

**CC&E DEI Progress Report
June 10, 2021**

The College of the Coast & Environment developed a Diversity Action Plan one year ago. While before that time, we were concerned about diversity issues, the plan was an opportunity for us to formalize and systematize our efforts in this important endeavor. This report looks back over our efforts of the last year to measure our progress. In addition to that, because we view our Action Plan as an ongoing and evolutionary document, we will use what we have learned in the last year to make adjustments.

OVERVIEW

National Concern: Lack of Diversity in the Geosciences

According to 2017 data from the National Science Board, diversity in the earth, atmospheric and ocean sciences is the lowest-performing among all of the STEM areas, with approximately two percent of bachelor's and graduate degrees awarded to Black individuals and approximately 10 percent of bachelors and five percent of graduate degrees awarded to Latinx individuals.

The magnitude of this challenge has been illustrated by Dr. Peter Betzer, retired Emeritus Professor and founder of the Bridge to the Doctorate Program at the University of South Florida College of Marine Science. His research indicates that from 2002 to 2006, a total of 13,093 PhDs were awarded nationally to Black individuals in all programs. Of these, 454 were awarded in the field of ocean science. Of the ocean science doctoral degrees conferred nationally, a total of six were to individuals from the Black community and seven to individuals from the Latinx community during these five years. Since having a doctoral degree in the appropriate field of study is a critical requirement for faculty positions, the applicant pool of diverse candidates has been and remains very low.

Diversity in CC&E

Student Diversity

While diversity in CC&E's student body exceeds the national average in our fields of study, it falls far below the demographics for our state. Between Spring 2008 and 2019 individuals from underrepresented communities earned 12 percent of CC&E's bachelor's degrees, seven percent of the master's degrees, and three percent of the doctoral degrees. (Source: "LSU Graduates by College, Degree Level, Curriculum, Racial/Ethnic Category, and Gender.")

Faculty Diversity

Due to the global nature of the disciplines studied by our college, CC&E's faculty is versed in collaborating with people from diverse cultures and backgrounds. Additionally, nearly 30 percent of our faculty were born outside of the U.S., many from Asian countries. However, individuals from underrepresented communities comprise seven percent of CC&E's faculty.

CC&E Action Plan

In 2020, CC&E created its first Diversity, Equity and Inclusion (DEI) Action Plan. This plan includes the collective ideas of CC&E's leadership, faculty, staff, and graduate students as well as data from national

demographics and scientific literature. In this action plan, which is aligned with the *LSU Diversity & Inclusion Roadmap, 2020-2022*, we 1) assess our progress since our Coastal Environmental Science BS degree was established in 2008; 2) show where progress is needed; and 3) develop strategic initiatives to attract more students from underrepresented communities, hire more faculty from underrepresented communities, ensure that the pipeline to LSU becomes more robust and representative of the demographics of our state, and that CC&E is an inclusive, welcoming, and nurturing environment for all students, faculty, and staff. The plan identifies four initiatives and specific action items that CC&E will undertake to maintain an environment that embraces individual differences, encourages multiple perspectives, and better prepares students for an increasingly diverse workforce. These initiatives include:

- Augment the Student Pipeline – We must continue to attract and retain more students from underrepresented communities, mentor students from underrepresented communities so that they can continue to advance academically, and encourage more students from underrepresented communities to pursue graduate degrees.
- Build the Ranks of our Faculty – We are improving our strategy to recruit more faculty from underrepresented communities.
- Reinforce a Culture of Inclusion – We will continue to foster an atmosphere of inclusion, build collaborative alliances, and increase funding for diversity initiatives.
- Teach and Learn: Improve Pedagogy – We must continuously improve the quality of teaching, modifying methods and practices as needed so that a diverse student body can gain a deeper understanding of the subject matter.

CC&E Initial Areas of Focus

While tremendous work needs to be done to improve diversity throughout the college, CC&E's leadership team has decided to initially focus on the greatest challenge for our college – improving diversity among faculty and doctoral students.

INTERNAL PROGRESS

CC&E DEI Task Force

CC&E has created a DEI task force to help implement action items. This task force is comprised of seven members – one faculty representative from DOCS and one from DES, one from staff, one from CC&E's Advisory Council, one from CEGO, one alumnus, and a chair. The committee is staffed by a representative from the dean's office. Members will serve one-year, renewable terms. Our first task force meeting will be in the fall of 2021 with Dr. Sibel Bargu Ates serving as the task force chairperson.

Bridge to the Doctorate

Our research led us to the Bridge to the Doctorate program at the University of South Florida (USF) College of Marine Science. Working in partnership with their local community, USF created an endowment, currently funded at \$1.3 million, to help individuals from underrepresented communities obtain doctoral degrees in marine science. After implementation, USF awarded doctoral degrees to six individuals from the Black community and nine representatives from the Latinx community between 2010-2016. This was a large percentage of the doctoral degrees in marine science that were awarded nationally to representatives of these underrepresented communities during those years.

CC&E met with LSU's Bridge to the Doctorate program leaders. With appropriate funding, CC&E is convinced that we can achieve similar results to USF. Our college is in the initial stages of developing materials to support this philanthropic priority and has already met with the LSU Foundation and two potential donors.

