





OFFICE OF UNDERGRADUATE RESEARCH ANNUAL REPORT 2019-20

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OFFICE OF UNDERGRADUATE RESEARCH ANNUAL REPORT 2019-20

2019-20 At-A-Glance Statistics	2
Why Undergraduate Research?	3
Contributions to the Common Good	4
Summary of Accomplishments	5
Outreach	6
Undergraduate Research Advising	7
Undergraduate Research Leaders	8
Small & Travel Grants	9
Undergraduate Research Opportunities Program (UROP)	10
Undergraduate Research Scholarships	11
Summer Program for Undergraduate Research (SPUR)	13
Undergraduate Research Education Series (URES)	14
Monson Essay Prize	15
Outstanding Undergraduate Researcher Awards (OURA)	16
Undergraduate Research Symposium (URS)	17
Utah Conference on Undergraduate Research (UCUR) & National Conference on Undergraduate Research (NCUR)	18
Research on Capitol Hill (ROCH)	19
Undergraduate Research Journal	20
Undergraduate Research Scholar Designation (URSD)	21
Goals for 2020-21	22

2019-20 AT-A-GLANCE STATISTICS

OUTREACH

2,723 students at 90 events
94 research opportunities posted

ADVISING

327 total advising appointments
187 general information
33 SPUR
13 peer advising
61 UROP proposal & decision
33 Capstone Programs
61 UROP proposal draft reviews

UNDERGRADUATE RESEARCH LEADERS

1,872 students reached

SMALL GRANTS & TRAVEL GRANTS

29 small grants awarded
48 travel grants awarded

UNDERGRADUATE RESEARCH OPPORTUNITIES PROGRAM (UROP)

590 total UROP scholars
Fall 2019: 206 (282 applications)
Spring 2020: 244 (334 applications)
Summer 2020: 140 (189 applications)

SUMMER PROGRAM FOR UNDERGRADUATE RESEARCH (SPUR)

161 students presented at the 2019 Summer Symposium
129 raters completed 761 poster evaluation rubrics

UNDERGRADUATE RESEARCH EDUCATION SERIES (URES)

1,258 attendees at 37 events
Summer 2019: 663, 11 events
Fall 2019: 578, 16 events
Spring 2020: 172, 10 events

UNDERGRADUATE RESEARCH SYMPOSIUM (URS)

232 total student presenters
215 total presentations
187 poster presentations
25 oral presentations
2 performances
1 visual art presentation
128 raters completed 685 poster evaluation rubrics

UTAH CONFERENCE ON UNDERGRADUATE RESEARCH (UCUR)

61 University of Utah presenters

RESEARCH ON CAPITOL HILL (ROCH)

26 University of Utah presenters

UNDERGRADUATE RESEARCH JOURNAL

170 student authors

UNDERGRADUATE RESEARCH SCHOLAR DESIGNATION (URSD)

165 total URSD recipients
Summer 2019: 18
Fall 2019: 26
Spring 2020: 121

NOTE: NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH (NCUR) AND SUMMER PROGRAM FOR UNDERGRADUATE RESEARCH (SPUR) WERE CANCELED IN 2020

WHY UNDERGRADUATE RESEARCH?

STUDENTS

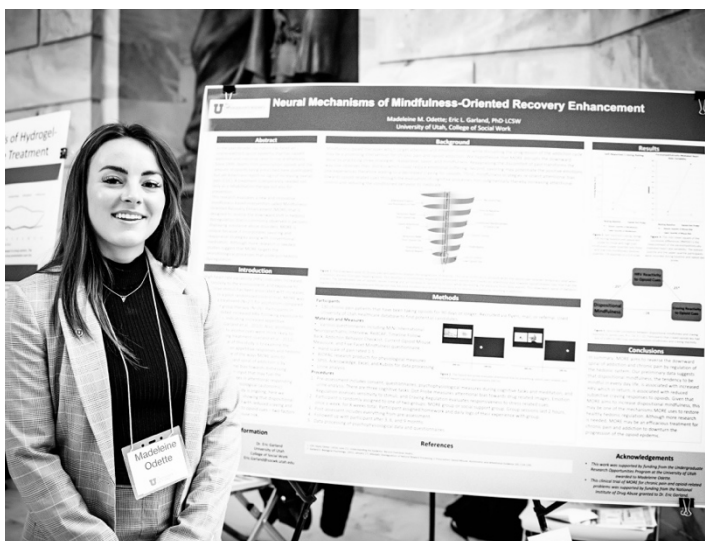
When we involve our undergraduate students in research, we demonstrate that we view them as colleagues in our pursuit of knowledge. Involvement in research can give students a sense of belonging, with their work forming a physical and/or intellectual home within the University. This is especially important at large institutions, as students crave an experience that is personal and allows them to work closely with faculty and other members of the academic community. Undergraduate research opportunities thus leverage some of our greatest assets as a Research I institution to the benefit of the student experience. In addition, we know that the experience of undergraduate research with a faculty mentor is associated with student retention and persistence to graduation.

FACULTY & SCHOLARSHIP

The faculty experience is also enriched by research mentorship and collaboration with undergraduate students. Our undergraduate students bring new perspectives and enthusiasm for the work and they are the future of our fields. By investing in our students, we are investing in the next generation of scholars.

OUR COMMUNITY & SOCIETY

Through research, students learn to navigate the nuances inherent to serious scholarly investigation and to interpret data responsibly and within a context. By collaborating with our students, we welcome students “into the fold” of the scholarly community and a reflective and critical-thinking public contributes positively to the long-term health of our community.



