

TBP FELLOWS

Fellowships have been awarded to 31 members for a year of graduate study in 2024-25.

Sergei Akhmatdinov MI K '23
King No. 63 | Elec. & Computer eng'g

Cavin J. Alderfer CO Δ '24
Sigma Tau No. 50 | Civil eng'g

Dorian A. Bobbett NE A '23
Zimmerman No. 13 | Eng'g Education Res.

Kaitlyn I. Butler MO Δ '24
Hanley No. 13 | Space Systems eng'g

Anna Cetera RI B '24
Fife No. 245 | Electrical eng'g

Ashley S. Chon CA A '24
Fife No. 246 | Chemical eng'g

James R. Clinton CA Ω '24
Hennis No. 5 | Mechanical eng'g

Alrick J. Davis DC A '23
Fife No. 247 | Sustainability Science

Aleksandra A. Dudek CA E '23
Anderson No. 23 | Mechanical eng'g

Madhusudan "Sudan" Duwadi NJ Γ '22
Fife No. 248 | Biomedical eng'g

Shane P. Gallagher NJ B '24
Stark No. 45 | Materials Sci. & eng'g

Arianna C. Gehan NJ A '24
Fife No. 249 | Biomedical eng'g

Jacquelyn M. Gwynn MD Γ '24
Centennial No. 39 | Aerospace eng'g

Natasha K. Hunt PA A '22
Williams No. 45 | Bioengineering

Andrew Kim NY I '23
Dodson No. 11 | Chemical eng'g

Tessa Lytle MA A '23
Stark No. 46 | Mechanical eng'g

Steven W. Man CA Σ '23
Fife No. 250 | Robotics

Hannah S. McCollum AZ A '24
Fife No. 251 | Chemical eng'g

Firaol S. Midekssa NY K '21
Tau Beta Pi No. 843 | Biomedical eng'g

Utkarsh Misra FL Γ '23
Tau Beta Pi No. 844 | Elec. & comp. eng'g

Adedolapo "Majid" Ogungbire AR A '23
Matthews No. 27 | Civil eng'g

Ekin Gunes Ozaktas MD A '24
Swalin No. 8 | Electrical eng'g

Matteo Sanchez-Dahl DC Γ '23
Spencer No. 69 | Comp. Biomedical eng'g

Sayre P. Satterwhite IA B '24
Anderson No. 24 | Marine eng'g

Jehan L. Shalabi NJ Γ '22
Brandt No. 3 | Electrical eng'g

Deniz Sinar NY Δ '23
Nagel No. 27 | Bioengineering

Andrew "Andie" R. Tubbs TN E '23
Tau Beta Pi No. 845 | Biomedical eng'g

Zoe L. Vittum ME A '23
Tau Beta Pi No. 846 | Biomedical eng'g

Yancey D. Williams II AL Γ '23
Tau Beta Pi No. 847 | Biomedical eng'g

Jacqueline "Jackie" O. Yang NY A '24
Forge No. 12 | Electrical eng'g

Chujun "Julia" Zhao NY A '23
Tau Beta Pi No. 848 | Biomedical eng'g

The **Anderson Fellowships** are named for Mabel E. and Marshall Anderson, *MI Γ '32*, who was TBII Fellow No. 19 and left a bequest to the Society in 2005.

The third **Brandt Fellowship** is made possible thanks to a gift from Larry D. Brandt, *OR A '67*, which will permanently endow a fund in support of TBII member graduate studies.

Given for the 39th time, the **Centennial Fellowship** honors the Society's most outstanding fellow and commemorates Tau Beta Pi's 100th anniversary.

The **Dodson Fellowship** is named for the late Charles R. Dodson, *MD B '30*, who made a gift to the Association in 1998 and 1999.

The seven **James Fife Fellowships** are presented in memory of the father of the late member William Fife, *CA A 1921*.

The **Forge Fellowship** is named for Charles O. Forge, *CA Γ '56*, who left a bequest in 2010.

The 13th **Hanley Fellowship** is awarded in honor of Mary A. and Edward P. Hanley, *IL B '42*, TBII Fellow No. 84, who left a bequest to TBII in 1991 and 2021.

The **Hennis Fellowship** is awarded for the 5th time thanks to a generous gift from the late Lee A. Hennis, *CA Δ '65*, to continue mentoring young engineers.

The **Harold M. King Fellowship**, awarded for the 63rd time, honors the 1954-58 president of TBII, Harold M. King, *MA A 1910*, and is given to that recipient whose participation in his/her technical society is judged worthy of special mention.

