

4:17—4:22 pm
Juan Garcia-Robledo ~ ICESI-Colombia (N. Severe/
D. Scadden)
*Characterizing new subsets of bone marrow Mesenchymal
Stroma Cells (MSCs) and their role in hematopoiesis regulation*

4:23—4:28 pm
JeeWoo Kang ~ MIT (J. Pereira / A-C. Devlin / J. Koh /
B. Wainger)
*Formation of the neuromuscular junction from control and ALS
mutant human iPSCs using a microfluidic culture system*

4:29—4:34 pm
Yue Lin ~ Harvard (S. Vasudevan)
*IFIT Proteins and Their Effects on Chemo-resistance in Cancer
Cells*

4:35—4:40 pm
Celine Schreidah ~ Univ. of Toledo (T. Gallegos/C.
Kamei/ I. Drummond)
New Tools for Studying Stem Cell-Mediated Kidney Regeneration

4:41—4:46 pm
Nikhil Sobti ~ Boston Univ. (M. Rebello/J. Pini/
K. Ishii/ E. Liao)
*Evaluation of aristaless-like homeobox (ALX) transcription factor
function in craniofacial development and frontonasial dysplasia*

4:47—5:00 p.m.
**Closing remarks and presentation of Nada Anzak
award**
William Anderson

5:00—5:25 pm POSTER PREVIEW and REMOVAL
Presented to class on Friday, August 4, 2017 |

Andrew Chang ~ Harvard (G. Gobbi da Silveira /
R. Mostoslavsky)
Investigating the role of TCF7L2 in DNA Repair

Bryan Peacker ~ Harvard (K. Zhu / A. Wagers)
*Testing the feasibility of in vivo genome editing by CRISPR/Cas9-
based homology directed repair*

5:30—7:30 p.m.
Celebratory Dinner
Mentors and PIs invited
HSCI ~ Bauer Building Lobby

@Harvardstemcell

TWELFTH ANNUAL UNDERGRADUATE INTERNSHIP SYMPOSIUM

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

*This program would not be
possible without your support,
engagement and encouragement.*

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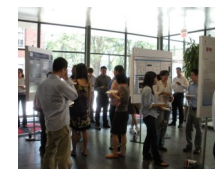
**THURSDAY
10 AUGUST 2017**

**HSCI | HARVARD
STEM CELL INSTITUTE**

1000 scientists. One goal. Discovering cures.

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

PROGRAM SCHEDULE



Posters on view between
each session break

11:00 am Welcome and introduction

William Anderson, PhD

Faculty Co-Director

GROUP A

11:15—11:20 am

Christopher Cantrell ~ Harvard (JD. Mordes/J. Klim/
K. Eggan)

*The Role of the Heat Shock Pathway in TDP43 Cytoplasmic
Mislocalization and Aggregation*

11:21—11:26 am

Ajay Singh ~ Harvard (A. Burberry/D. Mordes/K. Eggan)

*Characterizing sporadic ALS fibroblast mitochondrial functionality
and hypoxic stress response*

11:27—11:32 am

Spencer Kiehm ~ Harvard (N. Natarajan / R. Lee)

*The Effects of Chronic Caloric Restriction on the Cardiovascular
Health and Aging of Phebus Macaques*

11:33—11:38 am

Annie Wang ~ Harvard (I. Rachmin / J. Williams /
P. Libby / R. Lee)

*Understanding IL-33/ST2 Pathway Regulation of Perivascular
Fibrosis in the Heart*

11:39—11:44 am

Soumyaa Mazumder ~ Harvard (R. Gibbs/S. Piccinotti/
L. Rubin)

*Using Patient-Derived iPSC Models to Characterize the Effects of
Survival Motor Neuron (SMN) Deficiency on Muscle Formation*

11:45—11:50 am

Elizabeth Thomas ~ Harvard (O. Barrandon/D. Melton)

Circling in on the S961 Circulating Factor

11:51—11:56 am

Lexi Bounds ~ Arizona State (J. Korecka-Roet/R. Thomas /
O. Isacson/P. Hallett)

*Validating Anti-Sense Oligonucleotides (ASOs) to rescue disease
phenotypes in iPSC-derived neurons from Parkinson's disease (PD)
patients with LRRK2 mutations*

11:57 am—12:02 pm

Ariel Vilidnitsky ~ Harvard (T. Osborn/D. Dinesh/E. Ferrari/
P. Hallett)

*Testing the Small Molecule CHIR-99021 as a Replacement for Wnt-1
Protein in the Generation of Midbrain Dopaminergic Neurons*

12:03—12:08 pm

Carolina Ferrari ~ UPenn (S. Musah / D. Ingber)

*Synthesis and organization of basement membrane proteins by iPSC-
derived podocytes and renal epithelial cells*

