Dear Friends,

The resilience of our Arts & Sciences community during Covid-19 has been nothing short of amazing. This issue of Ampersand shows how our students, faculty and staff rose to meet extraordinary challenges. Thanks to their creativity and determination, students progressed in their academic careers, and I am enormously proud of what we have accomplished together.

Over the past 10 years, a major innovation in teaching has been the practice of “flipped classrooms.” In this model, students view pre-recorded lectures and come to class prepared to actively discuss that material. Many of us have become familiar with online tools such as Zoom and chat rooms, lifelines over the past year for everything from workplace meetings to keeping in touch with grandparents. In articles beginning on p. 20 and 32, you can read more about how some of our professors have married the flipped classroom concept with Zoom to create highly engaging online classroom experiences for our students, especially in math, chemistry, and biology.

The new Commonwealth Institute for Black Studies brings UK scholars together for deep, diverse research

Yuanyuan Su uncovers the secrets of a galaxy cluster not so far away

A LIFETIME OF LEARNING AND HEALING IN TWO LANGUAGES

Remembering Thomas French Whayne Jr.

Jennifer Whitney achieves her dream of a UK geology degree thanks to the Rast/Brown Scholarship

I regret never having known Dr. Whayne, but over these past seven months in my new role, I have met so many Arts & Sciences alumni and donors who are committed to our success. Whether you are making us a priority in your philanthropy, providing internships for our students, or spreading the word about our impact on the Commonwealth and the world, we are better because of your loyalty and enthusiasm. Thank you.

Sincerely,

CHRISTIAN M M BRADY
Interim Dean, College of Arts & Sciences
Professor of Ancient Hebrew and Jewish Literature
Department of Modern & Classical Languages, Literatures & Cultures
christian.brady@uky.edu
Professionals, Graduate Students Explore Diversity, Inclusion in New Online Certificate Program

By Richard LeComte

In 2019, the College of Arts & Sciences started bringing together a group of people from several walks of life to learn about diversity. The breadth of the new program—an online Graduate Certificate in Diversity and Inclusion—goes a long way to practice what it preaches.

“I think that’s really one of the ideas behind the certificate: to bring people together from different backgrounds and in different careers and studies and professions,” said M. Cristina Alcalde, associate dean of Inclusion and Internationalization, who founded the program. “Given what’s happening at the University right now and nationally, I think this is a particularly relevant certificate to have.”

The program is made up of four eight-week, three-credit courses. Alcalde said the program rose from a Provost’s Office call for more online programming; the subject turns out to be a great fit for many different professions.

In addition to the core course, Perspectives on Diversity for many different professions.

The diversity of the program itself has attracted students from a wide range of UK disciplines as well as outside professionals. Because the classes are taught asynchronously, students get a chance to read, contemplate and learn from their peers’ comments on bulletin board discussions.

“We have someone from nursing speaking to someone from engineering speaking to someone from education, and we’re all trying to apply the same concepts together,” Alcalde said. “These are very important discussions to have right now, and this certificate is particularly relevant in today’s world.”

In addition to the core course, Perspectives on Diversity, students may select three electives, including African American Lives; Understanding Latinx Cultures; Health, Illness, and Disabilities; and Intercultural Communication for Professionals. They are taught by a broad range of College faculty members. The program draws from the wide expertise of College faculty and highlights some of the most pressing issues of the day.

The diversity and inclusion students may select three electives, including African American Lives; Understanding Latinx Cultures; Health, Illness, and Disabilities; and Intercultural Communication for Professionals. They are taught by a broad range of College faculty members. The program draws from the wide expertise of College faculty and highlights some of the most pressing issues of the day.

The College of Arts & Sciences offers several online certificate programs and master’s degree options for graduate students.

- Applied Environmental and Sustainability Studies
- Applied Statistics
- Digital Mapping
- Diversity and Inclusion
- Latin Studies
- Liberal Studies
- Professional and Technical Writing

For more information, go to online.as.uky.edu.

New UK Cooperative Connects Humanities, Social Sciences Scholars with Community

A new initiative of the College, the Cooperative for the Humanities and Social Sciences (CHSS), was launched in August 2020. The effort promotes partnerships among faculty and graduate students across the University while facilitating engagement with local, state, national and international communities.

“Such fields as history, philosophy, literature, sociology, geography, anthropology and fine arts can create broader understanding of the human experience and help advance a more just and equitable society,” said Karen Petrone, professor of history and director of the Cooperative.

The Cooperative’s programming in 2020-2021 addresses the theme of “Crises and Creating Social Change.” It brings together knowledge and perspectives from community members and UK faculty to move the community in constructive and hopeful directions.

In addition to Petrone, the steering committee for the effort features Steve Davis, associate professor of history; Herman Farrell, university research professor in the Department of Theatre & Dance in the College of Fine Arts; Lee Mandelo, a doctoral student in Gender and Women’s Studies; Kristin Monroe, Sheikh Islamic Studies professor and associate professor of anthropology; Edward Morris, professor of sociology; Natalie Nenadic, associate professor of philosophy; Doug Slaymaker, professor of Japan Studies in MCLLC; Anna Smith, assistant professor of statistics; and Matthew W. Wilson, associate professor of geography.

This spring, the Cooperative has created writing groups drawing from UK faculty and graduate students from diverse disciplines and methods. Programming has included a panel on “Universities, Youths, Race and Policing,” which brought together scholars, a juvenile justice activist and the police chief of Berea, Kentucky.

The Cooperative will also host a workshop for graduate students on publicly engaged scholarship and a session with historian John Barry on what the 1918 pandemic can teach us today. For more information or to make a contribution, go to chss.as.uky.edu.

In an effort to provide quality content and connect alumni, friends and the community to the College of Arts & Sciences, the Virtual Speaker Series began last May. With nearly 20 online events to date, topics covered have included the science behind COVID-19, the 2020 election, pandemic mental health, writing toward protest and healing, challenges for higher education and Black Studies at UK. Events are scheduled each month and are free to attend through Zoom.