The **Matthews Fellowship** is awarded in honor of R.C. "Red" Matthews, *IL A 1902*, who served as Secretary and Secretary-Treasurer from 1905-47 and as Secretary-Treasurer Emeritus in 1947-78.

The Fellowship Board has announced the selection of 31 engineering students from 417 applicants for graduate fellowships. More than \$8,900,000 in stipends will have been given by the Society when this 91st group of fellows completes its graduate work. These awards bring the total to 1,830 fellowships since the program began in 1929. The Association is grateful to volunteer members for their role in the selection process; they are recognized at www.tbp.org/?Fellows.

Sergei Akhmatdinov

King Fellow No. 63

Sergei graduated as a Presidential Scholar from Western Michigan University with a B.S.E. in computer engineering and a minor in mathematics. He served as the MI Kappa Chapter president for two years and is committed to advising the chapter post-graduation. During his undergraduate studies, Sergei engaged in diverse research initiatives. He worked on a predictive model for power consumption in FPGA designs under Dr. Lina Sawalha's guidance and, in collaboration with Dr. Simin Masihi, pioneered a pressure sensor design for haptic feedback in robotic surgery and aerospace. With Dr. Steve Carr, he contributed to a Linux Security Module that safeguards files against unauthorized changes. In addition to research, Sergei tutored mathematics, computer science, and physics at Kalamazoo Valley Community College. He will pursue a Ph.D. in electrical and computer engineering at the University of Michigan, focusing on embedded system optimizations for machine learning and machine vision applications. Driven by his deep passion for research and mentorship, Sergei intends to seek a career in academia.



Cavin J. Alderfer

Sigma Tau Fellow No. 50

Cavin graduated cum laude from Colorado State University (CSU) with a B.S. in environmental engineering. He was a member of the University Honors College and served as the Colorado Delta Chapter treasurer his senior year. He participated in research, engaging in endeavors related to groundwater resource management, irrigation systems evaluation, and salt and nutrient fate and transport. Cavin was honored to receive 1st prize at the 2023 CSU Hydrology Days Showcase where he presented his research on groundwater depletion and recharge trends across the United States over the past century. He also served as a peer mentor and tutor for the Engineering Residential Learning Community, leveraging his knowledge and past experience to help ease the transition to college for first-year engineering students. Cavin intends to enter graduate school at Colorado State University and earn an M.S. in civil eng'g. He will participate in research on agricultural water management and crop productivity with Dr. Jeffrey Niemann and is very excited to spend another two years at CSU!



Dorian A. Bobbett

Zimmerman Fellow No. 13

Dorian graduated with distinction from the University of Nebraska-Lincoln in 2023 with a B.S. in chemical engineering and minors in engineering leadership and mathematics. As an undergrad, she was involved in the McNair Scholars Program, Tau Beta Pi, Engineers Without Borders, Engineering Ambassadors, Women in Engineering, and several other on-campus STEM outreach groups. Dorian's passion for outreach led her to become involved in engineering education research with Dr. Grace Panther, where she explored engineering faculty adaptability while teaching during the pandemic. Combined with her experiences as a teaching assistant for an introductory chemical engineering course, Dorian chose to pursue a Ph.D. in engineering education research at the University of Michigan. Currently, she is working with Dr. Karin Jensen on exploring the relationships of engineering doctoral students and their advisors, with the goal of improving graduate education and mentoring for engineering students.



The **Nagel Fellowship** is given in honor of Robert H. Nagel, P.E., NY Δ '39, for his service as TBI magazine Editor and Secretary-Treasurer from 1942-82 and as Secretary-Treasurer Emeritus in 1982-97.

The **Sigma Tau Fellowship**, given for the 50th time, perpetuates the name of Sigma Tau, a national engineering honor society founded at the University of Nebraska in 1904 and merged with Tau Beta Pi in 1974. It also commemorates Sigma Tau's former national president and secretary-treasurer, Carel B. Mapes.

The **Charles H. Spencer Fellowship** is given for the 69th time. Named for Tau Beta Pi's president from 1936-47, Charles H. Spencer, IL B 1913, it is awarded to a recipient whose contributions to his/her collegiate chapter are judged worthy of commendation.

The **Donald A. Stark Fellowships** are supported by a gift from a charitable trust named for the man who contributed much to progress in the fluid-power industry.

The **Swalin Fellowship** is named in honor of Helen M. and Richard A. Swalin, Ph.D., MN A '52, who left a bequest in 2015 to support TBI scholarships and fellowships.

