

Office of Sponsored Projects & Research

Annual Report 2014-2015

July, 2015

The mission of OSPR is to assist our campus constituents as they distinguish themselves through their scholarly efforts, and to contribute to the intellectual vibrancy of the campus and community.

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OSPR:

- ◆ Believes active **teacher-scholars matter**
- ◆ Supports the **research & scholarly culture** of KSC through professional development opportunities
- ◆ Invests in faculty scholarly work through **internal grant programs**
- ◆ Assists faculty developing **external grant proposals** through high-touch consultative services and technical support
- ◆ Assists grant recipients in managing their awards through **non-financial post-award** services, and with our partners in the Business Office ensures appropriate administration of funds
- ◆ Upholds the College's mission by attending to regulatory and **compliance** concerns through the development of policies and procedures relating to externally sponsored projects

When our faculty and staff are successful in their scholarly pursuits, a fundamentally more vibrant learning environment is created for our students.

The 4 Pillars of OSPR

Research & Scholarly Culture

Cultivation of a Supportive Community of Teacher-Scholars

Faculty Professional Development Opportunities

Administrative Infrastructure

Systems, Processes, Technical Tools, & Compliance Mechanisms necessary to support the sponsored programs enterprise

Internal Investment

Internal Grants/Seed Funding to Support Research & Scholarship

External Funding Support

High-Touch Proposals & Award Assistance

Cultivation of Research & Scholarly Culture

OSPR is pleased to partner with the **Research Advisory Council** faculty representatives on events and critical discussions that nurture our scholarly community.

In November, RAC representative Dr. Karrie Kalich facilitated a faculty roundtable discussion on the topic of **Inviting Undergraduates into Your Scholarly Work: Approaches, Challenges, and Strategies for Success**. This type of peer-to-peer support is essential to the ongoing development of our scholarly culture.

In March, with support of the Provost and the Dean of Arts & Humanities, KSC hosted Dr. Sean X. Goudie for a **Mini 'First Book' Institute** at KSC. This opportunity gave faculty in the midst of their first book projects critical insights into that process, and helped sharpen the focus of their individual arguments.

Our best events emanate from YOUR ideas...so please be in touch with OSPR or the RAC if you have suggestions for the future!

<http://www.keene.edu/office/ospr/rac/>



"This was a GREAT event, inspiring and encouraging. The dialogue that was created with the seminar leader and with the participants among ourselves was illuminating and very helpful."

~Mini 'First Book' Institute Participant

Administrative Infrastructure for Sponsored Programs



NCURA Peer Review & Strategic Planning

This past year, Keene State College contracted with the National Council of University Research Administrators to undergo external review of our sponsored programs administrative operations. The process involved a rigorous self-study against 15 national standards, a two-day site visit, and interviews with over 40 campus constituents by the review team. The OSPR team is currently digesting the resulting report, which contained both praise for what KSC has already accomplished as well as suggested directions for the future. The report, in tandem with KSC's institutional strategic plan, will be utilized by OSPR as a roadmap for the future.

"Keene State College is to be commended for its forward-thinking in increasing the infrastructure for a pre-award office. Not only has this served to markedly increase the volume of research and sponsored programs, but it will position the college well to continue growing its volume and complexity of research and sponsored programs."

"The office is visible and enjoys an excellent reputation among senior leadership, faculty, and staff for its leadership, professionalism, and assistance."

~National Council of University Research Administrators, External Review Report, February 9, 2015



Image courtesy KSC Marketing & Communications

Internal Investments

New! Early Career Summer Research Seed Funding



Attracting, retaining, and nurturing passionate teacher-scholars is central to Keene State College's identity as a vibrant intellectual community grounded in the liberal arts. The Office of the Provost, OSPR and the Research Advisory Council piloted a new funding program for Summer, 2015.