Stay up-to-date on upcoming topics and register for future events at www.as.uky.edu/vss. Make sure to check out recordings of past events at www.as.uky.edu/vss-archive. We hope to see you virtually soon!
Five recently hired faculty members associated with the African American and Africana Studies interdisciplinary program in the College of Arts & Sciences are broadening the range of course offerings for University of Kentucky students.

“It is important to hire Black faculty in these areas and all areas, because their individual and collective research expertise is essential to the mission of the University,” said DaMaris B. Hill, interim director of the African American and Africana Studies program. “Black Studies is an incubator for new knowledge regarding global Black peoples and humanity. These AAAS new faculty hires and AAAS faculty affiliates are agents of research and new discoveries. These hires are an important indication within the College of Arts and Sciences, and by extension at the University of Kentucky, that Black Studies matter.”

The new faculty are:

Lydia Pelot-Hobbs is an assistant professor in the Department of Geography. Her research is focused on the nexus of the carceral state, racial capitalism and social movements and grassroots organizing. (Not pictured)

Vieux Touré is an instructor in Modern and Classical Languages, Literatures and Cultures (French and Francophone Studies). Vieux’s research explores transnegritude—a concept he is developing—and Black identity politics in African literature of the 20th and 21st centuries.

JWells is an assistant professor in the Department of Writing, Rhetoric, and Digital Studies. JWells’ research interests include cultural literacies, women’s rhetorics, maternal incarceration and race.

Brandon M. Erby is an assistant professor in the Department of Writing, Rhetoric, and Digital Studies. His research interests include African American rhetoric, literacies studies, critical education and the rhetoric and historiography of the Civil Rights and Black Power movements.

Aria S. Halliday is an assistant professor in the Department of Gender and Women’s Studies. Halliday specializes in cultural constructions of black girlhood and womanhood in material, visual and digital culture in the 20th and 21st centuries.
The College of Arts & Sciences inducted the 2020 Hall of Fame alumni and faculty class in a virtual ceremony April 9, 2021. Visit www.as.uky.edu/halloffame to read more about the 2020 inductees and to view the event.

Alumni Inductees

Ouita Papka Michel, Political Science B.A. ‘87, was a member of the debate team, Phi Alpha Delta, and the first of six Gates fellows. In 1986, she became only the second woman to win a national debate championship. As a restaurateur, Michel has made locally grown ingredients a priority in her cuisine since 2001 when she and her husband, Chris, opened their flagship restaurant Holly Hill Inn in Midway, Kentucky. She has been a James Beard Foundation Award nominee numerous times; her most recent nomination was in 2020 for Outstanding Restaurateur. Michel and her restaurants are regularly featured in media such as The New York Times, Southern Living, Garden & Gun, Food Network and the Cooking Channel. She was also a guest judge on Season 16 of Bravo’s Top Chef. She has made locally grown ingredients a priority in her cuisine since 2001 when she and her husband, Chris, opened their flagship restaurant Holly Hill Inn in Midway, Kentucky. She has been a James Beard Foundation Award nominee numerous times; her most recent nomination was in 2020 for Outstanding Restaurateur. Michel and her restaurants are regularly featured in media such as The New York Times, Southern Living, Garden & Gun, Food Network and the Cooking Channel. She was also a guest judge on Season 16 of Bravo’s Top Chef.

Dr. George C. Wright, Sociology B.A. ’71, entered federal service upon graduating from the University of Kentucky. During his federal career, he served in numerous capacities as a special agent in charge for law enforcement organizations across the country. Williams also served on many anti-terrorism and counter-terrorism, anti-gang, drug enforcement and white-collar crime task forces. His senior management skills and services were also lent to the White House, the Office of Management and Budget and the Nuclear Regulatory Commission. After 9/11, he was recruited to assist in the creation of two new federal agencies, the Transportation Regulatory Commission. After 9/11, he was recruited to assist in the creation of two new federal agencies, the Transportation Regulatory Commission. After 9/11, he was recruited to assist in the creation of two new federal agencies, the Transportation Regulatory Commission.

Faculty Inductees

Dr. Patricia A. Cooper (Gender & Women’s Studies) grew up in Blacksburg, Virginia, and her feminist consciousness and anti-war activism arose while she was an undergraduate student at Mary Washington College and Wittenberg University from 1967 to 1971. As a graduate student at the University of Maryland, Cooper focused on women’s, Black and working-class history and received an M.A. in American Studies in 1973 and a Ph.D. in U.S. history in 1981. In 1983, she joined the History and Politics Department of Drexel University in Philadelphia where she worked with others to create processes for addressing sexual harassment and helped establish a women’s studies program. Cooper moved to UK in 1993 as director of the Women’s Studies Program. She helped launch the Women’s Studies Graduate Certificate, served on the UK Commission on the Status of Women and was the first chair when the Gender and Women’s Studies Program became a department in 2009.

Dr. Ronald D Eller (History) is originally from southern West Virginia and has spent more than 40 years writing and teaching about the Appalachian region. He served for 15 years as director of the UK Appalachian Center, where he coordinated research and service programs on a wide range of Appalachian policy issues including education, health care, economic development, civic leadership and the environment. Eller holds a Ph.D. in American history from the University of North Carolina at Chapel Hill and has published more than 60 articles and reports, but is most well-known for his award-winning books. Miners, Millhands and Mountainaires: The Industrialization of the Appalachian South was a finalist for the Pulitzer Prize in 1983 and won the 1982 Willis Weatherford Award in Appalachian Studies and the 1983 Thomas Wolfe Literary Award. His most recent book, Unlevel Ground: Appalachia Since 1945, won a second Willis Weatherford Award in 2008 as well as the 2009 V.O. Key Award from the Southern Political Science Association. Eller has served as chair of the Governor’s Kentucky Appalachian Task Force, the first chair of the Kentucky Appalachian Commission and as a member of the Sustainable Communities Task Force of President Clinton’s Council on Sustainable Development.
As humans search for intelligent life—or any life at all—in the universe, they’re using their own intelligence to craft new ways of exploring galaxies. They’re even starting to use artificial intelligence, itself a new frontier, to deepen science’s understanding of what lies beyond.

That’s where Yuanyuan Su, an assistant professor in the Department of Physics and Astronomy, is applying her own intelligence. She and her lab are using artificial intelligence to analyze images gathered from the Earth’s latest telescopes and satellites to figure out what’s actually there.

