

## UROP

UROP (Undergraduate Research Opportunities Program) allows students to assist faculty members with their research, or create and carry out a project under faculty member supervision. This year's student spotlight is Trek Martin for his superb research with expert engineer and faculty member Steven Burian.

Trek explored possible venues for which our environmental concerns over water use in both agriculture and residential applications can be alleviated. Trek proposed alleviating concern through the use of sensors and hydroinformatics to manage water in cities, farms, and industry.

Trek's project was to merge Steven Burian's hydroinformatics and Taylor Sparks' hydrogel-based sensor technologies, both existing research programs at the University of Utah. In his project, Trek designed, prototyped, and tested inter-connected sensors, data aggregation, and sprinkler control systems. He used these findings to gain an accurate understanding of the costs, benefits, and potential environmental impacts of a new sensor technology usage.

Trek says, "This is my first semester, of many, working on the project. In fact, I plan on it being my thesis at the conclusion of my academic career. Right now, I'm mostly doing research on potential applications and prototype technologies; It's still very early. I am preparing a test rigging to have a control group to compare my future designs with."

The ENVST Program is thrilled to watch our students make real world applications and work with incredible faculty members. If you are interested in the UROP program, please visit:

<http://urop.utah.edu/home.php> or <http://envst.utah.edu/other-opportunities/research.php>.



## SCIF

The Sustainable Campus Initiative Fund, or SCIF, is a grant program that enables students to contribute their vision of sustainability to the University of Utah community. Students are invited to submit proposals for projects that address an issue related to sustainability, and accepted proposals are implemented on campus. Here are a few exciting ways in which students have employed SCIF grants to improve our campus community:

### Shoreline Solar Plaza

Large Grant: \$35,000

Construction of the Shoreline Solar Plaza, an engaging and environmentally friendly outdoor gathering space, was completed in 2014. The area is covered by eight solar panel canopies, which generate enough energy to satisfy the annual electricity needs for an entire household. The plaza includes built-in tables and chairs, solar powered electrical outlets, a gas barbeque and a fire pit, making it a prime hangout/study spot and a testament to sustainability. (Pictured above)

### Living Plant Wall

Small Grant: \$4,805

A cadre of five creative students collaborated to clean up indoor air pollution in the Student Union by installing a living plant wall. This refreshing floral facade absorbs harmful, volatile organic compounds and filters the air while simultaneously beautifying the building and reducing heating costs. We can all breathe a bit easier thanks to this verdant innovation!

### Real Food Challenge Retreat

Micro Grant: \$300

This year the University of Utah signed the Real Food Campus Commitment, pledging to buy at least 20% of its food from local, "real" sources by 2020. Universities across the country have rallied behind the Real Food commitment, and a national conference was recently held in Seattle. Thanks to a SCIF grant, one of our students was able to attend the conference and garnish valuable insights into how the University of Utah might go about fulfilling its commitment.



## Contributors

This issue of the ENVST Newsletter was put together by the ENVST Student Leadership Committee of the Spring 2015 Semester, with help from those in the program's office.



**ENVIRONMENTAL AND SUSTAINABILITY STUDIES**

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## LWL

The ENVST Program hosts Lunch with Leaders (LWL), an event in which professionals (and previous graduates of the ENVST Program), are invited to go out to lunch with students from the program. This is an excellent opportunity for students to interact with professionals in our Program's field of study and to ask questions regarding their education and work experience that has led them on their career path.

Some past leaders from our community were;

### Sumner Swaner

A Sustainable Developer and Planner. He is responsible for the development of a model for incorporating open space into communities.

### Rick Carter

Rick has worked with major energy companies in DC for over 30 years to pursue a balance of energy and environmental/sustainability policy.

### Cathy Kahlow

District Ranger for SL Ranger District Uinta-Wasatch-Cache National Forest, responsible for land management along the Wasatch Front.

### Brandon Lee

A Principal for Regulatory and Economic Services overseeing environmental and engineering projects. He is currently leading an effort to quantify the risks posed in the U.S. Arctic due to increased interest in maritime activities and the economic impact of regulatory action.

### Sara Baldwin Auck

IREC Regulatory Program Director, a new position for IREC, which for more than 30 years has led national efforts to make clean energy accessible and affordable for more Americans.

*Lunch is held monthly at one of the restaurants on 1300 E and is provided by the ENVST Program. It is an excellent resource for our students to learn about different career paths within the Program's field and network with leaders from the community.*

*If you are interested in participating please contact*

## Alumni Spotlight

### McKenzie Skiles

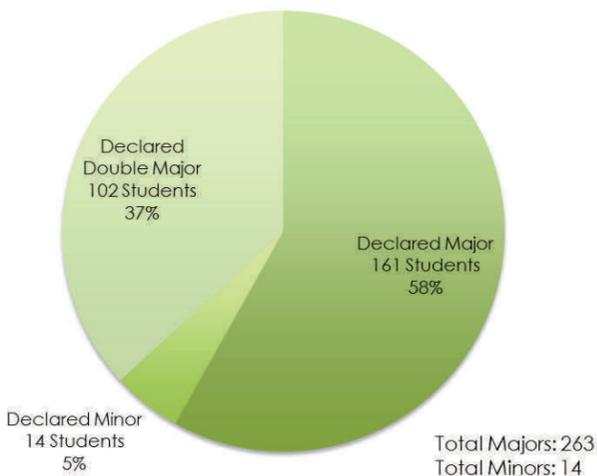
Postdoctoral Researcher, NASA Jet Propulsion Laboratory

McKenzie began as an undergraduate interested in earth and climate science while having time to ski. Her favorite course was Principles of Wildlife Ecology and Conservation with Fred Montague. It was one of her first college courses that made science compelling and relevant, which led her to becoming a scientist herself. After speaking with her advisor, she embarked on her double major in Geography and Environmental and Sustainability Studies. This gave her time to play in the snow, take courses that she was interested in, and figure out how she could best apply herself in a career. Having taken a course in Snow and Avalanche Dynamics, she developed skills and worked on a project that introduced her to a graduate advisor where she began the process of becoming a "snow scientist." McKenzie loves her job and sometimes looks around at the NASA Lab, amazed at the path that led here there.

"The broad education I received as a part of the environmental studies program has helped me consider the relevance of my scientific research in terms of policy and decision making, and prepared me to communicate effectively with a spectrum of audiences, from other scientists, to students, to the general public."

The moral of the story, and her word of advice, is that you don't have to always know your path every step of the way. Take a broad range of classes to find how to apply your passions into a career. Study what interests you and find a way to be passionate about what you are doing.

## ENVST Statistics



## Upcoming Events

September 3

**Bike to Movie Night** Ride your bike to an environmentally entertaining outdoor film showing. A great way to meet sustainably conscious peers.

October 23

**Garden Soirée** Come in costume to the campus gardens for a delicious tasting of this year's yield.

November 5

**Wild and Scenic Film Festival**

Support ENVST scholarships by attending the Wild and Scenic Film Fest. An eclectic collection of films focused on sustainability and the outdoors.