2022

GW Arts & Sciences

A Celebratory Sendoff to the Class of 2022!

THE GEORGE WASHINGTON UNIVERSITY
COLUMBIAN COLLEGE OF ARTS AND SCIENCES

2022

Table of Contents

GW Arts & Sciences

Managing Editor
Denise St.Ours

Senior Writer/Editor
John DiConsiglio

Contributing Writers
Greg Varner
Kristen Mitchell

Design & Production
julsdesign inc.

Photographers
William Atkins
Catherine Delgado
Denny Henry

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801 22nd St. NW
Suite 212
Washington, DC 20052
202-994-6210
ccasnews@gwu.edu, #gwccas
www.columbian.gwu.edu

"Empathy is the key. We have to be empathetic toward the challenges that our students and their families face."

— PAUL WAHLBECK, DEAN, COLUMBIAN COLLEGE OF ARTS & SCIENCES

DEAN PAUL WAHLBECK:
MANAGING A TRANSFORMED EDUCATIONAL LANDSCAPE

WHEN **PAUL WAHLBECK** WAS named dean of the Columbian College of Arts and Sciences in July 2020, he faced an educational landscape transformed by the COVID-19 pandemic. From navigating the challenges of online learning while managing a major budget crisis to ensuring the health and wellbeing of students, faculty and staff, the path ahead seemed daunting.

But, in many ways, Wahlbeck—who served as interim dean for two years prior to his permanent appointment—was ideally suited to lead the university's largest academic unit during this time of uncertainty. As the former vice dean of CCAS programs and research, chair of the Political Science Department and a GW faculty member for more than two decades, he was in familiar territory—and one that is all the more enhanced through long-standing ties with students, faculty and alumni. He has earned a reputation not only as an advocate for strengthening the student learning experience and supporting faculty scholarship, but also as a compassionate teacher and colleague whose door is always open to chat about everything from the Supreme Court (his field of expertise) to baseball (a sport he is passionate about).

"To me, empathy is the key," he said. "We have to be empathetic toward the challenges that our students and their families face. And we have to do everything we can to help them work through those challenges while delivering a high-quality education."

Wahlbeck discussed the learning landscape and his vision for the future of Columbian College.

Q: Let's talk about your priorities as dean. Have they changed since the onset of the pandemic?

A: I think the pandemic actually affirmed my goals and the direction in which I've been attempting to steer us.

First, one of the critical pieces of the Columbian College experience is experiential learning. It's common for students to hold internships while in Washington. But there are other forms of experiential learning—such as short-term study abroad—that I'm all the more driven to advance. These past couple of years have deepened the appetite for that type of experience, and we will continue to build on it as the world begins opening up again.

A second piece is faculty teaching and research. Our faculty's scholarly activities are at the heart of the college's innovative spirit as we aspire to preeminence as a comprehensive global research university. Delivering a quality education is fundamental to the mission of our college—it's an important part of our job along with research, innovative scholarship and the creative aspects of our enterprise.

And third, I am committed to doing all we can to ensure we are creating a diverse, equitable and inclusive environment for our students, faculty, staff and other members of our community. We are currently in the process of hiring an inaugural director of diversity, equity and inclusion (DEI), and have recently formed a council made up of members of our community charged with recommending DEI-focused programs or initiatives based on an assessment of how we can make progress toward our commitment. Given the events that have made headlines since I began my tenure, I am all the more desirous to push forward on this initiative.

Q: How would you describe your leadership style? Is there anybody you pattern yourself after?

A: One of my mentors was the late **Lee Sigelman**, a former colleague and chair of the Political Science Department. He valued collegiality and getting input from every person in the room before making decisions. It's always important to listen—but especially now. The best ideas may very well come from the other people around me. I have to be willing to listen to the views of everyone in the room. As dean, I have to surround myself with good people who have our shared values in mind and empower them to do their jobs.

Q: Most people know you love baseball and you're a big Cubs fan. But what's something we don't know about you?

A: When I was a kid, I played the cello. I was a very mediocre part of a very outstanding high school orchestra. But in the fall of my freshman year of college, I had to choose whether to take an intro to political science class or join the college symphony. I picked political science.

I've often thought that had I gone the other route, I would have loved to be a symphony conductor. And being dean is a lot like being a conductor! I'm not usually the one who's playing the instrument, but I'm helping the talented people around me work together in order to accomplish all of our shared goals.

briefcase

Green Chemistry: New Tools for Safer Pesticides

PUBLIC CONCERN OVER THE USE of pesticides has grown in recent years, along with the realization that traditional testing methods used to gauge risks fall short in a number of areas. Now, research led by Assistant Professor of Chemistry **Jakub Kostal** has pointed the way to the development of a new computational approach to rapidly screen pesticides for safety, performance and endurance in the environment. The new approach will aid in the design of next-generation molecules to develop safer pesticides.

"In many ways, our tool mimics computational drug discovery, in which vast libraries of chemical compounds are screened for their efficacy and then tweaked to make them even more potent against specific therapeutic targets," said Kostal. "Similarly, we use our systems-based approach to modify pesticides to make them less toxic and more degradable, while, at the same time, making sure they retain good performance."

Going forward, the team hopes to augment their model with pesticide designed from biobased, renewable chemical building blocks to advance sustainability goals in chemical design. Their research, which was funded by the National Science Foundation, appeared in the journal *Science Advances*.

HIDDEN TOLL: SCHOOL SHOOTINGS SHATTER COMMUNITIES

THE DECADES-LONG PLAGUE OF school shootings in America has left survivors traumatized and families devastated. Now a new study co-authored by Assistant Professor of Public Policy and Public Administration **Lang (Kate) Yang** reveals the hidden toll these tragedies take on communities.

In a first-of-its kind study of the 210 shootings that occurred on public school campuses between 1999 and 2018, research reveals that these incidents were followed by higher-income families moving away, causing declines in enrollment and leaving schools and the communities surrounding them poorer, more segregated and branded with stigma.

Despite increased school funding, "campus shootings reduce the desirability of the community and lead to the exit of relatively well-off families," said Yang, who co-authored the study. "That is an understandable and natural response to a traumatic event, but it's not necessarily rational. Campus shootings are largely isolated events. They don't predict future violence. Yet there is clearly a stigma associated with them."

The families' flights occurred even though the incidents were followed by significant per-pupil spending increases and no noticeable rise in community-wide violence. The drops in enrollment may also lead to a downward spiral that harms students who remain in affected communities for years to come, according to the study.

Primate Fur Teases Human Hair Evolution

Lemurs in Madagascar

HAIR IS AN IMPORTANT FEATURE of primate diversity and evolution—including among humans. It serves functions that are tied to thermoregulation, protection, camouflage and signaling. But the evolution of wild primate hair has remained relatively understudied—until recently.

Anthropology researchers from Columbian College's Center for the Advanced Study of Human Paleobiology examined the factors driving hair variation in a wild population of lemurs known as Indriidae. They focused on the impact of climate, body size and color vision on hair evolution. Their findings, published in the *American Journal of Biological Anthropology*, show that lemurs living in dry, warm environments have denser hair, which the researchers believe helps protect them from the strong rays of the sun; lemurs in colder regions are more likely to have dark hair, evidence that dark colors in mammals could aid with thermoregulation as they help absorb heat from the sun's rays; and lemurs with patches of red hair were found to be associated with enhanced color vision.

"Human hair evolution remains a mystery, largely because hair does not fossilize," said **Elizabeth Tapanes**, MPhil '20, PhD '21, lead author on the paper. "The lemurs we studied exhibit an upright posture like humans and live in a variety of ecosystems like early humans, so our results provide a unique window into human hair evolution."

LOEB INSTITUTE MAPS RELIGIOUS FREEDOM

COLUMBIAN COLLEGE'S JOHN L. Loeb Institute for Religious Freedom, which seeks to foster dialogue and understanding about religious liberty and the separation of church and state, partnered with two global nonprofits to launch a first-of-its-kind mapping framework documenting disparities in religious freedom worldwide.

The Religious Freedom Data Spectrum draws on information from 13 organizations that rank countries on indicators of religious freedom and persecution. By mapping each of the rankings in one location, the Data Spectrum presents a broad picture of religious oppression around the world while alerting governments, watchdog organizations and advocacy groups to trouble spots and emerging trends.

"The spectrum will help researchers and policymakers compare the state of religious freedom around the world," said **Samuel Goldman**, executive director of the Loeb Institute and an associate professor of political science. "By coordinating data from various sources, we aim to highlight problem cases, as well as identify areas of improvement."

The publicly accessible interactive map provides a comparative framework for viewing country rankings on freedom of religion and belief. The Loeb Institute helped compile data on global barriers to religious freedom such as government restrictions and social hostilities. GW student researchers also aided in collecting data and building the Data Spectrum website.

The Religious Freedom Data Spectrum ranks countries on religious tolerance.

NASA ROCKETS ASTROPHYSICS IMPACT

COLUMBIAN COLLEGE astrophysists are expanding their reach into space exploration through a new agreement with the NASA Goddard Space Flight Center that will enable enhanced access to lab facilities and equipment and open new doors to the exchange of ideas and expertise in fields ranging from data analysis to designing the next generation of telescopes.

The GW Astrophysics Group, as they are known, has enjoyed frequent collaborations with NASA in the past, particularly in the field of high-energy astrophysics. Faculty and student researchers have helped analyze and interpret data from, among other objects, cosmic explosions and gamma-ray bursts, playing a key role in "understanding the nature of the most energetic phenomena in the universe," said **Sylvain Guiriec**, assistant professor of physics and a research scientist at the Goddard Center.

