marianna University School of Medicine

WS11-12-O/P

Membrane-based RNA sequencing to analyze the interaction between cancer cells and immune cells

◯ Tadashi Imafuku, Sadahiro Iwabuchi, Shinichi Hashimoto

Wakayama Medical University

WS11-14-O/P

Genetically encoded fluorescent lactate biosensors for investigating tumor-immune microenvironment

◯ Yusuke Nasu[1,2)], Yuki Kamijo[1)]

[1)]Department of Chemistry, School of Science, The University of Tokyo, [2)]Japan Science and Technology Agency

WS12 Innate Immunity 2: Innate immune cell

15:25 ~ 16:40 Room D

Chairpersons: Shinichiro Sawa, Tsukasa Nabekura

The discovery and investigation of Innate Lymphoid Cells (ILCs) over the past 15 years has changed our perception of immune regulation and how the immune system contributes to the maintenance of tissue homeostasis. In this session, we have selected 8 outstanding talks related to Innate immune cells including NK cells, ILCs and NKT cells and look forward to active participation and discussion.

WS12-03-O/P

CD36 is an inhibitory CpG ODN/CXCL14 receptor that limits the tumor-suppressive activity

◯ Kosuke Tanegashima[1)], Manaka Hasebe[1,2)], Risa Saito[1,3)], Riku Takahashi[1,3)], Takahiko Hara[1,2,3)]

[1)]Stem cell project, Tokyo Metropolitan Institute of Medical Science, [2)]Grad. Sch. of Tokyo Metropol. Univ., [3)]Grad. Sch. of Tokyo Medical and Dental Univ.

WS12-05-O/P

Characterization of anti-asialo-GM1 monoclonal antibodies

◯ Ka He[1)], Tatsuji Kimura[2)], Kazuyoshi Takeda[3)], Yoshihiro Hayakawa[1)]

[1)]Institute of Natural Medicine, University of Toyama, [2)]Diagnostic Division, Yamasa Corporation, [3)]Laboratory of Cell Biology, Graduate School of Medicine, Juntendo University

WS12-08-O/P

PD-L1 expressing CD127^{+} ILC1s inhibit PD-1^{+} γδ T cells in the mesenteric adipose tissue to alleviate murine peritonitis

◯ Ritsu Nagata[1,3)], Yuichi Akama[4)], Pedro Goncalves[5)], Nicolas Serafini[5)], Tomoko Kageyama[2)], Manami Satoh[1,3)], Motomu Shimaoka[4)], Hiroshi Ohno[1,3)], Naoko Satoh-Takayama[2,3)]

[1)]Laboratory for Intestinal Ecosystem, Center for Integrative Medical Sciences RIKEN, [2)]Precision Immune Regulation RIKEN ECL Research Unit, Center for Integrative Medical Sciences, RIKEN, [3)]Graduate School of Medical Life Science, Yokohama City University, [4)]Department of Molecular Pathobiology and Cell Adhesion Biology, Mie University Graduate School of Medicine, [5)]Institut Pasteur, Université Paris Cité, Inserm U1223, Innate Immunity Unit

WS12-09-O/P

ILC1-Derived Amphiregulin Regulates Epithelial Turnover in Response to Mechanical Stress in the Skin

◯ Tetsuro Kobayashi[1)], Daisuke Asanuma[2)], Shigeyuki Namiki[2)], Kenzo Hirose[2)], Kazuyo Moro[1,3,4)]

[1)]Laboratory for Innate Immune Systems, RIKEN IMS, [2)]Department of Pharmacology, Graduate School of Medicine, The University of Tokyo, [3)]Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University, [4)]Laboratory for Innate Immune Systems, iFReC, Osaka University

WS12-11-O/P

Identification of a FURIN-Dependent ILC2 Regulatory Mechanism Not Mediated by the p38-GATA3 Pathway

◯ Takuya Yashiro[1)], Kazuyo Moro[1,2,3)]

[1)]Laboratory for innate immune systems, Graduate school of medicine, Osaka university, [2)]Laboratory for Innate Immune Systems, RIKEN-IMS, [3)]Laboratory for Innate Immune Systems, IFReC, Osaka University

WS12-15-O/P

Dietary antigens enhance ILC3s and regulate intestinal homeostasis

◯ Ayana Mori[1,2)], Shiho Nagata[1,3)], Tomoko Kageyama[2)], Naoko Tachibana[3)], Hiroshi Ohno[3,4)], Naoko Satoh-Takayama[1,2)]

[1)]Immunobiology Laboratory, Graduate School of Medical Life Science, Yokohama City University, Yokohama, Japan, [2)]Precision Immune Regulation RIKEN ECL research Unit, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, [3)]Laboratory for Intestinal Ecosystem, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, [4)]Laboratory for Immune Regulation, Graduate School of Medicine, Chiba University, Chiba, Japan

WS12-16-O/P

Development of a novel proliferation method of invariant Natural Killer T cells

◯ Kiwamu Motoyoshi, Takahiro Aoki, Mariko Takami, Shinichiro Motohashi

Department of Medical Immunology, Graduate school of medicine, Chiba University

WS13 Hematopoiesis and immune environment

15:25 ~ 16:40 Room E

Chairpersons: Takeshi Nitta, Mayumi Hirakawa

Hematopoietic stem cells give rise to all blood cells, including erythrocytes, myeloid cells, and lymphocytes. These multipotent progenitors develop and mature in the bone marrow and thymus then, migrate to other organs such as the spleen and lymph nodes for further differentiation. The stepwise processes of immune cell differentiation are finely tuned by the interplay between immune cells and immune environment, which leads to changes in gene expression by transcription factors and epigenetic modifications. Dysregulation of these hematopoietic processes alters the fate and functions of immune cells and sometimes causes hematological diseases. In this workshop, we will discuss recent discoveries related to cellular and molecular mechanism of immune cell differentiation and the immune environment, as well as new analytical technologies.

WS13-01-O/P

Identification and characterization of CXCL13 producers in bone tissue

◯ Takuma Okawa[1)], Motoyoshi Nagai[1,2)], Kazuaki Nakata[2)], Taeko Dohi[1)], Yuki I. Kawamura[2)], Shinya Fujita[3)], Keiyo Takubo[3,4)], Koichiro Suzuki[1)], Koji Hase[1,5,6)]

[1)]Graduate School of Pharmaceutical Science, Keio University, [2)]Clinical Research Advancement Section, Research institute, National Center for Global Health and Medicine, [3)]Department of Stem Cell Biology, Research institute, National Center for Global Health and Medicine, [4)]Department of Cell Fate Biology and Stem Cell Medicine, Tohoku University Graduate School of Medicine, [5)]The Institute of Fermentation Sciences, Faculty of Food and Agricultural Sciences, Fukushima University, [6)]International Vaccine Design Center, The Institute of Medical Science, The University of Tokyo

WS13-03-O/P

Systemic inflammation skews cell fate of common lymphoid progenitors

◯ Masashi Kanayama, Toshiaki Ohteki

Department of Biodefense Research, Medical Research Institute, Tokyo Medical and Dental University (TMDU)

WS13-08-O/P

A novel synergistic activity of bHLH transcription factor E2A and Erg instructs B cell lineage commitment by regulating the enhancer landscape

◯ Reiko Hidaka, Kazuko Miyazaki, Hiroshi Kawamoto, Masaki Miyazaki

Kyoto University, Institute for Life and Medical Sciences, Department of Immunology.

WS13-09-O/P

Non canonical Polycomb group proteins regulate T cell development in a sex-dependent manner

◯ Mayumi Hirakawa, Tomokatsu Ikawa

Division of Immunology and allergy, Research Institute for Biomedical Sciences, Tokyo University of Science

WS13-13-O/P

CD69 controls regulatory T cell generation in the thymus

◯ Yukihiro Endo, Nanako Yasujima, Taiyo Sasayama, Ichita Hasegawa, Yangsong Wang, Shunka Kano, Ryo Nasu, Motoko Kimura

Department of Experimental Immunology, Graduate School of Medicine, Chiba University

WS13-16-O/P

A single-cell analysis revealed tissue-restricted antigen-expressing fibroblasts accumulated in epithelium-free areas in rat thymic medulla

◯ Yasushi Sawanobori, Yusuke Kitazawa, Hisashi Ueta, Nobuko Tokuda

Anatomy, Dokkyo Medical University

WS13-26-O/P

Single-particle phenotyping of immune cell-derived extracellular vesicles *in vivo* based on their tracking system

◯ Tomoya Hayashi[1,2,3)], Shuntaro Shimizu[1,2,3,4)], Kouji Kobiyama[1,2,3)], Hideo Negishi[1,2,3)], Burcu Temizoz[1,2,3)], Ken J Ishii[1,2,3)]

[1)]Division of Vaccine Science, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo (IMSUT), [2)]International Vaccine Design Center, IMSUT, [3)]The University of Tokyo Pandemic Preparedness, Infection and Advanced Research Center (UTOPIA), The University of Tokyo, [4)]Department of Chemistry, Chemical Engineering & Life Science, Yokohama National University

WS14 Macrophage 2

15:25 ~ 16:40 Room G

Chairpersons: Masako Kohyama, Eiji Umemoto

Macrophages are found in all tissues in the body, and they are highly heterogenous populations in terms of their phenotypes and functions. Macrophages have been thought to play an important role not only in the host defense against pathogens but also in maintaining homeostasis. In this session, we would like to discuss recent progress in our understanding on the development and functional polarization of macrophages and how they control tissue homeostasis.

WS14-01-O/P

Retinoid X receptor activation facilitates the differentiation of monocytes into CX_3CR1^{hi} macrophages via mitochondrial metabolism

◯ Hinata Sugiyama[1)], Masayoshi Onuki[1)], Wakana Ohashi[1,2)], Yuta Takamura[3)], Hiroki Kakuta[3)], Koji Hase[1,4)]

[1)]Faculty of Pharmacy and Graduate School of Pharmaceutical Science, Keio Univ., [2)]School of Pharmaceutical Sciences, Shizuoka Univ., [3)]Graduate School of Medicine Dentistry and Pharmaceutical Sciences, Okayama Univ., [4)]IFeS, Fukushima Univ.

WS14-03-O/P

Fibroblast-derived CSF1 supports gut mucosal macrophage pool and resistance to bacterial infection

◯ Soichiro Yoshida[1)], Daichi Nonaka[1)], Eriko Sumiya[1,2)], Shinichiro Sawa[1)]

[1)]Division of Mucosal Immunology, Research Center for Systems Immunology, Medical Institute of Bioregulation, Kyushu University, [2)]Present address: Department of Orthopedic Surgery, Faculty of Medicine, University of Tokyo

WS14-04-O/P

Periportal macrophages protect against commensal-driven liver inflammation

◯ Yu Miyamoto[1,2)], Masaru Ishii[1,2)]

[1)]Department of Immunology and Cell Biology, WPI-Immunology Frontier Research Center, Osaka University, [2)]Department of Immunology and Cell Biology, Graduate School of Medicine, Osaka University

WS14-08-O/P

MAFB in Macrophages Regulates Sympathetic Neuron Density in Cold-Induced Brown Adipose Tissue

◯ Michito Hamada[1)], Manoj Kumar Yadav[2)], Megumi Ishida[1)], Natalia Gogoleva[1)], Ching-Wei Liao[1)], Maho Kanai[1)], Akihiro Kuno[1)], Satoru Takahashi[1)]

[1)]Anatomy and Embryology, Faculty of Medicine, University of Tsukuba, [2)]National Institutes of Health, Bethesda, MD 20892, USA

WS14-09-O/P

GPR35 signal regulates a regulatory macrophage subset in the adipose tissue

◯ Misato Mizutani, Rin Sugiyama, Akane Ishida, Katsuhiro Nakanishi, Wakana Ohashi, Eiji Umemoto

Laboratory of Microbiology and Immunology, University of Shizuoka

WS14-10-O/P

The roles of macrophages in parturition

◯ Sunao Matsuzaka, Haruta Mogami, Yu Matsuzaka, Eriko Yasuda, Masahito Takakura, Yoshitsugu Chigusa, Masaki Mandai

Department of Gynecology and Obstetrics, Kyoto University Graduate School of Medicine

WS14-13-O/P

Notch signaling regulates macrophage heterogeneity in liver disease

◯ Hongyan Qin

State Key Laboratory of Holistic Integrative Management, Department of Medical Genetics and Developmental Biology, Fourth Military Medical University

WS15 Infection immunity 2

15:25 ~ 16:40 Room H

Chairpersons: Yasunobu Miyake, Saya Moriyama

Our immune system has developed robust and sophisticated host defense mechanisms as a result of its prolonged struggle against infectious pathogens. Pathogens, on the other hand, have also evolved unique and unexpected immune evasion systems. Understanding these host and pathogen strategies enables the development of novel and effective therapies for infectious diseases. In this workshop we will focus on viral, fungal and parasitic infections with the latest findings on host and pathogen regulators, animal models of disease and vaccination, and effects of metabolic changes on the immune response. Active participation and constructive discussions would be highly appreciated.

WS15-01-O/P

Hepatic ILC1s confer host protection against viral infection during undernutrition

◯ Megumi Tatematsu[1)], Shunsuke Takasuga[1)], Akane Fuchimukai[1)], Tsukasa Nabekura[2)], Akira Shibuya[3)], Koichi Ikuta[4)], Takashi Ebihara[1,5)]

[1)]Akita University Graduate Schcool of Medicine, [2)]Aichi Cancer Center Research Institute, Division of Immune Response, [3)]Faculty of Medicine, and Center for TARA, University of Tsukuba , [4)]Center for Medical Education and Internationalization Graduate School of Medicine and Faculty of Medicine, Kyoto University, [5)]Center for Integrated Control, Epidemiology and Molecular Pathophysiology of Infectious Diseases, Akita University

WS15-03-O/P

Non-canonical type I IFNs are regulated by cholesterol synthesis pathway and prime the RIG-I mediated antiviral innate immune signaling

◯ Tasuku Nishimura[1)], Takahisa Kouwaki[1,2)], Ken Takashima[1,2)], Hiroyuki Oshiumi[1,2)]

[1)]Department of Immunology, Graduate School of Medical Sciences, Kumamoto University, [2)]Department of Immunology, Faculty of Life Sciences, Kumamoto University

WS15-04-O/P

Regnase-1 haploinsufficiency restricted SARS-CoV-2 pneumonia in mice by reducing a neutrophil subset with the interferon-stimulated gene signature

◯ Kotaro Tanaka[1)], Keiko Yasuda[1,2)], Junichi Aoki[1)], Osamu Takeuchi[1)]

[1)]Department of Medical Chemistry, Graduate School of Medicine, Kyoto University, [2)]Department of Immunology Nagoya City University Graduate School of Medical Sciences

WS15-05-O/P

The establishment of a transgenic mouse system to analyze HTLV-1-driven CD4$^+$ T cell immortalization mechanism

◯ M Ishrat Jahan[1)], Kenji Sugata[1)], Koki Nimura[5)], Takushi Nomura[1)], Nobuko Irie[2)], Kimi Araki[4)], Masahiro Ono[3,2)], Yorifumi Satou[1,2)]

[1)]Joint research center for Human Retrovirus infections, Kumamoto University, [2)]International Research Center for Medical Sciences (IRCMS), Kumamoto University, [3)]Department of Life Sciences, Imperial College London, [4)]Division of Developmental Genetics, Institute of Resource Development and Analysis, Kumamoto University, [5)]School of Medicine, Kumamoto University, Japan

WS15-08-O/P

Immunological evaluation of post-fusion influenza vaccine adjuvanted with DSP-0546LP in the non-human primate model

◯ Ayae Nishiyama[1)], Yuji Masuta[1)], Yu Adachi[2)], Hidenori Kimura[3)], Akihisa Fukushima[3)], Yoshimasa Takahashi[2)], Takuya Yamamoto[1)]

[1)]Laboratory of Precision Immunology, Center for Intractable Diseases and ImmunoGenomics research, National Institutes of Biomedical Innovation, Health and Nutrition, [2)]Research Center for Drug and Vaccine Development, National Institute of Infectious Diseases, [3)]Sumitomo Pharma. Co., Ltd.

WS15-10-O/P

Binding analysis of HIV-2 Nef protein with host CD3 intracellular motif

◯ Ryota Koseki[1)], Idai Ozawa[1)], Kengo Hirao[1)], Masato Sumi[1)], Takashi Tadokoro[2)], Sophie Andrews[3)], Sarah Rowland-Jones[3)], Kimiko Kuroki[1)], Katsumi Maenaka[1)]

[1)]Hokkaido University, [2)]Sanyo-Onoda City University, [3)]University of Oxford

WS15-15-O/P

Sex bias in the immune response to the emerging fungal pathogen *Sporothrix brasiliensis*

◯ Fabio Seiti Yamada Yoshikawa[1)], Sandro Rogerio de Almeida[2)], Shinobu Saijo[1)]

[1)]Medical Mycology Research Center, Chiba University, Chiba, Japan, [2)]Faculty of Pharmaceutical Sciences, University of Sao Paulo, Sao Paulo, Brazil

WS15-16-O/P

PILRs and their SNP mutations are involved in the regulation of host immune responses against the pathogenic fungus, *Aspergillus fumigatus*

◯ Yasunobu Miyake, Hiroki Yoshida
Saga University, Faculty of Medicine

December 4

WS16 TCR-mediated signaling

15:10 ~ 16:25 Room B

Chairpersons: Satoshi Matsuda, Yuriko Tanaka

Antigen recognition through TCR triggers a diverse array of T cell responses including development, activation, and functional differentiation. This is also the case with innate T cells. Recent advances in research methodologies such as proximity-dependent labeling and TIRF imaging have unveiled a detailed landscape of TCR signaling pathway. In this session consisting of 7 talks and 13 posters, we will discuss wide variety of mechanisms regulating T cell activation upon antigen recognition. We hope active participation and discussion for elucidating the molecular basis of TCR signaling pathway.

WS16-01-O/P

The difference of Lck interactomes in CD4+CD8– and CD4–CD8+ thymocytes

◯ Junji Harada[1,2], Ichiro Taniuchi[1]
[1]Laboratory for Transcriptional Regulation, Center for Integrative Medical Sciences, RIKEN, [2]Department of RIKEN Molecular and Chemical Somatology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University

WS16-06-O/P

The quantitative detection of T cells with biallelic TCRα rearrangements

◯ Takahiro Iguchi[1], Ryunosuke Muro[2], Takeshi Nitta[2], Hiroshi Takayanagi[1]
[1]Department of Immunology, Graduate School of Medicine, The University of Tokyo, [2]Division of Molecular Pathology, Research Institute for Biomedical Sciences, Tokyo University of Science

WS16-07-O/P

Human T cells broadly recognizing multiple mycobacterial lipids

◯ Nanami Kamata[1,2], Yuki Sakai[1,2], Minori Asa[1,2], Hayato Kasai[1,2], Sho Yamasaki[1,2,3]
[1]Department of Molecular Immunology, Research Institute for Microbial Diseases, Osaka University, [2]Laboratory of Molecular Immunology, Immunology Frontier Research Center (IFReC), Osaka University, [3]Center for Infectious Disease Education and Research (CiDER), Osaka University

WS16-08-O/P

Single-cell analysis reveals age-related differences in T cell response to COVID-19 mRNA vaccines

◯ Ayana Sunami[1,2], Norihide Jo[2,3], Yoko Hamazaki[1,2,4]
[1]Laboratory of Immunobiology, Graduate School of Medicine, Kyoto University, [2]Department of Life Science Frontiers, Center for iPS Cell Research and Application (CiRA), Kyoto University, [3]Alliance Laboratory for Advanced Medical Research, Graduate School of Medicine, Kyoto University, [4]Kyoto University Immunomonitoring Center (KIC)

WS16-09-O/P

Neoself-antigens are the primary target for autoreactive T cells in human lupus

◯ Shunsuke Mori, Hisashi Arase
Laboratory of Immunochemistry, World Premier International Immunology Frontier Research Centre, Osaka University

WS16-16-O/P

M-cell-dependent commensal uptake confers encephalitogenic phenotypes on γδT17 cells in Peyer's patch

◯ Seiga Komiyama[1], Yuyo Ka[2], Tomoyuki Ogura[2], Satoshi Onawa[3], Hiroshi Watarai[4], Tsuneyasu Kaisho[5], Nobuyuki Udagawa[6], Daisuke Takahashi[1], Koji Hase[1]
[1]Division of Biochemistry, Graduate School of Pharmacy, Keio University, [2]Animal Resource Technical Research Center, Central Institute for Experimental Medicine and Life Science, [3]Kanagawa Institute of Industrial Science and Technology, [4]Department of Immunology and Stem Cell Biology, Kanazawa University, [5]Department of Immunology, Institute of Advanced Medicine, Wakayama Medical University, [6]Department of Oral Biochemistry, Matsumoto Dental University

WS16-17-O/P

Alterations of human liver γδ T cells by CMV infection

◯ Mouna Khan[1)], Hajime Morita[1)], Tashiaki Bando[1)], Lynn Zreka[1)], Shuhe Ma[1,2)], Daichi Akuzawa[1)], Yuki Masuo[1)], Shunsuke Uno[1)], Moyu Zhang[1)], Hideki Ueno[1,2)]

[1)]Human Immunology, Graduate School of Medicine, Kyoto University., [2)]Immunology Group, Institute for the Advanced Study of Human Biology (ASHBi), KUIAS Kyoto University, Kyoto, Japan

WS17 B cell activation and differentiation

15:10 ~ 16:25 Room C

Chairpersons: Daisuke Kitamura, Kyoko Ochiai

B cells are an essential part of our humoral immune system and can produce antibodies against many kinds of pathogen in a helper T cell-dependent manner. However, some B cells can solely produce antibodies during an immune response to Th cell-independent antigen, e.g., LPS, bacterial DNA. B cells contribute to our immune system as a soldier and also a commander. We here discuss many questions about B cell differentiation: how B cells and antibodies control an innate immune response, how activated or germinal center B cells determine their fate, and how B cells distinguish between foreign and self antigens.

WS17-01-O/P

Role of antigen and IgM persistent in endosome/lysosome in T cell-independent antibody response to polysaccharides

◯ Asahi Nunokawa[1,2)], Kana Matsumura[1)], Huang Yuming[1)], Takeshi Tsubata[1,2)]

[1)]Tokyo Medical and Dental University, [2)]Nihon University School of Dentistry

WS17-02-O/P

Essential roles of FcμR and complement activation in eliciting effective humoral immunity

◯ Zichao Wen[1)], Lulu Dong[1)], Jun Liu[1)], Qing Min[2)], Ying Wang[1)], Ziying Hu[3)], Xiaoqian Feng[1)], Chaoqun Cui[1)], Yingying Luan[1)], Yaxuan Li[1)], Birgitta Heyman[5)], Ji-Yang Wang[1,2,4)]

[1)]Department of Immunology, School of Basic Medical Sciences, Fudan University, Shanghai, China., [2)]Shanghai Sci-Tech Inno Center for Infection & Immunity, Shanghai, China., [3)]Department of Microbiology and Immunology, College of Basic Medical Sciences, Zhengzhou University, Zhengzhou, China., [4)]Department of Clinical Immunology, Children's Hospital of Fudan University, National Children's Medical Center, Shanghai, China., [5)]Department of Medical Biochemistry and Microbiology, Uppsala University, Uppsala, Sweden.

WS17-03-O/P

The contribution of IL-9 receptors on peritoneal B cells and ILC2 to the T-cell-independent immune responses

◯ Mari Tenno, Takumi Umezu, Yuko Emoto, Haruna Sato, Kei Kato, Daisuke Kitamura

Tokyo University of Science

WS17-04-O/P

Explore the alteration of B cell caused by *Bach2*-deficiency

◯ Kyoko Ochiai[1)], Yayoi Kimura[2)], Kazuhiko Igarashi[1)]

[1)]Biochemistry, Tohoku University Graduate School of Medicine, [2)]Advanced Medical Research Center, Yokohama City University

WS17-05-O/P

Plasma cell KLF2 expression at the induction site directs migration to the bone marrow

Wataru Ise[1,2,8)], ◯ Takuya Koike[1,2,7,8)], Yuki Tai[2)], Taiichiro Shirai[3)], Ryoji Kawakami[4)], Takeshi Inoue[2)], Nozomi Hojo[5)], Katsuyuki Shiroguchi[5)], Kazuhiro Suzuki[3)], Tomohiro Kurosaki[2,6,7)]

[1)]Regulation of Host Defense Team, Division of Microbiology and Immunology, Center for Infectious Disease Education and Research, Osaka University, [2)]Laboratory of Lymphocyte Differentiation, WPI Immunology Frontier Research Center, Osaka University, [3)]Laboratory of Immune Regulation, WPI Immunology Frontier Research Center, Osaka University, [4)]Laboratory of Experimental Immunology, WPI Immunology Frontier Research Center, Osaka University, [5)]Laboratory for Prediction of Cell Systems Dynamics, RIKEN Center for Biosystems Dynamics Research (BDR), [6)]Center for Infectious Diseases Education and Research, Osaka University, [7)]Laboratory for Lymphocyte Differentiation, RIKEN Center for Integrative Medical Sciences (IMS), [8)]These authors contributed equally

WS17-06-O/P

Autoreactive B cells are formed by somatic hypermutation without help of autoreactive T cells

◯ Wataru Okada, Shun Tokumoto, Sano Nagano, Miya Yoshino, Koji Tokoyoda

Division of Immunology, School of Life Science, Faculty of Medicine, Tottori University

WS17-07-O/P

Humanized BCR mice are a useful tool for analysis of autoreactive B cells

◯ Rinka Ito[1)], Yutaro Yada[1)], Yasuhiro Kazuki[2)], Yoshihiro Baba[1)]

[1)]Medical Institute of Bioregulation, Kyushu Univ., [2)]Tottori Univ.

WS17-08-O/P

All-trans-retinoic acid suppresses age-associated B cell generation and ameliorates autoimmunity

◯ Keisuke Imabayashi, Yoshihiro Baba
Division of Immunology and Genome Biology, Medical Institute of Bioregulation, Kyushu University

WS18 Infection immunity 3

15:10 ~ 16:25 Room D

Chairpersons: Manabu Ato, Miwa Sasai

Bacterial infections are a significant threat to global health. Antimicrobial resistance threatens effective prevention and treatment of bacterial infections. To address this worldwide health challenge, it is crucial to gain a comprehensive understanding of both pathogens and the host immune responses. In this workshop, we will focus on bacterial and protozoan infections of the host immune system, vaccine development, and treatment. Active participation and constructive discussion are highly appreciated.

WS18-10-O/P

Salmonella utilizes antibiotics and antibodies for immune evasion

◯ Uki Kimura[1)], Karen Saiki[1)], Nobuhiro Matsuyama[1)], Akiko Takaya[2)], Koji Tokoyoda[1)]
[1)]Division of Immunology, Graduate School of Medical Sciences, Tottori University, Tottori, Japan., [2)]Department of Natural Products Chemistry, Graduate School of Pharmaceutical Sciences, Chiba University, Chiba, Japan.

WS18-14-O/P

Oligopeptide binding protein A provides novel preventive paradigms against _Salmonella_ infections

◯ Ken Yoshii[1)], Koji Hosomi[1)], Takahiro Nagatake[1,2)], Jun Kunisawa[1,3,4,5,6,7)]
[1)]Laboratory of Vaccine Materials and Laboratory of Gut Environmental System, National Institutes of Biomedical Innovation, Health and Nutrition (NIBIOHN), [2)]Laboratory of Functional Anatomy, Department of Life Sciences, School of Agriculture, Meiji University , [3)]Graduate School of Medicine, Pharmaceutical Sciences, Dentistry and Science, Osaka University, [4)]International Vaccine Design Center, The Institute of Medical Science, The University of Tokyo, [5)]Department of Microbiology and Immunology, Kobe University Graduate School of Medicine, [6)] Graduate School of Biomedical and Health Sciences, Hiroshima University, [7)]Research Organization for Nano and Life Innovation, Waseda University

WS18-16-O/P

Pilus-based vaccine development to prevent Group A Streptococcal infections

◯ Jacelyn Mei San Loh[1,2)], Adrina Khemlani[1)], Catherine Tsai[1,2)], Nikki Moreland[1,2)], Thomas Proft[1,2)]
[1)]Department of Molecular Medicine & Pathology, School of Medical Sciences, The University of Auckland, [2)]Maurice Wilkins Centre for Molecular Biodiscovery, Auckland, New Zealand

WS18-17-O/P

Novel tuberculosis vaccine evaluation with simian immunodeficiency virus and mycobacterium tuberculosis co-infected monkey model

◯ Natsuko Yamakawa, Yasuhiro Yasutomi
NIBIOHN Tsukuba Primate Research Center

WS18-19-O/P

A phage cocktail predicting the evolution of phage resistance can effectively combat MDR _Acinetobacter baumannii_ infection and delay phage resistance

◯ Yong Shao[1,4)], Ying Zhang[2,3)], Jianqiong Zhang[1,2,3,4)]
[1)] Key Laboratory of Developmental Genes and Human Disease, Ministry of Education, Southeast University, Nanjing, China, [2)]Department of Microbiology and Immunology, Medical School, Southeast University, Nanjing, China, [3)]Department of Critical Care Medicine, Zhongda Hospital, Jiangsu Provincial Key Laboratory of Critical Care Medicine, Medical School, Southeast University, Nanjing, China, [4)]School of Life Science and Technology, Southeast University, Nanjing, China

WS18-20-O/P

Association between LILRB3 and LILRA6 alleles and bacterial infection

◯ Gen Hasegawa[1,2)], Kouyuki Hirayasu[1,3)], Yifan Li[1)], Hisashi Arase[4,5,6)], Masaya Yamaguchi[6,7,8,9)], Shigetada Kawabata[6,8)], Rikinari Hanayama[1,10)]
[1)]Department of Immunology, Graduate School of Medical Sciences, Kanazawa University, [2)]Keiju Medical Center, [3)]Department of Evolutionary Immunology, Advanced Preventive Medical Sciences Research Center, Kanazawa University, [4)]Department of Immunochemistry, Research Institute for Microbial Diseases, Osaka University, [5)]Laboratory of Immunochemistry, WPI Immunology Frontier Research Center, Osaka University, [6)]Center for Infectious Disease Education and Research, Osaka University, [7)]Bioinformatics Research Unit, Graduate School of Dentistry, Osaka University, [8)]Department of Microbiology, Graduate School of Dentistry, Osaka University, [9)]Bioinformatics Center, Research Institute for Microbial Diseases, Osaka University, [10)]WPI Nano Life Science Institute (NanoLSI), Kanazawa University

WS18-22-O/P

The cAMP Responsive Element Modulator (CREM) Transcription Factor Regulates Innate and Adaptive Immunity and Alters Susceptibility to Malnutrition

◯ Audrey Brown[1)], Md Jashim Uddin[1)], Rebecca Munday[4)], Farha Naz[1)], G Brett Moreau[1)], Girija Ramakrishnan[1)], Stephen Rich[2)], Rashidul Haque[3)], Priya Duggal[4)], Chelsea Marie[1)], William Petri Jr.[1)]

[1)]Division of Infectious Diseases and International Health, Department of Medicine, University of Virginia School of Medicine, Charlottesville, Virginia, USA, [2)]Department of Public Health Sciences, Center for Public Health Genomics, University of Virginia School of Medicine, Charlottesville, Virginia, USA, [3)]International Centre for Diarrheal Disease Research, Dhaka, Bangladesh, [4)]Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA

WS19 Tolerance and immune suppression focusing on regulatory T cell biology

15:10 ~ 16:25 Room E

Chairpersons: Kenji Chamoto, Naoko Satoh-Takayama

This workshop focuses on fundamental advances in understanding immune tolerance and suppression, particularly emphasizing regulatory T cell (Treg) biology. Key topics include the modulation of transcription factor Foxp3, which regulates Treg development and function, and how Treg cells mediate targeted suppression of immune responses. The session also explores pathways involved in Treg development in the thymus and peripheral tissues and mechanisms controlling the interplay between immune cells and signaling pathways such as Runx3/Cbfβ and RORγt. Advances in the induction of antigen-specific Tregs using mRNA technology and the characterization of Tregs from peripheral blood are discussed for their therapeutic potential in autoimmune diseases and transplant rejection.

WS19-01-O/P

Runx3/Cbfβ is required for differentiation and function of Thetis APCs that drives Rorγt^{+} pTreg differentiation

◯ Chihiro Ogawa, Ichiro Taniuchi

RIKEN Center for Integrative Medical Sciences, Laboratory for Transcriptional Regulation

WS19-02-O/P

Foxp3 corporates with NFκB to promote endogenous Foxp3 transcription *in vivo*

◯ Yuxi Wei, Akira Nakajima, Shohei Hori

Laboratory of Immunology and Microbiology, Graduate School of Pharmaceutical Sciences, The University of Tokyo

WS19-03-O/P

Possible diversity of Treg cell development pathways branching from CD25^{neg}Foxp3^{neg} pre-precursor stage in the thymus

◯ Ryoji Kawakami[1,2)], Shimon Sakaguchi[1,2)]

[1)]Institute for Life and Medical Sciences (LiME), Kyoto University, [2)]Immunology Frontier Research Center (IFReC), Osaka University

WS19-04-O/P

Generation and activation of naturally arising memory-phenotype CD4^{+} T lymphocytes are homeostatically restricted by regulatory T cells dependently of TCR, CD28, and IL-2 signaling

◯ Jing Li, Ziying Yang, Akihisa Kawajiri, Kosuke Sato, Shunichi Tayama, Naoto Ishii, Takeshi Kawabe

Department of Microbiology and Immunology, Tohoku University Graduate School of Medicine

WS19-05-O/P

Characterization of peripheral blood Treg cells

◯ Takashi Sekiya

Department of Immune regulation, The Research Center for Hepatitis and Immunology, National Center for Global Health and Medicine

WS19-06-O/P

CD80/CD86-CD28 signal blockade during the mixed lymphocyte reaction augments the alloantigen-specific inhibitory function of natural regulatory T cells

◯ Kyoko Yogo[1,3)], Kazuyoshi Takeda[1)], Ko Okumura[1)], Ryuichi Murakami[2)], Shohei Hori[2)], Koichiro Uchida[1)]

[1)]Center for Immunotherapy and Diagnosis, Juntendo University, [2)]Laboratory of Immunology and Microbiology, Graduate School of Pharmaceutical Sciences, The University of Tokyo, [3)]JUNTEN BIO Co., Ltd.

WS19-07-O/P

Induction of antigen-specific Treg in vivo with mRNA

◯ Shota Imai[1)], Tomoyoshi Yamano[1,2)], Rikinari Hanayama[1,2)]

[1)]Department of Immunology, Graduate School of Medicine, Kanazawa University, [2)]WPI Nano Life Science Institute (NanoLSI), Kanazawa University

WS20 Organ-Specific Immune Diseases

15:10 ~ 16:25 Room F

Chairpersons: Kimito Kawahahata, Haruka Miki

The studies presented in this session focus on a heterogeneous group of diseases, including autoimmune and inflammatory diseases occurring in the nervous system, endocrine system, digestive system, skin, etc. Various studies using human specimens and animal models will be presented to clarify the immunopathogenesis underlying these diseases, and these methods and findings will be useful for developing new research in other fields as well. We hope that all participants have an active discussion in both oral and poster presentation and that this session will provide insights into understanding disease mechanisms.

WS20-01-O/P

Neutrophil-derived IL-23 p19 monomer suppresses type 17 immunity

◯ Daiya Ohara, Yusuke Takeuchi, Yoonha Lee, Hiroki Mukoyama, Hitomi Watanabe, Gen Kondoh, Keiji Hirota

Institute for Life And Medical Sciences, Kyoto University

WS20-02-O/P

Th1-type Tregs induced by interferon-γ limit EAE exacerbation

◯ Masaaki Okamoto[1)], Naganori Kamiyama[4)], Takashi Kobayashi[4,5)], Masahiro Yamamoto[1,2,3)]

[1)]Department of Immunoparasitology, Research Institute for Microbial Diseases, Osaka University, [2)]Laboratory of Immunoparasitology, WPI Immunology Frontier Research Center, Osaka University, [3)]Department of Immunoparasitology, Center for Infectious Disease Education and Research, Osaka University, [4)]Department of Infectious Disease Control, Faculty of Medicine, Oita University, [5)]Research Center for GLOBAL and LOCAL Infectious Diseases, Oita University

WS20-03-O/P

Stage-dependent dynamics of resident memory T cells in lesion sites of multiple sclerosis and neuromyelitis optica spectrum disorders

◯ Fumihiro Yanagimura[1,5)], Akihiro Nakajima[1)], Etsuji Saji[1)], Takashi Nakajima[5)], Hiroshi Shimizu[2)], Yasuko Toyoshima[2,7)], Hitoshi Takahashi[6,8)], Akiyoshi Kakita[2)], Masatoyo Nishizawa[4,8)], Osamu Onodera[1)], Izumi Kawachi[1,3)]

[1)]Department of Neurology, Brain Research Institute, Niigata University, [2)]Department of Pathology, Brain Research Institute, Niigata University, [3)]Medical Education Center, Niigata University School of Medicine, [4)]Niigata University of Health and Welfare, [5)]Department of Neurology, NHO Niigata National Hospital, [6)]Niigata Neurosurgical Hospital, [7)]Agano Hospital, [8)]Brain Research Institute, Niigata University

WS20-04-O/P

Ketogenic diet regulates autoimmune neuroinflammation via changes in small intestinal gut microbiome

◯ Katsuki Yaguchi[1,2)], Tadashi Takeuchi[1,3)], Eiji Miyauchi[1,4)], Masami Kawasumi[1)], Yumiko Nakanishi[1)], Tamotsu Kato[1)], Jigen Sekine[1)], Shin Maeda[2)], Hiroshi Ohno[1,5)]

[1)]Laboratory for Intestinal Ecosystem, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan., [2)]Department of Gastroenterology, Graduate School of Medicine, Yokohama City University, Yokohama, Japan., [3)]Department of Microbiology and Immunology, Stanford University School of Medicine, California, USA., [4)]Institute for Molecular and Cellular Regulation, Gunma University, Maebashi, Japan., [5)]Immunobiology Laboratory, Department of Medical Life Science, Graduate School of Medical Life Science, Yokohama City University, Yokohama, Japan.

WS20-05-O/P

***Akkermansia muciniphila* endorses T cell pathogenicity and invasion to CNS in experimental autoimmune encephalomyelitis**

◯ Manu Mallahalli Shanthappa[1)], Hirohiko Hohjoh[2)], Daiki Takewaki[1)], Shinji Oki[1)], Wakiro Sato[1)], Takashi Yamamura[1)]

[1)]Department of Immunology, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Ogawahigashicho, Kodaira, Tokyo., [2)]Department of Molecular Pharmacology, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Ogawahigashicho, Kodaira, Tokyo

WS20-10-O/P

CXCL13 producing peripheral helper T cell (Tph) is a crucial pathogenesis in Castleman disease (iMCD)

◯ Kazuyuki Yoshizaki[1)], Yoshikane Kikushige[2)], Takuya Harada[2)], Hiroaki Niiro[2)], Kazuko Uno[3)], Atsushi Kawakami[4)], Tomohiro Koga[4)]

[1)]Osaka Univ., [2)]Kyushu Univ., [3)]Louis Pasteur Center for Medical Research, [4)]Nagasaki University

WS20-12-O/P

Identification of *PTPN2* as a population-specific susceptibility locus for primary biliary cholangitis through genome-wide association study

◯ Yuki Hitomi[1)], Yoshihiro Aiba[2)], Kazuyoshi Ishigaki[3)], Minoru Nakamura[2,4,5)]

[1)]Department of Human Genetics, Research Institute, National Center for Global Health and Medicine, [2)]Clinical Research Center, NHO Nagasaki Medical Center, [3)]Laboratory for Human Immunogenetics, RIKEN Center for Integrative Medical Sciences, [4)]Division of Biomedical Information Analysis, Medical Institute of Bioregulation, Kyushu University, [5)]Department of Hepatology, Nagasaki University Graduate School of Biomedical Sciences

WS20-15-O/P

Development of novel therapy targeting gut microbiota for primary sclerosing cholangitis

◯ Haruka Okada[1)], Masataka Ichikawa[2)], Nobuhiro Nakamoto[1)], Takanori Kanai[1)]

[1)]Division of Gastroenterology & Hepatology, Department of Internal Medicine, Keio University School of Medicine, [2)]Division of Gastroenterology, Tokyo Dental College Ichikawa General Hospital

WS21 Granulocytes and Mast cells in homeostasis and diseases

15:10 ~ 16:25 Room G

Chairpersons: Hisako Kayama, Sujin Kang

Granulocytes derived from myeloid lineage, including neutrophils, basophils, eosinophils, together with mast cells function as kye players under several inflammatory conditions through exerting immunomodulatory activities. In this session, we highlight the roles of granulocytes and mast cells in infection, sepsis, and tissue (liver, lung, and skin) inflammation. We hope that all participants have an active discussion in this session. (7 min for presentation and 3 min for discussion)

WS21-01-O/P

IL-27 signaling promotes peanut-specific IgE production

◯ Jun Kasamatsu[1)], Hiroki Yoshida[2)], Hiromitsu Hara[1)]

[1)]Kagoshima University, [2)]Saga University

WS21-03-O/P

RNA-binding protein tristetraprolin negatively regulates pro-inflammatory mediator production in basophils via mRNA degradation

◯ Junya Ito[1,2)], Kensuke Miyake[1)], Tomoki Chiba[2)], Hajime Karasuyama[1)], Hiroshi Asahara[2)]

[1)]Institute of Research, Tokyo Medical and Dental University (TMDU), [2)]Department of Systems BioMedicine, Tokyo Medical and Dental University (TMDU)

WS21-04-O/P

Basophils are crucial for the resolution of lung inflammation in acute respiratory distress syndrome

◯ Kensuke Miyake[1)], Seiko Takasawa[1,2)], Tomoya Tateishi[2)], Jun Sugihara[2)], Junya Ito[1)], Hajime Karasuyama[1)], Yasunari Miyazaki[2)]

[1)]Institute of Research, Tokyo Medical and Dental University (TMDU), [2)]Department of Respiratory Medicine, Tokyo Medical and Dental University (TMDU)

WS21-05-O/P

Neutrophils are composed on heterogeneous subsets in Human Liver

◯ Lynn Zreka[1)], Hajime Morita[1)], Toshiaki Bando[1)], Shuhe Ma[1,2)], Mouna Khan[1)], Daichi Akuzawa[1)], Yuki Masuo[1)], Shunsuke Uno[1)], Hirotaka Sato[1)], Hideki Ueno[1,2)]

[1)]Dept. of Immunology, Graduate School of Medicine, Kyoto University, Kyoto, Japan, [2)]Immunology Group, Institute for the Advanced Study of Human Biology (ASHBi), KUIAS Kyoto University, Kyoto, Japan

WS21-06-O/P

Interferon-γ recruits immature neutrophils to suppress acute inflammation during polymicrobial sepsis in mice

◯ Kenshiro Matsuda, Akira Shibuya

University of Tsukuba

WS21-07-O/P

Deficiency of the antioxidant stress response master transcription factor Nrf2 ameliorates IgE-induced anaphylaxis in mice by suppressing IgE-dependent activation of mast cells

◯ Sakura Noguchi, Kazuki Nagata, Tsubasa Ashikari, Chiharu Nishiyama

Department of Biological Science and Technology, Faculty of Advanced Engineering, Tokyo University of Science

WS21-08-O/P

Neuronal substance P-driven MRGPRX2-dependent mast cell degranulation products histamine and chymase differentially promote vascular permeability

◯ Ayako Kaitani[1)], Masakazu Nagamine[1)], Kumi Izawa[1)], Tomoaki Ando[1)], Akihisa Yoshikawa[1,2)], Akie Maehara[1)], Naoko Negishi[1)], Nobuhiro Nakano[1)], Ko Okumura[1)], Jiro Kitaura[1)]

[1)]Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, [2)]Department of Otorhinolaryngology, Juntendo University Graduate School of Medicine

WS22 New molecular and cellular mechanisms in cancer immunology 15:10 ~ 16:25 Room H

Chairpersons: Yoshihiro Hayakawa, Naoko Ohtani

The aim of this session is to highlight groundbreaking discoveries in the molecular and cellular dynamics of cancer immunology. By focusing on the identification and study of novel immune mechanisms, this session aims to pave the way for new therapeutic targets that can better modulate immune responses in cancer.

