



Wofford College

**STUDENT-FACULTY COLLABORATIVE
AND MENTORED SUMMER
UNDERGRADUATE RESEARCH**

Summer 2023



MESSAGE FROM THE DIRECTOR

Summer is an important time in the academic year for students and faculty members to engage in research and creative works. Collaborative and mentored undergraduate research, which largely takes place during the summer months, is one of the ways that members of the Wofford community are engaged in scholarship. In recent years, over 200 students and 35 faculty members have participated in the student-faculty collaborative research program.

This booklet highlights the biographies and projects of many of the students and faculty members who participated in collaborative and mentored undergraduate research during the summer of 2023. Many of these creative works and research projects will be shared during Family Weekend and at the Southern Conference Undergraduate Research Forum (SURF).

We are grateful to all the students, faculty, staff, alumni, community partners and friends of the college who have contributed and who have made this creative work possible.

Go Terriers!



Dr. Ramón Galiñanes Jr.

Director of undergraduate research
and post-graduate fellowships

STUDENT BIOGRAPHIES



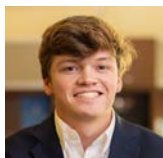
Sophia Bernstein '25 is an environmental studies major from Charleston, South Carolina. She studied biodiversity in the Pantanal region of Brazil. During their time in Brazil, her team built plots that will play a vital role in the research that will be conducted in years to come.

Faculty collaborator and mentor: Dr. Jennifer Bradham, assistant professor of environmental studies.



Ally Bigham '24 is a Spanish major and business minor from Charlotte, North Carolina. She researched Spanish newspapers from 1931-39, the years of the Second Spanish Republic and Spanish Civil War. She translated, coded and analyzed the newspapers to observe how they viewed and discussed ethnicity, race and Basque nationalism. They closely analyzed Euskadi, a newspaper representing the Basque Nationalist Party during 1936, immediately after the outbreak of the Civil War and fascism in Spain. She is a member of the softball team, a Spanish peer tutor and co-president of Sigma Delta Pi.

Faculty collaborator and mentor: Dr. Ramón Galiñanes Jr., director of undergraduate research and post-graduate fellowships.



Daniel Brasington '25 is an economics major from Woodruff, South Carolina. He worked with four other students to establish an oral history of the Black experience at Wofford to commemorate the college's 60th anniversary of desegregation, which occurred in 1964. They focused on the experience of Black students, faculty and staff for the first 20 years after Wofford's integration. The team interviewed some of the college's first Black graduates and learned of their experiences on campus and their accomplishments since graduation. The team has been working to use these conversations to try and convey the stories of these people who have been so instrumental to the growth and betterment of the college.

Faculty collaborator and mentor: Dr. Dwain Pruitt, chief equity officer.



Maranda Brown '25 is an international affairs major from Covington, Georgia. She worked to identify common denominators tied to Black girlhood through different forms of literature from the 20th and 21st centuries. The research team was able to connect that geography can impact the self-perception of Black girls and was able to interview many authors/researchers on their literary works. The goal for this summer was to lay the foundation to grow the project next summer by finding more participants of all ages and designing a podcast for others to listen to their findings. In addition to conducting research, she worked as an intern for the nonprofit Brown Girls Read and prepared for the upcoming academic year as the Black Student Alliance President.

Faculty collaborator and mentor: Dr. Bria Harper, assistant professor of English.



Sarah Buckmaster '24 is a sociology and anthropology major from Greenville, South Carolina. She conducted two community-based research projects in neighborhoods across Spartanburg. Continuing her ethnographic research in the Una, Saxon and Arcadia neighborhoods, she is analyzing investment, property ownership and housing dynamics in relation to neighborhood wellness to advocate for improved housing conditions. In Drayton, she is leading a collaborative research project to learn resident history, experience and perspective related to past, present and future development projects. Interested in the intersection of community organizing and ethnography, she plans to pursue further education in the field of anthropology after graduation.

Faculty collaborator and mentor: Dr. Alysa Handelsman, assistant professor of sociology and anthropology.



Aubrey Chapman '25 is a German and English major from Ninety Six, South Carolina. She worked on a project focused on the life, art and exile of three Jewish Austrian artists: Bettina Bauer-Ehrlich, Lisel Salzer and Lisl Weil. The project has included expanding and adding to a website as a digital exhibit for all three artists and

compiling an annotated bibliography including books about Austrian art, interwar Vienna, and the Jewish Austrian experience and influence in Austria. She also worked on a short paper about the Austrian exile experience in the U.S., particularly in New York City.

Faculty collaborator and mentor: Dr. Kirsten Krick-Aigner, professor of German.



Mackenzie Clinch '24 is a psychology major from Greenville, South Carolina. She worked with four groups of mice to examine how the different groups formed varying preferences to glucose. The first two groups, one male and one female, were generic lab mice, while the second two groups, also one male and one female, had the T1R3 receptor (taste receptor responsible for tasting glucose) knocked out. While the second two groups had this receptor knocked out, they were still expected to form a preference to glucose due to a fairly recent discovery of something called glucokinase. The results of this research could eventually lead to strategies for containing sugar consumption in humans.

Faculty collaborator and mentor: Dr. Dave Pittman, professor of psychology.



Willow Conley '25 is a biology major from Bluffton, South Carolina. She worked with five other students studying stream ecology on the Lawson's Fork Creek watershed. They took samples of habitat and water quality data, benthic macroinvertebrates, fish and crayfish from 12 sites on streams all across Spartanburg. Her focus was on benthic macroinvertebrates, and she explored the differences between the habitat and benthic macroinvertebrate communities of tributaries and the mainstem. She found several interesting differences between the two. The mainstem had greater stream width, thalweg depth and percentage of predator macroinvertebrates, while the tributaries had greater percentages of pool and tolerant macroinvertebrates.

Faculty collaborators and mentors: Dr. Amelia Atwell, visiting assistant professor of biology, and Dr. Johnathan Davis, assistant professor of biology.



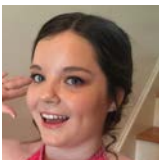
Lucy Derrick '24 is an environmental studies major and German and studio art double minor from Columbia, South Carolina. She was a part of Caught in the Tangle, an ongoing performance and study about mental health. She researched mental health, created artwork inspired by personal and anonymous quotes from previous surveys done in 2021 and 2022, and helped build an art installation – a triangular metal cage with programmed lights. The research group put on performances to raise money for The National Alliance on Mental Illness (NAMI), one of the nation's largest grassroots mental health organizations.

Faculty collaborator and mentor: Maya Fein, former assistant professor of theatre.



Hannah Dozier '26 is a double major in environmental studies and Chinese from Hemingway, South Carolina. She worked with a team of student researchers to create better learning materials for Chinese grammar. The goal of the project is to make Chinese grammar easier to understand for beginner students by improving the readability of the English explanations and by relating the grammar usage to the learner's daily life. This research also implements ways for students with different learning styles and preferences to interact with the material in the most impactful ways possible.

Faculty collaborator and mentor: Dr. Yongfang Zhang, associate professor of Chinese.



