

4:17—4:22 pm

Jisoo Kim ~ Harvard (Y. Itoh / A. Engmann / L. Custo Greig / K. Wang / J. Macklis)

Investigating the Function(s) of Ctip2 in Corticospinal Neuron Axon Extension

4:23—4:28 pm

Apoorva Rangan ~ Harvard (S. Tavakoli / A. Wagers)

A Small Molecule Approach to Increasing Skeletal Muscle Engraftment Frequency in Zebrafish

4:29—4:34 pm

Henna Hundal ~ Harvard (A. Shah / R. Lee)

Ras-related Protein Rab11a is Essential for Thioredoxin Interacting Protein-Mediated Fructose Uptake in the Mouse Intestinal Epithelium

4:35—4:45 p.m.

Presentation of Nada Anzak Award

M. William Lensch and Maureen Herrmann

Closing Remarks

and **William Anderson**

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

5:30—7:30 p.m.

Celebratory Dinner

Mentors and PIs invited

HSCI ~ Bauer Building Lobby

@Harvardstemcell

THIRTEENTH ANNUAL UNDERGRADUATE INTERNSHIP SYMPOSIUM

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William Anderson, PhD

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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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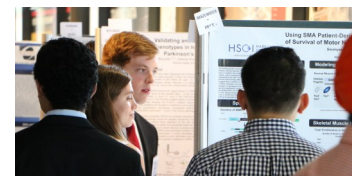
**THURSDAY
9 AUGUST 2018**

HSCI | HARVARD STEM CELL INSTITUTE

1000 scientists. One goal. Discovering cures.

**HARVARD UNIVERSITY
SHERMAN-FAIRCHILD
ROOM 268
7 DIVINITY AVENUE
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

Ghazal Aghagoli ~ Brown (S. Freeburg / W. Goessling)

Understanding the Role of Wnt Signaling in Zebrafish Liver Outgrowth

11:21—11:26 am

Vandit Shah ~ Nirma University

(I. Oderberg / W. Goessling)

Liver Intestinal Cross-talk: Using Single-Cell RNA Sequencing to Study Liver Regeneration in Zebrafish

11:27—11:32 am

Nada Attia ~ Harvard (Y. Kitamura / K. Shah)

Evaluating the Significance of DR4, DR5, and EGFR Presence in Breast to Brain Metastatic Cell Lines in Conferring Sensitivity to Targeted Stem Cell Therapeutics

11:33—11:38 am

Nina Cheng ~ Drexel (J. Khalsa / K. Shah)

Characterization of the Tumor Microenvironments of Four Stem Cell-derived Immunocompetent Murine Models for GBM Immunotherapy

11:39—11:44 am

Deepika Kurup ~ Harvard (V. Lagomarsino / T. Young-Pearse)

Investigation of Endosomal-Lysosomal Trafficking in Alzheimer's Disease using Patient-derived iPSCs

11:45—11:50 am

Gabriella Le Blanc ~ McGill (M. Fernandez / T. Young-Pearse)

Neurotoxicity of Membrane-anchored A β Peptides

11:51—11:56 am

Alan Wong ~ Harvard (K. Johnson / G. Dardik / N. Leigh / R. Oshiro / J. Whited)

Systemic Signals and Mediators Underlying Systemic Cell Cycle Activation in Axolotl

11:57 am—12:02 pm

Aaron Sandoval ~ Univ. of Florida (G. Dunlap / J. Whited)

Identifying the Role of Amphiregulin in Axolotl Limb and Mouse Digit Tip Regeneration

12:03—12:08 pm

Arpita Jajoo ~ Tufts (F. Shamsi / Y-H Tseng)

Investigating the Role of SOX5 and HOXA5 in Brown Adipocyte Differentiation and Thermogenic Capacity

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

GROUP B

1:00—1:05 pm

Ananya Gupta ~ Johns Hopkins (S. Dubois / J. Dvornick / S. Agarwal)

Modeling Pearson Marrow Pancreas Syndrome using Human Induced Pluripotent Stem Cells (iPSCs) Harboring Mitochondrial DNA Deletions

1:06—1:11 pm

Anthony Kang ~ Northwestern Univ. (M. Feigenson / V. Rosen)

Identification of Meniscus-specific Genes in Developing Murine Hindlimbs

1:12—1:17 pm

Sobhi Kazmouz ~ Monmouth College (J. Whangbo / J. Ritz)

