Coming to America

Desire to practice medicine motivates alum toward new degrees
CSMConnect is the College of Science and Mathematics (CSM) biannual newsletter designed to keep you informed of the latest activities and developments going on in the college. CSM values the networks developed with partners on and off campus. You are important in our network of partners. CSM provides students a high quality and innovative academic experience through our six minor programs, seven undergraduate degrees, and three masters programs. Students can create their own learning experience through provided tracks, research, and specialized courses. CSM is soaring into the next level of national prominence through cutting-edge research.

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Kennesaw State University President Pamela Whitten and Provost and Senior Vice President for Academic Affairs Kathy Schwaig have named Kojo Mensa-Wilmot as dean of the College of Science and Mathematics. He will start in his new role on August 1.

Reporting to the provost, Mensa-Wilmot will serve as the chief academic and administrative officer for the College of Science and Mathematics, tasked with growing the college and fostering development of its students, faculty and staff.

“Dr. Mensa-Wilmot is an accomplished educator and nationally renowned scholar who shares KSU’s vision of excelling as a student-focused, research-driven university,” said Whitten. “Under his leadership, I am confident that he will increase the quality of the educational experience and research opportunities for students and faculty. His excitement about joining our senior leadership team is a testament to the upward trajectory of KSU.”

Currently, Mensa-Wilmot serves as department head and professor in the University of Georgia’s Department of Cellular Biology in the Franklin College of Arts and Sciences and is the academic leader of the Chemical Biology Group at UGA. He also champions diversity initiatives on campus, advising the UGA Minority Premedical Students Association and the Scholars for Diversity in STEM.

Most recently, Mensa-Wilmot and his team of researchers earned a $2.6 million award from the National Institutes of Health to study Human African Trypanosomiasis, a disease found in sub-Saharan Africa and transmitted by tsetse flies. He is a world-renowned expert on Trypanosoma brucei, the single-celled organism that causes the disease.

“Dr. Mensa-Wilmot is a passionate educator, accomplished researcher and experienced leader who will continue building the College of Science and Mathematics into a destination for scholarly research and student development,” Schwaig said.

Mensa-Wilmot earned his Bachelor of Science degree from the University of Ghana and his Ph.D. in biochemistry and molecular biology from Johns Hopkins University’s School of Public Health. A prolific and well-published researcher, he is a reviewer at six different scientific journals and was named a fellow at the African Academy of Sciences in 2017.

“This is an exciting time for KSU and the College of Science and Mathematics” said Mensa-Wilmot. “As dean, one of my goals will be to expand opportunities for faculty, staff and students, focusing on interdisciplinary approaches that enable us to find new solutions to the challenges facing our global communities.”
Salerno Symposium showcases faculty research

Two faculty researchers were recently recognized for their contributions in the fields of chemistry and biology at KSU’s John C. Salerno Memorial Research Symposium, a symposium highlighting a cross-section of faculty research at the University. Altug Poyraz, assistant professor of chemistry, earned the John C. Salerno Prize for Research Achievement, and Martin Hudson, associate professor of biology, received the People’s Choice Award for Best Presentation.

KSU R Day 2019

The Department of Statistics and Analytical Sciences hosted the eighth annual “KSU R Day” on Friday, November 22, 2019. The event featured 48 undergraduate and graduate students presenting 38 posters of research using the statistical software package “R”. The posters ranged in topics from “Money, Money, Money: Determining the Best Method for Predicting Stock Valuation” to “Marketing to Electric Vehicle Owners: A Win for the Environment, A Win for the Company, A Win for the Members” to “Perceived Stress, Coping Style, and Cortisol in Student Nurses Undergoing High Stakes Testing.”

Grant catalyzes chemist outreach initiatives

Kennesaw State student organization Alliance of Graduate Inorganic Chemists received a grant, Aug. 4, 2019, from the Georgia Section of the American Chemical Society that has bolstered their outreach efforts to educate the community on chemistry. AGIC president Alvaro Calderon said three grants are given to applicants every year who prove they can educate the public on science, as well as foster an appreciation for science within the community. The AGIC’s proposal to the American Chemical Society consisted of going to Title I schools and teaching chemistry to underrepresented children.
Research Updates

The College welcomes talented new faculty and celebrates funding successes for our colleagues.