CONTRIBUTIONS TO THE COMMON GOOD

Every student belongs to a learning community.

We were responsible for the Undergraduate Research Living and Learning Community. The Living and Learning Community helped initiate the feeling of belonging to the scholarly community by providing incoming students with a structured living environment and additional opportunities and resources to explore research at the University. It helped support students' self-identification as interested and engaged students and members of society and thereby reinforced their participation in the intellectual community at the University and society at large.



Every student has a deeply engaged learning experience.

Our programs facilitate and promote student involvement in deeply engaged learning experiences. We provide support and guidance to undergraduate student researchers through every phase of the experience: discovery, research dissemination, reflection, and recognition.



Every student has a Plan to Finish and is supported by student success advocates, mentors, and advisors.

Our Undergraduate Research Advisors are an available resource for students throughout the entire research process. By providing support and guidance throughout students' involvement with our programs and by encouraging quality mentoring from University of Utah faculty mentors, our office supports students' research and overall academic achievement. This in turn supports students' accomplishment of their Plan to Finish and bolsters retention and graduation rates.

I am very appreciative that this program exists. It allows undergraduate students to have great insight into research projects that would otherwise be only for graduate level students.

- UROP Student

SUMMARY OF ACCOMPLISHMENTS

Response to COVID-19

- We moved the Undergraduate Research Symposium, originally scheduled for April 7, to an online format, live on April 20: <https://our.utah.edu/virtual-urs-2020/>
- We have partnered with the Office of the Vice President for Research and the Immunology, Inflammation and Infectious Diseases (3i) Initiative to develop a special program to support the involvement of undergraduate student researchers in crucial Summer 2020 research. The program builds on the existing Undergraduate Research Opportunities Program (UROP), providing undergraduate collaborators with a stipend for their remote research contributions: <https://our.utah.edu/covid-19-urop/>
- All Summer 2020 Undergraduate Research Education Series events will be offered as webinars.
- We offer guidance for research mentors to provide meaningful undergraduate research experiences remotely: <https://our.utah.edu/remote-undergraduate-research-mentoring/>

Expanded and Enhanced Summer Program Partnership

This year, the Summer Programs Partnership, which includes the Research Experiences for Undergraduates in the departments of Chemistry and Physics & Astronomy, the Native American Summer Research Internship in the School of Medicine, the Summer Program for Undergraduate Research in OUR, and the Huntsman Cancer Institute's PathMaker Cancer Research Program, was joined by the Genomics Summer Research for Minorities (GSRM) Internship. Together the partnership supported 118 students in summer 2019. Additionally, we are pleased to report a noted increase in applications for summer program funding in various areas across campus, including Atmospheric Sciences, Environmental & Sustainability Studies, Electrical & Computer Engineering, Materials Science & Engineering, and Sociology.



The Office of Undergraduate research has allowed me the opportunity to truly experience the kind of work I want to do in my career. The SPUR and UROP programs have been amazing experiences in guiding me towards my desired career.

- UROP and SPUR Student

OUTREACH

We engage in student outreach activities throughout the year with the goal of increasing participation in undergraduate research. Our student outreach activities include tabling, information sessions, in-class presentations, and presentations to student organizations. Through our outreach activities, we hope to make students more aware of the multitude of research opportunities available to them, the benefits of participating in undergraduate research, and help them get started finding a fulfilling research experience. We also maintain the online Research Opportunities Database, which informs students of ways in which they can get involved in undergraduate research at the U.

2,723 students reached at 90 events

CAMPUS OUTREACH PARTNERS

Academic Advising Center /
Anthropology / Applied Cognition Lab /
Block U / Business Scholars / Center for
Ethnic Student Affairs / Chemistry /
Communication / Diversity Scholars /
Environmental & Sustainability Studies /
Entrepreneurship / Ethnic Studies / Health
Science LEAP / Geography /
International Student & Scholar Services /
Mechanical Engineering / Orientation &
Transition / Physics / Pre-Med / Pre-PA /
Psi Chi / Social & Behavioral Sciences /
Social Work / Sociology / Solution
Scholars / Undergraduate Studies

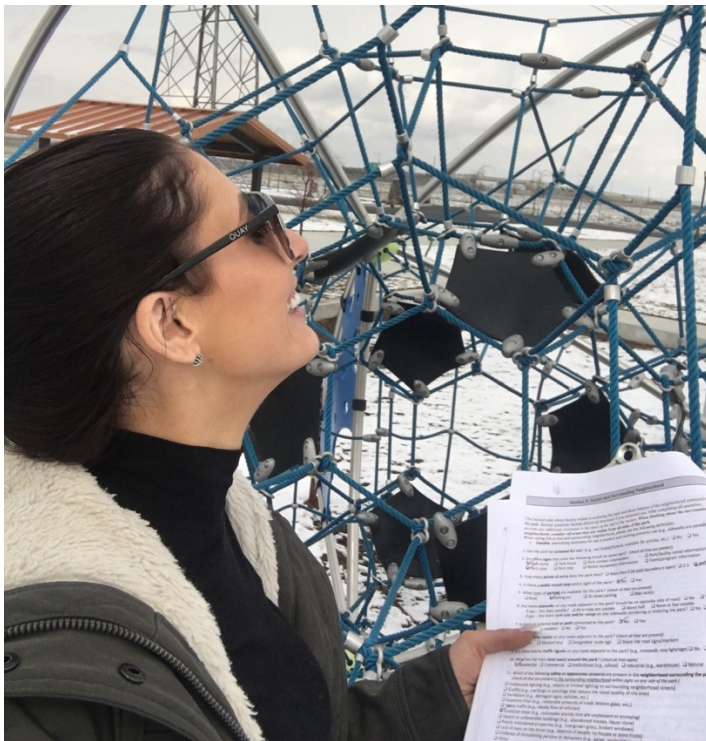
My time in UROP has taught me strategies tackling problems that don't have obvious solutions. Participating in undergraduate research has allowed me to develop the capacity for thinking critically about complex issues and the ability to build and articulate my own arguments. In the future, I will use my research experience to attend graduate school in international politics before pursuing a career in foreign relations.