“There are two milestones in the history of modern astronomy,” Su said. “The first was to put cameras on telescopes. Instead of sketching them, as we had in the past, we can now take pictures of celestial objects. Astronomy thus develops from being subjective to objective.

“The second was to put telescopes in space, allowing us to look at the high energy (X-ray and gamma ray) part of the universe. We can understand the physics behind astronomical phenomena with their high energy properties. Astronomy becomes astrophysics.”

And now? AI.

CONTINUED ON PAGE 10 »
I want to be a female role model for my students and my baby girl.

YUANYUAN SU
Assistant Professor, Department of Physics and Astronomy

"AI-based techniques are being applied to fully utilize the large astronomy datasets from the ongoing and future multi-wavelength surveys," Su said.

Su studies the hot plasma spaces in between galaxies, called the intracluster medium, using space X-ray telescopes. She is collaborating with Nathan Jacobs, Yu Zhang and Gongbo Liang at the Department of Computer Science in the UK College of Engineering to find a way of using techniques from machine learning and computer vision to analyze astronomy images.

This project stems from Su’s primary research, which involves the study of galaxy clusters.

"Galaxies in our universe do not distribute uniformly in space," Su said. "They tend to be clustered together. Clusters of galaxies are the largest and most massive gravitationally bound objects in the universe. The study of galaxy clusters has impacts on cosmology and many aspects of astrophysics."

The team has used a deep neural network to extract information on the population and evolution of galaxy clusters from their X-ray images, which yield results superior to using conventional approaches.

The algorithm is run on high-performance computing clusters operated by the Center for Computational Sciences at UK.

"Such neural networks were originally developed for classifying consumer photographs based on their image content," said Jacobs, who is an associate professor of computer science and director of the Multimodal Vision Research Laboratory. "I find it exciting to adapt these techniques to address practical problems and basic scientific questions."

Their work was published in 2020 by the Monthly Notices of the Royal Astronomical Society.

Su came to UK in 2019 after serving as a postdoctoral fellow at the Harvard-Smithsonian Center for Astrophysics.

"My office (at Harvard) was next to ‘the great refractor,’ probably the first telescope that took photographs," Su said. "Annie Jump Cannon, and many other women astronomers, used it to classify the stars."

In addition to the AI project, Su is exploring multi-wavelength studies of galaxy clusters. Galaxy clusters are the largest gravitationally bound objects in the universe, containing thousands of galaxies that are held together by dark matter. The space between galaxies is filled with a diffuse gas, the so-called "intracluster medium."

This gas is so hot that it radiates in X-rays but is undetectable at visual wavelengths. Su and her colleagues use space-based telescopes to observe galaxy clusters since the Earth’s atmosphere absorbs X-rays.

Su has published an Astrophysics Journal study using HISAKI, a small extreme ultraviolet space telescope operated by the Japan Aerospace Exploration Agency. It was originally designed to observe the atmospheres of the planets in the solar system. A team of U.S. and Japanese scientists led by Su has used HISAKI to study a cluster of galaxies 6.4 billion light years away, leading to HISAKI’s first astrophysical result.

"It is brightest at the center of the cluster where the hot gas should be quickly losing its energy, as it emits so many X-rays," Su said. "We therefore expect to observe this gas at lower temperatures as a result of this radiative cooling."

She is originally from Sichuan, China, the hometown of giant pandas. Su received her Ph.D. from the University of Alabama and went on to a postdoc in California before moving to Harvard. Over the last two years, Su has become not only a professor, but a mother as well.

"I want to be a female role model for my students and my baby girl," Su said. "I am so glad to be at UK. I am grateful for talented colleagues, hard-working students, and I found my collaborators."

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Despite these challenges, Su remains optimistic about the future of women in astrophysics.

"When I was in school, it wasn’t considered an ideal path for girls to study physics," Su said. "I felt isolated and doubted my choice when I became the only female physics major in my class. But I was fortunate to get to know great women scientists in my career. I have been deeply influenced and encouraged by them."

Su became interested in astrophysics at a young age. However, her path to becoming an astrophysicist wasn’t always smooth.

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The New Commonwealth Institute for Black Studies Brings UK Scholars Together for Deep, Diverse Research

By Richard LeComte

Black people's stories reach deep into the Commonwealth's most cherished institutions—among them horse racing, basketball, football and many other sports. Sports will be one of the key areas of research for a new College initiative: the Commonwealth Institute for Black Studies (CIBS).

For Derrick White, the Institute will help him pursue his long-term look into the history of Blacks in sports.

“All of my research fits within the realm of the goals and ideals of the Commonwealth Institute,” said White, professor of history and African American and Africana Studies. “My most recent book on race in sports, particularly Black college football, is deeply rooted in Black Studies.”

In March 2021, the Commonwealth Institute for Black Studies kicked off with “An Evening with Dr. Henry Louis Gates Jr.,” an online event featuring the Harvard University professor, public intellectual and host of “Finding Your Roots,” a groundbreaking genealogy series on PBS. The interdisciplinary institute, which will include more than 40 scholars, will establish research clusters across the campus and promote UK’s research and scholarship on topics of importance for Black Studies.

“The challenge of systemic racism is one of the twin pandemics confronting our country,” said UK President Eli Capilouto in August 2020. “To this challenge, we bring a growing cadre of talent among faculty who are working across the broad spectrum of issues confronting Black, Indigenous and people of color in our community, our state and our country. The Commonwealth Institute will serve as an intellectual home and base of support for this critical work.”

Capilouto announced the initiative last summer, but it had been on Anastasia Curwood’s drawing board for a few years. She was developing a major for African American and Africana Studies (AAAS), but she also wanted to reach out to other parts of the campus. The Institute will be housed in the AAAS Program in the College of Arts & Sciences.

“I did a little strategic planning session with myself,” said Curwood, a history professor and director of CIBS. “I wanted to raise the scholarly profile of the unit to highlight the world class scholars that we have.”

