

Abstracts of papers presented
at the 2024 Cold Spring Harbor Asia Conference

IMMUNE TOLERANCE: MECHANISM, DISEASES & THERAPEUTICS

October 28–November 1, 2024

Arranged by

Chuan Wu, *National Cancer Institute, NIH, USA*

Sun Hur, *Harvard Medical School, USA*

Axel Kallies, *The University of Melbourne, Australia*

Bin Li, *Shanghai Jiaotong University School of Medicine, China*

Tim Sparwasser, *University of Mainz, Germany*



Cold Spring Harbor Conferences Asia
Cold Spring Harbor Laboratory



IMMUNE TOLERANCE: MECHANISM, DISEASES AND THERAPEUTICS

Monday, October 28– Friday, November 1, 2024

Monday	7:00 pm	1 T-Cell Tolerance
Tuesday	9:00 am	2 Allograft Tolerance
Tuesday	2:00 pm	Poster Session
Tuesday	3:00 pm	<i>Chinese Tea and Beer Tasting</i>
Tuesday	7:00 pm	3 Autoimmune Diseases
Wednesday	9:00 am	4 Microbiota and Mucosal Tolerance
Wednesday	2:00 pm	<i>Visit to Old Suzhou*</i>
Wednesday	7:00 pm	5 Tumor Immune Tolerance
Thursday	9:00 am	6 Humoral Tolerance
Thursday	2:00 pm	7 Infectious Tolerance
Thursday	6:00 pm	<i>Cocktails and Banquet</i>
Friday	9:00 am	9 Fetal Immune Tolerance

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 7:00pm

More information will be available at CSHA office.

(Map at the end of this abstract book)

PROGRAM

MONDAY, October 28—7:00 PM

SESSION 1 T-CELL TOLERANCE

Chairperson: **Chuan Wu**, National Cancer Institute, Bethesda, Maryland, USA

KEYNOTE SPEAKER

Metabolic reprogramming of T cell immunity and tolerance—A journey from reductionist to systems immunology

Hongbo Chi [35'+10']

Presenter affiliation: St. Jude Children's Research Hospital, Memphis, Tennessee.

1

The transcription factor ETS1 controls the postselection differentiation of thymic iNKT1 cells

Roxroy C. Morgan, Cameron Frank, Ezra Moos, Mary Attaway, Randy A. Melanson, Olubusayo Bolonduro, Andrew Koh, Elizabeth T. Bartom, Barbara L. Kee [20'+10']

Presenter affiliation: University of Chicago, Chicago, Illinois.

2

Functional specialization of regulatory T cell-mediated immune regulation in health and disease

Li-Fan Lu [20'+10']

Presenter affiliation: University of California, San Diego, La Jolla, California.

3

SESSION 2 ALLOGRAFT TOLERANCE

Chairpersons: **Jakub Abramson**, Weizmann Institute of Science, Rehovot, Israel
Chuan Wu, National Cancer Institute, Bethesda, Maryland, USA

High endothelial cells contribute to sexual dimorphism of the immune response

Amit Binyamin, Dena Leshkowitz, Afek Elnekave, Osher Ben-Nun, Tal Givony, Danielle Serr, Shifra Ben-Dor, Rebecca Haffner-Krausz, Merav Kedmi, Hadas Keren-Shaul, Jan Dobeš, Ayelet Avin, Yulia Kotlovski, Yael Goldfarb, [Jakub Abramson](#) [20'+10']
Presenter affiliation: Weizmann Institute of Science, Rehovot, Israel. 4

Regulation of CD8+ T cell fates by Bcl6

[Chen Dong](#) [20'+10']
Presenter affiliation: Westlake University, Hangzhou, China. 5

HLA supertype mismatch induces high TCMR risk through direct TCR allo-recognition

