



UNDERGRADUATE RESEARCH & CREATIVE WORKS NEWSLETTER

April 2016



UNDERGRADUATE RESEARCH & CREATIVE WORKS

Have a Great Summer!

From all of us here in the Undergraduate Research and Creative Works office, we hope you had successful academic year! As a department, we work hard to keep students and faculty aware of opportunities and accomplishments in the realm of collaborative research and creative works. We wish everyone a safe and happy summer. To those of you graduating, congratulations on all your hard work. To those of you returning next fall, we look forward to working with you on your research and creative works next year!



It's Never too early to think Ahead!

Are you interested in doing undergraduate research with professors here on campus? Do you know of a particular professor doing working on a project that you're interested in?



It's never too early to start thinking about Fall semester. With seniors graduating in May, many research positions will be left open to be filled by students who are still on campus. Asking professors and faculty now if they have or will have research opportunities will help you potentially earn a position in undergraduate research on campus in the fall. Also check out **ScholarBridge**. It's like LinkedIn for scholars. The newest way to find research opportunities on campus- all you have to do is create a profile and you'll be able to search through the faculty on campus who are engaging in research and are interested in including students. Don't wait until August when you get back after summer break. By then it'll be too late, and positions will be full! Act Now. It's never too early to think ahead!

Mission Statement



The mission of the Office of Undergraduate Research and Creative Works program at High Point University is to engage undergraduates in student-faculty collaborations that reflect individual and unique scholarly and imaginative experiences which promote the development of new competencies and foster critical thinking, and provide students with privileged opportunities to add to the sum of human knowledge.



Summer Research	2
Senior Profile	3
Grants	4
Conference Reports	4-5
Conference Photos	6-7
In the News	7

Summer is here! That means....

Summer Research Programs!

Congratulations to our students who were chosen to participate in one of our three summer research programs for the summer of 2016! Students will either take part in SuRI, SuRPS, or SuRF this summer.

SuRI – The Summer Research Institute (SuRI) is open to all High Point University undergraduate students in any discipline. The participating students sign up with a faculty mentor with whom they wish to work over the summer on a project of their choosing.

SuRPS – The Summer Research Program in the Sciences (SuRPS) is a competitive research program in which students apply to work with faculty in the biology, chemistry, or physics departments on pre-determined projects.

SuRF - The NEW Congdon School of Health Sciences – Summer Research Fellowship (SuRF) provides motivated students with opportunities to work closely with faculty in the School of Health Sciences to perform intensive mentored research. Students involved in this program publish manuscripts with faculty in esteemed peer-reviewed journals and consistently present their findings at national and international scientific symposia. The application process for the SuRF is highly competitive.

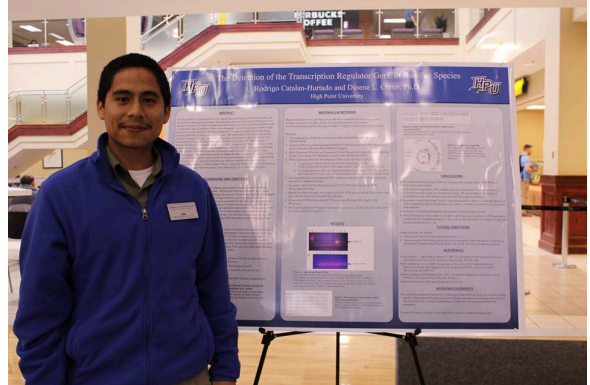


Congratulations to the following students:

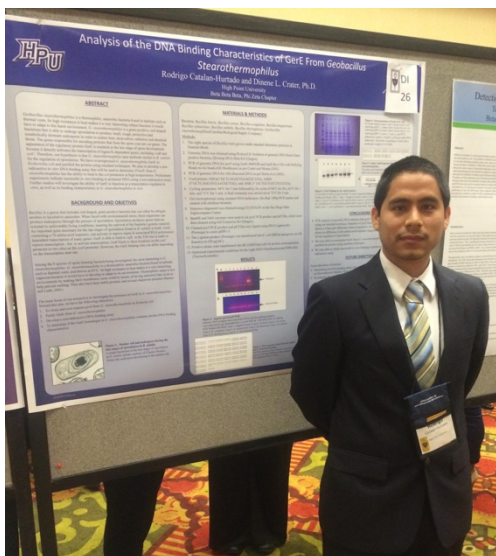
SuRI	Nathaniel Sakers	Daniel Magurno	Alen Vasquez
Kayla Barbour	Melanie Savage	Deanna Lee	Spencer Ader
Helen Barker	Steven Smith	Sarah Edmark	Max Maurer
Olivia Baynes	Sierra Thorson	Kyra Gillard	
Alfred Bozzo	Caila White	Lisa Nguyen	SuRF
Lucas Chirino	Samantha Wilson	Kaitlyn Griffith	Michelle Aube
Melanie Fichialos		Simeon Simeonides	Lacey Gould
Kira Fogelsong	SuRPS	Johan Winkler	Amanda Gregory
Sarah Jessica Forte	Jena Dryden	Matthew Warrick	Colleen Mulrey
Connor Gordon	Mallory McKee	Amanda Goodwin	Hailey Parry
Christina Honeycutt	Joshua Williams	Kristen Brokaw	Nicholas Pritchard
Mollie McKinley	Sarah Mastropietro	Lindsey Palmquist	Steven Safille
Scott Morin	Harrison Seitz	Olivia Tornow	Many Szymanski
Meghan Patton	Thomas Kylo	Jason Barbaretta	Lindsay Tiberi
Benjamin Rolison	Alexandra Sprouse	Ryan Jegedus	Connor Whicker

Senior Profile: Rodrigo Catalan-Hurtado

Unsure about doing undergraduate research? Not sure that you'll like it? Well- meet Rodrigo Catalan-Hurtado. Rodrigo is a senior physics and biology double major with a mathematics minor. When asked about his favorite experience while doing undergraduate research, he couldn't answer the question. Not because he didn't like it- no. Because the undergraduate research he's done has been one of his favorite experiences of his entire undergraduate experience.



Rodrigo has taken part in three instances of undergraduate research, all of which are ongoing. His first experience with undergraduate research was with Dr. Dinene Crater of the biology department beginning in 2014. In this project he investigated “the ability of GerE to function as a transcription regulator *in vitro*, as well as its binding characteristics in *G. stearothermophilus in vivo*.” Rodrigo’s second experience in undergraduate research began in August of 2015 and was with Dr. Brad Barlow in the physics department. In this project, Rodrigo researched the Eclipsing Reflection Effect Binaries from the OGLE Survey project to determine masses for stellar systems. Rodrigo also participated in SuRPs, the Summer Undergraduate Research Program, here at High Point University during the summer of 2015. Again working with Dr. Brad Barlow, Rodrigo used the 1.5-m SMARTS telescope in the Chilean Andes to view the HD 318015 binary for 36 days. Using special Python code that he wrote, Rodrigo was able to measure velocities and light curves of the stars which allowed him to analyze many of the system’s binary parameters.



Rodrigo has some pretty cool things to say about his undergraduate research. During his research he has potentially identified the most luminous binary star system discovered to date! If that’s not cool, I don’t know what is. Rodrigo also has two research papers in the works that he hopes to get published within the next two years, all thanks to his undergraduate research.

Publication isn’t the only benefit to research either- Rodrigo says he has obtained tons of skills through his research that will be extremely useful in the future. He has polished his coding skills, analyze light curves, perform experiments that require standard biological protocols, etc. All of these skills have the potential to be enormously useful for him later in life.

In the future, Rodrigo plans to either get a PhD in Astrobiology or Biophysics, as long as he gets into graduate school. His alternate plans are to obtain a career in biotechnology.

Good luck, Rodrigo!

Congratulations to Students Receiving Travel Grants

Joshua Parsons and his mentor Dr. Jenny Fuselier were allocated a grant to attend the Undergraduate Math Conference on April 16th at the University of Tennessee in Knoxville. While attending, Joshua attended a talk about partitions which led into discussion about progressions and proofs.

Alex Sprouse, Petru Hadarau, Carla Yost and their mentor Dr. Michael Grider were allocated a grant to attend SYNAPSE: Symposium for Young Neuroscientists and Professors of the South-East in Clinton, SC on April 2nd. At the conference, the students were exposed to quality experiments and how to communicate the results and conclusions of their work through poster presentations. Alex, Petru, and Carla are all freshman and are very excited to continue to be active in undergraduate research over the next few years here at High Point University.

