



2026
SSE Awards
Celebration

TULANE UNIVERSITY
School of Science
& Engineering



**TULANE UNIVERSITY
SCHOOL OF SCIENCE AND ENGINEERING
2026 SSE AWARDS CELEBRATION**

Thursday, April 30, 2026
Glazer Family Club at Yulman Stadium
Tulane University

WELCOME

Hridesh Rajan, Ph.D.
Dean, School of Science and Engineering

PRESENTATION OF ALUMNI AWARDS

Kathryn Stone
Chemical Engineering, BSE '83

**2026 OUTSTANDING YOUNG
ALUMNUS AWARD**

William Adams
Engineering Physics, BSE '19

Briley Bourgeois, Ph.D.
Engineering Physics, BSE '18

**2026 OUTSTANDING ALUMNA
AWARD**

Alyssa Dausman, Ph.D.
Geology, BS, '96

**2026 OUTSTANDING ALUMNA
FOR COMMUNITY IMPACT
AWARD**

Yvette Dapremont Bright
Computer Engineering, BSE, '82

PRESENTATION OF FACULTY AND STAFF AWARDS

Lev Kaplan, Ph.D.
Senior Associate Dean, School of Science and Engineering

Daniel Shantz, Ph.D.
Associate Dean, School of Science and Engineering

Marie Dahleh, Ph.D.
Associate Dean, School of Science and Engineering

Laurie O'Brien, Ph.D.
Associate Dean, School of Science and Engineering

Michelle Sanchez, Ph.D.
Associate Dean, School of Science and Engineering

EARLY ACHIEVEMENT IN
TEACHING AWARD
Keena Kareem, Ph.D.
Earth and Environmental Sciences

Nick Sparks, Ph.D.
Physics and Engineering Physics

MID-CAREER ACHIEVEMENT IN
TEACHING AWARD
Matt Barrios, Ph.D.
Physics and Engineering Physics

Michael Joyce, Ph.D.
Mathematics

OUTSTANDING ACHIEVEMENT
IN TEACHING AWARD
Julie Alvarez, Ph.D.
Psychology

Meenakshi Vijayaraghavan, Ph.D.
Cell and Molecular Biology

COLLABORATIVE TEAM AWARD
RECOAST
Julie Albert, Ph.D.
Chemical and Biomolecular
Engineering

EARLY ACHIEVEMENT IN
RESEARCH AWARD
Matthew Czapiga, Ph.D.
River-Coastal Science and
Engineering

OUTSTANDING ACHIEVEMENT
IN RESEARCH AWARD
Yu-Ping Wang, Ph.D.
Biomedical Engineering

MID-CAREER ACHIEVEMENT IN
RESEARCH AWARD
Nicholas Mattei, Ph.D.
Computer Science

Noshir Pesika, Ph.D.
Chemical and Biomolecular
Engineering

OUTREACH AND OPPORTUNITY
AWARD
Katie Russell, Ph.D.
Chemical and Biomolecular
Engineering

