

Student Research and Creativity Institute grants announced

Students given funding to develop solar-powered water filtration; study nurses health policy efforts in the wake of health care reform

An array of scholarly and creative pursuits are evident in the latest round of projects to receive funding from SVSU's Student Research & Creativity Institute. Eight exceptional student projects were selected:

Julie Boon, a psychology major from Free Soil, received \$645 to cover travel and other expenses related to her examination of President Gerald Ford's relations with Portugal, Indonesia and East Timor in 1975. Indonesia invaded East Timor after it was decolonized by Portugal. Ford's papers were declassified less than 10 years ago; as a result, many aspects of his presidency have not received scholarly study.

A trio of mechanical engineering majors, **Doug Butterfield** from Auburn, **Jason Haubenstricker** from Birch Run, and **Brennan MacMillan** from Bay City, were awarded \$2,000 to design and build a fully functional vermicomposter that will provide finished compost and worm tea for the SVSU Greenhouse. It will further efforts to convert food waste from SVSU Dining Services into organic fertilizer to support plants grown at the Greenhouse.

Brenton J. Fetting, a biology major from Saginaw, was awarded \$4,115 to study frogs and other organisms to

evaluate the health of wildlife and habitat in Michigan. He plans to employ a relatively new technique for assessing and monitoring habitat health that involves a survey of parasite-host relationships, especially those of animals living in aquatic environments. In his proposal, he noted that "this study would be the first of its kind in Michigan, and would provide new data in regards to the environmental quality of various regions of Michigan."

Josh Gittings, a mechanical engineering major from Midland, was awarded \$5,291 to study the effects that silicon has on the impact toughness and tensile strength of plain carbon steels. He said the lack of information currently "is a real problem for foundries because silicon is known to increase the fluidity of the steel." Gittings anticipates his research will allow those in the steel foundry industry who may use silicon to increase the ability of steel to be cast and to better understand how the addition of the silicon will affect the mechanical properties of steel.

Pamela Johnson, a psychology and sociology major from Bay City, received \$1,130 to research parental expectations and children's academic achievement in Saginaw's African-American community.

She plans to interview 20 African-American mothers during the 2011 winter semester on maternal expectations and gender differences in academic achievement. Johnson's goal is to gain insight into the minds of African-American mothers and their differing expectations for boys and girls, and how these expectations are communicated to children.

Vishal Parimoo, an electrical engineering major from Bay City, received \$2,300 to develop a solar-powered water filtration unit that would be user-friendly and self-sufficient. Plans call for a water-tight briefcase that when deployed will open and harness the energy from the sun to power a water-filtration circuit along with several filters. When not in use, the system will charge backup batteries that can be utilized after sunset. In his proposal, Parimoo noted that water problems affect approximately half of the human population, and more than 2 billion lack basic water sanitation. Flooding and other problems can disrupt access to safe drinking water for millions of Americans.

Danielle Schian, a biochemistry major from Caro, was awarded \$2,910 to study the use of water as a solvent in organic reactions. This is of interest because water is an

environmentally safe solvent, it is less costly to use and dispose of than organic solvents, and it is non-toxic, non-flammable, and user friendly. Her research may also prove useful in recycling chemical compounds and could potentially cut costs for chemical industries if it is found to be generalizable to other organic reactions.

Katherine Warren, a nursing graduate student from Clare, received \$5,733 to examine the health policy involvement of advanced practice nurses, something that has not been studied since the passage of national health care reform. She will use the funds to conduct a mailed survey of all licensed advance practice nurses working in Michigan. The findings are expected to yield insight into how the nursing profession can have a larger impact on the state's health and well-being.

SRCI proposals that receive funding are determined through a competitive selection process by a selection committee that includes at least one representative from each of SVSU's five colleges. Mark Potts, special assistant to the provost, serves as coordinator of the program that commits \$50,000 annually to fund outstanding student projects. Visit svsu.edu/srci for more information.

President Eric R. Gilbertson will deliver his annual

State of the University Address

**Thursday, Jan. 27 at 4 p.m. in the Malcolm Field Theatre for Performing Arts.
The campus community is invited to attend. A reception will follow the address.**

Art Martin

Assistant Professor of Biology

As a boy growing up in Toledo, Art Martin never imagined crustacean excrement being part of his life's work, but the assistant professor of biology now finds it central to his research. Students have the enviable assignment of gathering specimens.

"What they're going to be doing is collecting crayfish urine," he explained. "We know crayfish use urine as a primary mechanism for communication."

Martin has reached out to chemistry colleagues to collaborate to learn the urine's chemical composition.

"The chemistry is definitely impacting the outcome of interactions, so we want to see what chemistry is in there that's important."

One of Martin's professors in graduate school introduced him to crayfish for studying social behavior.