Dr. Mario Bretfeld joined the Department of Ecology, Evolution, and Organismal Biology in Fall 2019. As a plant ecophysiologist, his lab studies how plants function in order to understand and predict where they grow and how they interact with one another and the environment. Because plants act as conduits for and transformers of energy and resources, changes in vegetation have profound effects on the supply and flow of energy and resources in ecosystems. The goal of his lab is to optimize management of natural landscapes in order to restore and maintain their ecosystem functions and services.

Dr. Austin Brown joined the Department of Statistics and Analytical Sciences in Fall 2019. His research interests are primarily focused on nonparametric statistical process control charting techniques and statistics in sports. He has presented work at national and international conferences in both areas. With regards to the former, he has developed nonparametric control charting schemes for monitoring multiple stream processes and explored the novel utilization of machine learning techniques in Phase I and Phase II analysis. His work in statistics in sports has a broad focus, with works ranging from assessing the effect of player injury on team performance to using hierarchical clustering and dendrograms as a visual method of tiering NFL quarterback play.

Dr. Nicolas Douguet joined the Department of Physics in Fall 2019. The recent astonishing advances in the new generation of light source has provided access to unexplored time scale, allowing the real-time study and control of the electron dynamics in matter. The dream of producing a movie of a chemical reaction or design biomolecules could become reality in a near future. Dr. Douguet’s research in attosecond and strong field physics consists in developing theoretical models and numerical methods to investigate the interaction between ultra-short laser pulses and complex systems with the goal to monitor the ultra-fast electrons dynamics in atoms and molecules at its natural timescale.

Dr. Clink Penick joined the Department of Ecology, Evolution, and Organismal Biology in Fall 2019. Research in the Penick lab focuses on the evolution and ecological success of social insects (ants, bees, wasps, and termites). Pound for pound, social insects and humans make up the largest animal biomass on dry land and occupy nearly every terrestrial ecosystem. To understand the traits that have facilitated this success, his research takes an integrative approach that combines techniques in ecology, physiology, behavior, and evolution. He works with a broad variety of species from ecosystems that range from remote tropical forests to the sidewalks of New York City.
Dr. Dr. Christopher Cornelison, Assistant Professor of Microbiology, and Thomas McElroy, Associate Professor of Biology, were recently awarded a grant from the US Fish and Wildlife Service and subawards at the University of West Georgia and the US Forest Service Southern Research Station. The Award is for $200,475 and the project title is, “Investigating winter activity and population connectivity of Perimyotis subflavus in traditional and nontraditional hibernacula in the Southeastern U.S. as it relates to susceptibility to WNS.” Dr. Christopher Cornelison joined the Department of Molecular and Cellular Biology in Spring 2020.

Dr. Sarah Guindre-Parker joined the Department of Ecology, Evolution, and Organismal Biology in Fall 2019. She is an integrative behavioral ecologist interested in how animals cope with unpredictable changes in their environments. Unpredictable environments pose a unique challenge for vertebrates, since anticipatory changes in morphology, behavior or physiology are not always possible. Instead, organisms must respond with little warning. Her research integrates across evolution, behavioral ecology and endocrinology to understand how birds facing unpredictable environmental conditions are adapted to survive and reproduce in these habitats.

Dr. Glenn Young joined the Department of Mathematics in Fall 2019. He is an applied mathematician broadly interested in mathematical biology. His work typically involves integrating and developing techniques from dynamical systems, stochastic analysis, ordinary and partial differential equation theory, and numerical methods to analyze biologically motivated systems. Recently, he’s been exploring the effects of environmental variability on ecological processes, namely competitive and cooperative population dynamics. He has previously worked on a diverse range of biological problems from immunology, collective behavior of cellular populations, and epidemiology.

Dr. Somayeh Mashayekhi joined the Department of Mathematics in Fall 2019. His research contributes to the field of applied mathematics and he is working on several interdisciplinary research projects which involve large multidisciplinary teams, including mathematicians, physicists, chemists, engineers, and biologists. These projects open the applications of fractional calculus, to describe the multi-scale thermomechanical material behavior of polymers and to study human history that aims to map the genes that cause human disease. His work has focused specifically on population genetics and coalescent theory, fractal media, and fractional viscoelasticity and results have directly contributed to the study of many experimental settings.

Dr. Pengcheng Xiao joined the Department of Mathematics in Fall 2019. His research interests lie primarily in three areas: computational neuroscience, math biology modeling, and data science.

