

WEDNESDAY, OCTOBER 3, 2012, NOBEL FORUM

- 9:00-9:15 Vice President Jan Andersson, Karolinska Institutet
WELCOME ADDRESS

Chairperson: Ernest Arenas
- 9:15-10:00 Keynote Speaker: **Donald Ingber**, Harvard University
MECHANOBIOLOGY TO ORGAN ENGINEERING
- 10:00-10:30 *Coffee break*
- 10:30-11:15 **Stefano Piccolo**, University of Padua
ROLE OF YAP AND TAZ IN MECHANOTRANSDUCTION
- 11:15-12:00 **Jonas Frisén**, Karolinska Institutet
NEW CELLS IN OLD BRAINS

Lunch

Chairperson: Björn Högberg
- 13:30-14:15 **Ali Khademhosseini**, Harvard University
MICROENGINEERED HYDROGELS FOR TISSUE AND STEM CELL
BIOENGINEERING
- 14:15-15:00 **Kristi Anseth**, University of Colorado
SYNTHETIC HYDROGELS AS DYNAMICALLY TUNABLE STEM CELL
CULTURE NICHES

Coffee break
- 15:00-15:30
- 15:30-16:15 **Matthias Lutolf**, École Polytechnique Fédérale de Lausanne
PROBING AND MANIPULATING HEMATOPOIETIC STEM
CELL FATE DECISIONS
- 16:15-17:00 **William Shih**, Harvard University
DNA NANOSTRUCTURE TOOLS FOR BIOPHYSICS AND THERAPEUTICS

THURSDAY, OCTOBER 4, 2012, NOBEL FORUM

- Chairperson: Ola Hermanson
- 9:00-9:45 **Julien Gautrot**, Queen Mary, University of London
MULTI-SCALE GEOMETRIC CONTROL OF CELL BEHAVIOUR
- 9:45-10:30 **Ernest Arenas**, Karolinska Institutet
ENGINEERING DOPAMINERGIC NEURONS WITH CELL EXTRINSIC
FACTORS
- 10:30-11:00 *Coffee break*
- 11:00-11:45 **Ana Teixeira**, Karolinska Institutet
NANOSCALE REGULATION OF RECEPTOR SIGNALLING

Lunch

Chairperson: Anna Herland
- 13:15-14:00 **May Griffith**, Linköping University
BIOMIMETIC MATERIALS AS REGENERATION TEMPLATES
- 14:00-14:45 **Lesley Chow**, Imperial College London
EXPLORING AND ENGINEERING THE CELL-MATERIAL INTERFACE
- 14:45-15:15 *Coffee break*
- 15:15-16:00 **Paolo Macchiarini**, Karolinska Institutet
INTERACTION BETWEEN STEM CELLS AND BIOARTIFICIAL
SCAFFOLDS
- 16:00-16:45 **Olle Lindvall**, Lund University
MOVING STEM CELLS TOWARDS THE CLINIC IN PARKINSON'S
DISEASE