The Summer Undergraduate Research Fellowships (SURF) program is a donor and foundation supported initiative enabling Berkeley undergraduates to spend the summer doing immersive research, often in preparation for a senior thesis.

This summer SURF had the largest cohort ever including 123 undergraduates working within and across a remarkable range of disciplines and organized into a number of “sub programs”:

- **SURF L&S** for students from the College of Letters & Science
- **SURF Rose Hills** for students from Southern California in select science and engineering majors
- **SURF Math Teams** - groups of four students working together under Math faculty
- **SURF-SMART** for students supporting a variety of graduate student doctoral research

For program details and individual profiles of this year’s SURF fellows visit: [surf.berkeley.edu](http://surf.berkeley.edu).

The SURF program is administered by the Office of Undergraduate Research and Scholarships ([research.berkeley.edu](http://research.berkeley.edu)), part of the Division of Undergraduate Studies, College of Letters and Science.

The SURF program is made possible through the generous support of our donors:


We extend our sincere gratitude to all of the faculty, post-docs, staff researchers, and graduate students who made a commitment to mentor this year’s cohort of SURF fellows.

For their tremendous commitment as staff to the SURF program, special thanks to Brittany Johnson, Emily Remirez, Brittany Daws, Jonathan Liu, Roland Fang, Quynh Uong, and Sean Burns. Additionally, the SURF program would like to thank all OURS staff, Dean Bob Jacobsen, the UGIS administration, business office and staff, LeConte Facilities, the SMART leadership in Graduate Division, and the fantastic team at L&S College Relations.
2019 CONFERENCE
SCHEDULE AT A GLANCE

Thursday, August 22nd

9:00 - 9:30am
Registration, Coffee/Tea, Poster Set-Up
LeConte Hall - West Entrance Lobby

9:30 - 9:45am
Conference Welcome & Opening Remarks
LeConte Lecture Hall 4

10:00 - 11:15am
Session 1A, LeConte Lecture Hall 2
Literary Imaginings of Society & Self
Session 1B, LeConte Lecture Hall 3
Particles, Atoms, & Molecules
Session 1C, LeConte Lecture Hall 4
Molecular & Cell Biology I

11:30 - 12:45pm
Session 2A, LeConte Lecture Hall 2
Representation & the Carceral Apparatus
Session 2B, LeConte Lecture Hall 3
Host & Pathogen Interactions
Session 2C, LeConte Lecture Hall 4
Geology & Astronomy

12:45 - 1:30pm - Poster Session
LeConte Hall, Physics Reading Room & Collaboration Center

1:15 - 2:30pm
Session 3A, LeConte Lecture Hall 2
Relationships with the Environment
Session 3B, LeConte Lecture Hall 3
Molecular & Cell Biology II
Session 3C, LeConte Lecture Hall 4
Condensed Matter Physics

3:15 - 4:30pm
Session 4A, LeConte Lecture Hall 2
Interviews & Ethnography
Session 4B, LeConte Lecture Hall 3
Cellular Transitions in Mitosis & Meiosis
Session 4C, LeConte Lecture Hall 4
Neurobiology I

5:30 - 7:00pm
Closing Gathering and Group Photo

Friday, August 23rd

9:00 - 9:30am
Coffee/Tea and Socializing
LeConte Lobby Hall - West Entrance Lobby

9:30 - 10:45am
Session 4A, LeConte Lecture Hall 2
Interviews & Ethnography
Session 4B, LeConte Lecture Hall 3
Cellular Transitions in Mitosis & Meiosis
Session 4C, LeConte Lecture Hall 4
Chemistry & Engineering

11:00am - 12:15pm
Session 5A, LeConte Lecture Hall 2
Perception & Cognition
Session 5B, LeConte Lecture Hall 3
Privacy & Economics
Session 5C, LeConte Lecture Hall 4
Neurobiology II

12:15 - 1:00pm - Lunch*
LeConte Hall, West Entrance Patio
*Lunch for SURF Fellows and Session Moderators

