

Abstracts of papers presented
at the 2025 Cold Spring Harbor Asia Conference

MICROBIOME AND BARRIER IMMUNITY

October 27–October 31, 2025

Arranged by

Ken Cadwell, *University of Pennsylvania*

Nicola Harris, *Monash University*

Xiaoyu Hu, *Westlake University*

Chuan Wu, *National Cancer Institute*



Cold Spring Harbor Conferences Asia
Cold Spring Harbor Laboratory



MICROBIOME AND BARRIER IMMUNITY
Monday, October 27 – Friday, October 31, 2025

Monday	7:00 pm	1 Barrier Surface I
Tuesday	9:00 am	2 Barrier Surface II
Tuesday	2:00 pm	Poster Session
Tuesday	7:00 pm	3 Microbiome and Tumor
Wednesday	9:00 am	4 Neuro-immune Barrier
Wednesday	1:30 pm	<i>Visit to Old Suzhou*</i>
Wednesday	7:00 pm	5 Host-Microbe Crosstalk I
Thursday	9:00 am	6 Host-Microbe Crosstalk II
Thursday	2:00 pm	7 Infection and Inflammation I
Thursday	6:00 pm	<i>Cocktails and Banquet</i> <i>Sponsored by</i> <i>Shanghai Future Technology Co., Ltd.</i>
Friday	9:00 am	8 Infection and Inflammation II

Oral presentation sessions are located in the CSHA Auditorium

Poster session is in the Lake Front Hall.

Cocktail social hour is held outside in the Suz Garden.

Old Suzhou visits depart from the CSHA lobby

**optional tour requires additional fee.*

Meal locations and times are as follows:

Lunch: Main Cafeteria 12:00pm - 1:30pm

Dinner: Main Cafeteria 6:00pm - 7:30pm

Banquet: Suz Garden 7:00pm

More information will be available at CSHA office.

(Map at the end of this abstract book)

PROGRAM

MONDAY, October 27—7:00 PM

SESSION 1 BARRIER SURFACE I

KEYNOTE SPEAKER

Microbiome, metabolites and immunity—Defining mechanisms

Kathy D. McCoy [35'+10']

Presenter affiliation: University of Calgary, Calgary, Canada.

1

Neonatal eosinophils orchestrate intestinal barrier maturation and long-term immune homeostasis

Ignacio Gonzalez-Perez, Kristina Handler, Isabelle C. Arnold [20'+10']

Presenter affiliation: University of Zürich, Zürich, Switzerland.

2

Protecting the intestinal barrier—A multidimensional spatial organisation calibrates gut responses

Wang H. Cao, M. Zeeshan Chaudhry, Cyril Seillet, Kelvin Z. Tuong, Richard Strugnell, Gabrielle T. Belz [20'+10']

Presenter affiliation: University of Queensland, Brisbane, Australia.

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TUESDAY, October 28—9:00 AM

SESSION 2 BARRIER SURFACE II

Chairperson: **Ken Cadwell**, University of Pennsylvania, Philadelphia, Pennsylvania, USA

KEYNOTE SPEAKER

Communication of the microbiome, intestinal stem cells, the mucosal immune system in health and disease

Thaddeus S. Stappenbeck [35'+10']

Presenter affiliation: Cleveland Clinic, Cleveland, Ohio.

4

Host adaptations to gut microbes

Ken Cadwell [20'+10']

Presenter affiliation: University of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania.

5

Milk osteopontin protects against infant bronchiolitis by enhancing microbiome-mediated extramedullary dendritic cell hematopoiesis

Simon Phipps [20'+10']

Presenter affiliation: QIMR Berghofer, Brisbane, Australia.

6

Break

Epithelial cell membrane perforation induces allergic airway inflammation

Kejian Shi, Yao Lv, Chunqiu Zhao, Huan Zeng, Yeqiong Wang, Yuxuan Liu, Lin Li, She Chen, Pu Gao, Feng Shao, Mo Xu [10'+5']
Presenter affiliation: National Institute of Biological Sciences, Beijing, China; Tsinghua University, Tsinghua Institute of Multidisciplinary Biomedical Research, China.

7

Cntnap2 shifts stromal cells from a pro-renewal to a pro-inflammatory state during intestinal inflammation

Zhihua Liu [10'+5']

Presenter affiliation: Tsinghua University, Beijing, China.

