5th Annual Helen L. and Martin S. Kimmel Center for Stem Cell Biology Retreat
May 2, 2016

Schedule at a glance

8:00 am .................... Registration, Breakfast, and Poster setup

8:55 am .................... Welcome and opening Remarks

9:10 am .................... Session I

10:10 am .................. Coffee Break and Poster Viewing

10:40 am .................. Session II

11:20 am .................. Keynote Address I

12:20 pm .................. Slide Blitzes

12:45 pm .................. Lunch and Posters

2:30 pm .................... Session III

4:10 pm .................... Tea and Poster Viewing

5:10 pm .................... Keynote Address II

6:10 pm .................... Poster Prizes and Concluding Remarks
8:00 am .................... Registration, Breakfast, and Poster setup

8:55 am .................... Welcome and opening Remarks

Ruth Lehmann, PhD
Director, Kimmel Center for Stem Cell Biology; Director, Skirball Institute of Biomolecular Medicine. Chair, Dept. of Cell Biology

9:10 am – 10:10 am .................... Session I

Chair: Mayumi Ito, PhD
Depts. of Dermatology and Cell Biology

9:10 am  David Levy, PhD
Assoc Dean Collaborative Science; Depts. of Pathology and Microbiology
“Metabolic regulation by mitochondrial STAT3”

9:30 am  Boris Reizis, PhD
Dept. of Pathology
“Do you need hematopoietic stem cells in the steady state?”
9:50 am  Valentina Snetkova  
Stem Cell Biology Program  
Predoctoral Trainee, Skok Lab;  
NYSTEM Training Grant  
“Active and inactive enhancers co-operate to exert localized and long-range control of gene regulation”

10:10 am – 10:40 am .................. Coffee Break and Poster Viewing

10:40 am – 11:20 am .................. Session II

Chair: Daniel Turnbull, PhD  
Dept. of Radiology and Pathology; Skirball Institute

10:40 am  Jeremy Nance, PhD  
Dept. of Cell Biology; Skirball Institute  
“Assembling a germline stem cell niche in the C. elegans embryo”

11:00 am  Ken Birnbaum, PhD  
NYU Dept. of Biology  
“Fast Forward to Adult Organogenesis or Rewind to Early Development?”
11:20 am – 12:20 pm .......... Keynote Address I

**Fiona Doetsch, PhD**  
Research Group Leader,  
Biozentrum; University of  
Basel, Switzerland

"Novel niche compartments mediate adult neural stem cell quiescence and activation"

Introduced by:  
**Gordon Fishell, PhD**  
Depts. of Neuroscience & Physiology, and Neurology
12:20 pm – 12:45 pm .......... Slide Blitzes

12:45 pm – 2:30 pm .......... Lunch and Posters

2:30pm – 4:10pm .................... Session III

Chair: Erika Bach, PhD
Dept. of Biochemistry and Molecular Pharmacology

2:30 pm  Eva Hernando, PhD
Dept. of Pathology
“Epigenetic regulation of melanoma metastasis”

2:50 pm  David Fenyö, PhD
Dept. of Biochemistry and Molecular Pharmacology
“Quantifying Protein-Protein Interactions by Stochastic Modeling of Super-Resolution Fluorescence Microscopy Images”
3:10 pm  **Juhee Pae**  
Stem Cell Biology Program  
Predoctoral Trainee, Lehmann Lab;  
NCI Training Grant  
*“Targeted protein degradation promotes germ cell lineage specification”*

3:30 pm  **Brian Dynlacht, PhD**  
Dept. of Pathology  
"Transcriptional and epigenetic control of muscle differentiation"

3:50 pm  **Liam Holt, PhD**  
Dept. of Biochemistry and Molecular Pharmacology  
*“GEM nanoparticles reveal that TORC1 controls molecular crowding”*

4:10 pm – 5:10 pm .......... Tea and Poster Viewing
5:10 pm – 6:10 pm ……… Keynote Address II

Paul Frenette, MD
Chair and Director of The Ruth L. and David S. Gottesman Institute for Stem Cell and Regenerative Medicine Research; Professor, Depts. of Medicine (Hematology) and Cell Biology; Albert Einstein College of Medicine, Bronx, NY

“Regulation of hematopoietic stem cell niches by local and long-distance cues”

Introduced by: Matthias Stadtfeld, PhD
Dept. of Cell Biology; Skirball Institute

6:10 pm ...... Poster Prizes and Closing Remarks
Carlos Sanchez, Lehmann Lab
Drosophila Wildtype Testis, zoomed in

Carlos Sanchez, Lehmann Lab
Drosophila Wildtype Testis

Carlos Sanchez, Lehmann Lab
Drosophila Wildtype Ovary

Remi Coux, Lehmann Lab
3rd Instar Drosophila Larval Ovary mosaic for L3mbt loss of function. Red: Vasa, white: Spectrin, Blue: DAPI and Green: GFP. The mutant clonal somatic cells (GFP negative) derepress the germline marker GFP.

Remi Coux, Lehmann Lab
Maturing drosophila egg chamber containing an oocyte surrounded by Nurse and Follicle Cells, white: L3MBT (transcription factor), blue: DAPI (DNA), Red: Spectrin (cytoskeleton).

Begum Aydin, Mazzoni Lab
Expression of pan-neuronal and dopaminergic neuron markers (TuJ1 and TH, respectively) in a mESC-derived embryoid body 48 hours after the induction of Ascl1-Lmx1b-Nurr1 transcription factor combination (VS shows transgene expression).

Evgenia Korol, Tahiliani Lab
HEK cells stained for DNA ("nucRed647" reagent)

Evgenia Korol, Tahiliani Lab
GFP expressing HEK cells