

Happy Holidays!



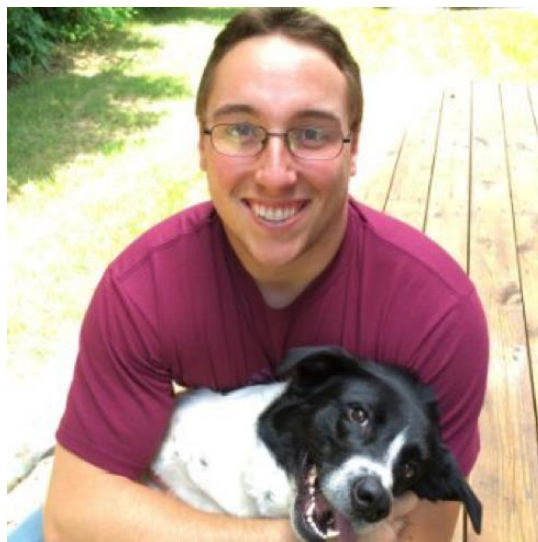
Biology Alumni



After graduating from Salisbury University in 2013 with a BS in Biology, **Eleanor Siri** went on to pursue a Doctor of Optometry degree at Salus University (<http://www.salus.edu>). She graduated in May 2017 and is back in Salisbury in her own Optometry practice.

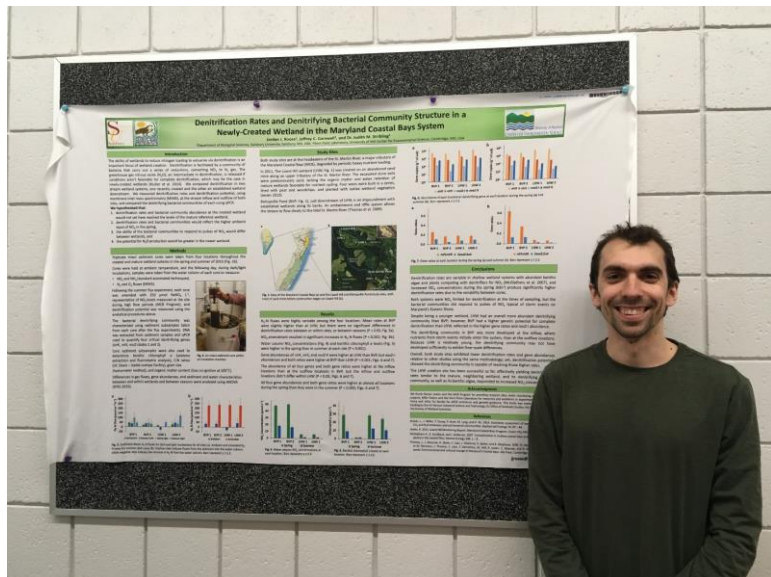
How has your education here at SU helped you with your career/success?

The small sized classes and teaching style of all the science professors played a huge role on my learning and studying style in Optometry school. The spirit of excellence and emphasis on understanding the material in order to apply it in real life is currently helping direct the way I thoroughly educate my patients. I can proudly call myself an SU alumna. Thank you Salisbury faculty. Go seagulls!



Recent SU Biology alumnus, **Stephen Rigoulot** (BS 2012), is currently finishing his dissertation research towards a PhD in Horticulture at Virginia Tech University. Stephen's research involves the genetic modification of poplar trees so they can better withstand drought stress. More information about Stephen, his research, and his career path can be found at: <https://fralin.vt.edu/Students/StudentSpotlights/stephen-rigoulot.html>

Our Graduate Students



Jordan Roose, MS candidate and advisee of Dr. Judith Stribling, presented his research at the November 5-9 Coastal and Estuarine Research Federation (CERF) Conference in Providence, RI. His poster was titled "Denitrification Rates and Denitrifying Bacterial Community Structure in a Newly-Created Wetland in the Maryland Coastal Bays System." Jordan received funding for the conference from the Atlantic Estuarine Research Society and from CERF, as well as from SU and the Dept. of Biological Sciences.

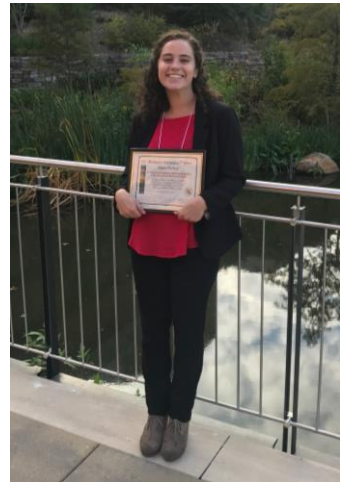
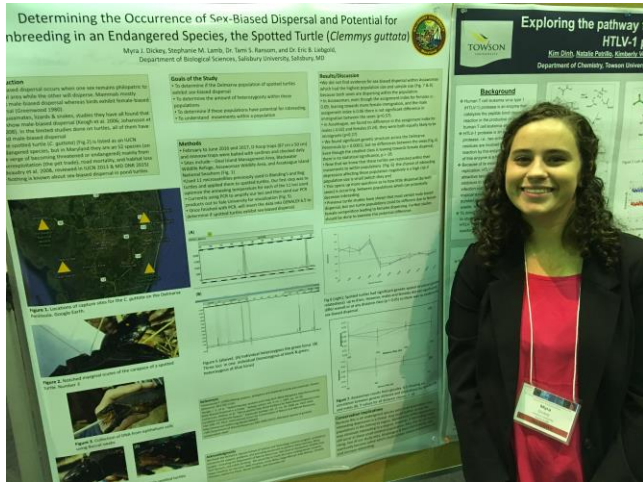


Marissa Moran, MS candidate and advisee of Dr. Ann Barse, presented her research (Echinostome trematodes in a Delaware salt marsh) at the 718th Meeting of the Helminthological Society of Washington (November 2) on Kent Island.