- UROP Student

94 undergraduate research
opportunities posted
OUR.utah.edu/opportunities/

UNDERGRADUATE RESEARCH ADVISING

We provide comprehensive advising for students throughout the entire undergraduate research process. Advising is intended to provide a supportive environment for the student to become involved with research and to prepare the student for and guide the student through the many processes that undergraduate research will include, promoting a deeply engaged and high-quality research experience. With our support, the student will be prepared to pursue further research opportunities and careers.



Stephanie was great. They helped me understand where my previous proposal could use some work, and they helped me prepare my proposal for spring semester. They allowed me to send my proposal their way and they gave me great feedback and I got the award!

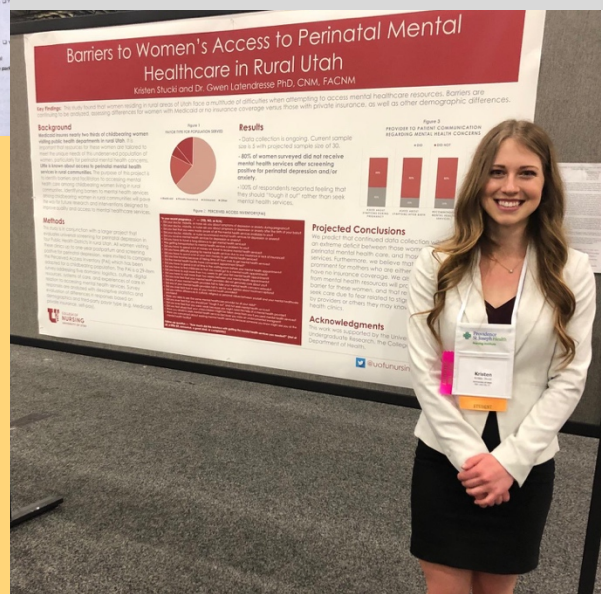
- UROP Student

327 total advising appointments

187 general information
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33 Capstone Programs

61 UROP proposal draft reviews



UNDERGRADUATE RESEARCH LEADERS

Each year since 2015, we select a new group of experienced undergraduate researchers to serve as ambassadors for our office.

The Undergraduate Research Leaders assist the office and promote undergraduate student research through a variety of activities:

- Office outreach and student recruitment
- Student engagement
- Peer advising
- Program development
- Small and Travel Grant reviews

2019-2020 INITIATIVES

OUR Pod: The URLs created a podcast called OUR Pod. The goal of OUR Pod is to highlight the research that undergraduate students are doing across disciplines at the University of Utah. The Undergraduate Research Leaders collaborate with K-UTE Radio to bring you OUR Pod. The URLs put out 5 episodes this year.

Social Media: URLs posted events, deadlines, reminders, happy news, and anything else undergraduate research related to the Office of Undergraduate Research's Facebook, Twitter, and Instagram social media accounts. This type of engagement allowed for our Facebook page views to rise to 108%; receive over 100 likes every month on Twitter; and over 300 likes per post on Instagram.

1,872 students reached through advising, tabling, presentations, and emails



Working in the OUR has been amazing. I thoroughly enjoyed getting to know everyone in the office. I am sad that we couldn't celebrate the end of the spring semester in person but I am so happy to have had the opportunity to work in the OUR.

- Undergraduate Research Leader

SMALL & TRAVEL GRANTS

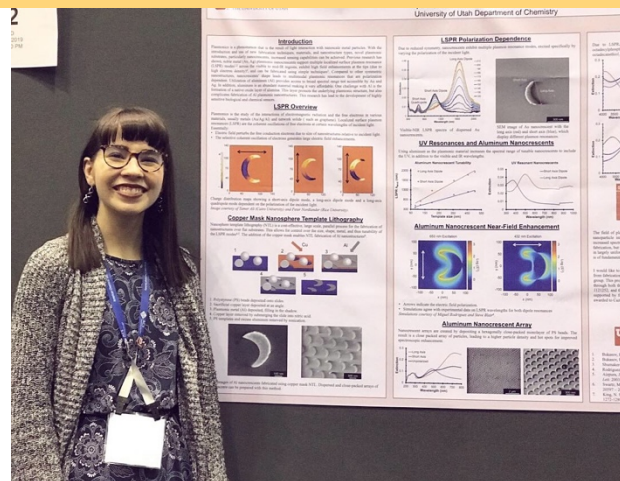
SMALL GRANTS

Funding from the Small Grant program (maximum \$200) supports future purchases of research supplies, training fees, or other research costs related to the student's work.

TRAVEL GRANTS

Funding from the Travel Grant program (maximum \$500) might cover expenses for future airfare, lodging, conference registration, or gas/mileage for data collection or conference attendance.

