UConn IDEA Grant
imagine / develop / engage / apply

Fall 2017 UConn IDEA Grant Award Recipients

Congratulations to the 19 UConn undergraduates who have been awarded UConn IDEA Grants! 13 of the award recipients will be completing individual projects, and 6 will be working on collaborative group projects.

The award recipients represent a variety of disciplines, from nursing to puppetry, biomedical engineering to ecology and evolutionary biology. They will conduct independent research projects; produce documentaries, novels, and creative nonfiction pieces; design prototypes; and engage in service initiatives.

Special thanks to the faculty and staff that supported student applications to the UConn IDEA Grant and to those who will be mentoring the award recipients as they complete their projects.

Individual Projects

Amelia Bowman '20 (IMJR: Young Adult Fiction: Identity and Diversity, CLAS)
Bringing Diversity to the Teenage Post-Apocalypse
Mentor: Victoria Ford Smith, English, CLAS
- Amelia will write a post-apocalyptic young adult novel that defies the standard narrative and reintroduces meaning to the near extinction of the human race. This novel will be written with a diverse cast of characters who explore topical issues such as social paranoia.

Arianna Diaz, Dec '18 (IMJR: Global Studies, CLAS; English, CLAS)
Combating Xenophobia: Bridging the Gap Between the Public and the U.S. Refugee Resettlement Process Using Data Visualization
Mentor: Kathryn Libal, Human Rights Institute
- To decrease xenophobia towards refugees in America, Arianna will collect data and narratives from scholarly materials and interviews with actors in the resettlement process that dispel misconceptions. Using data visualization tools, she will creatively display data as info-graphics to be shared online.

Nina Drozdenko '19 (Digital Media & Design, SFA)
Documenting Filipino American Diversity Through Film
Mentor: Matthew Worwood, Digital Media & Design, SFA
- Nina will produce a short documentary film highlighting the diversity of the Filipino American community across the United States, inspired by a desire to understand her heritage as a second-generation Filipino American.

Kat Folker '19 (Puppetry, SFA)
Beware the Great Beast: Exploring Otherness Through the Art of Horror
Mentor: Bart Roccoberton, Puppetry, SFA
- Kat will design and fabricate puppets for a short film to be completed in the spring 2019 that explores the genre of horror and how it reflects social issues - specifically gay panic and self-discovery.

Taylore Grunert '19 (English, CLAS; Ecology & Evolutionary Biology, CLAS)
"Catharsis Theory": A Graphic Novel Exploring LGBT Subjectivity and Coming of Age
Mentor: Cathy Schlund-Vials, English and Asian & Asian American Studies, CLAS

- Taylore will write a fictional graphic novel, based on personal experience, which explores LGBT adolescence in a way often ignored by mainstream LGBT narratives.

Annie Jin '19 (Molecular & Cell Biology, CLAS)
Identification of Early Gene Differentiation Markers in Progenitor Cells Involved in the Onset of Fibrodysplasia Ossifican Progressiva (FOP)
Mentor: David Goldhamer, Molecular & Cell Biology, CLAS

- Fibrodysplasia ossificans progressiva (FOP) is a rare genetic disease that results in the abnormal formation of bone outside of the normal skeleton. Annie's project aims to uncover whether and what differences in gene expression might be responsible for the differentiation of progenitor cells into bone in individuals with the disease as opposed to individuals without the disease. Annie hopes to do this by using mouse models, fluorescence activated cell sorting and RNA Sequencing

Ameen Kalkhoran '21 (Biomedical Engineering, ENGR)
Functionally-graded Apatite Coatings for Percutaneous Implants
Mentor: Mei Wei, Materials Science and Engineering, ENG

- Ameen aims to develop a novel functionally-graded triple apatite-based coating structure for percutaneous devices which will enhance both the bone and soft-tissue integration to the implant surface and reduce the possibility for epithelial downgrowth and infection.

Abigail LaFontan '20 (Political Science, CLAS)
Food Awareness in an Agriculturally Rich Community
Mentor: Phoebe Godfrey, Sociology, CLAS

- Abigail will establish a garden at a summer camp in Kent, CT that will be used to teach children to grow their own vegetables, and survey parents regarding access to local, farm fresh produce and the deterrents or incentives that guide their food choices.

