

NIH Center for Regenerative Medicine (NIH-CRM) / Stem Cell Interest Group (SCIG) Stem Cell Research Symposium

July 14, 2011 – All Day Event

Co-sponsors: The NIH Center for Regenerative Medicine and the NIH Stem Cell Interest Group

Location: Ruth Kirschstein Auditorium, Natcher Building (Building 45), NIH Main Campus, Bethesda, Maryland
(Note: Location change from building 31).

Purpose: In conjunction with the NIH Stem Cell Interest Group, the NIH Center for Regenerative Medicine presents a symposium focused on stem cell data from the intramural community and selected collaborators. The program will emphasize projects funded through the NIH Center for Regenerative Medicine pilot award program with translational potential. Attendees will be provided an overview of the status of the regenerative medicine field.

Registration: Please use the following link to register - <http://fmp-8.cit.nih.gov/ncrm-scig/registration.html>

About the Sponsors:

The **NIH Center for Regenerative Medicine** is a Common Fund-supported initiative created to advance stem cell research within the intramural program and move stem cell technology toward clinical applications.

The **NIH Stem Cell Interest Group** was created in 2001 in an effort to facilitate communication between intramural and extramural scientists in the field of stem cell biology. The SCIG is supported by the NHLBI and sponsors the Stem Cell Seminar Series.

Program:

NIH-CRM/SCIG Stem Cell Research Symposium

Natcher Auditorium

8:15 - 9:00am	Welcome: Coffee/Continental Breakfast	
9:00 – 10:30am	Session 1: Leading to Clinical Translation	
	Mahendra Rao, MD, PhD: VP Regenerative Medicine, Life Technologies	Introduction
	Wei Zheng, PhD: Group Leader, Cellular Signaling Assays, NIH Chemical Genomics Center (NCGC)	Synergy of high throughput screening and iPS cell technology for research and drug development
	Cynthia Dunbar, MD: Head, Molecular Hematopoiesis Section, NHLBI	Pre-clinical evaluation of pluripotent/multipotent stem cell- based therapies in non-human primates
	Pamela Robey, PhD: Chief, Craniofacial and Skeletal Diseases Branch, Director, Bone Marrow Stromal Cell Transplantation Center, NIDCR	Moving forward with cell-based therapies at the NIH
10:30-11:00am	Keynote Speaker Francis Collins, MD, PhD: Director, NIH	Keynote Address
11:00-11:15am	Break	
11:15-12:35pm	Session 2: iPSC	
	Paul Liu, MD, PhD: Head, Oncogenesis and Development Section, NHGRI	Whole genome view of DNA sequence variations in human iPS cells generated with an episomal vector

	Bethrice Thompson: Special Volunteer, Hormone Action and Oncogenesis Section, NCI	Characterization of transcriptional regulation in iPS cells
	Oyvind Dahle, PhD: Research Fellow, Laboratory of Protein Dynamics and Signaling, NCI	The role of Nodal signaling in pluripotency and reprogramming
	Kenneth Boheler, PhD: Head, Molecular Cardiology Unit, Cardiac Function Section, NIA	Large-scale identification of N- linked glycoproteins on human pluripotent stem cells and their potential for isolating homogeneous cell populations of therapeutically viable cells

12:35-1:35pm

LUNCH

Lunch on own

1:35-2:55pm	Session 3: Differentiation I	
	Colin Sweeney, PhD: Research Fellow, Laboratory of Host Defenses, NIAID	Zinc finger nuclease mediated safe harbor targeted gene transfer in patient iPSCs functionally corrects X-linked chronic granulomatous disease
	Manfred Boehm, MD: Laboratory of Cardiovascular Regenerative Medicine, NHLBI	Hyper IgE Syndrome: The Stats in wound healing and reprogramming.
	Nicholas Restifo, MD: Tumor Immunology Section, Center for Cancer Research, NCI	Direct reprogramming of anti-tumor T cells in the adoptive immunotherapy of cancer
	Patrick Lynch, PhD: Research Fellow, Division of Cellular and Gene Therapies, CBER/FDA	Chromatin signatures of gene promoters associated with cell identity in bone marrow derived multipotent mesenchymal stromal cells during in vitro expansion

2:55-3:15pm

Break

3:15-4:35pm	Session 4: Differentiation II	
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	Kapil Bharti, PhD: Staff Scientist, Section on Epithelial and Retinal Physiology and Disease [NEI], NINDS	Restoring vision: using iPS cell derived RPE to understand disease mechanisms
	Thyagarajan Subramanian, MD: Director, Movement Disorders Program, The Huck Institutes of Life Sciences, Penn State University	Co-transplantation of retinal pigment epithelial cells with embryonic stem cells in parkinsonsonian rats
	Kevin Francis, PhD: Research Fellow, Section on Mammalian Molecular Genetics, NICHD	Human induced pluripotent stem cells for the study of cholesterol synthesis and trafficking disorders
	Daman Kumari, PhD: Staff Scientist, Gene Structure and Disease Section, NIDDK	Development of iPSCs from fragile X syndrome patients for studying disease mechanisms and screening of potential drugs
	Deborah Hursh, PhD: Division of Cellular and Gene Therapies, CBER/FDA	FDA regulatory perspectives on embryonic and induced pluripotent stem cells

4:35-4:45pm

Closing Remarks

Mahendra Rao, MD, PhD: Summary of oral presentations
VP Regenerative
Medicine,
Life Technologies

Natcher Atrium

4:45-6:30pm

Poster Session

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