



THE PROPOSAL

The Geneseo Office of Sponsored Research Newsletter

Spring 2016

Cheers to 10 GREAT Years!

Looking for an affirmation of the wonderful student creative and scholarly work done under the careful guidance of outstanding Geneseo faculty? GREAT Day is just the answer, and has been for the last 10 years.

When then Provost Kate Conway-Turner (now president at Buffalo State) first arrived at Geneseo in 2004, she was impressed by the amount and quality of undergraduate research that was occurring on campus. However, it was obvious that much of this important work went unnoticed by members of the community who were not directly involved. She began to discuss with faculty how we might combine the ways we were showcasing undergraduate research and creativity – to have a larger impact on the campus – and how we might cultivate a climate that would allow us to increase the amount of undergraduate research and creative endeavors occurring. Kate reflected, “From those initial thoughts, the concept of having a campus-wide celebration of research and creativity developed. And the rest is history.”

The charge for the planning and implementation of the first GREAT Day in 2007 fell to Anne Baldwin, director of Sponsored Research and Andrea Klein, director of Campus Events and Scheduling. According to Anne, “The sheer volume of effort needed to plan for and hold the event was a real eye-opener for me. I had never planned such a large event, nor had I coordinated a conference, so I had to learn about facilities, space and equipment needs, guidelines for submissions and presentations, the format of the day, hosting a keynote speaker, etc.” Andrea shared, “It was so exciting to have Kate task Anne and me with having a vision for something like GREAT Day.”



Poster Session 2007

In addition to all the planning required, the new event needed a name. A “Name the Day” contest was held. There were 34 student submissions including senior philosophy major Elizabeth Otero’s idea, “Geneseo, Recognizing Excellence, Achievement and Talent” – the oh-so-punnable GREAT Day – that has now become part of the lexicon of Geneseo.

On the inaugural GREAT Day, 441 students made 306 presentations including posters, oral presentations, dance, and artwork. Classes were cancelled so all students and faculty could participate. Each year since, the event has grown and improved.

In 2008, Emeriti Professor of Mathematics Steve West was called upon to coordinate the festivities. That year the Chamber Music Festival was added. Steve recalled, “The quality of the student organized Chamber Music Festival always exceeded my expectations.”



The goal for the GREAT Day Keynote Speaker has always been to provide an opportunity for the entire campus to hear from a nationally-noted scholar. Funding for this endeavor came in 2009 when Jack and Carol Kramer, both class of 1976, generously established an endowment providing for a quality speaker in perpetuity. According to Jack, “Carol and I were inspired to endow the lecture series because of the positive impact GREAT Day has on the campus community. It is a phenomenal program and a terrific way to recognize students and bring people together.” Anne noted, “The keynote speakers have been tremendously impressed with the event and have stated that it is the best student symposium that they have ever attended.”

Patty Hamilton-Rodgers was appointed GREAT Day Coordinator in 2012. Her efforts have supported continued growth in both the number of student participants and in the breadth of campus involvement in the event. Through the years, GREAT Day has included a flash mob, a dumpster dive, and the Geneseo Insomnia Film Festival screening awards, in addition to poster and paper presentations, artwork exhibits and the Chamber Music Festival. The Student Association has generously provided funding for the GREAT Day luncheon since 2011 and approximately 60 students volunteer each year to help coordinate the event. Patty has set a goal for this 10th year of 1,000 students presenting (last year there were 914, so it is close).

Provost Carol Long shared, “I always look forward to GREAT Day. Mentored by their faculty, our students share new discoveries and insights with the community for the benefit of all! This inclusive celebration of the many forms of inquiry and artistic expression of Geneseo students and the feel-good, sense of camaraderie on campus should not be missed!”

Hope to see you all at the 10th Annual GREAT Day, April 19, 2016
www.geneseo.edu/great_day





Lytton Smith, English—Scholar, Poet, and Translator

Scholar, poet, translator, and assistant professor of English Lytton Smith focuses his scholarly work on citizenship in post-1950s American poetry. Originally from a village in England with a population about the same size as SUNY Geneseo’s, his father’s work took him and his family abroad. As Lytton lived in different countries and learned to speak several languages, the question of citizenship became central to his identity formation.

