



RESEARCH

QUARTERLY RESEARCH REPORT
OCTOBER 2024

TANJU KARANFIL
SENIOR VICE PRESIDENT FOR RESEARCH,
SCHOLARSHIP AND CREATIVE ENDEAVORS





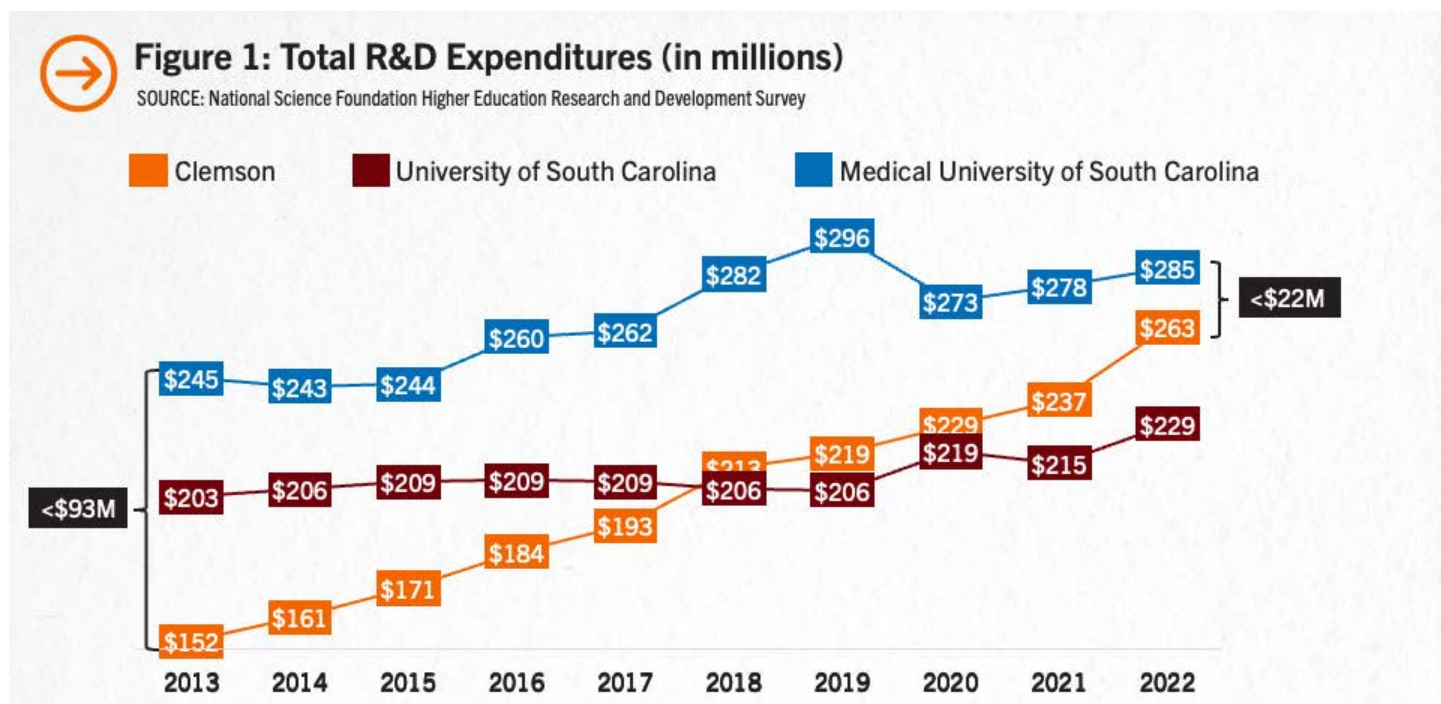
From the Senior Vice President for Research, Scholarship and Creative Endeavors

Clemson University has outpaced its peers in research growth over the past decade and laid a strong foundation for reaching its goals under Clemson Elevate:

1. *Double Research by 2035.*
2. *Position Clemson for AAU Membership.*

Clemson has been on an exponential growth curve for a half-century. Total Research and Development (R&D) Expenditures increased from \$6.7 million in 1973 to nearly \$287 million in fiscal year 2023. The number of master's degrees awarded has nearly quadrupled to 1,883 over that time; doctoral degrees awarded have more than sextupled to 285. Incredible.

Looking over the past decade, we see Clemson catching its peers in research activity. Within South Carolina, Clemson once sat at the bottom in total R&D expenditures among South Carolina's three research universities. Since 2015, Clemson has posted 73 percent growth in Total R&D Expenditures, compared to 16 percent at Medical University of South Carolina (MUSC) and 13 percent at University of South Carolina (USC). With that growth, Clemson surpassed USC in total R&D in 2018 and has closed the gap between MUSC considerably (Figure 1).



Compared to out-of-state peer institutions, Clemson measures favorably as well. Clemson's 5.6 percent Compound Annual Growth Rate (CAGR) in Total R&D Expenditures over the past decade exceeds the average CAGR of Carnegie R1 institutions by a full percentage point, according to data from the National Science Foundation Higher Education Research and Development Survey (HERDS). Clemson's CAGR also surpassed that of MUSC and USC, as well as peer institutions such as North Carolina State University, Virginia Tech, Georgia Tech and Purdue University (Figure 2 next page).

We have solidified our status as one of the nation's most active research institutions. We have nurtured a culture where Clemson can win high-value research awards. We have added great talent in leadership

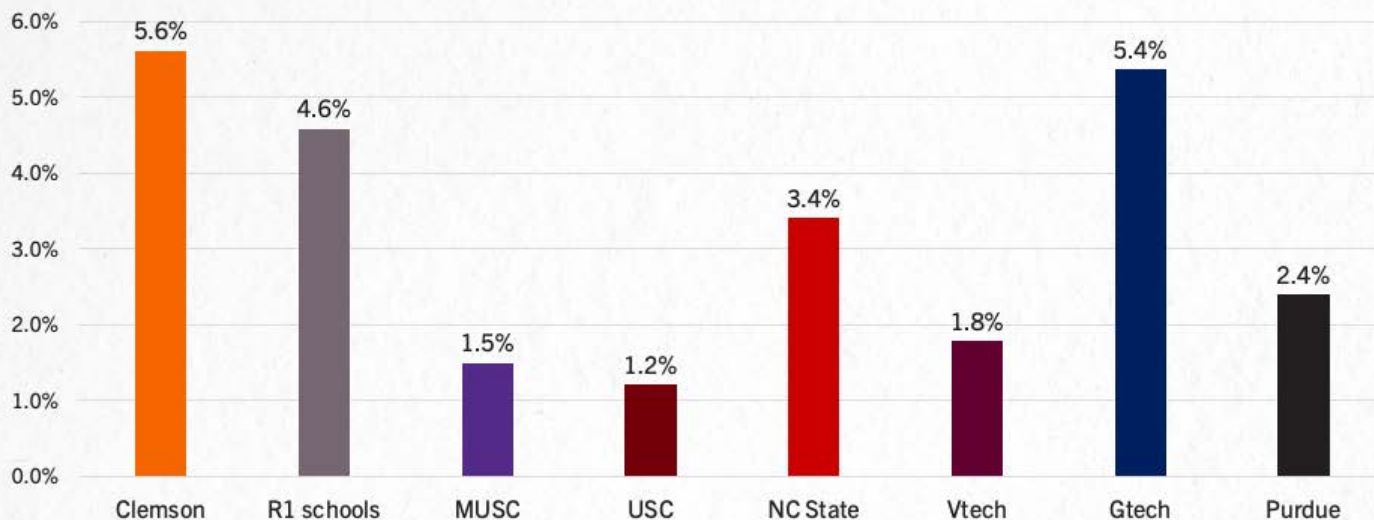


From the Senior Vice President for Research, Scholarship and Creative Endeavors



Figure 2: Compound Annual Growth Rate in Total R&D Expenditures

SOURCE: National Science Foundation Higher Education Research and Development Survey