Rachel Dozier '26 is a double major in History and Chinese with a minor in Arabic from Hemingway, South Carolina. She worked with a team of student researchers to create better learning materials for Chinese grammar. The goal of the project is to make Chinese grammar easier to understand for beginner students by improving the readability of the English explanations and by relating the grammar usage to the learner's daily life. This research also implements ways for students with different learning styles and preferences to interact with the material in the most impactful ways possible.

Faculty collaborator and mentor: Dr. Yongfang Zhang, associate professor of Chinese.



Izzy Dugle '25 is a psychology major and intended history minor from Greenville, South Carolina. She worked as part of a team to continue research started by senior thesis psychology students. This study examined how paced breathing affects responses to emotional and neutral stimuli and the related physiological responses and changes in cognition. She helped recruit participants and ran the data collection procedure. She analyzed various physiological measures, including sweat response, heart rate and heart rate variability. She will continue this research in the fall.

Faculty collaborator and mentor: Dr. Katherine Steinmetz, associate professor of psychology.



William Edwards '24 is an environmental studies major from Louisville, Kentucky. He examined the impact of urbanization on fish found in the mainstems and tributaries of Lawson's Fork Creek, mainly located in the growing urban core of Spartanburg. They sampled 12 sites and collected 1,505 fish. Bluehead chub, redbreast sunfish and greenhead shiner condition were analyzed using two biological condition metrics: Fulton's condition factor and length-weight residuals. Reach-scale habitat measures and landscape-scale land-use measures were recorded to determine the impact of urbanization on stream quality and fish condition. He gained valuable research experience using electroshocking technology. Additionally, he gained experience writing a scientific research paper and creating a poster.

Faculty collaborators and mentors: Dr. Amelia Atwell, visiting assistant professor of biology, and Dr. Johnathan Davis, assistant professor of biology.



Dani Emmen '25 is a sociology and anthropology major from Myrtle Beach, South Carolina. She worked on an oral history project about Wofford College. The goal is to rewrite the history of Wofford College to include the Black experience. To do that, her team interviewed countless alumni, faculty and staff about their time at Wofford.

Faculty collaborator and mentor: Dr. Dwain Pruitt, chief equity officer.



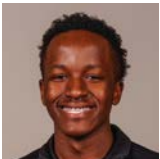
Kaelyn Emon '24 is a psychology major and a philosophy minor from Spartanburg, South Carolina. She worked with a team to look at the influence of paced breathing on one's emotional and cognitive responses. She assisted the team by encoding participant data and analyzing a portion of the psychophysiological and behavioral data that was collected.

Faculty collaborator and mentor: Dr. Katherine Steinmetz, associate professor of psychology.



Jeanae Escobar '24 is a Spanish and environmental studies major and studio art minor from The Bronx, New York. She conducted various interviews with members of Spartanburg's Latino community to gauge local perceptions of food accessibility and how that impacts their cultural practices. She aims to create awareness for the importance of food accessibility, especially in terms of ethnic family practices and keeping traditions alive. Her work parallels her personal experience as she moved from her hometown to the Carolinas, bringing into question how identity and culture is impacted by our environments.

Faculty collaborator and mentor: Dr. Amy Telligman, associate professor of environmental studies.



James Few '25 is a chemistry major with a concentration in biochemistry from Spartanburg, South Carolina. Her group studied the reproductive success of the Eastern Bluebird and local songbird diversity by observing the number of eggs laid, birds hatched and the overall reproductive success. She also looked into other factors that could impact the success, such as trace metal content in the soil. The group worked to determine whether there was a correlation between the soil's metal content and the major roadways that surrounded the park. Bluebirds have been declining, and the group's goal was to find factors that can offset this.

Faculty collaborators and mentors: Dr. Lori Cruze, associate professor of biology, and Dr. Grace Schwartz, assistant professor of chemistry.



Katie Garner '25 is an environmental studies major with a data science concentration from Rock Hill, South Carolina. She worked on a team examining the affect large mammals have on their environment during forest rejuvenation. This research was conducted in the Brazilian Pantanal. The team built eight sites, each of which contained two plots, one to allow large mammals in and another that excluded them. Each plot had a camera trap set up to photograph any wildlife coming through. Within each plot, three subplots were made and any saplings between 10 centimeters and 1 meter were recorded and tagged. This is a multi-year research project, in which camera trap data will be paired with plant data over the extent of the project to see how the presence and lack of mammals affects the growth of the forest. She used the plant data collected to analyze the species diversity and density of the plots.

Faculty collaborator and mentor: Dr. Jennifer Bradham, assistant professor of environmental studies.



Mac Gavin '24, is a sociology and anthropology and psychology double major from Lincolnton, North Carolina. She was part of a research team that continued a study conducted as a senior thesis in spring 2023. The study was on the effect of controlled breathing on emotional responses to pictures. The study aimed to learn how slow-paced breathing affects emotional responses to emotional and neutral images, and how this relates to physiological responses and cognition. She helped recruit participants and conducted the experiment on them. She also helped record and analyze respiration and EKG data. She hopes to continue working on this study in the fall and on a mood study in tandem with Boston College.

Faculty collaborator and mentor: Dr. Katherine Steinmetz, associate professor of psychology.



Maggie Genoble '24 is a studio art and art history double major from Union, South Carolina. She conducted research in preparation for her January 2024 art exhibition as Wofford's Whetsell Fellow. She has been working on her studio practice with artistic experimentations, revisions, and planning for her show as

well as reading about discourses in internet art and new media involving gender representations. She also visited multiple contemporary art exhibitions in Asheville and Charlotte, North Carolina.

Faculty collaborator and mentor: Michael Webster, assistant professor of studio art.



Harlan Glenn '25 is a biology and finance major from Lighthouse Point, Florida. He worked with his team sampling streams, understanding their ecology, and how urbanization affects it all. His group's projects are the first in a hopefully long line of freshwater research projects working to analyze fish and macroinvertebrate communities and how they are affected by the growth of Spartanburg. Urbanization can have detrimental impacts on freshwater communities and everything that lives inside of them, such as crayfish. He chose to study crayfish communities throughout the Lawson's Fork Creek watershed. After sampling numerous sites around Spartanburg and analyzing the findings, he found distinct differences in habitat preferences between dominant crayfish communities and in their constitution against urbanization.

Faculty collaborators and mentors: Dr. Amelia Atwell, visiting assistant professor of biology, and Dr. Johnathan Davis, assistant professor of biology.



Owen Gilley '26 is a biology major from Spartanburg, South Carolina. He was part of a team conducting a survey of macroinvertebrates, such as crayfish and aquatic insects, in Lawson's Fork Creek and its tributaries. Because different macroinvertebrates have different levels of pollution tolerance, they are often sampled to monitor water quality in streams. His research focused on comparing macroinvertebrates collected sweep-net sampling, which uses a handheld net to collect specimens from submerged plant roots, and kick-net sampling, which uses a wide, fixed net to collect specimens that are dislodged and swept downstream by disturbing rocky riffles. The research measures multiple facets of biodiversity and pollution tolerance for the sampled macroinvertebrates, comparing the results for the two net-sampling methods

to each other and against those for total recorded specimens at each sampling site. The goal of the research is to determine which of the two net-sampling methods, if either, produces results more representative of a stream's overall biodiversity. Additionally, the results found may help provide insights into how macroinvertebrates are distributed differently in plant root and riffle habitats.

