



Volume 9,
Issue 1

December 2020

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

- Membership extended for free!
- CASCAS Workshop to be held in January
- A tribute & memorial...
- 2021 Annual Meeting to be virtual

*Inside this
issue:*

| | |
|--------------------------|-----|
| 2021 Annual Meeting | 2 |
| CASCAS Updates | 3,5 |
| Yarbrough Grants Updates | 4 |
| A Tribute & Memorial | 6-7 |

And much more...

Letter from the NCAS President

By Dr. Lei Zhang, Winston State University

Dear fellow members and supports of the North Carolina Academy of Science,

I hope this letter finds you all well and having a prosperous year!

I have been affiliated with NCAS as a member for over 16 years and now I am honored to serve as President of the North Carolina Academy of Science (NCAS) for the 2020-2021 year. I look forward to working with all of you over the next year.

Like all others in the world, we are experiencing a historically difficult time we never faced before because of the COVID-19 pandemic. We are so lucky to have a strong and dedicated Board of Directors. I believe, with working together and a positive response to this challenging period, we will lessen the negative impact on all possible venues.

Our journal - the Journal of the North Carolina Academy of Science has moved to a new, advanced web platform called Meridian, hosted by Silverchair. As part of your membership benefits, you have free access to the journal. The board has decided to extend your current membership to the end of 2021 at no cost although your kind donations are always welcome.

The 117th Annual Meeting scheduled for March 2020 in Hickory (at Lenoir Rhyne University) was canceled due to the pandemic. However, the local organizing committee has been continually working tirelessly in planning and implementing a great and unique digital/online/virtual annual meeting for March 2021. This meeting will not only provide an ideal online platform for researchers, especially for undergraduate researchers, to present and exchange their new discoveries in all disciplines of science, but also deliver great online keynote and guest speeches, scientific seminars and instructional workshops. So, please invite your colleagues and students to join the meeting to expand our community.

In addition, I would like to use this opportunity to invite our members who are interested in volunteering as NCAS officers, board members, and committee members to fill the available vacancy positions.

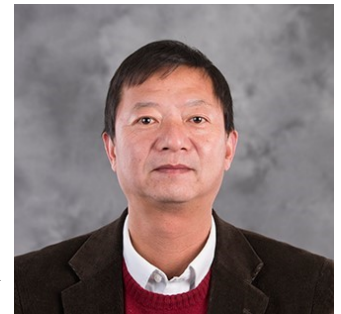
If you are not yet a member, I would encourage you to peruse our website (<http://www.ncacadsci.org/>) to see all of the benefits that come with being a member. If you are a member, then please share your knowledge and experience of the Academy with colleagues so that we can increase our membership.

I look forward to meeting you all at the coming annual meeting in March 2021.

Stay safe and stay healthy!

Lei Zhang, Ph.D. President 2020-2021

Professor of Physics, Winston Salem State University, zhangl@wssu.edu



Dr. Lei Zhang

NCAS 2021 Annual Meeting Scheduled to be Held Virtually on March 12-13, 2021

Report By Dr. Judy Moore, Lenoir-Rhyne University

Make your plans now to join us at the 117th Annual Meeting of the North Carolina Academy of Science! It will be hosted by the School of Natural Science and Mathematics of Lenoir-Rhyne University as a virtual event via Zoom. It begins Friday evening March 12 and runs through the entire day on Saturday, March 13th, 2021.

You will be invigorated as you hear students and faculty sharing their research, learn from our panelists discussing current issues in science and society, participate in workshops and be inspired by our dynamic keynote speaker, professor and author Dr. David Hu of Georgia Institute of Technology. To learn more about Dr. Hu, see p.2 of our [newsletter from Nov 2019](#).

The 2021 Annual Meeting link from the NCAS homepage will soon go live – check back often for updated information!

SAVE THE DATE!

MARCH 12-13, 2021

NCAS ANNUAL MEETING (virtual)

hosted by

**LENOIR-RHYNE
UNIVERSITY**

FUTURE NCAS ANNUAL MEETINGS

2022
Campbell University

2023
East Carolina Univ.

2024
Winston Salem State U.

2025
Could be your institution!

Contact us today!
Dr. Marisol Santisteban
maria.santisteban@uncp.edu

Loriciferan Model Officially Transferred to NC Museum of Natural Sciences

Having been displayed at the museum for a number of years, the transfer of the model from the Academy to the museum is now official. The model is based on the discovery of the Loriciferan, *Pliciloricus enigmaticus*, by Higgins & Kristensen. The Director & CEO of the museum, Dr. Eric Dorfman, thanked the Academy with this statement: “Your gift of the beautiful 3-dimensional laser-fabricated scale model to the Museum’s collections and your desire to ensure that the public and generations to come will appreciate the species that inspired its creation while simultaneously learning about the late Dr. Robert P. Higgin’s important contributions to science are admirable.”