Saisi Qu, Yu Cui, Rui Qin, Weiwei Yin, Jianghua Chen, [Wei Chen](#) [10'+5']
Presenter affiliation: Zhejiang University, Hangzhou, China. 6

Regulatory T cell dynamics in the tumor microenvironment

Anat Gelfand, Hila Razon, [Ari Glasner](#) [10'+5']
Presenter affiliation: Rappaport Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel. 7

Break

Distal regulatory elements restrain IFN- γ expression for tissue homeostasis

Kairong Cui, Zuojia Chen, Keji Zhao, [Chuan Wu](#) [20'+10']
Presenter affiliation: NIH, Bethesda, Maryland. 8

Tregs in immune tolerance and diseases

[Wanjun Chen](#) [20'+10']
Presenter affiliation: National Institutes of Health, NIDCR, Bethesda, Maryland. 9

Roles for Ets1 in T cell selection

Mary Attaway, Belen Flores Kuri, Barbara L. Kee [10'+5']
Presenter affiliation: University of Chicago, Chicago, Illinois.

10

SPONSOR TALK

Translational control in the immune system—Too many roads not taken

Changchun Xiao [20'+10']

Presenter affiliation: Head of China Research, Sanofi and Founding Director, Suzhou, China.

11

TUESDAY, October 29—2:00 PM

POSTER SESSION

Causal relationship between gut microbiota, blood metabolites and multiple sclerosis—Evidence from mendelian randomization study

Lian Chen, Wei Wang, Dai-shi Tian, Chuan Qin

Presenter affiliation: Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China.

12

Calculus bovis improves experimental autoimmune encephalomyelitis via gut microbiome

Lian Chen, Wei Wang, Chuan Qin, Dai-shi Tian

Presenter affiliation: Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China.

13

In vivo screens identify FZD4 as a druggable cholesterol regulator to overcome cross-tolerance to sorafenib and PD-1 blockade in hepatocellular carcinoma

Lanqi Gong, Jie Luo, Xin-Yuan Guan

Presenter affiliation: The University of Hong Kong, Hong Kong, China; The University of Hong Kong-Shenzhen Hospital, Shenzhen, China.

14

SOCS1 haploinsufficiency in HLH links IFN- γ -induced hyperinflammation with sex-biased TLR7 upregulation and B cell hyperactivation

Yuke He, Chengmei Xie, Jianyang Ma, Yuting Qin, Marija Jelusic, Todor Arsov, Nicholas P. D. Liaw, Vicki Athanasopoulos, Jeffrey J. Babon, Nan Shen, Carola G. Vinuesa

Presenter affiliation: China-Australia Centre for Personalised Immunology, Shanghai, China.

15

The functional assembly of FOXP3-FOXP1 heterometric complex through phase separation

Xue Jiang, Zhan Xu, Bin Li

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

16

Antigen-specific T cell vaccine ameliorates rheumatoid arthritis by reconstituting neutrophil repertoire

Lulu Cao, Shanzhao Jin, Xin Feng, Qian Wang, Jing Li, Huanqun Zhu, Xue Li, Yuebo Jin, Yue Yang, Feng Sun, Yingni Li, Ru Li, Hua Ye, jing He, Shuwei Dong, Jie Tian, Fanlei Hu, Zhanguo Li

Presenter affiliation: Peking University People's Hospital and Beijing Key Laboratory for Rheumatism Mechanism and Immune Diagnosis (BZ0135), Beijing, China.

17

MIP2 as a potential therapeutic agent against intracerebral hemorrhage

Rabeea Siddique, Suliman Khan

Presenter affiliation: The Second Affiliated Hospital of Zhengzhou University, Zhengzhou, China.

18

Investigation of the role and mechanism of hepatocyte Sirt7 in alcoholic liver disease

Gaoshuang L. Liang, Jinying P. Peng, Zhuan L. Li

Presenter affiliation: Hunan Normal University School of Medicine, Changsha, China.

