



Systems Immunology in Aging and Complex Diseases

Farmington, CT
September 14 – 15, 2023

Schedule of Activities

Thursday, September 14th

- 7:30 – 8:50 am Registration (JGM-Lobby)
- 8:50 – 9:00 am **Opening Remarks**
Duygu Ucar, Ph.D., The Jackson Laboratory
- REPRODUCTIVE AGING**
Session Moderator: Duygu Ucar, Ph.D., The Jackson Laboratory
- 9:00 – 9:40 am **Talk Title TBD**
Coleen Murphy, Ph.D., Princeton University
- 9:40 – 10:20 am **Towards age-relevant preclinical models of menopause**
Berenice Benayoun, Ph.D., USC
- 10:20 – 11:00 am **Genetic insights into making and maintaining ovarian reserve**
Ewelina Bolcun Filas, Ph.D., The Jackson Laboratory
- 11:00 – 11:30 am *Break*
- 11:30 – 12:30 pm **Keynote Lecture: Systems immunology of human immune set points**
John Tsang, Ph.D., Yale Center for Systems and Engineering Immunology (CSEI)
- 12:30 – 1:10 pm *Lunch*
- VACCINE RESPONSES**
Session Moderator: Sathya Ravi, Ph.D., The Jackson Laboratory
- 1:10 – 1:40 pm **Sex differences in immune system aging and vaccine responses**
Duygu Ucar, Ph.D., The Jackson Laboratory

- 1:40 – 2:20 pm **Leveraging gravitation and space biology to model immune aging and disease**
David Furman, Ph.D., Buck Institute for Research on Aging
- 2:20 – 2:50 pm **Leveraging high temporal resolution profiling approaches in systems vaccinology studies**
Damien Chaussabel, Ph.D., The Jackson Laboratory
- 2:50 – 3:20 pm *Break*
- INFLAMMATION**
Session Moderator: Berenice Benayoun, Ph.D., University of Southern California
- 3:20 – 4:00 pm **Change in DNA methylation with aging across different immune cell types: hunting for a mechanism**
Luigi Ferruci, M.D., Ph.D., NIH, National Institute on Aging
- 4:00 – 4:40 pm **Cross-population and cross-sex validation of integrative measures of emergent immune processes**
Alan Cohen, Ph.D., Columbia
- 4:40 – 4:55 pm **Attendee Short Talk #1**
- 4:55 – 5:30 pm **Attendee Short Talk #2**
- 5:30 – 7:00 pm **Poster Session & Social Hour**

Friday, September 15th

TECHNOLOGICAL AND COMPUTATIONAL ADVANCES

Session Moderator: Djamel Nehar-Belaid, Ph.D., The Jackson Laboratory

- 9:00 – 9:40 am **Unraveling the Endometriosis Microenvironment using Single Cell Discovery**
Elise Courtois, Ph.D., The Jackson Laboratory
- 9:40 – 10:20 am **Landscape of Accessible Chromatin in Hematopoiesis, Lupus, and Aging**
Sai Ma, Ph.D., Icahn School of Medicine at Mount Sinai
- 10:20 – 11:00 am **Deciphering gene regulatory networks of cell-fate specification**
Sushmita Roy, Ph.D., University of Wisconsin, Madison

11:00 – 11:30 am	<i>Break</i>
11:30 – 12:30 pm	Keynote Lecture: Talk Title TBD Yousin Suh, Ph.D., Columbia University
12:30 – 1:10 pm	<i>Lunch</i>
	BRAIN Session Moderator: Asa Thibodeau, Ph.D., The Jackson Laboratory
1:10 – 1:50 pm	Estrogenic control of microglial reactive states in the female mouse hippocampus Sarah Ocanas, Ph.D., University of Oklahoma Health Sciences Center
1:50 – 2:30 pm	Talk Title TBD Bess Frost, Ph.D., UT Health San Antonio
2:30 – 3:10 pm	New tools to study the aging tissue-resident immune compartment Emily Goldberg, Ph.D., University of California San Francisco
3:10 – 3:30 pm	<i>Break (Sponsored by the JAX Cancer Center)</i>
	CANCER AND AGING This session is sponsored by the JAX Cancer Center Session Moderator: Laura Haynes, Ph.D., UConn Health Center
3:30 – 4:10 pm	Strategies to enhance human immunity during ageing Arne Akbar, Ph.D., University College London
4:10 – 4:50 pm	A precarious balance: the role of aging in initiation of cancer Peter Adams, Ph.D., Sanford Burnham Prebys
4:50 – 5:30 pm	Metabolic reprogramming: A bridge between aging and tumorigenesis Ana P. Gomes, Ph.D., Moffitt Cancer Center
5:30 – 6:00 pm	Panel: Cancer and Aging
6:00 pm	Closing Remarks and Group Photo