

Program

TUESDAY, JUNE 25, 2024

15:00–17:00 Registration

17:10–17:15 Opening Remarks: Kiyoshi TAKEDA

17:15–18:55 Plenary Lectures

Chair: Kiyoshi TAKEDA

17:15–18:05 [PL1]

Host-microbiota interaction is regulated by autonomous skin-intrinsic germinal centers24

Yasmine BELKAID

(Metaorganism Immunity Laboratory, Laboratory of Immunology, Institut Pasteur, France)

18:05–18:55 [PL2]

Oral and gut microbiota share an evolutionary history with humans26

Ruth E. LEY

(Max Planck Institute for Biology Tübingen, Germany)

18:55–20:30 Welcome Reception

WEDNESDAY, JUNE 26, 2024

9:00–12:00 Session A

Microbiota and Immunity

Chairs: Kenji KABASHIMA

Florent GINHOUX

9:00–9:30 [A-1]

Neuro-immune interactions in tissue homeostasis28

David ARTIS

(Weill Cornell Medicine, USA)

9:30–10:00 [A-2]

Host-microbiota interaction for the maintenance of intestinal homeostasis30

Kiyoshi TAKEDA

(Immunology Frontier Research Center, Osaka University, Japan)

10:00–10:30 [A-3]

Induction of host mucosal immunity to intestinal commensal microbes addressed by reversible colonisation32

Andrew J. MACPHERSON

(University Hospital of Bern, Switzerland)

10:30–11:00 Coffee Break

11:00–11:30 [A-4]	Microbial exposure during early human development primes fetal immune cells	34
	<u>Florent GINHOUX</u> (Gustave Roussy, France/Translational Immunology Institute, SingHealth and Duke NUS, Singapore/Singapore Immunology Network (SIgN), A*STAR, Singapore)	
11:30–12:00 [A-5]	Elucidating the role of metabolic pathway in sarcoidosis granuloma formation	36
	<u>Kenji KABASHIMA</u> (Graduate School of Medicine, Kyoto University, Japan)	
12:00–12:15	Short Talk ①	
	<u>Yuya KIGUCHI (PS-37)</u>	142
12:15–14:00	Lunch after taking Group photo	
14:30–17:30	Session B	
	Microbiota in the intestine	
	Chairs: <u>Yumi MATSUOKA-NAKAMURA</u> <u>Ami BHATT</u>	
14:30–15:00 [B-1]	Staphylococcal agr quorum sensing system and skin microbiome: unveiling their role in infantile atopic dermatitis	38
	<u>Yumi MATSUOKA-NAKAMURA</u> (Immunology Frontier Research Center, Osaka University, Japan)	
15:00–15:30 [B-2]	Microbiome dynamics during infection	42
	<u>Andrew GOODMAN</u> (Yale University School of Medicine, USA)	
15:30–16:00 [B-3]	Deciphering the human microbiome with chemistry	44
	<u>Emily P. BALSUS</u> (Harvard University, USA/Howard Hughes Medical Institute, USA)	
16:00–16:30	Coffee Break	
16:30–17:00 [B-4]	From precise microbial genomics to precision medicine	46
	<u>Ami BHATT</u> (Stanford University, USA)	
17:00–17:30 [B-5] (Recorded Lecture)	Host-microbiome interaction in health and disease	48
	<u>Eran ELINAV</u> (Weizmann Institute of Science, Israel)	

17:30–17:45 **Short Talk** ②
Tomoaki YOSHIDA (PS-39)144

17:45–19:30 **Dinner**

19:30–21:30 **Poster Session I (Odd Number Posters)**

THURSDAY, JUNE 27, 2024

9:00–12:00 **Session C**

Microbiota in the skin

Chairs: Masayuki AMAGAI
Tiffany SCHARSCHMIDT

9:00–9:30 **[C-1]**
**Dissecting the pathophysiology of an intractable diseases via
single-cell RNA-sequencing**50
Keisuke NAGAO
(Arthritis and Musculoskeletal and Skin Diseases, NIH, USA)

9:30–10:00 **[C-2]**
Staphylococci: Friends and foes in the human microbiome52
Michael OTTO
(National Institute of Allergy and Infectious Diseases, NIH, USA)

10:00–10:30 **[C-3]**
Early life immune-microbe crosstalk in skin54
Tiffany SCHARSCHMIDT
(University of California, San Francisco, USA)

10:30–11:00 **Coffee Break**

11:00–11:30 **[C-4]**
The skin microbiome and bacteriotherapy in atopic dermatitis ...56
Tissa Ryoko HATA
(University of California San Diego, USA)

11:30–12:00 **[C-5]**
**Deciphering the skin's shield: unveiling the pH-dependent dynamics
of the stratum corneum and microbiome interplay**58
Masayuki AMAGAI
(Department of Dermatology, Keio University School of Medicine, Japan/
Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical
Sciences, Japan)

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Nozomi HORI (PS-28)126

12:15–14:30 **Lunch**

14:30–17:30 Session D**Intestinal inflammation**

Chairs: Toshifumi HIBI
Eugene B. CHANG

14:30–15:00 [D-1]

Inhibition of intestinal inflammation in humans with novel drugs aimed at immune regulation and modulation of gut microbiome ...60

Toshifumi HIBI

(Kitasato University Kitasato Institute Hospital, Japan)

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Healthy and dysbiotic intestinal bacterial metabolites mediate mucosal homeostasis vs inflammation64

Ryan Balfour SARTOR

(University of North Carolina at Chapel Hill, USA)

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Regional microbiota mismatches with gut ecosystems arising from fecal microbiota transplants drive persistent, off-target consequences to the host66

Eugene B. CHANG

(University of Chicago, USA)

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Toshiro SATO

(Keio University, Japan)

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Nobuhiko KAMADA

(University of Michigan, USA/Osaka University, Japan)

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Shunya HATAI (PS-54)165

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- 9:00–11:15 Session E**
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 Hiroshi OHNO
- 9:00–9:30 [E-1]**
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Hal DRAKESMITH
 (MRC Weatherall Institute of Molecular Medicine, UK)
- 9:30–10:00 [E-2]**
Impact of gut microbiota on obesity and insulin resistance76
Hiroshi OHNO
 (RIKEN Center for Integrative Medical Sciences, Japan)
- 10:00–10:30 Coffee Break**
- 10:30–10:45 Short Talk ⑤**
 Jumpei SASABE (PS-52)162
- 10:45–11:15 [E-3]**
**Development of live biotherapeutic products based on
 understanding of the gut microbiota**80
Kenya HONDA
 (Keio University School of Medicine, Japan)
- 11:15–11:25 Introduction of The Naito Foundation**
- 11:25–11:35 Announcement of Award Recipients**
- 11:35–11:45 Closing Remarks:** Kiyoshi TAKEDA
- 11:45–13:00 Lunch**