WS22-01-O/P

Satb1 maintains the functionality of regulatory and cytotoxic T cells during tumor responses

◯ Wooseok Seo[1,2)], Chengcheng Zou[2)], Kanako Shimizu[2)], Ruka Setoguchi[3)], Kiyokazu Kakugawa[2)], Krutula Nair[2)], Haruhiko Koseki[2)], Terumi Kohwi-Shigematsu[4)], Shohei Hori[3)], Shin-ichiro Fujii[2)], Hiroyoshi Nishikawa[1)], Ichiro Taniuchi[2)]

[1)]Nagoya University / Dep. of Immunology, [2)]RIKEN, [3)]University of Tokyo, [4)]University of California

WS22-08-O/P

T cell exhaustion steps according to mitochondrial status and the analysis of their glycolytic function

◯ Koji Kitaoka[1)], Yasuharu Haku[1)], Tomonori Yaguchi[1,2)], Tasuku Honjo[1)], Kenji Chamoto[1,2)]

[1)]Center for Cancer Immunotherapy and Immunobiology Graduate School of Medicine Kyoto University, [2)]Department of Immuno-Oncology PDT, Graduate School of Medicine Kyoto University

WS22-10-O/P

A novel pro-tumourigenic mechanism of Ex-Regs in cancer

◯ Qiao Gou[1)], Hiroyuki Takaba[1)], Daizo Koinuma[2)], Kohei Miyazono[2,3)], Hiroshi Takayanagi[1)]

[1)]Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, [2)]Department of Molecular Pathology, Graduate School of Medicine, The University of Tokyo, [3)]Department of Applied Pathology, Graduate School of Medicine, The University of Tokyo

WS22-13-O/P

Establishment of monoclonal antibodies derived from tumor-infiltrating B cells for cancer therapeutic application

◯ Tsubasa Kobayashi[1)], Toshihiro Suzuki[2)], Tetsuya Nakatsura[2)], Daisuke Kitamura[1)]

[1)]Research Institute for Biomedical Sciences, Tokyo University of Science, [2)]Division of Cancer Immunotherapy, EPOC, National Cancer Center

WS22-15-O/P

Impacts of tumor-derived DCs on the thymus function

◯ Yangsong Wang, Ichita Hasegawa, Yukihiro Endo, Ryo Nasu, Motoko Kimura

Chiba University

WS22-24-O/P

Deletion of the endoribonuclease Regnase-1 unleashes NK cell anti-tumor activity via OCT2-dependent transcription of *Ifng*

◯ Yasuharu Nagahama[1,2)], Shizuo Akira[1,3,4)]

[1)]Laboratory of Host Defense, WPI Immunology Frontier Research Center, Osaka University, [2)]Host Defense Laboratory, Immunology Unit, Osaka Research Center for Drug Discovery, Otsuka Pharmaceutical Co., Ltd., [3)]Center for Advanced Modalities and Drug Delivery System, Osaka University, [4)]Department of Host Defense, Research Institute for Microbial Diseases, Osaka University

WS22-27-O/P

Fibroblastic reticular cell-derived CXCL12 controls immunosuppression in tumor-draining lymph nodes

◯ Yasuhiro Kanda[1)], Madoka Ozawa[1)], Takashi Nagasawa[2)], Tomoya Katakai[1)]

[1)]Department of Immunology, Niigata University Graduate School of Medical and Dental Sciences, [2)]Laboratory of Stem Cell Biology & Developmental Immunology, Graduate School of Frontier Biosciences, Osaka University

WS22-28-O/P

LPS promotes mast cells induced fibrosis in cancer tissue by increasing CXCL8 and CCL19 expression

◯ Xiangmei Zhang[1)], Jidong Zhao[2)], Baoen Shan[1)]

[1)]Hebei Provincial Cancer Institute, Fourth Hospital of Hebei Medical University, Shijiazhuang 050011, China, [2)]Department of Thoracic Surgery, Fourth Hospital of Hebei Medical University, Shijiazhuang 050011, China

WS23 T cell regulation in host defense and disease

12:50 ~ 14:05 Room B

Chairpersons: Shinya Tanaka, Noriko Komatsu

T cells play a central role in the regulation of host defense and disease by being activated and differentiated in peripheral tissues. These processes are regulated by various molecular mechanisms, which depend on the surrounding environment. In this session, we will discuss the latest advances in understanding the molecular mechanisms of T cell regulation under different environmental context. Additionally, this session will cover insights gained not only from rodent models but also from human samples and non-human primate models for more comprehensive understanding of the biological phenomena involving T cells. The session consists of 19 presentations, including 7 oral presentations (8-minute talks followed by 2 minutes of discussion) and 12 poster presentations, and we look forward to active discussions by the participants.

WS23-01-O/P

CD7 Deficiency Impairs T Cell Activation, Differentiation, and Survival

◯ Tristan Yoder, Wan-Lin Lo
University of Utah

WS23-02-O/P

Role of TFH and IL-4 signal in Boost-vaccination with SARS-CoV-2 spike protein

◯ Jumana Khalil[1,2)], Yuichiro Yamamoto[3)], Kohji Noguchi[3)], Rina Hashimoto[4)], Kazuo Takayama[4)], Masato Kubo[2,5)]
[1)]Kyoto University, Graduate School of Medicine, Department of Immunology, [2)]Tokyo University of Science, Division of Molecular Pathology, Research Institute for Biomedical Science, [3)]Tokyo University of Science, Department of Pharmaceutical Sciences, Faculty of Pharmaceutical Sciences, [4)]Kyoto University, Center for iPS Cell Research and Application, [5)]RIKEN, Laboratory for Cytokine Regulation, Center for Integrative Medical Sciences

WS23-03-O/P

MyD88 and IL-2 control memory T helper cell formation

◯ Kokoro Ohki[1)], Shintaro Hojyo[2)], Mei Sakagami[1)], Koji Tokoyoda[1)]
[1)]Division of Immunology, School of Life Science, Faculty of Medicine, Tottori University, Yonago, Japan, [2)]Division of Molecular Psychoimmunology, Institute for Genetic Medicine, Hokkaido University, Sapporo, Japan

WS23-04-O/P

Induction of cytotoxic CNS-associated Eomes-expressing Th cells via upregulation of type I interferon

◯ Tzuwen Yeh[1)], Fumio Takahashi[1)], Marco Prinz[2)], Takashi Yamamura[1)], Shinji Oki[1)]
[1)]National Center of Neurology and Psychiatry, [2)]Institute of Neuropathology, University of Freiburg, Freiburg, Germany

WS23-05-O/P

Co-expression of CD276 and Lag3 are cell surface markers for functional cytotoxic CD4 T cells in humans

◯ Yumi Tamura, Shun Ohki, Yohei Kawano, Rin Yoshizato, Haruna Nagai, Shizuki Nishi, Yuqi Jin, Yasuo Kitajima, Yun Guo, Tomoharu Yasuda
Department of Immunology, Graduate School of Biomedical & Health Sciences, Hiroshima University

WS23-06-O/P

Macaque IL-10-producing CD4 CD8 double positive T cells in the peripheral blood exhibit memory phenotype and increase with age

◯ Ryota Takahashi, Hirohito Ishigaki, Yasushi Itoh
Shiga Univ. of Med. Sci., Dept. of Pathology, Dev. of Pathogenesis and Disease Regulation

WS23-07-O/P

Age-related changes of naïve T cell function in a non-human primate model

◯ Yoshinori Okina[1)], Shokichi Takahama[1)], Takuto Nogimori[1)], Yasuhiro Yasutomi[2)], Takuya Yamamoto[1,3,4)]
[1)]Laboratory of Precision Immunology, Center for Intractable Diseases and ImmunoGenomics, National Institutes of Biomedical Innovation, Health and Nutrition, [2)]Laboratory of Immunoregulation and Vaccine Research, Tsukuba Primate Research Center, National Institutes of Biomedical Innovation, Health and Nutrition, [3)]Laboratory of Aging and Immune Regulation, Graduate School of Pharmaceutical Sciences, Osaka University, [4)]Department of Virology and Immunology, Graduate School of Medicine, Osaka University

WS24 Dendritic cells: Molecular basis for regulation of their differentiation, activation, and function 12:50 ~ 14:05 Room C

Chairpersons: Hisako Kayama, Sujin Kang

Dendritic cells (DCs), which are present in almost every tissue of the body, can be divided into three main subsets, such as conventional DCs, plasmacytoid DCs, and monocyte-derived DCs. Our understanding of the functional specializations and development of distinct DC subsets has increased in recent years. This session will highlight the mechanisms regulating differentiation, activation, and function of DCs during infection and disease formation. We hope that all participants have an active discussion in this session. (7 min for presentation and 3 min for discussion)

WS24-02-O/P

The role of splenic CD8α$^+$CD103$^+$ cDC1 in the maintenance of immune homeostasis

◯ Junko Morimoto[1)], Hiroyuki Kondo[1)], Rinka Okahisa[1)], Li Hui[1)], Daisuke Kurotaki[2)], Koji Yasutomo[1)]

[1)]Department of Immunology and Parasitology, Graduate School of Medicine, Tokushima University, [2)]Laboratory of Chromatin Organization in Immune Cell Development, International Research Center for Medical Sciences, Kumamoto University

WS24-04-O/P

SIRPα promotes the survival of cDC2s by preventing their activation and induction of an nuclear receptor family protein

◯ Satomi Komori[1,2)], Takenori Kotani[2)], Yoji Murata[2)], Takashi Matozaki[1,2)], Yasuyuki Saito[2)]

[1)]Division of Biosignal Regulation, Department of Biochemistry and Molecular Biology, Kobe University Graduate School of Medicine, [2)]Division of Molecular and Cellular Signaling, Department of Biochemistry and Molecular Biology, Kobe University Graduate School of Medicine

WS24-08-O/P

Morphological abnormalities of induced pluripotent stem cell-derived dendritic cells (iPSC-derived DCs) in MIRAGE syndrome with *SAMD9* mutation

◯ Hidetoshi Hagiwara[1)], Masataka Ito[2)], Kanako Mitsui-Sekinaka[1)], Kunihiko Moriya[1)], Yujin Sekinaka[1)], Yuri Kawasaki[3)], Yohko Kitagawa[3)], Kanako Tanase-Nakao[4)], Satoshi Narumi[5)], Megumu K. Saito[3)], Shigeaki Nonoyama[1)], Kohsuke Imai[1)]

[1)]Department of Pediatrics, National Defense Medical College, [2)]Department of Developmental Anatomy and Regenerative Biology, National Defense Medical College, [3)]Department of Clinical Application, Center for iPS Cell Research and Application, Kyoto University, [4)]Department of Molecular Endocrinology, National Center for Child Health and Development, [5)]Department of Pediatrics, Keio University School of Medicine

WS24-09-O/P

The role of mitochondria damage in Imiquimod-induced psoriasis

◯ Daisuke Ori[1)], Haruna Okude[1)], Riko Konishi[1)], Takumi Kawasaki[2)], Taro Kawai[1,3)]

[1)]Laboratory of Molecular Immunobiology, Division of Biological Science, Nara Institute of Science and Technology, [2)]Department of Immune Dynamics in Viral Infections, National Research Center for the Control and Prevention of Infectious Diseases, Nagasaki University, [3)]Life Science Collaboration Center (LiSCo), Nara Institute of Science and Technology (NAIST)

WS24-10-O/P

STAT1 binding element in the *Irf8* promoter is required for inducing a distinct inflammatory dendritic state during intracellular pathogen infection

◯ Kenta Kikuchi[1)], Wataru Kawase[2)], Yusuke Tsujimura[3)], Fuki Kudo[4)], Keita Saeki[4)], Takayuki Yoshimoto[5)], Manabu Ato[3)], Keiko Ozato[4)], Tomohiko Tamura[2)], Daisuke Kurotaki[1)]

[1)]Laboratory of Chromatin Organization in Immune Cell Development, International Research Center for Medical Sciences (IRCMS), Kumamoto University, [2)]Department of Immunology, Yokohama City University Graduate School of Medicine, [3)]Department of Mycobacteriology, Leprosy Research Center, National Institute of Infectious Diseases, [4)]Program in Genomics of Differentiation, Eunice Kennedy Shriver National Institute of Child Health and Human Development, [5)]Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University

WS24-11-O/P

Genetic ablation of the protein tyrosine phosphatase Shp1 in CD11c$^+$ cells improves insulin resistance

◯ Yoichi Imai[1)], Yoriaki Kaneko[1)], Masato Kinoshita[1)], Junya Suwa[1)], Mitsuharu Watanabe[2)], Yasuyuki Saito[3)], Hiroshi Ohnishi[4)], Takashi Matozaki[3)], Keiju Hiromura[1)]

[1)]Gunma University Graduate School of Medicine Department pf Nephrology and Rheumatology, [2)]NHO Takasaki General Medical Center Department of Nephrology and Rheumatology, [3)]Department of Biochemistry and Molecular Biology, Kobe University Graduate School of Medicine, [4)]Department of Laboratory Scineces, Gunma University Graduate School of Healthe Sciences

WS24-15-O/P

Identification of CIITA degron and ubiquitination site by FBXO11

◯ Yusuke Kasuga[1,3)], Royota Ouda[1)], Masashi Watanabe[2)], Xin Sun[1)], Miki Kimura[1)], Atsuki Takeishi[1,3)], Tsutomu Tanaka[1,3)], Shigetsugu Hatakeyama[2)], Koichi Kobayashi[1,3)]

[1)]Department of Immunology, Faculty of Medicine, Hokkaido University, [2)]Department of Biochemistry, Faculty of Medicine, Hokkaido University, [3)]Hokkaido University Institute for Vaccine Research and Development

WS25 B cell homeostasis

12:50 ~ 14:05 Room D

Chairpersons: Yoshihiro Baba, Koji Tokoyoda

B cells control humoral immunity together with helper T cells and themselves differentiate into plasma cells secreting one of the strongest weapons to pathogen, antibodies. Despite playing a key role in humoral immunity, it still remains unclear how B cells and plasma cells are generated and maintained in the body. We here discuss the lifestyle of B cells and plasma cells, in particular, the transcriptional regulators of B-lineage commitment and the dynamics of B cells and plasma cells during protective and pathological immune responses.

WS25-01-O/P

The trinity of transcription factors E2A, Ebf1 and Erg guides lymphoid progenitors to B cell lineage

◯ Rinako Hayashi[1)], Reiko Hidaka[1)], Kazuko Miyazaki[1)], Takashi Nagasawa[2)], Hiroshi Kawamoto[1)], Masaki Miyazaki[1)]

[1)]Institute for Life and Medical Sciences, Kyoto University, [2)]Graduate School of Frontier Biosciences, Osaka University

WS25-02-O/P

Critical roles of UPF1 in early B cell development

◯ Kotaro Akaki, Noriki Iwai, Takashi Mino, Osamu Takeuchi

Department of Medical Chemistry, Graduate School of Medicine, Kyoto University

WS25-03-O/P

Self-enforcing networks of inflammatory cytokine signaling accelerate the development and recurrence of *TCF3::HLF*-positive B-ALL

◯ Aisa Suzuki, Tsukasa Shigehiro, Tomokatsu Ikawa

Research Institutes for Biomedical Sciences ,Tokyo University of Science

WS25-04-O/P

Essential role of ER membrane complex subunit 1 (EMC1) in B cell homing and humoral immunity

◯ Kazuhiko Kawata[1)], Chie Kikutake[2)], Mikita Suyama[2)], Yoshihiro Baba[1)]

[1)]Division of Immunology and Genome Biology, Medical Institute of Bioregulation, Kyushu University, [2)]Medical Institute of Bioregulation, Bioinformatics, Kyushu University, Japan

WS25-05-O/P

Control of IgE production and germinal center B cell survival by Aps/Sh2b2, a member of Lnk-family adaptor proteins

◯ Shinya Hidano[1)], Masanori Iseki[2)], Satoshi Takaki[1)]

[1)]Department of Immune Regulation, The Research Center for Hepatitis and Immunology, Research Institute, National Center for Global Health and Medicine, [2)]Department of Immunology and Molecular Genetics, Kawasaki Medical School

WS25-06-O/P

The J chain acts as a critical regulator for intestinal IgA^{+} plasma cell differentiation before weaning

◯ Ryo Goitsuka[1)], Keiko Fujisaki[2)]

[1)]Research Institute for Biomedical Sciences, Tokyo University of Science, [2)]Laboratory for Lymphocyte Differentiation, RIKEN Center for Integrative Medical Sciences

WS25-07-O/P

Atypical and non-classical CD45RB^{lo} memory B cells are the majority of circulating SARS-CoV-2 specific B cells following mRNA vaccination or COVID-19

◯ David Geoffrey Priest[1)], Takeshi Ebihara[2,3)], Janyerkye Tulyeu[4)], Jonas N. Søndergaard[4)], Yumi Mitsuyama[3)], Hisatake Matsumoto[2,3)], James B. Wing[1,4,5)]

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WS25-08-O/P

The COMMD3/8 complex drives plasmablast differentiation of age-associated B cells during extrafollicular responses in lupus

◯ Taiichiro Shirai[1,2)], Kentaro Kuzuya[1)], Kazuhiro Suzuki[1,2,3)]

[1)]Laboratory of Immune Response Dynamics, Immunology Frontier Research Center, Osaka University, Japan, [2)]Department of Immune Response Dynamics, Research Institute for Microbial Diseases, Osaka University, Japan, [3)]Center for Infectious Disease Education and Research, Osaka University, Japan

WS26 Systemic Immune Diseases

12:50 ~ 14:05 Room E

Chairpersons: Hirofumi Shoda, Yohei Kirino

This session will present the latest research findings in systemic immune diseases, including systemic lupus erythematosus, Sjogren's syndrome, vasculitis, and systemic inflammatory diseases. In order to develop new treatments for these diseases, it is necessary to clarify the underlying pathogenesis of the diseases. In this regard, studies of human diseases and animal models using traditional and comprehensive omics approaches, which will be presented in this session, will be of great help. We hope that all participants have an active discussion in both oral and poster presentation and that this session will provide insights into understanding disease mechanisms.

WS26-01-O/P

Multimodal single-cell analysis revealed B cell receptor dynamic change in systemic lupus erythematosus

◯ Toshiyuki Shiki Ushijima[1)], Hiroyuki Teruya[1)], Manaka Goto[1)], Hideyuki Takahashi[1)], Takahiro Itamiya[1,2)], Haruka Tsuchiya[1)], Hirofumi Shoda[1)], Tomohisa Okamura[1,2)], Keishi Fujio[1)]

[1)]Department of Allergy and Rheumatology, Graduate School of Medicine, The University of Tokyo, [2)]Department of Functional Genomics and Immunological Diseases, Graduate School of Medicine, The University of Tokyo

WS26-03-O/P

The B cell inhibitory receptor CD72 is a novel C1q receptor that prevents development of SLE by inhibiting B cell response to apoptotic cells

◯ Hashadi Nadeesha Walakulu Gamage[1,2,3)], Chizuru Akatsu[2)], Nobutaka Numoto[1)], Takahiro Tsuneshige[1,2,3)], Masatake Asano[3)], Nobutoshi Ito[1)], Takeshi Tsubata[1,2,3)]

[1)]Department of Structural Biology, Medical Research Institute, Tokyo Medical and Dental University, [2)]Department of Immunology, Medical Research Institute, Tokyo Medical and Dental University, [3)]Department of Pathology, Nihon University School of Dentistry

WS26-04-O/P

New quantitative and qualitative analytical framework of scRNAseq data reveals the pathophysiology of systemic lupus erythematosus

◯ Masahiro Nakano[1)], Michihiro Kono[1,2)], Hiroaki Hatano[1)], Kenichiro Asahara[1)], Takahiro Nishino[1)], Haruka Takahashi[1,2)], Bunki Natsumoto[1)], Kazuyoshi Ishigaki[1,2,3)]

[1)]Laboratory for Human Immunogenetics, Riken Center for Integrative Medical Sciences, [2)]Department of Microbiology and Immunology, Keio University School of Medicine, [3)]Keio University Human Biology-Microbiome-Quantum Research Center (WPI-Bio2Q)

WS26-06-O/P

Development of the anti-human TLR7 monoclonal antibody for therapeutic intervention in systemic lupus erythematosus

◯ Ryutaro Fukui[1)], Yusuke Murakami[2,1)], Atsuo Kanno[1)], Yuji Motoi[1)], Atsushi Manno[4)], Tomohiro Honda[5)], Shinnosuke Yamada[5)], Jun Ishiguro[6)], Kensuke Nakamura[7)], Giorgio Senaldi[8)], Toshiyuki Shimizu[3)], Kensuke Miyake[1)]

[1)]The Institute of Medical Science, The University of Tokyo, [2)]Department of Pharmaceutical Sciences & Research Institute of Pharmaceutical Sciences, Musashino University, [3)]Graduate School of Pharmaceutical Sciences, The University of Tokyo, [4)]Discovery Research Laboratories II, Daiichi Sankyo Co., Ltd., [5)]Translational Science Department II, Daiichi Sankyo Co., Ltd., [6)]Discovery Research Laboratories V, Daiichi Sankyo Co., Ltd., [7)]Modality Research Laboratories II, Daiichi Sankyo Co., Ltd., [8)]Clinical development, Daiichi Sankyo, Inc.

WS26-14-O/P

Salivary gland fibroblasts drive autoimmune pathology via the interaction with CD4$^+$T cells in Sjögren's syndrome

◯ Kunihiro Otsuka[1,2)], Hiroyuki Kondo[1)], Shin-Ichi Tsukumo[1)], Naozumi Ishimaru[3)], Koji Yasutomo[1)]

[1)]Department of Immunology and Parasitology, Graduate School of Medicine, Tokushima University, [2)]Department of Oral Molecular Pathology, Graduate School of Dentistry, Tokushima University, [3)]Department of Oral Pathology, Tokyo Medical and Dental University Graduate School of Medical and Dental Sciences

WS26-17-O/P

Anti-integrin αvβ6 antibody in Takayasu arteritis with or without ulcerative colitis

◯ Yuki Ishikawa[1)], Hiroyuki Yoshida[2,3)], Hajime Yoshifuji[4)], Koichiro Ohmura[4,5)], Tomoki Origuchi[6)], Tomonori Ishii[7)], Tsuneyo Mimori[4,8)], Akio Morinobu[4)], Masahiro Shiokawa[2)], Chikashi Terao[1,9,10)]

[1)]Laboratory for Statistical and Translational Genetics, Center for Integrative Medical Sciences, RIKEN, [2)]Department of Gastroenterology and Hepatology, Kyoto University Graduate School of Medicine, [3)]Kansai Electric Power Hospital, [4)]Department of Rheumatology and Clinical Immunology, Graduate School of Medicine, Kyoto University, [5)]Department of Rheumatology, Kobe City Medical Center General Hospital, [6)] Department of Immunology and Rheumatology, Unit of Advanced Preventive Medical Sciences, Nagasaki University Graduate School of Biomedical Sciences, [7)]Department of Hematology and Rheumatology, Tohoku Medical and Pharmaceutical University, [8)]Takeda Clinic for Rheumatic Diseases, [9)]Clinical Research Center, Shizuoka General Hospital, [10)]School of Pharmaceutical Sciences, University of Shizuoka, The Department of Applied Genetics

WS26-18-O/P

Unravelling the gene regulatory networks driving the polygenetic risk of human complex diseases

◯ Haruka Takahashi[1,2)], Hiroaki Hatano[2)], Masahiro Nakano[2)], Yumi Tsuchida[3)], Shuji Sumitomo[3)], Akari Suzuki[4)], Yuta Kochi[5)], Keishi Fujio[3)], Kazuhiko Yamamoto[4)], Kazuyoshi Ishigaki[1,2,6)]

[1)]Department of Microbiology and Immunology, Keio University School of Medicine, [2)]Laboratory for Human Immunogenetics, Riken Center for Integrative Medical Sciences, [3)]Department of Allergy and Rheumatology, Graduate School of Medicine, The University of Tokyo, [4)]Laboratory for Autoimmune Diseases, Riken Center for Integrative Medical Sciences, [5)]Department of Genomic Function and Diversity, Division of Biological Data Science, Medical Research Institute, Tokyo Medical and Dental University, [6)]Keio University Human Biology-Microbiome-Quantum Research Center (WPI-Bio2Q)

WS26-25-O/P

Novel transcriptomic evidence for a shared immunological signature-based treatment of Adult-onset Still's disease and other autoinflammatory diseases

◯ Ikuo Takazawa[1)], Haruka Tsuchiya[1)], Takahiro Itamiya[1,2)], Harumi Shirai[1)], Yumi Tsuchida[1)], Yasuo Nagafuchi[1,2)], Hirofumi Shoda[1)], Tomohisa Okamura[1,2)], Keishi Fujio[1)]

[1)]Department of Allergy and Rheumatology, Graduate School of Medicine, The University of Tokyo, [2)]Department of Functional Genomics and Immunological Diseases, Graduate School of Medicine, The University of Tokyo

WS26-26-O/P

Isoliquiritigenin inhibits activation of NLRP3 inflammasome with CAPS mutations by suppressing caspase-1 activation and mutant NLRP3 aggregation

◯ Koudai Kani[1)], Hiroe Honda[2)], Kiyoshi Takatsu[2)], Yoshinori Nagai[1)]

[1)]Department of Pharmaceutical Engineering, Faculty of Engineering, Toyama Prefectural University, [2)]Toyama Prefectural Institute for Pharmaceutical Research

WS27 Tolerance and immune suppression for disease control

12:50 ~ 14:05 Room F

Chairpersons: Tomonori Yaguchi, Maiko Sumikawa-Hajime

This workshop aims to discuss breakthroughs in immune tolerance and suppression, focusing on therapies for autoimmune diseases, transplants, and cancer. Key discussions highlight how regulatory T cells and other immune suppressive mechanisms contribute to tissue repair, disease remission, and successful transplantation. Novel conditioning methods, such as targeted irradiation, drug development and regulatory T cell induction, and stem cell modulation, can potentially reduce immune system attacks on vital tissues. In cancer research topic, we discuss the immune suppressive T cells to induce suppressive dendritic cells in tumor microenvironment. These developments offer new pathways for therapies that could improve outcomes in immune-related diseases by harnessing the body's natural regulatory mechanisms to achieve immune balance and prevent harmful immune reactions.

WS27-01-O/P

Orally induced tolerance of DTH depends on the inhibition of sensitization in skin-dLNs by integrin α4β7^{+} T cells derived from mesenteric LNs

◯ Arisa Akagi[1)], Rintaro Shibuya[2)], Sho Hanakawa[3)], Akihiko Kitoh[1)], Kenji Kabashima[1,3)]

[1)]Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, [2)]Kimberly and Eric J. Waldman Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York City, NY, United States, [3)]Skin Research Labs, Agency for Science, Technology and Research (A*STAR), Republic of Singapore

WS27-02-O/P

Neural repair and suppression of progression via modulation of microglia by tissue effector Tregs that maintain remission in experimental autoimmune encephalomyelitis

◯ Youwei Lin[1,2)], Takashi Yamamura[1)]

[1)]Department of Immunology, National Institute of Neuroscience, National Center of Neurology and Psychiatry, [2)]Department of Neurology, National Center Hospital, National Center of Neurology and Psychiatry

WS27-03-O/P

Irradiation conditioning with head shielding protects allogeneic recipients against acute graft-versus-host disease

◯ Ismael Chatita Adolf[1)], Sayuri Nakata[1)], Takanori Teshima[2)], Hitoshi Takizawa[1,3)]

[1)]Laboratory of Stem Cell Stress, International Research Center for Medical Sciences, Kumamoto Univ, Kumamoto, [2)]Department of Hematology, Hokkaido Univ Graduate School of Medicine, Sapporo, [3)]Center for Metabolic Regulation of Healthy Aging (CMHA), Kumamoto Univ, Kumamoto

WS27-04-O/P

Both the increased expression of PD-1 and the production of humoral factors in stem cells from human exfoliated deciduous teeth reduce the damaging effects of peripheral blood mononuclear cells on human insulin-producing cells

◯ Kenta Iwasaki

Department of Kidney disease and Transplant Immunology, Aichi Medical University School of Medicine

WS27-05-O/P

iPSCs engrafted in allogeneic hosts without immunosuppression induce donor-specific tolerance to secondary allografts

◯ Tomoki Kamatani[1)], Reiko Kimura[1)], Satoshi Ikeda[2)], Makoto Inoue[2)], Ken-ichiro Seino[1)]

[1)]Hokkaido Univ., [2)]Sumitomo Pharma, Co., Ltd.

WS27-06-O/P

Disulfiram treatment inhibits antibody-mediated transplant rejection by suppressing macrophage activation and B-cell pyrimidine metabolism

◯ Etsuko Toda[1,2)], Weili Chen[1)], Kazuhiro Takeuchi[3,1)], Shinobu Kunugi[1)], Mika Terasaki[1)], Yasuhiro Terasaki[1)], Yuya Terashima[2)], Akira Shimizu[1)]

[1)]Nippon Medical School, [2)]Tokyo University of Science, [3)]Kagoshima Univ.

WS27-07-O/P

Targeting High CD86 Expression in CD8 T Cells to Enhance Antitumor Immunity in the Tumor Microenvironment

◯ Xin Hu[1)], Yifang Shui[1,2)], Weitao Que[1)], Yixian Fan[1)], Masayuki Fujino[1,3)], Xiao-Kang Li[1)]

[1)]National Research Institute for Child Health and Development, [2)]The First Affiliated Hospital of Zhengzhou University, [3)]National Institute of Infectious Diseases

WS28 Cytokines and chemokines

12:50 ~ 14:05 Room G

Chairpersons: Shinobu Saijo, Takumi Maruhashi

Cytokines and chemokines play a central role in orchestrating the immune system. They are secreted by various immune cells and maintain homeostasis, repair tissue, and promote and converge inflammation through the receptors. Recent development of antibodies and small molecule compounds that inhibit these functions is remarkable, however, there are still a lot of basic findings that are expected to be applied in clinical practice. Therefore, we aim to discuss the cutting-edge findings of the diverse features of cytokines and chemokines in both health and disease conditions in this session.

WS28-01-O/P

Role of intrathrombotic CX3CR1-CX3CL1 axis during resolution on murine deep vein thrombosis model

◯ Mizuho Nosaka, Yuko Ishida, Yumi Kuninaka, Akihiko Kimura, Naofumi Mukaida, Toshikazu Kondo

Wakayama Medical Univ.

WS28-02-O/P

Investigating the Role of CCL20 on Psoriasis and Atopic Dermatitis Using CCL20 Deficient Mice

◯ Supanuch Ekronarongchai, Nozomi Sachi, Yomei Kagoshima, Yasuhiro Soga, Sotaro Ozaka, Naganori Kamiyama, Takashi Kobayashi

Department of Infectious Disease Control, Faculty of Medicine, Oita University

WS28-09-O/P

Soluble ST2 aggravates asthma by enhancing IL-33-mediated eosinophilic inflammation and cytokine production in ILC2s

◯ Pei-Chi Lo[3)], Yasutaka Motomura[1)], Kazuyo Moro[1,2,3)]

[1)]Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University, [2)]Laboratory for Innate Immune Systems, RIKEN-IMS, [3)] Laboratory for Innate Immune Systems, iFReC, Osaka University

WS28-10-O/P

RNA helicase DDX6 plays a role in inflammatory diseases through the IL-6 amplifier, an enhanced activation of NF-κB in non-immune cells

◯ Shintaro Hojyo[1,2,3], Seiichiro Naito[1,4], Hiroki Tanaka[1], Jing-Jing Jiang[1], Masato Tarumi[1], Ari Hashimoto[5], Yuki Tanaka[1,2], Kaoru Murakami[1], Shimpei I Kubota[1,2], Shigeru Hashimoto[1,3], Masaaki Murakami[1,2,3,6]

[1]Division of Molecular Psychoneuroimmunology, Institute for Genetic Medicine, Graduate School of Medicine, Hokkaido University, [2]Quantum Immunology Team, Institute for Quantum Life Science, National Institute for Quantum and Radiological Science and Technology (QST), [3] Institute for Vaccine Research and Development (HU-IVReD), Hokkaido University, [4]Department of Cardiovascular Medicine, Graduate School of Medicine, Hokkaido University, [5]Department of Molecular Biology, Graduate School of Medicine, Hokkaido University, [6]Division of Molecular Neuroimmunology, National Institute for Physiological Sciences, National Institutes of Natural Sciences

WS28-17-O/P

5,6-dimethylxanthenone-4-acetic acid (DMXAA), a Partial STING Agonist, Competes for Human STING Activation

◯ Burcu Temizoz[1,2,5], Takayuki Shibahara[3], Tomoya Hayashi[1,2,5], Kouji Kobiyama[1,2,5], Erdal Sag[6], Atsushi Kumanogoh[7,3], Masahiro Yamamoto[7,8], Mayda Gursel[9], Seza Ozen[6], Etsushi Kuroda[10], Cevayir Coban[2,4,7,5], Ken J Ishii[1,2,7,5]

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WS28-18-O/P

Therapeutic effects of conditioned medium of immortalized dental pulp stem cells from human exfoliated deciduous teeth on the paclitaxel-induced peripheral neuropathy via TIMP-1

◯ Miu Yamagishi, Eri Horio, Natsuki Yamaguchi, Jukito Sonoda, Satomi Miyakawa, Shinya Inoue, Fumihiro Murakami, Ning Qu, Yasuhiro Katahira, Hideaki Hasegawa, Takayuki Yoshimoto

Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University, 6-1-1, Shinjuku-ku, Tokyo, Japan.

WS28-19-O/P

Role of the Microbiota-Derived Corisin in Acute Kidney Injury

◯ Tomoko Anou[1], Taro Yasuma[1,2], Corina Gabazza[1], Chisa Inoue[1,2], Yuko Okano[1,2], Atsuro Takeshita[1,2], Masaaki Toda[1], Kota Nishihama[2], Mei Uemura[2], Yutaka Yano[2], Esteban Gabazza[1]

[1]Department of Immunology, Mie University Graduate School of Medicine, [2]Department of Diabetes & Endocrinology, Mie University Graduate School of Medicine

WS29 Cell therapy, vaccine, and new therapeutic modality

12:50 ~ 14:05 Room H

Chairpersons: Hiroaki Ikeda, Tsukasa Nabekura

This session aims to showcase the latest breakthroughs in cancer immunotherapy, concentrating on cell-based therapies such as CAR-T, cancer vaccines, and next-generation treatment modalities like nanoparticles and drug delivery systems (DDS). Presentations will offer insights into how these innovative therapies could transform future cancer care.

WS29-01-O/P

Development of new adoptive T cell therapy that overcomes tumor heterogeneity with escape variant tumor clones

◯ Kiyoshi Yasui[1], Daisuke Ehara[1,2], Mitsuhiro Yoneda[1], Situo Deng[1], Sachiko Okamoto[3], Yasunori Amaishi[3], Daisuke Muraoka[4], Naohisa Ogo[5], Akira Asai[5], Hiroyuki Murota[2], Hiroaki Ikeda[1]

[1]Nagasaki Univ. Grad. Sch. of Biomed. Sci., Dept. of Oncology., [2]Nagasaki Univ. Grad. Sch. of Biomed. Sci., Dept. of Dermatology., [3]Tech. Development Ctr, Takara Bio Inc., [4]Aichi Cancer Ctr. Res. Inst., Div. of Translational Oncoimmunology., [5]Ctr. for Drug Discovery, Grad. Div. Pharm., Univ. of Shizuoka.

WS29-03-O/P

The relationship between receptor shedding and Trogocytosis

◯ Atsutaka Minagawa, Shin Kaneko

Kyoto University

WS29-04-O/P

Efficient production of CAR-NK cells with a potent antitumor effect using leukocyte progenitor cells

◯ Jia Han, Tsukasa Shigehiro, Shogo Tanimori, Hiroyuki Kadota, Karin Noma, Tomokatsu Ikawa
Tokyo University of Science, Research Institute for Biomedical Science

WS29-06-O/P

Imaging of biphasic signalosomes constructed by checkpoint receptor 2B4 in conventional and CAR-T cells

◯ Ryohei Matsushima[1,2], Ei Wakamatsu[1], Hiroaki Machiyama[1], Wataru Nishi[2], Yosuke Yoshida[1,3], Tetsushi Nishikawa[1,4], Hiroko Toyota[1], Masae Furuhata[1], Hitoshi Nishijima[1], Arata Takeuchi[1], Makoto Suzuki[2], Tadashi Yokosuka[1]
[1]Tokyo Medical University department of Immunology, [2]Kumamoto University department of Thoracic Surgery, [3]Tokyo Medical University Department of Nephrology, [4]Tokyo Medical University Department of Dermatology

WS29-08-O/P

Breast cancer specific antigen recognition by TIL-derived MR1-restricted TCRs

◯ Abdul Hayee[1], Eiji Kobayashi[1], Hiroshi Hamana[2], Chihiro Motozono[3], Satoshi Yamaguchi[1], Ha Thi Viet My[1], Tatsuhiko Ozawa[1], Hiroyuki Kishi[1]
[1]Department of Immunology, Faculty of Medicine, Academic Assembly, University of Toyama, Toyama, Japan, [2]Shinobi Therapeutics Co., Ltd., Kyoto, Japan, [3]Division of Infection and Immunity, Joint Research Center for Human Retrovirus Infection, Kumamoto University, Kumamoto, Japan

WS29-11-O/P

Withdrawn

WS29-26-O/P

In vivo Generation of Designer antigen-presenting cells using mRNA for Cancer Immunotherapy

◯ Tomoyoshi Yamano, Toan Van Le, Shota Imai, Iriya Fujitsuka, Rikinari Hanayama
Department of Immunology, Kanazawa University

WS29-28-O/P

Antitumor immunity via harnessing nano-sized membrane vesicles

◯ Mirei Kataoka[1], Yusuke Ito[1], Seiichi Ohta[2], Yuki Kagoya[1]
[1]Keio University, [2]The University of Tokyo

Poster

◯ : Presenter

December 3

WS01 Mucosal-Skin Immunity 1

WS01-01-O/P

Cytotoxic CD4$^+$ T cells eliminate senescent cells by targeting cytomegalovirus antigen

◯ Tatsuya Hasegawa[1,2,3], Tomonori Oka[2,3], Heehwa G. Son[2,3], Valeria S. Oliver-Garcia[2,3], Marjan Azin[2,3], Thomas M. Eisenhaure[4], David J. Lieb[4], Nir Hacohen[2,4], Shadmehr Demehri[2,3]

[1]MIRAI Technology Institute, Shiseido Co., Ltd. , [2]Center for Cancer Research, Massachusetts General Hospital and Harvard Medical School, [3]Department of Dermatology, Massachusetts General Hospital and Harvard Medical School, [4]Broad Institute of MIT and Harvard

WS01-02-O/P

"Tyzzerella nexilis" strains enriched in mobile genetic elements accelerate multiple sclerosis progression

◯ Daiki Takewaki[1,2], Yuya Kiguchi[2,3], Hiroaki Masuoka[2], Mallahalli Manu[1], Ben J E Raveney[1], Seiko Narushima[4], Rina Kurokawa[2], Yusuke Ogata[2], Sachiko Miyake[5], Wakiro Sato[1], Wataru Suda[2], Takashi Yamamura[1]

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WS01-03-O/P

Maternal gut microbiota induces γδT cells at the maternal-fetal interface for immunosurveillance

◯ Koichiro Suzuki[1], Takahiro Yamada[1,2], Yusuke Kinashi[1], Seiga Komiyama[1], Yuyo Ka[3], Kayo Tomiyama[3], Nanako Ushio-Watanabe[4], Yoshifumi Nishikawa[4], Koji Hase[1]

[1]Division of Biochemistry, Faculty of Pharmacy and Graduate School of Pharmaceutical Science, Keio University, [2]Department of Immunobiology, Yale School of Medicine, [3]Central Institute for Experimental Medicine and Life Science (CIEM), [4]National Research Center for Protozoan Diseases, Obihiro University of Agriculture and Veterinary Medicine

WS01-04-O/P

Unraveling the transcriptional Regulation of CD4$^+$ T_{RM} in Crohn's Disease

◯ Mitsuru Arase[1], Mari Murakami[1,2], Kiyoshi Takeda[1,2]

[1]Department of Microbiology and Immunology, Graduate School of Medicine, Osaka University, [2]WPI Immunology Frontier Research Center, Osaka University

WS01-05-O/P

C. albicans-Induced a1, 2-fucosylation Manipulates Morphogenesis of *C. albicans*

◯ Daichi Mori[1], Yoshiyuki Goto[1,2,3,4]

[1]Project for Host Microbial interactions in Symbiosis and Pathogenesis, Division of Molecular Immunology, Medical Mycology Research Center, Chiba University, [2]Division of Pandemic and Post-disaster Infectious Diseases, Research Institute of Disaster Medicine, Chiba University, Chiba, [3]Division of Infectious Disease Vaccine R&D, Research Institute of Disaster Medicine, Chiba University, Chiba, [4]Chiba University, Synergy Institute for Futuristic Mucosal Vaccine Research and Development (cSIMVa), Chiba

WS01-06-O/P

Mouse IgA modulates human gut microbiota with inflammatory bowel disease patients

◯ Keishu Takahashi[1], Naoki Morita[1], Ryutaro Tamano[1], Peng Gao[1], Noriho Iida[2], Akira Andoh[3], Hirotsugu Imaeda[4], Ken Kurokawa[5], Mayo Tsuboi[5], Yoku Hayakawa[5], Mitsuhiro Fujishiro[5], Reiko Shinkura[1]

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WS01-07-O/P

The Impact of Microbial Lipid Metabolism on Skin Barrier pH Homeostasis

◯ Yoshihiro Ito[1], Keitaro Fukuda[1,2], Michiko Koizumi-Kitajima[1], Masayuki Amagai[1,2]

[1]Keio University, School of Medicine, Department of Dermatology, [2]Laboratory for Skin Homeostasis, IMS, RIKEN

WS01-08-O/P

The interaction between tongue ILC2s and IL-33$^+$ duct cells of von Ebner's gland accommodates barrier function against oro-mechanical damage

◯ Satoshi Koga[1], Kazuyo Moro[1,2,3]

[1]Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University, [2]Laboratory for Innate Immune Systems, RIKEN-IMS, [3]Laboratory for Innate Immune Systems, iFReC, Osaka University

WS01-09-P

Live *Lacticaseibacillus paracasei* strain Shirota augments CD38$^+$HLA-DR$^+$ CD4$^+$ T cells in peripheral mononuclear cells from healthy adults

◯ Ayaka Maki, Satoshi Matsumoto, Tomoaki Naito, Tetsuji Hori

Yakult Honsha Co., Ltd.