19

TREM2 mediates metabolic and immune regulation of lipid-associated macrophages in lymph node metastasis

Cuicui Huang, Lanqi Gong, Anne WM Lee, Xinyuan Guan, Shanshan Li

Presenter affiliation: The University of Hong Kong-Shenzhen Hospital, Shenzhen, China.

20

cJun/AP-1 activation mediates Treg fragility and promotes tumor clearance

Wenqing Cao, Ruoyi Xue, Xin Li, Chang Liu

Presenter affiliation: Nanjing University, Nanjing, China.

21

Preferential accumulation of CD62-KLRG1+ memory CD8 T cells in decidualized endometrium—Pathogen-specific defense to protect the embryo?

Lu Liu, Xixi Huang, Tingxuan Yin, Xianyang Hu, Meirong Du

Presenter affiliation: Fudan University, Shanghai, China.

22

- EBV-reactive KIR+ CX3CR1+ CD8+ T cells mediate liver transplantation tolerance by targeting alloreactive CD4+ T cells**
Yongbo Liu, Bingran Wang, Di Sun, Linrong Lu, Yuan Liu, Qiang Xia
 Presenter affiliation: Renji Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, China. 23
- Pathogenic granzyme K-expressing CD8 T cells promote recurrent airway inflammatory diseases**
 Feng Lan, Jizhou Li, Wenxuan Miao, Fei Sun, Xin Liu, Jianbin Wang, Luo Zhang, Hai Qi
 Presenter affiliation: Tsinghua University, Beijing, China. 24
- Enhancing therapeutic efficacy of adenomyosis—A new strategy via a biomimetic drug delivery system with macrophage membrane-encapsulated dydrogesterone nanocrystals**
Jing Luo, Renwen Zhang, Yixing Zou, Aihua Liao
 Presenter affiliation: Huazhong University of Science and Technology, Wuhan, China. 25
- Trio analysis of rare coding variants in Chinese childhood lupus reveals novel candidate genes**
Jianyang Ma, Yuting Qin, Soon-Min Hong, Nan Shen, Vinuesa G. Carola, Yuke He
 Presenter affiliation: China-Australia Centre for Personalized Immunology (CACPI), Shanghai, China. 26
- Loss of function gene variation in TET2 can cause human lupus**
Yuting Qin, Qian Shen, Yuke He, Jianyang Ma, Carola G. Vinuesa
 Presenter affiliation: China-Australia Centre for Personalised Immunology, Renji Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China. 27
- Interdependence between stemness and regulatory function in B-1 cells and molecular basis**
Qian Shen, Howard Wang, Xiangpeng Meng, Jonathan A. Roco, Amalie Grenov, Carola Vinuesa
 Presenter affiliation: Francis Crick Institute, London, United Kingdom. 28
- Aging-associated decline of neuronal PD-L1 augments CD8+ T cell-mediated neuroinflammation**
 Mengjiao Sun, Nuo Cheng, Kaibin Shi, Wei-Na Jin
 Presenter affiliation: China National Clinical Research Center for Neurological Diseases, Beijing, China; Chinese Institutes for Medical Research, Beijing, China. 29

Massive parallel sequencing delineating dynamics and formation of immune repertoire from non-cancer repertoire to low-grade PIN and then to prostate cancer

Qingkai Wang, Danhua Su

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

30

Characterization of T-bet-expressing Treg cells in tumor immunity

Sang-Nee Tan, Jing Hao, Jing Ge, Yazheng Yang, Meng Lin, Xiaohong Zhao, Genyu Wang, Ling Ni, Chen Dong

Presenter affiliation: Westlake University, Zhejiang, China; Tsinghua University, Beijing, China.

31

Repeated Omicron infections overcome T cell immune imprinting to original SARS-CoV-2

Ying Wang

Presenter affiliation: Shanghai Jiaotong University School of Medicine, Shanghai, China.

