2014 Deans' Summer Research Fellows

Student: Umer Ahmed  
Mentor: Christopher Kontos  
Faculty Mentor Department: Pharmacology & Cancer Biology  
The role of PP1 in Caskin2-dependent endothelial cell quiescence

Student: Safa Al-Saeedi  
Mentor: Timur Kuran  
Faculty Mentor Department: Economics  
Muslim Women’s Involvement in the Public Discourse in Beirut & Istanbul

Student: Abby Ardis  
Mentor: Deborah Hicks  
Faculty Mentor Department: other department...  
Investigating Inequality in College Access for Rural Appalachian Students

Student: Hanan Awel  
Mentor: Dr. Sumi Ariely  
Faculty Mentor Department: Global Health  
Destination Middle East: The impact of working conditions in Saudi Arabia on the current physical, mental, and

Student: Ethan Baruch  
Mentor: Emily Bernhardt  
Faculty Mentor Department: Biology  
The Effects of Urbanizing Landscapes on Aquatic Macroinvertebrate Communities

Student: Martha Berg  
Mentor: Christina Meade  
Faculty Mentor Department: Global Health  
Risk Behavior in Capetown: A Study of Drug Abuse and HIV Risk in Delft, South Africa

Student: Barbara Blachut  
Mentor: Amanda Hargrove  
Faculty Mentor Department: Chemistry  
Synthesis of 3,4,5-Trisubstituted Oxazolidinones for Development of a RNA-Targeted Small Molecule Library
2014 Deans' Summer Research Fellows

Student: Cat Blebea
Mentor: David Sherwood

Faculty Mentor Department  Biology
Discerning the Role of SPARC in Basement Membrane Invasion in Caenorhabditis Elegans

Student: Rebecca Brenner
Mentor: Anne West

Faculty Mentor Department  Neurobiology
Psychostimulant-induced plasticity of parvalbumin-positive GABAergic interneurons

Student: James Brock
Mentor: David Rohde

Faculty Mentor Department  Political Science
Gridlock in the Modern US Senate- the evolution of the informal rules, especially self-restraint by minorities, in the

Student: Laura Brody
Mentor: Robin Kirk

Faculty Mentor Department  ICS
Divisional Representation in Belfast's Irish Republican History Museum

Student: Lexia Chadwick
Mentor: Zoila Airall

Faculty Mentor Department  Education
The Darker Body: Sexual Desirability of Black Women by White Italian Men

Student: Korrine Cook
Mentor: Melissa Watt

Faculty Mentor Department  Global Health
Exploring Opportunities for the Prevention and Identification of Obstetric Fistula in Northern Tanzania

Student: Patricia DeLacey
Mentor: Anne Pusey

Faculty Mentor Department  Evolutionary Anthropology
Settlement patterns and core area selection of wild female chimpanzees (Pan troglodytes)


**2014 Deans' Summer Research Fellows**

**Student:** Emma Devereux  
**Mentor:** Dr. Elizabeth Losos  

**Faculty Mentor Department** Nicholas School of the  
Responses of African elephants (Loxodonta Africana) in the Kruger National Park towards a bee threat: a possible

**Student:** Chenchen Feng  
**Mentor:** Craig Roberts  

**Faculty Mentor Department** Neurobiology  
A Cross Cultural Comparison of the Science Communication behind Anti-Smoking Campaigns in the US and China

**Student:** Nadia-Estelle Fiat  
**Mentor:** Engseng Ho  

**Faculty Mentor Department** Cultural Anthropology  
A Diaspora in Decline: A Study of the Parsi Community in Hong Kong

**Student:** Sina Gebre-Ab  
**Mentor:** Orin Starn  

**Faculty Mentor Department** Cultural Anthropology  
Social and Political Factors Impacting the Healthcare Experience of Eritrean migrants in the UK diagnosed with mental

**Student:** Nali Gillespie  
**Mentor:** Suzanne Shanahan  

**Faculty Mentor Department** Sociology  
Refugees' Perceptions of Health and Well-Being in Jordan over Time

**Student:** Aruni Gunaratne  
**Mentor:** Joanne Kurtzberg  

**Faculty Mentor Department** Pathology  
Effect of Cell Therapy on Remyelination of the Mouse Cerebellum Following Brain Injury