8

mTORC1 wires alveolar macrophage homeostatic programming to facilitate airway homeostasis and defense

Jiaqi Liu, Zhuoyang Li, Yangyang Li, Shengxiao Zhang, Ya-Ting Wang [10'+5']

Presenter affiliation: Tsinghua University, Beijing, China.

9

Pathobiological dynamics of the oropharyngeal microbiome are associated with clinical outcomes in Allogeneic stem cell transplantation

XiaoJin Wu, Yu Zhang, Yali Zheng, Can Wang, Siqi Zhang, Yuqi Zhang, Fangfang Zhou, Curtis Huttenhower, Yan Yan [10'+5']
Presenter affiliation: Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Shanghai, China; Shanghai Institute of Immunity and Infection, Soochow University, Shanghai, China.

10

yδ T cells as barrier guardians against MHC-I-deficient colorectal cancer

Tianming A. Li, Luke T. Quigley, Kok Fei Chan, David S. Williams, Lisa A. Mielke, Andreas Behren, Jessica Da Gama Duarte [10'+5']

Presenter affiliation: Olivia Newton-John Cancer Research Institute, Melbourne, Australia; La Trobe University, Melbourne, Australia.

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TUESDAY, October 28—2:00 PM

POSTER SESSION

TMBIM2 orchestrates neuroepithelial signaling to maintain gut barrier and immune homeostasis

Jimeng Cui, Yiqian Zhang, Ye Tian

Presenter affiliation: Chinese Academy of Sciences, Beijing, China.

12

Age-dependent shifts in plasmablasts and plasmacytoid dendritic cells compartments reveal a critical window for tonsillar immune maturation in children

Yang Gao, Jingying Ye

Presenter affiliation: Tsinghua University, Beijing, China.

13

Skin aging and microbiome—Probiotic delivery system

Ji Hoon Ha, Seung Eun Kim, YeonGyun Jung, Da-Ryung Jung, Ik hwan Kim, Jun Hwan Jang, Jin young Kim, Jun Tae Bae, Jin Mo Kim, Sang-Geun Han, Jae-Ho Shin, Yoon Soo Cho

Presenter affiliation: Kolmar Korea, Seoul, South Korea.

14

Habitual diet, gut microbiome dysbiosis, and α-synucleinopathy conversion in isolated REM sleep behavior disorder

Bei Huang

Presenter affiliation: The Chinese University of Hong Kong, Hong Kong, China.

15

Endothelial DDX24 is a shared guardian of BBB and GVB

Ying Huang, Yujiao Gong, Huanhuan He

Presenter affiliation: The Fifth Affiliated Hospital of Sun Yat-sen University, ZhuHai, China.

16

Multidisciplinary team approach to a case of undifferentiated fever revealin plasma cell neoplasm complicated by monoclonal immunoglobulin deposition disease and cast nephropathy <u>Daofang Jiang</u> Presenter affiliation: Shanghai East Hospital, School of Medicine, Tongji University, Shanghai, China.	17
Distinct gut microbial profiles predict antihistamine outcomes in burn patients with post-burn pruritus <u>Yeongyun Jung, SoHyun Yeo, Ryeong-Hui Kim, Eun Kyung Lee, Jae-Ho Shin, Yoon Soo Cho</u> Presenter affiliation: Hallym University College of Medicine, Seoul, South Korea.	18
Biofilm-mediated <i>Enterococcus–E. coli</i> interactions in a catheter model of ICU colonization <u>Philip A. Karlsson, Josef D. Järhult, Helen Wang</u> Presenter affiliation: Uppsala University, Uppsala, Sweden.	19
Gut–liver–heart axis and TMAO-driven inflammation in heart failure <u>Samat Kozhakhmetov, Almagul Kushugulova</u> Presenter affiliation: National Laboratory Astana, Nazarbayev University, Astana, Kazakhstan.	20
Barrier dysfunction and cytokine-driven inflammation in chronic heart failure <u>Almagul Kushugulova, Samat Kozhakhmetov</u> Presenter affiliation: National Laboratory Astana, Nazarbayev University, Astana, Kazakhstan.	21
Investigation of biomarkers governing the gut-liver axis in drug-induced hepatotoxicity Zhanagul Khassenbekova, Dinar Tarzhanova, Indira Uyzbayeva, Akmaral Zhantureyeva, Samat Kozhakhmetov, <u>Almagul Kushugulova</u> Presenter affiliation: National Laboratory Astana, Nazarbayev University, Astana, Kazakhstan.	22

