



# Undergraduate Research Guidebook

2015



# Undergraduate Research Guidebook 2015

## Calendar of Events

Plan your year now for important UR funding opportunities and presentation events. Visit <http://rgs.usu.edu/studentresearch> for details.

### September

Undergraduate Research Orientation, September 11 at 1:00 in Ag Science Building room 101.

### October

URCO proposals for projects starting spring, 2016, are due by noon, October 15. See: <http://urco.usu.edu>

Utah Conference on Undergraduate Research abstract submission deadline: October 30.

### November

Utah Research on Capitol Hill abstract submission deadline: November 15.

Deadline for submission to CUR Posters on the Hill: November 4.

Deadline for submission of abstracts to NCUR: December 9.

### January

Research on Capitol Hill on January 26, 2016 at the State Capitol Rotunda in Salt Lake City.

Ignite audition to be held: Mid January

Spring UR Orientation: UR in the summer: January 20, 11:30-12:30, location TBD.

## February

URCO proposals for projects starting summer, 2016, are due by noon, February 15. See: <http://urco.usu.edu>

Deadline for submissions for Student Research Symposium (held in April): February 15.

UCUR: February 19, 2016, held at University of Utah.

## April

Research Week, April 11-15 (<http://rw.usu.edu/>)

Student Showcase: April 14

Awards Ceremony for Outstanding Undergraduate  
Researchers and Mentors, April 15

National Conference on Undergraduate Research – April 7-9, 2016

Utah State University-Uintah Basin Campus Research Day

Applications for Transcript Designation—Undergraduate Research  
Scholar – Due April 15

Conference on Undergraduate Research Posters on the Hill in  
Washington, D.C.

## July

URCO proposals for projects starting fall, 2016, are due by noon, July 15. See: <http://urco.usu.edu>

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# Message from the President

Greetings, and welcome to USU's undergraduate research program. I am pleased that you are becoming oriented with the many opportunities available to you, as hands-on learning is a hallmark of a Utah State education. Whether you are a freshman or a senior, undergraduate research is like a backstage pass to USU, giving you access to laboratories, studios, and fieldwork that is often reserved for graduate students—or even just faculty—at other research institutions. I encourage you to become familiar with the funding, presentation, mentoring and other assistance available to you for your individual projects. As you get more and more involved with a particular research focus, you'll find you are bolstering your resume but are also gaining the confidence, independence and critical thinking skills needed for academic and personal success.

Regards,

Stan L. Albrecht

President

*Stan L. Albrecht's research includes work on environmental risks and community health and the politics of waste disposal siting. He has received funding from the EPA and NIEHS and has published five books and over 100 articles, and co-edited a special volume of Society and Natural Resources on environment and health.*

# Introduction

When you graduate from USU, what do you need to get a great job or a ticket to grad school? Aside from good grades and test scores, you'll need a great resume, an attractive transcript, a relationship with a professor who can write your letter of recommendation, and some demonstration of proficiency in your field and in life. And maybe, while you're here, you might want to have some fun.

Students' extra time is at a premium, and they choose activities that provide the biggest bang for the proverbial buck. Undergraduate research is that magic bullet—no other activity provides as many benefits to students who want to get ahead and position themselves for outstanding careers or graduate study.

Since 1975, USU's Undergraduate Research Program has provided opportunities for students to take control of their research interests and dive head-on into discovering their own passions and strengths. In addition to tailoring your research for the best personal fit, you can create your project to best suit your research goals and hobbies, and all disciplines are supported. This means you can study rock formations in Logan Canyon, or examine petroglyphs along the Colorado River in Moab, or research and engineer autonomous unmanned aerial vehicles.

Undergraduate research helps students build stronger resumes with real-life experiences—making them better candidates when shopping the job market. Because the Undergraduate Research Program allows students the control of choosing projects to fit within their interests, students are more engaged in their studies, and their classrooms come to life. Student researchers at USU are paired with faculty mentors, who can open additional doors for student researchers in the form of fellowships and prestigious awards.

# Getting Started in Undergraduate Research

Over the years, becoming involved in an undergraduate research has become more prevalent to the point that many employers and graduate schools have come to expect it from students. Undergraduate research allows students to gain knowledge that cannot be acquired in traditional coursework. Such involvement allows the students to have a better understanding of their chosen discipline and enables them to have a clearer vision of their career goals. The importance of undergraduate research cannot be overlooked.

Students often cite finding a research project as the major barrier to getting involved with research. Whether a student ends up doing an independent project, working in a lab, a library, or participating in field research, the search for a mentor and project that fit the student's interests can be difficult. Here are some of strategies for making the search a fruitful one.

## Courses

One of the best ways that students and faculty connect is in the classroom. The classroom is a key place that students can find a faculty member who inspires them and with whom they wish to work. Most instructors conduct research and will welcome the opportunity to talk with student who are interested in getting involved. If you like a class—even if it is outside of your major—talk to your professor! The question “Do you work with undergraduates on research?” is a good place to start.

# Connecting to Your Discipline

Some colleges have undergraduate research opportunities and ideas integrated directly into their webpages:

- [College of Agriculture and Applied Sciences](<http://caas.usu.edu/>) includes some great content on [how to get started in the college](<http://caas.usu.edu/students/undergrad-research>).
- [College of Science](<http://www.usu.edu/science/>) has [departmental undergraduate research coordinators](<http://www.usu.edu/science/html/undergraduate-research>) to help you find a project.
- [S.J. & Jessie E. Quinney College of Natural Resources](<http://www.qcncr.usu.edu>) hosts [undergraduate research opportunities]([http://www.qcncr.usu.edu/pages/undergraduate\\_programs/opportunities/undergradresearch](http://www.qcncr.usu.edu/pages/undergraduate_programs/opportunities/undergradresearch)) in the college.

In other cases, individual [department webpages](<http://www.usu.edu/academics/colleges/>) often include a link to research, or undergraduate research, though not always in the same place (so look around). Here are a few examples:

- [Art & Design](<http://art.usu.edu/index.php?page=overview-3>)
- [Psychology](<http://psychology.usu.edu/html/research/undergraduate-research>)
- [History](<http://history.usu.edu/html/research/undergraduate-research>)
- [Biological Engineering]([http://www.be.usu.edu/students/undergraduate\\_students/undergraduate\\_research](http://www.be.usu.edu/students/undergraduate_students/undergraduate_research))
- [Sociology]([sociology.usu.edu/html/research/undergraduate-research](http://sociology.usu.edu/html/research/undergraduate-research))
- [Physics](<http://www.physics.usu.edu/peak/URpage/UROP/Welcome.html>)

# Departmental Resources

**Undergraduate advisors.** Every department has [professional advisors](<http://catalog.usu.edu/content.php?catoid=8&navoid=1644>) who can provide a lot of help in finding a good opportunity within a department. Set up a time to talk and ask about opportunities in undergraduate research.

**[Departmental Honors Advisors]**(<https://honors.usu.edu/current>) are another likely source of information. Even if you are not in honors, the departmental honors advisor may know which faculty are looking to mentor an undergraduate researcher.

As was mentioned before, the [College of Science](<http://www.usu.edu/science/>) has [departmental undergraduate research coordinators](<http://www.usu.edu/science/htm/undergraduate-research>) to help you find a project.

## Direct Contact

All [department webpages](<http://www.usu.edu/academics/colleges/>) include a list of faculty (generally via a “people” or “faculty” link) and that is an excellent place for students to review the faculty in the department person by person to see what sort of research that they conduct. If you see something that you like, send an email and set up a time to chat!

## Undergraduate Research Office

Finally, the [Undergraduate Research office](<http://rgs.usu.edu/studentresearch/htm/ur-opportunities>) can provide additional guidance--set up a time to see [Dr. Bates](<http://rgs.usu.edu/office/htm/directory/memberID=9517>) and he will work with you to find a good match.

# Networking

According to an old saying, “It’s not what you know, but who you know.” This is particularly true for starting and advancing your career. USU is home to eight colleges and several departments. There are many clubs and organizations available to you. As early as possible, you try to meet people in your field and build your contacts. This process is called networking. Networking allows you to have access to jobs that are not publicly announced but are filled through known contacts. As an undergraduate, networking is also a valuable tool for you to find your future mentor(s). Here at USU, we help you build your networks through the following clubs and professional organizations:

## College of Agriculture & Applied Sciences

The College of Agriculture is a strong, research-based college that is able to offer undergraduate researchers a wide range of research opportunities in all six of the departments. Some examples of undergraduate research experiences include:

- Testing antiviral substances that are components of biomedical drugs

- Identifying genetic markers for economically important traits in livestock animals

- Learning to apply water intelligently (data-based water application)

- Examining the impact of production agriculture and food processing on the state’s economy

- Testing food products for acceptability by consumers

The associate dean for the College of Agriculture will meet with Undergraduate researchers to identify interests and career goals. Fellows will be teamed with a faculty mentor in a common area of interest. Fellows are often able to present their research findings at regional and national undergraduate conferences and publish in peer-reviewed journals with their faculty mentors and graduate students.

## Departments

### Animal, Dairy, and Veterinary Sciences Department

<http://www.advs.usu.edu/>

**Animal Science Club.** Exposes students to animal agriculture through traveling to different operations across the country, judging livestock, holding annual club calf sale, and a steer jackpot. (<https://advs.usu.edu/htm/students/animal-science-club/>)

**Dairy Science Club.** Educates members and the community about today's dairy industry through visits and field trips to farms. (<https://advs.usu.edu/htm/students/dairy-science-club/>)

**Pre-Vet Club.** Fosters camaraderie for fellow students within the pre-vet program and holds informative activities that provide them with useful knowledge and contacts within the field of veterinary medicine. (<https://advs.usu.edu/htm/students/pre-vet-club/>)

**Sheep & Goat Club.** Helps students to learn more about the sheep industry and assists students with placement in internships and career opportunities. (<https://advs.usu.edu/htm/students/sheep-goat-club/>)

### Applied Economics Department

<http://apec.usu.edu/>

**AG - ri - CULTURE Club.** Aims to promote agriculture and focuses on supplementing the students' classroom experience with real life knowledge through professionals from inside and outside the college. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=249&f=col&colID=2>)

**Agribusiness Club.** Caters to students who are interested in agribusiness. It provides opportunities for students to learn more about career options and apply their classroom knowledge with real life case studies. (<https://caas.usu.edu/htm/current-students/join-a-club/agribusiness-club/>)



## Landscape Architecture and Environmental Planning Department

<http://laep.usu.edu/>

**American Society of Landscape Architects.** Mirrors the mission of the national ASLA which is to advance landscape architecture through communication, fellowship, advocacy, and education. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=363&f=col&colID=2>)

## Nutrition, Dietetics, and Food Sciences Department

<http://ndfs.usu.edu/>

**Dietetic Student Association.** Provides students with opportunities to network, increase awareness of career paths, learn current issues in nutrition, and collaborate on projects and activities related to nutrition and health. (<https://www.facebook.com/pages/LIVE-LOVE-NUTRITION/227514407343247>)

**Food Science Club.** Assists food science and food technology majors' professional development by participating in leadership roles and networking. The club also has a College Bowl team that competes in national product development competitions. (<https://caas.usu.edu/htm/current-students/join-a-club/food-science-club/>)

## Plants, Soils, and Climate Department

<http://psc.usu.edu/>

**Plants, Soils & Climate Club.** Provides a means for students to meet together, build relationships, and participate in fund raising projects. The funds received from these projects are used to finance student competitions and trips in areas of interest throughout the western United States. (<https://psc.usu.edu/htm/students-/plant-science-club/>)

**Soils Team.** Participants engage in local, regional, and national competitions involving the description and classification of soils. (<https://psc.usu.edu/htm/students-/soils-team/>)

**USU Student Organic Farm.** Educates the students on healthy organic farming system while working together with the community to healthy local alternatives to grocery store produce. ([www.usu.edu/organicfarms/](http://www.usu.edu/organicfarms/))

## School of Applied Sciences, Technology and Education

<http://aste.usu.edu/>

**Aggie FACS.** Is affiliated with the state (UAFCS) and national (AAFCS) organizations, providing students with the opportunity to network with practicing professionals. (<https://aste.usu.edu/html/student-resources/organizations/aggie-facs>)

**Ag Tech Club.** Facilitates student activities designed to develop skills and knowledge specific to agricultural systems technology. (<https://aste.usu.edu/html/student-resources/organizations/ag-tech-club>)

**Agricultural Communication Club.** Fosters career and professional development among future agricultural communicators and facilitates public relations within the College of Agriculture and Applied sciences. (<https://aste.usu.edu/html/student-resources/organizations/agricultural-communication-club>)

**Design Academy.** A performance based program where students design, build and program competitive robots. They also have the opportunity to join a competitive team and compete at the regional level. (<https://aste.usu.edu/html/student-resources/organizations/design-academy>)

**Technology and Engineering Education Club.** Club members can participate in Vex Robotic Competitions, where previous club members have taken first place in the VEX world championship for Autonomous Programming and Sensors, second place in the Excellence Award and fifth place in Bracket Play. (<https://aste.usu.edu/html/student-resources/organizations/technology-and-engineering-education-club>)