The **Tau Beta Pi Fellowships** are supported by matching gifts from companies as part of the annual alumni giving program.

The **Edward H. Williams Jr. Fellowship**, awarded for the 45th time, honors the founder of Tau Beta Pi. It is given to a recipient who plans to earn a doctoral degree and become a professional engineering teacher, as was Dr. Williams, PA A 1875.

The **Zimmerman Fellowship** is named for Marlin U. Zimmerman Jr., MD A '44, who left a bequest in 2011.

Kaitlyn I. Butler

Hanley No. 13

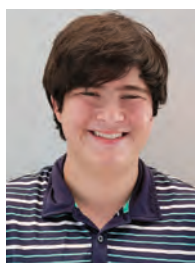
Kaitie graduated from the Univ. of Missouri-Kansas City (UMKC) in 2024, summa cum laude, with a B.S. in mechanical eng'g and as a Marion H. Bloch Scholar. Senior year, she served as UMKC president of both AIAA and the MO Delta Chapter, where she notably hosted the annual Flight Symposium and the TBII career panel featuring VP's, PM's, and CTOs. She also served as local SWE Chapter VP, followed by the role of treasurer. Previously, Kaitie was the founder and president of UMKC's first AIAA Design Build Fly engineering team and continues to support and encourage the development of the team. This summer, she'll perform contracted work for National Security Innovation Network, followed by continuing her research and graduate studies on unmanned aerial systems under Missouri Institute for Defense and Energy. She aims to further technological advances in the defense industry through collaboration of common mission goals and the pursuit of excellence.



James R. Clinton

Hennis Fellow No. 5

James is graduating from Harvey Mudd College, where he majored in engineering, was a 2023-24 TBII Scholar, and served as CA Omega Chapter president in 2023-24. He is interested in researching mechanism design for robotics and has conducted research in spring-driven robotic mechanisms with Harvey Mudd Prof. Mark Ilton, to understand how different physical parameters influence system performance. James also worked with Prof. Anthony Clark at Pomona College, designing a locomotion system that transforms between wheeled and spoked configurations. He has also participated in an REU at Carnegie Mellon Univ., working with Prof. Zeynep Temel to design mechanisms to enhance locomotion capabilities of a reconfigurable robot swarm. In the fall, James will pursue a Ph.D. in mechanical engineering at the Univ. of California, Santa Barbara as an NSF Graduate Research Fellow, hopes to pursue a career in academia, and enjoys playing the viola and working on art projects.



Anna Cetera

Fife Fellow No. 245

Anna, a first-generation graduate from the University of Rhode Island (URI), has earned both a B.S. in biomedical engineering and a B.A. in Spanish through its five-year, dual-degree International Engineering Program. Fluent in Spanish following her immersive year at the Univ. of Cantabria in Spain, Anna has actively contributed to her community as the SWE outreach chair and as RI Beta Chapter recording secretary, where she played a key role in the unique experience of initiating Dr. Marc B. Parlange, URI President, in 2024. Her research at URI's Translational Neurorobotics Lab, under the guidance of Dr. Reza Abiri, involves developing noninvasive brain-computer interface (BCI) systems and assistive neurobotic devices aimed at restoring upper-limb function. Anna is continuing her education at URI, pursuing an M.S. in electrical eng'g with a focus on real-time systems and neural networks to advance noninvasive BCI systems. She has aspirations to earn a Ph.D. in BCI development and to establish her own lab.



Alrick J. Davis

Fife Fellow No. 247

Alrick is a distinguished summa cum laude graduate in chemical engineering from Howard University in Washington, D.C., with political science and mathematics minors. As president of the Howard Caribbean Students' Assoc. and DC Alpha Chapter treasurer, Alrick has contributed to diversity and community engagement. His academic excellence is recognized as a Jamaican Rhodes Scholar Finalist and an NSBE-Cummins Inc. Integrated Pipeline Program Scholar. Alrick's professional experience includes impactful policy development and environmental advocacy internships, notably with the U.S. House of Representatives. He founded the FiDiYutes Initiative, promoting community service between Jamaican students and their homeland, underscoring his commitment to global challenges like water equity. Alrick has researched combustion and after-treatment analysis in emissions system catalysts and implemented new acid digestion methods. He aims to merge innovative engineering solutions with sustainable policies to diminish water equity, treatment barriers, and implications on waterborne diseases, in underserved regions.