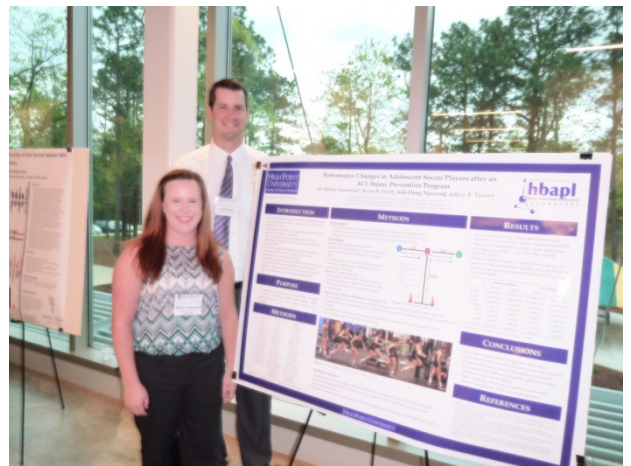


How did it go? Conference Reports

Mandy Szymanski and her mentor Dr. Matthew Kuennen attended the Southeast Chapter of the American College of Sports Medicine conference in Greenville, SC on February 18-20th. Mandy presented her research findings in poster format. She also had the opportunities to network with graduate school representatives. Additionally, Mandy and Dr. Kuennen attended various talks and were the best cheering section at the SEACSM student quiz bowl that HPU has ever seen! They are excited to attend and represent HPU next year.

Jamie Schnuck presented her work at the Southeast chapter of the American College of Sports Medicine conference regional meeting. She was very professional in her presentation and the defense of her work. Jamie also competed as one of eight finalists in the undergraduate student research competition, and placed 2nd overall. She was also one of 3 HPU students in the SEACSM Student Bowl, our team placed within the top 6 schools in the bowl! Great Work Jamie and team!

Congratulations to **Allison Townsend** for her presentation “Performance Changes in Adolescent Soccer Players after an ACL Injury Prevention Program” at NCAS. NCAS is the North Carolina Academy of Sciences meeting which met this year at Methodist University. Students at this conference have the opportunities to present their research as well as learn about scientific advances in a number of fields. The purpose of Allison’s project was to determine if there were performance benefits that arose when adolescent female soccer players completed an ACL prevention program. Allison even had an added benefit to attending this conference- spending a little time at her future school! She will be attending Methodist university for Physical Therapy school beginning this fall. Congratulations Allison and great work!



High Point will be hosting NCAS on March 24-27, 2017. So keep your eyes on the lookout!

How did it go? Conference Reports Continued

HPU Dancers Dazzle

Congratulations to Ms. Lindsey Howie and her dance class on their attendance to the American College Dance Association Conference in Mississippi. While there, the students attended classes, performed, and wonderfully represented High Point University. While there, three students presented their choreographic works. **Dani Criss'** piece "Do You See Me" was selected to be part of the closing night gala performance. She also presented her work at High-PURCS here on campus. Congratulations dancers!



Students Bring High Point History to Baltimore

Congratulations to Dr. Paul Ringel's students who presented their Project on the local historically African American school, William Penn. The students presented at the National Council of Public Historians in Baltimore.

Annual Meeting of the Association of Southeastern Biologists

At the beginning of April, about 30 of High Point's students and faculty attended the Annual Meeting of the Association of Southeastern Biologists in concord, NC. While attending, two biology majors won awards!

Congratulations to **Maria A. Trujillo** and **Tyler Wilson**. Maria received the 2016 Student Poster Presentation Award in Cell and Molecular Biology by the Association of Southeaster Biologists for her poster "Mapping the Sorting Signals of the Cytoplasmic Domain of Atg27". This award is given to one student annually to recognize an outstanding poster presentation in the areas of Cells and Molecular Biology. Maria's mentor is Dr. Veronica Segarra of the biology department. Tyler received the 2016 Student Oral Presentation Award for Microbiology by the Association of the Southeastern Biologists for his presentation "Amoxapine: A Novel β -lactamase Inhibitor In Methicillin Resistant Staphylococcus aureus". This award is given to one student annually to recognize an outstanding oral presentation in the area of Microbiology. Tyler's mentor is Dr. Patrick Vigueira in the biology department. Congratulations Maria and Tyler!