32

A host enzyme reduces non-alcoholic fatty liver disease by inactivating intestinal lipopolysaccharide

Zhiyan Wang, Nore Ojogun, Yiling Liu, Robert Munford, Mingfang Lu

Presenter affiliation: Fudan University, Shanghai, China.

33

Cancer neutrophil encyclopedia—A deep dive into antigen-presenting warriors

Yingcheng Wu

Presenter affiliation: Fudan University, Shanghai, China.

34

Combined multidimensional single-cell protein and RNA profiling reveals increased circulating low-density neutrophils during pregnancy

Junyu Xu

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

35

YL-001 enhances CAR-T cells potency through impairing CAR-Tregs

Guiming Li, Husheng Mei, Mingqi Hou, Xiaochen Tang, Wenjun Zhang, Zhan Xu, Rui Liang, Bin Li, Aibin Liang, Jing Yang

Presenter affiliation: Tongji University, Shanghai, China.

36

Targeting p97-Npl4 interaction selectively inhibits tumor-infiltrated regulatory T cell development to enhance antitumor immunity

Pingping Nie, Zhifa Cao, Ruixian Yu, Chao Dong, Shi Jiao, Zhaocai Zhou

Presenter affiliation: Fudan University, Shanghai, China.

37

An IPEX mutation unveils FOXP3-T-bet complex as a pivotal switch governing the Th1 program in regulatory T cells

Weiqi Zhang, Xinnan Liu, Zheng Bao, Shigang Yin, Feihong Luo, Bin Li, Xueyu Dai

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

38

Single-cell spatial analysis reveals microenvironmental features that contribute to immune discrepancies between adult and pediatric nasopharyngeal carcinomas

Yu Zhang, Lanqi Gong, Yizhuo Zhang

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

39

Skin commensal Staphylococcus spp. reduce the recurrence of otomycosis by regulating tryptophan metabolism

Wenguang Shi, Xiangyu Mou, Wenjing Zhao

Presenter affiliation: Sun Yat-Sen University, Shenzhen, China.

40

TUESDAY, October 29—3:00 PM

Chinese Tea and Beer Tasting

TUESDAY, October 29—7:00 PM

SESSION 3 AUTOIMMUNE DISEASES

Chairpersons: **Tim Sparwasser**, University of Mainz, Mainz, Germany
Chaoran Li, Emory University School of Medicine, Atlanta, Georgia, USA

In search of good memory—From B cells to the CNS

Hai Qi [20'+10']

Presenter affiliation: Tsinghua University, Beijing, China.

41

Immunobiology illuminated by pediatric immune diseases

Carrie L. Lucas [20'+10']

Presenter affiliation: Yale University, New Haven, Connecticut.

42

Metabolic targets for the treatment of autoimmune diseases

Tim D. Sparwasser [20'+10']

Presenter affiliation: University Medicine Mainz, Mainz, Germany.

43

**Obesity disrupts cholesterol homeostasis to dysregulate VAV
Treg subsets and metabolic health**

Cody Elkins, Chengyu Ye, Christopher D. Scharer, Mandy L. Ford,
Haydn Kissick, Chaoran Li [10'+5']

Presenter affiliation: Emory University School of Medicine, Atlanta,
Georgia.

44

**Metabolic regulation of regulatory T cell development and
function in diseases**

Yangyang Li, Yunyue Shen, Jing Wang, Jiankun Song, Qin Yu,
Mengqin Yu, Liang Dong [10'+5']

Presenter affiliation: ShanghaiTech University, Shanghai, China.

45

SPONSOR TALK

Building a proteome-wide resource for protein sciences

Tao Chen [20'+10']

Presenter affiliation: Absea Biotechnology Ltd., Berlin, Germany.