Ashley S. Chon

Fife Fellow No. 246

Ashley graduated from the University of California, Berkeley, in 2024 with a B.S. in chemical engineering. She served on the CA Alpha Chapter service committee, held social chair and IVP positions in AIChE, and competed with Berkeley's ChemE Car team. Ashley conducted research in Dr. Nitash Balsara's lab, studying the crystallization of Polystyrene-b-Polyethylene Oxide Diblock Copolymers. She's interned at Bayer, testing steam traps, creating energy control procedure documents, and ensuring safety, compliance, and efficiency at every stage of pharmaceutical production. Outside academics, she enjoys playing soccer, binge-watching shows, and taking spontaneous trips. This fall, Ashley will begin her master's degree in MIT's master of science in chemical engineering practice program. In the future, she aspires to work in the biotechnology/pharmaceutical field, hoping to help solve and mitigate current medical challenges.



Aleksandra A. Dudek

Anderson Fellow No. 23

Aleksandra graduated summa cum laude from UCLA with a B.S. in mechanical engineering and a technical breadth in computer science. While an undergrad, she worked with the CA Epsilon Chapter, providing open tutoring sessions for physical science courses. She also served as director of tours for Engineering Ambassadors, as a member of the SWE outreach committee, and as an enthusiastic member of the Den. She joined the mechanical eng'g Ph.D. program at the Univ. of Michigan (UM) as a member of the Barton Research Group, where she is focusing on controls and human-robot interaction. Specifically, her work aims to improve human robot collaboration in bidirectionally coupled situations by leveraging game-theoretic modeling and learning control to optimize the robotic behavior. At UM, she's involved in the Mechanical Eng'g Graduate Council and GradSWE, working to connect graduate students with the greater Ann Arbor community. In the future, Aleksandra plans to work on surgical robotics to further the field of medicine, while teaching to inspire the next generation of engineers!



Madhusudan Duwadi

Fife Fellow No. 248

Sudan graduated with a B.S. in biomedical engineering from the New Jersey Institute of Technology (NJIT), where he completed the National Academy of Engineering's Grand Challenges program — an NJIT first. He has served as

NJ Gamma Chapter VP of external affairs and as Greater Boston Alumni Chapter president. As an undergrad, he began his research career as a research assistant in an auditory neuroscience lab, studying how the brain processes sounds in

noisy environments. He is now a Ph.D. candidate and an NSF Neurophotonics research trainee at Boston Univ., specializing in biomedical engineering and neuroscience. His research is focused on understanding brain signals during audio-visual attention tasks in noisy scenarios, using statistical models and machine learning. These projects aim to translate neuroscience applications into practical daily uses, utilizing fNIRS and EEG for brain-computer interfaces, enhanced hearing aids, and AR-VR technologies.



Jacquelyn M. Gwynn

Centennial Fellow No. 39

Jackee is a graduating midshipman at the United States Naval Academy. She will earn a B.S. in aerospace engineering with a focus in astronautics. As an Admiral Frank L. Bowman Scholar, she conducted research with Dr. Jin Kang on

a post processing method for additively manufactured hybrid rocket fuel grains with the potential for applications in naval weapons systems. Jackee also worked as the software lead on a capstone team to develop an attitude

determination and control system for the Naval Academy Standard Bus CubeSat. She served as MD Gamma Chapter president and Naval Academy Parachute Team captain, completing 400+ skydives as a competition and demonstration parachutist. Upon graduation, Jackee will be commissioned as an Ensign in the U.S. Navy, earn her master's degree in aerospace eng'g at Georgia Tech, and work as a military graduate research assistant. Then she will attend Nuclear Power School before serving her naval career as a submarine officer.



Shane P. Gallagher

Stark Fellow No. 45

Shane graduated summa cum laude from Rutgers University with a B.S. in materials science & engineering in May 2024. He is passionate about mentoring younger students and served as the Rutgers' Material Advantage chapter president and the NJ Beta Chapter vice president. In his free time, he enjoys cooking and staying active. At Rutgers, he was involved in undergraduate research and studied ultra-high temperature ceramics under Dr. Richard Haber. He also worked as a materials characterization intern at Pratt & Whitney, where he developed a passion for aerospace materials. Starting this fall, Shane will be pursuing a Ph.D. in materials science & engineering at the University of California, Santa Barbara, where he will study high-temperature ceramic composites. After graduation, he is eager to work in materials research & development and help to revolutionize the aviation industry.



