



The 32nd Annual Short Course on Experimental Models of Human Cancer

Bar Harbor, Maine
August 14-22, 2023

Schedule of Activities

Monday, August 14th

- 3:00 pm - 8:00 pm Registration
Participants are not permitted to enter Highseas prior to 3:00 pm.
- 4:30 – 5:00 pm Course Welcome and Introductions (Highseas, 3rd Floor)
- 5:00 – 6:00 pm **The Cancer Concept Through the Centuries** (Highseas, 3rd Floor)
Edison Liu, M.D., The Jackson Laboratory
- 6:00 – 8:00 pm Welcome Dinner with the JAX Cancer Center (Highseas, 1st floor)

Tuesday, August 15th

- 7:45 – 8:00 am *Shuttle from Highseas to The Jackson Laboratory*
- 8:00 – 9:00 am Registration and Breakfast
- INTRODUCTION TO CANCER**
*Moderated by Karolina Palucka, M.D., Ph.D., The Jackson Laboratory
and Brent Berwin, Ph.D., The Jackson Laboratory*
- 9:00 – 9:45 am **Intrinsic and microenvironmental regulation of early dissemination,
cancer cell dormancy and metastasis initiation**
Julio Aguirre-Ghiso, Ph.D., Albert Einstein College of Medicine
**Presenting Remotely*
- 9:45 – 10:30 am **Metabolic and Neuro-immunological Regulation of Cancer**
Tak Mak, Ph.D., Princess Margaret Cancer Center
- 10:30 – 11:00 am Group Photo

11:00 – 11:30 am	<i>Break</i>
11:30 – 12:30 pm	1:1 Office Hours
12:30 – 1:45 pm	Lunch with Speakers
1:45 – 2:30 pm	<p>Normalizing the Tumor Microenvironment to Improve Cancer Immunotherapy: Bench to Bedside</p> <p>Rakesh Jain, Ph.D., Harvard Medical School, Massachusetts General Hospital</p>
2:30 – 3:15 pm	<p>Insights into the role of selective autophagy in tumorigenesis</p> <p>Esperanza Arias-Perez, Ph.D., Albert Einstein College of Medicine</p>
3:15 – 3:45 pm	<i>Break</i>
3:45 – 4:30 pm	<p>Tumor extracellular vesicles and particles promote metastasis and systemic disease</p> <p>David Lyden, M.D., Ph.D., Weill Cornell Medical College</p> <p><i>*Presenting Remotely</i></p>
4:30 – 5:45 pm	Poster Session
5:45 – 6:00 pm	<p><i>Shuttle from The Jackson Laboratory to Highseas</i></p> <p><i>Dinner on your own</i></p>

Wednesday, August 16th

8:00 – 8:15 am	<i>Shuttle from Highseas to The Jackson Laboratory</i>
8:15 – 9:00 am	Registration and Breakfast
	<p><u>TUMOR METASTASIS AND DORMANCY</u></p> <p><i>Moderated by Brent Berwin, Ph.D., The Jackson Laboratory</i></p>
9:00 – 9:45 am	<p>Biology of minimal residual disease: how cancer cells disseminate and adapt to the new niche</p> <p>M. Soledad Sosa, Ph.D., Albert Einstein College of Medicine</p> <p><i>*Presenting Remotely</i></p>
9:45 – 10:30 am	<p>Modeling APOBEC mutagenesis in mice</p> <p>James Alvarez, Ph.D., Fred Hutchinson Cancer Center</p>
10:30 – 11:00am	<i>Break</i>

11:00 – 11:45 am	Biology of disseminated tumor cells: An integrated imaging approach J. Javier Bravo Cordero, Ph.D., Icahn School of Medicine at Mount Sinai
11:45 – 12:30 pm	Macrophages in mouse models of cancer Judith Varner, Ph.D., University of California San Diego
12:30 – 1:30 pm	Lunch with Speakers
1:30 – 3:30 pm	Workshop: Basic Biomethods for the Use of Murine Cancer Models Biotrain Team, The Jackson Laboratory
3:30 – 4:00 pm	<i>Break</i>
4:00 – 6:00 pm	Panel Discussion Moderated by Jacques Banchereau, Ph.D., Immunai and Djamel Nehar-Belaid, Ph.D., The Jackson Laboratory
6:00 – 6:30 pm	<i>Shuttle from The Jackson Laboratory to Highseas</i>
6:30 – 8:30 pm	Lobster Dinner (Highseas)