The **Early Career Summer Research Seed Funding** program is designed to (1) assist early career faculty members in establishing their research, creative, and scholarly programs as they work toward tenure and promotion; (2) help them establish a trajectory leading to external recognition of their work via success with external grant/fellowship agencies; and (3) encourage the engagement of undergraduates in one's scholarly work wherever feasible.

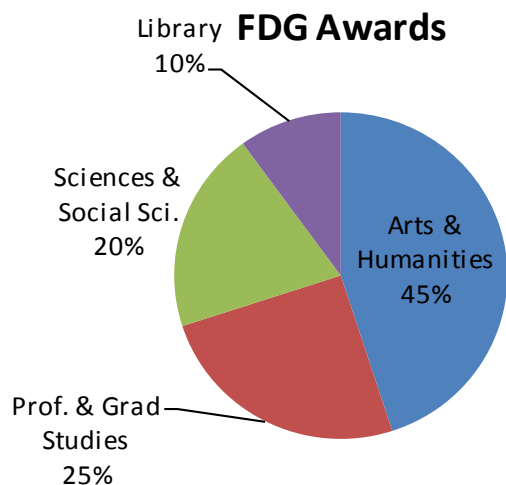
Funding for this program comes from the Provost's portion of the indirect cost recoveries from external grants.

The recipients from the first round were:

- ◆ **Dr. Lisa DiGiovanni** (Modern Languages); *Longing for Resistance*
- ◆ **Dr. Jonathan Gitelson** (Art); *Are You Here?*
- ◆ **Dr. Susan Wade** (History); *The Illumination of the Eye and the Vision of the Soul*

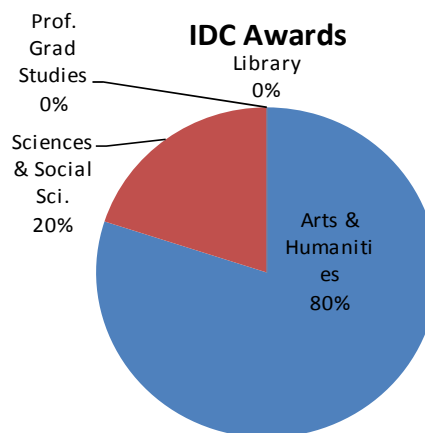
Faculty Development Grants

The **Faculty Development Grant** Committee reviewed 22 proposals in FY15, resulting in 20 awards for a total of **\$46,515** in support of faculty projects.



Indirect Cost Reinvestment Grants

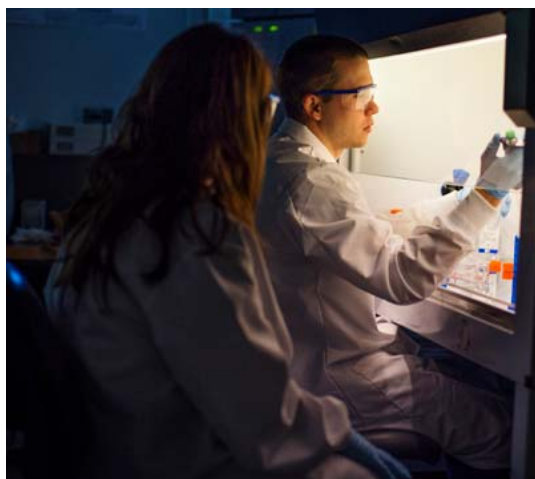
Each year, a percentage of the indirect costs recovered by the College from external grants are reinvested back into the research and creative culture of the campus through the **Indirect Cost Reinvestment Grant Program**. This year, OSPR awarded **\$8,017** in funding from this program.



External Proposal Engagement FY15

The opportunity to conduct biological research, funded by nationally competitive grants from the NSF and NIH, engaged me in my major more than I could have thought when I first began at Keene State. The opportunity to conduct this work allowed me to make connections in the science community and present relevant research to other students and scientists throughout the state.