MENTORING AWARD
D. Jelagat Cheruiyot, Ph.D.
Ecology and Evolutionary Biology

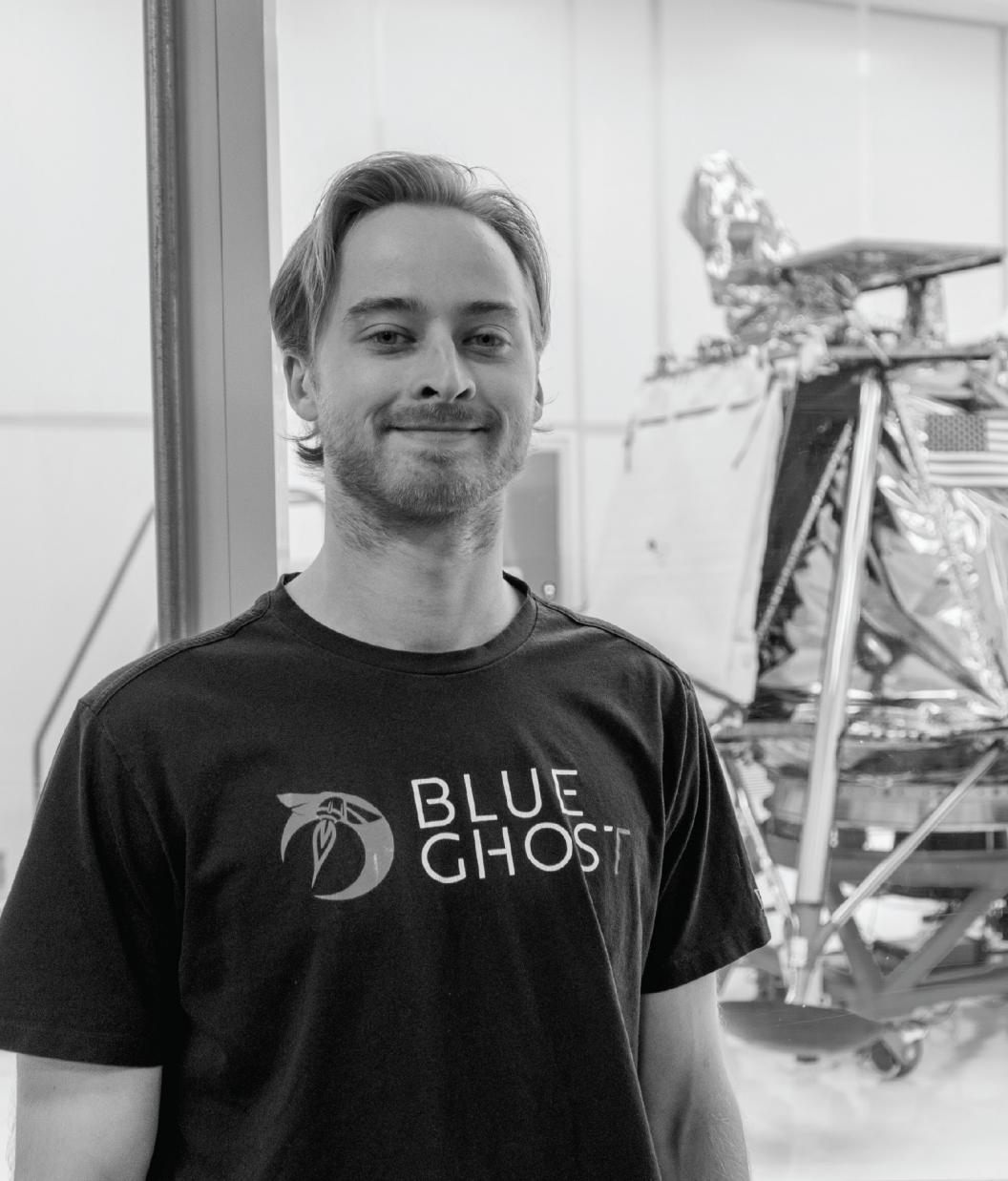
EARLY CAREER STAFF AWARD
Casey Alba-Howsmon
Biomedical Engineering

MID-CAREER STAFF AWARD
Yasin Bakış, Ph.D.
Ecology and Evolutionary Biology
Danielle Scanlon
Dean's Office, K-12 STEM Education

OUTSTANDING STAFF AWARD
Xiaodong Zhang, Ph.D.
Chemistry

CLOSING REMARKS

Hridesh Rajan, Ph.D.
Dean, School of Science and Engineering



William Adams is a spacecraft engineer at Muon Space, where he leads thermal engineering efforts for advanced spaceflight systems. His work focuses on designing and managing the thermal environments that enable spacecraft to survive and operate in extreme conditions, playing a critical role in mission success from development through flight operations.

Adams' career has already been marked by a historic milestone. As Lead Thermal Engineer for Firefly's Blue Ghost Mission 1, he led the thermal control subsystem and supported mission operations for the first fully successful commercial lunar landing. His contributions helped guide the spacecraft through the extreme temperature conditions of space and the lunar surface. His name now travels with the mission, etched onto the Blue Ghost lander on the moon.

After graduating from Tulane in 2019 with a degree in engineering physics, Adams went on to earn his master's degree in aerospace engineering sciences from the University of Colorado Boulder. During that time, he gained experience at NASA's Jet Propulsion Laboratory, contributing to simulation and modeling efforts for planetary missions. He joined Firefly Aerospace in 2021 as a thermal analyst and quickly advanced into leadership, guiding system-level testing, overseeing thermal design across multiple vehicle platforms, and managing a team of engineers supporting both launch and orbital systems.

