

UNDERGRADUATE RESEARCH AND CREATIVE WORKS

BigSURS and High-PURCS

December/January 2014

Submissions to the Big South Undergraduate Research Symposium (BigSURS), which will be held at Campbell University on April 10-11, 2015 are now open to students. BigSURS provides undergraduate scholars in all fields a forum to share the results of their research through posters, presentations, performances, and works of art. Abstract submission closes February 15th. To submit an abstract and to learn more, go to <http://www.campbell.edu/bigurs-2015>. The Department of Undergraduate Research and Creative Works will pay for registration and transportation fees for High Point students who attend.



BigSURS 2015 Abstract Due Date
February 15th
Get more info and apply at
www.campbell.edu/bigurs-2015/

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APRIL 10&11
CAMPBELL UNIVERSITY

High Point University students from all disciplines, majors, and minors are invited to participate in HPU's 3rd annual Research and Creativity Symposium (High-PURCS), which will be held on April 15, 2015. Students may choose to present their work in a variety of mediums, including posters, oral presentations, a brief performance, or an exhibit. Projects entered must be mentored by a faculty member and reflect originality and creativity. The call for abstract to High-PURCS closes March 1.

Getting Started with Research

Students who are interested in joining the university research culture but are not sure how to go about the process should consider joining the Research Rookies Program for an introduction to basic research skills and processes. Otherwise, speaking to a current or previous professor about beginning a research project or paper is a great way to get started! In addition, Students interested in getting published should think about submitting to High Point University's journal, *Innovation*,

Mission Statement

To engage undergraduates in student-faculty led collaborations that reflect individual and unique scholarly and imaginative experiences which promote the development of new competences, foster critical and creative thinking and provide students with privileged opportunities to add to the sum of human knowledge.



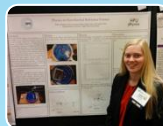
Research Apprentices and Summer Research

2



Alumni Activity and Creative Works Grants

3



Undergraduate Research Grants

4

Undergraduate research is a student-faculty collaboration to examine, create, and share new knowledge or work commensurate with practices and discipline.

Journal of Creative and Scholarly Works. Submissions are accepted until December 31 each year, and accepted manuscripts are published by May. New alumni are welcome to submit a manuscript for publication.

Summer Research Programs 2015

Our summer research opportunities are expanding and now is the time to take part! There are two programs: the Summer Research Institute (SuRI) and the Summer Research Program in the Sciences (SuRPS). SuRI is open to undergraduates in all disciplines. Students must identify a faculty mentor with whom they will work over the summer, as well as a description of the project goal, method, and timeline. Students may stay on-campus for free during the research period as long as they are not enrolled in any classes. SuRPS is a competitive program for 24 undergraduate research assistant positions with faculty in biology, chemistry, and physics. A position in the program comes with free housing, meals, and a summer stipend. Project opportunities are available on our website, and students may pick their top 3 projects on the application. SuRPS applications are due on or before February 9, and applications for SuRI are due on or before March 20.



Previous Summer Research Students

Congratulations to our new Research Apprentices!



Research Apprentices and Apprentice Medal

Congratulations are in order for several students who have now reached the status of Research Apprentice through the completion of the Research Rookies program! This fantastic program caters to freshmen and first-semester sophomores who are interested in becoming a part of the undergraduate research community on campus. It provides a great opportunity to learn effective ways of creating and presenting undergraduate work, and allows for students to get a head start in the kind of research or creative work that will make them stand out to future employers and graduate schools. It runs for two consecutive semesters, involves 15 tasks, and a final mini project. Students who completed the program this past semester and were recognized as *Research Apprentices* at the Research Rookies ceremony on January 30th are as follows: Cassandra Behling, Holly Gambrell, Amanda Gregory, Jennifer Marshall, Mayeesa Mitchell, Kaitlin Mulholland, Aakash Nawaz, Elizabeth Perkins, Elesa Poteres, and Summer Stevens.