Dr. Glenn Young joined the Department of Mathematics in Fall 2019. He is an applied mathematician broadly interested in mathematical biology. His work typically involves integrating and developing techniques from dynamical systems, stochastic analysis, ordinary and partial differential equation theory, and numerical methods to analyze biologically motivated systems. Recently, he’s been exploring the effects of environmental variability on ecological processes, namely competitive and cooperative population dynamics. He has previously worked on a diverse range of biological problems from immunology, collective behavior of cellular populations, and epidemiology.
Chemistry Researcher Wins Petroleum Grant

Altug Poyraz to investigate carbon nanomaterials
Altug Poyraz, an assistant professor of inorganic chemistry at Kennesaw State University, has been awarded an American Chemical Society Petroleum Research Fund (ACS-PRF) grant for research on petroleum coke, a carbon-rich solid fuel produced during the oil refining process.

The ACS-PRF grant is intended to encourage investigators to pursue areas outside the scope of their usual research.

“Federal funding is extremely competitive and, typically, researchers are expected to have an expertise and background in the area of their proposed research,” said Poyraz. “This ACS-PRF grant will allow me to gain experience in the field of carbon materials, more specifically petroleum coke-based carbon materials, which are increasingly gaining popularity in many areas of science and engineering.

Poyraz, who joined KSU in 2017 from the Brookhaven National Laboratory, maintains a nanomaterials research group with interests in the broad area of inorganic materials design, synthesis and characterization.

The ACS-PRF grant will allow him to explore new possibilities within organic materials like petroleum coke (PC), a product of the oil refinery process used as fuel in refineries. It is also used as raw material in the cement, steel and aluminum industries.

According to Poyraz, conventional PC activation, which involves using highly toxic chemical and physical activations of carbon under extremely high temperatures, is used to create tiny, nano-sized pores in the substance. However, the carbon materials resulting from these methods have much smaller pore sizes, which limits the use of these materials in some applications.

Scientists are looking for ways to fine-tune the size of the pores in carbon and carbon-based nanomaterials to expand their use.

“Carbon materials with tunable pore sizes are highly anticipated in various fields of science and engineering owing to their high surface area, large pores and pore volume,” Poyraz said. “In our proposed research, we hypothesize that large-surface area and pore-size carbon materials can be synthesized, which could help PC become more usable and potentially lead to more efficient petroleum-based fuels in the future.”

Poyraz was recently recognized for his contribution in the field of chemistry at KSU’s John C. Salerno Memorial Research Symposium, a symposium highlighting a cross-section of faculty research at the University.

He won the John C. Salerno Prize for Research Achievement for developing a non-flammable, aqueous rechargeable Zinc-ion battery that last longer than a similar lithium battery.

In addition to his teaching and research duties, Poyraz serves on the editorial board of Nature Scientific Reports.
Bao Nguyen (Biochemistry, ’19) may be one of Kennesaw State’s most determined graduates. At 47, he fully expects to fulfill his dream of becoming a medical doctor – again.

A trained neurologist in Vietnam, Nguyen hoped to practice in America. However, a dozen years since immigrating to the United States, he is still several years away from obtaining a U.S. medical degree.

Nguyen, who graduated from the University of Medicine and Pharmacy of Ho Chi Minh City in 1996, was 24 years old when he became a doctor for the first time.

“The medical school system in Vietnam differs from the U.S.,” he explained. “In Vietnam, you take the entrance exam after you graduate from high school. If you are selected, you are trained in medical school for six years and graduate as a general practitioner. From there, you can do a residency or choose your own specialty and get further training within that specialty later.”

Following med school, Nguyen served a three-year residency program in Vietnam and worked as a neurologist until permanently settling in the U.S. with his young family in 2007. Due to a series of unfortunate events, he was unable to transfer his medical license to the U.S. and while he passed the United States Medical Licensing Examination, he was not matched with any residency program – a requirement for becoming a physician.

Since coming to America, he has run the gauntlet of this country’s complicated medical licensing laws for foreign doctors, which many say often dissuade immigrants from becoming physicians. Rather than give up on his dream, however, he decided to double down, which is what makes his story one of true grit and determination.
Currently working as a sleep technician for FusionSleep in Atlanta, he has held various jobs during the past dozen years to support his family, which includes his wife, Hong, and 16- and 10-year-old sons.

Over the past six years, Nguyen has done several internships and shorter externships at local hospitals and clinics, as well as in Rome, Ga., Warner Robins, Ga., and Mobile, Ala.

