



Volume 7,
Issue 1

October–
November 2018

*What's going on in
the North Carolina
Academy of Science:*

- Congratulations,
Yarborough
Winners!
- Save the date—
116th Annual
Meeting
- Invitation to
CANCAS Fall
Workshop

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Featured Scientist: Dr. Sarah Goforth

By: Dr. Casey Davenport, University of North Carolina at Charlotte

In this issue we are featuring Dr. Sarah Goforth, an assistant professor of chemistry at Campbell University. Dr. Goforth grew up in a family steeped in science; her dad is a doctor, her mom a mathematician, and her brothers computer scientists. Thus, science was something she always enjoyed and was naturally drawn towards. Despite her parents thinking that chemistry is “not so much fun,” Dr. Goforth enjoyed the challenge and knew it was something she was good at. She already knew that she wanted to teach science as early as 10th grade, but her desire to focus on chemistry was solidified on a campus college visit to Furman University, where she became excited by the many undergraduate research opportunities available. After an excellent experience with undergraduate research, Dr. Goforth went on to complete her Ph.D. at the University of Florida working under Dr. Lisa McElwee-White and then to the University of Virginia as a post-doc for Dr. Brent Gunnoe.



Dr. Sarah Goforth, Campbell University

Dr. Goforth had intended to stay at the University of Virginia for 2 years as a post-doc, but a job opportunity at Campbell University was one she could not pass up. Typically, professors need to teach general chemistry as a service load along with a course like inorganic chemistry. However, Dr. Goforth had her sights set on a different combination: “I wanted to teach both inorganic and organic chemistry...they sound like opposites, but you think in the same way!” The Campbell University position advertised for an instructor in both organic and inorganic chemistry, which immediately caught her attention, and turned out to be a perfect fit for both her and the department.

Now, Dr. Goforth strives to create amazing research opportunities for her undergraduate students; she loves that at Campbell “we have lots of freedom to grow student opportunities and make something new and exciting for them.” The newest venture that Dr. Goforth is working on is creating an interdiscipli-

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Featured Scientist: Dr. Sarah Goforth

By: Dr. Casey Davenport, University of North Carolina at Charlotte

nary study abroad opportunity that combines chemistry with art. “Chemistry and art are seemingly different, but they are both materials based, using key properties to see how they interact...[they] take advantage of materials to make something aesthetically beautiful.” While other institutions have created similar study abroad programs, Dr. Goforth is taking it a step further by collaborating with an art professor, and having students from both art and chemistry take part in the program to help foster creativity and see how seemingly disparate disciplines can work together. The inaugural class is slated to start next year, with the first trip planned for Summer 2020 in Italy.

Have a scientist you think should be featured in the NCAS newsletter? Let us know—we would love to showcase more of our talented peers and students! Email Dr. Karen Guzman at guzman@campbell.edu

CANCAS Fall Workshop Invitation

By: Dr. Daniel Stovall, NC Wesleyan College

Join CANCAS for the annual Undergraduate Research Workshop on Saturday, November 3rd from 10:00 am until 3:00 pm at NC Wesleyan College. Students can register at <https://www.eventbrite.com/e/cancas-undergraduate-research-workshop-registration-49105942195>. Registration is \$15 for nonmembers.

Prior to registering, be sure to renew your CANCAS membership at <https://www.joinit.org/o/north-carolina-academy-of-science>! Faculty advisors can get membership for all students in a club or group on their campus using the “group membership” option. Students register individually for the workshop. When you register for the workshop, each student's email that was used when renewing membership will be their promo code, and registration will be free!

If you have questions, contact one of the CANCAS co-directors: Dr. Daniel Stovall (dstovall@ncwc.edu) or Dr. Laura Reichenberg (laura.Reichenberg@pfeiffer.edu).

THANK YOU

Thanks to Meredith College who hosts our Academy Headquarters and Home Office!

Unveiling the New NCAS Website

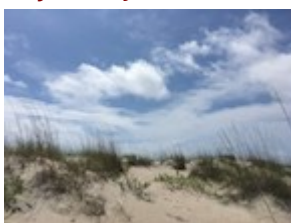
We have an exciting announcement! When you receive this newsletter, the new NCAS website will be live! We have been working hard on the site over the last several months and hope you find it useful and visit it often. Check it out by going to <https://www.ncacadsci.org>, click around, and let us know what you think!

