

News from the Hampden-Sydney Sciences 2022-23

Pauley Science Center formally opens; new Professorship supports Environmental Sciences at H-SC



The Pauley Science Center opened to great fanfare in August of 2022. Hampden-Sydney STEM students have enjoyed the increased laboratory and study spaces in Pauley as well as improved opportunities for collaboration across the STEM disciplines. The building was formally dedicated in November 2022 with pioneering heart surgeon **W. Randolph Chitwood '68** and Moderna Senior Vice-President **Scott Nickerson '95** giving remarks over a celebratory weekend. In the spring of 2023, the College announced an \$8.5 million gift towards completing fundraising for Pauley as well as ensuring that the Center has the equipment necessary for students and faculty to engage in cutting edge research.



The Spring of 2023 also brought word of the new endowed James E. Hansen Professorship in Environmental Science. The Professorship, to be held by Assistant Professor of Biology **Scott Starr**, will greatly expand the College's efforts to provide world class instruction and research opportunities in the environmental sciences.

Biology—by Michael A. Berberoglu

The 2022-2023 academic year has been a busy one in the Biology Department at Hampden-Sydney College. The department was thrilled to kick off the Fall 2022 semester in the new state-of-the-art Pauley Science Center. This new facility is the hub of Science, Mathematics, and Computer Science here at H-SC, and towers tall over the campus with four floors that include both classrooms and cutting-edge research laboratories.

Exterior (top) and Collaboration Forum (bottom) views of the new Pauley Science Center

Biology Department research laboratories include two adjacent labs on the 2nd floor, dedicated to undergraduate research projects in the Biological Sciences, one of which is the Cancer Research & Tissue Engineering Laboratory, shared by Dr. Fischer and Dr. Hargadon, with adjacent cell culture room, and the adjacent Biology Research Laboratory shared by Dr. Werth and Dr. Wolyniak. The Biology Department is also home to the Ecology Lab on the 2nd floor shared by Dr. Goodman, Dr. Lowry, and Dr. Starr. The build-in fish tank on our 2nd floor, maintained by Dr. Starr, is a beautiful showcase of animals in a natural setting, and has been a focal point of student and faculty attention and interest within the new building.

On the ground floor, Biology Department facilities include the shared Neuroscience Laboratory, and the attached Vivarium and surgical suite. The Biology Department welcomes our new faculty member hire, Dr. Michael Berberoglu (Assistant Professor of Biology, Neurobiology), who shares this space with Dr. Kristin



Neurobiologist Dr. Michael Berberoglu joined the H-SC Biology Department in 2022

Fischer, and Dr. Dan Weese in the Psychology Department. Dr. Berberoglu has established a zebrafish research lab here at H-SC, providing students with an opportunity to work with a vertebrate animal model system for studies in Developmental Biology and Neurobiology. Dr. Berberoglu is teaching courses in Developmental Biology, Neurobiology, Stem Cells & Regeneration, as well as Introductory Biology and Lab, and Anatomy & Physiology. Welcome Dr. Berberoglu! In the paragraphs below, individual faculty accomplishments and updates are highlighted.

Dr. Rachel Goodman, Chair of Biology, and her research students have been completing multi-year research projects in wildlife diseases in reptiles on our college campus. **Henry Carman '23** presented a poster titled "Impact of ranavirus on growth and survival of two freshwater turtles in central Virginia ponds" at the Global Amphibian and Reptile Disease Conference in Knoxville, TN. **Dr. Goodman** presented a talk at the same conference titled "Comparison of swab and tissue samples for detection of *Ophidiomyces ophidiicola* in Eastern Wormsnakes (*Carphophis amoenus amoenus*)." Both projects included both Henry and Dr. Goodman as co-authors along with **Paul Mahaffy '22**, **Nathan Cabrera '24**, and Galle Blanvillain (Virginia Tech). Dr. Goodman recently published a paper with co-authors Ken Toyama and Luke Mahler (University of Toronto) in the Biological Journal of the Linnean Society titled, "Climate shapes patterns of sexual size and shape dimorphism across the native range of the green anole lizard, *Anolis carolinensis* (Squamata: Dactyloidae)." This research found a trend for Rensch's rule, an increase in male-biased SSD with average body size, in this species. They also noted a reversed version of Bergmann's rule, with body size of lizards decreasing in warmer environments in males. Dr. Goodman will be starting a new project in the coming summer with **Will Gardner '25** and Dr. Scott Starr on IUCN Red List Assessor Training and Assessment of Invertebrates. The International Union for Conservation of Nature (IUCN) Red List of Threatened Species is an online database that is consulted by scientists, natural resource managers, and policy-makers to determine the conservation status of species. After training and passing certification for Red List Assessor Training, Will and his mentors will be investigating an invertebrate species that may be at risk and contributing assessment data to determine its conservation status. Dr. Goodman recently received a Fulbright Scholar Award to work in Colombia on a collaborative research project and educational outreach initiative. She will be working at six different universities during 2023 and 2024 to train scientists and students in methods for ranavirus surveillance and field biosecurity techniques.

