

GEORGIA COLLEGE AND STATE UNIVERSITY AQUATIC SCIENCES CENTER

Annual ASC Newsletter
2024-2025



INFORMATION ABOUT THE CENTER

The Aquatic Sciences Center has been very active and is grateful to the faculty who are involved and supporting our center. The center provides Georgia College & State University as well as the local community with access to renowned scientists and equipment in order to assess, mitigate and treat every day problems in our waterways. Georgia College & State University's Aquatic Sciences center is lucky to have a group of faculty with such diverse expertise and specialties that will be nothing but an asset to the university and community. The Aquatic Sciences Center hopes to soon take on projects and community samples in order to assist and give back to the Middle Georgia Community. With Georgia College & State University being very centrally located, it puts us in a great position to be able to provide a variety of water quality services. We look forward to seeing what the center can accomplish in the coming year and what we have already accomplished in the last year!

Latest Releases:

CONGRATULATIONS TO
OUR FACULTY

[Learn More](#)

MEMBERS AT GCSU
RESEARCH DAY 2025

[Learn More](#)

THE LATEST COMMUNITY
OUTREACH

[Learn More](#)

A MESSAGE FROM THE ASC DIRECTOR

Dr. Samuel Mutiti

Welcome to this year's issue of the GCSU Aquatic Sciences Center Newsletter! I am excited to welcome all collaborators, researchers, and community members to the ASC this year. I also would like to say farewell to Anna Agi, our past graduate assistant who brought so much to the ASC during her time as a student. I wish her the best with her PhD.



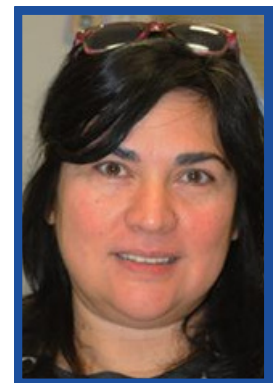
I would also like to welcome Hasari Bermudezsoto (graduate assistant) and Anya Mukundan (research technician) as new ASC affiliates. Our center is committed to fostering interdisciplinary collaboration and innovation to address the pressing water challenges of our time (both emerging and old challenges). Follow us on this exciting journey as we explore the depths of water and help protect our water resources. As our center is partially funded by generous donors, we deeply appreciate any contributions that help sustain our mission.

AQUATIC SCIENCES CENTER SPOTLIGHTS

A MESSAGE FROM THE DEPARTMENT CHAIR

Dr. Kalina Manoylov

As the interim department chair, I am honored to support such a vibrant and dedicated group of researchers, students, and staff in GCSU's Department of Biology and Environmental Sciences. Our Aquatic Sciences Center continues to be a hub of collaboration, advancing the understanding of aquatic ecosystems. This year has brought many exciting developments, from impactful publications to outreach initiatives.



Looking ahead, we'll be hosting several events that showcase our research and foster dialogue with the broader community. As the renovation of Herty Hall begins, the Aquatic Sciences Center will exist not as a singular physical space, but as a collection of researchers, labs, students, and events. Congratulations to the Center's participating faculty and students.

GRADUATING MASTERS STUDENT HIGHLIGHTS

**Anna Agi, Laura Griffin,
Shannon Northen, Sally Sir**

We would like to recognize the students who are graduating from our faculty mentors of the ASC. Anna Agi will be attending North Carolina State University to continue her education with a Ph.D. in crop and soil sciences and fisheries and aquatics.

Her area of study will be aquatic weed management and harmful algal blooms. Laura Griffin will be graduating and applying for her first job. Shannon Northen will be starting her career at Ensae as an environmental scientist. She will be helping with investigation and remediation efforts with in the state. Sally Sir will be moving to Arkansas.



UNDERGRADUATE STUDENT HIGHLIGHTS

We would like to take the time to recognize the undergraduate students who took part in our faculty-mentored student research. These students are those who work under one of our Aquatic Sciences Center faculty.