WS01-10-P

Sublingual immune cell clusters contain both CD4$^+$ and CD8$^+$ T cells and are enriched for CD8$^+$ T_{RM}s

◯ Yutaka Kusumoto[1)], Mayuko Hashimoto[1)], Takahiro Adachi[2)], Tsuneyasu Kaisho[3)], Michio Tomura[1)]

[1)]Laboratory of Immunology, Faculty of Pharmacy, Osaka Ohtani University, [2)]Division of Precision Health, Medical Research Institute, Tokyo Medical and Dental University, [3)]Department of Immunology, Institute of Advanced Medicine, Wakayama Medical University, Graduate School of Medicine

WS01-11-P

Mother's genotype affects the large intestinal microbiome of their offspring even after weaning

◯ Kaori Ito, Kota Sakurai, Jahidul Islam, Tomonori Nochi

International Education and Research Center for Food and Agricultural Immunology, Graduate School of Agricultural Science, Tohoku University

WS01-12-P

Toxic Epidermal Necrolysis Caused by Taiwanofungus camphoratus in a Psoriasis Patient

◯ An Ping Huo[1,2,3)], Cheng-Chung Wei[1,2,3)], Pui-Ying Leong[1,2,3)]

[1)]Division of Allergy, Immunology and Rheumatology, Department of Internal Medicine, Chung Shan Medical University Hospital Taichung, Taiwan, [2)]Institute of Medicine, Chung Shan Medical University, Taichung, Taiwan, [3)]School of Medicine, Chung Shan Medical University, Taichung, Taiwan

WS01-13-P

Roles of FoIr2$^+$ macrophages in CD4$^+$ skin-resident memory T cells

◯ Akihiko Murata, Koji Tokoyoda

Division of Immunology, Department of Molecular and Cellular Biology, School of Life Science, Faculty of Medicine, Tottori University

WS01-14-P

Effects of physicochemical properties of adjuvant-antigen complexes on mucosal immune responses by intranasal immunization

◯ Naoto Yoshino, Takashi Odagiri, Shizuma Ishikawa, Yasushi Muraki

Division of Infectious Diseases and Immunology, Department of Microbiology, School of Medicine, Iwate Medical University

WS01-15-P

Sublingual immunization with inactivated enterovirus A71 induced pathogen-specific mucosal and systemic protective antibody responses

◯ Meito Shibuya[1,2)], Tomonori Machita[1)], Tomoyuki Yamamoue[1)], Satoshi Koike[3)], Kyousuke Kobayashi[3)], Seiya Yamayoshi[4,5)], Hiroshi Kiyono[1,7,8)], Kohtaro Fujihashi[1,6,9,10)]

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WS01-16-P

Elucidation of DC subsets in the oral cavity and T cell response after antigen sensitization on the oral cavity

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WS01-17-P

Role of IL5 in the small intestinal inflammation in Ncx KO mice

◯ Yoshio Katsumata[1)], Lisa Fujimura[2)], Masahiro Okamoto[3)], Takashi Fumita[1)], Akemi Sakamoto[2,4)], Masahiko Hatano[2,4)]

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WS01-18-P

Dietary exposure to nano- and microplastics mediated regulation of acute colitis

Fumiya Okano[1)], ◯ Akihito Harusato[1,2)], Yoshitaka Nakanishi[3)], Masashi Kato[2)], Yoshito Itoh[1)]

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WS01-19-P

Elucidating the role of archaea in the human gut microbiome

◯ Shohei James Asami[1)], Hiroaki Masuoka[2)], Wataru Suda[2)], Hiroshi Ohno[1)]

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WS01-20-P

IL-23 secretion by keratinocytes rather than antigen presenting cells play critical role in the pathogenesis of psoriasiform dermatitis

◯ Yoonha Lee[1,2], Daiya Ohara[1], Hiroki Mukoyama[1], Yusuke Takeuchi[1], Hitomi Watanabe[1], Gen Kondoh[1], Keiji Hirota[1]

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WS01-21-P

Elucidation of differentiation mechanisms of flu-induced M cells in the lower respiratory tract

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December 3

WS02 Cytotoxic T cells

WS02-01-P

Single-cell transcriptome analysis unveils a distinctive subpopulation of CD8 T cells expressing PRDM1 in Kawasaki disease patients with coronary artery lesions

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WS02-02-P

CD8-dependent contact hyper sensitivity is regulated by Themis

◯ Masayuki Kitajima, Toshiyuki Okada, Harumi Suzuki

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WS02-03-O/P

The transcription factor BATF pioneers the effector differentiation of CD8⁺ T cells through direct interaction with IRF4

◯ Sotaro Fujisawa[1], Yamato Tanabe[1], Toshikatsu Tamai[1], Junko Kurachi[1], Miki Koura[1], Yusuke Miyanari[2], Makoto Kurachi[1]

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WS02-04-O/P

Fate inflexibility of virtual memory CD8 T cells during chronic infection

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WS02-05-P

The Arf pathway is required for the survival of CD8⁺ T cells stimulated with strong TCR signal

◯ Mami Sumiyoshi[1], Yoichi Maekawa[2,3], Satoshi Matsuda[1]

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WS02-06-O/P

Efficient inhibition of DNAM-1 clustering via sequestrating CD155 from DNAM-1-TCR microclusters by CD96 with height

◯ Ei Wakamatsu, Ann Hattori, Hiroaki Machiyama, Hiroko Toyota, Masae Furuhata, Ryuji Hashimoto, Hitoshi Nishijima, Arata Takeuchi, Tadashi Yokosuka

Tokyo Medical Univ.

WS02-07-P

Glycolysis in CD8⁺ T cells plays a major role in the onset of immune-mediated HLA-related idiosyncratic drug-induced toxicity

◯ Takeshi Susukida[1], Yuchen Sun[2], Noriaki Arakawa[2], Takuya Hirao[3], Shigeki Aoki[4], Kousei Ito[4], Yoshihiro Hayakawa[1]

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WS02-08-P

Chemically-Defined, Animal-Origin Free Medium for hPSC derived CD8 T Cell Differentiation

◯ Jessica Chang, Yasuyuki Kita, Hirotaka Wagatsuma

Ajinomoto Co., Inc

WS02-09-O/P

Dysfunctional Mitochondria Promote DNA Damage and T Cell Exhaustion in CD8⁺ T Cells

◯ Kung-Chi Kao[1,2], Yu-Ming Chuang[1,2], Yi-Ru Yu[3], Bugi Ratno Budiarto[4], Shih-Yu Chen[4], Ping-Chih Ho[1,2]
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WS02-10-P

Strategic regulation of T cell exhaustion by vitamin D via alternative splicing

◯ Mayumi Mori[1], Taro Tsujimura[2], Takuya Yamamoto[2,3,4], Yo-ichi Nabeshima[1]
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WS02-11-P

Sustainability of memory CD8⁺ T cell upon repetitive antigen stimulation

◯ Yamato Tanabe, Makoto Kurachi, Sotaro Fujisawa
Department of Molecular Genetics, Kanazawa University

WS02-12-O/P

Vitamin C treatment enhances the immune responses of CD8⁺ T cells by upregulation of *Batf3*

◯ Kenta Kondo[1], Mina Kumode[1,2], Koji Terada[1], Yasutoshi Agata[1]
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WS02-13-O/P

Identification of human CD8⁺ T cells recognizing viral lipopeptides

◯ Minori Asa[1,2], Sho Yamasaki[1,2,3]
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WS02-14-P

Examination to reveal mechanisms for suppression of cytotoxic T lymphocyte activation by target cells

◯ Hidefumi Kojima[1], Yuji Nakai[2]
[1]Division for Technical Support, Center for Research Collaboration and Support, Dokkyo Medical Univ. Sch. of Med., [2]Section of Food Sciences, Institute of Regional Innovation, Hirosaki University

WS02-15-P

Elucidation of the functional sites of Nkg7 in its cellular localization and the release of cytotoxic granules

◯ Ryosuke Kumagai, Hiroaki Takimoto, Koji Eshima
Division of Immunology, Kitasato University Graduate School of Science

WS02-16-O/P

Histone deacetylase 1 controls the generation and maintenance of effector-like CD8⁺ T cells during chronic viral infection

Ramona Rica[1], Monika Waldherr[1], Marlene Schülein[1], Emi Miyakoda[1], Thomas Krausgruber[2], Christoph Bock[2,3], Nicole Boucheron[1], Wilfried Ellmeier[1], ◯ Shinya Sakaguchi[1]
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WS03 In vivo model and new cancer immunotherapy

WS03-01-O/P

LAG-3 blockade reactivates the CD8⁺ T cell expansion program to re-expand contracted clones in the tumor

◯ Munetomo Takahashi[1], Mikiya Tsunoda[2], Shigeyuki Shichino[2], Shumpei Ishikawa[1], Kouji Matsushima[2], Satoshi Ueha[2]
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WS03-02-P

A novel biparatopic TIM-3 antibody induces superior antitumor effects through multi-ligand blockade

◯ Kanto Nakajima[1], Yuji Mishima[1], Motoya Mie[1], Norihiro Nakamura[1], Junichiro Yuda[2]
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WS03-03-P

Combination therapy of proton beam irradiation and PD-L1 inhibitor induced an immune response in murine models of pancreatic cancer

◯ Tuyen Thuy Bich Ho[1)], Alessandro Nasti[1)], Akihiro Seki[2)], Yoshio Sakai[2)], Kosuke Satomura[3)], Kyo Kume[4)], Munetoshi Maeda[4)], Hiroyasu Tamamura[5)], Makoto Sasaki[5)], Kazutaka Yamamoto[5)], Taro Yamashita[2,3)], Shuichi Kaneko[1,2,3)]

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WS03-04-P

Trastuzumab Deruxtecan (T-Dxd), the novel HER2 Antibody-drug-conjugates regulates anti-tumor activity against HER2+ CCA via multiple mechanisms

◯ Prin Sungwan[1)], Jutatip Panaampon[1,2)], Seiji Okada[1)]

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WS03-05-P

Analysis of the combination effects of cytotoxic chemotherapy and PD-1 blockade therapy using PD-1 fate-tracer mise

◯ Ayuko Yamaguchi[1,2)], Haruka Suzuki[1,2)], Megumi Tatematsu[1)], Shunsuke Takasuga[1)], Akane Fuchimukai[1)], Takashi Ebihara[1,3)]

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WS03-06-O/P

PQDN improves $CD8^+$ T cell metabolism by mitochondrial tuning resulting in improved cancer immunotherapy

◯ Huimin Sun[1)], Yosuke Dotsu[1)], Daisuke Muraoka[1,2)], Daisuke Kato[4)], Naohisa Ogo[3)], Yudai Sonoda[3)], Situo Deng[1)], Kiyoshi Yasui[1)], Mitsuhiro Yoneda[1)], Hiromu Kondo[4)], Akira Asai[3)], Hiroaki Ikeda[1)]

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WS03-07-P

Robust pancreatic tumor suppression by a novel combination treatment with anti-PD-1 immune checkpoint antibody and stroma modifying RNA oligonucleotide STNM01 in mice

◯ Juanjuan Ye[1,2)], Futoshi Suizu[1)], Keiko Yamakawa[1)], Yuri Mukai[1)], Akira Nishiyama[2)], Hiroyuki Yoneyama[3)], Takayoshi Tsuchiya[4)], Motohiko Kato[5)], Naohisa Yahagi[6)], Kyuichi Kadota[1)]

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WS03-08-O/P

Cystatin A enhances CD4+ T cells and M1 macrophages antitumor activity in murine models of pancreatic cancer

◯ Alessandro Nasti[1)], Shingo Inagaki[2)], Tuyen Thuy Bich Ho[1)], Akihiro Seki[3)], Keiko Yoshida[2)], Kosuke Satomura[2)], Taro Yamashita[2,3)], Yoshio Sakai[2)], Shuichi Kaneko[1,2,3)]

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WS03-09-P

Immune checkpoint inhibitory activity of *Hericium erinaceus* mycelia obtained from liquid media using food by-products

◯ Hajime Kobori[1,2)], Taro Yasuma[3)], Masaaki Toda[3)], Kazuhiko Masuno[4)], Hirokazu Kawagishi[2,5)], Corina N. D'Alessandro-Gabazza[3)], Esteban C. Gabazza[3)]

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WS03-10-O/P

Synergistic Effects of Immune Checkpoint Inhibition Therapy with Lactobacillus Metabolites

◯ Takumi Iwasawa[1,2,3], Suguru Yamauchi[4], Tomoaki Ito[3,5], Kazunori Kato[1,2]

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WS03-11-O/P

Complete humanization of MHC region in mouse

◯ Teruhiko Suzuki[1], Mana Yamakawa[1], Saki An[1], Hiroko Yanagisawa[1], Yasuhiro Kazuki[2,3,4,5], Mitsuo Oshimura[2], Eiji Mizutani[6], Takahiko Hara[1,7,8]

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WS03-12-P

An attempt for generation of homozygous MHC humanized cells and mice

◯ Yuka Egawa[1,2], Mana Yamakawa[1], Saki An[1], Hiroko Yanagisawa[1], Yasuhiro Kazuki[3,4,5,6], Mitsuo Oshimura[3], Takahiko Hara[1,2,7], Teruhiko Suzuki[1], Eiji Mizutani[8]

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WS03-13-O/P

Anti-tumor effect of a human SIRPα antibody targeting human macrophages in a humanized mouse model

◯ Tania Afroj[1], Satomi Komori[1], Ikumi Katano[2], Takeshi Takahashi[2], Takenori Kotani[1], Yoji Murata[1], Takashi Matozaki[1], Yasuyuki Saito[1]

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WS03-14-P

Establishment of Inducible Disruption of Bioactive Lipid Receptors on Neutrophils Using an *In Vivo* Degron System

◯ Kiyokazu Kakugawa[1], Priyanka Saminathan[2], Ian Mathews[2,4], Loutje Van Der Sman[2], Maija Corey[2], Mohit Jain[3,4], Sonia Sharma[1,2]

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WS03-15-P

Intravital visualization of immune cell responses after anticancer small molecule drug treatment

◯ Junyoung Park, Hyunseok Kim, Hyungjin Kwon

IVIM Technology

December 3

WS04 Innate Immunity (I) Innate inflammation and disease

WS04-01-P

Soluble form of the MDA5 protein in human sera

◯ Tomoaki Hoshino

Department of Medicine 1, Kurume University School of Medicine

WS04-02-O/P

Nucleolar dysfunction leads to the XPG-dependent generation of RNA-DNA hybrids, which prime the innate immune response underlying ribosomal diseases via the cGAS-STING pathway

◯ Ken Takashima, Hiroyuki Oshiumi

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WS04-03-P

Immunomodulatory activity of a water-soluble crude extracts obtained from *Coix lacryma-jobi var. ma-yuen* on immune cells

◯ Susumu Tomono[1], Masaaki Yoshida[2], Yinzhi Lin[1], Sachiko Akashi-Takamura[1]

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WS04-04-P

Impact of cholic acid on the development of iHFC diet-induced MASH in mice

◯ Kana Goto[1], Yukihiro Furusawa[1], Koichi Tsuneyama[2], Yoshinori Nagai[1]

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WS04-05-P

Impact of iHFC diet on pathological changes of type 2 diabetes and MASH in type 2 diabetic TSOD mice

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WS04-06-P

RNaseT2-deficiency promotes TLR13-dependent replenishment of tissue-protective Kupffer cells

◯ Ryota Sato[1)], Kaiwen Liu[1)], Takuma Shibata[1)], Ryutaro Fukui[1)], Yuji Motoi[1)], Toshikazu Kondo[2)], Toru Miyazaki[3)], Tsuneyasu Kaisho[4)], Kensuke Miyake[1)]

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WS04-07-O/P

The role of small neutral amino acid transport in macrophage metabolic reprogramming during inflammation

◯ Shota Yasukura[1)], Masanori Yoshinaga[1)], Michael C Bassik[2)], Osamu Takeuchi[1)]

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WS04-08-P

Role of Nuclear factor-Y in NLRC5-mediated MHC class I gene expression

◯ Zufang Wu[1)], Tsutomu Tanaka[1)], Xin Sun[1)], Ning An[1)], Koichi S Kobayashi[1,2,3)]

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WS04-09-O/P

Low-level Endotoxin Preconditioning after Burn Injury Significantly Improves Survival Rate in Mouse Sepsis Model

◯ Bradley M. Kearney[1,2)], Hiroyuki Nakashima[1)], Masahiro Nakashima[1)], Hiromi Miyazaki[1)], Kohei Yamada[1)], Kazuma Mori[1)], Azusa Kato[1)], Takeshi Ono[1)], Hiroyasu Goto[1)], Ryohei Suematsu[1)], Manabu Kinoshita[1)]

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WS04-10-P

Wdfy4 is indispensable for the development of TLR7-induced lethal hepatitis model

◯ Yusuke Murakami[1)], Ryutaro Fukui[2)], Tomoya Narita[1)], Reika Tanaka[2)], Kosuke Zenke[1)], Masashi Muroi[1)], Keiki Kumano[1)], Kensuke Miyake[2)]

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WS04-11-P

The cytokine component Epstein-Barr virus induced 3 attributes to TLR7-mediated splenomegaly and bicytopenia

◯ Masanori Iseki[1)], Yuma Sakamoto[1)], Daiki Takezaki[1,2)], Yoshihiro Matsuda[1,2)], Mariko Inoue[3)], Shin Morizane[2)], Tomoyuki Mukai[1)]

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WS04-12-P

Fibrinogen induces inflammatory responses via the immune activating receptor LILRA2

◯ Yifan Li[1,2)], Kouyuki Hirayasu[1,2)], Gen Hasegawa[1,2)], Yosei Tomita[1,2)], Yuko Hashikawa[1,2,3)], Ryosuke Hiwa[4)], Hisashi Arase[5,6,7,8)], Rikinari Hanayama[2,3)]

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WS04-13-P

Enhancement of adjuvant activity of phosphodiester-linked IFN-α-inducible CpG oligonucleotide G9.1 in combination with protein

◯ Jun-ichi Maeyama[1)], Fumiko Suzuki[2)], Sumiko Iho[3)], Yuriko Ozeki[4)], Sohkichi Matsumoto[4)], Saburo Yamamoto[1)]

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WS04-14-O/P

K3-SPG-mediated long-term protection against viral infection

◯ Asuka Joy Tobuse[1)], Kouji Kobiyama[1,2)], Jun Tsuchida[1)], Teppei Hara[1)], Yaeko Nakajima-Takagi[4)], Motohiko Oshima[4)], Tomoya Hayashi[1)], Burcu Temizoz[1)], Hideo Negishi[1)], Yasuhiro Yasutomi[3)], Atsushi Iwama[4)], Ken J Ishii[1,2)]

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WS04-15-O/P

Structural insights into the IgM-CD5L complex and its impact on resolution of inflammation through DAMPs recognition

◯ Satoko Arai, Toru Miyazaki

The Institute for AIM Medicine

WS04-16-O/P

Tissue-specialized alveolar fibroblasts adopt multiple molecular states to regulate innate immunity after lung injury

◯ Tatsuya Tsukui, Paul J Wolters, Dean Sheppard

Division of Pulmonary, Critical Care, Allergy and Sleep Medicine, Department of Medicine, University of California, San Francisco

WS04-17-O/P

Myd88/Trif signaling is necessary for neurological recovery after stroke

◯ Ryuki Koyama, Shichita Takashi, Jun Tsuyama

Tokyo Medical and Dental University Medical Research Institute Department of Neuroinflammation and Repair

WS04-18-O/P

Anti-amyloid-beta antibody restores the post-stroke neural reparative function impaired by amyloid-beta pathology

◯ Kento Otani[1,2)], Eri Tanaka[1,2)], Koji Hase[2)], Takashi Saito[3)], Takashi Shichita[1)]

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WS04-19-P

Adjunctive treatment of mitochondrial uncoupler BAM15 attenuates sepsis-related acute lung injury partly through the reduction of neutrophil inflammation

◯ Kritsanawan Sae-khow, Awirut Charoensappakit, Asada Leelahavanichkul

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WS04-20-P

Citrullinated histone H3 as a potential biomarker for monitoring intubated patients with sepsis-related acute respiratory distress syndrome

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December 3

WS05 Allergy

WS05-01-P

The inhibitory effect of butyrate and propionate on IgE-dependent basophil activation by inhibiting HDAC activity

◯ Junichi Kashiwakura[1)], Misaki Tsutsui[1)], Itsuki Takaya[1)], Mizuki Uesaka[1)], Tadashi Matsuda[2)]

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WS05-02-P

Anti-inflammatory effects of ferulic acid derivative R16 from Seri *(Oenanthe javanica)*

◯ Eri Isowaki[1)], Kuninobu Negishi[1)], Yuto Nakata[2)], Takahide Kaneko[1)], Hayato Sato[1)], Tatsuo Katagiri[3)], Wataru Ouchi[4)], Toshihiro Murata[4)]

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WS05-03-P

Humanized Fabs against human IgE Cε2 remove IgE and suppress anaphylactic reactions

◯ Hexing Wang[1,2,3], Tomoaki Ando[1], Toshiaki Maruyama[4], CJ Okumura[4], Kumi Izawa[1], Ayako Kaitani[1], Akie Maehara[1], Nobuhiro Nakano[1], Ko Okumura[1], Jiro Kitaura[1,3]

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WS05-04-P

Direct exposure of Cry j 1 to nano-sized electrostatic atomized water particles (NEAWPs) significantly reduces the allergenicity in dendritic cell and T cell

◯ Sasa Iwamatsu[1], Mao Kaneki[2], Chiharu Ohira[2], Yasuhiro Komura[1], Yohei Ishigami[1], Megumi Yoshida[3], Saburo Saito[3], Masahiro Sakaguchi[3], Tomoki Fukuyama[2]

[1]Panasonic Corporation, [2]Azabu University, [3]ITEA Inc.

WS05-05-P

Expression pattern of Leukocyte Immunoglobulin-Like Receptor B in Eosinophilic Chronic Rhinosinusitis

◯ Yusuke Nouchi[1,2], Yuji Takeda[1], Shinichi Saitoh[1], Akemi Araki[1], Risako Yamaguchi[1,3], Yusuke Suzuki[2], Makoto Chiba[2], Yui Kawai[2], Chihiro Watanabe[2], Tsukasa Ito[2], Hironobu Asao[1]

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WS05-06-P

Role of IL-33 in the sneezing of allergic rhinitis

◯ Huiyang Li[1], Yasutaka Motomura[1,4], Kazuyo Moro[1,2,3]

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WS05-07-O/P

Role of Sox4 in IL-10-producing lung regulatory T cells

◯ Hayashi Yuki[1], Akira Suto[1], Kensuke Suga[1,2], Takahiro Kageyama[1], Takashi Ito[1], Kazuyuki Meguro[1], Shigeru Tanaka[1], Taro Iwamoto[1], Arifumi Iwata[1], Shunsuke Furuta[1], Kotaro Suzuki[1], Hiroshi Nakajima[1]

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WS05-08-O/P

Crosstalk of innate and adaptive immune responses in laundry detergents-induced antigen-specific eosinophilic airway inflammation

◯ Naoko Nagano[1], Kyoko Saito[1], Keisuke Orimo[1], Masato Tamari[1], Kenichiro Motomura[1], Susumu Nakae[2], Hideaki Morita[1,3], Kenji Matsumoto[1]

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WS05-09-O/P

Serotonin-producing mast cells suppress ILC2 activation in asthmatic inflammation

◯ Naoki Okada[1,2], Koichiro Asano[2], Kazuyo Moro[1,3,4]

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WS05-10-O/P

Efficacy of anti-IL-4Rα in modulating cellular responses in asthma of various endotypes

◯ Hinami Kawahata[1], Takuya Yashiro[1], Yasutaka Motomura[1], Kazuyo Moro[1,2,3]

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WS05-11-O/P

TRPV1-positive vagal sensory neurons suppress eosinophilic lung inflammation through the neuron-intrinsic JAK1-CGRP beta axis

◯ Masato Tamari[1], Kenichiro Motomura[1], Hideaki Morita[1,2], Kenji Matsumoto[1]

[1]Department of Allergy and Clinical Immunology, National Research Institute for Child Health and Development, [2]Allergy Center, National Center for Child Health and Development

WS05-12-P

Hyaluronic acid enhances the effect of allergen-specific sublingual immunotherapy in a mouse model of mite-induced chronic asthma

◯ Shigeki Katoh[1,2], Hitomi Ikegami-Tanaka[2], Toru Oga[2]

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WS05-13-P

Direct exposure to nano-sized electrostatic atomized water particles (NEAWPs) significantly reduces the allergenicity of *dermatophagoides pteronyssinus* in bronchial epithelium and dendritic cells

◯ Tomoki Fukuyama[1)], Sasa Iwamatsu[2)], Mao Kaneki[1)], Chiharu Ohira[1)], Yasuhiro Komura[2)], Yohei Ishigami[2)]
[1)]Azabu University, [2)]Panasonic Corporation

WS05-14-P

Effect of a cyclin-dependent kinase 4/6 inhibitor on development of lung fibrosis in severe asthma model of mice

◯ Masaya Matsuda, Emi Ishizu, Yuna Fujiwara, Hayato Shimora, Takeshi Nabe
Lab. of Immunopharmacol., Fac. of Pharam. Sci., Setsunan Univ.

WS05-15-P

Suppression of allergic reaction in activated mast cells by diazinon

◯ Hina Kawashima, Miyoko Matsushima, Sayaka Takagi, Fuzuki Hayashi, Nanami Yoshida, Shino Ando, Yuzuki Matsuda, Tsutomu Kawabe
Department of Integrated Health Sciences, Nagoya University Graduate School of Medicine, Tokai National Higher Education and Research System

WS05-16-P

Possible involvement of myofibroblasts expressing an anti-apoptotic factor Bcl-xL in the steroid resistant asthma

◯ Hayato Shimora[1)], Hiroto Maeyama[1)], Ryunosuke Tanioka[1)], Yuichiro Kaibori[2)], Nobuyuki Yamagishi[2)], Masaya Matsuda[1)], Takeshi Nabe[1)]
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WS05-17-P

Preventive mechanism of peanut allergy induced by oral mucosal allergen administration in mice

◯ Yuya Yoshida[1)], Yuzuki Konno[1)], Ryohei Shibao[1)], Hikaru Fuchita[1)], Norihisa Mikami[2)], Hirohito Kita[3,4)], Takumi Tsuji[1)]
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WS05-18-O/P

Pathogenic memory T_H2 cells exacerbate esophageal fibrosis of eosinophilic esophagitis by amphiregulin production

◯ Chiaki Iwamura, Tatsuya Kaneko, Kiyoshi Hirahara
Dept of Immunology, Graduate School of Medicine, Chiba University

WS05-19-O/P

Antigen-presenting cell function of mucosal mast cells is involved in the development of intestinal mast cell hyperplasia in IgE-mediated food allergy

◯ Nobuhiro Nakano[1)], Kenji Oishi[2)], Toshiyuki Yoneyama[2)], Eisuke Inage[2)], Takahiro Kudo[2)], Yoshikazu Ohtsuka[2)], Jiro Kitaura[1)], Toshiaki Shimizu[1,2)], Ko Okumura[1)]
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WS05-20-P

Low-dose heparin calcium inhibits cleavage of caspase-1, caspase-11, IL-33, and gasdermin D in intestinal epithelial cells

◯ Ayako Wakabayashi[1)], Atsuko Owaki[1)], Etsuko Toda[2,3)], Yasuyuki Negishi[1)], Rimpei Morita[1)]
[1)]Department of Microbiology and Immunology, Nippon Medical School, [2)]Laboratory for Morphological and Biomolecular Imaging, Nippon Medical School, [3)]Department of Analytic Human Pathology, Nippon Medical School

WS05-21-P

Suppression of food allergy by highly purified mesenchymal stem cells

◯ Sora Osakada[1)], Rintaro Yoshikawa[1)], Takashi Suyama[2)], Hiromi Miyauchi[2)], Yumi Matsuzaki[1,2)]
[1)]Shimane University , Faculty of Medicine, [2)]PuREC Co., Ltd.

WS05-22-P

Effects of oral exposure to titanium dioxide nanomaterials in a mouse model of food allergy

◯ Norimasa Tamehiro, Reiko Adachi, Chie Taguchi, Kumiko Ogawa, Norihito Shibata
National Institure of Health Sciences

WS05-23-P

***Lactococcus lactis* KF140 ameliorate the symptoms of food allergy and atopic dermatitis by suppressing Th2 responses**

◯ Hee Soon Shin[1,2)], So-Young Lee[1,2)], Gun-Dong Kim[1)]
[1)]Korea Food Research Institute , [2)]University of Science and Technology

WS05-24-O/P

IL-33 primes mast cells to respond to Piezo1 stimulation, leading to degranulation

◯ Yoshiaki Kobayashi[1,2], Kent Sakai[3], Daiki Nakagomi[2], Atsuhito Nakao[1,3]

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WS05-25-P

Antigen protease activity on intact or tape-stripped skin induces acute itch and T helper sensitization leading to airway eosinophilia in mice

◯ Seiji Kamijo[1], Toru Kimitsu[2], Tomoko Yoshimura[2], Yurie Masutani[2], Keiko Takada[2], Shigaku Ikeda[1,2], Hideoki Ogawa[1,2], Ko Okumura[1], Toshiro Takai[1]

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WS05-26-P

Anti-inflammatory Activity of Cytokine Interleukin-38 on Skin Inflammation of Atopic Dermatitis

◯ Katie Ching-Yau Wong[1], Ting-Fan Leung[2], Chun-Kwok Wong[1,3]

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WS05-27-P

Psychological Stress Enhances Itch in Atopic Dermatitis via Sensory Nerve Sensitization Independent of Mast Cells

◯ Kei Nagao[1,2], Soichiro Yoshikawa[1], Ryota Hashimoto[3], Toshiro Takai[4], Sumika Toyama[1], Mitsutoshi Tominaga[1], Kenji Takamori[1,5]

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WS05-28-P

Stress-experienced monocytes/macrophages lose their anti-inflammatory function via β2-adrenergic receptor in skin allergic inflammation

◯ Soichiro Yoshikawa[1,2], Hitoshi Urakami[2,3], Kei Nagao[1,2], Kensuke Miyake[4], Shuhei Sano[5], Emi Nishii[5], Hajime Karasuyama[4], Mitsutoshi Tominaga[1], Kenji Takamori[1,6], Shin Morizane[3], Sachiko Miyake[5]

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WS05-29-P

Investigation on proliferation response of lymphocytes in NC/Jic mice

◯ Shino Ando, Miyoko Matsushima, Fuzuki Hayashi, Hina Kawashima, Sayaka Takagi, Nanami Yoshida, Yuzuki Matsuda, Tsutomu Kawabe

Department of Integrated Health Sciences, Nagoya University Graduate School of Medicine, Tokai National Higher Education and Research System

WS05-30-P

Characterization of T cells in a humanized mouse model of Th2 cell-induced contact hypersensitivity

◯ Yusuke Ohno[1], Misa Mochizuki[1], Kenji Kawai[1], Yukio Nakamura[2], Ryuji Suzuki[2], Motohito Goto[1], Riichi Takahashi[1], Ryoji Ito[1]

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WS05-31-P

Effects of sex differences and prenatal environment on exacerbation of contact hypersensitivity in Nrf2-deficient mice

◯ Ayaka Sugihara, Kazuki Nagata, Chiharu Nishiyama

Department of Biological Science and Technology, Faculty of Advanced Engineering, Tokyo University of Science

December 3

WS06 Arthritis and Fibrosis

WS06-01-O/P

Distinct proliferative and spatial properties of peripheral helper T cells in rheumatoid arthritis synovium

◯ Yuki Masuo[1)], Akinori Murakami[1,2)], Rinko Akamine[1)], Osamu Iri[1)], Koichi Murata[2,3)], Takayuki Fujii[2,3)], Yasuhiro Murakawa[4,5)], Chikashi Terao[6)], Yukinori Okada[7,8,9)], Motomu Hashimoto[10)], Hideki Ueno[1,5)], Hiroyuki Yoshitomi[1,5)]

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WS06-02-O/P

Human synovial Tph cells are involved in synovial inflammation in rheumatoid arthritis via a novel inflammatory humoral factor

◯ Akinori Murakami[1,2,3)], Rinko Akamine[2,3)], Yuki Masuo[2,3)], Osamu Iri[2)], Yasuhiro Murakawa[4,5)], Chikashi Terao[6)], Yukinori Okada[7,8,9)], Motomu Hashimoto[10)], Shuichi Matsuda[1)], Hideki Ueno[2,3,5)], Hiroyuki Yoshitomi[2,3,5)]

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WS06-03-O/P

Expression of CD103 and CD200 define functionally distinct arthritogenic Th17 cells

◯ Yusuke Takeuchi[1,2)], Daiya Ohara[1)], Hitomi Watanabe[1)], Gen Kondoh[1)], Akio Morinobu[2)], Keiji Hirota[1)]

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WS06-04-O/P

GM-CSF-dependent Macrophage Subpopulation Derived from Ly6C^{hi} Monocytes Causes Development and Enhancement of Joint Inflammation in Autoimmune Arthritis

◯ Hiroki Mukoyama[1,2)], Yusuke Takeuchi[1,2)], Daiya Ohara[1)], Yoonha Lee[1)], Hitomi Watanabe[1)], Gen Kondoh[1)], Akio Morinobu[2)], Keiji Hirota[1)]

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WS06-05-O/P

The critical involvement of RasGRP4 in synovial resident cells in inflammatory arthritis

◯ Rihan Da, Tetsuya Saito, Natsuka Umezawa, Hiroyuki Baba, Wen Shi Lee, Shinsuke Yasuda

Department of Rheumatology, Tokyo Medical and Dental University

WS06-06-O/P

Identification of the oncostatin M-driven macrophage-fibroblast interaction as a drug target in autoimmune arthritis

◯ Rui Ling[1)], Nam Cong Nhat Huynh[1)], Masatsugu Komagamine[1)], Tianshu Shi[1)], Masayuki Tsukasaki[2)], Noriko Komatsu[1,3)], Hiroshi Takayanagi[1)]

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WS06-07-P

Single-cell transcriptomic analysis of arthritis-associated osteoclastogenic macrophages (AtoMs) identifies hypoxia-responsive pathological tissue remodeling and bone destruction

◯ Tomoya Agemura[1,2)], Yasuhito Yahara[1)], Kentaro Fujii[1)], Masaru Ishii[1)]

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WS06-08-P

Dysfunctional Macrophages Exacerbate Autoimmune Arthritis in SKG Mice

Ayae Tanaka[1)], Takayoshi Owada[2)], Anna Hasegawa[1)], Nobuhide Tsuruoka[3)], Toshibumi Taniguchi[4)], Hirokuni Hirata[2)], Kazuhiro Kurasawa[1)], Kei Ikeda[1)], ◯ Masafumi Arima[1)]

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WS06-09-P

The MALAT1/TGF-β signaling pathway is dysregulated in rheumatoid arthritis patients

◯ Misagh Rajabinejad[1,2)], Hossein Asgarian-Omran[2,3)]

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WS06-10-P

Parsing the point of action of anti-rheumatic drugs and the mechanism of treatment-resistant synovitis by synovial single-cell analysis

◯ Risa Yoshihara[1)], Haruka Tsuchiya[1)], Yasunori Omata[2)], Kazuyoshi Ishigaki[3)], Takahiro Itamiya[1,4)], Hiroaki Harada[1)], Hirofumi Shoda[1)], Kazuhiko Yamamoto[3)], Sakae Tanaka[2)], Tomohisa Okamura[4)], Keishi Fujio[1)]

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WS06-11-P

Analysis of soluble TIM-4 in the serum of patients with collagen diseases

◯ Hisaya Akiba[1)], Yoshiyuki Abe[2)], Yoko Tabe[3)], Naoto Tamura[2)], Sachiko Miyake[1)]

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WS06-12-P

Alteration of CD4+ T cells with aging in arthritis model mice

◯ Shusuke Tanaka, Taihei Nishiyama, Ayako Ohyama, Airi Kondo, Hiromitsu Asashima, Haruka Miki, Yuya Kondo, Hiroto Tsuboi, Isao Matsumoto

Department of Rheumatology, Institute of Medicine, University of Tsukuba

WS06-13-P

Computer model of remote inflammation of rheumatoid arthritis

◯ Satoshi Yamada[1)], Akihiko Yoshimura[2)], Kaoru Murakami[3)], Rie Hasebe[4)], Masaaki Murakami[3,4,5)]

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WS06-14-P

Heterogeneity of the Pathogenesis of Spondyloarthritis: Plasmacytoid Dendritic Cells Orient Axial Lesions

◯ Sotaro Nakajima[1)], Haruka Tsuchiya[1)], Risa Yoshihara[1)], Kazuyoshi Ishigaki[1,2)], Haruka Takahashi[1)], Tomohisa Okamura[3)], Kazuhiko Yamamoto[4)], Hiroko Kanda[1,5)], Hirofumi Shoda[1)], Tetsuya Tomita[6)], Keishi Fujio[1)]

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WS06-15-O/P

Attenuated Lung Fibrosis in Myeloid-Specific Ezh2 Deficient Mice: Insights from a Systemic Sclerosis Model

◯ Sita Virakul[1)], Benjawan Saechue[2)], Rajit Chompoowong[3)], Patipark Kueanjinda[8)], Haruhiko Koseki[4)], Nattiya Hirankarn[5)], Wijit Banlunara[6)], Benchaphorn Limcharoen[7)], Tanapat Palaga[1)]

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WS06-16-P

Ear thickness-based evaluation of the disease severity in a murine model of systemic sclerosis

◯ Fatemeh Mirkatouli, Ryoken Yamanaka, Norimasa Yamasaki, Sawako Ogata, Kento Miura, Osamu Kaminuma

Hiroshima University

WS06-17-P

TNFα-induced adipose-related protein (TIARP) suppresses the pathogenesis of bleomycin induced pulmonary fibrosis

◯ Yuka Yoshiki[1,2)], Haruka Miki[1)], Reona Tanimura[1)], Ryota Sato[1)], Ayako Ohyama[1)], Saori Abe[1)], Ayako Kitada[1)], Hiromitsu Asashima[1)], Yuya Kondo[1)], Hiroto Tsuboi[1)], Isao Matsumoto[1)]

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WS06-18-O/P

rW27 alleviates *E. faecalis*-promoted, CDAHFD-induced NASH disease in mice by attenuating liver fibrosis

◯ Chen Xiu Jie[1,2,3)]

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December 3

WS07 Macrophage (Session 1)

WS07-01-O/P

Alveolar macrophage-specific depletion system in mice reveals the unique roles in respiratory infections

◯ Yuki Nakayama[1,2)], Miwa Sasai[1,2,3,4)], Masahiro Yamamoto[1,2,3,4)]

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WS07-02-P

Transcription Factor FOXO1 in Macrophages Regulates Inflammation and Pathogenesis of ARDS in Mouse Model

◯ Hinata Wade, Masahiro Kitabatake, Ryutaro Furukawa, Atsushi Hara, Noriko Ouji-Sageshima, Toshihiro Ito

Department of Immunology, Nara Medical University

WS07-03-P

Lipopolysaccharide pre-conditioning enhances the bactericidal activity of Kupffer cells against both gram-positive and negative bacteria in mice