Following the success of Blue Ghost Mission 1 in 2025, Adams joined Muon Space where he now leads thermal engineering efforts for various spacecraft constellation platforms. At Muon, he is responsible for designing safe and stable thermal environments for cryogenic imaging systems used for remote wildfire detection and other Earth imaging applications.

Throughout his career, Adams has combined technical expertise with a strong commitment to mentorship and collaboration. Even while completing his graduate studies during the COVID-19 pandemic, he continued to support students through teaching and tutoring. He remains actively engaged with Tulane, returning to campus to share his experience with students and sponsoring senior design projects focused on advancing lunar technologies. His work reflects both the rigor and ambition of modern aerospace engineering and a continued investment in the next generation of engineers.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
2026 OUTSTANDING YOUNG ALUMNUS AWARD

WILLIAM ADAMS

Engineering Physics, BSE '19



TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
2026 OUTSTANDING YOUNG ALUMNUS AWARD

BRILEY BOURGEOIS, PH.D.

Engineering Physics, BSE '18

Dr. Briley Bourgeois is a materials scientist and innovator at the National Laboratory of the Rockies (NLR), where he develops new approaches to sustainable chemical manufacturing. His work focuses on transforming how energy is used in chemical processes, with the goal of reducing emissions and advancing cleaner, more efficient industrial systems.

A Louisiana native from Paulina, Dr. Bourgeois' interest in environmental change began early, shaped by firsthand observations of the state's shifting coastal landscape. That experience sparked a lasting curiosity about the relationship between human activity and the environment and ultimately led him to Tulane. There, he studied engineering physics and discovered a passion for materials science and energy research.

As an undergraduate, he worked in energy materials labs and became the lead researcher on a novel printable and light-curable ink capable of forming solar cell materials in a fraction of the time and energy required by traditional methods. He also demonstrated strong leadership across campus, serving as a resident advisor and cofounding Tulane's Engineers Without Borders chapter, where he helped initiate an international water infrastructure project.

Bourgeois went on to earn his Ph.D. in materials science and engineering from Stanford University, where his research in plasmonic photocatalysis explored how light can be used to drive chemical reactions more efficiently. His work bridged fundamental science, studying light-driven chemistry at the atomic-scale, and real-world application, including the development of open-source autonomous chemical reactor software tools now used by research groups across the country. Alongside his research, he remained deeply committed to mentorship, training students and supporting collaborative lab environments.

Now a Director's Fellow at NLR, Dr. Bourgeois is leading a \$500k research program developing a new type of plasma chemical reactor designed to convert greenhouse gases into useful fuels and chemicals using renewable electricity. His work represents a forward-looking approach to one of the most pressing challenges in energy and sustainability. Across every stage of his career, he has combined scientific rigor with leadership, curiosity, and a clear commitment to applying research in ways that create meaningful environmental impact.



Yvette Dapremont Bright is a senior executive and nonprofit founder whose career spans more than three decades of leadership in healthcare, technology, and operations. A native of New Orleans and a graduate of Tulane University's School of Engineering, she began her career with IBM in the United States and Europe before earning an MBA in Healthcare from Saint Joseph's University.

Bright joined Independence Blue Cross in 1991 and held ten leadership roles over a 25-year career. In 2016, she was named Chief Operating Officer and Executive Vice President, becoming the first woman and first African American to join the company's C-suite in its nearly 80-year history. In her executive roles, she led the company's eBusiness evolution, transforming systems and operations while driving significant revenue growth and cost efficiencies. During her tenure, Independence Blue Cross grew into one of the nation's largest health insurers, with more than \$14 billion in revenue and 10,000 employees.

Following her retirement, Bright founded the Brighter Horizon Foundation in 2019 to support first-generation minority students in the Greater Philadelphia area in achieving college or trade degrees debt-free. The foundation provides a comprehensive, hands-on approach, including academic tutoring, financial aid guidance, and mentorship, along with financial support to close the full cost gap of education. Since its founding, Brighter Horizon has supported dozens of scholars, with many going on to graduate from leading universities and trade programs.

