RESEARCH

Quarterly Research Report

July 2026

Tanju Karanfil

Senior Vice President for Research,

Scholarship and Creative Endeavors

From the Senior Vice President for Research, Scholarship and Creative Endeavors

Research elevates Clemson's national reputation.

In early June, five students presented their research successes to the President's Industry Council, speaking passionately about the importance of research to the quality of their education. One, a chemistry undergraduate student named Lukas Garcia, had just won $25,000 at a national entrepreneurship contest for an AI business he created to support pharmaceutical development. A second, mechanical engineering Ph.D. student Tony Wang, was working on a venture called DriveX, which provides a virtual testing platform for autonomous vehicles and related software and infrastructure. Economics and applied mathematics double major Janhavi Deshpande spoke about her research to create predictive models for traffic fatalities. Janhavi was recently named the College of Science Outstanding Senior. Construction management Ph.D. student Stuti Garg was working on an AI-assisted device to help identify and alleviate worker stress. And Kwame André, a graduate student in human-centered computing, spoke about his effort to help AI work well with humans.

The President's Industry Council – representatives of South Carolina's top employers and influential industries – was impressed with the knowledge and entrepreneurial spirit these students displayed. Each demonstrated a strong ability to understand and articulate complex topics clearly. Their futures are bright. These research experiences are helping them win national contests and earn nationally competitive internships and fellowships. These students are flying the Clemson flag for all to see. Research elevates the value of a Clemson education and enhances our national reputation.

Similarly, our high-achieving faculty members are elevating the Tiger Paw to broader national and international audiences. At our 10th Annual Research Symposium in May, we recognized 18 faculty members with University Research, Scholarship and Artistic Achievement Awards (URSAAA). URSAAA is reserved for the highest levels of national and international recognition that researchers can receive in their fields. One benchmark for earning URSAAA recognition is to author a publication that garners at least 1,000 citations. Citations, one of the metrics used to evaluate Association of American Universities (AAU) membership, identify the building blocks of innovation and verify the influence of one's scholarly output. Amassing 1,000 or more citations for a single publication is rare and significant.

URSAAA Recipients

At the Symposium, we also announced the 2026 Clemson University Researchers of the Year. Mik Carbajales-Dale, professor in the School of Civil and Environmental Engineering and Earth Sciences, is an expert on the energy economy and its environmental impact. He develops decision-support tools to reduce the environmental impacts of emerging technologies. He has authored 70 publications that appeared in the premier journals of his field. Luigi Boccuto, the junior faculty recipient of the award, is a clinical geneticist working on early screening and diagnosis tools, as well as potential treatments, for autism spectrum disorder and related conditions. An assistant professor in the School of Nursing, Boccuto is among the top 2% of the most-cited scientists worldwide, according to a list compiled by Stanford University and Elsevier.

There are so many great examples of our researchers earning recognition that elevates Clemson's reputation. I have compiled numerous examples on pages 12-19.

From the Senior Vice President for Research, Scholarship and Creative Endeavors

And those only include the most recent accomplishments. Consider some high-profile recognitions over the past year:

- Two Clemson faculty members were named lifetime fellows of the American Association for the Advancement of Science, one of the highest honors in the scientific community.
- Two Clemson researchers earned South Carolina's highest civilian honor, the Order of the Palmetto: one for contributions to agriculture, and one for helping to advance the nursing profession.
- A Clemson scientist earned the S.C. Governor's Award for Excellence in Scientific Awareness for her work to nurture middle-schoolers' interest in science.
- The American Chemical Society honored a Clemson professor for his development of high-performance lubricants that keep engines working under extreme conditions.
- A Clemson physicist was named an American Physical Society fellow for his contributions to quantum computing.
- An early-career investigator at Clemson received the New Innovator Award from the National Institutes of Health.
- A civil engineering professor earned the international IEEE Technical Achievement Award for his work developing next-generation infrastructure that can withstand cyberattacks while enabling connected and autonomous vehicles to safely share the roads.

Clemson faculty are earning international book awards, fellowships, lifetime achievement awards and numerous honors that recognize the impact of their research, scholarship and creative endeavors. Clemson is special. The strategic investments and initiatives we've made to strengthen research have been delivering benefits across the university and raising Clemson's national profile.

And, Clemson researchers continue to seek support to expand their research and their impact. During the first three quarters of FY2026, Clemson researchers submitted $723 million in proposals for research funding and received $170 million in competitive research awards. These awards include significant investments to spur innovation and enhance workforce development in key industry sectors for South Carolina and the broader region. Details on research expenditures and awards, including a list of the top grants received, are in the Research Metrics section on pages 4-11. The diversity of disciplines and sponsors for these projects reflects the breadth of research strength and expertise at Clemson. To provide more examples, the Focus on Faculty section on pages 20-28 includes a profile of one faculty member from each college.

I have great pride in the research at Clemson and the people doing that work. ***Research elevates the value of a Clemson education and enhances our national reputation.***

Go Tigers!

Sincerely,

Tanju Karanfil, Ph.D., PE, BCEE, IWA Fellow

Senior Vice President for Research, Scholarship and Creative Endeavors

Clemson University

RESEARCH

RESEARCH METRICS

This section covers institutional research productivity with data on proposal submissions, awards and expenditures.

Executive Summary

- Total R&D expenditures increased to $368 million at Clemson in 2025. See details on page 5.
- Competitive expenditures were $140 million through the third quarter of FY2026. Details on expenditures by business unit, innovation cluster, funding source and per tenure/tenure-track faculty member are included on pages 6-7.
- Proposal submissions were $723 million through the third quarter of FY2026. Details on proposals per college, along with targets for FY2026, are on page 8.
- Research awards through the third quarter were $170 million. Details on awards per college are on page 9.
- Clemson faculty remain successful at earning high-value awards. A list of the largest grants received in FY2026 is on pages 10-11.

The tables on the following pages provide details on proposal submissions, awards and expenditures per college/unit. Abbreviations used in the tables are listed below.