CONTINUED ON PAGE 14 »
As the name Commonwealth Institute suggests, scholars will be examining issues close to home. One of the biggest issues is the lives of enslaved people and segregation in Central Kentucky and particularly Lexington; that history will be one major emphasis of the Institute’s activities, Curwood said. Among the scholars working in this area is Vanessa Holden, assistant professor of history, and Curwood is looking forward to having her contribute to the Institute.

“Slavery and inequality in the history of Central Kentucky is one of the pillars that our research agenda stands on,” Curwood said. “We are following the practices of other institutions that have fully involved their campus communities in the collection of local histories of slavery and Jim Crow on their sites.”

But along with the history of enslaved peoples, Blacks in sports and other issues, the Institute will be looking ahead into Afro-futures and internationally as well. For example, the February 2021 Black Women’s Conference presented a session focused on Blacks and diversity in the growing Esports arena. Both Curwood and Hill emphasize the fact that they’re looking at the Black experience from all angles and to listen to all voices.

“We’re not tied to any specific cultural ideology,” Hill said. “We’re not looking for a monolith of what it means to be an American. We’re not interested in a monolith of what it means to be Black. We’re not interested in a single model of what it means to be a woman, and we’re not interested in a single future.”

Looking toward that future, the Institute will be involving both undergraduates and graduate students in all its research facets. Undergraduates are especially important for Hill; both she and Curwood see creating opportunities for international study and internships as integral to the Institute’s mission.

“We’ll have opportunities for graduate students, pre-doctoral students and postdoctoral students, but I want to include the undergraduates too,” Hill said. “We want them to have specific duties that allow them to fully engage in the scholarly and the practical aspects of research.”

Visit cibs.as.uky.edu to learn more about CIBS, make a contribution or sign up to receive the latest information about the Institute’s work and upcoming events.

COMMONWEALTH INSTITUTE FOR BLACK STUDIES MISSION AND RESEARCH FOCUS

MISSION:
The Commonwealth Institute for Black Studies at the University of Kentucky is an epicenter for cutting-edge research on people of African descent worldwide.

VISION:
Our deep pool of talent pushes the boundaries of knowledge creation. We cross traditional disciplinary boundaries, centering Black lives within history and culture, literatures and communication, health and the sciences, the natural and built environment and policy and the law.

PURPOSE:
Our researchers tackle urgent questions such as the sources and impacts of Black political power, conceptions of race in the future, the global migrations of people, the continuing afterlives of slavery, and the impact of the digital age on Blackness.

RESEARCH PILLARS:
The Commonwealth Institute for Black Studies encompasses researchers who cover nearly 80 areas of intellectual expertise. Although their individual research topics cover tremendous variety, they rest on five thematic pillars:

• Black Futures (21st Century Race in Digital Cultures)
• Slavery and Inequality in Central Kentucky
• Race and Sports (Basketball, Football and Equine Studies)
• From Appalachia to Zimbabwe: Global Blackness
• Gender and Sexuality

WE CANNOT UNDERSTAND WHERE HUMANITY HAS BEEN AND WHERE WE ARE GOING WITHOUT BLACK STUDIES.

Anastasia Curwood, director of the Commonwealth Institute for Black Studies
When Dr. Thomas F. Whayne Jr. passed away suddenly in June 2020, it was a shock to everyone who knew him. He was a man of such energy and intellect that one very demanding field—cardiology—was not enough to contain his passion for helping people. Determined to become bilingual in Spanish, he fostered a relationship with the UK Department of Hispanic Studies that lasted nearly three decades.

The story of how a renowned cardiologist with no Hispanic roots became a crucial part of the UK Department of Hispanic Studies is a testament not only to the outsized talent of Dr. Whayne but also to the evolution of Hispanic Studies at UK. Dr. Whayne first studied Spanish in high school in Washington, D.C, which was enough of a foundation for him to leap into Spanish 4 as a freshman at the University of Pennsylvania.

While Dr. Whayne was at Penn, his cousin arranged for him to go on a blind date with her friend and classmate Eugenia Ingram. Tom and Genie stayed in touch, but it wasn’t until she moved to New York City to work in a research lab at the New York Hospital-Cornell Medical Center that they were able to have a second date. In 1963, Tom received his medical degree from Penn and was assigned for his internship and residency to the same hospital where Genie was employed. Clearly they were meant to be together, and they married that same year.

The demands of medical training meant putting Spanish on hold as he worked to make his mark in cardiology. Dr. Whayne earned a Ph.D. in Biochemistry from UC-San Francisco in 1970 and in that year alone published four medical articles. Over the next 50 years, he would publish more than 180 medical articles, including 110 Medline-listed publications.

It was during his time at St. Joseph’s Hospital in Lexington that Spanish re-entered Dr. Whayne’s life. “Many years passed, and for some crazy reason in 1990 I decided that I wanted to study Spanish again,” he said. “I called what was then the Department of Spanish and Italian at UK, and I was put in touch with a graduate student from Chile.” Meeting with this graduate student on a weekly basis helped Dr. Whayne regenerate his Spanish speaking skills.

As Dr. Whayne settled into the academic community at UK, he became increasingly philanthropic, supporting a variety of funds over the years with Genie. He endowed the Thomas F. Whayne Professor of Heart Health in the UK College of Medicine and also made annual contributions to the Department of Hispanic Studies in support of the cause that had become dear to his heart—graduate students.

The language is so beautiful and I really do have a passion for it.

THOMAS FRENCH WHAYNE JR.
When graduate students attend academic conferences, they are striking out on their own to network with a wider circle of potential mentors beyond their home university’s faculty, while also gaining a broader exposure to trends in their field and discovering new ideas for their own research. It is an absolutely critical experience for developing scholars, yet the costs of travel, lodging and registration can be prohibitive for students with limited means. Over the years Dr. Whayne’s philanthropy has enabled dozens of Hispanic Studies graduate students to have these essential opportunities.

“Dr. Whayne’s generous travel funding helped my participation in the Cine-Lit 9: Mujer y Género conference last year. This type of financial help encourages those of us who are graduate students also working as teaching assistants to participate in academic conferences sharing our research and growing as scholars,” said Ana Álvarez Guillén (Ph.D. 2021), now a Spanish Instructor at UK.