Investigating the Immune Profiles of Chronic Graft-versus-Host Disease Patients after Stopping Low Dose Interleukin-2 Therapy

1:18—1:23 pm

Young Joon Kim ~ Columbia (B. Aubrey / S. Armstrong)

Investigating Synthetic Lethal Targeting of IKZF1/IKAROS during Menin and DOT1L Inhibition in Human Leukemia

1:24—1:29 pm

Xiaotian Liao ~ Minerva Schools at KGI (S. Nandakumar / V. Sankaran)

Treating Hemophilia A with CRISPR-mediated Gene Activation in Hematopoietic Cells

1:30—1:35 pm

Gretchen Long ~ SUNY Polytechnic (M. Gupta / C. Kim)

Treating BRG1 Deficiency in Lung Adenocarcinoma with ATR Inhibition

1:36—1:41 pm

Mert Mestanoglu ~ Bahcesehir Univ. School of Medicine

(J. Stanicka / S. Hegarty / Z. He)

Phophotome-wide CRISPR Deletion Screen for Regulators of CNS Regeneration

1:42—1:47 pm

Licyel Paulas Condori ~ Univ. Mayor de San Simon

(J. Frame / T. Long / T. North)

The Potential Crosstalk between Glucose Metabolism and Inflammation in Enhancing Red Blood Cell Specification and/or Differentiation

1:48—1:53 pm

Dulanjalee Senadeera ~ South Asian Institute of Technology and Medicine (S. Raj/N. Xubo/T. Cutia/J. Galloway/A. Craft)

Testing Bioactive Molecules on Mouse ESC Cells to Identify a Change in Cell Fate to Generate Cartilage and Tendon Tissues

1:54—2:30 pm POSTER PREVIEW

GROUP C

2:35—2:40 pm

Abby Thurm ~ UCLA (B. Trinh / A. Ebralidze / D. Tenen)

The Regulation of Hematopoietic Transcription Factor PU.1 by Long Non-coding RNA

2:41—2:46 pm

Dalton Brunson ~ Harvard (C. Yan / M. Hayes / M. Theodorou / E. Garcia / K. McCarthy / D. Do / N. Iftima / D. Langenau)

Assessing Combinatory Effect of PARP Inhibitor with DNA Damaging Agent on Rhabdomyosarcoma at Single Cell Resolution

2:47—2:52 pm

James Coleman ~ Harvard (N. Guo / A. Sahay)

Searching for the Role of Klf9 in the Quiescence of Stem Cells in the Mouse Hippocampus

2:53—2:58 pm

Matthew Diaz ~ Harvard (T. Zhao / D. Scadden)

Optimization of a Screening Assay for the Discovery of Small Molecules to Induce Osteosarcoma Differentiation

2:59—3:04 pm

Ruhi Kanwar ~ Stanford (K. Daneshvar / A. Kratkiewicz / A. Mullen)

All-in-One CasRx System for Efficient RNA Knockdown

3:05—3:10 pm

Gurbani Kaur ~ Harvard (J.J. Tan / J. Guyette / H. Ott)

Development of Three-Dimensional Heart Tube Constructs to Model Human Heart Development in vitro

3:11—3:16 pm

Mai-Linh Ton ~ Harvard (W. Hendriks / C. Bragg)

Role of the SVA Retrotransposon in X-Linked Dystonia Parkinsonism

3:17—3:22 pm

Lujia (Cha Cha) Yang ~ Harvard (A. Waghray / J. Rajagopal)

Characterizing the Role of IGFBP6 in Human Airway Epithelium as Novel Injury Marker

3:23—3:28 pm

Jordan Franklin ~ Harvard (Z. Smith / A. Meissner)

Understanding the Induction of Epigenetic Lesions in Cancer

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

GROUP D

4:05 — 4:10 pm

Michelle Ko ~ Harvard (S. Simmons / M. Daly / J. Levine / F. Zhang / P. Arlotta)

In vivo Perturb-Seq to Understand the Convergent and Divergent Pathways in Autism Spectrum Disorder

4:11—4:16 pm

Giulio Deangeli ~ Sant'Anna School, University of Pisa

(M. Ko / X. Jin / S. Simmons / M. Daly / J. Levine / F. Zhang / P. Arlotta)

In silico Characterization of the Transcriptomic Phenotype in Mouse Brain Cell Types after Perturbation of Autism Spectrum Disorder Genes