Bile acid-LPCAT1 axis governs intestinal barrier homeostasis and symptoms in diarrhea-predominant irritable bowel syndrome

Lixiang Zhai, [Baohua Li](#), Shujun Xu, Zhaoxiang Bian, Haitao Xiao, Hoi Leong Xavier Wong, Jiao Peng, Yingdi Zhang, Jiayu He, Gengyu Bao, Wenyu Fang, Yunlyu Li, Huan Deng, Ling Zhao, Ziwan Ning, Junfang Lyu, Chengyuan Lin, Qin Liu

Presenter affiliation: Hong Kong Baptist University, Hong Kong SAR, China; Shenzhen University, Shenzhen, China.

23

Xbp1 links gut milieu and ILC2 functionality via one-carbon metabolism

Yanyan Cui, Jing Shen, [Shiyang Li](#)

Presenter affiliation: Shandong University, Jinan, China.

24

***Porphyromonas gingivalis* promotes pancreatic cancer through GSDMD-mediated pyroptosis of macrophages**

Haoyu Li, [Yuke Li](#), Yibing Han, Peihui Ding

Presenter affiliation: Stomatology Hospital, Zhejiang University School of Medicine, Hangzhou, China.

25

LC-MS profiling reveals bioactive peptidoglycan fragments derived from *Lactobacilli* that confer intestinal protection in hosts

[Yaqun Liang](#), Yuan Qiao

Presenter affiliation: Nanyang Technological University, Singapore.

26

High-resolution genomic resource of human oral and airway microbiomes highlights uncultured diversity and common disease associations

[Yawen Ni](#), Xiaohui Zou, Qing Zhang, Shenghui Li, Yue Zhang, Chun Wang, Xiaoxuan Yao, Bin Cao

Presenter affiliation: Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, China; China-Japan Friendship Hospital, Beijing, China.

27

***P. gingivalis* translocates to pancreas and promotes PDAC progression via supernatant-mediated CD8⁺ T cell dysfunction**

Chengli Zhang, [Yuanyi Qian](#), Zhiyong Wang, Peihui Ding

Presenter affiliation: Zhejiang University, School of Medicine, Hangzhou, China.

28

Brg1-imprinted chromatin status controls the effector and memory ILC2 metabolism to exacerbate allergic lung inflammation

Jinxin Qiu, Ju Qiu

Presenter affiliation: Shanghai Institute of Nutrition and Health, University of Chinese Academy of Sciences, Chinese Academy of Sciences, Shanghai, China.

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Metagenomic characterization of gut microbiota in individuals with low cardiovascular risk

Ainur T. Tauykelova, Aliya I. Sailybayeva, Makhabbat S.

Bekbossynova, Almagul R. Kushugulova

Presenter affiliation: Corporate Fund University Medical Center, Astana, Kazakhstan.

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High-throughput functional analyses of the genetic drivers of inflammatory bowel disease

Mario Loeza-Cabrera, Ciara Hosea, Adrien Assie, Buck S. Samuel

Presenter affiliation: Baylor College of Medicine, Houston, Texas.

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Metagenomic characterization of gut microbiota in individuals with low cardiovascular risk

Ainur T. Tauykelova, Aliya I. Sailybayeva, Makhabbat S.

Bekbossynova, Almagul R. Kushugulova

Presenter affiliation: Corporate Fund "University Medical Center", Astana, Kazakhstan.

32

Distinct microbiome variation in children and adults following RSV infection and its association with host response

Qi Wang, Yulin Zhang, Bo Liu, Lin Sun, Xiaohui Zou, Bin Cao

Presenter affiliation: Second Affiliated Hospital of Harbin Medical University, Harbin Medical University, Harbin, China; China-Japan Friendship Hospital, Beijing, China.

33

Bile acid synthesis dysregulation in liver diseases promotes ectopic expansion of oral streptococci in the intestine

Yugui Wang

Presenter affiliation: College of Veterinary Medicine, Chinese Academy of Agricultural Sciences, Lanzhou, China; Key Laboratory of Veterinary Parasitology of Gansu Province, Lanzhou, China; Shanxi Agricultural University, College of Veterinary Medicine, Taigu, China.