Faculty collaborators and mentors: Dr. Amelia Atwell, visiting assistant professor of biology, and Dr. Johnathan Davis, assistant professor of biology.



Jasmine Grant '26 is a biology and psychology double major on the pre-med track from Charleston, South Carolina. She participated in the #BlackGirlUpstate research project, which explored the ways Black girls and women in the South cultivate their identities in the midst of negative cultural stereotypes via various forms of media and literature.

Faculty collaborator and mentor: Dr. Bria Harper, assistant professor of English.



Breelyn Grooms '25, is a biology and history double major from Anderson, South Carolina. She studied several impacts that seasonal variation potentially had on Eastern Bluebirds. The research team monitored nest boxes at Milliken Arboretum throughout the summer for Bluebird nesting activity. Data was collected on the number of eggs laid, egg hatching success, and fledging success of the hatched young. Eastern Bluebird nestlings also were banded during the season and had mass and wing measurements recorded for separate analysis. This study was a continuation of research that she was a part of in 2022, and the study is intended to continue for many years. This summer's data regarding reproductive success and output displayed trends that correlated with increasing temperatures, which matched findings from last year. With the collected wing and mass measurements, she was able to analyze data and see a trend showing overall nestling size decrease as the Eastern Bluebird breeding season progressed. All collected data has been shared with national databases

to assist with larger studies involving avian populations, ecological issues and overall environmental health.

Faculty collaborators and mentors: Dr. Lori Cruze, associate professor of biology, and Dr. Grace Schwartz, assistant professor of chemistry.



Jacqueline Hansen '24 is a sociology and anthropology major and a philosophy minor with a concentration in gender studies from Clover, South Carolina. She aided in gathering, inputting and finalizing data for research detailing the history of one of Spartanburg's Black communities: the Back of the College community and beyond into the historical Northside. She also interviewed past residents to gather information about what life was like in these communities at different times. All of this information is being published in a book that will be released in the spring of 2024 alongside the publication of a website that will provide open access to information about these communities, including interview transcripts, pictures and other historical documents.

Faculty collaborator and mentor: Dr. Jim Neighbors, professor of English.



Olivia Hartley, '24, is an art history major from Barnwell, South Carolina. She spent the summer researching Julia Elizabeth Tolbert, an artist from Upstate South Carolina who Wofford is very fortunate to have her near-complete collection. Julia Elizabeth was a prolific artist who spent most of her life either studying or teaching art at various institutions such as Columbia College, Lander University and Syracuse University. It was her time at the University of Georgia, where Julia Elizabeth completed her master's thesis, that was of the most interest in this project. There, she studied under renowned artist and teacher of artists Lamar Dodd, and they fostered a mutual intellectual rapport and a sharing of ideas that can be seen in the writings of both. Julia Elizabeth's artwork transformed during this period, as can be seen in both the final product, her new interest in the process of making her art, and in the ideas presented in her thesis. The findings

of this research period will be the basis for an exhibition spring 2024.

Faculty collaborator and mentor: Dr. Karen Goodchild, Chapman Family Professor of Humanities.



Promise Henry '25 is a double major in accounting and finance and minor in education from Cowpens, South Carolina. She explored the role of self-esteem as a mediating factor in financial resiliency. She helped find articles online, wrote portions of the research paper and helped make sense of data that was collected. She and Dr. Josh Harris hope to publish their findings in late 2023 or early 2024.

Faculty collaborator and mentor: Dr. Josh Harris '09, assistant professor of finance.



Jill Hethcox '24 is a biology major and history minor from Charleston, South Carolina. She worked on stream ecology research, learning about the effects of urbanization on stream health. She specifically focused on changes in benthic macroinvertebrate communities in Lawson's Fork Creek.

Faculty collaborators and mentors: Dr. Amelia Atwell, visiting assistant professor of biology, and Dr. Johnathan Davis, assistant professor of biology.



Nate Hopkins '26 is a biology and Spanish major from Greenville, South Carolina. He worked to disseminate information taken from previous Wofford research projects about the Spartanburg area. These studies collectively analyzed how certain factors in the community negatively impact specific groups' ability to ascend the socio-economic ladder. Through podcasts and social media, he summarized these studies and helped bring attention to community centers and facilities that can benefit many members of the Spartanburg community.

Faculty collaborator and mentor: Dr. Laura Barbas Rhoden, professor of Spanish.



Hayden Jones '25 is a double major in history and international affairs from Anderson, S.C. He is a part of several organizations on campus, including the Black Student Alliance, Wofford Men of Color and Campus Union. He conducted research on climate change stories.

Faculty collaborator and mentor: Dr. Christine Dinkins, Kenan Professor of Philosophy.



Foster Kemp '26 plans to major in environmental science with an sociology and anthropology minor. He did research in the neighborhood he's been a part of his whole life, Drayton. Within Drayton, he identified community perspectives concerning recent and future developments. Pacolet Milliken has partnered with Oak and Ave Property Group, as well as Wofford to engage neighborhood residents, business owners and service providers to develop community driven neighborhood spaces.

Faculty collaborator and mentor: Dr. Alysa Handelsman, assistant professor of sociology and anthropology.



Tianna Kidd '25 is a biology and French double major from Greenwood, South Carolina. She worked as the community representative and liaison with “Caught in the Tangle,” a research-based performance on mental health education and awareness. She spent time networking in the Spartanburg community to create lasting outreach programs with organizations such as NAMI Spartanburg and Uplift for LGBTQ+ youth. She also spent time working as both a dancer and woodworking engineer to craft the set for the show. Kidd used technical skills like soldering electrical wires, drilling, and grinding bolts to help craft the finished set for the show. The summer research culminated into four performances and donations raised for NAMI Spartanburg.

Faculty collaborator and mentor: Maya Fein, former assistant professor of theatre.



Katie Kirk '25, a native of Greenville, South Carolina, is a government major with a concentration in American politics and a business minor. She participated in research about the role of religion, specifically Eastern

Orthodoxy, in the Russian invasion of Ukraine. She researched the complex history of Eastern Orthodoxy and its development in Russia and Ukraine. Additionally, she examined sermons from church leaders and speeches from the Kremlin to evaluate the impact of religious ideology on political motivations relating to the invasion.

Faculty collaborator and mentor: Dr. Phil Dorroll, associate professor of religion.



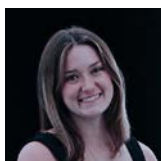
Grayson McDowell '24 is a physics and philosophy double major from Gaffney, South Carolina. He taught himself the coding language MATLAB in order to analyze data from a psychological study conducted. He explored the effects of deep breathing on heart health.

Faculty collaborator and mentor: Dr. Carolyn Martsberger, associate professor of physics.



Emma O'Brien '26 is chemistry and Spanish double major from San Antonio, Texas. She participated in biochemistry research. She researched the protein Acetyl-CoA Carboxylase and how to purify the protein from chicken liver cells as well as growing cell cultures. This protein plays an important role in metabolic formation of fat. She will continue to research different inhibitors of this protein to potentially curb nonalcoholic hepatic steatosis.