1:15 - 2:30pm
Session 6A, LeConte Lecture Hall 2
Historical Perceptions
Session 6B, LeConte Lecture Hall 3
Neurobiology II
Session 6C, LeConte Lecture Hall 4
Genetics & Evolution

2:30 - 3:15pm
LeConte Lecture Hall 4
Closing Gathering and Group Photo
Thursday, August 22nd

9:00 - 9:30am  
Registration, Coffee/Tea, and Networking  
*LeConte Lobby*

9:30 - 9:45am  
Conference Welcome & Opening Remarks  
Dr. Sean Burns, Director of OURS  
*LeConte Lecture Hall 4*

10:00 - 11:15am  
**Session 1A, LeConte Lecture Hall 2**  
*Literary Imaginings of Society & Self*  
Moderator: Brittany Johnson

**Hannah Cox, Linguistics, French**  
Poetry and Exile: The Work of Armen Lubin  
Faculty Mentor: Karl Britto

**Clara Jimenez, English**  
Transforming Melancholia: Depression and Female Coping in *Beloved* and *Corregidora*  
Faculty Mentor: Abdul JanMohamed

**Iris Morrell, Comparative Literature**  
“Force and Its Resistance, Nothing Third”: Dialectics and Gendered Domination in Kleist’s *Penthesilea*  
Faculty Mentor: Niklaus Largier

**Ian Stratford, History**  
The Politics of Ancient Greek Religious Cults  
Faculty Mentor: Emily Mackil

**Session 1B, LeConte Lecture Hall 3**  
*Particles, Atoms, & Molecules*  
Moderator: Emma Luu

**L. Dalila Robledo, Physics**  
En Route to Photoassociation and STIRAP on Ultracold LiRb Molecules  
Faculty Mentor: Dan M. Stamper-Kurn

**Siyang Li, Physics**  
Characterization of Silicon Photomultipliers for Astrophysical Observations  
Faculty Mentor: George F. Smoot
Diego Peña, Physics  
Characterization of Metastable Titanium in Atomic Beam  
Faculty Mentor: Dan M. Stamper-Kurn

Mingyu Li, Physics, Applied Mathematics  
An Electro-Thermal Response Model of Cryogenic Bolometers  
Faculty Mentor: Yury G. Kolomensky

Zitong Yang, Mathematics, Computer Science, Physics  
Algorithms in High Dimensional Statistics with Low Dimensional Models  
Faculty Mentor: Yi Ma

Peter Ren, Chemical Biology, Computer Science  
Deep Mutagenesis of the Gp62 Subunit of the T4 Clamp Loader  
Faculty Mentors: John Kuriyan, Subu Subramanian

Iris Wu, Molecular & Cell Biology  
Investigating Novel Regulators of Mitochondrial Unfolded Protein Response  
Faculty Mentors: Andrew Dillin, Koning Shen

Elena Slobodyanyuk, Molecular & Cell Biology  
Investigating the Role of YY1 in Transcription Regulation  
Faculty Mentors: Robert Tjian, Xavier Darzacq

Cindy Chau, Molecular Environmental Biology  
Amino Acid Sensing in The TOR Pathway Of Plants  
Faculty Mentor: Nanticha Lutt

Katie Shalvarjian, Microbial Biology  
Genome-Wide Fitness Profiling of Ralstonia Solanacearum  
Faculty Mentors: Steve Lindow, Tiffany Lowe-Power
Elena Mateus, Media Studies
Perception of Prison with Experience: Volunteering for San Quentin News
Faculty Mentor: William Drummond

Juan Flores, Sociology
Police Tactics: Reproduction of Criminality in Fragmented Communities
Faculty Mentor: Laleh Behbehanian

Fernando Vallejo, Sociology
How Undocumented People with Convictions Challenge Crimmigration and Deportation
Faculty Mentor: Laleh Behbehanian

Sabrina Lu, Psychology, Legal Studies
Gender and Perceptions of Criminality
Faculty Mentor: Jason Okonofua

