

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

# INFECTION, INFLAMMATION AND CANCER

May 5–May 9, 2025

Arranged by

Xuetao Cao, *Chinese Academy of Medical Sciences*

Ming Li, *Memorial Sloan Kettering Cancer Center*

Xin Lu, *The University of Oxford*

Laura Mackay, *The University of Melbourne*



Cold Spring Harbor Conferences Asia  
Cold Spring Harbor Laboratory



## INFECTION, INFLAMMATION AND CANCER

Monday, May 5– Friday, May 9, 2025

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Monday	7:00 pm	Keynote Speaker
Monday	7:45 pm	<b>1</b> Cell Metabolism and Metabolite Signalling
Tuesday	9:00 am	<b>2</b> Tissue and Tumour Microenvironment
Tuesday	2:00 pm	<b>Poster Session</b>
Tuesday	3:00 pm	<i>Chinese Tea and Beer Tasting</i>
Tuesday	7:00 pm	<b>3</b> Cell Death and Cell Senescence
Wednesday	9:00 am	<b>4</b> Host-Pathogen Interaction
Wednesday	1:30 pm	<i>Visit to Old Suzhou</i>
Wednesday	7:00 pm	<b>5</b> Immunotherapy and Cancer
Thursday	9:00 am	<b>6</b> Genetics and Epigenetics
Thursday	2:00 pm	<b>7</b> Tissue and Mucosal Immunology
Thursday	6:00 pm	<i>Cocktails and Banquet</i>
Friday	9:00 am	<b>8</b> Cell Signaling
Friday	11:30 am	Keynote Speaker

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Oral presentation sessions are located in the CSHA Auditorium  
Poster session and Chinese Tea & Beer Tasting are 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 6:00pm

More information will be available at CSHA office.

*(Map at the end of this abstract book)*

## PROGRAM

MONDAY, May 5—7:00 PM

### KEYNOTE SPEAKER

**Introduction by: Xuetao Cao**, Nankai University, Tianjin, China

#### **Inflammatory mediators of cachexia**

Eileen White [35'+10']

Rutgers Cancer Institute, New Brunswick, New Jersey.

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MONDAY, May 5—7:45 PM

### **SESSION 1** CELL METABOLISM AND METABOLITE SIGNALLING

**Chairpersons:** **Eileen White**, Rutgers Cancer Institute, New Brunswick, New Jersey, USA

**Xin Lu**, University of Oxford, Oxford, United Kingdom

#### **hnRNP-A2B1 innate activation of immune response against infection and cancer**

Xuetao Cao [20'+10']

Presenter affiliation: Chinese Academy of Medical Sciences, Beijing, China; Nankai University, Tianjin, China; Naval Medical University, Shanghai, China.

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#### **Oxysterol-induced ER stress drives immunosuppressive myelopoiesis and differentiation**

Xiaocheng Du, Yitian Jin, Chenqi Xu, Guangchuan Wang [10'+5']

Presenter affiliation: Shanghai Institute of Biochemistry and Cell Biology, Center for Excellence in Molecular Cell Science, CAS, Shanghai, China; University of Chinese Academy of Sciences, Shanghai, China.

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#### **Farnesyl pyrophosphate potentiates dendritic cell migration in autoimmunity via protein geranylgeranylation and mitochondrial fusion**

Xiaomin Zhang, Yali Chen, Geng Sun, Yankang Fei, Ha Zhu, Xuetao Cao, Juan Liu [10'+5']

Presenter affiliation: National Key Laboratory of Immunity and Inflammation, Shanghai, China.

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**Selective regulation of unconventional T cell subsets by purinergic signalling**

Hui-Fern Koay [20'+10]

Presenter affiliation: The University of Melbourne at The Peter Doherty Institute for Infection and Immunity, Melbourne, Australia.

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**Lithium carbonate revitalizes tumor-reactive CD8+ T cells by shunting lactic acid into mitochondria**

Jingwei Ma, Liang Tang, Yaoyao Tan, Jingxuan Xiao, Bo Huang [10'+5']

Presenter affiliation: Huazhong University of Science & Technology, Wuhan, China.

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**Charting single-cell metabolism co-evolution during metastasis**

Yingcheng Wu, Jiaqiang Ma, Qiang Gao [10'+5']

Presenter affiliation: Fudan University, Shanghai, China.

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TUESDAY, May 6—9:00 AM

**SESSION 2**      TISSUE AND TUMOUR MICROENVIRONMENT

**Chairpersons:**    **Seamus Martin**, Trinity College Dublin, Dublin, Ireland  
                         **Feng Shao**, National Institute of Biological Sciences, Beijing, China

**Determinants of spontaneous and engineered anti-tumor immunity**

Thorsten R. Mempel, Kazuhiro Taguchi, Jiarui Li, Leo Shen [20'+10]

Presenter affiliation: Massachusetts General Hospital, Boston, Massachusetts; Harvard Medical School, Boston, Massachusetts.

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**Targeting IL-21—Non-linear tuning T cells in anti-tumour immunity**

Zhian Chen, Yanfang Cui, Yew Ann Leong, Charles Mackay, Di Yu [20'+10]

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

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**Rescuing dendritic cell interstitial motility sustains anti-tumor immunity cycle**

Haichao Tang, Zongfang Wei, Ting Zhou [10'+5']

Presenter affiliation: Westlake University, Hang Zhou, China.

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**Harnessing tumor macrophage heterogeneity**  
Florent Ginhoux [20'+10]  
Presenter affiliation: Gustave Roussy Hospital, Villejuif, France. 11

***Break***

**Neutrophils—The power of many**  
Lai Guan Ng [20'+10]  
Presenter affiliation: Shanghai Jiao Tong University School of  
Medicine, Shanghai, China. 12

**Harnessing nucleic acid sensing pathways to boost antitumour  
immune surveillance via B cell lineage reprogramming**  
Sirui Li [10'+5']  
Presenter affiliation: CAS Center for Excellence in Molecular Cell  
Science, Shanghai, China. 13

**Tissue resident myeloid-epithelial networks in type 2 immune  
regulation**  
Xiaoyu Hu, Jiali Wang, Liu Yang, Xue-Kun Guo [20'+10]  
Presenter affiliation: Westlake University, Hangzhou, China; Tsinghua  
University, Beijing, China. 14

TUESDAY, May 6—2:00 PM

**POSTER SESSION**

**KRAS-m6A-BCL9L axis promotes CD4+ T-cell-mediated  
immunosuppression in colorectal cancer**  
Danyu Chen, Harry Cheuk-Hay Lau, Jun Yu, Chi Chun Wong  
Presenter affiliation: The Chinese University of Hong Kong, Hong  
Kong, China. 15