Gamma-ray burst from a collapsing star (Credit: DESY, Science Communication Lab)

Earlier this year, Guiriec, Physics Department Chair **Chryssa Kouveliotou** and Associate Professor of Astrophysics **Alexander van der Horst** joined a team of international researchers that helped NASA identify magnetar explosions in a neighboring galaxy. In recent years, CCAS astrophysicists have also collaborated with NASA and scientists from around the globe for projects that included detecting the highest-energy light ever observed from a gamma-ray burst and studying the first confirmed observation of a kilonova, two merging neutron stars.

This past year, eight graduate students from the Physics Department worked at the Goddard Center on several leading instrumentation projects. "We can offer graduate students a broad range of high-quality PhD research projects, which allows [us] to attract more high-quality students . . . and broaden and deepen collaborations with NASA," said van der Horst.

FROZEN COMMONS: CLIMATE CHANGE IMPACT ON ARCTIC POPULATIONS

GEOGRAPHY RESEARCH PROFESSOR **Vera Kuklina** will lead a team of researchers from across the United States in a National Science Foundation funded investigation of the shifting Arctic landscape's impact on Indigenous peoples and local communities.

The five-year, $3 million collaborative project, titled "Frozen Commons: Change, Resilience and Sustainability in the Arctic," will examine the effects of changing ice, snow and permafrost on the infrastructure and daily lives of Arctic populations. It will combine research data from climate scientists with observations from people living and working in the region, such as hunters, fishermen and Indigenous artists. Researchers hope to collect and analyze a range of perspectives on the cultural, social and economic implications of climate-induced environmental change in the Arctic.

"Ice melting, permafrost degradation, changing snow seasons—these processes affect the world," said Kuklina, who was raised among a nomadic, Mongolian-speaking minority in Russia. "These local and Indigenous communities have long-term observations that are usually underestimated but are relevant on a local and a global scale."

"Frozen commons" are defined as ice, snow and permafrost landscapes collectively managed by the region's Indigenous peoples, local communities, governments and non-local stakeholders. Melting ice and snow and thawing permafrost are all evidence of amplified Arctic climate change. The project will examine the sustainability of frozen commons under changing environmental conditions to assess the resilience of Arctic communities, which are highly dependent on cold and frozen conditions.

A road in the Irkutsk region of Russia built on thawing permafrost. (Photo: Stanislav Podusenko)

Lipreading Bridges Conversation Gap

Lipreading difficulties include distinguishing the "uh'"sound (left) from the "ay" sound (right).

FOR AMERICAN ADULTS WHO LIVE with hearing loss, navigating daily life can be an exhausting gauntlet of lost conversations. Older adults, in particular, often find noisy situations overwhelming and may opt to avoid gatherings they once enjoyed, risking isolation and even cognitive decline.

Researchers from the Department of Speech, Language and Hearing Science recognize the challenge and are working to introduce innovative new strategies along with their own state-of-the-art training software to help bridge the conversation gap. Their approach emphasizes the relationship between seeing and hearing in communication, drawing in part from cognitive neuroscience studies led by Professors **Lynne Bernstein** and **Edward Auer** that track visual speech as a complex process across the visual, auditory and language processing areas of the brain. "It is now acknowledged more widely that there are two [speech processing] pathways—one through the ears and one through the eyes," Bernstein said.

Observing a person's face can offer an array of communication information from social cues to speech signals. But while good listeners may be adept at making eye contact, effective lipreading requires being carefully attuned to the lower part of the face, a tactic that improves with effective lipreading training.

"We shouldn't expect anyone to improve their lipreading overnight," Bernstein said. "But our studies show that, with good training, people keep improving. We've never seen anyone top out."

MEAT EATING'S ROLE IN HUMAN EVOLUTION

QUINTESSENTIAL HUMAN TRAITS such as large brains first appeared in *Homo erectus* nearly 2 million years ago. This evolutionary transition toward human-like traits is often linked to a major dietary shift involving greater meat consumption. However, a new study led by Assistant Professor of Anthropology **W. Andrew Barr** calls into question the primacy of meat eating in early human evolution.

While the archaeological evidence for meat eating increases dramatically after the appearance of *H. erectus*, Barr argues this increase can largely be explained by greater research attention on this time period—effectively skewing the evidence in favor of the "meat made us human" hypothesis.

"Generations of paleoanthropologists have gone to famously well-preserved sites in places like Olduvai Gorge looking for—and finding—breathtaking direct evidence of early humans eating meat, furthering this viewpoint that there was an explosion of meat eating after two million years ago," noted Barr. "However, when you quantitatively synthesize the data from numerous sites across eastern Africa to test this hypothesis, as we did here, that 'meat made us human' evolutionary narrative starts to unravel."

The researchers found that while the raw abundance of modified bones and the number of zooarchaeological sites and levels all demonstrably increased after the appearance of *H. erectus*, the increases were mirrored by a corresponding rise in sampling intensity, suggesting that intensive sampling—rather than changes in human behavior—could be the cause.

Homo erectus in East Africa surrounded by fauna. (Credit: Mauricio Anton)

Front row (from left): Axelle Kamanzi Shimwa, Claire Charpentier, Stephanie Gomez, Kristen Tuosto; back row (from left): Provost Christopher Alan Bracey, Anthony J. (AJ) Cade II and CCAS Dean Paul Wahlbeck

DOCTORAL STUDENTS HONORED FOR RESEARCH AND ADVOCACY

FIVE COLUMBIAN COLLEGE PhD candidates joined a network of preeminent scholars from across the country when they were inducted this year into the Edward Alexander Bouchet Graduate Honor Society. Named for the first African American doctoral recipient in the United States and chartered jointly by Yale and Howard universities in 2005, the society celebrates diversity and excellence in doctoral education.

The new inductees are **Anthony J. (AJ) Cade II** (History), who is chronicling the overlooked legacy of the Louisiana Native Guards, the first Union Army regiment during the Civil War with Black officers leading Black soldiers into battle; **Claire M. Charpentier** (Biomedical Sciences), who is focused on understanding the genetics behind defects of the neural tube, which contributes to the formation of the brain and spinal cord; **Stephanie Gomez** (Microbiology and Immunology), who is examining novel epigenetic and immune therapy combinations for treating ovarian cancer; **Axelle Kamanzi Shimwa** (Human Paleobiology), who is studying how ecological factors influence the feeding behavior of endangered Virunga mountain gorillas; and **Kristen Tuosto** (Human Paleobiology), who is exploring how early-life environmental adversity—like droughts and food shortages—influences bone growth among wild savannah baboons in Southern Kenya.

UNIONIZED NURSING HOMES EXPERIENCED LOWER COVID RATES

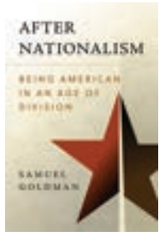
NURSING HOMES WERE AT THE epicenter of the COVID-19 pandemic but new research suggests a nuanced difference among them: According to a study led by Assistant Professor of Political Science **Adam Dean** and published in the journal *Health Affairs*, residents and workers at unionized nursing homes experienced lower mortality and infection rates than their non-unionized counterparts.

"By protecting workers during the pandemic, labor unions are limiting the spread of COVID-19 inside nursing homes and have likely saved the lives of thousands of residents," said Dean. The study indicates higher union membership across essential industries could have reduced COVID-19 transmission and prevented many deaths.

Dean and his research team examined more than 14,000 unionized and non-unionized nursing homes throughout the continental United States from June 2020 to March 2021, utilizing proprietary data on union membership from the Service Employees International Union. Researchers discovered that workers at unionized nursing homes were 6.8 percent less likely to contract COVID-19 than workers at non-unionized facilities. The study also found that unionized nursing homes experienced 10.8 percent lower resident death rates.

Unionized nursing homes and other essential workplaces are more likely to provide effective personal protective equipment and more paid sick leave. The research team estimates that if all U.S. nursing homes were unionized, as many as 8,000 resident deaths and 25,000 employee infections could have been prevented during the 10-month study period.

A Sampling of Books by Faculty



AFTER NATIONALISM: BEING AMERICAN IN AN AGE OF DIVISION

In the midst of America's fractured political landscape, many experts maintain that nationalism is making a comeback. But in *After Nationalism*, Associate Professor of Political Science **Samuel Goldman** counters that nationalism isn't resurgent—it has always been here. Goldman, the executive director of the GW John L. Loeb, Jr. Institute for Religious Freedom, argues that tensions surrounding national identity are a central part of the American experience. In a diverse society with deep divides, nationalism is unavoidable, he says. Instead of nationalism, Goldman advocates embracing differences as the driving characteristic of American society and bolstering grassroots level political projects.

REPRODUCTION RECONCEIVED: FAMILY MAKING AND THE LIMITS OF CHOICE AFTER ROE V. WADE

Roe v. Wade, the now overturned 1973 Supreme Court decision legalizing abortions, redefined Americans' concept of choice. But **Sara Matthiesen**, assistant professor of history and women's gender and sexuality studies, emphasizes that *Roe* also transformed another choice: having children. In *Reproduction Reconceived*, she argues that *Roe's* "other" choice—child-rearing—has become as imperiled as the right to abortion. With the fraying social safety net and worsening inequalities, Matthiesen reveals how vulnerable populations such as the incarcerated, communities of color and working class and poor parents are finding that "family-making" is less of a viable choice than ever.

O BEAUTIFUL: A NOVEL

In her latest novel, Professor of English **Jung Yun** provides an unflinching portrayal of a woman coming to terms with the ghosts of her past and the tortured realities of a deeply divided America. Yun delves into discussions of racism, power, family and belonging while presenting an immersive portrait of a community rife with tensions and competing interests. Her protagonist, journalist Elinor Hanson, must reconcile her anger with her love of a beautiful, but troubled land. *The Washington Post* called *O Beautiful* "a quiet and dangerous story and an insightful meditation on how to make our lives here, amid the beauty and horror of our country."