Alumni Activity

Monica Johnson, a recent High Point University graduate, published her research in *Explorations, the Journal of Undergraduate Research and Creative Activities for the State of North Carolina*, based upon her studies in psychology. Her work examines the relations between transgression severity and relationship closeness on apology acceptance forgiveness, and anger. A trend that the study discovered was that study participants would find themselves angrier with acquaintances than friends regarding low severity transgressions, but if the transgressions were more severe, anger would be directed to friends and acquaintances alike. Monica is currently in the process of applying to Clinical and Counseling psychology programs, and her recent publication will help her to stand out from her peers.

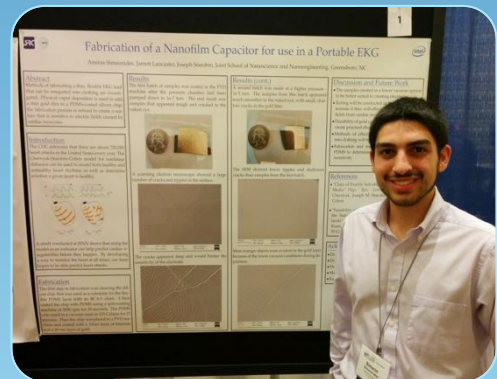
Grants for Creative Works

Theater professor Ryan Hemsoth is taking 13 students to the United States Institute for Theatre Technology (USITT) conference in Cincinnati, Ohio from March 18-21, 2015 to compete in the annual tech olympics event. This event is comprised of teams competing for time in a variety of theatre-related technical skills such as lighting, sound, costumes and so on. In addition to the competition, the conference exhibits many examples of student work and achievement and offers networking opportunities with theater professionals. The thirteen students attending are **Alexandra Oliver, Claire Denny, Matt McKone, Roxanne Daneman, Sarah Steele, Rachel Garrett, Cara Cramer, Victoria Dixon, Melanie Arvanites, Alex Rugato, Ceili Lang, Robert Kratz, and Alexandra Mauch.**

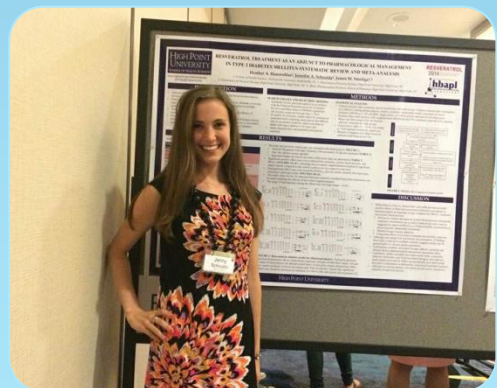
Theater student **Summer Kiesel** received a grant from the Undergraduate Research and Creative Works department to attend the Kennedy Center American College Theatre Festival Irene Ryan Competition on February 3-7, 2015 at Darton State College in Albany, Georgia. Summer was nominated by an outside reviewer to compete in this competition thanks to her performance in HPU's production of "The Winter's Tale." The event will involve college-level nominees from various universities in the region competing for scholarships by performing a package of two scenes and a monologue in front of several judges.