**USU Experimental Sounding Rocket Club.** Promotes knowledge of basic rocketry and provides hands-on rocket building experience for its members. It aims to design, create, and test experimental rockets in a reasonably safe environment. ([www.facebook.com/pages/USU-Experimental-rocket-Club/167513169942346](http://www.facebook.com/pages/USU-Experimental-rocket-Club/167513169942346))

**USU NIFA Flight Team.** Provides students with the opportunity to compete at the annual NIFA/SAFECON event in both ground and flight events. The club assists the participants in order to strengthen their skills. ([www.aviation.usu.edu/htm/current-students/student-organizations](http://www.aviation.usu.edu/htm/current-students/student-organizations))

## School of Veterinary Medicine

<http://vetmed.usu.edu/>

**American Association of Equine Practitioners.** Focuses on the creation and enhancement of Equine medicine among veterinary students and furthering the professional development of its members. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=410&f=col&colID=2>)

**USU SVM Agricultural Animal/Therigenology.** Offers students with hands-on experience, guest lectures, and other experiences related to Agricultural Animal medicine. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=417&f=col&colID=2>)

**Animal Science Club.** Provides interested students with opportunities to become exposed to animal agriculture through traveling to different operations across the country, judging livestock, holding annual club calf sale, and a steer jackpot. (<http://adv.svu.edu/htm/students/animal-science-club/>)

## Caine College of the Arts

Research in the Caine College of the Arts is broadly defined to encompass a wide variety of creative and scholarly endeavors, including creation or analysis of works of art, theatre, music, and design performance of musical or theatrical works research, scholarship, and criticism of musical, theatrical, artistic, or design

endeavors research and scholarship in the education and pedagogy of the disciplines included in the college. Undergraduate research in the arts and humanities is student-driven, faculty-mentored inquiry, scholarly investigation, and/or creative activity. The undergraduate researcher's work may contribute to outcomes including, but not limited to, individual or collaborative analytical writing; oral presentation; small analytical products; works of visual art; compilations of scholarship; exhibits; musical compositions; plays; performance; public scholarship; and/or peer-reviewed publication. Whatever the research product, its value is generally weighed by standards specific to experts in the field, whether jurors, editors, or reviewers.

Each field of study within the college defines what it means to engage in "hands-on learning." For some departments, a student on fellowship might have immediate immersion in a studio, while for other departments, the student might be involved in a research project using historical documents or case studies. An associate dean will coordinate, but students will have individual faculty mentors in their fields of study.

The Caine College of the Arts includes the departments of art, music, and theatre arts and the interior design program. Undergraduate researchers in the arts division could concentrate on production of the arts (as with studio arts such as printmaking or sculpture), the performance of the arts (as with the performance arts such as music or theatre), on interpretation and analysis of the arts (as with scholarship in the arts such as art, design, music or theatre history), or on pedagogy education in the arts (as with piano pedagogy or art, music, or theatre education). The above listing is not intended to be exhaustive, but rather to get Fellows thinking about the wide range of possibilities.

## **Advice on Undergraduate Research in the Arts**

The traditional model of scholarship and creative activity in the arts typically features the lone artist or scholar. In considering how undergraduate researchers might be incorporated into artistic projects when feasible, we developed a list of suggestions taken from the experience of faculty who have worked with

undergraduate researchers. In general, we expect the student to arrive on campus as a novice and to develop an apprentice relationship with a faculty mentor, learning from that mentor's experience and expertise, and then moving into more independent research projects.

Can a student undertake some of the foundational work for a project, particularly the bibliographic or historical area?

Are there meaningful supportive tasks that a student might take on, such as super titles for an operatic production or program notes for a performance?

Does the student have a particular skill that the scholar does not, such as a foreign or classical language that might contribute to the project? Or perhaps a student has a skill in technology that would be helpful in design or delivery of the project as in designing a webpage?

## Departments

### Art and Design Department

<http://art.usu.edu/>

**Utah State Film.** Provides an avenue for students who are interested in viewing, producing, and discussing films. The club provides means to screen both films and documentaries of any special interest. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=251&f=col&colID=1>)

**USU Photo Guild.** Creates opportunities that supplements the students' learning experience such as field trips, workshops, and exhibits organized by the guild. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=328&f=col&colID=1>)

### Interior Design Program

<http://interiordesign.usu.edu/>

## Music Department

<http://music.usu.edu/>

**Independent Music Club.** Aims to promote Music in the university through student participation and promote an outlet for students who are interested in Music. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=5&f=col&colID=1>)

**Musicians for Healing.** Creates opportunities for musicians in the university and from the community to share their talents and give meaningful service by creating a pleasant ambiance music for patients at Logan Regional Intermountain Hospital. ([www.facebook.com/usuimprov](http://www.facebook.com/usuimprov))

**The New Music Collaborative.** Allows student composers to test their skills, learn how to work with one another, and gain critical communication skills. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=476&f=col&colID=1>)

## Theatre Arts Department

<http://theatre.usu.edu/>

**USU Theatre Student Association.** Provides the USU students with the means to attend conferences, workshops and functions that will further their education, opportunities to create theatrical performances, and gain experience within the world of Theatre Arts. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=318&f=col&colID=1>)

**Utah State Improv Club.** Aims to help people to be more confident and build theatre arts in USU by playing games, doing exercises, and educating people about theatre arts. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=293&f=col&colID=1>)

# Jon M. Huntsman School of Business

The Jon M. Huntsman School of Business provides undergraduate researchers the opportunity to develop core competencies in the use of research methods critical to solving meaningful business and public policy issues. In recognition of the Fellowship, each student

is invited to become an associate in The Research Group™, a nationally recognized consortium of university scholars, corporate leaders, and undergraduate students dedicated to high quality research experiences. Working under the guidance of noted business scholars, students learn to develop, extend, and test theories that help guide business strategy. In doing so, students develop meaningful problem-solving skills that not only foster academic success, but life-long career success as well. The program also provides students with the opportunity to receive recognition for their research efforts through presentations at regional and national undergraduate conferences, publications with faculty in peer-reviewed scholarly conference proceedings and/or journals, and/or preparation and presentation of technical reports for business and public organizations. In this way, students not only obtain important skills, they gain meaningful experience and bona fide evidence of scholarship.

## Departments

### Economics and Finance Department

<http://huntsman.usu.edu/economicsandfinance/>

**Finance and Economics Club.** Exposes the students to exceptional speakers, provides experiences for hands-on learning and increase their networking opportunities. The Club organizes many activities annually such as Career Exploration Trips. Past and upcoming activities can be viewed here: [my.usu.edu/web/finance-an-economics-club](http://my.usu.edu/web/finance-an-economics-club).

### Management Department

<http://huntsman.usu.edu/management/>

**Association for Information Systems.** Promotes excellence in information systems education and provides students with opportunities for personal and professional development through various opportunities and events. ([my.usu.edu/web/association-for-information-systems-ais](http://my.usu.edu/web/association-for-information-systems-ais))

**Business Intelligence Group.** Facilitates meaningful and realistic experiences for students interested in Data Science and Information Systems through the application of data science theories learned in class. ([my.usu.edu/web/business-intelligence-group-bi-group](http://my.usu.edu/web/business-intelligence-group-bi-group))

**Center for E-Commerce and Business Analytics (CEBA).** Investigates how the newest technologies allow tools to be developed in order to help business leaders make better management decisions. ([my.usu.edu/web/center-for-e-commerce-and-business-analytics-ceba](http://my.usu.edu/web/center-for-e-commerce-and-business-analytics-ceba))

## **Management Information Systems Department**

<http://huntsman.usu.edu/mis/>

**Center Huntsman Marketing Association (HMA).** Trains its members in marketing and allows them to learn the skills of networking, resume building, and interviewing. Members are also provided exclusive opportunities to visit companies. ([my.usu.edu/web/huntsman-marketing-association-hma](http://my.usu.edu/web/huntsman-marketing-association-hma))

**Leaders for Continuous Improvement.** Focuses on providing students with experience and skills required to get career placement through activities such as practice interviews, resume workshops with professionals, and company tours. ([my.usu.edu/web/leaders-for-continuous-improvement](http://my.usu.edu/web/leaders-for-continuous-improvement))

## **School of Accountancy**

<http://huntsman.usu.edu/acct/>

# **Emma Eccles Jones College of Education and Human Services**

The Emma Eccles Jones College of Education and Human Services can provide a diverse array of opportunities for new undergraduate researchers. Undergraduate researchers can engage in research that ranges among a diverse field of topics:



- Internet access and assistive technologies for people with disabilities
- Advanced readers at risk in elementary schools
- Gender and play among children
- Special needs infants and toddlers
- Math virtual manipulatives
- Drug dependency
- Childhood obesity

The College is home to the Center for Persons with Disabilities, a leading research institution in the nation, the National Center for Hearing Assessment and Management, the Center for the School of the Future, and the Emma Eccles Jones Early Childhood Center. New undergraduate researchers will have the opportunity also to be partnered with older undergraduates who can provide mentoring. The associate dean will work with new students to find appropriate projects.

## Departments

### Communicative Disorders and Deaf Education Department

<http://comd.usu.edu/>

**American Sign Language Club.** Aims to create a place for all students and raise awareness about Deaf Culture in the world today. ASL provides opportunities for the hearing and the Deaf communities to communicate and socialize with one another. ([www.usu.edu/desa/asl/ASL%20Club%20Home.html](http://www.usu.edu/desa/asl/ASL%20Club%20Home.html))

**National Student Speech, Language and Hearing Association (NSSLHA).** Organizes community service projects that provide literacy services to children and adults. ([www.cehs.usu.edu/academics/student-orgs](http://www.cehs.usu.edu/academics/student-orgs))

**Student Academy of Audiology (SAA).** Promotes hearing awareness through involvement in humanitarian efforts and provides audiology services and education to the community. ([usuaudiology.com](http://usuaudiology.com))

## **Family, Consumer, and Human Development Department**

<http://www.usu.edu/fchd/>

**Family Finance.** Provides majors and other interested students opportunities for leadership, service, and social interaction. ([www.usu.edu/fchd/undergraduate/clubs.cfm](http://www.usu.edu/fchd/undergraduate/clubs.cfm))

**Marriage and Family Therapy Student Association (MFTSA).** Raises awareness about marriage and family therapy at USU and in the community through various activities. (<http://www.cehs.usu.edu/index.php/students-programs/student-organizations>)

**Student Gerontology Association.** Promotes the study of aging among students and help seniors in the community. (<https://www.facebook.com/pages/Utah-State-University-Student-Gerontology-Association/260324207339580>)

## **Health, Physical Education, and Recreation Department**

<http://hper.usu.edu/>

**Health Education Association (HEAUSU).** Focuses on service projects that raise awareness of positive health behaviors and future career preparation. ([www.usu.edu/medical/htm/usu-student-organizations](http://www.usu.edu/medical/htm/usu-student-organizations))

**Parks and Recreation Club.** Provides opportunities for students to meet on a regular basis to internships, employment, conference attendance, The Club also conducts community service and fundraising activities. ([www.cehs.usu.edu/academics/student-orgs](http://www.cehs.usu.edu/academics/student-orgs))

**Pre-Physical Therapy Club.** Provides unique opportunities for networking among physical therapists, and prepares its members for grad school or a career in Physical Therapy. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=31&f=col&colID=3>)

**Physical Education Club.** Encourages students to exercise regularly and sponsors a departmental fun run each October. ([www.cehs.usu.edu/academics/student-orgs](http://www.cehs.usu.edu/academics/student-orgs))

**USU Pre-OT Club.** Helps students gain a clear understanding of the field of OT, provide resources, knowledge, and events for the purposes of engaging students in meaningful, preparatory activities. (<http://usupreot.weebly.com/attend-our-monthly-meeting.html>)

## Instructional Technology and Learning Sciences Department

<http://itls.usu.edu/>

**Instructional Technology Student Association (ITSA).** ITSA is dedicated to the implementation, and improvement of effective instructional design in education and corporate instruction. ([itls.usu.edu/current/itsa.html](http://itls.usu.edu/current/itsa.html))

## Psychology Department

<http://psychology.usu.edu/>

**Psi Chi.** An honor society that encourages excellence in scholarship through activities where professionals talk about important issues and career opportunities related to psychology. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=26&f=col&colID=3>)

## School of Teacher Education and Leadership

<http://www.teal.usu.edu/>

**Utah Middle Level Student Association (UMLSA).** A student association for those interested in teaching middle school. UMLSA helps host the Utah Middle School conference each spring. (<http://www.cehs.usu.edu/index.php/students-programs/student-organizations>)

# Special Education and Rehabilitation Department

<http://sped.usu.edu/>

**Student Council for Exceptional Children (SCEC).** Dedicated to improving educational outcomes for individuals with exceptionalities. The members participate in service activities, informational seminars on teaching, and social activities for students with disabilities, (<http://www.usu.edu/ususa/clubsandorgs/viewClubcfm?id=219&f=col&colID=3>)

## College of Engineering

The College of Engineering consists of five departments: Biological, Civil and Environmental, Electrical and Computer, Engineering and Technology Education, and Mechanical and Aerospace Engineering. All departments have Accreditation Board for Engineering and Technology (ABET) accredited undergraduate engineering programs. Undergraduate researchers will work on real-life research projects with a faculty mentor and his or her team of researchers. Undergraduate research department coordinators match student interests with a faculty member engaged in that specific area of research: One Fellow may find converting algae to biofuel of interest and work with a faculty mentor in the Biological Engineering Department. Another, concerned about water quality and the environment, may work with a faculty mentor in the Civil and Environmental Engineering Department to study water resources and ways to improve water quality, both nationally and internationally. An Electrical and Computer Engineering Department faculty member might mentor a student to investigate very low power communications devices for possible future implantation in the human body. The latest research in engineering education and training technology in the Engineering and Technology Education Department may be fascinating to one Fellow. Another may find the potential of thermal fluids or material sciences in nuclear engineering of great interest and get matched up with a faculty mentor in the Mechanical and Aerospace Engineering Department.