DIVISIONS: A NEW HISTORY OF RACISM AND RESISTANCE IN AMERICA'S WORLD WAR II MILITARY

For years, historians have celebrated America's World War II military for unifying a fractious national community. But in *Divisions*, **Thomas A. Guglielmo**, chair of the Department of American Studies, tells a different story. As the first comprehensive look at racism within the era's military, Guglielmo draws on decades of extensive research and storytelling to narrate the complex battlefield divisions between African Americans, whites, Asian Americans, Latinos and Native Americans. He reshapes our understanding of the war with a dramatic examination of racism and resistance in the military from enlisted personnel in the field to commanders in headquarters and civilian leaders in Washington.

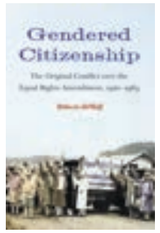
JUDAISM AND VIOLENCE: A HISTORICAL ANALYSIS WITH INSIGHTS FROM SOCIAL PSYCHOLOGY

An expert on understanding peace and violence in religions such as Judaism, Christianity and Islam, Professor of Religion **Robert Eisen** draws on insights from social psychology in an attempt to explain Jewish violence against non-Jews. His historical analysis—focusing on the Hebrew Bible, rabbinic Judaism, medieval and early modern Judaism and modern Zionism—demonstrates the potential within Judaism to incite violence. He gives the modern conception of Zionism special attention because of its relevance to the current Middle East conflict.

CHAINED TO HISTORY: SLAVERY AND US RELATIONS TO 1865

From the revolutionary era to the Civil War, slavery has been at the center of American politics and foreign relations. In *Chained to History*, Professor of History **Steven Brady** tracks the coexistence of slavery and American freedom since the nation's founding. He examines the role of slavery in shaping the American identity and securing the United States' position in the global community while attempting to manage the actuality of human servitude in a country dedicated to human freedom. Brady shows how slavery was interwoven with America's foreign relations and affected policy controversies ranging from trade to extradition treaties to military alliances.

A Sampling of Books by Alumni



GENDERED CITIZENSHIP: THE ORIGINAL CONFLICT OVER THE EQUAL RIGHTS AMENDMENT

From 1920 to 1963, Americans nationwide fought to provide equal legal protection across genders and prohibit discrimination on the basis of sex through the Equal Rights Amendment (ERA). In a comprehensive and full-length history of the struggle over the ERA, **Rebecca DeWolf**, BA '04, MA '08, (History) uses primary source material to recount how the ERA conflict ultimately became the defining narrative for the changing nature of American citizenship in the era. She focuses not only on the familiar theme of why the ERA failed to gain enactment, but on how the debates transcended traditional liberal versus conservative disputes in early- to mid-20th-century America.

DRESSING UP: THE WOMEN WHO INFLUENCED FRENCH FASHION

Known for its allure and elegance, French fashion of the late 19th century arose with great fervor. In *Dressing Up*, **Elizabeth Block**, BA '94, (English, Art History) lavishly illustrates the influence of wealthy American women on the rise of French couture. She details American women's role as high-value customers who bolstered the French fashion industry and served as a medium for the era's transnational fashion system. Using vibrant images, fashion plates and portraits, she reveals the true power of American women in French fashion.

LEARNING TO PRAY: A BOOK OF LONGING

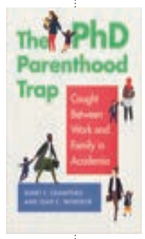
In his latest volume of poems and aphorisms, **Yahia Lababidi**, BA '96, (English)—who President Obama's inaugural poet, Richard Blanco, called a "modern-day master"—takes readers on a spiritual and undogmatic journey. Writing in lean, luminescent verse, critics say Lababidi creates a portal into quiet worlds, guiding us to be our best selves and reminding us of the richness of the stilled and savored. His poems are designed to help the reader summon courage and beauty in difficult times.

CRISIS AVERTED: PR STRATEGIES TO PROTECT YOUR REPUTATION AND THE BOTTOM LINE

How should a business respond to a crisis? In *Crisis Averted*, **Evan Nierman**, BA '00, (Communications) explores the unpredictable world of crisis management and the decisions that make or break a company's future. His no-nonsense playbook is designed to help businesses spot looming threats and employ the best public relations strategies for safeguarding their single most important asset: their reputations. Nierman's management methods aim to empower organizations in all industries with the guidance necessary to face PR challenges with confidence and competence.

HISTORY DISRUPTED: HOW SOCIAL MEDIA AND THE WORLD WIDE WEB HAVE CHANGED THE PAST

Can the Internet change the past? Social media, Wikipedia, mobile networks and the viral and visual nature of the Web have inundated the public sphere with historical misinformation, altering what we know about our history and "History" as a discipline. In *History Disrupted*, **Jason Steinhauer**, BA '02, (American Studies) provides a comprehensive account of the Internet's capacity to shape our understanding of the past. He explores the intersection between history and today's debates about technology, media and its impact on politics and society.



THE PhD PARENTHOOD TRAP: CAUGHT BETWEEN WORK AND FAMILY IN ACADEMIA

For many parents in the world of higher education, the idea of work-life balance is essentially a myth. **Kerry Crawford**, PhD '14, (Political Science) explores the realities of raising children while forging a career in academia. Using empirical evidence, she chronicles the sudden disruptions, daily constraints, sleep deprivation and lack of support systems—along with cases of bias and harassment related to pregnancy or parental leave—that threaten career advancement on the tenure track. Crawford also provides advice for peers and recommends best practices and policy changes to dismantle the barriers between parenthood and academia.

FRANKIE WELCH'S AMERICANA: FASHION, SCARVES, AND POLITICS

Artist Frankie Welch combined a creative mind and an entrepreneurial spirit to establish herself as a leading American textile, accessories and fashion designer in a career that spanned four decades, from the 1960s through the 1990s. **Ashley Callahan**, MA '98, (History of Decorative Arts) chronicles Welch's life from her upbringings in Rome, Georgia, to her political and social influence in the Washington, D.C. area. Callahan details artwork like her custom scarves and highlights her role as a medium for understanding both American politics and women's fashion.

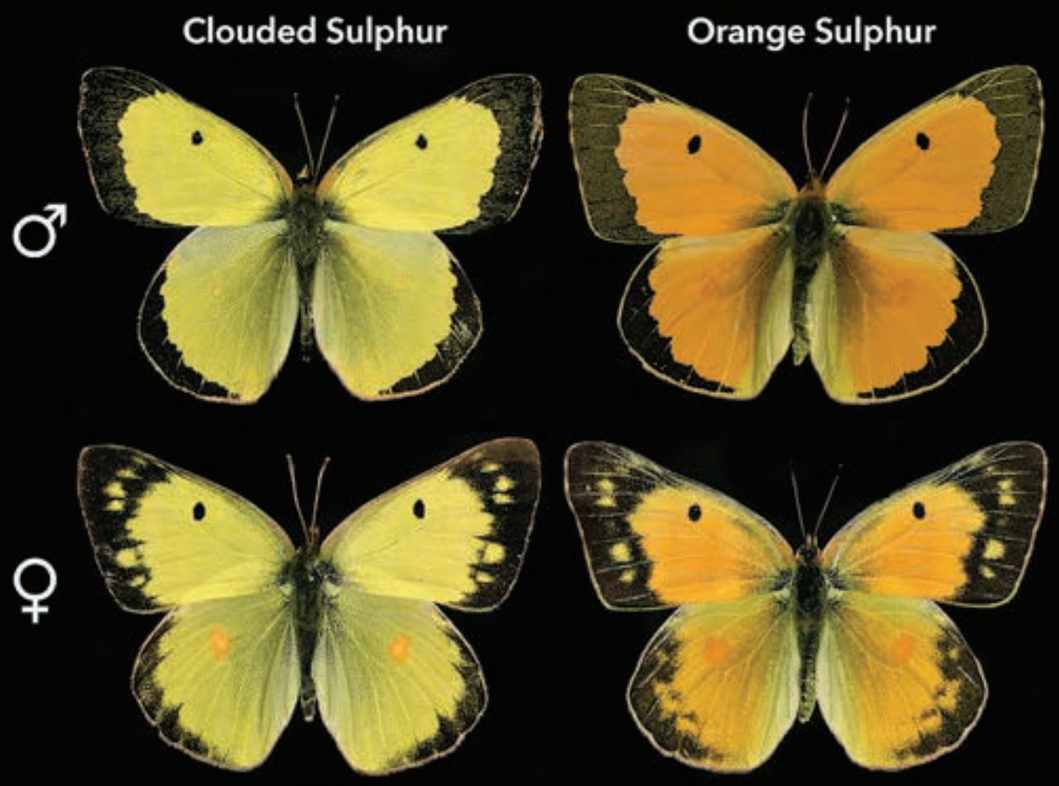
The Iridescent Splendor of Butterfly Wings

Biology's Arnaud Martin revealed how switching off a gene can switch on ultraviolet in butterfly wings—and open a window to evolution in action.

FROM THE BRILLIANT ORANGE-RED WINGS OF THE MONARCH TO the owl-like eyespots of the Caligo, butterflies are admired by nature lovers as much for their diversity as their ethereal beauty.

But their array of palettes signals more than just aesthetic grace. The distinctions between the flamboyantly bright Swallowtails and the rust-colored Metalmarks have evolutionary consequences—and can mark the difference between, for example, finding a mate or escaping a predator. As Assistant Professor of Biology **Arnaud Martin** explained, a single gene can paint vividly contrasting species pictures.