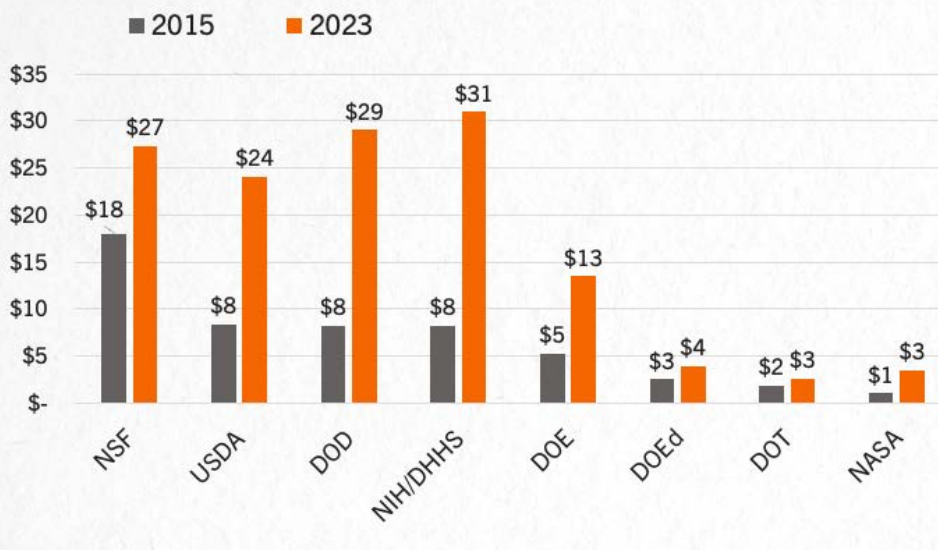


across the colleges. We have been strategic in capitalizing on our strengths, innovation campuses and partnerships. We have aligned with federal priorities and diversified our portfolio with substantial increases in funding from numerous agencies. In 2015, funding from the National Science Foundation (NSF) accounted for a significant portion of our portfolio. But we have since seen large gains in funding from the U.S. Department of Agriculture (USDA), U.S. Department of Defense (DOD), National Institutes of Health (NIH) and the U.S. Department of Energy (DOE), as well as some gains from the U.S. Department of Education (DOEd), U.S. Department of Transportation (DOT) and NASA (Figure 3).

In Fiscal Year 2024, we continued our growth. During the fiscal year ending June 30, 2024, our competitive expenditures increased 24 percent from the prior fiscal year to \$198 million. This includes expenditures only from competitively bid projects, such as federal grant awards. Our research awards during the fiscal year exceeded \$237 million, and proposal submissions increased again in FY2024 and are up to \$951 million. Expanded research metrics data is available on [pages 5-10](#).



Figure 3: Expenditures by Top Agencies (in millions)





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

Since 2015, Clemson has earned 121 awards valued at or above \$2 million, bringing more than \$700 million to the university. Outstanding. We continued to earn high-value awards from federal agencies in FY2024, and our top awards for the fiscal year included funding from numerous agencies: the U.S. Air Force, the U.S. Department of Agriculture, the National Science Foundation, the National Institutes of Health, the U.S. Army, and others. That diversification is key to the health and strength of our growing research portfolio. Some examples of high-value projects earned in FY2024 are on [pages 11-12](#).

High-value awards such as these are critical to the Clemson Elevate goal of doubling research by 2035. They build capacity by investing in our people and our infrastructure. As we conduct more research, meanwhile, our faculty continue to earn significant honors and recognition, an important step to increasing our national reputation as we pursue AAU membership. Some examples of recent achievements are listed on [pages 13-19](#).

Additionally, this report includes a brief profile of one faculty member from each college, along with select accomplishments for each individual, to provide an idea of the breadth of work happening at Clemson and the impact we are having through our research, scholarship and creative endeavors.

It truly is a great time to be a Clemson Tiger!



Tanju Karanfil

Sincerely,

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

Senior Vice President for Research, Scholarship and Creative Endeavors
Clemson University

NOTE: This report includes an opening letter from the Senior Vice President for Research, Scholarship and Creative Endeavors; data on research metrics, including awards, proposals and expenditures; news on faculty and student achievement; and profiles of one faculty member from each college. Click the tabs at the top of each page to navigate to the executive summaries at the beginning of each section. Underlined text in Clemson orange links directly to pages within this document or to additional information posted online.



RESEARCH

RESEARCH METRICS

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

Executive Summary

- Clemson reported total R&D expenditures of \$287 million for 2023 to the National Science Foundation Higher Education Research and Development (HERD) Survey. This is an increase of more than 9 percent from 2022 ([page 6](#)).
- During the fiscal year ending June 30, 2024, our competitive expenditures increased 24 percent from the prior fiscal year to \$198 million ([page 7](#)).
- Proposal submissions increased again in FY2024 and are up to \$951 million ([page 9](#)).
- Research awards during the fiscal year exceeded \$237 million ([page 10](#)).
- Clemson faculty remain successful earning high-value awards. A selection of large grants received in FY2024 are on [pages 11-12](#).

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 & PSA: College of Agriculture, Forestry & Life Sciences and Public Service & Agriculture

CBSHS: College of Behavioral, Social & Health Sciences

CECAS: College of Engineering, Computing & Applied Sciences

COE: College of Education

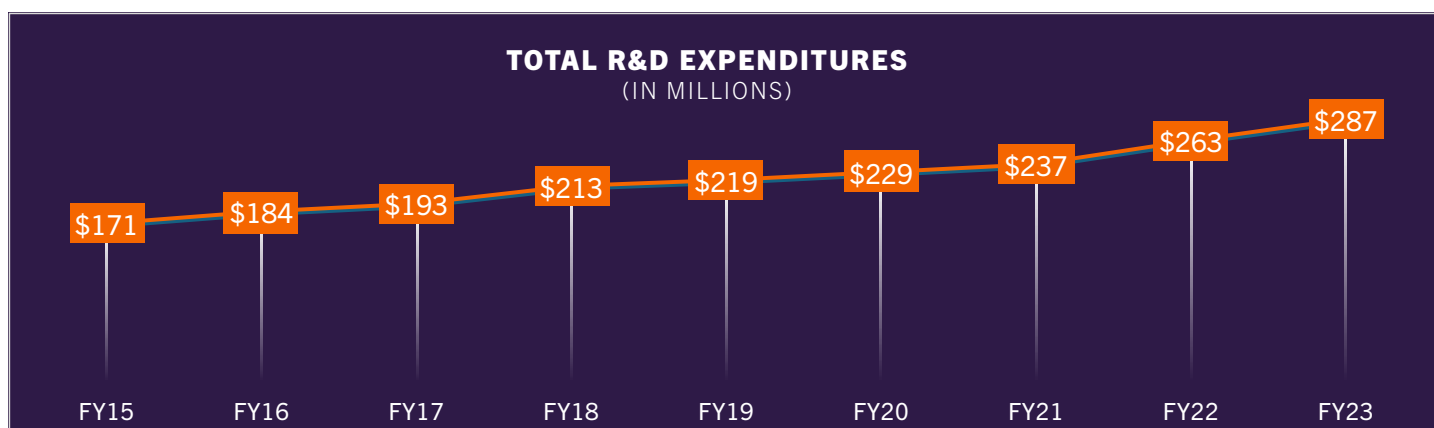
COB: Wilbur O. and Ann Powers College of Business

COS: College of Science

Total R&D Expenditures

Clemson's total R&D expenditures continued to increase in 2023 to \$287 million, as shown in the chart 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.



	2020	2021	2022	2023	2024
NIH R01-Equivalent Awards	1	3	1	6	2
Doctorates Awarded	249	225	242	285	310
STEM Doctorates Awarded	162	159	172	190	197
Disclosures	68	44	50	61	76
Patents	12	15	33	11	13
Licenses/Options	13	13	27	16	20
Licensing Revenue	\$315,578	\$239,074	\$380,286	\$392,162	\$387,274
Start-up Companies (based on licenses/options)	1	1	4	4	7
Supporting Workforce					
Graduate Student Enrollment	5,627	5,538	5,448	6,401	5,872
Sponsored Graduate Research Assistants	637	546	729	926	1,049
Postdoctoral Fellows	98	106	117	112	141
Research Faculty: Permanent 100% Non-E&G Funded	18	12	2	5	4
Research Faculty: Temporary 100% Non-E&G Funded	54	45	32	28	36

Competitive Expenditures

Competitive expenditures reached \$198.5 million in FY2024, an increase of nearly 24 percent from the previous fiscal year. Competitive expenditures include funds only from competitively bid projects, such as federal grant awards.