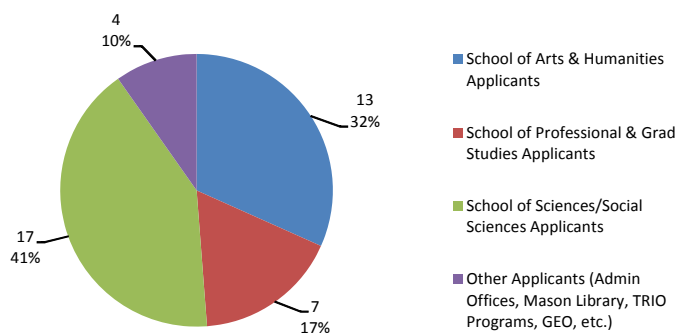
~Graduating Senior, KSC Institutional Research & Assessment 2015 Survey



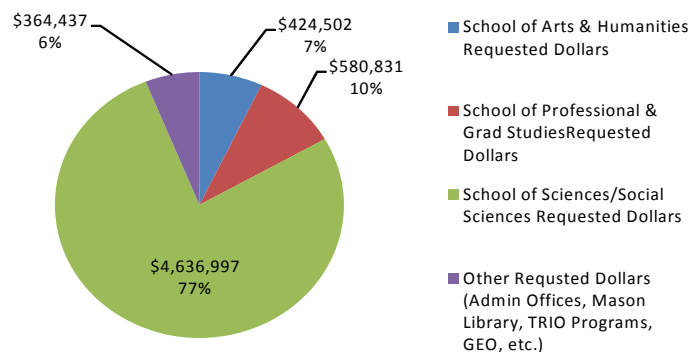
Research associate Nathan Martin and undergraduate Tara Pratt feeding epithelial lung cells in the lab of Dr. Nora Traviss.

(Will Wrobel photo courtesy of KSC Marketing & Communications)

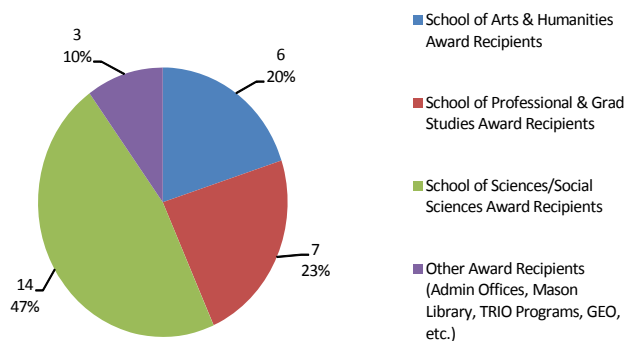
In FY15, 41 Individuals Submitted External Funding Proposals (some of them multiple proposals)



52 Proposals Emanated from Across the College & Requested \$6,006,767

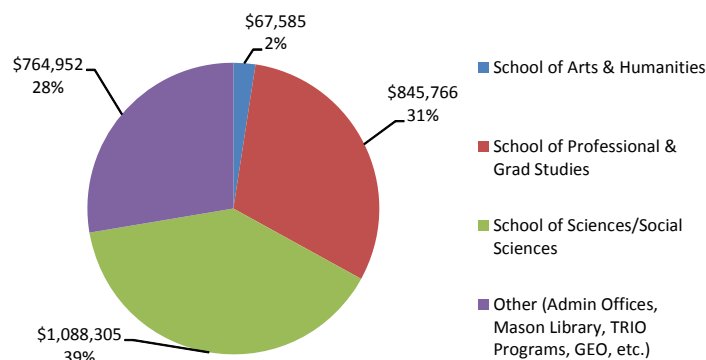


In FY15, 30 Individuals Received Awards from External Sponsors (some of them multiple awards)