Natasha K. Hunt

Williams Fellow No. 45

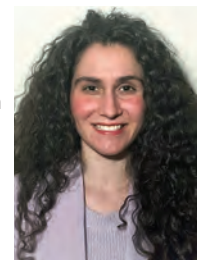
Natasha graduated from Lehigh University earning B.S. and M.S. degrees in bioengineering, concentrating in biomaterials and biomechanics. Currently, she is pursuing a Ph.D. in bioengineering through the UC Berkeley-UCSF Joint Program. At Lehigh, Natasha served as the PA Alpha Chapter secretary, spearheaded an after-school program to bake and deliver baked goods to a local homeless shelter, served as president of the university swimming club, and long-held an officer position in the Lehigh outing club. Her research at Lehigh focused on designing polymer scaffolds that degrade in response to cell growth during regeneration of joint cartilage affected by injury or diseases such as osteoarthritis. In her Ph.D. work, Natasha aims to continue developing therapies and treatments to address osteoarthritis, but now through the lens of the gut microbiome. She is excited to leverage the combined engineering expertise of UC Berkeley and the clinical advancements at UCSF. She aspires to lead her own university lab after graduate school.



Arianna C. Gehan

Fife Fellow No. 249

Arianna is graduating as the valedictorian of Stevens Institute of Technology with a B.E. in biomedical engineering. She joined the NJ Alpha Chapter in 2022 and served as the alumni outreach chair. At Stevens, Arianna worked in a lab studying deep brain stimulation in Parkinson's Disease. Additionally, she's been involved on campus in various organizations including Alpha Eta Mu Beta, Theta Phi Alpha, the school newspaper, and poetry club. Off campus, Arianna is involved in the diabetic community where she regularly volunteers with the Juvenile Diabetes Research Foundation and meets with her congressional representative to advocate for research funding. In 2022, she co-founded Daia, where she's building digital solutions to make living with diabetes safer. Inspired by her own experiences of living with type-1 diabetes, Arianna has been building an app to give diabetics more control in sharing their blood sugar. In 2024, she will attend Columbia University to further her studies focusing on diabetes software.



Andrew Kim

Dodson Fellow No. 11

Andrew is a chemical engineering student at The Cooper Union School, completing his bachelor's and master's degrees simultaneously. He's always been interested in batteries that power modern technology, the code that runs society, and technologies that protect the environment. He started his research in bioenergy with carbon capture and storage, freshman year, under Dr. Amanda Simson and currently researches electrospun polymers for carbon capture. Andrew took a three-year academic gap to serve in the Republic of Korea military, where he was awarded a certificate of excellent service & character by the Mayor of Seoul. During this time, he published ten first-author papers on various nano-materials for energy technologies, including sulfur batteries, supercapacitors, and solar concentrators, under the guidance of Dr. Rajkumar Patel of Yonsei Univ. Now, he is investigating how the introduction of solvents affects quantum chemical predictions of polysulfide adsorption in sulfur batteries and plans to merge his interests in machine learning and AI to approach complex chemical problems.



Tessa Lytle

Stark Fellow No. 46

Tessa graduated with high distinction from Worcester Polytechnic Institute (WPI) in 2023 with B.S. and M.S. degrees in mechanical eng'g. Her WPI major qualifying project consisted of designing and building a 3D printed humanoid robot and simulating bipedal locomotion. As an undergrad, Tessa was involved in several organizations, serving as president of Pi Tau Sigma, Engineers Without Borders, and ASME. As a synchronized figure skater, Tessa represented Team USA from 2019-23 as a member of the *Haydenettes*. She's a two-time national champion, international medalist, and two-time world competitor. In 2023, Tessa conducted research at Los Alamos National Lab related to multi-axis vibration testing and modal analysis and presented a paper of this work at the 2024 International Modal Analysis Conference. Her Ph.D. research at WPI focuses on phase-based motion magnification and vibration analysis. This summer, Tessa will conduct research at Sandia National Lab as part of the Nonlinear Mechanics and Dynamics Research Institute.



Steven W. Man

Fife Fellow No. 250

Steven graduated magna cum laude from the University of California, Santa Barbara in 2023 with a B.S. in mechanical eng'g. He conducted research in Prof. Elliot Hawkes' soft robotics lab, focusing on building embryo-inspired robots capable of locomotion through vibration and convergent extension. Additionally, Steven gained experience through summer internships at the Johns Hopkins Applied Physics Lab and SpaceX, where he contributed to projects such as the NASA Dragonfly mission and Starlink Space Lasers. Currently, he's pursuing a Ph.D. in robotics at Carnegie Mellon Univ. under the supervision of Profs. Aaron Johnson and Sarah Bergbreiter. His research interests lie in developing physically intelligent systems to navigate unstructured environments, thereby advancing exploration and search & rescue technologies. Steven is also dedicated to outreach aimed at broadening access to robotics and engineering for underrepresented groups, collaboration with campus organizations introducing middle and high school students to STEM research.