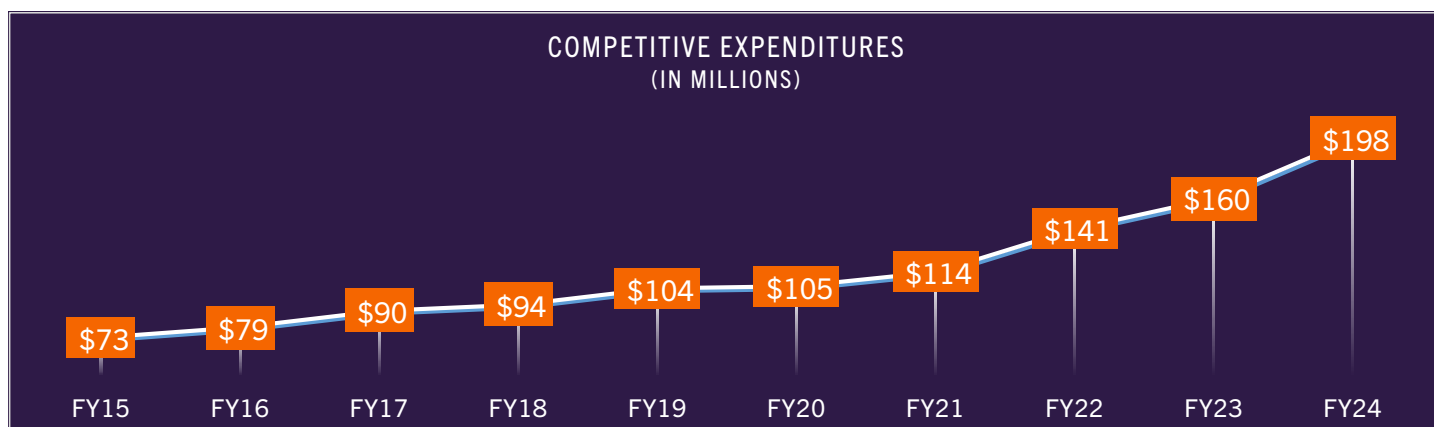
Additional details on expenditures by business unit, innovation cluster, funding source, and per tenure/tenure-track faculty member are included in the table on the next two pages.

The line graph on the following page compares competitive expenditure data for the past decade.

Research Expenditures (millions)	2020	2021	2022	2023	2024
By Business Unit	\$105.3	\$114.4	\$141.4	\$160.3	\$198.5
CAAC	\$1.2	\$1.0	\$1.1	\$1.3	\$1.8
CAH	\$0.4	\$0.1	\$0.2	\$0.6	\$1.0
CAFLS & PSA	\$20.2	\$20.5	\$25.0	\$29.7	\$40.7
COB	\$0.7	\$0.7	\$0.7	\$1.0	\$1.4
CECAS	\$46.4	\$54.4	\$71.7	\$76.0	\$88.6
CBSHS	\$6.7	\$9.0	\$12.0	\$16.7	\$21.1
COE	\$2.4	\$2.3	\$3.8	\$5.6	\$6.6
COS	\$17.3	\$15.9	\$18.5	\$23.1	\$28.0
VP for Res & Interdisc Inst	\$9.5	\$9.6	\$7.0	\$6.2	\$7.6
All Other	\$0.5	\$0.8	\$1.5	\$1.6	\$1.8
By Innovation Cluster	\$105.3	\$114.4	\$141.4	\$160.3	\$198.5
Advanced Materials	\$13.5	\$14.3	\$18.6	\$21.1	\$23.6
Cyberinfrastructure & Big Data Science	\$4.4	\$5.5	\$8.2	\$7.7	\$8.6
Energy, Trans. & Advanced Manufacturing	\$14.5	\$19.9	\$27.7	\$29.5	\$32.0
Health Innovation	\$27.1	\$27.1	\$26.3	\$30.5	\$38.7
Human Resilience	\$9.7	\$12.7	\$14.8	\$19.1	\$24.2
Sustainable Environments	\$23.9	\$21.3	\$26.8	\$33.7	\$49.7
Other	\$12.1	\$13.6	\$19.6	\$20.2	\$21.7

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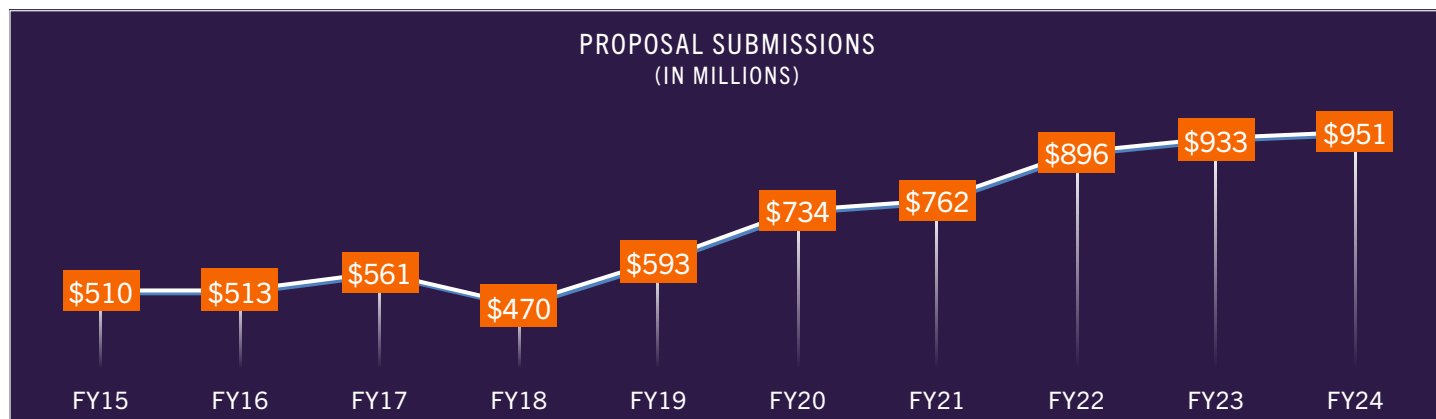
Competitive Expenditures



Research Expenditures (millions)	2020	2021	2022	2023	2024
By Funding Source	\$105.3	\$114.4	\$141.4	\$160.3	\$198.5
Federal Government	\$85.2	\$95.1	\$125.1	\$141.0	\$175.0
Foundations, Societies, and Associations	\$6.9	\$6.2	\$4.6	\$5.4	\$6.6
Industry/Other	\$5.6	\$4.8	\$4.8	\$5.9	\$5.2
International	\$0.3	\$0.4	\$0.5	\$0.5	\$0.6
Local Government	\$0.5	\$0.8	\$0.9	\$0.7	\$0.6
State Government	\$6.8	\$7.3	\$6.2	\$8.2	\$10.4
Per T/TT Faculty Member					
CAAC	\$20,942	\$18,195	\$21,321	\$26,231	\$35,020
CAC	\$4,218	\$1,113	\$1,864	\$5,507	\$10,135
CAFLS & PSA	\$137,438	\$131,195	\$196,657	\$231,788	\$301,646
COB	\$6,991	\$7,132	\$6,787	\$9,865	\$14,564
CECAS	\$201,553	\$223,843	\$296,203	\$310,088	\$358,535
CBSHS	\$50,495	\$67,202	\$90,220	\$121,581	\$149,294
COE	\$47,742	\$48,805	\$80,058	\$121,114	\$124,266
COS	\$116,020	\$107,258	\$120,778	\$146,445	\$177,322
Clemson average (Total exp/Total T/TT faculty)	\$96,497	\$103,187	\$142,129	\$159,792	\$196,501