Rimjhim Agarwal, Molecular & Cell Biology
Investigating the Mechanism of NLRP1 Inflammasome Activation by Dengue Virus Protease
Faculty Mentor: Russell Vance

Jasmine Larrick, Molecular & Cell Biology, Anthropology
Molecular Determinants and Mechanism of Flavivirus NS1-Induced Endothelial Permeability
Faculty Mentor: Eva Harris

Siddharth Chittaranjan, Molecular & Cell Biology, English
Comparative Dual-RNA Seq Transcriptome Profiling of Host-Pathogen Interactions During Chlamydia Trachomatis Infection of Human Primary Endocervical Cells
Faculty Mentor: Deborah Dean
Davy Deng, Molecular & Cell Biology
Exploring the Role of Aerobic Respiration Listeria Monocytogenes Pathogenesis
Faculty Mentor: Daniel Portnoy

Elise Rio, Molecular Environmental Biology, Global Studies, Anthropology
An Exploration of the Genetic Factors Contributing to Resistance and Susceptibility of Listeria Monocytogenes of Phagosome-Mediated Killing
Faculty Mentor: Daniel Portnoy

Session 2C, LeConte Lecture Hall 4
Geology & Astronomy
Moderator: Micah Brush

Fran Meyer, Geology
Constraining the Tempo of Ordovician Cooling
Faculty Mentor: Nicholas Swanson-Hysell

Maryn Sanders, Geophysics
A Comparative Study of Small, Shallow Landslide Processes Across Sandstone, Mudstone, and Shale Geologic Units
Faculty Mentor: Bill Dietrich

Hunter Martin, Physics, Mathematics
The Impact of Baryons on the Intrinsic Alignment of Galaxies in the MassiveBlack-II Simulation
Faculty Mentor: Sukhdeep Singh

Keto D. Zhang, Astrophysics, Data Science
Numerical Simulation of the Ejecta Velocity Distribution of Type Ia Supernovae
Faculty Mentors: WeiKang Zheng, Alexei V. Filippenko

Nicole Mizrahi, Geology
Sulfur Abundance and Isotopic Composition Across the Terrestrial Cretaceous-Paleogene Boundary
Faculty Mentors: Paul Renne, Isabel Fendley

12:45 - 1:30pm
Lunch*
LeConte Hall, West Entrance Patio
*Lunch for SURF Fellows and Session Moderators

Thursday, August 22nd
Erika Page, Global Studies
The Brazilian Landless Workers’ Movement and the Fight for Agroecology
Faculty Mentor: Michael Watts

Calvin Nguyen, American Studies
The Grove, Los Angeles: A Study on Themed, Commercial, and Pseudo-Civic Spaces
Faculty Mentor: Kathleen Moran

Sylvia Targ, Conservation and Resource Studies, Geography
Starvation for Conservation? A Socio-Ecological Analysis of the Impact of Tayrona National Park on Fisher Wellbeing in Magdalena, Colombia
Faculty Mentors: Adam Jadhav, Nathan Sayre, Lynn Huntsinger

Alexandra Langer, History
The Hydrological Legacy of Sugar Planting in St. Croix, U.S. Virgin Islands
Faculty Mentor: Benjamin Siegel

Isabella Shipley, Interdisciplinary Studies Field
Art and Environmentalism
Faculty Mentor: Indira Martina Moore

Session 3A, LeConte Lecture Hall 2
Relationships with the Environment
Moderator: Victoria Cheng

Joy Li, Molecular & Cell Biology
Investigating the Immunological Effects of STING Pathway Activators in Spontaneous Tumor Models
Faculty Mentor: David Raulet
Andrew Hong, Chemistry
Expanding the Toolkit of Multi-Carborane Linkers for Boron Neutron Capture Therapy
Faculty Mentor: Robert Flavell

Tiffany Hangse, Molecular & Cell Biology
Development of a Human Thymic Epithelial Co-Culture System to Enhance T Cell Maturation
Faculty Mentor: Jeffrey Bluestone

