

4:09—4:14 pm

Min Jin Lee (L. Challet Meylan / C. Cowan)

Modeling insulin resistance in human pluripotent stem cell-derived endothelial cells

4:15—4:20 pm

K. Yanick Mulumba (T. Meissner / C. Cowan)

Preventing autoreactivity and T-cell inhibition of CAR T cells

4:21—4:26 pm

Danielle Reny (A. Rigamonti / L. Rubin)

Directed differentiation of motor neurons in spin culture

4:27—4:32 pm

Dennis Sun (R. Amamoto / P. Arlotta)

Response to ectopic proliferation induction in the axolotl brain

4:33—4:43 p.m.

Closing remarks

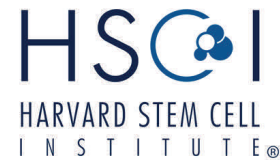
Willy Lensch

4:45—5:15 pm **POSTER PREVIEW and REMOVAL**



5:30—8:00 p.m.

Celebratory Dinner
Cambridge Queen's Head Pub
Mentors and PIs invited



TENTH ANNUAL UNDERGRADUATE INTERNSHIP SYMPOSIUM

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William Anderson, PhD

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*Harvard Stem Cell Institute
extends its sincere thanks to the
undergraduate internship
selection committee
and to the participating
lab mentors, PIs and faculty guests.*

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possible without your support,
engagement and encouragement.*



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FRIDAY
15 AUGUST 2014



HARVARD UNIVERSITY
MAXWELL-DWORKIN
ROOM G115
33 OXFORD STREET
CAMBRIDGE, MA USA

PROGRAM SCHEDULE



Posters on view between
each session break

10:45 am Welcome and introduction
M. William Lensch, PhD | Faculty Co-Director

GROUP A

11:00—11:05 am
Shannen Kim (K. McAvoy / A. Sahay)
Mechanistic insights into the role of neuronal competition in regulating adult hippocampal neurogenesis

11:06—11:11 am
Wendy Feng (A. Besnard / A. Sahay)
Adult hippocampal neurogenesis gates the balance between pattern separation and pattern completion

11:12—11:17 am
Jonathan Jou (R. Shah / J. Galloway)
Characterizing the transcription pathways in developing and injured zebrafish tendon

11:18—11:23 am
Max Frenkel (K. Daneshvar / A. Mullen)
Guilt by association: Ribonucleoprotein complexes of ID1 long non-coding RNA in endodermal differentiation

11:24—11:29 am
Elizabeth Miller (F. Mercier / D. Scadden)
Modeling clonal evolution in acute myeloid leukemia

11:30—11:35 am
Sophia Reeder (M. Ignatius / D. Langenau)
A role for Notch in rhabdomyosarcoma

11:36—11:41 am
Alexa Roemmich (S. Batts / Z-Y. Chen)
Isolation of adult mouse inner ear stem cells and progenitors

11:42—11:47 am
Jamasb Sayadi (W. Zhao / M. Mannstadt)
Directed differentiation of ES and iPS cells towards parathyroid cells

11:48—11:53 am
Ivan Seah (D. Wanlu / K. Shah)
Stem cell loaded oncolytic viral therapies for metastatic tumors to the brain

11:54—11:59 am
Berke Sengun (J. Iaconelli / R. Karmacharya)
Modulation of β -catenin with HDAC inhibitors in neuronal cells

12:00—12:05 pm
Chu Thi Hien Thu (L. Carvalho / L. Vandenberghe)
Investigating the effect of HSPGs primary receptors on retinal transduction using adeno-associated viral vectors

12:07 —12:37 pm POSTER PREVIEW & light lunch

GROUP B

12:38—12:43 pm
Abderhman Abubashem (S. Senyo / R. Lee)
New approaches to lineage mapping in the mammalian heart

12:44—12:49 pm
Francisco Galdos (A. Mahmoud / R. Lee)
Identification of pancreatic extracellular factors for maintenance of beta cell maturity

