



ORONO, MAINE • AY 2016 - 17 • SPRING 2017

## Program Dates & Deadlines

Program	Dates
2017 UMaine Student Symposium Abstract Submissions	3/3/17 4:00 pm EST
2017 UMaine Student Symposium Decision Notifications	3/21/17
2017 Summer Fellowship Proposal Submission	3/25/17 4:00 pm EDT
2017 UMaine Student Symposium	4/24/17
2017 Summer Fellowship Award Notifications	4/24/17

### 2017 Undergraduate Student Symposium: Research & Creative Activity

The Center for Undergraduate Research invites the submission of undergraduate research and creative activity projects from ALL disciplines to be presented in a symposium involving poster sessions, oral presentations and performances/exhibits. Submissions must be in the form of an abstract describing the focus, method or process, and outcomes of the project. Entries must be authored by one or more undergraduate students from the University of Maine and be accompanied by the endorsement of a faculty mentor. All email correspondences will be sent to the first student author listed in the submission form. All participants, including student co-authors, faculty, & staff need to register for the event after acceptance notifications are sent.

Call for Abstracts Deadline: 3/3/17 at 4:00 PM EST

Acceptance notifications will be sent via email on 3/21/17.

Event Date & Time: Monday, 4/24/17

Event Location: Cross Insurance Center, Grand Ballroom, Bangor, ME

To apply: [tinyurl.com/umss17](http://tinyurl.com/umss17)

For further information and questions visit [cugr.umaine.edu](http://cugr.umaine.edu) or [umaine.edu/research/symposium/](http://umaine.edu/research/symposium/)

Contact Alexandria Jesiolowski, CUGR Admin Specialist, [cugr@umaine.edu](mailto:cugr@umaine.edu)

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The 2017 Student Symposium will be held, once again, at the Cross Insurance Center, Bangor, ME.





## Important:

**Undergraduate students participating in CUGR Fellowship sponsored research are required to be trained in the Responsible Conduct of Research.**

### Spring 2017 UG RCR Training:

Date: Thursday, February 16, 2017

Time: 5-8:30 p.m.

Place: Hill Auditorium, Engineering Science Research Building (ESRB)

For more info: [tinyurl.com/UMRCR](http://tinyurl.com/UMRCR)

In addition, undergraduate students participating in NSF, NIH and USDA-NIFA sponsored research are required to be trained.

IMPORTANT! Pre-registration is required and students must be accompanied by a mentor (one per 5 students). To register, please complete the [Spring 2017 Undergraduate RCR Registration form](#) by 5 p.m. Thursday, Feb. 9. Please note, registrants will need valid @maine.edu credentials to access the form.

If you need assistance with registration please contact Leisa Preble ([lpreble@maine.edu](mailto:lpreble@maine.edu)).

## 2017 UMaine Student Symposium: *Research & Creative Activity*

In past years, the Graduate Student Government (GSG) and the Center for Undergraduate Research (CUGR) have hosted independent academic student research events known as the Graduate Academic Exposition and the CUGR Academic & Creative Activities Symposium. This year the GSG and CUGR are working together to organize a joint event called UMaine Student Symposium. The event will consist of student research presentations that will be judged by faculty, alumni, and industry professionals. Within their field of expertise, judges will review and score assigned undergraduate and graduate student research presentations in the form of a poster, exhibit, or oral presentation. This event will also act as a forum for research centers and future employers to market their needs to students, as well as offer a means for professional development. Due to the large scale of hosting a joint event such as this, the planning committee has decided to host the event at the Cross Insurance Center in Bangor. Holding the event in a large public venue will increase the visibility and accessibility of the research conducted by students at UMaine and will allow students to converse and share ideas with legislators, professionals and community leaders. It will also provide an opportunity for students to interact with those that stand to directly benefit from their research findings. To facilitate this, representatives from State government, industry, research concerns, and local community groups have been invited to attend and engage with UMaine student presenters, which will ultimately increase the publicity of student research at UMaine.