CAAC: College of Architecture, Art & Construction

CAH: College of Arts & Humanities

CAFLS: College of Agriculture, Forestry & Life Sciences

CBSHS: College of Behavioral, Social & Health Sciences

CECAS: College of Engineering, Computing & Applied Sciences

COE: College of Education

COB: Wilbur O. and Ann Powers College of Business

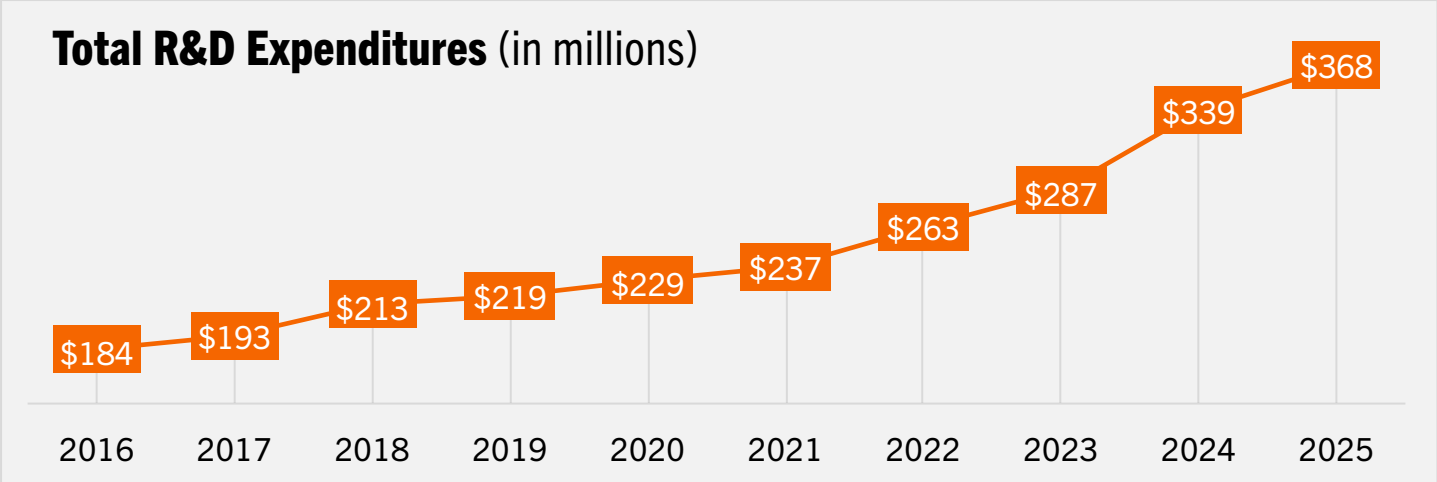
COS: College of Science

CVM: Harvey S. Peeler Jr. College of Veterinary Medicine

Total R&D Expenditures

Clemson's total R&D expenditures reached $368 million in FY2025, as shown in the graph below. This data includes expenditures on all research revenue, including state support, gifts, external research services, competitive awards and other sources, as reported to the National Science Foundation Higher Education Research and Development (HERD) Survey.

The table below shows various outputs (Ph.D. productivity, licensing revenue, patents, etc.) and the size of the workforce supporting research activity at Clemson.



	2022	2023	2024	2025	3rd Quarter 2026
NIH R01-Equivalent Awards	1	6	2	3	1
Doctorates Awarded	242	285	310	318	343
STEM Doctorates Awarded	172	190	197	220	243
Disclosures	50	61	76	73	60
Patents	33	11	13	11	10
Licenses/Options	27	16	20	4	10
Licensing Revenue	$380,286	$392,162	$387,274	$410,660	$87,555
Start-up Companies (based on licenses/options)	4	4	7	8	5
Supporting Workforce					
Graduate Student Enrollment	5,448	6,401	5,872	5,676	5,485
Sponsored Graduate Research Assistants	729	926	1,049	1,031	893
Postdoctoral Fellows	117	112	141	151	156
Research Faculty: Permanent 100% Non-E&G Funded	2	5	4	3	4
Research Faculty: Temporary 100% Non-E&G Funded	32	28	36	56	50

Competitive Expenditures (3rd Quarter FY2026)

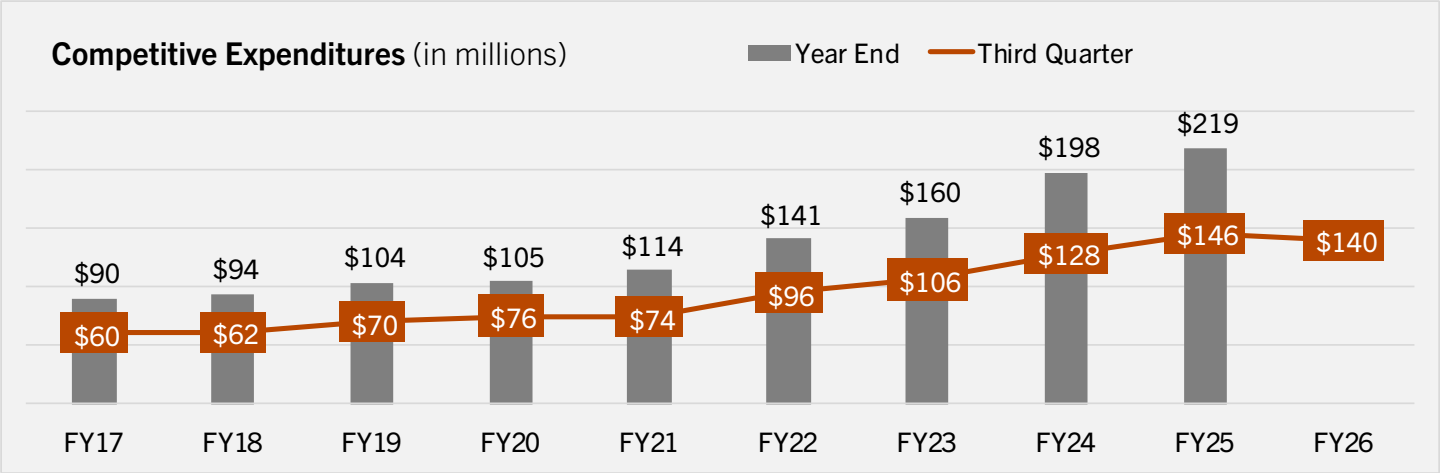
Competitive expenditures were $140 million through the third quarter of FY2026. Competitive expenditures include funds only from competitively bid projects, such as federal grant awards.

Additional details on expenditures by business unit, innovation cluster, funding source and per tenure/tenure-track faculty member are included in the table on the next two pages.

The graph on the following page compares annual competitive expenditure data over the past decade. The orange line shows expenditures for the third quarter for each fiscal year and the bar shows year-end data.

Research Expenditures (millions)	2022	2023	2024	2025	3rd Quarter 2026
By Business Unit	$141.4	$160.3	$198.5	$218.5	$140.3
CAAC	$1.1	$1.3	$1.8	$1.9	$1.5
CAH	$0.2	$0.6	$1.0	$1.4	$0.7
CAFLS	$25.0	$29.7	$40.7	$45.8	$26.6
COB	$0.7	$1.0	$1.4	$1.6	$1.2
CECAS	$71.7	$76.0	$88.6	$95.9	$61.8
CBSHS	$12.0	$16.7	$21.1	$27.1	$16.3
COE	$3.8	$5.6	$6.6	$7.0	$6.4
COS	$18.5	$23.1	$28.0	$28.7	$18.1
VP for Res & Interdisc Inst	$7.0	$6.2	$7.6	$6.9	$4.4
All Other	$1.5	$1.6	$1.8	$2.2	$3.5
By Innovation Cluster	$141.4	$160.3	$198.5	$218.5	$140.3
Advanced Materials	$18.6	$21.1	$23.6	$25.6	$16.1
Cyberinfrastructure & Big Data Science	$8.2	$7.7	$8.6	$9.8	$6.9
Energy, Trans. & Advanced Manufacturing	$27.7	$29.5	$32.0	$34.5	$22.5
Health Innovation	$26.3	$30.5	$38.7	$42.9	$24.7
Human Resilience	$14.8	$19.1	$24.2	$25.8	$18.2
Sustainable Environments	$26.8	$33.7	$49.7	$55.9	$33.7
Other	$19.6	$20.2	$21.7	$24.1	$18.2