46

WEDNESDAY, October 30—9:00 AM

SESSION 4 MICROBIOTA AND MUCOSAL TOLERANCE

Chairpersons: **Xiaoyu Hu**, Tsinghua University, Beijing, China
Sun Hur, Harvard Medical School, Boston,
Massachusetts, USA

**Sin1-mTOR signaling mediated regulation of immune cell
metabolism and growth**

Bing Su, Ziyang Xu, Song Li, Ouyang Xinxing, Yisong Mei, Yao Chen
[20'+10']

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

47

A tuft cell-centric checkpoint of type 2 immunity

Jiali Wang, Ruoxi Shen, Kunpeng Yang, Xiaohuan Guo, Jingyou Yu, Chuan Wu, Xue-Kun Guo, Xiaoyu Hu [20'+10']

Presenter affiliation: Institute for Immunology, Beijing, China; School of Basic Medical Sciences, Beijing, China; Tsinghua-Peking Center for Life Sciences, Beijing, China.

48

A distinct cis-regulatory element is required for ILC3s to maintain intestinal food tolerance through amplifying ROR γ t expression

Jie Zhao, Haoyu Liu, Na Li, Panwei Song, Wenyan Wang, Xiaohuan Guo [10'+5']

Presenter affiliation: Tsinghua University, Beijing, China.

49

SUB1-DOCK2 axis dictates autoimmunity by controlling the migration of self-reactive CD4+ T cells

Xiaoxue Li, Feng Wang [10'+5']

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

50

Break

Innate immune determinants of intestinal physiology, tolerance, and inflammation

Gregory F. Sonnenberg [20'+10']

Presenter affiliation: Weill Cornell Medicine, Cornell University, New York, New York.

51

Nucleic acid-driven self-assemblies—FoxP3 and Aire

Sun Hur [20'+10']

Presenter affiliation: Harvard Medical School, Boston, Massachusetts.

52

Gut commensal *Bacteroides spp* protects against atherosclerosis by regulating cholesterol metabolism

Chao Yin, Gan Lin, Xiangyu Mou, Wenjing Zhao [10'+5']

Presenter affiliation: Shenzhen Campus of Sun Yat-Sen University, Shenzhen, Guangdong, China.

53

WEDNESDAY, October 30—2:00 PM

Visit to Old Suzhou

SESSION 5 TUMOR IMMUNE TOLERANCE

Chairpersons: **Thomas Gebhardt**, University of Melbourne, Melbourne, Australia
Kairui Mao, Xiamen University, Xiamen, China

Immunity to cutaneous and metastatic melanoma

Thomas Gebhardt [20'+10']

Presenter affiliation: University of Melbourne, Melbourne, Australia. 54

Degrading the inhibitory Siglec-7 and -9 for cancer immunotherapy

Peng Wu [20'+10']

Presenter affiliation: Scripps Research, La Jolla, California. 55

PPAR δ mediated regulation of CIITA-MHCII pathway—Unveiling a novel mechanism of intra-tumoral Treg function

Qiyuan Yang, Yuqiong Liang, Tomoko Hatanaka, Jingting Yu, Ye Zheng [20'+10']

Presenter affiliation: Salk Institute for Biological Studies, La Jolla, California. 56

Lymphatic-localized Treg-mregDC crosstalk limits antigen trafficking and restrains anti-tumor immunity in colorectal cancer

Kairui Mao, Siyuan You, Shuqin Li [10'+5']

Presenter affiliation: Xiamen University, Xiamen, China. 57

Cancer cells transfer Tmem176b to suppress T cell early activation and drive immune evasion

Xianjun Gao, Fang Liu, Abin You, Feng Ye, Nengming Xiao [10'+5']

Presenter affiliation: Xiamen University, Xiamen, China. 58

Foxp3 serotonylation is essential for regulatory T-cell function and anti-tumor immunity

Xue-Li Zhang, Shu-Yu Xiao, Aziguli Tulamaiti, Yan Yang, Zhi-Gang Zhang [10'+5']

Presenter affiliation: State Key Laboratory of Systems Medicine for Cancer, Shanghai, China. 59

Alternative epigenetic imprints authorize the Treg heterogeneity in the thymus

Xuelei Wang, Yingying Xu, Liangjiao Yao, Song Mei, Qifan Zhao, Yi Zang, Kepeng Yan, Gang Wei, Bin Li, Yan Zhang, Wei Lv [10'+5']
Presenter affiliation: University of Chinese Academy of Sciences, Shanghai, China.

