Mina J. Bissell, Ph.D.

Distinguished Scientist, Life Sciences Division Faculty, Comparative Biochemistry, UC Berkeley Ernest Orlando Lawrence Berkeley National Laboratory



Dr. Bissell is a pioneer in the role of ECM and microenvironmental regulation of gene expression; she changed established paradigms. She earned her degrees in Chemistry and Bacterial Genetics from Harvard. She was Director of all Life Sciences at LBNL, where she is now Distinguished Scientist (one of only three and the only woman). Dr. Bissell has more than 320 publications, is on the editorial board of many journals, includ-

ing Science, and has given more than 95 named/distinguished lectures. Her awards include the Lawrence medal, the Mellon Award, the AACR's Eli Lilly/Clowes Award, the first "Innovator Award" of the US DOD for breast cancer, the Brinker Award from Komen Foundation, the Discovery Health Channel Medical Honor and medal, the Pezcoller Foundation–AACR International Award for Cancer Research, and the Inserm 2007 Foreign Award. In 2008, she received the Excellence in Science Award from FASEB, the American Cancer Society's Medal of Honor and had an award named after her in Portugal. She was elected to AAAS, the IOM, the American Academy of Arts and Sciences, and the American Philosophical Society. She was President of the American Society of Cell Biology and has received honorary doctorates from Paris and Copenhagen.



Gerstner Sloan-Kettering Graduate School of Biomedical Sciences

INAUGURAL RETREAT April 30, 2010 To May I, 2010

Marc W. Kirschner, Ph.D.

Professor & Chair, Department of Systems Biology John Franklin Enders University Professor Harvard Medical School



Marc W. Kirschner, Ph.D. graduated from Northwestern University in 1966 and received his Ph.D. from the University of California, Berkeley in 1971. Following postdoctoral research at Berkeley and at the University of Oxford, he was appointed as Assistant Professor at Princeton University in 1972 and full Professor in 1978. In 1978, he moved to the Department of Biochemistry and Biophysics at the University of California, San Francisco

as a Professor. After fifteen years at the University of California, San Francisco, Dr. Kirschner moved to Harvard Medical School in 1993 to become the founding Chair of the Department of Cell Biology. In 2003, he established the Department of Systems Biology at Harvard Medical School and became its first Chair. He was recently named University Professor, Harvard's highest professorial distinction.

Dr. Kirschner is a member of the National Academy of Sciences and the American Academy of Arts and Sciences, Foreign Member of the Royal Society of London and the Academia Europaea. He has received numerous honors and awards. Kenneth J. Marians

Thomas J. Kelly PROVOST

Harold Varmus PRESIDENT

Gerstner Sloan-Kettering Graduate School of Biomedical Sciences

Memorial Sloan-Kettering Cancer Center

Mohonk Mountain House New Paltz, New York

Friday April 30, 2010

9:45am – IO:00am OPENING REMARKS: Kenneth J. Marians

IO:OOam – II:3Oam SESSION I: Student & Faculty talks

II:30am – II:45am BREAK

II:45am – I:00pm SESSION II: Student & Faculty talks

I:OOpm – 2:I5pm LUNCH West Dining Room

2:30pm – 3:35pm session III: Student & Faculty talks

3:35pm – 3:45pm вкеак

3:45pm – 4:45pm KEYNOTE: Mina J. Bissell

4:45pm FREE TIME

6:30pm – 8:00pm DINNER: Remarks by Harold Varmus West Dining Room

8:15pm – 9:30pm Poster session

9:30pm

Saturday May I, 2010

7:00am – 9:30am BREAKFAST Carriage Lounge/Main Dining Room

9:30am – II:IOam SESSION IV: Student & Faculty talks

II:IOam – II:25am BREAK

II:25am – I2:25pm KEYNOTE: Marc W. Kirschner

I2:30pm – I2:50pm WRAP-UP: Larry Norton

I2:50pm – I:00pm CLOSING REMARKS: Thomas J. Kelly

I:ISpm LUNCH/FREE TIME

4:00pm BUS DEPARTS FOR MSK

All Sessions are held at the Conference House

Session I

MODERATOR: Eric S. Alonzo

Mark G. Frattini, Medicine The Journey from Target Identification to Drug Discovery to Clinical Development: The Cdc7 Story

Dimiter V. Tassev, Pediatrics Targeting neuroblastoma using a GD2-specific scFv-Fc fusion protein

Nicholas Gauthier, Computational Biology Combinatorial perturbations of GBM tumorspheres

Eric G. Pamer, Immunology, Medicine Intestinal commensal microbes and mammalian immune defenses

Session II

MODERATOR: Eric S. Alonzo

Eric S. Alonzo, Immunology Aligning pathways towards an integrated map of cellular processes

Eric Lai, Developmental Biology Transcriptional and post-transcriptional control of nervous system development

Shannon F. Yu, Developmental Biology Cellular and molecular events regulating myoblast fusion in mammals

Yvonne Gruber Mica, Developmental Biology Directed differentiation and prospective isolation of human embryonic stem cell derived melanocytes

Session III

MODERATOR: Karen E. Hunter

Eric C. Holland, Cancer Biology & Genetics, Neurosurgery What does it mean to model cancer in mice?

Semanti Mukherjee, Cancer Biology & Genetics Evaluating statistical power of shared controls in genome wide association studies

Karen E. Hunter, Cancer Biology & Genetics The role of heparanase in promoting tumor progression in the *RIP1-Tag2* model of pancreatic islet carcinogenesis

Keynote

Mina J. Bissell Genes and the microenvironment: the two faces of breast cancer

Session IV

MODERATOR: John Maciejowski

Simon N. Powell, Molecular Biology, Radiation Oncology Homologous recombination in human cancers: Lessons from breast cancer development and treatment

James A. Dowdle, Molecular Biology Mouse SPO11 interacting partners: In search of meiotic doublestrand break proteins

Alexandria N. Miller, Structural Biology Structural studies and characterization of a eukaryotic two-pore domain potassium channel

Jeffery R. Smith, Cell Biology The role of Rho GTPases in breast cancer invasion and proliferation

John Maciejowski, Molecular Biology The MPS1 protein kinase controls the cytosolic and kinetochoreresident branches of the spindle checkpoint in human cells

Keynote

Marc W. Kirschner How the wnt pathway responds to signals

Wrap-up

INTRODUCTION: Kenneth J. Marians

Larry Norton, Medicine How clinicians and scientists view the world