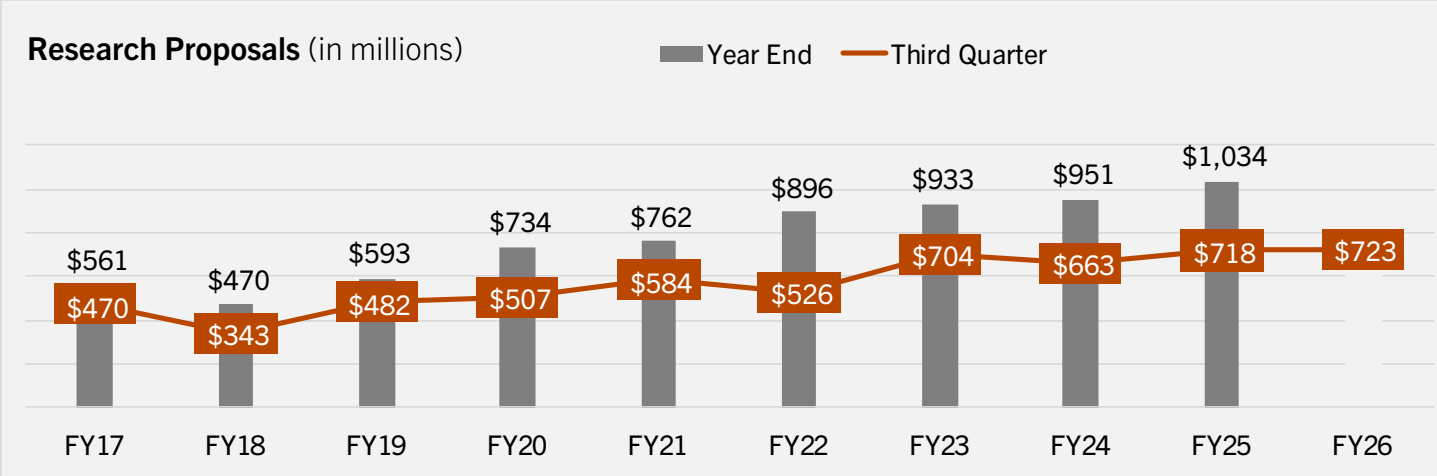
Competitive Expenditures (3rd Quarter FY2026)



Research Expenditures (millions)	2022	2023	2024	2025	3rd Quarter 2026
By Funding Source	$141.4	$160.3	$198.5	$218.5	$140.3
Federal Government	$125.1	$141.0	$175.0	$193.0	123.0
Foundations, Societies and Associations	$4.6	$5.4	$6.6	$7.2	5.1
Industry/Other	$4.8	$5.9	$5.2	$4.9	3.6
International	$0.5	$0.5	$0.6	$0.5	0.5
Local Government	$0.9	$0.7	$0.6	$0.8	1.2
State Government	$6.2	$8.2	$10.4	$12.0	6.9
Per T/TT Faculty Member					
CAAC	$21,321	$26,231	$35,020	$36,468	$29,052
CAH	$1,864	$5,507	$10,135	$13,125	$6,551
CAFLS	$196,657	$231,788	$301,646	$339,614	$190,179
COB	$6,787	$9,865	$14,564	$15,709	$11,539
CECAS	$296,203	$310,088	$358,535	$386,815	$241,234
CBSHS	$90,220	$121,581	$149,294	$179,508	$117,303
COE	$80,058	$121,114	$124,266	$124,571	$111,548
COS	$120,778	$146,445	$177,322	$177,284	$106,349
Clemson average (Total exp/Total T/TT faculty)	**$142,129**	**$159,792**	**$196,501**	**$207,926**	**$136,777**

Proposal Submissions (3rd Quarter FY2026)

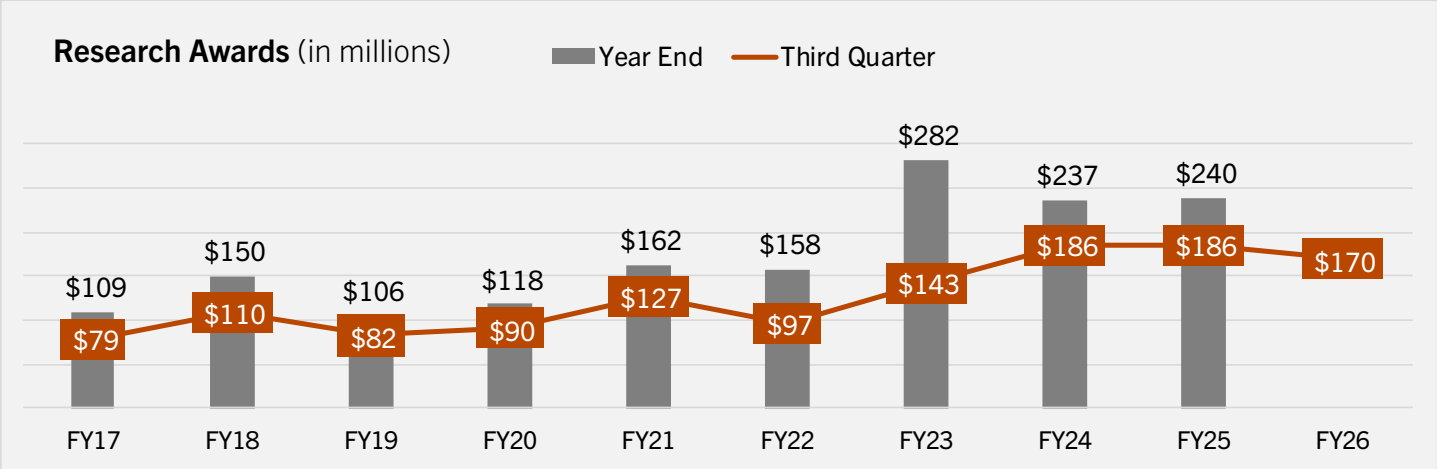
Proposal submissions were $723 million through the third quarter of FY2026. The graph shows annual submissions value over the past decade with third quarter comparisons for each year.



Proposal Submissions	2022	2023	2024	2025	3rd Quarter 2026	
By Count	1,492	1,680	1,728	1,708	1,363	
CAAC	24	20	18	30	24	
CAH	11	7	12	14	13	
CAFLS	392	451	455	454	447	
CBSHS	151	183	179	176	12	
CECAS	631	684	701	623	458	
COE	43	45	49	97	66	
COB	9	11	11	14	9	
COS	193	259	262	272	206	
VP for Res & Interdisc Inst	23	11	13	11	7	
All Other	15	9	28	17	19	
By Value (millions)	$896	$933	$951	$1,034	$723	FY2026 Targets
CAAC	$6.5	$10.4	$8.6	$9.6	$6.6	**$12.13**
CAH	$1.7	$3.0	$1.5	$0.9	$1.6	**$3.58**
CAFLS	$249.9	$149.6	$188.9	$205.3	$191.6	**$173.22**
CBSHS	$73.1	$106.5	$116.4	$107.6	$69.7	**$123.48**
CECAS	$380.8	$426.0	$429.8	$430.2	$244.4	**$496.13**
COE	$32.3	$34.4	$34.0	$76.8	$40.5	**$39.69**
COB	$4.8	$6.3	$3.1	$4.1	$1.4	**$7.17**
COS	$127.3	$169.8	$125.5	$186.6	$128.8	**$198.45**
VP for Res & Interdisc Inst	$11.0	$6.7	$5.7	$2.1	$17.9	
All Other	$8.9	$20.3	$36.9	$10.6	$18.6	

Research Awards (3rd Quarter FY2026)

Research awards for the third quarter were $170 million. The graph below shows annual awards earned over the past decade along with third quarter comparisons for each year. The table provides details on awards per college and young investigator awards received.