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Beyond the skin—Immune-metabolic crosstalk in psoriasis and its multi-organ metabolic consequences <u>Jiaqi Wu</u> , Shuangshuang Liu, Wei Dan, Xiao Tong, Jingyi Gong, Jindian Xu, Weiwei Chen, Yu Gu, Yanmei Wang, Zimeng Li, Yingli Jia, Li-Hao Huang Presenter affiliation: Fudan University, Shanghai, China.	35
Gut microbial metabolite butyrate suppresses hepatocellular carcinoma growth via CXCL11-dependent enhancement of natural killer cell infiltration <u>Menghan Zhang</u> , Xuefeng Huang, Xi Wang, Huichun Xing Presenter affiliation: Beijing Ditan Hospital, Beijing, China.	36
Associations between MTA1 and carcinogenesis of oral leukoplakia—Evidence from cohort studies and functional analyses <u>Qiyue Zhang</u> , <u>Jinhan Zhou</u> , Zhiyong Wang Presenter affiliation: Zhejiang University, School of Medicine, Hangzhou, China	37
<i>Fusobacterium nucleatum</i>-driven PD-L1 upregulation shapes an immunoevasive tumor microenvironment in HPV-negative oral cavity squamous cell carcinoma tumor (OSCC) <u>Hengyan Zhu</u> , Jason Yk Chan, Zigui Chen Presenter affiliation: The Chinese University of Hong Kong, Hong Kong, China.	38
Sleep deprivation in adolescence aggravates allergic airway inflammation in adults <u>Lin Zhu</u> , Xiaozhou Wu, Jinhao Yang, Bowen Shang, Jiale Chen Presenter affiliation: Tianjin Medical University, Tianjin, China.	39
Respiratory commensal <i>Streptococcus</i> regulates innate immunity to protect against influenza infection <u>Xiaohui Zou</u> , Bo Liu, Bin Cao Presenter affiliation: China-Japan Friendship Hospital, Beijing, China.	40
Helminth reshapes host gut microbiota and immunoregulation by deploying an antimicrobial program of innate immunity <u>Yang Zou</u> Presenter affiliation: Lanzhou University, Lanzhou, China; Chinese Academy of Agricultural Sciences, Lanzhou, China.	41

SESSION 3 MICROBIOME AND TUMOR

Chairperson: **Nicola Harris**, Monash University, Melbourne, Australia

Defining the factors that drive mucosal healing in inflammatory bowel disease

Aidil Zaini, Haozhe Wang, Daniel Gankin, Emma Halmos, Sarah Melton, Peter Gibson, Benjamin J. Marsland, Nicola L. Harris [20'+10']

Presenter affiliation: School of Translational Medicine, Monash University, Melbourne, Australia.

42

Investigating $\gamma\delta$ T cells in the gastrointestinal tract to define new strategies for improved immunotherapies

Lisa A. Mielke [20'+10']

Presenter affiliation: Olivia Newton-John Cancer Research Institute, Heidelberg, Australia; La Trobe Institute of Molecular Science, Bundoora, Australia.

43

Immunoregulation in the proximal intestine—Learning from human immune enteropathies

Nadine Cerf-Bensussan [20'+10']

Presenter affiliation: INSERM and Université Paris Cité, Paris, France.

44

Neutrophils as potential effector cells in host resistance to tick infestation

Jiali Yan, Tetsuro Kobayashi, Maki Mizumura, Kayoko Yamaji, Hirotaka Kanuka, Hiroko Matsunaga, Haruko Takeyama, Kazuyo Moro [10'+5']

Presenter affiliation: Laboratory for Innate Immune Systems, Graduate School of Medicine, Suita, Japan.

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Mechanical stress drives ATP-dependent AREG production from ILC1 to aid skin epithelial turnover

Tetsuro Kobayashi [10'+5']

Presenter affiliation: RIKEN IMS, Yokohama, Japan.

46

Epigenetic reprogramming alters human intestinal stem cell fate in pouchitis

Chaoting Zhou, Jing Yu Carolina Cen Feng, Shan Liu, Katherine Ventre, Jordan Axelrad, Kyung Ku Jang, Ken Cadwell [10'+5']

Presenter affiliation: University of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania.

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SESSION 4 **NEURON-IMMUNE BARRIER**

Chairperson: **Heping Xu**, Westlake University, Hangzhou, China

The roles of Mrgpr GPCR family in barrier immunity

Xinzhong Dong [20'+10']

Presenter affiliation: Johns Hopkins University School of Medicine,
Baltimore, Maryland.