**Feasibility of CD19 CAR-NK cell therapy for refractory/relapsed  
large B-cell lymphoma and its immunological characteristics  
related to efficacy**  
Wei Chen, Yi Eve Sun  
Presenter affiliation: Tongji University, Shanghai, China. 16

<b>IGF2BP2 promotes tumor angiogenesis and targeting IGF2BP2 synergizes with anti-angiogenic therapy in colorectal cancer</b> <u>Weikang Chen</u> , Haojie Bai, Yani Huo, Yifan Wu, Wei Kang, Dong Zhang, Yongxing Zhang, Shiyan Wang, Lixia Xu, Chi Chun Wong, Ka Fai To, Xiaoxing Li, Jun Yu Presenter affiliation: Sun Yat-sen University, Guangzhou, China.	17
<b>Extracellular vesicles with PD-L2 expression contributes to Th1 differentiation and potentiates anti-PD-1 response in GC</b> <u>Xiaoyi Chong</u> , Xiaotian Zhang Presenter affiliation: Peking University Cancer Hospital & Institute, Beijing, China.	18
<b>Circulating exosomal microRNAs in rheumatoid arthritis—Insights into disease activity and inflammation</b> <u>Xin Qi Chuah</u> , Sook Khuan Chow, Wai Leng Lee, Renee Lay Hong Lim, Jung Shan Hwang Presenter affiliation: Sunway University, Bandar Sunway, Malaysia.	19
<b>SMARCA5 links histone lactylation to tumor metabolism and immune escape</b> <u>Ji Cong</u> , Shi Liu, Zhihua Liu Presenter affiliation: Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China.	20
<b>Tryptophan metabolite indole-3-aldehyde induces AhR and c-MYC degradation to promote tumor immunogenicity</b> <u>Lei Cui</u> , Zining Wang, Xiaojun Xia Presenter affiliation: Sun Yat-sen University, Guangzhou, China.	21
<b>Dual-targeted "glue" molecule can overcome drug resistance in cancer chemotherapy by targeted enhancing mitochondria-ER contact</b> <u>Dan Ding</u> Presenter affiliation: Nankai University, Tianjin, China.	22
<b>Bacteroides fragilis promotes chemoresistance in colorectal cancer and its elimination by phage VA7 restores chemosensitivity</b> <u>Xiao Ding</u> , Lung-Ngai Ting, Chi Chun Wong, Yufeng Lin, Pingmei Huang, Chuanfa Liu, Lanping Jiang, Shiyu Li, Yujie Liu, Mingxu Xie, Weixin Liu, Yuan Kai, Luyao Wang, Yanqiang Ding, Yang Sun, Xiang Gao, Sunny H. Wong, Jun Yu Presenter affiliation: The Chinese University of Hong Kong, Hong Kong, China.	23

<b>Ultra-deep PacBio sequencing reveals the features and genomic function of gut viruses in colorectal cancer</b> <u>Yanqiang Ding</u> , Gang Guo, Olabisi Coker, Liuyang Zhao, Gaixia Liu, Chuanfa Liu, Feiyu Shi, Junjun She, Jun Yu Presenter affiliation: The Chinese University of Hong Kong, Hong Kong, China.	24
<b>Nucleotide dysmetabolism upon transcription inhibition underlies cell death in bacteria</b> <u>Han Fu</u> , Xiaojie Shi, Yixin Wang, Yongkai Wu, Guoping Zhao, Chen Yang, Liangdong Lyu Presenter affiliation: Fudan University, Shanghai, China; CAS Center for Excellence in Molecular Plant Sciences, Key Laboratory of Synthetic Biology, China.	25
<b>Induction of proinflammatory response in macrophages by ORF3a-containing extracellular vesicles derived from SARS-CoV-2-infected cells</b> <u>Sin-Yee Fung</u> , Kam-Leung Siu, Man Lung Yeung, Judy Wai Ping Yam, Dong-Yan Jin Presenter affiliation: The University of Hong Kong, Pokfulam, Hong Kong, China.	26
<b>Exploring the crosstalk and gender dimorphism of peripheral and central immunity.</b> <u>Wenxia Gao</u> , Wei Chen, Yi Eve Sun Presenter affiliation: Tongji University, Shanghai, China.	27
<b>HBV-associated hepatocellular carcinomas inhibit antitumor CD8<sup>+</sup> T cell via the long noncoding RNA <i>HDAC2-AS2</i></b> <u>Yanan Gao</u> , Zhenxing Zhang, Xuetao Huang, Maojun You, Jianjun Luo, Runsheng Chen, Pengyuan Yang Presenter affiliation: Institute of Biophysics, Chinese Academy of Sciences, Beijing, China.	28
<b>Molecular genetic analysis of FMF using genomic approaches</b> <u>Lilit Ghukasyan</u> , Gisane Khachatryan, Tamara Sirunyan, Arpine Minasyan, Lana Karapetyan, Varduhi Hayrapetyan, Roksana Zakharyan, Arsen Arakelyan Presenter affiliation: Institute of Molecular Biology, NAS RA, Yerevan, Armenia.	29

<b>C8orf76 promotes colorectal tumorigenesis by inducing immunosuppressive microenvironment and is a therapeutic target for boosting anti-PD-1 efficacy</b> Shang Guo, <u>Hongyan Gou</u> , Xiaohong Wang, Xia Jiang, Chunxian Wei, Chi Chun Wong, Huarong Chen, Haiyun Shang, Zengren Zhao, Jun Yu Presenter affiliation: The Chinese University of Hong Kong, Hong Kong, China.	30
<b>FDXR enhances CD8+ T cell infiltration by regulating steroid metabolism in adipose-associated microenvironment</b> <u>Yi Han</u> Presenter affiliation: Sun Yat-sen University, Guangzhou, China.	31
<b>Single-cell and spatial transcriptome analyses reveal tertiary lymphoid structures linked to tumour progression and immunotherapy response in nasopharyngeal carcinoma</b> <u>Shuai He</u> , Yang Liu, Jin-Xin Bei Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.	32
<b>Therapy of allergic rhinitis using ribavirin spray to clear nasal commensal viruses</b> Yue Dong, Xuetao Cao, <u>Jin Hou</u> Presenter affiliation: Naval Medical University, Shanghai, China.	33
<b>Histone methyltransferase PRDM2 regulates the expression of IL-1<math>\beta</math> in macrophages during sepsis</b> <u>Han Hu</u> Presenter affiliation: National Key Laboratory of Immunity and Inflammation, Shanghai, China.	34
<b>Tumor state transition during vascular metastasis induces the immune escape in portal vein tumor thrombus</b> <u>Pingdong Hu</u> Presenter affiliation: State Key Laboratory of Epigenetic Regulation and Intervention, Beijing, China.	35
<b>Studying the molecular biological characteristics and therapeutic targets of aneuploid gastric cancer</b> <u>Hongyang Huang</u> , Kun Liao, Zhengyu Qian, Ruihua Xu Presenter affiliation: Sun Yat-Sen University Cancer Center, Guangzhou, China; Chinese Academy of Medical Sciences, Guangzhou, China.	36