Faculty collaborator and mentor: Dr. Ramin Radfar, professor of chemistry.



Kelley Overlees '24 is a humanities major and a business and education double minor from Spartanburg, South Carolina. She worked on the third version of “Caught in The Tangle: An Interconnected Experience.” This version of the performance focused on re-vamping the big triangle, also known as “The Tangle.” She worked on researching mental health at the beginning of the project, attending a National Alliance on Mental Illness (NAMI) International Webinar where she learned about the long-lasting effects mental illness has on students and educators of all ages. After the initial research, she worked on building the 3D triangle out of metal poles. There were four performances, which included a film of last year’s performance. Groups in each show were led through different spaces that connected to the film and

gave the audience a glimpse at different mental health feelings. At the end of the show was the reveal of the triangle, where audience members could walk around and inside, and the lights could be programmed to fit a color they chose.

Faculty collaborator and mentor: Maya Fein, former assistant professor of theatre.



Sunni Owens '26 is a biology and sociology and anthropology double major on the pre-med track from Charleston, South Carolina. She conducted research with on the Back of the College community. Her research consisted of tours of where the neighborhood once stood, interviewing former residents and logging records of former residents at the public library to go in a website.

Faculty collaborator and mentor: Dr. Jim Neighbors, professor of English.



Joseph Partin '26 is a finance and Chinese double major from Cayce, South Carolina. He spent the summer rewriting and revising the grammar in the Chinese 101 through 202 classes in addition to researching the failings of prior textbooks, all the while searching for how improvements could be made.

Faculty collaborator and mentor: Dr. Yongfang Zhang, associate professor of Chinese.



Meris Privette '24 is a biology major in the neuroscience concentration from Greenville, South Carolina. She investigated how paced breathing affects emotional responses to emotional and neutral images. Physiological responses of participants were recorded in order to study the effect that paced breathing has on cognition. Her group hopes that their findings will expand upon previous literature suggesting that paced breathing affects psychological and physiological responses. She spent many work days analyzing data and expanding her skills in coding software.

Faculty collaborator and mentor: Dr. Katherine Steinmetz, associate professor of psychology.



Ashley Quick '25 is a biology major from Spartanburg, South Carolina. She was a part of a team that conducted research on the Eastern Bluebird population at Milliken Arboretum. The goal is to determine how reproductive output varies by season. She also had the opportunity to develop her own research project and focused on how noise pollution and human disturbance impacted Eastern Bluebird behavior and reproductive success. She hopes that this research will provide more insight into how urbanization affects animal behavior, particularly birds, as their population has declined significantly in recent years.

Faculty collaborators and mentors: Dr. Lori Cruze, associate professor of biology, and Dr. Grace Schwartz, assistant professor of chemistry.



Lilia Reihls '25 is a psychology and Spanish double major with a minor in education from Kilmarnock, Virginia. She was part of a team that studied emotion. Through testing participants and analyzing the impact of emotional stimuli on physiological variables, the team made strides in a research project that will continue in the fall of 2023. She enjoyed testing participants and balancing demographics, as well as learning about variables such as heart rate variability, skin conductance and heart rate. She has been working on this project since the fall of 2022 and has enjoyed seeing it develop.

Faculty collaborator and mentor: Dr. Katherine Steinmetz, associate professor of psychology.



Julia Richardson '24 is a Chinese, religion and philosophy triple major from Moore, South Carolina. She spent the summer researching language pedagogy and revising the grammar sections of commonly used novice-level Chinese textbooks. She hopes that the research completed by her team can benefit many Chinese students at Wofford for years to come.

Faculty collaborator and mentor: Dr. Yongfang Zhang, associate professor of Chinese.



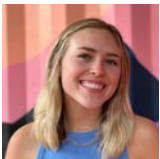
Will Rush '26 is an economics major with a planned minor in math from Pinehurst, North Carolina. He worked to develop a system to gather, organize and interpret stats for the Wofford women's basketball team with the goal of maximizing the team's performance. After using code to categorize the data from the play-by-plays, he closely analyzed game film for stats such as paint touches to play calls. He plans to continue working to analyze data during the season in real time.

Faculty collaborators and mentors: Dr. Tim Bersak, associate professor of economics, and Dr. Ahmed Eddhir, visiting assistant professor of economics.



Zion Sampson '26 is a biology major from Aiken, South Carolina. He worked on the Wofford Black history project, which was created to capture the history of Wofford's integration efforts, as well as capture a lot of the personal experiences of the college's first Black students. He and his group interviewed Wofford alumni, faculty and staff, and researched and wrote some of Wofford's Black history.

Faculty collaborator and mentor: Dr. Dwain Pruitt, chief equity officer.



Ellie Shealy '25, a chemistry major from Lexington, South Carolina, worked with a team to monitor Eastern Bluebird nest boxes at Milliken Arboretum. She and a partner analyzed the level of trace metal concentrations in the soil near nest boxes at varying distances from the nearest roadways. Since Milliken Arboretum is surrounded by three major roadways, they tested the soil samples for lead, copper, zinc and mercury concentrations. With this data, they examined whether the concentrations of those trace metals correlated with the distance to the nearest roadways. They compared the concentrations they found with those considered to be harmful to songbirds to determine if there was a detrimental effect on the Eastern Bluebirds' survival, reproductive output and reproductive success.

Faculty collaborators and mentors: Dr. Lori Cruze, associate professor of biology, and Dr. Grace Schwartz, assistant professor of chemistry.



Emma Skelton '24 is a history, psychology and sociology and anthropology triple major from Greenville, South Carolina. She worked with five other student researchers to add historical data to the Back of the College project. This project was started as a way to educate people on the history of the college before the addition of the Senior Village, Greek Village, basketball arena, and football stadium. We went through census records beginning in 1967 and input the information of those who lived in the neighborhood into a shared Excel file. This information will be available in the spring when the Back of the College book and website are launched.

Faculty collaborator and mentor: Dr. Jim Neighbors, professor of English.



Lillian Smith '26 is an international affairs and Spanish double major pursuing a minor in economics from Charleston, South Carolina. She worked with a team researching ethnic and racial tensions in Spain during the Spanish Civil War. The team used newspapers published in Spain during the war for their investigative research. The project started by combing through databases to find publications from 1931 to 1939. The team eventually narrowed their focus to a newspaper called Euzkadi. The focus of the project shifted, as a result of this choice, to Basque nationalism during 1936, the first year of the Spanish Civil War. The team is building a website dedicated to understanding Basque nationalism and the Basque race. In the future, further research will be undertaken to fully code the words used in the newspaper.

Faculty collaborator and mentor: Dr. Ramón Galiñanes Jr., director of undergraduate research and post-graduate fellowships.



Sam Stuckey '26 is a biology and Spanish double major from Hemingway, South Carolina. He and a teammate interviewed South Carolina residents over the age of 50 on their experiences with climate change. His goals were to amplify the voices within and promote understanding in South Carolina communities. The research emphasized the impacts that the communities are dealing with and

the emotions that these impacts produce. The information was compiled to create a Climate Stories booklet.