Proposal Submissions

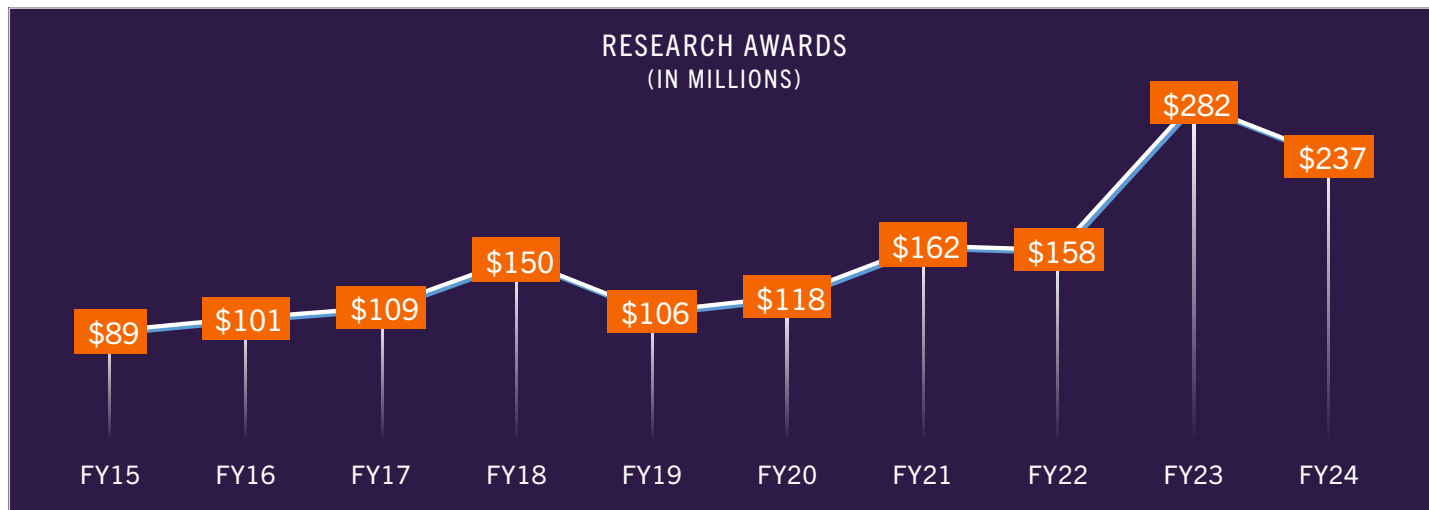
Proposal submissions were \$951 million for FY2024. Proposal submissions for each year are shown in the graph below. Additional details on the number and value of submissions for each college, as well as college targets for FY2024, are included in the table below.



Proposal Submissions	2020	2021	2022	2023	2024	
By Count	1,728	1,581	1,492	1,680	1,728	
CAAC	60	49	24	20	18	
CAH	16	12	11	7	12	
CAFLS & PSA	509	426	392	451	455	
CBSHS	143	150	151	183	179	
CECAS	672	596	631	684	701	
COE	42	37	43	45	49	
COB	11	14	9	11	11	
COS	219	229	193	259	262	
VP for Res & Interdisc Inst	29	29	23	11	13	
All Other	27	39	15	9	28	
By Value (millions)	\$734	\$762	\$896	\$933	\$951	FY2024 Targets
CAAC	\$2.7	\$3.8	\$6.5	\$10.4	\$8.6	\$11.00
CAH	\$3.2	\$1.7	\$1.7	\$3.0	\$1.5	\$3.25
CAFLS & PSA	\$99.3	\$89.7	\$249.9	\$149.6	\$188.9	\$160.00
CBSHS	\$41.1	\$64.3	\$73.1	\$106.5	\$116.4	\$112.00
CECAS	\$405.9	\$342.9	\$380.8	\$426.0	\$429.8	\$450.00
COE	\$18.9	\$22.4	\$32.3	\$34.4	\$34.0	\$36.00
COB	\$2.9	\$4.2	\$4.8	\$6.3	\$3.1	\$6.50
COS	\$129.3	\$175.4	\$127.3	\$169.8	\$125.5	\$180.00
VP for Res & Interdisc Inst	\$19.8	\$22.3	\$11.0	\$6.7	\$5.7	
All Other	\$10.7	\$35.7	\$8.9	\$20.3	\$36.9	

Competitive Research Awards

Research awards during the fiscal year exceeded \$237 million. Awards in FY2023 were elevated by the largest single federal award Clemson has ever received, a \$70 million grant from USDA. Considering that historic grant in 2023, FY2024 remains a strong year with awards above levels reported in prior fiscal years.



Research Awards	2020	2021	2022	2023	2024
By College/Unit (millions)	\$118.3	\$162.2	\$157.6	\$282.0	\$237.3
CAAC	\$1.0	\$1.0	\$0.4	\$3.4	\$1.5
CAH	\$0.4	\$0.4	\$0.8	\$2.1	\$0.7
CAFLS & PSA	\$26.5	\$29.9	\$26.9	\$107.4	\$37.4
CBSHS	\$7.7	\$17.4	\$13.7	\$21.0	\$27.8
CECAS	\$48.0	\$75.0	\$76.4	\$102.8	\$109.4
COE	\$2.3	\$5.1	\$5.7	\$10.1	\$4.9
COB	\$1.2	\$0.2	\$0.9	\$1.1	\$1.1
COS	\$14.2	\$25.4	\$17.8	\$24.4	\$34.0
VP for Res & Interdisc Inst	\$14.6	\$5.1	\$6.6	\$7.1	\$7.0
All Other	\$2.6	\$2.6	\$8.3	\$2.6	13.5
Young Investigator Awards	13	9	5	8	10
NSF CAREER	9	8	4	6	10
NIH KO1	1	-	-	-	-
Air Force Young Investigator	-	-	-	1	-
Army Young Investigator	1	-	-	-	-
DARPA Young Investigator	1	-	-	-	-
EPA Early Career	-	-	-	-	-
DOE Early Career	1	1	1	-	-
Arnold & Mabel Beckman Foundation	-	-	-	1	-
Dept. of Education Inst. of Educational Sciences	1	-	-	-	-

Top Competitive Awards (FY2024)

The Centers for Disease Control and Prevention (CDC) awarded Clemson \$17.4 million to inform and improve disease-outbreak detection and response in South Carolina and beyond. The Disease Modeling and Analytics to Inform Outbreak Preparedness, Response, Intervention, Mitigation and Elimination in South Carolina (DMA-PRIME) initiative will utilize data-driven approaches to conduct infectious disease forecasting, design decision-support toolkits and enhance methods of communication to public health organizations and decision-makers. The initiative is led by Lior Rennert, associate professor in the public health sciences department and director of the Center for Public Health Modeling and Response.



Clemson has become a trusted leader in public health response. This team led by Lior Rennert, associate dean for health science in the College of Behavioral, Social and Health Sciences (seated far right), earned \$17.5 million from the Centers for Disease Control and Prevention (CDC) to improve disease outbreak detection and response in South Carolina and beyond.

The Virtual Prototyping of autonomy-enabled Grounds Systems (VIPR-GS) Research Center at Clemson University received another \$21 million. Now in its fifth year, VIPR has received more than \$78 million in funding. A partnership with the U.S. Army DEVCOM Ground Vehicle Systems Center (GVSC), VIPR is developing innovative virtual prototyping tools for designing the next generation of on- and off-road vehicles. The project is led by Zoran Filipi, professor and Timken chair in vehicle system design.

The National Institutes of Health (NIH) awarded \$11 million to advance research on musculoskeletal health. The award is a phase 2 Center of Biomedical Research Excellence grant for the South Carolina Translational Research Improving Musculoskeletal Health (SC-TRIMH) led by Hai Yao, Clemson's associate vice president for biomedical innovation, Ernest R. Norville endowed chair in biomedical engineering and professor of bioengineering. SC-TRIMH aims to expand the critical mass of funded investigators conducting musculoskeletal research; strengthen innovative scientific cores that support and advance musculoskeletal research; and advance the ongoing development of an independent, sustainable, multidisciplinary thematic program.



The U.S. Department of Agriculture (USDA) awarded Clemson \$6.5 million for a program to help eradicate the Asian longhorned beetle. The non-native pest causes extensive loss to ornamental and commercial tree species and forested areas, along with the associate industries that utilize these products or depend on forest-related tourism. The Asian longhorned beetle (ALB) snuck into South Carolina for the first time in 2020 and established a toehold in Lowcountry hardwood trees. The project is led by Steven Long, assistant director for plant industry.

Top Competitive Awards (FY2024)

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The National Science Foundation (NSF) awarded \$6 million for a project to advance translational research called “STRIDE - Stimulating Translation of Research via Intentional Development and Ecosystem.” The project is led by K.C. Wang, professor of electrical and computer engineering and C. Tycho Howle endowed chair. The project seeks to grow the university’s research translation support infrastructure in the technology transfer office, colleges, and innovation center; empower faculty and students to pursue research translation and create research translation support entities across the institution; and provide financial and other support to seed translational research projects with high potential for impactful translation.