Another Spanish instructor at UK, Darryl Dedelow Jr., attended the XI Conferencia Internacional Lingüística 2019 in Havana, Cuba, his very first academic conference, thanks to Dr. Whayne’s support. “I had the chance to not only broaden my knowledge and get to know many colleagues from my field, but also to discover a new country and culture,” Dedelow said.

In addition to conference support, Dr. Whayne served as a patron of UK graduate students by employing them to converse with him in Spanish. One of these former students was Dr. Josefina C. López Saavedra, whom he met in 2004. López Saavedra recalls: “I was impressed not only by his unconditional love and passion for the Spanish language but also by his extensive knowledge of Spanish literature and culture. For many years, I became not only his mentor but also his editor and translator.” Her efforts paid off, and Dr. Whayne was able to publish 18 medical articles in Spanish and give his editor and translator. “Her efforts paid off, and Dr. Whayne has been the best student that I have ever had, as he wanted to talk about every single topic: current events, politics, history, culture, you name it. In our conversations we always tried to fix the world.”

Dr. Whayne’s involvement with graduate students over the years eventually led to a new role of serving as an outside examiner on dissertation committees, and he served on 11 from 2007 to 2019. This service led to friendships with other Hispanic Studies faculty. Dr. Whayne had lunch on a monthly basis with Professor Emeritus Edward Stanton: “Tom was an American original. Like the young Nick Carraway in Fitzgerald’s ‘The Great Gatsby,’ he made lists of things to accomplish. One of those lists had the names of the many Spanish-speaking countries in the world, which he checked off, one by one, as he visited them over the years,” Stanton said.

Dr. Whayne’s enthusiasm for the Spanish language and for helping graduate students came from the same character traits that made him a great doctor. “Those who knew Tom as a physician always spoke of his knowledge and indefatigable research, his rapport, care and compassion for patients,” Stanton said.

In honor of his multifaceted impact on Hispanic Studies at UK, department chair Moisés R. Castillo announced the Dr. Thomas F. Whayne Jr. Graduate Excellence Endowment in Hispanic Studies. This endowment will support Hispanic Studies scholarships, travel and lodging for conference attendance, and pay for dissertation research. “A plaque on the door will honor his memory and remind us all about his philanthropy,” Castillo said. Though he was frequently solicited by his alma maters, Dr. Whayne knew early on that the University of Kentucky was where he wanted to give. “I just decided, I’ll keep my money in Kentucky,” he said in December 2019. “I’ll keep this commitment until my death, and then provide a significant sum in my will when I die. It’s loyalty.”

The Thomas F. Whayne Jr. Graduate Excellence Endowment in Hispanic Studies is the result of that bequest. It will ensure that Hispanic Studies graduate students, who are the linchpin of the department, will be well supported. Kentucky has sizeable Hispanic communities throughout the state, and a thriving department at the state’s flagship university is now better equipped to ensure that the language and people Dr. Whayne loved will continue to flourish.

“The language is so beautiful,” he said, “and I really do have a passion for it.”

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In honor of his multifaceted impact on Hispanic Studies at UK, department chair Moisés R. Castillo announced the Dr. Thomas French Whayne Jr., M.D., Ph.D. Seminar Room. “This is the space in which (in pre-Covid times) we usually conduct not only departmental meetings, but most of our graduate seminars, and all of the dissertation defenses in which Dr. Whayne participated and that were so dear to him,” Castillo said.

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To leave a legacy or to support students with a gift from your retirement account or will, please contact the Arts & Sciences Office of Philanthropy at givetous@uky.edu or (859) 257-3551.

A plaque on the door will honor his memory and remind us all about his philanthropy.

Though he was frequently solicited by his alma maters, Dr. Whayne knew early on that the University of Kentucky was where he wanted to give. “I just decided, I’ll keep my money in Kentucky,” he said in December 2019. “I’ll keep this commitment until my death, and then provide a significant sum in my will when I die. It’s loyalty.”

The Thomas F. Whayne Jr. Graduate Excellence Endowment in Hispanic Studies is the result of that bequest. It will ensure that Hispanic Studies graduate students, who are the linchpin of the department, will be well supported. Kentucky has sizeable Hispanic communities throughout the state, and a thriving department at the state’s flagship university is now better equipped to ensure that the language and people Dr. Whayne loved will continue to flourish.

“The language is so beautiful,” he said, “and I really do have a passion for it.”

—Tom Whayne

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“Dr. Whayne’s generous travel funding helped my participation in the Cine-Lit 9: Mujer y Género conference last year. This type of financial help encourages those of us who are graduate students also working as teaching assistants to participate in academic conferences sharing our research and growing as scholars,” said Ana Álvarez Guillén (Ph.D. 2021), now a Spanish Instructor at UK.

Another Spanish instructor at UK, Darryl Dedelow Jr., attended this same conference and presented a paper there. “This prestigious conference takes place once every four years and brings together prominent film directors from the Spanish-speaking world with scholars of cinema and literature,” Dedelow said. “Through my attendance and participation at this conference, I was able to connect with many distinguished scholars and forge important relationships as I move into academia.”

Graduate student David Cortés Fernández was able to attend a linguistics conference, XI Conferencia Internacional Lingüística 2019 in Havana, Cuba, his very first academic conference, thanks to Dr. Whayne’s support. “I had the chance to not only broaden my knowledge and get to know many colleagues from my field, but also to discover a new country and culture,” Cortés Fernández said.

In addition to conference support, Dr. Whayne served as a patron of UK graduate students by employing them to converse with him in Spanish. One of these former students was Dr. Josefina C. López Saavedra, whom he met in 2004.

López Saavedra recalls: “I was impressed not only by his unconditional love and passion for the Spanish language but also by his extensive knowledge of Spanish literature and culture. For many years, I became not only his mentor but also his editor and translator.” Her efforts paid off, and Dr. Whayne was able to publish 18 medical articles in Spanish and give more than 70 international presentations in Spanish-speaking countries.

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Chat rooms and classrooms and Zoom (oh my!)—the College of Arts & Sciences is using them all to teach and to keep students engaged in a liberal education.

Instructors in math and chemistry are combining technology, learning techniques honed by experience and human interaction to provide multifaceted learning environments for their students.

The goal, as always, is to keep students engaged with hands-on instruction methods even if the current pandemic limits face-to-face class time.

