ABOVE: Thirty-one students and nine professors from the Department of Chemistry and Biochemistry represented the College of Charleston at the Southeastern Regional Meeting of the American Chemical Society in November.

As we get ready to welcome the Class of 2024, we’d like to take a moment to reflect on just a few of our most exciting moments and accomplishments from the 2018-2019 academic year.

As always, our students participated in a wide array of research and experiential learning opportunities, often supported by our generous donors, and many were recognized on the national and regional stage. Our faculty continued to acquire external grants that fueled both their research interests and their ability to mentor undergraduate students in hand-on science and math research projects.

History was made this year as the School established the College’s first engineering program - a Bachelor of Science in Systems Engineering, and we hope to complete final state-level approval of the College’s first PhD program in Mathematics with Computation.

Please take a moment to review some of last year’s finest moments! Digital viewers may click on any news item for more information.

Sebastian van Delden
Interim Dean

Biology professor Phil Dustan attended the News & Documentary Emmy Awards as part of the team of “Chasing Coral,” a film that has brought global attention to the issue of coral bleaching caused by changing ocean temperatures. “Chasing Coral” was awarded Outstanding Nature Documentary. The film is available on Netflix.

Dustan is pictured with filmmaker Jeff Orlowski.

Graduate marine biology student, Sarah Kell, appeared in a three-part series on abcnews.com that featured her research on microplastics in our drinking water.
Biochemistry majors Dashiell Jay, left, and Mason Huebsch, right, were named Goldwater Scholars, one of the highest honors for STEM undergraduates. Jay and Huebsch are 2 of the 10 Goldwaters awarded to College of Charleston students since 2013.

ABOVE: Hillary McLaurin won a Fulbright Award to teach in Germany. A 2019 graduate, McLaurin double majored in computer information systems and German. This summer she was awarded a School of Sciences and Mathematics undergraduate summer research grant to study security and vulnerabilities of smart home and wearable devices such as Alexas, fitness trackers and smart watches.

BELOW: Geology major Trey Gillespie won the prestigious Outstanding Student Presentation Award (OSPA) at the Fall 2018 American Geophysical Union (AGU) conference in Washington, DC. OSPA awards promote, recognize and reward undergraduate, Master’s and PhD students for quality research in Earth and space sciences.

Students studying Astronomy and Astrophysics can now view the night skies with the department’s new 24-inch Plane Wave, the most powerful telescope in the State of South Carolina.
LEFT: Mathematics alumnus Scott Ward ’85 established The Scott Ward Award for Excellence in Mathematical Studies Endowment as a means to give back to the College and to encourage others to build their own endowment. John Cobb ‘19, a double major in mathematics and chemistry was the first recipient. A 2017 Goldwater Scholar and a recipient of the National Defense Science and Engineering Graduate Fellowship, John will pursue a graduate degree at University of Wisconsin Madison.

RIGHT: GEL Laboratories LLC recently established the GEL Laboratories Scholarship in Chemistry, an annual, non-endowed scholarship designed to bolster the number of chemistry graduates at the College. Awards are made to first- and second-year students who plan to pursue a chemistry degree.

GEL currently employs nearly 50 College of Charleston graduates.

Research

Astrophysics majors Blake Mino and Lucy Williamson journeyed to the Atacama Desert in northern Chile to visit the LaSilla Observatory to take part in the first three-nation, science collaboration between astronomy faculty and students. By researching the atmospheres of exoplanets, Mino and Williamson are helping NASA focus its study of planets capable of supporting life.
**BS in Systems Engineering**
The School of Sciences and Mathematics welcomes its first class of engineering students in Fall 2020! With overwhelming support from the Lowcountry’s tech and manufacturing industry leaders, the South Carolina Commission on Higher Education approved a new major in systems engineering. This unique program will enable graduates to gain employment in a wide variety of engineering fields. A strong liberal arts curriculum will include four semesters of foreign language.

**Center for Oceans and Human Health and Climate Change Interactions**
The School of Sciences and Mathematics will now be part of a multi-institution center in South Carolina studying the effects of ocean health-related illness. Funded by a $5.7 million grant from the National Institute of Environmental Health Sciences (NIEHS), this center includes more than 20 researchers from five colleges and universities whose work is aimed at better protecting human health. The intersection of climate change and urbanization is nowhere more apparent than in the coastal zone. Personnel will be engaged in field and laboratory research projects that will lead to new educational and research opportunities for students and faculty at the College.

**MS in Data Science and Analytics**
RIGHT: This summer School of Sciences and Mathematics welcomed its first class of the new Master of Data Science and Analytics program, which aims to bring students into the world of big data and artificial intelligence to solve the most challenging problems in business, science and medicine. Designed as an accelerated curriculum, the graduate degree will prepare students for their careers within 13 months. The curriculum is also designed to allow students to customize their experience to focus on emerging fields such as biomedical informatics, business analytics, and physics.

**Study Abroad**
This past year, Science & Math faculty led study abroad courses and experiential learning trips to Indonesia, Iceland, Germany, Panama, Costa Rica, Madagascar, the Bahamas, New Mexico, Spain and India.