Orange sulfur butterflies with UV-photography overlays reveal bright iridescence in ultraviolet colors. (Credit: Vincent Ficarrotta)



The male orange sulphur butterfly (top right) is the only one to display UV iridescence in nature. The female (top left) and both the female and male clouded sulphur butterfly (bottom left and right) do not. (Credit: Vincent Ficarrotta and Arnaud Martin)

"As evolutionary biologists, we're interested in identifying and understanding the genes that drive physical differences between species," noted Martin, who led a new study identifying a gene that determines whether ultraviolet iridescence shows up in the wings of butterflies—and offers clues into the evolutionary process by which species become distinct from one another. The research, published in *Proceedings of the National Academy of Sciences*, demonstrated how removing the gene in butterflies whose wings lack UV coloration leads to bright patches of UV iridescence in their wings.

"We showed how a single gene determines whether ultraviolet coloration is switched on or off in two separate butterfly species. Because the geographic ranges of these two species overlap today, that visual distinction is all the more important when it comes time to finding a mate," Martin said.

Visual cues such as patterns and coloration, including UV iridescence, help animals recognize their own species and locate potential mates. Mating with the wrong species can be evolutionarily costly and lead to infertile offspring. Martin and his research team looked at two species of North American butterflies: the orange sulphur (*Colias eurytheme*) and the clouded sulphur (*Colias philodice*). The wings of the male orange sulphur butterfly reflect UV light, which is invisible to the naked eye. Conversely, the wings of the female orange sulphur butterfly and the male and female clouded sulphur butterflies do not display UV coloration. The male orange sulphur butterfly's UV-iridescent wings help females of the same species recognize the males as their own.

The two species were ecologically isolated from one another prior to the modern era and developed distinct traits. But, as farmers in the United States intensified their cultivation of alfalfa—a favorite food source for sulphur butterflies—the two species swarmed alfalfa fields, increasing the chances that some would mate with one another and swap genes. The orange sulphur butterfly in particular, once restricted to the western half of North America, has now colonized the eastern part of the continent and merged with populations of the clouded sulphur species.

In the lab, the researchers scanned the genomes of orange sulphurs and clouded sulphurs from an eastern population to see which genes merged and which stayed distinct during the past century of hybridization. Their analysis showed that the two species had clearly swapped and shared genes, and their respective chromosomes looked very similar. The one exception, however, was the sex chromosome, which remained distinct between the two species. This suggested that the sex chromosome hosts key genes that keep the two species somewhat distinct, including the UV coloration.

'Bric-a-Brac'

The team narrowed down the part of the sex chromosome that causes UV iridescence and identified a gene—called the "bric-a-brac" gene—that, when expressed in cells, gives rise to the individual microscopic scales comprising a butterfly's wings. The researchers, however, noticed that a few cells did not express the gene. These turned out to be the cells that give rise to the UV-iridescent scales in wings.

"It was a bit like solving a giant Sudoku puzzle," said **Joe Hanly**, a postdoctoral scientist in Martin's lab and a co-first author of the paper. "When we looked at the result, it was thrilling. Right in front of our eyes, we found a gene that was making these species look different from each other."

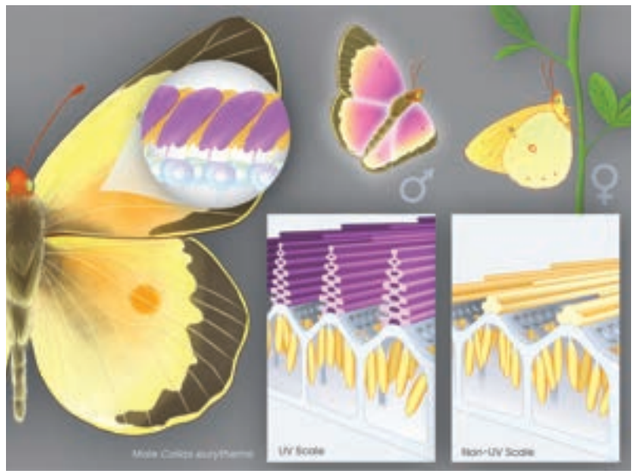
Using a high-powered electron microscope, the team could also see how the presence or absence of the gene shaped the nanostructure of the scales and, they suspected, their ability to amplify UV light. Using the genome editing technique CRISPR, they switched off the gene in the non-iridescent butterflies. Not only did the nanoscale structure of the scales change, but so did the butterflies' outward appearance.

"Large portions of the butterflies' bodies were covered in UV-reflecting scales, including the clouded sulphur butterflies," said **Vincent Ficarrotta**, a doctoral student in Martin's lab and also a co-first author of the paper. "Scales that normally would only be yellow or orange now reflected UV light."

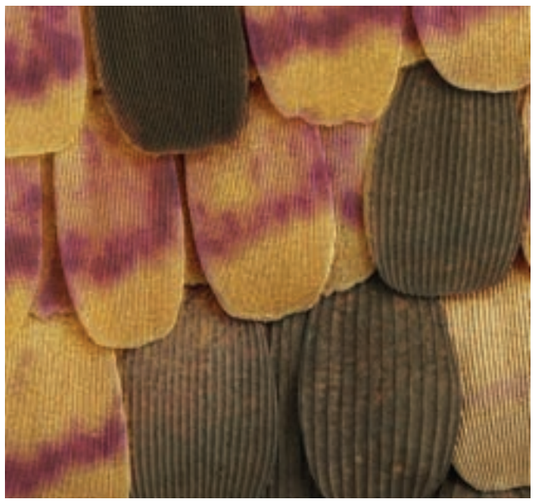
Martin said other questions still need to be answered, such as whether the sex chromosomes host other genes involved in mate choice, and the number and exact nature of the mutations in the bric-a-brac gene that underlie the species' differences. He noted, however, that studying these two butterfly species offered a one-of-a-kind opportunity to see evolution in action.

"Speciation studies often compare species that are extremely early in the separation process or that have been separated so long that they have accumulated too many differences for a meaningful genomic analysis," Martin said. "Here we have a pair of species that are not too identical, not too distinct, where the hybridization has been intense but is less than a century old. It's a goldilocks system for studying speciation."

> "When we looked at the result, it was thrilling. Right in front of our eyes, we found a gene that was making these species look different from each other."
>
> —JOE HANLY, POSTDOCTORAL SCIENTIST



UV coloration is used as a male courtship signal in orange sulphur butterflies (magenta). (Illustration: Julie Johnson/Life Science Studios)



A microscopic view of a sulphur butterfly wing, featuring UV iridescence (purple) on scales induced by removal of the bric-a-brac gene using CRISPR. (Credit: Arnaud Martin and Anna Ren)

For CCAS Community, Ukraine Connections Loom Large

With Ukraine under siege, Columbian College faculty, students and alumni worry about family, friends and research colleagues while spearheading humanitarian aid efforts.

A monument in Odessa memorializing the estimated 1.5 million Ukrainian Jews killed in the Holocaust. (Photo courtesy Michelle Kelso)

WHEN **IEVGEN LAVRUKHIN**, MPHIL '18, PhD '20, THINKS ABOUT his native Ukraine, he fondly remembers his years studying physics at Karazin Kharkiv National University. That is where he met his wife, fellow physics student **Oksana Chubenko**, PhD '19, and where he spent his days strolling through parks after class, joining fellow students at microbreweries and restaurants in Kharkiv and attending science lectures at the dozens of universities and schools throughout the city.

"It's a very big, very vibrant, very nice city," said Lavrukhin, now a postdoctoral fellow at the University of Michigan. "It was a super awesome place to be a student."

But the images Lavrukhin and his wife now see of Kharkiv no longer resemble the bustling student hub where they fell in love. Since Russia launched its siege of Ukraine earlier this year, the nation's second largest city has been bombarded by missiles and artillery strikes. Many of the nearly 3 million people in the eastern province have fled or scattered to shelters. The city center is all but obliterated, and the university buildings where Lavrukhin and Chubenko studied are largely ruins. One friend posted a social media photo of Lavrukhin's old physics lab with the roof caved in.

"The campus basically doesn't exist anymore," Lavrukhin said.

While family members were trapped in the line of Russian fire, Lavrukhin and Chubenko were among the many members of the Columbian College community who worried about loved ones in Ukraine while they supported humanitarian aid efforts at home and abroad.

Physics Professor **Andrei Afanasev**, who grew up in Kharkiv, anxiously awaited word from his mother and sister during the early weeks of the war as they huddled in a city bomb shelter. "They, unfortunately, became experts on the sound of bombs dropping close by," he said. They escaped across the western border and found safety in Lithuania.

Assistant Professor of Sociology and International Affairs **Michelle Kelso**, who often visited Ukraine while researching Holocaust remembrances, traveled to neighboring Romania over spring break to join relief efforts. She helped reunite friends and colleagues among the more than 4 million refugees fleeing Ukraine. "Seeing so many people—so many friends—under duress, our hearts were breaking," she said. "We had to do something."

> "It's hard to see the country where you grew up on fire. I believe very strongly that Ukraine will survive this. But there are so many unknowns right now."
>
> — ERIN SEROKA, PHYSICS PhD STUDENT

Ievgen Lavrukhin's physics lab at Karazin Kharkiv National University after Russian attacks (Photo courtesy Ievgen Lavrukhin)

Michelle Kelso (second from left) traveled to Romania in March to volunteer alongside Romanian and Ukrainian aid workers. (Photo courtesy Michelle Kelso)

And physics PhD student **Erin Seroka**, who lived with her family in Kyiv from the ages of 6 to 15 and attended school just miles from the scenes of atrocities in Bucha, spearheaded fundraising campaigns at GW for the beleaguered region. With the help of fellow GW students and faculty members, Seroka partnered with nonprofits to bring first aid, food, medication, transportation and basic needs to the Ukrainian people.