Google Called... But They're Following a Bigger Dream Instead

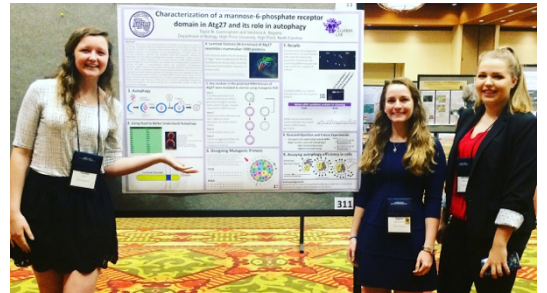
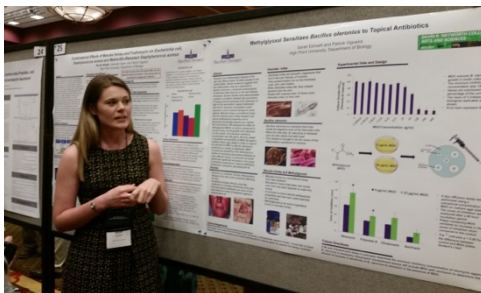
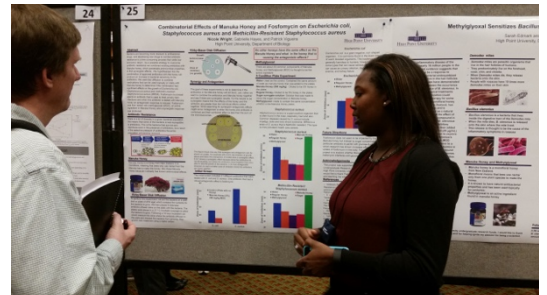
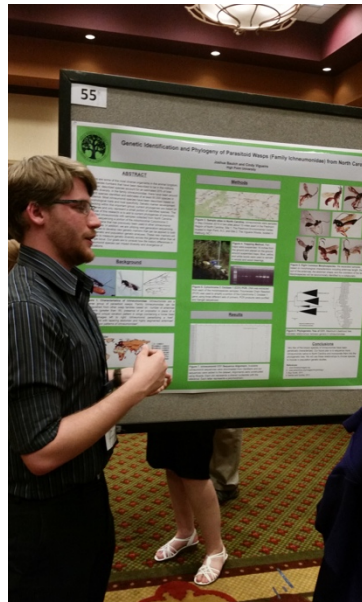
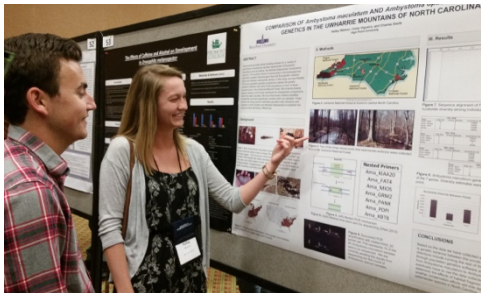
Remember Reza Moghtaderi Esfahani and Nick Zayatz from the newsletter a few months ago? The young men that Google called?

Well they've decided to chase something bigger than Google, a chance to stay together and do what they love. Reza, Nick, and their Cirtual team will be staying together post-grad and moving to New Orleans in pursuit of opportunity and success. Congratulations Gentlemen!

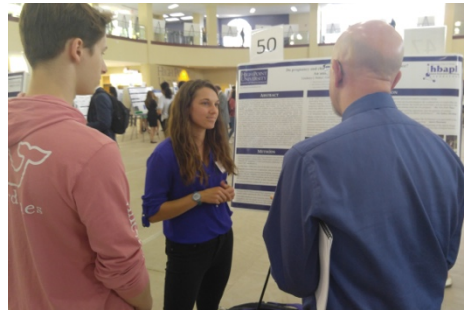
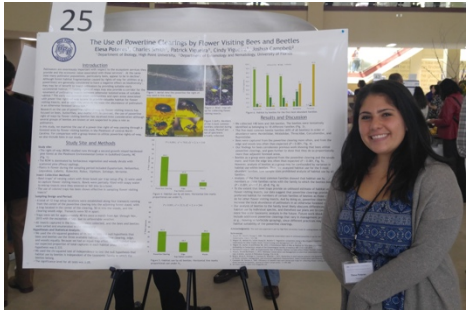
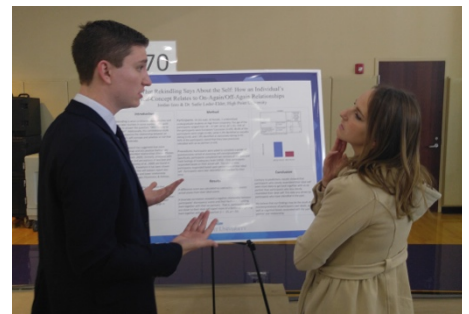
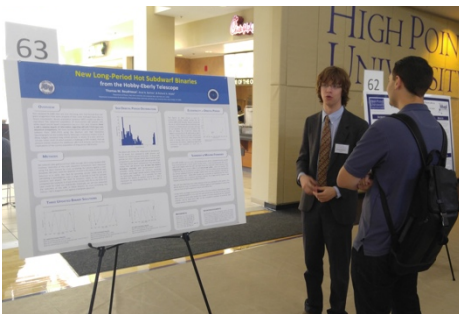
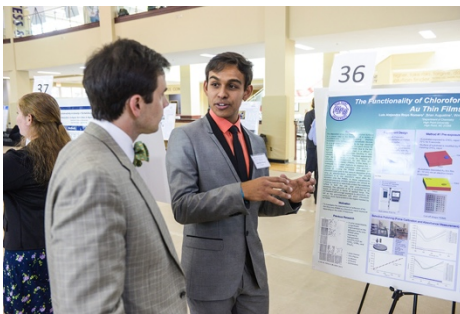
UNDERGRADUATE RESEARCH & CREATIVE WORKS