- **Dr. White:** Elise Mirabella, Kali Holierhoek, Drennan Barnes
- **Dr. C. Mutiti:** Victoria Alden, Melvin Pritchett
- **Dr. DeVore:** Elizabeth Smith, Laura Harvey, Natalie Dally, Emily Pittmann
- **Dr. Weese:** Elias Aufderheide, Ella Reese (Double Bobcat), Samantha Moore
- **Dr. S. Mutiti:** Lola Grant, Kat Stevens



NEW ASC MEMBERS FALL 2025

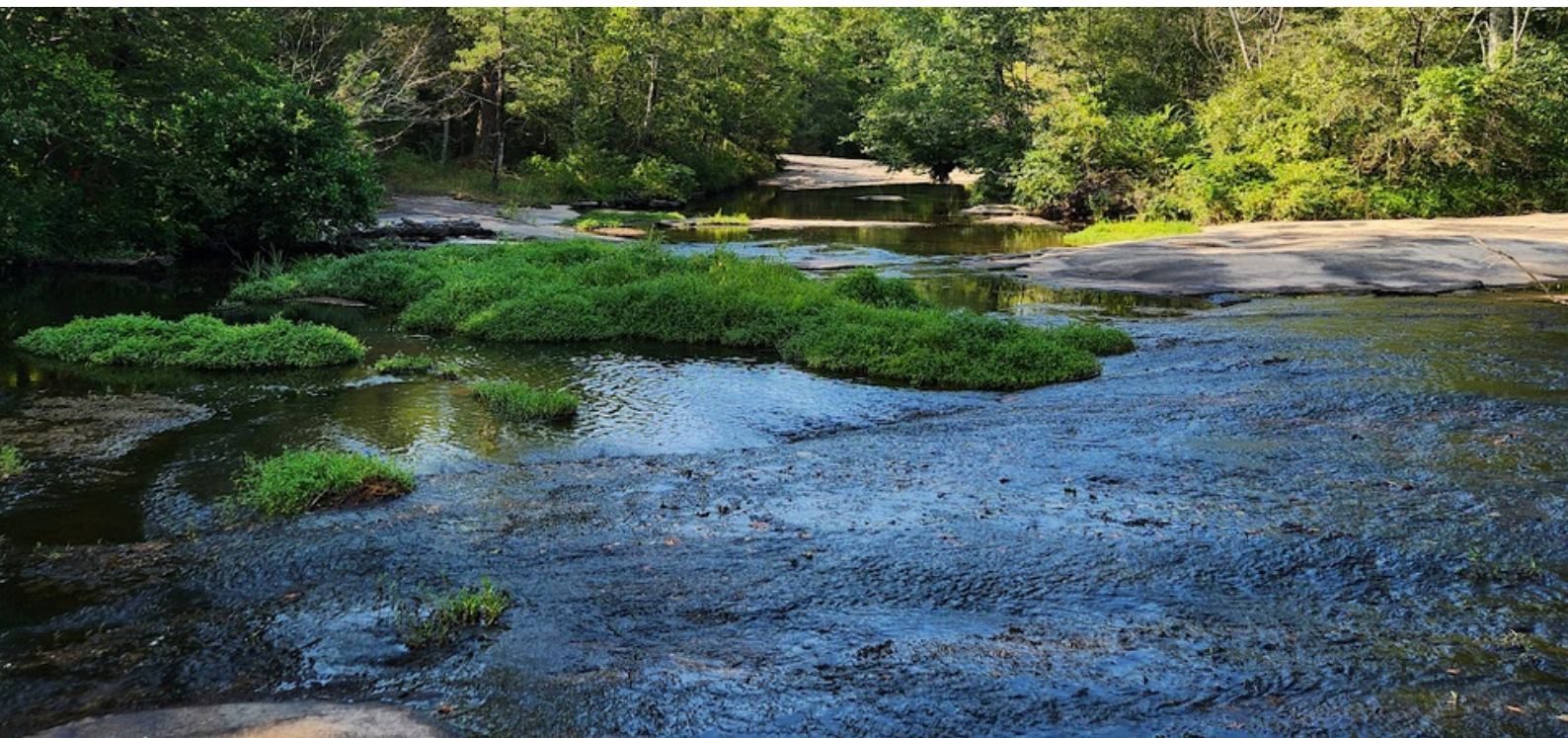
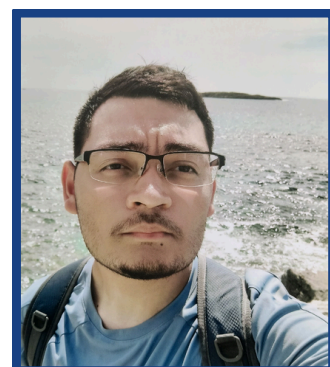
Anya Mukundan — *Research Assistant and Technician*

Originally from Colorado, Anya completed her Masters in Marine Biological Resources (IMBRSea) overseas, studying at multiple institutions including the University of Bergen in Norway. Anya's interests include ecotoxicology, applied marine conservation, and molecular ecology. She is excited to support important aquatic research, monitoring, and education throughout the state.