<b>TLR2-MyD88 signal couples mono-unsaturated fatty acid accumulation with endoplasmic reticulum expansion in response to bacterial infection</b> <u>Ziyang Huang</u> , He Xu, Hongru Pan, Gaoqi Wu, Boran Li, Yongjuan Sang, Qiming Sun, Quan D. Zhou Presenter affiliation: Zhejiang University, Hangzhou, China.	37
<b><i>Faecalibacterium prausnitzii</i> inhibits gastric tumorigenesis and antagonizes <i>Helicobacter pylori</i> colonization</b> <u>Lanping Jiang</u> , Chichun Wong, Qing Li, Kaili Fu, Dehua Liu, Mingxu Xie, Tianhui Li, Harry C. Lau, Olabisi O. Coker, Wei Kang, Xiao Ding, Pingmei Huang, Ruijie Zeng, Jun Yu Presenter affiliation: The Chinese University of Hong Kong, Hong Kong, China.	38
<b>A tumor cell-specific organelle-anchored bioorthogonal therapeutic system for inducing visualized endoplasmic reticulum stress</b> <u>Di Jiao</u> , He Wang, Dan Ding Presenter affiliation: Nankai University, Tianjin, China.	39
<b>KDM5A senses nuclear NAD<sup>+</sup> abundance to orchestrate histone methylation for innate immune memory</b> <u>Huan Jin</u> , Xiaojun Xia Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.	40
<b>Investigating T cell immunobiology using genetically engineered models</b> <u>Nikhil Joshi</u> Presenter affiliation: Yale University, New Haven, Connecticut.	41
<b>Modular design of T cell nanoengagers for tumor immunotherapy via genetically engineered lipid-tagged antibody fragments</b> <u>Helong Kang</u> , Yuanke Li Presenter affiliation: Nankai University, Tianjin, China.	42
<b><i>Lactobacillus sakei</i> CVL-001 induces trained immunity through NOD2 mediated dendritic cell activation to mitigate infectious colitis caused by <i>Citrobacter rodentium</i></b> <u>Wan-Gyu Kim</u> , Tae Sung Lee, Do Hyeon Jung, Young-Jun Kim, Yun-Ji Lee, In Su Seo, So-yeon Ahn, Ji-young Kim, Sang-Eun Jung, Chang-Jung Kim, Geun Woo Kim, Jong Hwan Park Presenter affiliation: Chonnam National university, Buk-gu, Gwangju, South Korea.	43

<b>Single-cell sequencing analysis-driven nanomedicine design for mimicking endogenous immune repair in myocardial infarction</b> <u>Buayishamu Kutilike</u> , Xueqi Lv, Baofa Sun, Xinglu Huang Presenter affiliation: Key Laboratory of Bioactive Materials for the Ministry of Education, Tianjin, China.	44
<b>An update anti-cancer therapy—Blocking glucose and fatty acid uptake</b> <u>Wenjia Li</u> Presenter affiliation: UCLA, Los Angeles, California; Chinese of Academy of Sciences, Institute of Life Science, Beijing, China.	45
<b>Investigating resident memory CD4<sup>+</sup> T cells in human anogenital tissues and their susceptibility to HIV infection</b> <u>Yuchen Li</u> , Thomas R. O'Neil, Kirstie M. Bertram, Andrew N. Harman, Anthony L. Cunningham, Najla Nasr Presenter affiliation: Westmead Institute for Medical Research, Sydney, Australia; University of Sydney, Sydney, Australia.	46
<b>High interferon-induced influenza vaccine enhances lung tissue-resident memory T cell formation through rapid and early localized immune activation</b> <u>Yuting Li</u> , Yiqi Cai, Menglong Hu, Shaokai Ni, Quan Zhou, Yushen Du Presenter affiliation: Zhejiang University School of Medicine, Hangzhou, China.	47
<b>Ribosomal homocysteinylation enhances <math>\gamma\delta</math> T cell antitumor immunity</b> <u>Kun Liao</u> , Zixuan Xiao Presenter affiliation: Sun Yat-sen University, Guangzhou, China.	48
<b>Oncogenic KRAS drives immunosuppression of colorectal cancer by impairing DDX60-mediated dsRNA accumulation and viral mimicry</b> Yi Zhou, Yaxin Zhang, Mingzhou Li, Tian Ming, Chao Zhang, Chengmei Huang, Jiexi Li, Fengtian Li, Huali Li, Enen Zhao, Feng Shu, Lingtao Liu, Xingyan Pan, Yijun Gao, Lin Tian, Libing Song, Huilin Huang, <u>Wenting Liao</u> Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.	49
<b>hnRNP A2B1 sustains T cell antitumor immunity through phase separation and target RNAs stabilization</b> <u>Shi Liu</u> , Wenyan Gao, Zhihua Liu Presenter affiliation: Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China.	50

<b>B cells modulate the homeostasis of splenic marginal zone antigen-presenting cells to promote the anti-viral CD8+ T cell response</b>	
<u>Xinyuan Liu</u> , Ari Waisman	
Presenter affiliation: Institute for Molecular Medicine, Mainz, Germany.	51
<b>CXCR4 chemokine receptor oligomer assembly and dynamic regulation</b>	
<u>Yezhou Liu</u> , Aijun Liu, Xinyu Li, Qiwen Liao, Weijia Zhang, Lizhe Zhu, Richard D. Ye	
Presenter affiliation: Kobilka Institute of Innovative Drug Discovery, School of Medicine, The Chinese University of Hong Kong, Shenzhen, Shenzhen, China.	52
<b>Primary and orthotopic murine models of nasopharyngeal carcinoma reveal molecular mechanisms underlying its malignant progression</b>	
<u>Yuantao Liu</u> , Xudong Wan, Chong Chen, Musheng Zeng, Qian Zhong	
Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.	53
<b>MEN1 loss confers resistance to replication stress-inducing drugs</b>	
<u>Ronnie Ren Jie Low</u> , Simon J. Boulton	
Presenter affiliation: The Francis Crick Institute, London, United Kingdom.	54
<b>Integrated scRNA-seq and in vivo modeling uncover MHC-mediated immune evasion and anti-PD-1 resistance in AFP-producing gastric cancer(AFPGC)</b>	
<u>Jialin Lu</u> , Yakun Wang, Xiaoyi Chong, Lin Shen, Xiaotian Zhang	
Presenter affiliation: Peking University Cancer Hospital and Institute, Beijing, China.	55
<b>Intra-hepatic microbial heterogeneity in multifocal hepatocellular carcinoma and its association with host genomic and transcriptomic alterations</b>	
<u>Yinghong Lu</u> , Jun Yu	
Presenter affiliation: The Chinese University of Hong Kong, Hong Kong, China.	56