Faculty collaborator and mentor: Dr. Laura Barbas Rhoden, professor of Spanish.



Devon Taylor '24 is a chemistry major from Lagrange, Georgia. She worked with the biology department investigating the stream ecology of Lawson's Fork Creek. Half of the summer was spent gathering data through field work, while the other half was spent performing data analysis on the biodiversity, habitat and watershed data gathered.

Faculty collaborators and mentors: Dr. Amelia Atwell, visiting assistant professor of biology, and Dr. Johnathan Davis, assistant professor of biology.



Godwins Tuyishime '24 is a biology major with a minor in mathematics and a concentration in data science from Charleston, South Carolina. He engaged in a research project to improve the accessibility of the Bayesian data-driven finite approximation strategy for controlling false discoveries. The methodology exploited Bayesian modeling of existing data to perform large-scale multiple testing over a region with high spatial correlation in the data. However, the methodology has been elusive due to insufficient documentation of the provided code and application, and the analysis has become outdated. He reviewed the code provided by the methodology's developers and documented it to ensure future users could easily utilize the approach. He obtained the daily surface level eight-hour ozone data from the air explorer database maintained by the EPA, covering 1997-2022. He subsequently prepared this data to reproduce the original analysis and expanded it to consider the time-related factors affecting ozone levels. He aimed to provide a well-documented and timely application of the methodology to any domains that may rely on data with dependency structures.

Faculty collaborator and mentor: Dr. Deidra Coleman, associate professor of mathematics.



Lindsey Vane '25 is a biology major and chemistry minor from Columbia, South Carolina. She assessed the exposure of backyard chickens to lead pollution in Spartanburg by measuring lead levels in the soil, chicken droppings and chicken eggs from four houses in different neighborhoods. Additionally, she looked at the correlation between the age of each home and the lead concentrations.

Faculty collaborators and mentors: Dr. Lori Cruze, associate professor of biology, and Dr. Grace Schwartz, assistant professor of chemistry.



Laila Villeda '26 is a finance and French major from Cumming, Georgia. She participated in the first part of the Wofford Black history project with four other students. She conducted research in the archives, interviewed alumni and former staff and faculty, and wrote entries to acknowledge Wofford's past in regards to its desegregation.

Faculty collaborator and mentor: Dr. Dwain Pruitt, chief equity officer.



Arnise Wright '24 is a biology major and sociology and anthropology minor from Goose Creek, South Carolina. She worked on the #BlackGirlSouth/#BlackGirlUpstate research project, which focused on how Black girls in the South define themselves through literature and personal experiences. The goal was to identify how Southern Black girls describe themselves, create spaces of belonging, identity their shift from girlhood to womanhood, and resist negative stereotypes projected on them.

Faculty collaborator and mentor: Dr. Bria Harper, assistant professor of English.



Kleo Young '25 is a double major in biology and chemistry from Jonesville, South Carolina. He conducted research that is relevant not only to Wofford history, but to Spartanburg history. He researched the Back of the College community, a one-time thriving Black community behind Main Building that wrapped around Beaumont Mills and where current Barnet Park is today. His research focused on who lived there and what businesses

operated in that community from 1960 to 2017. The community had a type of collective nature that is uncommon today. The neighborhood was built by Black people who had recently been liberated by the 13th Amendment. The neighborhood had many families, schools, churches and Black-owned businesses. But the neighborhood no longer exists due to urban renewal and the expansion of Prisma Health and Wofford. The importance of this research is history preservation, telling the stories of Black residents of the community, and keeping people and big businesses accountable for their actions. The website and book that will showcase this research will launch in spring of 2024.

Faculty collaborator and mentor: Dr. Jim Neighbors, professor of English.

PAPADOPOULOS SCHOLARS



Nadia Ferguson '25 is a chemistry major with a minor in sociology and anthropology on the pre-med track from Spartanburg, South Carolina. She worked on National Science Foundation-Research Experience for Undergraduates-funded project. The goal of this project is to successfully attach terminal groups, such as antioxidants, that enhances a molecule when coupled with a poloxamer. In the future, different terminal groups with radioprotective qualities will be introduced. This research can aid in combating the long-term effects of damaging treatments such as radiation.

Faculty collaborator and mentor: Dr. Robert Harris, professor of chemistry.



Taylor Fuller '24 is a biology and sociology major from New York. She worked on a National Science Foundation-Research Experience for Undergraduates-funded project at North Carolina A&T State University. Her research was a 10-week program in synthetic biology, but integrated other disciplines such as mathematics, chemistry, biological engineering and computer science. Her specific research focused on the design and development of chemically-inducible kinase

variants for spatiotemporal control of cellular signaling processes. The three main goals of the program were to use synthetic biology strategies to solve complex biological problems, to work on a multidisciplinary research team, and to develop cross-disciplinary communication skills. She also participated in a series of workshops focused on core synthetic biology techniques, bioethical issues associated with synthetic biology, implicit bias and career preparation.

Faculty collaborator and mentor: Dr. Robert Newman, distinguished professor of biology, North Carolina A&T State University.



Mark Hanna '25 is a biology major on the pre-med track from Myrtle Beach, South Carolina. He conducted research with the Ralph H. Johnson VA Medical Center in Charleston through their Summer Undergraduate Research Fellowship. He was part of a team that investigated the mechanical signaling of aortic aneurysms by conducting clinical trials. Through attending this eight-week research program, he was able to collaborate with like-minded peers and be mentored by various health professionals and faculty from both the VA medical center and MUSC. Additionally, he was able to further deepen his knowledge and understanding of important concepts that are prevalent in the field of medicine today as well as gain practice conducting research in a professional setting.



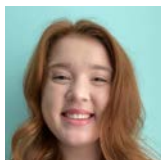
Caroline Kirk '25 is a biology major and mathematics minor from Greenville, South Carolina. She worked in the Grier Lab at the University of South Carolina School of Medicine in Greenville. The lab projects are focused on the intracellular immune response to pathogens.

SELECT ADDITIONAL STUDENTS PARTICIPATING IN NATIONAL SCIENCE FOUNDATION RESEARCH AND OTHER NATIONAL RESEARCH EXPERIENCES FOR UNDERGRADUATES



Kate Johnson '24 is a chemistry major with a biochemistry concentration and a business minor from Boiling Springs, South Carolina. She joined a team of Wofford students at Furman University to participate in a National Science Foundation-Research Experience for Undergraduates-funded project. Her research centered around the design and synthesis of a ligand that could be utilized for hydroamination in an atom-economical and cost-effective way to make C-N bonds.

Faculty collaborator and mentor: Dr. Robert Harris, assistant professor of chemistry.



Grace Lindsay '24, a chemistry major from Newberry, South Carolina, worked with a team of fellow Wofford students on an NSF REU research grant at Furman University. The team focused on modifying the end groups of poloxamers, a group of molecules that have shown the ability to heal cellular membranes. Additionally, the use of poloxamers with various small-molecule antioxidants and radioprotective groups has shown increased effectiveness of these molecules. As a member of this team, she focused on synthesizing several end-group modified poloxamers.