“Students learn by working on problems, not just by listening,” said Alberto Corso, associate professor and director of undergraduate studies in the Department of Mathematics. “That’s what I tell all of my students. We all like to watch our favorite basketball teams play, but we can’t play with them unless we practice. We need to be on the court and practice three-pointers.”

The Chemistry and Mathematics Departments present prime examples of this commitment to teaching excellence, as faculty members combine recorded lectures, Zoom class meetings for questions and some in-person work in problem-solving for students taking gateway classes.

Teachers label this technique as a “flipped classroom,” in which students take an active part in their education. They watch videos to prepare themselves for interaction with faculty and teaching assistants.

“The flipped classroom has been the big innovation in teaching over the past 10 years,” said Kathi Kern, director and associate provost of Teaching, Learning, and Academic Innovation at UK.

“Two of our very popular undergraduate courses ‘flipped’ almost 10 years ago—HIS 121 (War and Society) and STA 210 (Introduction to Statistical Reasoning). In each of these courses, faculty pre-recorded lectures so that class time could be devoted to discussion, analysis and experiments, with faculty and graduate students interacting with the undergrads. This style of teaching in Stats 210 was the inspiration for the design of some of the large, interactive classrooms in the Jacobs Science Building.”

Kern compared flipped classrooms to preparing for discussion in a seminar.

“Students shouldn’t come to class just to listen to a faculty member,” she said. “It’s like reading a novel on your own and coming to class to discuss it. You could use your class time to watch a documentary film, but if people already have absorbed that material, then they get to interact with each other. They encounter the material initially on their own, but then they make sense of it with their faculty.”

The idea of the flipped classroom informs teaching in the college’s gateway chemistry classes, said Allison Soult, senior lecturer and director of general chemistry. Technology has aided instructors in interactive learning, and that technology continues to benefit students during the pandemic. Such programs as the Canvas online learning system and the interactive PlayPosit app make coordinating classes easier and more meaningful.

“We already had our students watching videos, and then we had them come to class to do active learning activities,” Soult said. “Our instructors have recorded short videos that we use with the PlayPosit application. It allows instructors to add questions to their videos that students must answer to continue the lesson. The grades are synced to Canvas so students get credit for completing these.”

The app motivates the students to watch the videos and measures their understanding of the content.

Then students can come to class through Zoom and ask more advanced questions.

CONTINUED ON PAGE 22
"Before class, I review the results from the PlayPosit lessons to determine where students are struggling with a particular topic," South said. "Then in my Zoom session, I can review that material with an explanation and go through example problems. The review is recorded and shared through Canvas so all students can see it, even if they were unable to attend the live Zoom session." In gateway mathematics classes, faculty members are mixing in-person and online class meetings with recorded lectures to give students a full look at this difficult subject, Corso said. Corso is teaching a yearlong calculus class for biology majors. Faculty members worked diligently before the semester started to plan out lectures, information sessions and recitations with teaching assistants to make sure a mix of in-person, live-conferencing and video lectures would do the trick.

"To devise our plan—and this is something for all the service classes that math teachers, with about 5,000 students in any given semester—the coordinators of the courses met together over the summer every week with a different topic: How do we do the lectures? How do we organize the recitations? How do we organize the exams and quizzes? For my class, we decided we’d have videos that the students could watch on their own time, and then the class time would be used for answering questions." Katherine Paulin, lecturer in mathematics, coordinates 22 sections of college algebra, including two joint college-credit classes in high schools. The classes all have the same basic Canvas shell that students can work from and interact with instructors.

"We redid the class over the summer of 2019," she said. "All students are seeing video lectures that I recorded myself. They have a Canvas page where they can read the definitions of the terms I use and the formulas, and then get to watch a video of me working problems just as I would in the classroom." In the spring, MA 109—College Algebra—has the same basic Canvas shell that students can work from and interact with instructors.

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ONE DAY FOR UK IS THE UNIVERSITY OF KENTUCKY’S ANNUAL DAY OF GIVING, and this year it’s happening on April 21. We are off to a great start thanks to generous matching donations totaling $25,000 from alumni Ethelee ‘Lee’ Baxter (’61), John Boone (’69), Roger DiSilvestro (’72), Dr. Steven B. Edelstein (’85), Geoffrey Morgan (’80), Robert Rich (’66), and Doris F. Rosenbaum (’72). These matching dollars enable YOU to double your impact on April 21. Last fall, you helped A&S raise $61,834 and showed the world what Kentucky Can do! We need your help to do that again—sign up to be a BBNfluencer and get insider access to various ways to help support A&S on One Day for UK at kentuckycan.uky.edu/bbnfluencers.

The cheerleaders have established a long-standing tradition of spelling out K-E-N-T-U-C-K-Y during basketball games each season, with a celebrity guest often featured as the “Y.” This year for One Day for UK, we want YOU to Be the Y. Why do you love UK? On April 21, share your favorite UK memory on @UKPhilanthropy social media platforms and tag us #ukartsci to help us earn extra funds for the College. There will also be a challenge to post your best Y pose.

Last fall A&S almost won the Globetrotter Challenge by receiving gifts from the most states and/or countries. Since we have so many alumni EVERYWHERE, we are motivated to win this challenge this year. Help us turn the map Kentucky Blue for Arts & Sciences!

There are plenty of other exciting challenges so keep an eye on the website www.onedayforuk.uky.edu and A&S social media pages to participate and follow our progress.

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Depending on where you are in the United States, if you’re hungry for something made of cornmeal, you might be ordering a johnnycake, a cornpone hoecake, some spoonbread—or any of more than 200 variations on just that one menu item.

Those are just a few of the linguistic variations one can find in the Linguistic Atlas Project (LAP), the largest survey of American dialects, which contains 90 years’ worth of linguistic data and more than 800 items whose names change according to geography. The astonishing project now resides in UK’s College of Arts & Sciences.

“The thing that surprises me about the Atlas data is not necessarily any particular term, but more the sheer number of terms that people have and use for everyday items around the house, farm (at least back in the day) and community,” said Allison Burkette, a professor in the Department of Linguistics.