The College of Engineering awards 10 fellowships each year to qualified juniors to engage in engineering research activities, and many other undergraduates are funded by faculty research projects. Research programs in the college are extensive and varied:

- Bioprocess and bioenergy
- Structural design and water quality
- Highway technology
- Networks and concurrent systems
- Space science, signal and image processing
- Aircraft operation and maintenance
- Manufacturing and aerospace engineering, and more.

For more information on undergraduate research opportunities in the College of Engineering at Utah State, contact Jagath Kaluarachchi at [jagath.kaluarachchi@usu.edu](mailto:jagath.kaluarachchi@usu.edu).

## Departments

### Biological Engineering Department

<http://be.usu.edu/>

**Biological Engineering Club.** Provides opportunities for students to network, meet up, get to know the professors, learn about research opportunities, and discover potential industry careers and internships. ([engineering.usu.edu/htm/students/clubs-organizations](http://engineering.usu.edu/htm/students/clubs-organizations))

**Biomedical/Engineering Society.** Educates the future leaders of the profession and prepares them for multidisciplinary research fields by offering allowing them to participate in a wide range of activities that will enhance their careers. ([engineering.usu.edu/htm/students/clubs-organizations](http://engineering.usu.edu/htm/students/clubs-organizations))

**Institute of Biological Engineering (IBE).** IBE is committed to finding solutions to global problems through education, research, and in developing biologically based technologies. ([engineering.usu.edu/htm/students/clubs-organizations](http://engineering.usu.edu/htm/students/clubs-organizations))

### Civil and Environmental Engineering Department

<http://www.cee.usu.edu/>

**American Water Resources Association (AWRA).** Aims to advance multidisciplinary water resources education, management and research. (<http://www.awra.org/>)

## Computer Science Department

<http://www.cs.usu.edu/>

**Sign Free Software and GNU/Linux Club.** An organization for professionals and students who love computing and strive for a better computing world. (<http://www.cs.usu.edu/html/organizations/>)

## Electrical and Computer Engineering Department

<http://ece.usu.edu/>

**Institute of Electrical and Electronics Engineers (IEEE).** Serves its members by being their resource for achieving lifelong career vitality and through providing an effective voice on policies that promote U.S. prosperity. (<http://www.ieeeusa.org/>)

## Engineering Education Department

<http://www.eed.usu.edu/>

**American Society for Engineering Education (ASEE).** Aims to help students see all the possibilities an engineering degree offers them by promoting excellence in instruction, research, public service, and practice. (<http://www.asee.org/about-us>)

**International Technology Education Association (ITEA).**

Increases student achievements in science, technology, engineering and mathematics by providing technological studies in safe facilities. (<http://www.iteea.org/EbD/ebd.htm>)

## Mechanical and Aerospace Engineering Department

<http://www.mae.usu.edu/>

**American Get Away Special Team.** Caters to students who want to be involved with space research. One of its main research projects is the FUNBOE project which studies boiling dynamics in microgravity. (<https://sites.google.com/a/mrt.usu.edu/gasteam/>)

**Society of Automotive Engineers (SAE).** SAE global association of scientists, engineers, and practitioners that connects and educates its members while promoting, developing and advancing aerospace, commercial vehicle and automotive engineering. (<http://www.sae.org/>)

## Other National & College-wide Organizations

<http://www.engineering.usu.edu/>

### **DiscoverE (formerly National Engineers Week Foundation).**

Aims to sustain and grow a dynamic engineering profession through outreach, education, celebration, and volunteerism.

**Engineers Without Borders (EWB).** Supports community-driven development programs by collaborating with local partners in designing and implementing sustainable engineering projects.

(<http://ewb.usu.edu/>)

### **Society of Environmental Engineering Students (SEES).**

Conducts interdisciplinary research discussion groups and seminars where Environmental Engineering students and faculty can communicate their thoughts on contemporary aspects of Environmental Engineering.

(<http://www.usu.edu/sees/index.html>)

## College of Humanities and Social Sciences

Research in CHaSS is broadly defined to encompass scholarly work, creative writing, and both qualitative and quantitative research in the social sciences. Each field of study within the College defines what it means to engage in research. For some departments, a student on Fellowship might have immediate immersion in an archive, while for other departments, the student might be involved in conducting research projects or case studies. The associate dean will coordinate, but students will have individual faculty mentors in their fields of study.

The humanities division of CHaSS includes English, history, languages, and philosophy. Research and Creative Activity Fellows in the humanities division could concentrate on written production (such as plays, stories, essays, poems, and articles), professional work documents, multimedia productions, interpretation and analysis, studies of folklore and folklife, or research about women and gender or cultural studies.

The social science division of CHaSS includes anthropology,

journalism and communication, military science and aerospace studies, political science, social work, sociology, and speech communication. Undergraduate researchers in the social science division could concentrate on either primary or secondary research, including interviews and surveys, field research, analyses of quantitative or qualitative data related to human behavior and human societies, and the interpretation and production of media and mass communications such as newspapers or television.

The above listing is not intended to be exhaustive, but rather to get undergraduate researchers thinking about the wide range of possibilities. Common to all research in CHaSS is some kind of systematic inquiry or practice that is designed to further our knowledge, understanding, or appreciation.

## **Advice about Undergraduate Research in the Humanities**

The traditional model of scholarship in humanities features the lone researcher. In considering how undergraduate researchers might be incorporated into humanities projects when feasible, we expect the student to arrive on campus as a novice and to develop an apprentice relationship with a faculty mentor, learning from that mentor's experience and expertise, and then moving into more independent research projects.



## Departments

### English Department

<http://english.usu.edu/>

**The Bull Pen.** Provides opportunities for students interested in creative writing to workshop their writing with other like-minded students. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=431&f=col&colID=5>)

### History Department

<http://history.usu.edu/>

**Religious Studies Club.** Facilitates activities which benefit the university and stimulates academic interest, rigor, and understanding of religion and the field of Religious Studies. ([religioustudies.usu.edu/htm/study/religious-studies-club](http://religioustudies.usu.edu/htm/study/religious-studies-club))

**Phi Alpha Theta.** An honor society for history majors and enthusiasts that promotes the love of history through sponsored activities and service projects. (<http://history.usu.edu/htm/study/clubs-and-organizations/phi-alpha-theta/>)

### Journalism and Communication Department

<http://www.usu.edu/journalism/>

**Public Relations Student Society of America.** Strives to unite PR students with the current trends in the field and help build a strong foundation for their career path. (<http://usuprssa.wordpress.com/>)

**USU Student Magazine Club.** Provides real-life work experience for talented writers, artists and future business leaders by creating a student-produced magazine targeted towards the students of USU. ([journalism.usu.edu/htm/study/clubs-and-organizations](http://journalism.usu.edu/htm/study/clubs-and-organizations))

### Languages, Philosophy and Communication Studies Department

<http://lpsc.usu.edu/>

**Communication Studies Club.** Provides learning opportunities where faculty and students can interact through social events and academic activities. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=464&f=col&colID=5>)

**French Club.** The club brings the French-loving community together through activities and events where they get the chance to speak or learn French and promote the many cultures of French-speaking countries. (<http://usufrenchclub.weebly.com/index.html>)

**Italian Club.** The Italian Club gives the students an opportunity to practice their Italian skills, and make friends with other fans of the language. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=423&f=col&colID=5>)

**Japan Club.** Organizes fun, interesting, and meaningful activities that unite the Japanese and American students and promote mutual cultural awareness. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=258&f=col&colID=5>)

**Middle East Club.** Open to Arab and non-Arab students alike, the club aims to create mutual understanding and appreciation through linguistic, political, religious and cultural immersion in activities that help foster an environment of learning. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=55&f=col&colID=5>)

**MSLT club.** Allows current and former MSLT students to connect, share, and collaborate in practices of second language teaching and to discuss current researches in Second Language Acquisition. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=342&f=col&colID=5>)

**Russian Club.** Aims to increase cultural knowledge through educational opportunities, service projects, and fun recreational activities. (<https://www.facebook.com/pages/USU-Russian-Club/612745258790754?sk=timeline>)

**Spanish Club.** Helps the students and the community to improve their language capabilities and cultural understanding of Spanish speaking countries. (<https://www.facebook.com/groups/582776401781896/>)

## Political Science Department

<http://politicalscience.usu.edu/>

**Criminal Law and Policy for Change.** C.L.A.P. for Change analyzes current laws and policies that need revision and advocate the needed reforms. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=348&f=col&colID=5>)

**USU College Democrats.** Provides means for involvement and information that enables students to be politically involved with the National Democratic Party. ([www.usu.edu/democrats](http://www.usu.edu/democrats))

**USU College Republicans.** Creates awareness of conservative beliefs on campus and helps advance the Republican cause through activism, education, events and involvement in the USU campus. (<http://www.usu.edu/republicans>)

## Sociology, Social Work and Anthropology Department

<http://sswa.usu.edu/>

**Anthropology Club.** Promotes anthropological interests and awareness and prepares students for careers requiring skills and knowledge from liberal arts and natural sciences. (<https://www.facebook.com/UtahStateAnthropology/timeline>)

**Medical Unity.** Prepares future health care providers to operate in a Spanish-speaking cultural environment and to become culturally competent healthcare professionals. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=98&f=col&colID=5>)

## S. J. & Jessie E. College of Natural Resources

University Undergraduate researchers in the College of Natural Resources can participate in a wide range of research activities, reflecting the breadth of scientific interests that students seeking

natural resource and environmental careers can pursue. Some possible examples might include:

Assisting with soil sampling and analysis in the wildland soils laboratory.

- Testing wildlife DNA in the conservation genetics laboratory.
- Interviewing and entering data from hikers, ATV riders, and other outdoor enthusiasts for studies done by the Institute of Outdoor Recreation and Tourism.
- Making field measurements of forest and rangeland plants.
- Sampling streams and ponds for chemical analyses or invertebrate population sampling.
- Gathering the latest published scientific information about a broad spectrum of topics, from geographic and environmental education to stream flow dynamics to behavior and habitat needs of endangered North American and tropical wildlife.

Refer to the website at <http://www.cnr.usu.edu/htm/students/current-students/undergrad-research> for more information.

## Departments

### Environment and Society Department

<http://www.cnr.usu.edu/envs/>

**Aggie Recyclers.** Raises awareness and promotes recycling around campus. They are also responsible for emptying recycling bins around the campus at least once a week and volunteers time to work at the USU Recycling Center. (<https://www.facebook.com/pages/Aggie-Recyclers/145675854527?fref=nf>)

### Watershed Sciences Department

<http://www.cnr.usu.edu/wats/>

## Wildland Resources Department

<http://www.cnr.usu.edu/wild/>

**Society for Range Management.** A group of students who are interested in range science and related fields. They sponsor activities that allow its members to learn about current issues in range and offer educational opportunities to the community. (<http://www.cnr.usu.edu/htm/students/student-organizations/srm>)

**The Wildlife Society.** Prepares students for careers dealing with wildlife through hands-on experience, professional meetings, guest speakers, and specialty field trips. (<http://www.cnr.usu.edu/htm/students/student-organizations/tws>)

**Student Subunit, Utah Chapter, American Fisheries Society.** Improves the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science. (<http://usuafs.wordpress.com/>)

## College-wide Organizations

<http://www.cnr.usu.edu/>

**Berryman Institute.** A national organization dedicated to improving human-wildlife relationships and providing hands-on field experience with human-wildlife conflict management professionals. ([www.berrymaninstitute.org](http://www.berrymaninstitute.org))

**QCNR Ambassadors.** The Ambassadors are representatives, recruiters, and advocates of the QCNR at events across campus, on college tours, in high schools, at transfer schools, and other opportunities throughout Utah and Idaho. ([https://qcnr\\_main.ou.usu.edu/pages/undergraduate\\_programs/organizations/am](https://qcnr_main.ou.usu.edu/pages/undergraduate_programs/organizations/am))

**Society of American Foresters.** Advances the science, technology, education, and practice of professional foresters to benefit society. (<https://cnr.usu.edu/htm/students/student-organizations/saf/saf-activities/>)

## **Student Organization for Society and Natural Resources.**

Connects students to the environment through service opportunities and educational activities. (<http://cnr.usu.edu/html/students/student-organizations/sosnr/about-sosnr>)

# College of Science

Each department's undergraduate research coordinator will be involved in describing the exciting and diverse opportunities for research available in their respective areas. Students may also attend seminars and other departmental activities to get to know other undergraduates and the faculty in their major department. Students will participate in their placement after learning of the opportunities that various departments have to offer. Before the end of the first semester each Fellow will be teamed with a faculty mentor in his/her area of interest.