Hannah S. McCollum

Fife Fellow No. 251

Hannah is graduating summa cum laude from the University of Arizona (UA) Honors College with a B.S. in chemical engineering and a minor in statistics and data science. She is involved with several organizations, including Theta Tau and serving as AIChE chapter president. She's been awarded multiple scholarships, most notably UA's Chapman Scholarship, as an outstanding junior in chemical, mining & materials science eng'g. Her research focused on studying the effects of chlorination on reverse osmosis membranes to change their surface characterization and decrease fouling and scaling. In the summers, she had two internships at Procter & Gamble and Integral Consulting Corp. Hannah has a passion for teaching, especially underrepresented populations in STEM, and has worked as a STEM tutor for high school students and a preceptor throughout college. At Stanford Univ., she will pursue her Ph.D. in chemical engineering and plans to study electrochemistry or catalysis with applications in carbon capture and environmental sustainability.



Firaol S. Midekssa

Tau Beta Pi Fellow No. 843

Firaol is a third year Ph.D. student in the biomedical engineering department at the University of Michigan. Her research focuses on modulating biomaterials, specifically hydrogels to enhance prevascularization, and graft-host vascular integration for various clinical applications. Prior to graduate school, Firaol studied at the University of Rochester, graduating magna cum laude with a biomedical eng'g B.S. degree in 2020.



At Rochester, she was part of NSBE, SWE, and the Biomedical Engineering Society. Firaol participates with similar organizations at the graduate school level and is also heavily involved in DEI initiatives on campus. For example, she currently serves as the co-leader of the biomedical engineering graduate student council DEI committee. Additionally, Firaol co-founded and serves as co-advisor of the Biomedical Engineering Graduate Student Application Assistance program. After her Ph.D., she's interested in applying her knowledge and skills in the tissue engineering and regenerative medicine industry sector.

Utkarsh Misra

Tau Beta Pi Fellow No. 844

Utkarsh is graduating with honors from the University of South Florida (USF) in June, earning both a B.S. and M.S. in electrical engineering. This summer, he will begin his Ph.D. studies at the University of Texas at Austin's ECE program, where he plans to focus on developing 2D material-based devices for advanced computing applications. Throughout his time at USF, Utkarsh's research has centered on the thermal and electronic properties of nanomaterials and semiconductor nano-devices. His passion for research and global collaboration took him to pursue research projects at academic institutes in Germany and India, supported by the DAAD Rise Fellowship 2022 and the Visiting Researcher Fellowship 2023. In USF leadership roles, Utkarsh served as the IEEE Chair, Undergraduate Research Society Chair, IEEE vice chair, and FL Gamma Chapter social chair. Alongside his academic pursuits, he is a member of the USF Men's Rowing team, competing in various local and national collegiate tournaments, and representing his university.



Adedolapo M. Ogungbire

Matthews Fellow No. 27

Adedolapo is pursuing a Ph.D. in civil eng'g at the University of Arkansas (U of A) as a distinguished doctoral fellow. He is from Osun State, Nigeria, and his academic journey has been marked by distinction, beginning with his undergrad studies at Osun State Univ., where he emerged valedictorian. He continued his studies at the U of A, earning a master's degree. Under the supervision of Dr. Suman Mitra, his research centers around sustainable transportation, machine learning, and micro-mobility. He is also interested in travel behavior and how information technology affects travel and urban settlements. Adedolapo is involved in various societies and volunteer groups where he enjoys sharing about cultures from his home country and interacting with professionals. These societies and groups include the Inst. of Transportation Engineers, Intl. Culture Team, African Student Organization, and his participation has earned him several awards, most notably the Arkansas Traveler Award. He plans to pursue a career as a transportation data scientist, focusing on improving sustainable transportation infrastructures.



Ekin Gunes Ozaktas

Swalin Fellow No. 8

Ekin Gunes graduated with a B.S. degree from Johns Hopkins University, double majoring in electrical eng'g and physics, with a mathematics minor. He has received numerous academic awards, including the Muly & Bander Research Awards, the Whitehead and Huggins Awards, the Max Kade Fellowship for research in Germany, and an EPFL ERIP Fellowship for research in Switzerland. His research focused on optoelectronic device and solar cell design involving 2D materials, plasmonic nanostructures, metamaterials, and investigating the effects of disordered and aperiodic arrangements. His work on topological edge modes in frustrated antiferromagnets and on photonics applications of machine learning led to journal publications, conference presentations, and winning a best poster award. He served as MD A Chapter president, is a member of Sigma Pi Sigma, and attended 20+ Model UN conferences in leadership positions. Next, Ekin Gunes will pursue graduate studies at Stanford Univ.