Research Awards	2022	2023	2024	2025	3rd Quarter 2026
By College/Unit (millions)	$157.6	$282.0	$237.3	$240.4	$169.8
CAAC	$0.4	$3.4	$1.5	$2.3	$0.9
CAH	$0.8	$2.1	$0.7	$0.4	$0.3
CAFLS	$26.9	$107.4	$37.4	$47.8	$41.4
CBSHS	$13.7	$21.0	$27.8	$20.7	$23.0
CECAS	$76.4	$102.8	$109.4	$102.0	$58.6
COE	$5.7	$10.1	$4.9	$13.4	$8.1
COB	$0.9	$1.1	$1.1	$1.9	$1.0
COS	$17.8	$24.4	$34.0	$24.6	$24.5
CVM					$4.5
VP for Res & Interdisc Inst	$6.6	$7.1	$7.0	$7.4	$4.7
All Other	$8.3	$2.6	13.5	$19.8	$2.7
Young Investigator Awards	5	8	10	8	5
NSF CAREER	4	6	10	6	3
NIH KO1	-	-	-	2	-
Air Force Young Investigator	-	1	-	-	1
Army Young Investigator	-	-	-	-	-
DARPA Young Investigator	-	-	-	-	-
EPA Early Career	-	-	-	-	-
DOE Early Career	1	-	-	-	1
Arnold & Mabel Beckman Foundation	-	1	-	-	-

Top Competitive Awards (3rd Quarter FY2026)

The Bezos Earth Fund awarded Clemson $11 million to advance the development of new cotton varieties that are more productive and profitable for farmers. In particular, this project aims to reduce the environmental footprint of cotton production and processing by developing new varieties with built-in color, improved performance and greater resilience. The project is led by Chris Saski, professor of plant and environmental sciences.

The U.S. Army awarded Clemson $9 million to support the Virtual Prototyping of Autonomy-Enabled Ground Systems (VIPR-GS) project based at the Clemson University International Center for Automotive Research. VIPR is leading the development of next-generation military vehicles. Led by Robert Prucka, Alan Kulwicki Professor and chair of the Department of Automotive Engineering, VIPR consists of 80 Clemson faculty from across 13 departments and more than 130 student researchers.

The S.C. Department of Public Health awarded Clemson Rural Health $7.7 million to develop and operate a mobile maternity clinic to improve prenatal and postpartum care in areas with limited services. A signature goal of the grant is to reduce the number of preventable maternal deaths due to lack of access to care. The project is led by Clemson Rural Health director Ron Gimbel in partnership with Self Regional Healthcare.

The U.S. Department of Agriculture (USDA) awarded $4.5 million to support the Harvey S. Peeler Jr. College of Veterinary Medicine. Led by founding dean Steven Marks, the college will create new opportunities to improve South Carolina's economy, retain top talent and protect animal and human health. Students will have the opportunity to become highly skilled veterinarians who can practice in underserved communities in South Carolina.

The U.S. Army awarded Clemson $2.1 million through the University of Alabama-Huntsville to continue a project investigating advanced laser systems. This work aims to improve the performance of beams of directed energy (DE) that can address threats at the speed-of-light and are especially critical to counter future hypersonic weapons. This project utilizes cutting-edge optical materials and structured light engineering capabilities within Clemson University's Center for Optical Materials Science and Engineering Technologies. The project is led by Joe Watkins, director of general engineering.

Top Competitive Awards (3rd Quarter FY2026)

The National Science Foundation (NSF) awarded Clemson $1.3 million through a collaboration with the University of South Carolina to design and implement a Science Teacher Leadership Academy for K-12 educators in South Carolina. The goal is to train and retain high-quality science teachers in high-need rural areas of the state. The project is led by Julianne Wenner, associate professor of teaching and learning.

USDA awarded Clemson $1 million to investigate the development of bio-based wood adhesives from low-cost agricultural residues, rather than petrochemical-based products. This work will expand market opportunities for American agriculture, reduce reliance on imported and petroleum-derived materials and support efficient resource utilization across the forest products and construction sectors. The project is led by Soledad Peresin, director of the Wood Utilization + Design Institute.

USDA awarded Clemson $800,000 to advance breeding of cotton varieties that use water more efficiently. The U.S. Cotton Trust Protocol identified a critical need to water-use-efficient cotton varieties in the U.S. cotton belt. Led by Sruthi Narayanan, associate professor of plant and environmental sciences, this team will work on developing new breeding tools for improving water-use-efficiency in cotton.

The U.S. Army awarded Clemson $745,300 to increase the ability of human-autonomy teams (HATs) to develop situational awareness and shared understanding. HATs possess the capabilities to process information and execute tasks at paces previously unseen but lack core teamwork functions and have difficulty in adapting to human cues and interactions. Led by Nathan McNeese, the McQueen Quattlebaum Endowed Professor of Human-Centered Computing, the project aims to close those gaps and improve performance of HATs.

NSF awarded Clemson $556,678 to study magnetic nanoparticles with potential applications in medical diagnostics, disease detection, and advanced sensing technologies. Led by Thompson Mefford, associate professor of materials science and engineering, the research team will analyze these nanoparticles under external signals and interactions to better understand their behavior, which can facilitate the design of advanced nanostructures with broad applications.

RESEARCH NEWS

This section highlights research news from across the university.

Executive Summary

- Clemson faculty and students are earning significant awards, fellowships and scholarships for their research. Examples of student success through research are on pages 13-16.
- This year, eight Clemson faculty have earned young investigator awards, the most competitive, prestigious awards given to the brightest young minds in academia. Details are on page 17.
- Clemson University named Mik Carbajales-Dale and Luigi Boccuto its senior and junior Researchers of the Year, respectively, a the 10th Annual Research Symposium. Details are on page 18.
- Clemson University honored 18 faculty with University Research, Scholarship and Artistic Achievement Awards (URSAAA) in recognition of exceptional achievements in their respective fields. The full list of honorees is on page 19.

Honors and Achievements

Darren Linvill

Clemson's Darren Linvill has been named an Andrew Carnegie Fellow by the Carnegie Corporation of New York. Linvill is professor of communication and co-director of the Media Forensics Hub at Clemson University. The fellowship provides $200,000 and will support Linvill's work with the Media Forensics Hub to understand online deception and foreign malign influence, as well as educate people on how to identify deception and inauthentic information online. Founded in 2015, the Andrew Carnegie Fellows Program provides the largest stipend of its kind for research in the humanities and social sciences. Linvill was one of 24 researchers named to the 2026 class, selected from more than 380 nominations from across the country. READ MORE

Meredith Morris has been awarded a Fulbright Specialist grant to advance international research and training on parasitic diseases through a collaboration with scientists in the Czech Republic. Morris, an associate professor in the Clemson University Department of Genetics and Biochemistry, is a molecular parasitologist whose work focuses on kinetoplastids, a group of parasites responsible for diseases such as African sleeping sickness, Chagas disease and leishmaniasis, which pose global health threats. READ MORE

Casey Youngflesh has been named an Early Career Fellow by the Ecological Society of America (ESA). He is an ecologist in the College of Science. The fellowship, one of the field's top recognitions for emerging scientific leaders, honors scientists who demonstrate strong contributions and future potential across research, education, communication and the application of ecology to real-world problems. Youngflesh uses computational tools to understand the mechanisms that shape biodiversity. READ MORE