Shea Khyeam, Molecular & Cell Biology, Nutritional Sciences
Investigating Novel Regulators of Cardiac Regenerative Potential
Faculty Mentor: Guo Huang

Catherine Jung, Molecular Environmental Biology
Investigating Changes in Heart Rate During Pregnancy
Faculty Mentor: Vasanth Vedantham

Session 3C, LeConte Lecture Hall 4
Condensed Matter Physics
Moderator: Liya Oster

Noah Stevenson, Physics
Tracking Non-Markovian Quantum Dynamics of a Superconducting Qubit with Deep Learning Filters
Faculty Mentor: Irfan Siddiqi

Steve (Zihang) Wang, Physics
E-Beam Induced 1T'-2H Phase Transition in Few Layer TMDs
Faculty Mentor: Alex Zettl

Namrata Ramesh, Physics
Investigating Self Assembly of Gold Nanocrystal Superlattices
Faculty Mentor: Naomi Ginsberg

Jinen (Tim) Guo, Physics
Experimental Implementation of RF Electron Trap for Quantum Information Processing
Faculty Mentor: Hartmut Höfler

Ryan Lee, Physics, Mathematics
Temperature Dependence of a Mott Insulator
Faculty Mentor: Michael F. Crommie
Friday, August 23rd

9:00 - 9:30am
Coffee/Tea and Mingling
LeConte Lobby

9:30 - 10:45am
Session 4A, LeConte Lecture Hall 2
Interviews & Ethnography
Moderator: Jacob Liming

Emma Yataco, Interdisciplinary Studies Field
Why Some Stay and Some Leave: Conversion and De-Conversion in the Mormon Church
Faculty Mentor: Edwin Lin

Laura Goy, Public Health
Understanding Barriers to HIV Suppression for Clients with High Viral Load in Malawi
Faculty Mentor: Ann Swidler

Lara Rostomian, Integrative Biology
Knowledge and Attitudes Regarding Family Planning Options in Armenia
Faculty Mentor: Anke Hemmerling

James Kennerly, Chinese, Anthropology
Faculty Mentor: Mariane C. Ferme

Session 4B, LeConte Lecture Hall 3
Cellular Transitions in Mitosis & Meiosis
Moderator: Pavel Klier

Mounika Gopi, Molecular & Cell Biology
Investigating mRNA Regulation of an Antioxidant in Yeast Meiosis
Faculty Mentors: Gloria Brar, Helen Vander Wende

Zoe Lung, Molecular & Cell Biology
Developing a Chemically Induced Proximity System to Study Meiotic Chromosome Dynamics in C. Elegans
Faculty Mentor: Abby Dernburg

Kathryn Li, Molecular & Cell Biology
Coordination of Organelle Inheritance During Polarized Cell Division
Faculty Mentor: David Drubin
Tia Cheunkarndee, Molecular & Cell Biology, Public Health  
Investigating the Regulation of Atg40 Expression During Meiosis  
Faculty Mentor: Gloria Brar

Connor Tou, Bioengineering  
CRISPR Diversifiers: Expanding the Toolkit to S. Cerevisiae  
Faculty Mentor: John Dueber

Session 4C, LeConte Lecture Hall 4  
Chemistry & Engineering  
Moderator: Barry Fung

Jonathan Lee Yang, Chemistry  
Copper Catalyzed $S_n$' Formation of Borylated (Z)-Fluoroalkenes for Drug Design  
Faculty Mentor: John Hartwig

Danielle Diaz, Mechanical Engineering  
Yuniba Yagues, Chemical Engineering, Materials Science & Engineering  
Modeling and Testing of Eco-Friendly Piezoelectret Sensor for Anthropocentric Pressure Measurements  
Graduate Student Mentor: Neil Ramirez

Jaime Zendejas, Physics  
Digital Acoustic Noise Cancellation  
Faculty Mentor: Yury G. Kolomensky