60

THURSDAY, October 31—9:00 AM

SESSION 6 HUMORAL TOLERANCE

Chairpersons: **Ludger Klein**, Ludwig-Maximilians-Universität München, Munich, Germany
Mingzhao Zhu, Institute of Microbiology, CAS, Beijing, China

KEYNOTE SPEAKER

Peering into the secrets of self-reactive B cells

Carola Vinuesa, Amalie Grenov, Vicki Athanasopoulos, Yuke He, Qian Shen, Nan Shen [35'+10']
Presenter affiliation: The Francis Crick Institute, London, United Kingdom.

61

Role of B cells in central T cell tolerance

Ludger Klein [20'+10']
Presenter affiliation: Ludwig-Maximilians-Universität München, Munich, Germany.

62

Bi-directional neuro-immune communication regulates host defense against helminth infection

Yinsheng Wang, Xiaoyu Zhang, Heping Xu, Coco Chu [10'+5']
Presenter affiliation: Insitute for Immunology, Beijing, China.

63

Break

Molecular mechanism underly FOXP3+ Treg perturbation and the future of Treg-based immunotherapy

Bin Li [20'+10']
Presenter affiliation: Shanghai Jiao Tong University School of Medicine, Shanghai, China.

64

H2A.Z-primed epigenetic landscape promotes memory CD8 T cell recall response

Wei Liang, Jiyu Ding, Mingzhao Zhu [10'+5']

Presenter affiliation: Institute of Biophysics, CAS, Beijing, China;
Institute of Microbiology, CAS, Beijing, China.

65

Targeting tissue-resident helper T cells for immunotherapy of ovarian cancer metastasis

Zijian Xu, Ming Li [10'+5']

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

66

Direct presentation of inflammation-associated self antigens by thymic innate-like T cells induces elimination of autoreactive CD8 thymocytes

Yuanyuan You, Josefina Dunst, Kewei Ye, Patrick A. Sandoz, Annika Reinhardt, Inga Sandrock, Natalia R. Comet, Rupak Dey Sarkar, Emily Yang, Estelle Duprez, Judith Agudo, Brian D. Brown, Paul J. Utz, Wolfgang Kastenmüller, Carmen Gerlach, Immo Prinz, Björn Önfelt, Taras Kreslavskiy [10'+5']

Presenter affiliation: Karolinska Institute, Stockholm, Sweden.

67

THURSDAY, October 31—2:00 PM

SESSION 7 INFECTIOUS TOLERANCE

Chairpersons: **Axel Kallies**, University of Melbourne, Melbourne, Australia
Xiaofei Yu, Fudan University, Shanghai, China

Molecular and cellular regulation of exhausted T cell differentiation

Axel Kallies [20'+10']

Presenter affiliation: University of Melbourne, Melbourne, Australia.

68

**Clonal diversity of human effector and memory T cells—
Extending to regulatory T cells**

Corinne De Gregorio, Alessio Murgia, Blanca Fernandez, Xinlei Xi, Jun Siong Low, Antonio Lanzavecchia, Antonino Cassotta, Federica Sallusto [20'+10']

Presenter affiliation: Università della Svizzera italiana, Bellinzona, Switzerland; ETH Zürich, Zurich, Switzerland.

69

Lactic acid induces innate immune tolerance via epigenetic reprogramming

Weiwei Shi, Tiffany Cassmann, Aditya Bhagwate, Taro Hitosugi, W. K. Eddie Ip [10'+5']

Presenter affiliation: Mayo Clinic, Rochester, Minnesota; Mayo Clinic, Rochester, Minnesota.