"Since they're a good model, I've stuck with it," he said, adding that it's a good system for undergraduate students to engage in because crayfish are readily accessible, relatively easy to examine, and a "keystone species, which means they're a good indicator for changes in an environment."

Martin serves as advisor for a resurgent biology club that schedules educational field trips and performs service projects such as removing litter along Bay Road. He previously taught at a large southern institution where student contact was infrequent. SVSU

stands in contrast. "The students I see outside the classroom are really motivated," he said. "They want to read and learn about science more. They ask good questions. They want to better themselves before they leave here and move on to medical school or graduate school."

Some 10 future graduates will have a chance to leave with a unique credential. To do more freshwater research, particularly in Saginaw Bay, Martin obtained a resource grant from the SVSU Foundation "to buy a ton of scuba equipment and get students certified to dive."

"They'll walk away from SVSU having the ability to scuba dive anytime, anywhere in the world," he said. "It will always remind them of the field research they did here."

A certified diver himself, Martin will accompany students on local waterways this summer to collect and study zebra mussels that "completely alter the ecological freshwater systems around here."

"It's a big project that a lot of students can be involved in," joining biology and chemistry faculty who see the regional watershed as fertile research ground.

"Professors are making a big push in that direction," Martin said. He hopes increasing numbers of students will join them. "That opportunity is better than going to class. It facilitates learning because it's a personal interaction on what science truly is."



Julie Decker, Janet Rentsch, Melissa Woodward

Office of Sponsored Programs • January 2011

From the birth of an idea to the final report after a grant is completed, the Sponsored Programs office is a “cradle-to-grave operation,” as Julie Decker sees it.

“We are able to help put together a really solid proposal that not only helps obtain funding, but it also helps in the management of the grant, if it’s funded,” she said.

In a typical year, the office will submit at least 100 proposals seeking support for an array of research endeavors, community and campus initiatives, and other pursuits.

Janet Rentsch says SVSU is consistently at or near the national benchmark of having 10 percent of faculty actively engaged in grants. She receives e-mails “every day” from the federal government with new opportunities, and the office purchased a membership to a national database to monitor thousands of private foundations.

The next step is finding the right match. “A lot of it is knowing the faculty members,” Rentsch said, “knowing what they want money for.”

When grant deadlines approach, the staff must be meticulous.

“Our office is the final stop for everything,” said Melissa Woodward. “Your wording in the report has to reflect what they’re asking you to use it for, and to make sure it follows the guidelines. You have to pay high attention to detail.”

Right down to the type size. “Proposals get kicked out,” Decker

explained. “If you use 12-point font and they say 11, you’re done.”

In recent years, the office also has coordinated internal grants, often the entry point for new faculty members to learn how to submit proposals.

“The internal grants act as seed money,” Decker said. “It’s like a training ground. They have to meet the same compliance requirements they would with a bigger grant.”

Decker, Rentsch and Woodward agree they enjoy seeing the creative process at work and helping faculty members achieve their goals.

“I’m always in awe of brilliance,” Woodward said. “We get a glimpse of that. We’re honored to see their passion.”

“Their research is fascinating,” Rentsch added. “If we can get the money – sometimes not even very much – they could do so much more.”

The trio is also mindful of maintaining good working relationships with funding agencies.

“We have a really good reputation among sponsors, especially in-state ones,” Decker said. “When we are helping an individual professor, we’re not only helping him or her; we’re thinking about another professor three years down the road who wants to ask for a grant from that institution.”

So the life cycle may begin anew.