29 small grants awarded
48 travel grants awarded



Through undergraduate research, I learned how to be confident, professional, and open minded in professional settings. I learned how every discipline is connected in a big web and how we need every one of these disciplines to find a solution to the world's problems. I found a place to concentrate my passion for learning. Undergraduate research has truly been an incredible experience that has taught me professionalism and confidence.

- UROP Student



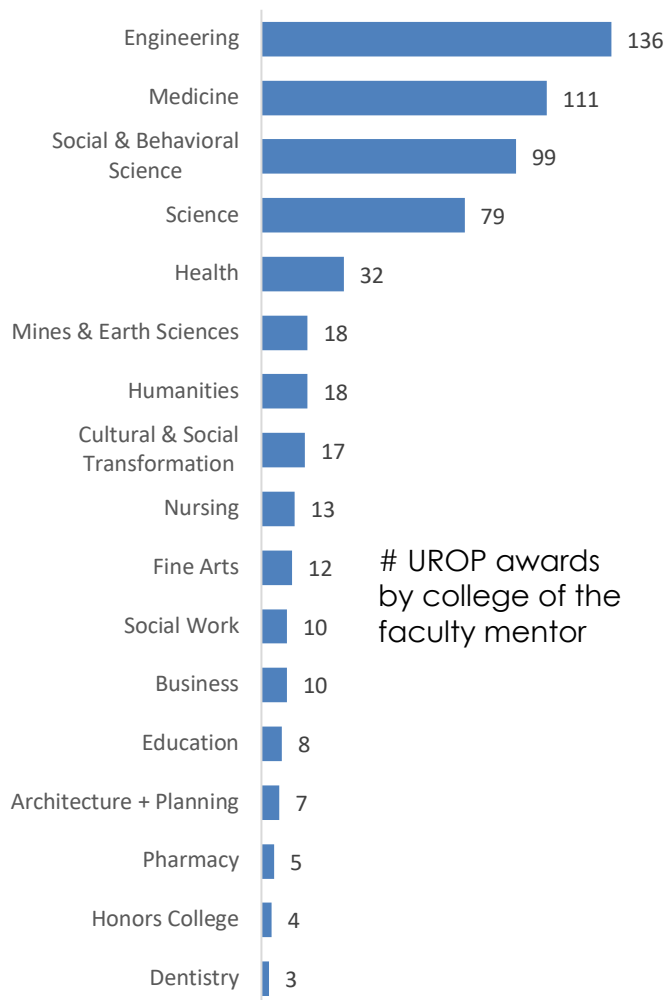
UNDERGRADUATE RESEARCH OPPORTUNITIES PROGRAM (UROP)

UROP provides undergraduate students and faculty members the opportunity to work together on research or creative projects.

UROP recipients are hired by the Office of Undergraduate Research and are paid a \$1,200.00 stipend for up to 120 hours of research or creative work during the semester

590 total UROP scholars

Fall 2019: 206 (282 applications)
 Spring 2020: 244 (334 applications)
 Summer 2020: 140 (189 applications)



The Office of Undergraduate Research has always been more than willing to accommodate and help students when they need. With the current situation and the movement of everything online, the OUR has gone above and beyond to accommodate students. I also really appreciate the accessibility of office staff and faculty, I was never afraid to reach out if I needed anything. I had to change mentors this semester, and I was nervous about that and the process, but everything went very smoothly thanks to all who were involved.

- UROP Student



UNDERGRADUATE RESEARCH SCHOLARSHIPS

CHEVRON

Chevron's University Partnership Program (UPP) has partnered with the Office of Undergraduate Research to support female students working on STEM-specific projects.

Danielle Beatty (Taylor Sparks) - High Entropy Alloy Development and Characterization for Use in Future Renewable Energy Applications

Leota Coyne (Mitchell Power) - Geochemistry of Sediment from Aksumite Empire on the Tigray Plateau, Ethiopia

Kaitlin Hall (Cynthia Furse) - Design of an Interstitial Microwave Applicator for 3D Printing Antennas in the Body

Marina Knysheva (Yan-Ting Shiu) - Investigating the differences of coronary artery histology between atherosclerosis patients

Alejandra Mendez (Matthew Mulvey) - Evolution of Extraintestinal Pathogenic Escherichia Coli in the Gastrointestinal (GI) Tract Over Time

Sarai Patterson (Shelley Minter) - Design of electrode materials for improved current output of microbial fuel cells

Bianca Ruiz-Negron (Man Hung) - Using machine learning to predict all cause 30 days and 90 days hospital readmissions in patients with atrial fibrillation undergoing catheter ablation

Lindsay Rupp (Rob MacLeod) - Ventricular Pacing Depth Localization Based on Epicardial Activation Maps

DEE

The Lawrence T. Dee and Janet T. Dee Foundation was established for the purpose of promoting charitable activities in Ogden and the surrounding area.

Marcus Blackburn (Frank Sachse) - Using Electrical Conduction Modeling in the Heart to Investigate Mechanisms of Arrhythmogenesis

Madison Block (William Brazelton) - Differential Identification of Extremophiles in Layered Geophysical Environments

Zachary Bowser (Nitin Phadnis) - Engineering Artificial Segregation Distortion with Chromosomal Breakage

Kathryn Glaitli (Joshua Bonkowsky) - Creating a Zebrafish Model of Pelizaeus-Merzbacher Disease

Nam Nguyen (Christopher Reilly) - Roles of TRPV3 and TRPA1 in Wood Smoke Pneumotoxicity

Caroline Ramous (John David Symons) - Intact endothelial cell autophagy is necessary to observe training-induced vascular adaptations

Gabriella Rasmussen (Alessandra Angelucci) - Tracing Monosynaptic Cortical Circuits of Feedforward and Feedback Connections to V1 Cells that Project to V2

FRANCIS FAMILY FOUNDATION

The Francis Endowment Fund recognizes outstanding undergraduate researchers in the arts, social sciences, and the humanities.

