



## Kyoto University Symposium for Microbiology and Immunology 2026

京都大学 微生物と免疫 シンポジウム 2026

Date: January 13-14, 2026

日時：2026 年 1 月 13-14 日

Venue: Horiba Symposium Hall, International Science Innovation  
Building, Kyoto University

場所：京都大学国際科学イノベーション棟 HORIBA シンポジウムホール、ホワイエ



## Program

**13<sup>th</sup> January (Tue).**

9:00 — 9:30	Registration (Preparing for poster exhibition)	
9:30 — 9:40	Opening Remarks	
Session 1	Chairperson: Yoshinaga Ito	
9:40 — 10:05	Speaker 1	Kenji Kabashima 梶島健治 Medicine/Hospital
10:05 — 10:30	Speaker 2	Yoshitaka Takano 高野義孝 Agriculture
10:30 — 10:55	Speaker 3	Masato Katahira 片平正人 Inst Adv Energy
10:55 — 11:10	Break	
Session 2	Chairperson: Masato Katahira	
11:10 — 11:35	Speaker 4	Yoko Hamazaki 濱崎洋子 CiRA
11:35 — 12:00	Speaker 5	Kazunari Akiyoshi 秋吉一成 Medicine/Engineering
Photo session & Lunch (Preparing for poster exhibition)		
13:00 — 14:00	Poster session (Odd numbers)	
14:00 — 15:00	Poster session (Even numbers)	
Special Lecture	Chairperson: Osamu Takeuchi	
15:00 — 16:00	Special Lecture: Prof. Kenya Honda 本田賢也@ Keio University	
16:00— 16:15	Break	
Session 3	Chairperson: Yoshitaka Takano	
16:15 — 16:40	Speaker 6	Akari Nishida 西田朱里 Biostudies/Pharmacology
16:40 — 17:05	Speaker 7	Hideki Ueno 上野英樹 Medicine
17:05 — 17:30	Speaker 8	Hiroyuki Ogata 緒方博之 化研 Inst Chem Res (ICR)
17:30 — 20:30	Free discussion	

## 14<sup>th</sup> January (Wed).

9:00 — 9:30	Registration (Preparing for poster exhibition)	
<b>Session 4</b>	<b>Chairperson: Hiroyuki Ogata</b>	
9:30 — 9:55	Speaker 9	Yasuhiro Murakawa 村川泰裕 Medicine/ASHBi
9:55 — 10:20	Speaker 10	Akiko Makino 牧野晶子 LiMe/Biostudies
10:20 — 10:45	Speaker 11	Motonari Uesugi 上杉志成 Inst Chem Res (ICR)
10:45 — 11:00	Break	
<b>Session 5</b>	<b>Chairperson: Yasuhiro Murakawa</b>	
11:00 — 11:25	Speaker 12	Kimitoshi Kimura 木村公俊 Medicine/Hospital
11:25 — 11:50	Speaker 13	Hiroshi Nonaka 野中洋 Engineering
Lunch (Preparing for poster exhibition)		
13:00 — 14:00	Poster session (Odd numbers)	
14:00 — 15:00	Poster session (Even numbers)	
<b>Session 6</b>	<b>Chairperson: Hiroshi Nonaka</b>	
15:00 — 15:25	Speaker 14	Osamu Takeuchi 竹内理 Medicine
15:25 — 15:50	Speaker 15	Ryohei Terauchi 寺内良平 Agriculture
15:50 — 16:05	Break	
<b>Session 7</b>	<b>Chairperson: Ryohei Terauchi</b>	
16:05 — 16:30	Speaker 16	Kenji Chamoto 茶本健司 CCII
16:30 — 16:55	Speaker 17	Yoshinaga Ito 伊藤能永 LiMe
<b>16:55 — 17:10</b>	<b>Closing Remarks</b>	
17:10 — 19:30	Free discussion / Clearance of venue	

口頭発表@シンポジウムホール

1 月 13 日

-Session1 9:40 — 10:55 Chairperson: Yoshinaga Ito -

1. 9:40 — 10:05 Kenji Kabashima 榎島健治 (Medicine/Hospital)

(To Be Announced)

2. 10:05 — 10:30 Yoshitaka Takano 高野義孝 (Agriculture)