Thursday, August 17th

8:00 – 8:15 am	Shuttle from Highseas to The Jackson Laboratory
8:15 – 9:00 am	Registration and Breakfast
	<u>TUMOR IMMUNOLOGY</u> <i>Moderated by Djamel Nehar-Belaid, Ph.D., The Jackson Laboratory</i>
9:00 – 9:45 am	Introduction to Clinical Cancer Immunotherapy Mario Sznol, M.D., Yale University, Yale Cancer Center
9:45 – 10:30 am	Role of microbiota in cancer immunotherapy Dan Littman, M.D., Ph.D., HHMI, NYU School of Medicine
10:30 – 11:00 am	<i>Break</i>
11:00 – 11:45 am	Innate Lymphoid Cells in Biology Marco Colonna, M.D., Washington University in St. Louis

- 11:45 – 12:30 pm **Autoimmunity and Cancer Immunology: Informing Each Other through Patient-Oriented Studies**
Virginia Pascual, M.D., Weill Cornell Medical College
- 12:30 – 1:30 pm **Lunch with Speakers**
- 1:30 – 2:15pm **Innate immunity and inflammation in tumor progression**
Alberto Mantovani, M.D., Humanitas University
**Presenting Remotely*
- 2:15 – 3:00 pm **New Insights into Cancer Immunity from the Application of Advanced Optical Imaging**
Ron Germain, M.D., Ph.D., National Institutes of Health
- 3:00 – 3:30 pm *Break*
- 3:30 – 4:15 pm **Metabolic control of NASH to HCC progression**
Michael Karin, Ph.D., UCSD
- 4:15 – 5:00 pm **T cells with regulatory function**
Alma-Martina Cepika, Ph.D., Stanford University
- 5:00 – 5:15 pm *Shuttle from The Jackson Laboratory to Highseas
Dinner on your own*

Friday, August 18th

- 8:00 – 8:15 am *Shuttle from Highseas to The Jackson Laboratory*
- 8:15 – 9:00 am Registration and Breakfast
- TUMOR GENETICS AND GENOMICS**
Moderated by Sheng Li, Ph.D., The Jackson Laboratory
- 9:00 – 9:45 am **Models and Mechanisms of Tumor Initiation**
David Cheresh, Ph.D., University of California San Diego
- 9:45 – 10:30 am **Deciphering Cellular Epigenome Heterogeneity and Evolution in Cancer within an Aged Ecosystem**
Sheng Li, Ph.D., The Jackson Laboratory
- 10:30 – 11:00 am *Break*

- 11:00 – 11:45 am **RNA splicing in aging and cancer**
Olga Anczukow, Ph.D., The Jackson Laboratory
**Presenting Remotely*
- 11:45 – 12:45 pm **1:1 Office Hours**
- 12:45 – 1:45 pm **Lunch with Speakers**
- 1:45 – 2:30 pm **Role of Interferons in Inflammatory Memory and Immunotherapy Resistance**
Andy Minn, M.D., Ph.D., University of Pennsylvania
- 2:30 – 3:15 pm **Molecular biomarkers of response and resistance to PD-L1 blockade in clinical settings**
Romain Banchereau, Ph.D., Genentech
- 3:15 – 3:45 pm *Break*
- 3:45 – 5:45 pm **Panel Discussion**
Moderators:
Sheng Li, Ph.D., The Jackson Laboratory
Romain Banchereau, Ph.D., Genentech
- 5:45 – 6:30 pm *Shuttle from The Jackson Laboratory to the Bar Harbor Regency Stone House*
- 6:30 – 8:30 pm **Gala Dinner**
(Bar Harbor Regency Stone House)
- 8:30 pm *Shuttle from The Bar Harbor Regency Stone House to Highseas*

Saturday, August 19th

- 8:00 – 8:15 am *Shuttle from Highseas to The Jackson Laboratory*
- 8:15 – 9:00 am Registration and Breakfast
- CANCER IMMUNOLOGY AND AGING**
Moderated by Karolina Palucka, M.D., Ph.D., The Jackson Laboratory
- 9:00 – 9:45 am **Characteristics of Functional Memory T Cell Subsets in Anti-Cancer Immune Responses**
Marcus Bosenberg, M.D., Ph.D., Yale School of Medicine