Graduate Monica Johnson

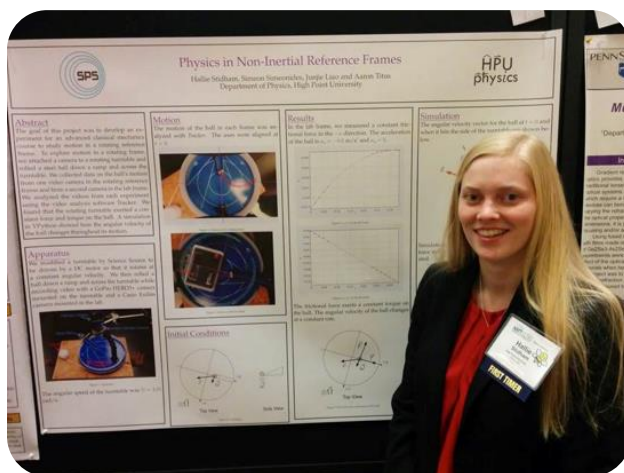


Simeon Simeonides and his poster presentation



Jenny Schoulda and her research

Communication student **Macaulley Quirk** received a grant to work on her own independent documentary film with her mentor James Trammell. The purpose of her project was to expand her electronic media communications skills through film production. Her documentary examines people who raise guide dog puppies, and the bond a puppy and their caretaker form while overcoming training obstacles and everyday distractions. As the producer of the film, Macaulley had to write a storyboard and basic storyline, as well as edit the film (with professor guidance) and screen it for an audience. She says that she gained valuable communication skills through talking with strangers and forming an intimate bond with them in order to do her work.



Hallie Stidham with her Physics project

Grants for Research

Shane Gregory and **Christopher Wagner** with mentor Dr. Patrick Viguera received a grant from the office of Undergraduate Research and Creative Works to attend the 2nd Annual Cell Biology of Eukaryotic Pathogens Symposium on October 17th at Clemson University and found it to be a fantastic research experience. This was the first session the students attended and they are now collaborating on future projects involving the use of Clemson's state of the art facilities, referred to as the Eukaryotic Pathogens Innovation Center. Shane Gregory said "the symposium was an enjoyable and educational experience" because he was able to see the work of others and get an idea of the kind of research he wishes to do.

Physics majors **Jacob Brooks**, **Stephanie Pettit**, **Hallie Stidham**, and **Simeon Simeonides** presented research during a poster session sponsored by the Society of Physics Students (SPS) at the 2015 American Association of Physics Teachers (AAPT) Winter Meeting in San Diego, CA with funding provided by URCW. Beyond presenting, these students attended other SPS sessions throughout the conference, and assisted with the Students to Experience Engineering and Science outreach program aimed at local middle school students. Jacob's poster presentation, titled "VPython Modeling to Design Artificial Cilia Platform Magnetics" received an award for best SPS poster presentation. Hallie's poster presentation, "Physics in Non-Inertial Reference Frames" was an extension of work presented by her co-authors Junjie Liao and Simeon Simeonides at a conference at Appalachian State University in 2014. Stephanie's presentation "Multi-Component Chalcogenide Gradient Index Material Research" was based upon work she performed at Pennsylvania State University during a summer program in Interdisciplinary Materials and Physics under the guidance and mentorship of professors from Pennsylvania State University. Simeon's research, "Fabrication of Nanofilm Capacitor for Use in a Portable EKG" was based on work performed in summer 2014 internship at the Joint School of Nanoscience and Nanoengineering (JSNN), which was funded by the Semiconductor Research Corporation.

Students **Jenny Schoulda** and **Christina Giusto** had a wonderful experience attending *Resveratrol 2014 – The Third International Congress of Resveratrol and Health* in Kona, Hawaii from November 30th to December 3rd. with their advisor Dr. James Smoglia. Funding was provided by a grant from URCW. Jenny presented a poster regarding a meta-analysis on the effects of resveratrol as an adjunct to pharmacological treatment for type 2 diabetes mellitus which was also published in the journal *Molecular Nutrition and Food Research*, which is ranked top five in its field and has a less than 25 percent acceptance rate. Christina was one of only 10 abstracts selected for a podium presentation, and did an exceptional job presenting her work. This conference was filled with world-leading experts who publish in prestigious scientific journals, allowing both Jenny and Christina to network with and present alongside these research professionals.