Dr. Kristian M. Hargadon '01 pursued a number of scholarly activities during the 2022-2023 academic year. While setting up his new laboratory in the Pauley Science Center, he pursued a number of writing projects related to his research program in tumor immunology and cancer genetics. Dr. Hargadon published a major review article on the oncogenic functions of the FOXC2 transcription factor in the journal *Cancer and Metastasis Reviews*. Stemming from work he had previously conducted with collaborating students at H-SC, this article included **Travis Goodloe '16** and **Nathaniel Lloyd '20** as co-authors. In addition to this comprehensive review, Dr. Hargadon published (with **Eli Strong '20** as co-author) a more focused mini-review on the role of FOXC2 in cancer drug resistance in *Technology in Cancer Research & Treatment*. With an invitation from the editor-in-chief of *Cellular and Molecular Life Sciences*, Dr. Hargadon also published a significant review article on genetic dysregulation of immunologic and oncogenic signaling pathways that drive cancer resistance to immunotherapy. He also published two book chapters in Springer's *Handbook of Cancer and Immunology* book series, with one chapter focusing on combination T cell-based immunotherapy for cancer and another focusing on the range of immunotherapies that are currently being used to treat melanoma. He is currently serving as Guest Editor, along with colleagues at the Mayo Clinic and Lebanon Valley College, for a special issue Research Topic related to T cell immunosuppression in the tumor microenvironment for the journal *Frontiers in Cell and Developmental Biology*. Dr. Hargadon continues to bring his research interests into the classroom in ways designed to expose large student populations to aspects of his research program. Near the end of 2022, Dr. Hargadon published a pedagogical research article in the *Journal of Cancer Education*, highlighting the efficacy of a novel course-based undergraduate research experience (CURE) that he developed and implemented in his 300-level Immunology course at H-SC. The article, which describes a bioinformatics-based approach to enhance student understanding of the Cancer-Immunity Cycle, earned Dr. Hargadon an R. Davilene Carter Presidential Prize for Best Manuscripts from the American Association for Cancer Education, the second such award Dr. Hargadon has received in as many years. Finally, though his experimental work with students was put on hold during the move into the new Pauley Science Center, Dr. Hargadon continued to collaborate with undergraduates on bioinformatics-based research projects. Of note, **Jeb Wall '22** (now in his first year of medical school at Virginia Commonwealth University) analyzed RNA-sequencing data obtained from publicly available clinical datasets to gain insights into the oncogenic pathways and processes impacted by FOXC2-correlated genes, and he presented various aspects of this work at two national meetings, the National Conference on Undergraduate Research (held virtually) and the Annual Meeting of the American Association for Cancer Research (held in New Orleans, LA). Another of Dr. Hargadon's research students, **Taylor McGee '23**, became the College's most recent recipient of the prestigious **Barry M. Goldwater Scholarship**.

Dr. Scott Starr and his lab members completed their first field season at H-SC during the summer. **Victoria Fenton '23** conducted her research on Odonate Diversity of Prince Edward County, Virginia. This research will be continued this summer by Dr. Starr and **Cullyn Cary '25** who will survey the Odonate diversity within Central Virginia. Cullyn will also be conducting research on the diversity of Odonates at the county level across the United States and evaluating Odonate species of greatest conservation need within Virginia. **Roman Trettel '23** established new field sampling sites throughout the Buffalo Creek watershed and conducted his research on macroinvertebrate diversity and water quality. Dr. Starr will continue to sample these sites this summer. Roman presented his research at the Mid-Atlantic Regional Conference of Undergraduate Scholarship (MARCUS) at Randolph College. **Declan Kent '23** conducted research processing the Farmville Heat Watch data. Declan was able to identify several locations that had elevated surface temperatures. During the Fall, Dr. Starr, Declan, Town of Farmville horticulturist Jay Wilkerson, and Virginia Department of Forestry Molly O'Liddy helped plan and carry out a tree planting and tree giveaway of 500 saplings at the Fishin' Pigs parking lot in Farmville with the help of student and community volunteers. Dr. Starr was also part of a collaboration that published the paper Taxonomic identity, biodiversity, and antecedent disturbances shape the dimensional stability of stream invertebrates in the *Journal Limnology and Oceanography Letters*.