## Departments

### **Biology Department**

<http://www.biology.usu.edu/>

**Entomology Club.** Educates and involves students and community members in entomology through outreach, social events, beekeeping and research. (<https://www.facebook.com/groups/112841172126201/>)

**Industrial Hygiene Club.** Evaluates and controls chemical and physical hazards in the workplace. The members are also exposed to IH by socializing with those already in the program and networking with local certified IHS. (<http://www.usu.edu/ususa/clubsandorgs/viewClub.cfm?id=77&f=col&colID=7>)

### **Chemistry and Biochemistry Department**

<http://www.chem.usu.edu/>

**Chemistry & Biochemistry Club.** Promotes science awareness in the community, specifically chemistry and biochemistry. (<http://www.chem.usu.edu/html/undergraduate-program/chemistry-club>)

## Geology Department

<http://geology.usu.edu/>

**Geology Club.** Serves and educates the community of Cache Valley and sparks interest in people who are not educated in the subject of geology. (<https://sites.google.com/site/usugeologyclub/>)

## Mathematics and Statistics Department

<http://www.math.usu.edu/>

**USU Applied Mathematics Club.** Aims to increase interest in mathematics through guest speakers, short seminars on computational methods, competitions in mathematics, introductory classes on computational software and teacher training workshops. (<http://usuappliedmath.wix.com/usu-siam-chapter>)

## Physics Department

<http://physics.usu.edu/>

**Society of Physics Students.** Allows students interested in physics to perform research and be involved to science outreach. (<https://www.biology.usu.edu/html/undergrad-info/undergrad-research/clubs>)

## Other Organizations

<https://www.biology.usu.edu/html/undergrad-info/undergrad-research/clubs>

**Pharmacy Club.** Helps students to prepare for a career in pharmacy.

**Pre-Physician Assistant Club.** Helps USU students to successfully prepare for PA school.

**Pre-SOMA Club.** Promotes osteopathic medical education among students to increase the number of applicants to medical schools and prepares students for the rigors of medical school.

**Science Educators Club.** Provides professional development, service and social opportunities among science education majors.

# Collaborative / Cross-College Research Areas at USU

Utah State University also has a number of research centers, specialized units that focus on a particular research area such as the:

## Space Dynamics Laboratory

<http://www.sdl.usu.edu/>

As a not-for-profit unit of the Utah State University Research Foundation, SDL solves the technical challenges faced by the military, science community, and industry through:

- Serving MDA and the DoD as the University Affiliated Research Center (UARC) for electro-optical sensor systems research and development
- Designing and delivering electro-optical and space environment sensors and subsystems for over 400 rocket-borne and space-based payloads
- Pioneering efficient and effective calibration and characterization techniques and facilities
- Innovating CubeSat busses and small-scale components that provide large-scale benefits to the customer
- Enabling significant advances in data compression, processing, and exploitation
- Developing real-time reconnaissance data visualization hardware and software for operational military applications

## Utah Agricultural Experiment Station

(<http://uaes.usu.edu/>)

The Utah Agricultural Experiment Station (UAES) is part of a network of researchers and facilities at the nation's land-grant universities and is committed to improving agriculture and natural resources for the people of Utah. Experiment station research provides the Researcher working in the lab science-based



information used by Extension specialists and agents to assist people in every state in the nation. At research facilities on the Utah State University campus and throughout the state, the UAES supports hundreds of research projects. It operates labs that test soils, plant tissue, irrigation water and livestock feed. It researches food safety and processing, plant and animal genetics, economic and social forces that shape families and communities, and brings agricultural into harmony with sustainable use of natural resources.

## **Center for Persons with Disabilities**

(<http://www.cpdusu.org/>)

The CPD is Utah's Center for Excellence in Developmental Disabilities at Utah State University. It is a dynamic collection of projects, guided by a goal to improve the lives of people with disabilities and their families. This is done through research, education, demonstration services and technical assistance.

The research adds to the knowledge about disability, its causes, its diagnosis and the best ways to accommodate it in daily life.

The CPD's training programs pass research-based techniques on to educators, families and service providers in the community.

Demonstration services further bolster training by providing a real-world environment where techniques are tried and trainees learn how to provide services in their field. The people who receive services benefit from the expertise of the center, which provides education, evaluation and treatment to people who need it.

Technical assistance is provided to entities that require help as they implement policies relating to disability.

## **Ecology Center**

(<http://www.usu.edu/ecology/>)

Ecology is increasingly interdisciplinary, and ecologists have diverse training backgrounds. The Ecology program at Utah State includes affiliated faculty from 11 departments in 5 colleges and fellow students with many different interests. The Ecology curriculum is research-based and includes a common but flexible core of seminars and courses, along with specific departmental degree requirements

and a research thesis or dissertation.

Acceptance into the Ecology degree program requires acceptance by a faculty who will serve as advisor for the degree program. If you are interested in studying Ecology at Utah State, you should contact the Faculty Associate(s) whose areas of research align with your professional interests. Inquiries sent to the Ecology Center will be routed to appropriate department(s), department head(s), or faculty member(s).

## **Utah Water Research Laboratory**

(<http://uwrl.usu.edu/>)

The Utah Water Research Laboratory (UWRL) is a stand-alone facility located at Utah State University (USU) on the Logan River, Logan, Utah. The UWRL operates within an academic environment and collaborates with government and private sectors to address technical and societal aspects of water-related issues, including quality, quantity, distribution, and conjunctive use. This is accomplished through providing more than 100,000 square feet of state-of-the-art laboratory, computer, and office space.

## **Nora Eccles Harrison Museum of Art**

(<http://artmuseum.usu.edu>)

The Nora Eccles Harrison Museum of Art (NEHMA) is an academic art museum dedicated to modern and contemporary art. NEHMA serves the students and faculty across Utah State University through a collection of over 5,000 objects and rotating exhibitions of permanent and travelling artworks. Last year we provided direct support to thousands of USU students via customized tours, Museum-based assignments, film screenings, concerts and lectures. As the only accredited art museum serving Cache Valley and Northern Utah, NEHMA also plays a vital role for community patrons and Logan tourism. These include numerous children and adults from K-12 programs and civic organizations who engage in educational programming at the Museum. Annual attendance to the Museum is typically above 10,000.

Research is essential to NEHMA's mission to collect, preserve and

exhibit modern and contemporary visual art with an emphasis on artists from the Western United States and includes research on current artworks in NEHMA's collection as well as planned exhibitions. Other areas involve exhibition design, educational programming, and curriculum connections. As a collecting institution, research is an ongoing process for curatorial staff and is supported through interns, research fellows and student staff.

## Responsible Conduct of Research

Research integrity is essential in any field of study. How can results be reliable and useful to a larger audience if the research is not conducted with the highest ethical principles? A system of principles known as Responsible Conduct of Research (RCR) has evolved over centuries of research. These principles include how data are collected and reported; the nature of authorship; intellectual property; relationships between mentor and apprentice. Because of the importance of RCR, Utah State University has created an increasingly sophisticated set of courses where students can learn about research ethics.

## Research Ethics and Misconduct

According to the Department of Health and Human Services - Public Health Service Policies on Research Misconduct 42 CFR Part 93, research misconduct is defined as “fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.” Research misconduct, however, does not include honest error or differences of opinion. The complete text of PHS Policies on Research Misconduct 42 CFR Parts 50 and 93 is available at [http://ori.hhs.gov/sites/default/files/42\\_cfr\\_parts\\_50\\_and\\_93\\_2005.pdf](http://ori.hhs.gov/sites/default/files/42_cfr_parts_50_and_93_2005.pdf).

## **Fabrication**

When the reported or recorded data or results are made up, it is considered as fabricated. This includes faking the names and information of participants to support claims.

## **Falsification**

“Manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.”

## **Plagiarism**

One of the biggest and most common blunders that researchers make is the act of plagiarizing. Plagiarism refers to the act of copying someone else’s work or ideas without giving proper credit to the original author. Plagiarism can be intentional or unintentional and it is not necessarily a black and white issue. Its scope can be very broad and complex, thus making it more difficult to understand. To make things clearer, here are several important points to remember regarding plagiarism:

- Intentional plagiarism occurs when you use, copy, borrow, and/or submit ideas and materials by someone else and pass it as your own.
- Lifting ideas and phrases from various sources and putting them together to create a statement is considered as patchwork plagiarism. This includes using synonyms of the original words in the text to give the illusion of paraphrasing the original work.
- Plagiarism by non-attribution includes failure to cite and quote the original source. Whenever you summarize, paraphrase, or quote another author’s work, make sure that you cite the original source in the footnotes, endnotes, or parenthetical notes. Also, whenever you use the author’s exact words, make sure that you enclose them in quotation marks or put them as block text.
- There is also such thing as self-plagiarism. It occurs when a student submits an essay or article written for one subject to fulfill course requirements of another subject.

Plagiarism can be avoided by taking precautionary steps and by double checking your work before turning it in. A more extensive look on plagiarism and how to avoid it is discussed in <http://ocw.usu.edu/English/introduction-to-writing-academic-prose/plagiarism.html>. The Council of Writing Program Administrators (WPA) and Purdue OWL also provide an informative guide on avoiding plagiarism. The Purdue OWL article can be accessed here <https://owl.english.purdue.edu/owl/resource/589/1/> while the WPA manual can be downloaded by visiting <http://wpacouncil.org/>.

## Human Subjects Research

Researchers at Utah State University conduct research designed to create new knowledge and promote an improved quality of life for citizens of Utah, the nation, and the world. The Institutional Review Board (IRB) at Utah State University (USU) is a committee designated to review and approve research involving human participants **prior** to the initiation of such research, and to conduct periodic reviews of such research.

The Institutional Review Board (IRB) supports all researchers who do studies involving human participants, helping to ensure participant protection while promoting high-quality research that can provide rewards to participants and/or society. Such research might be conducted by faculty as their own scholarly work, or as research assignments for classes they teach, or by undergraduate/graduate students who are pursuing individual research projects.

Individuals who conduct research involving human participants must complete an online training program provided through the Collaborative Institutional Training Initiative (CITI) prior to conducting their research. Researchers at USU may access CITI training at any time, and certification lasts for three years: <http://rgs.usu.edu/irb/training/>

The IRB website provides a variety of resources including the USU Investigator Handbook, a list of frequently asked questions, example consent documents, tips for pre-paring applications, several training presentations, and information for researchers working with marginalized ethnic and cultural groups. Four IRB staff members provide additional guidance and manage the review

process in conjunction with the IRB Chair and Board of 18 members.

The IRB uses the online program Protis for IRB application submission, review, and protocol management. Archived forms are available on the IRB website to review the types of questions that will be asked in the Protis application.

For more information, please visit [rgs.usu.edu/irb](http://rgs.usu.edu/irb).

## Research Using Animals

In accordance to the Animal Welfare Act, both the USU Laboratory Animal Resources (LAR) facilities and personnel and the USU Institutional Animal Care and Use Committee (IACUC) fulfill their ethical and legal obligations in ensuring the care and safety of animals in any research. The IACUC oversees all research or teaching activities involving live vertebrate animals, including biomedical, agricultural, and wildlife activities. The IACUC has the right to approve, modify, disapprove, suspend, and/or terminate activities in USU that involves animals. All researches involving animals must follow the prescribed protocol and guarantee that: Animals will not be abused or treated inhumanely.

- All personnel working with the animals must receive proper training prior to performing any experiment and/or meet with the Supervisor first to discuss proper handling techniques.
- All animals must be properly handled all the time.
- Anyone involved in the research shall wear appropriate protective clothing, and follow the appropriate safety procedures.

Note that if you do not comply with the research policies involving animals, your privilege of working with animals in research may be suspended.

For more information, read the Animal Care and Use section of the Policy Manual <https://hr.usu.edu/files/policies/534.pdf> and the Policies and Regulations section for research involving animals at <http://rgs.usu.edu/iacuc/html/policies>.

# Safety

Conducting research, both in field or in a laboratory, can pose serious threats and hazards. While doing your undergraduate research, you may use certain instrumentation and materials that may harm you, your subjects, and even the environment. Therefore, government agencies and other external entities established mandatory requirements for people involved in certain kinds of research. Depending on the type of research that you will be involved in, additional formal safety training programs must be taken.

Should your research involve the use of chemicals, it is imperative that you refer to your department's chemical hygiene plan. This includes institution procedures, plans, and protective measures to protect everyone involved in the research (<http://rgs.usu.edu/ehs/hhtm/programs-and-services>).

Utah State University's Environmental Health and Safety Office provides training and safety programs for the following:

**Biological Safety** – deals with the safe use of human and animal pathogens, biological toxins, human blood and recombinant DNA on campus. For further information contact Kirt Poulsen at [kirt.poulsen@usu.edu](mailto:kirt.poulsen@usu.edu) or James Day ([james.day@usu.edu](mailto:james.day@usu.edu) or at 797-3290).

**Environmental Safety** – program designed to keep Cache Valley's environment clean and safe by monitoring and regulating air and water quality, recycling programs, and hazardous waste. For further information contact Eric Jorgensen at [eric.jorgensen@usu.edu](mailto:eric.jorgensen@usu.edu) or at 797-2856.