Started in 1929 by the American Dialect Society, the LAP collects linguistic data using a comprehensive, systematic approach. Over the course of many decades, the project has moved from various institutions, eventually landing at the University of Georgia, where it stayed for more than 25 years.

“I was introduced to the Atlas at UGA and worked on the project as a graduate student,” Burkette said. “Eventually, I was tapped to be the next project editor, and UK was chosen as the permanent home. So, in 2018, both the Atlas and I came to Lexington together.”

The project is a valuable historical record of not just language use but American culture. It includes more than 8,500 hours of digitized data, and the project has a strong reputation in digital humanities and complex systems research.

“UK was solicited because we have a strong and growing reputation in sociolinguistics and specifically linguistic geography,” said Jennifer Cramer ‘04, chair of the Department of Linguistics.

Here’s how it works: The LAP consists of several sub-projects divided by geographical region. Each project represents the collection of linguistic data (grammar, pronunciation and vocabulary) in the form of dialect interviews.

In these face-to-face conversations, participants were asked a series of targeted questions. For example, “What do you call the piece of furniture that has drawers for you to keep your clothes in?”

“Bureau, chest of drawers and dresser were common answers in the 1930s and ‘40s,” Burkette said. “Researchers wrote down these responses in International Phonetic Alphabet (IPA)—a set of symbols that linguists use to capture pronunciation.”

A renowned scholar of language variation, Burkette is working to digitize the collection.

“We have interview data in many formats, including handwritten field notes in IPA, aluminum disk recordings, reel-to-reel tapes, cassette tapes, CDs—many different media that represent the technologies of many different eras,” she said. “We’re trying to physically organize it, and digitize as much as we can, so that it can be made available via the forthcoming UK LAP website.”

Additionally, Burkette and her team of faculty, staff and student researchers plan to conduct follow-up interviews throughout the Commonwealth. The interviews will be compared to those from the late 1950s and ‘60s to learn more about how language in Kentucky changes over time.

“These students get hands-on experience working with linguistic data, through transcribing the handwritten IPA,” she said. “They interact with LAP material at both ends of the spectrum—the physical and the digital. Additionally, we will be training students to conduct interviews as well, which will give them experience in the field and allow them to contribute to the larger project.”

“I’m very grateful that as a student I have the access to and the ability to learn from such a prestigious, innovative and important set of linguistic and cultural data.”

— Crissandra George, graduate student in linguistics theory and typology

The LAP materials are in the process of being transferred. With the help of UK Libraries, they will be made widely available to the UK community and beyond—making the project a centerpiece for future engagement and outreach efforts.

“Linguistics as a field generally encourages people to appreciate diversity within language. Being able to document the breadth and depth of that diversity in American English makes the LAP a very special project, unlike anything else out there,” Burkette said. “The LAP can provide people of Kentucky, for instance, with access to varieties of speech and culture in the state and instill a sense of pride in those varieties.”


A linguistic archival atlas of AMERICAN SPEECH GOES DIGITAL

By Lindsey Piercy
Jennifer Whitney achieves her dream of a UK geology degree thanks to Rast/Brown Scholarship

UK rocked Jennifer Whitney’s world—or at least UK gave her a passion for the study of rocks.

“My rock collection is obscene,” said Whitney, who’s graduating from UK with a geology degree from the Department of Earth & Environmental Sciences in spring 2021. “I talk about it all the time. I think everybody should fall in love with geology, like I did. I just knew that this was something that I had to do.”

The path Whitney took to her bachelor’s degree has been circuitous, but her goal is in sight thanks to a key resource at UK: the Rast/Brown Scholarship Fund for Earth and Environmental Sciences, which awards $2,500 to four geology students each year. Dr. Kenneth Neavel, who received his master’s degree in geology from UK in 1985, gave the funds to start the scholarship.

“My objectives for establishing the Rast/Brown Scholarship were to financially support the department, specifically by funding undergraduate scholarships for students from historically underrepresented groups and to honor (former faculty members) Dr. Nicholas Rast and Dr. William Brown, who were instrumental in my academic and personal maturation,” said Neavel, who lives in Austin, Texas, and has had a long career in the petroleum industry. “It has been very satisfying and heart-warming to learn of the scholarship fund’s impact on the recipients’ success and has impressed upon me the significance of establishing the scholarship fund now, rather than waiting for bequeathment.”

CONTINUED ON PAGE 30 »
Whitney landed the scholarship because she needed an extra boost to get her degree. “Life does not always go the way we expect it to, and I think it’s just so wonderful when people are able to finally follow their dreams, even just a bit delayed,” said Rebecca Freeman, undergraduate studies director and assistant professor in Earth & Environmental Sciences. “I think the scholarship honors the donor’s wishes in terms of encouraging people to study geosciences who might not traditionally be very well represented.”

Whitney began studying at UK in 2011. Born in Tucson, Arizona, she grew up in Lexington and attended local schools. Her family has deep roots in the Wildcat tradition. “Both of my parents went to UK, and my dad got all three of his degrees here,” Whitney said. “My mom got her bachelor’s here too, and she has taught English as a Second Language at UK. My grandmother and grandfather got their degrees at UK. I mean, we go way back. It’s something that I’ve wanted since I was a little kid.”

Early on in her studies, Whitney started as an education major. But then she took an introductory geology class and found her passion. She and a friend helped to revive the Geology Club, and she met Freeman, who proved to be an early mentor for Whitney. Given the lack of representation of women in the environmental sciences field, Whitney found that Freeman offered her an excellent role model. “She’s just so smart, and she knows her stuff, and she’s passionate about it like I am,” Whitney said. “She’s also so passionate about her students, and she wants to see them succeed.”

Unfortunately, Whitney faced some life challenges that forced her to leave the University. She had two small children, went to work full-time and left Kentucky. She continued her education through community-college classes, but she kept alive the dream of graduating from UK. “I went through some very big life changes, and I had to step away from my degree,” she said. “But in terms of earning a degree, there was nothing that I wanted more.”

Whitney left such a favorable impression on Freeman that the professor made a point of keeping in touch with her student. And Freeman helped Whitney find a way back to UK. “After I was hired at UK in 2011, she was one of my earliest students,” Freeman said. “I kept in contact with her over the years she was away from UK. She would often email me and say how much she missed reading scholarly research papers in geology with me, so I’d send her some papers to read.”