**Spatial resolved multi-omics unveils senescence-associated metastatic trajectories and immune microenvironment remodeling in ovarian carcinoma**

Yufeng He, Ce Luo, Siyu Lin, Zhiwei Zeng, Chuyu Qiao, Peng Zhang, Haorui Zhang, Rui Zhang, Pengfei Ren, Tian Xu, Yanping Zhao, Xinyu Wang, Yuanguang Meng, Zexian Zeng, Zhe Zhang

Presenter affiliation: Peking University, Beijing, China.

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**Targeting SCAP/SREBP-mediated lipid synthesis in macrophages to enhance anti-tumor immunity**

Hong-Ru Pan, Fangfang Zheng, Zhiqiu Yao, Gaoqi Wu, Ziyang Huang, Xudong Wang, He Xu, Yiqi Cai, Wenzhao Zhou, Zhiwei Ge, Qiming Sun, Yushen Du, Jin Zhang, Quan D. Zhou

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

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**The cytokine Spz/Toll receptor signaling controls stem cell proliferation in intestinal regeneration and tumorigenesis**

Guofan Peng, Shichao Yang, Yuexia Zhang, Yu Zhao, Jun Zhou

Presenter affiliation: Hunan University, Changsha, China.

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**Macrophage-to-cancer cell mitochondrial transfer supports tumor progression**

Antonio Postigo

Presenter affiliation: FRCE-IDIBAPS, Barcelona, Spain.

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**CHP1 inhibits tumor neoantigen-specific CD8<sup>+</sup> T cell infiltration and leads to immune resistance in colorectal cancer by downregulating ether lipid synthesis**

Zhengyu Qian, Xinyao Zhang, Wei Zhou, Zixian Wang, Ruihua Xu

Presenter affiliation: Sun Yat-sen University Cancer Center, State Key Laboratory of Oncology in South China, Guangdong Provincial Clinical Res, Guangzhou, China; Chinese Academy of Medical Sciences, Guangzhou, China.

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**Heat-killed *Lactobacillus plantarum* NCHBL-004 suppresses tumor growth in a syngeneic melanoma mouse model through TLR2 activation**

In-Su Seo, Tae-Sung Lee, Do-Hyeon Jung, Yeong-Jun Kim, Yun-Ji Lee, Ji-Yeong Kim, So-Yeon Ahn, Sang-Eun Jung, Geun-Woo Kim, Chang-Jung Kim, Jong-Hwan Park

Presenter affiliation: Chonnam National University, Gwangju, South Korea.

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**Osteoclast-like giant cells promote the malignant characteristics and facilitate the immune evasion of undifferentiated carcinoma with osteoclast-like giant cells of pancreas—A spatially resolved multi-omics single-cell analysis**

Kegong Tao, Xin Zeng

Presenter affiliation: Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China.

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**Neuropilin-1 degradation-based peptides for tumor immunotherapy**

Honglin Wang, Dan Ding

Presenter affiliation: Nankai University, Tianjin, China.

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**Nonenzymatic lysine D-lactylation induced by glyoxalase II substrate SLG dampens inflammatory immune responses**

Qihang Zhao, Qiang Wang, Qinghua Yao, Zhengdong Yang, Wenfang Li, Xiaojie Cheng, Yingling Wen, Rong Chen, Xuanying Wang, Dexiang Qin, Shuyang Zhu, Liujie He, Nan Li, Yanfeng Wu, Xuetao Cao, Pin Wang

Presenter affiliation: National Key Laboratory of Immunity & Inflammation, Shanghai, China; Suzhou Institute of Systems Medicine, Chinese Academy of Medical Sciences & Peking Union Medical College, National Key Laboratory of Immunity and Inflammation, China.

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**Tumor-associated macrophage heterogeneity and glioma vasculature normalization**

Wenying Wang, Xiu-Wu Bian, Yu Shi

Presenter affiliation: Southwest Hospital, Chongqing, China.

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**Perinuclear SUMO2 modification of SARS-CoV-2 spike protein blocks viral cell-to-cell transmission**

Xinyu Wang, Gaowei Hu, Yupeng Shao, Zhongwei Dong, Lina Liu, Yixuan Wang, Yaxi Xie, Caixia Zhu, Fang Wei, Yuyan Wang, Qiliang Cai

Presenter affiliation: Fudan University, Shanghai, China.

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**Inhibition of cancer cell macropinocytosis driver DHODH reverses immunosuppression and overcomes anti-PD-1 resistance**

Yujia Wang, Yangyang Chai, Yanfang Liu, Xinpeng Liu, Yunkai Zhang, Xuetao Cao

Presenter affiliation: Peking Union Medical College, Beijing, China; Naval Medical University, Shanghai, China.

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**The small GTPase RBJ inhibits cancer ERV expression for immune escape and immunotherapy resistance**

Ziqiao Wang, Xuetao Cao

Presenter affiliation: Institute of Basic Medical Research, Chinese Academy of Medical Sciences, Beijing, China; Naval Medical University, Shanghai, China.

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**Nuclear ACAT1 orchestrates natural killer cell-dependent antitumor immunity in colorectal cancer**

Chen Wei, Kun Liao, Hao-Jie Chen, Zi-Xuan Xiao, Qi Meng, Rui-Hua Xu

Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.

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**COVID-19-induced inflammatory metabolic dysregulation in critically ill patients**

Tianzi Wen, Xiuwu Bian, Xiaohong Yao

Presenter affiliation: Army Medical University, Xinjiang, China.