Hasari Bermudez Soto — *Graduate Assistant*

Hasari is a graduate student under Dr. Mutiti and Dr. VandeVoort researching heavy metal contamination in soils. As a graduate assistant with the ASC, he will promote the center, organize community service events, and help write grants.



ASC ACCOMPLISHMENTS



CONGRATULATIONS TO OUR FACULTY!

- Congratulations to our ASC Faculty for being awarded a grant to complete the second edition of the Introduction to Environmental Science textbook. These faculty are Dr. C. Mutiti, Dr. S. Mutiti, Dr. White, Dr. Manoylov, and Dr. VandeVoort. [Learn More.](#)



STUDENTS OF ASC FACULTY WINNING AT CONFERENCES

- Sally Sir - Dr. Kristine White - Association of Southeastern Biologists (ASB) - Best Presentation in Aquatic Biology
- Victoria Alden - Dr. Christine Mutiti - Georgia Academy of Science (GAS) - Best Undergraduate Poster in the Earth and Atmospheric Sciences section



MEMBERS AT GEORGIA ACADEMY OF SCIENCE!

- Elias Aufderheide, Wiley Bundy, Muzila Nchimunya, Anna Agi, and Megan Martin all presented at GAS 2025 March 7-8. Anna Agi and Megan Martin won best presentation in Biological Sciences and Earth & Atmospheric Sciences, respectively.
- Anna Agi, Wiley Bundy and Muzila Nchimunya were also awarded travel grants.



MEMBER ACCEPTED INTO GA AQUARIUM PROGRAM

- Cameron (Cami) Cooper (sophomore environmental science) was accepted into the volunteer program at the Georgia Aquarium for the Summer of 2025. [Learn More.](#)



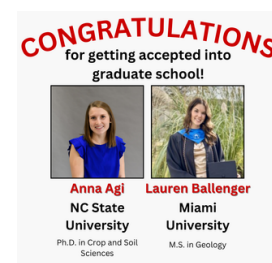
OUR MEMBERS AND THEIR NEW JOBS

- Shannon Northen, Jaiden Stidston, and Matthew Tessendorf are all putting their newly-earned degrees to work in their new careers. We are so proud!. [Learn More](#)



MEMBERS ACCEPTED INTO GRADUATE SCHOOL

- Anna Agi will be attending NCSU for her Ph.D. in crop & soil sciences and fisheries and aquatics. Lauren Ballenger will be attending Miami University for her M.S. in geology. [Learn More.](#)



ASC ACCOMPLISHMENTS

DR. MELANIE DEVORE - BOARD MEMBER OF GA NATIVE PLANT SOCIETY

- Dr. Melanie DeVore was recently named as board member of the Georgia Native Plant Society. Congratulations on your accomplishment!



CONGRATULATIONS TO MEMBERS OF THE WEESE LAB!

- Daquille Peppers, Caroline Fowler, and Jordan Yacoub all from Dr. Weese's Marine Lab recently collaborated on a paper. The paper, titled "Francisella orientalis detected in feral tilapia populations in Hawai'i" has been published in the *Journal of Aquatic Animal Health*.



FORMER STUDENT PUBLISHES RESEARCH

- Cameron Brown, a former M.S. student of Dr. Barkovskii, published her work titled "Environmental Drivers of the Divergence of Harveyi Clade Pathogens with Distinctive Virulence Gene Profiles" in the journal *Microorganisms*. [Read here.](#)



MEMBER PRESENTED AT NATIONAL MEETING

- Anna Agi, club president and Aquatic Sciences Center graduate assistant, presented at the North American Diatom Symposium (NADS) at Iowa Lakeside Laboratory. She presented a poster presentation and won a travel award. \



AQUATIC SCIENCES CLUB MEMBERS AT THE GEOLOGICAL SOCIETY OF AMERICA

- Three of our club members went to Anaheim, California to present at The Geological Society of America's Annual Meeting. Both Tori Morgan and Muzila Nchimunya presented a poster and Lauren Ballenger presented an oral presentation .



CONGRATULATIONS TO 2024 ASC SUMMER FELLOW

- Abigail Dugger was awarded the 2024 Aquatic Sciences Center Fellow for her research with amphipods. Check out her images.