When: Monday April 24th, 2017 8AM-5PM

Where: Cross Insurance Center: Ballroom, Bangor Maine

For questions or more information please contact, Alexandria Jesiolowski,

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## Responsible and Ethical Conduct of Research

### Overview:

The National Institutes of Health (NIH) defines 'Responsible and Ethical Conduct of Research' (RCR) as, "the practice of scientific investigation with integrity. . [involving] the awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research."

### Responsible & Ethical Research Shared values

Honesty — conveying information truthfully and honoring commitments,

Accuracy — reporting findings precisely and taking care to avoid errors,

Efficiency — using resources wisely and avoiding waste,

Objectivity — letting the facts speak for themselves; avoiding improper bias.

For more information: [umaine.edu/orsp/compliance/responsible-conduct-of-research](http://umaine.edu/orsp/compliance/responsible-conduct-of-research)



Students, faculty and alumni are encouraged to submit information by contacting Alexandria Jesiolowski, 207-581-3583, [CUGR@maine.edu](mailto:CUGR@maine.edu)

Visit us online at [cugr.umaine.edu](http://cugr.umaine.edu)

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# 2017 Undergraduate Research and Creative Activities Summer Fellowship

## Call For Proposals

The Center for Undergraduate Research (CUGR) is pleased to announce the Research and Creative Activities Summer fellowship program to support undergraduate student involvement in faculty supervised research. Several \$3000 Fellowships will be awarded for the 2016 summer semester on a competitive basis; the competition is open to all UMaine undergraduate students from all majors. Each fellowship provides financial support for one student to conduct faculty - mentored research. The CUGR Advisory Committee will review research and creative activities proposals for clarity of objectives, importance to the field, proposed approach, appropriateness of the budget, and indication of the project feasibility.

**To Apply:** CUGR.UMAINE.EDU: <https://goo.gl/forms/mMMsGa5BWxflc9Ik2>  
**DEADLINE - 3/25/17, 4:00 PM**

### Eligibility Criteria:

1. Any undergraduate student currently enrolled in a degree program at the University of Maine may submit a proposal in consultation with a faculty mentor. Preference will be given to students graduating in or after May 2018.
2. Applicants will describe the research, placing it in the context of scholarly activities, while presenting it in such a way that it is understandable to the reviewers from outside of the applicant's field.
3. Recipients must submit a report including technical and financial data by 9/15/17 and are expected to present the product of their research at the 9th Annual CUGR Symposium in April 2018.

## Internship Opportunities

This is the semester of our annual research and creative achievement symposium and as such, we will have no shortage of work. In order to better meet our event preparation needs, we have once again opened up our internship opportunities. We have several different types of internship positions available , work-study, volunteer, and positions for academic credit . These are available to students of all disciplines.

These internship opportunities will support approximately 10 hours a week between January - February and up to 20 hours a week between March - April (based on the student's availability).

Interns will be expected to help with event logistics; name tags, room layout and set-up, program compilation, communications/marketing, and other event planning tasks. A list of preferred skills, expected job tasks, along with application instructions can be found on our website by following the link below.

<https://cugr.umaine.edu/cugr-programs/internship-opportunities/>

## CUGR UG Student Travel Grant Program Accepting Submissions Beginning Fall Semester 2017

This program is designed to help UG students travel to conferences and professional meetings to present their research. This program is intended to help UG students gain soft skills and receive recognition for their hard work. Undergraduate students who are enrolled at a degree program at UMaine and conducting faculty - mentored research are eligible to apply for this travel grant to present their research results at technical conferences or professional meetings. The review process is on a rolling basis and priority will be given to students who have presented at the CUGR Symposium. The anticipated award amount is \$300-500 per student.