12:09 —12:55 pm POSTER PREVIEW & light lunch

GROUP B

1:00—1:05 pm

Jorge Diego Martin-Rufino ~ Univ. of Salamanca (C. Becker/G.
Savvidis/L. Daheron/H. Negre/J. Ritz)

*Generation of β -cells from T Cell-derived iPSCs for replacement therapy in
diabetes*

1:06—1:11 pm

Addie Davis ~ Ohio Northern University (M. Gupta / C. Kim)

Characterization of the Brg1 Gene

1:12—1:17 pm

Pavana Khan ~ Carleton College (C. Garcia de Alba Rivas /
P. Pessina / C. Kim)

Understanding the Role of Endogenous Lung Stem Cells in Lung Fibrosis

1:18—1:23 pm

Gaurav Agarwal ~ Oxford (S. Nandakumar / V. Sankaran)

*Characterization of the Role of Bim in Normal and Ineffective
Erythropoiesis*

1:24—1:29 pm

Ghazal Haddad ~ Univ. of Toronto (Md. Almanun/A.
Ghamari/A. Cantor)

*The Role of ANKRD26 5'UTR Mutations in Megakaryopoiesis and
Leukemogenesis*

1:30—1:35 pm

Roshini Kalagara ~ Brown (E. Pignatti/L. Jiang/D. Breault/D.
Carlone)

*The Role of CXXC Finger Protein 1 in Mediating Mesenchymal
Progenitor Cell Function*

1:36—1:41 pm

P.J. Kelley ~ Harvard (T. Cutia / K. Henke / T. Capellini /
M. Young / A. Craft)

Developing Novel Methods to Interrogate Joint Development

1:42—1:47 pm

Aditya Mittal ~ Univ. of Pittsburgh (P. Du / R. Gregory)

*ISY1 Regulated through DGCR8 and Drosha Microprocessor Interacting
with FLII*

1:48—1:53 pm

Alexandra Nazzari ~ Emory (F. Tian/S. Zhou/P. Williams/
Z. He)

In Vivo Genetic Screen: Using CRISPR to Analyze Axon Regeneration

1:54—2:30 pm POSTER PREVIEW

GROUP C

2:35—2:40 pm

Marlise Arellano ~ Harvard (V. Lagomarsino / T. Young-
Pearse)

*Elucidating pathways involved in mental illness using an iPSC derived
DISC1 genetic mutant model*

2:41—2:46 pm

Andrew Garcia ~ Univ. of CA Santa Barbara (B. Banerjee /
D. Worstell / R. Sherwood)

*Generation of Pancreatic Cell Types via Combinatorial Transcription
Factor Activation*

2:47—2:52 pm

Jose Martinez-Fernandez ~ Harvard (D. Bryant / J. Whited)

Amphiregulin in Axolotl Limb Regeneration

2:53—2:58 pm

Alexander Wall ~ NCSU (N. Leigh/A. Wong/R. Oshiro/B.
Miller/K. Johnson/D. Bryant/J. Whited)

*Localization of Dermatopontin in Intact Limbs and Blastemas in the
Axolotl*

2:59—3:04 pm

Gabrielle Price ~ Spelman (S. H. Choi / K. Shah)

*Immune modulation of resected glioblastoma multiforme by
engineered mesenchymal stem cells.*

3:05—3:10 pm

Zakir Tahiry ~ Brown (C. Walesky/W. Goessling)

*Role of Hepatocyte Nuclear Factor 4 α (HNF4 α) in Hepatobiliary
Development and Cancer Pathogenesis*

3:11—3:16 pm

Francisco Marchi de Azevedo Lourenco ~ Univ. Florida

(A. Wanet/Y. Zhang/T. Verbiest/B. Trinh/M. Rie/D. Tenen)

*E-Cadherin expression in leukemic blasts induces differentiation to
granulocytes*

3:17—3:22 pm

Chay Graham ~ Univ. of Cambridge (K. McAvoy /

A. Sahay)

Characterizing Klf9 Activity in Transient Hippocampal Neurogenesis

3:23—3:28 pm

Alexander Reed ~ Harvard (A. Besnard / A. Sahay)

*Characterizing somatostatin interneuron activation in the adult
dorsolateral septum*

3:29—4:00 pm POSTER PREVIEW & refreshments

GROUP D

4:05 — 4:10 pm

Qais Abuhasan ~ An-Najah National University (C. Vaine/
L. Power/P.EB/C. Bragg)

*Characterizing Pathogenic Pathways in TAF1 Mutations Related to
Intellectual Disability Dysmorphic Features*

4:11—4:16 pm

Hadyn Bradstreet ~ Harvard (A. Paksa / J. Rajagopal)

*Probing for a Notch Feedback Signal in Mammalian Airway
Epithelium*