◯ Hiroyuki Nakashima, Bradley Michael Kearney, Kazuma Mori, Ryohei Suematsu, Kohei Yamada, Masahiro Nakashima, Manabu Kinoshita

Immunology and Microbiology, National Defense Medical College

WS07-04-O/P

The differential pyrin inflammasome responses between resident peritoneal and bone marrow-derived macrophages

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WS07-05-O/P

Clathrin heavy chain: a regulatory key for NLRP3 inflammasome activation via endocytosis in macrophages

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WS07-06-P

NLRP3 and SGPL1 interaction plays a key role in priming event for inflammasome activation

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WS07-07-P

Gelsolin from macrophages promotes fibroblasts migration during skin wound healing

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WS07-08-O/P

TAK1-binding protein 2 (TAB2) suppresses aberrant activation of NLRP3 inflammasome mediated by autocrine TNF-α

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WS07-09-P

TAK1 is involved in the maintenance of monocyte-derived macrophages that emerge during the acute phase of inflammation

◯ Katsuki Iwahori, Hideki Sanjo

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WS07-10-O/P

A critical role of protein cross-linking enzyme transglutaminase 2 in M2 macrophage polarization and fibrosis

◯ Hideki Tatsukawa, Kiyotaka Hitomi

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WS07-11-O/P

Autologous Macrophages induced by IL-34-based condition Suppress Hepatic Fibrosis with CD8+ T Cell Inhibition

◯ Yuichi Igarashi, Haruka Wada, Ken-ichiro Seino

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WS07-12-O/P

Dual-wield pathway of macrophages drives myofibroblast transition via dysregulation of iron metabolism

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WS07-13-P

PDGFRα$^-$ fibroblasts and macrophages cooperatively suppress the necrotic changes in myocardial infarction

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December 3

WS08 Infection immunity 1

WS08-01-O/P

Regnase-4 protects mice against HSV-1 infection by reinforcing type I interferon production

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WS08-02-O/P

Transcription factor FOXO1 critically regulates viral replication and inflammatory reaction during SARS-CoV-2 infection both in *in vitro* and *in vivo* models

◯ Ryutaro Furukawa[1], Noriko Ouji-Sageshima[1], Masahiro Kitabatake[1], Atsushi Hara[1], Shigeyuki Shichino[2], Satoshi Ueha[2], Kouji Matsushima[2], Toshihiro Ito[1]

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WS08-03-O/P

Immune profiling of less reactogenic mRNA vaccine revealed the pathways associated with adverse reaction

◯ Tomohiro Takano[1], Keigo Kumagai[2], Hitoshi Iuchi[3], Aya Mizuike[2,4], Tomoharu Mizukami[2], Eita Sasaki[1], Koji Kobiyama[5], Ken Ishii[5], Michiaki Hamada[3], Masayoshi Fukasawa[2], Takayuki Matsumura[1], Yoshimasa Takahashi[1]

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WS08-04-P

The balance of inflammatory and non-inflammatory IgG subclasses at pre-vaccination correlates with the reactogenicity of COVID-19 booster vaccines

◯ Mizuki Fujisawa[1)], Takayuki Matsumura[1)], Saya Moriyama[1)], Yu Adachi[1)], Ryutaro Kotaki[1)], Tomohiro Takano[1)], Masaharu Shinkai[2)], Yoshimasa Takahashi[1)]

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WS08-05-P

Diminished Neutralization activity against the XBB1.5 Strain Post 6-month COVID-19 mRNA Booster Vaccination: Automated Pseudovirus-Based Neutralization Assay for Large-scale serosurveillance

◯ Chieko Makino Okamura[1,2)], Tianchen Zhao[3,4)], Yuta Tani[3)], Morihito Takita[3,4)], Chika Yamamoto[3,4)], Hiroki Yoshimura[3,4)], Harumichi ishigame[1,5)], Takaharu Ueno[6)], Kazu Okuma[6)], Masatoshi Wakui[7)], Masaharu Tsubokura[3,4)], Hidehiro Fukuyama[1,2,8,9)]

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WS08-06-P

Development of a single-chain variable antibody fragment against a conserved region of the SARS-CoV-2 spike protein

◯ Tingyu Gao, Atsushi Irie, Takahisa Kouwaki, Hiroyuki Oshiumi

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WS08-07-O/P

History of infection and vaccination affects the quality of T cell responses in humans

◯ Dongyun Lu[1)], Celine Chua[1)], Xinxin Xue[1)], Naila Shinwari[1)], Ito Isao[2)], Takao Hashiguchi[3)], Ryutaro Kotaki[4)], Yoshimasa Takahashi[4)], Hideki Ueno[1)]

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WS08-08-O/P

Differential potency of memory T cells and memory B cells in older adults following COVID-19 mRNA vaccination

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WS08-09-P

The mechanism for maintenance of memory CD8 T Cells after COVID-19 mRNA vaccination

◯ Takuto Nogimori[1)], Mayu Kumamoto[1,2)], Yuji Masuta[1)], Tomoka Matsuura[3)], Satoko Ohfuji[3)], Tetsuo Kase[3)], Kyoko Kondo[4)], Yu Nakagama[5)], Yasutoshi Kido[5)], Victor Appay[6)], Wakaba Fukushima[3)], Takuya Yamamoto[1,2,7)]

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WS08-10-O/P

HLA-C-restricted nucleocapsid-specific CTLs show potent antiviral activity and long-lived memory phenotype

◯ Chihiro Motozono[1)], Mako Toyoda[1)], Hiroshi Hamana[2)], Hiroyuki Kishi[2)], Takamasa Ueno[1)]

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WS08-11-P

Self-assembling peptide CK2 contributes to the induction of antigen-specific cytotoxic T lymphocyte as a carrier of adjuvant and antigen

◯ Koubun Yasuda[1)], Miya Fujimoto[2)], Etsushi Kuroda[1)]

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WS08-12-P

An mRNA vaccine encoding the SARS-CoV-2 Omicron XBB.1.5 receptor-binding domain protects mice from the JN.1 variant

◯ Ryuta Uraki[1,2,3], Maki Kiso[3], Mutsumi Ito[2], Seiya Yamayoshi[1,2,3], Peter Halfmann[4], Shilpi Jain[5,6,7], Mehul S. Suthar[5,6,7,8], Nao Jounai[9], Kazuki Miyaji[9], Fumihiko Takeshita[9], Yoshihiro Kawaoka[1,2,3,4]

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WS08-13-P

Hyaluronic acid nanogel to develop a new safe vaccine

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WS08-14-P

Full-length nanopore sequencing of circular RNA landscape in peripheral blood cells following sequential BNT162b2 mRNA vaccination

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WS08-15-P

Correlation analysis between repertoire and gene expression in SARS CoV-2 antigen-specific immune cells

◯ Kosuke Miyauchi, Akiko Sugimoto, Takashi Watanabe

RIKEN IMS

WS08-16-O/P

Predictive Biomarkers of COVID-19 Prognosis Identified in Bangladesh Patients and Validated in Japanese Cohorts

◯ Kazuko Uno[1], Abu Hasan[2], Rummana Rahim[2], Toshio Tanaka[3], Mizanur Rahman[2], Kazuyuki Yoshizaki[4]

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WS08-17-P

Multi-omics Analysis of Autoantibody-Mediated Suppression of Type I Interferon Signaling in Myeloid Cells in Severe COVID-19 Patients

◯ Masahiro Kiuchi[1], Chiaki Iwamura[1,2], Kaori Tsuji[1], Atsushi Sasaki[1], Takahisa Hishiya[1], Rui Hirasawa[1], Kota Kokubo[1], Atushi Onodera[1], Motoko Kimura[2,3], Shinichiro Motohashi[4], Kiyoshi Hirahara[1,2,5]

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WS08-18-O/P

T cell repertoire and transcriptome profiling of CD8⁺ T cells in the peripheral blood of dengue virus infection during acute, early, and late recovery phases

Eleonor F Avenido-Cervantes[1,2], Akiko Baba[1], Jiun-Yu Jian[3], Archival M Cervantes[2], Blanca R Jarilla-Nagataki[2], Mario Antonio L Jiz II[2], Arthur Dessi E Roman[4], Yu-Chen James Liu[5], Daisuke Okuzaki[5], Shusaku Mizukami[3], Katsuyuki Yui[3], ◯ Kenji Hirayama[1]

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WS08-19-P

Kupffer cell-B cell interaction promotes host defense against gut bacterial infection in the liver

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WS08-20-P

Exploring Immune Maturation and Allergy Suppression Through Natural Environment Exposure

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WS08-21-P

Viral Infections Assosiated to Patients with Hematologic Malignancies (HMs) and Hematopoietic Cell Transplant (HCT) Recipents

◯ Rosinta Hotmaida Pebrianti Purba[1)], Lintong Hottua Simbolon[1)], Helen Try Juniasti[2,1)]

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December 3

WS09 Mucosal-Skin Immunity 2

WS09-01-O/P

Sulfated glycans in intestinal homeostasis and disease

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WS09-02-O/P

Novel Metabolites Altered by Appendectomy Lead to Tuft Cell Hyperplasia and Play an Important Role in the Amelioration of Ulcerative Colitis

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WS09-03-O/P

Crucial Role of Pancreatic GP2 in Regulating Bacterial Translocation and Organ Failure

◯ Yosuke Kurashima[1,2,3)], Zhongwei Zhang[1)], Yun-Gi Kim[4)], Nozomu Obana[5)], Shinji Fukuda[5,6)], Ryutarou Fukui[7)], Kensuke Miyake[7)], Koji Hase[8)], Hiroshi Ohno[9)], Satoshi Uematsu[10)], Peter B Ernst[3)], Hiroshi Kiyono[1,2,3)]

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WS09-04-O/P

Loss of claudin-1 in keratinocytes induces itch transmitted by multiple types of sensory nerves

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WS09-05-O/P

Epithelial barrier dysfunction by intestine-specific AP-1B deficiency causes renal IgA deposition

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WS09-06-O/P

Reactive persulfide controls intestinal inflammation by suppressing CD4$^+$ T lymphocyte proliferation

◯ Shunichi Tayama[1)], Yuya Kitamura, Kyoga Hiraide[2)], Hibiki Suzuki, Jing Li[1)], Ziying Yang[1)], Kosuke Sato[1)], Akihisa Kawajiri[3)], Yuko Okuyama, Takeshi Kawabe[1)], Takaaki Akaike[4)], Naoto Ishii[1)]

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WS09-07-O/P

M cells in the tear duct-associated lymphoid tissue contribute to the development of allergic conjunctivitis by facilitating germinal-center reaction

◯ Yuki Oya[1)], Shunsuke Kimura[1,2)], Koji Hase[1,3,4)]

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WS09-08-O/P

Identification of staphylococcus aureus genes affecting response to bleach bath therapy in patients with atopic dermatitis

◯ Hiroshi Kawasaki[1,2)], Ayano Fukushima-Nomura[2)], Yoshihiro Ito[2)], Eiryo Kawakami[1)], Masayuki Amagai[2)]

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WS09-09-P

Ultraviolet-B irradiation expands skin-resident CD81^{+}Foxp3^{+} regulatory T cells with a highly activated phenotype

◯ Hiroaki Shime[1)], Mizuyu Odanaka[1)], Masaki Imai[1,2)], Daisuke Sugiyama[1)], Shoryu Takayama[1)], Akimichi Morita[3)], Sayuri Yamazaki[1)]

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WS09-10-P

Elucidation of the Mechanism of IgA Induction by Heat-killed Lactic Acid Bacteria

◯ Jiahui Lyu[1,2)], Riho Matsumura[1,2)], Mizusa Suzuki[1,2)], Peng Gao[1)], Yasunori Yonejima[3)], Chiaki Tomimoto[3)], Reiko Shinkura[1)]

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WS09-11-P

Characterization of human monocytic cell line THP-1 associated with 3D human skin models under UVA exposure

◯ Tanapat Palaga[1)], Suphanun Phuphanitcharoenkun[2,3)], Fiona Louis[4)], Rungaroon Waditee-Sirisattha[1)], Hakuto Kageyama[5)], Michiya Matsusaki[6)]

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WS09-12-P

Suppression of STAT3 activation in itch-transmitting sensory neurons by the topical application of delgocitinib to the mouse skin

◯ Takuma Kanai[1,2)], Minoru Tateno[3)], Sonoko Takahashi[1)], Ayako Matsuyama[1)], Natsuki Yatsuo[1,2)], Rumi Sato[1)], Susumu Toshima[1,4)], Katsuyo Ohashi-Doi[3)], Hiroshi Kawasaki[1,4)], Takaharu Okada[1,2)]

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WS09-13-P

A Novel Recombinant *Lactococcus lactis* Mucosal Vaccine Platform Based on Group A Streptococcus Pili

◯ Catherine Jia-Yun Tsai[1,2,3)], Kohtaro Fujihashi[3,4)], Ken Ishii[4)], Thomas Proft[1,2)]

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WS09-14-P

Functional interregional heterogeneity of anatomically compartmentalized ILC2s in the intestine

◯ Yuki Fukushima[1)], Satoshi Koga[1,3)], Kazuyo Moro[1,2,3)]

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WS09-15-P

The IL10-IL10R axis in *Pdgfra+* fibroblasts is required for the prevention of colitis

◯ Takayoshi Ito, HIsako Kayama, Kiyoshi Takeda

Osaka Univ.

WS09-16-P

Development of three-dimensional printed models of the nasal cavity for evaluation of the *in vivo* deposition of nasal vaccines

◯ Yohei Uchida[1)], Rika Nakahashi[1,2)], Shingo Umemoto[3)], Masashi Suzuki[3)], Hiroshi Kiyono[1,2,4,5,6)]

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WS09-17-P

Effects of dietary fiber and its metabolites on the small intestinal immune system

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WS09-18-P

Investigating the Impact of Intestinal Microfold Cells on Gut Microbiota Structure and Function Using Synthetic Bacterial Community

◯ Mitsuki Ito[1,2)], Shohei Asami[1)], Tadashi Takeuchi[1,3)], Takashi Kanaya[1)], Hiroshi Ohno[1)]

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WS09-19-P

Rosiglitazone exerts an anti-fibrotic effect in intestinal fibrosis via TGFβ/Smad and ERK signaling pathways

◯ Supasuta Leangpanich, Arong Gaowa, Motomu Shimaoka

Mie Univ.

WS09-20-P

Pathogenetic analysis of ulcerative colitis-like inflammatory bowel disease using ER-stress reporter gene and HLA-DR4 transgenic mice

◯ Atsushi Irie, Ryo Ikeda, Hroyuki Oshiumi

Department of Immunology, Graduate School of Medical Sciences, Kumamoto University

WS09-21-P

Conjunctival goblet cell associated antigen passage serves as a target for both allergy prevention and drug delivery

◯ Yasuharu Kume[1,2,3)], Tomoaki Ando[1)], Keiji Matsumoto[1,2,3)], Meiko Kimura[1,2,3)], Moe Matsuzawa[1,2,3)], Kumi Izawa[1)], Ayako Kaitani[1)], Nobuhiro Nakano[1)], Shintaro Nakao[3)], Nobuyuki Ebihara[2)], Ko Okumura[1)], Jiro Kitaura[1,4)]

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December 3

WS10 Tissue inflammation controlled by T cells

WS10-01-P

The expression and functional role of cytotoxicity-associated molecule, Nkg7, in murine CD4$^+$ T cells

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WS10-02-O/P

SH-2251 functions as an antagonist of retinoic acid receptor alpha, suppressing IL-5-producing Th2 cell differentiation and function and chronic Th2-type airway inflammation

◯ Shunsuke Nomura[1)], Makoto Kuwahara[2)], Junpei Suzuki[2)], Masakatsu Yamashita[1,2)]

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WS10-03-O/P

Agonization of *Nr4a1* Inhibits Th17 Differentiation and Mitigates Experimental Arthritis in SKG mice

◯ Yoichi Nakayama[1)], Ryosuke Hiwa[1)], Ayaka Okubo[1)], Mikihito Shoji[1)], Mirei Shirakashi[1)], Hideaki Tsuji[1)], Koji Kitagori[2)], Ran Nakashima[1)], Shuji Akizuki[1)], Hajime Yoshifuji[1)], Akio Morinobu[1)]

[1)]Department of Rheumatology and Clinical Immunology, Kyoto University Graduate School of Medicine, [2)]Occupational Welfare Division, Agency for Health, Safety and Environment, Kyoto University

WS10-04-O/P

Dual Function of α-Synuclein as Antigen and Adjuvant Orchestrate Th17 Responses in Parkinson's Disease

◯ Emi Furusawa Nishii[1)], Asako Chiba[1)], Ayami Okuzumi[2)], Shinichi Ueno[2)], Yasunobu Hoshino[2)], Taku Hatano[2)], Nobutaka Hattori[2,3)], Sachiko Miyake[1)]

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WS10-05-P

Differences in the characteristics and functions of brain and spinal cord regulatory T cells

◯ Mahiro Watanabe, Ako Matsui, Natsumi Awata, Ayame Nagafuchi, Mio Kawazoe, Yoshihiro Harada, Minako Ito

Kyushu University Medical Institute of Bioregulation Division of Allergy and Immunology

WS10-06-P

Lumbar lymph nodes are aberrant in SOD1-G93A mice

◯ Yoshihiro Harada, Mio Kawazoe, Ako Matsui, Minako Ito

Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University

WS10-07-O/P

The T cell receptor specificity contributes to Th1-type effector regulatory T cell differentiation

◯ Shun Yuasa, Ryuichi Murakami, Shohei Hori

Laboratory of Immunology and Microbiology, Graduate School of Pharmaceutical Sciences, The University of Tokyo

WS10-08-P

Fatty acid metabolism constrains Th9 cell differentiation and anti-tumor immunity

◯ Toshio Kanno[1)], Takahiro Nakajima[2)], Keisuke Miyako[1)], Yusuke Endo[1)]

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WS10-09-P

Naturally arising memory-phenotype CD4$^+$ T lymphocytes rapidly accumulate in ischemic organs to exacerbate the tissue injury in an innate manner

◯ Kosuke Sato[1,2)], Akihisa Kawajiri[1)], Jing Li[1)], Ziying Yang[1)], Shunichi Tayama[1)], Kenshiro Matsuda[3)], Chigusa Oda[3)], Akira Shibuya[3)], Motoshi Wada[2)], Naoto Ishii[1)], Takeshi Kawabe[1)]

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WS10-10-P

Upregulated APJ expression may affect effecter T cell functions

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WS10-11-O/P

Type I interferon drives T cell cytotoxicity by upregulation of interferon regulatory factor 7 in autoimmune kidney diseases

◯ Nariaki Asada, Huiying Wang, Jonas Engesser, Anett Peters, Anna Kaffke, Hans-Joachim Paust, Ulf Panzer

University Medical Center Hamburg-Eppendorf

WS10-12-P

Interleukin-32-expressing CD4+ T cells may represent a new key cell subset in systemic sclerosis interstitial lung disease

◯ Sho Ishigaki, Katsuya Suzuki, Yuko Kaneko

Divison of Rheumatology Department of internal medicine, Kieo University School of medicine

WS10-13-O/P

Functional Dynamics of Children's T follicular helper Cells in the context of Cryptosporidiosis

◯ Dana Marie Van Fossen[1)], Zannatun Noor[2)], Lisa Wagar[3)], Rashidul Haque[2)], Carol A Gilchrist[1)], William A Petri[1)]

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WS10-14-O/P

Analysis of the formation mechanism of ATL-specific *CCR4* super-enhancer

◯ Shengyi Liu[1)], Hiroaki Hiramatsu[1)], Takashi Ishida[1)], Takuma Kato[1)], Hiroyoshi Nishikawa[1,2)]

[1)]Nagoya University Graduate School of Medicine, [2)]Exploratory Oncology Research and Clinical Trial Center, National Cancer Center

WS10-15-P

Single Cell Metabolomics for Immunological Study

◯ Asuka Maruo[1)], Kazuhiro Sonomura[1)], Masaki Tajima[2)], Tomonori Yaguchi[3,4)], Kana Yamasaki[4)], Koji Kitaoka[4)], Taka-Aki Sato[1)], Tasuku Honjo[4)], Kenji Chamoto[3,4)]

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December 3

WS11 Tumor microenvironment and biomarkers

WS11-01-O/P

Sympathetic Nerve Ablation Impact on Angiogenesis and Antitumor Immunity in Hepatocellular Carcinoma

◯ Chen Sun[1)], Yuqing Shen[1)], Fuhua Wang[1)], Tian Lu[1)], Jianqiong Zhang[1,2)]

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WS11-02-O/P

Single cell immunoprofiling of tumor infiltrating T cells in renal cell carcinoma

◯ Taku Kouro[1,2)], Mitsuru Komahashi[1,3)], Shun Horaguchi[1,3)], Kayoko Tsuji[1)], Rika Kasajima[4)], Tetsuro Sasada[1,2)]

[1)]Div. Cancer Immunotherapy, Kanagawa Cancer Center Research Institute, [2)]Cancer Vaccine and Immunotherapy Center, Kanagawa Cancer Center, [3)]Department of Pediatric Surgery, Nihon University School of Medicine, [4)]Molecular Pathology and Genetics Division, Kanagawa Cancer Center Research Institute

WS11-03-O/P

Elucidating the Immune Microenvironment of Multiple Myeloma Through Advanced Multi-Omics Analysis

◯ Shangru Jia[1)], Alok Sharma[2,3,4)], Artem Lysenko[2,3)], Keith Boroevich[3)], Tatsuhiko Tsunoda[1,2,3)]

[1)]Tsunoda Lab, Department of Computational Biology and Medical Sciences, Graduate School of Frontier Sciences, The University of Tokyo, Japan, [2)]Laboratory for Medical Science Mathematics, Department of Biological Sciences,School of Science, The University of Tokyo, Japan, [3)]Laboratory for Medical Science Mathematics, RIKEN Center for Integrative Medical Sciences, Japan, [4)]Institute for Integrated and Intelligent Systems, Griffith University, Nathan, Brisbane, QLD4111, Australia

WS11-04-P

Do myeloma cell-derived monoclonal immunoglobulins trigger inflammasome activation in dendritic cells?

◯ Mariko Ishibashi[1)], Mika Sunakawa[1,2)], Rimpei Morita[1)]

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WS11-05-O/P

ADAM9 drives immune suppression in the lung cancer microenvironment

◯ Yuh Pyng Sher[1)], Jing Pei Liu[1)], Shih Jen Liu[2)]

[1)]China Medical University, [2)]National Health Research Institutes

WS11-06-P

Metformin synergizes with PD-1 blockade to promote normalization of tumor vessels via CD8T cells and IFNγ

Miho Tokumasu[1)], ◯ Mikako Nishida[1)], Weiyang Zhao[1)], Ruoyu Chao[1)], Natsumi Imano[1)], Nahoko Yamashita[1)], Kyoko Hida[2)], Hisamichi Naito[3)], Heiichiro Udono[1)]

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WS11-07-O/P

Combination of plasma MMPs and PD-1-binding soluble PD-L1 as a non-invasive tool to predict recurrence in gastric cancer and the efficacy of immune checkpoint inhibitors in non-small cell lung cancer

◯ Fumihiko Ando[1,2)], Takeru Kashiwada[3)], Shoko Kuroda[1)], Ryotaro Takano[1,2)], Yoshishige Miyabe[1,4)], Tomoko Asatsuma-Okumura[1)], Masahiro Seike[3)], Yoshiko Iwai[1)]

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WS11-08-P

Lysosomal degradation of PD-L1 is associated with immune-related adverse events during anti-PD-L1 immunotherapy in NSCLC patients

◯ Ryuji Owada[1)], Takeru Kashiwada[2)], Ryotaro Takano[1,3)], Fumihiko Ando[1,3)], Shoko Kuroda[1)], Yoshishige Miyabe[1,4)], Tomoko Asatsuma-Okumura[1)], Masahiro Seike[2)], Yoshiko Iwai[1)]

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WS11-09-P

Biomarker discovery for predicting tumor response to downtaging therapies for patients with unresectable hepatocellular carcinoma

◯ Toshiaki Nakano[1,2)], Li-Wen Hsu[2)], Chia-Yun Lai[2)], Chao-Long Chen[2)], Yu-Fan Cheng[2)]

[1)]Chang Gung Univ. College of Medicine, [2)]Liver Transplantation Center, Kaohsiung Chang Gung Memorial Hospital

WS11-10-P

Investigation of non-invasive markers for evaluating the efficacy of clinical treatment in pancreatic cancer patients

◯ Takahiro Tomiyama[1)], Hirotomo Murakami[1,2)], Yuta Nagatsuka[1)], Yoshinori Okina[1)], Takuto Nogimori[1)], Masahiko Kubo[3)], Akira Tomokuni[4)], Kunihito Gotoh[3)], Shokichi Takahama[1)], Hirofumi Akita[2)], Takuya Yamamoto[1,5,6)]

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WS11-11-P

The Interactive Lymphocytes Partner as a Predictor of Clinical Outcomes in Undifferentiated Endometrial Carcinomas

Ren-Chin Wu[1)], Guan-Ru Peng[2)], Kah Yi Yap[2)], Chih-Hung Ye[2)], Thien-Log Le[2)], Weng Si Kou[2)], Patrick Chong[2)], An-Chi Wei[2)], Kang-Yi Su[2)], ◯ Shu-Han Yu[2)]

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WS11-12-O/P

Membrane-based RNA sequencing to analyze the interaction between cancer cells and immune cells

◯ Tadashi Imafuku, Sadahiro Iwabuchi, Shinichi Hashimoto

Wakayama Medical University

WS11-13-P

Cell State Analysis of Immune Cells in the Tumor Microenvironment with Deep Learning

◯ Jiaxin Li[1)], Tatsuhiko Tsunoda[2,3)], Artem Lysenko[2,3)]

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WS11-14-O/P

Genetically encoded fluorescent lactate biosensors for investigating tumor-immune microenvironment

◯ Yusuke Nasu[1,2)], Yuki Kamijo[1)]

[1)]Department of Chemistry, School of Science, The University of Tokyo, [2)]Japan Science and Technology Agency

WS11-15-P

Features of spatially deconvoluted cell states and their community in tertiary lymphoid structures across cancer types

◯ Yan Ange[1)], Tatsuhiko Tsunoda[1,2,3)], Artem Lysenko[3,2)]

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December 3

WS12 Innate Immunity (II) Innate immune cell

WS12-01-P

Effects of Phytochemicals on mouse bone marrow-derived dendritic cells

◯ Kaho Oki, Takumi Iwasawa, Kazunori Kato

Dep. of Nutrition. Sci., Grad. Sch. of Health and Sport. Sci., Univ. of Toyo

WS12-02-P

DOCK11 regulates migration and cytokine secretion of macrophages

◯ Ryohei Kondo, Akihiko Nishikimi

Biosafety Administration Division, Research Institute, National Center for Geriatrics and Gerontology

WS12-03-O/P

CD36 is an inhibitory CpG ODN/CXCL14 receptor that limits the tumor-suppressive activity

◯ Kosuke Tanegashima[1)], Manaka Hasebe[1,2)], Risa Saito[1,3)], Riku Takahashi[1,3)], Takahiko Hara[1,2,3)]

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WS12-04-P

Role of autophagy in the maintenance of NK cell effector function

◯ Kairi Murakoshi, Yui Shinzawa, Ka He, So-ichiro Sasaki, Yoshihiro Hayakawa

Section of Host Defences, Institute of Natural Medicine, University of Toyama, Toyama, Japan

WS12-05-O/P

Characterization of anti-asialo-GM1 monoclonal antibodies

◯ Ka He[1)], Tatsuji Kimura[2)], Kazuyoshi Takeda[3)], Yoshihiro Hayakawa[1)]

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WS12-06-P

Calreticulin, a ligand for NCR1 is induced on adipocytes by lipid peroxidation products derived from high-fat diet and activates group 1 innate lymphoid cells in adipose tissues

◯ Kazunori Matsumura, Satoshi Takaki

Department of Immune Regulation, The Research Center for Hepatitis and Immunology, Research Institute, National Center for Global Health and Medicine

WS12-07-P

Natural killer cells eliminate senescent dermal fibroblasts

◯ Ayami Iijima, Tatsuya Hasegawa

MIRAI Technology Institute, Shiseido Co., Ltd., Yokohama, Japan

WS12-08-O/P

PD-L1 expressing CD127^{+} ILC1s inhibit PD-1^{+} γδ T cells in the mesenteric adipose tissue to alleviate murine peritonitis

◯ Ritsu Nagata[1,3)], Yuichi Akama[4)], Pedro Goncalves[5)], Nicolas Serafini[5)], Tomoko Kageyama[2)], Manami Satoh[1,3)], Motomu Shimaoka[4)], Hiroshi Ohno[1,3)], Naoko Satoh-Takayama[2,3)]

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WS12-09-O/P

ILC1-Derived Amphiregulin Regulates Epithelial Turnover in Response to Mechanical Stress in the Skin

◯ Tetsuro Kobayashi[1)], Daisuke Asanuma[2)], Shigeyuki Namiki[2)], Kenzo Hirose[2)], Kazuyo Moro[1,3,4)]

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WS12-10-P

TL1A/DR3 signaling mediates corticosteroid insensitivity in ILC2s

◯ Hiromi Matsuyama, Kentaro Machida, Yoichi Dotake, Takahiro Matsuyama, Koichi Takagi, Kentaro Tanaka, Hiromasa Inoue

Department of Pulmonary Medicine, Graduate School of Medical and Dental Sciences, Kagoshima University

WS12-11-O/P

Identification of a FURIN-Dependent ILC2 Regulatory Mechanism Not Mediated by the p38-GATA3 Pathway

◯ Takuya Yashiro[1)], Kazuyo Moro[1,2,3)]

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WS12-12-P

The roles of group2 innate lymphoid cells in intestinal inflammation

◯ Emi Irie[1,3)], Ichiro Mizushima[1)], Ka Kan[1)], Yuta Kaieda[1)], Junya Tsunoda[1,2)], Yohei Mikami[1)], Takanori Kanai[1)]

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WS12-13-P

DNAM-1 exacerbates intestinal inflammation by activating ILC3 via the Akt/mTORC1/HIF-1α signaling pathway

◯ Natsuki Ide[1,2)], Kazuki Sato[1)], Kenshiro Matsuda[1,3)], Kazuko Shibuya[1,3)], Akira Shibuya[1,3,4)]

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WS12-14-P

Group 3 innate lymphoid cells regulate ketogenesis

◯ Takuma Misawa, Shigeo Koyasu
Laboratory for Immune Cell Systems, RIKEN IMS

WS12-15-O/P

Dietary antigens enhance ILC3s and regulate intestinal homeostasis

◯ Ayana Mori[1,2)], Shiho Nagata[1,3)], Tomoko Kageyama[2)], Naoko Tachibana[3)], Hiroshi Ohno[3,4)], Naoko Satoh-Takayama[1,2)]
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WS12-16-O/P

Development of a novel proliferation method of invariant Natural Killer T cells

◯ Kiwamu Motoyoshi, Takahiro Aoki, Mariko Takami, Shinichiro Motohashi
Department of Medical Immunology, Graduate school of medicine, Chiba University

WS12-17-P

Effects on metabolic diseases caused by high-fat diet in CD1dKO mice

◯ Hiroki Ishikawa[1)], Ryuichi Nagashima[1,2)], Yoshihiro Kuno[1,3)], Hiraku Sasaki[4)], Chikara Kohda[1)], Masayuki Iyoda[1,3)]
[1)]Department of Microbiology and Immunology, Showa University School of Medicine, [2)]Division of Immunology, Department of Biosciences, Kitasato University School of Science, [3)]Division of Nephrology, Department of Medicine, Showa University School of Medicine, [4)]Department of Health Science, Faculty of Health and Sports Science, Juntendo University

WS12-18-P

Follicular helper NKT cells induced prominent humoral immune responses: a possible cooperation with non-canonical B cells

◯ Koji Hayashizaki[1,2)], Shogo Takatsuka[3)], Toshio Kanno[4)], Masato Kubo[5)], Yoshimasa Takahashi[2)], Daisuke Kitamura[6)], Yusuke Endo[4)], Yuki Kinjo[1,2)]
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WS12-19-P

The unfolded protein response controls group 3 innate lymphoid cells in intestinal homeostasis and inflammation

◯ Siyan Cao, Marco Colonna
Washington University in St. Louis

WS12-20-P

Inflammatory imprinting of ILC3 in the tumor progression

◯ Chloé Papapetropoulos, Zacarias Garcia, Solenne Marie, Capucine Grandjean, Philippe Bousso, James Di Santo, Nicolas Serafini
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December 3

WS13 Hematopoiesis and immune environment

WS13-01-O/P

Identification and characterization of CXCL13 producers in bone tissue

◯ Takuma Okawa[1)], Motoyoshi Nagai[1,2)], Kazuaki Nakata[2)], Taeko Dohi[1)], Yuki I. Kawamura[2)], Shinya Fujita[3)], Keiyo Takubo[3,4)], Koichiro Suzuki[1)], Koji Hase[1,5,6)]
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WS13-02-P

Exploring the splenic stromal cell populations that serve as the extramedullary hematopoietic niche

◯ Ayumi Itabashi[1)], Kazuo Okamoto[2)], Kazue Somiya[1)], Hiroshi Takayanagi[1)]
[1)]Department of Immunology, The University of Tokyo, [2)]Division of Immune Environment Dynamics, Cancer Research Institute of Kanazawa University

WS13-03-O/P

Systemic inflammation skews cell fate of common lymphoid progenitors

◯ Masashi Kanayama, Toshiaki Ohteki
Department of Biodefense Research, Medical Research Institute, Tokyo Medical and Dental University (TMDU)

WS13-04-P

Effects of Ectopic Tertiary Lymphoid Structures on Salivary Gland Tissue in Aged Mice

◯ Hiroaki Abe, Erika Yamashita, Masaru Ishii
Department of Immunology and Cell Biology, Graduate School of Medicine, Osaka University

WS13-05-P

Characterization and functional analysis of myeloid cells derived from long-term proliferating cultured common lymphoid progenitors

◯ Yohei Kawano, Mizuki Moriyama, Shun Ohki, Nozomi Katsuya, Yasuo Kitajima, Tomoharu Yasuda
Department of Immunology, Graduate School of Biomedical and Health Sciences, Hiroshima University

WS13-06-P

Resident cDC2 subset presents lymph-borne antigens to helper T cells in the lymph node DCP

◯ Madoka Ozawa, Tomoya Katakai
Department of Immunology, Niigata University Graduate School of Medical and Dental Sciences

WS13-07-P

Dynamic changes in DNA methylation during mononuclear phagocyte differentiation

◯ Takaya Yamasaki, Akira Nishiyama, Tomohiko Tamura
Department of Immunology, Yokohama City University Graduate School of Medicine

WS13-08-O/P

A novel synergistic activity of bHLH transcription factor E2A and Erg instructs B cell lineage commitment by regulating the enhancer landscape

◯ Reiko Hidaka, Kazuko Miyazaki, Hiroshi Kawamoto, Masaki Miyazaki
Kyoto University, Institute for Life and Medical Sciences, Department of Immunology.

WS13-09-O/P

Non canonical Polycomb group proteins regulate T cell development in a sex-dependent manner

◯ Mayumi Hirakawa, Tomokatsu Ikawa
Division of Immunology and allergy, Research Institute for Biomedical Sciences, Tokyo University of Science

WS13-10-P

Analyses of the role of transient receptor melastatin 7 in early T cell development

◯ Masatsugu Oh-hora[1)], Tomoaki Koga[2)], Mitsuyoshi Nakao[2)], Takehiko Yokomizo[1)]
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WS13-11-P

Unraveling relevance of phosphorylation on multiple tyrosine residues in Runx1 during thymocyte differentiation

◯ Zhizhen Qin[1,2)], Ichiro Taniuchi[1)]
[1)]Laboratory for Transcriptional Regulation, Center for Integrative Medical Science, RIKEN, [2)]Department of RIKEN Molecular and Chemical Somatology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University

WS13-12-P

Regulation of positive-selection threshold by transcription factor SATB1

◯ Taku Naito, Marii Ise, Yuriko Tanaka, Taku Kuwabara, Motonari Kondo
Dept of Mol Immunol, Toho University School of Medicine

WS13-13-O/P

CD69 controls regulatory T cell generation in the thymus

◯ Yukihiro Endo, Nanako Yasujima, Taiyo Sasayama, Ichita Hasegawa, Yangsong Wang, Shunka Kano, Ryo Nasu, Motoko Kimura
Department of Experimental Immunology, Graduate School of Medicine, Chiba University

WS13-14-P

A crucial role of autophagy in neonatal thymus in autoimmunity

◯ Shigefumi Matsuzawa[1,2)], Aya Ushio[1,3)], Ruka Nagao[1)], Kunihiro Otsuka[1)], Takaaki Tsunematsu[1)], Naozumi Ishimaru[1,3)]
[1)]Department of Oral Molecular Pathology, Graduate School of Biomedical Sciences, Tokushima University, [2)]Section of Oral and Maxillofacial Surgery, Division of Maxillofacial Diagnostic and Surgical Sciences, Faculty of Dental Science, Kyushu University, [3)]Department of Oral Pathology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University

WS13-15-P

The role of IL-7 in formation of the medullary microenvironment in the thymus

◯ Marii Ise, Yuriko Tanaka, Taku Naito, Taku Kuwabara, Motonari Kondo
Department of Molecular Immunology, Faculty of Medicine, Toho University

WS13-16-O/P

A single-cell analysis revealed tissue-restricted antigen-expressing fibroblasts accumulated in epithelium-free areas in rat thymic medulla

◯ Yasushi Sawanobori, Yusuke Kitazawa, Hisashi Ueta, Nobuko Tokuda
Anatomy, Dokkyo Medical University

WS13-17-P

Neural Crest-Derived Mesenchymal Cells Produce Factors That Support Thymic Reconstitution Following Irradiation

◯ Doris Narki Tetteh[1)], Mari Hikosaka Kuniishi[2,1)], Martin Mawuli Agbove[1)], Hidetoshi Yamazaki[1)]
[1)]Mie University, [2)]University of Toyama

WS13-18-P

Depletion of K14-Driven Thymic Epithelial Cells Leads to Abnormal T cell Regeneration

◯ Martin Mawuli Agbove, Doris Narki Tetteh, Hidetoshi Yamazaki
Mie University

WS13-19-P

Prediction and evaluation of amino acid residues required for binding of HLA and β2m by in silico analysis

◯ Ryoya Kobayashi[1)], Tomohiro Shirayanagi[1)], Tyuji Hoshino[2)], Shigeki Aoki[1)], Kousei Ito[1)]
[1)]Chiba University, Graduate School of Pharmaceutical Sciences, Laboratory of Biopharmaceutics, [2)]Chiba University, Graduate School of Pharmaceutical Sciences, Department of Physical Chemistry

WS13-20-P

Age-related thymic involution occurs in Fas-deficient mice

◯ Nayu Shimamoto[1)], Takeshi Nitta[2)], Hiroshi Takayanagi[1)]
[1)]Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, [2)]Division of Molecular Pathology, Research Institute for Biomedical Sciences, Tokyo University of Science

WS13-21-P

Immunosuppression in anti-FVIII Response by Loss of Tlx1 Expression in the Postnatal Splenic Mesenchymal Stem Cells in Mice with Hemophilia A

◯ Akihisa Oda[1)], Shoko Furukawa[1)], Atsushi Hara[2)], Kaito Yasuike[2)], Masahiro Kitabatake[2)], Noriko Ouji-Sageshima[2)], Tomohiro Ito[2)], Kenichi Ogiwara[1)], Ryo Goitsuka[3)], Keiji Nogami[1)]
[1)]Department of Pediatrics, Nara Medical University, [2)]Department of Immunology, Nara Medical University, [3)] Division of Cell Fate Regulation, Research Institute for Biomedical Sciences, Tokyo University of Science

WS13-22-P

Characterization of immune cell populations in aged mice

◯ Daisuke Aki[1)], Yoshiko Mori-Saitoh[1)], Shin-Ichiroh Saitoh[1)], Akihiko Yoshimura[2)]
[1)]Wakayama Medical University, [2)]Tokyo University of Science

WS13-23-P

T cell immune response and cytokine gene expression activated by probiotics.

Mai Shiohata[1)], Hirokazu Sakuma[1)], ◯ Kahoko Hashimoto[1,2)], Kahoko Hashimoto[1,2)], Naoko Kurosaki[1,2)]
[1)]Chiba Institute of Technology, [2)]Chiba Institute of Technology, Graduate School of Engineering

WS13-24-P

Development of an automatic PBMC/target cells separator from peripheral blood with high performance and high specificity for the research into immunotherapy

◯ Hiromitsu Tazawa[1)], Osamu Kikuchi[1,2)], Yuki Furuya[1)], Hidedgi Tajima[4)], Kazumi Sawakami[4)], Manabu Muto[1,3)]
[1)]Clinical Bioresource Center, Kyoto University Hospital, [2)]Center for Cancer Immunotherapy and Immunobiology, [3)]Clinical Oncology, Kyoto University Hospital, [4)]Precision System Science Inc.

WS13-25-P

Changes in immune cell composition in mice irradiated with low-dose-rate gamma rays

◯ Daisaku Takai[1)], Akiko Abe[2)], Toshiyuki Kobayashi[1)]
[1)]Institute for Environmental Sciences, [2)] JAC Co. ltd.

