Note from the Chair

The 2021-22 school year is now in the books and what a year it was for BioSci! Our amazing students, faculty and staff continued to go “above and beyond” and Gumby their way through another year.

As you will see in this edition of our newsletter, we continued to garner attention and awards for our excellence in discovery, preparation of the next generation of biologists and outreach to increase biological literacy in South Carolina and beyond.

This past semester, we were thrilled to have an in-person BioSci Undergraduate Research Symposium featuring the discoveries made by seven students completing Departmental Honors or Departmental Scholars requirements. We also greatly enjoyed visiting the 15 posters, four of which won awards, presented by undergraduate Creative Inquiry students at the annual Focus on Creative Inquiry poster session.

We hosted the 43rd Biology Merit Exam with 275 participating middle and high school students. This year's theme was frogs. Watch out for these budding biologists (no pun intended) — they did a phenomenal job on this challenging exam, written by Professor Emeritus Robert Kosinski.

A few weeks ago, we celebrated the life of Professor Emeritus David Tonkyn. He was an animal ecologist who was passionate about conservation and endangered species, particularly of tigers. He helped start Tigers for Tigers and led field study courses to the Rocky Mountains and India during his 31 years in BioSci. The Dr. David Tonkyn Memorial Fellowship has been established to support graduate students studying conservation and endangered species, and we would welcome your donations.

As always, thank you for all you do to support our students, faculty and staff.

Best regards,
Saara

Please visit our Facebook page or follow us on Twitter or Instagram for weekly news about our students, alumni, faculty and staff. Email us with any questions/comments/suggestions at BiolSci@clemson.edu.
Discoveries in Biological Sciences

- **Zhicheng Dou** and Chemistry professor Dan Whitehead discover a promising therapy for those who suffer from toxoplasmosis, a disease caused by the eukaryotic pathogen *Toxoplasma gondii*.
- **Matt Koski**'s work supports strengthening conservation efforts in glacial refugia because of their high genetic diversity and shows that pigments in petals visible only in the ultraviolet spectrum play an integral role in the ability of silverweed plants to quickly respond to a changing environment.
- **Bill Baldwin** studies the links between obesity, age and body chemistry and finds that some of the interactions behind weight gain are complex and cannot be distilled down to just omega-3 and omega-6 fatty acids.
- **J. Antonio Baeza**'s recent discovery of two new marine species has him looking at the future and the past.
- **Saara DeWalt** and an international team of tropical ecologists show naturally regrowing forests recover surprisingly fast and can play a role in climate change mitigation.
Alumni in the Spotlight

- Class scheduling luck started Hayley Hassler (M.S. microbiology ’21) on her path to COVID immunity research.
- Brandie Smith (M.S. zoology ’97) named the John and Adrienne Mars Director of the Smithsonian’s National Zoo and Conservation Biology Institute.
- Woody Bryan (B.S. zoology ’86), chief business officer at Revolo Biotherapeutics, serves as a judge in the inaugural College of Science Catalyst Competition where students compete to show their innovation and problem-solving skills.
- Amoira Rush (B.S. biological sciences ’21) serves as hometown’s example of pursuing — and achieving — big dreams.

**Tigers on Call connects pre-health students and alumni in health care fields** — Of the 48 providers, 24 were BioSci alumni. Thank you to all our alumni providers: Craig Brackett, microbiology ’82; Lisa Carroll, microbiology ’04; Shivani Desai, biological sciences ’17; Kimberly DuBose, microbiology ’95; Trent Gillespie, biological sciences ’94; Jonathan Glen, pre-medicine ’68; Sarah Gustafson, biological sciences ’05; Natasha Jeter, microbiology ’96; G. Tripp Jones, zoology ’71; Cecil Bryan Jordan II, microbiology ’79; Matthew Logan, biological sciences ’96; Greg Niemer, microbiology ’91; Ashley Rickey, microbiology ’06; Kayla Shine, microbiology ’19; Keith Smith, microbiology ’82; Sam Stone, pre-medicine ’76; J.T. Thomas, biological sciences ’18; Brian Tucker, microbiology ’99, plant and environmental sciences ’04; Benjamin J Velky, biological sciences ’12; Jay Wilkins, biological sciences ’14.
Biological Sciences undergraduate and graduate students honored with 2021-2022 spring awards

Clemson University - Student Awards - Read More

- Phil and Mary Bradley Graduate Student Award for Mentoring in Creative Inquiry: Lauren Stoczynski, Ph.D. Biological Sciences '22