Developing Interest in Graduate Studies from within CC&E's Coastal Environmental Science Program

The college is looking internally to help our undergraduates understand their career options as well as the path to academia.

Funding Proposals

The college continues to look for proposals that may fund these initiatives.

EXTERNAL PROGRESS

Dean D'Elia routinely and actively engages with many organizations and institutions of higher education in our fields of study. He has identified several organizations that also share a commitment to improving diversity in our fields of study. The dean and other members of the college have engaged in conversations with these organizations, sharing best practices, working toward the establishment of formal and informal programs and processes, and identifying funding opportunities to increase diversity. These are highlighted below.

GOMURC

Dean D'Elia currently serves as the chairperson of the Gulf of Mexico University Research Collaborative, or GOMURC. This organization represents more than 80 public and private universities across the five Gulf States. GOMURC's board has unanimously agreed to partner across institutions to help narrow the diversity gap.

In January 2021, GOMURC hosted a virtual workshop. More than 50 participants exchanged ideas regarding the development of a field-specific strategy to enhance the production of doctoral graduates in the physical and environmental sciences. Three reoccurring themes were mentioned: 1) the importance of and components for successful mentorship, 2) the need to help students establish and leverage networks, and 3) clear communication about career path and graduate program opportunities, among other items. A follow-up meeting was held in February 2021.

On June 29, 2021, LSU, on behalf of GOMURC, will host the visit of Dr. Lauren Alexander Augustine, Executive Director, Gulf Research Program, National Academies of Science, Engineering, and Medicine; to discuss these challenges and share ideas about network-based activities that GOMURC could lead on behalf of the Gulf Research Program. These include but are not limited to developing a partnership-network-mentorship model, establishing a two or three-week summer institute about coastal and environmental science for high school teachers who work in underrepresented communities, obtaining more scholarships and graduate assistantships, and developing more programs similar to the National Science Foundation Research Experiences for Undergraduates, or REU. In preparation for this visit, CC&E is reviewing information on current or newly-funded NSF projects related to DEI to identify additional potential collaborators and working with GOMURC to identify DEI initiatives in physical and environmental science in the Gulf states.

GOMURC is in the initial stages of developing an informal program to exchange doctoral students and provide students with opportunities for CV review and research presentations at member institutions.

Consortium for Ocean Leadership (COL)

Based in Washington, D.C., COL is a consortium of leading ocean science and technology institutions from academia, aquaria, and industry. As a former COL board member, Dean D'Elia partnered with COL on the submission of an NSF INCLUDES Planning Grant: Gulf of Mexico Partnership for Broadening Participation in Graduate Ocean Science Education. The proposal aimed to increase the participation of people from underrepresented communities in graduate ocean science education by building capacity for cross-institutional collaboration in the Gulf of Mexico region, establishing more partnerships with historically Black colleges and universities, and obtaining a better understanding of students' needs specific to the ocean sciences. Although this project was not funded, the submission process confirmed the desire for cross-institutional collaboration with DEI challenges.

Loyola University

Loyola University is a private institution with an undergraduate enrollment of 3,100+ and graduate enrollment of approximately 2,000. Loyola offers a Bachelor of Science in environmental science, a Bachelor of Arts in environmental studies, and a master's in environmental law. Additionally, more than one-third of Loyola's undergraduates are from underrepresented communities, including 17.3 percent from the Black community, and 16.5 percent from the Latinx community. In May 2021, Dean D'Elia met with Tania Tetlow, President of Loyola University New Orleans, to discuss potential opportunities to partner in academic programs, especially at the graduate level, with associated faculty exchange and future opportunities for joint involvement in teaching, research, practice, and service activities. This may include the establishment of a 3+2 program in environmental sciences. Dr. Vince Wilson is leading this initiative.

Climate Adaptation Science Center

On June 8, 2021, Dean D'Elia met with Auburn University about collaborating on a statement of interest for the National Climate Adaptation Science Center and Regional Climate Adaptation Science Centers Fellows Program to Advance Diversity, Equity, and Inclusion in Climate Science. As a partner site, we would provide undergraduate summer research experiences for representatives from underrepresented communities; develop awards to increase the preparation of undergraduate and graduate students in climate science; and host a visiting scholar from minority serving institutions to facilitate technology transfer, new climate science initiatives, and support student development.

The idea of establishing a summer teacher institute for environmental sciences was also discussed.

CONCLUSION

The LSU College of the Coast & Environment (CC&E) is firmly committed to sustaining a diverse, equitable, and inclusive community in which our students, faculty, and staff participate in, contribute to, and benefit equally from the educational and research endeavors of the college. As an inclusive community, diversity is a fundamental element of our mission. CC&E is committed to creating and maintaining an environment that embraces individual differences, encourages multiple perspectives,

and better prepares students for an increasingly diverse workforce. All faculty, students, and staff are expected to embrace these values.

The initiatives mentioned in this progress report represent specific actions that the college is undertaking to help narrow the diversity gap within our college while maintaining an environment in which race, gender, and other differences are respected, appreciated, and valued. The college plans to accomplish these and other action items within five years with the appropriate support, funding, and an “all-in” commitment from CC&E and the broader LSU campus.