30th Annual Short Course on Experimental Models of Human Cancer

Virtual Event
August 16 - 27, 2021

Registered Attendees will receive access to our virtual event portal (Canvas LMS) approximately two weeks in advance of the course. All on-demand content will be available in Canvas on Monday, August 9. The course is divided into 10 modules and consists of pre-recorded lectures (approximately 60 minutes in length) and live panel discussions, workshops, faculty Q&A, short talks, and poster presentations. Live sessions are presented via Cisco Webex and will be recorded and posted to the Canvas portal for on-demand access within 48 hours. Course content will remain accessible to attendees until October 31, 2021. All times are shown in Eastern Daylight Time.

Schedule of Activities

Monday, August 16

Live Sessions

2:00 pm – 3:00 pm  Lecture Title TBA
                        David Lyden, M.D., Ph.D., Cornell University

Recommended On-Demand Content
Speakers are featured in the following live session

Keynote Lecture: Inflammation and Cancer: Good Cells Behaving Badly
Lisa Coussens, Ph.D., Oregon Health & Science University

Exploiting Metabolic Stress in Cancer Treatments
Tak Mak, Ph.D., University Health Network Toronto

The Mechanistic Basis of Cancer Immunotherapy
Ira Mellman, Ph.D., Genetech

Lecture Title TBA
Gwendalyn Randolph, Ph.D., Washington University School of Medicine in St. Louis

Schedule is subject to change
Tuesday, August 17

**Live Sessions**

11:00 am – 12:00 pm  
*Panel Discussion: Current Key Questions in Cancer Biology and Therapy*  
Presented By: Lisa Coussens, Tak Mak, Ira Mellman, Gwendalyn Randolph  
Moderated By: Francesca Menghi, Ph.D., The Jackson Laboratory

12:00 pm – 1:00 pm  
**Faculty Q&A**

2:00 pm – 3:00 pm  
*Advanced Dynamic and Static Optical Imaging Methods for Exploration of Tumor-Immune System Interactions*  
Ronald Germain, M.D., Ph.D., National Institutes of Health

**Recommended On-Demand Content**  
Speakers are featured in the following live session

**Keynote Lecture: Lecture Title TBA**  
David Livingston, M.D., Harvard Medical School

**Mechanisms of Residual Cell Survival and Recurrence in Breast Cancer**  
James Alvarez, Ph.D., Duke Cancer Institute

**Lecture Title TBA**  
Cyrus Ghajar, Ph.D., Fred Hutchinson Cancer Research Center

**Lecture Title TBA**  
Eva Hernando-Monge, Ph.D., NYU Langone Health

**Lecture Title TBA**  
Edison T. Liu, M.D., The Jackson Laboratory

**Lecture Title TBA**  
Tannishta Reya, Ph.D., University of California San Diego

**Biology of Minimal Residual Disease**  
M. Soledad Sosa, Ph.D., Icahn School of Medicine at Mount Sinai

Schedule is subject to change
Wednesday, August 18

**Live Sessions**

11:00 am – 12:00 pm  
**Panel Discussion: Mechanisms of Metastatic Disease**  
Presented by: David Livingston, James Alvarez, Cyrus Ghajar, Eva Hernando-Monge, Edison Liu, Tannishtha Reya, Soledad Sosa  
Moderated By: Jan Martinek, Ph.D., The Jackson Laboratory

12:00 pm – 1:00 pm  
**Faculty Q&A**

2:00 pm – 4:00 pm  
**Single Cell RNA Seq**  
Paul Robson, Ph.D., The Jackson Laboratory

**Recommended On-Demand Content**  
Speakers are featured in the following live session

- **Innate Lymphoid Cells in Biology**  
  Marco Colonna, Ph.D., Washington University in St. Louis

- **Tools for T Cells: Infection and Cancer**  
  Mark Davis, Ph.D., Stanford Medicine

- **Induction of Adaptive Immunity**  
  Stephanie Eisenbarth, M.D., Ph.D., Yale School of Medicine