WS13-26-O/P

Single-particle phenotyping of immune cell-derived extracellular vesicles *in vivo* based on their tracking system

◯ Tomoya Hayashi[1,2,3)], Shuntaro Shimizu[1,2,3,4)], Kouji Kobiyama[1,2,3)], Hideo Negishi[1,2,3)], Burcu Temizoz[1,2,3)], Ken J Ishii[1,2,3)]
[1)]Division of Vaccine Science, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo (IMSUT), [2)]International Vaccine Design Center, IMSUT, [3)]The University of Tokyo Pandemic Preparedness, Infection and Advanced Research Center (UTOPIA), The University of Tokyo, [4)]Department of Chemistry, Chemical Engineering & Life Science, Yokohama National University

WS13-27-P

Functional analysis of BRCA2 in hematopoiesis

◯ Kosuke Yamazaki[1,2], Tomohiro Iguchi[2], Midori Yamaguchi[2], Manami Sano[2], Kazuto Takayasu[2], Kosuke Yusa[4], Masato Kanemaki[3], Ichiro Taniuchi[5], Hisao Masai[2,1], Hiroyuki Sasanuma[2]

[1]The University of Tokyo, [2]Tokyo Metropolitan Institute of Medical Science, [3]National Institute of Genetics, [4]Kyoto Univ., [5]RIKEN

WS13-28-P

Semaphorin 6D regulates emotional, metabolic and inflammatory outputs through supporting synaptic maturation and GABAergic signaling in the amygdala

◯ Mayuko Izumi[1], Yoshimitsu Nakanishi[1], Sujin Kang[2], Atsushi Kumanogoh[1]

[1]Department of Respiratory Medicine and Clinical Immunology, Graduate School of medicine, Osaka University, [2]Laboratory of Immune Regulation, WPI-IFReC, Osaka University

WS13-29-P

Angiopoietin-like 4 regulates the myofibroblast differentiation in pulmonary fibrosis through the regulation of lipid metabolism

◯ Masahiro Kitabatake[1], Hinata Wade[1], Atsushi Hara[1], Akihisa Oda[2], Ryutaro Furukawa[1], Noriko Ouji-Sageshima[1], Toshihiro Ito[1]

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December 3

WS14 Macrophage (Session 2)

WS14-01-O/P

Retinoid X receptor activation facilitates the differentiation of monocytes into CX_3CR1^{hi} macrophages via mitochondrial metabolism

◯ Hinata Sugiyama[1], Masayoshi Onuki[1], Wakana Ohashi[1,2], Yuta Takamura[3], Hiroki Kakuta[3], Koji Hase[1,4]

[1]Faculty of Pharmacy and Graduate School of Pharmaceutical Science, Keio Univ., [2]School of Pharmaceutical Sciences, Shizuoka Univ., [3]Graduate School of Medicine Dentistry and Pharmaceutical Sciences, Okayama Univ., [4]IFeS, Fukushima Univ.

WS14-02-P

***In vitro* differentiation of THP-1 cells into M1 macrophage-like cells and their cell-dynamics**

◯ Akira Yamauchi[1], Shuichiro Okamoto[1], Kei Miyano[2], Yasumitsu Nishimura[3], Einosuke Ikeshita[4], Futoshi Kuribayashi[1]

[1]Kawasaki Medical School, Department of Biochemistry, [2]Kawasaki Medical School, Department of Natural Sciences, [3]Kawasaki Medical School, Department of Hygiene, [4]Kawasaki Medical School, Undergraduate 3rd grade

WS14-03-O/P

Fibroblast-derived CSF1 supports gut mucosal macrophage pool and resistance to bacterial infection

◯ Soichiro Yoshida[1], Daichi Nonaka[1], Eriko Sumiya[1,2], Shinichiro Sawa[1]

[1]Division of Mucosal Immunology, Research Center for Systems Immunology, Medical Institute of Bioregulation, Kyushu University, [2]Present address: Department of Orthopedic Surgery, Faculty of Medicine, The University of Tokyo

WS14-04-O/P

Periportal macrophages protect against commensal-driven liver inflammation

◯ Yu Miyamoto[1,2], Masaru Ishii[1,2]

[1]Department of Immunology and Cell Biology, WPI-Immunology Frontier Research Center, Osaka University, [2]Department of Immunology and Cell Biology, Graduate School of Medicine, Osaka University

WS14-05-P

Exploring anti-inflammatory benefits of heparin in a murine abortion model

◯ Yasuyuki Negishi[1,2], Tomoko Ichikawa[2], Takami Watanabe[2], Satoko Nakamura[3], Hajime Ino[1,2], Yumi Horii[1,2], Yuki Kaito[2], Shunji Suzuki[2], Rimpei Morita[1]

[1]Department of Microbiology and Immunology, Nippon Medical School, [2]Department of Obstetrics and Gynecology, Nippon Medical School, [3]Faculty of Medicine, Nippon Medical School

WS14-06-P

Suppressive effects of Seric acid from Seri (*Oenanthe javanica*) on macrophage-mediated inflammation

◯ Yuto Nakata[1], Eri Isowaki[2], Tatsuo Katagiri[3], Wataru Ouchi[4], Toshihiro Murata[4]

[1]University of Toyama, Graduate School of Medicine and Pharmaceutical Sciences, [2]University of Toyama, Faculty of Pharmaceutical Sciences, [3]University of Toyama, Liberal arts and sciences, [4]Tohoku Medical and Pharmaceutical University, Faculty of Pharmaceutical Sciences, Division of Pharmacognosy

WS14-07-P

Activation of α7 nicotinic acetylcholine receptor attenuates inflammation through decreasing cellular glutathione levels

◯ Ayaka Ito[1,2,3], Yoshihiro Nanahara[1,4], Ibuki Shirakawa[1,3], Mitsuko Kobayashi[1,3], Zhengshijian Pu[1,3], Hiroshi Arima[4], Takayoshi Suganami[1,3]

[1]Research Institute of Environmental Medicine, Nagoya University, [2]Institute for Advanced Research, Nagoya University, [3]Department of Immunometabolism, Nagoya University Graduate School of Medicine, [4]Department of Endocrinology and Diabetes, Nagoya University Graduate School of Medicine

WS14-08-O/P

MAFB in Macrophages Regulates Sympathetic Neuron Density in Cold-Induced Brown Adipose Tissue

◯ Michito Hamada[1], Manoj Kumar Yadav[2], Megumi Ishida[1], Natalia Gogoleva[1], Ching-Wei Liao[1], Maho Kanai[1], Akihiro Kuno[1], Satoru Takahashi[1]

[1]Anatomy and Embryology, Faculty of Medicine, University of Tsukuba, [2]National Institutes of Health, Bethesda, MD 20892, USA

WS14-09-O/P

GPR35 signal regulates a regulatory macrophage subset in the adipose tissue

◯ Misato Mizutani, Rin Sugiyama, Akane Ishida, Katsuhiro Nakanishi, Wakana Ohashi, Eiji Umemoto

Laboratory of Microbiology and Immunology, University of Shizuoka

WS14-10-O/P

The roles of macrophages in parturition

◯ Sunao Matsuzaka, Haruta Mogami, Yu Matsuzaka, Eriko Yasuda, Masahito Takakura, Yoshitsugu Chigusa, Masaki Mandai

Department of Gynecology and Obstetrics, Kyoto University Graduate School of Medicine

WS14-11-P

Identification of a novel neuron-associated macrophage in the liver

◯ Aoi Takino[1], Yu Miyamoto[2,3], Masaru Ishii[1,2,3]

[1]Department of Immunology and Cell Biology, Graduate School of Frontier Biosciences, Osaka University, Osaka, Japan, [2]Department of Immunology and Cell Biology, Graduate School of Medicine, Osaka University, Osaka, Japan, [3]WPI-Immunology Frontier Research Center, Osaka University, Osaka, Japan

WS14-12-P

Analysis of senescence induction and characterization in THP-1

◯ Kyoko Nishida-Tamehiro

Biotechnology Group, Tokyo Metropolitan industrial technology research institute

WS14-13-O/P

Notch signaling regulates macrophage heterogeneity in liver disease

◯ Hongyan Qin

State Key Laboratory of Holistic Integrative Management, Department of Medical Genetics and Developmental Biology, Fourth Military Medical University

WS14-14-P

Down-regulation of pro-tumorigenic cytokines by the inhibition of LRRC8A Cl^- channel through NOX2-Nrf2 signaling pathway in THP-1-differentiated M_2 macrophages

◯ Susumu Ohya, Miki Matsui

Department of Pharmacology, Graduate School of Medical Sciences, Nagoya City University

WS14-15-P

Unique cell harvesting technology without using Scraper or Trypsin

◯ Eriko Ikeda, Asumi Yoshihara, Yuzo Kasuya

CellSeed Inc.

December 3

WS15 Infection immunity 2

WS15-01-O/P

Hepatic ILC1s confer host protection against viral infection during undernutrition

◯ Megumi Tatematsu[1], Shunsuke Takasuga[1], Akane Fuchimukai[1], Tsukasa Nabekura[2], Akira Shibuya[3], Koichi Ikuta[4], Takashi Ebihara[1,5]

[1]Akita University Graduate Schcool of Medicine, [2]Aichi Cancer Center Research Institute, Division of Immune Response, [3]Faculty of Medicine, and Center for TARA, University of Tsukuba , [4]Center for Medical Education and Internationalization Graduate School of Medicine and Faculty of Medicine, Kyoto University, [5]Center for Integrated Control, Epidemiology and Molecular Pathophysiology of Infectious Diseases, Akita University

WS15-02-P

RSV-induced Gas6/Axl promotes the growth of nasopharyngeal colonized *Streptococcus pneumoniae*

◯ Saki Ishikawa, Takehiko Shibata

Tokyo Medical University, Department of Microbiology

WS15-03-O/P

Non-canonical type I IFNs are regulated by cholesterol synthesis pathway and prime the RIG-I mediated antiviral innate immune signaling

◯ Tasuku Nishimura[1)], Takahisa Kouwaki[1,2)], Ken Takashima[1,2)], Hiroyuki Oshiumi[1,2)]

[1)]Department of Immunology, Graduate School of Medical Sciences, Kumamoto University, [2)]Department of Immunology, Faculty of Life Sciences, Kumamoto University

WS15-04-O/P

Regnase-1 haploinsufficiency restricted SARS-CoV-2 pneumonia in mice by reducing a neutrophil subset with the interferon-stimulated gene signature

◯ Kotaro Tanaka[1)], Keiko Yasuda[1,2)], Junichi Aoki[1)], Osamu Takeuchi[1)]

[1)]Department of Medical Chemistry, Graduate School of Medicine, Kyoto University, [2)]Department of Immunology Nagoya City University Graduate School of Medical Sciences

WS15-05-O/P

The establishment of a transgenic mouse system to analyze HTLV-1-driven CD4$^+$ T cell immortalization mechanism

◯ M Ishrat Jahan[1)], Kenji Sugata[1)], Koki Nimura[5)], Takushi Nomura[1)], Nobuko Irie[2)], Kimi Araki[4)], Masahiro Ono[3,2)], Yorifumi Satou[1,2)]

[1)]Joint research center for Human Retrovirus infections, Kumamoto University, [2)]International Research Center for Medical Sciences (IRCMS), Kumamoto University, [3)]Department of Life Sciences, Imperial College London, [4)]Division of Developmental Genetics, Institute of Resource Development and Analysis, Kumamoto University, [5)]School of Medicine, Kumamoto University, Japan

WS15-06-P

Dectin-2 contributes to antigen-specific IgM and IgG3 production against influenza virus polysaccharide

◯ Hideki Yamamoto[1)], Natsuo Yamamoto[2,3)], Tsuyoshi Suzuki[2)], Yoichiro Iwakura[4)], Chikako Tomiyama[1)]

[1)]Department of Medical Technology, Graduate School of Health Sciences, Niigata University, Niigata, Japan, [2)]Department of Emergency and Critical Care Medicine, Fukushima Medical University, Fukushima, Japan, [3)]Virus Research Center, Sendai Medical Center, National Hospital Organization, Sendai, Japan, [4)]Center for Animal Disease Models, Research Institute for Biomedical Sciences, Tokyo University of Science, Noda, Japan

WS15-07-P

Immune responses and effectiveness of stockpiled pre-pandemic influenza vaccine in mice

◯ Hideki Asanuma[1)], Tetsuro Tanabe[2)], Hideaki Inui[2)], Shinji Watanabe[1)], Yasushi Suzuki[1)], Tomoko Arita[1)], Masayuki Shirakura[1)], Noriko Kishida[1)], Kaori Sano[1)], Hideki Hasegawa[1)]

[1)]National Institute of Infectious Diseases, [2)]KM Biologics Co., Ltd.

WS15-08-O/P

Immunological evaluation of post-fusion influenza vaccine adjuvanted with DSP-0546LP in the non-human primate model

◯ Ayae Nishiyama[1)], Yuji Masuta[1)], Yu Adachi[2)], Hidenori Kimura[3)], Akihisa Fukushima[3)], Yoshimasa Takahashi[2)], Takuya Yamamoto[1)]

[1)]Laboratory of Precision Immunology, Center for Intractable Diseases and ImmunoGenomics research, National Institutes of Biomedical Innovation, Health and Nutrition, [2)]Research Center for Drug and Vaccine Development, National Institute of Infectious Diseases, [3)]Sumitomo Pharma. Co., Ltd.

WS15-9-P

Preventive effects of Okinawamozuku-derived fucoidan on flu virus infection

◯ Yoshiyuki Miyazaki[1,2)], Hayato Nakano[3)], Shugo Takeuchi[4)], Hideaki Takeuchi[5)], Toshiya Satoyama[2)], Naoto Hirose[1)], Daisuke Tachikawa[1,2,6)]

[1)]Kyushu University, [2)]NPO Research Institute of Fucoidan, [3)]Ventuno Co., Ltd., [4)]Kaisou-sci. Corp., [5)]Kamerycah Inc., [6)]Wakamiya Hospital

WS15-10-O/P

Binding analysis of HIV-2 Nef protein with host CD3 intracellular motif

◯ Ryota Koseki[1)], Idai Ozawa[1)], Kengo Hirao[1)], Masato Sumi[1)], Takashi Tadokoro[2)], Sophie Andrews[3)], Sarah Rowland-Jones[3)], Kimiko Kuroki[1)], Katsumi Maenaka[1)]

[1)]Hokkaido university, [2)]Sanyo-Onoda City University, [3)]University of Oxford

WS15-11-P

Therapeutic efficacy of an adjuvant-containing live-attenuated AIDS vaccine in pathogenic SHIV-infected cynomolgus macaques

◯ Tomotaka Okamura, Yasuhiro Yasutomi

Tsukuba Primate Research Center, National Institutes of Biomedical Innovation, Health and Nutrition

WS15-12-P

Evaluation of neutralizing monoclonal antibody against HTLV-1 infection in non-human primate HTLV-1 model

◯ Emiko Urano[1)], Yuetsu Tanaka[2)], Yasuhiro Yasutomi[1)]

[1)]National Institutes of Biomedical Innovation, Health and Nutrition, [2)]University of the Ryukyus

WS15-13-P

Regulatory mechanisms of Th17 cells in the pathogenesis of oral candidiasis

◯ Emi Kaji[1,2)], Kenji Toyonaga[1)], Sonoko Tasaki[1)], Jun-ichi Nagao[1,3)], Sari Kishikawa[1)], Masanobu Nakagami[1)], Aoba Iwanuma[1)], Satoru Iwai[1)], Yoshihiko Tanaka[1,3)]

[1)]Div Infect Biol.,Fukuoka Dent Coll., [2)]Div Anesthesiol., Fukuoka Dent Coll., [3)]Oral Med Res Cent., Fukuoka Dent Coll.

WS15-14-P

Functional analysis of signaling adaptor in a murine candidiasis model

◯ Kenji Toyonaga[1,2)], Jun-ichi Nagao[1,2)], Sonoko Tasaki[1)], Masayuki Umemura[3)], Sari Kishikawa[1,2)], Satoru Iwai[1)], Emi Kaji[1)], Aoba Iwanuma[1)], Masanobu Nakagami[1)], Kanae Negoro-Yasumatsu[1,2)], Kesisaku Matsuzaki[1)], Yoshihiko Tanaka[1,2)]

[1)]Section of Infection Biology, Department of Functional Bioscience, Fukuoka Dental College, [2)]Oral Medicine Research Center, Fukuoka Dental College, [3)]Molecular Microbiology Group, Department of Infectious Diseases, Tropical Biosphere Research Center, and Department of Host Defense, Graduate School of Medicine, University of the Ryukyus

WS15-15-O/P

Sex bias in the immune response to the emerging fungal pathogen *Sporothrix brasiliensis*

◯ Fabio Seiti Yamada Yoshikawa[1)], Sandro Rogerio de Almeida[2)], Shinobu Saijo[1)]

[1)]Medical Mycology Research Center, Chiba University, Chiba, Japan, [2)]Faculty of Pharmaceutical Sciences, University of Sao Paulo, Sao Paulo, Brazil

WS15-16-O/P

PILRs and their SNP mutations are involved in the regulation of host immune responses against the pathogenic fungus, *Aspergillus fumigatus*

◯ Yasunobu Miyake, Hiroki Yoshida

Saga University, Faculty of Medicine

WS15-17-P

Age-related changes in type 2 immune responses and gut microbiota with nematode infection

◯ Motoko Morimoto[1)], Hiromu Kurokawa[1)], Ayano Ogawa[1)], Wakako Ikeda-Ohtsubo[2)]

[1)]Miyagi University, [2)]Tohoku University

WS15-18-P

Visualization of four-dimensional immune responses to experimental cerebral malaria in C57BL/6 mice infected with *Plasmodium berghei* ANKA

◯ Tomoyo Taniguchi, Tomoharu Urasoe, Teppei Yamakawa, Yuki Gibo, Yuta Hirose, Yuiko Ohtani, Kenta Oyafuso, Hiromu Toma, Hidehiro Kishimoto

Department of Immunology and Parasitology, Graduate School of Medicine, University of the Ryukyus

WS15-19-P

The roles of innate lymphoid cells in developing *Schistosoma mansoni* to a mature adult worm in severely immunocompromised mice

◯ Risa Nakamura[1,2,3)], Megumi Hamasaki[1,2,3)], Hideki Muto[4)], Shinjiro Hamano[1,2,3)]

[1)]Department of Parasitology, Institute of Tropical Medicine (NEKKEN), Nagasaki Univ., [2)]Nagasaki University Graduate School of Biomedical Sciences Doctoral Leadership Program, [3)]The Joint Usage/Research Center on Tropical Disease, NEKKEN, Nagasaki Univ., [4)]Biomedical Research Support Center (BRSC), Nagasaki University School of Medicine

WS15-20-P

Spatial Distribution of Myeloid Immune Cells in Tick-Infested Mouse Skin

◯ Jiali Yan[1)], Tetsuro Kobayashi[2)], Maki Mizumura[1)], Kayoko Yamaji[3)], Haruko Takeyama[4)], Kazuyo Moro[1,2,5)]

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December 4

WS16 TCR-mediated signaling

WS16-01-O/P

The difference of Lck interactomes in CD4+CD8– and CD4–CD8+ thymocytes

◯ Junji Harada[1,2)], Ichiro Taniuchi[1)]

[1)]Laboratory for Transcriptional Regulation, Center for Integrative Medical Sciences, RIKEN, [2)]Department of RIKEN Molecular and Chemical Somatology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University

WS16-02-P

Interactome analysis of transcription factors controlling T cell development

◯ Kazuki Okuyama, Aneela Nomura, Ichiro Taniuchi
RIKEN IMS Lab for Transcriptional Regulation

WS16-03-P

Roles of TfR1-mediated iron homeostasis in the initiation of T lineage

◯ Yuichi Kama, Seiya Mogi, Hiroyuki Hosokawa
Department of Immunology, Tokai University School of Medicine

WS16-04-P

Role of m6A-binding proteins Ythdc1 in thymic maturation and proliferation

◯ Taku Kureha, Hiroshi Takayanagi
Graduate School of Medicine and Faculty of Medicine, The University of Tokyo

WS16-05-P

IL-18 primes T cells with an antigen-inexperienced memory phenotype for proliferation and differentiation into effector cells through Notch signaling

◯ Wen Li[1)], Shinji Takai[1)], Denan Jin[1)], Yoshimasa Tanaka[2)], Haruki Okamura[1)]
[1)]Department of Innovation Medicine, Osaka Medical and Pharmaceutical University, Japan, [2)]Center for Medical Innovation, Nagasaki University, Nagasaki, Japan

WS16-06-O/P

The quantitative detection of T cells with biallelic TCRα rearrangements

◯ Takahiro Iguchi[1)], Ryunosuke Muro[2)], Takeshi Nitta[2)], Hiroshi Takayanagi[1)]
[1)]Department of Immunology, Graduate School of Medicine, The University of Tokyo, [2)]Division of Molecular Pathology, Research Institute for Biomedical Sciences, Tokyo University of Science

WS16-07-O/P

Human T cells broadly recognizing multiple mycobacterial lipids

◯ Nanami Kamata[1,2)], Yuki Sakai[1,2)], Minori Asa[1,2)], Hayato Kasai[1,2)], Sho Yamasaki[1,2,3)]
[1)]Department of Molecular Immunology, Research Institute for Microbial Diseases, Osaka University, [2)]Laboratory of Molecular Immunology, Immunology Frontier Research Center (IFReC), Osaka University, [3)]Center for Infectious Disease Education and Research (CiDER), Osaka University

WS16-08-O/P

Single-cell analysis reveals age-related differences in T cell response to COVID-19 mRNA vaccines

◯ Ayana Sunami[1,2)], Norihide Jo[2,3)], Yoko Hamazaki[1,2,4)]
[1)]Laboratory of Immunobiology, Graduate School of Medicine, Kyoto University, [2)]Department of Life Science Frontiers, Center for iPS Cell Research and Application (CiRA), Kyoto University, [3)]Alliance Laboratory for Advanced Medical Research, Graduate School of Medicine, Kyoto University, [4)]Kyoto University Immunomonitoring Center (KIC)

WS16-09-O/P

Neoself-antigens are the primary target for autoreactive T cells in human lupus

◯ Shunsuke Mori, Hisashi Arase
Laboratory of Immunochemistry, World Premier International Immunology Frontier Research Centre, Osaka University

WS16-10-P

Predictive Modeling of T-Cell Receptor-Epitope Interactions in Systemic Sclerosis Using a Dual-Attention Deep Learning Approach

◯ Andi Nursanti Andi Ureng[1)], Rifaldy Fajar[2)], Roland Helmizar[3)], Prihantini Prihantini[4)], Sahnaz Vivinda Putri[5)]
[1)]Department of Pharmacy, Andini Persada College of Health Sciences, Indonesia, [2)]Computational Biology and Medicine Laboratory, Yogyakarta State University, Indonesia, [3)]Department of Internal Medicine, Baiturrahmah University, Indonesia, [4)]Machine Learning for BioMedicine Laboratory, Bandung Institute of Technology, Indonesia, [5)]Health Management Laboratory, International University Semen Indonesia, Indonesia

WS16-11-P

Acquisition of glioblastoma-specific T cell receptor

◯ Sora Yada, Kanami Tanaka, Hiroyuki Kishi, Eiji Kobayashi
University of Toyama

WS16-12-P

Identification of interdonor-conserved human CD4$^+$T cells that recognize a mycobacterial adjuvant, TMM, as an antigen

◯ Yuki Sakai[1,2)], Minori Asa[1,2)], Nagatoshi Fujiwara[3)], Daisuke Motooka[4)], Shinsuke Inuki[5)], Go Hirai[6)], Sho Yamasaki[1,2,7)]
[1)]Department of Molecular Immunology, Research Institute for Microbial Diseases, Osaka University, [2)]Laboratory of Molecular Immunology, Immunology Frontier Research Center (IFReC), Osaka University, [3)]Department of Food and Nutrition, Faculty of Contemporary Human Life Science, Tezukayama University, [4)]Genome Information Research Center, Research Institute for Microbial Diseases, Osaka University, [5)]Graduate School of Biomedical Sciences, Tokushima University, [6)]Graduate School of Pharmaceutical Sciences, Kyushu University, [7)]Center for Infectious Disease Education and Research (CiDER), Osaka University

WS16-13-P

The impact of TCR affinity and differentiation state on clonal competition

◯ Masaki Kurosu, Mikiya Tsunoda, Hiroyasu Aoki, Haruka Shimizu, Haru Ogiwara, Kouji Matsushima, Satoshi Ueha
Division of Molecular Regulation of Inflammatory and Immune Diseases, Research Institute for Biomedical Sciences, Tokyo University of Science

WS16-14-P

CD6 regulates fine-tunes T cell activation by regulating the size of TCR signalosomes through its binding to CD166

◯ Arata Takeuchi, Tetsushi Nishikawa, Hiroaki Machiyama, Ei Wakamatsu, Hitoshi Nishijima, Masae Furuhata, Hiroko Toyota, Ryohei Matsushima, Tadashi Yokosuka
Department of immunology, Tokyo Medical University

WS16-15-P

STAP-1 is a novel adaptor protein to promote TCR-mediated T cell activation and autoimmune inflammation

◯ Yuto Sasaki[1)], Teppei Takeda[1)], Fumiya Okuyama[1)], Jun-ichi Kashiwakura[2)], Tadashi Matsuda[1)], Kenji Oritani[3)]
[1)]Graduate School of Pharmaceutical Sciences, Hokkaido University, [2)] Department of Life Science, Faculty of Pharmaceutical Sciences, Hokkaido University of Science, [3)]Department of Hematology, International University of Health and Welfare

WS16-16-O/P

M-cell-dependent commensal uptake confers encephalitogenic phenotypes on γδT17 cells in Peyer's patch

◯ Seiga Komiyama[1)], Yuyo Ka[2)], Tomoyuki Ogura[2)], Satoshi Onawa[3)], Hiroshi Watarai[4)], Tsuneyasu Kaisho[5)], Nobuyuki Udagawa[6)], Daisuke Takahashi[1)], Koji Hase[1)]
[1)]Division of Biochemistry, Graduate School of Pharmacy, Keio University, [2)]Animal Resource Technical Research Center, Central Institute for Experimental Medicine and Life Science, [3)]Kanagawa Institute of Industrial Science and Technology, [4)]Department of Immunology and Stem Cell Biology, Kanazawa University, [5)]Department of Immunology, Institute of Advanced Medicine, Wakayama Medical University, [6)]Department of Oral Biochemistry, Matsumoto Dental University

WS16-17-O/P

Alterations of human liver γδ T cells by CMV infection

◯ Mouna Khan[1)], Hajime Morita[1)], Tashiaki Bando[1)], Lynn Zreka[1)], Shuhe Ma[1,2)], Daichi Akuzawa[1)], Yuki Masuo[1)], Shunsuke Uno[1)], Moyu Zhang[1)], Hideki Ueno[1,2)]
[1)]Human Immunology, Graduate school of medicine, Kyoto University., [2)]Immunology Group, Institute for the Advanced Study of Human Biology (ASHBi), KUIAS Kyoto University, Kyoto, Japan

WS16-18-P

γδ T cell-mediated activation of cDC1 orchestrates $CD4^+$ Th1 cell priming in malaria

◯ Yarob Ibraheem[1)], Ganchimeg Bayarsaikhan[1)], Maria Lourdes Macalinao[2)], Kazumi Kimura[1)], Katsuyuki Yui[1,2,3)], Taiki Aoshi[1)], Shin-Ichi Inoue[1)]
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WS16-19-P

γδ T cells contribute to the abnormal behavior in Autism Spectrum Disorder via IL-17a signaling

◯ Natsumi Awata, Ako Matsui, Minako Ito
Medical Institute of Bioregulation, Kyushu University

WS16-20-P

Molecular detection of an antigenic iNKT cell ligand in mammals

◯ Hayato Kasai[1,2)], Yuki Hosono[1,2)], Noriyuki Tomiyasu[4)], Yoshihiro Izumi[4)], Akihiro Imamura[5)], Eri Ishikawa[1,2)], Masatomo Takahashi[4)], Hideharu Ishida[5)], Takeshi Bamba[4)], Sho Yamasaki[1,2,3)]
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WS16-21-P

α4 integrin-mediated T cell adhesion and migration are regulated by miR-200c-3p

◯ Eun Jeong Park, Khwanchanok Mokmued, Motomu Shimaoka
Mie University Graduate School of Medicine

WS17 B cell activation and differentiation

WS17-01-O/P

Role of antigen and IgM persistent in endosome/lysosome in T cell-independent antibody response to polysaccharides

◯ Asahi Nunokawa[1,2], Kana Matsumura[1], Huang Yuming[1], Takeshi Tsubata[1,2]
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WS17-02-O/P

Essential roles of FcμR and complement activation in eliciting effective humoral immunity

◯ Zichao Wen[1], Lulu Dong[1], Jun Liu[1], Qing Min[2], Ying Wang[1], Ziying Hu[3], Xiaoqian Feng[1], Chaoqun Cui[1], Yingying Luan[1], Yaxuan Li[1], Birgitta Heyman[5], Ji-Yang Wang[1,2,4]
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WS17-03-O/P

The contribution of IL-9 receptors on peritoneal B cells and ILC2 to the T-cell-independent immune responses

◯ Mari Tenno, Takumi Umezu, Yuko Emoto, Haruna Sato, Kei Kato, Daisuke Kitamura
Toyko University of Science

WS17-04-O/P

Explore the alteration of B cell caused by *Bach2*-deficiency

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WS17-05-O/P

Plasma cell KLF2 expression at the induction site directs migration to the bone marrow

Wataru Ise[1,2,8], ◯ Takuya Koike[1,2,7,8], Yuki Tai[2], Taiichiro Shirai[3], Ryoji Kawakami[4], Takeshi Inoue[2], Nozomi Hojo[5], Katsuyuki Shiroguchi[5], Kazuhiro Suzuki[3], Tomohiro Kurosaki[2,6,7]
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WS17-06-O/P

Autoreactive B cells are formed by somatic hypermutation without help of autoreactive T cells

◯ Wataru Okada, Shun Tokumoto, Sano Nagano, Miya Yoshino, Koji Tokoyoda
Division of Immunology, School of Life Science, Faculty of Medicine, Tottori University

WS17-07-O/P

Humanized BCR mice are a useful tool for analysis of autoreactive B cells

◯ Rinka Ito[1], Yutaro Yada[1], Yasuhiro Kazuki[2], Yoshihiro Baba[1]
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WS17-08-O/P

All-trans-retinoic acid suppresses age-associated B cell generation and ameliorates autoimmunity

◯ Keisuke Imabayashi, Yoshihiro Baba
Division of Immunology and Genome Biology, Medical Institute of Bioregulation, Kyushu University

WS17-09-P

Newly Identified Gain-of-Function Mutation in BTK SH3 domain Promotes B-1 B Cell Expansion and Autoantibody Production

◯ Xin Meng[1], Wenjie Wang[2], Hai Zhang[2], Lulu Dong[3], Xin Lan[4], Qing Min[5], Jingjing Zhao[1], Meiping Yu[2], Lipin Liu[2], Xiaochuan Wang[2,6], Ji-Yang Wang[3,2,5]
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WS17-10-P

Protein kinase D is essential for B cell activation and humoral immunity

◯ Airi Shibata[1)], Keisuke Imabayashi[1)], Eri Ishikawa[2)], Tomoharu Yasuda[3)], Sho Yamasaki[2)], Yoshihiro Baba[1)]
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WS17-11-P

The roles of Cyclin-Dependent Kinase 9 in B activation

◯ Shin-ichi Tsukumo, Koji Yasutomo
Tokushima University

WS17-12-P

Regulatory mechanisms of class-switch recombination of immunoglobulins via cis-regulatory elements for *Aicda* gene expression

◯ Merumo Shimizu[1)], Kazuko Miyazaki[1)], Daisuke Kitamura[2)], Hiroshi Kawamoto[1)], Masaki Miyazaki[1)]
[1)]Institute for life and medical sciences, Kyoto University, [2)]Tokyo University of Sciences

WS17-13-P

B cell-intrinsic Arf1 plays a pivotal role in germinal center formation

◯ Yui Kotani[1,2)], Mami Sumiyoshi[1)], Madoka Ozawa[3)], Tomoya Katakai[3)], Satoshi Matsuda[1)]
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WS17-14-P

HuR/ELAVL1 is essential for the activation-induced cytidine deaminase- dependent decrease of Topoisomerase 1 in antibody diversification

◯ Wajid Amin, Shoki Nishio, Maki Kobayashi, Tasuku Honjo
Kyoto University

WS17-15-P

Pulmonary administration of a nonreplicating adenoviral vector vaccine generates more potent and broader neutralizing IgGs against SARS-CoV-2 spike than intramuscular administration

◯ Toshiro Hirai[1,2)], Koki Ueda[2)], Mako Kakihara[2)], Kazuo Takayama[3)], Yasuo Yoshioka[1,2,4,5)]
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WS17-16-P

Ca^{2+}/calmodulin-dependent protein kinase II is involved in the regulation of IgE class switch recombination, but not the differentiation in human B cells

◯ Kano Tanabe, Yukinori Kozuma
Faculty of Health Science, Kumamoto Health Science University

WS17-17-P

The critical role of H3K27me3 enzyme subunit Eed in the early phase of germinal center formation

◯ Man Zhang, Yun Guo, Tomoharu Yasuda
Department of Immunology, Hiroshima University

WS17-18-P

A mutation type of activation-induced cytidine deaminase reveals novel functional regulation of class switch recombination

◯ Yuchen Zhang[1,2)], Peng Gao[1)], Naoki Morita[1)], Ayako Isotani[3)], Shunsuke Yuri[3)], Reiko Shinkura[1,2)]
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WS17-19-P

Regulation of humoral immunity by differential use of BACH1 and BACH2

◯ Takeshi Kurasawa[1)], Akihiko Muto[1)], Mitsuyo Matsumoto[2)], Kyoko Ochiai[1)], Ari Itoh[3)], Kazutaka Murayama[4)], Kazuhiko Igarashi[1,5)]
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WS17-20-P

STAP-1 acts as a scaffold protein for positive regulation of CD40 signals in B cells

◯ Shoya Kawahara[1)], Jun-ichi Kashiwakura[2)], Kenji Oritani[3)], Tadashi Matsuda[1)]
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December 4

WS18 Infection immunity 3

WS18-01-P

The reactions of immune cells by bacteria specific modified nucleosides

◯ Miho Shimamura, Yu Nagayoshi, Kayo Nishiguchi, Hitomi Kaneko, Ryosuke Yamamura, Kazuhito Tomizawa
Department of Molecular Physiology, Faculty of Life Sciences, Kumamoto University

WS18-02-P

Activation of caspase-11 exacerbates *Acinetobacter* infection through gasdermin D-driven membrane rupture

◯ Yasuyuki Matsuda[1)], Hajime Yamauchi[1)], Go Kamoshida[2)], Tsukasa Shiraishi[3)], Shin-ichi Yokota[3)], Hideki Hara[1)]
[1)]Asahikawa Med. Univ., [2)]Meiji Pharm. Univ., [3)]Sapporo Med. Univ.

WS18-03-P

Histone-lysine methyltransferase Setdb2 contributes to lethality of secondary bacterial pneumonia via regulating cytokines and chemokines in macrophages

◯ Atsushi Hara, Masahiro Kitabatake, Noriko Ouji-Sageshima, Ryutaro Furukawa, Toshihiro Ito
Department of Immunology, Nara Medical University

WS18-04-P

Phosphorylation of JNK exacerbates Staphylococcus aureus infection by promoting inflammasome activation

Yasuyuki Matsuda[1)], Kei Sakamoto[2)], Hajime Yamauchi[1)], Akihiko Yoshimura[3)], Gabriel Nunez[4)], ◯ Hideki Hara[1)]
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WS18-05-P

A single-cell RNA-seq approach to analyze the interaction of *Salmonella* with the host immune system

◯ Hirotaka Hiyoshi[1)], Mohamad Al Kadi[2)], Maika Yamashita[2)], Daisuke Okuzaki[2)], Toshio Kodama[1)]
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WS18-06-P

Analysis of innate immune responses against *Streptococcus mutans*

◯ Aoba Iwanuma[1,2)], Kenji Toyonaga[1,3)], Jun-ichi Nagao[1,3)], Satoru Iwai[1)], Sari Kishikawa[1,3)], Emi Kaji[1)], Masanobu Nakagami[1)], Keisaku Matsuzaki[1)], Kyoko Oka[2,3)], Yoshihiko Tanaka[1,3)]
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WS18-07-P

Localization and characteristics of IL-17F in the mycobacteria-infected lungs

◯ Masayuki Umemura[1,2,3)], Toshihiro Konno[1,4)], Giichi Takaesu[1,2,5)], Goro Matsuzaki[1,2,5)]
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WS18-08-P

Inherited CARD9 deficiency complicated with central nervous system *Mycobacterium avium* complex infection

◯ Tomonari Shigemura[1,2)], Haruo Nagumo[3)], Norimoto Koabayashi[4)], Kazunaga Agematsu[5)], Takamasa Saito[1)], Takashi Kurata[5)], Shiho Asaka[6,9)], Tomomi Yamaguchi[7,8)], Tomoki Kosho[7,8)], Yozo Nakazawa[1)]
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WS18-09-P

Caspase-12 is an innate immune sensor for bacteria-associated molecular patterns

◯ Kohsuke Tsuchiya, Takashi Suda
Kanazawa University

WS18-10-O/P

Salmonella utilizes antibiotics and antibodies for immune evasion

◯ Uki Kimura[1)], Karen Saiki[1)], Nobuhiro Matsuyama[1)], Akiko Takaya[2)], Koji Tokoyoda[1)]
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WS18-11-P

Immunological analysis of cognitive dysfunction induced by periodontal disease

◯ Sari Kishikawa[1,2], Jun-ichi Nagao[1,2], Kenji Toyonaga[1,2], Emi Kaji[1], Masahiro Nakagami[1], Aoba Iwanuma[1], Sonoko Tasaki[1], Kanae Negoro[1,2], Satoru Iwai[1], Yoshihiko Tanaka[1,2]

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WS18-12-P

Evaluation of periodontitis in mouse model by periodontal pathogenic bacterial infection

◯ Masanobu Nakagami[1,2], Jun-ichi Nagao[1,3], Sari Kishikawa[1,3], Kenji Toyonaga[1,3], Satoru Iwai[1], Keisaku Matsuzaki[1], Emi Kaji[1], Aoba Iwanuma[1], Yasunori Yoshinaga[2,3], Ryuji Sakagami[2], Yoshihiko Tanaka[1,3]

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WS18-13-P

Investigation of immune regulation of Th17 cells in the development of periodontitis

◯ Jun-ichi Nagao[1,2], Masanobu Nakagami[1], Sari Kishikawa[1,2], Kenji Toyonaga[1,2], Emi Kaji[1], Aoba Iwanuma[1], Kanae Negoro-Yasumatsu[1], Sonoko Tasaki[1], Satoru Iwai[1], Yoshihiko Tanaka[1,2]

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WS18-14-O/P

Oligopeptide binding protein A provides novel preventive paradigms against *Salmonella* infections

◯ Ken Yoshii[1], Koji Hosomi[1], Takahiro Nagatake[1,2], Jun Kunisawa[1,3,4,5,6,7]

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WS18-15-P

Peyer's patches are required for antigen-specific systemic IgA induction against oral recombinant *Salmonella*

◯ Tomomi Hashizume-Takizawa, Hidenobu Senpuku

Nihon University School of dentistry at Matsudo

WS18-16-O/P

Pilus-based vaccine development to prevent Group A Streptococcal infections

◯ Jacelyn Mei San Loh[1,2], Adrina Khemlani[1], Catherine Tsai[1,2], Nikki Moreland[1,2], Thomas Proft[1,2]

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WS18-17-O/P

Novel tuberculosis vaccine evaluation with simian immunodeficiency virus and mycobacterium tuberculosis co-infected monkey model

◯ Natsuko Yamakawa, Yasuhiro Yasutomi

NIBIOHN Tsukuba Primate Research Center

WS18-18-P

Elucidating the Mechanistic Anti-Methicillin-resistant *Staphylococcus Aureus* (MRSA) Effects of Platelets Using iPS Cell-derived Platelets (iPSC-PLTs)

◯ Qirui Lin[1], Kimiko Nonomura[1], Sou Nakamura[1], Satoshi Uchiyama[2], Victor Nizet[2], Koji Eto[1], Naoshi Sugimoto[1]

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WS18-19-O/P

A phage cocktail predicting the evolution of phage resistance can effectively combat MDR *Acinetobacter baumannii* infection and delay phage resistance

◯ Yong Shao[1,4], Ying Zhang[2,3], Jianqiong Zhang[1,2,3,4]

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WS18-20-O/P

Association between LILRB3 and LILRA6 alleles and bacterial infection

◯ Gen Hasegawa[1,2], Kouyuki Hirayasu[1,3], Yifan Li[1], Hisashi Arase[4,5,6], Masaya Yamaguchi[6,7,8,9], Shigetada Kawabata[6,8], Rikinari Hanayama[1,10]

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WS18-21-P

CCR2 plays a critical role in the protection against abnormal pregnancies caused by *Toxoplasma gondii* infection

◯ Naganori Kamiyama[1], Nozomi Sachi[1], Sotaro Ozaka[1], Yasuhiro Soga[1], Yomei Kagoshima[1], Supanuch Ekronarongchai[1], Masahiro Yamamoto[3,4,5], Takashi Kobayashi[1,2]

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WS18-22-O/P

The cAMP Responsive Element Modulator (CREM) Transcription Factor Regulates Innate and Adaptive Immunity and Alters Susceptibility to Malnutrition

◯ Audrey Brown[1], Md Jashim Uddin[1], Rebecca Munday[4], Farha Naz[1], G Brett Moreau[1], Girija Ramakrishnan[1], Stephen Rich[2], Rashidul Haque[3], Priya Duggal[4], Chelsea Marie[1], William Petri Jr.[1]

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December 4

WS19 Tolerance and immune suppression focusing on regulatory T cell biology

WS19-01-O/P

Runx3/Cbfβ is required for differentiation and function of Thetis APCs that drives Rorγt^{+} pTreg differentiation

◯ Chihiro Ogawa, Ichiro Taniuchi

RIKEN Center for Integrative Medical Sciences, Laboratory for Transcriptional Regulation

WS19-02-O/P

Foxp3 corporates with NFκB to promote endogenous Foxp3 transcription *in vivo*

◯ Yuxi Wei, Akira Nakajima, Shohei Hori

Laboratory of Immunology and Microbiology, Graduate School of Pharmaceutical Sciences, The University of Tokyo

WS19-03-O/P

Possible diversity of Treg cell development pathways branching from CD25^{neg}Foxp3^{neg} pre-precursor stage in the thymus

◯ Ryoji Kawakami[1,2], Shimon Sakaguchi[1,2]

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WS19-04-O/P

Generation and activation of naturally arising memory-phenotype CD4^{+} T lymphocytes are homeostatically restricted by regulatory T cells dependently of TCR, CD28, and IL-2 signaling

◯ Jing Li, Ziying Yang, Akihisa Kawajiri, Kosuke Sato, Shunichi Tayama, Naoto Ishii, Takeshi Kawabe

Department of Microbiology and Immunology, Tohoku University Graduate School of Medicine

WS19-05-O/P

Characterization of peripheral blood Treg cells

◯ Takashi Sekiya

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WS19-06-O/P

CD80/CD86-CD28 signal blockade during the mixed lymphocyte reaction augments the alloantigen-specific inhibitory function of natural regulatory T cells

◯ Kyoko Yogo[1,3], Kazuyoshi Takeda[1], Ko Okumura[1], Ryuichi Murakami[2], Shohei Hori[2], Koichiro Uchida[1]

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WS19-07-O/P

Induction of antigen-specific Treg in vivo with mRNA

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WS19-08-P

Polyclonal iTreg mediate Target Specific Suppression

◯ Yoshihiro Oya[1,2], Takuya Nakazawa[2], Ryutaro Matsumura[2], Hiroshi Nakajima[3], Ethan M Shevach[4]

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WS19-09-P

An endogenous lipid in human plasmais a potential immunosuppressant

◯ Shigenari Ishizuka[1,2], Yasunobu Miyake[2], Hiroki Yoshida[2], Sho Yamasaki[1,3,4]

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WS19-10-P

Dimer formation and ligand recognition of secreted receptor LILRA3

◯ Shinsuke Imai[1], Hiroshi Watanabe[1], Kimiko Kuroki[1], Katsumi Maenaka[1,2,3,4,5]

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WS19-11-P

Functional defect in regulatory CD4$^+$ T cells in a novel inflammatory bowel disease model

◯ Hideki Ogura[1], Soutaro Hanawa[2], Akie Teratani[1], Ryo Unita[3], Satoshi Ishido[1]

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WS19-12-P

Differentiation of peripherally-derived Treg cells and restoration of oral tolerance by food intake and costimulatory blockade

◯ Masaya Arai[1], Ryoji Kawakami[2], Yamami Nakamura[1], Yoko Naito[3], Daisuke Motooka[3], Norihisa Mikami[1], Shimon Sakaguchi[1,2]

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WS19-13-P

ILDR2$^+$CD206$^+$ macrophages in the sublingual mucosa potentially induce regulatory T cells

◯ Farzana Sultana, Miyuki Azuma, Shigenori Nagai

Molecular Immunology

WS19-14-P

Balancing Treg and exTreg dynamics via CTCF-mediated chromatin organization controls autoimmune diseases and immunotherapy outcomes

◯ Ying ying Zhou[1], Li Qiu[2], Yuan Hui[2,3], Sheng bao Suo[4,5], Guang shuai Jia[3], Qi bin Leng[2]

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WS19-15-P

Non-specific Symmetric Control is Crucial for Autonomous Optimization of Immune Balance

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December 4

WS20 Organ-Specific Immune Diseases

WS20-01-O/P

Neutrophil-derived IL-23 p19 monomer suppresses type 17 immunity

◯ Daiya Ohara, Yusuke Takeuchi, Yoonha Lee, Hiroki Mukoyama, Hitomi Watanabe, Gen Kondoh, Keiji Hirota
Institute for Life And Medical Sciences, Kyoto University

WS20-02-O/P

Th1-type Tregs induced by interferon-γ limit EAE exacerbation

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WS20-03-O/P

Stage-dependent dynamics of resident memory T cells in lesion sites of multiple sclerosis and neuromyelitis optica spectrum disorders

◯ Fumihiro Yanagimura[1,5)], Akihiro Nakajima[1)], Etsuji Saji[1)], Takashi Nakajima[5)], Hiroshi Shimizu[2)], Yasuko Toyoshima[2,7)], Hitoshi Takahashi[6,8)], Akiyoshi Kakita[2)], Masatoyo Nishizawa[4,8)], Osamu Onodera[1)], Izumi Kawachi[1,3)]
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WS20-04-O/P

Ketogenic diet regulates autoimmune neuroinflammation via changes in small intestinal gut microbiome

◯ Katsuki Yaguchi[1,2)], Tadashi Takeuchi[1,3)], Eiji Miyauchi[1,4)], Masami Kawasumi[1)], Yumiko Nakanishi[1)], Tamotsu Kato[1)], Jigen Sekine[1)], Shin Maeda[2)], Hiroshi Ohno[1,5)]
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WS20-05-O/P

Akkermansia muciniphila endorses T cell pathogenicity and invasion to CNS in experimental autoimmune encephalomyelitis

◯ Manu Mallahalli Shanthappa[1)], Hirohiko Hohjoh[2)], Daiki Takewaki[1)], Shinji Oki[1)], Wakiro Sato[1)], Takashi Yamamura[1)]
[1)]Department of Immunology, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Ogawahigashicho, Kodaira, Tokyo., [2)]Department of Molecular Pharmacology, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Ogawahigashicho, Kodaira, Tokyo

WS20-06-P

An Engineered Probiotic Produces a Type III Interferon IFNL1 and Reduces Inflammations in *in vitro* Inflammatory Bowel Disease Models

◯ Koon Jiew Eri Chua[1,2,3,4)], Hua Ling[1,2,3,4)], In Young Hwang[1,2,3,4)], Hui Ling Lee[1,2,3,4)], John C March[5)], Yung Seng Lee[1,2,6)], Matthew Wook Chang[1,2,3,4)]
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WS20-07-P

Treatment of multiple sclerosis by immunomodulatory glycolipid OCH in Phase II Clinical Trial and in an animal model

◯ Atsuko Kimura[1)], Ben JE Raveney[1)], Tomoko Okamoto[2)], Wakiro Sato[1)], Shinji Oki[1)], Youwei Lin[2)], Sachiko Miyake[3)], Yuji Takahashi[2)], Takashi Yamamura[1)]
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WS20-08-P

Investigation of anti-inflammatory effects of nicotine in ulcerative colitis (UC) using a PET imaging agent, [^{18}F]ASEM

◯ Kohei Nakajima, Genki Yoshino, Mikako Ogawa
Graduate School of Pharmaceutical Sciences, Hokkaido Univ.