Carly Martin '20 (English, CLAS)
The Great Forest Beast
Mentor: Alison Paul, Art & Art History, SFA

- Carly will write and illustrate a children's book that addresses themes of environmental degradation with a whimsical aspect accessible to children.

Benjamin Ranelli '19 (Ecology & Evolutionary Biology, CLAS; English, CLAS)
Causes of Synchrony in Food Provisioning to Nestlings and Its Relationship to Nest Success in Forest Fragments
Mentor: Chris Elphick, Ecology & Evolutionary Biology, CLAS

- Benjamin's study will examine why ovenbird parents coordinate, or synchronize, when they feed their chicks, and investigate whether synchronized provisioning increases the success rate of ovenbird nests.

Dhruv Shah '19 (Molecular & Cell Biology, CLAS)
Snapshots of the Healthcare Provider Experience
Mentor: Bruce Cohen, English, CLAS

- Dhruv will craft a portfolio of creative nonfiction literary pieces inspired by interviews with healthcare professionals to capture the realities experienced by professionals in particular specialties.

Mackenzie Watkins, Dec '18 (Ecology & Evolutionary Biology, CLAS)
Crypsis in Simple Systems: Do Brown Trout Background Match in Controlled Experiments?
Mentor: Margaret Rubega, Ecology & Evolutionary Biology, CLAS
- Mackenzie will observe and analyze whether predator- naïve brown trout (Salmo trutta) engage in background matching behavior under controlled conditions to see if the pattern of background matching in simple environments exists.

Sabrina Yum-Chan '19 (Psychological Sciences, CLAS; Molecular & Cell Biology, CLAS)
The Effect of Stress on the Microbiome of Drosophila melanogaster
Mentor: Nicole Broderick, Molecular & Cell Biology, CLAS
- Sabrina will study the effect of physiological stresses on the gut microbiome using the invertebrate model *Drosophila melanogaster.*

Group Projects

Mateo Escobar '20 (Biomedical Engineering, ENG; Materials Science & Engineering, ENG)
Caitlin Turney '20 (Chemical Engineering, ENG; German, CLAS)
How to Best Improve Sanitation Practices in the Peruvian Andes: Community-Led Total Sanitation and Citizen Science
Mentor: Jonathan Mellor, Civil & Environmental Engineering, ENG
- Mateo and Caitlin will conduct a pilot study to determine the impact of combining the Community-Led Total Sanitation (CLTS) and Citizen Science (CS) interventions on increasing adherence to good hygiene and sanitation practices and reduce open defecation of a rural community located in Peru.

Gregory Grasso '19 (Mechanical Engineering, ENG)
Stephen Price '20 (Mechanical Engineering, ENG; German Studies, CLAS)
Instructional Drone Project
Mentor: Jason Lee, Mechanical Engineering, ENG
- Gregory and Stephen aim to develop a lightweight, customizable, durable drone that is accessible to all at a low cost. To stimulate interest in STEM fields, they will develop educational materials explaining the assembly process to expose younger students to scientific concepts and engineering techniques.

Amberly Lao '19 (Nursing, NUR)
Tessa Weidig '19 (Nursing, NUR)
Support for Mothers and Families: A Battle on Neonatal Abstinence Syndrome
Mentors: Xiaomei Cong, Nursing, NUR; Valarie Artigas, Nursing, NUR
- Amberly and Tessa will conduct a clinical and educational study addressing the growing prevalence of high risk infants with Neonatal Abstinence Syndrome from the perspective of mothers and other family members, and design and develop educational materials to support the needs of this vulnerable population.

The UConn IDEA Grant program awards funding to support self-designed projects including artistic endeavors, community service initiatives, entrepreneurial ventures, research projects, and other creative and innovative projects. Undergraduates in all majors at all campuses can apply. Applications are accepted from individuals and from small groups who plan to work collaboratively on a project.

More information on the UConn IDEA Grant program
can be found at http://ugradresearch.uconn.edu/IDEA.