70

Extramedullary neutrophil generation in lung promotes stroke-associated pneumonia

Nuo Cheng, Ying Zhang, Wenyan He, Kaibin Shi [10'+5']

Presenter affiliation: Chinese Institutes for Medical Research, Beijing, China; China National Clinical Research Center for Neurological Diseases, Beijing Tiantan Hospital, Capital Medical University, Beijing, China.

71

Break

Cholesterol metabolism regulates tumor-associated macrophage function

Jun Xiao, Shuang Wang, Weiyun Li, Hongyan Wang [20'+10']

Presenter affiliation: Shanghai Institute of Biochemistry and Cell Biology, Shanghai, China.

72

The neuritin-cannabinoid receptor 2 axis negatively regulates inflammatory diseases by targeting T cells

Ping Wei, Kaimin Zhang, Fan Pan [10'+5']

Presenter affiliation: Shenzhen University of Advanced Technology (SUAT), Chinese Academy of Sciences (CAS), Shenzhen, China.

73

An immune defense pathway for stress tolerance

Xiaofei Yu, Mengyu Xia, Jiabin Lan, Xinyu Zhou, Anoj Ilange [10'+5']

Presenter affiliation: Fudan University, Shanghai, China.

74

SPONSOR TALK

Thermofisher [20'+10']

THURSDAY, October 31—6:00 PM

COCKTAILS and BANQUET

SESSION 8 FETAL IMMUNE TOLERANCE

Chairpersons: **Chrysothemis Brown**, Memorial Sloan Kettering Cancer Center, New York, New York, USA
Li-hao Huang, Fudan University, Shanghai, China

Early life imprinting of intestinal tolerance

Chrysothemis Brown [20'+10']

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

75

Spermidine restricts neonatal inflammation via metabolic shaping of neutrophils

Jiale Chen, Lin Zhu, Zhaohai Cui, Yuxin Zhang, Ran Jia, Bo Hu, Wei Zhong, Jin Xu, Lijuan Zhang, Pan Zhou, Ying Yu, Qiang Liu, Jie Zhou [10'+5']

Presenter affiliation: Tianjin Medical University, Tianjin, China.

76

Double-negative (DN) tumor-infiltrating lymphocyte (TIL) subset functions as novel regulatory T cells and predicts outcome of TIL-based adoptive cell therapy in Epstein-Barr virus DNA-selected high-risk nasopharyngeal carcinoma

Jiang Li, Xiufeng Liu, Junbao Zhang [10'+5']

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

77

Mitochondrial metabolic regulation of exhausted CD8+ T-cell subpopulations enhances anti-CD3 mAb-mediated diabetes remission in autoimmune diabetes

Zhangyao Su, Hang Zhao, Lingling Bian, Xinyu Xu [10'+5']

Presenter affiliation: The First Affiliated Hospital of Nanjing Medical University, Nanjing, China.

78

Immunology learned from mothers and babies

Sing Sing Way [20'+10']

Presenter affiliation: Cincinnati Children's Hospital, Cincinnati, Ohio.

79

Experimental psoriasis-induced activation of intestinal macrophages—Implications for intestinal chylomicron secretion and inflammation

Jiaqi Wu, Shuangshuang Liu, Wei Dan, Yanmei Wang, Li-hao Huang [10'+5']

Presenter affiliation: Fudan University, Zhongshan Hospital, Shanghai, China.

80

Shapeshifting FoxP3 self-assembly allows multiway DNA bridging

Fangwei Leng, Raquel Merino, Xi Wang, Wenxiang Zhang, Taekjip Ha, Sun Hur [10'+5']

Presenter affiliation: Boston Children's Hospital, Boston, Massachusetts; Harvard Medical School, Boston, Massachusetts.

81