



STANFORD SAPP FAMILY CS BIO-X UNDERGRADUATE SUMMER RESEARCH PROGRAM

Wednesday Talks:
June 25 through August 27, 2025

Talks are 12:00-1:00PM
Clark Center Auditorium
*Followed by an interactive lunch
between faculty and students*



2024 Stanford Sapp Family CS Bio-X Undergraduate Summer Research Program Cohort

June 25
Tracey McLaughlin (Medicine - Endocrinology, Gerontology, & Metabolism): *Obesity and Insulin Resistance: Focus on the Fat Cell*
E.J. Chichilnisky (Neurosurgery and Ophthalmology): *Toward a High-Fidelity Artificial Retina*
Ehsan Adeli (Psychiatry & Behavioral Sciences - Public Mental Health & Population Sciences): *A Journey in AI and Neuroscience*

July 2
Carolyn Bertozzi (Chemistry): *Glycoscience at the Blood-Brain-Barrier*
Fan Yang (Orthopaedic Surgery and Bioengineering): *Tiny Gels, Big Impact: Regenerating Tissues & Modeling Disease*
Paul J. Wang (Medicine - Cardiovascular Medicine): *How to Have a Career in Academics and Innovation*

July 9
Anthony Wagner (Psychology): *Pathways of Age-Related Memory Variability*
Rogelio Hernández-López (Bioengineering and Genetics): *Engineering T Cells to Fight Challenging Cancers*
Dean Felsher (Medicine - Oncology and Pathology): *Oncogene Addiction: Making Cancers Go in Reverse*

July 16
Sergiu Pașca (Psychiatry & Behavioral Sciences - Sleep Medicine): *How the Human Brain Builds Itself*
Christin Kuo (Pediatrics - Pulmonary Medicine): *Investigating Neuroendocrine Cell Diversity and Function in the Human Lung*
Alex Gao (Biochemistry): *Discovering New Molecular Functions in Microbial Antiviral Defense and Beyond*

July 23
Ellen Kuhl (Mechanical Engineering): *AI for Food: Accelerating and Democratizing Discovery and Innovation*
Vayu Hill-Maini (Bioengineering): *From the Kitchen to the Lab... And Back*
Tammy Sirich (Medicine - Nephrology): *Searching for Solutes Retained in Kidney Failure*

July 30
Stephen Quake (Bioengineering and Applied Physics): *The Tabula Sapiens and Beyond...*
Jennifer Cochran (Bioengineering): *Protein Engineering to Develop Next-Generation Cancer Therapeutics*
Eric Gross (Anesthesiology, Perioperative & Pain Medicine): *What Alcohol Flushing Can Teach Us About Anesthesia and Analgesia*

August 6
Jenn Brophy (Bioengineering): *Manipulating Soil Microbes to Improve Plant Drought Tolerance*
Kerwyn Casey Huang (Bioengineering and Microbiology & Immunology): *Understanding the Human Intestinal Environment*
Michael Howitt (Pathology and Microbiology & Immunology): *Acquiring a Taste for Parasites: Chemosensory Tuft Cells in Shaping Intestinal Immunity*

August 13
Jesse Engreitz (Genetics): *Mapping the Regulatory Wiring of the Genome to Link Disease Variants to Functions*
Scott Delp (Bioengineering and Mechanical Engineering): *Optimizing Human Performance*
Charles Gawad (Pediatrics - Hematology & Oncology): *Exploring Potential Roles for Viral Nucleic Acids in the Pathogenesis of Childhood Acute Lymphoblastic Leukemia*

August 20
Frank Longo (Adult Neurology): *Translational Research in Neurodegenerative Disease – From Mechanisms in a Dish to the Clinic*
Christina Curtis (Medicine - Oncology, Genetics, and Biomedical Data Science): *Towards Predictive Oncology and Digital Twins of Malignancy*
Cory Shain (Linguistics): *An Integrated Network for Language in the Brain*

August 27
Alison Marsden (Pediatrics - Cardiology and Bioengineering): *Model-Guided Design of Pediatric Heart Surgeries*
Gheorghe Chistol (Chemical & Systems Biology): *How Do Eukaryotes Initiate Replication? Single-Molecule Adventures in Chromatin Biology*
David Myung (Ophthalmology): *Biomaterials to Heal the Wounded Cornea*