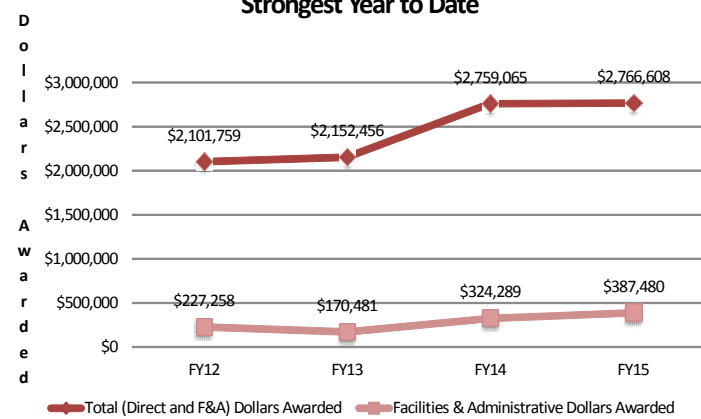


External Awards & Success

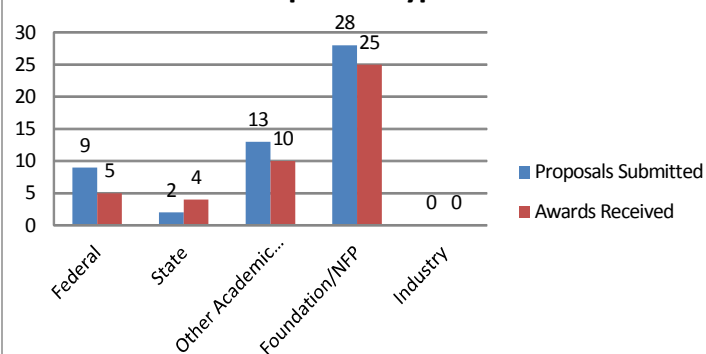
KSC Received 44 Awards worth a Total of \$2,766,608 Across the Following Areas



The Dollars Awarded in FY15 Represent KSC's Strongest Year to Date



FY15 Sponsored Programs Portfolio by Sponsor Type



Art Professor Lynn Richardson—Recipient of the 2015 Faculty Distinction in Research and Scholarship Award

Art Professor Lynn Richardson came to Keene State in 2007, and since then she has exhibited her work in 26 solo shows and 30 group shows. She has also delivered over 25 artist lectures and workshops. As a result, she has earned a reputation that spans the globe, having shown her work across the United States and Canada, as well as in Sweden, Taiwan, and China.

~Courtesy KSC Marketing & Communications

Sciences/Social Sciences Highlight: Science between semesters at Keene State



The BEST opportunity. In the second week of May, over five thousand undergraduate students depart from Keene State College to pursue summer jobs, relaxation or a jump start on their careers. But a few dozen science students don't participate in the exodus — the summer provides an opportunity to apply classroom skills in a real-world research setting right here in Keene.

Funded through grant money from the BEST, SURF, NIH, NSF and other grant funding programs, these students work from May to August alongside science faculty members on projects ranging from cancer research to forest inventories. These students work in the lab forty hours per week, focusing on the research, without the academic-year pressures of schoolwork, extracurricular endeavors and athletics.

With these distractions aside, the student and faculty team can fully engage with the research they're working on. Senior **Emily Neverett** of Nashua, NH, explains that the summer is the best time to really get down and dirty with research. Neverett has been working in **Dr. Jason Pellettieri's** lab since 2012, conducting research involving the planarian worm and its

relation to skin cancer in humans.

"This summer work has really prepared me because it has given me a taste of what it is like to do research full-time. During the school year we only work about ten hours a week because your semesters are so jam-packed with classes. This has definitely given me practice at what typical research looks like," says Neverett.

Dr. Brian Anderson, an associate professor in the Chemistry Department, has a few students with whom he works closely over the summers. Dr. Anderson was also once an undergraduate summer researcher, and acknowledges that the summer undergraduate research program that he took part in sparked his interest in pursuing higher education and advanced degrees. Anderson says that working in the lab in the summer is one of the highlights of his teaching experience at Keene State, and is as exciting for him as it is for his students.