Arelis Moore been recognized by the Gulf South Summit for championing service learning at Clemson. She received the 2026 Outstanding Faculty Contributions to Service-Learning in Higher Education – Instruction Award at a ceremony in Houston. Moore, associate professor of Spanish and international health, leads bilingual service-learning projects and directs Creative Inquiry research and a study abroad project in the Dominican Republic focused on health education and collaborative needs and assets assessments to build healthier communities. READ MORE

Arelis Moore

Honors and Achievements

From left: Rick Owens, Deborah Robinson and Rhondda Thomas

The Nathanael Greene Chapter of the National Society of the Daughters of the American Revolution (NSDAR) recently honored a team of Clemson University faculty and staff for their historic preservation efforts at Woodland Cemetery and African American Burial Ground. Research at the site has identified the people buried there, connecting to their living descendants, and added to the learning experience for dozens of Clemson students, faculty and staff, as well as community members. Calhoun Lemon Professor of Literature Rhondda Thomas, Genealogist Deborah Robinson and Historic Preservation Officer Rick Owens accepted the Excellence in Historic Preservation Certificate and Medal. READ MORE

Brad Stancil has been recognized with the 2025 Excellence in Innovation Award from the Association of Official Seed Certifying Agencies (AOSCA). Stancil is assistant director of Clemson University's Fertilizer Regulatory and Certification Services. The award honors Stancil's work to modernize how Clemson's regulatory and certification programs operate with innovations that are already delivering faster, more efficient service to South Carolina farmers and agribusinesses. READ MORE

From left: Lena Burgess, Amber McCabe, Lucia Gonzales, Whitney Bridges, Zahra Rahemi, Samantha Luhn and Jason Thrift.

Four faculty and three students in the Clemson University of School of Nursing have received Palmetto Gold Awards from the South Carolina Nurses Foundation. Palmetto Gold Awards recognize registered nurses and students across South Carolina who exemplify excellence in nursing practice and a deep commitment to the profession. Recipients are selected through an annual nomination and review process that includes nurses from across the state in a variety of practice settings. Faculty award winners include Lena Burgess, DNP, principal lecturer; Lucia Gonzales, Ph.D., associate director of research and associate professor; Zahra Rahemi, Ph.D., associate professor; and Jason Thrift, Ph.D., assistant professor. Student award winners include graduate students Whitney Bridges, RN, and Amber McCabe, RN, and undergraduate student Samantha Luhn. READ MORE

Honors and Achievements

Gilman Scholars

Nineteen Clemson University students have been selected for the U.S. Department of State's Benjamin A. Gilman International Scholarship Program, a nationally competitive award that funds Pell-eligible students to study or intern abroad while earning academic credit. This year, the Gilman Program received more than 19,900 applications, the highest number in the program's 25-year history. Clemson's scholarship recipients will participate in a variety of international experiences, from observing classrooms in Reggio Emilia, Italy, to interning at an immigration law firm in Seville, Spain. Students will study in countries including Spain, France, Italy, South Korea, Japan, Australia and the United Kingdom. READ MORE

Ph.D. student Nima Zafarmomen earned the J. Waldo Smith Hydraulic Fellowship from the American Society of Civil Engineers for his innovative research in hydroinformatics and urban water systems. Zafarmomen is using artificial intelligence to tackle one of engineering's growing challenges: predicting and managing stormwater risks. This award recognizes both his academic excellence and his work to improve infrastructure resilience in the face of climate-related challenges. It is presented annually to not more than two graduate students, who will use the fellowship for tuition, research and living expenses. The ASCE scholarship is awarded by the nation's oldest civil engineering society and one of the field's most respected professional organizations. READ MORE

Nima Zafarmomen

Honors and Achievements

Five Clemson University students and one alumna have been selected for Fulbright U.S. Student Program English Teaching Assistant awards, nationally competitive scholarships that support teaching and cultural exchange abroad. The Fulbright U.S. Student Program is designed to increase mutual understanding between the people of the United States and other countries through academic and cultural exchange. English Teaching Assistants support English instruction in host-country classrooms while serving as cultural ambassadors for the United States. Recipients are chosen based on academic achievement, leadership potential and commitment to community engagement.
READ MORE

Fulbright Recipients

Recent biomedical engineering graduate Eliza Haines received the prestigious Knight-Hennessy Scholarship and is headed to Stanford University to pursue a master's degree in electrical engineering. It is an opportunity to advance her neurotechnology research in the heart of Silicon Valley. Haines' big-picture goal is to develop neurotechnologies that would help people who have locked-in syndrome communicate. Locked-in syndrome is a condition in which a person is fully conscious but unable to move or speak. Already, Haines has conducted research into brain-computer interfaces, helping develop machine-learning techniques to better process brain signals. She ultimately wants to work at a medical-device company in research and development after completing her master's degree at Stanford. READ MORE

Eliza Haines

Clemson University physics major Drew Hodges earned a 2026 Astronaut Scholarship for his work exploring the intersection of space research and nuclear engineering. The award provides $15,000 in financial support, access to industry mentors and an opportunity to present his research in atmospheric and space physics at the foundation's national symposium in Houston this summer. READ MORE

Drew Hodges

Young Investigator Awards

This year, eight Clemson faculty have earned young investigator awards from either the U.S. Department of Energy, the National Science Foundation or the U.S. Air Force. These are the most competitive, prestigious awards given to the brightest young minds in academia. These awards are career catalysts. Some of Clemson's most successful researchers were once recipients of these young investigator awards. With eight new awards this year, 85 junior Clemson faculty have received prestigious young investigator awards over the past 10 years. Names of this year's recipients are listed below. A full list of active young investigator awards is posted online here.

Shanna Estes
Assistant Professor
Chemistry
Sponsor: U.S. Department of Energy

Chris Flathmann
Assistant Professor
School of Computing
Sponsor: U.S. Air Force

Prakash Khedun
Assistant Professor
Agricultural Sciences
Sponsor: National Science Foundation

Soledad Peresin
Director
Wood Design + Utilization Institute
Sponsor: National Science Foundation

Mert Pese
Assistant Professor
School of Computing
Sponsor: National Science Foundation

James Sternberg
Assistant Professor
Food, Nutrition and Packaging Sciences
Sponsor: National Science Foundation

Lan Zhang
Assistant Professor
Electrical and Computer Engineering
Sponsor: National Science Foundation

Zhenkai Zhang
Assistant Professor
Chemical and Biomolecular Engineering
Sponsor: National Science Foundation

Researcher of the Year

Clemson University named Mik Carbajales-Dale and Luigi Boccuto its senior and junior Researchers of the Year, respectively, a the 10th Annual Research Symposium on May 6.

"These are highly cited scholars making a profound impact in their respective fields and raising Clemson's national profile. I congratulate them on their successes and am eager to see the ongoing impact their work will have in their fields and on their communities," said Tanju Karanfil, senior vice president for research, scholarship and artistic achievement.

Senior Researcher of the Year Mik Carbajales-Dale, professor in the School of Civil and Environmental Engineering and Earth Sciences, is an expert on the energy economy and its environmental impact. He leads the Clemson Energy-Economy-Environment (E3) Systems Analysis Group, which is building decision-support tools to reduce the environmental impacts of technology systems and to understand the structural transformation necessary to advance a prosperous and sustainable energy future.