Dr. Smith sees writing as a tool to develop “literary citizenship.” One meaning of literary citizenship expands the role of the writer through praxis. “It suggests that it is not enough to be a writer,” he says. “The writer needs to contribute to society as a citizen—for example, as a teacher of writing in prisons or as a journal editor.” A second sense of literary citizenship, central to the professor’s analytical and creative work, is the exploration of citizenship in literature. Dr. Smith has published two books of poetry, *While You Were Approaching the Spectacle and Before You Were Transformed By It* (Nightboat Books, 2013) and *The All-Purpose Magical Tent* (Nightboat Books, 2009), and translated four Icelandic books.

After arriving on campus in 2014, Dr. Smith delved into several campus projects. He began the only undergraduate chapter of NeuWrite, a cross-disciplinary working group for scientists and writers whose mission is to communicate science in a compelling way to the public. He is a Writer’s House fellow and supervises a group of students called The Guerilla Group. Guerillas distribute unsigned poems in unexpected places, for example, taped above a water fountain. Dr. Smith is involved in Writers and Books where he occasionally teaches writing courses. Thus far, he has helped to bring several high profile writers to Geneseo for readings and workshops. In February, he and Milne librarians launched the first National Book Review Month (NaRMo).

Dr. Smith’s future projects include increasing the number of guest writers at Geneseo and holding a literary immersion experience in which students participate in workshops during the day and camp together at night.

*It was a dark and stormy night, by
which I mean watching
the climatological present itself in the
ways physics wishes—
collided front, atmospheric shift,
precipitate—and learning
the instruments and practices necessary
to its reading:
in the sleight of English country roads
headbeams smuggle
villages into shape while I’m wondering
what I’ve enabled
you into. Or: then, that night,
downpour registered against
a scale of sound on the roofing, cycling
the frequencies
for where the atmosphere prickles the
signal crossing over.
Writing back to you from the world’s
other side I learned
I had missed all the things poised in the
half-breath before
falling. The cartoon anvil. The villain’s
shadow. The penny
dropping. No longer owning the books
you inscribed to me
nor having deliberately decided to
discard them either
I am here watching climatology’s
showiest depression effects.*

Ganie DeHart, Psychology—Mentor to Hundreds of Student Researchers



Students Toria Herd, Dr Ganie DeHart and Maribeth Ebbers, at Society for Research in Child Development conference in Philadelphia.

The timeline of Dr. Ganie DeHart’s longitudinal research conducted jointly with Geneseo students is almost as long as her tenure at the College. Dr. DeHart arrived at Geneseo in 1988. A Distinguished Teaching Professor and Chair of SUNY Geneseo’s Department of Psychology, Dr. DeHart in 1992 began to research four-year-old children, focusing on their interactions with siblings and friends. She was initially funded by a Geneseo Presidential Summer Fellowship and employed four undergraduate research assistants. She encouraged her undergraduates to apply for Undergraduate Summer Fellowships to develop a coding scheme to record the children’s behaviors, and she obtained an NIH Academic Research Enhancement Award grant to follow up on the original group of 65 children, renovate vacant space on campus for a laboratory, and purchase videotape equipment and computers.

In the past 24 years, Dr. DeHart has mentored more than 200 students, giving them research and conference presentation experiences that have propelled them to graduate studies in disciplines such as psychology, public health, and counseling. Several of her former students have been awarded NIH post-baccalaureate Intramural Research Training grants, and some are now faculty themselves at various institutions of higher education. Today, she has over 40 students working in her laboratory. “The best teaching I do is in the lab, it is where I can see the impact of what I do,” says Dr. DeHart. Recently she was recognized for her excellence in undergraduate teaching and mentoring when she was named 2015 NYS Professor of the Year by the Carnegie Foundation and the Council for the Advancement and Support of Education.

The original four-year-olds of the research group are now 28. The student-driven research has expanded to include data from four age groups and has evolved to focus on Latino, Caribbean, and Chinese-American children. It has obtained the only dataset in the country that has longitudinal data from four age groups. Analysis of data revealed that sibling and friend interactions reverse over time. Four-year-old sibling relationships are more intimate and familiar, but as children age their friendships become more intimate and familiar. Also, older brothers tend to treat their younger sisters well and to protect them, but older sisters tend to mistreat their younger brothers. Dr. DeHart and her students have dubbed this the “mean girl” syndrome.



