

## SUNDARI CHETTY, PH.D.

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### ACADEMIC APPOINTMENTS

6/1/2022- Assistant Professor, Center for Regenerative Medicine,  
Massachusetts General Hospital

6/1/2022- Assistant Professor, Dept. of Psychiatry, Harvard Medical School

6/1/2018 –5/31/2022 Assistant Professor, Dept. of Psychiatry and Behavioral Sciences,  
Stanford University School of Medicine

1/1/2016 – 6/1/2018 Instructor, Dept. of Psychiatry and Behavioral Sciences,  
Stanford University School of Medicine

1/2016 – 6/1/2018 Siebel Scholar, Institute for Stem Cell Biology and Regenerative  
Medicine, Stanford University

### EDUCATION

2009-15 Post-doctoral Fellow, Stem Cell and Regenerative Biology, Laboratory of Douglas  
Melton, Harvard University

2005-09 Ph.D., Neuroscience, Laboratory of Daniela Kaufer, University of California, Berkeley

2001-05 B.A., Molecular and Cell Biology, University of California, Berkeley

### FELLOWSHIPS AND FUNDING

2017-23 NICHD Autism Centers of Excellence Grant (co-PI, \$2.17m subaward to Chetty lab)

2016-18 Siebel Fellowship

2009-15 Leona M. and Harry B. Helmsley Charitable Trust

2008 California Institute for Regenerative Medicine Pre-Doctoral Fellowship

2005 Helen Wills Neuroscience Institute Fellowship

### PUBLICATIONS

1. J. Pluvinage, J. Sun, C. Claes, R. A. Flynn, M. S. Haney, T. Iram, X. Meng, R. Lindemann, N. M. Riley, E. Danhash, J. P. Chadarevian, E. Tapp, D. Gate, I. Cobos, **S. Chetty**, A. Pasca, S. Pasca, E. Berry-Kravis, C. R. Bertozzi, M. Blurton-Jones, T. Wyss-Coray. (2021) The CD22-IGF2R interaction is a therapeutic target for microglial lysosome dysfunction in Niemann-Pick Type C. *Science Translational Medicine*, 13 (622), 10.1126/scitranslmed.abg2919.

- J. Li, T. Brickler, A. Banuelos, K. Marjon, A. Shcherbina, S. Banerjee, J. Bian, C. Narayanan, I. Weissman, **S. Chetty**. (2021) Overexpression of CD47 is associated with brain overgrowth and 16p11.2 deletion syndrome. *Proceedings of the National Academy of Sciences*, 118 (15) e2005483118.

Commentary: S. Schafer and F.H. Gage. (2021) To eat, or not to eat, that is the question: Neural stem cells escape phagocytosis in autism with macrocephaly. *Proceedings of the National Academy of Sciences*, 118 (19) e2104888118.

- B. Assetta, C. Tang, J. Bian, T. Brickler, **S. Chetty**, Y. Huang. (2020) Generation of Human Neurons and Oligodendrocytes from Pluripotent Stem Cells for Modeling Neuron-oligodendrocyte Interactions. *JoVE* doi: 10.3791/61778.
- L. Ma, A. Shcherbina, **S. Chetty**. (2021) Variations and expression features of CYP2D6 contribute to schizophrenia risk. *Molecular Psychiatry*, 26: 2605-2615.
- A. Shcherbina, J. Li, C. Narayanan, W. Greenleaf, A. Kundaje, and **S. Chetty**. (2019) Cell cycle dynamics of human pluripotent stem cells primed for differentiation. *Stem Cells* 37:1151–1157.
- D. Sambo, J. Li, T. Brickler, and **S. Chetty**. (2019) Transient treatment of human pluripotent stem cells with DMSO to promote differentiation. *JoVE* (149), e59833, doi:10.3791/59833.
- J. Li, C. Narayanan, J. Bian, D. Sambo, T. Brickler, W. Zhang, **S. Chetty**. (2018) A transient DMSO treatment increases the differentiation potential of human pluripotent stem cells through the Rb family. *PLoS ONE* 13(12): e0208110.
- A.M. Tsankov, V. Akopian, R. Pop, **S. Chetty**, C.A. Gifford, L. Daheron, N.M. Tsankova, A. Meissner. (2015) A qPCR ScoreCard quantifies the differentiation potential of human pluripotent stem cells. *Nature Biotechnology* 33: 1182-1192.
- S. Chetty\***, E.N. Engquist, E. Mehanna, K.O. Lui, A.M. Tsankov, D.A. Melton\*. (2015) A Src inhibitor regulates the cell cycle of human pluripotent stem cells and improves directed differentiation. *The Journal of Cell Biology* 210: 1257-1268. (\*co-corresponding author)
- S. Chetty**, F.W. Pagliuca, C. Honore, A. Kweudjeu, A. Rezania, D.A. Melton. (2013) A simple tool to improve pluripotent stem cell differentiation. *Nature Methods* 10: 553-556.
- S. Chetty**, A.R. Friedman, K. Taravosh-Lahn, E.D. Kirby, C. Mirescu, F. Guo, D. Krupik, A. Nicholas, A. Geraghty, A. Krishnamurthy, M. Tsai, D. Covarrubias, A. Wong, D. Francis, R.M. Sapolsky, T.D. Palmer, D. Pleasure, D. Kaufer. (2014) Stress and glucocorticoids promote oligodendrogenesis in the adult hippocampus. *Molecular Psychiatry* 19: 1275-1283.
- A.K. Solbakk, G.F. Alpert, A.J. Furst, L.A. Hale, T. Oga, **S. Chetty**, N. Pickard, R.T. Knight. (2008) Altered prefrontal function with aging: insights into age-associated performance decline. *Brain Research* 1232: 30-47.

