Abstracts of papers presented
at the 2023 Cold Spring Harbor Asia Conference

IMMUNORECEPTOR SIGNALING AND THERAPEUTIC APPLICATIONS

November 6–November 10, 2023

Arranged by

Naoki Hosen, *Osaka University*
Enfu Hui, *University of California, San Diego*
Caroline Robert, *Gustave Roussy & Paris-Saclay University*
André Veillette, *Institut de Recherches Cliniques de Montréal*
Chenqi Xu, *Shanghai Institute of Biochemistry & Cell Biology, CAS*
Sho Yamasaki, *Osaka University*

Cold Spring Harbor Conferences Asia
Cold Spring Harbor Laboratory

IMMUNORECEPTOR SIGNALING AND THERAPEUTIC APPLICATIONS

Monday, November 6 – Friday, November 10, 2023

Monday	7:00 pm	**Keynote Speaker**
Monday	7:45 pm	**1** Antigen Receptors I
Tuesday	9:00 am	**2** Antigen Receptors II
Tuesday	2:00 pm	**Poster Session**
Tuesday	4:30 pm	*Chinese Tea and Beer Tasting*
Tuesday	7:00 pm	**Keynote Speaker**
Tuesday	7:45 pm	**3** Antigen Receptors III
Wednesday	9:00 am	**4** Immune Cell Therapy
Wednesday	2:00 pm	*Visit to Old Suzhou**
Wednesday	7:00 pm	**5** Costimulatory and Coinhibitory Receptors
Thursday	9:00 am	**6** Immune Checkpoint Blockade Therapy
Thursday	2:00 pm	**7** Modulation of Immunoreceptors by Other Receptor Pathways I
Thursday	5:30 pm	Cocktails and Banquet
Friday	9:00 am	**8** Modulation of Immunoreceptors by Other Receptor Pathways II

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 12:00am - 1:30pm
Dinner: Main Cafeteria 6:00pm - 7:30pm
Banquet: Suz Garden 6:30pm

More information will be available at CSHA office
(Map at the end of this abstract book)

PROGRAM

MONDAY, November 6—7:00 PM

KEYNOTE SPEAKER

Immune organoids and combinations to advance our understanding of autoimmunity, vaccination and infection
Mark M. Davis [35'+10']
Presenter affiliation: Howard Hughes Medical Institute, Stanford University, California. 1

MONDAY, November 6—7:45 PM

SESSION 1 ANTIGEN RECEPTORS I

Chairperson: **Chenqi Xu,** Shanghai Institute of Biochemistry and Cell Biology, CAS, Shanghai, China

THEMIS is a novel substrate and allosteric activator of SHP1, playing dual roles during T cell development
Gaofeng Fan [10'+5']
Presenter affiliation: ShanghaiTech University, Shanghai, China. 2

How T-cells recognize antigens in health and disease—Perspectives from molecular imaging
Johannes B. Huppa, Janett Göhring, René Platzer, Timo Peters, Angelika Plach, Venugopal Gudipati [20'+10']
Presenter affiliation: Medical University of Vienna, Vienna, Austria. 3

SESSION 2 ANTIGEN RECEPTORS II

Chairperson: **Chenqi Xu,** Shanghai Institute of Biochemistry and Cell Biology, CAS, Shanghai, China

TUESDAY, November 7—2:00 PM

POSTER SESSION

TUESDAY, November 7—4:30 PM

Chinese Tea and Beer Tasting

TUESDAY, November 7—7:00 PM

KEYNOTE SPEAKER

TUESDAY, November 7—7:45 PM

SESSION 3 ANTIGEN RECEPTORS III

Chairperson: **Sho Yamasaki,** Osaka University, Osaka, Japan

SESSION 4 IMMUNE CELL THERAPY

Chairperson: **Naoki Hosen,** Osaka University Graduate School of Medicine, Osaka, Japan

WEDNESDAY, November 8—2:00 PM

Visit to Old Suzhou

WEDNESDAY, November 8—7:00 PM

SESSION 5 COSTIMULATORY AND COINHIBITORY RECEPTORS

Chairperson: **Enfu Hui,** University of California-San Diego, La Jolla, California, USA

THURSDAY, November 9—9:00 AM

SESSION 6 IMMUNE CHECKPOINT BLOCKADE THERAPY

Chairperson: **André Veillette,** Montreal Clinical Research Institute (IRCM), Montreal, Canada

CD47 masks pro-phagocytic ligands in cis on tumor cells to suppress anti-tumor immunity
Zhenghai Tang, Ming-Chao Zhong, Jin Qian, Cristian Camilo Galindo, Dominique Davidson, Jiaxin Li, Yunlong Zhao, Enfu Hui, Andre Veillette [10'+5']
Presenter affiliation: Institut de Recherches Cliniques de Montréal (IRCM), Montréal, Québec, Canada. 39

Break

Mechanism based approaches to improve the efficacy of immune checkpoint therapy
Feng Wang [10'+5']
Presenter affiliation: Shanghai Jiao Tong University School of Medicine, Shanghai, China. 40

FcγR co-engagement by therapeutic antibodies targeting immune checkpoints cluster antigens at the immune synapse and correlates with increased T cell stimulation
Jonathan D. Worboys, Michael A. Conner, Peter Morley, David Jones, Andrew Sanderson, Jeremy D. Waight, Daniel M. Davis [10'+5']
Presenter affiliation: University of Manchester, Manchester, United Kingdom. 41

Multiple layers of $CD8^+$ T cell responders to PD-1/PD-L1 blockade
Lilin Ye [20'+10']
Presenter affiliation: Third Military Medical University of China, Chongqing, China. 42

THURSDAY, November 9—2:00 PM

SESSION 7 MODULATION OF IMMUNORECEPTORS BY OTHER RECEPTOR PATHWAYS I

Chairperson: **Gloryn Chia,** National University of Singapore, Singapore

Nucleo-cytosolic acetyl-CoA drives tumor immune evasion by epigenetically regulating PD-L1 in melanoma
Weinan Guo, Huina Wang, Xiuli Yi, Lintao Jia, Chunying Li [10'+5']
Presenter affiliation: Xijing Hospital, Fourth Military Medical University, Xi'an, China. 43

THURSDAY, November 9—5:30 PM

COCKTAILS and BANQUET

SESSION 8 MODULATION OF IMMUNORECEPTORS BY OTHER RECEPTOR PATHWAYS II

Chairperson: **James Chou,** Shanghai institute of Organic Chemistry, CAS, Shanghai, China