Mapping 5-methylcytosines in *Trypanosoma brucei* nucleic acids at nucleotide resolution

Rebecca Huss '16, Biology
Faculty sponsor: Kevin Militello, Biology



WHAT IS YOUR PROJECT? *I study 5-methylcytosine in Trypanosoma brucei. 5-MeC is a modified base, an epigenetic “tag” on DNA or RNA. It can affect how a cell may organize or copy that material. One organism I study 5-MeC in is Trypanosoma brucei, the causative agent of African Sleeping Sickness. We focus on discovering where methylation is targeted: DNA, RNA, or both, as well as the location of the methylated cytosines at nucleotide resolution. Sodium bisulfite treatment and sequencing of the DNA and RNA is used to identify the presence of 5-MeC, as well as its exact location in the sample.*

HOW IS YOUR PROJECT FUNDED? *The National Institutes of Allergy and Infectious Diseases funds my project.*

WHAT DID YOU HOPE TO GAIN FROM WORKING ON THIS PROJECT? *I wanted to become involved in research to learn firsthand what the research process is like in biology. I wanted to work in molecular biology and microbiology because I thought it was an area I might like to pursue after graduation. I also hoped that working in a lab would help me become more involved in the biology department.*

IS THERE ANYTHING THAT HAS SURPRISED YOU? *I was surprised at how invested I felt in not only my research, but also school in general. I began striving for more in all areas of my life, raising my expectations of myself, as seeing an improvement in my performance. I've become more confident and self-assured since taking on this project.*

HOW HAS WORKING ON THIS PROJECT IMPACTED YOUR LONG TERM PLANS? *Over the course of my time working in Dr. M.'s lab, I've started to narrow down what areas of biology I'd like to focus on. While I've enjoyed research and would like to continue to do research after graduation, I likely will seek areas outside of molecular biology and microbiology.*

WHAT ADVICE DO YOU HAVE FOR OTHER STUDENTS WHO MAY BE INTERESTED IN WORKING ON A SIMILAR PROJECT? *To other students looking to do research in biology, I would suggest finding a professor that works on a project you find intriguing. Talk to that professor about your interest in their work and demonstrate your ability to work and devote time to the project. To students working in molecular biology or microbiology or on a similar project, I recommend staying positive after frustrating inconclusive results; you can never predict when results may suddenly be exciting or a new study concept comes to you.*

Potential Impacts of Hemlock Woolly Adelgid Induced Tree Mortality on Hemlock Ravine Lotic Ecosystems

Brandyn Balch '17, Geography
Faculty sponsor: James Kernan, Geography

WHAT IS YOUR PROJECT? *In 2012, hemlock woolly adelgid (Adelges trisugae)—abbreviated HWA, was discovered in Letchworth State Park. The feeding habits of the invasive HWA disrupts the flow of nutrients to hemlock needles, eventually leading to their death and causing them to drop from the tree. The primary objectives of this research are: evaluate the potential impacts of Eastern hemlock mortality from HWA on Letchworth hemlock ravine lotic (freshwater stream) ecosystems, establish baseline conditions in the early stages of infestation to which future surveys will be compared, and design a protocol by which long-term monitoring may be conducted.*

WHAT DID YOU HOPE TO GAIN FROM WORKING ON THIS PROJECT? *Since my goal is to have graduate school funded via a research assistantship, this research served as invaluable experience with regards to grant writing, science writing, fieldwork, and data analysis. This is exactly what I hoped for! However, my hopes from the beginning were more than just personal gain; I find it incredibly fulfilling to conduct such important work that not only contributes to the knowledge base of environmental science, but also has a positive impact on our community.*

HOW HAS WORKING ON THIS PROJECT IMPACTED YOUR LONG TERM PLANS? *This project has given me a new passion for science and research! When I first came to Geneseo, I didn't even plan on going to graduate school, but now I've been pulled quite happily into the science and academic world and might even pursue a Ph.D. someday.*

WHAT HAVE YOU ENJOYED THE MOST? *Being immersed in nature is and always will be my favorite part of this work. It's where I am happiest.*

WHAT ADVICE DO YOU HAVE FOR OTHER STUDENTS WHO MAY BE INTERESTED IN WORKING ON A SIMILAR PROJECT?