Molecular battles between plants and anthracnose fungi /植物と炭疽病菌の戦いの分子基盤

3. 10:30 — 10:55 Masato Katahira 片平正人 (Inst Adv Energy)

Analysis of the interaction between virus factors and antiviral factors using in-cell NMR /ウイルス因子と抗ウイルス因子の相互作用のインセル NMR 法による解析

<10:55 — 11:10 Break>

-Session2 9:40 — 10:55 Chairperson: Masato Katahira -

4. 11:10 — 11:35 Yoko Hamazaki 濱崎洋子 (CiRA)

Analysis of the interaction between virus factors and antiviral factors using in-cell NMR /ウイルス因子と抗ウイルス因子の相互作用のインセル NMR 法による解析

5. 11:35 — 12:00 Kazunari Akiyoshi 秋吉一成 (Medicine/Engineering)

Nanogel DDS for immunotherapy /免疫治療におけるナノゲル DDS

<Photo session & Lunch (Preparing for poster exhibition)>

Prof. Kenya Honda 本田賢也 @ Keio University

Microbiome Blueprinting / マイクロバイオームブループリンティング

Trillions of microorganisms transit through and reside in the mammalian gastrointestinal tract each day, collectively producing thousands of small molecules and metabolites that exert both local and systemic effects on host physiology. Identifying effector microorganisms and small molecules that causally influence host phenotypes, and deciphering the underlying mechanisms, has become a central focus of microbiome research and is beginning to enable the development of microbiota-based therapeutics. Our lab has been developed two complementary reductionist approaches. The first begins with a specific host phenotype, such as the induction of particular immune cell subsets, and progressively narrows the microbiota to identify the responsible effector bacteria. The second starts with bacteria-derived molecules and metabolites and investigates how these factors influence human physiology. Together, these strategies form the foundation for the rational design of microbiota-targeted therapeutics aimed at ameliorating specific diseases and conditions.

<16:00 — 16:15 Break>

-Session3 16:15 — 17:30 Chairperson: Yoshitaka Takano -

6. 16:15 — 16:40 Akari Nishida 西田朱里 (Biostudies/Pharmacology)

GPR109A-mediated metabolic regulation under ketogenic conditions / ケトジェニック環境下における GPR109A を介した代謝調節機構の解明

7. 16:40 — 17:05 Hideki Ueno 上野英樹 Medicine (Medicine)

Human Systems Immunology: Elucidating Disease Pathogenesis and Discovering Therapeutic Targets / ヒトシステム免疫学: 疾患の発症機構の解明と治療標的の同定

8. 17:05 — 17:30 Hiroyuki Ogata 緒方博之 (Inst Chem Res)

Host Takeover Strategies of Giant Viruses / 巨大ウイルスの宿主乗っ取り戦略

<17:30 — 20:30 Free discussion @1F lounge>

## 口頭発表@シンポジウムホール

1月14日

### -Session4 9:30 — 10:45 Chairperson: Hiroyuki Ogata -

9. 9:30 — 9:55 Yasuhiro Murakawa 村川泰裕 (Medicine/ASHBi)

Enhancer maps and novel technologies to characterize human immune diseases /ヒトの免疫疾患を理解するためのエンハンサーマップ構築と独自技術開発

10. 9:55 — 10:20 Akiko Makino 牧野晶子 (LiMe/Biostudies)

Cellular Contexts Driving the Endogenization of RNA Virus / RNA ウイルスの内在化を駆動する細胞環境

11. 10:20 — 10:45 Motonari Uesugi 上杉志成 (Inst Chem Res)

Small Molecules That Potentiate Antitumor Immunity /がん免疫を活性化する化合物

<10:45 — 11:00 Break>

### -Session5 11:00 — 11:50 Chairperson: Yasuhiro Murakawa -

12. 11:00 — 11:25 Kimitoshi Kimura 木村公俊 (Medicine/Hospital)

Unraveling the Multifaceted Nature of Microglia/ミクログリアの多面性の解明

13. 11:25 — 11:50 Hiroshi Nonaka 野中洋 (Engineering)

Development of a chemical labeling method for endogenous receptors in the animal brain and its application to microglia labeling /動物脳内の内在性受容体化学標識法の開発とミクログリア標識への展開