**Student:** Victoria Haney  
**Mentor:** Paulo Ferreira  

**Faculty Mentor Department** Duke Eye Center  
Probing the role of the cyclophilin-like domain (CLD) of Ran-binding protein 2 (Ranbp2) in neuroprotection of
2014 Deans' Summer Research Fellows

**Student:** Connor Hann  
**Mentor:** Joshua Socolar  

**Faculty Mentor Department** Physics  
Theory of Icosahedral Quasicrystal Growth

**Student:** Mark Herzog  
**Mentor:** Eric Green  

**Faculty Mentor Department** Global Health  
Evaluation of a telehealth program bringing specialty care to high risk pregnancies in rural Virginia

**Student:** Amy Huang  
**Mentor:** George Dubay  

**Faculty Mentor Department** Chemistry  
Determining the organic composition of samples through GC-MS, SPE, and HPLC-MS analysis

**Student:** WeiQiao Huang  
**Mentor:** David Kirsch  

**Faculty Mentor Department** Pharmacology & Cancer Biology  
The role of Notch in tumor maintenance in a primary mouse model of soft-tissue sarcoma

**Student:** Brendan Huang  
**Mentor:** Timothy McMahon  

**Faculty Mentor Department** Medicine  
Analysis of nitric oxide bioavailability as a function of sickle cell disease therapy

**Student:** Lillian Kang  
**Mentor:** Neil Freedman  

**Faculty Mentor Department** Cell Biology  
Endothelial cell-specific mechanisms of Kalirin's atherosclerosis-protective properties

**Student:** Joseph Kleinhenz  
**Mentor:** Pei Zhong  

**Faculty Mentor Department** other department...  
Passive Acoustic Monitoring of Extracorporeal Shockwave Lithotripsy Therapy
2014 Deans' Summer Research Fellows

Student: Andrew Kragie
Mentor: Gerald Wilson

**Faculty Mentor Department**  History
MLK and LBJ: Political Leadership in the Civil Rights Movement

Student: Eric Lakey
Mentor: Emily Derbyshire

**Faculty Mentor Department**  Chemistry
Targeting Chorismate Synthase to Treat Malaria

Student: Hillary Lee
Mentor: Julie Teichroeb

**Faculty Mentor Department**  Evolutionary Anthropology
Handling Time and Rank-Order Food Site Preferences for Vervet Monkeys

Student: William Lee
Mentor: Daniel Wechsler

**Faculty Mentor Department**  Pharmacology & Cancer Biology
Elucidating the Mechanisms of CRM1 in Leukemogenesis

Student: Cathy Li
Mentor: Daniel Gauthier

**Faculty Mentor Department**  Physics
Analysis of Spatiotemporal Behavior of the Dynamic Systems in Neural Network

Student: Grace Li
Mentor: Subhashini Chandrasekharan

**Faculty Mentor Department**  IGSP
Non-Invasive Prenatal Testing in The People's Republic of China: Ethical and Practical Barriers

Student: Abigail Lin
Mentor: Alexander Hartemink

**Faculty Mentor Department**  Computer Science
Integrating biological mechanisms into a machine-learning framework to predict gene expression from promoter
2014 Deans' Summer Research Fellows

Student: Ching Ying Lin
Mentor: George Dubay

Faculty Mentor Department  Chemistry
Profiling Organic Composition of Sicilian Pottery Through HPLC-MS, GC-MS, and Multi-Dimensional Analysis

Student: Kehaan Manjee
Mentor: Mbaye Lo

Faculty Mentor Department  Asian and Middle Eastern Studies
Understand the Role of Islamic Institutions of Higher Learning in sub-Saharan Africa

Student: Brittany Nanan
Mentor: David Siegel

Faculty Mentor Department  Political Science
Interpreting the Interactions Between Counter-Terror Methods and Human Rights

Student: Jasmine Nee
Mentor: Gerard Blobe

Faculty Mentor Department  Pharmacology & Cancer Biology
The synergistic effects of retinoic acid, ODSH, and HSPG receptors on differentiation in neuroblastoma

Student: Hunter Nisonoff
Mentor: Bruce Donald

Faculty Mentor Department  Computer Science
Computational design of monomeric protein to HIV-1 gp41 envelope membrane-proximal external region trimer