MURACE SUMMER FELLOWSHIP RECIPIENTS

- Dr. Christine Mutiti and student Rebecca Barringer were one of the seven Summer 2025 recipients of the MURACE Summer Fellowship for their research on soil carbon on forest environments.



CONGRATULATIONS TO THE 2025 ASC SUMMER FELLOW

- Graduate student Muzila Nchimunya was awarded the 2025 Aquatic Sciences Fellowship for her research on groundwater quality assessment in Lusaka, Zambia.



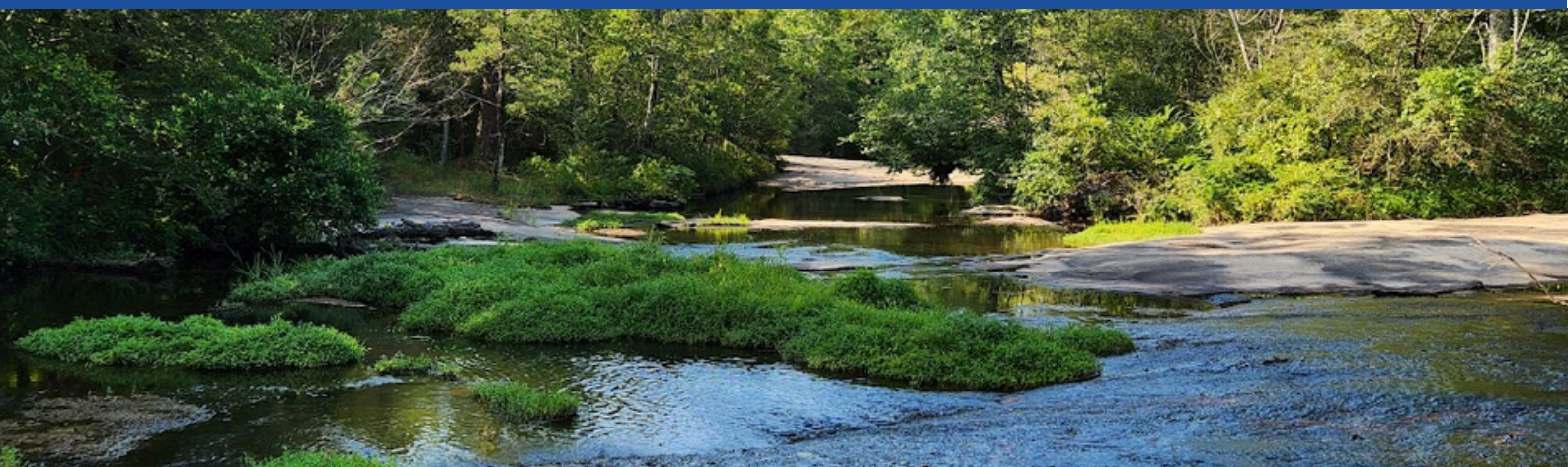
NEW INTERIM CHAIR AND DEAN ANNOUNCED

- Congratulations to Dr. Indiren Pillay, who has been appointed as Interim Dean of the College of Arts & Sciences, and Dr. Kalina Manoylov, who has stepped into the role of Interim Department Chair.



MUTITI LAB STUDENTS TRAVEL TO ZAMBIA

- This summer (2025), Dr. Samuel Mutiti was awarded an Academic Affairs Small Research Grant to conduct important research on water quality and phytoremediation in Lusaka, Zambia, along with two graduate students, Muzila Nchimunya and Megan Martin.





Dr. Dave Bachoon

Ph.D. Microbiology
Specialty

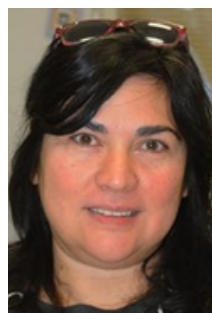
- Microbial Source Tracking



Dr. C. Daniel Burt

Ph.D. Crop & Soil Science
Specialty

- Enumeration of fecal bacteria in soil and water



Dr. Kalina Manoylov

Ph.D. Zoology/Ecology,
Evol. Biology/Behaviour
Specialty

- Algal Ecology & Water Quality



Dr. Christine Mutiti

Ph.D Botany
Specialty

- GIS & wetland ecology



Dr. Allison Rick VandeVoort

Ph.D Plant & Environmental
Science
Specialty

- Soil characterization & analysis



Dr. David Weese

Ph.D Biological Sciences
Specialty

- Population genetics & biodiversity through DNA



Dr. Andrei L. Barkovskii

Ph.D. Microbiology
Specialty

- Waterborne Pathogens



Dr. Melanie DeVore

Ph.D. Plant Biology
Specialty

- Aquatic plant taxonomy



Dr. Matt Milnes

Ph.D Zoology
Specialty

- Vertebrate physiology



Dr. Samuel Mutiti

Ph.D Hydrology/Geology
Specialty

- Soil & water quality monitoring/assessment (physical, chemical, & biological)