- **Lecture Title TBA**  
  Dmitry Gabrilovich, M.D., Ph.D., The Wistar Institute

- **How Vaccine Regimens, Adjuvants, and Immunogen Design Impact Antigen Fate in Lymph Nodes**  
  Darrell Irvine, Ph.D., Massachusetts Institute of Technology

- **Lecture Title TBA**  
  Alberto Mantovani, M.D., Humantias

- **Mechanisms of Autoimmunity and Autoinflammation**  
  Virginia Pascual, M.D., Weill Cornell Medicine

Schedule is subject to change
Thursday, August 19

**Live Sessions**

11:00 am – 12:00 pm  **Panel Discussion: Inflammation**  
Presented By: Marco Colonna, Mark Davis, Stephanie Eisenbarth, Dimitry Gabrilovich, Darrell Irvine, Alberto Mantovani, Virginia Pascual  
Moderated By: Djamel Nehar-Belaid, Ph.D., The Jackson Laboratory

12:00 pm – 1:00 pm  **Faculty Q&A**

2:00 pm – 4:00 pm  **Short Talks**  
Presented By: JAX Pre- and Post-doctoral Fellows

**Recommended On-Demand Content**  
Speakers are featured in the following live session

**Lecture Title TBA**  
Romain Banchereau, Ph.D., Genentech

**Normalizing the Tumor Microenvironment to Improve Cancer Immunotherapy: Bench to Bedside**  
Rakesh Jain, Ph.D., Harvard Medical School and Dana-Farber Cancer Institute

**Role of the Microbiota in Local and Systemic Immune Responses**  
Dan R. Littman, M.D., Ph.D., NYU Langone Health

**Lecture Title TBA**  
Pamela Ohashi, Ph.D., F.R.S.C., University Health Network, Princess Margaret Cancer Centre

**Reverse Translational Studies to Guide Anti-PD-1 Cancer Combination Strategies in the Clinic**  
Elaine Pinheiro, Ph.D., Merck

**Lecture Title TBA**  
Robert Schreiber, Ph.D., Washington University in St. Louis

**Clinical Cancer Immunotherapy – An Introduction**  
Mario Sznol, M.D., Yale School of Medicine

Schedule is subject to change
Friday, August 20

**Live Sessions**

11:00 am – 12:00 pm  **Panel Discussion: Next Generation Immunotherapies**  
Presented By: Romain Banchereau, Rakesh Jain, Dan Littman, Pamela Ohashi, Elaine Pinheiro, Robert Schreiber, Mario Sznol  

Moderated By: Anczuków Lab

12:00 pm – 1:00 pm  **Faculty Q&A**

2:00 pm – 4:00 pm  **JAX Associates Short Talks**  
Francesca Menghi, Ph.D.; Djamel Nehar-Belaid, Ph.D.; Santhosh Sivajothi, Ph.D.; Jan Martinek, Ph.D.; Julie Wells, Ph.D.; and Chun Yu, Ph.D.

**Recommended On-Demand Content**  
Speakers are featured in the following live session

Alternative RNA Splicing Defects in Cancer: Molecular and Therapeutic Insights From Model Systems | Olga Anczuków, Ph.D., The Jackson Laboratory

RNA Isoforms in Cancer Diagnosis and Therapy  
Jacques Banchereau, Ph.D., The Jackson Laboratory

RNA Splicing in Tumorigenesis  
Robert Bradley, Ph.D., Fred Hutchinson Cancer Research Center

Lecture Title TBA  
Jørgen Kjems, Ph.D., Aarhus University

Fundamentals of Genomics and Immunogenetics  
Elaine Mardis, Ph.D., Nationwide Children’s Hospital

Lecture Title TBA  
Christine Mayr, Ph.D., Memorial Sloan Kettering Cancer Center

**Opposing Roles of Interferon and Pattern Recognition Receptor Signaling in Cancer and Cancer Immunology**  
Andy Minn, M.D., Ph.D., UPenn Perelman School of Medicine