Student: Feng Pan
Mentor: Craig Burnside

Faculty Mentor Department  Economics
Analysis of 2014 Argentine Peso Devaluation: Another Tequila Crisis or Not

Student: Sagar Patel
Mentor: Cagla Eroglu

Faculty Mentor Department  Cell Biology
The role of glia secreted proteins Hevin and SPARC in synaptic refinement during development
2014 Deans' Summer Research Fellows

Student: Alexis Pearce
Mentor: José-María Rodríguez-García

Faculty Mentor Department  Romance Studies
The Intersection of Human Rights and Literature in Argentina

Student: Camille Peeples
Mentor: Jenni Owen

Faculty Mentor Department  Public Policy
The Children’s Advocate: Evaluating The Long-Term Benefits of the Guardian ad Litem Program for Children in Local

Student: Vikram Ponnusamy
Mentor: Joe Heitman

Faculty Mentor Department  Molecular Genetics &
Role of DNA Repair Genes in RNA-Mediated Silencing in Cryptococcus neoformans

Student: Sandy Ren
Mentor: Paul Magwene

Faculty Mentor Department  Biology
Analyzing the phenotypic consequences and genetic networks due to genotypic variation of invasive growth in

Student: Houston Rhodes
Mentor: Charles Piot

Faculty Mentor Department  African and African American
Diet/Nutrition and Alzheimer's Disease in Lomé, Togo

Student: Rachel Shenker
Mentor: Dan Kiehart

Faculty Mentor Department  Biology
Distribution and Dynamics of Integrin During Dorsal Closure

Student: Yekaterina Shpanskaya
Mentor: Ute Hochgeschwender

Faculty Mentor Department  Neurobiology
Functional Testing of Synaptic Transmission by Luciferase Activation of Opsins Across Synaptic Partners
Student: Shilpa Sridhar
Mentor: Steven Churchill

Faculty Mentor Department  Evolutionary Anthropology
Body Mass Estimation of Fossil Hominins

Student: Yunqian (Sherry) Tang
Mentor: Dan Tracey

Faculty Mentor Department  Neurobiology
Analyzing Drosophila multidendritic neuron transcriptome

Student: Ishan Thakore
Mentor: Eric Green

Faculty Mentor Department  Global Health
Addressing Perinatal Depression in Bungoma County through a mobile-phone system

Student: Tara Trahey
Mentor: Sheila Dillon

Faculty Mentor Department  Art, Art History, Visual Studies
The [Woman] Riding a Bull: A Case Study of Iconography, Production, and Vase Trade in Archaic Greece

Student: Ha Tran
Mentor: Marc Caron

Faculty Mentor Department  Cell Biology
Neurobiological mechanisms of adverse early life experience

Student: Matthew Tyler
Mentor: David Dunson

Faculty Mentor Department  Statistical Science
Extending testing procedures for Dirichlet mixtures in toxicogenetics data

Student: Ronnie Wimberley
Mentor: Sara LeGrand

Faculty Mentor Department  Global Health
Juntos: A Digital Health Intervention for Latino Men who Have Sex with Men
2014 Deans' Summer Research Fellows

Student: Joseph Wu
Mentor: Dan McShea

Faculty Mentor Department  Philosophy
Reconsidering Early 20th Century Philosophy of Biology: An Analysis of John Gregg and Joseph Woodger

Student: Jincheng Xu
Mentor: Ayana Arce

Faculty Mentor Department  Physics
CERN Summer Research Opportunity

Student: Lillian Zerihun
Mentor: Jayne Ifekwunigwe

Faculty Mentor Department  African and African American Studies
Cultural Practices and Identity in Orthodox, Islamic, and Pentecostal Religious Organizations of Addis Ababa, Ethiopia

Student: Xueyuan Zhang
Mentor: Alfred Goshaw

Faculty Mentor Department  Physics
Building and Using a Cosmic Ray Detector to Analyze High Energy Particles

Student: Roger Zou
Mentor: Daniel Kiehart

Faculty Mentor Department  Biology
The Effect of Canthus Removal on Cell Sheet Forces during Drosophila Dorsal Closure