WS20-09-P

Phenotypic Validation of Humanized IgA1 and CD89 Transgenic Mice as a Model for IgA Nephropathy-Like Autoimmune Disease

◯ Kaiyuan Zi, Juan Liang
GemPharmatech Co., Ltd.

WS20-10-O/P

CXCL13 producing peripheral helper T cell (Tph) is a crucial pathogenesis in Castleman disease (iMCD)

◯ Kazuyuki Yoshizaki[1)], Yoshikane Kikushige[2)], Takuya Harada[2)], Hiroaki Niiro[2)], Kazuko Uno[3)], Atsushi Kawakami[4)], Tomohiro Koga[4)]
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WS20-11-P

Gut Dysbiosis with AHR Activation Exacerbates the Pathogenesis of Pulmonary Arterial Hypertension

◯ Ryotaro Asano, Makoto Okazawa, Tadakatsu Inagaki, Yui Kotani, Xin Ding, Tomohiko Ishibashi, Takeshi Ogo, Yoshikazu Nakaoka
National Cerebral and Cardiovascular Center

WS20-12-O/P

Identification of *PTPN2* as a population-specific susceptibility locus for primary biliary cholangitis through genome-wide association study

◯ Yuki Hitomi[1)], Yoshihiro Aiba[2)], Kazuyoshi Ishigaki[3)], Minoru Nakamura[2,4,5)]
[1)]Department of Human Genetics, Research Institute, National Center for Global Health and Medicine, [2)]Clinical Research Center, NHO Nagasaki Medical Center, [3)]Laboratory for Human Immunogenetics, RIKEN Center for Integrative Medical Sciences, [4)]Division of Biomedical Information Analysis, Medical Institute of Bioregulation, Kyushu University, [5)]Department of Hepatology, Nagasaki University Graduate School of Biomedical Sciences

WS20-13-P

Hepatic stellate cells in primary biliary cholangitis display an increase of molecules associated with antigen-presentation capacities

◯ Toshiaki Bando[1)], Hajime Morita[1)], Lynn Zreka[1)], Shuhe Ma[1,3)], Mouna Khan[1)], Daichi Akuzawa[1)], Yuki Masuo[1)], Shunsuke Uno[1)], Hirotaka Sato[1)], Takashi Ito[2)], Hideki Ueno[1,3,4)]
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WS20-14-P

AI-Driven Epigenetic Analysis Reveals Novel Therapeutic Targets in Primary Sclerosing Cholangitis

◯ Elfiany Syafruddin[1)], Prihantini Prihantini[2)], Andi Nursanti Andi Ureng[3)], Rifaldy Fajar[4)], Sahnaz Vivinda Putri[5)], Roland Helmizar[6)]
[1)]Computational Research Team, Bulukumba Muhammadiyah University, Indonesia, [2)]Machine Learning for BioMedicine Laboratory, Bandung Institute of Technology, Indonesia, [3)]Department of Pharmacy, Andini Persada College of Health Sciences, Indonesia, [4)]Computational Biology and Medicine Laboratory, Yogyakarta State University, Indonesia, [5)]Health Management Laboratory, International University Semen Indonesia, Indonesia, [6)]Department of Internal Medicine, Baiturrahmah University, Indonesia

WS20-15-O/P

Development of novel therapy targeting gut microbiota for primary sclerosing cholangitis

◯ Haruka Okada[1)], Masataka Ichikawa[2)], Nobuhiro Nakamoto[1)], Takanori Kanai[1)]
[1)]Division of Gastroenterology & Hepatology, Department of Internal Medicine, Keio University School of Medicine, [2)]Division of Gastroenterology, Tokyo Dental College Ichikawa General Hospital

WS20-16-P

Butyrate-regulated Histone Modifications in Orbital Fibroblast from Graves' Ophthalmopathy

◯ Sukonlaphat Pitikeattikul[1)], Preamjit Saonanon[2)], Vannakorn Pruksakorn[2)], Tanapat Palaga[3)], Sita Virakul[3)]
[1)]Medical Microbiology, Interdisciplinary Program, Graduate School, Chulalongkorn University, Bangkok, Thailand, [2)]Department of Ophthalmopathy, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, [3)]Department of Microbiology, Faculty of Science, Chulalongkorn University, Bangkok, Thailand

WS20-17-P

IgM-type anti-TSH receptor antibody produced through gene transfection

◯ Keiko Nagata[1)], Shusei Hamamichi[2)], Yoshinori Ichihara[1)], Tatsuya Sawano[1)], Kanako Kazuki[2)], Takashi Moriwaki[2)], Junichiro Miake[1)], Kazuhiko Matsuzawa[1)], Yasuhiro Kazuki[2)], Takeshi Imamura[1)]
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WS20-18-P

Vimentin knockdown attenuates PDGF-BB-induced orbital fibroblast functions in Graves' ophthalmopathy

◯ Rajit Chompoowong[1)], Jutamas Wongphoom[2)], Nakarin Kitkumthorn[3)], Preamjit Saonanon[4)], Vannakorn Pruksakorn[4)], Tanapat Palaga[5)], Nattiya Hirankarn[6)], Martin van Hagen[6,7,8)], Willem A Dik[7)], Sita Virakul[5)]

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WS20-19-P

Gamma-glutamyltransferase 1 is an eQTL in nonimmune cells and is associated with the development of Post-ERCP pancreatitis via NF-κB activation

◯ Rie Hasebe[1)], Jing Jing Jiang[2,3)], Yuki Tanaka[4)], Kaoru Murakami[2)], Kumiko Tanaka[2)], Takeshi Yamasaki[1)], Yuta Shinohara[2)], Shintaro Hojyo[2)], Shimpei Kubota[2)], Shigeru Hashimoto[2)], Masaaki Murakami[1,2,4)]

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WS20-20-P

Pathophysiological Mechanisms of the Onset, Development, and Disappearance Phases Based on the Spatiotemporal Dynamics of Skin Eruptions in Chronic Spontaneous Urticaria

◯ Sungrim Seirin-Lee[1)], Shunsuke Takahagi[2)], Michihiro Hide[3)]

[1)]Kyoto University, [2)]JA Hiroshima General Hospital, [3)]Hiroshima City Hiroshima Citizens Hospital

WS20-21-P

A novel immunomodulatory compound identified through a screening targeting dendritic cell ameliorates colitis and contact hypersensitivity in mice

◯ Kazuki Nagata[1)], Fumiya Sakata[1)], Ayaka Sugihara[1)], Miki Takahashi[1)], Hiroyuki Hirano[2)], Hiroyuki Osada[2,3)], Chiharu Nishiyama[1)]

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WS20-22-P

Pathophysiological analysis of vitiligo symptoms in autoimmune prone mice

◯ Yuriko Tanaka[1)], Marii Ise[1)], Taku Naito[1)], Taku kuwabara[1)], Shuhei Mashimo[1,2)], Akiko Inoue[1,3)], Motonari Kondo[1)]

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WS20-23-P

Moesin regulates homeostasis of alveolar epithelial cells and macrophages

◯ Hiroki Satooka, Takako Hirata

Shiga University of Medical Science

WS20-24-P

Up-regulation of transcription factor *ELF3* is a hallmark of human thymomas and causes a reduction of thymic regulatory T cells in mice

◯ Wataru Muramatsu[1,2)], Taishin Akiyama[1,2)]

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WS20-25-P

Decoding Immunogenic Peptide Expression in Alzheimer's Disease via Quantum-Inspired Deep Learning on Human Leukocyte Antigen Peptidomics Data

◯ Sahnaz Vivinda Putri[1)], Prihantini[2)], Andi Nursanti Andi Ureng[3)], Rifaldy Fajar[4)], Elfiany Syafruddin[5)]

[1)]Health Management Laboratory, International University Semen Indonesia, Indonesia, [2)]Machine Learning for BioMedicine Laboratory, Bandung Institute of Technology, Indonesia, [3)]Department of Pharmacy, Andini Persada College of Health Sciences, Indonesia, [4)]Computational Biology and Medicine Laboratory, Yogyakarta State University, Indonesia, [5)]Computational Sciences Research Team, Bulukumba Muhammadiyah University, Indonesia

December 4

WS21 Granulocytes and Mast cells in homeostasis and diseases

WS21-01-O/P

IL-27 signaling promotes peanut-specific IgE production

◯ Jun Kasamatsu[1)], Hiroki Yoshida[2)], Hiromitsu Hara[1)]
[1)]Kagoshima University, [2)]Saga University

WS21-02-P

The investigation of eosinophil subsets in asthma pathogenesis

◯ Ayaka Hashimoto[1)], Takuya Yashiro[1)], Kazuyo Moro[1,2,3)]
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WS21-03-O/P

RNA-binding protein tristetraprolin negatively regulates pro-inflammatory mediator production in basophils via mRNA degradation

◯ Junya Ito[1,2)], Kensuke Miyake[1)], Tomoki Chiba[2)], Hajime Karasuyama[1)], Hiroshi Asahara[2)]
[1)]Institute of Research, Tokyo Medical and Dental University (TMDU), [2)]Department of Systems BioMedicine, Tokyo Medical and Dental University (TMDU)

WS21-04-O/P

Basophils are crucial for the resolution of lung inflammation in acute respiratory distress syndrome

◯ Kensuke Miyake[1)], Seiko Takasawa[1,2)], Tomoya Tateishi[2)], Jun Sugihara[2)], Junya Ito[1)], Hajime Karasuyama[1)], Yasunari Miyazaki[2)]
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WS21-05-O/P

Neutrophils are composed on heterogeneous subsets in Human Liver

◯ Lynn Zreka[1)], Hajime Morita[1)], Toshiaki Bando[1)], Shuhe Ma[1,2)], Mouna Khan[1)], Daichi Akuzawa[1)], Yuki Masuo[1)], Shunsuke Uno[1)], Hirotaka Sato[1)], Hideki Ueno[1,2)]
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WS21-06-O/P

Interferon-γ recruits immature neutrophils to suppress acute inflammation during polymicrobial sepsis in mice

◯ Kenshiro Matsuda, Akira Shibuya
University of Tsukuba

WS21-07-O/P

Deficiency of the antioxidant stress response master transcription factor Nrf2 ameliorates IgE-induced anaphylaxis in mice by suppressing IgE-dependent activation of mast cells

◯ Sakura Noguchi, Kazuki Nagata, Tsubasa Ashikari, Chiharu Nishiyama
Department of Biological Science and Technology, Faculty of Advanced Engineering, Tokyo University of Science.

WS21-08-O/P

Neuronal substance P-driven MRGPRX2-dependent mast cell degranulation products histamine and chymase differentially promote vascular permeability

◯ Ayako Kaitani[1)], Masakazu Nagamine[1)], Kumi Izawa[1)], Tomoaki Ando[1)], Akihisa Yoshikawa[1,2)], Akie Maehara[1)], Naoko Negishi[1)], Nobuhiro Nakano[1)], Ko Okumura[1)], Jiro Kitaura[1)]
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WS21-09-P

Roles of transcription factor PU.1 and TGF-β-Signaling in the Regulation of CD103 Expression in Mast Cells and Dendritic Cells

◯ Kenta Ishii, Kazuki Nagata, Chiharu Nishiyama
Department of Biological Science and Technology, Faculty of Advanced Engineering, Tokyo University of Science

December 4

WS22 New molecular and cellular mechanisms in cancer immunology

WS22-01-O/P

Satb1 maintains the functionality of regulatory and cytotoxic T cells during tumor responses

◯ Wooseok Seo[1,2], Chengcheng Zou[2], Kanako Shimizu[2], Ruka Setoguchi[3], Kiyokazu Kakugawa[2], Krutula Nair[2], Haruhiko Koseki[2], Terumi Kohwi-Shigematsu[4], Shohei Hori[3], Shin-ichiro Fujii[2], Hiroyoshi Nishikawa[1], Ichiro Taniuchi[2]
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WS22-02-P

Naturally arising memory-phenotype CD4$^+$ T lymphocytes differentiate into Th1, Th17, and Treg cells to contribute to tumor immunity while inhibiting graft-versus-host disease

◯ Feng Gao, Ziying Yang, Jing Li, Akihisa Kawajiri, Kosuke Sato, Shunichi Tayama, Naoto Ishii, Takeshi Kawabe
Department of Microbiology and Immunology, Tohoku University, Graduate School of Medicine

WS22-03-P

Type-I IFN signaling in the gut lymphoid tissue regulates the polyamine homeostasis in the peripheral CD8$^+$ T cells

◯ Kana Yamasaki[1], Sara Delghandi[1], Kazuhiro Sonomura[3], Tomonori Yaguchi[1,2], Tasuku Honjo[1], Kenji Chamoto[1,2]
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WS22-04-P

IFN-γ Modulation of Type 2 Immune Response enhances T cell Anti-tumor Immunity

◯ Tzu-Hsuan Chang[1,2], Francesca Alfei[3], Stefania Vilbois[1,2], Yingxi Xu[1,2,4,5], Ping-Chih Ho[1,2]
[1]Department of Fundamental Oncology, University of Lausanne, Lausanne, Switzerland., [2]Ludwig Institute for Cancer Research, University of Lausanne, Epalinges, Lausanne, Switzerland, [3]Amal Therapeutics, Av. de la Roseraie 64, Genève, Switzerland, [4]National Clinical Research Center for Blood Diseases, Institute of Hematology and Blood Diseases Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Tianjin, China, [5]Tianjin Institutes of Health Science, Tianjin, China

WS22-05-P

PIGR mediates susceptibility of tumor cells to cytotoxicity of CD8$^+$ T cells

◯ Chenxu Jiang[1], Kiyoshi Yasui[1], Situo Deng[1], Mitsuhiro Yoneda[1], Yasuhiro Nagata[2], Hiroaki Ikeda[1]
[1]Department of Oncology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan, [2]Leading Medical Research Core Unit, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan

WS22-06-P

Depletion of CD4$^+$ T cells suppressed tumor growth in a murine model of lung cancer with pulmonary fibrosis through enhancing anti-tumor effects of CD8$^+$ T cells

◯ Takehiro Sakabe, Masahiro Kitabatake, Noriko Ouji-Sageshima, Ryutaro Furukawa, Tatsuki Nishioka, Toshihiro Ito
Department of Immunology, Nara Medical University

WS22-07-P

The role of histone demethylase Phf2 in T cell immune responses and effect of Phf2 deficiency on antitumor activity

◯ Yuzuki Tano[1], Yuya Arakawa[2], Yuri Tsuchiya[3], Rina Matsuda[1], Honoka Myahara[1], Ayumi Sumizaki[1], Masaki Yasukawa[1,3], Takeshi Yamada[1,3]
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WS22-08-O/P

T cell exhaustion steps according to mitochondrial status and the analysis of their glycolytic function

◯ Koji Kitaoka[1], Yasuharu Haku[1], Tomonori Yaguchi[1,2], Tasuku Honjo[1], Kenji Chamoto[1,2]
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WS22-09-P

Possible involvement of miR-31 in T cell exhaustion mediated by a T-box transcription factor, Eomesodermin

◯ Ritsuki Tanabe, Ryuichi Nagashima, Hiroaki Takimoto, Koji Eshima
Division of Immunology, Kitasato University Graduate School of Science

WS22-10-O/P

A novel pro-tumourigenic mechanism of Ex-Regs in cancer

◯ Qiao Gou[1)], Hiroyuki Takaba[1)], Daizo Koinuma[2)], Kohei Miyazono[2,3)], Hiroshi Takayanagi[1)]

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WS22-11-P

Prostaglandin E_2 – EP2/EP4 signaling induces an active phenotype of regulatory T cells characteristic in tumor microenvironment

◯ Ryuma Matsuura, Shuh Narumiya

Department of Drug Discovery Medicine, Kyoto University Graduate School of Medicine

WS22-12-P

A subset of tumor associated macrophages secrete TiHF1 and promote tumor growth through Th1-Treg polarization

◯ Ayumi Kuratani[1)], Masahiro Yamamoto[1,2,3)]

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WS22-13-O/P

Establishment of monoclonal antibodies derived from tumor-infiltrating B cells for cancer therapeutic application

◯ Tsubasa Kobayashi[1)], Toshihiro Suzuki[2)], Tetsuya Nakatsura[2)], Daisuke Kitamura[1)]

[1)]Research Institute for Biomedical Sciences, Tokyo University of Science, [2)]Division of Cancer Immunotherapy, EPOC, National Cancer Center

WS22-14-P

CD20 promotes anti-IgM-dependent proliferation of the human Diffuse Large B Cell Lymphoma line

◯ Yohei Kobayashi, Yuri Shimizu, Ryota Sato, Ryutaro Fukui, Takuma Shibata, Kensuke Miyake

Division of Innate Immunity, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo

WS22-15-O/P

Impacts of tumor-derived DCs on the thymus function

◯ Yangsong Wang, Ichita Hasegawa, Yukihiro Endo, Ryo Nasu, Motoko Kimura

Chiba University

WS22-16-P

Clec4A4/CLEC4A acts as a negative immune checkpoint regulator to suppress anti-tumor immunity

◯ Tomofumi Uto, Tomohiro Fukaya, Shuya Mitoma, Moe Tominaga, Katsuaki Sato

Division of Immunology, Department of Infectious Diseases, Faculty of Medicine, University of Miyazaki

WS22-17-P

Glioblastoma stem-like cells evade immune response via CD47 and PD-L1 expression

◯ Masaki Yoshioka[1)], Syunsei Noguchi[2)], Masayoshi Kobayashi[1,3)], Shinichiro Motohashi[3)], Yasuo Iwadate[1,4)]

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WS22-18-P

Extracellular acidity in tumor tissue upregulates PD-L1 expression on tumor cells via proton-sensing G protein-coupled receptors

◯ Daichi Mori[1,2,3)], Takahiro Tsujikawa[1)], Gaku Omura[1)], Osam Mazda[2)], Shigeru Hirano[1)], Tsunao Kishida[2)]

[1)]Department of Otolaryngology-Head & Neck Surgery, Kyoto Prefectural University of Medicine, [2)]Department of Immunology, Kyoto Prefectural University of Medicine, [3)]Department of Otolaryngology-Head & Neck Surgery, Red Cross Society Kyoto Daiichi Hospital

WS22-19-P

Histone Deacetylation in the Regulation of MHC Class I Gene Expression

◯ Alaa Ahmad[1)], An Ning[1)], Yusuke Kasuga[1)], Ryota Ouda[1)], Xin Sun[1)], Tsutomu Tanaka[1,3)], Koichi S Kobayashi[1,2,3)]

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WS22-20-P

Epithelial cells induce cell death in precancerous cells via the MHC-I interaction

◯ Shiyu Ayukawa, Nagisa Kamoshita, Takeshi Maruyama

Tokyo University of Pharmacy and Life Sciences

WS22-21-P

Binding affinity and specificity analysis of anti-HLA-G antibodies for anti-tumor immune activation

◯ Yuhi Kuriki[1)], Yoji Mori[1)], Sakie Shimokakimoto[1)], Kazuma Hikichi[1)], Naruki Akaiwa[1)], Hisashi Arase[2)], Atsushi Furukawa[1,3)], Naoyoshi Maeda[1,4)], Kimiko Kuroki[1)], Katsumi Maenaka[1,5,6,7)]

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WS22-22-P

Analysis of candidate antibodies inhibiting immune checkpoint receptor function for antitumor immune activation

◯ Tomokatsu Nishiuchi[1)], Ryota Koseki[1)], Naruki Akaiwa[1)], Hiroshi Ito[2)], Koji Nakamura[2)], Kimiko Kuroki[1)], Katsumi Maenaka[1,3,4,5,6)]

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WS22-23-P

The Analysis of cell surface expression of novel immune checkpoint molecule HLA-F on colorectal cancer cells

◯ Noriko Ouji-Sageshima, Shinomiya Reina, Masahiro Kitabatake, Ryutaro Furukawa, Atsushi Hara, Ito Tishihiro

Department of Immunology, Nara Medical University

WS22-24-O/P

Deletion of the endoribonuclease Regnase-1 unleashes NK cell anti-tumor activity via OCT2-dependent transcription of *Ifng*

◯ Yasuharu Nagahama[1,2)], Shizuo Akira[1,3,4)]

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WS22-25-P

Deficiency of nuclear receptor Nr4a3 alleviates colitis-associated cancer in mice

◯ Niya Yamashita[1)], Natsuki Minamikawa[1)], Naoto Ito[1)], Mayuka Katagiri[1)], Kazuki Nagata[1)], Akihiko Yoshimura[2)], Chiharu Nishiyama[1)]

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WS22-26-P

Effect of myeloid-specific *Ezh2* deficiency in tumor formation in hepatocellular carcinoma mouse model

◯ Benjawan Saechue[1)], Kittin Weerasopon[2,3)], Atsadang Boonmee[4)], Haruhiko Koseki[5)], Tanapat Palaga[3,6)]

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WS22-27-O/P

Fibroblastic reticular cell-derived CXCL12 controls immunosuppression in tumor-draining lymph nodes

◯ Yasuhiro Kanda[1)], Madoka Ozawa[1)], Takashi Nagasawa[2)], Tomoya Katakai[1)]

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WS22-28-O/P

LPS promotes mast cells induced fibrosis in cancer tissue by increasing CXCL8 and CCL19 expression

◯ Xiangmei Zhang[1)], Jidong Zhao[2)], Baoen Shan[1)]

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December 5

WS23 T cell regulation in host defense and disease

WS23-01-O/P

CD7 Deficiency Impairs T Cell Activation, Differentiation, and Survival

◯ Tristan Yoder, Wan-Lin Lo

University of Utah

WS23-02-O/P

Role of TFH and IL-4 signal in Boost-vaccination with SARS-CoV-2 spike protein

◯ Jumana Khalil[1,2)], Yuichiro Yamamoto[3)], Kohji Noguchi[3)], Rina Hashimoto[4)], Kazuo Takayama[4)], Masato Kubo[2,5)]

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WS23-03-O/P

MyD88 and IL-2 control memory T helper cell formation

◯ Kokoro Ohki[1)], Shintaro Hojyo[2)], Mei Sakagami[1)], Koji Tokoyoda[1)]

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WS23-04-O/P

Induction of cytotoxic CNS-associated Eomes-expressing Th cells via upregulation of type I interferon

◯ Tzuwen Yeh[1)], Fumio Takahashi[1)], Marco Prinz[2)], Takashi Yamamura[1)], Shinji Oki[1)]

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WS23-05-O/P

Co-expression of CD276 and Lag3 are cell surface markers for functional cytotoxic CD4 T cells in humans

◯ Yumi Tamura, Shun Ohki, Yohei Kawano, Rin Yoshizato, Haruna Nagai, Shizuki Nishi, Yuqi Jin, Yasuo Kitajima, Yun Guo, Tomoharu Yasuda

Department of Immunology, Graduate School of Biomedical & Health Sciences, Hiroshima University

WS23-06-O/P

Macaque IL-10-producing CD4 CD8 double positive T cells in the peripheral blood exhibit memory phenotype and increase with age

◯ Ryota Takahashi, Hirohito Ishigaki, Yasushi Itoh

Shiga Univ. of Med. Sci., Dept. of Pathology, Dev. of Pathogenesis and disease regulation

WS23-07-O/P

Age-related changes of naïve T cell function in a non-human primate model

◯ Yoshinori Okina[1)], Shokichi Takahama[1)], Takuto Nogimori[1)], Yasuhiro Yasutomi[2)], Takuya Yamamoto[1,3,4)]

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WS23-08-P

RORα regulates memory T cell sensitivity to inflammation for bystander activation

◯ Kensuke Takada[1)], Zimeng Cai[2)], Mina Kozai[1)], Hironobu Mita[2)], Mutsumi Inaba[2)], Kazuhiro Matsuo[1)]

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WS23-09-P

Dysfunction of proteasomes in T cells causes immunodeficiency

◯ Erkhembayar Shinebaatar, Junko Morimoto, Rinna Koga, Koji Yasutomo

Tokushima University

WS23-10-P

Withdrawn

WS23-11-P

Lipid Mediator Palmitoylethanolamide (PEA) inhibits pathogenic T cell differentiation

◯ Yasuhiro Soga[1)], Naganori Kamiyama[1)], Nozomi Sachi[1)], Sotaro Ozaka[1)], Yomei Kagoshima[1)], Spanuch Ekronarongchai[1)], Masahiro Yamamoto[3,4,5)], Takashi Kobayashi[1,2)]

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WS23-12-P

T-Be-Developed: Diverse Signals, Diverse Fates

◯ Wan-Lin Lo

University of Utah School of Medicine

WS23-13-P

OX40 ligand fusion proteins and their *in vivo* agonistic activities against T-lymphocytes

◯ Ayaka Sato[1)], Hodaka Nagai[1)], Ayano Suzuki[1)], Aya Ito[1)], Shimpei Matsuyama[1)], Mitsuki Azuma[1)], Masashi Morita[1)], Mari Hikosaka-Kuniishi[1)], Naoto Ishii[2)], Takanori So[1)]

[1)]University of Toyama, [2)]Tohoku University

WS23-14-P

Loss of peptidylarginine deiminase 4 in T follicular helper cells dysregulates specific humoral responses

◯ Taiki Sugaya[1,2)], Ippei Ikegami[1)], Kenichi Takano[2)], Shingo Ichimiya[1)]

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WS23-15-P

Analysis of glycan expression in senescent T cells

◯ Hiroko Nakatsukasa, Kenichiro Goda, Hiroto Kawashima

Laboratory of Microbiology and Immunology, Graduate School of Pharmaceutical Sciences, Chiba University

WS23-16-P

IgG Fc-fusion single-chain OX40L, 4-1BBL, CD70 and GITRL promote the expansion of antigen-specific effector T cells

◯ Shimpei Matsuyama[1)], Hodaka Nagai[1)], Ayaka Sato[1)], Ayano Suzuki[1)], Aya Ito[1)], Mitsuki Azuma[1)], Masashi Morita[1)], Mari Hikosaka-Kuniishi[1)], Naoto Ishii[2)], Takanori So[1)]

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WS23-17-P

Interleukin 9 Mediates T Follicular Helper Cell Activation for Promoting Antibody Responses

◯ Ippei Ikegami, Taiki Sato, Taiki Sugaya, Shingo Ichimiya

Department of Human Immunology, Research Institute for Immunology, Sapporo Medical University School of Medicine

WS23-18-P

Small-GTPase Rap1 and downstream integrin activators talin1 and kindlin-3 are required for efficient proliferation of T cells independently of LFA1

◯ Yoshihiro Ueda, Naoyuki Kondo, Yuji Kamioka, Tatsuo Kinashi

The Department of Molecular Genetics , Institute of Biomedical Science, Kansai Medical University

WS23-19-P

Elucidating the ligand specificity of VISTA, an immuno-inhibitory co-receptor

◯ Ryuki Abiru, Takumi Maruhashi, Il-mi Okazaki, Kenji Shimizu, Daisuke Sugiura, Taku Okazaki

Laboratory of Molecular Immunology, Institute for Quantitative Biosciences, The University of Tokyo

December 5

WS24 Dendritic cells: Molecular basis for regulation of their differentiation, activation, and function

WS24-01-P

Roles of transcription factors PU.1 and SpiB, and epigenetic regulation in commitment between conventional dendritic cells and plasmacytoid dendritic cells

◯ Naoto Ito[1)], Mayumi Hirakawa[2)], Weiting Zhao[1)], Natsuki Minamikawa[1)], Mayuka Katagiri[1)], Ryusei Tokita[1)], Ryosuke Miura[1)], Kazuki Nagata[1)], Tomokatsu Ikawa[2)], Chiharu Nishiyama[1)]

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WS24-02-O/P

The role of splenic CD8α^{+}CD103^{+} cDC1 in the maintenance of immune homeostasis

◯ Junko Morimoto[1)], Hiroyuki Kondo[1)], Rinka OKahisa[1)], Li Hui[1)], Daisuke Kurotaki[2)], Koji Yasutomo[1)]

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WS24-03-P

The transcription factor BATF is involved in nucleic acid-induced maturation of dendritic cells

◯ Tomoko Asatsuma-Okumura, Ryuji Owada, Shoko Kuroda, Masaaki Hashiguchi, Yoshiko Iwai

Nippon Medical School

WS24-04-O/P

SIRPα promotes the survival of cDC2s by preventing their activation and induction of an nuclear receptor family protein

◯ Satomi Komori[1,2)], Takenori Kotani[2)], Yoji Murata[2)], Takashi Matozaki[1,2)], Yasuyuki Saito[2)]

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WS24-05-P

Butyric acid suppresses migration of monocyte derived Dendritic Cell by inhibiting Actin polymerization via mDia1 inhibition

◯ Takumi Nagamoto[1,2], Keisuke Nishimura[1,2], Hiroyuki Murabe[2], Jun Saegusa[1,2]

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WS24-06-P

Regulatory Mechanisms of Gene Expression and Development of Conventional Dendritic Cell and Plasmacytoid Dendritic Cell by Short-Chain Fatty Acids

◯ Weiting Zhao[1], Kazuki Nagata[1], Naoto Ito[1], Ryusei Tokita[1], Yuta Yahagi[1], Hotaka Okamura[1], Osamu Kaminuma[2], Chiharu Nishiyama[1]

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WS24-07-P

Immunosuppressive effect of perilla leaf aroma components

◯ Ryusei Tokita, Naoto Ito, Hikaru Okada, Sakaura Noguchi, Ayaka Sugihara, Kazuki Nagata, Chiharu Nishiyama

Department of Biological Science and Technology, Faculty of Advanced Engineering, Tokyo University of Science

WS24-08-O/P

Morphological abnormalities of induced pluripotent stem cell-derived dendritic cells (iPSC-derived DCs) in MIRAGE syndrome with *SAMD9* mutation

◯ Hidetoshi Hagiwara[1], Masataka Ito[2], Kanako Mitsui-Sekinaka[1], Kunihiko Moriya[1], Yujin Sekinaka[1], Yuri Kawasaki[3], Yohko Kitagawa[3], Kanako Tanase-Nakao[4], Satoshi Narumi[5], Megumu K. Saito[3], Shigeaki Nonoyama[1], Kohsuke Imai[1]

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WS24-09-O/P

The role of mitochondria damage in Imiquimod-induced psoriasis

◯ Daisuke Ori[1], Haruna Okude[1], Riko Konishi[1], Takumi Kawasaki[2], Taro Kawai[1,3]

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WS24-10-O/P

STAT1 binding element in the *Irf8* promoter is required for inducing a distinct inflammatory dendritic state during intracellular pathogen infection

◯ Kenta Kikuchi[1], Wataru Kawase[2], Yusuke Tsujimura[3], Fuki Kudo[4], Keita Saeki[4], Takayuki Yoshimoto[5], Manabu Ato[3], Keiko Ozato[4], Tomohiko Tamura[2], Daisuke Kurotaki[1]

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WS24-11-O/P

Genetic ablation of the protein tyrosine phosphatase Shp1 in CD11c$^+$ cells improves insulin resistance

◯ Yoichi Imai[1], Yoriaki Kaneko[1], Masato Kinoshita[1], Junya Suwa[1], Mitsuharu Watanabe[2], Yasuyuki Saito[3], Hiroshi Ohnishi[4], Takashi Matozaki[3], Keiju Hiromura[1]

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WS24-12-P

A group Streptococcus-Derived Proteins and Host Factors Contributing to Innate Inflammation in murine Dendritic Cells

◯ Natsuo Yamamoto[1,2], Tsuyoshi Suzuki[2], Hideki Yamamoto[3], Suguru Ohmiya[1], Masamichi Katsumi[1], Hidekazu Nishimura[1], Ken Iseki[2]

[1]Sendai Virus Center, [2]Department of Emergency and Critical Care Medicine, Fukushima Medical University, [3]Department of Medical Technology, Graduate School of Health Sciences, Niigata University, Niigata, Japan

WS24-13-P

Dendritic cell decrease in peritoneal exudate cells in liver cirrhosis patients

◯ Shiori Kaji[1)], Izumi Sasaki[2)], Takashi Kato[3)], Daisuke Okuzaki[4)], Sadahiro Iwabuchi[5)], Shinichi Hashimoto[5)], Shin-Ichiroh Saitoh[6)], Tsuneyasu Kaisho[2)]

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WS24-14-P

Role of migratory dendritic cells in mRNA vaccine-induced CTL differentiation

◯ Ryunosuke Muro[1)], Suqi Wang[2)], Taku Ito-Kureha[2)], Takeshi Nitta[1)], Hiroshi Takayanagi[2)]

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WS24-15-O/P

Identification of CIITA degron and ubiquitination site by FBXO11

◯ Yusuke Kasuga[1,3)], Royota Ouda[1)], Masashi Watanabe[2)], Xin Sun[1)], Miki Kimura[1)], Atsuki Takeishi[1,3)], Tsutomu Tanaka[1,3)], Shigetsugu Hatakeyama[2)], Koichi Kobayashi[1,3)]

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WS24-16-P

The differentiation of dendritic cells and macrophages in hu-PBL-hIL-4-Tg mouse

◯ Ayako Hirota[1)], Shino Oshima[2)], Yuki Hoshino[2)], Soga Yamada[2)], Banri Tsuda[3)], Atsushi Yasuda[4)], Ryoji Ito[5)], Akiko Kanamori[6,7)], Tomotaka Mabuchi[1)], Hitoshi Ishimoto[8)], Takashi Shiina[2)], Yosie Kametani[2)]

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WS24-17-P

Adjuvant activated antigen presenting cells increase both the autophagy and immune responce

◯ Hirokazu Sakuma[1)], Mai Shiohata[1)], Kahoko Hashimoto[1,2)], Naoko Kurosaki[1,2)]

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December 5

WS25 B cell homeostasis

WS25-01-O/P

The trinity of transcription factors E2A, Ebf1 and Erg guides lymphoid progenitors to B cell lineage

◯ Rinako Hayashi[1)], Reiko Hidaka[1)], Kazuko Miyazaki[1)], Takashi Nagasawa[2)], Hiroshi Kawamoto[1)], Masaki Miyazaki[1)]

[1)]Institute for Life and Medical Sciences, Kyoto University, [2)]Graduate School of Frontier Biosciences, Osaka University

WS25-02-O/P

Critical roles of UPF1 in early B cell development

◯ Kotaro Akaki, Noriki Iwai, Takashi Mino, Osamu Takeuchi

Department of Medical Chemistry, Graduate School of Medicine, Kyoto University

WS25-03-O/P

Self-enforcing networks of inflammatory cytokine signaling accelerate the development and recurrence of *TCF3::HLF*-positive B-ALL

◯ Aisa Suzuki, Tsukasa Shigehiro, Tomokatsu Ikawa

Research Institutes for Biomedical Sciences ,Tokyo University of Science

WS25-04-O/P

Essential role of ER membrane complex subunit 1 (EMC1) in B cell homing and humoral immunity

◯ Kazuhiko Kawata[1)], Chie Kikutake[2)], Mikita Suyama[2)], Yoshihiro Baba[1)]

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WS25-05-O/P

Control of IgE production and germinal center B cell survival by Aps/Sh2b2, a member of Lnk-family adaptor proteins

◯ Shinya Hidano[1)], Masanori Iseki[2)], Satoshi Takaki[1)]

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WS25-06-O/P

The J chain acts as a critical regulator for intestinal IgA$^+$ plasma cell differentiation before weaning

◯ Ryo Goitsuka[1)], Keiko Fujisaki[2)]

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WS25-07-O/P

Atypical and non-classical CD45RB^{lo} memory B cells are the majority of circulating SARS-CoV-2 specific B cells following mRNA vaccination or COVID-19

◯ David Geoffrey Priest[1)], Takeshi Ebihara[2,3)], Janyerkye Tulyeu[4)], Jonas N. Søndergaard[4)], Yumi Mitsuyama[3)], Hisatake Matsumoto[2,3)], James B. Wing[1,4,5)]

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WS25-08-O/P

The COMMD3/8 complex drives plasmablast differentiation of age-associated B cells during extrafollicular responses in lupus

◯ Taiichiro Shirai[1,2)], Kentaro Kuzuya[1)], Kazuhiro Suzuki[1,2,3)]

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WS25-09-P

IgA-deficiency breaks immunological and neurological homeostasis

◯ Takahiro Adachi

Dept. Precision Health, MRI, TMDU

WS25-10-P

Disruption of plasma cell differentiation through complex interplay of loss, gain, and altered IRF4 functions

◯ Qing Min[1)], Yaxuan Li[2)], Wenjie Wang[3)], Xin Meng[4)], Hai Zhang[3)], Meiping Yu[3)], Lulu Dong[2)], Xuzhe Wu[2)], Xiaochuan Wang[3)], Ji-Yang Wang[1,2,3)]

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WS25-11-P

Function and role of complexin 2-expressing B-1 cells in immune tolerance

◯ Emi Tsuru[1)], Hiroki Mogawa[2)], Atsuya Nobumoto[2)], Masaaki Mizobuchi[2)], Masayuki Tsuda[1)]

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WS25-12-P

Human RP105 monoclonal antibody promotes antigen-specific antibody production under unique culture conditions

◯ Tatsuya Yamazaki[1)], Kenta Iwasaki[2)], Susumu Tomono[1)], Masaki Imai[3)], Masanori Inui[1)], Daisuke Okuzaki[4)], Sachiko Akashi-Takamura[1)]

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WS25-13-P

Hu-PBL-NOG-hIL-4-Tg mouse system maintains human adoptive immunity to produce antigen-specific plasmablasts

◯ Shino Ohshima[1)], Soga Yamada[1)], Ayako Hirota[2)], Nagi Katano[1)], Banri Tsuda[3)], Atsushi Yasuda[4)], Yukio Nakamura[5)], Ryoji Ito[6)], Tomotaka Mabuchi[2)], Hitoshi Ishimoto[7)], Takashi Shiina[1,8)], Yoshie Kametani[1,8)]

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WS25-14-P

The dynamics of iron metabolism during antibody secreting cell differentiation

◯ Akihiko Muto, Takeshi Kurasawa, Kazuhiko Igarashi

Department of Biochemistry, Tohoku University Graduate School of Medicine

WS25-15-P

Reversal of brain dysfunction through control of senescent cells

◯ Ayame Nagafuchi[1)], Mana Iizuka[2)], Ako Matsui[1)], Akihiko Yoshimura[2)], Minako Ito[1)]

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WS25-16-P

Bone marrow plasma cells express metallothionein genes in response to IL-6 stimulation

◯ Ari Itoh-Nakadai[1)], Masayuki Shirota[3)], Atsuko Kayaba[3)], Akiko Sugahara-Tobinai[3)], Maiko Kobayashi[1)], Shota Endo[3)], Masanori Inui[2)], Tomoyuki Kawada[1)], Ryo Funayama[3)], Keiko Nakayama[3)], Toshiyuki Takai[3)]

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WS25-17-P

Analyses on the roles of extracellular domain of Parm1

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WS25-18-P

Analysis on the regulatory mechanism of selective transcription of Parm1 in IgG+ B cells

◯ Shiori Hatakeyama[1)], Kagefumi Todo[2)], Haruka Honda[1)], Masaki Hikida[1)]

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WS25-19-P

Evaluation of the IRF4 heterocomplexes and homodimers induced by mutations in the IRF association domain and autoinhibitory region

◯ Katsuya Sato[1)], Yupeng Li[1)], Setoka Hirano[1)], Masatake Osawa[2)], Hitoshi Nagaoka[1)]

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WS25-20-P

Variable gene repertoire analysis of antibodies against SARS-CoV-2 spike protein

◯ Makoto Tsuiji, Sayaka Mori, Hinako Ohkusa, Shinichi Fujihara

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December 5

WS26 Systemic Immune Diseases

WS26-01-O/P

Multimodal single-cell analysis revealed B cell receptor dynamic change in systemic lupus erythematosus

◯ Toshiyuki Shiki Ushijima[1)], Hiroyuki Teruya[1)], Manaka Goto[1)], Hideyuki Takahashi[1)], Takahiro Itamiya[1,2)], Haruka Tsuchiya[1)], Hirofumi Shoda[1)], Tomohisa Okamura[1,2)], Keishi Fujio[1)]

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WS26-02-P

Efficacy evaluation of B cell targeting drugs and the involved mechanism of action study in humanized BAFF transgenic SLE mice model

◯ Juan Liang, Shuxin Xu, Qiuping Xu, Yuxi Zhang

GemPharmatech Co., Ltd.