<Lunch (Preparing for poster exhibition)>

**-Session6 15:00 — 15:50 Chairperson: Hiroshi Nonaka -**

**14. 15:00 — 15:25 Osamu Takeuchi 竹内理 (Medicine)**

(To Be Announced)

**15 15:25 — 15:50 Ryohei Terauchi 寺内良平 (Agriculture)**

Molecular co-evolution between rice and Magnaporthe oryzae / イネ-いもち病菌相互作用の分子共進化

**<10:45 — 11:00 Break>**

**-Session7 16:05 — 16:55 Chairperson: Ryohei Terauchi -**

**16. 16:05 — 16:30 Kenji Chamoto 茶本健司 (CCII)**

The role of fatty acid oxidation in cancer immunotherapy/がん免疫における脂肪酸酸化の役割

**17. 16:30 — 16:55 Yoshinaga Ito 伊藤能永 (LiMe)**

Addressing Tumor Heterogeneity by Sensitizing Resistant Cancer Cells to T cell-Secreted Cytokines /抵抗性癌細胞をT細胞サイトカインに感受性化する

**<17:10 — 19:30 Free discussion / Clearance of venue>**

1	Jumana Shaheen	Investigating the role of Selenomethionine in Cellular Antioxidant Defense	Med
2	CHUIA JIN 晋 楚佳	A deletion in FLS2 and its expansion after domestication caused global dissemination of melon cultivars defective in flagellin recognition	Agr
3	Nozomi Abe 安部 希美	Structural insights into hyperfusogenicity of measles virus neurotropic fusion protein	HHS
4	Karen Kai Lin Hwang	Messenger RNA-Encoded Reporters for Monitoring Cellular Stress and Bioenergetics	MedicalSci
5	Takuya Ogawa	Determining factors in polysaccharide structure for the vesicular cargo protein loading in the hyper-vesiculating bacterium <i>Shewanella vesiculosa</i> HM13	ICR
6	masahiro kawakami 川上 真弘	Investigating codon usage mediated translation regulation of RNA viruses	Med
7	Reiko Hidaka 日高 礼子	Two E-boxes in the Rag1-promoter is essential for the V(D)J recombination of T cell receptor and Immunoglobulin genes.	Med
8	Hiroyuki Yoshitomi,Rinko Akamine 吉富 啓之, 赤嶺 綸子	Tertiary lymphoid structures primarily facilitate canonical B-cell differentiation in rheumatoid arthritis 関節リウマチの三次リンパ構造では胚中心反応様の B 細胞分化が主に生じる	Med
9	Keigo Takae 高瀬 啓伍	Construction of a comprehensive transcriptomic atlas of the cynomolgus macaque and mouse	Med
10	Eiji Nakata 中田 栄司	Self-Assembled Fluorophore-Based Probe for Efficient Detection of Endogenous Nitroreductase Activity in Escherichia Coli 自己集合化蛍光プローブによる大腸菌内在性ニトリダクターゼの検出	IAE
11	Tomoki Tasaka 田坂 智貴	Analysis of Skin Immune Responses Using scRNA Data and Mathematical Modeling	MedicalSci
12	Shingo Iwasaka 岩阪 晋吾	The relation between Nr4a1 and IL-10 producing B cells	Med
13	Hiroki Akiba 秋葉 宏樹	Design of cis-binding biparatopic antibodies against TNFR2 for the suppression of regulatory T cells TNFR2 を標的とするシス結合型バイパラトピック抗体による制御性 T 細胞の増殖抑制	Pharm
14	Akiyoshi Senda 千田 晃嘉	Single-cell transcriptomic analysis of human skin aging	MIP