Professional Profile

- **Mohammad Saad Alam**, assistant professor of electrical & computer engineering, delivered a keynote lecture on “Technical Challenges in the Integration of Plug-in Hybrid Electric Vehicles with the Smart Grid” at the Conference on Advances in Mechanical Engineering, Aligarh, India, Nov. 27-28.
- **Cyrus Aryana**, associate professor of mathematical sciences, presented a paper titled “A Direct Calculation of the Vector of Riemann Constants Delta Corresponding to the Marked Doubles of Genus Greater than or Equal to One” at the National Joint Mathematics Meetings, American Mathematical Society Sessions, New Orleans, La., Jan. 9.
- **Monika Dix**, assistant professor of modern foreign languages, attended and presented at the Modern Language Association annual conference, titled “Motherhood Real and Imagined: Narrating Women’s Lives, Identities, and Images in Heian Japan,” in Los Angeles, Jan. 6-9.
- **Myra Fall**, assistant professor of teacher education – elementary/special education, published an article titled “Childhood Obesity What We Can Do” in the Fall 2010 *Michigan Association for Health, Physical Education, Recreation, and Dance State Journal*.
- **Eric Gardner**, professor of English, had his book, *Unexpected Places: Relocating African American Literature*, recognized as one of 2010’s Outstanding Academic Titles by *Choice* magazine, which is published by The American Library Association. Gardner’s book is one of only 36 titles focusing on American and/or English literature that is included in *Choice* magazine’s compilation of the year’s best books in more than 50 different academic fields.
- **Elaine Hunyadi**, assistant director of the Saginaw Bay Writing Project, and **Helen Raica-Klotz**, lecturer of English/Writing Center coordinator, presented “Transitional Conversations: Connecting Writing in High School and College” at the National Writing Project annual conference, Nov. 18-20 in Orlando, Fla. Also, Raica-Klotz presented “Harboring No Doubts: Cross Collaboration and Creation of a Developmental Writing Tutoring Program” at the International Writing Centers Association Conference, Nov. 4-6 in Baltimore, Md.
- **Tai-Chi Lee**, professor of computer science, had a paper titled “An Implementation of Elliptic Curve Cryptosystems” accepted for publication by the *International Journal of Pure and Applied Mathematics & Computing, Academic Publications*.
- **Stephen Taber**, associate professor of biology, was selected by The San Antonio Conservation Society to receive an award for his 2009 book, *Plants of Central Texas Wetlands*, which illustrates and describes several hundred species of plants that Taber and his coauthor Scott B. Fleenor (The University of Texas at Austin) encountered during their study of a relict swamp in central Texas.
- **Richard Trdan**, professor of biology, and **Sally Shepardson**, assistant professor of biology, are co-authors of a paper titled “Novel Protein Genes in Animal mtDNA: A New Sex Determination System in Freshwater Mussels (*Bivalvia:Unionoida*),” which appeared in *Molecular Biology and Evolution*. Other contributors included Sophie Breton, Andrew Ruminas, Helen Piontkivska, and SVSU biology alumnus Walter Hoeh (Kent State University); Donald Stewart (Acadia University); Arthur Bogan (North Carolina State Museum of Natural Sciences); and Eric Chapman, (University of Kentucky).
- **Matthew Zivich**, professor of art, had a painting titled “The Martinique Inn” (1985, oil on canvas) accepted for showing at the University of Michigan’s Work.Detroit gallery in Detroit. The show, titled “Trains of Thought,” was concerned with the portrayal of railroads, locomotives and all the implications of this form of transportation. Artists from the Detroit and Ann Arbor areas were invited to submit works.

New Cardinals

- **Geoffrey V. Carter**, assistant professor of rhetoric & professional writing, announced the birth of a daughter, Vivienne Elizabeth Jacobs (8 lbs., 14 oz., 21.5 in.) Dec. 20.

Condolences

- **To Cindy Clifford**, administrative secretary, whose mother, Barbara Parsons, passed away Dec. 30.
- **To Holly Furlo**, accountant, whose mother-in-law, Kathryn Basner, passed away Jan. 1.
- **To Kerry Segel**, professor of English, whose father, Sheldon Charles Segel, passed away Jan. 12.

Transitions

New Hires

- Amy Stepanski, Research Analyst
- Ashleigh Hubbard, Athletics Complex Events Coordinator
- Katie Merkle, Marketing & Sales Coordinator
- Laura Townsend, Sales & Training Specialist
- William Stec, AV/Event Specialist
- Andrea Hamlin, Assistant Director of Campus Recreation
- Lee Koski, Assistant Laboratory Technician
- Kaustav Misra, Assistant Professor of Economics
- Karen Baumgartner, Grant Accountant

Promotions

- Tim Patterson, Senior Systems Administrator
- Marie Rabideau, Assistant Dean of Student Affairs/Coordinator of Student Conduct Programs
- Alan Reisinger, Custodial Specialist
- Monica Reyes, Associate Director of CBED

Reappointments

- Catherine Weinstein, Reference Librarian
- Monika Sciba, Coordinator of Records, Management and Recruitment

Resigned

- Averill Packard, Reference Librarian
- Kenneth Kousky, Dow Entrepreneur-in-Residence
- Michael Major, Women’s Tennis Coach
- Sara Hinderer, Assistant Professor of Nursing

Retired

- Ann Miner

Title Changed

- J.J. Boehm, Director of Media and Community Relations
- Craig Aimar, Assistant VP/Director of Retention
- Jennifer Pahl, Assistant VP/Director of Admissions

Directory Updates

- Maryann Gillette, 300 Curtiss Hall
- Holly LaRose-Roenicke, 337 Curtiss Hall
- Jason Swackhamer, 336 Curtiss Hall

The Interior is published on the last Tuesday of each month for faculty and staff at SVSU. University departments sponsoring activities or events listed in the Interior will provide reasonable accommodations for persons with disabilities when contacted at least three days in advance.

J.J. Boehm

Director of Media Relations
jjboehm@svsu.edu • (989) 964-4055

Tim Inman

Director of Creative Services
tmi@svsu.edu • (989) 964-4086

Submission Deadline:

Noon on Wednesday before the publication date.
Please send items by e-mail to: jjboehm@svsu.edu.