Newly-named Hansen Assistant Professor of Environmental Sciences Scott Starr meets with students

Prof. Alex Werth worked to get construction of the new Pauley Science Center completed, and to organize the move from the old science building. He has been traveling this year and working on several whale biology projects, including blue whale feeding (with colleagues in California, Alaska, Denmark, and Bermuda), right whale entanglement in fishing gear (Canada), humpback whale interactions with plastic (Dominican Republic, Madagascar, and Reunion Island), pygmy right whale feeding (Australia and New Zealand), and several other projects on whale anatomy, evolution, ecology, and conservation. He is looking for new students to get involved with this research. He is also happy that his Biodiversity class is now a regular course offering.

Dr. Mike Wolyniak continues to work with colleagues from across the nation on a multi-institution initiative designed to bring students at H-SC and partner institutions the opportunity to enhance their exposure to data science. The National Science Foundation (NSF) awarded Wolyniak and his colleagues a \$1.3 million grant to expand their existing 4-institution coalition to 12 members and to offer a series of hybrid courses in pure and applied data science courses that students within the consortium can take in pursuit of a network certificate recognizing their work. Specifically, Dr. Wolyniak will offer courses in genomics and bioinformatics as well as public health in support of this project. Wolyniak was also the 2022 recipient of the Virginia Foundation for Independent Colleges' Libby and Hiter Harris Award for Excellence in Undergraduate Teaching in recognition of his work in bringing authentic research experiences into the classroom. Dr. Wolyniak also successfully applied to the American Society for Biochemistry and Molecular Biology (ASBMB) for reaccreditation of H-SC's Biochemistry and Molecular Biology Program. H-SC received its first ever full 7-year accreditation in 2022, placing its Biochemistry and Molecular Biology program in a league with only ~100 other institutions nationwide. Dr. Wolyniak's students continue to do excellent work in the laboratory and to present their findings at regional and national conferences. **Caleb Manu '23** has continued his work on exploring the potential shown by bacteriophages for



Trey Grimes '23, Taylor McGee '23, Dr. Mike Wolyniak, Caleb Manu '23, and Tyler Hobart '23 atop the Space Needle while attending the ASBMB Annual Meeting in Seattle

antimicrobial therapeutics and has focused on finding specific bacteriophage genes that may be isolated and overexpressed as a novel means of controlling pathogenic bacteria. He has been supported in this work by summer research by **Connor Eickelman '24**, who will inherit a lot of this research after Caleb graduates and joins a Ph.D. program this year. **Al Blackburn '23** spent the summer working on isolating and purifying specific genes from the emerging pathogen *Streptococcus bovis*, while **Jacob Siler '23** continued his multi-year exploration of the oral microbiome and its role in influencing the field of dentistry. Dr. Wolyniak accompanied Caleb Manu '23, **Taylor McGee '23**, **Tyler Hobart '23**, and **Trey Grimes '23** to Seattle in March 2023 to the Annual Meeting of the ASBMB, where each presented a poster of their ongoing work in the

Biochemistry and Molecular Biology program at H-SC. Caleb Manu '23 also presented his work at the 2023 National Conference on Undergraduate Research (NCUR) at the University of Wisconsin-Eau Claire while Taylor McGee '23 presented his work done at the University of Iowa this past summer at the 2022 Annual Meeting of the American Society for Cell Biology in Washington, DC.

Dr. Wolyniak also coordinated with **Prof. Bryan Tims** who worked with **Caleb Manu '23** on BSL-2 policies and procedures.

