DISTINGUISHED LECTURE in BIOLOGICAL ENGINEERING

“Reprogramming Stem Cell Fate”

Thursday – June 4, 2015 – 10:15 a.m.
EPFL – room SV1717a

Prof. Helen M. Blau
Baxter Laboratory for Stem Cell Biology,
School of Medicine, Stanford University, Stanford, CA (USA)

host: Prof. Matthias Lutolf

About the speaker:

Dr. Blau received her B.A. from University of York in England and her M.A. and Ph.D. from Harvard University. She is currently the Donald E. and Delia B. Baxter Professor and Director of the Baxter Laboratory for Stem Cell Biology in the Microbiology and Immunology Department and the Stanford Institute for Stem Cell Biology and Regenerative Medicine in the Stanford University School of Medicine, Stanford, California. Dr. Blau served on the Ellison Medical Foundation Scientific Advisory Board and the Harvard Board of Overseers and is an elected member of the American Academy of Arts and Sciences, the Institute of Medicine of the National Academy of Sciences and a fellow of the American Association for the Advancement of Science. Awards and honors include the Senior Career Recognition Award of WICB of the American Society of Cell Biology; the FASEB Excellence in Science Award; an Honorary Doctorate from the University of Nijmegen, Holland; a Nobel Forum Lecture at the Karolinska Institute in Stockholm, a Rolf-Sammet-Fonds Visiting Professorship at the University of Frankfurt, an invitation to give a plenary talk at the 400th Pontifical Academy at the Vatican and an audience with Pope John Paul II, and a Fulbright Senior Specialist award to study and teach at the Institut Pasteur and Institut Curie in Paris.

Dr. Blau's research area is regenerative medicine with a focus on stem cells. She is world renowned for her work on nuclear reprogramming and demonstration of the plasticity of cell fate using cell fusion. These studies provided the scientific underpinnings for mammalian cloning and induced pluripotent stem cells. Blau also led the field with novel approaches to treating muscle damaged due to disease, injury, or aging. She pioneered the design of biomaterials to mimic the in vivo microenvironment and direct stem cell fate. A major focus of her current work is the rejuvenation of muscle stem cell function to enhance muscle repair in the aged. Her research has enhanced muscle stem cell based therapies and led to the discovery of novel molecules and therapeutic strategies for the treatment of muscle wasting in disease and aging.

The Blau lab brings together bioscientists, computer scientists, and bioengineers who are interested in everything from the basic mechanisms of disease, to technology development, to clinical translation. The laboratory also collaborates extensively with other researchers. Our overall objective is to understand and apply biology to improve quality of life.

(For further details please visit http://web.stanford.edu/group/blau).

See current Bioengineering seminar calendar at http://bioengineering.epfl.ch/seminars