"I am grateful to see how the international community supported Ukraine and I wanted to do my part," Seroka said.

Heartbreak and Hope

Like many in the CCAS community, Afanasev's connections to Ukraine straddle both personal and professional lines. He has long collaborated with colleagues in Ukraine, including a 2019 U.S. Department of Energy initiative to develop a joint nuclear education graduate curriculum. The project stalled, first because of the COVID-19 pandemic and again because of the war.

Afanasev still holds out hope of hosting Ukrainian students and researchers at GW in the future. Indeed, even as rumors of a Russian invasion swirled earlier this year, Afanasev planned to attend a summer conference in Kyiv. "I was devastated, shocked" by the invasion, he said. "I truly didn't believe it would happen—until it did." He heard dire news from his colleagues in Kharkiv, including one fellow scholar who evacuated his apartment after an unexploded missile lodged in his ceiling.

Kelso, the director of the CCAS Human Services & Social Justice program, began her research trips to Ukraine in 2018 along with her husband, who is from Romania. She was instantly captivated by Odessa, the southern city along the Black Sea that she called a "mecca" of culture, art and history. "I fell in love with Odessa, I fell in love with Ukraine," she said. "The energy was so exciting that I immediately wanted to buy an apartment there for our retirement years."

Shortly after the war broke out, Kelso launched a Facebook campaign which raised more than $10,000 in donations, including funds for a hospital in Odessa. She and her husband also traveled to Romania, where they housed eight refugee families in Bucharest apartments and office spaces that they own along with her husband's family. The families included a mother and two young daughters who were forced to quickly flee heavy fighting from near the Sumy region.

"They literally had no time to pack. They just took whatever they could grab and go," Kelso said. She took the family shopping for clothes with donated funds. But the daughters, both aspiring musicians, left behind their prized possessions—a cello and a traditional stringed instrument called a bandura. A Romanian performing arts academy enrolled the girls in an afterschool program and lent the 13-year-old daughter a cello. "They haven't found a bandura yet, but they're trying to interest [the 9-year-old] girl in the violin," Kelso said. "It really does take a village."

Chubenko's family were relatively secure with food and electricity in the eastern Sumy region—although Lavrukhin said the thud of artillery fire was ever-present. Lavrukhin's mother and brother were evacuated from Slovyansk in the Donetsk region, just days before Russian rockets struck a crowded train station nearby and killed at least 50 people. His former classmates in Kharkiv mostly fled the city's high-rise buildings for underground shelters. "No one sleeps at home because it's unsafe," Lavrukhin said. "They come out of the shelters for cooking and to pick up things they need—then go right back underground again."

Seroka's friends largely evacuated the country, including a childhood babysitter who escaped with her seven children through Slovakia to a two-room apartment in the Czech Republic. Her husband stayed behind in Ukraine where he continued to strap on a bulletproof vest and drive through battle sites, transporting aid supplies east and returning to the western border with refugees.

"It's hard to see the country where you grew up on fire," Seroka said. "I believe very strongly that Ukraine will survive this. But there are so many unknowns right now. No one knows what Ukraine will look like after this war."

Graduate student and artist Wes Holloway (Photo: Mark McCray)

Body of Work: Student Artist Deconstructs Stereotypes

After being partially paralyzed in an accident, Wes Holloway focused his work on body images that challenge society's expectations.

ARTIST **WES HOLLOWAY** HAS a fascination with the physical. His art can depict grappling wrestlers, embracing lovers and bodies entangled in scenes of pleasure and pain.

Body images and the ways society responds to the human form is a theme that's defined Holloway's work—and his life. In 2003, as a freshman at the University of Texas, Holloway's split-second decision to dive unknowingly into shallow water at a party had tragic consequences. He suffered a traumatic spinal cord injury that left him paralyzed from the chest down.

ART BY WES HOLLOWAY:

"Desiderium" Oil on vellum, 42in x 108in 2022

In many ways, the accident was a turning point for Holloway, a graduate student in Columbian College's Social Practice Program, which connects art with policy and creative action through courses at the Corcoran School of the Arts & Design and the Trachtenberg School of Public Policy and Public Administration. He committed himself to pursuing his dreams of becoming a professional artist, while focusing his craft on deconstructing stereotypes of masculinity, sexuality and body ideals.

"As a man with a flawed body myself, I ask, 'What is perfection, and what is truly beautiful?'" he said. "For me, the beauty [of art] is presenting images that reflect the desire to want my body to do things—but also the acceptance that it doesn't do those things anymore."

A recipient of the Morris Louis Art Student Assistant Fund and the Martha Von Hirsh Memorial Scholarship, Holloway is grateful for the doors that opened to enable him to follow his interests in art and activism. Through programs like "Open Doors: The Centuries Initiative for Scholarships & Fellowships," GW is expanding opportunities for the next generation of leaders like Holloway by charting a course to increase access to the transformative power of a GW degree.

"Attending GW puts me in a place where...I am able to effectively tie my artwork into the issues, with the hope that I will create meaningful change in viewpoints and legislation," he said. "Complex problems demand creative strategies. These scholarships have given me the ability to uplift my voice."

Holloway has exhibited his work in galleries from Texas to Nebraska to New York City, and taught art classes to underserved communities and others suffering from spinal cord injuries. He is a committed advocate for causes such as gay rights and accessibility issues, and sees his life and work as a conversation that helps him share his story and empathize with others.

"I can speak to people though art in ways that I can't always do with words," he said. "Art has helped open my eyes to what other people have lived through and the universality of what we all go through."

> "Attending GW puts me in a place ... where I am able to effectively tie my artwork into the issues, with the hope that I will create meaningful change in viewpoints and legislation."
>
> —WES HOLLOWAY, GRADUATE STUDENT, SOCIAL PRACTICE PROGRAM

Growing up outside of Houston, Holloway always enjoyed drawing but was initially encouraged by his parents to seek a career in science. "They were not in favor of me going to school for art," he laughed. "They told me I could study science or engineering or architecture—just not art."

But after his accident, Holloway used art to help make sense of his new realities. Even as doctors explained the extent of his injuries—he had broken his C5-C6 vertebrae and would never regain use of his legs, abdomen or hands—he began experimenting with new ways of holding brushes and pencils in his wrists, while sketching images of bodies in motion. "At 18, I went from being an able-bodied young man to not," he said. "It was quite the life shift and art has been my way of processing it."

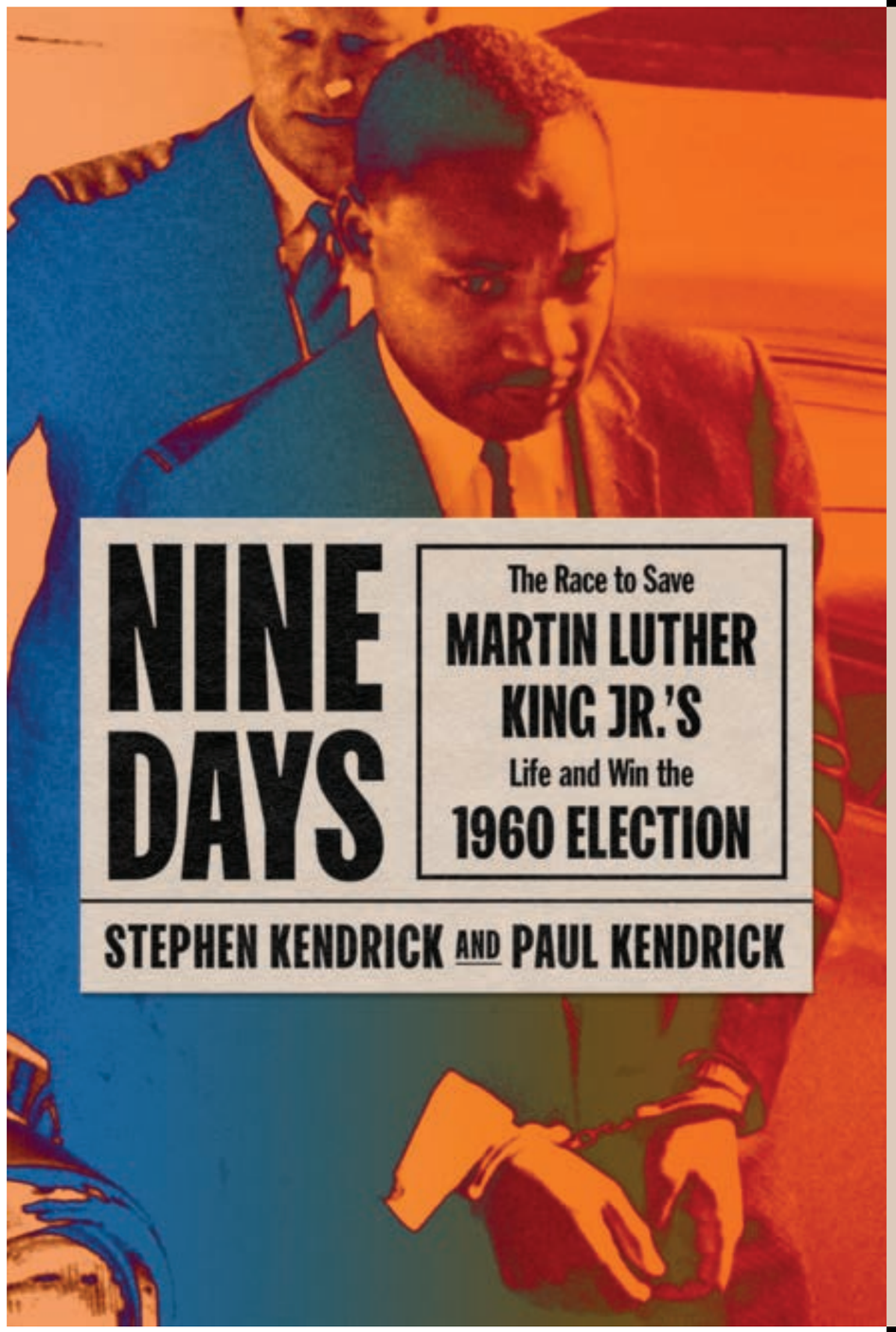
When he returned to school, Holloway was determined to dedicate himself to his art. "I told my parents that life's too short and I'm going to follow this passion." He originally considered becoming an art teacher, but his professors and mentors urged him to continue working in the studio. While still an undergraduate, Holloway won a spot at a Kennedy Center exhibition for young artists with disabilities. Even as he continued dealing with his limitations—his lack of hand functions prevents him from stretching his own canvases—he refined his artistic style. While painting remains his preferred medium, he's experimented with collages, composite layers and superimposing images from popular media to challenge societal body representations.