Kelsey Barnick (Cagan Sekercioglu) - Elk Habitat Fragmentation in the Wasatch Mountain Range

Amelie Bennett (Kate Mattingly) - Dancing Together: Building Empathy in Children through Movement

Elizabeth Izampuye (Akiko Kamimura) - Exploring the Relationship Between Patient Satisfaction and Expectations among Free Clinic Patients

Sheva Mozafari (Scott Langenecker) - The Quality of Life of Older Adults and Their Support Persons

Kristianna Radley (Ken Smith) - Searching for the Fountain of Ute: Birthplace and Longevity in Utah

Gus Stevens (Elena Asparouhova) - How Human-Algorithm Interactions in Equity Markets Effect Asset Pricing

Julia Vonessen (Rachel Hayes-Harb) - The relationship between listener attitudes and the comprehension of nonnative-accented speech

Michelle White (Nitin Phadnis) - A mutagenesis experiment to discover the systems of genes underlying sex-ratio chromosomal drive in *Drosophila pseudoobscura*



PARENT FUND

Undergraduate Advancement is a mutual effort by Academic and Student Affairs to provide programs that both support and retain undergraduate students at the University of Utah.

Wonmi Lee (Jules Madga) - Development of a Smart Hydrogel Based Sensor for Monitoring and Preventing Opioid Overdose

Kaden Rawson (Dustin Williams) - Loading a Novel Anti-biofilm Compound into Polyurethane Foam (PU) For Use in Negative Pressure Wound Therapy (NPWT)



ROCKY MOUNTAIN POWER

Since 2019, the Rocky Mountain Power Foundation has partnered with the Office of Undergraduate Research to support women-identifying students in STEM and/or students who are veterans working on projects in STEM fields.

Anna Jacobsen (Sarah Franklin) - Clarifying the role of *Smyd5* in heart disease

Nicole Mortensen (Jeffrey Bates) - Molecularly Imprinted Contact Lenses for Patients with Glaucoma

Ali Palmer (Lee Raby) - Maternal Sensitivity as a predictor of infants' physiological reactivity one year later

Zahra Saifee (Krista Carlson) - Application of Calcium Phosphate Cements in Dental Pulp Capping

SUMMER PROGRAM FOR UNDERGRADUATE RESEARCH (SPUR)

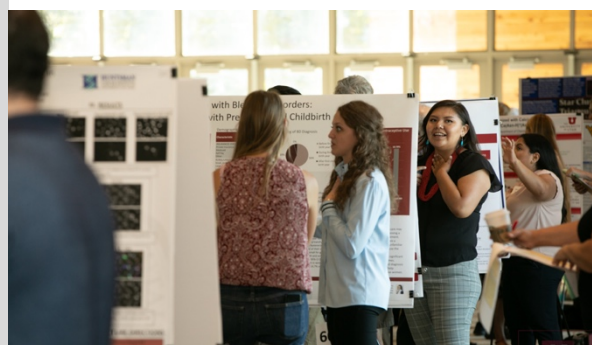
Generously funded by the Office of the Vice President for Research, SPUR provides undergraduate researchers with an intensive 10-week research experience under the mentorship of a University of Utah faculty member. Students also attend summer URES events, submit to the *Undergraduate Research Journal*, and present at the Summer Symposium. *SPUR 2020 was canceled due to COVID-19 and students were offered UROP experiences as an alternative to SPUR participation.*

My SPUR experience reinforced my desire to continue conducting research throughout my education and career. I hope to become a physician someday and pursue some type of research in addition to treating patients. I am not sure whether my future research will be primarily clinical or bench science research, but this summer has really increased my confidence in my aptitude for bench science research. Being a part of this lab community revealed to me how collaboration and the support of others are often key in any endeavor. This has further encouraged me to work towards interdependence rather than independence.

- SPUR Student

SUMMER PROGRAM PARTNERS

Beckman Scholars Program |
Chemistry REU | Genomics Summer
Research for Minorities (GSRM)
Internship | HCI PathMakers | Native
American Summer Research
Internship (NARI) | Physics &
Astronomy REU | Research
Experience in ALPine Meteorology
(REALM) REU | Research Experience
in Utah for Sustainable Materials
Engineering (ReUSE) REU



161 students presented at the 2019 Summer Symposium
129 raters completed **761** completed poster evaluation rubrics
Prior to the program's cancellation, there were **27**
anticipated students in SPUR 2020

UNDERGRADUATE RESEARCH EDUCATION SERIES (URES)

We offer educational lectures, panels, and workshops on topics of interest to undergraduate student researchers and their faculty mentors. These events are open to all and are designed with undergraduate students in mind.