**General Health and Safety** – basic rules and regulations that help keep the student researchers, maintenance workers, faculty, and office staff safe. This includes everything from handling hazardous chemicals to operating heavy machinery to working in an ergonomic environment. For further information contact Kirt Poulsen at [kirt.poulsen@usu.edu](mailto:kirt.poulsen@usu.edu) or at 797-3507.

**Industrial Hygiene** – is the science of anticipating, recognizing, evaluating and controlling workplace conditions that may cause workers' injury or illness. Industrial hygienists use environmental monitoring and analytical methods to detect the extent of worker exposure and employ engineering, work practice controls and other methods to control potential health hazards. For further

information contact Rachel Curry at [rachel.curry@usu.edu](mailto:rachel.curry@usu.edu) or at 797-7423.

**Laboratory Safety** – designed to help scientists use and safely dispose substances that are hazardous or require special handling. For further information contact Rachel Curry at [rachel.curry@usu.edu](mailto:rachel.curry@usu.edu) or at 797-7423.

**Occupational Safety** – improves the safety of the work environment through the recognition, evaluation and control of hazardous conditions, and complying with regulatory requirements of the Occupational Safety and Health Administration (OSHA) and various state and local codes. For further information contact Kirt Poulsen at [kirt.poulsen@usu.edu](mailto:kirt.poulsen@usu.edu) or at 797-3507.

**Radiological Safety** – Utah State University is licensed to use radioactive materials and devices by Utah's Division of Radiation Control. Radiation Safety Program structure and elements can be found in the Radiation Safety Handbook: <http://rgs.usu.edu/ehs/files/uploads/radiological-safety/RSH.pdf> For further information, contact John P Jones ([john.p.jones@usu.edu](mailto:john.p.jones@usu.edu) or at 7973514).

Before starting on your research, be sure to contact and address all your queries to the Environmental Health and Safety Office (visit the website at <http://rgs.usu.edu/ehs/>).

# Funding Opportunities

## Undergraduate Research & Creative Opportunity (URCO) Grants

The Undergraduate Research and Creative Opportunities (URCO) Grant Program, funded by the Office of Research and Graduate Studies, was established in 1975 to support worthy independent student projects.

Undergraduate Research is an inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to their discipline. Thus, undergraduate research is broadly defined, and encompasses all types of scholarly and creative inquiry, including creating a sculpture, composing a piece of music, doing archival scholarly work, and working at the laboratory bench.



All undergraduate students in good academic standing may apply for an URCO grant. The application must designate a faculty advisor.

The URCO program is undergoing a substantial revision in the 2015-16 academic year. For specifics, please see <http://urco.usu.edu> or attend the Undergraduate Research Orientation to be held on September 11th, at 1pm in the AG Science Building room 101.

Deadlines for the 2015-16 school year are as follows:

October 15th, Noon

March 15th, Noon

July 15th, Noon

# Engineering Undergraduate Research Program (EURP)

<https://www.engineering.usu.edu/htm/research/undergraduateresearch/>

The Engineering Undergraduate Research Program (EURP) is designed to involve outstanding undergraduate students in research projects and encourage students to consider graduate school.

Students selected for the program are paid a minimum of \$1,500 a semester for up to three semesters and are expected to work at least 10 hours per week, present research results at a professional venue and apply for the “Undergraduate Research Scholar” designation on their transcripts.

# Travel Assistance

The Office of Research and Graduate Studies partially funds student travel to national undergraduate research conferences, including NCUR and Posters on the Hill. For more information, contact [scott.bates@usu.edu](mailto:scott.bates@usu.edu).

## Undergrad Travel Award

Presentation skills are critical to the success of graduate students, and conference presentations represent the best opportunity for developing those skills. Professional presentations build professional skills-the nuts and bolts of communicating results to professional audiences-and provide outstanding career-building opportunities.

The RGS Undergraduate Student Travel Award promotes student involvement in their disciplines by partially funding travel costs associated with professional presentations at regional, national, and international conferences. Allocation decisions are made on a first-come/first-served basis. Funds are allocated to each month of the year; conferences throughout the year are funded.

### Funding

The maximum amount of funding from RGS, per student, is as follows (note that funds must be matched dollar-for-dollar from a department or other university source, conference travel-grants can be used for the match):

- International Conference: \$400 from RGS
- National Conference: \$300 from RGS
- Regional Conference (i.e. conferences held in UT, ID, WY, CO, NM, AZ, NV): \$200 from RGS

## Eligible Costs

RGS Travel Awards may cover costs in any of the following categories:

- Conference registration
- Airfare (actual costs as supported by detailed receipts)
- Hotel (actual costs as supported by detailed receipts; no incidentals)
- Mileage
- Per diem
- International Travel Insurance

## Eligibility

All full-time undergraduate students are eligible to apply for an RGS Undergraduate Student Travel Award. Students may apply to travel multiple times per fiscal year but will be funded only once during that year. In total, students are eligible to receive an RGS Travel Award one during their USU Undergraduate career. Only one student per presentation/poster will be funded, though multiple students may be funded to attend the same meeting/conference.

## Apply

To apply, complete this form at [rgs.usu.edu](https://rgs.usu.edu)

# ASUSU Academic Opportunity Fund (AOF) for Travel

<http://rgs.usu.edu/studentresearch/html/ur-opportunities/fund-your-research/travel-funding>

The dramatic increase in undergraduates at Utah State presenting at professional conferences in their fields of study beyond NCUR and CUR events signaled a need for financial support. Fortunately, ASUSU stepped up to the challenge and created a fund specifically for undergraduates, which parallels the one for graduate students. About \$20,000 annually is set-aside for this purpose, and funds tend to run out before the end of the year.

## How to Apply

- Complete all parts of the application.
- Attach a copy of your original acceptance letter.
- Submit a copy of your research abstract.
- Submit a cover letter and explanation of the conference and the benefit to USU of your presentation.
- Applications will be accepted up to six months prior to the conference date.
- Receive notice of your application status.

Apply early for support when submitting the abstract/paper to the conference, rather than waiting until the invitation arrives.

Applications that feature matching funds from a faculty grant, the department, or college are viewed more favorably. Funds for summer travel must be secured during the academic year, as the oversight committee does not meet during this time. For more details check <http://rgs.usu.edu/studentresearch/html/ur-opportunities/fund-your-research/travel-funding>

## Honors Research and Study Abroad Fund

(<http://honors.usu.edu/honors-research-fund/>)

The Honors Research and Study Abroad Fund are designed to give Honors students access to direct funding for activities that will

academically enhance their undergraduate experience.

- Students may apply for awards with a minimum amount of \$50. Maximum award per year from each fund is \$1000.
- Applications are considered on a rolling basis.
- Only active Honors students on track to graduate with Honors are eligible to apply.
- Students must apply for Honors Research or Study Abroad Funding before the project or event occurs. Honors will not award retroactive funding.

Examples of learning opportunities eligible for Honors Research and and/or Studyoad funding:

- Research, scholarship, and artistic activities or materials
- Research trips to archives, libraries, or remote sites
- International service opportunities
- International or domestic internships
- Participation in academic conferences
- Enrollment in a non-USU course that would prepare the student for his or her capstone project
- Partners in the Parks fees and travel expenses
- Study abroad
- Matching funds for URCO grants

Examples of ineligible expenses:

- Personal equipment purchases (iPods, digital cameras, computers, or any equipment that would remain the property of the student)
- Non-professional or educational travel (personal trips, vacations, social events)
- USU tuition

## How to Apply

The application form asks students to describe their needs, to develop a budget, and to identify other sources of funding for which they have applied. Students attending a conference, studying

abroad, or traveling for a specific service opportunity must provide proof of acceptance to the program. Applicants must be Honors students in good standing and on track to graduate with Honors. Please download the application below, and submit a TYPED application form, a one-page budget, and a letter of support from a faculty member to the Honors Program in LLC Building A, Room 112 (or email to Amber Summers-Graham at [amber.summers@usu.edu](mailto:amber.summers@usu.edu)).

# National and International Scholarships and Fellowships

<http://honors.usu.edu/htm/fellowships-and-grants>

For students who have engaged in research as undergraduates, a number of scholarships and fellowships may be appropriate for consideration to support research during the undergraduate years or in graduate school. The Honors staff is available to consult on applications. Many of these awards are extremely competitive, and it is wise to plan early. For any award, first do the homework yourself: review the foundation's website and pay particular attention to such items as "Are you a candidate for a Truman Scholarship?" which cue applicants to the appropriateness of their pursuit. The Truman Foundation, for instance, seeks students who want to be "change agents" and who will pursue public service. A strong service record is important for Truman candidates; on the other hand, the Barry M. Goldwater Scholarship seeks the best researchers in science, technology, engineering, and medicine. The Morris Udall Scholarship supports a diverse array of majors that have interest in the environment, ranging from the expected Natural Resources majors to nature writing, from environmental engineering to landscape architecture.

The most prestigious awards are considered to be the Rhodes and

Marshall Scholarships. Utah State has had seven Rhodes Scholars, the earliest in the 1921 and the most recent in 2004. Honors prepare students to be competitive, offering dry runs of the interview process and social events, through its fall scholarship prep course.

NSF Graduate Fellowships are natural awards for students at research universities, and the Colleges of Engineering and Science have a particularly strong track record in their students winning these. NSF includes not only the sciences but also many of the social sciences.

Applications are made on-line and are typically due in the late fall of any year. [www.nsf.gov](http://www.nsf.gov) offers more information. USU's investment in the Undergraduate research program is also an investment in students who will seek these prestigious awards.

# Presentation Opportunities

## Utah Research on Capitol Hill

<http://rgs.usu.edu/studentresearch/html/ur-opportunities/present-your-research/utah-research-on-capitol-hill>

Each January, Utah State University and the University of Utah join together as the state's two public research universities to demonstrate the value of research to an undergraduate education to legislators with a showing of research projects and products in Salt Lake City at the State Capitol. Originated by Utah State in 2001, this event is reserved for students whose home residence is Utah. Parents are invited to this day as well as members of the Board of Regents and USU's Board of Trustees.

Abstracts accepted starting: October 15th

Abstracts due by: November 15th

Event date: January 28th

# Utah Conference on Undergraduate Research

<http://www.ucur.org/>

UCUR is designed to showcase the best undergraduate work from students all over the state. Undergraduates from all disciplines are invited to apply for the conference, which provides an excellent opportunity to students to present their work in a scholarly setting to students, faculty, field specialists and community members.

Presentations may include both visual and oral displays of work in all academic disciplines, from art history to molecular biology.

Abstracts accepted starting: Sept 15th

Abstracts due by: October 30th

Event date: February 19th

# National Conference on Undergraduate Research

<http://rgs.usu.edu/studentresearch/htm/ur-opportunities/present-your-research/ncur>

The National Conference on Undergraduate Research is the largest conference of its kind in the United States. Annually some 2,000–participants—largely students but some faculty members—gather to share their work from all disciplines. Participation in this three to four-day event is funded through the Office of Research and Graduate Studies.

To qualify, students must note the USU undergraduate research contact when submitting. For more information, review [www.ncur.org](http://www.ncur.org).

Abstracts accepted starting: October 5th

Abstracts due by: December 2nd

Event date: April 7th to 9th



# Student Research Symposium

<http://rgs.usu.edu/studentresearch/htm/ur-opportunities/present-your-research/student-showcase>

Each spring, typically in April, students are invited to participate in the campus celebration of research, scholarship, and creative activity. Research Week is an opportunity for faculty and students showcase their research projects. The Student Student Research Symposium will be celebrating its 30th anniversary in 2016.

Various departments also host in-house symposia, panels, and poster sessions

Abstracts accepted starting: February 1st

Abstracts due by: February 15th

Event date: April 10th

# Council on Undergraduate Research Posters on the Hill

[http://www.cur.org/conferences\\_and\\_events/student\\_events/posters\\_on\\_the\\_hill/](http://www.cur.org/conferences_and_events/student_events/posters_on_the_hill/)

Each spring the Council on Undergraduate Research (CUR) hosts an annual undergraduate poster session on Capitol Hill. This event helps members of Congress understand the importance of undergraduate research by talking directly with the students whom these programs impact. Applications open annually the first week of September and are generally due between mid-October and mid-November. For more details on this years application process, please visit the Posters on the Hill information page.

Abstracts due by: November 4th

Event date: April (specific date to be determined).

# Summer Research Opportunities

It is not uncommon for students to look for summer jobs in order to earn extra money and gain experience. However, not all of these job experiences are relevant to a student's career path. Thus, if you are looking for a work experience that will help you solidify your future and get paid in the process, joining a summer research program is the best way to spend your summer. Most programs offer great opportunities to travel out of state – covering your travel fees, lodging and even awarding you a stipend.

Here at Utah State University, we provide you with many summer research opportunities that will help you prepare for a promising career in the future. (<http://rgs.usu.edu/studentresearch/html/summer-research-opportunities>)

## NSF REU

Funded by the National Science Foundation (NSF), the Research Experiences for Undergraduates (REU) gives students the opportunity to participate in research projects on REU sites at their home campus or other campuses. The NSF offers two types of REU funding: supplemental and site funding. Both types of funding programs expose students to a wide range of opportunities to acquire skills that will prepare them for future careers. Each REU site has a different set of criteria, deadlines, and application process. Double check on [http://www.nsf.gov/crssprgm/reu/reu\\_search.jsp](http://www.nsf.gov/crssprgm/reu/reu_search.jsp) to find the right program for you.