Dr. Michael A. Berberoglu was welcomed as a member of the Hampden-Sydney College community in the Fall of 2022 as an Assistant Professor of Biology (with specialization in Neurobiology). Since joining the faculty, Dr. Berberoglu has been well-received by students in the classroom, teaching the upper-level Developmental Biology course which has not been offered for several years here at H-SC. With more than 16 years of research experience in the fields of Developmental Biology and Neurobiology, and performing research using the zebrafish model system, Dr. Berberoglu is also teaching the Neurobiology course focusing on cellular and molecular Neurobiology, and will be offering a new course in Stem Cells & Regeneration. Dr. Berberoglu is working with members of the Psychology Department to continue to build on the Neuroscience Minor program here at H-SC, which is a great opportunity for students interested in studies of the brain and neuroscience to pursue further studies. Dr. Berberoglu has established a zebrafish research lab here at H-SC, and has been co-mentoring **Josiah King '23** on an Honors Thesis Project (co-mentored with Dr. Michael Wolyniak) involving the use of zebrafish to study Covid-19-induced parosmia and Ace2 receptor expression in the zebrafish. H-SC undergraduate student **Matthew Miscikowski '26** has also joined the Berberoglu Lab and will be carrying out a summer research project on the Role of Rbfox RNA-binding proteins in brain development and function. Moreover, Dr. Berberoglu has been chosen as the nominee from Hampden-Sydney College, 2023 for submission of the Mednick Memorial Fellowship Award application to the Virginia Foundation of Independent Colleges. This is particularly noteworthy, as Dr. Berberoglu has received this nomination during his first year as faculty here at Hampden-Sydney College. The Biology Department welcomes Dr. Berberoglu!

As you can see from the accomplishments above, it has been a busy year on the Hill for the Biology Department. As the 2022-2023 academic year comes to a close, the Biology Department looks ahead to what lies on the horizon...*a prosperous and productive learning environment for current H-SC students and the next generation.*

Chemistry—by Joseph M. Crockett

Starting with the summer of 2022, the following year has been extremely eventful for the Chemistry Department of HSC. The move from Gilmer to our new digs in the Pauley Science Center, the organization of the new building and the starting of classes have all affected all of us. The third floor of Pauley is laid out with the advanced lab wing on the north side of the building with the “wet lab” area in the center and the instrument room and the writeup room flanking it. The Techniques and Intermediate labs are on the south wing. It is a beautiful new building that will last for the next generations of HSC gentlemen.

The move from Gilmer continued through the summer into the fall term with everyone pitching in to help with the organization of the stockroom, separation and classification of chemicals, set up of the Techniques and Intermediate lab stations, getting the Advanced labs set-up and running, the monumental task of getting all of the instruments up and running, and the many smaller tasks needed to fine tune the whole set-up. Work still remains to finish the department’s time in Gilmer Hall. The move was expertly supported by the HSC faculty with kudos going to **Dr. Kevin Dunn** for his oversight of the process.



Dr. Sipe consults with a student in the Chemistry Department’s new study/lounge space



Dr. Ava Kreider-Mueller joined the Chemistry Department in 2022

Dr. Ava Kreider-Mueller joined the department as a Visiting Assistant Professor of Chemistry for the 2022-2023 academic year. She did her undergraduate work at Bard College and her graduate work with Gerald Parkin and Jonathan Owen at Columbia University in Inorganic Chemistry. She comes to HSC from teaching positions at Clemson University, UMass-Dartmouth, and the Battelle Memorial Institute in Charlottesville. Ava, welcome to Hampden-Sydney!

Dr. Joe Crockett '73 joined the department as a Visiting Professor of Chemistry for the 2022-2023 academic year. Joe had a long career of 43 years teaching at Tulane University, Baker University in Kansas, and the last 35 years at Bridgewater College in Virginia where he retired in 2020. The last two years he has been substitute teaching at high schools in Rockingham County. He did his undergraduate work at HSC when Dr. Herb Sipe was a new faculty member, and doctoral work at UNC-Chapel Hill with Dr. Maurice Brookhart in Organic and Organometallic Chemistry.

The summer research program had two students working with **Dr. Herb Sipe**. **Pierce Gemborys '25** worked on a project for the “Implementation of CW-EPR, A Python Program for Analyzing and Processing EPR Spectra”.

Briggs Randall '24 “An Analysis of ESR Programs”. **Ben Rose '23** did a summer research program well away from the campus, traveling to France for the summer. Four other students were working with Dr. Tim Reichart. **Trey Grimes '23**, **Tyler Hobart '23**, **Brett Reis '23** and **Andrew Rehak '23** were working on projects which they continued into the present academic year and are listed below.