Photos Photos Photos

Annual Meeting of the Association of Southeastern Biologists

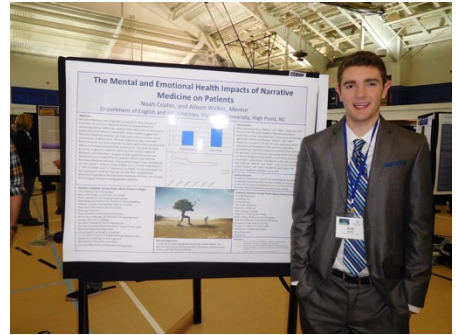
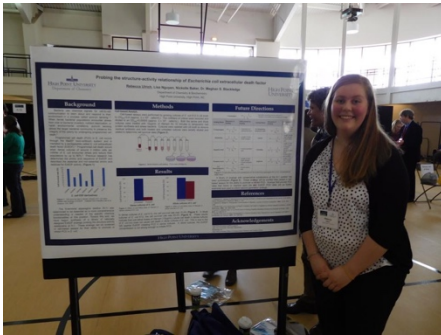
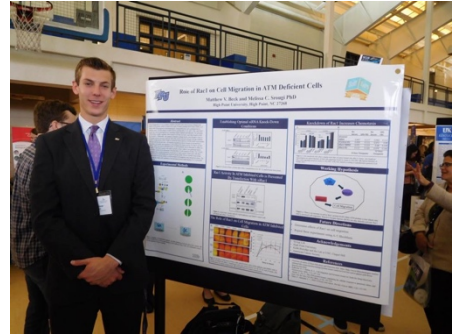
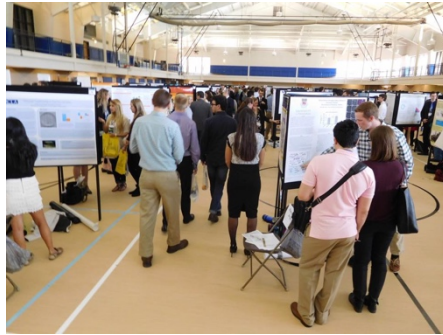


High-PURCS



More Photos

NCUR-National Conferences on Undergraduate Research 2016



Spotted in the News!

Congratulations to Professor Jim Goodman and his students from the School of Communication for winning the Award of Excellence for their short film, “The One Per Cent,” from The Broadcast Education Association’s Festival of Media Arts. Way to go!

Senior **Brandon Holder** is doing great things worldwide. He’s been spotted in a Greensboro newspaper! Brandon has invented a water filtration system inspired by his time spent in Haiti. He saw that they needed an efficient way to water their crops so that they could produce more food. This inspired him to create a water filtration system that produces clean water for drinking and watering crops. Nice work Brandon!

CONTACT US AND LIKE US ON FACEBOOK!

Dr. Joanne Altman

Email: urcw@highpoint.edu

Website: www.highpoint.edu/urcw

Facebook: High Point University Undergraduate Research & Creative Works

Final Newsletter brought to you by Rebecca Irons.
Becky is a graduating senior and is pursuing a marketing career in Charlotte, North Carolina.