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**SARS-CoV-2 enhances complement-mediated endothelial injury via the suppression of membrane complement regulatory proteins**

Jian Wu, Sanpeng Xu, Zhiqing Li, Boyi Cong, Zongheng Yang, Zhichao Yang, Wanfeng Gao, Shuo Liu, Zhou Yu, Sheng Xu, Nan Li, Jin Hou, Guoping Wang, Xuetao Cao, Shuxun Liu Liu

Presenter affiliation: Zhejiang University School of Medicine, Hangzhou, China; Naval Medical University, Shanghai, China.

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**Targeting linear ubiquitination of PHB2 potentiates cancer immunotherapy**

Wenwei Wu, Kexin Shu, Yiyu Wang, Yi Han, Yongqiang Zheng, Zhengyu Qian, Zixian Wang, Ruihua Xu

Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.

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**Regulation of T cell function and immune suppression in glioma**

Xin Wu, Xiu-Wu Bian, Xindong Liu

Presenter affiliation: Southwest hospital, Chongqing, China.

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**TREM2 sustains glucose metabolic homeostasis to drive antibacterial defense during sepsis**

Zehua Wu, Qixing Chen.

Presenter affiliation: Zhejiang University, Hangzhou, China.

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<b>Unlocking the role of limited arginine in shaping lymphocyte fate</b> <u>Meng Xia</u> , Ziqi Zou, Jiajie Zhou, Qingqing Wang Presenter affiliation: Zhejiang University, Hangzhou, China.	76
<b>Single-cell dissection of stromal-tumor crosstalk driving resistance to chemotherapy plus anti-PD1 in esophageal squamous cell carcinoma</b> <u>Shujing Xiang</u> , Yanxing Chen, Chaoye Wang Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China; Chinese Academy of Medical Sciences, Guangzhou, China.	77
<b>A chimeric gH/gL nanoparticle vaccine elicits robust protective humoral immunity against EBV and KSHV</b> <u>Chu Xie</u> , Cong Sun, Mu-Sheng Zeng Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.	78
<b>A phenylalanine-based nanomaterial promotes CD8<sup>+</sup> T cell stemness to boost antitumor immunity</b> <u>Chunyuan Xie</u> , Jun Wu, Xiaojun Xia Presenter affiliation: Sun Yat-sen University, Guangzhou, China.	79
<b>Engineered oncolytic bacteria modulates cyst(e)ine metabolism in pancreatic cancer therapeutics</b> <u>Mengqi Xiong</u> , Jin Hai Zheng Presenter affiliation: School of Biomedical Sciences, Hunan, China.	80
<b>Type VII secretion system extracellular protein B targets STING to evade host anti-Staphylococcus aureus immunity</b> Lin Gao, Tian Tian, <u>Tingrong Xiong</u> , Xiaomei Zhang, Ning Wang, Liu Luxuan, Yun shi, Qiang Liu, Dongshui Lu, Ping Luo, Weijun Zhang, Ping Cheng, Qiang Gou, Yu Wang, Hao Zeng, Xiaokai Zhang, Quanming Zou Presenter affiliation: Third Military Medical University, Chongqing, China.	81
<b>Analytical identification and in vitro expansion of tumor antigen-specific T cells based on peptide-major histocompatibility complex I</b> Kailing Su, <u>Runyuan Yang</u> Presenter affiliation: Nankai university, Tianjin, China.	82

<b>The NF-Y transcription factors plays a crucial role in <i>Drosophila</i> intestinal homeostasis</b> <u>Shichao Yang</u> , Guofan Peng, Yu Zhao, Jun Zhou Presenter affiliation: Hunan University, Changsha, China.	83
<b>Long-range cholinergic input promotes glioblastoma progression</b> <u>Yang Yang</u> , Tunan Chen, Hua Feng, Xiu-Wu Bian Presenter affiliation: Southwest Hospital, Army Medical University, Chongqing, China.	84
<b>Cucurbitacin B alleviates skin lesions and inflammation in psoriasis-like mouse models by inhibiting cGAS-STING pathway</b> <u>Yijian Zhang</u> , Xueting Wang, <u>Yang Yang</u> , Long Zhao, Bin Zhang Presenter affiliation: the Fifth Medical Center of PLA General Hospital, Beijing, China.	85
<b>Targeting PARP1 lactylation facilitates its ubiquitin-dependent degradation and sensitizes BRCA-proficient triple-negative breast cancer to PARP inhibition</b> <u>Yi Yang</u> Presenter affiliation: Army Medical University, Southwest Hospital, Chongqing, China; Jinfeng Laboratory, Chongqing, China.	86
<b>Oxidized cholesterol incorporation enhanced antigen presentation and antitumor efficacy of a lipid nanoparticle-formulated mRNA cancer vaccine</b> <u>Ruhui Yao</u> Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.	87
<b>Inflammatory responses induced by recombinant <i>Hydra</i> actinoporin-like toxin-1 in HeLa cells</b> <u>Wei Yuen Yap</u> , Sheila Nathan, Jung Shan Hwang Presenter affiliation: Sunway University, Selangor Darul Ehsan, Malaysia.	88
<b>Updated results from a phase II study of perioperative disitamab vedotin (RC48) plus cadonilimab (AK104, PD-1/CTLA-4 bispecific antibody) for HER2-expressing muscle-invasive bladder cancer (MIBC)</b> <u>Nianzeng Xing</u> , <u>Lu Yin</u> , Sujun Han, Xin Wang Presenter affiliation: National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences, Beijing, China.	89



## **RIPK1, immunity and human diseases**

Junying Yuan

Presenter affiliation: Shanghai Institute of Organic Chemistry, the Chinese Academy of Sciences, Shanghai, China.

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## **Fungi community within colorectal neoplasia and its contribution to colorectal carcinogenesis**

Kai Yuan, Weixin Liu, Xiang Zhang, Jun Yu

Presenter affiliation: The Chinese University of HongKong, HongKong, China.

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## **Early detection of colorectal cancer using plasma cell-free DNA genomic profiling**

Yu Zhan, Hanlu Wei, Qi Zhao, Huiyan Luo, Ruihua Xu

Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.

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## **PARP11 as a novel immunoregulatory target for enhancing anticancer immunotherapy**

Hongru Zhang, Xueli Fu, Cheng Chen, Jia Zhao

Presenter affiliation: Nankai University, Tianjin, China.

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## **Spatial proteomics reveals COVID-19 cardiac and brain injury mechanisms**

Peipei Zhang, Yifang Ping, Xiuwu Bian

Presenter affiliation: Ruijin Hospital, School of Medicine, Shanghai Jiaotong University, Shanghai, China; Chongqing Advanced Pathology Research Institute, Chongqing, China.