RESEARCH EDUCATION PARTNERS

Career and Professional Development Center / Department of Anthropology / Department of Biology / Department of Chemistry / Department of Communication / Department of Materials Science & Engineering / Department of Ophthalmology/Visual Sciences / Department of Philosophy / Department of Physics / Department of Writing & Rhetoric Studies / Division of Ethnic Studies / Honors College / Institutional Review Board / Lasonde Institute / Marriott Library / Office for Inclusive Excellence / Undergraduate Research Mentor Development Program / Undergraduate Studies

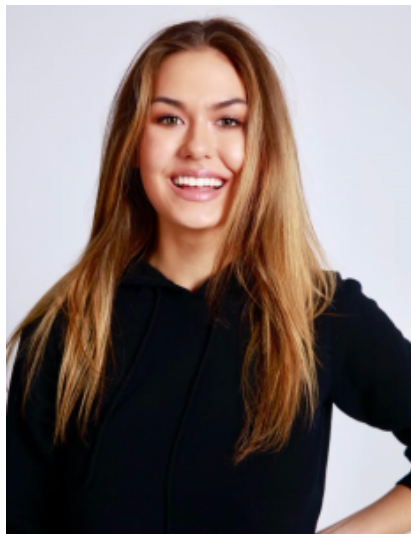
1,258 total URES attendees
at 37 events

Summer 2019: 663, 11 events
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Spring 2020: 172, 10 events

- Asking for Letters of Recommendation
- Citation Management
- Contextualizing Your Research
- Creating Effective Research Posters
- Data Management
- Doing Library Research
- Entrepreneur Your Research
- Giving & Receiving Helpful Feedback
- How to Read a Research Article
- How to Translate Your Research into a Resume
- Images in Scientific Images
- Imposter Syndrome
- Intro to the IRB
- Leveraging Your Research in Industry
- Literature Reviews
- Mentorship Workshop
- Microaggressions and Research
- Navigating Research, Race, Gender, & Difference
- Personal Statements
- Reflection as a Part of the Research Process
- Responsible Conduct of Research
- Writing Abstracts

MONSON ESSAY PRIZE

The Charles H. Monson Essay Prize honors Charles H. Monson Jr., who was a distinguished member of the University Philosophy Department from 1958 to 1974. Professor Monson earned his Bachelor's and Master's degrees from the University of Utah and received his Ph.D. from Cornell University. During his years at the University of Utah, he served as chair of the Philosophy Department and Associate Vice President for Academic Affairs. He received the University's Distinguished Teaching Award in 1970. In his honor, an annual prize is awarded to an undergraduate student who writes an outstanding essay on a subject having to do with social change.



Hanna Thistle (Prof. Rebecca Utz)

*INTERTWINING BIOMEDICAL & BIOPSYCHOSOCIAL
HEALTHCARE MODELS TO MINDFULLY ACHIEVE OVERALL
WELLBEING*

A sociocultural approach to addressing the rising stress and anxiety levels involves shifting current attitudes towards mental health. Just because mental health is invisible to the human eye does not mean it contributes any less to one's overall health and wellbeing than physical health does. Instead of mental health being an uncomfortable and largely avoided topic of conversation, it should be widely normalized, encouraged and prioritized just as much just as much P.E. classes and gym outings prioritize physical health. The educational system could make a major sociocultural impact on future generations of kids equipping them with healthy behavior skills that can be used as lifelong tools.



Rachel Coy (Prof. Shane Macfarlan)

*WAR RITUAL IN SMALL SCALE SOCIETIES: POTENTIAL
TREATMENT FOR VETERANS WITH PTSD*

The results of this research may have long-term implications on both psychiatric treatment options for veterans with PTSD and the policies and procedures for reintegrating military personnel back into civilian life. Additionally, by increasing our understanding of mental illness it helps to destigmatize these conditions. The study of how mental illness is acknowledged and treated in non-western cultures could provide a novel approach to our understanding of mental health problems.

OUTSTANDING UNDERGRADUATE RESEARCHER AWARD (OURA)

In 2015, we introduced the Outstanding Undergraduate Researcher Award. We are delighted to recognize an outstanding undergraduate researcher from each college/school at the University of Utah. Faculty mentors are invited to nominate students and awardees are selected by committee. The criteria are:

- Record of sustained commitment to developing research skills and knowledge under the supervision of a faculty mentor
- Evidence of independent and critical thinking
- Active participation in research-related activities on campus
- Positive contributions to the research culture of the Department, College, and University

2020 OUTSTANDING UNDERGRADUATE RESEARCHERS

Hakan Ashaboglu

Prof. Trent Smith
ARCHITECTURE +
PLANNING

Alicia Ross

Prof. Satu Hummasti
FINE ARTS

Christopher Rapp

Prof. Gannet Hallar
MINES & EARTH
SCIENCES

Jacqueline Mumford

Prof. Robert Allen
BUSINESS

Nathan Brian Rose

Prof. Adriana Coletta
HEALTH

Bruno Gonzáles

Prof. Michelle Litchman
NURSING

Christine Martinez

Prof. Wanda S. Pillow
CULTURAL & SOCIAL
TRANSFORMATION

Benjamin Battistone

Prof. Ginger Smoak
HONORS

Nam Nguyen

Prof. Chris Reilly
PHARMACY

Caitlin Silianoff

Prof. Christopher Mead
HUMANITIES

Shaniah Chee

Prof. Brian Coddington
SOCIAL & BEHAVIORAL
SCIENCE

Braden Fallon

Prof. Melodie Weller
DENTISTRY

Madeline Harker

Prof. Amos Guiora
LAW

Danielle Sheremeta

Prof. Claire Son
EDUCATION

James Carrington

Prof. Minna-Roh
Johnson
MEDICINE

Connor Weatherly

Prof. Henry White &
Prof. Shelly Minter
SCIENCE

Takara Truong

Prof. Mark Minor
ENGINEERING

Hector Robles

Prof. Jason Castillo
SOCIAL WORK

UNDERGRADUATE RESEARCH SYMPOSIUM (URS)

The Undergraduate Research Symposium (URS) provides an opportunity for students to present their work in a scholarly setting to students, faculty, and other members of the University of Utah community. Undergraduate students from all disciplines are invited to present their research and creative work. *The 2020 Undergraduate Research Symposium was moved online to accommodate the need for remote participation.*

I thought the adjustments made to the program following emerging COVID-19 guidelines were well-considered, and made the most of my research experience for the remainder of the semester. The "online symposium" was really cool and seems like a good idea to spread the word to other undergraduates interested in research, by showing them how much can be accomplished within just a semester.