15	Mengyan Li 李 檬言	Mechanism of IL-18 elevation in NLRC4 mutation disease	Med
16	Sogo Itaya 板谷 奏吾	Developing highly Wolbachia-infected mosquito cell lines for future applications in arbovirus growth inhibition	HHS
17	Yuki Toriba 鳥羽 雄希	Effects of plant-derived extracellular vesicles on human cell lines	HHS
18	Rana Elmanzalawy	Using Antisense oligo to Knockdown noncoding RNA In AML	MedicalSci
19	ZHAOXI YU 余 兆熙	DeepKOALA: A Fast and Accurate Deep Learning Framework for KEGG Orthology Assignment	ICR
20	CHEN YU LIN 林 辰諭	Metagenomic Insights into Antiviral Defense Gene Enrichment in Marine Particle-Attached Prokaryotes メタゲノム解析による海洋粒子付着性微生物におけるウイルス防御遺伝子集積の解明	Agr
21	Alshimaa Mostafa	Keratinocytes expressing KID syndrome mutation fuel chronic candida infection via impaired candida sensing and chemokine production	Med
22	Honoka Watanabe 渡辺 帆乃花	Giant Viruses Genes Beneficial for Hosts and the Possibility of Their Horizontal Transfer 巨大ウイルスが保有する宿主貢献的な遺伝子群とその水平伝播可能性	ICR
23	Gawoon Shim	Understanding embryo spacing within mammalian uterus	Med
24	yu wang	Mitochondria control information through betaine-LRP/PRC axis	Med
25	Asuka Ishida 石田 あす花	Investigation of distinct pathways driving live cell engulfment 生細胞の貪食を駆動する異なる経路の解明	Biostu
26	Nozomi Kamakura	Functional Analysis of G12 Signaling in B Cells Using a Chemogenetic System 化学遺伝学的なシステムを用いた B 細胞における G12 シグナルの機能解析	Pharm
27	River Budau	The gut microbiota affects metabolic and immune response via GPR43	Biostu
28	Atsutaka Minagawa	Shedding suppresses receptor-ligand trogocytosis to enhances long-term antitumor potential.	CiRA
29	YALCIN PISIL	Engineering IgG/IgA Hybrid Fc Antibodies That Recapitulate IgA1-Like Neutralization Across HIV and SARS-CoV-2 Through CH3 $\alpha$ 1-Driven Geometric Adaptability	LiMe
30	Mai Takahashi	Transcriptomic analysis of tumor-local and systemic immune activation by in situ vaccination using a novel nanoparticulate TLR9 ligand	Med
31	Ayaki Saito 齋藤 郁貴	Comprehensive signal profiling using GPCR assays GPCR アッセイによる網羅的シグナルプロファイリング	Pharm
32	Taro Suzuki 鈴木 太郎	Novel immunotherapy via induction of Tertiary Lymphoid Structure 三次リンパ組織誘導による新規固形がん免疫療法の開発	CiRA
33	Redhalfi Fadhila	Recharging Mitochondria to Combat Climate Changes in VOC-Induced Asthmatic Cells If its possible i would be happy halal	MedicalSci

<abbreviations> Med: Graduate school of Medicine, Medical Sci: Medical Sciences, KuHP: Kyoto University Hospital, Pharm: Graduate School of Pharmaceutical Sciences, Biostu: Graduate School of Biostudies, Agr: Graduate School of Agriculture, HHS: School of Human Health Sciences, LiMe: Institute for Life and Medical sciences, CiRA: Centre for iPS Cell Research, ICR: Institute for Chemical Research, CCII: Center for Cancer Immunotherapy and Immunobiology, Hakubi: The Hakubi Project