"I came to Keene to teach and especially in the research lab. That's what I love. That chance you get to work with the students and get more of those 'ah-ha!' moments and see how their

curiosity grows over the course of an experiment, and see how they grow as a chemist over time," he says. The relationship between Keene State science faculty and summer student researchers is symbiotic in nature, allowing the students an immersive experience in which to exercise the skills learned in the classroom while the faculty get extra hands in the lab. Emily Neverett explains that the positive experience with Dr. Pellettieri is based mainly on the mutual respect that he shows and receives from his research team.

"Dr. Pellettieri does a great job at including us in any decision that is made about the research. If he has a new hypothesis, he comes and shares it with us first. And we get to have little impromptu meetings, and he always wants our input. He takes the time to fully explain things and make sure everyone is on the same page because he wants you to be able to contribute and he wants you to be part of it and understand what's going on," Neverett says.

Keene State gets students into the lab as early as possible to allow the student a chance to apply the skills learned in the classroom to real-world problems. "I think what we as faculty members try to push ... is that you can get involved in research from freshman year. The more research experience you have, the better you're going to look in job interviews, grad school, whatever you want to do," said Anderson. "I currently have two freshmen working for me this summer. It's typical at schools to have seniors come in and do research or junior year do research, but here we're really trying to grow from the whole time and get you as much experience as we can," said Anderson.

This may seem like putting the horse before the cart, but in terms of cementing the lessons learned in the classroom, it works. **Dr. Paul Baures**, a professor of chemistry, explains: "The earlier the students start to reinforce those skills, the stronger the student will be as a researcher. By senior year, the majority of the students who publish in peer journals are the ones who started early. Working in the lab reinforces the skills they learn in the classroom and those skills will be with them forever."

At the end of the summer, it's the students' love of the game that keeps them coming back for the fall semester or to be out looking for a job in the sciences.

"It was the best opportunity I think I could have asked for. It taught me so much about working hard and dedication and working with others and collaboration as well as developing all of these laboratory skills that are going to prepare me for my future," reflects Neverett.

~Courtesy of KSC Marketing & Communications

**At Keene State College,
external faculty research
grants and internal program
dollars like the BEST
(Building Excellence in Sci-
ence & Technology) program
each play a role in creating
the scholarly learning envi-
ronment for our students.**



Photo by Jon Gilbert Fox

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~Emily Neverett

Professional Studies Highlight: SPDI Design Team Makes Boy's Dream Come True



Nicholas Cusack gives his feedback on the final tweaks for his bike with SPDI designers Alex Delcore (middle) and Peter Solek.

***By the time they are seniors,
Keene State students are
significantly more likely to have
worked with a faculty member on
a research project than their peers
at similar institutions.***

~KSC Office of Institutional Research & Assessment;
2014 National Survey of Student Engagement (NSSE)

Making a difference. A design team from the Sustainable Product Design and Innovation (SPDI) program have opened the world to a 10-year-old boy whose dream was to ride his own bicycle. **Nicholas Cusack**, who was born with proximal femoral focal deficiency, has a shortened left arm and a prosthetic right leg, which makes it very difficult for him to ride a regular bike.

About a year ago, Nicholas' father, Geography Professor Chris Cusack, approached SPDI Assistant Professor Lisa Hix and asked if someone in her program might be able to design a bike Nicholas could ride. **Dr. Hix** presented the problem to **Alex Delcore** and **Peter Solek**, two of her students who were interested in creating prosthetic devices and adaptive products, and they welcomed the challenge.

Their first, and perhaps biggest, hurdle was getting the clearance required for using a human subject, and a minor at that, in a research project. The team spent most of a semester getting Collaborative Institutional Training Initiative (CITI) training in Good Clinical Practice and Human Subjects Research from the University of Miami (Fla.). Then they had to submit a proposal before Keene State's Institutional Review Board.