Faculty collaborator and mentor: Dr. Robert Harris, assistant professor of chemistry.



Matthew Lopez '25 is a biology major with minors in sociology and anthropology and chemistry from Greer, South Carolina. He worked at the University of Tennessee as part of a National Science Foundation-Research Experience for Undergraduates-funded program. He examined antibiotic resistance in *Escherichia coli*, more specifically, whether the deletion of type 1 toxin-antitoxin

genes have an impact on resistance to aminoglycosides. He hopes that his work provides some insight into the genetic factors associated with bacterial resistance and plans to seek other research opportunities.

Faculty collaborator and mentor: Dr. Elizabeth M. Fozo, associate professor of microbiology, University of Tennessee.



Rory Miller '26 is a physics and Chinese double major from Greenville, South Carolina. He conducted research at Coastal Carolina University, studying marine biology and looking at the impact bluegills have on a body of water when they eat their food. His team caught the fish from a local pond, regulated their oxide, ammonia and nitrogen levels, and took a high-speed video of them eating. He also participated in a project that studied the flight of Mango Stem Borer beetles over long distances. In order to mimic their flight in the lab, we spun the beetle wings at high speeds while being submerged in oil precipitation and took a laser photo of the set up. Through this research project he became laser-certified.

Faculty collaborator and mentor: Dr. Roi Gurka, professor of physics, Coastal Carolina University.

FACULTY BIOGRAPHIES



Dr. Amelia Atwell, visiting assistant professor of biology, received a bachelor's in biology from Dalton State College, a master's in environmental sciences from the University of Tennessee at Chattanooga, and a Ph.D. in environmental sciences from Arkansas State University. For her master's, she examined the effect of small-scale urban and agricultural land use on water quality features, including collecting and counting aquatic insects in a watershed in Northwest Georgia. In her Ph.D., she continued investigating how land use influences water quality features in a watershed that has been severely impacted by row crop agriculture in Northeast Arkansas, but instead of aquatic insects she focused on fish communities. During that time, she also worked in an EPA certified lab that conducted toxicological studies and analyzed samples for various environmental contaminants like nitrogen, phosphorus and lead. While she has training in environmental chemistry, toxicology and stream ecology, her primary research focus is on the water quality and aquatic insect aspects of stream ecology. She joined the faculty at Wofford in fall 2022, where she has taught biological inquiry and ecotoxicology. Outside of teaching and research, she enjoys running, hiking and spending time in and around a stream.



Dr. Laura Barbas Rhoden, a professor of Spanish at Wofford College, is the author of two books, "Writing Women in Central America" and "Ecological Imaginations in Latin American Fiction," and numerous articles on Latin American environmental humanities, as well as civic partnerships and global learning in higher education. She is co-president of the Association for the Study of Literature and the Environment, an international professional organization, and founder of Alianza Spartanburg, a social impact network dedicated to fostering the inclusion of Latinx residents in improving quality of life in Spartanburg. She currently serves as a non-trustee program committee member for the Mary Black Foundation; a member of the EMERGE Family Therapy and Teaching Clinic Board; the Behavioral Health

Task Force; the Spartanburg Food System Coalition; and the Community Advisory Board for CONNECT. She has collaborated with Dr. Christine Dinkins, Wofford's Kenan Professor of Philosophy, community members and students to conduct several public research projects in the Spartanburg community. Students have presented these projects at national and international conferences, and the project reports are available open access in the Wofford Digital Commons.



Dr. Tim Bersak, associate professor and chair of economics, is originally from Denver, Colorado. He completed bachelor's degrees in economics and health sciences at Boston University before earning his master's and Ph.D. in economics from Clemson University in 2012 and 2015, respectively. Much of his research focuses on healthcare, health insurance and the production of infant and early childhood health. An avid sports fan, he also enjoys applying the tools of applied microeconomics analysis to other settings.



Dr. Jennifer Bradham, assistant professor of environmental studies, earned a BS from College of Charleston, an MS from the University of California, Santa Barbara, and a Ph.D. from Vanderbilt University. She is a quantitative ecologist who evaluates how large mammals interact with their environment and how these interactions may be altered in response to anthropogenic land use modification and climate change. While most of her research occurs in the Neotropics, she also has developed a local research program based in data science and focused on equity. In collaboration with incredible Wofford colleagues and community partnerships, this work has included interdisciplinary assessments of greenspace equity and quantifying the impacts of condemned and abandoned properties, among other ongoing projects.



Dr. Deidra A. Coleman, associate professor of mathematics and a native of Savannah, Georgia, earned her Ph.D. in statistics at North Carolina State University. She is beginning her seventh year as a member of the faculty at Wofford College. She has mentored students engaged in undergraduate research since 2015. Her

research interests are in improving the methods for early outbreak detection, adding to the approaches for encouraging statistical literacy and studying the mathematical beauty associated with subtraction games. She loves introducing students to the potential of that type of exploration.



Dr. Lori Cruze, associate professor of biology, earned a bachelor of science degree from the University of Tennessee and a Ph.D. from the University of Florida. Prior to joining the faculty at Wofford College in 2015, she was a research professor in the department of obstetrics and gynecology at the Medical University of South Carolina. Cruze is a reproductive biologist by training and is broadly interested in reproductive physiology, endocrinology and ecotoxicology. Her latest research focuses on the reproductive biology of local songbird species.



Dr. Johnathan Davis, assistant professor of biology, has a B.S. in wildlife and fisheries science and an M.S. in marine and environmental biology. He earned a Ph.D. from Tennessee Technological University in environmental science, where he studied the conservation of native fishes of the Southeastern U.S. Prior to joining the faculty at Wofford in 2022, he was a professor in the biology department at Young Harris College for 11 years. He is a fisheries biologist and ecology and is interested in the conservation biology of native fishes. His latest research focuses on the impact of urbanization on local fishes.



Dr. Christine Dinkins, Kenan Professor of Philosophy and recipient of Wofford's Covington Award for Excellence in the Teaching of the Humanities and Social Sciences, is co-author of two books, "Listening to the Whispers: Re-thinking Ethics in Healthcare" and "Our Dissertations, Ourselves: Shared Stories of Women's Dissertation Journeys." Dinkins also has published widely on the use of the Socratic method in teaching and qualitative research. She has collaborated with Dr. Laura Barbas Rhoden, professor of Spanish, community members and Wofford students with support from the undergraduate research program to conduct several public research

projects in the Spartanburg community. Students have presented these projects at national and international conferences, and the project reports are available open access in the Wofford Digital Commons.



Dr. Phil Dorroll, associate professor of religion at Wofford, holds a Ph.D. in religion from Emory University. His work focuses on Sunni Islamic theology in classical Arabic and modern Turkish, and the history of interactions between Eastern Christianity and Islam. He also is currently researching the earliest Arabic manuscripts produced by enslaved Muslims in the Carolinas.



