KEYSTONE SYMPOSIA
on Molecular and Cellular Biology
Autophagy: Mechanisms and Disease (EK7)
October 5-8, 2020 • Virtual at your computer
Scientific Organizers: Patricia Boya, Felix Randow and Masaaki Komatsu
Part of the Keystone Symposia Global Health Series, supported by the Bill & Melinda Gates Foundation
Sponsored by Astellas Pharma Inc., AstraZeneca and Cell Research

MONDAY, OCTOBER 5
Welcoming Remarks and Keynote Address: Beth Levine Lecture (6am Denver/Mountain Time Start)
*Patricia Boya, Centro de Investigaciones Biológicas, CSIC, Spain
Eric H. Baehrecke, University of Massachusetts Medical School, USA
Autophagy, Mitochondria and Disease

Mini Symposium to Honor Beth Levine (6:35am Denver/Mountain Time Start)
*Patricia Boya, Centro de Investigaciones Biológicas, CSIC, Spain
*Eric H. Baehrecke, University of Massachusetts Medical School, USA
Herbert (Skip) W. Virgin, Vir Biotechnology, USA
Beth Levine: A Legacy of Science, Collaboration, Community and Mentorship
Ana Maria Cuervo, Albert Einstein College of Medicine, USA
Beth Levine: A Legacy of Science, Collaboration, Community and Mentorship
Malene Hansen, Sanford Burnham Prebys Medical Discovery Institute, USA
Beth Levine: A Legacy of Science, Collaboration, Community and Mentorship
Xiaonan Dong, University of Texas Southwestern Medical Center, USA
Short Talk: Role of Sorting Nexins in Virophagy
Yang Liu, University of Texas Southwestern Medical Center, USA
Short Talk: Crosstalk between TLR9 and Beclin 1 in Muscle
Salwa Sebti, University of Texas Southwestern Medical Center, USA
Short Talk: Role of Autophagy and Beclin 1 in Aging

New Insights into the Molecular Regulation of Autophagy (8am Denver/Mountain Time Start)
*Felix Randow, Medical Research Council, UK
David C. Rubinsztein, Cambridge Institute for Medical Research, UK
A DNM2 Centronuclear Myopathy Mutation Reveals a Link between Recycling Endosome Scission and Autophagy
*Fulvio Reggiori, University Medical Centre Groningen, Netherlands
Molecular Regulation of Autophagosome Formation
Noboru Mizushima, University of Tokyo, Japan
Molecular Mechanism of Large-Scale Organelle Degradation in the Lens

Poster Session 1 (11am Denver/Mountain Time Start)

TUESDAY, OCTOBER 6
Selective and Non-Canonical Autophagy (6am Denver/Mountain Time Start)
Ana Maria Cuervo, Albert Einstein College of Medicine, USA
Chaperone Mediated Autophagy
*Richard J. Youle, NINDS, National Institutes of Health, USA
Mitophagy
*Anne Simonsen, University of Oslo, Norway
Regulation of Autophagy by Lipid-Binding Proteins
Martin McMahon, University of Utah School of Medicine, USA
Combined Targeting of RAS Signaling Plus Autophagy as a Future Treatment Strategy for Cancer
Patricia Boya, Centro de Investigaciones Biológicas, CSIC, Spain
New Links between Autophagy and Developmental Cell Death
Jennifer Martinez, NIEHS, National Institutes of Health, USA
Non-Canonical Autophagy Mediates Immunotolerant Mechanisms
Andrea KH Stavoe, 275.00
Short Talk: Aging Represses Autophagosome Biogenesis but not Autophagosome Transport or Maturation in Neurons
Caroline Mauvezin, 150.00
Short Talk: Autophagy and Lysosomal Degradation Ensure Accurate Chromosomal Segregation to Prevent Genomic Instability
Chris Shoemaker, 275.00
Short Talk: Receptor-Mediated Clustering of FIP200 Bypasses the Role of LC3 Lipidation in Autophagy
Yasuhiro Yamamoto, 150.00
Short Talk: Selective Autophagy of NEK9 Regulates Primary Cilia Formation