### 2016 Symposium News

#### Bangor Daily News

[tinyurl.com/CUGR-BDN1](http://tinyurl.com/CUGR-BDN1)

[tinyurl.com/CUGR-BDN2](http://tinyurl.com/CUGR-BDN2)

[tinyurl.com/CUGR-BDN3](http://tinyurl.com/CUGR-BDN3)

#### WLBZ Channel 2

[tinyurl.com/CUGR-CH2](http://tinyurl.com/CUGR-CH2)

#### WABI Channel 5

[tinyurl.com/CUGR-WABI](http://tinyurl.com/CUGR-WABI)

#### WCSH Channel 6

[tinyurl.com/CUGR-CH6](http://tinyurl.com/CUGR-CH6)

### Contact Us

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## Benefits of Undergraduate Research

### For Students:

1. Through research and creative activities, undergraduates learn to solve problems using a variety of methods.
2. They can hone their abilities to communicate and put ideas together, to organize and write, and to investigate and ask questions.
3. Research provides an opportunity for a mentor - mentee relationship different from a teacher-student relationship. In that context, the learning is invaluable.

### For Mentors:

1. Undergraduates often have a broader perspective, enthusiasm and energy that are ripe for explorations and learning.
2. One of the most rewarding processes for faculty mentors is witnessing the evolution of student learning when involved in research and creative activities
3. For faculty, mentoring student explorations is an investment in tomorrow's scholars.
4. For graduate students, mentoring UG is a valuable experience.

## 2016-17 Undergraduate Research & Creative Activities Academic Year Fellowship Recipients

The Center for Undergraduate Research is pleased to announce the recipients of the Center for Undergraduate Research Creative and Academic Achievement Fellowships for 2016-2017. The fellowships were developed to enhance and increase undergraduate student involvement in faculty supervised research. Each fellowship provides a \$1000 award for the student to help cover costs of the project.

2016-17 Creative and Academic Achievement Fellowship Award Recipients  
(Student Name, Academic Program, Project Title, Mentor)

- Aaron Bissonnette, (Chemical Engineering), Synthesis of Carbohydrate Chains, Mentor: Matthew Brichacek
- Abby Bellefleur, (Communication), Mental Health and the Media: Exploring the Relationship between Television Viewing Habits and College Student's Attitudes toward Mental Health, Mentor: Liliana Herakova
- Aidan Bauer, (New Media), Escape: A Roguelite Stealth Experience, Mentor: Jon Ippolito
- Alan Estes, (Theatre), (sign) or A Staged Collection of Experiences in the Deaf Community", Mentor: Marcia Douglas
- Brady Andrews, Amelia Reinhardt, Tyler O'keene, (English), English(es) as a Language & Subject, Mentor: Paige Mitchell
- Catherine Gottwalt, Emma Barnes, (English), Creative and Communicative Integrity, Mentor: Paige Mitchell
- Christian Zwirner, (Biochemistry), Investigation of Epidermal Growth Factor Receptor's Role in Host Response to C. albicans Infection, Mentor: Sally Dixon-Molloy
- Christopher Frantz Gilbert, (Psychology), Non-Invasive SleepMove Mattress Used to Detect Cognitive Decline, Mentor: Marie Hayes
- Christopher J. Carey, (Psychology), The impact of training methodologies on learning categorical representations and their generalizability to novel tasks using rule based structures., Mentor: Shawn W. Ell
- Grace Scott, (Chemistry), Phenolic Compounds in Maine Coast Sea Vegetables, Mentor: Angela Myracle
- Graham Van Goffrier, (Physics), Investigating a Correlation Between Minimal Surfaces and Relativistic String Dynamics, Mentor: Professor Neil Comins
- Hannah Harling Stefl, (Human Nutrition), Exploring the Nutritional Value of Carrots and Determining Attributes that are Favored by Consumers, Mentor: Angela Myracle
- Kayla Greenawalt, (Ecology & Environmental Science), Identifying Pollen of Native Grasses from the Falkland Islands to Build a Reference Collection, Mentor: Jacquelyn Gill
- Mackenzie Leigh Teffft, (Psychology), Dyadic Interactions as They Relate to Emotional Adjustment in Adolescents, Mentor: Rebecca Schwartz-Mette
- Malik Robinson, (Philosophy), Overlapping Otherness: A Phenomenological Exploration of Black Homophobia, Mentor: Kirsten Jacobson
- Matthew A. Moyet, (Biology), Synthesis of New Bismuth Nanoparticles for Photocatalysis of Harmful Pesticides, Mentor: Howard H. Patterson
- Meaghan Delcourt, (Psychology), The Pathway from Nonsuicidal Self-Injury to Suicidal Ideation: Investigating the Role of Depressive Rumination and Heart Rate Variability, Mentor: Emily Haigh
- Nat Midura, Cara Morgan, Molly Masters, (Civil and Environmental Engineering, English, English), Intertextual Binaries among CLAS and STEM Ideologies, Mentor: Paige Mitchell
- Nathan Roscoe, (Mechanical Engineering), Controlling a Martian Entry, Descent, and Landing (EDL) of a Hypersonic Inflatable Aerodynamic Decelerator (HIAD) Vehicle using an Internal Movable Mass Actuator (IMMA)., Mentor: David Rubenstein
- Samuel Landry, (Chemical Engineering), Microfluidic mixer for studying nanoparticle formation, Mentor: Scott Collins
- Sarah Courtright, (New Media), Four Hellhounds of the Apocalypse, Mentor: Jon Ippolito
- Silvia Guzman, (New Media), Deconstruction of Stereotypes and Biases Manufactured by the Media to Create a More Conscious Society, Mentor: Mike Scott
- Trevor LeGassie, (New Media), Project Dismay, Mentor: Mike Scott
- William Patrick Breeding, (Bioengineering), Photocatalysis of Atrazine by various Bismuth Oxyhalides: Rates, Mechanisms and Byproducts, Mentor: Howard H. Patterson