K.C. Wang, center

The S.C. Department of Health and Environmental Control (SC DHEC) awarded Clemson \$4.5 million for a project to help reduce substance-use disorder. For this project, Prisma Health and the Addiction Medicine Center will continue a collaborative partnership with SC DHEC to provide opioid education, stewardship and harm reduction for people with substance-use disorders. In particular, the project aims to improve health equity and access among groups disproportionately affected by the overdose epidemic and support those previously underserved by overdose prevention programs.

The USDA’s National Institute of Food and Agriculture (NIFA) awarded a Clemson-led team \$4.1 million for research into the nation’s most devastating citrus disease, an arboreal affliction that costs Florida alone \$1 billion annually. Feng Luo, the Marvin J. Pinson, Jr. ’46 distinguished professor in the School of Computing, is the principal investigator on the project. With the funding, the team will deepen its research into Huanglongbing (HLB), a bacterial disease that affects citrus trees, leading to misshapen, bitter fruits and eventually killing the tree. It is transmitted by the Asian citrus psyllid insect.

The U.S. Army awarded Clemson \$4 million via 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.

The S.C. Department of Health and Human Services awarded Clemson \$3.3 million to support development of the S.C. Alzheimer’s Disease Research Center in collaboration with the University of South Carolina and Medical University of South Carolina. The center intends to serve as a statewide initiative to advance the diagnosis, treatment and prevention of Alzheimer’s disease and related dementias through research, clinical care and community and healthcare provider education. The project is led by Lesley Ross, SmartState/SmartLife endowed chair in aging and cognition.



RESEARCH

RESEARCH NEWS

This section highlights research news from across the university.

Executive Summary

- 2024 Clemson University Researchers of the Year Ronnie Chowdhury and Thao Tran are making big impacts in their fields ([pages 14-15](#)).
- Clemson awarded 16 University Research, Scholarship and Artistic Achievement Awards ([pages 16-17](#)). To earn the award, recipients must meet at least one of the following criteria: Author a publication with more than 1,000 citations; Earn an exclusive fellowship or national and international honor, award or recognition or; Exceed research expenditures of \$1 million in a fiscal year.
- Nine Clemson faculty members earned prestigious early CAREER Awards from the National Science Foundation in 2024 and one CAREER Award recipient left his previous institution to join Clemson and advance his research career ([pages 18-19](#)).

2024 Researchers of the Year

A chemist working to unlock the power of quantum technology and a cybersecurity expert helping to advance smart cities and regions were named 2024 Clemson University Researchers of the Year.

Mashrur “Ronnie” Chowdhury, the Eugene Douglas Mays chair of transportation in the Glenn Department of Civil Engineering, was named Senior Researcher of the Year at the annual Clemson University Research Symposium on May 8. Thao Tran, assistant professor of chemistry in the College of Science, was named Junior Researcher of the Year.

Chowdhury serves as founding director of the National Center for Transportation Cybersecurity and Resiliency (TraCR) and the Center for Connected Multimodal Mobility (C2M2), both sponsored by the U.S. Department of Transportation. His research focuses on the evolving realms of sensing, communications, computing, cybersecurity, and cyber-resiliency, all with the goal of establishing a secure and resilient IoT (Internet of Things) environment for smart cities and regions. Chowdhury and his team delve into the myriad vulnerabilities present in the nation’s transportation systems, public infrastructures, and cyber-physical-social systems, while also exploring strategies to mitigate these vulnerabilities effectively.

Chowdhury is a Fellow of the American Society of Civil Engineers, a senior member of the Institute of Electrical and Electronics Engineers, and a member of the Transportation Research Board Committee on Intelligent Transportation Systems.

“I am honored to receive this award, as it represents recognition of the impact of our research and the dedication of our team members, including my students,” Chowdhury said. “This recognition will motivate us to continue and expand our work in the evolving frontiers of cyber-physical-social systems and their cybersecurity.”

Tran is working to develop a deep understanding of how chemistry determines targeted physical properties in innovative materials and why such chemistry-property relationships exist. Her work is supporting important advances in energy and information technologies that could advance environmental conservation, national security, and healthcare.

“I’m truly honored to receive the 2024 Junior Researcher of the Year award. My research team, including Ph.D. students, undergraduate researchers, and exchange scholars, feels encouraged to be recognized for all the work we are putting in,” Tran said. “We’re grateful for the continued, unparalleled support from multiple units, people and leaders across the institution. We’re excited to continue to contribute to quantum materials research that benefits people and society while cultivating the future STEM workforce with new knowledge, skill sets, and thinking capabilities necessary for building meaningful careers.”



Ronnie Chowdhury with President Clements

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2024 Researchers of the Year

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Tran is one of just 11 researchers from the United States selected for a prestigious 2023 Beckman Young Investigators Award from the Arnold and Mabel Beckman Foundation to support her research in quantum technology. She is the first recipient from Clemson or any college or university in South Carolina. Tran is also a recipient of the National Science Foundation's Early CAREER Award and the College of Science 2024 Rising Star in Discovery Award. She was honored as 2024 Scialog Fellow by the Research Corporation for Science Advancement and named 2024 Rising Star in Materials Chemistry Science by American Chemical Society Materials Au.



For Researcher of the Year, each college nominates a junior faculty member who received their terminal degree within the past 10 years and a senior faculty member. Winners were selected by an interdisciplinary committee.

In addition to Tran, junior faculty nominees were Elizabeth Cieniewicz, assistant professor in the Department of Plant and Environmental Sciences; Dhaval Gajjar, assistant professor in the Nieri Department of Construction, Development and Planning; Joshua Catalano, assistant professor in the Department of History; Irene Pericot-Valverde, assistant professor in the Department of Psychology, Emily Howell, assistant professor in the Department of Education and Human Development; Jessica Larsen, Carol and John Cromer '63 family endowed associate professor in the Department of Chemical and Biomolecular Engineering; and He Li, assistant professor in the Department of Management.

Additional senior faculty nominees were Xiuping Jiang, professor in the Department of Food, Nutrition and Packaging Sciences; Hala Nassar, professor in the School of Architecture; Jordan Frith, Pearce professor in the Department of English; Lesley Ross, professor and SmartLife endowed chair in the Department of Psychology; Hans Klar, professor and chair of the Department of Educational and Organizational

Leadership Development; Barbara Campbell, professor in the Department of Biological Sciences; and Ryan Mullins, J. Daniel and Nancy Garrison distinguished professor in the Department of Marketing.

"Congratulations to all of our nominees," Karanfil said. "This is a tremendous group of scholars, all deserving of this recognition. Being nominated by your college for this award is a great honor."

“Congratulations to all of our nominees. This is a tremendous group of scholars, all deserving of this recognition. Being nominated by your peers is an incredible honor.



- **Tanju Karanfil**

senior vice president for research,
scholarship and creative endeavors

University Research, Scholarship & Artistic Achievement Awards (URSAAA)

The University awarded 16 faculty members with University Research, Scholarship and Artistic Achievement Awards at the annual Research Symposium on May 8.

To earn the award, recipients must meet at least one of the following criteria:

- Author a publication with more than 1,000 citations;
- Earn an exclusive fellowship or national and international honor, award or recognition; or
- Exceed research expenditures of \$1 million in a fiscal year.