Mik Carbajales-Dale

"I'm honored to receive this award. It's really a reflection of the great team that I have and all their hard work as well as the fantastic collaborators that we work with. I look forward to being able to work with more folks from across campus and growing our research enterprise further," Carbajales-Dale said.

Additional nominees for senior Researcher of the Year were Rod Andrew Jr., professor, Department of History and Geography; Timo Heister, professor, School of Mathematical and Statistical Sciences; Robert Powell, George B. Hartzogb Jr. endowed professor, Department of Parks, Recreation and Tourism Management, College of Behavioral, Social and Health Sciences; Corrine Sackett, professor, Department of Education and Human Development; and Scott Swain, professor and Powers distinguished fellow, Department of Marketing.

Junior Researcher of the Year Luigi Boccuto, assistant professor in the School of Nursing, is a clinical geneticist interested in autism spectrum disorder and related conditions, such as Phelan-McDermid syndrome, hereditary cancer, overgrowth syndromes and intellectual disability. His research can help to develop biomarkers for early screening and diagnosis, as well as identify potential treatments.

Luigi Boccuto

"This achievement would have not been possible without the constant guidance and support of our dean and director, the invaluable collaboration of my faculty colleagues and, last but not least, the amazing work of our graduate and undergraduate students: this award belongs to them as much as to me," Boccuto said.

Additional nominees for junior Researcher of the Year were Rafeal D'Oliveira, assistant professor, School of Mathematical and Statistical Science; Quin Hiroshi Gibson, assistant professor, Department of Philosophy and Religion; Lindsey Rowe, assistant professor, Department of Education and Human Development; Sharon Sheridan, assistant professor, Department of Management; and Ming Yang, assistant professor, Department of Chemical and Biomolecular Engineering.

University Research, Scholarship and Artistic Achievement Awards (URSAAA)

Clemson University honored 18 faculty with University Research, Scholarship and Artistic Achievement Awards (URSAAA) in recognition of exceptional achievements in their respective fields. URSAAA designation is reserved for faculty members who have achieved the highest levels of national and international recognition in their fields. The following faculty earned URSAAA recognition in 2026:

- **Paula Agudelo**, professor, Department of Plant Environmental Sciences (URSAAA Achievement: Annual expenditures exceeding $1 million)
- **Michelle Cook**, professor, Department of Teaching and Learning (URSAAA Achievement: Publication exceeding 1,000 citations)
- **Alyssa Gamaldo-Roddy**, professor, Department of Psychology (URSAAA Achievement: Annual expenditures exceeding $1 million)
- **Amy Ingram**, professor, Department of Management, (URSAAA Achievement: Publication exceeding 1,000 citations)
- **Yunyi Jia**, McQueen Quattlebaum professor, School of Mechanical and Automotive Engineering (URSAAA Achievement: Annual expenditures exceeding $1 million)
- **David Karig**, professor, Department of Bioengineering (URSAAA Achievement: Annual expenditures exceeding $1 million)
- **Ron Landis**, clinical associate professor, Department of Management (URSAAA Achievement: Publication exceeding 1,000 citations)
- **Miguel Larsen**, research professor and emeritus faculty, Department of Physics and Astronomy (URSAAA Achievement: Recipient of the NASA Distinguished Public Service Medal)
- **Gang Li**, professor, School of Mechanical and Automotive Engineering (URSAAA Achievement: Annual expenditures exceeding $1 million)
- **Ying Mei**, professor, Department of Bioengineering (URSAAA Achievement: Annual expenditures exceeding $1 million)
- **Bradley Meyer**, professor, Department of Physics and Astronomy (URSAAA Achievement: Publication exceeding 1,000 citations)
- **Shahid Mukhtar**, professor, Department of Genetics and Biochemistry (URSAAA Achievement: Publication exceeding 1,000 citations)
- **Fei Peng**, professor, Department of Materials Science and Engineering (URSAAA Achievement: Annual expenditures exceeding $1 million)
- **Robert Powell**, George B. Hartzog Jr. endowed professor, Department of Parks, Recreation and Tourism Management (URSAAA Achievement: Recipient of the National Association for Interpretation's highest honor, the Fellow Award)
- **Robert Prucka**, Alan Kulwicki professor of motorsports engineering, School of Mechanical and Automotive Engineering (URSAAA Achievement: Annual expenditures exceeding $1 million)
- **Greg Reighard**, professor emeritus, Department of Plant and Environmental Sciences (URSAAA Achievement: Fellow of both the American Society for Horticultural Science and the International Society for Horticultural Science, and recipient of the American Pomological Society's Wilder Medal)
- **Timothy Sellnow**, professor, Department of Communication (URSAAA Achievement: Publication exceeding 1,000 citations)
- **Windsor Sherrill**, provost distinguished professor of public health sciences and senior associate vice president for research, Clemson University School of Health Research (URSAAA Achievement: Annual expenditures exceeding $1 million)

RESEARCH

FOCUS ON FACULTY

This section highlights junior faculty members at Clemson University. Profiles were submitted by the colleges.

Executive Summary

- Click the links below to read about faculty member from the respective college.
  - » College of Agriculture, Forestry and Life Sciences
  - » College of Architecture, Art and Construction
  - » College of Arts and Humanities
  - » College of Behavioral, Social and Health Sciences
  - » Wilbur O. and Ann Powers College of Business
  - » College of Education
  - » College of Engineering, Computing and Applied Sciences
  - » College of Science

College of
AGRICULTURE, FORESTRY AND LIFE SCIENCES

Anastasia Thayer, Ph.D.

Assistant Professor

Agricultural Sciences

Thayer joined the College of Agriculture, Forestry and Life Sciences in 2022, after working as an assistant professor and Extension specialist at Utah State University. Thayer focuses on natural resource economics and farm management, using econometrics, mathematical programming and simulations to answer research questions related to livestock economics relevant for producers in the southeastern United States. As part of the $75 million USDA grant Advancing Markets for Producers in South Carolina, the largest single federal award received by the university, Thayer leads the agricultural market development group, working with other faculty in agribusiness to understand adoption challenges for producers of beef cattle, peanuts and leafy greens.

Thayer teaches four courses: three are undergrad/graduate courses; and one is a graduate course on commodity market analysis and forecasting. She has published more than 20 peer-reviewed articles. Thayer has advised six undergraduate students participating in various research opportunities (e.g., UPIC internships, Eureka!), has been a mentor and primary advisor to four M.S. students (two as co-chair), served on committees for four Ph.D. candidates and an additional eight M.S. students, and has co-advised one postdoctoral fellow, all in her short tenure at Clemson. Her service to the university and beyond includes being a member of the Curriculum Committee for her department and a member of the undergraduate committee of the Southern Agricultural Economics Association.

Select Accomplishments

- Has received two sub-award grants as a principal investigator (PI) and collaborates as co-PI with numerous individuals outside her department.
- Selected grants include:

1. Leveraging Concentrated Organic Byproduct Materials for Higher Nutrient Use Efficiency and Anaerobic Soil Disinfestation in Organic Vegetable Production - $866,439 from the USDA.
2. Empirical assessment of grain sorghum resiliency, productivity, and profitability in the southeastern USA, $399,974 from Southern Sustainable Agricultural Research and Education (Southern SARE).
3. Development of Educational Climate-Smart Agricultural Resources for Forage-Livestock Systems in South Carolina, $74,094 from the University of Arkansas.
4. Identifying Barriers of Small and Medium-sized Vegetable Farms to Adopt Climate Resilient Irrigation in Southeast US: A Seed Proposal, $299,990 from the USDA.