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## **Enzyme-instructed peptide self-assembly on cancer cell membrane for cancer immunotherapy**

Shengyi Zhang, Yinghao Ding, Zhiwen Hu, Zhimou Yang

Presenter affiliation: Nankai University, Tianjin, China.

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## **Spermine targets hnRNPA2B1 to inhibit IL-1 $\beta$ expression and resolves inflammation**

Shihao Zhang, Jinghao Wang, Mingyue Wen, Bo Li, Zenghui Cui, Boyi Cong, Xuetao Cao

Presenter affiliation: Peking Union Medical College, Chinese Academy of Medical Sciences, Beijing, China.

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## **Membrane-bound supramolecular nanofiber network stimulates transient receptor potential channels for calcium overload cancer therapy**

Zhenghao Zhang, Tianxiao Zhang, Zhiwen Hu, Zhimou Yang

Presenter affiliation: Nankai University, Tianjin, China.

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<b>An epitope vaccine derived by analyzing clinical trial samples safeguards hosts with prior exposure to <i>S. aureus</i> against reinfection</b> <u>Xiaokai Zhang</u> , Yu Wang, Shuang Ge, Zhen Song, Hao Zeng, Quanming Zou Presenter affiliation: National Engineering Research Center of Immunological Products, Chongqing, China.	98
<b>Hepatic TM6SF2 activates anti-tumor immunity to suppress metabolic dysfunction-associated steatotic liver disease–associated hepatocellular carcinoma and boosts immunotherapy</b> <u>Yating Zhang</u> , Mingxu Xie, Jun Wen, Qian Song, Jun Yu, Xiang Zhang Presenter affiliation: Institute of Digestive Disease, Hong Kong, China.	99
<b><i>Catenibacterium mitsuokai</i> promotes hepatocellular carcinogenesis by binding to hepatocyte and generating quinolinic acid</b> <u>Ying Zhang</u> , Weixin Liu, Chi Chun Wong, Qian Song, Xinyue Zhang, Qianying Zhou, Xuxin Ren, Xiaoxue Ren, Xiaoxing Li, Lixia Xu, Xiang Zhang, Ming Kuang, Jun YU Presenter affiliation: The Chinese University of Hong Kong, Hong Kong, China; The First Affiliated Hospital, Sun Yat-sen University, Guangzhou, China.	100
<b>Microbiome metabolite potentiate anti-PD1 efficacy in MSS colorectal cancer patient-derived organoids via activating autologous tumor-infiltrating CD8+ T cells</b> <u>Yongxin Zhang</u> , Wu Song, Lei Zhou, Shuwen Wei, Lixia Xu, Xiaoxing Li, Jun Yu Presenter affiliation: The First Affiliated Hospital, Sun Yat-sen University, Guangzhou, China.	101
<b>Microneedle-loaded self-assembled mitochondria-targeting peptide for tongue squamous carcinoma therapy by interfering with mitochondrial dynamics</b> <u>Yufan Zhang</u> , Dan Ding Presenter affiliation: Nankai University, Shenzhen, China.	102
<b>Single-cell data-driven design of armed oncolytic virus and combination therapy to activate a cooperative innate-adaptive immunity against cancer</b> <u>Jiliang Zhao</u> , Dan Ding, Hongkai Zhang Presenter affiliation: Nankai University, Tianjin, China; Beijing Institute of Biological Products Company Limited, Beijing, China.	103

<b>Single-cell transcriptomics reveals immune dysregulation and TGF-<math>\beta</math>-driven suppression in chronic brucellosis</b> Dejian Xie, Heling Xu, Jingjing Lu, Wenlong Shen, Ping Li, Shuang Liu, Junwei Deng, Jiabao Hou, Wei Gao, Jin Hua, Feng Guo, Haobo Wang, Changlong Lu, Jingbo Zhai, Lanzhu Gao, Yan Zhang, Shanhu Li, <u>Zhihu Zhao</u> Presenter affiliation: Beijing Institute of Biotechnology, Beijing, China.	104
<b>Synthetically engineered probiotic for non-invasive diagnosis and therapy of colorectal cancer</b> Yujie Sun, Yu Zhao, Kang Han, Jun Zhou, <u>Jin Hai Zheng</u> Presenter affiliation: School of Biomedical Sciences, Changsha, Hunan, China.	105
<b>TMPRSS2 and TMPRSS4 are the receptors for EBV infection of epithelial cells</b> <u>Qian Zhong</u> Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.	106
<b>An engineered bacterium for detecting and promoting PD1 antibody treatment for colorectal cancer</b> Yu Zhao, <u>Jun Zhou</u> Presenter affiliation: Hunan University, Changsha, China.	107
<b>Stress granule assembly impairs macrophage efferocytosis to aggravate allergic rhinitis</b> <u>Ye Zhou</u> , Xuetao Cao, Jin Hou Presenter affiliation: Naval Medical University, Shanghai, China.	108
<b>Reprogramming immunosuppressive tumor microenvironments with <i>Salmonella</i>-delivered sialidase and COX-2 blockade synergy enhances cancer immunotherapy</b> Yongjie Zhu, Jin Hai Zheng Presenter affiliation: School of Biomedical Sciences, Hunan, China.	109
<b>ITG<math>\beta</math>4-enriched extracellular vesicles derived from lenvatinib-resistant hepatocellular carcinoma facilitate lung metastasis through fibroblast-niche formation</b> <u>Tian-Tian Zou</u> , Lun-Xiu Qin Presenter affiliation: Huashan Hospital, Fudan University, Shanghai, China.	110

TUESDAY, May 6—3:00 PM

### Chinese Tea and Beer Tasting

**SESSION 3**      **CELL DEATH AND CELL SENESENCE**

**Chairpersons:**    **Ming Li**, Memorial Sloan-Kettering Cancer Center,  
New York, New York, USA  
                      **Xiaoyu Hu**, Tsinghua University, Beijing, China

**Gasdermin-mediated pyroptosis—From antibacterial to antitumor immunity**

Feng Shao [20'+10]

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

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**A synthetic system for RNA-responsive pyroptosis based on type III-E CRISPR nuclease-protease**

Mingbin He, Weiwei Wang, Mingzhou Chen, Ya Qin [10'+5']

Presenter affiliation: College of Life Sciences, Wuhan, China.

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**GPX4 enhances de novo purine synthesis to inhibit cuproptosis and facilitates STING activation for antitumor immunity**

Yabing Nan, Menghan Hu, Shi Liu, Zhihua Liu [10'+5']

Presenter affiliation: National Cancer Center/National Clinical  
Research Center for Cancer/Cancer Hospital, Chinese Academy of  
Medical Sciences, Beijing, China.