"The Sweet Taste of Success" Oil on vellum, 30in x 42in 2022

"Only For Your Eyes" Oil on vellum, 30in x 42in 2022

"I consider [Holloway's] work an intervention in the cultural blind spot that exists at the intersection of queer culture and the disabled body, reimagining those identities and proposing other worlds," said Assistant Professor of Sculpture and Spatial Practices **Maria del Carmen Montoya**. She applauded Holloway for "deconstructing notions of perfection and prying open a space of possibility for the differently-abled body."

Through nonprofits like the United Spinal Association of Houston and Art Reach in Texas, Holloway has led studio art programs for other people with disabilities as well as communities like senior citizens, children in foster care and victims of sex trafficking. "I think of art as bridge building," he said. "It can help us make common connections and gain a little bit of understanding of different people's pasts and perspectives."



Saving MLK: Alumnus Author Recounts King's Days of Peril

In 1960, Martin Luther King, Jr., faced a harrowing nine days in a dangerous prison. In his book, Paul Kendrick, BA '05, MPA '07, tells how King's ordeal changed politics as we know it.

IN OCTOBER 1960, A 31-YEAR-OLD MARTIN LUTHER KING, JR., NOT YET the civil rights icon who would inspire a nation, agreed to join a student sit-in at an Atlanta department store. King, who had never yet spent a night in jail, knew he faced a possible arrest. But the reality was even more harrowing. While the students were taken to local jails, King was transferred to a dangerous Georgia state prison where Black inmates endured violence by white guards.

A 31-year-old King (left) was persuaded by Atlanta student activists to join their 1960 sit-in to propel civil rights to the forefront of the presidential campaign. (Photo courtesy Library of Congress)

Martin Luther King, Jr., reunited with his family upon his release from Reidsville State Prison after nine days behind bars. (Photo courtesy Library of Congress)

Just weeks before the presidential election, King's ordeal was the ultimate "October surprise" for the two candidates, John Kennedy and Richard Nixon. In a razor-close contest, one in which Black voters seemed poised to decide the outcome, both campaigns debated how to respond—as King's life hung in the balance.

The little-known historical drama features student activism, political maneuvering and moral courage, while paralleling modern-day events. And it's a story that **Paul Kendrick**, BA '05, MPA '07, was seemingly born to tell. A writer, speaker and political leader who served in the Obama White House, Kendrick chronicled the episode in his book *Nine Days: The Race to Save Martin Luther King's Life and Win the 1960 Election*, co-authored with his father Stephen.

"It's a story that reminds us how government, politics and elections can create something good," Kendrick said. "It shows we can help America live up to its ideals if we work across our differences."

Uniting people has been a lifelong theme for Kendrick, both in his career and at GW. As an undergraduate student majoring in American studies, he helped found The George Washington Williams House of African American History and Culture, a student hub for promoting African American history, culture and unity. He received the university's Martin Luther King Award for service to the community and served as a Presidential Administrative Fellow.

In addition to working for the Obama White House, Kendrick has spearheaded numerous campaigns and grassroots movements to promote leadership and education. He is currently the executive director of Rust Belt Rising, a nonprofit that trains Midwest political leaders to connect with working families. *Nine Days*, which was featured in the *New York Times Book Review* and *Oprah Magazine* and was recommended by President Obama, is his third book with his father. All three tell stories of interracial collaborations that changed the course of history.

"I've always been passionate about advancing equality, fairness and opportunity in America," Kendrick said. "For me, part of writing history is finding stories that inspire us to see our own times in ways that can boldly affect change."

> "For me, part of writing history is finding stories that inspire us to see our own times in ways that can boldly affect change."
>
> —PAUL KENDRICK, BA '05, MPA '07

An Origin Story

In one sense, *Nine Days* is an "origin story," Kendrick said, of a young King defining his civil rights strategy. Following the success of his Montgomery bus boycott, King was persuaded by the Atlanta student activists to join their sit-in and propel civil rights to the forefront of the 1960 campaign. When King was sent to Reidsville State Prison, under the pretext of a minor traffic ticket, the candidates were pressured to speak out.

At the time, the Black vote appeared evenly split and many were skeptical of Kennedy, a wealthy white Massachusetts senator who had virtually no positive record on civil rights. Indeed, noted Kendrick, King considered Nixon a friend. His own father supported him, along with prominent Black voices, including Jackie Robinson.

But a team of Kennedy advisors took swift action. Pioneering Black journalist Louis Martin, future Pennsylvania senator Harris Wofford and Peace Corps founder Sargent Shriver urged the candidate to respond—promptly and decisively. Kennedy called Coretta Scott King to express his sympathy and instructed his brother Robert Kennedy to contact the Georgia judge.

Meanwhile, the three advisors distributed millions of pamphlets to publicize Kennedy's role in King's release. Nixon, eyeing white Southern Democratic votes, remained silent.

In the historically close election, Democrats won a 7 percentage point shift in the Black vote from the previous presidential race. As many as nine states were decided by Black voters, sealing a coalition that remains today. "It was a pivotal point in giving us the politics we have today," Kendrick said.

For *Nine Days*, Kendrick relied on extensive archival research, newly unearthed documents and interviews with many of the drama's key players. Kendrick first met Wofford while studying at GW. He forged a friendship with the former senator that lasted until his death in 2019, even accompanying him to the King Memorial.

To Kendrick, the 1960 story has echoes of today's political landscape. He compared Kennedy's outreach to Coretta Scott King with President Biden's phone call to the family of Jacob Blake after his shooting in Kenosha, Wisconsin.

Likewise, he points to similarities between the Atlanta students and Black Lives Matter activists. Kendrick interviewed many of the veterans of the Atlanta student movement for the book and considers them the unsung heroes of the civil rights story. "Then—and today— there is a lot of focus on politicians. But ultimately we also have to think of the work that happens at the grassroots level," he said. "There are young activists out there like GW students who are still forcing our country to grapple with injustices and getting politicians to take a stand against them."

Around the World: TSPPPA's Adams Completes 'Mind-Expanding' Journey

Bill Adams traveled to every country in the world, from Saharan sands to the Antarctic ice of Neko Harbour in 2018. (Photos courtesy Bill Adams)

Globe-trotting professor and alumnus Bill Adams, PhD '77, joined an ultra-exclusive club as a visitor to all 196 nations on earth.

PROFESSOR OF PUBLIC POLICY AND PUBLIC ADMINISTRATION **BILL ADAMS**, PhD '77, is a world-traveler—in the most literal sense of the term. With a visit to the Central African Republic last year, Adams marked the completion of a multi-decade journey that is rarer than climbing Mount Everest: He visited every country in the world. From the vast Saharan nations to the European microstates, he ventured to 196 countries—all 193 members of the United Nations, plus three entities with majority UN diplomatic recognition: the Vatican, Palestine and Kosovo.

Along the way, Adams hiked through mountain gorilla ranges in the Congo and rode the Trans-Siberian Express across Russia. He witnessed a total solar eclipse over the Libyan desert, a lunar eclipse over the Ganges and a sunrise over Machu Picchu. He flew in a hot air balloon over the Buddhist temples of Myanmar, savored chocolate croissants on the Eiffel Tower and attended Carnival in Rio and May Day in Havana. As a Fulbright Scholar, he taught at the University of Malaya in Kuala Lumpur and lectured at universities in Prague, Berlin, Nablus, Cairo and Kolkata.

"Every stop is a mind-expanding, unforgettable education in history, sociology, religion and politics," said Adams, whose scholarly research spans the fields of public administration, public policy, political science, applied statistics, social psychology and mass communications.

While there's no official tally of how many people have reached the milestone, most travel sites estimate about 100 to 250. Adams' total of 196 countries doesn't include those with limited diplomatic recognition such as Taiwan and the Turkish Republic of Northern Cyprus—but he has visited those too.

Over time, Adams says he's learned to pack light ("The rest of the world has laundries," he said) and meticulously research everything from inexpensive airfares to destination weather patterns. Most importantly, at each stop he eagerly immersed himself in the local culture and sought out opportunities to engage with the locals, from dancing at a wedding in Cairo to volunteering at an orphanage in Vietnam.

Learning at least a few words in each local language helped too, he said. "You don't need to be fluent. But if you say 'salaam alaikum,' for example, it conveys respect and breaks the ice," he noted. "It is a consistent pleasure to see how friendly and warm most people are around the world."

Transformative Travel

Growing up in a small Texas town, Adams' youthful travel ambitions rarely exceeded driving through Dallas. "I was jealous of classmates who had made it to Louisiana," he said. He visited Mexico when he was 14, but his first major international trip was backpacking through Europe during the summer after graduating from Baylor University.

