VIRTUAL | 29th Annual Short Course on Experimental Models of Human Cancer
August 17 – 28, 2020

Registered Attendees will receive access to our Canvas LMS approximately two weeks in advance of the course. Pre-recorded content will be available on initial login to Canvas. Each day of the course, additional pre-recorded lectures will be uploaded with live afternoon sessions for Q&A with speakers, Keynote Lectures, and Workshops. The times of all live sessions are shown in Eastern Daylight Time, and will be available on-demand 48 hours after session. Each pre-recorded lecture will be approximately 60 minutes in length.

Schedule is Subject to Change

Monday, August 17

PRE-RECORDED CONTENT
To be released August 13th @ 4pm

Introduction to Cancer
Edison Liu, M.D., The Jackson Laboratory

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

Inflammation and Cancer: Good Cells Behaving Badly
Lisa Coussens, Ph.D., Oregon Health and Sciences University

Exploiting Metabolic Stress in Cancer Treatments
Tak Mak, Ph.D., University Health Network, Princess Margaret Cancer Centre
Tuesday, August 18

PRE-RECORDED CONTENT
To be released August 14th @ 4pm

Homeostatic Mechanisms Control The Partnership of Dormant DCCs and Adult Stem Cell Niches
Julio Aguirre-Ghiso, Ph.D., Icahn School of Medicine at Mount Sinai

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

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

High-dimensional Immune Monitoring in Cancer Immunotherapy to Find New Predictive or Prognostic Biomarkers
Sacha Gnjatic, Ph.D., Icahn School of Medicine at Mount Sinai

LIVE SESSIONS

11:00 am – 1:00pm  Panel Discussion: Mechanisms of IO Resistance & Q&A Session With Faculty

Presented by: Lisa Coussens, Tak Mak, Elaine Pinheiro, Mario Sznol & Ira Mellman
Moderator: Ira Mellman
Wednesday, August 19

PRE-RECORDED CONTENT
To be released August 17th @ 4pm

Induction of Adaptive Immunity
Stephanie Eisenbarth, Ph.D., Yale University

Human Dendritic Cells in the High-dimensional Era
Juliana Idoyaga, Ph.D., Stanford University

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

Innate Lymphoid Cells in Biology
Marco Colonna, M.D., Washington University School of Medicine

Tools for T Cells: Infection and Cancer
Mark Davis, Ph.D., Stanford University

LIVE SESSIONS

11:00 am – 1:00 pm Panel Discussion: Immune Mechanisms of Metastatic Disease & Q&A Session With Faculty

Presented by: Julio Aguirre-Ghiso, James Alvarez, Sacha Gnjatic & M. Soledad Sosa
Moderators: Lisa Coussens, M. Soledad Sosa & Francesca Menghi

2:00 pm Lecture: Advanced Dynamic and Static Optical Imaging Methods for Exploration of Tumor-Immune System Interactions
Ronald Germain, M.D., Ph.D., National Institutes of Health
Thursday, August 20

PRE-RECORDED CONTENT
To be released August 18th @ 4pm

Clinical Cancer Immunotherapy – An Introduction
Mario Sznol, M.D., Yale University

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

Designing Therapeutic Cancer Vaccines for Natural and Synthetic T cells
Darrell Irvine, Ph.D., Massachusetts Institute of Technology

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

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

The Power of ONE: Immunology in the Age of Single Cell Genomics
Ido Amit, Ph.D., Weizmann Institute of Science

LIVE SESSIONS

11:00 am – 1:00 pm  Panel Discussion: Antigen Presentation & Q&A Session With Faculty

Presented by: Marco Colonna, Mark Davis, Stephanie Eisenbarth, Ronald Germain, Juliana Idoyaga & Adam Williams
Moderators: Juliana Idoyaga & Jan Martinek

2:00 pm  Virtual Poster Session
Friday, August 21

PRE-RECORDED CONTENT
To be released August 19\textsuperscript{th} @ 4pm

**Fundamentals of Genomics and Immunogenetics**
Elaine Mardis, Ph.D., \textit{Nationwide Children's Hospital}

**Alternative RNA Splicing Defects in Cancer: Molecular and Therapeutic Insights From Model Systems**
Olga Anczukow, Ph.D., \textit{The Jackson Laboratory}

**RNA Isoforms in Cancer Diagnosis and Therapy**
Jacques Banchereau, Ph.D., \textit{The Jackson Laboratory}

**Opposing Roles of Interferon and Pattern Recognition Receptor Signaling in Cancer and Cancer Immunology**
Andy Minn, M.D., \textit{Pennsylvania State University}

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

**Workshop: cBio Portal for Cancer Genomics**
Carol Bult, Ph.D., \textit{The Jackson Laboratory}

LIVE SESSIONS

11:00 am – 1:00 pm  **Panel Discussion: Regulation of Immune Responses & Q&A Session With Faculty**

Presented by: Mark Davis, Darrell Irvine, Matthew Krummel, Dan Littman, Ira Mellman, Virginia Pascual, Elaine Pinheiro & Mario Sznol

