

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

2014 Deans' Summer Research Fellows

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

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