Dr. Kristine White

Ph.D Coastal Sciences
Specialty

- Water quality assessment with aquatic arthropods



Anna Agi

Aquatic Sciences Center Graduate Assistant- Biology

- Georgia College & State University, Milledgeville, Georgia
- Help maintain the website, organize community service events, and help write grants for the center
- President and founder of the Aquatic Sciences Club (ASC)
- Published algal voucher flora to website found [here](#)



Daly Tuten

Aquatic Sciences Center Research Student - Biology

- Georgia College & State University, Milledgeville, Georgia
- Research student for the center working on a personal research project
- Title: Heavy metals and nutrients from *Hydrilla* found in Lake Sinclair



Ruth Eilers

Aquatic Sciences Center Partnership with Academic Outreach

- Provides a variety of hands-on science activities to P-12 students and adults in Middle Georgia and beyond.
- 2022 recipient of the Georgia Adopt-a-Stream Trainer of the year award
- Heads the GCSU Thirst for Knowledge and offers Adopt-a-Stream monitoring events and trainings

Dr. Dave Bachoon

- **Title:** Spatiotemporal assessment of pathogenic *Leptospira* in subtropical coastal watersheds. **Journal:** *Journal of Water and Health*, 2024.
- **Title:** Mitochondrial DNA marker: A PCR approach for tracking rat (*Rattus rattus* and *Rattus norvegicus*) fecal pollution in surface water systems. **Journal:** *The Science of the Total Environment*, 2024.

Dr. Andrei L. Barkovskii

- **Title:** Environmental Drivers of the Divergence of Harveyi Clade Pathogens with Distinctive Virulence Gene Profiles **Journal:** *Microorganisms*, 2024.

Dr. Melanie DeVore

- **Title:** Stinging Trichome Density and Morphology of Three Nettle Species Reflect Mountain Gorillas' Feeding Behavior. **Journal:** *Ecology and Evolution*, 2025.

Dr. Kalina Manoylov

- **Title:** Growth and anatoxin-a production of *Microcoleus* (Cyanobacteria) strains from streams in California, USA. **Journal:** *Harmful Algae*, 2025.
- **Title:** The chloroplast and mitochondrial genomes of two *Gomphonema parvulum* (Bacillariophyta) environmental isolates from South Carolina (United States) and Virginia (United States). **Journal:** *Journal of Phycology*, 2024.
- **Title:** Has climate change over the last ten years caused a banalisation of diatom communities in Cypriot streams?. **Journal:** *Journal of Phycology*, 2024.
- **Title:** The importance of integrating phycological research, teaching, outreach, and engagement in a changing world. **Journal:** *Journal of Phycology*, 2024.
- **Title:** Use of natural history museum ungulate specimen hair as biomarkers for environmental trace element contamination. **Journal:** *Environmental Science and Pollution Research*, 2024.
- **Title:** Preface: Advances in freshwater algal ecology. **Journal:** *Hydrobiologia*, 2024.



Dr. Matthew Milnes

- **Title:** Evolutionary Loss of Male-Specific Coloration Is Associated with the Loss of Androgen Receptor Expression in Skin of *Sceloporus* Lizards **Journal:** *Ecological and Evolutionary Physiology*, 2024.
- **Title:** Effects of testosterone on urogenital tract morphology and androgen receptor expression in immature Eastern Fence lizards (*Sceloporus undulatus*) **Journal:** *General and Comparative Endocrinology*, 2024.