Our Undergraduate Students



In November, **Miranda Smullen** (left) & **Chelsey Tull** (right) gave lightning talks (5-minute talks about our research) at the 718th Meeting of the Helminthological Society of Washington on Kent Island. Miranda was advised by Dr. Ann Barse, while Chelsey was advised by Drs. Ann Barse & Christina Bradley.



In October, **Myra Dickey** presented her research on genetic analyses of sex-biased dispersal and inbreeding in endangered spotted turtles at UMBC's 20th Annual Undergraduate Research Symposium in Chemical and Biological Sciences. Myra won first place in the Biological Sciences section. Dr. Eric Liebgold advised Myra.

American Society for Biochemistry and Molecular Biology – SU Chapter



Jeremie Rose (Jamie) Barbosa teaches elementary school students to isolate their cheek cell DNA.



Mariah Passwaters-Stamper helps and poses with two students proudly showing off their candy DNA models.

On November 4, 2017, the undergraduate members of SU's chapter of the American Society for Biochemistry and Molecular Biology (ASBMB) volunteered to hold a workshop for STEM Saturday through the Wicomico County public school system. On that Saturday, members Eposi Elong, Barbara Taylor, and Dorothy Maclean-Blevins worked beside elementary school kids while Lauren DeLong taught them how to isolate their cheek cell DNA for the first half of the workshop. After a quick snack break, Mariah Passwaters-Stamper and Amanda Rocker guided the students while Gabrielle Voithofer and Jeremie Rose Barbosa taught them how to model DNA using candy. This entirely student-run workshop was inspired by past STEM outreach events such as "Thinking and Doing," organized by Dr. Patti Erickson, one of the ASBMB advisors. While Dr. Erickson went on sabbatical this year, the undergraduate members took initiative to communicate with Wicomico County BOE member Gretchen Boggs and plan a successful workshop. Ms. Boggs commended the group, thanking the members for leading an "exciting adventure for the Elementary Kids," and asking ASBMB to return again another time. The members of ASBMB hope to work with the public library and local Girl Scout troops as well as the local school system for future student-led STEM outreach.

ASBMB Executive Board member Gabrielle Voithofer also wrote an engaging article published by the ASBMB blog, *The Substrate*, on previous outreach planned and led by ASBMB undergraduate members. This article can be found here: <http://substrate.asbmb.org/2017/11/08/outreach-review-encouraging-interest-in-science-in-elementary-age-children/>

Undergraduate Research Fellows

Three Biology majors were chosen to be among the first cohort of 13 Salisbury University Undergraduate Research Fellows (URF). URFs are student leaders who serve as ambassadors for undergraduate research and creative activities. They were selected through a competitive process among applicants who had high grade point averages, multiple semesters of research experience (including projects, conferences, awards, grants, and publications), strong letters of recommendation from faculty mentors, resumes and interviews that demonstrated excellence and potential, clear understanding of how research has impacted them, and a desire to bring research and creative opportunities to more students. We are proud of their accomplishments and excited to offer this opportunity for them to serve as leaders.

Starting in 2018, these URFs will work to better connect undergraduate students with the Office of Undergraduate Research and Creative Activities (OURCA), the Office of Graduate Studies and Research, faculty, staff, and administration. Fellows will provide input on student needs toward the development of initiatives to grow and support undergraduate research and creative activities. They will serve as student ambassadors and role models.

Lauren DeLong

- Major: Biology
- Minor: Chemistry and Mathematics
- Highlights: National Institute of Health Intern, National Conference on Undergraduate Research, SU Student Research Conference, University Student Academic Research Award, Henson Grant Award, Honor's College, SU Housing and Residence Life "Educator of the Year Award," Maryland Delegate Award, Maryland Senatorial Award, Beta Mu Scholarship, Karen J. Beggs Memorial Scholarship
- Hometown: Fulton, MD

Myra Dickey

- Major: Biology
- Minor: Chemistry
- Highlights: SU Student Research Conference, University Student Academic Research Award, Henson Grant Award Program, Guerrieri Summer Research Program, Study Abroad – Honduras
- Hometown: Annapolis, MD