WS26-03-O/P

The B cell inhibitory receptor CD72 is a novel C1q receptor that prevents development of SLE by inhibiting B cell response to apoptotic cells

◯ Hashadi Nadeesha Walakulu Gamage[1,2,3)], Chizuru Akatsu[2)], Nobutaka Numoto[1)], Takahiro Tsuneshige[1,2,3)], Masatake Asano[3)], Nobutoshi Ito[1)], Takeshi Tsubata[1,2,3)]

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WS26-04-O/P

New quantitative and qualitative analytical framework of scRNAseq data reveals the pathophysiology of systemic lupus erythematosus

◯ Masahiro Nakano[1)], Michihiro Kono[1,2)], Hiroaki Hatano[1)], Kenichiro Asahara[1)], Takahiro Nishino[1)], Haruka Takahashi[1,2)], Bunki Natsumoto[1)], Kazuyoshi Ishigaki[1,2,3)]

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WS26-05-P

Spontaneous Systemic Lupus Erythematosus Mouse Model Based on TLR7^{Y264H} Genetic Mutation

◯ Ting Wang, Juan Liang
GemPharmatech Co., Ltd.

WS26-06-O/P

Development of the anti-human TLR7 monoclonal antibody for therapeutic intervention in systemic lupus erythematosus

◯ Ryutaro Fukui[1)], Yusuke Murakami[2,1)], Atsuo Kanno[1)], Yuji Motoi[1)], Atsushi Manno[4)], Tomohiro Honda[5)], Shinnosuke Yamada[5)], Jun Ishiguro[6)], Kensuke Nakamura[7)], Giorgio Senaldi[8)], Toshiyuki Shimizu[3)], Kensuke Miyake[1)]
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WS26-07-P

Pathogenetic role of IFNγ producing CD4+T cells in IMQ induced lupus model mice

◯ Reona Tanimura, Yuya Kondo, Ryota Sato, Ryohei Nishino, Hiromitsu Asashima, Haruka Miki, Hiroto Tsuboi, Takayuki Sumida, Isao Matsumoto
Department of Rheumatology, Faculty of Medicine, University of Tsukuba

WS26-08-P

GATA4 enhances cGAS-STING-dependent production of type I interferons in senescent lupus monocytes

◯ Taiga Kuga[1,2)], Asako Chiba[1)], Goh Murayama[2)], kosuke Hosomi[1)], Tomoya Nakagawa[1)], Yoshiyuki Yahagi[1,2)], Makio Kusaoi[2)], Ken Yamaji[2)], Naoto Tamura[2)], Sachiko Miyake[1)]
[1)]Department of Immunology, Juntendo University Faculty of Medicine, [2)]Department of Internal Medicine and Rheumatology, Juntendo University Faculty of Medicine

WS26-09-P

Establishment and pathogenesis analysis of a mouse model of lupus mesenteric vasculitis

◯ Maki Fujishiro[1)], Kunihiro Hayakawa[1)], Marina Shinoura[1)], Yuko Kataoka[2)], Keigo Ikeda[2)], Shinji Morimoto[2)]
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WS26-10-P

Contribution of phosphodiesterase 1B to neuropsychiatric manifestations in lupus-prone mice through microglial activation

◯ Shuhei Takeyama[1)], Michihito Kono[1)], Kohei Karino[1)], Yuki Kudo[1)], Masatoshi Kanda[2)], Hiroyuki Nakamura[2)], Maria Tada[1)], Ryo Hisada[1)], Yuichiro Fujieda[1)], Masaru Kato[1)], Olga Amengual[1)], Tatsuya Atsumi[1)]
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WS26-11-P

Elucidation of the impact of high-fat diet on autoimmune disease progression

◯ Yulu Liu[1,2)], Ayaka Ito[1,2,3)], Ibuki Shirakawa[2)], Azusa Kobayashi[2)], Michiko Kobayashi[2)], Takayoshi Suganami[1,2)]
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WS26-12-P

CD8T cells depletion promotes human Tph/Tfh and B cells proliferation without graft versus host diseases in PBMC transferred-humanized mice

◯ Sota Fujimori, Piruzyan Mariam, Ryota Sato, Sayuka Kato, Yuzo Koda
Oncology & Immunology Unit, Research Division, Mitsubishi Tanabe Pharma Corporation

WS26-13-P

Analysis of regulatory mechanism for T cell activation via Trat1 in Sjögren's syndrome

◯ Ruka Nagao[1)], Akiko Yamamoto[2)], Aya Ushio[4)], Kunihiro Otsuka[1)], Shigefumi Matsuzawa[1,3)], Takaaki Tsunematsu[1)], Naozumi Ishimaru[4)]
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WS26-14-O/P

Salivary gland fibroblasts drive autoimmune pathology via the interaction with CD4^{+}T cells in Sjögren's syndrome

◯ Kunihiro Otsuka[1,2)], Hiroyuki Kondo[1)], Shin-Ichi Tsukumo[1)], Naozumi Ishimaru[3)], Koji Yasutomo[1)]
[1)]Department of Immunology and Parasitology, Graduate School of Medicine, Tokushima University, [2)]Department of Oral Molecular Pathology, Graduate School of Dentistry, Tokushima University, [3)]Department of Oral Pathology, Tokyo Medical and Dental University Graduate School of Medical and Dental Sciences

WS26-15-P

Skewed TCR usage in pathogenic T cells of SS model mouse

◯ Shuhei Mashimo[1,2], Yuriko Tanaka[1], Michitsune Arita[1], Taku Naito[1], Taku Kuwabara[1], Marii Ise[1], Akira Ishiko[2], Motonari Kondo[1]

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WS26-16-P

Activation of signaling pathways via TLR4 may contribute to the elevated expression of BAFF receptor, BR3, in peripheral monocytes of patients with primary Sjögren's syndrome

◯ Keiko Yoshimoto, Yumi Ikeda, Katsuya Suzuki, Hiroyuki Fukui, Kotaro Matsumoto, Masaru Takeshita, Chihiro Takahashi, Tsutomu Takeuchi, Yuko Kaneko

Division of Rheumatology, Department of Internal Medicine, Keio University School of Medicine

WS26-17-O/P

Anti-integrin αvβ6 antibody in Takayasu arteritis with or without ulcerative colitis

◯ Yuki Ishikawa[1], Hiroyuki Yoshida[2,3], Hajime Yoshifuji[4], Koichiro Ohmura[4,5], Tomoki Origuchi[6], Tomonori Ishii[7], Tsuneyo Mimori[4,8], Akio Morinobu[4], Masahiro Shiokawa[2], Chikashi Terao[1,9,10]

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WS26-18-O/P

Unravelling the gene regulatory networks driving the polygenetic risk of human complex diseases

◯ Haruka Takahashi[1,2], Hiroaki Hatano[2], Masahiro Nakano[2], Yumi Tsuchida[3], Shuji Sumitomo[3], Akari Suzuki[4], Yuta Kochi[5], Keishi Fujio[3], Kazuhiko Yamamoto[4], Kazuyoshi Ishigaki[1,2,6]

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WS26-19-P

Understanding the pathogenesis of Aicardi-Goutières syndrome-like encephalopathy caused by mutations in the RNA-editing enzyme ADAR1

◯ Hyebin Yoo[1], Reiichi Sugihara[2], Taisuke Nakahama[1,2,3,4], Yuki Kato[1,2,3], Yukio Kawahara[1,2,3,4,5]

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WS26-20-P

An *Enterococcus* phage-derived enzyme suppresses graft-versus-host disease

◯ Kosuke Fujimoto[1,2], Satoshi Uematsu[1,2]

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WS26-21-P

Lysosomal dysfunction in dendritic cells causes autoimmune diseases

Yoshiko Mori Saitoh[1,2], Kenichi Harada[3], Yoh Wada[4,5], Ge-Hong Sun Wada[6], Tamami Denda[7], Yasunori Ota[7], Hiroshi Sagara[8], Yuji Watanabe[8], Sadahiro Iwabuchi[9], Shinichi Hashimoto[9], Kensuke Miyake[2,10], ◯ Shin-Ichiroh Saitoh[1,2]

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WS26-22-P

Point mutation at the ligand binding domain disrupts RORgt function in Th17 lineage differentiation and restricts autoimmune diseases

◯ Keisuke Miyako[1,2], Toshio Kanno[1], Yusuke Endo[1]

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WS26-23-P

Neuropilin-1 (NRP1) as a potential marker of self-reactive Th cells in autoimmune disease

◯ Ben Je Raveney[1)], Atsuko Kimura[1)], Youwei Lin[2)], Tomoko Okomoto[2)], Atsuko Katsumoto[2)], Reiko Saika[2)], Wakiro Sato[1)], Shinji Oki[1)], Takashi Yamamura[1)]

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WS26-24-P

TFAM deficient mice spontanously develop inflammation and autoantibodies

◯ Taku Kuwabara, Yuriko Tanaka, Marii Ise, Taku Naito, Shuhei Mashi, Motonari Kondo

Toho University

WS26-25-O/P

Novel transcriptomic evidence for a shared immunological signature-based treatment of Adult-onset Still's disease and other autoinflammatory diseases

◯ Ikuo Takazawa[1)], Haruka Tsuchiya[1)], Takahiro Itamiya[1,2)], Harumi Shirai[1)], Yumi Tsuchida[1)], Yasuo Nagafuchi[1,2)], Hirofumi Shoda[1)], Tomohisa Okamura[1,2)], Keishi Fujio[1)]

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WS26-26-O/P

Isoliquiritigenin inhibits activation of NLRP3 inflammasome with CAPS mutations by suppressing caspase-1 activation and mutant NLRP3 aggregation

◯ Koudai Kani[1)], Hiroe Honda[2)], Kiyoshi Takatsu[2)], Yoshinori Nagai[1)]

[1)]Department of Pharmaceutical Engineering, Faculty of Engineering, Toyama Prefectural University, [2)]Toyama Prefectural Institute for Pharmaceutical Research

WS26-27-P

Proteasome dysfunction in adipocytes induces lipodystrophy and autoinflammation

◯ Rinna Koga, Junko Morimoto, Kunihiro Otsuka, Koji Yasutomo

Department of Immunology and Parasitology, Tokushima University Graduate School of Medicine

WS26-28-P

Phenotypic and Therapeutic Evaluation of Humanized C3 Transgenic Mice as a Model for C3 glomerulopathy-Like Autoimmune Disease

◯ Shuxin Xu, Juan Liang, Qiuping Xu, Kaiyuan Zi

GemPharmatech Co., Ltd.

WS26-29-P

Inborn errors of immunity with a missense mutation of *COMMD8*

◯ Mizuki Kishi[1,2)], Taiichiro Shirai[1,3)], Kazuhiro Suzuki[1,2,3,4)]

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December 5

WS27 Tolerance and immune suppression for disease control

WS27-01-O/P

Orally induced tolerance of DTH depends on the inhibition of sensitization in skin-dLNs by integrin α4β7$^+$ T cells derived from mesenteric LNs

◯ Arisa Akagi[1)], Rintaro Shibuya[2)], Sho Hanakawa[3)], Akihiko Kitoh[1)], Kenji Kabashima[1,3)]

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WS27-02-O/P

Neural repair and suppression of progression via modulation of microglia by tissue effector Tregs that maintain remission in experimental autoimmune encephalomyelitis

◯ Youwei Lin[1,2)], Takashi Yamamura[1)]

[1)]Department of Immunology, National Institute of Neuroscience, National Center of Neurology and Psychiatry, [2)]Department of Neurology, National Center Hospital, National Center of Neurology and Psychiatry

WS27-03-O/P

Irradiation conditioning with head shielding protects allogeneic recipients against acute graft-versus-host disease

◯ Ismael Chatita Adolf[1)], Sayuri Nakata[1)], Takanori Teshima[2)], Hitoshi Takizawa[1,3)]

[1)]Laboratory of Stem Cell Stress, International Research Center for Medical Sciences, Kumamoto Univ., Kumamoto, [2)]Department of Hematology, Hokkaido Univ. Graduate School of Medicine, Sapporo, [3)]Center for Metabolic Regulation of Healthy Aging (CMHA), Kumamoto Univ., Kumamoto

WS27-04-O/P

Both the increased expression of PD-1 and the production of humoral factors in stem cells from human exfoliated deciduous teeth reduce the damaging effects of peripheral blood mononuclear cells on human insulin-producing cells

◯ Kenta Iwasaki

Department of Kidney disease and Transplant Immunology, Aichi Medical University School of Medicine

WS27-05-O/P

iPSCs engrafted in allogeneic hosts without immunosuppression induce donor-specific tolerance to secondary allografts

◯ Tomoki Kamatani[1)], Reiko Kimura[1)], Satoshi Ikeda[2)], Makoto Inoue[2)], Ken-ichiro Seino[1)]

[1)]Hokkaido Univ., [2)]Sumitomo Pharma, Co., Ltd.

WS27-06-O/P

Disulfiram treatment inhibits antibody-mediated transplant rejection by suppressing macrophage activation and B-cell pyrimidine metabolism

◯ Etsuko Toda[1,2)], Weili Chen[1)], Kazuhiro Takeuchi[3,1)], Shinobu Kunugi[1)], Mika Terasaki[1)], Yasuhiro Terasaki[1)], Yuya Terashima[2)], Akira Shimizu[1)]

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WS27-07-O/P

Targeting High CD86 Expression in CD8 T Cells to Enhance Antitumor Immunity in the Tumor Microenvironment

◯ Xin Hu[1)], Yifang Shui[1,2)], Weitao Que[1)], Yixian Fan[1)], Masayuki Fujino[1,3)], Xiao-Kang Li[1)]

[1)]National Research Institute for Child Health and Development, [2)]The First Affiliated Hospital of Zhengzhou University, [3)]National Institute of Infectious Diseases

WS27-08-P

***Toxoplasma* IST suppresses inflammatory and apoptotic response in cytokine-stimulated hepatocytes**

◯ Eun Hee Shin[1,2,3)], Seung-Hwan Seo[2)], Ji-Eun Lee[1)], Do-Won Ham[1)]

[1)]Seoul National University College of Medicine, [2)]Seoul National University Institute of Endemic Diseases, [3)]Seoul National University Bundang Hospital

WS27-09-P

Implications of TIGIT expression and maintenance in suppressing activated T cells

◯ Naoko Negishi, Jiro Kitaura, Ko Okumura, Sonoko Habu

Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine

WS27-10-P

Propofol suppresses antibody production in a T cell-dependent manner

◯ Susumu Hiraoka[1,2)], Hiroki Satooka[1)], Takako Hirata[1)]

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WS27-11-P

Suppression of antigen specific T cell responses by LAG-3 agonism

◯ Taisuke Narazaki, Daisuke Sugiura, Il-mi Okazaki, Takumi Maruhashi, Kenji Shimizu, Taku Okazaki

Laboratory of Molecular Immunology, Institute for Quantitative Biosciences, The University of Tokyo

WS27-12-P

Sexual Function Deterioration Among Donor and Recipients after Living-Donor Lobar Lung Transplantation (LDLLT) Procedure: A Systematic Review

◯ Ester Marnita Purba[1,2)], Wahyuni Kurniawati[3,2)], Rosinta H. P. Purba[2)], Lintong Hottua Simbolon[2)]

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WS27-13-P

The effects of immune response and Oxytocin on ischemic resistance

◯ Ako Matsui, Yoshihiro Harada, Mio Kawazoe, Minako Ito

Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University

WS27-14-P

Neuromodulation in patients with epilepsy

◯ Hiroki Tanaka[1)], Kaoru Murakami[1)], Chenfung Lee[1)], Takeshi Yamasaki[2)], Rie Hasebe[2)], Masaaki Murakami[1,2,3)]
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December 5

WS28 Cytokines and chemokines

WS28-01-O/P

Role of intrathrombotic CX3CR1-CX3CL1 axis during resolution on murine deep vein thrombosis model

◯ Mizuho Nosaka, Yuko Ishida, Yumi Kuninaka, Akihiko Kimura, Naofumi Mukaida, Toshikazu Kondo
Wakayama Medical Univ.

WS28-02-O/P

Investigating the Role of CCL20 on Psoriasis and Atopic Dermatitis Using CCL20 Deficient Mice

◯ Supanuch Ekronarongchai, Nozomi Sachi, Yomei Kagoshima, Yasuhiro Soga, Sotaro Ozaka, Naganori Kamiyama, Takashi Kobayashi
Department of Infectious Disease Control, Faculty of Medicine, Oita University

WS28-03-P

Involvement of CX3CL1-CX3CR1 axis in restraint stress-induced thymic atrophy and relevant underlying mechanism

◯ Yumi Kuninaka, Yuko Ishida, Akiko Ishigami, Mizuho Nosaka, Toshikazu Kondo
Wakayama Medical University

WS28-04-P

Dextran sodium sulfate (DSS)-induced colitis is exacerbated in mice in the absence of C-C motif chemokine ligand 9

◯ Yomei Kagoshima[1,2)], Sotaro Ozaka[2)], Nozomi Sachi[1)], Supanuch Ekronarongchai[1)], Yasuhiro Soga[1)], Naganori Kamiyama[1)], Takashi Kobayashi[1)]
[1)]Department of Infectious Disease Control, Faculty of Medicine, Oita University, [2)]Department of Gastroenterology, Faculty of Medicine, Oita University

WS28-05-P

Mice lacking C-C motif chemokine ligand 9 developed severe experimental autoimmune encephalomyelitis

◯ Nozomi Sachi, Yomei Kagoshima, Supanuch Ekronarongchai, Yasuhiro Soga, Sotaro Ozaka, Naganori Kamiyama, Takashi Kobayashi
Department of Infectious Disease Control, Oita University Faculty of Medicine.

WS28-06-P

CCL28 deficiency exacerbates liver injury in chronic carbon tetrachloride-induced hepatitis

◯ Yuta Hara, Masamitsu Bando, Ryohei Okumura, Shunya Hosokawa, Kazuhiko Matsuo, Takashi Nakayama
Division of Chemotherapy, Faculty of Pharmacy, Kindai University

WS28-07-P

Role of CCL28 in eosinophil recruitment into tumor tissues to enhance antitumor immune responses

◯ Kazuhiko Matsuo, Shinya Yamamoto, Akihisa Nishida, Mako Yakasaki, Akane Kusanagi, Akari Edamitsu, Yuta Hara, Takashi Nakayama
Kindai University Faculty of Pharmacy

WS28-08-P

Ly6C^{low}MHCII^{high} monocytes/macrophages contribute to renal fibrosis via fractalkine-CX3CR1 axis

◯ Yuya Iwahashi[1,2)], Yuko Ishida[2)], Hisanobu Tosuji[1)], Yumi Kuninaka[2)], Mizuho Nosaka[2)], Mariko Kawaguchi[2)], Naofumi Mukaida[2)], Isao Hara[1)], Toshikazu Kondo[2)]
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WS28-09-O/P

Soluble ST2 aggravates asthma by enhancing IL-33-mediated eosinophilic inflammation and cytokine production in ILC2s

◯ Pei-Chi Lo[3)], Yasutaka Motomura[1)], Kazuyo Moro[1,2,3)]
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WS28-10-O/P

RNA helicase DDX6 plays a role in inflammatory diseases through the IL-6 amplifier, an enhanced activation of NF-κB in non-immune cells

◯ Shintaro Hojyo[1,2,3], Seiichiro Naito[1,4], Hiroki Tanaka[1], Jing-Jing Jiang[1], Masato Tarumi[1], Ari Hashimoto[5], Yuki Tanaka[1,2], Kaoru Murakami[1], Shimpei I Kubota[1,2], Shigeru Hashimoto[1,3], Masaaki Murakami[1,2,3,6]

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WS28-11-P

OSMRβ-mediated signaling on resident fibroblasts promotes healing of diabetic skin wounds through angiogenesis and granulation proliferation

◯ Yuko Ishida[1], Yumi Kuninaka[1], Tadasuke Komori[1], Mizuho Nosaka[1], Akihiko Kimura[1], Atsushi Miyajima[2], Yoshihiro Morikawa[1], Mariko Kawaguchi[1], Toshikazu Kondo[1]

[1]Wakayama Medical University, [2]The University of Tokyo

WS28-12-P

aDUSPs regulate the Jak/STAT3-mediated signaling pathway

◯ Yuichi Sekine[1], Tadashi Matsuda[2]

[1]Kyoto Pharmaceutical University, [2]Hokkaido University

WS28-13-P

Role of Interleukin-40 in Modulating Macrophage Function and Promoting Inflammatory Development in Allergic Asthma

◯ Aixuan Li[1], Katie Wong[2], Danqi Huang[2], Wing Hung Ko[1], Chun Kwok Wong[3,4,2]

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WS28-14-P

Identification and characterization of putative enhancer regions that direct *Il6* transcription in murine macrophages

◯ Norisuke Kano[1], Takeo Miki[1], Yurina Uehara[1], Daisuke Ori[1], Taro Kawai[1,2]

[1]Nara Institute Science and Technology, [2]Life Science Collaboration Center (LiSCo), Nara Institute of Science and Technology (NAIST)

WS28-15-P

Augmentation of Th17 cells-mediated airway inflammation by aging-related IL-18 production

◯ Masakiyo Nakahira, Etsushi Kuroda

Department of Immunology, School of Medicine, Hyogo Medical University

WS28-16-P

Interleukin-6/gp130 signaling in CD4$^+$ T cells promotes the pathogenesis of pulmonary hypertension

◯ Tadakatsu Inagaki[1], Tomohiko Ishibashi[1], Makoto Okazawa[1], Ryotaro Asano[1], Yui Kotani[1], Xin Ding[1], Tadamitsu Kishimoto[2], Yoshikazu Nakaoka[1,3]

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WS28-17-O/P

5,6-dimethylxanthenone-4-acetic acid (DMXAA), a Partial STING Agonist, Competes for Human STING Activation

◯ Burcu Temizoz[1,2,5], Takayuki Shibahara[3], Tomoya Hayashi[1,2,5], Kouji Kobiyama[1,2,5], Erdal Sag[6], Atsushi Kumanogoh[7,3], Masahiro Yamamoto[7,8], Mayda Gursel[9], Seza Ozen[6], Etsushi Kuroda[10], Cevayir Coban[2,4,7,5], Ken J Ishii[1,2,7,5]

[1]Division of Vaccine Science, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, [2]International Vaccine Design Center (VDesC), The Institute of Medical Science (IMSUT), The University of Tokyo, Tokyo, Japan, [3]Department of Respiratory Medicine and Clinical Immunology, Graduate School of Medicine, Osaka University, Osaka, Japan, [4]Division of Malaria Immunology, Department of Microbiology and Immunology, The Institute of Medical Science (IMSUT), The University of Tokyo, Tokyo, Japan, [5]Core Research for Evolutional Science and Technology (CREST), Japan Science and Technology Agency (JST), Tokyo, Japan, [6] Department of Pediatric Rheumatology, Hacettepe University, Ankara, Türkiye, [7]Immunology Frontier Research Center (IFReC), Osaka University, Osaka, Japan, [8]Department of Immunoparasitology, Division of Infectious Disease, Research Institute for Microbial Diseases, Osaka University, Osaka, Japan, [9]MG Laboratory on Vaccines and Immunotherapeutics, Basic and Translational Research Program, Izmir Biomedicine and Genome Center, Izmir, Türkiye, [10]Department of Immunology, School of Medicine, Hyogo Medical University, Hyogo, Japan

WS28-18-O/P

Therapeutic effects of conditioned medium of immortalized dental pulp stem cells from human exfoliated deciduous teeth on the paclitaxel-induced peripheral neuropathy via TIMP-1

◯ Miu Yamagishi, Eri Horio, Natsuki Yamaguchi, Jukito Sonoda, Satomi Miyakawa, Shinya Inoue, Fumihiro Murakami, Ning Qu, Yasuhiro Katahira, Hideaki Hasegawa, Takayuki Yoshimoto

Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University, 6-1-1, Shinjuku-ku, Tokyo, Japan

WS28-19-O/P

Role of the Microbiota-Derived Corisin in Acute Kidney Injury

◯ Tomoko Anou[1)], Taro Yasuma[1,2)], Corina Gabazza[1)], Chisa Inoue[1,2)], Yuko Okano[1,2)], Atsuro Takeshita[1,2)], Masaaki Toda[1)], Kota Nishihama[2)], Mei Uemura[2)], Yutaka Yano[2)], Esteban Gabazza[1)]

[1)]Department of Immunology, Mie University Graduate School of Medicine, [2)]Department of Diabetes & Endocrinology, Mie University Graduate School of Medicine

WS28-20-P

Human endothelial cells are directly affected by monosodium urate crystal without activation of NLRP3 in hyperuricemia

◯ Motokazu Tsuneto[1)], Yuka Katsukura[2)], Naruomi Yamada[3)], Akika Nagira[3)], Ichiro Hisatome[4)]

[1)]Division of regeranative medicine and tharapeutics, Tottori university, [2)]Research Team 2, Wellness Science Labs, Meiji Holdings Co., Ltd., [3)]Nutrition and Food Function Group, Health Science Research Unit R&D Division Meiji Co., Ltd., [4)]Yonago Medical Center

WS28-21-P

Pre-incubation with two anti-TLR4 mAbs decreases the production of proinflammatory cytokines in LPS-stimulated Kupffer cells

◯ Bristy Basak, Masanori Inui, Tatsuya Yamazaki, Susumu Tomono, Sajid Iftekhar Chowdhury, Sachiko Akashi Takamura

Aichi Medical University

WS28-22-P

Therapeutic effects of conditioned medium of immortalized stem cells from human exfoliated deciduous teeth on the diabetic peripheral neuropathy in a mouse model of streptozotocin-induced diabetes mellitus

◯ Eri Horio, Natsuki Yamagutchi, Jukito Sonoda, Miu Yamagishi, Satomi Miyakawa, Shinya Inoue, Fumihiro Murakami, Hiromitsu Amamizu, Yasuhiro Katahira, Hideaki Hasegawa, Izuru Mizoguchi, Takayuki Yoshimoto

Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University

WS28-23-P

Three cytokine pairs modulate sepsis effects at the organism level

◯ Michihiro Takahama[1,2)], Nicolas Chevrier[2)]

[1)]Graduate School of Pharmaceutical Sciences, Osaka University, [2)]Pritzker School of Molecular Engineering, University of Chicago

WS28-24-P

CD40-TRAF5 axis controls antibody production and germinal center formation *in vivo*

◯ Mari Hikosaka-Kuniishi[1)], Chieri Iwata[1)], Yusuke Ozawa[1)], Sayaka Ogawara[1)], Tomomi Wakaizumi[1)], Ayaka Sato[1)], Riho Itaya[1)], Soichiro Kobayashi[1)], Ren Sunakawa[1)], Masashi Morita[1)], Naoto Ishii[2)], Takanori So[1)]

[1)]Laboratory of Molecular Cell Biology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan, [2)] Department of Microbiology and Immunology, Tohoku University Graduate School of Medicine, Sendai, Japan

WS28-25-P

Development and Application of Digital Bioassays as a Biomarker Detection Technology

◯ Takuya Komachi[1)], Yuji Kubo[1)], Yoichi Makino[1)], Yoshihiro Minagawa[2)], Hiroshi Ueno[2)], Kazuhito Tabata[2)], Hiroyuki Noji[2)]

[1)]Technical Research Institute, TOPPAN Holdings Inc., [2)]Department of Applied Chemistry, School of Engineering, The University of Tokyo

WS28-26-P

Bleomycin-induced Pulmonary Fibrosis in Transgenic Mice Carrying the Human MUC5B rs35705950 variant

◯ Yurie Kogue[1)], Corina Gabazza[2)], Taro Yasuma[2)], Tomohito Okano[1)], Masaaki Toda[2)], Tetsu Kobayashi[1)], Esteban Gabazza[2)]

[1)]Department of Respiratory and Critical Medicine, Mie University Graduate School of Medicine, [2)]Department of Immunology, Mie University Graduate School of Medicine

December 5

WS29 Cell therapy, vaccine, and new therapeutic modality

WS29-01-O/P

Development of new adoptive T cell therapy that overcomes tumor heterogeneity with escape variant tumor clones

◯ Kiyoshi Yasui[1)], Daisuke Ehara[1,2)], Mitsuhiro Yoneda[1)], Situo Deng[1)], Sachiko Okamoto[3)], Yasunori Amaishi[3)], Daisuke Muraoka[4)], Naohisa Ogo[5)], Akira Asai[5)], Hiroyuki Murota[2)], Hiroaki Ikeda[1)]

[1)]Nagasaki Univ. Grad. Sch. of Biomed. Sci., Dept. of Oncology., [2)]Nagasaki Univ. Grad. Sch. of Biomed. Sci., Dept. of Dermatology., [3)]Tech. Development Ctr, Takara Bio Inc., [4)]Aichi Cancer Ctr. Res. Inst., Div. of Translational Oncoimmunology, [5)]Ctr. for Drug Discovery, Grad. Div. Pharm., Univ. of Shizuoka

WS29-02-P

Development of a split and universal Chimeric Antigen Receptor system targeting solid tumors

◯ Hiroyuki Kadota, Tsukasa Shigehiro, Yuki Narita, Shogo Tanimori, Jia Han, Tomokatsu Ikawa

Tokyo University of Science, Research Institute for Biomedical Sciences

WS29-03-O/P

The relationship between receptor shedding and Trogocytosis

◯ Atsutaka Minagawa, Shin Kaneko

Kyoto University

WS29-04-O/P

Efficient production of CAR-NK cells with a potent antitumor effect using leukocyte progenitor cells

◯ Jia Han, Tsukasa Shigehiro, Shogo Tanimori, Hiroyuki Kadota, Karin Noma, Tomokatsu Ikawa

Tokyo University of Science, Research Institute for Biomedical Science

WS29-05-P

Development of CAR macrophage therapy for the treatment of solid tumors

◯ Kyoko Fukuda[1)], Masahiro Kariya[2)], Lan Yi Li[3)], Kazunobu Ohnuki[1)], Masamichi Ide[2)], Tetsuya Nakatsura[1)], Yuichiro Hagiya[2)], Tianyi Liu[4)], Yasushi Uemura[1)]

[1)]National Cancer Center, [2)]Innovative Technology Lab., AGC Inc., [3)]Dept. Cancer Therapy Develop. Beijing Tianyifang Bio. Dev. Co., Ltd, [4)]Inst. Oncol. Chinese PLA General Hosp., Beijing, China

WS29-06-O/P

Imaging of biphasic signalosomes constructed by checkpoint receptor 2B4 in conventional and CAR-T cells

◯ Ryohei Matsushima[1,2)], Ei Wakamatsu[1)], Hiroaki Machiyama[1)], Wataru Nishi[2)], Yosuke Yoshida[1,3)], Tetsushi Nishikawa[1,4)], Hiroko Toyota[1)], Masae Furuhata[1)], Hitoshi Nishijima[1)], Arata Takeuchi[1)], Makoto Suzuki[2)], Tadashi Yokosuka[1)]

[1)]Tokyo Medical University department of Immunology, [2)]Kumamoto University department of Thoracic Surgery, [3)]Tokyo Medical University Department of Nephrology, [4)]Tokyo Medical University Department of Dermatology

WS29-07-P

Endogenous TCRs contribute CAR-T cells activation by clustering with self antigen-MHCs

◯ Hiroaki Machiyama[1)], Ei Wakamatsu[1)], Arata Takeuchi[1)], Hitoshi Nishijima[1)], Masae Furuhata[1)], Hiroko Toyota[1)], Mamonkin Maksim[2)], Tadashi Yokosuka[1)]

[1)]Tokyo Medical University, [2)]Baylor College of Medicine

WS29-08-O/P

Breast cancer specific antigen recognition by TIL-derived MR1-restricted TCRs

◯ Abdul Hayee[1)], Eiji Kobayashi[1)], Hiroshi Hamana[2)], Chihiro Motozono[3)], Satoshi Yamaguchi[1)], Ha Thi Viet My[1)], Tatsuhiko Ozawa[1)], Hiroyuki Kishi[1)]

[1)]Department of Immunology, Faculty of Medicine, Academic Assembly, University of Toyama, Toyama, Japan, [2)]Shinobi Therapeutics Co., Ltd., Kyoto, Japan, [3)]Division of Infection and Immunity, Joint Research Center for Human Retrovirus Infection, Kumamoto University, Kumamoto, Japan

WS29-09-P

Identification of tumor-reactive T-cell clones proliferating in tumor-draining lymph nodes

◯ Mikiya Tsunoda[1)], Munetomo Takahashi[2)], Hiroyasu Aoki[3)], Masaki Kurosu[1)], Haru Ogiwara[1)], Shigeyuki Shichino[1)], Kouji Matsushima[1)], Satoshi Ueha[1)]

[1)]Division of Molecular Regulation of Inflammatory and Immune Diseases, Research Institute for Biomedical Sciences, Tokyo University of Science, [2)]Faculty of Medicine, The University of Tokyo, [3)]Department of Preventive Medicine, Graduate School of Medicine, The University of Tokyo

WS29-10-P

Combination of T cell therapy and a compound 433 overcomes tumor heterogeneity

◯ Pengyu Miao[1)], Situo Deng[1)], Daisuke Ehara[1,2)], Daisuke Muraoka[3)], Naohisa Ogo[4)], Mitsuhiro Yoneda[1)], Kiyoshi Yasui[1)], Akira Asai[4)], Hiroaki Ikeda[1)]

[1)]Dept. of Oncology, Nagasaki Univ. Grad. Sch. of Biomed. Sci, [2)]Dept. of Dermatology, Nagasaki Univ. Grad. Sch. of Biomed. Sci , [3)]Div. of Translational Oncoimmunology, Aichi Cancer Ctr. Res. Inst, [4)]Ctr. for Drug Discovery, Grad. Div Pharm., Univ. of Shizuoka

WS29-11-O/P

Antigenic functions of glioblastoma-enriched glycosphingolipid modulating human iNKT cell functions

◯ Masaki Terabe[1)], Morgan Coombs[1)], Tyrone Dowdy[1)], Md Masud Alam[1)], Seketoulie Keretsu[1)], Kelsey Smith[2)], Jenny Gumperz[2)], Mioara Larion[1)]

[1)]National Cancer Institute, NIH, [2)]Univ. Wisconsin-Madison

WS29-12-P

Antibody-dependent cellular cytotoxicity of induced pluripotent stem cell-derived natural killer T cells by anti-GD2 monoclonal antibody for neuroblastoma

◯ Katsuhiro Nishimura[1,2)], Takahiro Aoki[1,3)], Midori Kobayashi[1)], Mariko Takami[1)], Daisuke Katsumi[1,2)], Hiroko Yoshizawa[1,2)], Shugo Komatsu[2)], Haruhiko Koseki[4)], Tomoro Hishiki[2)], Shinichiro Motohashi[1)]

[1)]Department of Medical Immunology, Graduate School of Medicine, Chiba University, [2)]Department of Pediatric Surgery, Graduate School of Medicine, Chiba University, [3)]Department of Pediatrics, Graduate School of Medicine, Chiba University, [4)]Laboratory for Developmental Genetics, RIKEN Center for Integrative Medical Sciences

WS29-13-P

Establishment and induction of long-term cancer immune memory by RK-LIPO activated NKT cells and elucidation of its antitumor mechanism

◯ Toshi Jinnohara[1)], Masumi Takahashi[1)], Takashi Taida[2)], Masaru Taniguchi[1)], Hiroshi Ohno[1)]

[1)]RIKEN IMS , [2)]Chiba Univ

WS29-14-P

Engineering TCR-controlled Fuzzy Logic into CAR T Cells Enhances Therapeutic Specificity

◯ Taisuke Kondo[1)], François Bourassa[2)], Sooraj Achar[1,3)], Grégoire Altan-Bonnet[1)], Paul François[2)], Naomi Taylor[1)]

[1)]National Institutes of Health, [2)]McGill University, [3)]University of Oxford

WS29-15-P

A combination of systemic plus intra-tumor neopeptide vaccination controls tumors in a mouse model

◯ Kou Hioki[1)], Melisa D. Castro Eiro[1)], Ling Li[1)], Marlous Wildemans[1)], Youkyung Lim[1)], Harmen J. G. van de Werken[1)], Yvonne M. Mueller[1)], Burcu Temizoz[2)], Kouji Kobiyama[2)], Christopher Schliehe[1)], Ken J. Ishii[2)], Peter D. Katsikis[1)]

[1)]Department of Immunology; Erasmus University Medical Center, Rotterdam, the Netherlands, [2)]Division of Vaccine Science, Department of Microbiology and Immunology, International Vaccine Design Center (vDesC), The Institute of Medical Science, The University of Tokyo (IMSUT), Tokyo, Japan

WS29-16-P

Identification of immunogenic HLA class I and II neoantigens using surrogate immunopeptidomes

◯ Serina Tokita[1,2)], Takayuki Kanaseki[1,2)], Toshihiko Torigoe[1,2)]

[1)]Department of Pathology, Sapporo Medical University, [2)]Joint Research Center for Immunoproteogenomics, Sapporo Medical University

WS29-17-P

HLA-II neoantigen presentation in the TME and CD4$^+$ T cell surveillance in colorectal cancer

◯ Satoru Matsumoto[1,2)], Takayuki Kanaseki[1,3)], Takahiro Tsujikawa[4)], Serina Tokita[1,3)], Toshihiko Torigoe[1)]

[1)]Department of Pathology, Sapporo Medical University School of Medicine, [2)]IMS Sapporo Digestive Disease Center General Hospital, [3)]Sapporo Medical University Joint Research Center for Immunoproteogenomics, [4)]The Department of Otorhinolaryngology-Head and Neck Surgery, Kyoto Prefectural University of Medicine

WS29-18-P

Development of mRNA vaccines targeting common cancer antigens

◯ Nobuo Tsukamoto, Honoka Nishide, Hiroki Kinoshita, Kazunobu Onuki, Alicia Cristina Pena-Romero, Kazumasa Takenouchi, Tetsuya Nakatsura

Division of Cancer Immunotherapy, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center

WS29-19-P

IFN-γ-Induced MHC Class II Expression on Tumor Cells Plays a Crucial Role in Anti-Cancer Immunity Induced by mRNA Cancer Vaccine

◯ Mahiro Shibata[1,2)], Hui Jin[1,2)], Hisashi Arase[1,2)]

[1)]Department of Immunochemistry, Research Institute for Microbial Diseases, Osaka University, [2)]Laboratory of Immunochemistry, Frontier Research Center for Immunology, Osaka University

WS29-20-P

Bacterial infection Induces transient melanoma dedifferentiation with attenuated antigenicity

◯ Yutaka Horiuchi, Sara Hatazawa, Yukie Ando, Momo Mataki, Takashi Murakami

Dept. Microbiol., Fac. Med., Saitama Med. Univ.