“The internships and externships remind me about what I love about medicine and why it is worth it to go back to school and do it all over again,” he said.

From practices dealing in family medicine to pediatrics, internal medicine and psychiatry, Nguyen has compiled a lengthy list of experiences and garnered a wealth of physician recommendations attesting to his strong work ethic.

“I got to see and interact with patients,” he said. “I was able to perform diagnostics on them, read their tests results and plan treatments. I got to put my medical knowledge to use and these experiences re-enforced my passion and desire to practice medicine again.”

Despite the language and cultural differences between Vietnam and the U.S., Nguyen said what makes for a good physician in one country is similar to any other.

“To be a good doctor, you need to have compassion. You don’t just treat disease but, instead, you care for a person,” he said. “Having a good bedside manner is also important. But most importantly, you have to love what you do because only then does work becomes more enjoyable.”

Nguyen’s wife, Hong, helped motivate him to continue his education. Hong, who works as a psychiatry nurse practitioner in community health for Highland River Health in the Cherokee Recovery and Wellness Center in Canton, also is a KSU alum having graduated from KSU in 2012 with a bachelor’s degree in nursing. There’s no mistaking the pride Nguyen feels in her accomplishments as he notes her advanced medical training.

“After graduating from Kennesaw State’s nursing program, she got a family nurse practitioner master’s degree in 2016 at South University and she recently earned her post master’s degree in psychiatry from Georgia College and State University,” he said.

It’s clear that Hong’s experience as a student at KSU greatly influenced his own decision to attend her alma mater.

He has no regrets about coming to America, he said, and offered advice for others who seek to travel the same path.

“Never give up on your dream. Know your passion and what you want to then stay focused and keep working and working hard toward your goals,” he said. “Sometimes when the thing does not turn out the way you expect, just hang on and continue to work hard. It will work out if you stay on course.”

After a four-year commitment to put himself on track to enter medical school in this country, he received a new bachelor’s degree in biochemistry at KSU in May. His hard work and excellent grades paid off, earning him the distinction of graduating summa cum laude.
Researchers work on new ways to improve health of infants

Gerber grant supports “Grow Baby Grow” program

Kennesaw State researchers Louise Lawson and Nicole Ferguson of the Department of Statistics and Analytical Sciences have received a three-year, $334,000 grant from the Gerber Foundation, an organization that supports projects enhancing the quality of life of infants and young children in nutrition, care, and development.

Their project, “Grow Baby Grow,” will focus on studying classifications used to determine appropriateness of growth in premature infants and how these growth curves can predict which infants are most at risk. They plan to standardize the classifications, using epidemiological techniques to help better identify those infants most at risk.

“Our analysis of growth curves will help clinicians ensure that infants in neonatal intensive care units (NICUs) are growing appropriately while in the hospital, thereby allowing these infants to receive targeted nutritional and medical treatment,” said Lawson, professor of statistics. “Using our results, any clinician or medical researcher can use the growth curves to make better diagnostic decisions.”
Lawson and Ferguson will conduct this research in the Human Studies Lab, a teaching and research computer laboratory they co-founded at KSU. This lab in the College of Science and Mathematics focuses on medical and other public health research, using high speed computers in a secure environment to analyze medical record data in order to describe trends or help make recommendations related to research questions.

KSU undergraduate and graduate students actively participate in the research process through enrollment in the professors’ statistics courses as well as becoming research assistants for the lab.

“In fact, one of our graduate student assistants, Randall English, was instrumental in helping us write the grant for Gerber,” said Lawson, lab director. “He developed the idea for the introductory paragraphs of the proposal, which was instrumental in persuading the Gerber grant reviewers to fund us.”

English, who is pursuing a master’s degree in applied statistics at KSU, has worked in the lab for more than a year.

“I never expected the opportunities available from working with Dr. Lawson and Dr. Ferguson,” he said. “I knew that the master’s program would prepare me for a job in statistics, but I had no idea I would also be involved in this hands-on research experience.”

“One of the lab’s primary goals is to include more students in research and train them on applied data analytics and statistical techniques,” added Ferguson, lab co-director and associate professor of statistics. “With the Gerber grant, we will now be able to spend more time on research and provide stipends for some of our student researchers.”

The Human Studies Lab was originally formed to explore questions related to growth in infants born prematurely. For research purposes, lab members have access to a large data set of anonymous medical records for more than 1 million infants in NICUs around the United States, representing approximately 20 percent of all U.S. NICUs’ records.