His wanderlust took off after a "transformative" 1981 trip to Egypt, he said. From the pyramids to the people who invited him into their homes, Adams was immediately enthralled. "Cairo was like another planet back then. Egyptians were super friendly, the food was delicious and the ancient sights were incredible." Even as Adams began to travel more, he returned to Egypt multiple times. "It was my first big travel addiction," he said.

On his way to Timbuktu in 2005, Adams stopped at the Great Mosque of Djenné in Mali.

Adams spent semester breaks exploring other favorite destinations like Thailand and Brazil while increasingly traveling to new countries. In 2007, while examining his pin-covered travel map, he realized that he had visited nearly every country in the Western Hemisphere. He flew to the remaining Caribbean islands during long winter weekends. Next, he checked off the remainder of Europe with trips to Belarus and microstates like Andorra and Liechtenstein. Soon, he was venturing into hard-to-reach nations like Libya and Iran.

By 2014, with 50 nations remaining, the world seemed within reach. With his goal in sight, Adams pushed himself out of his comfort zone into adventures in Afghanistan, Mauritania and North Korea.

In 2020, after participating in a trial for the Moderna vaccine, Adams decided to complete his quest. The three nations left on his list—Yemen, South Sudan and the Central African Republic—had few COVID-19 restrictions, but presented other dangers. All three were in the midst of prolonged civil wars. In his final stop, the Central African Republic, Adams landed in police custody for the first time in his world journey. While being held for taking a routine photo, Adams negotiated a $600 fine down to $20 before he was released. "In retrospect, I can laugh about it," he said, "but at the time, while trying to stay cool, you don't know for sure that this will end well." Throughout his journey, Adams said, his only other hazardous situation was a night in Somalia when a flat tire stranded him on a dark road near warlord territory. He eventually flagged down an NGO jeep.

Adams isn't done traveling either. While he may have seen every country, there are still sights he's eager to explore, including the Pantanal wetlands in Brazil, the Atacama desert in Chile and the Douro River Valley in Portugal.

And despite his best efforts, the Northern Lights have eluded him. He's made three attempts to view them—twice in Iceland and once in Canada. He plans to try again soon in Norway. "I'm determined to see those blasted Northern Lights," he laughed, "even if I have to move to Norway for the winter."

> "Every stop is a mind-expanding, unforgettable education in history, sociology, religion and politics."
>
> — BILL ADAMS, PhD '77, PROFESSOR OF PUBLIC POLICY AND PUBLIC ADMINISTRATION

Adams posed with Samburu warriors in northern Kenya in 2002.

The highest elevation Adams attained was in Nepal in 2001, with Mt. Everest behind him.

Adams at the Workers' Party Monument in Pyongyang, North Korea in 2014.

Tapping the Healing Power of ART for 50 YEARS

Alberta Gyimah-Boadi, MA '19

By Greg Varner

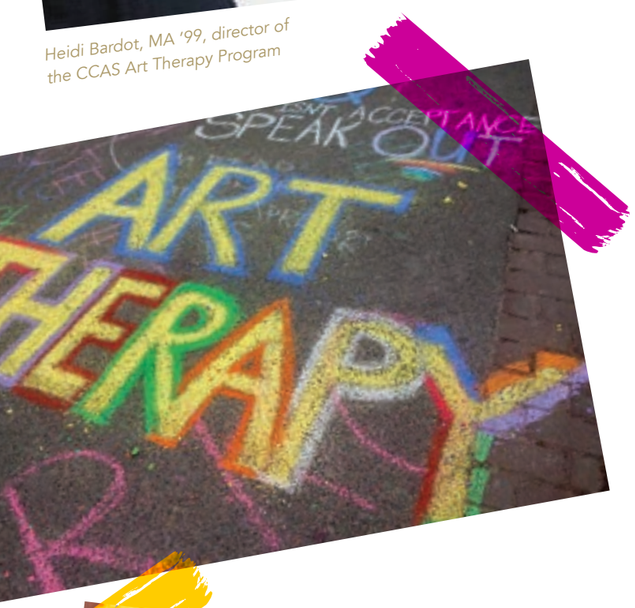
WHEN COLUMBIAN COLLEGE'S ART THERAPY Program first opened its doors in 1971, the fledgling field was little understood and barely registered a footnote in clinical circles.

The idea that people suffering from the effects of extreme trauma—from victims of brain injuries to military veterans coping with post-traumatic stress disorder—could receive treatment through art was met with skepticism in much of the health care world. In its first year, the CCAS program enrolled just 10 students and offered only four courses.

Fast forward 50 years and the field of art therapy is now viewed globally as a respected integrative mental health discipline and considered a valuable component for treating a variety of conditions that include career burnout, grief counseling and managing disease.

The CCAS Art Therapy Program, one of the oldest and most influential of its kind, celebrated a milestone half-century of using art concepts to aid in healing the mind and body.

Heidi Bardot, MA '99, director of the CCAS Art Therapy Program



Art Therapy "allows people to talk about something that is almost impossible to talk about."

—HEIDI BARDOT, DIRECTOR, CCAS ART THERAPY PROGRAM

"Often, people don't have the words to go with what they're feeling; however, they might be able to create an image or use shapes and colors to express it," said **Heidi Bardot**, MA '99, director of the CCAS program and an alumna. "It allows people to talk about something that is almost impossible to talk about."

One of the oldest and most influential of its kind, the CCAS Art Therapy Program recently celebrated its milestone half-century anniversary. Guided by faculty members who are credentialed art therapists with expertise in clinical practice and research, the program has grown to include hands-on trauma training, internships at more than 100 organizations and practical experience through an onsite community clinic. It has also fostered collaborations with neuroscience experts and forged international partnerships with health care workers worldwide.

Nearly all graduates of the program—97 percent versus the national average of 86.8 percent—earn their professional licensure after their first board examinations. They work in virtually all health care settings—medical and psychiatric hospitals, military bases, pain clinics, shelters, universities, correctional facilities, elder care and art studios. They are also leaders in academia and research, as they publish, teach and direct art therapy graduate programs across the world.

Strong Foundations

The program has always been on the cutting-edge of research, science and treatment, noted Bardot. Watercolorist and ceramic artist **Bernard Levy**, who co-founded the program and served as its director from 1971 to 1984, was also a professor in the CCAS Department of Psychological and Brain Sciences. Fellow co-founder **Elinor Ulman** started the first professional art therapy journal and served as the program's first coordinator of clinical training.

From the start, the program's faculty and clinicians stressed that, unlike traditional verbal therapy, art therapy gives clients an opportunity to express feelings without reliance on the spoken narrative—usually in cases where the emotions associated with a trauma are too deep to easily convey. "We have art therapists working with all diagnoses and all ages," Bardot said. "I worked with children in hospice who could talk about anything when they were drawing, because it gave them that ability to separate. They talked about really deep emotional issues."

Alberta Gyimah-Boadi, MA '19, works in a group practice and at Children's National Hospital in Washington, D.C. She draws on her personal experiences to help create spaces that allow young people to be comfortable expressing their feelings. "When I was growing up, I used art as my creative outlet," she said. "There was a little bit of a stint when I was a teenager when I went to a counselor, and I was never really comfortable expressing myself."

Sangeeta Prasad, MA '89, spearheaded an art therapy program in India.

A vital component of the program is the hands-on training students receive in the community clinic beginning in their second year. "It's almost like a private practice," Bardot said. "They have to deal with the paperwork and payments and all sessions are videotaped for educational purposes."

When the community clinic was incorporated by the program in 2008, students made a "huge jump" in their level of professionalism, Bardot noted. The clinic offers one-on-one and group and family sessions to the greater Washington-area community at a reduced fee. Its clients range from 5-year-old children to octogenarians. Clinicians are also available for in-service presentations and workshops.

In addition, all students do internships at sites ranging from schools and hospitals to community centers and jails, logging about 24,000 volunteer hours every year. **Mindy Van Wart**, a second-year graduate student who plans to help clients cope with grief and bereavement, completed an internship with a local antipoverty organization. She focused on workforce development, such as making sure clients have appropriate wardrobe for job-hunting and helping them address emotional issues.

Often she invites clients to make a drawing by asking, "If the way you're feeling today could be represented on a page with lines and colors, how would that look?" Or she might ask clients to draw a bridge and place themselves in relation to it. "Are you crossing it—or underneath it?" she asks hypothetically.

"I try really hard not to interpret what people have drawn, but to ask them questions," Van Wart said. "Our creative side can tell ourselves things our logical side doesn't have access to. It's just another doorway to help us cope with things, defining our goals, strengths and challenges."

An Expanding Focus

As director, Bardot has brought a strong international dimension to the program. She developed service-learning opportunities in various countries including France, India, United Arab Emirates, South Africa and Croatia.

"Our students are learning a very Western form of art therapy because of where we are," noted Bardot. "Their challenge is taking what they've learned and recreating it in a different country." She stresses that collaboration is key: "I don't think you can go to another country and not work with local experts. The summer abroad program includes service learning, so we always connect with local organizations and local experts. Our students have a very immersive experience and become part of the community."

One of the experts who helped Bardot set up a program in India is alumna **Sangeeta Prasad**, MA '89, who worked as a field supervisor with interns and now has a private practice in Fairfax, Va., helping individuals cope with depression, anxiety and trauma. "I found the [GW] faculty to be so wonderful and nurturing," she said. "I had people who really took care of me as an international student and helped me understand the American culture at a time when there was no Internet."

The program has also begun collaborations with neuroscience experts on research surrounding art therapy quantitative and qualitative results. "We're now able to look at the science of what's happening in the brain and the body when you're experiencing trauma" noted Bardot. People usually remember traumatic events, such as automobile accidents or episodes of violence, in so-called "lightbulb moments," or flashes of the memory, she explained. "It's rare that you remember absolutely everything from start to finish. You remember pieces of it. Your brain stores all of that information visually and yet you don't have the words to actually connect to it. Art therapy can help you access those words, tell your story and begin to heal."