Some new features:

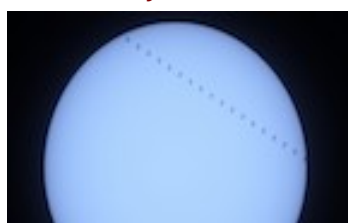
- Renew your membership, check your membership status, donate to NCAS, or become a new member online – our new membership site is easy to use and more information can be found at <https://www.ncacadsci.org/take-action/>
- We've added a news blog that will be updated frequently! It can be found at <https://www.ncacadsci.org/new-blog/> . Please contact any member of the Publications committee (<https://www.ncacadsci.org/committees/#pubsco>) if you have news to share!
- We asked for photos from NCAS members to include on our site – thanks to Maria Pickering, Tom Hancock, Nick Miller, and David Guzman for their submissions, which are now featured throughout the site. We will be asking for more submissions in the future – send us your best pictures of your science!
- You can now read current and past issues of this newsletter online on the NCAS Publications Page, found at <https://www.ncacadsci.org/publications/> - we are still building up the archives available through the site, so if there's an edition you need but don't see live, contact Jessica McCann (Jessica.mccann@duke.edu) for access.

Photo Winners for Website

Report by: Dr. Jessica McCann, Duke University



Bald Head Island by Tom Hancock



ISS transiting the Sun by Nick Miller



Sunflowers in Dorothea Dix Park by Maria Pickering



View from Chimney Rock by Maria Pickering



Bald Head Island by Tom Hancock



Landscape with Telescope by Nick Miller

Yarborough Awards

Report By Dr. Scott Robertson, Methodist University, & Dr. Jordan Womick, Campbell

ACCEPTED PROPOSALS YARBROUGH UNDERGRADUATE RESEARCH GRANTS 2018-2019 Academic Year

To Whom It May Concern,

The Yarborough Undergraduate Research Grant Committee is pleased to announce the accepted Yarborough Grant Proposals for the 2018-2019 year. Recipients have indicated their acceptance of the grant and are listed below alphabetically by last name.

1. Nabih Khan for the submission “Metabolic trend-line of triglycerides post-consumption” with faculty advisor John Mecham at Meredith College.
2. Tyler Scott for the submission “Specific status of *Eurycea guttolineata* and *Eurycea longicauda* based on mtDNA sequence data” with faculty advisor David Beamer at Nash Community College.
3. Hannah Snyder for the submission “Testing allergenicity of peanut proteins Ara h1, Ara h2, Ara h3, and Ara h6 against various degrees of thermal processing” with faculty advisor Michael Stiff at Lenior-Rhyne University.
4. Spencer Winspear for the submission “Preliminary mechanistic studies of the halogenation of vanillin” with faculty advisor Sarah Goforth at Campbell University.

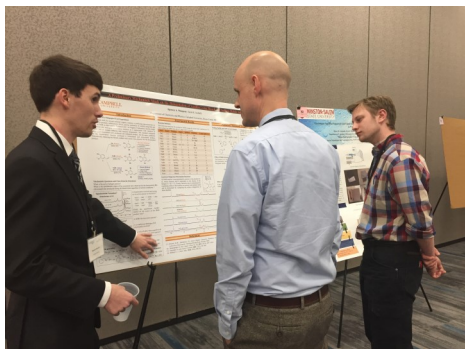
The committee looks forward to seeing the outcomes of the research at the 2019 annual meeting.

Sincerely,
Yarborough Grant Committee

Scott Robertson (co-chair)
Methodist University
srobertson@methodist.edu

Jordan Womick (co-chair)
Campbell University
womickj@campbell.edu

Yarborough Grant Recipients 2018-2019



Mr. Spencer Winspear, Campbell Univ.



Ms. Nabih Khan, Meredith College

President's Letter

Report by: Dr. Jean-Luc Scemama, NCAS President, East Carolina University

Dear Colleagues,

I would like to start this letter by extending my deepest sympathy and thoughts to the people, friends and colleagues who have been impacted by hurricane Florence. Let's do everything we can to help during the recovery efforts.

I am honored to serve as President of the North Carolina Academy of Science (NCAS) for the 2018-2019 year. The mission of the NCAS is "to promote public appreciation of science, science education, scientific research and a meaningful role for science in public policy". Since its inception in 1902, NCAS has evolved and become an entity more tuned to the education of young scientists and the annual meeting is now a wonderful platform where undergraduate and graduate students come together to, often, perform their first scientific presentation, network and learn about graduate school opportunities.

Today, more than ever, the Academy has an important role to play. When science is being ignored, we have the duty to stay true to our mission and expand our visibility to reach a larger audience. To that extent, last year, we partnered with "March for Science" and we intend to continue supporting this movement.