Jehan L. Shalabi

Brant Fellow No. 3

Jehan began her Ph.D. in electrical engineering at Purdue University at the age of 20, supported by an NSF Graduate Research Fellowship. She earned her B.S. in electrical eng'g summa cum laude from the New Jersey Institute of Technology. At Purdue, she specializes in electromagnetic fields and optics within the Electrodynamics Group, focusing on infrared detection and enhancing thermal imaging capabilities. She works on multiple projects, including heat-assisted detection and ranging, the development of a next-generation ultrafast nanoscale infrared bolometer, and enhancing night-time autonomous navigation by leveraging thermal imaging. Jehan's goal is to become the first Palestinian-American astronaut. She interned at NASA Goddard and as a research intern in the MIT Summer Research Program, where she worked on autonomous vehicle navigation. Jehan was also an analog astronaut at the Hawai'i Space Exploration Analog and Simulation, where she served as the space engineer and conducted research on the Mauna Loa Volcano.



Matteo Sanchez-Dahl

Spencer Fellow No. 69

Matteo graduated summa cum laude from George Washington University (GW) with a B.S. in biomedical eng'g and a CS minor. A 2022-23 TBTI Scholar, he served as DC Alpha Chapter corresponding secretary, GW Society of Hispanic Professional Engineers (SHPE) Chapter president, and as an undergraduate student representative on the National Board of Directors. As a GEM Associate Fellow pursuing a master's in computational BME at Carnegie Mellon Univ. (CMU), Matteo has explored his intellectual curiosities and engaged in service with local community partners. Serving as the CMU graduate student chair of SHPE and as a TBTI District 3 Director has enabled him to participate in alumni panels and host outreach presentations to help students maximize their personal and professional success. Matteo believes employing empathy to connect with new perspectives is part of the essence of scientific exploration and aims to leverage his leadership and engineering expertise to support multi-sectoral initiatives.



Deniz Sinar

Nagel Fellow No. 27

Deniz graduated magna cum laude from Cornell University in 2023 with a B.S. in bioengineering. As a researcher in the Barstow Lab, she conducted research on bioelectrochemical systems for biofuel production using electroactive microbes with support from three Cornell Engineering research grants. She has worked at Lanza-Tech (2022) and the Joint BioEnergy Institute (2024) studying gas fermentation for sustainable biofuel production. She will pursue a bioengineering Ph.D. at Stanford Univ. to explore her academic interests in synthetic biology, sustainability, cell-free systems, protein engineering, and carbon-negative biomanufacturing. She is also dedicated to STEM outreach initiatives and science communication. She led the Cornell iGEM synthetic biology project team, worked with schools across North America to initiate similar research teams, and led a Global BioArt Competition in 2023. In the future, she strives to become a principal investigator working on cutting-edge synthetic biology tools to promote planet health while leading the next generation of aspiring scientists.



Sayre P. Satterwhite

Anderson Fellow No. 24

Sayre graduated from the University of Iowa in 2024 with a B.S.E. in mechanical eng'g, a certificate in artificial intelligence, machine learning & simulation, and an economics minor. He engaged in environmental fluid mechanics research under Corey Markfort, investigating the role of the atmospheric boundary layer on the development of oceanic waves. This helped him become the first NOAA Hollings Scholar from the Univ. of Iowa, where his research created algorithms to measure directional wave spectra using autonomous sailing drones. He completed four internships, at Tenneco in both the U.S. and Germany, Siemens, and Saildrone, Inc. Sayre will begin his graduate studies this fall at the Univ. of Michigan in naval architecture and marine eng'g under Professor Anchal Sareen, investigating novel marine renewable energy harvesting methods. Following his studies, he aims to use his research to expand economically and socially feasible renewable energy sources available on The Great Lakes. Sayre enjoys fiddling and designing/welding custom bicycle frames.