48

Neuronal regulation of intestinal immune homeostasis and inflammation

Heping Xu [20'+10']

Presenter affiliation: Westlake University, Hangzhou, China.

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Neutrophils—One-trick leukocytes?

Lai Guan Ng [20'+10']

Presenter affiliation: Westlake University, Hangzhou, China.

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Break

Brain-blood barrier at the neuro-immune interface

Chenghua Gu [10'+5']

Presenter affiliation: Harvard Medical School, HHMI, Boston,
Massachusetts.

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Intestinal immune profiling of enteric nervous system and neuroimmune crosstalk

Haozhe Wang, Aidil Zaini, Bailey Cardwell, Matthew C. Rowe, Alana Butler, Connie Wong, Daniel P. Poole, Benjamin Marsland, Joel C. Bornstein, Nicola L. Harris [10'+5']

Presenter affiliation: Monash University, Melbourne, Australia.

52

Lcn2 from neutrophil extracellular traps induces astrogliosis and post-stroke emotional disorders

Yuan Liu, Yuting Ge, Zhengrun Gao [10'+5']

Presenter affiliation: Shanghai Jiao Tong University School of
Medicine, Shanghai, China.

53

The enteric neuron–epithelial–immune axis in barrier immunity
Hailong Zhang, Mengmeng Cui, Matthew Waldor [10'+5']
 Presenter affiliation: Medical University of South Carolina, Charleston,
 South Carolina; Harvard Medical School, Howard Hughes Medical
 Institute, Boston, Massachusetts. 54

**Engineering microbial metabolite delivery to probe the gut–
 immune axis**
 Lindsey M. Williams, Brad Cleveland, Huiqi Wang, Jack T. Smith,
Shijie Cao [10'+5']
 Presenter affiliation: University of Washington, Seattle, Washington. 55

WEDNESDAY, October 29—1:30 PM

Visit to Old Suzhou

WEDNESDAY, October 29—7:00 PM

SESSION 5 HOST-MICROBE CROSSTALK I

Chairperson: **Read Pukkila-Worley**, UMass Chan Medical School,
 Worcester, Massachusetts, USA

**Type 1 follicular helper T cells are required for long-lived IgA
 plasma cell development following mucosal viral infection**
 Kei Haniuda, Natalie Edner, Yuko Makita, Sandhya Appiah, Tania
 Watts, Gregory Wu, Thamotharampillai Dileepan, Jennifer
Gommerman [20'+10']
 Presenter affiliation: University of Toronto, Toronto, Canada. 56

**Bacterial patterns of pathogenesis in intestinal epithelial
 immunity**
Read Pukkila-Worley [20'+10']
 Presenter affiliation: UMass Chan Medical School, Worcester,
 Massachusetts. 57

**Impact of innate immune receptors in mucosal barrier diseases
 and the microbiota**
Jenny Ting [20'+10']
 Presenter affiliation: University of North Carolina at Chapel Hill, Chapel
 Hill, North Carolina. 58

LysoDCs orchestrate tissue-specific Th17 immunity to segmented filamentous bacteria in Peyer's patches

Renan Oliveira Corrêa, Marie Cherrier, Marco M. Rodari, Rose Hardy, Cécilia Luciani, Mathieu Fallet, Francesco Carbone, Nadine Cerf-Bensussan, Hugues Lelouard, Valérie Gaboriau-Routhiau [10'+5']
Presenter affiliation: Institute IMAGINE, INSERM U1163, Paris, France.

59

Sebum amplifies the pathogenic potential of *Staphylococcus epidermidis* in acne development

Lang Sun, Qingqun Wang, Zheng Yu [10'+5']
Presenter affiliation: Xiangya School of Basic Medical Sciences, Central South University, Changsha, China.

60

What AHR we talking about? Host Aryl Hydrocarbon Receptor (AHR) spying on microbial communication and quorum

Pedro Moura-Alves [10'+5']
Presenter affiliation: i3S, Universidade do Porto, Porto, Portugal; University of Oxford, Oxford, United Kingdom; Max Planck Institute for Infection Biology, Berlin, Germany.