- URS Presenter

232 total student presenters

215 total presentations

187 poster presentations

25 oral presentations

2 performances

1 visual art presentation

128 raters completed **685** poster evaluation rubrics

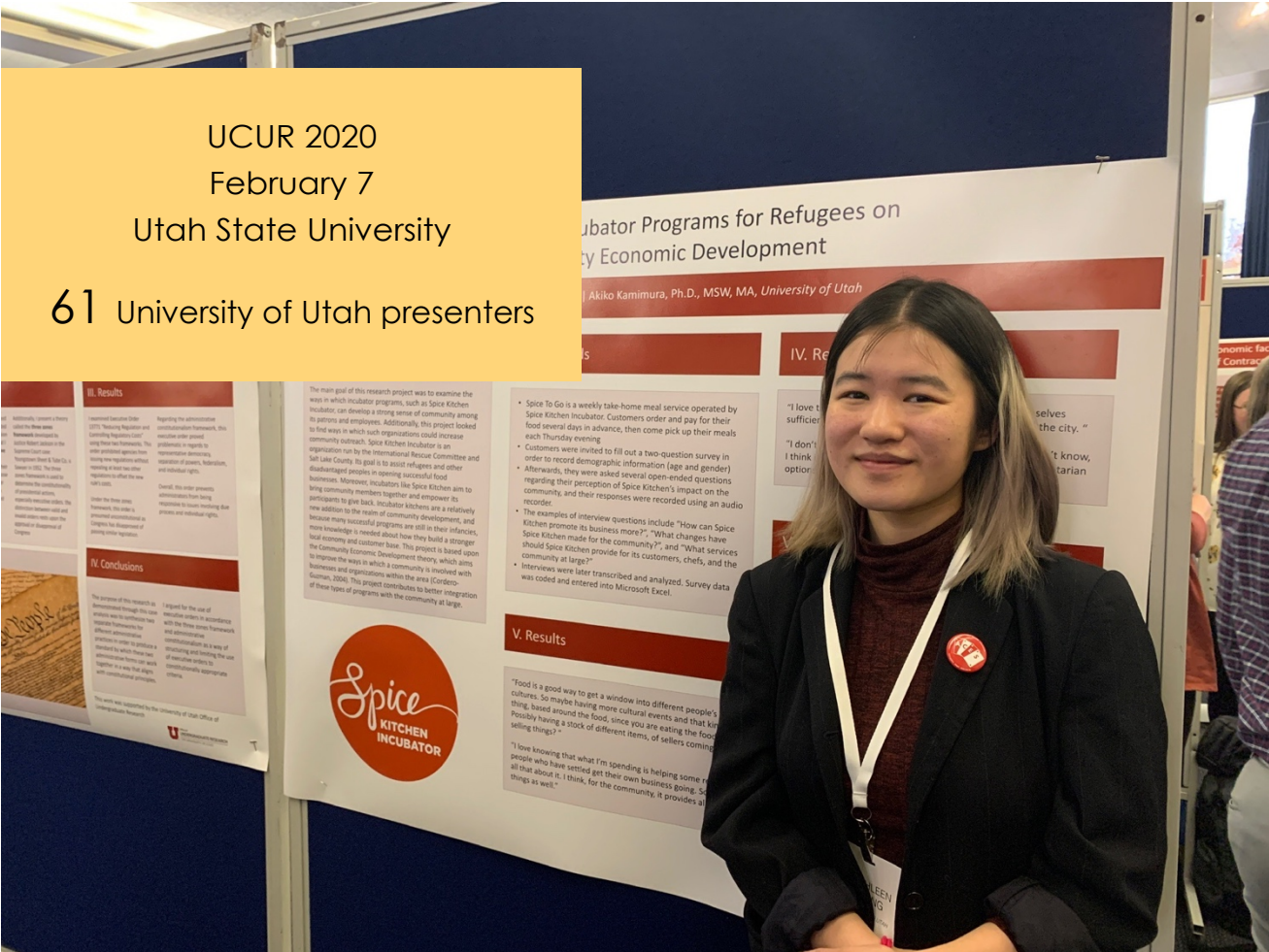
"Presenting" virtually due to the pandemic, while not a complete presenting experience, I must say that for someone with social anxiety, it was a great way to get my foot into the waters of presenting for the first time without the additional stress of doing so in a public setting.

- URS Presenter



UTAH CONFERENCE ON UNDERGRADUATE RESEARCH (UCUR) & NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH (NCUR)

Each year, the Office of Undergraduate Research facilitates attendance at UCUR and NCUR by organizing abstract submissions and supporting travel to the conferences. These conferences provide an opportunity for students to present their work to peers throughout the state and country. *NCUR 2020 was canceled.*



RESEARCH ON CAPITOL HILL (ROCH)

The Office of the Vice President for Research, the Office of Government Relations, and the Office of Undergraduate Research select students each year to exhibit their work via posters to Utah state legislators. This event demonstrates the importance of undergraduate research and creative work from the top two research universities in the state: University of Utah and Utah State University.