College of
ARCHITECTURE, ART AND CONSTRUCTION

Amer Hamad Issa Abukhalaf

Assistant Professor

Nieri Department of Construction and Real Estate Development

Abukhalaf joined Clemson University in 2024. His interdisciplinary research explores the intersections of disaster resilience, mental health, emergency preparedness and the built environment. With a background spanning civil engineering, project management and public health-oriented disaster research, his work focuses on developing equitable, community-driven strategies that strengthen resilience among vulnerable and underserved populations.

Abukhalaf's research investigates how climate hazards, housing instability, socioeconomic disparities and communication barriers shape disaster preparedness and long-term well-being. His scholarship examines hurricane preparedness behaviors, post-disaster mental health outcomes, emergency communication and the role of housing conditions in shaping risk perception and resilience. Recent projects include NSF-supported research on tornado-related mental health disparities and collaborative HUD-funded initiatives addressing affordable housing and disaster recovery.

One example of this is a recent proposed NIH pilot project, "A Trauma-Informed and Community-Based Co-Design Model for Disaster Recovery in Upstate South Carolina". This project and proposed model differ from traditional disaster response approaches by shifting the focus from short-term emergency stabilization to sustained, community-centered mental health support. While most established frameworks prioritize immediate logistics such as shelter, food, and medical care, this model embeds behavioral health into long-term resilience planning. It is grounded in local empirical data and shaped through structured community engagement, ensuring relevance to the specific needs of vulnerable populations. Rather than operating as a temporary intervention, the model is designed as an ongoing community resource that strengthens preparedness, social connectedness, and access to support services, offering a scalable framework for future disaster-prone communities.

Select Accomplishments

- Abukhalaf, A. H. I. (2024). Medical Xpress - Resilience and recovery: Navigating mental health challenges in disaster response (doi: 10.13140/RG.2.2.29156.96648).
- Abukhalaf, A. H. I. (2023). Medical Xpress - Disaster response and recovery must include mental health support plan (doi: 10.13140/RG.2.2.25559.75684).
- Abukhalaf, A. H. I. (2022). Science X - Whether it's a hurricane, an active shooter, or a pandemic, we must reconsider campus emergency planning (doi: 10.13140/RG.2.2.24811.21287).

College of ARTS AND HUMANITIES

Elizabeth Rivlin, Ph.D.

Associate Professor

English

Rivlin came to Clemson straight from graduate school in 2004. She specializes in Shakespeare and early modern British literature, covering the period from 1500-1650. Her first book, The Aesthetics of Service in Early Modern England (Northwestern University Press, 2012), focuses on moments in Shakespeare and other early modern literature when servants disrupt traditional hierarchies and inspire their masters to imitate them—and sometimes even serve them! The book received positive reviews, has been cited by a number of other scholars and remains in print today. In addition, Rivlin has published a number of articles on service and servants in literature in some of the most prominent journals in her field. In 2022, she received the University Research, Scholarship and Artistic Achievement Award, reserved for faculty who have earned the highest levels of national and international recognition in their fields.

Rivlin's recent research focuses on Shakespearean spin-offs, adaptations, and readerships. Her second book, Middlebrow Shakespeare: American Reading Publics, will be published by Columbia University Press in 2027. It offers a new history, deeply rooted in original research and archival sources, narrating how and why Americans have read and revised Shakespeare's works and repurposed the idea of Shakespeare as author. Since the Civil War and up to the present day, institutionalized reading programs, book clubs, and publishing initiatives have presented, packaged, and promoted Shakespeare for large American readerships. The idea behind these enterprises has been that reading Shakespeare can catalyze self-improvement, social mobility and cultural privilege. Middlebrow Shakespeare argues that Americans have eagerly seized this promise, turning to the reading of Shakespeare as a powerful tool for individual and collective identity formation. The book examines, for the first time, how literary and reading institutions have shaped middle-class Americans' experience of Shakespeare and demonstrates how important Shakespeare has been, and remains, to American readers. This book is expected to reach a wide academic audience and be of interest to Shakespeare enthusiasts in the general public.

Select Accomplishments

- Received a prestigious National Endowment for the Humanities Summer Stipend in 2020.
- Co-edited a book collection of essays, with Alexa Huang, Shakespeare and the Ethics of Appropriation (Palgrave Macmillan, 2014).
- Received the Dean's Award for Excellence in Teaching in 2012.
- Won the Douglas W. Bradbury Award for Outstanding Contributions to the Honors College.

College of
BEHAVIORAL, SOCIAL AND HEALTH SCIENCES

Michael D. Jones, Ph.D.

Thurman Professor

Political Science

Jones's research focuses on public policy, political communication and democratic governance, with particular emphasis on how narratives shape public understanding of complex policy issues. He is one of the original architects of the Narrative Policy Framework (NPF), an internationally recognized approach to studying the role of stories in politics and public policy using scientific and quantitative methods. His research examines how citizens, institutions and political actors interpret issues involving emerging technologies, risk, polarization, public trust and governance.

His current research agenda includes projects examining artificial intelligence and public opinion, political polarization and radicalization, risk perception, robotics policy, collaborative governance and long-term analysis of American political party narratives from 1840–2024. His work combines experimental research, survey methods, large-scale narrative coding and interdisciplinary collaboration to better understand how democratic societies communicate and make policy decisions during periods of technological and political change. In addition to his scholarly research, Jones actively mentors graduate students and collaborates with scholars across the United States and internationally.

Jones received his Ph.D. in political science from the University of Oklahoma in 2010. Prior to joining Clemson University as the Thurmond Professor of Political Science, he served on the faculties of the University of Tennessee, Oregon State University and Virginia Tech, and was a Research Fellow at Harvard University's Edmond J. Safra Center for Ethics.

Select Accomplishments

- Recognized among the world's Top 2% Most-Cited Scientists by Stanford University, Elsevier standardized citation indicators (2025).
- Recipient of the Policy Studies Organization Enduring Contribution Award for long-term scholarly impact in public policy research (2023).
- Recipient of the Distinguished Alumni Professional Achievement Award from Idaho State University (2022).
- Former Editor-in-Chief of the *Policy Studies Journal*, one of the leading journals in public policy and policy process research.
- Author or editor of multiple books and more than 40 refereed journal articles and book chapters.
- Mentor to graduate students whose research has earned conference awards, publications, and national scholarly recognition.

Wilbur O. and Ann Powers College of BUSINESS

Lisa Beeler, Ph.D.

Assistant Professor

Marketing

Beeler's research focuses on professional selling, sales management and frontline marketing strategy, with particular emphasis on salesperson wellbeing, sales force analytics, incentives and the evolving role of technology in sales organizations. Since joining Clemson University in 2021, she has published 10 peer-reviewed articles in leading marketing and sales journals, including journals on the Financial Times FT50 list, and has published 20 total peer-reviewed articles since earning her Ph.D. from the University of Tennessee in 2017. Her scholarship has appeared in premier journals, including the *Journal of the Academy of Marketing Science*, *Journal of Business Research*, *Industrial Marketing Management* and the *Journal of Personal Selling & Sales Management*. Her research excellence has been recognized with Clemson University's Junior Scholar Research Excellence Award in both 2024 and 2025, along with two Powers College of Business Research Grants. She also serves as Research Faculty in Clemson's Sales Innovation Program (SIP), where she collaborates with corporate partners to address contemporary salesforce challenges and disseminate research findings to practitioner audiences.