Dr. Joseph Crockett '73 visited the Chemistry Department in 2022-23 as an organic chemist

The Advanced Lab program had 19 students involved this year in numerous projects. **Dr. Tim Reichart** had six students working with senior honors projects, **Trey Grimes '23**, **Tyler Hobart '23**, **Brett Reis '23**, and **Andrew Rehak '23** on the synthesis and characterization of transmembrane domains from SARS-CoV-2 proteins, **Ben Rose '23**, on developing a novel peptide-catalyzed cascade cyclization method, and **Taylor McGee '23** on developing an ESR-based technique to monitor peptide oligomerization states. **Russell Bowles '23**, **Jake Brown '22**, **Nathan Carrera '24**, **Henry Carman**, **Jaron Concepcion '24**, **Pat Conde '23**, **Mark Hurst '24**, **Henry Loehr '24**, **Chase Magette '24**, **Caleb Manu '23**, **Thomas Morris '24**, **Briggs Randall '24**, and **Becton Topping '24**, also worked on various projects proposed by Dr. Herb Sipe, Dr. Ava Kreider-Mueller, and Dr. Joe Crockett.

Taylor McGee '23 presented a poster at the Seattle meeting of the American Society for Biochemistry and Molecular Biology Conference in March, 2023. His presentation was on “Development of a Spin-Labeled Peptide Model Using SARS-CoV-2 Spike Protein Transmembrane Domain” in conjunction with work supervised by Dr. Tim Reichart.

But, of course we must close with a sad note as the department said good-bye to **Beverly Hines** this year. Beverly retired from the department but is still on campus with the fine arts department. She is greatly missed, an understatement, as she has been an integral part of the operation of the department for many years.



Beverly Hines retired from the Chemistry Department in 2022-23

Mathematics and Computer Science — by Dr Michael C. Strayer

This year, **Dr. Brian Lins** published a paper “Convergence of iterates in nonlinear Perron-Frobenius theory” in the journal *Discrete and Continuous Dynamical Systems - Series B*.

Dr. Sarah Loeb had another busy year with two papers published: “Bootstrap Percolation via Automated Conjecturing” in *Ars Mathematica Contemporanea* (with N. Bushaw, B. Conka, V. Gupta, A. Kierans, H. Lafayette, C. Larson, K. McCall, A. Mulyar, C. Sullivan, S. Taylor, E. Wainright, E. Wilson, G. Wu) and “Symmetry Parameters of Various Hypercube Families” in *The Art of Discrete and Applied Mathematics* (with D. Boutin, S. Cockburn, L. Keough, and P. Rombach). She gave invited session talks at the both the Association for Women in Mathematics Research Symposium and Joint Mathematics Meetings conferences.

Last summer, Dr. Loeb was accepted to the American Mathematics Society’s Mathematical Research Communities workshop *Trees in Many Contexts*. She and her collaborators met again over spring break. Dr. Loeb received travel support from the AMS for both research trips and for her travel to the Joint Mathematics Meeting conference.

Finally, this year Dr. Loeb started her second three-year term on the editorial board for the Mathematical Association of America's Classroom Resource Materials book series.

Physics & Astronomy – by Dr. R. Glyn Holt

Dr. Glynn Holt joined the Physics department in the Fall, after a 25 year career in the Mechanical Engineering Department at Boston University. Dr. Holt was educated at the University of Mississippi and at Göttingen University, Germany. He joined the Mechanical Engineering department at Yale University as a Postdoctoral Associate in 1990, and joined the Jet Propulsion Laboratory in 1993, where he was a research scientist and served as investigator and alternate payload specialist for STS-73. Dr. Holt's research interests lie in the broad areas of physical, engineering and biomedical acoustics, with particular emphasis on the dynamics and applications of bubbles, drops and surface waves. Primarily an experimentalist, he has participated in the design and execution of laboratory experiments involving not only physical systems, but in vitro and in vivo experiments as well. He has also designed and executed field experiments at Naval pond facilities, aboard KC-135 flights, and aboard STS/Spacelab flights. He has co-founded a medical device company, Levisonics, to build an acoustic device dedicated to the analysis of blood coagulation pathologies. He has authored over 50 refereed journal papers; 43 conference proceedings, book chapters, technical reports and patents, and has presented over 200 invited and contributed talks to national and international organizations. He is a Fellow of the Acoustical Society of America.



Dr. Glynn Holt joined the Physics & Astronomy Department in 2022

Dr. Steve Bloom continues to work on revised journal articles related to pedagogy of mechanics, such as using EXCEL and Mathematica to study flight of airplanes and rockets. In addition, he is excited as he begins his survey of exoplanets using the now automated HSC Observatory. He also is continuing to monitor some interesting quasars with our telescope!

Dr. Stanley Cheyne continued his research on bubbly liquids with Dr. Hugh (Trey) Thurman and Dr. Glynn Holt. We have been working to improve the data of phase speed and sound absorption at the single bubble resonance. During the summer of 2022, we got the best data to date. Dr. Cheyne presented the paper, "Phase speed and attenuation determination of a monodisperse liquid at the single bubble resonance using a single and two microphone transfer function method" at the 183rd meeting of the Acoustical Society of America in December of 2022.