Throughout her career, Bright has remained deeply committed to mentorship and service, guiding students and young professionals and helping them navigate academic and career pathways. She currently serves on multiple corporate and nonprofit boards and was recognized with the Pearl S. Buck Foundation Woman of Influence Award in 2023. Her work reflects a lifelong belief in the power of education to create opportunity and strengthen communities.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
2026 OUTSTANDING ALUMNA FOR COMMUNITY IMPACT
AWARD

YVETTE DAPREMONT BRIGHT

Computer Science, BSE '82



Dr. Alyssa Dausman is Senior Vice President and Chief Scientist at The Water Institute, where she oversees all science and research. As part of the senior executive team, she guides the strategic research directions of the Institute, as well as supports operations to ensure a sustainable and impactful nonprofit. She continues to perform scientific research and strategically leads large-scale projects involving Structured Decision Making to support complex planning efforts.

Her work spans critical initiatives including the Louisiana Governor's Climate Task Force, the Southern Hills Aquifer System management, and resilience assessments in Florida. As a result of her leadership, she has been invited to speak internationally, including at UNESCO headquarters in Paris on integrating science into policy for water resource planning. She has also been funded by the U.S. Department of State to teach Structured Decision Making in Armenia to support natural resource planning.

Dr. Dausman began her career as a hydrologist with the U.S. Geological Survey in Florida after completing her degree at Tulane, followed by a master's degree from the University of New Orleans and a Ph.D. from Florida International University. Her early work focused on numerical modeling and water availability in major aquifer systems, as well as uncertainty analysis, leading to teaching and collaboration opportunities around the world, including in India, Portugal, and Mexico.

In 2011, she returned to the Gulf Coast to support coastal restoration efforts following the Deepwater Horizon Oil Spill. She served in key roles with the Gulf Coast Ecosystem Restoration Task Force and the U.S. Department of the Interior, contributing to restoration planning and monitoring. She later served as Science Director for the RESTORE Council, where she led the development of a \$156 million portfolio of restoration projects and helped shape the Council's Comprehensive Plan.

A strong advocate for education and community, Dr. Dausman serves on the Board of the Newcomb Alumnae Association at Tulane and volunteered for more than a decade teaching yoga to active military through the Warriors at Ease program.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
2026 OUTSTANDING ALUMNA AWARD

ALYSSA DAUSMAN, PH.D.

Geology, BS '96

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
EARLY ACHIEVEMENT IN RESEARCH AWARD

MATTHEW CZAPIGA, PH.D.

River-Coastal Science and Engineering



Dr. Matthew Czapiga is an assistant professor of river-coastal science and engineering at Tulane University, recognized for his emerging leadership in the study of river and delta systems. His research focuses on riverine and deltaic morphodynamics, addressing critical challenges related to coastal vulnerability, sediment transport, and sustainable river management.

Since joining Tulane in 2024, Dr. Czapiga has quickly established a growing research program, securing multiple externally funded grants from the National Science Foundation, the Louisiana Board of Regents, and the National Academy of Sciences. His work has been published in leading journals, including *Nature Geoscience*, *Water Resources Research*, and *Journal of Fluid Mechanics*, and continues to gain recognition within the field.

In addition to his research, Dr. Czapiga has developed new courses, mentored graduate students, and contributed to building Tulane's River-Coastal Science and Engineering program. His work reflects both strong early achievement and a trajectory toward becoming a leading voice in his field.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
MID-CAREER ACHIEVEMENT IN RESEARCH AWARD

NICHOLAS MATTEI, PH.D.

Computer Science



Dr. Nicholas Mattei is an associate professor of computer science at Tulane University and co-director of the Tulane Center for Community-Engaged AI. He is recognized for his leadership in artificial intelligence and decision-making systems, with a focus on the societal impacts of AI and its application to real-world challenges.

Since earning tenure in 2024, Dr. Mattei has led a rapidly growing research program, securing approximately \$3 million in funding as principal and co-principal investigator from the National Science Foundation, Office of Naval Research, and industry partners. His work combines artificial intelligence, machine learning, economics, and social science, producing high-impact publications and collaborative projects that support improved decision-making for communities and organizations.

Dr. Mattei is also a national leader in AI, serving as Chair of the Association for Computing Machinery's Special Interest Group on Artificial Intelligence and as program chair for the 2025 AAAI/ACM Conference on AI, Ethics, and Society. Through his research, teaching, and public engagement, he is helping shape a more thoughtful and responsible future for artificial intelligence.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
MID-CAREER ACHIEVEMENT IN RESEARCH AWARD

NOSHIR S. PESIKA, PH.D.