The following individuals received an URSAAA:



Kyle Brinkman

Professor and Department Chair
Materials Science and Engineering

URSAAA Achievement: Fellow of the American Ceramic Society and the Royal Society of Chemistry



David Freedman

Professor and Chair
Environmental Engineering and Earth Sciences

URSAAA Achievement: Publication exceeding 1,000 citations



Mazyar Faridi

Assistant Professor
English

URSAAA Achievement: National Endowment for the Humanities faculty fellowship



Ronald Gimbel

Professor and Director
Clemson Rural Health

URSAAA Achievement: Annual expenditures exceeding \$1 million



Zoran Filipi

Director
School of Mechanical and Automotive Engineering

URSAAA Achievement: Annual expenditures exceeding \$1 million



Sudeep Hegde

Assistant Professor
Industrial Engineering

URSAAA Achievement: Publication exceeding 1,000 citations

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URSAAA

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Leslie Hossfeld

Dean

College of Behavioral, Social and Health Sciences

URSAAA Achievement: Annual expenditures exceeding \$1 million



Lesley Ross

Professor and SmartLife Endowed Chair in Aging and Cognition

URSAAA Achievement: Annual expenditures exceeding \$1 million



Nathan McNeese

McQueen Quattlebaum Endowed Associate Professor

Human-Centered Computing

URSAAA Achievement: Annual expenditures exceeding \$1 million



Joe Ryan

Sue Stanzione Distinguished Professorship for ClemsonLife

URSAAA Achievement: Fulbright Scholar



James Morris

Professor

Genetics and Biochemistry

URSAAA Achievement: Annual expenditures exceeding \$1 million



Divya Srinivasan

McQueen Quattlebaum Professor

Industrial Engineering

URSAAA Achievement: Annual expenditures exceeding \$1 million



Meihua Qian

Associate Professor

Education and Human Development

URSAAA Achievement: Publication exceeding 1,000 citations

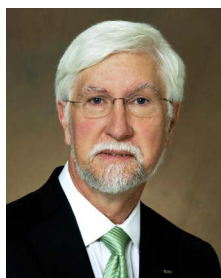


Joe Watkins

Chair

General Engineering

URSAAA Achievement: Annual expenditures exceeding \$1 million

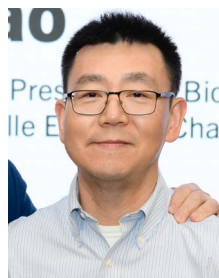


Bruce Rafert

Director of Initiatives

Eukaryotic Pathogens Innovation Center

URSAAA Achievement: Publication exceeding 1,000 citations



Hai Yao

Ernest R. Norville Endowed Chair and Professor

Bioengineering

URSAAA Achievement: Annual expenditures exceeding \$1 million

Early Career Awards

Young faculty members are proving Clemson to be a great place to build a career.

Consider the growing numbers of early-career award recipients at Clemson. In fiscal year 2024, nine faculty members earned prestigious early CAREER awards from the National Science Foundation (NSF) and another left his previous institution to come to Clemson and bring his award with him.

These are highly competitive catalyst awards given to the brightest young minds in the country to help them build a research portfolio. The full list of early career award recipients, including past winners, is posted [online here](#). Brief descriptions of this year's NSF CAREER Award recipients are included below and on the next page.

Jackie Cha, assistant professor of industrial engineering, received a \$574,833 NSF CAREER Award for research aimed at helping surgical teams work with robots as new technology changes team dynamics in the operating room. Recent advances in surgical robots have transformed how teams of humans and robots collaborate with each other. Some of those robots in labs are on the cusp of being able to independently perform surgical tasks but are not fully autonomous. Cha's work will help humans and robots work together.

Long Cheng, assistant professor in the School of Computing, received a \$502,505 NSF CAREER Award to evaluate privacy protections, inclusiveness and policy compliance of "voice personal assistants" like Amazon Alexa or Google Assistant, which are commonly used for ordering items online or managing bank transactions, among other uses. Cheng aims to design a new accessible and inclusive privacy notice mechanism for users; propose a dynamic analysis framework to evaluate how existing skills conform to various policy requirements and measure potential social bias issues in mainstream VPA platforms.

Federico Iuricich, assistant professor in the School of Computing, received a \$550,602 NSF CAREER Award for research to enable effective human-AI collaboration in data analysis tasks, specifically when working with 3D point cloud data. Point cloud data allows the collection of three-dimensional maps by unmanned vehicles in remote and inaccessible places. This point cloud data has become ubiquitous in spatial applications such as autonomous navigation, urban planning, forest monitoring and

NSF CAREER Awardees 2024



Jackie Cha
Assistant Professor
Industrial Engineering



James Lewis
Assistant Professor
Genetics & Biochemistry



Long Cheng
Assistant Professor
School of Computing



Dan Li
Assistant Professor
Industrial Engineering



Jordon Gilmore
Associate Professor
Bioengineering



Ge Lv
Assistant Professor
Mechanical Engineering



Federico Iuricich
Assistant Professor
School of Computing



Adam Melvin
Associate Professor
Chemical Engineering



Stephen Kaeppler
Assistant Professor
Physics & Astronomy



Thao Tran
Assistant Professor
Chemistry

continued on next page ►

Early CAREER Awards

► continued from previous page

disaster management, among others. While artificial intelligence is advancing, human experts remain indispensable. Iurich will help humans and AI work together.

Jordon Gilmore, associate professor of bioengineering, received a \$550,000 NSF CAREER Award for a project to improve diagnostics and treatment of infected chronic wounds. Gilmore's research combines artificial intelligence, advanced medical textiles and electrochemical biosensing to support real-time healthcare diagnostics. For his CAREER project, Gilmore hopes to better understand the formation and progression of bacterial biofilms prevalent in chronic wounds. The work could help to develop a real-time system for monitoring and treating infections that often lead to amputation.

Stephen Kaeppler, assistant professor of physics and astronomy, received a \$360,000 NSF CAREER Award for a project to understand fundamental physical processes associated with a commonly occurring auroral type called pulsating aurora, specifically on the electrical circuit associated with the "on-off" modulations that are pulsating aurora. As part of the workforce development, Kaeppler will continue to train undergraduates in space mission design and for some of those undergraduate students to participate in a NASA sounding rocket program for students (ROCKSAT-X).

James Lewis, assistant professor of genetics and biochemistry, received a \$1.3 million NSF CAREER Award to better understand the genomic architecture that controls trait differences between sexes. The Lewis Lab studies butterfly evolution as a model for trait adaptation and diversification. For his CAREER project, he will map the genetic architecture of male-specific wing color in a neotropical butterfly and test the contribution of these genes to population differentiation. This work will test longstanding models for trait evolution and diversification.

Dan Li, assistant professor of industrial engineering, received a \$555,504 NSF CAREER Award to help develop system-wide cyber-physical resilience of continuous manufacturing operations. She will investigate the interplay between the industrial internet-of-things (IIoT) and physical equipment to uncover previously unseen system-level risks induced by interconnectivity. Li aims to collaborate with industry stakeholders and extend this work to other critical infrastructures to enhance national cyber-physical resilience.

Ge Lv, assistant professor of mechanical engineering, received a \$570,938 NSF CAREER Award to advance knowledge in the control and optimization of powered lower-limb exoskeletons by investigating a novel human-in-the-loop framework to rapidly customize task-invariant assistance for volitional human motion across locomotor tasks.

Thao Tran, assistant professor of chemistry, received a \$718,100 NSF CAREER Award to advance her research on the use of materials chemistry in technological advances related to energy and quantum information science. Tran will combine chemical principles, appropriate synthetic techniques and advanced structural and physical properties characterization to develop new, more functional materials. The work will help to advance quantum technologies that can process information to solve complex problems much faster than classical computers.

Lastly, Adam Melvin recently joined Clemson as an associate professor of chemical engineering, bringing his \$500,000 NSF CAREER award with him from Louisiana State University. Melvin is working to develop peptides to control protein degradation, which can be used in diagnosing cancer and diabetes.



RESEARCH

FOCUS ON FACULTY

This section highlights junior faculty members at Clemson University. Each College submitted a profile of one junior faculty member.

Executive Summary

- Each college provided a brief introduction to a select faculty member. Click the links below to read about faculty 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**

Puneet Dwivedi, Ph.D.

Professor, Hilliard Endowed Chair in Sustainable Forestry

Forestry and Environmental Conservation



Before joining Clemson University in August, Dwivedi was a professor of sustainability sciences at the University of Georgia Warnell School of Forestry and Natural Resources (2013 – 2024). Dwivedi received his Ph.D. at the University of Florida School of Forest, Fisheries, and Geomatics Sciences, majoring in Forest Policy and Economics with a minor in Food & Resource Economics. His postdoctoral research took him to Yale University School of the Environment (2010 – 2012) and the University of Illinois Energy Biosciences Institute (2012 – 2013), where he focused on the sustainable use of biomass for energy production in India and the United States.

Dwivedi's doctoral dissertation on the sustainability of wood-based ethanol production in the Southern United States was awarded the prestigious 2014 International Union of Forest Research Organizations Outstanding Doctoral Research Award (Forest Operations Engineering and Management). While at Georgia, Dwivedi received several awards for research (2022, 2020, 2019), teaching (2023), and mentoring (2022, 2018). He was honored with a 2023 Institute for Georgia Environmental Leadership Fellowship from the Georgia Forestry Foundation.