12:50—12:55 pm
Adam Pissaris (J-H. Lee / C. Kim)
Investigating the role of TSP1 in alveolar-directed differentiation of bronchioalveolar stem cells

12:56—1:01 pm
Juliana Castrillon (D. Carlone / D. Breault)
Pinpointing telomerase as a MSC biomarker

1:02—1:07 pm
Elizabeth Cheeseman (A. Tsytsykova / M. Armant / L. Silberstein)
In vitro labelling of bone marrow and lung derived mesenchymal stromal cells

1:08—1:13 pm
Aaron Cheng (V. Gaun / P. Fraenkel)
Identifying new regulators of iron homeostasis

1:14—1:19 pm
Ernie Doherty (S. Shu / K. Polyak)
The JQ1 resistance mechanism in triple negative breast cancer

1:20—1:25 pm
Natalie Florescu (S. Elf / A. Mullally)
Mutant CALR IL3-independence in BaF3/MPL Cells

1:26—1:31 pm
Mike Fort (K. Hwang / A. Cox / W. Goessling)
The role of the Hippo pathway in early zebrafish hepatobiliary development

1:32—1:55 pm POSTER PREVIEW

GROUP C

2:00—2:05 pm
Megan Barefoot (U. Jadhav / R. Shivdasani)
The role of EED in the PRC2 complex on the differentiation and proliferation of intestinal stem cells

2:06—2:11 pm
Richard Giadone (A. Ghamari / A. Cantor)
Investigating ubiquitin mediated regulation of GATA switches during erythro- and megakaryopoiesis

2:12—2:17 pm
Jasleen Grewal (S. Ho Sui / W. Hide)
Studying zebrafish hematopoiesis using PathPrint—an R package for pathway level analysis of gene expression data

2:18—2:23 pm
Emily Harris (Y-J. Kang / C. Yan)
Validating key genes associated with glioblastoma formation and progression

2:24—2:29 pm
Kameron Kooshesh (R. Sherwood / R. Maas)
Pioneer transcription factors, genome editing, and transcriptional regulation: Native interrogation of gene regulatory region function via CRISPR/Cas

2:30—2:35 pm
Sedona Murphy (M. Kim / S. Vazquez / T. Serwold)
Identifying essential transcription factors that establish the phenotype of thymic epithelial cells

2:36—2:41 pm
Duy Nguyen (D. Doupe / N. Perrimon)
Inducing cell-type specific knockouts of genes of interest using CRISPR

2:42—2:47 pm
Promise Okeke (J. Lu / P. Lerou)
Regulation of alternative splicing in ataxia telangiectasia iPS cells and derivatives

2:48—2:53 pm
Caroline Arellano-Garcia (Z. Castaño / S. McAllister)
Understanding the systemic interactions between cancer stem cells and non-cancer stem cells

2:54—2:59 pm
Bing Shui (S-M. Cheong / X. He)
Identifying function of novel transcription factor B15 in Wnt signaling pathway using intestinal stem cell organoid culture

3:05—3:25 pm POSTER PREVIEW & refreshments

GROUP D

3:30—3:35 pm
Sahil Agrawal (P. Tripathi / Q. Zhou)
Strategies to facilitate neuronal survival and regeneration following spinal cord injuries

3:36—3:41 pm
Michael Drum (D. Fass / S. Haggarty)
Discovering physiological targets of TCF4

3:42—3:50 pm
Bridget Gosis (K. Musunuru / K. Musunuru)
The role of HERG, KCNQ1, and SCN5A ion channels in inherited and acquired Long QT Syndrome

3:51—3:56 pm
Melody Guan (A. Veres / D. Melton)
Developing a functional assay for monitoring insulin production by beta cells using a luciferase reporter

3:57—4:02 pm
Stephanie Hadley (D. Ben-Zvi / D. Melton)
The effects of estrogen and circadian rhythm pathways on the differentiation of human embryonic stem cell-derived beta cells

4:03—4:08 pm
Jonathan Li (J. Rivera-Feliciano / D. Melton)
Derivation of haploid stem cell lines from human sperm