Call for Judges for the Annual Meeting

From Dr. Laura Reichenberg, Pfeiffer University

Judges are needed for virtual presentations. Many of the biological science disciplines are represented at the meeting and, ideally, judges will be paired with presentations that match their area of expertise. You will be asked to judge presentation session, followed by a collaborative selection of Derieux winners in your area. Volunteering your time as a judge is a great way to help encourage our undergraduate researchers, while participating in the Annual Meeting! If you are interested, please email Dr. Laura Reichenberg at laura.reichenberg@pfeiffer.edu or indicate your interest on your Annual Meeting registration form.

Meet the 2020-2021 CASCAS Officers

Photo credit: Dr. Laura Reichenberg, Pfeiffer University



Alicia Sigmon
President
Lenoir-Rhyne University



Allison Wike,
Vice President
Pfeiffer University



Alec Taylor
Secretary
Pfeiffer University



Olivia Nunn
Historian
Lenoir-Rhyne University

Academy Membership Report

Report by Dr. Eric Anderson, East Carolina University

This has been a financially challenging time for many in our NCAS family, and we recognize that fact. For this reason, we have decided to waive this year's membership fee and extend all current NCAS memberships through the end of 2021. If you are financially able and want to continue your financial support for the academy, we welcome your renewal through the membership portal (<https://www.joinit.org/o/north-carolina-academy-of-science>) or make a donation in any amount at <https://www.ncacadsci.org/take-action#donate>.

We Have Missed You!

A note from the Publications Committee

Can't believe this is the first newsletter we have put out since January, so this is why it is packed with lots of great information and updates. Be looking for the January newsletter when we will bring you more Academy news including details of the 2021 Annual Meeting.

Yarbrough Undergraduate Research Grant Award Winners 2020-2021

Report by Dr. Jordan Womick, Campbell University

The Yarbrough Undergraduate Research Grant Committee is pleased to announce the accepted Yarbrough Grant Proposals for the 2020-2021 year. Recipients have indicated their acceptance of the grant and are listed below alphabetically by last name.

1. **Kylie Dahlberg** for the submission “The Effects of Insect Herbivory on Iridoid Glycoside Concentrations in the Native Honeysuckle (*Lonicera sempervirens*) and Non-Native Honeysuckle (*Lonicera japonica*)” with faculty advisor Michael Stiff at Lenoir-Rhyne University.
2. **Katherine Darrigrand** for the submission “Enzymatic dynamic kinetic resolution for the stereoselective synthesis of alpha-hydroxy ketones” with faculty advisor Evan Reynolds at Campbell University.
3. **Jefferson Norwood** for the submission “Testing Phototaxis of Green Sea Urchins (*Lytechinus variegatus*) Against Different Concentrations of Acidity Using High Frequency Light” with faculty advisor Carly York at Lenoir-Rhyne University.
4. **Jillian Peterson** for the submission “Differences in Kinematic Responses of *Danio rerio* to Predation at Varying Acidification Levels” with faculty advisor Carly York at Lenoir-Rhyne University.

Join us in congratulating these student researchers on this achievement!

Yarbrough Grant Review Committee (*parentheses indicate other NCAS positions held*)

Jordan Womick, Chair Yarbrough Grants, Campbell University womickj@campbell.edu

Laura Reichenberg (CANCAS Executive Director) Pfeiffer University

Eric Anderson (Chair Membership Committee), East Carolina University

John A. Knesel, St. Andrews University

Taek You (Vice President), Campbell University

A Pause in Yarbrough Grants for 2021-2022

A note from the Yarbrough Grants Committee:

Due to complications with funding logistics we regret that the Yarbrough Grant will be inactive for the 2021 – 2022 cycle.

Join us in welcoming the new Co-Chair of Yarbrough Grants

Dr. David Cartrette
Dept. of Natural Sciences
Pfeiffer University,



CANCAS Fall Workshop Shifts to January

Report by: Dr. Laura Reichenberg, Pfeiffer University

The Undergraduate Research Workshop of the Collegiate Academy of the NC Academy of Science (CANCAS) will be hosted virtually on Saturday, January 16th, 2021 by Pfeiffer University. This is a great event which includes opportunities to ask questions to a panel of representatives from various programs (Ph.D., P.A., D.O, etc.), followed by workshops on professional ethical practices, graduate school admission preparation, resume development, building a professional social media presence, and best practices for virtual presentations.

Join us for the

Collegiate Academy of the North Carolina Academy of Science Since 1902

Annual Workshop

Hosted virtually on Saturday, January 16th
by Pfeiffer University

Renew Your CANCAS Membership Today!

Membership costs have been reduced this year to \$5 for individuals and \$50 for a group membership. CANCAS individual membership is required for workshop attendance. Participation in the group membership confers **FREE** attendance to the CANCAS workshop in January.

Go to <https://www.ncacadsci.org/cancas/> for instructions on creating CANCAS group memberships.

CANCAS membership can be renewed at the following link: <https://www.joinit.org/o/north-carolina-academy-of-science>.