Antonia Bronars, Mechanical Engineering  
Tensegrity Locomotion Using Inertial Mechanisms  
Faculty Mentor: Alice Agogino

Nikhil R. Chari, Chemical Biology  
Interactive Effects of Redox and Temperature on Soil Biogeochemical Processes  
Faculty Mentor: Whendee L. Silver
Duc Nguyen, Psychology
The Role of Compassion in Decision-Making
Faculty Mentor: Dacher Keltner

Jewelia Yao, Psychology
The Relationship Between Sulcal Depth and Working Memory in Childhood
Faculty Mentors: Silvia Bunge, Kevin Weiner

Christopher Machle, Cognitive Science
The Neural Basis of Choice Rejection
Faculty Mentor: Linda Wilbrecht

Gwyneth Hutchinson, Psychology
Circadian Mediation of the Pre-Ovulatory LH Surge
Faculty Mentor: Lance Kriegsfeld

Zoe E. Ferguson, Cognitive Science
Breaking the Stereotype Ceiling: A Study on Stereotype-Inconsistency
Faculty Mentor: Dana Carney

Zoe Kiely, Interdisciplinary Studies Field
Privacy, Identity, and Third Party Information Disclosure
Faculty Mentor: Shreeharsh Kelkar

Alicia Sidik, Interdisciplinary Studies Field, Society & Environment
Assessing Privacy and Security Approaches to Regulating Abuse in P2P Fintech Markets of Indonesia
Faculty Mentor: Amm Quamruzzaman

Aaditee Kudrimoti, Political Science
Energy and Development Synergy?: Chinese Hydropower Investments and Rural Electrification in Lao PDR
Faculty Mentor: Daniel Kammen
Zihao Li, Applied Mathematics, Economics, Statistics
The Effectiveness of China’s Two-Child Policy and Its Impacts on Women’s Labor Market Outcomes
Faculty Mentor: Jeffrey Perloff

Session 5C, LeConte Lecture Hall 4
Neurobiology I
Moderator: Pavel Klier

Ashley Rakuljic, Molecular & Cell Biology
3D Reconstruction of a Vocal Learning Neural Pathway in Rousettus Aegyptiacus (Egyptian Fruit Bat)
Faculty Mentor: Michael Yartsev

Helen Kang, Molecular & Cell Biology, Applied Mathematics
Information Integration in Nonlinear Systems
Faculty Mentors: Friedrich Sommer, Daniel Toker

Samira Maboudian, Cognitive Science
A Novel Approach to Fluency Data Analysis to Improve Dementia Diagnosis
Faculty Mentor: Ming Hsu

Arya Haghighi, Biochemistry
SLASER & JDE Analysis for MRI
Faculty Mentor: Roland Henry

Sijia Zhang, Molecular & Cell Biology, Anthropology
Understanding the Directed Outgrowth of the C. Elegans Hermaphrodite-Specific Neurons
Faculty Mentor: Gian Garriga

12:15 - 1:00pm
Lunch*
LeConte Hall, West Entrance Patio
*Lunch for SURF Fellows and Session Moderators

1:15 - 2:30pm
Session 6A, LeConte Lecture Hall 2
Historical Perceptions
Moderator: Sean Burns

Shreya Kareti, History of Art, South & Southeast Asian Studies
Constructions of Urban Space in French Colonial India
Faculty Mentor: Sugata Ray
Nicholas Pingitore, History
The Invention of Westphalia
Faculty Mentor: Ethan Shagan

Alexander Reed, History
Caesars and Subdivisions: The Urban Fabric of the Roman West in the Age of Augustus
Faculty Mentor: Carlos F. Noreña

Josette Miller, Anthropology
Expect the Unexpected: Reexamining Agency in Nineteenth-Century America
Faculty Mentor: Laurie Wilkie

Session 6B, LeConte Lecture Hall 3
Neurobiology II
Moderator: Molly Kirk

Vivian Li, Molecular & Cell Biology
The Influence of TREK1 (K2P) on Social Memory in the Hippocampus of Mice Models
Faculty Mentor: Toby Turney