**Long Non-Coding RNA in the Immune System**  
Adam Williams, Ph.D., The Jackson Laboratory

Schedule is subject to change
Monday, August 23

**Live Sessions**

11:00 am – 12:00 pm  **Panel Discussion: Harnessing Transcriptome for Therapy**  
Presented By: Olga Anczuków, Jacques Banchereau, Robert Bradley, Jørgen Kjems, Elaine Mardis, Christine Mayr, Andy Minn, Adam Williams  
Moderated By: Sheng Li, Ph.D., & Christine Beck, Ph.D., The Jackson Laboratory

12:00 pm – 1:00 pm  **Faculty Q&A**

2:00 pm – 3:00 pm  **Ethics in Cancer Research**  
Jens Rueter, M.D., Maine Cancer Genomics Initiative, The Jackson Laboratory

3:00 pm – 3:30 pm  **Grantwriting for Impact**  
Anna Lisa Lucido, Ph.D., P.M.P., The Jackson Laboratory

3:30 pm – 4:00 pm  **Writing, Improving and Publishing Your Manuscript: Tips for Early Career Scientists**  
Ilaro Taneli Helenius, M.S., Ph.D., The Jackson Laboratory

**Recommended On-Demand Content**

Speakers are featured in the following live session

**Repeats and Genomic Instability: From Retrotransposition to Recombination**  
Christine Beck, Ph.D., The Jackson Laboratory

**Lecture Title TBA**  
Lilian Kabeche, Ph.D., Yale School of Medicine

**Lecture Title TBA**  
Cigall Kadoch, Ph.D., Broad Institute of MIT and Harvard

**Epigenetic Evolution and Heterogeneity in Acute Myeloid Leukemia**  
Sheng Li, Ph.D., The Jackson Laboratory

**Lecture Title TBA**  
Ralph Scully, M.B.B.S., Ph.D., Harvard Medical School

**Introduction to Cancer Genomics**  
Roel Verhaak, Ph.D., The Jackson Laboratory

**Lecture Title TBD**  
Cheng-Zhong Zhang, Ph.D., Dana-Farber Cancer Institute

Schedule is subject to change
Tuesday, August 24

**Live Sessions**

11:00 am – 12:00 pm  *Panel Discussion: Genomics of Cancer*
Presented By: Christine Beck, Lilian Kabech, Cigall Kadoch, Sheng Li, Ralph Scully, Roel Verhaak, Cheng-Zhong Zang

Moderated By: Ucar Lab

12:00 pm – 1:00 pm  *Faculty Q&A*

2:00 pm – 4:00 pm  *Workshop: cBio Portal for Cancer Genomics*
Carol Bult, Ph.D., The Jackson Laboratory

**Recommended On-Demand Content**
Speakers are featured in the following live session

*Keynote Lecture: Stem and Myeloid Cells*
Irving Weissman, PhD., Stanford University

*Lecture Title TBA*
Arne Akbar, Ph.D., University College London

*Somatic Mutations*
Phil Jones, Ph.D., Wellcome Sanger Institute

*Age-Related Changes in the Tumor Microenvironment Drive Tumorigenesis*
Sheila Stewart, Ph.D., Washington University in St. Louis

*Microenvironmental Regulation of Myeloid Malignancies*
Jennifer Trowbridge, Ph.D., The Jackson Laboratory

*Sexual Dimorphism in Immune System Aging*
Duygu Ucar, Ph.D., The Jackson Laboratory

Schedule is subject to change
Wednesday, August 25

Live Sessions

11:00 am – 12:00 pm  Panel Discussion: Aging and Cancer
Presented By: Irving Weissman, Arne Akbar, Phil Jones, Sheila Stewart, Jennifer Trowbridge, Duygu Ucar

Moderated By: Ren Lab

12:00 pm – 1:00 pm  Faculty Q&A

2:00 pm – 3:00 pm  Data Analysis & Resources for Patient-Derived Cancer Models
Jeff Chuang, Ph.D., The Jackson Laboratory

Recommended On-Demand Content
Speakers are featured in the following live session

Keynote Lecture: Metabolic Stress and its Role in the Initiation and Progression of Primary and Metastatic Liver Cancer
Michael Karin, Ph.D., University of California, San Diego