In the past few years, projects have expanded as the lab has partnered with additional external collaborators. The research has included studying pulmonary function in older adults and studying the effectiveness of treating lower back pain with a new medical device.
Cultivating Research

Oyster, shiitake, and portobello – these are but a few popular varieties of mushrooms finding their way to cooktops in homes and restaurants in the United States and across the world. In 2017 alone, mushroom sales accounted for more than $1.2 billion in U.S. economic impact with over 929 million pounds produced according to the American Mushroom Institute.

Yet, these spore-bearing fruiting bodies of fungi, known for their nutritional and medicinal properties, are still underutilized in the predominately plant-based agricultural industry. Kennesaw State University researchers Chris Cornelison and Kyle Gabriel in the BioInnovation Laboratory are trying to change that trend by leveraging technology to optimize high growth yields and varieties of this crop in Georgia.

According to Cornelison, research scientist in biology and BioInnovation Laboratory director, increasing global populations are putting a tremendous burden on the production and preservation of traditional crops such as produce. They require the use of limited arable land, are susceptible to ever-changing weather patterns, and can result in waste from post-harvest decay.
Research Scientist Kyle Gabriel removes the fruiting body of the Oyster mushrooms on a bag of wheat straw and cotton seed hulls in the BioInnovation Lab.

“Over 40 percent of all the produce in the world goes bad before anyone can enjoy it, yet mushrooms do not require specific environmental conditions,” he said. “This requires that we develop methods for producing readily preservable and nutritious foods without regional climactic limitations.”

Thanks to a three-year award from the Georgia Department of Agriculture in 2017, the two collaborators conceived a plan to build a low-cost, small-footprint prototype of an automated mushroom production facility in a shipping container, which could easily be set up and utilized anywhere, even densely populated areas. The end goal is to provide their results as a how-to guide to the Georgia Department of Agriculture to share with other interested producers.

“As I became more familiar with how mushrooms are produced, it seems that it is technologically lagging behind other areas of food production, even with current technology for sensors and environmental controls being quite advanced,” said Cornelison.

Therefore, the linchpin of the mushroom growth project is the embedded environmental control system known as Mycodo, developed by Gabriel, postdoctoral researcher in the BioInnovation Laboratory. The system can autonomously regulate the growing conditions for mushrooms, which include temperature, humidity and carbon dioxide concentrations.

“I am a firm believer in utilizing technology to improve quality of life, especially when it can result in fresher products locally sold, thereby reducing the carbon footprint of packaging and transportation,” said Gabriel. “Automation, especially on the urban scale, has the potential to not only improve crop yields, but give people back time to complete other activities.”

Gabriel first began mushroom cultivation as a hobby when he was an undergraduate student. He created a cultivation chamber in his closet with a rudimentary hardware and software system he developed to automate the process of mushroom growth.

The release of the Raspberry Pi in 2012, a single board computer that is the size of a deck of playing cards, accelerated improvements to Gabriel’s system, which he has shared as an open source product. Now up to 70 electronic monitoring sensors can connect to this computer system, which autonomously modulates adjustments to the heating/cooling system, humidification system and exhaust system within the cultivation chamber of the shipping container.

At the same time, the two researchers also are completing test runs in the BioInnovation Laboratory with various mushroom strains foraged wildly in Georgia and a few commercially available not typically found in the state to find the best varieties that would be compatible with the proposed production methodology.
Gabriel explained their selection criteria include seeking out varieties that are highly palatable, have high production yields and ease of cultivation. With about 10,000 known species of fungi living wildly in North America, only about 10 varieties are grown commercially because some varieties cannot be successfully produced outside of nature.

“We are looking to improve Georgia agriculture by trying to source local mushroom strains that have higher productivity than commercially available strains,” he said.

Other smaller-scale experiments are being conducted in the BioInnovation Laboratory, looking at mushroom isolates such as lion’s mane and king stropharia and their growth rate performance on media or substrates of agricultural waste products such as peanut and pecan shells. After mushroom cultivation, Cornelison and Gabriel hope the used substrates can be sold as plant fertilizer.

In spring 2019, the experimental cultivation chamber within the shipping container was ready. A first production run in May yielded over 100 pounds of shiitake mushrooms from colonized shiitake substrate, sawdust blocks inoculated with shiitake mushroom mycelia.