Dr. Ahmed Eddhir is a visiting assistant professor in the Department of Economics. He earned his master's and Ph.D. in economics from Clemson University and holds a bachelor's degree in computer engineering from the University of Tripoli. Harnessing his knowledge of computer engineering and data analysis, he integrates these skills into his economics research. His primary focus lies in the industrial organization of online markets. He investigates the essential role of reputation in countering information asymmetry in digital platforms, paying special attention to the dynamics of reputational costs and seller disclosures on platforms, notably eBay. Another facet of his research delves into the behavioral patterns of last-minute bidding in online auctions. Ahmed also explores the broader implications of bidder experiences and the effectiveness of warranties as alternatives to traditional seller feedback mechanisms. He is passionate about teaching a range of subjects, including microeconomics, macroeconomics, industrial organization, econometrics and beyond. Last year he earned a certificate in Effective Teaching Practice from the Association of College and University Educators (ACUE).



Maya Michele Fein is a former assistant professor of theatre and served as production manager and lighting designer within the theatre department. After completing her MFA in stage design and a teaching certification program at Northwestern University, she continued her journey as a lighting designer for theatre,

opera and dance across the country. Her research focused on collecting mental health surveys that included narratives on participants' experiences with mental health. With a team of artists who have been on Broadway, she designed the lights, costumes, and set to create "Interconnected: The Tangle." This is a dance theatre project, and aims to de-stigmatize and bring awareness to the vast challenges of the human journey by bridging the arts and mental health education.



Dr. Ramón Galiñanes Jr. is the director of undergraduate research and post-graduate fellowships at Wofford College. He holds a bachelor's degree in history from Montclair State University, a master's of philosophy in politics, democracy and education from the University of Cambridge (England), and a master's degree and Ph.D. in political science from the University of Florida. His research examines important questions about civil conflict, democratization, migration, civic engagement, ethnic politics and social movements. He has received grants and fellowships from the American Political Science Association, the National Security Education Program, the U.S. State Department of Education Foreign Language and Area Studies Program and the Gates Cambridge Trust. Galiñanes has taught social science and humanities courses and has organized and directed several study-away courses to Washington, D.C., and New York City. Galiñanes is a first-generation college student who is passionate about encouraging and empowering students to develop as scholars and civic leaders.



Dr. Karen Goodchild, Chapman Professor of Teaching Excellence and Interim Coordinator, avidly pursues research and wants to share that passion with students. Currently, she is finishing an article tying the important 16th century art theorist Giorgio Vasari to developments in garden theory in the 16th century. This article will be published in the premier English language garden journal, *Studies in the History of Gardens & Designed Landscapes*, after which she will finish an article investigating the way comic literature of the 16th century reflected the real material environment and semi-fictional artistic history of Florence. As a research mentor, she oversees all art history capstone projects and has been a mentor for her

department's recent honors projects as well as for several South Carolina Independent Colleges and Universities (SCICU) research projects, and many independent studies.



Dr. Rachel Grotheer, assistant professor of mathematics, earned her Ph.D. in mathematical sciences at Clemson University and a BA in both mathematics and French at Denison University. Her teaching and research areas lie mostly in applied mathematics, with calculus-, computational- and modeling-based classes her favorite to teach. Her research interests increasingly blur the line between mathematics and data science, and include medical image reconstruction, signal processing, machine learning and natural language processing. In addition to teaching mathematics, she is one of three faculty members heading up Wofford's data science program.



Dr. Alysa Handelsman, assistant professor of anthropology, has been engaged in ethnographic research projects in Ecuador for the last two decades, focusing specifically on children and youth cultures and publishing on girlhood, motherhood, poverty and decolonial research design. Since 2018, she has taught a year-long community sustainability seminar and has been involved in designing and implementing sustainability programming in Spartanburg alongside Wofford students and community partners. This programming has focused on building sustainable communities through educational and extra-curricular opportunities for children and youth. She is a graduate of the City of Spartanburg's Citizen Academy (2021) and of Spartanburg County Foundation's Grassroots Leadership Development Institute (2022). She forms part of several community committees and boards, such as Live Healthy Spartanburg's Community Engagement Committee, the City's Unity Week Planning Committee, Spartanburg Housing's Marche Gault Scholarship Steering Committee, and the Grassroots Leadership Development Institute Alumni Advisory Board; she serves as a Board Member of Strategic Spartanburg and of Oak and Ave Impact. She works closely with partners at Spartanburg Housing, Cleveland Academy of Leadership, Carver Middle, and

Parks and Recreation, among others. For over a year, she has worked actively with students and partners in the Una, Saxon, and Arcadia neighborhoods to study the intersection of condemned properties and neighborhood wellness; this summer, she formed part of a research team that looked at “development” in the Drayton community from the perspective of residents. She also is part of a mixed-methods research team engaged in a multi-year project across Spartanburg District 7 schools that explores how youth imagine the future of their neighborhoods. Handelsman is the recipient of the Sullivan Foundation’s 2023 Faculty Regional Service Award. She is looking forward to continued collaborative research, fusing scholarship with activism.



Dr. Bria Harper, assistant professor of English, is originally from Birmingham, Alabama. As an only child, she was surrounded by communities of Black women that nurtured her and sparked her passion for community engagement among Black girls and women. She is a graduate of The University of Alabama with a Bachelor of Arts in English and African American Studies and a Master of Arts in Women’s Studies. She received her Ph.D. in English from Michigan State University. Her research areas include African American literature, Black feminist thought, Black girlhood studies, popular culture and memory studies.



Dr. Josh Harris '09, assistant professor of finance, earned his bachelor’s degree in religion from Wofford College, his MBA in finance from the University of South Carolina Darla Moore School of Business, and his Ph.D. in personal financial planning from Kansas State University. His research focuses on the intersection between finance, psychology and family dynamics, with a special emphasis on self-esteem as a predictor of financial well-being. Additionally, a common thread through his research and teaching that originated from his time as a Bonner Scholar at Wofford is the role and impact of social justice and service learning.



Dr. Robert Harris '09, assistant professor of chemistry, graduated from Wofford College with degrees in chemistry and mathematics. He completed his Ph.D. in organometallic chemistry at Duke University and an HHMI funded postdoctoral fellowship at Emory University, where he studied the mechanisms of transition metal catalyzed carbon-nitrogen bond forming reactions. Before returning to Wofford in 2019, Harris joined the faculty at the College of Wooster as a visiting assistant professor in chemistry. Currently, he has an ongoing collaboration with groups at Furman University and the Medical University of South Carolina. His research interests include curriculum reform in undergraduate chemical education, the development of transition metal complexes to catalyze new reactions in organic chemistry, and the synthesis and modification of polyalkylene oxides with applications as cell healing agents.



Dr. Kirsten A. Krick-Aigner, professor of German, has published widely in the fields of Austrian and German women's literature, Holocaust Studies and postwar German-language culture. Publications include co-edited volumes on jazz in literature, *Jazz in Word: European Non-Fiction* (2018), *Jazz in German-language Literature* (2013), and the volume *Unredeemed Past: Themes of War and Womanhood in the Works of Post-World War II Austrian Women Writers* (2011).