Once they'd been approved, their biggest design challenge was creating the foot bed/pedal for Nicholas' prosthetic foot. "We needed to create a way to secure his prosthetic foot to the pedal without locking it in, in case he fell off the bike. It was a big challenge to make it work while keeping everything safe," Delcore said. After they'd settled on a pedal design, they were able to produce it on a 3D printer.

The design team worked closely with SPDI Lecturer Jim Kyle, a mechanical engineer with a passion for riding and working on bicycles. "The folks at the Bellows Falls Community Bike Project in Bellows Falls, Vt., were also very helpful, donating the bike and supplying all the parts we've needed," Delcore said.

And what does Nicholas think of his new bike? "I like it a lot!" he said, a sentiment reflected broadly in the smile on his face during his trial ride.

"Nicholas' determination through the whole process has been awesome," said Delcore.

This may just be the beginning for similar projects, helping other people who need adaptive devices. "This was the first time we've worked so closely with a specific client on an adaptive product," Dr. Hix explained. "But we can use what we've learned during this process to go on to similar projects. We can incorporate projects such as this one into a product design course, or they can be done as an independent study."

~Courtesy of KSC Marketing & Communications

Arts & Humanities Highlight: Dr. Vincent Addresses Czech Senate

What should be anticipated by a Fulbright Scholar?

Well, the honor generally means either doing research or teaching (sometimes both) over a period of up to one year during which the awardee is attached to a foreign institution. On occasion a Fulbrighter is asked to provide a guest lecture, speak for a local organization or at a U.S. Consulate, or maybe serve as a curriculum adviser for a university. This was largely what **Dr. Paul Vincent** anticipated while serving as a visiting professor at Poland's Jagiellonian University. Interestingly, while he's teaching a course on Nazi Germany to masters-level students from throughout Europe (from Lithuania to Portugal), his chief contact during weekly office hours has been as mentor for those Keene State students currently studying away in Kraków. He's learned that the concept of office hours is not nearly so evolved in Poland as it is in America. (Because he has no office, he meets students each Wednesday at a local restaurant.)

One thing Professor Vincent never anticipated "in my wildest dreams" was an invitation he received in early April. It seems the Senate of the Czech Republic, working with the Institute of History in the Czech Academy of Sciences, decided to host a one-day conference marking the 70th anniversary of V-E Day (Victory in Europe). They landed speakers from Germany and Russia; however, needing a historian to address the American perspective on the topic, someone from the Senate contacted the U.S. Embassy in Prague, which in turn contacted the Czech Fulbright Commission. Dr. Vincent's name came up as an American Fulbrighter teaching in Kraków. "Addressing the Czech Parliament on the close of World War II was certainly not on my radar! I initially thought they must have emailed the wrong 'Paul Vincent.' It is, of course, the Fulbright Scholarship that triggered the invitation—plus the accident of residing in Europe during a momentous anniversary."

The invitation asked Dr. Vincent to address the Czech Parliament in the Senate Chamber on Tuesday, May 19. The conference, "On the Threshold of Freedom: V-E Day 1945," also included presentations by scholars from Russia, Germany, and the Czech Republic. Professor Vincent spoke on the topic "The Victors' Views 70 Years After – USA."

In commenting on the invitation, Dr. Vincent said, "I was both honored and horrified to receive it; I've never addressed such an august body as a national parliament." But he came to relish the unexpected opportunity. "With the dismemberment of Czechoslovakia initiated by the Munich Conference in September 1938, that country became Hitler's first victim—almost a full year before the Second World War broke out in Europe. I'm intrigued by the conference title," he said. "Why 'Threshold of Freedom?' In a very important respect, when one thinks back to 1945, it took 45 more years for Czechoslovakia to cross that threshold."

~Courtesy of KSC Marketing & Communications



Paul Vincent in his "office" at a Kraków café, with his unofficial advisees from Keene State.

Meet

Keene State College's

Fulbright Scholars!