Dwivedi has published 135 refereed articles, most of which originated in his research lab, the Dwivedi Forest Sustainability Lab. His research articles are in top-rated journals and comprehensively analyze forest sustainability issues across the Southern United States and beyond. For about 11 years at UGA, Dwivedi advised 30 graduate students and seven postdoctoral research associates as a major advisor. He has also received about \$7 million in grant support from federal and state agencies, non-profits, foundations and endowments to support his research. His research has been cited more than 3,400 times by other researchers worldwide. Considering his impactful research on forest sustainability in the southern United States, with a particular focus on outreach, education, capacity building and cross-sector collaborations, he was awarded the prestigious 2024 Sustainable Forestry Initiative Conservation Leadership Award in Atlanta. Dwivedi also serves on the Editorial Advisory Board of the *Global Change Biology Bioenergy* and is an associate editor for *Forest Policy and Economics and Forests, Trees, and People*.

Select Accomplishments

- Increasing the Participation of Beginning Farmers and Ranchers in the Conservation Reserve Program through Integrated Outreach and Research in the Southern United States. USDA Farm Service Agency. USDA Farm Service Agency. October 2023 – September 2027.
- Increasing the Participation of Underserved Forest Landowners in Federal Conservation Programs in the SE United States by Promoting Climate-Smart Longleaf Pine Across Multiple States. USDA NRCS. July 2024 - December 2027.



College of
**ARCHITECTURE, ART
AND CONSTRUCTION**

Kathleen Thum

*Associate Professor and Graduate Program
Coordinator*

Art



Thum's drawings, paintings and wall installations have been included in numerous group exhibitions such as "Man + Land + Water" at Winthrop University in Rock Hill, SC; "Nowhere Everywhere" at Cambridge School of Weston in Weston, MA and "SouthxEast" at Florida Atlantic University in Boca Raton, Florida. Her recent solo and two-person shows include exhibitions at University of Alabama in Huntsville, AL; Furman University in Greenville, SC and at Broward College in Davie, FL. Kathleen's work is also included in the 2014, 2015 and 2017 Manifest International Drawing Annual Exhibition in Print.

Thum has been awarded several fellowships to attend artist residencies, such as the Millay Colony in upstate New York, and the Jentel Artist Residency in Wyoming. Thum presented her artwork at the 2018 International Petrocultures Conference, a multi-disciplinary conference on oil cultures and energy humanities, in Glasgow, United Kingdom and in the 2016 Petrocultures Conference in St. John's, Newfoundland.

Select Accomplishments

- Solo Exhibition: 2024 Considering Carbon, Turchin Center for the Visual Arts, Appalachian State University, Boone, NC.
- Solo Exhibition: 2023 Covering Carbon, UCF Art Gallery, University of Central Florida, Orlando, FL.
- Solo Exhibition: 2019 Linefills, Marilyn Foley Art Gallery, University of Mobile, Mobile, AL.
- Solo Exhibition: 2017 Gathering Lines; Kathleen Thum Wilson Hall Gallery, University of Alabama in Huntsville, AL.
- 2024 Group Exhibition: Emergence; A Survey of Southeastern Studio Programs, Bunzi Gallery, The Bascom, Highlands, NC.
- PAPERWORK, Manifest Gallery, Cincinnati, OH.
- Drawing Discourse, 15th Annual Exhibition of Contemporary Drawing, S. Tucker Cooke Gallery University of North Carolina, Asheville.
- 2023 Group Exhibition: In the Time of Climate Change, Uh Hilo Pacific States Biennial North American Series, Wailoa Center, University of Hawaii at Hilo, Hilo, HI.
- SCRIBBLES: Habits, Compulsions & Outpourings of the Doodling Mind, Carter Burden Gallery, Manhattan, NY.
- Conditional Surroundings, Tipton Gallery, East Tennessee State University, Johnson City, TN.



College of
**ARTS AND
HUMANITIES**

Rod Andrew Jr., Ph.D.

Professor and Alumni Master Teacher

History



Andrew has been a member of the Department of History and Geography since 2000. He specializes in both the history of the American South and U.S. Military History, and his work spans the 18th, 19th, 20th and 21st centuries.

His first book, “Long Gray Lines: The Southern Military School Tradition, 1839-1915” (UNC Press, 2001), began as his master’s thesis at Clemson and focused primarily on southern land grant colleges, including Clemson. It was recognized as a Choice Academic Title. His second book, “Wade Hampton: Confederate Warrior to Southern Redeemer” (UNC Press, 2008) won the Mary Lawton Hodges Prize from the Institute of Southern Studies and the U.S. Army Historical Foundation Distinguished Writing Award.

In 2017, UNC Press published his book “The Life and Times of General Andrew Pickens: Revolutionary War Hero, American Founder.” It was recognized by the Revolutionary War Roundtable of Richmond as the best book on Revolutionary America from the years 2017-2018. Andrew has appeared on C-Span and Walter Edgar’s Journal discussing his Andrew Pickens book.

In 2025, the University Press of Kansas is set to publish his fourth book with a university press, “Narrow Passage: War, Politics, and the Survival of the U.S. Marine Corps, 1945-1952.”

Andrew is a retired Colonel in the U.S. Marine Corps Reserve with 4 years of active and 25 years of Reserve service, primarily as an artillery officer. During the latter part of his career, he served in a leadership role in Marine Corps History Division, and part of his duties included writing three peer-reviewed monographs on Marine Corps battles: U.S. Marines in Battle: An Nasiriyah, 23 March-2 April 2003 (2009); The First Fight: Operation: U.S. Marines in Operation Starlite, August 1965 (2016); and Hill Fights: The First Battle of Khe Sanh, 1967 (2017)

He teaches undergraduate classes in U.S. history, Southern history, American military history, and the history of World War II, and has led World War II student study abroad trips to Normandy and Bastogne, Belgium. He also teaches graduate seminars in Southern history.

Select Accomplishments

- Recipient of the Mary Lawton Hodges Prize from the Institute of Southern Studies.
- Recipient of the U.S. Army Historical Foundation Distinguished Writing Award.



College of
**BEHAVIORAL, SOCIAL
AND HEALTH SCIENCES**

Laura Olson, Ph.D.

J. Strom Thurmond Professor

Political Science



Olson is a two-time U.S. Fulbright Scholar to Italy (University of Bari, 2020 and 2025), president of the Society for the Scientific Study of Religion (2020) and editor-in-chief of the *Journal for the Scientific Study of Religion*. A native of Racine, Wisc., she earned a B.A. in political science from Northwestern University in 1990, as well as an M.A. (1991) and Ph.D. (1996) from the University of Wisconsin-Madison.

Her research focuses on contemporary religion and politics with emphasis on public opinion and civic engagement. Her work has appeared in leading scholarly journals, including *Political Research Quarterly*, *Social Science Quarterly* and the *Journal for the Scientific Study of Religion*. She is the author, coauthor or coeditor of nine books, most recently “Religion and Politics in America: Faith, Culture, and Strategic Choices” (Routledge, 2018), “Beyond Red State, Blue State: Electoral Gaps in the Twenty-First Century American Electorate” (Prentice Hall, 2008) and “Religious Interests in Community Conflict: Beyond the Culture Wars” (Baylor University Press, 2007). She has received support for her research from the Louisville Institute, the Global Religion Research Initiative at the University of Notre Dame and the Society for the Scientific Study of Religion.

She spent an academic year as a visiting research fellow at the Center for the Study of Religion at Princeton University and has served on the executive boards of the Southern Political Science Association, the Society for the Scientific Study of Religion, the Public Religion Research Institute, the Religious Research Association, the Women’s Caucus for Political Science-South and the American Academy of Religion’s Committee for the Public Understanding of Religion. A frequent source for various media outlets, she has been interviewed on CNN, National Public Radio, BBC World News and BBC Radio, and quoted in The New York Times, The Los Angeles Times, The Washington Post and USA Today. She also won Clemson University’s campus-wide Fluor Daniel Student Government Excellence in Teaching Award in 2003.

Select Accomplishments

- Susanne Hoeber Rudolph Outstanding Religion & Politics Scholar Award, American Political Science Association, 2022.
- President, Society for the Scientific Study of Religion, 2020.
- Published one book, 18 peer-reviewed articles and 7 book chapters since 2012.
- Presented 60 papers at national and international conferences since 2012.
- Invited lectures in Italy, Finland, the United Kingdom, Serbia, Poland and Austria, and at leading U.S. universities, including Princeton, Harvard, Chicago, Notre Dame, Washington University in St. Louis, Ohio State, Rice and Arizona State.