College of Science - Student Awards - Read More

- Outstanding Graduate in Learning: Lauren Stoczynski, Ph.D. biological sciences '22
- Outstanding Graduate in Discovery: Rhett Rautsaw, Ph.D. candidate in biological sciences
- Blue Key Academic & Leadership Award: Kori Hays, B.S. biological sciences '22
- Science Student Advisory Board Outstanding Member Award: Kat Terwelp, B.S. microbiology '22

Department of Biological Sciences - Undergraduate Student Awards

- Robert H. Martin Award (highest GPA): Taylor Thames, B.S. microbiology (biomedicine), minor psychology
- Outstanding Senior in Discovery: Grace Holliday, B.S. biological sciences '22
- Outstanding Senior: Kori Hays, B.S. biological sciences '22 and Charles Henry, B.S. microbiology '22
- Outstanding Junior: Andrew Fiorentino, B.S. biological sciences
- Special Recognition for Engagement: McKenna Rybaltowski, B.S. microbiology '22

Department of Biological Sciences - Graduate Student Awards

- Outstanding Graduate in Engagement Award: Randi Sims, M.S. biological sciences
- Outstanding Graduate in Learning Award: Lauren Stoczynski, Ph.D. biological sciences '22
- Outstanding Graduate in Discovery Award: Rhett Rautsaw, Ph.D. biological sciences

Biological Sciences Graduate Student Association Awards (BSGSA)
Commitment to Service: Lauren Stoczynski, Ph.D. biological sciences ’22
Commitment to Research: Kea Payton, Ph.D. biological sciences
Commitment to Graduate Student Life: Keiffer Williams, Ph.D. biological sciences
Alfred “Hap” Wheeler Distinguished BSGSA Member: Cierra Sullivan, Ph.D. biological sciences

Biological Sciences faculty and staff award presenters and award winners: Mike Moore, Zhicheng Dou, Brad Jones, Andrew Archibald, Carla Brewer, Antonio Baeza, Teri Elliott, Saara DeWalt, Londan Charley, Laura Love.

BioSci faculty and staff honored with College of Science awards

- Hattie B. Wagener Endowed Memorial Administrative Award: Teri Elliott, administrative assistant
- Outstanding Team Award: Biological Sciences Advising Center including head academic advisor Londan Charley; staff advisors Laura Love, Ashley Hubbard, Brad Jones, Anna Lee McTeer and Andrew Archibald; faculty advisor Robert Ballard; and registration coordinator Carla Brewer
- Excellence in Student Engagement Award: Antonio Baeza, associate professor
- Rising Star in Discovery Award: Zhicheng Dou, associate professor
- Dean’s Assistant Professorship Award: Matt Koski received one of the two awards
- Dean’s Distinguished Lectureship Award: Chris Minor received one of the three awards

Read about all recipients of the Spring 2022 Awards, Dean’s Professorship Awards and Dean’s Distinguished Lectureship Awards.
Kim Bowen (M.S. biological sciences '22) planned her first year of classes in BioSci’s online M.S. program to coincide with the curriculum she was teaching in her high school Advanced Placement biology classroom in Nampa, Idaho. Image credit: Nampa School District.

Teaching the teachers: our online M.S. in biological sciences impacts classrooms across the country

Our M.S. in biological sciences for Science Educators online program has had a national impact since its start in 2010. Thousands of K-12 teachers and science educators employed by museums, libraries, field stations, research laboratories and community colleges have enrolled in the program’s courses. As of April 2022, the program has awarded 730 M.S. degrees. Students have come from 41 states and several foreign countries.

Associate Professor Michael Childress said, “Teaching teachers is one of the most rewarding parts of my job. When teachers learn how to conduct experiments with their own students, you know your love of science will reach many more students for years to come.”

Read more about the impacts of our online master’s degree program.

More on Biological Sciences...

- After seeing the documentary Picture a Scientist about gender inequality in science last year, Alumni Distinguished Professor Lesly Temesvari envisioned an event that would spotlight women’s scholarship at Clemson. Her idea became a reality at the spring Picture a Scholar event.
- Discover what inspired Lorena Endara’s love for science and botany and led her to Clemson as both a lecturer and curator for the herbarium in the Bob and Betsy Campbell Museum of Natural History.
- Charles Henry (B.S. microbiology ‘22) and other BioSci students mentored and tutored students in the after-school program at the Littlejohn Community Center through the CU-REACH (Clemson University Reaching for Equitable and Cultural Heights) program.
- Michael Childress and his Something Very Fishy outreach project were at Greenville's Artisphere.