Shiitake mushrooms were chosen because of their high value, easy availability and familiarity to consumers. With this yield as the baseline, test runs will continue for improving the production facility prototype.

“I am excited about this project because it is a demonstration of the application of modern technology to solve problems that have existed for a long time,” said Cornelison. “Ultimately, we want this project to serve as an example to farmers in Georgia and nationwide that there is a fairly low-cost entry point into the mushroom cultivation market if they want to diversify their operations.”
Master of Science in Applied Statistics (MSAS)

Master of Science in Applied Statistics is a professional degree program which utilizes cutting-edge statistical methods. These methods are used in industry, business, and government for predictive modeling and process improvement with emphasis on the unique challenges associated with BIG Data. Graduates will analyze and interpret real-world data effectively.

Master of Science in Chemical Sciences (MSCB)

The Master of Science in Chemical Sciences (MSCB) is a thesis-based program with tracks in Chemistry and Biochemistry. MSCB offers a flexible curriculum, individually tailored to the student’s background and research interests. The program will prepare students to think in an interdisciplinary fashion about problems in chemistry, biochemistry and many other related areas of study.

Master of Science in Integrative Biology (MSIB)

Integrative Biology is based on the emerging paradigm linking concepts across disciplines to produce a more complete understanding of biological systems. The thesis-based graduate program is designed to integrate expertise in specialized fields within biology with collaborative research to solve current and complex biological problems.

Individual deadlines for applications can be viewed here.
It’s one thing to help a daughter, son or other family member pay for college. It’s quite another to help a complete stranger. But that’s just what some 350 Kennesaw State donors have done.

At a scholarship luncheon in October 2019, hosted by Kennesaw State’s Office of University Development, donors had the opportunity to meet the students whose lives they have changed forever.

“I did not fully understand the need for, or the impact of, the scholarships until meeting the recipients in person,” said Kathy Walker of the American Opportunity Foundation. “These students all have compelling stories, grateful hearts, a desire to give back to their community and a palpable determination to succeed, not just at KSU, but in life as well.”

Marc M. Girardot, whose family established the Dr. Nadia Girardot & Dr. Jean-Marie Girardot Scholarship for undergraduate students majoring in the arts or sciences, added that his family enjoys attending the luncheon because it gives them a chance to meet and hear directly from the students about how their gift has made a difference.

Sarah Fraser, a senior biology major, shares how the Charles S. Wollmer Memorial Scholarship made a difference in her college career.

Sarah Fraser wasn’t sure she would ever attend college. A native of St. Catharines, Ontario, near Canada’s Niagara Falls, the single mother of two children found herself in dire straits six years ago.

“In 2013, my family suffered a tragedy that left me on my own with two children,” said Fraser, who now lives in Kennesaw. “Suddenly, I became the sole provider for my family. What made it even worse was that I had no family living in this country, and I had put off my college education to raise my children.”

Fraser, who is now a senior biology major, had been working for little more than minimum wage and barely making ends meet.
“After two years working as a receptionist, I began to think about obtaining a college degree to better our situation,” said Fraser. “Some of my friends discouraged me, saying I would not be able to afford the basic necessities of life and go to college at the same time. This did concern me and I was scared, but I knew I had to do something.

“I saw earning a bachelor’s degree a lot like climbing Mount Everest,” she said. “There was a huge mountain between me and a college degree. I had no idea how I was going to make it all the way to the top, but I had the courage to start by putting one foot in front of the other.”

In 2015, she sat in a college classroom for the first time. Since attending KSU, she has been awarded with a National Science Foundation Scholarship and the Charles S. Wollmer Memorial Scholarship.

“With each scholarship, the difficult mountainous terrain was transformed,” said Fraser. “It seemed as though the tough and steep incline to the top was replaced by a manageable staircase.”

Fraser will graduate this spring and plans on attending graduate school at KSU.

“I look forward to one day becoming a college science lecturer and share my passion for science with others,” she said.

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**Growing Education**

Student learning experiences are enhanced by contributions provided to the college to support our student scholarships; improve the margin of excellence; and support research endeavors and professorships to help Kennesaw State University provide a strong environment for recruitment and retention of promising faculty.

For philanthropic opportunities, contact Jada Marcum, CSM Senior Director of Development at jmarcum@kennesaw.edu or call 470-578-6877. Visit giving.kennesaw.edu for more information.

To donate to the college, visit bit.ly/GivetoCSM.