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**L-carnitine derived from TAMs confers ferroptosis resistance of cancer stem cells via CPT1A**

Lei Ma [10'+5']

Presenter affiliation: Cancer Hospital.Chinese Academy of Medical  
Science, Peking, China.

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**The critical role of ferroptosis in *Neisseria meningitidis* infection**

Longyan Hong, Zhandi Zhao, Zhengjin Yang, Ziran Sun, Pengbo Guo  
[10'+5']

Presenter affiliation: School of Clinical and Basic Medicine, Shandong  
First Medical University and Shandong Academy of Medical Sciences,  
Jina, Jinan, China.

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**What doesn't kill you makes you stranger—Death receptor signalling in chemotherapy-induced senescence and inflammation**

Seamus J. Martin [20'+10]

Presenter affiliation: Trinity College, Dublin, Ireland.

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**SESSION 4**      **HOST-PATHOGEN INTERACTION**

**Chairpersons:**    **Xin Lu**, University of Oxford, Oxford, United Kingdom  
                         **Chen Dong**, Westlake University, Hangzhou, China

**Single-cell tissue analysis of the chronic hepatitis B liver reveals new aspects of pathogenesis and cancer**

Nadina Wand, James Lok, James Harris, Badran Elshenawy, Ian Fiddes, Amy Cross, Maria Veretennikova, Medhi Boutasbih, Peter Balfe, Ivana Carey, Joanna Hester, Fadi Issa, Hareem Maune, Yoh Zen, Kosh Agarwal, Jane A. McKeating [20'+10]

Presenter affiliation: University of Oxford, Oxford, United Kingdom; University of Oxford, Chinese Academy of Medical Sciences Oxford Institute, United Kingdom.

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**HBV infection drives divergent inflammatory responses in virus-initiated hepatocellular carcinogenesis**

Pengyuan Yang [20'+10]

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

118

**Enveloped viruses co-opt type I interferon-mediated host fatty acid elongation to enhance infectivity**

Yuting Li, He Xu, Gaoqi Wu, Zhiqiu Yao, Yushen Du, Quan Zhou [10'+5']

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

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**Molecular regulation of NK-like activation of CD8<sup>+</sup> T cells in viral infection**

Eui-Cheol Shin [20'+10]

Presenter affiliation: KAIST (Korea Advanced Institute of Science and Technology), Daejeon, South Korea.

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**Break**

**Epstein-Barr virus hijacks histone demethylase machinery to drive epithelial malignancy progression through KDM5B upregulation**

Chun-Ling Luo, Ya-Qing Zhou, Jin-Xin Bei [10'+5']

Presenter affiliation: Sun Yat-sen University Cancer Center, Guangzhou, China.

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**Host-pathogen interactions in *Helicobacter pylori* infection—  
Mucosal antimicrobial defence and AHR-mediated immune  
evasion**

Jan Traulsen, Antonia Voli, Pedro Moura Alves, Francesco Boccellato  
[10'+5']

Presenter affiliation: University of Oxford, Oxford, United Kingdom. 122

**Transcriptional program controlling innate and adaptive functions  
of antiviral NK cells**

Joseph C. Sun [20'+10]

Presenter affiliation: Memorial Sloan Kettering Cancer Center, New  
York, New York. 123

WEDNESDAY, May 7—1:30 PM

**Visit to Old Suzhou**

WEDNESDAY, May 7—7:00 PM

**SESSION 5** IMMUNOTHERAPY AND CANCER

**Chairpersons:** **Jane McKeating**, University of Oxford, Oxford,  
United Kingdom  
**Joseph Sun**, University of Washington, Seattle,  
Washington, USA

**Infection, cell plasticity and upper GI cancers**

Xin Lu [20'+10]

Presenter affiliation: University of Oxford, Oxford, United Kingdom. 124

**Chimeric glycoprotein nanoparticles elicit ultrapotent neutralizing  
antibodies against Epstein-Barr virus**

Mu-Sheng Zeng, Cong Sun, Zheng Liu [20'+10]

Presenter affiliation: Sun Yat-sen University Cancer Center,  
Guangzhou, China. 125

**Reprogramming tumor cell membranes into dendritic cell-  
mimicking autologous vaccines for cancer immunotherapy**

Yuanke Li [10'+5']

Presenter affiliation: Nankai University, Tianjin, China. 126

**SAMVIG—Self-amplifying mRNA platform generates in vivo viral-like vesicles to overcome critical barriers in cancer immunotherapy**

Menglong Hu, Yuting Li, Yiqi Cai, Yushen Du [10'+5']  
Presenter affiliation: Zhejiang University, Hangzhou, China. 127

**Analysis of T cells associated with responsiveness to cancer immunotherapies**

Chen Dong [20'+10]  
Presenter affiliation: Westlake University, Hangzhou, China. 128

**Single-cell analyses reveal distinct immune mechanisms underlying response to chemotherapy and PD-L1 blockade in triple-negative breast cancer**

Zhihua Liu [20'+10]  
Presenter affiliation: National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Science, Beijing, China. 129

**Reprogramming CAR-T cell fate—Prolyl hydroxylase inhibition as a strategy to drive superior persistence and efficacy**

Shijun Ma [10'+5']  
Presenter affiliation: Genome Institute of Singapore, ASTAR, Singapore. 130

**Radiation-induced tumor-derived migrasomes bridge innate and adaptive immune responses**

Yang Pu, Haifeng Jiao [10'+5']  
Presenter affiliation: Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences, Beijing, China. 131

THURSDAY, May 8—9:00 AM

**SESSION 6 GENETICS AND EPIGENETICS**

**Chairpersons:** **Kazuyo Moro**, The University of Osaka, Osaka, Japan  
**Shu Zhu**, University of Science and Technology of China, Hefei, China

**Control of dendritic cell functions by chromatin organization**

Nicholas M. Adams, Aleksandra Galitsyna, Ioanna Tiniakou, Eduardo Esteva, Simon Ullrich, Irina Solovei, Leonid A. Mirny, Boris Reizis [20'+10]  
Presenter affiliation: New York University Grossman School of Medicine, New York, New York. 132

**Enhancer RNA m<sup>6</sup>A modification controls SIRP $\alpha$  signaling strength in intestinal macrophages to ensure adequate efferocytosis for inflammation resolution**

Jia Xiong, Aixuan Zou, Kaifeng Jin, Yifan Gu, Qingqing Wang [10'+5']

Presenter affiliation: Zhejiang University, Hangzhou, China.