Students **Jessica Pikowski** and **Haley Slone**, along with their mentor Dr. Virginia McDermott received funding to attend the Eastern States Communication Association convention on April 23-26, 2015 in Philadelphia, Pennsylvania. The two students will present their own individual research. Jessica's project is titled "Not Just a Mindless Activity: Reality Television, Perceived Realism of Television and Verbal and Relational Aggressive Behavior of Viewers." The goal of her research was to analyze relationships between reality TV consumption, perceived realism of said TV shows, and self-reported verbal and relational aggressive behavior towards others. Jessica asked 150 students to complete a four page questionnaire related to TV viewing habits and found that a higher level of reality TV consumption combined with higher perceived realism is related to more relational aggressive behavior. Haley's research, titled "What Role Does Communication Play in Hunger and Food Insecurity" seeks to determine the overarching problem of hunger and food insecurity in relation to communication behaviors of activists in Greensboro, North Carolina (which places second in the nation for most food hardship). Haley interviewed more than 10 professionals who work to address hunger and food insecurity in the area and discussed the way in which they communicate with others and methods they believe will promote awareness and resolution of the issue. Her work will present the results of the interviews and recommendations for further work on hunger and food insecurity.

Students **Robert Rivera**, **Paul Freda**, and **Perry Morris**, along with mentor Dr. Martie Bell received a grant from URCW to attend the SHAPE America Southern District Convention in Atlanta, Georgia on February 18th - 21st. Their presentation, titled "Teaching Basketball Free Throws Using the Wii," focuses on a study comparing the Wii to the traditional method for teaching free throws using a pretest and posttest design that evaluated four 3rd grade classes. The project includes information about the study itself and also makes suggestions for successful teaching of free throws with the Wii.

Student Receives North Carolina Research Grant

Mollie McKinley, an HPU sophomore who received the George Barthalmus Undergraduate Research grant in November, has decided how she will use her grant for a research project which she will present at the North Carolina Research and Creative Works Symposium in the Fall of 2015. Her work will focus on Lady Mary Wroth and how she never gave up on pursuing writing despite the obstacles of a male-dominated field and society. Wroth was able to overcome these obstacles through writing prose and poetry. Mollie thanks her mentor Dr. Laura Linker for helping her through the process applying for a grant.



Student Mollie McKinley

Research Assistants Wanted



Lemur at the Greensboro Science Center

Students: if you are interested in getting involved in research or scholarly work with a professor, now is the time to take the next step! Consider approaching a professor about research they may be working on, or even ask a professor to mentor you in your own project endeavors. If you have a paper you think you would like to publish or present, ask a professor to help you through the process. Your research and scholarly work does not need to be science-focused to be published, so start your work sooner rather than later. There are also a number of research opportunities available on the URCW website. Several professors are looking for students to help them with scholarly work in upcoming semesters. A few are listed as follows:

Zoo Research

Dr. Joanne Altman, Director of Undergraduate Research and Creative Works, and Professor of Psychology, is seeking two dedicated students who are interested in getting involved in zoo research. Dr. Altman studies animal cognition and psychological well-being in captive wildlife. Right now Dr. Altman is cognitive testing lemurs at the Greensboro Science Center. Students are expected to go to the zoo on a regular schedule and work with the lemurs. This work will extend through the summer and the students will be part of our Summer Research Institute and can stay on campus over the summer for free. Students will have the opportunity to gain experience in research methods, animal behavior and training, writing a literature review, and more. Volunteers will have to do IACUC training and get tested for TB. Open to all majors and class levels. Contact Dr. Joanne Altman: jaltman0@highpoint.edu

Body Composition Analysis in Humans and Animals

Description: Dr. James Smoliga is researching how body composition scoring (BCS) is used in humans and in animals. Body composition involves measuring or estimating levels of body fat, muscle, bone, and other tissue through various techniques. For the human aspect of the research, students can gain experience related to the use dual-energy x-ray absorptiometry (DEXA), how it relates to visual BCS, and how these measures relate to athletic performance. For the animal aspect of the research, students will relate methods of body composition assessment in animals (both companion and wildlife) to those methods used in human research, with the goal of developing better methods of body composition evaluation and relating BCS to health outcomes. This is open to all majors and all levels. The end product of this research will be publication in peer-reviewed journals.

Contact Us

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