13. G.D. Rabinovici, A.J. Furst, J.P. O'Neil, C.A. Racine, E.C. Mormino, S.L. Baker, **S. Chetty**, P.Patel, T.A. Pagliaro, W.E. Klunk, C.A. Mathis, H.J. Rosen, B.L. Miller, W.J. Jagust. (2007) <sup>11</sup>C-PIB PET imaging in Alzheimer disease and frontotemporal lobar degeneration. *Neurology* 68:1205-1212.

### **INVITED ORAL PRESENTATIONS**

Molecular Psychiatry Meeting, (Chair of session: Modeling neurodevelopmental disorders using human pluripotent stem cells), Maui, 2022.

Lurie Center for Autism Research, MGH, Boston, MA, 2022.

IDDRC Seminar for Neurodevelopmental Disorders Research, Washington University, St. Louis, MO, 2021.

Stem Cell and Gene Therapy for Neurodevelopmental Disorders Conference, UC Davis, 2021.

California Institute for Regenerative Medicine, virtual seminar, 2021.

International Society for Autism Research, virtual meeting, 2021.

Regenerative Medicine Seminar Series, Stanford, CA, 2021.

Society for Neuroscience Conference, Chicago, IL, 2019.

Inaugural UCSF Preprints Symposium, San Francisco, CA, 2019.

NIH Autism Centers of Excellence Investigators meeting, Washington D.C., 2019.

Society for Neuroscience Conference, San Diego, CA, 2018.

UC Davis Mind Institute, Sacramento, CA, 2017, 2018.

NIH Rocky Mountain Laboratories, Hamilton, MT, 2016.

Asterias Biotherapeutics, Fremont, CA, 2016.

American Society for Cell Biology, Philadelphia, PA, 2014.

International Society for Stem Cell Research, Vancouver, Canada, 2014.

### **TEACHING AND MENTORING**

PSYC 199: Undergraduate research at Stanford University

Stanford Institutes of Medicine Summer Research (SIMR) Program, 2017, 2018, 2019

Stanford Summer Research Program-Amgen Scholars Program, 2019

Guest lecture for incoming PhD students in the Stanford Stem Cell Biology and Regenerative Medicine program, Human pluripotent stem cell course, September 2016 and 2018

Graduate Student Instructor, Molecular and Cell Biology 135e/k: Physiology of Human Development and Physiology of the Aging Process, Fall 2006 and Spring 2008, University of California, Berkeley

### **POSTDOCTORAL FELLOWS SUPERVISED AT MGH/HARVARD MEDICAL SCHOOL**

Siwei Chen, PhD

Md Mahfuz Al Mamun, PhD

Janani Ramesh, PhD

### **POSTDOCTORAL FELLOWS SUPERVISED AT STANFORD UNIVERSITY**

Joana Ribeiro, PhD

Liang Ma, PhD

Jingling Li, PhD

Thomas Brickler, PhD

Danielle Sambo, PhD

## **PHD STUDENTS SUPERVISED AT STANFORD UNIVERSITY**

Anna Shcherbina (Chair of thesis defense committee, Biomedical Informatics PhD program, 2016-2020)

Renata Martin (dissertation and thesis committee, Stem Cell Biology and Regenerative Medicine PhD program, 2018-2020)

Raymond McKoy (2018 rotation student, Neuroscience PhD program)

Esmond Lee (2017 rotation student, Stem Cell Biology and Regenerative Medicine PhD program)

## **UNDERGRADUATE STUDENTS SUPERVISED**

At Stanford: Trent Edwards, April Pruitt (SSRP Amgen Scholar)

At Harvard: Lydia Gold, Tanmaya Sambare, Elise Engquist, Ameen Chaudry, Elie Mehanna

At UC-Berkeley: Ashmi Ullal, Jennifer Shih, Amrita Krishnamurthy, Meng-Ko Tsai

## **ADMINISTRATIVE SERVICE**

Evaluation of MD/PhD candidates for residency in Psychiatry at Stanford University School of Medicine (2019-2022)

Renata Martin (dissertation and thesis committee, Stem Cell Biology and Regenerative Medicine PhD program, 2018-2020)

Anna Shcherbina (Chair of thesis defense committee, Biomedical Informatics PhD program, 2016-2020)

## **JOURNALS REFEREED**

*Trends in Neurosciences, Stem Cell Reports, PLoS ONE, National Science Review, Cell Reprogramming, Cell Cycle, Epigenetics, Frontiers in Neuroendocrinology, Stem Cells International*

## **SOCIETY MEMBERSHIPS**

International Society for Autism Research  
International Society for Stem Cell Research  
American Society for Cell Biology  
Society for Neuroscience

## **HIGH SCHOOL STUDENTS SUPERVISED**

At Stanford: Kaylauni Cisneros, Kevin Mao, Pei Wen Xiao