Moderators: Lucas Chang & Mario Sznol

2:00 pm  **Attendee Short Talks**
Monday, August 24

PRE-RECORDED CONTENT
To be released August 21st @ 4pm

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

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

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

LIVE SESSIONS

11:00 am – 1:00 pm   Panel Discussion: Harnessing Transcriptome for Therapy & Q&A with Faculty
Presented by: Olga Anczukow, Andy Minn & Duygu Ucar
Moderators: Olga Anczukow & Duygu Ucar

2:00 pm   Workshop: Single Cell RNAseq
Paul Robson, Ph.D., The Jackson Laboratory
Tuesday, August 25

PRE-RECORDED CONTENT
To be released August 23rd @ 4pm

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

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 University

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

Use of Animal Models to Design Strategies to Overcome Resistance to Immune Checkpoint Blockade
Taha Merghoub, Ph.D., Memorial Sloan Kettering Cancer Center

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

Tumor Microenvironment and Cancer Immunity
David DeNardo, Ph.D., Washington University School of Medicine

LIVE SESSIONS

11:00 am – 1:00 pm      Panel Discussion: Genomics of Cancer & Q&A With Faculty

Presented by: Christine Beck, Sheng Li, Elaine Mardis, & Roel Verhaak
Moderators: Jeffrey Chuang, Elaine Mardis & Christine Beck

2:00 pm
Workshop: Data Analysis and Resources for Patient-Derived Cancer Models
Jeffrey Chuang, Ph.D., The Jackson Laboratory
Mike Lloyd, Ph.D., The Jackson Laboratory
Soner Koc, Seven Bridges Genomics
Wednesday, August 26

PRE-RECORDED CONTENT
To be released August 24th @ 4pm

Emerging Models of Humanized Mice for Cancer Research
Lenny Shultz, Ph.D., The Jackson Laboratory

Creating Treatment Strategies for Poor Prognosis Acute Myeloid Leukemia
Fumihiko Ishikawa, M.D., Ph.D., RIKEN

DAB-2 Expressing TAMs Promote Cancer Cell Invasion
Vincenzo Bronte, Ph.D., University of Verona

Impact of Dendritic Cells on Anti-tumor Immunity
Stefani Spranger, Ph.D., Massachusetts Institute of Technology

Reprogramming the Tumor Microenvironment to Enhance Cancer Treatment: Bench to Bedside
Rakesh K. Jain, Ph.D., Harvard Medical School

LIVE SESSIONS

11:00 am – 1:00 pm  Panel Discussion: From Clinic to Models & Q&A with Faculty

Presenters: David DeNardo, Matthew Krummel, Marcus Bosenberg, Michael Karin, Taha Merghoub, Katerina Politi & David Tuveson
Moderators: Marcus Bosenberg & Gary Ren

2:00 pm  Coffee Hour: Grantwriting for Impact
Anna Lisa Lucido, Ph.D., PMP, The Jackson Laboratory

3:00 pm  Coffee Hour: Manuscripts: Writing, Improving and Publishing Your Manuscript – Tips For Early Career Scientists
Iiro Taneli Helenius, M.S., Ph.D., The Jackson Laboratory
Thursday, August 27

PRE-RECORDED CONTENT
To be released August 25th @ 4pm

Zebrafish Models of Human Cancer: Dissection of Cancer Cell Dependencies Using Genetic and Chemical Approaches
Thomas Look, M.D., Harvard Medical School, Dana-Farber Cancer Institute

Zebrafish Avatars of Human Cancer
David Langenau, Ph.D., Harvard Stem Cell Institute

3D Bioprinting the Cancer Microenvironment
Tarik Ozbolat, Ph.D., Pennsylvania State University

CRISPR Technologies for Genome, Epigenome and Transcriptome
Albert Cheng, Ph.D., The Jackson Laboratory

Modeling Epigenetic Dysregulation in Pediatric High-Grade Glioma
Suzanne Baker, Ph.D., St. Jude Children’s Research Hospital

Implementing Precision Medicine in Pediatric Oncology: Challenges and Opportunities
Ching Lau, M.D., Ph.D., The Jackson Laboratory

LIVE SESSIONS

11:00 am – 1:00 pm  
Panel Discussion: In Vivo Cancer Models & Q&A with Faculty

Presenters: Vincenzo Bronte, Fumihiko Ishikawa, Rakesh Jain, Lenny Shultz & Stefani Spranger
Moderators: Rakesh Jain & Chun Yu

2:00 pm  
Maine Cancer Genomics Initiative and Ethics in Human Cancer Research
Jens Rueter, M.D., The Jackson Laboratory
Friday, August 28

LIVE SESSIONS

11:00 am – 1:00 pm  Panel Discussion: Cancer Models & Q&A with Faculty

Presenters: Suzanne Baker, Alberg Cheng, David Langenau, Ching Lau, Thomas Look & Tarik Ozbolat
Moderators: Suzanne Baker & Olga Anczukow

2:00 pm – 4:00 pm  Closing Panel Discussion: Quo Vadis Cancer Research

Presenters: Julio Aguirre-Ghiso, Jacques Banchereau, Marcus Bosenberg, Vincenzo Bronte, Lisa Coussens, Michael Karin, Matthew Krummel, Edison Liu, Elaine Mardis, Ira Mellman, Stefani Spranger & Mario Sznol
Moderator: Karolina Palucka

- End -