61

Microbiota-derived metabolite sensing by SLC03A1 drives intestinal macrophage differentiation and identity

Weiwei Shi, Tiffany Cassmann, Dominik Saul, W. K. Eddie Ip [10'+5']
Presenter affiliation: Mayo Clinic, Rochester, Minnesota.

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SPONSOR TALK

Tao Chen [10'+5']
Presenter affiliation: Absea Biotechnology, Ltd., Berlin, Germany.

THURSDAY, October 30—9:00 AM

SESSION 6 HOST-MICROBE CROSSTALK II

Chairperson: **Ai Ing Lim**, Princeton University, Princeton, New Jersey, USA

Maternal-offspring immune partnerships

Ai Ing Lim [20'+10']
Presenter affiliation: Princeton University, Princeton, New Jersey.

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Gut plasma cells—Everything everywhere all at once

Oliver Pabst [20'+10']

Presenter affiliation: RWTH Aachen University, Aachen, Germany. 64

Mucin secreting cells are specialized mucosal immune defenders where their secretions both inhibit and cause disease of the intestine and lung

Gunnar C. Hansson [20'+10']

Presenter affiliation: University of Gothenburg, Gothenburg, Sweden. 65

Break

Beyond the skin—Immune-metabolic crosstalk in psoriasis and its multi-organ metabolic consequences

Jiaqi Wu, Shuangshuang Liu, Wei Dan, Xiao Tong, Jingyi Gong, Jindian Xu, Weiwei Chen, Yu Gu, Shupe Wang, Zimeng Li, Yingli Jia, Paul Li-Hao Huang [10'+5']

Presenter affiliation: Fudan University, Shanghai, China. 66

Gut microbe-derived fatty acid ethanolamides alleviate gastrointestinal symptoms in IBS-D patients with coexisting insulin resistance

Shujun Xu, Junfang Lyu, Gengyu Bao, Lixiang Zhai, Zhaoxiang Bian, HoiLeong Xavier Wong [10'+5']

Presenter affiliation: Hong Kong Baptist University, Hong Kong, China. 67

CD103 on naïve CD8⁺ T cells promotes cytokine-driven acquisition of memory phenotype and effector function

Can Li, Jung-Hyun Park [10'+5']

Presenter affiliation: National Cancer Institute, National Institutes of Health, Bethesda, Maryland. 68

Tuft cells couple type-2 immune circuits to IgA production in Peyer's patches

Gabriel M. Barron, Ramya Narasimhan, Thornton Thompson, Denise Monack, Jakob von Moltke, Michael R. Howitt [10'+5']

Presenter affiliation: Stanford Medicine, Stanford, California. 69

Gut microbiota transforms dietary polyphenols into hydrocinnamic acid to attenuate oxidative stress via multitargets and fuel hippurate synthesis

Wanrong Luo, Liyuan Xiang, Wenjie Zhang, Wenhua Lai, Xueting Wu, Minhu Chen, Rui Feng, Yijun Zhu [10'+5']

Presenter affiliation: The First Affiliated Hospital, Sun Yat-Sen University, Guangzhou, China. 70

SESSION 7 INFECTION AND INFLAMMATION I

Chairperson: **Xinyang Song**, Shanghai Institute of Biochemistry and Cell Biology, CAS, Shanghai, China

Tissue immunosurveillance mediated by T cell receptor interactions with barrier epithelial cells

Adrian C. Hayday, Nicolas Veland, Miguel Muñoz-Ruiz, Robin Dart, Pierre Vantourout [20'+10']

Presenter affiliation: King's College London, London, United Kingdom; Francis Crick Institute, London, United Kingdom.

71

Microbiota-epithelial-immune cells cross-talk in neonatal intestine

Jie Zhou, Yuxin Zhang, Yuchao Jing, Juan He [20'+10']

Presenter affiliation: Tianjin Medical University, Tianjin, China.

72

Microbial modulation of intestinal T lymphocytes

Xinyang Song [20'+10']

Presenter affiliation: CAS Center for Excellence in Molecular Cell Science, Shanghai, China.

73

Dengue infection and the gastrointestinal tract—Is the gut the tipping point to severe disease?

Adriana Pliego Zamora, Jaehyeon Kim, Naphak Modhiran, Parimala Vajjhala, Paul R. Young, Daniel Watterson, Yuji Sekiguchi, Helle Bielefeldt-Ohmann, Dieter Turlousse, Katryn J. Stacey [10'+5']

Presenter affiliation: The University of Queensland, Brisbane, Australia.

