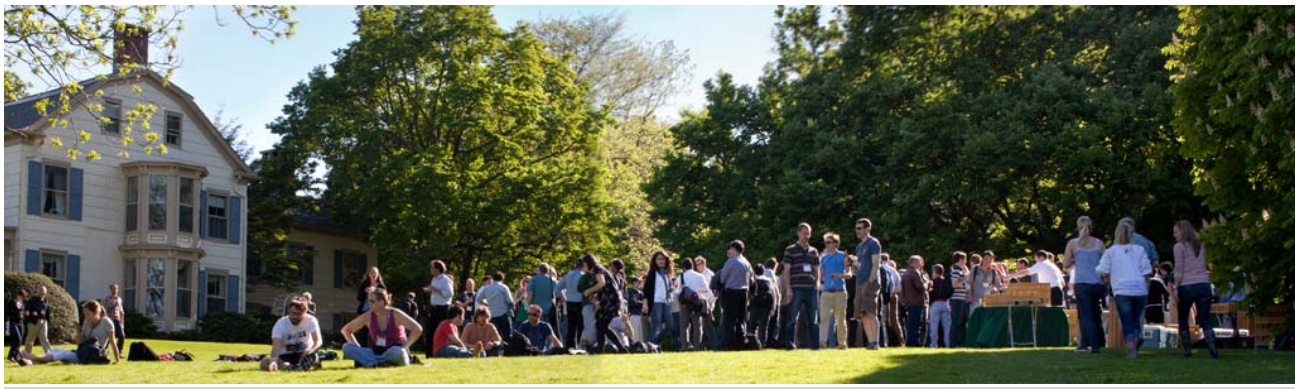
Cold Spring Harbor Laboratory
MEETINGS & COURSES PROGRAM



CELL BIOLOGY OF YEASTS

November 3 - 7, 2015

Abstract Deadline: September 11, 2015

Organizers:
Martha Cyert, *Stanford University* Daniel Lew, *Duke University* Kenneth Sawin, *University of Edinburgh, UK*

You are cordially invited to participate in the fifteenth biannual international meeting on yeast cell biology which will be held at Cold Spring Harbor Laboratory. The meeting will begin at 7.30pm (after dinner) on Tuesday, November 3, and will conclude with lunch on Saturday, November 7, 2015. The format of the meeting will include morning and evening sessions consisting of short talks, limited to approximately 12 minutes, principally on unpublished work. This meeting will cover all aspects of yeast cell biology, including, but not limited to, the following topics:

Keynote Speaker:
Susan Lindquist, Whitehead Institute for Biomedical Research

Topics & Discussion Leaders:

Spatial and Temporal Control Mechanisms
Jay Dunlap, Dartmouth Medical School
Iva Tolic, Ruder Boškovic Institute

Signal Transduction
Ray Deshaies, California Institute of Technology
Francesc Posas, Universitat Pompeu Fabra, Spain

Actin/Polarity
Sophie Martin, University of Lausanne
Iain Hagan, University of Manchester

Microtubules/Mitosis
Adele Marston, University of Edinburgh
Silke Hauf, Virginia Tech

Cell Cycle Control
Mart Loog, University of Tartu
Jan Skotheim, Stanford University

Nucleus/Organelles
Susan Lindquist, Whitehead Institute for Biomedical Research
Yasushi Hiraoka, Osaka University

Membrane Traffic
Lois Weisman, University of Michigan
Tony Bretscher, Cornell University

Abstracts should contain only new and unpublished material and must be submitted electronically by the

Functional analysis of the Sec62 C-terminal domain in membrane protein biogenesis

Sung-jun Jung[1], Hyun Kim[1]
[1]Seoul National University, , Seoul, South Korea

About 30 % of proteome in yeast are targeted to the endoplasmic reticulum (ER) membrane either by the signal recognition particle (SRP)-dependent pathway or the SRP-independent pathway. In the SRP-independent pathway, an essential protein Sec62p cooperates with Sec61p, a main protein conducting channel for the ER targeted membrane and secretory proteins. However, the molecular mechanism of Sec62p in this process has not been elucidated in detail.
The cytosolic C-terminal domain of Sec62p has been proposed as an acceptor site for N-terminal signal sequences of secretory proteins. To further study the role of the C-terminus of Sec62p in membrane protein biogenesis, C-terminal mutants of Sec62p were prepared and the membrane insertion of model membrane proteins was examined. We found that P219A mutation reduced the C-terminal translocation of model membrane proteins, suggesting that the C-terminus of Sec62p may function on the insertion of membrane proteins into the ER membrane. In addition, we probe for the site of physical interaction between Sec62p and the substrate proteins using a site-specific cross-linking approach.