Deadlines vary by REU site, but generally run between December and March.

## ORAU

The Oak Ridge Associated Universities (ORAU) is a 105-member consortium of major PhD-granting academic institutions. Core areas of focus within ORAU include radiation emergency response and operational readiness; environmental health, analysis and communications; forensic analysis; science workforce development

and evaluation; and technical training.

Participating in ORAU will allow undergraduates interested in conducting real-world, multidisciplinary research to benefit from networking with researchers and fellow students through ORAU.

ORAU has an extensive network of partnerships among universities, government, industry, and major research laboratories—including Oak Ridge National Laboratory—in research areas of strategic investment.

Eligibility criteria and other requirements vary depending on the program. Refer to <http://www.orau.org/science-education/internships-scholarships-fellowships/undergraduates.aspx> for the guidelines.

## **SURF - NIST**

The Summer Undergraduate Research Fellowship by the National Institute of Standards & Technology encourages outstanding undergraduate students to pursue careers in science and engineering. It aims to build a mutually beneficial relationship among the student, the institution, and NIST. The students will be given an opportunity to work with internationally known NIST scientists and be exposed to cutting-edge and state-of-the-art research. Visit the SURF – NIST page for FAQs, application package, guidelines, and deadlines <http://www.nist.gov/surfgaithersburg/welcome1.cfm>

## **iUTAH iFellows**

Undergraduate students from all Utah institutions of higher learning gain firsthand research experience by working with iUtah researchers and graduate students associated with the iUTAH project. Summer participants will participate in a 10-week research internship at the University of Utah, Utah State University, or Brigham Young University. iFellows will also attend cohort-building sessions where they will learn professional skills, practice poster and oral presentations, and engage with panels of STEM professionals from a number of different careers. Eligibility, deadlines, and other additional information about this program is available at <http://iutahepsc.org/education/ifellow.php>.

## Amgen Scholars Program

Provides the participants with hands-on summer research opportunities in biotechnology and related science and engineering fields at some of the world's leading institutions. By participating in this program, students are able to participate in research projects, build relationships with faculty mentors, and attend seminars and workshops—including the Amgen Scholars U.S. Symposium—where they interact and network with fellow scholars.

For more information on how to be an Amgen Scholar, visit <http://amgenscholars.com/>

## Units Supporting Undergraduate Research

### Honors Program

(<https://honors.usu.edu/>)

The Honors Program is home to USU students brave enough to take Horace's ancient challenge: Sapere Aude – or Dare to Know. The Honors Program creates a community of dynamic, ambitious, creative students who want not simply to earn a degree at USU but also to create a life-changing experience for themselves. Honors students all learn to integrate the four key parts of an Honors education at USU: critical thinking, independent research, interdisciplinary learning, and civic engagement. Our students want to – and will – change the world.

### Why Honors?

The Honors Program helps students to create this educational experience by offering many benefits, including...

**Advising:** Honors students get early priority registration and personalized advising with a Faculty Honors Advisor in the student's major department and the Honors Program Coordinator and Advisor.

**Funding:** Honors students qualify for Honors-only financial support from the Honors Research Fund (covers research or conference travel and/or materials), the Honors Study Abroad Fund (supports international travel for academic study or service projects), and Honors Scholarships (fund academic and/or housing costs for select Honors students).

**Coursework:** Honors students enjoy enhanced classroom experiences, featuring Honors General Education Seminars that meet USU requirements and create student collaboration about real world problems; Practical Application Credit for extracurricular academic projects such as service, study abroad, internships, research, and creative work; and Thesis/Capstone Projects designed by Honors students to showcase their research and creative skills to future employers or graduate programs.

**Community:** Honors students join a vibrant community of students and faculty fostered by monthly Faculty-Student Socials that allow students to practice networking skills and develop connections across disciplines; a Campus Calendar and weekly updates about upcoming events on campus; and Honors House in the Living and Learning Community, which is conveniently located next to the Honors office, lounge, and classroom.

Contact the Honors Office for more information on how to be a part of this program (see Contact Information section).

# Study Abroad

With USU's study abroad program, students are able to gain a global perspective by being exposed to different worldviews. Students are expected to have an expanded degree of multicultural competence and an appreciation for similarities and differences in thought around the world. (<http://globalengagement.usu.edu/htm/about-us/welcome>)

To develop a global perspective, students are encouraged to study and research into various aspects of human thought, behavior, and culture while they are in another country. Focusing on the people's beliefs, knowledge, and behaviors can provide valuable insights that may help shape the student's career like Quinney Scholar, Hesper Kohler:

*“While studying abroad in Fiji, my focus changed from marine resources to freshwater quality. In Fiji, I did an independent research project on E. coli levels in a river that went through Suva. The water quality was poor, yet the people had to use it for daily activities such as bathing, and harvesting fish and shellfish. In the squatter settlements, the people had to drink the water. Seeing how the people depended on the river helped me realize what I want to do with my life. After I graduate from USU, I will apply to Oregon State University to their Environmental Science Masters Degree and focus on Water Resources. I want to work with educational outreach and help communities use their freshwater in the most sustainable way. I will develop programs with community members on how to clean their water supply, and help them understand the environmental and human relationships that depend on managing the water supply.”*

– Hesper Kohler

# USU Libraries

The USU Librarians work for you. It is our job to get you the information you need! Need to know the cultural history of

the tomato? Doing research on fracking? Looking for books on Shakespeare? Or just need to locate a study your professor told you about? We can help. It's our job to help you find the information you need to be a successful student at USU.

The main USU library is the Merrill-Cazier Library, located in the center of our Logan campus. Librarians are available for in-person research help at the Information Desk in the Merrill-Cazier Library from 8am-9pm most weekdays.

The library homepage is <http://library.usu.edu/>. On this page, you can get personalized help from our librarians and use hundreds of research databases to help you find the information you need. Librarians are available from our homepage via instant messenger chat from 8am-9pm most weekdays. Additionally, you can call for assistance at 435-797-2678, text at 435-227-5420, or email us at [Library.Help@usu.edu](mailto:Library.Help@usu.edu).

The two major types of research tools we have to help you discover information are:

**Library Catalog:** The library catalog (<https://libcat.lib.usu.edu/>) includes all of our holdings, and you can find it linked on the homepage. If you have a book or an article you are looking for, you can look up the book title or journal/ magazine/newspaper title. Note: The catalog does NOT index articles, so searching for an article title will not work. To locate a known article, search for the journal/ magazine/ newspaper title in which it was published. To discover new articles, use databases.

**Databases:** If you need to find articles about a certain topic, databases are the way to go. Databases will help you discover articles, proceedings, and book chapters. We subscribe to hundreds of databases. You can find them by clicking on "Articles & Databases" on our homepage. They are arranged by subject area (<http://library.usu.edu/main/inabs/index.php>), though you can also search in one of our great multi- disciplinary databases, like Academic Search Premier.

Keep in mind that doing searches for academic information isn't always as easy as searching Google. If you ever get frustrated in your searches, contact us! You can come by the Information Desk in

the Merrill-Cazier Library, or call, text, or email us.

Chat: <http://library.usu.edu/> Call: 435-797-2678

Text: 435-227-5420 Email: [Library.Help@usu.edu](mailto:Library.Help@usu.edu)

# **Courses to Support Undergraduate Research**

## **English 2010, Research Writing**

This sophomore level writing class, also offered through Honors, offers an introduction to ethics and research so that any student is cued about responsible conduct of research. These principles are appropriate for researchers as well as for educated citizens and helps fulfill the University Studies mission statement of preparing “Citizen- Scholars.”

## **USU 4900, Undergraduate Research**

Many departments have their own course prefix/number for undergraduate credit. For those departments that do not, the university number can be used. Grades are submitted by the Associate Vice President, and the work is evaluated by a faculty member.

## **USU 6900, Research Integrity / Non-course Research Scholars Forum**

<http://rgs.usu.edu/compliance/htm/certificate>

Increasing emphasis among Federal funding agencies is being placed on ensuring that students and post-doctoral fellows are exposed to and comply with societal standards for the Responsible Conduct of Research (RCR). All trainees receiving funding from the National Science Foundation, the National Institute of Food and Agriculture, and from certain National Institutes of Health grants are required



to participate in RCR programs. In addition beginning this year, all doctoral students are required to complete RCR training as well. Utah State University provides this training for all individuals through its Research Scholars Certification Program. It is offered without charge to all students and post-doctoral fellows.

Participants in this course will receive training required by key Federal agencies to participate in their grant programs, and successful completion will include both responsible conduct of research (RCR) and institutional review board (IRB) [read: human subjects] certification. The course will provide an overview of approaches to moral reasoning and of core research integrity issues including:

- Ethical treatment of human subjects in research
- Ethical care and use of animals in research
- Data management
- Authorship and publication practices
- Peer review
- Conflicts of interest
- Collaborative science
- Mentor/trainee relationships
- Research misconduct

The course uses a case-based learning approach, with required readings and preparation and analysis of one case. Advanced undergraduates and graduates may enroll.

## **Credit Courses, Volunteer Work, and Employment**

Students will find that departments have varying rules and principles on whether research may be done for credit or pay. Rarely would a department allow a student to receive both course credit and pay for a project. Explore the department's expectations with your faculty mentor or associate dean.

The University also has a Career Services Center which links the

students to a meaningful career and employment. At the center, students are given the opportunity to choose a career, find an internship, prepare for graduate school, and find a job. USU understands that being able to locate a meaningful career can have a huge impact on an individual's emotional and physical health, quality of life, and the ability to reach one's highest potential.

All student employment jobs are posted in Career AGGIE <https://www.usu.edu/career/htm/career-aggie/>. The site has a step-by-step guide and an overview section to help you navigate through the page.

If you are still unsure of what to do or you are still thinking of your career options, it is a good idea to visit the coaches at the Career Services Center so they can help you out.

# Special Presentation Opportunities

## TEDxUSU [tedx.usu.edu](http://tedx.usu.edu)

In the spirit of Ideas Worth Spreading, TEDx is a program of local, self-organized events that bring people together to share a TED-like experience. At a TEDx event, TEDTalks video and live speakers combine to spark deep discussion and connection in a small group. These local, self-organized events are branded TEDx, where x = independently organized TED event. The TED Conference provides general guidance for the TEDx program, but individual TEDx events are self-organized.

## About TED Talks

TED is a nonprofit organization devoted to Ideas Worth Spreading. Started as a conference in California 26 years ago, TED has grown to support those world-changing ideas with many initiatives.

At a TED conference, the world's leading thinkers and doers are

asked to give the talk of their lives in 18 minutes or less. TED speakers have included Roger Ebert, Sheryl Sandberg, Bill Gates, Elizabeth Gilbert, Benoit Mandelbrot, Philippe Starck, Ngozi Okonjo-Iweala, Brian Greene, Isabel Allende and former UK Prime Minister Gordon Brown. Three major TED events are held each year: The TED Conference takes place every spring in Vancouver, Canada, simultaneous with TEDActive, in Whistler, BC; and the TEDGlobal Conference takes place each summer in Edinburgh, Scotland. (<http://rgs.usu.edu/tedxusu/htm/about-tedx>)

## **Undergraduates at TEDxUSU**

### **Nicole Martineau**

College of Science, Department of Biology and Caine College of the Arts, Department of Drama

Nicole Martineau's philosophy about teaching and research revolves around the idea that "Education is not a preparation for life but is life itself" (John Dewey).

Most people are surprised when she tells them about her biology education major and corresponding theater education minor, but in her experience, that's an integral part of the definition of a "teacher." Throughout her life, Nicole has observed that excellent instruction is the result of teachers who know and care about their subject, and are also able to tie material to other curricula or real-world applications. The blending of science and drama in her university studies has influenced her research and pedagogy. Through her cross disciplinary research, she has learned that teaching and research both require hard work, late nights, and a lot of love. More importantly, Nicole is more certain than ever that she wants to educate young people in both science and theater arts. She is grateful that theater's universal appeal and humanizing influence fosters the creativity and inquiry that drives our lives, stimulates our minds and hearts, and encourages us to ask questions and become lifelong learners. (<https://researchweek.usu.edu/2014/htm/awards/undergrad-researcher-of-the-year/nicole-martineau/>)

## Taylor Halversen

Student Experience Specialist, Business Innovation Factory

### “The Conversion”

Taylor Halversen is an honors student in her third year at Utah State University studying Communication Studies and Liberal Arts. Since spring semester 2011, she has been attempting to articulate student voice and perspective through the university system. As a result of her research, Halversen went on to intern at the Business Innovation Factory, a non-profit innovative design company stationed in Rhode Island, as a student experience consultant in the summer of 2012 and plans to continue her research to enhance student experience. Halversen received the A-pin award for academic achievement after only two years of study at USU and continues to strive for academic excellence. She craves learning and constant growth, largely in part to her experiences at Utah State University, and plans to live by a “Why not?”-motto as she constantly seeks out new ways of understanding the world. (<https://rgs.usu.edu/tedxusu/html/tedx-usu-2012/taylor-halversen>)

## Ignite

[ignite.usu.edu](http://ignite.usu.edu)

Ignite is the rising star of Research Week, encapsulating the essence of what it means for students to do research at Utah State. The program includes talks by eight graduate and undergraduate students, each of whom will discuss the stories and motivations behind their academic pursuits in just five minutes, with slides automatically advancing every 20 seconds. One of this year’s speakers for Ignite is Nicole Martineau who is also a part of TEDxUSU.