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**RNA N6-methyladenosine reader YTHDF1 promotes stemness and drug resistance of colorectal cancer through inducing NOTCH1 and is a therapeutic target**

Henley Cheung, Huarong Chen, Chi Chun Wong, Heming Zhou, Weixin Liu, Jun Yu [10'+5']

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

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***Break***

**Transcriptional and epigenetic programming of CD8<sup>+</sup> T cell stemness and persistence**

Gabrielle T. Belz [20'+10']

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

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**Alternative mRNA polyadenylation regulates macrophage hyperactivation via the autophagy pathway**

Yunzhu Chen, Baiwen Chen, Jingyu Li, Haixin Li, Gaoyang Wang, Xuemin Cai, Qianqian Zhang, Xiaoxu Liu, Chen Kan, Lei Wang, Zhengting Wang, Hua-bing Li [10'+5']

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

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**Transcriptome changes in circulating immune cells of critical COVID-19 patients—Uncovering the role of non-coding RNAs and tRNA metabolism**

Federico Virga, Daniela Taverna, Giulio Ferrero, Najla El Hachem, Marine Leclercq, Cato Jacobs, Sonia Tarallo, Barbara Pardini, Alessio Naccarati, Joost Wauters, Hanne Moon Lauwers, Els Wauters, Pierre Close, Francesca Orso, Massimiliano Mazzone [10'+5']

Presenter affiliation: Center for Cancer Biology, VIB, Leuven, Belgium; University of Torino, Torino, Italy.

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**SESSION 7**      **TISSUE AND MUCOSAL IMMUNOLOGY**

**Chairpersons:**    **Gabrielle Belz**, The University of Queensland, St. Lucia, Australia  
                         **Boris Reizis**, NYU Langone Health, New York, New York, USA

**ILC2-mediated mechanism of ulcerative colitis suppression following cecal resection**

Kazuyo Moro [20'+10]

Presenter affiliation: Osaka University, Osaka, Japan; RIKEN-IMS, Yokohama, Japan.

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**Engineered probiotic for diagnoses and ameliorates ulcerative colitis**

Yu Zhao, Yujie Sun, Kang Han, xiongzuo Tang, Jinhai Zheng, Jun Zhou [10'+5']

Presenter affiliation: Hunan University, Changsha, China.

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**Tumor-resident probiotic *clostridium butyricum* facilitates immune therapy in colorectal cancer by targeting secD-GRP78 axis**

Mingxu Xie, Yating Zhang, Kai Yuan, Yongxin Zhang, Ruyi Zhang, Jun Yu [10'+5']

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

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***Alistipes finegoldii* augments the efficacy of immunotherapy against solid tumors**

Zhiying Wu, Qiwen Wu, Yi Han, Yingnan Wang, Shujing Xiang, Ruihua Xu [10'+5']

Presenter affiliation: Sun Yat-sen University Cancer Center, State Key Laboratory of Oncology in South China, Guangzhou, China.

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**Break**

**The intestinal immune responses toward microbes and food**

Shu Zhu [20'+10]

Presenter affiliation: University of Sciences & Technology of China, Hefei, China.

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**Function of meningeal cells in brain homeostasis and bacterial meningitis**

Jie Wang, Xueyun Zeng, Xing Cao, Amir Rattner, Jeremy Nathans [10'+5']

Presenter affiliation: Nanjing Normal University, Nanjing, China. 143

**Immune evasion of colorectal cancer stem cells is dependent on SLC25A22-PVR axis**

Qinyao Wei, Fenfen Ji, Jun Yu, Chi Chun Wong [10'+5']

Presenter affiliation: State Key Laboratory of Digestive Disease, Li Ka Shing Institute of Health Sciences, The Chinese University of Hong Kong, Hong Kong, China 144

**Spatial multi-omics define the tumor-stromal ecosystem in intrahepatic cholangiocarcinoma**

Jianfeng Xu, Shizhe Yu, Jie Yuan, Wenwei Zhu, Xinxin Shen, Yikang Wang, Zunguo Du, Sunzhe Xie, Hao Xu, Junjie Pan, Yinghan Su, Haoting Sun, Lu Lu, Jia Liu, Yang Ye, Lun-xiu Qin [10'+5']

Presenter affiliation: Fudan University, Shanghai, China. 145

THURSDAY, May 8—6:00 PM

**COCKTAILS and BANQUET**

FRIDAY, May 9—9:00 AM

**SESSION 8** CELL SIGNALLING

**Chairpersons:** **Michael Karin**, UCSD School of Medicine, La Jolla, California, USA  
**Shao-Cong Sun**, Chinese Institute for Medical Research, Beijing, China

**Regulation of autoimmune neuroinflammation by T cell-microglia interplay via the noncanonical NF- $\kappa$ B pathway**

Shao-Cong Sun [20'+10]

Presenter affiliation: Chinese Institutes for Medical Research (CIMR), Beijing, China; Capital Medical University, Beijing, China. 146

**Endothelial STING signaling mediates antitumor efficacy of cancer immunotherapy**

Huanling Zhang, Jiaxin Wu, XiaoJun Xia [10'+5']

Presenter affiliation: Sun Yat-sen University Cancer Center,  
Department of Experimental Research, GuangZhou, China.

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**Harnessing electrostatic forces in immunoreceptor signaling for next-generation immunotherapy**

Chenqi Xu [20'+10']

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

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***Break***

**Control of T helper cell immune tolerance in health and cancer**

Ming Li [20'+10']

Presenter affiliation: Memorial Sloan Kettering Cancer Center, New York, New York.

149

**The regulation of the NLRP3 inflammasome and inflammation**

Ling Luo, Yening Zhang, Dan Wang, Fupeng Wang, Kai Zhao [10'+5']

Presenter affiliation: Central South University, Changsha, China.

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**UFMylation of NLRP3 prevents its autophagic degradation and facilitates inflammasome activation**

Kun Chen, Fan Yang, Jiongjie Jing [10'+5']

Presenter affiliation: Tongji University, Shanghai, China.

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FRIDAY, May 9—11:30 AM

**KEYNOTE SPEAKER**

**Introduction by: Shao-Cong Sun**, Chinese Institute for Medical Research,  
Beijing, China

**Control of obesity and inflammation driven liver cancer by the Dr. Jekyll and Mr Hyde site-specific actions of NRF2**

Michael Karin [35'+10']

Presenter affiliation: UCSD School of Medicine, La Jolla, California.

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