Andrew "Andie" R. Tubbs

Tau Beta Pi Fellow No. 845

Andie graduated summa cum laude with a B.S. in biomedical engineering and a minor in entrepreneurship from the University of Memphis, where he is now pursuing a Ph.D. in the same field. He served as TN Epsilon Chapter president and continues to engage as an alumni advisor. Initially drawn to astronautical eng'g with aspirations of becoming an astronaut, Andie shifted to biomedical eng'g after being diagnosed with Hypermobile Ehlers-Danlos Syndrome (hEDS)—a connective tissue disorder characterized by joint instability, chronic pain, and various comorbidities. Driven by a personal mission to develop an effective treatment for hEDS to help his sister, mother, himself, and millions worldwide, his research focuses on the role of MMP inhibitors in preventing the degeneration of extracellular matrices. Andie then plans to transition into bioastronautics, addressing joint and connective tissue degeneration in astronauts, and continue his journey to the stars. He ultimately aims to advance human space exploration, enhance understanding of the universe, and foster multi-planetary habitation.



Zoe L. Vittum

Tau Beta Pi Fellow No. 846

Zoe graduated from the University of Maine in 2023 as the salutatorian of her class, receiving a degree in biomedical engineering with minors in bioinstrumentation and neuro-science. Her interest in mechanobiology and ex-vivo modeling of biological systems led her to pursue her Ph.D. in biomedical eng'g with Prof. Mensah's lab. Zoe now researches mechano-sensitive proteins of the basal glycocalyx in vascular endothelial cells and their roles in transducing physiological stimuli and maintaining vascular health. Outside of her studies, Zoe is a member of the Biomedical Engineering Society and Society of Women Engineers.



Yancey D. Williams II

Tau Beta Pi Fellow No. 847

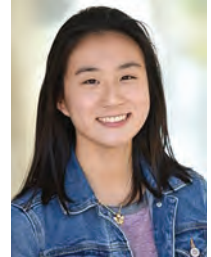
Yancey graduated from the University of Alabama at Birmingham (UAB) in 2023 with a B.S. in biomedical engineering. He served as president, and in other officer positions, for the AL Gamma Chapter, aiming to increase membership and retention through social awareness and community service. At UAB, Yancey was involved in various organizations, from vice president of the Biomedical Engineering Society to being a mentor in the Blazer Male Excellence Network. He has been recognized as a Minority White Coat Foundation Healthcare Scholar, Yale BioMed/Amgen Scholar, and UAB's 2023 Undergraduate Student President's Diversity Champion. He's now at Yale University, conducting research at the Cardiovascular Research Center. His research focuses on cardiac electrophysiology, specifically the metabolic signaling of AMP-activated protein kinase in ventricular arrhythmogenesis. Yancey will be pursuing a Ph.D. in biomedical eng'g to enter the field of regenerative medicine and develop novel yet low-cost biomedical devices.



Jacqueline "Jackie" Yang

Forge Fellow No. 12

Jackie is a graduating senior and Egleston Scholar at Columbia University studying electrical engineering. At Columbia, she has worked in the Lightwave Research Lab under Prof. Keren Bergman, developing a computationally efficient, dynamically-updating optical device simulator, and with Prof. John Wright on attention mechanisms in vision transformers. Her work has been supported by the Doris Duke Foundation, the Semiconductor Research Corp., and the Optica Foundation. Jackie is a TBPI Scholar and served as NY Alpha Chapter president. She's also been a teaching assistant for classes including Electronic Circuits, Signals & Systems, Computer Systems, and Multi-variable Calculus, and spent a summer teaching robotics to NYC high school students through the Education Experience for Undergraduates Program. In her free time, she enjoys running with the Columbia distance team, practicing cello, and playing chamber music. After graduation, she plans to pursue a Ph.D. in electrical eng'g at Stanford Univ. as a NSF Graduate Research Fellow.



Chujun "Julia" Zhao

Tau Beta Pi Fellow No. 848

Julia graduated as salutatorian of Columbia Univ. Engineering in 2023, having studied biomedical engineering and computer science. She is currently a Rhodes Scholar at the University of Oxford reading for a master's in statistics, after which she will start her Ph.D. at the Harvard-MIT Health Sciences and Technology program. Her research has spanned immunology and oncology, while her undergraduate work focused on leveraging machine learning to study mechanisms of cancer evolution for pancreatic cancer, one of the deadliest diseases. Her work has been published in *Science* and other journals, which also won her a Goldwater Scholarship in 2022. While at Columbia, she served as NY Alpha Chapter vice president, attended the TBII annual Convention, and led new activity programs on campus. Julia was also actively involved with the Systems Biology Initiative, Orchesis Dance Group, and volunteering. She hopes to pursue a career in academia with the goal of understanding complex human diseases and engineering novel therapeutics to treat them.



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