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Break

DMBT1 promotes SARS-CoV-2 infection and its SRCR-derived peptide inhibits SARS-CoV-2 infection

Chenxi Zhu, Ziqiao Wang, Zhendong Pan, Xinja Mai, Yiyun Chen, Wen Zhang, Ping Zhao, Hailin Tang, Rong Zhang, Dapeng Zhou [10'+5']

Presenter affiliation: Tongji University, Shanghai, China.

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Predictive gastric microbiome markers of gastritis-gastric cancer progression

Chin Wen Png, Yongliang Zhang [10'+5']

Presenter affiliation: National University of Singapore, Singapore; Yong Loo Lin School of Medicine, Singapore; Life Sciences Institute, Singapore.

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Insect-parasitic nematode *Steinernema hermaphroditum* as an emerging genetic model for nutritional immunity

Victoria Chen, John P. Marken, Sally W. Ireri, Frederick J. Tan, Javier Carpinteyro-Ponce, Xiaobin Zheng, Richard M. Murray, Mengyi Cao [10'+5']

Presenter affiliation: California Institute of Technology, Pasadena, California; Carnegie Institution for Science, Pasadena, California.

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Rescuing dendritic cell interstitial motility sustains antitumour immunity

Haichao Tang, Zongfang Wei, Bei Zheng, Lulu Wu, Yongdeng Zhang, Ting Zhou [10'+5']

Presenter affiliation: Westlake University, Hangzhou, China.

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The mechanism and functions of the ADP-heptose/ALPK1 innate immune pathway

Feng Shao [20'+10']

Presenter affiliation: National Institute of Biological Sciences, Beijing, China.

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THURSDAY, October 30—6:00 PM

COCKTAILS and BANQUET

*Sponsored by **Shanghai Future Technology Co., Ltd.***

FRIDAY, October 31—9:00 AM

SESSION 8 INFECTION AND INFLAMMATION II

Chairperson: **Xiaoyu Hu**, Westlake University, Hangzhou, China

Tissue resident myeloid cells in mucosal responses

Xiaoyu Hu [20'+10']

Presenter affiliation: Westlake University, Hangzhou, China.

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<p>A new genetic form of early-onset inflammatory bowel disease reveals the CD8 T_{IGR} regulatory cell in intestinal homeostasis <u>Michael Lenardo</u> [20'+10'] Presenter affiliation: Calico Life Sciences, South San Francisco, California.</p>	81
<p>Intravital imaging of translocated bacteria via fluorogenic labeling of gut microbiota in situ <u>Wei Wang</u> [10'+5'] Presenter affiliation: Fudan University, Shanghai, China.</p>	82
<p>Break</p>	
<p>VRAC coordinates the trade-off between nutrient absorption and antimicrobial defense in enterocytes against inflammation Xin Yi, Shiqing Zhang, Xinpei Gu, Xiaoyan Wu, Liang Ma, Sha Lv, Jingjing Huang, Yuanxing Zhi, Ying Cao, Xiong Cao, Fengxian Li, Shuwen Liu, Ken Kin Lam Yung, <u>Pingzheng Zhou</u> [10'+5'] Presenter affiliation: Southern Medical University, Guangzhou, China.</p>	83
<p>Pathogen-induced HDAC6 activation orchestrates FoxO1 acetylation/phosphorylation to drive periodontal inflammation and barrier dysfunction Hannah Lohner, Xiao Han, Maria Colon, Ruqiang Liang, Chunhao Li, <u>Huizhi Wang</u> [10'+5'] Presenter affiliation: Virginia Commonwealth University, VCU Philips Institute for Oral Health Research, Richmond, Virginia; University of California, Davis, California.</p>	84
<p>Effects of dietary sugar intake on T cell immune responses and gastrointestinal tract inflammation Wei Zhang, Xiao Ma, Hao Cheng, Zhenhong Li, <u>Dunfang Zhang</u> [10'+5'] Presenter affiliation: Sichuan University, Chengdu, China.</p>	85
<p>The intersection of adaptive and innate immunity in the lung—Implications for respiratory infections and pulmonary insufficiency <u>Baihao Zhang</u>, Sidonia Fagarasan [10'+5'] Presenter affiliation: RIKEN Yokohama Institute, Yokohama, Japan.</p>	86