Dr. Carolyn Martsberger, associate professor of physics, earned a bachelor's degree from the College of the Holy Cross, and then a master's and Ph.D. in physics from Duke University. While at Duke, she completed a certificate in translational medicine from the University of North Carolina. Prior to joining Wofford, she was a postdoctoral fellow in clinical neuropsychocardiology at Duke University Medical Center and taught physics at the undergraduate level. She is excited about her many opportunities to explore her passion for the intersection of cardiology, medicine and physics in a variety of settings. Her research focuses on understanding the nonlinear phenomena that promote irregular rhythms in cardiac tissue. She also is interested in how nonlinear, physiological systems such as the brain and heart collaborate and interact.



Dr. Jim Neighbors, an English professor and one of the co-coordinators of the African/African American Studies Program at Wofford College, is a partner in the collaborative project to tell the history of the primarily Black neighborhood that existed behind Wofford, called Back of the College by its residents. The project consists of a collaboration between community partners and Wofford students and faculty who work together to research U.S. Census data, Spartanburg city directories, city maps, newspaper articles and other historical documents, along with interviews of former neighborhood residents and alumni of the Cumming Street School, the first public high school for Black students whose building remains standing across from Jerry Richardson Indoor Stadium, to develop as thorough and accurate a history as possible. More than 40 Wofford students have participated in the project to date. A book manuscript is under consideration at a local press, and an interactive multi-media website is under construction.



Dr. Dave Pittman '94, professor of psychology, earned a bachelor of science degree from Wofford College, a master's degree in psychology and a Ph.D. in neuroscience from the Florida State University. He was the recipient of the Roger Milliken Award for Excellence in the Teaching of Science in 2011, Distinguished Graduate Award from the Program in Neuroscience at the Florida State University in 2014, and the Currie B. Spivey Award for scholarship that improves the quality of people's lives in 2017. He examines how taste neural signals are sent from the mouth to the brain and how the sense of taste then affects feeding behavior in both humans and rat animal models. His current research is focused on characterizing a new mechanism for the detection of sugar on the tongue. He has published 22 research manuscripts with 32 student co-authors and has been awarded 16 research grants, including two major NIH fundings.



Dr. Dwain C. Pruitt '95, Wofford's chief equity officer, is perhaps the world's only historian of early modern Europe and comic books. After completing his bachelor's degree in French and history at Wofford, he earned his master's and doctoral degrees in early modern European history at Emory University. His early modern European research focuses on race as lived experience in 18th century France. Since 2005, he has taught and conducted research about comic book culture and history. He has published articles in *French Historical Studies*, *Journal of Colonial History and Colonialism*, *Journal of Graphic Novels and Comics*, and *Sankofa: A Journal of African Children's and Young Adult Literature*. Chapter-length manuscripts appear in 2017's *Muslim Superheroes: Comics, Islam and Representation*, and in the forthcoming book "Incivility and Higher Education: The Costs of Bad Behavior." He has presented his scholarship at several regional, national and international history and popular culture conferences, including three presentations at the Comics Arts Conference held annually at San Diego Comic Con, and presentations at annual meetings of the American Historical Association, French Historical Studies, French Colonial Historical Society and the Western Society for French History.



Dr. Ramin Radfar, professor of chemistry, earned his Ph.D. from the University of South Carolina and subsequently worked for a year in the crystallography laboratory at Schering-Plough Research Institute. In August 2001, he joined the faculty at Wofford College and since then he has supervised research projects of more than 40 students. Radfar has excellent experience with expression, purification, crystallization and structural studies of large proteins. He has solved crystal structure of several proteins, including 4-diphosphocytidyl-2-C- methyl-D-erythritol (CDP-ME) synthetase from staph aureus and RNA-dependent RNA polymerase of hepatitis C virus in complex with divalent cation.



Dr. Grace Schwartz earned bachelor's degrees in chemistry and philosophy from Virginia Commonwealth University, and a Ph.D. in environmental engineering from Duke University. She specializes in trace element biogeochemistry, contaminant remediation and environmental analytical chemistry. Her dissertation work explored the environmental impacts of coal combustion with a specific focus on the biogeochemical transformations and leaching potential of trace element contaminants from coal ash under different ash disposal and spill scenarios. After graduating from Duke, Schwartz worked as a postdoctoral fellow at the Smithsonian Environmental Research Center, where she developed in situ remediation technology for mercury-contaminated wetland sediments. She became a postdoctoral fellow at Oak Ridge National Laboratory in 2017, where her research explored the ecosystem controls governing mercury methylation in sediments and periphyton biofilms. In fall 2020, Schwartz joined the faculty at Wofford and teaches courses in environmental and general chemistry. Outside of teaching and research, she enjoys marathon open water swimming and has competed in races ranging from 1 mile to 10 miles.



Dr. Katherine Steinmetz received her undergraduate degree in psychology and neuroscience from Allegheny College, where she participated in the neuroscience in the humanities program and wrote a thesis that investigated the electrophysiological changes caused by learning words in emotional contexts. She then went on to graduate school at Boston College. Working with Dr. Elizabeth Kensinger, she used neuroimaging (fMRI), eye-tracking, electrophysiological and behavioral techniques to investigate the neural mechanisms that influence memory for emotional events. She also did a post-doctoral fellowship focusing on the influences of stress and sleep on memory at Boston College and Notre Dame. Her laboratory focuses on understanding the neuroscience behind how emotional processing influences attention and memory. By combining techniques including behavioral testing, event-related potential (ERP) recordings and salivary hormonal assays techniques, her research examines both the cognitive (thought-level) and neural (brain-level) processes that

guide attention toward, and memory for, emotional information. She also is interested in how these processes may be influenced by factors such as stress and anxiety.



Michael Webster, assistant professor of studio art, is an artist who focuses on the social organization of space through site-specific projects, sculpture and installation. His work is context-driven and materially attuned, investigating the effects of power on social geography with a focus on long-term participatory projects rooted in the Southern United States. He was awarded the 2023 South Carolina State Fellowship from SouthArts, and has participated in residencies at the Hambidge Center for Creative Arts and Sciences, Elsewhere Living Museum and Penland School of Craft.



Dr. Yongfang Zhang, associate professor of Chinese, earned her M.A. and Ph.D. in Chinese pedagogy from the Ohio State University. Since 2006, she has participated as a trainer in teacher training programs at both K-12 and college levels in the U.S. and China, and also has offered dozens of professional development workshops for Chinese teachers. She has published widely on second language acquisition, language assessment and intercultural competence in language instruction. She started and has led a special interest group, “Intercultural Competence for Chinese Teachers and for Chinese Learners,” approved by the Chinese Language Teachers Association. She has been a certified ACTFL OPI Tester of Mandarin, an ACTFL OPI Mandarin Tester Trainer, a certified AAPPL rater and an AAPPL Quality Advisor. She has served as the principal investigator and the program director of the STARTALK Chinese summer program at Wofford College since its inception in 2013, and served as a STARTALK site visitor and a team leader (2018-2021).

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The Office of the Provost
The Office of the President
The Office of Student Success

Interested in learning more about summer collaborative research opportunities and/or undergraduate research at Wofford College?

Please contact Dr. Ramón Galiñanes Jr., director of undergraduate research and post-graduate fellowships, at galinanesr@wofford.edu.