WS29-21-P

Peptide immunotherapy targeting FAP-positive fibroblasts

◯ Keiko Udaka[1)], Taro Komatsu[1)], Yuki Tanaka[2)], Kousuke Onoue[2)], Yoshiko Yamashita[2)], Kazuhide Onoguchi[2)], Ryo Tanaka[3)], Yoichiro Iwase[3)], Naoki Sakaguchi[3,4)]

[1)]Department of Immunology, School of Medicine, Kochi University, [2)]Division of AI Drug Development, NEC Corporation, [3)]Pharmaceutical Solutions Division, R&D, TERUMO Corporation, [4)]Previous affiliation

WS29-22-P

MONTANID™ ISA 51 VG: open access adjuvant dedicated to therapeutic vaccines

◯ Ko Sugahara[1)], Jaymes Bryant Tibig[2,3)], Dorine Hello[2)]

[1)]Air Liquide Japan GK, [2)]SEPPIC SA, [3)]Université Claude Bernard Lyon

WS29-23-P

Intradermal injection of protein using a needle-free pyro-drive jet injector augments potent CD8⁺ T cell-mediated antitumor immunity via its shear stress-induced HMGB1

◯ Izuru Mizoguchi[1)], Jukito Sonoda[1)], Natsuki Yamaguchi[1)], Eri Horio[1)], Satomi Miyakawa[1)], Mingli Xu[1)], Toshihiko Yoneto[1)], Yasuhiro Katahira[1)], Hideaki Hasegawa[1)], Takashi Hasegawa[2)], Kunihiko Yamashita[2)], Takayuki Yoshimoto[1)]

[1)]Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University, [2)]Department of Device Application for Molecular Therapeutics, Graduate School of Medicine, Osaka University

WS29-24-P

Enhancing whole-cell vaccine effectiveness by inducing immunogenic cell death in combination with needle-free injectors

◯ Kunihiko Yamashita[1,3)], Chin-Yang Chang[2)], Jiayu A. Tai[1)], Yu-Diao Kuan[1)], Tomoyuki Nishikawa[1)]

[1)]Department of Device Application for Molecular Therapeutics,Graduate School of Medicine/Faculty of Medicine,Osaka Univ., [2)]Department of Gene and Stem Cell Regenerative Therapy, Graduate School of Medicine/Faculty of Medicine,Osaka Univ., [3)]Daicel Corporation

WS29-25-P

Analyzing the Effectiveness of Recombinant Oncolytic Vaccinia Viruses with Human b-Defensin 2 in Boosting Anti-Tumor Immunity using Predictive Modelling of Immune Responses

◯ Prihantini[1)], Rifaldy Fajar[2)], Sahnaz Vivinda Putri[3)], Andi Nursanti Andi Ureng[4)]

[1)]Bandung Institute of Technology, [2)]Yogyakarta State University, [3)]Daeng Radja Hospital, [4)]Andini Persada College of Health Sciences

WS29-26-O/P

In vivo Generation of Designer antigen-presenting cells using mRNA for Cancer Immunotherapy

◯ Tomoyoshi Yamano, Toan Van Le, Shota Imai, Iriya Fujitsuka, RIkinari Hanayama

Department of Immunology, Kanazawa University

WS29-27-P

A novel cell therapy using CCL19-expressing allogeneic mesenchymal stem cells exerts robust anti-tumor effects by accumulating CD103⁺ dendritic cells and priming CD8⁺ T cells without involving draining lymph nodes

◯ Yuichi Iida, Mamoru Harada

Department of Immunology, Faculty of Medicine, Shimane University

WS29-28-O/P

Antitumor immunity via harnessing nano-sized membrane vesicles

◯ Mirei Kataoka[1)], Yusuke Ito[1)], Seiichi Ohta[2)], Yuki Kagoya[1)]

[1)]Keio University, [2)]The University of Tokyo

WS29-29-P

Development and evaluation of a novel DDS formulation using shark antibodies

◯ Yuki Nitta[1,2)], Wataru Takagi[1)], Susumu Hyodo[1)], Masahiro Yasunaga[1,2)]

[1)]Tokyo Univ., [2)]National Cancer Center

Awards Ceremony and Lectures

Awards Ceremony and Lectures

12 月 4 日（水） Wednesday, 4th December

各賞授賞式・受賞講演
Awards Ceremony and Lectures

日本免疫学会功労会員表彰式 / Commendation Ceremony for JSI Meritorious Member

功労会員（2025 年度）
Meritorious Member (2025)

小安　重夫　氏
Dr. Shigeo Koyasu

第 27 回日本免疫学会賞授賞式 / 27th JSI Award Ceremony

第 27 回日本免疫学会賞受賞者
27th JSI Award Winner

「リンパ球動態の新たな制御機構の解明」
“Elucidation of novel mechanisms for the control of lymphocyte trafficking”

鈴木　一博　氏（大阪大学免疫学フロンティア研究センター 免疫応答動態学）
Dr. Kazuhiro Suzuki, Osaka University

第 11 回日本免疫学会ヒト免疫研究賞授賞式 / 11th JSI Human Immunology Research Award Ceremony

第 11 回日本免疫学会ヒト免疫研究賞受賞者
11th JSI Human Immunology Research Award Winner

「新しい免疫受容体の発見から炎症性疾患に対する創薬開発研究へ」
“From the discovery of novel immunoreceptors to the development of therapeutic antibodies for inflammatory diseases”

渋谷　彰　氏（筑波大学医学系医療系 革新的創薬開発研究センター）
Dr. Akira Shibuya, University of Tsukuba

第 11 回日本免疫学会女性免疫研究者賞授賞式 / 11th JSI Women Immunologist Award Ceremony

第 11 回日本免疫学会女性免疫研究者賞受賞者
11th JSI Women Immunologist Award Winner

「胸腺上皮細胞の分化と T 細胞老化に関する研究」
“Study on the Development of Thymic Epithelial Cells and T-Cell Aging”

濱崎　洋子　氏（京都大学 iPS 細胞研究所 京都大学大学院医学研究科）
Dr. Yoko Hamazaki, Kyoto University

※各種授賞式に引き続き、受賞講演を行います。
*The above Award Lectures will be start following ceremonies.

第 19 回日本免疫学会研究奨励賞授賞式 / 19th JSI Young Investigator Award Ceremony

第 19 回日本免疫学会研究奨励賞受賞者（五十音順）
19th JSI Young Investigator Award Winners

「免疫抑制受容体 PD-1 による遺伝子選択的・細胞選択的抑制機構の解明」
“Selective regulation of genes and cells by the immunoinhibitory receptor PD-1”
清水　謙次　氏（東京大学大学院 医学系研究科 定量生命科学研究所 分子免疫学分野）
Dr. Kenji Shimizu, The University of Tokyo

「寄生虫による免疫抑制メカニズムの解明」
“Immunomodulatory mechanisms by parasites”
下川　周子　氏（国立感染症研究所 寄生動物部）
Dr. Chikako Shimokawa, National Institute of Infectious Diseases

「腸内細菌代謝機構と宿主免疫・慢性炎症に関する研究」
“The Impact of Gut Microbial Metabolism on Host Immunity and Chronic Inflammation”
竹内　直志　氏（スタンフォード大学 医学部）
Dr. Tadashi Takeuchi, Stanford University

「1 細胞トランスクプトーム解析の活用による好塩基球の分化経路ならびに皮膚アレルギー制御機構の解明」
“Elucidation of the Basophil Differentiation Trajectory and Skin Allergy Regulation Mechanisms Using Single-Cell Transcriptome Analysis”
三宅　健介　氏（東京医科歯科大学 統合研究機構）
Dr. Kensuke Miyake, Tokyo Medical and Dental University

「γδ T 細胞の分化と選択におけるシグナル伝達の分子機構」
“Molecular mechanisms of TCR signaling in γδT cell development and selection”
室　龍之介　氏（東京大学大学院 医学系研究科 免疫学）
Dr. Ryunosuke Muro, The University of Tokyo

※研究奨励賞受賞者の研究課題については、12 月 4 日（水）16 時 40 分からポスター発表をいたします。
*The above JSI Young Investigator Award, Winners' Posters Discussion will be started from 16:40 on 4th December.

International Immunology Outstanding Merit Award Ceremony

International Immunology Outstanding Merit Award for 2023 Winner

“SARS-CoV-2 ORF8 is a viral cytokine regulating immune responses”

Dr. Masako Kohyama, Osaka University

若手免疫学研究推進事業 / Outstanding Young Immunology Researcher Award Winners Introduction

2024 年若手免疫学研究推進事業受賞者（五十音順）
Outstanding Young Immunology Researcher Award 2024 Winners

「転移再発頭頸部がんにおける Nivolumab 耐性機序の解明とバイオマーカーの探索」

“Exploration of the mechanisms of resistance to Nivolumab and the predictive biomarkers in recurrent/metastatic HNSCC”

奥村　元紀　氏（国立がん研究センター東病院 先端医療開発センター 免疫 TR 分野）

Dr. Genki Okumura, National Cancer Center Hospital

「2 型自然リンパ球と舌免疫系クロストークを介した組織バリア形成機構の解明」

“ILC2-mediated tongue immunological crosstalk orchestrates the integrity of oral barrier function”

古賀　諭　氏（大阪大学医学系研究科 感染症・免疫学講座 生体防御学教室）

Dr. Satoshi Koga, Osaka University

「肝癌悪性化に寄与する線維化機構と微小免疫環境の本態解明に関する研究」

“Decoding Fibrosis-Induced Malignancy and the Role of the Immune Microenvironment in Liver Cancer”

森田　覚　氏（慶應義塾大学 微生物学免疫学教室 本田研究室）

Dr. Satoru Morita, Keio University

若手女性研究者研究支援事業 / Outstanding Young Women Researcher Award Winners Introduction

2024 年若手女性研究者研究支援事業受賞者（五十音順）
Outstanding Young Women Researcher Award 2024 Winners

「部位特異的な糖転移酵素による糖鎖修飾メカニズム及び腸管恒常性維持機構の解明」

“Elucidation of the glycan modification mechanism by site-specific glycosyltransferases and their impact on gut homeostasis”

石橋　亜衣里　氏（大阪大学大学院医学系研究科 免疫制御学教室）

Dr. Airi Ishibashi, Osaka University

「全身性エリテマトーデスに自律神経 - 腸内細菌軸が関与するメカニズムの探究」

“Exploration of the Mechanism Involving the Autonomic Nervous System-Gut Microbiota Axis in Systemic Lupus Erythematosus”

白柏　魅怜　氏（京都大学医学部附属病院 免疫・膠原病内科）

Dr. Mirei Shirakashi, Kyoto University Hospital

「きぼう」プロジェクト　免疫学博士課程学生支援　採択者紹介 / “Kibou Projects” Scholarship for Doctoral Students in Immunology Winners Introduction

2022 年度採択者（五十音順）
2022 Winners

「抑制性免疫補助受容体による T 細胞活性化抑制機構の解析」
“Molecular mechanisms of T cell suppression by inhibitory co-receptors”
阿比留　龍喜　氏（東京大学）
Mr. Ryuki Abiru, The University of Tokyo

「乳汁免疫因子による子の大腸細菌叢の長期的な制御」
“Long-term influence of maternal immune factors on offspring’s large intestinal microbiota, independent of offspring immunity”
伊東　加織　氏（東北大学）
Ms. Kaori Ito, Tohoku University

「樹状細胞の分化並びに遺伝子発現を制御する転写調節因子の機能と免疫関連疾患への寄与」
“The roles of transcription factors in dendritic cell-mediated immune response”
伊藤　直人　氏（東京理科大学）
Mr. Naoto Ito, Tokyo University of Science

「硫酸化糖鎖の粘膜バリア機構における生理的意義および病態との関連」
“Roles of sulfated mucin in the intestinal homeostasis”
岡本　翔太　氏（大阪大学）
Mr. Shota Okamoto, Osaka University

「気道 M 細胞の分化機構と呼吸器疾患における機能の解明」
“Differentiation and function of iBALT M cells induced by influenza infection”
河合　真悟　氏（慶應義塾大学）
Mr. Shingo Kawai, Keio University

「LGP2:MDA5:RNA 複合体の構造可視化による自然免疫応答の理解」
“Self vs. non-self RNA discrimination in immune response by disease-associated MDA5 mutant”
栗原　新奈　氏（東京大学）
Ms. Nina Kurihara, The University of Tokyo

「Memory-phenotype CD4+ T 細胞による腸管虚血再灌流障害の増悪機構の解明」
“Naturally arising memory-phenotype CD4+ T lymphocytes rapidly accumulate in ischemic organs to exacerbate the tissue injury in an innate manner”
佐藤　皓祐　氏（東北大学）
Mr. Kosuke Sato, Tohoku University

「ループス腎炎を誘導するパトローリング単球の解析」

“Analysis of patrolling monocytes that drive lupus nephritis”

田中　麗華　氏（東京大学）

Ms. Reika Tanaka, The University of Tokyo

「DNA メチル化に着目した単核貪食細胞分化におけるエピゲノム解析」

“Global DNA methylation analysis in differentiation of mononuclear phagocytes”

山﨑　貴弥　氏（横浜市立大学）

Mr. Takaya Yamasaki, Yokohama City University

2023 年度採択者（五十音順）
2023 Winners

「関節リウマチ炎症滑膜内における B 細胞応答の解明」

“Investigation of B cell responses in the synovium of rheumatoid arthritis”

赤嶺　綸子　氏（京都大学）

Ms. Rinko Akamine, Kyoto University

「新生児期の免疫異常と皮膚 dysbiosis が引き起こすアトピー性皮膚炎“発症起点”の解明」

“Elucidating the mechanism of atopic dermatitis triggered by neonatal skin dysbiosis and immune imbalance”

伊藤　朋香　氏（大阪大学）

Ms. Tomoka Ito, Osaka University

「脳神経細胞障害からの回復過程における内因性オピオイドの役割」

“Role of endogenous opioids in the recovery process from brain neuronal damage.”

川副　明生　氏（九州大学）

Ms. Mio Kawazoe, Kyushu University

「新規免疫制御因子の遺伝子変異を伴う先天性免疫異常症の病態解明」

“Elucidating the pathogenesis of inborn errors of immunity associated with genetic mutations of a novel immunoregulatory molecule”

喜枝　美月　氏（大阪大学）

Ms. Mizuki Kishi, Osaka University

「可溶型 CD155 の除去によるがん免疫抑制機構の解明」

“Elucidation of the role of soluble CD155 in tumor immunity”

木下　翔太　氏（筑波大学）

Mr. Shota Kinoshita, University of Tsukuba

「抗生物質寛容型細菌の免疫逃避機構の解明」

“Strategies of antibiotic tolerant bacteria for overcoming host immunity”

木村　宇輝　氏（鳥取大学）

Mr. Uki Kimura, Tottori University

「MHC クラスⅡによる新規腸管免疫制御機構解明」

“Regulation of immune response in intestine by MHC class II molecules”

千菊　智也　氏（東京大学）

Mr. Tomoya Sengiku, The University of Tokyo

「自己炎症性疾患の特徴をもつ免疫介在性疾患の網羅的解析」

“Comprehensive analysis of immune-mediated diseases with characteristics of autoinflammatory disorders”

高澤　郁夫　氏（東京大学）

Mr. Ikuo Takazawa, The University of Tokyo

「ストレス造血における造血幹細胞における運命制御のメカニズムの解明」

“Elucidation of mechanisms that regulate hematopoietic stem cell fate decisions under stress hematopoiesis”

虎谷　和則　氏（京都大学）

Mr. Kazunori Toratani, Kyoto University

「新規治療標的探索に資する腫瘍特異的 Tsg1 発現マクロファージの同定とその機能解析」

“Identification and functional analysis of tumor-specific macrophage subsets for discovery of novel therapeutic targets”

倉谷　歩見　氏（大阪大学）

Ms. Ayumi Kuratani, Osaka University

「細胞傷害性 CD4 T 細胞による腫瘍の免疫監視」

“Immune surveillance of tumor cells mediated by cytotoxic CD4+ T cells”

田村　ベリース結実　氏（広島大学）

Ms. Yumi Tamura, Hiroshima University

2024 年度採択者（五十音順）
2024 Winners

「小腸から胸腺へ移行した樹状細胞による新たな食物アレルギー回避機構の立証」

“Thymic dendritic cells involved in T cell selection migrate from the small intestine”

石井　寛斗　氏（横浜市立大学）

Mr.Hiroto Ishii, Yokohama City University

「腸管上皮 Microfold 細胞欠失による腸内細菌叢への影響と T2D モデルとの関連についての探索」

“Investigating the Impact of Intestinal Microfold Cells on Gut Microbiota Structure and Function Using Synthetic Bacterial Community”

伊藤　光希　氏（東京理科大学）

Ms. Mitsuki Itou, Tokyo University of Science

「腸管上皮細胞のレチノイド X 受容体を介したバリア機構の解明」

“Elucidation of Barrier Mechanisms Mediated by Retinoid X Receptor in Intestinal Epithelial Cells”

杉山　ひなた　氏（慶應義塾大学）

Ms. Hinata Sugiyama, Keio University

「抗ウイルス応答におけるゴルジ体ストレス応答の機能解析」

“Functional analysis of Golgi Stress Response (GSR) in antiviral response”

豊留　里奈　氏（奈良先端科学技術大学院大学）

Ms. Rina Toyodome, Nara Institute of Science and Technology

「RNA 構造を標的とした核酸医薬による抗腫瘍免疫制御法の開発」

“Development of antitumor immune control strategy by nucleic acid medicine targeting RNA structure.”

村岡　慎太郎　氏（京都大学）

Mr. Shintaro Muraoka, Kyoto University

「百寿者腸内細菌による新規ステロイド代謝経路と新規ステロイド化合物の解明とその免疫系への影響」

“Elucidation of a Novel Steroid Metabolism Pathway and Novel Steroid Compounds by Centenarians’ Gut Microbiota, and Their Impact on the Immune System”

渡部　靖郎　氏（東京大学）

Mr. Yasuo Watanabe, The University of Tokyo

「パイロトーシスを介した炎症を制御する新たな分子の機能解析」

“Functional analysis of a new molecule that regulates pyroptosis-induced inflammation”

生駒　健太　氏（大阪大学）

Mr. Kenta Ikoma, Osaka University

「難治性 B 細胞性急性リンパ性白血病の悪性化に関わる炎症性サイトカインの役割の解明」

“The role of inflammatory cytokines in the malignant transformation of refractory B-cell acute lymphoblastic leukemia”

鈴木　藍彩　氏（東京理科大学）

Ms. Aisa Suzuki, Tokyo University of Science

※「きぼう」プロジェクト免疫学博士課程学生支援の採択者の研究課題については、12 月 4 日（水）16 時 40 分からポスター発表をいたします。

* The above “Kibou Projects” Scholarship for Doctoral Students in Immunology, Winners’ Poster Discussion will be started from 16:40 on 4th December.

Young Researcher's Forum

若手研究者フォーラム「共に語る研究者キャリアの道」
Young Researcher's Forum, "Let's Talk Together About Carriers of Researchers" Registration Form

12 月 4 日（水） Wednesday, 4th December 11:30 AM - 12:50

場所：Room G（定員：50 名程度）
Venue: Room G (Around 50 participants)

概要：
過去二年連続で実施された「若手研究者フォーラム」では、若手研究者が将来への不安や悩みを共有し、現役研究者からアドバイスを受ける機会が提供され、免疫学の未来についての展望や期待についても議論されたが、参加者からのフィードバックにより、若手研究者は率直な意見交換ができるフランクな交流機会を求めていることが明らかになった。そこで今年度はさらにキャリア選択に影響を及ぼす人生のイベント（結婚、出産・育児、介護など）についても議論する場を設けて、若手フォーラムを実施する。本フォーラムにより、免疫学の未来を担う若手研究者が将来の明確なビジョンの下でキャリア選択をするための一助となれば幸いである。

Abstract:
In the past two consecutive years, the 'Young Researchers Forum' has provided young researchers with an opportunity to share their anxieties and concerns about the future with others, receive advice from active researchers, and discuss the prospects and expectations for immunology. Based on feedback from previous participants, it became clear that young researchers seek a candid exchange of opinions and a frank networking opportunity. This year, we will also create a space for discussing life events (such as marriage, childbirth, parenting, and caregiving) that can impact career choices. We hope that this forum will assist young researchers in making career decisions under a clear vision for the future of Immunology Research.

※昼食（お弁当）を無料でご用意します。
※お子様連れでのご参加も歓迎します（昼食はご持参いただくか、お子様用にお弁当を予約してください）。
※会場に空きがあれば当日の飛び込み参加も可能ですが、昼食がご用意できない可能性がありますことご了承ください。

*A complimentary lunch (bento box) will be provided.
*We welcome participants with children (please bring your child's lunch or ask us additional bento boxes for them from a below form).
*Walk-in Participation: If space is available, walk-ins will be accepted on the day of the event, but we may not be able to provide lunch.

サテライトワークショップ
Satellite Workshop

12 月 4 日（水） Wednesday, 4th December from 8:30 PM ～

場所：TBD（長崎駅周辺を予定）
Venue: TBD (Planned to be near Nagasaki Station)

定員：40 名程度（要事前予約、会費制（3000 円～ 5000 円程度を予定、学生無料））

Capacity: Around 40 participants (advance registration required; participation fee would be 3,000 to 5000 yen. Free for Students.)

『若手研究者フォーラム「共に語る研究者キャリアの道」』での議論を受け、さらに踏み込んだ議論を行えるようにサテライトのワークショップの実施を 2 日目の学術集会後に予定。スケジュールコンフリクトのためにフォーラムには参加できなかった方も是非サテライトワークショップへの参加をご検討ください。また、お子様連れでの参加も可能です。

Following the discussions held at the Young Researchers' Forum "Discussing Career Paths for Researchers Together," we will host a more in-depth discussion at the satellite workshop on the evening of the second day of the meeting. Even if you are unable to attend the Forum due to schedule conflicts, we encourage you to consider participating in the Satellite Workshop.

Technical Seminar

Technical Seminar

11:40 ~ 12:40, Tuesday, December 3

T01 Technical Seminar 01 Room C: 101B

Chairperson: Hideki Hasegawa (Research Center for Influenza and Respiratory Viruses, National Institute of Infectious Diseases)

T01 Detection of interaction between enteric bacteria and intestinal IgA antibodies

Reiko Shinkura Laboratory of Immunology and Infection Control, Institute for Quantitative Biosciences, The University of Tokyo

Cytek Japan Corporation

11:40 ~ 12:40, Tuesday, December 3

T02 Technical Seminar 02 Room D: 101C

Chairperson: Kazuo Okamoto (Division of Immune Environment Dynamics, Cancer Research Institute, Kanazawa University)

T02 Peripheral immune control of mucosal viral infection

Norifumi Iijima National Institutes of Biomedical Innovation, Health and Nutrition

TOMY DIGITAL BIOLOGY CO., LTD.

11:40 ~ 12:40, Tuesday, December 3

T03 Technical Seminar 03 Room E: 102

T03 Spatial biology in multiple dimensions

Stefan Eulitz Miltenyi Biotec B.V. & Co. KG

Miltenyi Biotec K.K.

11:40 ~ 12:40, Wednesday, December 4

T04 Technical Seminar 04 Room C: 101B

Chairperson: Atsushi Kumanogoh (Department of Respiratory Medicine and Clinical Immunology, Graduate School of Medicine, Osaka University)

T04 T-Cell Immune System Responsible for Sustained Antitumor Effects

Hiroshi Kagamu Saitama Medical University International Medical Center

Standard BioTools K.K.

11:40 ~ 12:40, Wednesday, December 4

T05 Technical Seminar 05 Room D: 101C

Chairperson: Osamu Takeuchi (Department of Medical Chemistry Graduate School of Medicine, Kyoto University)

T05 A novel imaging flow cytometry for analyzing immunosuppressive mechanisms in the tumor microenvironment

Hiroyoshi Nishikawa Division of Cancer Immunology, Research Institute, National Cancer / Department of Immunology, Nagoya University Graduate School of Medicine / Division of Cancer Immune Multicellular System Regulation, CCII, Graduate School of Medicine, Kyoto University

Nippon Becton Dickinson Company, Ltd.

11:40 ~ 12:40, Wednesday, December 4

T06 Technical Seminar 06 Room F: 103

T06 CXCR4 Induces Memory Formation and Metabolic Shift in CAR-T Cells for AML Therapy

Ari Itoh-Nakadai Department of Hygiene and Public Health, Nippon Medical School

10x Genomics

11:40 ~ 12:40, Thursday, December 5

T07 Technical Seminar 07 Room C: 101B

T07 Prediction and exploration of functional hematopoietic stem cells

Satoshi Yamazaki The Institute of Medical Science, The University of Tokyo

Thermo Fisher Scientific

11:40 ~ 12:40, Thursday, December 5

T08 Technical Seminar 08 Room D: 101C

Chairperson: Shintaro Tanaka (Leica Microsystems K.K.)

T08-01 Imaging analysis of sensory neurons involved in atopic dermatitis

Takaharu Okada RIKEN Center for Integrative Medical Science, Lab for Tissue Dynamics

T08-02 AI-assisted image analysis software AIVIA for immune microenvironment imaging

Toshiyuki Hatano Leica Microsystems K.K.

Leica Microsystems K.K.

Clinical Seminar

Clinical Seminar

11:40 ~ 12:40, Tuesday, December 3

C01 Clinical Seminar 01 Room A: Convention Hall

Chairperson: Takanori Kanai (Department of Internal Medicine(Gastroenterology and Hepatology), Keio University School of Medicine)

C01 Pathophysiology-based Inflammatory Bowel Disease Treatment Strategies

Yohei Mikami Department of Internal Medicine, Keio University School of Medicine

Takeda Pharmaceutical Company Limited

11:40 ~ 12:40, Tuesday, December 3

C02 Clinical Seminar 02 Room B: 101A

Chairperson: Hiroaki Niiro (Department of Medical Education, Faculty of Medical Sciences, Kyusyu University)

C02 IL-6 inhibition and the pursuit of precision medicine in rheumatoid arthritis

Satoshi Kubo Department of Molecular Targeted Therapies, University of Occupational And Environmental Health

ASAHI KASEI PHARMA CORPORATION

11:40 ~ 12:40, Tuesday, December 3

C03 Clinical Seminar 03 Room F: 103

Chairperson: Hideki Ueno (Department of Immunology, Graduate School of Medicine, Kyoto University)

C03 mRNA Vaccinology: Enabling Pandemic Preparedness and Next-Generation Innovation

David Alvarez Moderna, Inc.

Moderna Japan Co. Ltd.

11:40 ~ 12:40, Tuesday, December 3

C04 Clinical Seminar 04 Room G: 107

Chairperson: Kazuyo Moro (Laboratory for Innate Immune Systems, Graduate School of Medicine, Osaka University)

C04-01 The cytokine network reveals new perspectives on Type2 Inflammation

Yasutaka Motomura Research Institute for Biomedical Sciences, Tokyo University of Science

C04-02 Immunology of Atopic Dermatitis

Tetsuro Kobayashi Laboratory for Innate Immune Systems, RIKEN Center for Integrative Medical Sciences

Sanofi K.K. / Regeneron Pharmaceuticals Inc.

11:40 ~ 12:40, Wednesday, December 4

C05 Clinical Seminar 05 Room A: Convention Hall

Chairperson: Yoshiya Tanaka (First Department of Internal Medicine, University of Occupational and Environmental Health)

C05 The role of type I interferon signaling in systemic autoimmune diseases in the single-cell era

Keishi Fujio Department of Allergy and Rheumatology, Graduate School of Medicine, The University of Tokyo

AstraZeneca K.K.

11:40 ~ 12:40, Wednesday, December 4

C06 Clinical Seminar 06 Room B: 101A

Chairperson: Akira Ando (Shiga University of Medical Science)

C06 Gut microbiota-derived succinate induces enteric nervous system regeneration

Daniel Mucida The Rockefeller University / Howard Hughes Medical Institute

MIYARISAN Pharmaceutical Co., Ltd.

11:40 ~ 12:40, Wednesday, December 4

C07 Clinical Seminar 07 Room E: 102

Chairperson: Shinichiro Motohashi (Department of Medical Immunology, Graduate School of Medicien, Chiba University)

C07 Super-resolution imaging elucidates the molecular mechanisms of cancer immunotherapies.- Signalosome network of immune checkpoint receptors and chimeric antigen receptors -

Tadashi Yokosuka Department of Immunology, Tokyo Medical University

MSD K.K.

11:40 ~ 12:40, Thursday, December 5

C08 Clinical Seminar 08 Room B: 101A

Chairperson: Wataru Ise (Center for Infectious Disease Education and Research, Osaka University)

C08 Recognition of host through immune receptors

Sho Yamasaki Research Institute for Microbial Diseases, Osaka University / Immunology Frontier Research Center, Osaka University / Center for Infectious Disease Education and Research, Osaka University / Center for Advanced Modalities and DDS, Osaka University

Otsuka Pharmaceutical Co., Ltd.

Afternoon Seminar

Afternoon Seminar

12:50 ~ 13:50, Tuesday, December 3

A01 Afternoon Seminar 01 Room A: Convention Hall

Outstanding Young Immunology Researcher Award

Chairpersons: Tomohiro Kurosaki (President of the JSI/ IFReC, Osaka University / RIKEN IMS)

Hiroshi Ohno (President of the 53rd Annual Meeting of the JSI / RIKEN IMS)

A01-01 Dietary Soy Promotes Mucosal IgA Response via Tfh Cell Induction in Peyer's Patches

Daisuke Takahashi Faculty of Pharmacy, Keio University / Graduate School of Pharmaceutical Sciences, Keio University Faculty of Pharmacy

A01-02 Role of MHC class I in the development and progression of lung cancer with Kras mutation

Tsutomu Tanaka Department of immunology, Hokkaido University / The Institute for Vaccine Research and Development (IVReD), Hokkaido University

A01-03 Comprehensive analysis of immune cells in sub-epithelial dome region

Yutaka Nakamura Wakayama Medical University

Nippon Becton Dickinson Company, Ltd.

12:50 ~ 13:50, Wednesday, December 4

A02 Afternoon Seminar 02 Room A: Convention Hall

Outstanding Young Women Researcher Award

Chairpersons: Tomohiro Kurosaki (President of the JSI/ IFReC, Osaka University / RIKEN IMS)

Hiroshi Ohno (President of the 53rd Annual Meeting of the JSI / RIKEN IMS)

A02 Role of Inflammatory Cytokine LIGHT in Airway Remodeling and Vasculitis in Asthma

Haruka Miki Department of Rheumatology, Institute of Medicine, University of Tsukuba / La Jolla Institute for Immunology

TOMY DIGITAL BIOLOGY CO., LTD.

Evening Seminar

Evening Seminar

18:30 ~ 19:30, Tuesday, December 3

E01 Evening Seminar 01 Room B: 101A

Chairperson: Takanori Kanai (Keio University School of Medicine, Department of Internal Medicine (Gastroenterology and Hepatology))

E01-01 The similarity of gut disease and skin disease: Th17 related disease

Tomohisa Sujino Keio University School of Medicine, Center for Diagnostic and Therapeutic Endoscopy

E01-02 Advancing Psoriatic Syndrome Management: Integrating Biologic Switch Strategies and AI-Enhanced Care

Takeya Adachi Department of Dermatology, Keio University School of Medicine / Keio Allergy Center / Department of Medical Innovation and Translational Medical Science, Kyoto Prefectural University of Medicine

Janssen Pharmaceutical K.K.

日本免疫学会からのお知らせ

特定非営利活動法人日本免疫学会からのお知らせ

1. 学会のホームページアドレス

日本免疫学会から会員の皆様へのお知らせは、ホームページを通じて行っておりますので、随時ご覧ください。

ホームページアドレス：https://www.jsi-men-eki.org/

2. 会員への電子メールによる情報配信について

日本免疫学会では、電子メールにて、会員の皆様への緊急なお知らせやお願いを配信しております。未だメールアドレスを会員データベースに登録されていない方は、至急会員専用ページ（https://www.men-eki.org/meneki_web/jsp/welcome.html）よりご登録いただくか、学会事務局（info@meneki.or.jp）へご連絡ください。

3. 会費納入について

本学会は、10月1日より、新年度（2025年度 <2024年10月1日～2025年9月30日>）となりました。新年度の会費は、学会事務局より送付いたしました「年会費用振替用紙」にてお振込みいただくか、会員専用ページ（https://www.men-eki.org/meneki_web/jsp/welcome.html）よりクレジットカードによる会費決済をおこなえますので、より多くの会員の皆様にご利用をお願い申し上げます。クレジットカード決済の際に、年会費と併せて寄附金を納付いただける場合に限り、クレジット手数料は無料（全額学会負担）となります。

新規入会をご希望の方は、学会ホームページ「入会申込」のボタンより、オンラインで手続きをお願いいたします。

4. 2025年度　特定非営利活動法人日本免疫学会役員（各五十音順）

理事長：黒崎知博　（2024年12月31日迄）

竹田　潔　（2025年1月1日から2026年12月31日迄）

理　事：岡田峰陽※、椛島健治、河本　宏、熊ノ郷　淳、渋谷　彰、高柳　広、竹田　潔、三宅幸子、山崎　晶※

※理事長推薦理事　（2024年12月31日迄）

荒瀬　尚、石井　健、樗木俊聡、大野博司、渋谷和子、新藏礼子、竹内　理

（2026年12月31日迄）

石井　優、反町典子、長谷耕二、堀　昌平、三宅健介、安友康二、山崎　晶

（2025年1月1日から2028年12月31日迄）

監　事：小安重夫、岩倉洋一郎　（2024年12月31日迄）

黒崎知博、吉村昭彦　（2025年1月1日から2026年12月31日迄）

5. 日本免疫学会へのご寄附のお願い

皆様のご協力のお蔭で、本学会は2016年11月7日をもちまして、認定特定非営利活動法人として本認定されましたが、本認定期間におきましても、より多くの方々（毎年100名以上）からの寄附があることが認定継続の要件となっております。

ご存じのとおり、本学会は、2005年度のNPO法人化を機に、社会貢献活動にも積極的に取り組み、「免疫ふしぎ未来」をはじめとして、一般社会に対し、より広く免疫学の魅力と重要性をアピールする活動を広げ、免疫研究への一層の理解と、啓蒙に努めております。

その一方で、会員数の減少や近年の物価高騰等により、実質的な学会資産の減少が続いており、これまで、各種事業の見直し等、学会として対応策を講じてまいりましたが、健全な学会運営をとりまく環境は依然厳しい状況です。

つきましては、今後、社会へのより一層の貢献のために、各種事業による免疫学の普及啓発事業等の活動をさらに発展させ、本学会の財政を安定させるためにも、より多くの皆様からの寄附を募集いたします。

寄附のお申し込みの詳細につきましては、本学会ホームページ、ご寄附のお願い（https://www.jsi-men-eki.org/kifu/）をご覧ください。クレジットカードでのお支払いも可能です。また、会員専用ページ（https://www.men-eki.org/meneki_web/jsp/welcome.html）より、年会費と併せて寄附金を納付いただければ、クレジット決済手数料は無料（全額学会負担）となりますので、本学会活動にご理解とご賛同をいただき、ご支援・ご協力をいただければ幸いです。

なお、本学会の主たる目的である業務に関係する寄附金は、個人・法人ともに税法上の優遇措置が与えられます。ご不明な点等ありましたら、下記の学会事務局までお問い合わせください。

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（文責：事務局長　織田純平）

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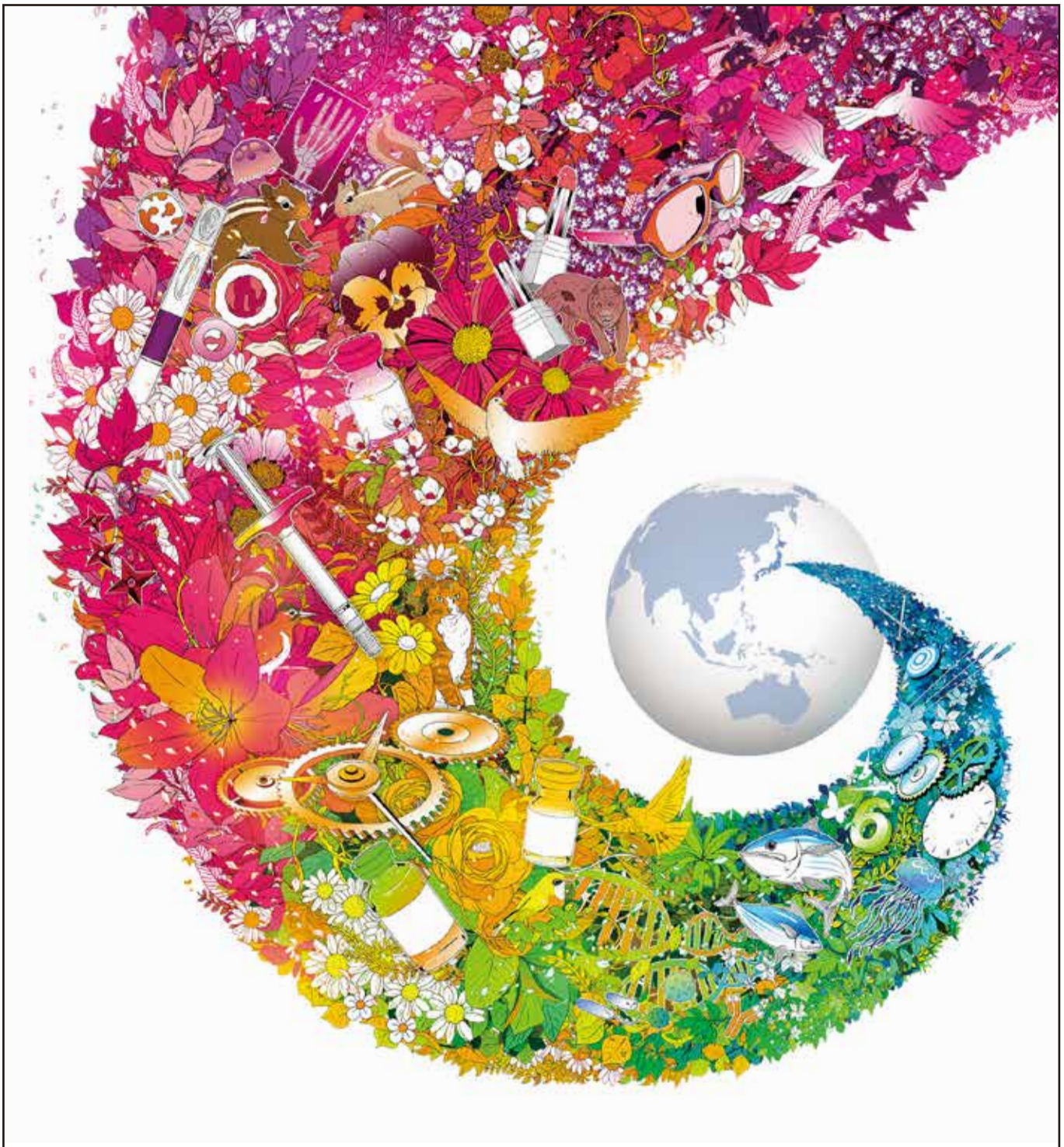

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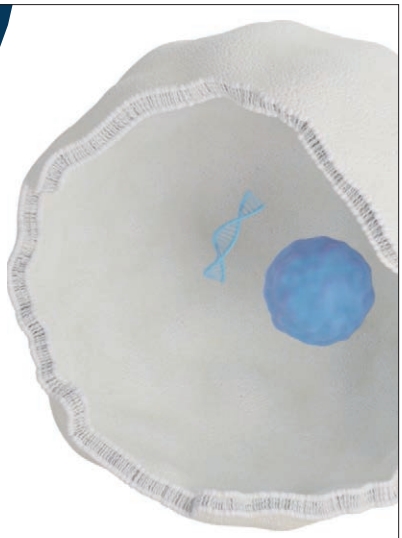

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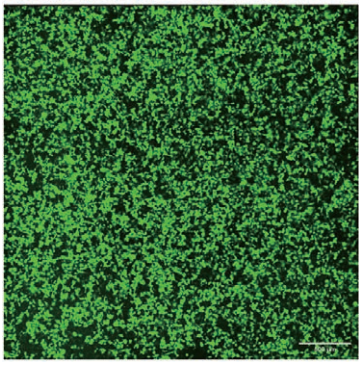

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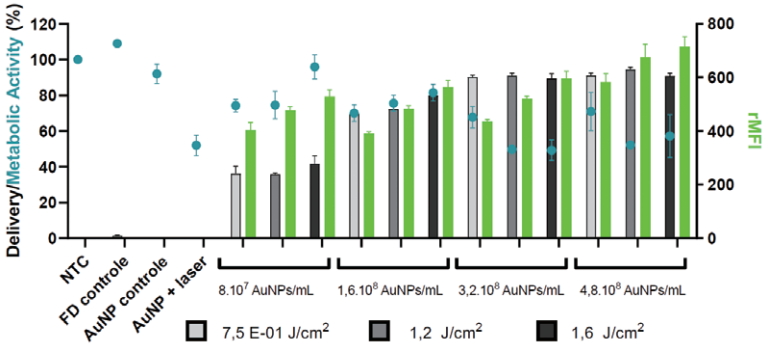

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