Sanika Ganesh, Molecular & Cell Biology
Transcriptional Changes During Experience-Dependent Plasticity in Somatosensory Cortex
Faculty Mentor: Daniel Feldman

Christopher Hall, Molecular & Cell Biology
The Effects of Pubertal Hormones on Dopaminergic Signaling in the Context of Learning and Decision-Making
Faculty Mentor: Linda Wilbrecht

Mohammad Saffari Doost, Integrative Biology
The Role of Medullary GABAergic Neurons in Controlling Sleep
Faculty Mentor: Yang Dan

Emily Ye, Molecular & Cell Biology
Exploring the Role of Gustatory Sensory Neurons in Mating Status Dependent Nutrient Consumption
Faculty Mentor: Kristin Scott
Faisal AlZaben, Molecular & Cell Biology
Identifying the Causal Genetic Basis in Thermotolerance in *S. Cerevisiae*
Faculty Mentor: Rachel Brem

Alma Halgren, Bioengineering, Computer Science
Copy Number Variation in Chimpanzees
Faculty Mentor: Peter Sudmant

Kendall Fitzgerald, Integrative Biology
Morphological, Taxonomical and Paleoecological Assessment of Plio-Pleistocene Shrew Fossils (Mammalia: *Soricidae*)
Faculty Mentor: Alan Shabel

Ravi Mandla, Molecular & Cell Biology
The Evolution of Chronotropic Scaling: A Computational Approach
Faculty Mentor: Vasanth Vedantham

Andrew Chen, Molecular & Cell Biology
Optimization of CRISPR-Cas9 Using an Adeno-Associated Virus (AAV) Delivered Self-Inactivation System
Faculty Mentor: David Schaffer

2:30 - 3:15pm
Closing Gathering and Group Photo
LeConte Hall Lecture Hall 4
Poster Session Participants

Math Team Fellows

1. Smooth Resolution of Gelfand-Zetlin Polytopes and Toric Varieties
   Junhao Fan, Mathematics
   Yining Liu, Mathematics
   Nikhil Sahoo, Mathematics
   Andy Zhang, Mathematics
   Faculty Mentor: David Nadler

Math Team Fellows

2. Investigating Kac-Moody Algebras
   Aidan Backus, Mathematics
   Peter Connick, Physics
   Joshua Lin, Mathematics, Physics
   Christopher Randall, Mathematics
   Faculty Mentor: Richard Borchers

Rose Hills Experience Fellows

3. Curtis Beck, Molecular & Cell Biology
   Insights into the Cross-Talk Between PRC1 and PRC2 Using Cryo-Electron Microscopy
   Faculty Mentor: Vignesh Kasinath

4. Samantha Chang, Bioengineering
   Reductive Loop Design Principles for Polyketide Synthases to Produce Biofuels
   Faculty Mentor: Amin Zargar

5. Ethan Chung, Bioengineering
   Uncovering the Mechanics of Fingerprint Treads Under Dynamic Wet Conditions
   Faculty Mentor: Hannah Stuart

6. Andy Q. Chen, Molecular & Cell Biology
   Nucleosomal States Regulate Disassembly and Assembly of Nucleosomes
   Faculty Mentor: Cesar D. Diaz-Celis

7. Diana Leslie Cornejo, Molecular & Cell Biology
   Understanding the Negative Impact of Chronic Prenatal Stress on Fetal Development
   Faculty Mentor: Lance Kriegsfeld
8. Peter DePaola IV, Chemical Biology
*Characterization of Unique Proteins Encoded by a Parasitic Genetic Element Discovered in Cholera Patients*
Faculty Mentors: Kristen LeGault, Kim Seed

9. Noah Epstein, Chemical Biology
*Structure and Properties of the Iron Sulfur Enzyme, the “Hybrid Cluster Protein”*
Faculty Mentor: Jonathan Rittle

