

2021 DEANS' SUMMER RESEARCH FELLOWS

Humanities

Cydney Livingston ('22)

The Human Betterment League: Sterilization, contraception, and family planning in Postwar North Carolina

Mentor: [Evan Hepler-Smith](#)

Interdisciplinary

Euna Cho ('22)

Evaluating the Effect of Interactive Art on Medical Students' Psychological Wellbeing

Mentor: [Kearsley Stewart](#)

Zizai Cui ('23)

Mathematics of the Mind

Mentor: [Ingrid Daubechies](#)

Isaiah Mason ('22)

Crossing the Cultural Divide: Healthcare Access for African Migrants in Northern and Southern Italy

Mentor: [Roberto Dainotto](#)

Holland Stam ('22)

Janson's History of Art v. Auction Trends

Mentor: [Hans Van Miegroet](#)

Ying Yu ('23)

Temporal Processing in Tonal and Atonal Music

Mentor: [Tobias Overath](#)

Life Sciences

Alexander Behura ('22)

Establishing Wnt signaling-mediated pro-arrhythmic cardiac remodeling

Mentor: [Andrew Landstrom](#)

Julia Choi ('22)

Analysis of locomotor power in primates

Mentor: [Daniel Schmitt](#)

Alina Feng ('23)

Characterization of genes interacting with matrix metalloproteinases during cell invasion in C. elegans.

Mentor: [David Sherwood](#)

Ashwin Kulshrestha ('22)

Enhancement of an in vitro DART-seq Assay for the Detection of N6-Methyladenosine

Mentor: [Kate Meyer](#)

Erica Langan ('22)

Single cell transcriptome analysis to elucidate the cellular composition of murine submucosal glands

Mentor: [Purushothama Rao Tata](#)

Grace Lee ('23)

Mapping the contributions of distinct cellular populations in regulating head orientation in the superior colliculus

Mentor: [Henry Yin](#)

Seayoung Lee ('22)

Tumor Immunobiological Factors in Lymphovascular Invasion of Inflammatory Breast Cancer

Mentor: [Gayathri Devi](#)

Alexandra Markunas ('22)

Lentiviral Delivery of Optogenetic Voltage Indicator to Examine Cardiac Repolarization Abnormalities Associated with Variant in TBX5 Gene

Mentor: [Andrew Landstrom](#)

Andrew Nguyen ('22)

Elucidating SRCP1's Therapeutic Potential on Tau Pathology

Mentor: [Matt Scaglione](#)

Brinda Raghavendra ('23)

Functional dissection of reproductive-to-brain circuits for social and affective states

Mentor: [Jenna McHenry](#)

Pratamesh Ramasubramanian ('23)

Evaluating NK Cell and Monocyte Contribution to ADCC response elicited by Infant Candidate Vaccines using Area Scaling Analysis

Mentor: [Justin Pollara](#)

Daniel Ryan ('22)

Characterizing the Influence of the Mosquito Microbiome in Regulating Aryl Hydrocarbon Receptor Activity

Mentor: [Emily Derbyshire](#)

Denise Shkurovich ('22)

Effects of posture and locomotion on grasping mechanics across primates

Mentor: [Daniel Schmitt](#)

Brennan Simon ('22)

Identification of an integrin alpha 3/alpha 6 mediated mechanism of leptomeningeal metastasis in triple negative breast cancer

Mentor: [Dorothy Sipkins](#)

Linda Tang ('22)

Characterizing an in vivo Mice Model for Studying Senescence in Hepatocytes

Mentor: [Anna Mae Diehl](#)

Arthi Vaidyanathan ('22)

Identification and Mechanistic Analysis of Environmental Pathogens with TNF-dependent Clearance

Mentor: [Edward Miao](#)

Kevin Wang ('22)

SoxN and Svb regulation through Wg

Mentor: [Amy Bejsovec](#)

Angela Wei ('23)

A three-dimensional human iPSC-based Alzheimer's disease modeling system for establishing gene therapy approaches

Mentor: [Ornit Chiba-Falek](#)

Catherine Yao ('22)

Intestinal epithelial regeneration after small bowel transplantation

Mentor: Babak Mirminachi

Claire Yin ('22)

Activities of Brachyury: a transcription factor in a dynamic system

Mentor: [David McClay](#)

Physical Sciences

Dhanasheel Muralidharan ('23)

Azostilbene-derived Small Molecules and Their Interactions with MALAT-1 Long Noncoding RNA Structure

Mentor: [Amanda Hargrove](#)

Junzhe Zhou ('22)

Probing cosmology with intrinsic alignment of galaxies in weak gravitational lensing surveys

Mentor: [Michael Troxel](#)

Quantitative Sciences

Yijia Liu ('23)

Spectral Analysis of Time Series using Multitaper Method

Mentor: [Hau-Tieng Wu](#)

Megan Richards ('22)

Evaluating robustness in interpretable diagnosis modeling for cervical cancer detection

Mentor: [Nimmi Ramanujam](#)

Social Sciences

Matthew Majsak ('22)

Exploring Political Engagement Amongst North African Youth, 10 Years After the Arab Spring

Mentor: [Mbaye Lo](#)

Camden Nelson ('22)

Effects of Virtual Format of Religious Services on Well Being

Mentor: [Patty Van Cappellen](#)

Anh-Huy Nguyen ('22)

Differences in STEM Graduation Rates for Underrepresented Minorities Across the University of California System

Mentor: [Peter Arcidiacono](#)

Sihan (Jen) Wang ('23)

Longhand, Laptop and e-Writer Note-taking and Their Effects on Student Learning

Mentor: [Bridgette Hard](#)

Jessie Xu ('22)

Financing Affordable Mortgages to Close the Racial Wealth Gap: A Partnership with Self-Help Credit Union

Mentor: [Charlie Becker](#)