Chemical and Biomolecular Engineering



Dr. Noshir S. Pesika is an associate professor of chemical and biomolecular engineering at Tulane University, recognized for his leadership in interfacial science, biomimetics, and tribology. His research combines fundamental scientific inquiry with practical applications, advancing technologies in areas such as self-healing materials, biomedical devices, and surface engineering.

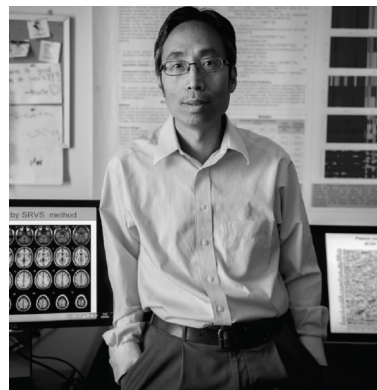
Dr. Pesika's work has earned international recognition, with an h-index of 29 and nearly 4,000 citations, as well as publications in leading journals including Proceedings of the National Academy of Sciences, Journal of the American Chemical Society, and Advanced Materials. He holds multiple patents and has secured significant research funding from the National Science Foundation, NASA, and industry partners. He was recently named a Senior Member of the National Academy of Inventors.

In addition to his research, Dr. Pesika plays a key leadership role at Tulane, directing shared instrumentation facilities and supporting interdisciplinary collaboration. His work reflects both sustained achievement and a continued trajectory of innovation and impact.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
OUTSTANDING ACHIEVEMENT IN RESEARCH AWARD

YU-PING WANG, PH.D.

Biomedical Engineering



Dr. Yu-Ping Wang is a professor of biomedical engineering at Tulane University, recognized for his contributions to data science and machine learning in biomedical imaging and genomics. His research focuses on developing mathematical and statistical methods that bridge imaging and genomic data, advancing the understanding of complex biological systems and disease.

Dr. Wang has authored more than 260 journal publications and has secured over \$14 million in NSF and NIH funding, including multiple R01 grants as principal investigator. His recent work has emphasized integrating multimodal data to improve precision in biomedical research and clinical applications.

In addition to his research, Dr. Wang is a dedicated mentor, having trained numerous doctoral students and postdoctoral researchers. He contributes actively to the field through editorial leadership and service on national review panels. His work continues to shape the future of biomedical engineering and interdisciplinary science.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
EARLY ACHIEVEMENT IN TEACHING AWARD

KEENA KAREEM, PH.D.

Earth and Environmental Sciences



A native New Orleanian, Dr. Keena Kareem is a Professor of Practice in the Department of Earth and Environmental Sciences at Tulane University, recognized for her exceptional teaching and transformative impact on students. She serves as the Director for the GIS Certificate Program and teaches across all levels of the curriculum, from introductory to advanced courses, such as Volcanology and

Advanced GIS, while designing new courses that expand opportunities in geoscience and energy studies. Before joining Tulane, she worked as a Geologist in the petroleum industry, managing assignments for both onshore and offshore projects in the Gulf of Mexico.

Dr. Kareem is known for creating engaging, student-centered learning environments that make complex scientific concepts accessible and relevant. Her courses consistently receive outstanding evaluations, with students highlighting her enthusiasm, clarity, and ability to connect coursework to real-world applications.

Beyond the classroom, she's a deeply committed mentor, guiding students in research, career development, and graduate study. Her support often extends well beyond graduation, with many students continuing to seek her guidance as they advance in their career. Her teaching and mentorship have made a lasting impact on the Tulane community.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
EARLY ACHIEVEMENT IN TEACHING AWARD

NICK SPARKS, PH.D.

Physics and Engineering Physics



Dr. Nicholas Sparks is a professor of practice in the Department of Physics and Engineering Physics at Tulane University, recognized for his exceptional teaching and deep commitment to student learning. He teaches a wide range of undergraduate and graduate courses, consistently creating engaging and accessible learning environments that help students build confidence in complex material.

Dr. Sparks is widely regarded by students and colleagues as one of the most effective educators in the department, regularly earning the highest teaching evaluations and praise for his clarity, enthusiasm, and ability to connect with students. He has taken on an extensive teaching load, often exceeding standard expectations, while maintaining a high level of quality across all courses.

