

Taiwan NSTC – Stanford SOM Visiting Student Program

1. Cardiovascular Diseases & Bio Supply Chain – Joseph Wu, MD, PhD (UCLA, Molecular & Medical Pharmacology (2004), MD, Yale University School of Medicine, Medicine (1997))

Director, Cardiovascular Institute

<https://profiles.stanford.edu/joseph-wu>

Lab: <https://med.stanford.edu/wulab.html>

- (1) An orange calcium-modulated bioluminescent indicator for non-invasive activity imaging. *Nature Chemical Biology* 2019;15(5):433-436. PMID: 30936501. PMCID: 6563924
- (2) A premature termination codon mutation in MYBPC3 causes hypertrophic cardiomyopathy via chronic activation of nonsense-mediated decay. *Circulation* 2019;139(6):799-811. PMID: 30586709. PMCID: 1512906

2. Genetics & Microbiota – Michael Snyder, PhD (1982 California Institute of Technology)

Director, Center for Genomics and Personalized Medicine

<https://med.stanford.edu/profiles/michael-snyder>

Lab: <https://med.stanford.edu/snyderlab/about.html>

- (1) Short-chain fatty acid metabolites propionate and butyrate are unique epigenetic regulatory elements linking diet, metabolism and gene expression. *Nature metabolism*, 2025, DOI 10.1038/s42255-024-01191-9
- (2) Global loss of promoter-enhancer connectivity and rebalancing of gene expression during early colorectal cancer carcinogenesis. *Nature cancer*, 2024, DOI 10.1038/s43018-024-00823-z

3. Gene Editing - Matt Porteus, MD, PhD (Stanford University School of Medicine (1994))

Director, Center for Definitive and Curative Medicine

<https://med.stanford.edu/profiles/matthew-porteus>

Lab: <https://med.stanford.edu/porteuslab.html>

- (1) Human striatal progenitor cells that contain inducible safeguards and overexpress BDNF rescue Huntington's disease phenotypes, *Molecular Therapy Methods & Clinical Development* 33 (1), 2025
- (2) A differentiated β -globin gene replacement strategy uses heterologous introns to restore physiological expression, *Molecular Therapy* (Available online 28 February 2025) <https://doi.org/10.1016/j.ymthe.2025.02.036>

4. GI / Organoids – Calvin Kuo, MD, PhD (M.D./Ph.D., Stanford University, Cancer Biology (1994))

Vice Chair, Dept of Medicine

<https://med.stanford.edu/profiles/calvin-kuo>

Lab: <https://www.kuolab.stanford.edu/>

(1) A human autoimmune organoid model reveals IL-7 function in coeliac disease.

Nature July 2024). <https://doi.org/10.1038/s41586-024-07716-2>.

(2) GPR124 regulates murine brain embryonic angiogenesis and BBB formation by an intracellular domain-independent mechanism.; Development 1 June 2024; 151 (11):

dev202794. doi: <https://doi.org/10.1242/dev.202794>

5. Neuroscience / Organoids – Sergiu Pasca, MD (Medical Doctor, Hatieganu School of Medicine, Romania, (2007))

Director, Stanford Brain Organogenesis Program

<https://profiles.stanford.edu/sergiu-pasca>

Lab: <https://www.pascalab.org/publications.html>

(1) Midline Assembloids Reveal Regulators of Human Axon Guidance, bioRxiv 2024 June 26. doi: 10.1101/2024.06.26.600229

(2) Developmental convergence and divergence in human stem cell models of autism spectrum disorder, bioRxiv 2024 April 2. doi: 10.1101/2024.04.01.587492

6. Stem Cells – Ravi Majeti, MD, PhD (MD - University of California, San Francisco (UCSF), 2002, PhD in Biomedical Sciences - UCSF, 2000)

Director, Stem Cell Institute

<https://profiles.stanford.edu/ravindra-majeti>

Lab: <https://med.stanford.edu/majetilab.html>

(1) Convergent epigenetic evolution drives relapse in acute myeloid leukemia. eLife, 13:e93019 (2024)

(2) Genome engineering with Cas9 and AAV repair templates generates frequent concatemeric insertions of viral vectors. Nature Biotechnology, 10.1038/s41587-024-02171-w (2024)

7. Cancer – Steven Artandi, MD, PhD (M.D., Columbia University (1995), Ph.D., Columbia University, Microbiology (1995))

Director, Cancer Institute

<https://profiles.stanford.edu/steven-artandi>

Lab: <https://med.stanford.edu/artandilab.html>

- (1) Acinar cell clonal expansion in pancreas homeostasis and carcinogenesis, Nature . 2021 Sep;597(7878):715-719. doi: 10.1038/s41586-021-03916-2
- (2) Regulation of human telomerase in homeostasis and disease, Nature Reviews Molecular Cell Biology volume 21, pages384–397 (2020)

8. Immunology & Aging – Mark Davis, PhD (Caltech, Molecular Biology (1981))

HHMI Investigator Emeriti

Past Director, Institute for Immunity, Transplantation, and Infection

<https://profiles.stanford.edu/mark-davis>

Lab: <https://med.stanford.edu/davislab.html>

- (1) KIR+CD8+ T cells suppress pathogenic T cells and are active in autoimmune diseases and COVID-19. Science (New York, N.Y.), 2022. DOI 10.1126/science.abi9591
- (2) CD4+ T cells contribute to neurodegeneration in Lewy body dementia. Science (New York, N.Y.), 2021. [DOI 10.1126/science.abf7266](https://doi.org/10.1126/science.abf7266)

9. Vaccinology – Bali Pulendran, PhD (1995 — PhD, Immunology, The Walter & Eliza Hall Institute, University of Melbourne)

Director, Institute for Immunity, Transplantation, and Infection

<https://profiles.stanford.edu/bali-pulendran>

Lab: <https://med.stanford.edu/pulendranlab/research.html>

- (1) The science and medicine of human immunology. Pulendran B, Davis MM. Science. 2020 Sep 25;369(6511):eaay4014. doi: 10.1126/science.aay4014.
- (2) Transforming vaccinology. Rappuoli R, Alter G, Pulendran B. Cell. 2024 Sep 19;187(19):5171-5194. doi: 10.1016/j.cell.2024.07.021.