Dr. Samuel Mutiti

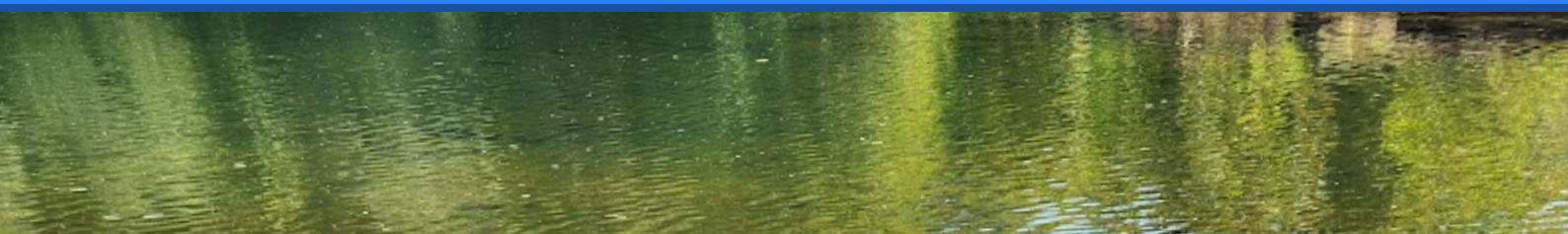
- **Title:** Community priorities in a landscape of environmental lead contamination: Intersectionality of poverty, well-being, and environmental contamination. **Journal:** *Advances in Global Health*, 2024.

Dr. David Weese

- **Title:** *Francisella orientalis* detected in feral tilapia populations in Hawai'i. **Journal:** *Journal of Aquatic Animal Health*, 2024.
- **Title:** Genetic signature of river capture imprinted in several *Schizopygopsis* fishes from the eastern Tibetan Plateau. **Journal:** *Genes*, 2024.

Dr. Kristine White

- **Title:** Caribbean Amphipoda (Crustacea) of Panama. Part IV: parvorder Caprellidira. **Journal:** *ZooKeys*, 2025.
- **Title:** The diversity and phylogenetic relationships of a *Chaetopterus* symbiont community in Djibouti, with redescription of *Chaetopterus djiboutiensis* Gravier, 1906 stat. nov. (Annelida: Chaetopteridae). **Journal:** *Diversity*, 2025.
- **Title:** Preliminary Checklist of Amphipod Crustaceans from Sapelo Island, GA. **Journal:** *Georgia Journal of Science*, 2024.
- **Title:** Caribbean Amphipoda (Crustacea) of Panama. Part III: parvorder Lysianassidira. **Journal:** *ZooKeys*, 2024.
- **Title:** Caribbean Amphipoda (Crustacea) of Panama. Part II: parvorder Hadziidira. **Journal:** *ZooKeys*, 2024.



EARTHFEST 2025

- Another successful EarthFest complete with GCSU's Environmental Science Club - April 25th. [Learn More](#)

ARTHEALTHY FESTIVAL

- Another partnership event with GCSU's Academic Outreach on April 12th from 12pm to 4pm. [Learn More](#)

SPRING WATER WEEK

- Our Fall Water Week is always such a success that we decided to do it twice! Spring Water Week featured a symposium, movie night and cleanup. [Learn More](#)

GUEST SPEAKER

- GCSU Department of Biological and Environmental Sciences as well as the ASC had the honor of hosting guest speaker, James Porter. [Learn More](#)

HOLIDAY CLEANUP SUCCESS

- We had another successful cleanup, this time in December as part of our holiday cleanup followed up with a holiday potluck! [Learn More](#)

2ND FALL WATER WEEK

- For the second year in a row, the ASC partnered with GCSU's Academic Outreach to host an amazing Water Week featuring a symposium and education day. [Learn More](#)

GCSU RECENT GRADUATE EXCELS AT SUMMER INTERNSHIP

- Shannon Northen recently completed her summer internship with Fox Environmental as an Environmental Specialist Intern following graduation. [Learn More](#)



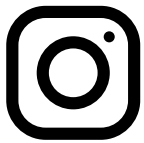
STAY IN THE LOOP

Contact Us:

Aquatic Sciences Center
Georgia College and State
University
Herty Hall Room 206
Campus Box 081
Milledgeville, GA, 41061
aquaticscience@gcsu.edu
478-445-5858



SOCIAL MEDIA



@asc_gcsu



@asc_gcsu

UPCOMING EVENTS

- ASC Symposium -
October 15th, 5 - 7
p.m. in Kenneth S.
Saladin ISC atrium.
- Tanyard Branch Creek
Cleanup - October 17th,
2 - 4 p.m.
- Water Education Day -
October 18th, 11 a.m. -
2 p.m. at Kenneth S.
Saladin ISC
- GA Cyber Academy
Community Day -
October 22nd, 11 a.m. -
3 p.m. in Fort Valley

WANT TO SUPPORT THE ASC?

Donations to the ASC
directly support community
outreach initiatives, student
research, and innovative
programs that connect the
community to vital water
research. Please visit
www.gcsu.edu/asc to make
a gift.