For years, Whitney said, she thought about finishing her degree, but she couldn’t get the pieces of her life to align. Then, about two years ago, Whitney was able to resume her studies at UK. The Rast/Brown Scholarship gave her a boost this year. She notes that the scholarship helps students who may not have the highest GPAs but do have a passion for geology. “The Earth and Environmental Sciences Department and the alumni looked at me and said, hey, even though you don’t have the GPA for other scholarships,” Whitney said. “We know how hard you’re working.”

And Freeman said the department’s faculty appreciate the way the scholarships allow them to reach out to students who may be under-represented in the field of Earth & Environmental Sciences. “We have so many wonderful students who don’t really fit the traditional student profile and who could also use a hand up, and so I really appreciate him (Ken Neavel) thinking beyond the more traditional scholarship recipients,” Freeman said. “He’s giving us this flexibility to grow the number of people who are in our major from underrepresented groups.”

In addition to the Rast/Brown Scholarship, Whitney has benefitted from Project Graduate, which helps adult learners who have earned 80 or more credit hours to return to finish their first bachelor’s degree. Along with her studies, Whitney works as an assistant in the Kentucky Stable Isotope Geochemistry Laboratory under Andrea Erhardt, assistant geology professor. The lab can analyze stable isotopes in nearly any compound, and Whitney is into all of it. “We analyze everything,” she said. “We do fish muscles. We also do rocks, soil samples, anything and everything you can think of. We then look for specific isotopes in the samples.”

When she’s not studying and analyzing, Whitney likes to read and hike with her two children. She has traveled to 46 states and five countries, including a stint in the Amazon rainforest. After she graduates, she would like to pursue a master’s degree in geology or geography. That career path will be open to her now, thanks in part to the Rast/Brown Scholarship. 

“It’s just been such a wonderful experience and I think that, being older and having been in the work force, it’s made me appreciate it even more.” JENNIFER WHITNEY, Geology Major
JENNIFER OSTERHAGE

Jennifer Osterhage '02 works diligently and creatively to help undergraduate students at all levels of biological studies achieve their goals. As director of undergraduate studies, she manages one of the largest majors at the University. She teaches Introductory Biology I, which can have up to 300 students per section. She grew up in Louisville and attended Mercy Academy, then came to UK on a Singletary Scholarship. A biology graduate of UK in 2002, she earned her doctorate at Vanderbilt University in 2007 and came to UK as a lecturer in 2011. She took over as undergraduate director in 2015.

Q: How do you handle the fact that students have such a wide range of motivations in studying biology, from checking a box for a course requirement to aspiring to be the next great doctor or researcher?

A: We try to meet students where they are and have something that’s of interest to everybody. I just received a grant to study motivation in intro bio, to try to understand what are the factors that are motivating students. I’ve already seen some preliminary results, and there are a range of motivations. First-year students seem to be really motivated by their instructor. And those instructors really help them maintain their motivation, whereas sophomores and juniors are motivated by their career goals. Some of them do just want to “check a box,” but I’m trying to understand what the underlying motivation is for students so we can enhance their experience.

Q: What is the most challenging aspect of biology for undergraduates at any level?

A: For every student, understanding what the expectations are at the college level is a big transition. So a lot of students think biology is just about memorizing facts, and it’s really not. It requires thinking and applying knowledge. I think a lot of students struggle with realizing that that’s what we’re asking them to do, more application, problem solving, critical thinking. So on the intro course, we have a lot of infrastructure built around helping students realize what the expectations are and helping them build those critical thinking application skills.

That’s really true for everybody, even coming from great high schools. Sometimes they don’t realize that biology isn’t just a collection of facts.

Q: How has the pandemic and online or hybrid teaching affected your teaching?

A: I think it’s similar to in-person teaching, especially for first-year students, that structure is really important. Having due dates every single day to keep students on track has been important for teaching first-year students, but it was essential for teaching first-year students online, just to have that structure. They need lots of ways to engage with the material. So we use recorded videos, supplemental materials, plus in-person, or not in-person, and Zoom meetings as well. Putting in as much structure to a course as possible really has helped both in the classroom and online, but it’s essential online.

Q: How do you meet the needs of advanced students who are biology or biochemistry majors who are planning on graduate work in biology or the health professions?

A: A lot of those students, if they have AP credit, don’t have to take intro bio. So some students do test out. I think UK does a great job of getting students in research experiences. We have a research course for first-year students, then we also have an upper-level research course. Getting those students in the laboratory, doing some real science, I think, that’s great for everybody. That’s one of the ways we can give our advanced students some unique opportunities. A lot of those students are authors on papers, and they present at meetings. They are integral parts of the labs that they join.

Q: Are there any ways biology education has changed since you were an undergrad?

A: About seven years ago, we realized that biology isn’t about dissections anymore. It’s real inquiry-based. So we redesigned all of our laboratories to be inquiry-based and real science. That’s helping students apply concepts from the lecture portion of the class, into the labs.

Q: Do you see the University doing more, or reaching out to women and members of minoritized communities?

A: That’s something that we’re thinking a lot about. Our Department has a new diversity, equity and inclusion committee that meets often. They are developing another seminar course to highlight the scientific contributions of minority groups. In my class this past winter, I had students interview scientists for them to see that not all scientists are the stereotypical white dude in a lab coat. There’s a lot of diversity in science and having students interview diverse scientists within our Department helps them picture themselves in that role. They realize that they are part of the scientific enterprise as well. We’re also going to try to apply for grants to enhance the success rate of minoritized groups in science, and that’s something we’re thinking a whole lot about.

Q: What do you do for fun?

A: I’ve got three young children, so that’s… maybe fun is the wrong word, but that keeps me busy. I actually ran cross country for UK when I was a student. I walked onto the cross-country team. I am still a runner today, so I really enjoy going out for a run. From UK’s campus, I love to go out to the Arboretum. That’s one of my favorites.

For the complete interview, visit www.as.uky.edu/jennifer-osterhage

Q&A with Jennifer Osterhage

For the complete interview, visit www.as.uky.edu/jennifer-osterhage

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