In addition to his classroom teaching, Dr. Sparks plays a key role in preparing graduate students for success, organizing qualifying exam review sessions that have contributed to improved outcomes across the department. His dedication to teaching and mentorship has made a lasting impact on students at every level.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
MID-CAREER ACHIEVEMENT IN TEACHING AWARD

MATT BARRIOS, PH.D.

Physics and Engineering Physics



Matthew Barrios is a senior professor of practice in the Department of Physics and Engineering Physics at Tulane University, recognized for his exceptional mentorship and leadership in engineering education. He teaches across the engineering curriculum while creating learning experiences that connect technical knowledge with real-world application and career development.

Dr. Barrios serves as a key advisor and industry liaison for engineering students, working closely with them to navigate internships, career pathways, and professional growth. He has helped shape major student experiences at Tulane, including launching the Engineering Capstone Design Expo and developing programs that connect students with industry partners.

Known for his accessibility and commitment to student success, Dr. Barrios supports students well beyond the classroom, offering guidance on everything from technical problem-solving to job negotiations. His mentorship has helped students build confidence, secure opportunities, and transition successfully into their careers. His impact continues to shape the next generation of engineers at Tulane.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
MID-CAREER ACHIEVEMENT IN TEACHING AWARD

MICHAEL JOYCE, PH.D.

Mathematics



Michael Joyce is a senior professor of practice in the Department of Mathematics at Tulane University, recognized for sustained excellence in teaching and leadership in undergraduate mathematics education. He serves as course coordinator for Calculus I, one of the largest courses in the School of Science and Engineering, where he has developed a comprehensive instructional

model that supports students, instructors, and teaching assistants.

Dr. Joyce is known for his clear, engaging teaching style and his ability to make complex mathematical concepts intuitive and accessible. He has led innovations in course design and instructional technology, including improving grading systems and expanding access to course materials, helping to enhance consistency and student learning across sections.

Beyond the classroom, Dr. Joyce is a dedicated mentor who invests deeply in student success, offering extensive support and guidance both during and after their coursework. His work has had a lasting impact on hundreds of students and has strengthened mathematics education across the university.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
OUTSTANDING ACHIEVEMENT IN TEACHING AWARD

JULIE ALVAREZ, PH.D.

Psychology



Dr. Alvarez is a Senior Professor of Practice in the Department of Psychology at Tulane University, recognized for her sustained excellence in undergraduate and graduate education. A clinical neuropsychologist by training, she has played a central role in developing and expanding Tulane's Master of Science programs in Behavioral Health and Psychological Science, designing new courses and

shaping curriculum to meet evolving student and workforce needs.

Dr. Alvarez is known for her engaging and highly organized teaching style, with students consistently praising her ability to make complex material accessible while maintaining rigor. Her courses regularly receive outstanding evaluations, reflecting both the depth of learning and the supportive environment she creates.

Beyond the classroom, Dr. Alvarez has advised over 300 undergraduate and graduate students in psychology and built lasting relationships with alumni, helping guide them into successful careers. Her leadership in program development and commitment to student success have had a significant impact on psychology education at Tulane.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
OUTSTANDING ACHIEVEMENT IN TEACHING AWARD

MEENAKSHI VIJAYARAGHAVAN, PH.D.

Cell and Molecular Biology



Meenakshi Vijayaraghavan is a senior professor of practice in the Department of Cell and Molecular Biology at Tulane University, recognized for her sustained excellence and lasting impact on undergraduate education. For nearly two decades, she has taught foundational courses in General Biology and Genetics, shaping the academic journeys of generations of science students.

Known for her clarity, rigor, and inclusive teaching style, Dr. Vijayaraghavan creates classrooms where students are challenged to think critically and supported as they grow in confidence and capability. Her courses consistently receive outstanding evaluations, even in large introductory settings.

Her teaching and mentorship have earned numerous honors, including the Randolph C. Read Award for Excellence in Teaching and the Suzanne and Stephen Weiss Presidential Fellowship. Beyond the classroom, she is a deeply committed mentor who invests in her students' success, helping them find direction, build confidence, and carry their learning forward long after they leave Tulane.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
COLLABORATIVE TEAM AWARD

RECOAST - JULIE ALBERT, PH.D.