# CUGR Undergraduate Student Travel Grant Recipients

## Congratulations to the recipients of the CUGR Travel Grant Award!

(Student Name, Project Title, Faculty Mentor, Conference/Meeting Title)

1. Jesse Clark, Determining an Expected House Majority Using Pattern Analysis, Prof. Richard Powell, Northeastern Political Science Association's 2015 Conference
2. Shannon O'Neil and Margaret Pierce, Families Raising Children with Disabilities: Concerns and Advice, Prof. Nancy Hall, Annual American Speech-Language-Hearing Association Convention
3. Joseph Garcia, Effects of Long-Range Interactions in the One-Dimensional Sznajd Model, Prof. Susan McKay, American Physical Society March Meeting
4. Harold Stewart III, Bridging Town-Gown Divides Through Collaboration and Undergraduate Research, Prof. Robert Glover, National Collegiate Research Conference
5. Haleigh Moran and Katrina Ogden, Depression and Adolescent Violence: Making Sense of Inconsistent Findings, Prof. Steven Barkan, ASA Honors Program
6. Kyle Shute, Statistical Analysis of Trapping Biases Related to Red Backed Vole and Deer Mouse, Erik Blomberg, National Wildlife Society Conference
7. Anthony Pawlicki, Effects of Habitat Characteristics on Northern Water Snakes in Maine, Malcolm Hunter, The Wildlife Society National Conference
8. Diana Abraham, Impacts on Pre-Service Teacher's Learning of Innovations in a Multicultural Education Course, Dr. Tammy, Mills National Association of Multicultural Education
9. Mitchel Roberge, Le Messenger: A Franco-American Newspaper and its Impact, Susan Pinette, American Council for Quebec Studies Biennial Conference
10. Berkay Payal, Determining Honey Bee Colony Health Using RF and Radar Techniques, Nuri Emanetoglu, MIT Undergraduate Research Technology Conference
11. Aeleah M. Granger, Muslim and Arab Prejudice: Understanding Emotions, Jordan P. LaBouff, Society of Personality and Social Psychology Conference
12. Maegan Maheu, Being & Not Being Franco-Américan In the Perspective of a 21st Century Millennial, Susan Pinette, American Council for Quebec Studies
13. Natasha Hubbard Blatt, Capstone, Ian Bricknell, Museum of Natural History
14. Emma Jane McWilliams, The impact of Make-up on perceptions of women in STEM and non-STEM fields, Shannon K. McCoy, Society for Personality and Social Psychology
15. Dylan James Haroldsen, Cognition under stress: The impact of social-evaluative stress during cognitive task performance, Shannon McCoy, Society for Personality and Social Psychology, 2017 Annual Convention
16. Kaelina Perron, The impact of Makeup on perceptions of women in STEM and non-STEM fields, Shannon McCoy, Society for Personality and Social Psychology
17. Kimberly Herron, Cognition under stress: The Impact of Social-Evaluative Stress During Cognitive Task Performance, Dr. Shannon McCoy, Society for Personality and Social Psychology, 2017 Annual Convention
18. Calla Williams, Feminist Identity and Leadership Self-Efficacy: Individual Differences Influencing Women's Leadership Representation, Shannon McCoy, Society for Personality and Social Psychology, 2017 Annual Convention

