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

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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Harvard Stem Cell Institute Internship Program (HIP)
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HSCI Executive Director:
Brock Reeve, M.Phil., MBA
Faculty Director:
William Anderson, PhD
Administrative Director:
Maureen Herrmann, EdM

@Harvardstemcell
PROGRAM SCHEDULE

11:00 am Welcome and introduction
William Anderson, PhD
Faculty Co-Director

GROUP A
11:15—11:40 am
Ghazal Aghagoli ~ Brown (S. Freeburg / W. Goessling)
Wnt Signaling Modulates Hepatopancreatic Development in Zebrafish

11:45—12:10 pm
Vandit Shah ~ Nirma University
Liver Intestinal Cross-talk: Using Single-Cell RNA Sequencing to Study Liver Regeneration in Zebrafish

12:15—12:40 pm
Nada Atia ~ Harvard (Y. Kitamura / K. Shah)
Characterizing the Significance of DRA, DR5, and EGFR Presence in Breast to Brain Metastatic Cell Lines in Conferring Sensitivity to Targeted Stem Cell Therapeutics

12:45—1:10 pm
Alan Wong ~ Harvard
Immunotherapy

1:15—1:40 pm
Ananya Gupta ~ Johns Hopkins
Characterization of the Tumor Microenvironments of Four Stem Cell-derived Immunocompetent Murine Models for GBM Immunotherapy

1:45—2:10 pm
Deepika Kurup ~ Harvard (V. Lagomarsino / T. Young-Pearse)
Investigating Endosomal-Lysosomal Trafficking in Alzheimer’s Disease using Patient-derived iPSCs

2:15—2:40 pm
Gretchen Long ~ SUNY Polytechnic
The Regulation of Hematopoietic Transcription Factor PU.1 by Long Non-coding RNA

2:45—3:10 pm
Matthew Diaz ~ Harvard (T. Zhao / D. Scadden)
Optimization of a Screening Assay for the Discovery of Small Molecules to Induce Osteosarcoma Differentiation

3:15—3:40 pm
Matthew Sandoval ~ Univ. of Florida (G. Dunlap / J. White)
Characterizing the Identification of Amphiregulin in Axolotl Limb and Mouse Digital Tip Regeneration

3:45—4:10 pm
Apurita Jaisoo ~ Tufts (F. Shamsi / Y-H Tseng)
Investigating the Expression Patterns of SOX5 and HOMAS in Brown Adipocyte Differentiation

12:05—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

1:10—1:15 pm
Anthony Kang ~ Northwestern Univ. (M. Feigenson / V. Rosen)
Identification of Meniscus-specific Genes in Developing Murine Hindlimbs

1:20—1:25 pm
Sohbi Kazmouz ~ Monmouth College (J. Whangbo / J. Ritz)
Investigating the Immune Profiling of Chronic Graft-versus-Host Disease Patients after Stopping Low Dose Interleukin-2 Therapy

1:30—1:35 pm
Young Joon Kim ~ Columbia (B. Aubrey / S. Armstrong)
Investigating Synthetic Lethal Targeting of IGFL1/RAIROS during Meni and DTX11, Inhibition in Human Leukemia

1:40—1:45 pm
Matthew Dziewczynski ~ Harvard
Optimization of mRNA Library for Single Cell RNA Sequencing to Understand the Convergent and Divergent Dimensional Heart Tube Constructs to Model Human Heart Development in vitro

1:50—1:55 pm
Aaron Sandoval ~ Univ. of Florida (J. Stanicka / S. Hegarty / Z. He)
Identifying the Role of a Phosphotyrosine-protein in Regulating Fli-1 Activity in Activated T lymphocytes

2:00—2:05 pm
Mert Mestanoglu ~ Bahcesehir Univ. School of Medicine
Extending the Function(s) of Ctip2 in Corticospinal Neuron Axon Regeneration

2:10—2:15 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

2:20—2:25 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.Trim / A. Ebralidze / D. Tenen)
The Regulation of Hematopoietic Transcription Factor PU.1 by Long Non-coding RNA

2:45—2:50 pm
Dallon Brunson ~ Harvard (C. Yan / M. Hayes / M. Theodorou / E. Garcia / K. McCarthy / D. Do / N. Hima / D. Langenau)
Analyzing Combinatory Effect of PARP Inhibitor with DNA Damaging Agent on Rhabdomyosarcoma at Single Cell Resolution

2:55—3:00 pm
Jordan Franklin ~ Harvard (Z. Smith / A. Meissner)
Understanding the Induction of Epigenetic Lesions in Cancer

3:05—3:10 pm
Ananya Gupta ~ Johns Hopkins (Z. Smith / A. Meissner)
Characterizing the Role of IGFBP6 in Human Airway Epithelium as a Possible Injury Marker

3:15—3:20 pm
Deepika Kurup ~ Harvard (Y. Kitamura / K. Shah)
Characterizing the Significance of DRA, DR5, and EGFR Presence in Breast to Brain Metastatic Cell Lines in Conferring Sensitivity to Targeted Stem Cell Therapeutics

3:25—3:30 pm
Lujia (Cha Cha) Yang ~ Harvard (A. Waghay / R. Rajagopal)
Investigating the Function(s) of Ctip2 in Corticospinal Neuron Axon Regeneration

3:35—3:40 pm
Mert Mestanoglu ~ Bahcesehir Univ. School of Medicine
Extending the Function(s) of Ctip2 in Corticospinal Neuron Axon Regeneration

3:45—3:50 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

4:05—4:10 pm
James Coleman ~ Harvard (J. Frame / T. Long / T. North)
Uncovering the Significance of Ctip2 in Corticospinal Neuron Axon Regeneration

4:15—4:20 pm
Ruhi Kanvar ~ Stanford (K. Daneshvar / A. Kratkiewicz / A. Mullen)
In vivo Perturb-Seq to Understand the Convergent and Divergent Pathways in Autism Spectrum Disorder

4:25—4:30 pm
Michelle Ko ~ Harvard (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

4:35—4:40 pm
Giovanni Deangeli ~ Sant’Anna School, University of Pisa (M. Ko / X. Jin / S. Simmons / M. Daly / J. Levine / F. Zhang / P. Arlotta)
Investigating the Function(s) of Ctip2 in Corticospinal Neuron Axon Regeneration

4:45—4:50 pm
Jisoo Kim ~ Harvard (Y. Itoh / A. Engmann / J. Macklis)
Investigating the Function(s) of Ctip2 in Corticospinal Neuron Axon Regeneration