Wilbur O. and Ann Powers College of

BUSINESS**Jonathan M. Leganza, Ph.D.***Assistant Professor***John E. Walker Department of Economics**

Leganza is a fellow at the Hayek Center for the Business of Prosperity at Clemson University.

Prior to joining Clemson, he was a Ph.D. student at the University of California San Diego. During his final year of doctoral studies, he was a National Bureau of Economic Research Pre-Doctoral Fellow in Retirement and Disability Policy Research. He received his Ph.D. in economics from the University of California San Diego in 2021, his B.A. in economics from Indiana University in 2015 and his B.S. in mathematics from Indiana University in 2015.

Leganza's research interests are in public finance, labor economics and health economics. He is especially interested in the economics of aging, and he studies topics related to retirement, social security policy and Medicare policy. His articles have appeared in leading journals such as *American Economic Journal: Economic Policy* and *Journal of Public Economics*.

Select Accomplishments

- Author of "Health Professional Shortage Areas and Physician Location Decisions" (with Stephanie Khoury and Alex Masucci), *American Journal of Health Economics*, forthcoming.
- Author of "Public Pensions and Private Savings" (with Esteban García-Miralles), *American Economic Journal: Economic Policy*, Vol. 16, No. 2, May 2024.
- Author of "The Effect of Required Minimum Distributions on Intergenerational Transfers," *Journal of Public Economics*, Vol. 232, 105091, April 2024.
- Author of "Joint Retirement of Couples: Evidence from Discontinuities in Denmark" (with Esteban García-Miralles), *Journal of Public Economics*, Vol. 230, 105036, February 2024.
- Recipient of the 2023–2024: Junior Teaching Excellence Award for the John E. Walker Department of Economics, Wilbur O. & Ann Powers College of Business.



College of
EDUCATION

David Fleming, Ph.D.

Professor and Department Chair

Teaching and Learning



Fleming is a professor and chair of the Department of Teaching and Learning. He has also served as associate dean and interim dean of the Graduate School, as well as interim chair for the Department of Education and Human Development. Prior to joining Clemson University in 2006, he was a faculty member at the University of Florida and a public-school teacher in Hampton and Richland Counties in South Carolina.

Fleming's scholarship activity is congruent with the aims and objectives of Clemson's land grant mission. His work involves out-of-school time academic interventions for students experiencing academic challenges. Such interventions include curricular components such as mathematics, literacy and science, but also integrates physical activity, the arts and goal setting. Ultimately, smart and deliberate uses of time outside the classroom remain the most underutilized resource in American education for youth learning and development. Fleming also contends that connecting resources and expertise to such efforts has the potential to make a substantial impact. His funded work has fully supported several doctoral students throughout their program as well as hundreds of undergraduate education majors who serve as teachers in his program. His work has been published in multiple journals including the primary peer-reviewed journal devoted to the field of out-of-school time programming, *Afterschool Matters*. He has also conducted more than 100 presentations at regional, national and international venues.

Select Accomplishments

- Received multiple College of Education Honorary Distinction Awards for Principal Investigator (PI) on a Single Grant and Cumulative Grant Achievement.
- Received more than \$6 million in external grant awards as PI.
- Awarded grants of at least \$200,000 for 15 consecutive years.
- Received the College Award of Excellence in Innovation for the GoalPOST (Goal-oriented Performance in Out of School Time) project, for which he serves as PI.
- Recognized as a Distinguished Alumnus from The Citadel and inducted in The Citadel Academy of Science and Math in 2015.



College of
**ENGINEERING, COMPUTING
AND APPLIED SCIENCES**

Pamela Murray-Tuite, Ph.D.

Professor

Civil Engineering



Murray-Tuite is a professor with the Glenn Department of Civil Engineering at Clemson University and the director of the South Carolina Institute for Sustainability and Resilience at Clemson. She is also the associate director of new federal initiatives for Clemson's Virtual Prototyping of Autonomy-Enabled Ground Systems (VIPR-GS) center and Clemson's associate director for the Center for Regional and Rural Connected Communities, a regional University Transportation Center. She currently serves as the Civil Engineering Department's graduate program coordinator. Before joining Clemson University, she was an associate professor with the Department of Civil and Environmental Engineering at Virginia Tech.

Murray-Tuite's research interests include transportation and community resilience, evacuation, travel behavior, transportation networks, routing and teaming. Her work is typically interdisciplinary and has been funded by the National Science Foundation, National Institutes of Health, S.C. Department of Transportation, the U.S. Army through VIPR-GS, the U.S. Army Engineer and Research Development Center (ERDC), the Virginia DMV, various university transportation centers and the Virginia Center for Transportation Innovation and Research/VDOT, among others. She has been involved in projects exceeding \$24 million, with a personal share of approximately \$5 million. She has authored/co-authored more than 95 peer-reviewed journal publications and two books.

Select Accomplishments

- She is a co-Principal Investigator (PI) on a recently awarded NSF grant "Building Collaborations and Capacity to Address Climate Hazards in the Southeast U.S." which will bring together researchers and stakeholders in South Carolina to advance knowledge of hazards, impacts and risks in the Earth system and actionable solutions that communities can employ to increase their resilience to these hazards.
- In 2023, she was the sole PI of a project investigating the impact of proposed I-73 and Southern Evacuation LifeLine road additions on the evacuation times for the Grand Strand Area of S.C. in the event of a hurricane.
- During 2022-2024, she was the co-PI of a \$1.8M grant from the US Army ERDC that investigated community and infrastructure resilience in the Savannah River Watershed, with a particular focus on Anderson County.
- In 2024, she co-authored a paper with her student that was recognized as an Editor's choice selection.
- In 2023, she co-authored a paper with a former postdoctoral researcher, current student and other collaborators that received the best paper award from the Transportation Research Board's Committee on Disaster Response, Emergency Evacuations, and Business Continuity.



Jason Fridley, Ph.D.

Professor

Biological Sciences



Fridley joined the Clemson faculty in 2022 after 16 years at Syracuse University. His research interests focus on plant biology and environmental science. His work on invasive plant species has led to several discoveries in plant science, including the ability of invaders to ‘break the rules’ of functional tradeoffs experienced by native species, and the tendency of invaders to capture energy when native species cannot. The latter was featured in the top science journal *Nature* as a sole-authored publication.

Upon moving his lab to Clemson, Fridley is shifting his focus to invasive plants of the Southeast U.S. and was recently awarded a National Science Foundation (NSF) grant to lead a study of forest invasions across the Americas, from New England to southern Brazil. Fridley also studies native forests of the Southern Appalachians and was recently awarded a second NSF grant at Clemson to understand how increasing drought conditions may alter the forests of Great Smoky Mountains National Park. Part of this project includes establishment of a new outdoor experimental lab in the Clemson Experimental Forest. Prior to his work on forests, Fridley was the director of the Buxton Climate Change Impacts study in a grassland in northern England, the oldest continuous manipulation of ground-level climate in the world. Fridley has also conducted research in Japan, France and New Zealand, and served twice as a Fulbright U.S. Scholar. In 2012, Fridley received the Blavatnik Award for Young Scientists by the New York Academy of Sciences, one of the few ecologists to be so honored. Fridley sees himself first and foremost as a mentor to graduate and undergraduate students, including four new Ph.D. students at Clemson. He also takes pride in commissioning review papers as a senior editor for the world’s oldest ecology journal, *Journal of Ecology*.

Select Accomplishments

- 100 refereed publications (H index = 46) since 2000.
- Eight NSF research grants as PI or co-PI since 2008.
- Faculty Winner, Blavatnik Award for Young Scientists, NY Academy of Sciences.
- Two Fulbright U.S. Scholar Awards, New Zealand and France.
- Chancellor’s Citation for Excellence in Scholarship, Syracuse University.
- Excellence in Graduate Education Award, Syracuse University.
- George Mercer Award, Ecological Society of America (outstanding paper).
- Advisor for 13 graduate students (10 Ph.D.s, 4 currently at Clemson) and three postdocs.
- More than 70 invited presentations in 13 countries.



Division of

RESEARCH

Quarterly Research Report

October 2024