Chemical and Biomolecular Engineering



Dr. Julie N. L. Albert is an associate professor in the Department of Chemical and Biomolecular Engineering at Tulane University and a leader in polymer science, materials engineering, and coastal innovation. Her research focuses on designing nano- and micro- structured polymer materials for applications related to energy technologies, environmental sustainability, and water quality. She is

currently a Science Policy Fellow with the Gulf Research Program.

Dr. Albert has received numerous honors for both her research and teaching, including a National Science Foundation CAREER Award and recognition as Teacher of the Year in her department. She is also widely recognized for her mentorship, having guided undergraduate, graduate, and post-doctoral scholars into successful careers across academia and industry.

In recent years, her work has expanded into large-scale, interdisciplinary collaboration through ReCoast, where she has helped lead efforts to translate engineering research into real-world solutions for coastal restoration and environmental resilience.



ReCoast is a multidisciplinary research and community partnership focused on addressing coastal land loss in Louisiana through innovative, sustainable solutions. Originating from a Tulane undergraduate service-learning project, the initiative grew into a large-scale collaboration supported by a \$5.7 million investment by the National Science Foundation Convergence Accelerator Program.

Led by Julie N. L. Albert, the team brings together expertise across engineering, ecology, coastal science, public health, and community engagement. In partnership with Glass Half Full, the group has piloted approaches to coastal restoration that use recycled glass sand, translating research into real-world application.

ReCoast has engaged hundreds of students and community members through hands-on research, service learning, and field projects, advancing scalable solutions to one of Louisiana's most urgent environmental challenges. The team continues to translate research into practice through Glass Half Full's Coastal Projects division. For updates on research findings, projects, and impact on restoration of Louisiana's coast, visit recycleforthe coast.org.

Advancing coastal restoration through research, collaboration, and community impact.

ReCoast Core Team:

Julie N. L. Albert	Vijay John
Mead Allison	Ehab Meselhe
Tiong Aw	Katie Russell
Henry Bart	Franziska Trautmann, Glass Half Full
Keith Clay	Sunshine Van Bael
Emily Farrer	Julie P. Vanegas, University of Texas Rio Grande Valley
Kat Fogg	Kejun Wen, Jackson State University
Jeremiah Henning, University of South Alabama	

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
OUTREACH AND OPPORTUNITY AWARD

KATIE RUSSELL, PH.D.

Chemical and Biomolecular Engineering



Dr. Katie Russell is a senior professor of practice in the Department of Chemical and Biomolecular Engineering at Tulane University, recognized for her leadership in experiential learning and student development. Her work focuses on designing courses that bridge theory and application through hands-on, real-world problem solving.

Dr. Russell has developed innovative learning experiences, including the first-year course Global Impacts in Chemical Engineering and the undergraduate Unit Operations Laboratory. Through partnerships with community organizations such as the Audubon Institute and Glass Half Full, she has created service-learning opportunities that allow students to engage directly with sustainability challenges.

In addition to her teaching, Dr. Russell leads undergraduate professional development initiatives as advisor to the American Institute of Chemical Engineers student chapter and as a liaison for industry and alumni engagement. Her work equips students with the skills, experience, and perspective needed to succeed as engineers and leaders.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
MENTORING AWARD

D. JELAGAT CHERUIYOT, PH.D.

Ecology and Evolutionary Biology



Dr. D. Jelagat Cheruiyot is a senior professor of practice in the Department of Ecology and Evolutionary Biology at Tulane University, recognized for her extraordinary commitment to mentorship and student success. Her work extends far beyond the classroom, supporting students as they navigate academic, personal, and professional challenges with confidence and purpose.

Dr. Cheruiyot has mentored countless undergraduate and graduate students, guided doctoral candidates in developing their own courses, and written hundreds of recommendations for students pursuing careers and advanced study. Her office is a constant gathering place, and her impact is reflected in the lasting relationships she builds with students who continue to seek her guidance long after graduation.

She also serves as a trusted mentor to faculty colleagues across the School of Science and Engineering, helping to shape teaching practices and strengthen the academic community. Known for her warmth, generosity, and unwavering support, Dr. Cheruiyot creates a sense of belonging wherever she goes. Her mentorship has transformed the experiences of countless students and colleagues, leaving a lasting mark on the Tulane community.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
EARLY CAREER STAFF AWARD

CASEY ALBA-HOWSMON

Biomedical Engineering



Casey Alba-Howsmon serves as department administrator for Biomedical Engineering at Tulane University, where she plays a central role in shaping the day-to-day experience of students, faculty, and visitors. Since joining the department in 2024, she has quickly become a trusted and essential presence, managing operations, communications, and programming with exceptional organization and care.