Please reach out to Dr. Laura Reichenberg at laura.reichenberg@pfeiffer.edu with any questions.

A Tribute & Memoriam to Three Special Individuals

Report by Dr. Judy Moore, Lenoir-Rhyne University

Frank Joseph Schwartz, 1929-2019: We reflect on the incredible life and contributions of NCAS's distinguished colleague and friend with the passing of Dr. Frank J. Schwartz on 26 November 2018. Frank served as journal editor for 19 years (1995-2014) while Professor and Curator of Fishes at UNC's Institute of Marine Sciences (IMS) in Morehead City. He is our longest serving editor, having edited the journal under both its original (*Journal of the Elisha Mitchell Scientific Society*) and current title (*Journal of the North Carolina Academy of Science*). In 2014, the Academy recognized his service with the honorary title of Editor Emeritus.



Born in Pennsylvania, Frank earned a master's degree in Fisheries Biology and a doctoral degree in Ichthyology from the University of Pittsburg. He held several faculty positions before joining the IMS faculty and mentored many graduate students. He lived his passion for aquatic research by traveling widely, clocking one thousand collection and survey expeditions around the world and deep under the sea (1967-2011), with funding from numerous prestigious institutions. He received many honors and distinctions and was one of the world's foremost experts on sharks. Frank published extensively in scientific journals as well as in *Our State* and *Wildlife in North Carolina*. When his body no longer permitted travel aboard his beloved *Capricorn*, he penned papers by hand from his office and his kitchen table, and compiled a bibliography of the literature on hybrid fishes. He passed away at age 89 and is remembered with fond gratitude.

Barbara Hibbs Blake, 1937-2019: On August 18, 2019 our long time NCAS colleague and former member of our Board of Directors, Barbara Blake of UNC-Greensboro and Bennett College, died of stroke complications. Barbara was a noted mammologist who studied the physiology of chipmunks, voles and bats. She was active in Sigma XI, a research honor society for scientists and engineers, and in the American Society of Mammalogists (ASM), serving as editor-in-chief and in other leadership capacities. ASM recognized Barbara with the Hartley H.T. Jackson Award in 2007 for her long and outstanding service to the organization.



Barbara was born in Roseburg, Oregon and graduated from Portland State University before completing her doctoral studies at Yale University. Her professional career included appointments at Drew University (NJ), the University of London (England), Bennett College (Greensboro, NC), and University of North Carolina at Greensboro. Barbara loved observing nature and delighted in the opera and theatre. Barbara and her husband established the Anthony and Barbara Blake Scholarship Fund at Guilford College in Greensboro to support students in their quest for an outstanding education. She is survived by her husband of 56 years, her two daughters, siblings, granddaughters, and her cherished dog Buddy. Thank you, Barbara, for your substantial impact on our NCAS community.

A Tribute... *continued from previous page*

Erin Stewart Lindquist (1975-2019): Dr. Erin Stewart Lindquist was an active member of NCAS and passionate about celebrating undergraduate research. She mentored countless student projects and served on our Board of Directors in a number of capacities, including as a past CASCAS director, organizing undergraduate student workshops and awards. Erin passed away peacefully in her home in Raleigh on August 2, 2019 surrounded by her loving family.



Erin, born in Saratoga Springs, NY, graduated from Cornell University and received her doctorate in ecology from the University of Georgia. Erin served as a faculty for the Organization for Tropical Studies, sharing her love of plants, the tropics, and research with undergraduate and graduate students through courses in Costa Rica while authoring the definitive scientific book on the trees of Cabo Blanco. Since 2006, Erin distinguished herself as professor of Biology and Environmental Sustainability at Meredith College in Raleigh. She was one of the original founders of the Ecological Research as Education Network (EREN) project, an initiative to establish a worldwide network across primarily undergraduate institutions. She inspired everybody around her to improve themselves and make the world a kinder place. She gracefully dealt with cancer for seven years, continuing to enjoy every minute with her kids and inspire all who knew her. We are thankful for Erin's betterment of our Academy and our world.

Opportunities for Service: Volunteer to Serve on the Board

The following positions are available:

President Elect for 2021-2022

Vice President

Elected Member

Treasurer

If interested, please contact Dr. Jean-Luc Scemama: scemamaj@ecu.edu

Summer Undergraduate Research Experience

Report by Dr. Carlos Goller, North Carolina State University

The NSF BIT SURE Research Experience for Undergraduates (REU) Summer 2021, hosted by North Carolina State University, is a 10-week program focuses on *advanced sequencing tools* that are transforming the way biologists conduct research and inclusive science. Participants learn about sequencing techniques and participate in professional development opportunities and virtual site visits. A series of workshops and learning opportunities promote diversity in science and learning. BIT SURE participants receive a stipend.

The **application** is available at: go.ncsu.edu/BITSURE. The deadline is **February 14, 2021**



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“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.

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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

