

# Cohort 6 / Fall 2015 UConn IDEA Grant Award Recipients

# **Individual Projects**

### Margo Bailey '17 (Marketing, BUS)

Bilingual Spanish-English Toy Marketing as a Catalyst for Cultural Awareness: The Effect on Parents and Children in the Toy Market

Mentors: Robin Coulter, Marketing, BUS; Ivan Ferrero Ruiz, Literatures, Cultures, and Languages

• Margo will investigate how multinational toy companies can leverage advertising and promotional efforts to influence the values of cultural awareness promoted by parents and instilled in young children.

#### Lucas Bladen '19 (Political Science, CLAS; Human Rights; CLAS)

No Place Like Home: A Study of North African Refugee and Immigrant Integration in French Politics and Culture Mentor: Jennifer Sterling-Folker, Political Science, CLAS

• Lucas will conduct a qualitative research study that explores French citizens' perceptions of the political and cultural integration of North African refugees and economic immigrants.

#### Elizabeth Charash '18 (History, CLAS)

The Faces of the Gun Violence Prevention Movement

Mentor: Mary Bernstein, Sociology, CLAS

Elizabeth will examine the gun violence prevention movement in America, researching grassroots
organizations and the culture surrounding the American affliction with guns to better share the stories of
those affected.

#### Brock Chimileski '17 (Physiology and Neurobiology, CLAS; Molecular and Cell Biology, CLAS)

Defining Orexin Neuron Plasticity in the Lateral Hypothalamic Area in Response to Changing Metabolic Conditions Mentor: Alexander Jackson, Physiology and Neurobiology, CLAS

Through single cell transcriptional profiling, Brock will investigate gene expression in orexin neurons
during changes in metabolic state. Orexin neurons regulate energy homeostasis and wakefulness, and
thus this study may reveal mechanisms underlying hunger, weight regulation, and obesity.

#### Christina Cotte '17 (Molecular and Cell Biology, CLAS; Pathobiology, CANHR)

B-1 Cell Generation in Transgenic Mouse Model of Sickle Cell Disease

Mentor: Steven Szczepanek, Pathobiology, CAHNR

• Christina's research will focus on what causes the B-1 subset of B cells to be depleted in Sickle Cell Disease (SCD). She will test for the defective portion of the cells' development by conducting bone marrow transplants in a humanized transgenic SCD mouse model and analyzing B cell counts.

#### Isabella Horan '19 (Pre-Teaching, Elementary Education, ACES)

Diversity in the World of Education

Mentors: Susan Payne, Education, ED; Regina Caines, Massachusetts Partnership for Diversity in Education

 Isabella will study the effects of diversity in education through connecting with organizations in Boston that place teachers of minority backgrounds into Boston area schools and speaking with teachers from diverse backgrounds about their placement experiences.

#### Caitlin Jagla '17 (Molecular and Cell Biology, CLAS)

Development of Proximity Ligation Assay Protocol to Investigate CB1/OX1 Heterodimerization in HEK293 Cells and Primary Mouse Neurons

Mentor: Debra Kendall, Pharmaceutical Sciences, PHR

• Caitlin will use proximity ligation assays to investigate CB1/OX1 heterodimerization in HEK293 cells and neurons to contribute to the development of alternatives to opioid pain medications.

#### Jessica Joseph '17 (Psychology, CLAS)

**Phonetic Integration** 

Mentor: Eiling Yee, Psychological Sciences, CLAS

Jessica will investigate whether sound symbolism is an example of integration – when information in one
modality influences the interpretation of information in another modality – by examining the effects of
seeing a shape on speech sound perception. Her experiment utilizes the "Bouba-Kiki" Effect, an
exemplification of sound symbolism, and applies a new methodology: the phoneme identification task.

#### Max Klein '17 (Sports Management, ED)

The Impact of Social Factors on a Drafted High School Baseball Player's Decision to Attend College or Sign a Professional Contract

Mentor: Joseph Cooper, Educational Leadership, ED

 Max will conduct a series of in-person and phone interviews culminating in a qualitative, exploratory study to determine what social factors impact a drafted high school baseball player's decision to attend college or sign a professional contract.

## Brian Liang '17 (Molecular and Cell Biology, CLAS)

Investigating the Role of Collagen in Nanoparticle-Cancer Cell Interactions

Mentor: Xiuling Lu, Pharmaceutical Sciences, PHR

• Brian's research project will elucidate the cancer tumor targeting mechanism of mesoporous sillica nanoparticles.

#### **Genevieve Nuttall '17** (Ecology and Evolutionary Biology, CLAS)

Does Plumage Color in Birds Respond to Environmental Change?

Mentor: Morgan Tingley, Ecology and Evolutionary Biology, CLAS

 Genevieve will explore the effect of habitat degradation and environmental changes on the plumage coloration of birds.

#### Raeanne Nuzzo '17 (Art - Graphic Design, SFA)

Fear: The Culture

Mentor: Mary Banas, Art and Art History, SFA

Raeanne will complete an interactive design project that examines statements about danger and fear
from the current presidential primary campaign, paired with the hashtag "#FearTheCulture" printed over
a variety of images from sensationalized media, as a method of exploring the contemporary American
culture of fear.

## Nicholas Russo '18 (Ecology and Evolutionary Biology, CLAS)

Dispersal of the Hemlock Woolly Adelgid (Adelges tsugae Annand) during Avian Spring Migration
Mentors: Morgan Tingley, Ecology and Evolutionary Biology, CLAS; Chris Elphick, Ecology and Evolutionary Biology,
CLAS

Nicholas will investigate the role of migratory birds in the spread of the hemlock woolly adelgid – an
invasive insect pest – by mist-netting birds from spring migration through the breeding season and
collecting hemlock woolly adelgid nymphs from their feathers.

Srinivas Srirangam '17 (Physiology and Neurobiology, CLAS)

Understanding the Nucleophilic Characteristics of Hemoglobin through Amino Acid Labeling and Mass Spectrometry

Mentor: Xudong Yao, Chemistry, CLAS

• Srinivas will analyze the rate of covalent modification of the lysine and histidine residues that are located near the alpha helices of hemoglobin through amino acid labeling and multiple-reaction-monitoring mass spectrometry to determine the nucleophilic characteristics of hemoglobin.

# **Group Projects**

Alexander Ajayi Dec. '16 (Finance, BUS)

Mahir Rana '17 (Computer Science and Engineering, ENG)

SquareOne: Connecting Driven Students Mentor: Steven Williams, Accounting, BUS

• Alexander and Mahir are developing an app-based platform connecting college students.

Minkyung Kim '18 (Nursing, NUR)

Seo-Yeon Lee '18 (Allied Health Sciences, CAHNR)

Korean American Health Fairs

Mentor: Tania Huedo-Medina, Allied Health Sciences, CAHNR

• Minkyung and Seo-Yeon will coordinate health fairs for Korean Americans that include educating the audience on several health topics and providing information on insurance and the healthcare system.