Meet the Editors (11am Denver/Mountain Time Start)
Sadaf Shadan, Nature, UK
Stella M. Hurley, Science, UK
Elisabetta Argenzio, EMBO Journal, Germany
Petra Gross, 275.00

WEDNESDAY, OCTOBER 7
Autophagy and Organelle Crosstalk (6am Denver/Mountain Time Start)
Ivan Dikic, Goethe University Medical School, Germany
ER-Phagy
*Alicia Melendez, Queens College - CUNY, USA
Autophagy in Germline Development
Rosa Puertollano, NHLBI, National Institutes of Health, USA
Emerging New Roles of Lysosomes in Cellular Response to Stress
Felix Randow, Medical Research Council, UK
Autophagy and Bacterial Infection
Tassula Proikas-Cezanne, University of Tuebingen, Germany
Regulation of WIP1 Beta-Propeller Function in Autophagy

* Session Chair † Invited but not yet accepted  Program current as of September 17, 2021.
For the most up-to-date details, visit https://www.keystonesymposia.org.
**Masaaki Komatsu**, Juntendo University School of Medicine, Japan  
*ER-phagy Mediated by the Ufm1-System*

**Carmine Settembre**, 275.00  
Short Talk: *Selective Autophagy of the Endoplasmic Reticulum (ER-phagy): From Cellular Functions to Signalling Regulation*

**Paul J. Wrighton**, Brigham and Women’s Hospital, USA  
Short Talk: *Live and Quantitative Imaging Reveals in vivo Dynamics and Molecular Basis of Physiological-Stress Induced Mitophagy*

**Thanh N. Nguyen**, 275.00  
Short Talk: *Atg4 Family Proteins Drive Phagophore Growth Independently of the LC3/GABARAP Lipidation System*

**Jennifer Martinez**, NIEHS, National Institutes of Health, USA  
Alicia Melendez, Queens College - CUNY, USA  
Leon O. Murphy, Casma Therapeutics, USA

**THURSDAY, OCTOBER 8**

**Autophagy and Disease, New Therapeutic Opportunities (6am Denver/Mountain Time Start)**

*Patricia Boya*, Centro de Investigaciones Biológicas, CSIC, Spain  
*Guido Kroemer*, Cordeliers Research Center, France  
*Anna Katharina Simon*, University of Oxford, UK  
*Hong Zhang*, Chinese Academy of Sciences, China  
*Martin Graef*, Max Planck Institute for Biology of Aging, Germany  
*Leon O. Murphy*, Casma Therapeutics, USA  
*Herbert (Skip) W. Virgin*, Vir Biotechnology, USA

**Autophagy and Obesity**

**Cell-Extrinsic Role of Autophagy in Inflammation**

**Inositol Polyphosphate Multikinase Inhibits Liquid-Liquid Phase Separation of TFEB to Regulate Autophagy Activity**

**New Mechanistic Insight into the Regulation of TFEB at the Lysosome**

**New Therapies for Infectious Diseases**

**Aditya Murthy**, 275.00  
Short Talk: *Multiplexed Proteomics in Macrophages Uncovers Novel Roles of Autophagy in Anti-Microbial Immunity*

**Yasin Dagdas**, 275.00  
Short Talk: *A Cross-Kingdom Conserved ER-Phagy Receptor Maintains Endoplasmic Reticulum Homeostasis during Stress*

**Yanxiang (Jessie) Guo**, 275.00  
Short Talk: *Autophagy Compensates for Lkb1 Loss to Maintain Adult Mice Homeostasis and Survival*

**Nicolas Dupont**, 275.00  
Short Talk: *The Primary Cilium and Lipophagy Translate Mechanical Forces to Direct Metabolic Adaptation of Kidney Epithelial Cells*

**Closing Remarks (Organizers) (10am Denver/Mountain Time Start)**