Ignite is part of a national speaking program with events regularly occurring around the world. It also includes an interactive component, where participants and audience members have the chance to compete in a simple “build” project for prizes. (<http://researchweek.usu.edu/ignite/html/ignite-2014>)

# 2015 Ignite Speakers

## **Justine Britten**

College of Agriculture and Applied Sciences, Animal, Dairy and  
Veterinary Sciences

“Save the Teats”

## **Nina Cavazos**

College of Humanities and Social Sciences, History

“Krishna in Logan”

## **Maureen Frank**

College of Natural Resources, Wildland Resources

“The Amazon in Your Back Yard”

## **Sydnee Fullmer**

Caine College of the Arts, Theatre Arts

“Living Truthfully in Imaginary Circumstances”

## **Ren Gibbons**

College of Engineering, Civil Engineering

“Path to the Bridge’s End”

## **Grant Holyoak**

College of Humanities and Social Sciences, Sociology

“Utah’s Immigration Hypocrisy”

## **Jonathan Koch**

College of Science, Biology

“The Plight of the Bumble Bee”

## **Salif Mahamane**

College of Education, Psychology

“Serendipity in Science”

# **2014 Ignite Speakers**

## **Nicole S. Martineau**

College of Science, Department of Biology and Caine College of the Arts, Department of Drama

“Putting it Together: Research Questions from Apparently Polar Passions”

## **Brian Cook**

College of Humanities and Social Sciences, Department of English

“Shallow Bones”

## **Jay Anderson**

College of Science, Department of Biology

“Plants and research—finding awareness through details”

## **Luz Maria Carreno**

College of Humanities and Social Sciences, Department of Social Work and Anthropology

“Language Brokering: A Risk or Necessity?”

## **Megan Sanderson**

College of Humanities and Social Sciences, Department of History

“Swimming Against the Historical Current”

## **Tyler King**

College of Engineering, Division of Civil and Environmental  
Engineering  
“Passion, Finding it”

## **Daniel Kinka**

College of Natural Resources, Department of Wildland Resources  
“The Chimerical Wolf”

## **Jarod Raithel**

College of Natural Resources, Department of Wildland Resources  
“Science and Storytelling: Wonder, Humility, Gratitude, and  
Interconnectedness”

# **Ignite 2013 Speakers**

## **Briana Bowen**

College of Humanities and Social Sciences, Political Science  
“Finding the Spark Zone”

## **Jeffrey Hazboun**

College of Science, Physics  
“Explore to Conserve”

## **Austin LaBau**

College of Humanities and Social Sciences, Sociology, Social Work  
and Anthropology  
“The Terrible, Horrible, No Good, Very Bad Day”

## **Joshua McDermott**

College of Humanities and Social Sciences, English  
“What it Means to See”

## **Karen Nielson**

College of Engineering, Mechanical and Aerospace

“Number 2”

## **Pedro Tejada**

College of Engineering, Computer Science

“Can Grad School Be Fun?”

## **Rebecca James**

College of Humanities and Social Sciences, English

“The Power of Questions”

## **Jesse Budd**

Jon M. Huntsman School of Business

“Don’t Event Try”

## **John Dehlin**

Emma Eccles Jones College of Education and Human Services, Psychology

“PhD at 45?”

## **Ben George**

Emma Eccles Jones College of Education and Human Services, Instructional Technology and Learning Sciences

“24 Nights in a Tent”



# Awards and Recognition

An award for Outstanding Undergraduate Research Mentor was created in 2003, and in 2004, it was joined by a parallel award to recognize each college's Outstanding Undergraduate Researcher. These students, too, are recognized and honored at Student Showcase. The student's accomplishments are highlighted in the Student Showcase booklet as well as in press releases. Names of college winners are submitted to the Research Office early in February of each year. Undergraduate researchers may nominate mentors to the appropriate college office.

In 2008, the Undergraduate Researcher of the Year Award was named The Peak Prize in honor of Professor David Peak (Physics) and Professor Terry Peak (Social Work) who have been stellar mentors and supporters of Undergraduate Research.

## Undergraduate Researchers of the Year

### 2015 Undergraduate Researchers of the Year

***Robins Award, Undergraduate Researcher of the Year:*** Nicole Martineau, Caine College for the Arts

Cathy Mangum, College of Science

Ryan Putman, College of Engineering

Michael King, College of Education

Reagan Wytsalucy, College of Agriculture

Colin Brady, College of Natural Resources

Nicole Martineau, Caine College for the Arts

Mike Bills, Jon M. Huntsman School of Business

Kaylee Johnson, College of Humanities and Social Sciences

## 2014 Undergraduate Researchers of the Year

***Robins Award, Undergraduate Researcher of the Year:*** David Baird, College of Natural Resources

Kathleen Combs, College of Agriculture

Nicole Martineau, Caine College for the Arts

Lindsey McBride, Jon M. Huntsman School of Business

Justin Hanson, Emma Eccles Jones College of Education and Human Services

Leah Langdon, College of Engineering

Chelsey Funk, College of Humanities and Social Sciences

David Baird, College of Natural Resources

## 2013 Undergraduate Researchers of the Year

***Robins Award, Undergraduate Researcher of the Year:*** Mitchell Dabling, Civil & Environmental Engineering, College of Engineering

Kevin Cope, Plants, Soils & Climate, College of Agriculture

Millie Struve, Theatre Arts, Caine College for the Arts

Megan Hansen, International Studies, Political Science, Jon M. Huntsman School of Business

Sara Hegsted, Communications Disorders & Deaf Education, Emma Eccles Jones College of Education and Human Services

Mitchell Dabling, Civil & Environmental Engineering, College of Engineering

Taylor Halverson, Language, Philosophy & Communication Studies,

College of Humanities and Social Sciences

Konrad Hafen, Wildlife Science, College of Natural Resources

Joseph Jensen, Physics, College of Science

## 2012 Undergraduate Researchers of the Year

***Robins Award, Undergraduate Researcher of the Year:*** William Brady DeHart, Psychology, Emma Eccles Jones College of Education and Human Services

Tiffany Maughan, Plants, Soils & Climate, College of Agriculture

Machaela Burt, Theatre Arts, Caine College for the Arts

Joshua Blume, Business, Jon M. Huntsman School of Business

William Brady DeHart, Psychology, Emma Eccles Jones College of Education and Human Services

Melina Santos Vander linder, Civil & Environmental Engineering, College of Engineering

Hannah Dulin, English, College of Humanities and Social Sciences

Shannon Kay, Fisheries & Aquatic Sciences, College of Natural Resources

Scott Roy, Math & Statistics, College of Science

Franziska Bullock, Psychology, Regional Campuses & Distance Education

## 2011 Undergraduate Researchers of the Year

***Robins Award, Undergraduate Researcher of the Year:*** Alyssa Calder, Biological Engineering, College of Engineering

Clifford King, Animal, Dairy and Veterinary Sciences, College of Agriculture

Christopher Ainge, Management, Jon M. Huntsman School of Business

Katherine Pike, Communicative Disorders and Deaf Education, Emma Eccles Jones College of Education and Human Services

Alyssa Calder, Biological Engineering, College of Engineering

Rachel Jaggi, German/International Studies/Sociology, College of Humanities and Social Sciences

Erin Fleming, Fisheries and Aquatic Sciences, College of Natural Resources

Julie Crozier Lamb, Psychology, Regional Campuses and Distance Education

Clayton Gunnell, Biology, College of Science

## 2010 Undergraduate Researchers of the Year

***Robins Award, Undergraduate Researcher of the Year:*** Carrie Young, Biology, Regional Campuses and Distance Education

Jeremy Crook, Plant Science, College of Agriculture

Darcy Stewart, Management, Entrepreneurship,  
Jon M. Huntsman School of Business

Aubree Nielsen VanTinderen, Elementary Education, Emma Eccles Jones College of Education and Human Services

Alex Hatch, Biological & Irrigation Engineering, College of Engineering

Kayla Woodring, Political Science,  
College of Humanities, Arts and Social Sciences

Danielle Babbel, Anthropology/Geography, College of Natural Resources

Sherry Baker, Biology/Public Health, College of Science

Carrie Young, Biology, Regional Campuses and Distance Education

## 2009 Undergraduate Researchers of the Year

***Robins Award, Undergraduate Researcher of the Year:*** Trenton Olsen, English, College of Humanities, Arts and Social Sciences

Katie Brown, Nutrition & Food Sciences, College of Agriculture

Natali Naegle, Jon M. Huntsman School of Business

Tanja Jensen, Communicative Disorders & Deaf Education, Emma Eccles Jones College of Education and Human Services

Ashleigh Restad, Civil & Environmental Engineering,  
College of Engineering

Trenton Olsen, English, College of Humanities, Arts  
and Social Sciences

Richie Gardner, Wildland Resources, College of Natural Resources  
Sydney Chamberlin, Physics, College of Science  
Dustin Jones, Psychology, Regional Campuses and  
Distance Education

## 2008 Undergraduate Researchers of the Year

***Robins Award, Undergraduate Researcher of the Year:*** Adam Kynaston, Psychology, Emma Eccles Jones College of Education and Human Services

Laura Rowley Wright, Plants, Soils & Climate, College of Agriculture

William Israelsen, Economics, Jon M. Huntsman School of Business

Adam Kynaston, Psychology, Emma Eccles Jones College of Education and Human Services

Elisabeth Linton, Biological & Irrigation Engineering, College of Engineering

Courtney Hill, Art History/English, College of Humanities, Arts and Social Sciences

Melissa Sanders, Watershed Sciences, College of Natural Resources

Art Mahoney, Computer Science, College of Science

Carrie Young, Natural Resources/Science, Regional Campuses and Distance Education

## 2007 Undergraduate Researchers of the Year

John Brinkerhoff, ADVS, College of Agriculture

Jeanet te Blackham, Marketing, Jon M. Huntsman School of Business

Aaron Anderson, FCHD, Emma Eccles Jones College of Education and Human Services

Gerald “Dusti” McEwen, BIE, College of Engineering

Lenaye Howard, History, College of Humanities, Arts  
and Social Sciences

Kelly Sivy, Wildland Resources, College of Natural Resources

Jan Marie Anderson, Physics, College of Science

Patrick Sean Haggerty & Shanna Wheeler, Regional  
Campuses and Distance Education

## **2006 Undergraduate Researchers of the Year**

Katie Brown, NFS, College of Agriculture

Zachary Ames, Business Administration, Jon M. Huntsman  
School of Business

Brianne Bartlett, El Ed, Emma Eccles Jones College of  
Education and Human Services

Zac Humes, Mechanical Engineering, College of Engineering

Sarah Thompson, Sociology, College of Humanities,  
Arts and Social Sciences

Jake Gibson, Watershed and Earth Systems, College  
of Natural Resources

Glen de Guzman, Biology, College of Science

David Evans, Natural Resources/Biology, Regional  
Campuses and Distance Education

## **2005 Undergraduate Researchers of the Year**

Aaron Davis, International Studies, College of Agriculture

Anne Israelsen, Economics and Finance, Jon M. Huntsman  
School of Business

Tracey Reeve, Exercise Science, Emma Eccles Jones College  
of Education and Human Services

John Crockett, Electrical Engineering, College of Engineering

Kacey Udy, BFA Theatre Arts,

College of Humanities, Arts and Social Sciences

Hayley Olsen, Environmental Studies, College of Natural Resources

Dustin Keele, Geology, College of Science

## **2004 Undergraduate Researchers of the Year**

Caralee Wilcock, NFS, College of Agriculture

Jeffrey Reese, Economics, Jon M. Huntsman School of Business

Cheryl Jones, FCHD, Emma Eccles Jones College of Education  
and Human Services

Todd Bigelow, Electrical Engineering, College of Engineering

Jennifer Hulse, Anthropology, College of Humanities, Arts  
and Social Sciences

Jessica Evans, Environmental Studies, College of Natural Resources

David Robert Hatch, Physics, College of Science

## **Becoming the Undergraduate Researcher of the Year**

The University & College Undergraduate Researchers of the Year Awards were inaugurated in 2004 and endowed by David and Terry Peak in 2008. In addition to being an excellent student, a notable undergraduate researcher is one who has consistently engaged in independent inquiry, through classes, student employment, and independent research grants (URCO). Students also typically seek to share their results at undergraduate research events or professional conferences. All college Undergraduate Researchers of the Year should be submitted to be part of the selection pool, from which one will be chosen as the University Undergraduate Researcher of the Year.

## Criteria

The student nominee must be a current student of USU.

The student nominee must be the newly selected College Undergraduate Researcher of the Year for this college.

Submission materials

Name and A # of nominee

Curriculum vitae of the nominee in standard format including a complete list of publications, awards, sponsored projects, and other recognitions by peers - international, national and regional.