- 9:45 – 10:30 am **Age-related stromal changes drive tumorigenesis**
Sheila Stewart, Ph.D., Washington University in St. Louis
- 10:30 – 11:00 am *Break*
- 11:00 – 11:45 am **Archetypes of Immune Systems in Cancer**
Max Krummel, Ph.D., University of California San Francisco
- 11:45 – 12:45 pm **Lunch with Speakers**
- 12:45 – 2:45 pm **Workshop: Integrated Approaches to Map and Functionally Interrogate Solid Tumors at Single Cell Resolution**
Paul Robson, Ph.D., The Jackson Laboratory
- 2:45 – 5:00 pm **Rising Stars Talks**
- Remodeling of the immune system across human lifespan at single cell resolution**
Djamel Nehar-Belaid, Ph.D., The Jackson Laboratory
- Targeting a metabolic pathway in myeloid cells reprograms their functional state**
Brian Morreale, MSc, Roswell Park Comprehensive Cancer Center
- Age-related intron retention in STAT2 modulates antiviral and antitumor immunity**
Ryan Englander, M.S., The Jackson Laboratory (*Presenting Remotely*)
- An mTORC1 to HRI signaling axis promotes cytotoxicity of proteasome inhibitors in multiple myeloma**
Odai Darawshi, Teaching Assistant, The Hebrew University of Jerusalem, Israel
- In vivo biomarker augmentation via priming agents for next-generation liquid biopsies**
Shervin Tqabrizi, MIT/Koch Institute for Integrative Cancer Research and the Broad Institute
- Mapping Heterogeneity in Colorectal Cancer through Spatial Transcriptomics and Digital Histopathology**
Jie Zhou, The Jackson Laboratory

Agonistic anti-CD40 converts Tregs into Type 1 effectors within the tumor micro-environment

Vivien Maltez, Ph.D. Laboratory of Immune System Biology, NIH, NIAID (*Presenting Remotely*)

Targeting monocyte metabolism in cancer Immunotherapy: Simultaneous Inhibition of mTORC1 and PPAR γ induces the differentiation of human monocytes into highly immunogenic dendritic cells

Fernando Erra Diaz, Instituto de Investigaciones Biomédicas en Retrovirus y SIDA, Argentina

Advanced Engineering Tools for Modeling and Monitoring Infectious Diseases, Autoimmunity, and Cancer

Sasan Jalili, Ph.D., The Jackson Laboratory for Genomic Medicine

5:00 pm – 5:15pm

*Shuttle from The Jackson Laboratory to Highseas
Dinner on your own*

Sunday, August 20th

8:00 – 8:15 am

Shuttle from Highseas to The Jackson Laboratory

8:15 – 9:00 am

Registration and Breakfast

CANCER MODELS

Moderated by Gary Ren, Ph.D., The Jackson Laboratory

9:00 – 9:45 am

Modeling Pancreatic Cancer

David Tuveson, M.D., Ph.D., Cold Spring Harbor Laboratory

9:45 – 10:30 am

Lymphatic transport at the intersection of metastasis and immunity

Amanda Lund, Ph.D., NYU Grossman School of Medicine

10:30 – 11:00 am

Break

11:00 – 11:45 am

Modeling Cancer Immunology and Immunotherapy Resistance

David DeNardo, Ph.D., Washington University in St Louis

11:45 – 12:30 pm

Fibroblasts in the metastatic niche

Gary Ren, Ph.D., The Jackson Laboratory

12:30 – 1:30 pm

Lunch with Speakers

- 1:30 – 2:15 pm **Murine Models of Atherosclerosis and Clonal Dominance in TET2-mutant Clonal Hematopoiesis**
Thomas Look, M.D., Harvard Medical School/Dana-Farber Cancer Institute
- 2:15 – 3:00 pm **Neoantigens as probes and targets of tumor specific immune responses**
Robert Schreiber, Ph.D., Washington University in St. Louis
**Presenting Remotely*
- 3:00 – 3:30 pm *Break*
- 3:30 – 4:30 pm **Modeling Cancer in the Context of Aging**
Ana Gomes, Ph.D., Moffitt Cancer Center
- 4:30 – 5:30 pm **Grant writing workshop: Tips and tricks for a great Specific Aims page**
Anna Lisa Lucido, Ph.D., PMP, The Jackson Laboratory
- 5:30 – 6:00 pm *Shuttle from The Jackson Laboratory to Highseas*
- 6:00 – 7:00 pm *Dinner at Highseas*