		food is provided	
34	Yukako Hattori 服部 佑佳子	Molecular Basis of Host Homeostasis Shaped by Microbes and Nutritional Environment 微生物と栄養環境が形成する宿主恒常性の分子基盤	Biostu, Hakubi
35	Jun Ichikawa 市川 淳	Association Between Klebsiella pneumoniae Detection in Cultures and Recurrent Primary Sclerosing Cholangitis After Liver Transplantation: A Single-Center Retrospective Cohort Study 原発性硬化性胆管炎 (PSC)の肝移植後再発と Klebsiella pneumoniae の関連について	Med
36	YUYI ZHOU 周 瑜儀	Clonal B-Cell somatic MYD88 L265P mutation identified in patients with Schnitzler syndrome	Med
37	Tatsuhiko Sakai	Diagnosis of IPEX Syndrome in a 13-Year-Old Boy Presenting with Takayasu Arteritis and Severe Atopic Dermatitis	Med
38	OMAR KHALED ABDELAZIZ MOHAMED OBEID	Synthetic and Functional Investigation of Arvenin I: A Covalent Plant Natural Product Potentiating Antitumor Immunity	MedicalSci
39	Shuhei Hirose 廣瀬 修平	Spermine enhances calorie restriction-mediated anti-tumor immunity in aged mice by controlling mTORC1 activity スペルミンは mTORC1 活性を制御することでカロリー制限による抗腫瘍免疫を活性化する	Med
40	MOJIAO LI 李 墨娇	The difference of mouse strain in the way of decision making and hypothesis formation	MedicalSci
41	Takehiro Kanda 神田 雄大	Toward deciphering the molecular mechanisms of Borna disease virus 1-induced encephalitis ボルナ病ウイルス 1 による脳炎発症メカニズムの解明に向けた研究	LiMe
42	Shota Nishikawa 西川 翔太	Investigation of the physiological functions of polyphenolic metabolite HMPA ポリフェノール代謝物 HMPA の生理機能解明	Pharm
43	Sunao Matsuzaka	The roles of fetal macrophages in the initiation of parturition 分娩開始における胎仔マクロファージの役割	Med
44	Hiromu Inoue 井上 宙夢	Screening and functional analysis of genes involved in extracellular membrane vesicle production in <i>Shewanella vesiculosa</i> HM13 <i>Shewanella vesiculosa</i> HM13 の細胞外膜小胞生産関連遺伝子群のスクリーニングと機能解析	ICR
45	Kumiko Uemura 植村 久美子	Single-Cell Spatial Proteomics Maps Glial Heterogeneity and Glutaminase Differences in Sporadic Amyotrophic Lateral Sclerosis	Med
46	Honoka Miyahara	Elucidating the characteristics of senescent endothelial cells recognized by autoantibodies responsible for irAE development	MedicalSci
47	Asako Shimoda 下田 麻子	Extracellular Vesicles as Bio-Nano Shuttles: The Role of Surface Glycans in Cellular Interactions 生体ナノシャトルとしての細胞外小胞：表層糖鎖機能と細胞相互作用	Hakubi

48	Shuhe Ma 馬 舒荷	Title: Distinct Profile of Monocyte-Derived Macrophages in Liver Perfusates from Patients with Primary Biliary Cholangitis Compared to Transplant Donors	Med, ASHBi
49	Yoshitaka Nakata 仲田 吉孝	Mpox virus OPG175 negatively regulates viral replication by controlling Wnt signaling	MedicalSci
50	Shima Goto	B cell-intrinsic toll-like receptor 7 signaling promotes tertiary lymphoid structures formation in injured kidney B 細胞の toll-like receptor 7 シグナルは障害腎における三次リンパ組織形成を促進する	Med
51	Mami Mamiya 間宮茉実	Lymphopenia-induced CD4+ T-cell proliferation can exacerbate skin inflammation elicited by commensal skin fungi リンパ球減少下で増殖する CD4 陽性 T 細胞は皮膚表在真菌マラセチアによる皮膚炎を増悪させる	Med
52	Viet Qui Le	Towards a scalable AI-based method for the morphological and morphometric characterisation of in vitro embryo models	MedicalSci
53	Matthew Denwell Herrera	Development of Deoxycholic Acid-based self-assembling adjuvants	MedicalSci
54	Tomonori Yaguchi 谷口 智憲	Phenotype of Circulating Tumor-Reactive T Cells Predicts Immune Checkpoint Inhibitor Response in Non-Small Cell Lung Cancer 非小細胞肺癌における末梢腫瘍反応性 T 細胞の機能状態に基づく免疫チェックポイント阻害薬応答予測	Med
55	Mao Hara 原 万生	Analysis of humoral immunity in SIV infected simianized-mice: Establishment of a neutralizing antibody quantification assay	HHS
56	Yixin Zou	A polyamine improves anti-tumor T cell function by promoting BiP chaperone activity in aged mice	Med
57	YANG YUANZHENG 楊	STRUCTURAL CHARACTERIZATION OF A MAJOR CARGO PROTEIN OF EXTRACELLULAR MEMBRANE VESICLES FROM A HYPER-VESICULATING BACTERIUM <i>SHEWANELLA VESICULOSA</i> HM13	Agr, ICR
58	Yuki Masuo 増尾優輝	Stem-like and effector peripheral helper T cells regulate local immune response in rheumatoid arthritis	Med
59	Koji Kitaoka 北岡 功次	Active aldehydes accelerate CD8+ T cell exhaustion through metabolic alteration in tumor microenvironment 活性アルデヒドが腫瘍微小環境の代謝を変化させ、CD8+ T 細胞の機能疲弊を加速させる	Med