Do it! It's well worth the experience and may even alter your career path, as it did with me. Also, don't be discouraged if your first trip into the field involves a lot of trial and error. I adjusted my methods several times throughout my first survey. But most importantly, make sure you are researching a topic you genuinely care about. Having a passion for your work is the very best motivation.





NSF RUI Program

Recognizing that predominantly undergraduate institutions (PUIs) play a critically important role in U.S. science, engineering, and technology, the National Science Foundation awards research grants to PUIs through the Research in Undergraduate Institutions (RUI) program. RUI grants are meant to: 1) support high-quality research by faculty at PUIs; 2) strengthen the research environment in academic departments that are primarily oriented toward undergraduate instruction; and 3) promote the integration of research and education of undergraduate students. All NSF directorates may support RUI funding activities. An RUI proposal may be:

- A request to support an individual research project or a collaborative research project involving PUI faculty and students at their own or other institutions.
- A request involving shared research instrumentation.

The principal difference between RUI proposals and standard NSF proposals is the required 5-page RUI Impact Statement which provides extra space for applicants to describe the expected effects of the proposed research on the research and educational environment of the PUI.

Proposals submitted through RUI are accepted in all fields of science and engineering supported by NSF, including research on learning and education. All RUI proposals must be submitted based on the requirements and timelines established for regular NSF programs or in special solicitations or program announcements/descriptions; there is no single deadline or target date for submission of RUI proposals. More information about the RUI program can be found in the NSF program solicitation # 14-579, "Facilitating Research at Primarily Undergraduate Institutions" (<http://www.nsf.gov/pubs/2014/nsf14579/nsf14579.htm>).



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After you enter your name and title, select "State University of New York at Geneseo" from the drop down list. CUR provides many resources, including webinars, seminars, workshops and institutes on various topics related to undergraduate research.

Upcoming Campus Deadlines

www.geneseo.edu/sponsored_research

Faculty Programs *All Faculty deadlines are at 4:00 PM*

- Feb. 26** Hurrell/McNaron Award for Scholarly Presentation
- Feb. 26** Proposal Writing Support Awards
- Feb. 26** Presidential Summer Faculty Fellowships
- Feb. 26** Geneseo Foundation & Roemer Summer Faculty Fellowships
- May 6** Summer Faculty Travel Grants (2016-17 year)
- May 6** Summer Incentive Grants (2016-17 year)

Student Programs *All Student deadlines are at 8:00 AM*

- Feb. 29** Geneseo Foundation Undergraduate Summer Fellowships and Jason and Diana Kyrwood '95 Student/ Faculty Research Endowed Fellowship in Honor of Ellen Kintz
- Feb. 29** Geneseo Foundation Student Assistantships
- Apr. 25** Undergraduate & Graduate Student Grants (Summer '16 Research & Travel)

GREAT Day www.geneseo.edu/great_day

- Mar. 11** GREAT Day SUBMISSIONS deadline, 4:30 PM
- Apr. 19** GREAT Day

SPIN Funding Opportunity Database

SUNY Geneseo now has an institutional subscription to InfoEd's Sponsored Programs Information Network (SPIN), the "world's largest database of sponsored funding opportunities." We encourage faculty and staff to make use of this resource, which can be accessed in two ways:

1. IP Address-Based Access

If you are connected to the SUNY Geneseo network, you can access SPIN without a login. Simply use your browser to go to <https://spin.infoedglobal.com/Home/GridResults> and you can begin searching for funding opportunities.

2. Authenticated (Login) Access (recommended)

Login access to SPIN provides several benefits over anonymous use. You can retain search filters and parameters across multiple sessions, bookmark opportunities, save searches, and set up automatic email notifications about new or updated opportunities. The Office of Sponsored Research can provide you with a user account. We can also conduct searches and set up automated notifications for you and save them to your account.

Basic search information and training videos are available and Sue Engman has also developed a SPIN Self-Help Guide. Email Sue at engman@geneseo.edu to request a SPIN login account and a copy of the guide.