We are lucky to have a strong and motivated Board of Directors and you will soon be able to access the new website that the publication committee under the direction of Dr. Karen Guzman, and our new Webmaster, Dr. Jessica McCann, have developed. This new website aims to increase our visibility, be more informative, easier to navigate and facilitate the membership process. To help achieve our mission, share the new website with friends and use it to recruit new members or affiliates to the Academy.

This week, the announcements of the Nobel prize winners are the perfect illustration that scientific research affects people's lives. The Nobel prize in Physiology or Medicine was awarded jointly to James P. Allison and Tasuku Honjo for their discovery of check point inhibitors that led to the development of cancer immunotherapy. The Nobel prize in Chemistry was awarded jointly to Drs. Frances Arnold, George Smith and Gregory Winter for their work on protein directed evolution that led to the production of proteins that are used to manufacture pharmaceuticals, biofuels, and antibodies.

Share your passion for science and invite a friend to the Annual Meeting at UNC Wilmington in March. By doing so, you will not only promote the North Carolina Academy of Science but you will also help in the economic recovery of our Wilmington friends.

CANCAS 2018—2019 Officers

President:

Jawuanna McAllister, NC Wesleyan College

Vice-President:

Trina Phan, NC State University
Cerita Kabryn Mattison, Appalachian State University

Secretary:

Beverly Anaele, NC Wesleyan College

Historian:

Oswaldo Rodriguez, Wake Technical Community College

If you'd like to be involved in
CANCAS, contact
Dr. Daniel Stovall
(dstovall@newc.edu)!

Opportunities to Serve on the Board

Dr. Jean-Luc Scemama, President of NCAS, East Carolina University

Dear Fellow Members,

To date, the position of President-elect has not been filled, therefore, we are looking for volunteers or for members to nominate a colleague who they think will be interested in the position of President-elect. Please, send me your nominations or nominate yourself at your earliest convenience.

You may all be well aware that the most demanding position on the board of directors is the Treasurer's position. At our last virtual meeting, the board discussed the appointment of a Co-Treasurer. This position will reduce the amount of pressure on our current Treasurer, and share the responsibilities associated with the position. If you are interested in serving as Co-Treasurer, please contact me at your earlier convenience.

Cheers,
Jean-Luc

To Better Serve our Members...

Along with the new tools we are rolling out for membership, we have also added a Co-Chair to the Membership Committee. Welcome Dr. Eric Anderson from East Carolina University who will be joining the current Chair, Dr. Scott Johnson of Wake Technical Community College!

Save the Date!

NCAS 116th Annual Meeting will be held at **UNC-Wilmington on March 22-23, 2019**. While our thoughts are with them as they rebuild and recover from Hurricane Florence, we're excited to celebrate North Carolina's research achievements with them in March. Stay tuned for more Annual Meeting information!





The North Carolina Academy of Science
Meredith College Department of Biological Sciences, 3800 Hillsborough St., Raleigh, NC 27606-5298

Phone: 919-760-8189
Fax: 919-788-0956
ncacadsci@email.meredith.edu

“Like” us on Facebook and follow us on Twitter (@NCAcadofSci) to get the latest updates and information on what’s happening at your North Carolina Academy of Science!



The **objective** of the North Carolina Academy of Science is to “encourage the advancement of science within the state of North Carolina by promotion of scientific research and by the fostering of education in the sciences”. The North Carolina Academy of Science meets these objectives by...

- Publishing a peer reviewed scholarly journal, the *Journal of the North Carolina Academy of Science*.
- Fostering and encouraging student involvement in the sciences through support of the Collegiate (CANCAS) and Student Academies (NCSAS).
- Promoting interactions among scientists and students throughout North Carolina.
- Providing a forum for exchange of ideas for solving issues important to North Carolina.

The Academy members include individuals from academia, industry, government, and all others who support the objectives and goals of the Academy.

North Carolina Academy of Science

Our Mission

The North Carolina Academy of Science promotes public appreciation of science, science education, scientific research and a meaningful role for science in public policy.

Our Goals:

Promote public appreciation of science

- Partnership with Science Centers
- Public Lecture Series
- Newsletter

Promote science education

- NCAS Webpage
- Academic Lecture Series
- NCAS Publications: Journal, Educational Publications
- Student Academy - Middle & High School

Promote scientific research

- Yarbrough and Bryden Research Grants
- CASCAS Undergraduate Research Workshop
- Presentation Opportunities at Annual Meetings
- Journal of the North Carolina Academy of Science

Promote science in public policy

- Symposia
- News Releases
- Position Statements
- Interactions with Public Officials