Paul Vincent, Poland, 2015

Jerry Jasinski, India, 2013

Shirley McLoughlin, Republic of Georgia, 2013

Deborah Merchant, Greece, 2012

Brian Green, Slovakia, 2005

Rich Blatchly, France, 2004

Jo Beth Mullens, Czech Republic, 2002

Klaus Bayr, Malaysia & Singapore, 1999

Jose Lezcana, Ecuador, 1999

Neal Pruchansky, Latvia, 1993

Undergraduate Research at Keene State College

Keene State College is a member of the [Council for Undergraduate Research \(CUR\)](#), a national organization that supports and furthers the cause of undergraduate learning through research in all disciplines.

Undergraduate Research takes many forms and can look different from discipline to discipline. For example, in the arts it might mean engaging in the creative process to produce new works that reflect and comment on the human condition, like making a film.

In the physical sciences it might mean working in a laboratory. In the social sciences it might mean conducting observational or survey work. In the humanities it might mean critically reading a body of work and synthesizing it in a new way - offering a new understanding on a theme or topic, or perhaps uncovering the relevance of previously under-appreciated archival materials.

In the professions it might mean designing innovative products, collecting and analyzing physiological data aimed at improving health, or carrying out research to inform public policy.

ALL of these activities are forms of undergraduate research. Though they look different, what they all have in common is the spirit of discovery, innovation, and creativity - the production of one's own original scholarship.

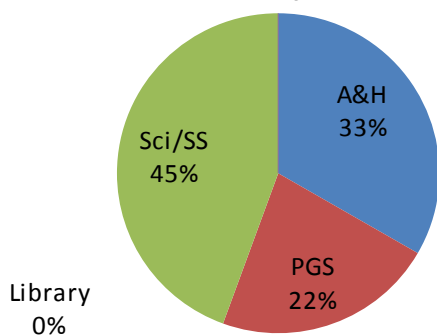
In order to further grow undergraduate research opportunities at KSC in the future, we are reorganizing. Beginning Fall, 2015 the undergraduate research functions will move to the newly created Center for Creative Inquiry!

To contribute to undergraduate research and creative activities, visit <http://www.keene.edu/development/>.

URCG Program

In FY14, the Undergraduate Research & Creative Grants (URCG) Committee reviewed 14 proposals, resulting in 9 awards for a total of \$6,705. Additionally, they reviewed 4 proposals to the SURF program, resulting in 3 summer fellowships (next page).

URCG awards by Area



Peter Temple and students received URCG & FDG funding for their work designing a health care clinic in Rwanda. Photo courtesy of KSC News & Events, February 18, 2015.

Summer Undergraduate Research Fellowship (SURF) Program

SURF fellowships allow talented students to spend a portion of their summer conducting research or carrying out a creative project that makes an original contribution to their chosen discipline. Each year, one outstanding student is selected to receive the Bruce LeVine Mellon '69 Summer Student Research Fellowship, named after the first Keene State College Alumnus to establish a summer research fellowship through annual giving.



Jeff Hall received the **Bruce Levine-Mellion '69 Summer Student Research Fellowship** to work on his project, "Synthesis and Examination of Novel PNHCP Pincer Ligands and Their Associated Metal Complexes." This is novel research, as he will be the first to synthesize the compounds he's looking into and experiment upon them to observe their physical properties and what potential uses they may have. "I am very fortunate to have been chosen for this fellowship," Hall explained. "The SURF opportunity has quite a few benefits, one of which was simply taking the time to prepare a grant write-up and move through the process of review. As a student of chemistry, much of my future career will be dependent on communicating ideas and their importance to those who do not study in my field, but may have funding or interest in furthering my research. For me, the summer fellowship will allow for ongoing interaction with my incredibly knowledgeable and diverse faculty, furthering my instrumental skills, and diving into a novel area of research within organometallic chemistry. I have been involved with research under **Dr. Brian Anderson** for nearly two years as of this spring, but typically research is accompanied by a heavy course load of chemistry and biology classes or, as with the past summers, a full-time job. Having a SURF grant will mean a true dedication to the research process and being able to work one-on-one with the faculty."