Dr. Jonathan Keohane has continued to maintain the Hampden-Sydney Observatory. He has recently replaced the aging 1 MP CCD camera with a new 51 MP CMOS camera, making the telescope much better for astrophotography. Anyone associated with Hampden-Sydney may use the HSC Observatory by simply contacting Dr. Keohane. Dr. Keohane is continuing to work as part of team of astronomy instructors and software developers, including John Torian (HSC 2024), to develop a second-year laboratory curriculum centered on the use of these automated observatories. Dr. Keohane is also continuing his work on multiwavelength comparisons of supernova remnants, which includes a project involving radio interferometry data analysis by **Anthony Dischino '23**. Most importantly, over the summer of 2023, Mr. Dischino and Dr. Keohane worked together installing the new HSC planetarium, located in the astronomy classroom of the new Pauley Science Center. This academic year, Dr. Keohane has been using and maintaining the planetarium, while Mr. Dischino has worked on giving planetarium shows to children.

Dr. Walter (Mike) McDermott continued his service to the College as Dean of Faculty.

Anthony Pinchefsky was instrumental in planning and executing the Department's move into our new research laboratories on the first and fourth floors of the Pauley Science Center.

Dr. Trey Thurman conducted an independent study course with **Kade Minton '25** focused on improving the efficiency of a Trombe wall. This course has direct application to Mr. Minton's proposed project for his Goldwater scholarship that he applied for this academic year. Dr. Thurman with Dr. McDermott is working with another student, **Peter Smith '24**, on his proposed project for a Goldwater scholarship that is focused on improving the efficiency of a coil gun which is an alternative to a rail gun. Dr. Thurman continued his research efforts with Dr. Cheyne and Dr. Holt in attempting to measure the dispersion curve for the phase speed of a bubbly liquid using a modified two microphone transfer function technique that models the bubbly liquid as a porous medium. Dr. Thurman was able to collect preliminary data that Dr. Cheyne and Dr. Holt presented at the December meeting of the American Acoustical Society.



Students enjoy the Pauley Science Center's new planetarium

Psychology—by Dr. Rebecca Bauer

The 2022-2023 academic year was a busy year full of new and exciting changes in the department.

Dr. Dan Weese will be retiring at the end of the 2023 academic year. He has been a valuable member of the psychology department and Hampden-Sydney community for 34 years. His courses have focused on behavioral and cognitive neuroscience, drugs and behavior, and sensation and perception. We will be conducting a national search to fill his position in the upcoming academic year.

Dr. Jennifer Vitale has taken on the double role as full time faculty member and the interim Assistant Dean of the Faculty. We are so thankful for her dedication to the department and to the college community!



Dr. Dan Weese retired from the H-SC Psychology Department after 34 years of service

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was published in the journal *Translational Issues in Psychological Science*. This article focused on how outcome bias may impact policy and political decision making. Republicans and Democrats judged COVID-19 policy decisions that varied in political affiliation and policy aim. The results suggested that outcome bias depended on the political party affiliation of the decision maker and the participant.

Dr. Rebecca Bauer completed her first year as a faculty member in the psychology department, teaching courses in developmental psychology, psychology of creativity, and quantitative methods. She presented a poster entitled “*Dispelling misconceptions with infographics: How do creative assignments promote inclusive perspectives?*” at the Teaching 4 Learning conference in Henderson, NV. This poster focused on using creative infographic assignments to revise misconceptions students often have about diversity, equity, and inclusion in an upper-level psychology course. Qualitative results suggested that these assignments can bolster inclusive perspectives while providing students with an outlet for taking action against stigma. In addition, Dr. Bauer presented a poster entitled “*Childhood creativity: Exploring developmentally appropriate creativity measurement in preschoolers*” at the Society for Research in Child Development national conference in Salt Lake City, UT. In collaboration with the University of Alabama, Hampden-Sydney students helped collect data from nearly 80 preschool children in the local community. This poster focused on exploring alternative ways to measure creativity that do not tax developmental skills. Children were evaluated on their creativity through both traditional and brand-new measures. Then they were evaluated on various developmental skills, such as vocabulary and self-regulation. Results suggested that the new measures of creativity may be more developmentally appropriate than traditional measures, depending on the domain of creativity in which the that children were assessed.



Dr. Rebecca Bauer joined the Psychology Department in 2022