200-word short bio of the nominee

Current photograph (professional-type headshot preferred)

## Process

Deans will fill out online form to submit one name.

Each of the eight College Undergraduate Researcher of the Year Awardees will be interviewed by the Undergraduate Research Advisory Board as a key part of the selection process for the University Undergraduate Researcher of the Year Award.

Deadline for online submissions to the RGS Office is  
JANUARY 7, 2015

## Recognition

Each of the eight College Undergraduate Researcher of the Year Awardees will receive a \$200 monetary award.

The one selected as the University Undergraduate Researcher of the Year will receive an additional \$300 monetary award.

Nominees will be invited to USU's Robins Awards Ceremonies, where the recipient will be announced.

College nominees will be recognized at the Student Research Awards Ceremony during USU's Research Week.

The nomination form for the Undergraduate Researchers of the Year can be accessed here <https://rgs.usu.edu/eventsandmedia/html/awards/ur/ury-nomination>.



# Undergraduate Research Mentors of the Year

## 2015 Undergraduate Research Mentors of the Year

Tom Chang, Chemistry and Biochemistry, College of Science

Charles Miller, Biological Engineering, College of Engineering

Travis Dorsch, Family Consumer and Human Development, Emma  
Eccles Jones College of Education and Human Services

Jeanette Norton, Plant, Soils and Climate, College of  
Agriculture and Applied Sciences

Karen Beard, Wildland Resources, College of Natural Resources

Carsten Meier, Art and Design, Caine College of the Arts

Shannon Peterson, Economics and Finance, Jon M. Huntsman  
School of Business

Rebecca Walton, English, College of Humanities and  
Social Sciences

## 2014 Undergraduate Research Mentors of the Year

Bo Yang, Department of Landscape Architecture and  
Environmental Planning,  
College of Agriculture

Matt Omasta, Theatre Education and Applied Theatre,  
Caine College of the Arts

Sterling Bone, Management Department, Jon M. Huntsman  
School of Business

Elizabeth Fauth, Family, Consumer, and Human Development,  
Emma Eccles Jones College of Education and Human Services

David Rosenberg, Civil and Environmental Engineering,  
College of Engineering

Christine Cooper-Rompato, English, College of Humanities  
and Social Sciences

Rich Etchberger, Wildland Resources, College of Natural Resources

## **2013 Undergraduate Research Mentors of the Year**

Rhonda Miller, School of Applied Sciences, College of Agriculture

Kathy Puzey, Art and Design, Caine College of the Arts

Chad Albrecht, Management Department, Jon M. Huntsman  
School of Business

Kerry Jordan, Psychology, Emma Eccles Jones College of  
Education and Human Services

Blake Tullis, Civil and Environmental Engineering,  
College of Engineering

Matthew Sanders, Language, Philosophy & Communication  
Studies, College of Humanities and Social Sciences

Zhao Ma, Environment and Society, College of Natural Resources

Michelle Baker, Watershed Sciences, College of Science

David Law, Family, Consumer and Human Development,  
Regional Campuses and Distance Education

## **2012 Undergraduate Research Mentors of the Year**

Silvana Martini, Nutrition, Dietetics and Food Sciences  
College of Agriculture

Christopher Scheer, Music, Caine College of the Arts

Tyler Brough, Economics and Finance, Jon M. Huntsman  
School of Business

Kerry Jordan, Psychology, Emma Eccles Jones College of  
Education and Human Services

Renee Bryce, Computer Science, College of Engineering

Lisa Gabbert, English, College of Humanities and Social Sciences

Helga Van Miegroet, Wildland Resources, College of  
Natural Resources

Sean Johnson, Chemistry and Biochemistry, College of Science

David Law, Family, Consumer and Human Development, Regional  
Campuses and Distance Education

## **2011 Undergraduate Research Mentors of the Year**

Brent Black, Plants, Soils & Climate, College of Agriculture

Alexa Sand, Art, Caine College for the Arts

Kenneth Bartkus, Marketing, Jon M. Huntsman School of Business

Julie Wolter, Communicative Disorders and Deaf Education,  
Emma Eccles Jones College of Education and Human Services

Kevin Heaslip, Civil & Environmental Engineering, College of  
Engineering

Christy Glass, Sociology, Social Work & Anthropology,  
College of Humanities and Social Sciences

David Koons, Wildland Resources, College of Natural Resources

Joanie Hevel, Chemistry & Biochemistry, College of Science

Nathan Straight, English, Regional Campuses and Distance  
Education

## **2010 Undergraduate Research Mentors of the Year**

Lee Rickords, Animal, Dairy, & Veterinary Sciences,  
College of Agriculture

Chad Albrecht, Management, Jon M. Huntsman School of Business

Lori Roggman, Center for Persons with Disabilities, Emma  
Eccles Jones College of Education and Human Services

Charles Miller, Biological & Irrigation Engineering, College  
of Engineering

Cacilda Rego, Language, Philosophy, & Speech Communication,  
College of Humanities, Arts and Social Sciences

Frank Howe, Wildland Resources, College of Natural Resources

Anne Anderson, Biology, College of Science

Emily Jones, Anthropology, Regional Campuses and  
Distance Education

## **2009 Undergraduate Research Mentors of the Year**

Megan Bunch, Nutrition & Food Sciences, College of Agriculture

Kenneth Bartkus, Management, Jon M. Huntsman  
School of Business

Sandra Gillam, Communicative Disorder & Deaf Education, Emma  
Eccles Jones College of Education and Human Services

Ryan Dupont, Civil & Environmental Engineering, College  
of Engineering

Bonnie Pitblado, Sociology, Social Work & Anthropology, College of  
Humanities, Arts and Social Sciences

Gene Schupp, Wildland Resources, College of Natural Resources

JR Dennison, Physics, College of Science

Christopher Johnson, Psychology, Regional Campuses and  
Distance Education

## **2008 Undergraduate Research Mentors of the Year**

Scott B. Jones, Plants, Soils & Climate, College of Agriculture

Ken Bartkus, Business Administration, Jon M. Huntsman  
School of Business

Linda Skogrand, Family, Consumer & Human Development,  
Emma Eccles Jones College of Education and Human Services

Doran Baker, Electrical & Computer Engineering, College  
of Engineering

John Seiter, Languages, Philosophy & Speech Communication,  
College of Humanities, Arts and Social Sciences

Karen Mock, Wildland Resources, College of Natural Resources  
Alvan Hengge, Chemistry & Biochemistry, College of Science

## **2007 Undergraduate Research Mentors of the Year**

Kenneth White, ADVS, College of Agriculture

Kenneth Bartkus, Business Administration, Jon M. Huntsman  
School of Business

Brian J. Higginbotham, FCHD, Emma Eccles Jones College of  
Education and Human Services

Anhong Zhou, BIE, College of Engineering

Michael Nicholls, History, College of Humanities, Arts, and  
Social Sciences

Wayne Wurtsbaugh, Watershed, College of Natural Resources

David Law, Psychology, College of Science

## **2006 Undergraduate Research Mentors of the Year**

Heidi Wengreen, NFS, College of Agriculture

Kenneth Bartkus, Business Administration, Jon M. Huntsman  
School of Business

Brian J. Higginbotham, FCHD, Emma Eccles Jones College of  
Education and Human Services

Barton Smith, MAE, College of Engineering

Susan Mannon, Sociology, College of Humanities, Arts and  
Social Sciences

Phaedra Budy, AWER, College of Natural Resources

Lisa Berreau, Chemistry, College of Science

Lianna Hatfield Etchberger, Science, Regional Campuses and  
Distance Education

## **2005 Undergraduate Research Mentors of the Year**

Dan Drost, PSB, College of Agriculture

Ruby Ward, ECON, Jon M. Huntsman School of Business

Scot t Hunsaker, Elementary Education, Emma Eccles Jones College  
of Education and Human Services

Todd Moon, ECE, College of Engineering

Steve Simms, Anthropology, College of Humanities, Arts and  
Social Sciences

Chris Luecke, AWER, College of Natural Resources

David Peak, PHYS, College of Science

## **2004 Undergraduate Research Mentors of the Year**

Janis Boettinger, PSB, College of Agriculture

Kenneth Bartkus, BA, Jon M. Huntsman School of Business

Eadric Bressel, HPER, Emma Eccles Jones College of Education  
and Human Services

Barton Smith, Mechanical Engineering, College of Engineering

Bonnie Glass-Coffin, Anthropology,

College of Humanities, Arts and Social Sciences

Helga Van Miegroet, College of Natural Resources

Daryll DeWald, Biology, College of Science

Susan Talley, Uintah Basin, Regional Campuses and Distance  
Education

## **2003 Undergraduate Research Mentors of the Year**

Jeanette Norton, PSB, College of Agriculture

E. Bruce Godfrey, Economics, Jon M. Huntsman School of Business

Tamara Ferguson, Psychology, Emma Eccles Jones College of  
Education and Human Services

Barton Smith, Mechanical Engineering, College of Engineering

John Seiter, Languages, Philosophy, and Speech Communication,  
College of Humanities, Arts and Social Sciences

Mark Brunson, Environment & Society, College of  
Natural Resources

Dennis Welker, Biology, College of Science

Richard Etchberger, Uintah Basin, Regional Campuses and  
Distance Education

# Becoming the Undergraduate Mentor of the Year

The Office of Research and Graduate Studies seeks nominations of faculty from the colleges for Undergraduate Research Mentors of the Year. (Submissions can only be made by the college deans' offices). Colleges are urged to specifically reach out to all RCDE units for inclusion in their college-wide processes. This faculty award was inaugurated in 2003 to recognize outstanding faculty as mentors of undergraduate researchers. A good faculty mentor provides a role model for methods of inquiry in a field of study and for the responsible conduct of research. Good mentors often provide students with their first entry into professional circles and support the dissemination of the student's work as through professional conference participation or publication.

## Criteria

The faculty awardee must be a current employee of USU or have retired within the past 12 months prior to submission.

The faculty awardee must be the newly selected College Undergraduate Research Mentor of the Year for this college.

Submission materials:

Name and A # of nominee

200-word bio of the nominee

Current photograph (professional-type headshot preferred)

## Process

Colleges will conduct college specific processes to select College Undergraduate Research Mentors of the Year Awardees

Colleges urged to specifically reach out to all appropriate RCDE units for inclusion in their college-wide process.

Deans will complete the online form to submit one name.



## Recognition

Awardee will be announced at USU's Robins Awards.

A \$500 monetary award will be given to each of the eight colleges winners.

Recipients will be recognized at the annual USU Research Gala, held during Research Week.

USU faculty members often go beyond their duties as a mentor. They are passionate professionals who are willing to share their knowledge and expertise with students like you. They are also responsible in fostering intellectual and professional growth among their students. In recognition of their outstanding effort, students are encouraged to nominate mentors for the Mentor of the Year Award. The nomination form can be accessed here <http://rgs.usu.edu/eventsandmedia/htm/awards/ur-mentor/urmy-nomination>.

## Undergraduate Research Scholar Transcript Designation

<http://research.usu.edu/undergrad/htm/awards-recognition/transcript-designation>

The Undergraduate Research Scholar Transcript Designation is given to more fully recognize the accomplishments of USU's undergraduate researchers.

To qualify for the Undergraduate Research Scholar the student must meet the following requirements:

**Completion of a minimum of two semesters of research,** scholarship, or creative activity supervised by a faculty mentor. Quantifying a number of hours per week spent on the project is helpful; students can keep a log of their time. A specific quantity is not required since the work may take place over a minimum of two semesters or go at a different pace over an extended number of semesters.

**Dissemination of research** through a recognized venue such as the on-campus Student Showcase, Undergraduate Research Day at the State Capitol, Utah Conference on Undergraduate Research, National Conference on Undergraduate Research, Council on Undergraduate Research's Posters on the Hill, or a professional conference in the field of study. Alternate venues for creative activity may include art exhibitions or performances.

The **endorsement** of the faculty mentor(s).

Confirmation of the completion of the plan should be submitted by the Student Researcher and Faculty Mentor no later than two weeks before graduation in order for the transcript to be so marked. (The faculty mentor can send confirmation of the application via e-mail.)

Application for the transcript designation should be submitted electronically to the Undergraduate Research Program at [rgs.usu.edu](http://rgs.usu.edu).

# Contact Information

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## Dr. Kenneth Bartkus

Director of Undergraduate Research  
Jon M. Huntsman School of Business  
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Emma Eccles Jones College of Education & Human Services  
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Jagath.Kaluarchchi@usu.edu

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# **Undergraduate Research Advisory Board (URAB)**

The Undergraduate Research Advisory Board was created by support, assess, and improve the undergraduate research program at USU. From the beginning, in the fall of 2007, discussions focused on removing impediments to student access and launching new efforts to enhance the program.

The Board is made up of faculty representatives who are members for two-year, rotating terms, as well as students who serve annual terms. Faculty members invited to serve have exemplary track records of working with undergraduate researchers and scholars. Students who are invited to serve have demonstrated dedication to undergraduate research.

The Undergraduate Research Advisory Board meets monthly to discuss issues regarding undergraduate research. Anyone is free to contact members of the board and ask that items be brought to a board meeting.

# Faculty Representatives

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