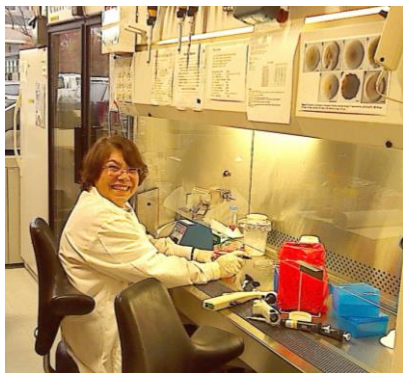
Patrick Miller

- Major: Biology
 - Minor: Chemistry
 - Highlights: SU Student Research Conference, University Student Academic Research Award, Henson Grant Award, Honor's College, SU Presidential Scholarship, Willow Valley Scholarship
 - Hometown: Salisbury, MD
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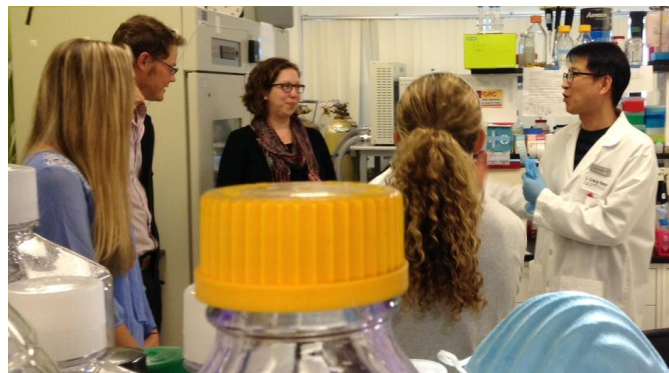
J. Craig Venter Institute



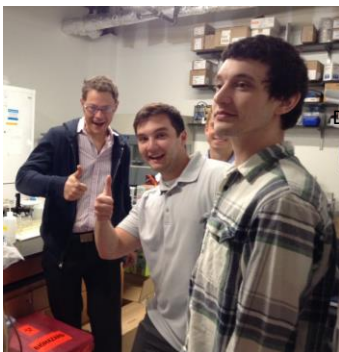
This past spring, Drs. Patti Erickson and Philip Anderson offered a Readings course (Biol420) in Synthetic Biology, which culminated in a trip to the J. Craig Venter Institute (<http://www.jcvi.org/cms/home/>) in Rockville, MD. Other interested students, including members of ASBMB, also joined us. While at JCVI, we learned about advances in synthetic biology, viral genome editing, and analysis of astronauts' microbiomes. We toured the laboratories and saw where the first synthetic organisms, JCVI-syn1.0 through 3.0, were created. From left to right: Ruthie Heying, Kevin Greenfarb, Dr. Anderson, Alex Copes, Lauren DeLong, Fiona Halloran, Callie Brown, Dr. Erickson, Robert Phillips, Matt Zimmerman, Dr. Sanjay Vashee, Dr. Alex Voorhies, and Dr. Lauren Oldfield.



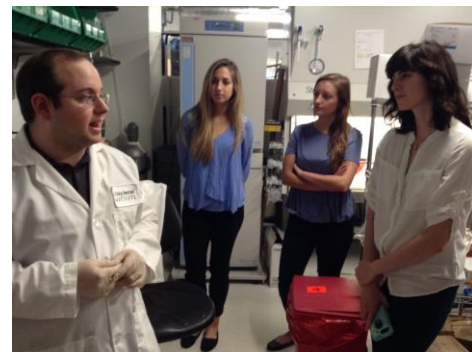
One of our hosts, Dr. Vashee, helped create JCVI-syn1.0, and Nacyra Assad-Garcia, has worked under this hood on all of the synthetic cells.



Sarah Grimshaw (center left) discussed protein analysis with Lauren, Dr. Anderson, Fiona, and Dr. Keehwan Kwon (far right).



Dr. Anderson and Robert give 'thumbs up', while Matt (behind Robert) Kevin, Callie, Alex, Lauren, and the rest of us listen to Dr. David Brown explain the work he is doing with insect and human tissue culture cells lines.



Our Faculty

DR. STEPHEN GEHRICH

“Campus Bee Hives” received \$1036 from the Salisbury University Green Fund to purchase bee-keeping equipment.

DR. PAUL GRECA, PROFESSOR EMERITUS

Targett TE, PA Greca, RL Dixon. Growth and survival of the estuarine fish *Fundulus heteroclitus* in response to diel-cycling hypoxia and acidification: interaction with temperature. Submitted to the Canadian Journal of Fisheries and Aquatic Sciences

DRS. KIM HUNTER, RYAN TAYLOR & MEGAN MURPHY

Recipients of a Salisbury University “Building Research Excellence” (BRE) grant of \$12,000.

DR. ERIC LIEBGOLD

Liebgold EB, CF Kramer*, TC Roomian, GM Dolezar*, PR Cabe. Accepted. Heterozygosity-behavior and heterozygosity-fitness correlations in a salamander with limited dispersal. Population Ecology.

*Former students at SU who collaborated on this project, Christian Kramer and Gine Dolezar (née Sorce).

Alumni Connection



SU BIOLOGY ALUMNI

Stay Connected

We want to hear from you! Please let us know where you are living and what you are doing! We would love to hear from you. In the future we plan to have an Alumni Connection section in our newsletter.

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Your Editorial Team

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cbriand@salisbury.edu