Monday, August 21st

- 8:00 – 8:15 am *Shuttle from Highseas to The Jackson Laboratory*
- 8:15 – 9:00 am Registration and Breakfast
- COMPUTATIONAL APPROACHES**
Moderated by Jeff Chuang, Ph.D., The Jackson Laboratory
- 9:00 – 9:45 am **Everything as code**
David van Valen, Ph.D., California Institute of Technology
**Presenting Remotely*
- 9:45 – 10:30 am **The role of extrachromosomal DNA amplifications in cancer**
Roel Verhaak, Ph.D., Yale University
**Presenting Remotely*
- 10:30 – 11:00 am *Break*

11:00 – 11:45 am	Elucidating cancer evolution and treatment susceptibilities through image analysis Jeff Chuang, Ph.D., The Jackson Laboratory
11:45 – 12:30 pm	Panel Discussion Moderated by Jeff Chuang, Ph.D., The Jackson Laboratory
12:30 – 1:30 pm	Lunch with Speakers
1:30 – 3:30 pm	Workshop: Using cBioPortal for Cancer Genomics Analysis Carol Bult, Ph.D., The Jackson Laboratory
3:30 – 3:45 pm	<i>Break</i>
3:45 – 5:45 pm	Workshop: Data Analysis and Resources for Patient-Derived Cancer Models Jeff Chuang, Ph.D., The Jackson Laboratory Mike Lloyd, Ph.D., The Jackson Laboratory
5:45 – 6:00 pm	<i>Shuttle from The Jackson Laboratory to Highseas</i>
6:00 – 7:00 pm	Dinner at Highseas

Tuesday, August 22nd

8:00 – 8:15 am	<i>Shuttle from Highseas to The Jackson Laboratory</i>
8:15 – 9:00 am	Registration and Breakfast
	<u>CANCER CARE DISPARITIES</u> <i>Moderated by Carol Bult, Ph.D., The Jackson Laboratory and Brent Berwin, Ph.D., The Jackson Laboratory</i>
9:00 – 9:45 am	The role of patient-derived models in cancer health equity Luis G. Carvajal-Carmona, Ph.D., UC Davis School of Medicine
9:45 – 10:30 am	Role of Epithelial Mesenchymal Transition in Tumor-Microenvironment Interactions and Health Disparities Valerie Odero-Marah, Ph.D., Morgan State University
10:30 – 11:00 am	<i>Break</i>

11:00 – 11:45 am	Clinical Cancer Genomics and a Model for Integrating Cancer Genomics in Community Practice Leah Graham, Ph.D., The Jackson Laboratory
11:45 – 12:30 pm	Myeloid cells as regulators of tumor progression and success of immunotherapy Dmitry Gabrilovich, M.D., Ph.D., AstraZeneca
12:30 – 1:30 pm	Lunch with Speakers
1:30 – 2:15pm	Molecular subtypes of triple-negative breast and ovarian carcinomas as predictors of patient response to platinum-based chemotherapy Francesca Menghi, Ph.D., The Jackson Laboratory
2:15 – 2:25pm	<i>Workshop participants will be escorted to the GRB Training Lab.</i>
2:25 – 4:25pm	Workshop: Measuring orthotopic mouse model of cancer Muneer Hasham, Ph.D., The Jackson Laboratory
4:25 – 4:35 pm	<i>Workshop participants will be escorted back to the auditorium.</i>
4:35 – 5:20 pm	Repetitive sequences and genomic instability Christine Beck, Ph.D., The Jackson Laboratory
5:20 pm	Adjourn
5:20 pm	<i>Shuttle from The Jackson Laboratory to Highseas</i>

Wednesday, August 23rd

7:00 – 9:00 am	Grab-and-go Breakfast (Highseas, Snack Room)
9:00 am	Highseas Check Out <i>Participants may remain on the 1st floor until 12:00pm if needed.</i>