ROCH 2020
February 18
Utah State Capitol
26 University of Utah presenters

The opportunity to present my UROP funded research on Capitol Hill was a wonderful opportunity and I am very grateful for this program.

- UROP Student

UNDERGRADUATE RESEARCH JOURNAL

The Undergraduate Research Journal's primary mission is to make more visible the rich and diverse student contributions to research and creative work at the University of Utah. All undergraduate students involved in research at the University of Utah are strongly encouraged to submit summaries of their work for publication in this journal. Starting in 2015, the Journal is published online thanks to an initial partnership with the Marriott Library.

UROP has been a marvelous opportunity and I greatly appreciate the funding to be able to do much more research. My undergraduate research experience has greatly impacted my education as I've been able to widely apply the knowledge learned in my major classes to my field of study. UROP will greatly help my future goals as I'm planning to go to graduate school and having the opportunity to do research as an undergrad is very helpful for shaping my career goals and having proper experience.

- UROP Student

170 student authors

OUR.utah.edu/urj2020/



Images from THE MURRAY MURALS PROJECT: CONNECTING LIVES ON CANVAS, Sydney Porter Williams (Professor V. Kim Martinez), Department of Art and Art History



UNDERGRADUATE RESEARCH SCHOLAR DESIGNATION (URSD)

The Undergraduate Research Scholar Designation (URSD) recognizes a student's commitment to their development as a researcher during their undergraduate career. The URSD appears in the awards section of the transcripts of graduating students. URSD recipients receive white research cords from the Office of Undergraduate Research to wear at convocation and commencement.



165 total URSD recipients

Summer 2019: 18

Fall 2019: 26

Spring 2020: 121

Research as an undergraduate has opened my eyes to the purpose of undergraduate classes. Many courses seem unnecessary and pointless in my future goals, becoming a professor, but they all aid in developing my problem-solving skills and my approach to varying situations. This experience has also exposed me to what it will take to be successful in graduate school and as a postdoc.

- UROP Student



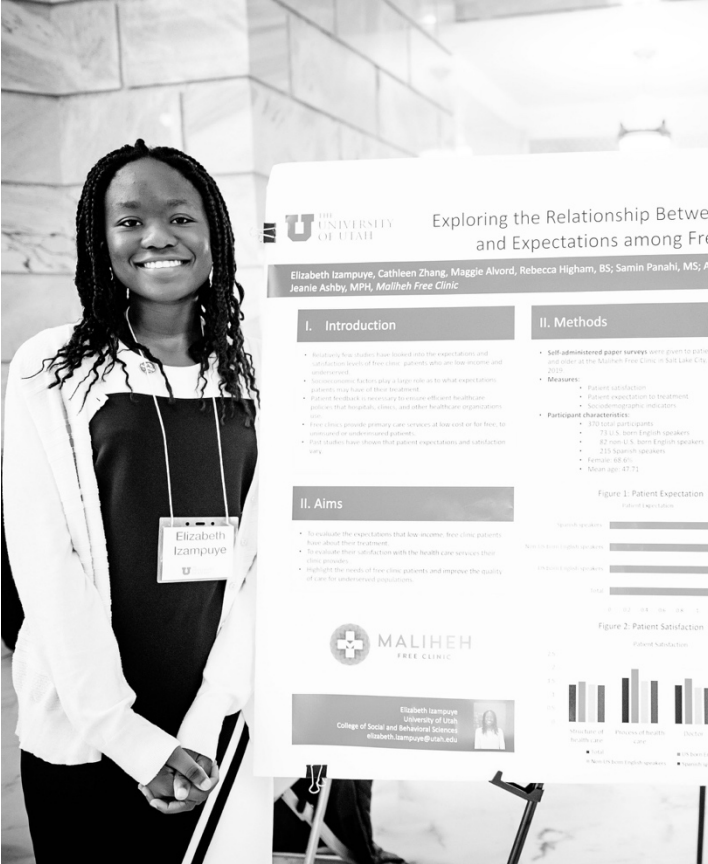
GOALS FOR 2020-21

Continue to respond to need for remote research and research mentoring

We will continue to adapt current programming and develop new programming that responds to the evolving COVID-19 situation. As part of this effort, we are working with a UROP scholar this summer to conduct a study entitled, *“The Disparate Impact of COVID-19 Remote and Online Work on Under-served Undergraduate Researchers.”*

Develop and launch first-year research experience course

Professor Anne Cook has been awarded the University Professorship to support the University of Utah’s ability to prepare undergraduate students for research experiences. She will hold the special rank of University Professor for 2 years. This award is based on Anne’s innovative work in teaching and mentoring undergraduate researchers, as well as her work as an administrator in promoting the role of undergraduates in the research mission of the college. During the period of her award, she will collaborate with the Office of Undergraduate Research to design coursework that trains undergraduate research mentees in essential skills required for successful research experiences in their individual disciplines and majors, and to develop programs for faculty and staff across campus who are interested in enhancing their mentoring of undergraduate researchers.



I have learned so much throughout the entire process from the team I am a part of, specifically my mentor. The skills I have acquired are ones that I will be able to use in future settings to set me apart from other applicants and students. I am so grateful for the experience it has given me and am excited for the possibility of continuing my research in the next semester. I would definitely recommend this program to anyone and hope that it continues to help change future students for the better.

- UROP Student