Modeling Anti-Cancer Immune Responses in Mice
Marcus Bosenberg, M.D. Ph.D., Yale School of Medicine

Tumor Microenvironment and Cancer Immunity
David DeNardo, Ph.D., Washington University in St. Louis

Imaging and World Beyond Checkpoint: Archetypes of Immunity Across Cancer
Matthew Krummel, Ph.D., University of California, San Francisco

Lymphatic Transport, Metastasis, and Anti-Tumor Immunity
Amanda Lund, Ph.D., NYU Langone Health

Unraveling the Complexity of Drug Resistance in Lung Cancer
Katerina Politi, Ph.D., Yale School of Medicine

Schedule is subject to change
Thursday, August 26

**Live Sessions**

11:00 am – 12:00 pm  **Panel Discussion: In Vivo Cancer Models**  
Presented By: Michael Karin, Marcus Bosenberg, David DeNardo, Matthew Krummel, Amanda Lund, Katerina Politi  
Moderated By: Chang Lab

12:00 pm – 1:00 pm  **Faculty Q&A**

2:00 pm – 4:00 pm  **Poster Session**  
Presented By: Course Attendees [by submission]

**Recommended On-Demand Content**  
Speakers are featured in the following live session

**Lecture Title TBA**  
Gary Churchill, Ph.D., The Jackson Laboratory

**Zebrafish Models of Human Cancer: Dissection of Cancer Cell Dependencies Using Genetic and Chemical Approaches**  
A. Thomas Look, M.D., Harvard Medical School, Dana-Farber Cancer Institute (Not Confirmed)

**Lecture Title TBA**  
Gary Ren, Ph.D., The Jackson Laboratory

**Human Pancreatic Cancer Insights from Model Systems**  
David Tuveson, M.D., Ph.D., Cold Spring Harbor Laboratory

**Modeling Oral Cancer: Genomic Landscape and Tumor Ecosystem**  
Fiona Watt, Ph.D., King’s College London

**Patient-Derived Models for Functional Precision Oncology in Advanced Breast Cancer**  
Alana Welm, Ph.D., University of Utah, Huntsman Cancer Institute

Schedule is subject to change
Friday, August 27

**Live Sessions**

11:00 am – 12:00 pm  **Panel Discussion: Cancer Models**  
Presented By: Gary Churchill, Thomas Look, Gary Ren, David Tuveson, Fiona Watt, Alana Welm  
Moderated By: JAX CompSci

12:00 pm – 1:00 pm  **Faculty Q&A**

2:00 pm – 3:00 pm  **Panel Discussion: Computational Science**  
Presented By: JAX CompSci

3:00 pm – 4:00 pm  **Closing Discussion**  
Presented By: Andrea Califano, Guo-cheng Yuan, David Van Valen, Yinyin Yuan, Jeffrey Chuang

**Recommended On-Demand Content**

**Lecture Title TBA**  
Andrea Califano, Ph.D., Columbia University

**Classifying Cancers from Images and Sequence Data**  
Jeff Chuang, Ph.D., The Jackson Laboratory

**Lecture Title TBA**  
Joe Gray, Ph.D., Oregon Health and Science University

**Untangling the -omic Consequences of Somatic Variants with Machine Learning**  
Casey Greene, Ph.D., University of Colorado School of Medicine

**Lecture Title TBA**  
David Van Valen, Ph.D., California Institute of Technology

**Lecture Title TBA**  
Guo-Cheng Yuan, Ph.D., Icahn School of Medicine at Mount Sinai

**Lecture Title TBA**  
Yinyin Yuan, Ph.D., The Institute of Cancer Research

Schedule is subject to change
This event is supported by the National Cancer Institute of the National Institutes of Health under Award Number R25CA122819, and by funding to The Jackson Laboratory Cancer Center, Award Number P30CA034196. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Platinum Level Sponsors

Gold Level Sponsors

Silver Level Sponsors

Bronze Level Sponsors

Schedule is subject to change