The Center for Undergraduate Research is led by Dr. Ali Abedi serving as Director and staffed by Ms. Alexandria Jesiolowski, Administrative Specialist. An Advisory Committee consisting of 12 faculty members across various disciplines provides guidance to the Director, and assists in proposal reviews & symposium planning. Each member serves a three year term.

## Advisory Committee

Ali Abedi - CUGR Director

Alexandria Jesiolowski - CUGR Administrative Specialist

François Amar - Dean, Honors College

Laura Artesani - Associate Professor of Music, CLAS

Timothy Cole - Associate Dean, CLAS

Heather Hamlin - Assistant Professor of Aquaculture, SMS

Sarah Harlan-Haughey - Assistant Professor of English/ Honors Preceptor, CLAS/Honors

Karl Kreutz - Professor of Earth and Climate Sciences, NSFA

Roberto Lopez-Anido - Professor of Civil & Environmental Engineering, COE

Mary Mahoney-O'Neil - Associate Dean, EDHD

Sid Mitchell - Associate Professor of Nursing, NSFA

Jessica Moore - Student Representative, Molecular and Biomedical Sciences

Patricia Poirier - Associate Professor of Nursing, NSFA

## Contact Us

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Please send us your student and faculty research stories! Each edition of the CUGR Newsletter highlights research experiences from UMaine and we would love to hear yours!

Send stories and pictures to:



## Student Experiences

### Anna Olsen

International Affairs major with a focus in Anthropology/ Archaeology

Area of undergraduate research:

Archaeological research on the site of Nadin Gradina, Croatia. The site is rich in material remains dating back to the Iron age (prior to 1 C.E.) and holds the trail of consistent human occupation since the Iron Age until present day.

“The world of Archaeology is consistently completing the short and long term picture of human activity. In understanding the past, we can gain perspective into how the anthropogenic element has shaped not only our species, but the world’s current ecology and climate. With global changes occurring today, understanding the past can lead us to understanding and building for the future.

When you find an area of research that stimulates your curiosity, take it and run with it! There is far more to discover in every field, and if you combine passion and education, the results are often quite successful.

I will be finishing my undergraduate degree at the University of Maine and pursuing a masters in archaeology focusing on human activity and the deep impacts of our species and its various forms throughout our existence.

CUGR has given wings to my education and allowed me to personally partake in the very discovery of history and thus given me an opportunity to have a voice in illuminating the impact and existence of humans on the Adriatic Coast. The ability to actively participate in such findings is an invaluable experience that has already helped direct my future academic course.

Working with Dr. Zaro brought a depth to my experience that could otherwise have not been achieved. A big part of archaeology is to have the imagination and vision to see not what is, but what was based on what little remains. Working closely with faculty who possess such education and vision to allow for the most accurate truth, has been and will be priceless in my own speculations and intrigues into human past.”

**Are you presenting at a conference? Are you hosting a symposium? Do you need an easel & poster board?**

#### Poster Board & Easel Rentals!

Co-sponsored by CUGR and Honors College, every UMaine department or student group can now rent a poster board and easel at a very low cost. For availability, pricing, and other information please contact the CUGR office

To submit a request: <http://tinyurl.com/CUGR-Rental>

\*Please fill out the rental form at least 2 weeks in advance to guarantee availability.