Known for her strong sense of ownership, Alba-Howsmon approaches every aspect of her work with intention and attention to detail, from coordinating academic programs and events to creating communications that reflect the strength of the department. Her work is defined not only by reliability, but by a commitment to making every interaction and experience better for those around her.

In a short time, she has made a lasting impact on the department's culture and operations, setting a standard for professionalism, initiative, and service that strengthens the entire community.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
MID-CAREER STAFF AWARD

YASIN BAKIŞ, PH.D.

Ecology and Evolutionary Biology



Dr. Yasin Bakış serves as Senior Manager of Biodiversity Informatics at the Tulane University Biodiversity Research Institute, where he leads the development of data systems supporting large-scale research in ecology, evolution, and environmental science. His work integrates artificial intelligence, biodiversity science, and data infrastructure to enable new approaches to

understanding complex environmental systems and global change.

Dr. Bakış has played a central role in advancing several of the institute's major initiatives, including the development of FishNet2, biology-guided neural networks (BGNNs) and the NSF Imageomics Institute. He is also leading an extensive portfolio of pending proposals focused on AI-enabled platforms that transform biological data into actionable insight. His contributions span both scientific and technical innovation, as well as collaborative project design, supporting a wide range of ongoing and future research efforts.

Through his leadership and technical expertise, Dr. Bakış contributes significantly to Tulane's growing prominence in biodiversity informatics, artificial intelligence, and data-driven environmental research.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
MID-CAREER STAFF AWARD

DANIELLE SCANLON

Dean's Office, K-12 STEM Education



Danielle Scanlon serves as assistant director of the Tulane Center for K-12 STEM Education, where she plays a central role in expanding access to STEM learning across New Orleans and beyond. Since joining Tulane in 2017, she has steadily grown into a trusted leader, helping shape programs that now reach thousands of students, teachers, and families each year.

Known as the backbone of the Center, Scanlon leads with a rare combination of organization, adaptability, and care. During times of transition and uncertainty, she stepped forward to ensure programs continued without interruption, often taking on additional responsibilities to support both her team and the broader School of Science and Engineering.

Her impact extends well beyond campus through her leadership in regional STEM initiatives, where she helps connect young students to opportunities that can shape their futures. Widely respected for her reliability and generosity, Scanlon is a steady presence behind the scenes, making meaningful experiences possible for others every day.

TULANE UNIVERSITY SCHOOL
OF SCIENCE AND ENGINEERING
OUTSTANDING STAFF AWARD

XIAODONG ZHANG, PH.D.

Chemistry



Dr. Xiaodong Zhang is a senior instrumentation specialist in the Department of Chemistry at Tulane University, where he plays a critical role in supporting advanced research across the School of Science and Engineering. He oversees and operates complex instrumentation, including X-ray photoelectron spectroscopy, mass spectrometry, and small molecule X-ray crystallography

systems that serve as essential infrastructure for faculty research.

Widely regarded as an indispensable collaborator, Dr. Zhang contributes not only technical expertise but also original scientific insight. He has co-authored numerous research publications and developed novel computational approaches to solving complex structural problems, reflecting a deep commitment to understanding the science behind the tools he maintains.

Known for his creativity, generosity, and quiet dedication, Dr. Zhang is often the person colleagues turn to when faced with difficult challenges. His work strengthens research across disciplines and enables discoveries that would not be possible without his expertise.

By the *Numbers*

\$5.2B

Tulane's Annual
Economic Impact
on Louisiana

\$28.74M

in New
Research Grants

2,685

Undergraduate
Students

643

Undergraduate
Degrees Awarded

475

Graduate
Students

23

Master's
Programs

15

Undergraduate Majors
Across 11 Departments

14

Doctoral
Programs

5,000+

Children Served

1,300

Children Participating in
On-Campus Programs

300

Teachers Served

150

Schools Participating
in Programs



TUULANE UNIVERSITY

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School *of* Science
& Engineering



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