10. Huws Landsberger, Physics
*Cooling Electrons Through Resonant Mode-Mode Coupling*
Faculty Mentor: Joel Fajans

11. Frank Lee, Microbial Biology
*Identification of a Flavin Exporter Essential for Extracellular Electron Transfer in Listeria Monocytogenes*
Faculty Mentor: Rafael Rivera-Lugo

12. Ryan Lehmkuhl, Electrical Engineering and Computer Sciences
*DELPHI: A Cryptographic Inference Service for Neural Networks*
Faculty Mentor: Raluca Ada Popa

13. Andrew Liao, Molecular & Cell Biology
*Ndc80 Turnover During the Mitotic Cell Cycle*
Faculty Mentor: Elçin Ünal

14. Zoe N. Merz, Chemical Biology
*Site-Specific Modification of Virus-Like Particles Towards Drug Delivery Applications*
Faculty Mentor: Matthew B. Francis

15. Leyla Namazie, Geophysics
*Obtaining Multicomponent Paleomagnetic Data to Understand the Geologic Behavior of the Baird Formation*
Faculty Mentor: Paul Renne

16. Metta Nicholson, Molecular Environmental Biology
*The Impact of Nonnative Wetland Species on Spectral Signatures of Greenness and Heterogeneity*
Faculty Mentor: Iryna Dronova
17. Natalie Petersen, Molecular & Cell Biology
The Impact of Di(2-ethylhexyl) Phthalate on Sperm Fertilizing Ability
Faculty Mentor: Polina Lishko

18. Courtney Rauchman, Data Science
The Intersection of Linkage Disequilibrium Score Regression (LDSC) and Selection
Faculty Mentor: Rasmus Nielsen

19. Nikko Sambold, Molecular & Cell Biology
Interrogating the Regeoselectivity of Halogenases
Faculty Mentor: Monica Neugebauer

20. Elizabeth Wang, Bioengineering
Evaluating 3,4,4-Li(1,2-HOPO) as a Decorporation Agent for Gadolinium-Based Contrast Agents
Faculty Mentor: Dahlia An

21. Brigita Widiarto, Molecular & Cell Biology
Loss of Interleukin-33 Disrupts Critical Period Plasticity in the Visual Cortex
Faculty Mentor: Ilia D. Vainchtein

22. Kirsten Nicole Youn, Molecular & Cell Biology, Nutritional Sciences
Investigating the Ability of Putative Tau KFERQ Degron Motifs to Regulate Protein Stability
Faculty Mentor: Carolina Alquezar Burillo

23. Nico Fujii, Molecular Environmental Biology
Palveen Sekhon, Molecular Environmental Biology
Investigating Introgressive Hybridization in Jumping Spider Mating Behavior
Graduate Student Mentor: Ignacio Escalante

24. Connor Geudeker, Civil Engineering
Laboratory Earthquakes: Direct Observation of Stick-Slip Fault Behavior
Graduate Student Mentor: Jes Parker

25. Nikolay Velkov, Civil Engineering
Laboratory Earthquake Analysis Toolkit
Graduate Student Mentor: Jes Parker
26. Emma Jiayue Tao, Computer Science, Philosophy
Perception of Spatial Design in Healthcare Facilities Using an Immersive Experience
Graduate Student Mentor: Haripriya Sathyanarayanan

27. Soumil Jain, Data Science, Molecular & Cell Biology
Using Event-Modeling Simulations to Analyze Resource Utilization of Smart Hospitals
Graduate Student Mentor: Haripriya Sathyanarayanan

28. Savannah Cragin, Media Studies
Seth Zhao, Applied Mathematics, Computer Science
“I Regret to Inform You that Your Private Information Has Been Compromised”
Graduate Student Mentor: Naniette H. Coleman

29. Nancy Jauregui, Social Welfare
Leveraging Students’ Funds of Knowledge to Develop STEM Research Projects through Written Work
Graduate Student Mentor: Laleh Coté

SURF Conference Poster Room
Physics Reading Room and Collaboration Center, LeConte 175
SURF Fellows According to Sponsor

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Calvin Nguyen

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