



MEETING AGENDA

Phase Separated Assemblies in Cell Biology

The Banbury Center, Cold Spring Harbor Laboratory, New York, USA
December 16-19, 2018

This meeting was funded by the
Cold Spring Harbor Laboratory Corporate Sponsor Program

Organizers:

Arup K. Chakraborty, Massachusetts Institute of Technology;
Geraldine Seydoux, Johns Hopkins University;
Richard Young, Whitehead Institute for Biomedical Research;
with Consulting Organizer, Phillip Sharp, Koch Institute for Integrative Cancer Research

This Banbury meeting brought together an interdisciplinary group of experts to: review functions and types of phase-separated assemblies in biology; develop a common conceptual framework and nomenclature; identify molecular code characteristics underlying assemblies; consider pathologies caused by aberrant phase-separated assemblies; and examine manipulation of phase-separated assemblies as a novel treatment target.

SUNDAY, DECEMBER 16

Afternoon Participant arrivals

6:00 pm Reception, dinner

MONDAY, DECEMBER 17

7:15 am Breakfast at Robertson House

8:30 am Welcoming and Introductory Remarks

Rebecca Leshan, The Banbury Center, Cold Spring Harbor Laboratory

Arup Chakraborty, Massachusetts Institute of Technology, Cambridge, USA

Geraldine Seydoux, Johns Hopkins University, Baltimore, USA

Rick Young, Whitehead Institute for Biomedical Research, Cambridge, USA



8:45 am SESSION 1: Physical Principles

Clifford Brangwynne, Princeton University, Princeton, USA

Arup Chakraborty, Massachusetts Institute of Technology, Cambridge, USA

Chiu Fan Lee, Imperial College London, London, UK

Christine Keating, Pennsylvania State University, University Park, USA

Tim Nott, University of Oxford, UK

Eric Siggia, Rockefeller University, New York, USA

12:30 pm Luncheon at Robertson House

2:00 pm SESSION 2: Molecular Determinants

Tanja Mittag, St Jude Children's Research Hospital, Memphis, USA

Julie Forman-Kay, Hospital for Sick Children, Toronto, Canada

Tony Hyman, Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany

Rohit Pappu, Washington University in St. Louis, USA

Rob Tycko, National Institutes of Health, Bethesda, USA

Steve McKnight, University of Texas Southwestern Medical Center, Dallas, USA

5:30 pm General Discussion and End of Day Wrap-Up

6:00 pm Reception, dinner

TUESDAY, DECEMBER 18

7:15 am Breakfast

8:30 am SESSION 3: Imaging Dynamics

Xavier Darzacq, University of California, Berkeley, USA

Ibrahim Cissé, Massachusetts Institute of Technology

Michael Botchan, University of California, Berkeley

Roy Parker, University of Colorado & Howard Hughes Medical Institute, Boulder, USA

Ruth Lehmann, New York University School of Medicine, New York, USA

Geraldine Seydoux, Johns Hopkins University, Baltimore, USA

12:15 pm Luncheon at Robertson House



1:45 pm SESSION 4: Function

Rick Young, Whitehead Institute for Biomedical Research, Cambridge, USA
Geeta Narlikar, University of California, San Francisco, USA
Sara Cuylen-Häring, European Molecular Biology Laboratory, Heidelberg, Germany
Christine Mayr, Memorial Sloan Kettering Cancer Center, New York, USA
Pietro De Camilli, Yale University, New Haven, USA
Sabine Petry, Princeton University, Princeton, USA

5:15 pm General Discussion and End of Day Wrap-Up

6:00 pm Reception, dinner

WEDNESDAY, DECEMBER 19

7:15 am Breakfast

8:30 am SESSION 5: Ensemble Properties

Benjamin Tu, University of Texas Southwestern Medical Center, Dallas, USA
Paul Taylor, St. Jude Children's Research Hospital, Memphis, USA
Derek Lowe, Novartis Institutes for BioMedical Research, Cambridge, USA

10:30 am SESSION 6: Meeting Wrap-Up

Meeting wrap-up, conclusions, and next steps

12:15 pm Luncheon

Participant departures

— END OF PROGRAM —



MEETING PARTICIPANTS

Michael Botchan, University of California, Berkeley
Clifford Brangwynne, Princeton University
Arup K. Chakraborty, Massachusetts Institute of Technology
Ibrahim Cissé, Massachusetts Institute of Technology
Sara Cuylen-Häring, European Molecular Biology Laboratory
Xavier Darzacq, University of California, Berkeley
Pietro De Camilli, Yale University
Julie Forman-Kay, Hospital for Sick Children
Anthony Hyman, Max Planck Institute of Molecular Cell Biology and Genetics
Christine Keating, Pennsylvania State University
Chiu Fan Lee, Imperial College London
Ruth Lehmann, New York University School of Medicine
Derek Lowe, Novartis Institutes for BioMedical Research
Christine Mayr, Memorial Sloan Kettering Cancer Center
Steven McKnight, University of Texas Southwestern Medical Center
Tanja Mittag, St. Jude Children's Research Hospital
Geeta Narlikar, University of California, San Francisco
Timothy Nott, University of Oxford
Rohit Pappu, Washington University in St. Louis
Roy Parker, University of Colorado & HHMI
Sabine Petry, Princeton University
Geraldine Seydoux, Johns Hopkins University
Phillip Sharp, Koch Institute for Integrative Cancer Research
Eric Siggia, Rockefeller University
Bruce Stillman, Cold Spring Harbor Laboratory
Paul Taylor, St. Jude Children's Research Hospital
Benjamin Tu, University of Texas Southwestern Medical Center
Robert Tycko, National Institute of Health
Valda Vinson, Science