At Clemson, Beeler has played a significant role in advancing experiential learning and student engagement within the Sales Innovation Program. She served as director of student development during the program's first years and founded Clemson's sales role-play competition team, leading students to consistent top national finishes, including a third-place team finish and a second-place individual finish. She regularly connects students with industry leaders by bringing corporate partners such as Salesforce, Michelin, Arthrex, OTIS and Gallo to campus each semester, providing students with networking and career development opportunities. Professor Beeler has also served in national leadership roles within the sales discipline, including vice chair for the American Marketing Association Sales Special Interest Group and director of research dissemination for the *Journal of Personal Selling & Sales Management*, where she significantly expanded the journal's online visibility and practitioner engagement.

Select Accomplishments

- Beeler, L., Mullins, R., & Habel, J. (2026). Using latent profile analysis to advance job demands-resources theory: An empirical demonstration in the sales context. *Journal of the Academy of Marketing Science*.
- • Beeler, L., Burchett, M., Chase, M. R., Mullins, S., & Habel, J. (2026). Inclusive climates in sales: Microaggressions, sales manager justice and salesperson engagement. *Journal of Business Research*, 202, 115789.

College of EDUCATION

Lesa Hoffman, Ph.D.

Professor

Education and Human Development

Hoffman received her Ph.D., the first advanced degree in her family, in cognitive and quantitative psychology at the University of Kansas in 2003. After completing a post-doctoral fellowship at The Pennsylvania State University, she held tenure-track faculty positions at the University of Nebraska-Lincoln, University of Kansas and University of Iowa. In January 2026, Hoffman began a new appointment as a Eugene T. Moore Distinguished Professor in the Department of Education and Human Development in the College of Education at Clemson University.

Hoffman's program of research seeks to empirically examine and to thoughtfully disseminate how developments in quantitative methodology can best be utilized to advance empirical work in the social sciences, with particular focus on the real-world behavior of longitudinal models, multilevel models and structural equation models. She is an award-winning instructor who has taught graduate courses and intensive workshops on three continents covering advanced quantitative methods, such as generalized linear models, longitudinal models, multilevel models and latent trait measurement and structural equation models.

Select Accomplishments

- Elected to the prestigious Society of Multivariate Experimental Psychology in 2009, received its Early Career Award in 2011 and was elected as its president in 2021. She also received the society's award for most outstanding article in *Multivariate Behavioral Research* in 2008 and its award for distinguished service in 2023.
- Served as principal investigator for two grants (NIH/NIA; NSF/MMS), as well as co-investigator, center core director, faculty mentor or consultant for 23 grants funded through NIH, three grants funded through NSF, nine grants funded through IES, and multiple grants from other sources for her contributions to quantitative methodology.
- Has contributed ~100 peer-reviewed publications, along with a sole-author textbook on longitudinal analysis of within-person fluctuation and change (with a second edition in progress), garnering over 14,000 citations.
- Has served as a Mercator Fellow for the Statistical Modeling in Psychology Research Training Group (hosted by the University of Mannheim, Germany).

College of
ENGINEERING, COMPUTING AND APPLIED SCIENCES

Rong Ge, Ph.D.

Professor

School of Computing

Ge is an internationally recognized scholar whose research spans energy-aware computing, GPU technologies, high-performance computing systems and quantum computing. Her research strengthens Clemson's leadership in advanced computing systems that support scientific discovery, artificial intelligence and emerging quantum technologies. Her work develops methods and tools for analyzing performance bottlenecks, improving resource utilization and enabling complex applications to run efficiently on modern supercomputers and high-performance computing platforms. Her research in energy-aware computing addresses one of the most pressing challenges in advanced computing: delivering high performance under power, cost, and sustainability constraints.

Ge has also played a leading role in expanding quantum computing research and education at Clemson. She developed a sequence of quantum computing courses for students across disciplines, ranging from hands-on introductory learning to advanced, research-oriented training. This curriculum lays the foundation for a future minor degree in quantum computing and supports broader efforts to establish graduate-level quantum programs. She is also leading efforts to develop a university-wide quantum computing hub that will connect faculty, students, courses, research projects and shared resources across campus. Together with her Ph.D. student, she founded Clemson's student quantum computing club, which holds regular meetings, prepares students for competitions, and has supported Clemson teams in multiple international quantum hackathons, where they have won major prizes.

Through her research leadership, external funding, national partnerships, curriculum development, and student mentoring, Professor Ge is helping Clemson build strength in technologies that are central to scientific discovery, economic competitiveness, national security, and the future quantum workforce

Select Accomplishments

- Received the prestigious NSF CAREER Award in 2015.
- Served as an associate editor for the IEEE Transactions on Parallel and Distributed Systems from 2018 to 2022 and received the IEEE TPDS Award for Editorial Excellence.
- Currently leading nine active externally funded projects totaling approximately $4.3 million
- Actively collaborates with Department of Energy national laboratories, including Argonne, Lawrence Livermore, Los Alamos, Oak Ridge and Savannah River national labs.
- Has graduated four Ph.D. students and currently advises five more. Her students have conducted research with national laboratories, published in competitive venues and built practical systems for solving real-world challenges.

College of SCIENCE

Jens Oberheide, Ph.D.

Professor

Physics and Astronomy

Oberheide is a space physicist who fuses satellite observations, data analytics and computer modeling to better understand the space environment surrounding our planet. Since joining Clemson University in 2010, he has built Clemson's Space Physics program into a nationally visible research group focused on space weather and upper-atmosphere dynamics. His studies have demonstrated how tropical weather systems and atmospheric waves generated deep in Earth's atmosphere can propagate upward over hundreds of miles and influence satellite drag, radio communications, navigation systems and other space-weather-sensitive technologies.

Oberheide's research directly supports national priorities in space weather preparedness, satellite operations, communications reliability and national security. Disturbances in the upper atmosphere can disrupt GPS navigation, aviation, satellite communications, emergency response systems, precision agriculture and defense operations. His work improves prediction of satellite drag and conditions in the near-Earth space environment that affect economic activity and national resilience. Oberheide's research also advances the development of data-driven atmospheric models and AI-enabled scientific analysis that support NASA, NSF, NOAA, and DoD space-weather initiatives.

At Clemson, Oberheide has developed a research program that has expanded Clemson's national presence in space physics. He is the principal investigator of an NSF Faculty Development in the Space Sciences (FDSS) award that significantly expanded Clemson's capabilities in space research. The grant directly supported strategic faculty recruitment that strengthened Clemson's research capabilities in space science. Oberheide's group works extensively with data from major NASA satellites. He is a co-investigator in the new NASA DYNAMIC space weather satellite mission and serves in national leadership roles for NSF and NASA space science programs.

Select Accomplishments

- Authored more than 100 peer-reviewed scientific publications and has received over 5,000 citations.
- Received the prestigious NSF-CEDAR Prize Lecture Award recognizing outstanding contributions to upper-atmosphere and space-weather research.
- Has secured approximately $5.7 million in externally funded research support, supporting Clemson research infrastructure, graduate education, and national collaborations in space physics.
- Has mentored numerous undergraduate and graduate students, and postdoctoral researchers.

RESEARCH

Bold Ideas. Broad Collaboration. Big Impact.