Chelsea Freleng's project, "Effects of Fitbit® on Sedentary Behavior and Physical Activity in Office Workers," will let her complete a study she's been conducting with **Dr. Melanie Adams** that determined that the campus' administrative staff spends a lot of time sitting. She's now conducting research to see if having these folks wear Fitbit® accelerometers will motivate them to be more physically active at the work place. "I was in awe when I received the email that I received the grant! It was very exciting that I would be able to continue my research over the summer," Freleng said. "I have worked so hard in making sure everything has gone smoothly in our research and have juggled that and classes very well. ... I feel very rewarded doing research and the fact that I might be able to present my research at a ASCM conference in Rhode Island next year, or even to have our study published in a journal is an incredible accomplishment for me. Without this SURF fellowship, none of these possibilities would have come true, so I am extremely thankful and looking forward to the future."



Thomas Fox's project is titled "In-Depth Study and Composition of the Orchestral Tone Poem." "The SURF grant is going to give me the opportunity to create a project using many aspects of my training here at KSC that I normally wouldn't have the resources to piece together on my own," Fox said. "With this grant I will have the ability to spend every waking hour this summer working on music. The project is based on Ray Bradbury's book *The Illustrated Man*. I will compose 20 short movements for orchestra in the style of a tone poem based on each chapter of Bradbury's book. This project will include the study of pivotal works that make use of leitmotif ... and address aspects of compositional development, including orchestration, instrumentation, and motivic development ... With the opportunity gained from this grant, I believe I will be able to drastically increase my chances at getting into a good graduate program, which is my next goal after graduating from KSC. I am greatly appreciative of this opportunity and thankful for all the guidance I have received from the faculty in the music department." Fox's faculty mentor is **Dr. Heather Gilligan**.

~Courtesy of KSC Marketing & Communications

**OFFICE OF
SPONSORED
PROJECTS &
RESEARCH**

115 Winchester Street
Keene, NH 03435-3510

Phone: 603-358-2427
Fax: 603-358-2939
E-mail: pmiceli@keene.edu

Penny J. Miceli, PhD, CRA
Director

Janet Albarado, MA, CRA
Associate Director

Audrey Arsenault, CRA
Lifecycle Grant Manager &
Research Integrity Specialist

Visit us on the web!
www.keene.edu/office/ospr



Thank you to our Partners!

It is OSPR's daily pleasure to support the scholarly and creative pursuits of the KSC community. We gratefully acknowledge our partners who play essential roles in supporting the research enterprise alongside us.

- ◆ **Research Advisory Council** (Dr. James Waller, Dr. Paul Baures, Dr. Karrie Kalich, & Dr. Nora Traviss)
- ◆ **Business Office** which houses the financial management and accounting side of our sponsored programs enterprise, and the **Purchasing Office**
- ◆ **Office of Institutional Research & Assessment** for their ongoing assistance in tracking the positive impact of research on our students and campus
- ◆ **Marketing & Communications** for highlighting research stories throughout the year, including many appearing here
- ◆ **Office of Development** and **Corporate Relations** for ongoing collaboration
- ◆ The **Environmental Health & Safety** staff, **Chemical Hygiene Officer**, & **BioSafety Committee**
- ◆ The KSC **Institutional Review Board** for the protection of human subjects
- ◆ The KSC **Institutional Animal Care and Use Committee**
- ◆ The faculty serving on the **Faculty Development Grant Committee** and the **Undergraduate Research and Creative Grants Committee**
- ◆ USNH **General Counsel** and **Internal Audit** offices
- ◆ Our many state-wide research partners including **NH-INBRE (Dartmouth College)** & **NH EPSCoR (University of New Hampshire)**

Thank you to the KSC community of Teacher-Scholars!