"Our creative side can tell ourselves things our logical side can't have access to. It's just another doorway to help us cope with things, defining our goals, strengths and challenges."

—MINDY VAN WART, ART THERAPY GRADUATE STUDENT

BREAKING NEWS: As Newspapers Fold, Will Civics Follow?

With newspapers disappearing, Americans are less engaged with local governments. Political Science's Danny Hayes argues the trends are linked—and dangerous to democracy.

BEFORE EMBARKING ON A CAREER IN ACADEMIA, Professor of Political Science **Danny Hayes** worked as a reporter for a small newspaper in West Texas. Along with eleven other journalists, he covered the kinds of local government stories that fly under the big media radar, from school board meetings to county elections.

"Local newspapers have traditionally been an important part of civic life," he said. "They have been ubiquitous. People started their day with their coffee and their hometown paper."

Hayes moved on—and so did the news landscape. Over the past two decades, rigorous local journalism outlets have all but disappeared. Decimated by declining advertising revenue, plummeting readership and the proliferation of the Internet, hundreds of newspapers have been shuttered and those that remain are "essentially shells of their former selves," Hayes said. Newspapers in big cities and small towns alike have slashed staff and drastically cut their local government coverage. Even the news desk at Hayes' old Texas paper has been reduced to just three reporters covering a geographic area the size of Illinois.

"You can't cover city hall and school boards and everything that goes on in local government with that kind of dramatic reduction in resources," Hayes said.

"Local newspapers have traditionally been an important part of civic life. ... People started their day with their coffee and their hometown paper."

— DANNY HAYES, PROFESSOR OF POLITICAL SCIENCE

In his book *News Hole The Demise of Local Journalism and Political Engagement*, Hayes and co-author Jennifer L. Lawless, a professor of politics at the University of Virginia, tie the demise of local journalism to another troubling trend: Americans' increasing disconnection with local politics.

As newspapers have withered, Hayes contends that civic engagement has waned. In *News Hole*, the authors draw on a detailed analysis of 15 years of reporting in over 200 local newspapers—as well as decades of election returns, surveys and interviews with dozens of journalists—to link vanishing local journalism and declining civic engagement. The parallel downward trends may threaten democratic institutions. As hometown reporting has diminished, the authors contend, Americans have become less knowledgeable about their local governments and less interested in community issues—with declining turnout in elections and fewer people even able to name their elected officials.

"If you don't have a newspaper covering what your elected officials are doing, it's unlikely you know whether you should vote to reelect them or not," Hayes said.

A Tale of Two Cities

Hayes outlines a new dynamic where attention to national politics dominates the public discourse. At the same time, without the detailed reporting of hometown newspapers, local interests fall to the wayside, he said. Voter turnout in presidential elections, for example, is soaring, with the 2020 presidential election boasting the highest turnout in the 21st century. However, mayoral election turnouts have reached near record lows, even in major cities like New York. Dallas' paltry 6 percent turnout in the 2015 mayor's race was "roughly the equivalent of a show of hands," Hayes said. Meanwhile, only 40 percent of Americans can name their city's mayor—down from 70 percent in the 1960s.

"It's a tale of two cities," Hayes said. "We are in an era of American politics where people are highly engaged—but it's almost exclusively on the national level."

As a result, Hayes notes, local politics is often dominated by the most politically motivated—who tend to be highly educated, wealthy and white—and leaves those living on the edges with less effective representation.

Ironically, the disengagement has come at a time when local government is more central to Americans' lives than ever. States and localities have been on the frontlines of battles over issues like health care reform, climate change and, most recently, the COVID-19 pandemic. But with fewer reporters acting as watchdogs, local elected officials are freer to operate without accountability—risking less efficient and effective local governments and city halls that are ripe for corruption.

Still, Hayes maintains it's not too late to reinvigorate local news industries—and at the same time preserve democratic traditions. In addition to strategies such as promoting newspaper ownership and even advocating for public subsidies, Hayes holds out hope that readers still have an appetite for local news.

While researching the book, Hayes and a team that included GW undergraduate students, conducted exit polls during the 2018 elections. In a small sample, they found that reminding voters of the importance of local institutions not only promotes civic engagement, it also seems to spark a greater hunger to consume local news.

"If you get more people interested in news about their communities, you give newspapers an incentive to cover public affairs at the local level," he said, "which is what we need for democracy to really work."

CCAS Faculty Receive Fulbright Honors

Psychology's Sarah Calabrese, Biology's Keryn Gedan and Geography's Aman Luthra are among the newest class of prestigious scholars.

THREE COLUMBIAN COLLEGE FACULTY MEMBERS were named to the 2022-2023 class of Fulbright Scholars, joining a prestigious list of academics who will conduct research and teach abroad this year.

Assistant Professor of Clinical Psychology **Sarah Calabrese** will travel to Australia to collaborate on a project with health care providers and sexual minority men with HIV. Assistant Professor of Biology **Keryn Gedan** will examine the effects of climate change on coastal plant communities in Argentina. And Assistant Professor of Geography **Aman Luthra** will investigate startup companies offering recycling services in urban India.

"We are delighted that our colleagues have been honored with one of the most distinguished awards a scholar can receive," said Columbian College Dean **Paul Wahlbeck**. "It's a testament to the quality of their research in their respective fields and showcases the important contributions our faculty are making around the world."

For over 75 years, the Fulbright program has provided more than 400,000 participants—chosen for their academic merit and leadership potential—with the opportunity to exchange ideas and contribute to finding solutions to challenges around the globe. This year's class of 800 U.S. scholars, artists and professionals join a roster of Fulbright alumni that includes 61 Nobel Prize laureates, 89 Pulitzer Prize recipients and 40 people who have served as heads of state or government.

Calabrese will partner with HIV experts and stigma interventionists in Australia to address the nation's HIV crisis among marginalized communities. As in many Western countries, Australia's sexual minority men bear the brunt of the HIV pandemic, accounting for 69 percent of new diagnoses despite representing less than 5 percent of the population. Calabrese's research will aid the development of a web-based intervention aimed at enhancing health care providers' communication with patients, correcting outdated misconceptions about transmission risk and reducing stigma.

"I am excited and grateful to have the opportunity to partner with Australian experts on this joint initiative," Calabrese said. "Ultimately, the Fulbright award will facilitate ongoing international research collaboration and the sharing of insights and resources to improve the lives of people with or at risk for HIV in Australia, the U.S. and other regions of the world."

In Argentina, Gedan will track the ecological effects of sea level rise in plant communities along the coastal zone of Buenos Aires, which sits on one of the largest estuaries in South America. Her work will include testing how trees respond to the influence of intruding salty groundwater. Gedan's previous research focused on the impact of climate change on the tidal wetlands and coastal uplands of the Chesapeake Bay.

"The Fulbright scholarship will enable me to expand my scientific study of sea level rise to a different continent, climate, topography and group of plants," she said. "I am so excited to meet new colleagues and collaborators among the Argentine community of ecologists."

Luthra will travel to India to study what he calls the "uberization of recycling"—focusing on how new high-tech recycling firms are competing against the industry's self-employed workers, called "kabariwalas." Traditionally, the kabariwalas buy recyclable, reusable and repairable materials directly from households, Luthra explained. The new firms offer the same service, but have access to tools like mobile apps. Luthra, who was born and raised in Delhi, will investigate the new firms' strategies and how the kabariwalas are responding to the competition.

"This award will afford me the opportunity to conduct fieldwork in Delhi, something I have been unable to do for the past two years since the pandemic began," Luthra said. "It will also allow me to build a network of researchers in Delhi, a city whose future I have both a personal and academic interest in."

"We are delighted that our colleagues have been honored with one of the most distinguished awards a scholar can receive."

— PAUL WAHLBECK, CCAS DEAN

From left, 2022-2023 Fulbright Scholars Sarah Calabrese, Aman Luthra and Keryn Gedan

Faculty Profile: For Ashwini Tambe, a Wider World of Women's Studies

As the new director of the Women's, Gender and Sexuality Studies Program, Ashwini Tambe focuses her scholarship across borders, disciplines and lives.

THE SEEDS OF **ASHWINI TAMBE'S** FEMINIST activism may have been sown on a street in Bengaluru, India, at the age of 11. That's when a young man speeding by on a bicycle slapped her shoulder. Street harassment by men is a common problem in India, she explained, but even at a young age, she refused to accept it. She chased after the assailant, pulling off her shoes and throwing them at the fleeing cyclist.

For Tambe, the new director of Columbian College's Women's Gender and Sexuality Studies (WGSS) Program and a professor of history, it was not necessarily a life-defining moment, but it was an example of a time when she had to be fearless. "You have to be ready to stand up when things are unacceptable," she said.

Ashwini Tambe, director of the CCAS Women's, Gender and Sexuality Studies Program

The first graduate program in women's studies in the United States, the CCAS Women's, Gender, and Sexuality Studies Program marked its 50th anniversary this year.

"There is a lot we can learn from activism outside the United States. It's our loss if we don't look beyond our borders."

—ASHWINI TAMBE, DIRECTOR, CCAS WOMEN'S, GENDER AND SEXUALITY STUDIES PROGRAM

That philosophy has guided Tambe in her activism and scholarship. The author of two books and two edited volumes and the editorial director of a flagship journal for women's studies, Tambe is a leading voice in transnational feminism. She has researched the interplay of gender and power, from the streets of South Asia to the halls of Washington, D.C. As WGSS director, her goal is to continue connecting scholars' agendas across academic disciplines, international borders and real people's lives.

"I look forward to sustaining WGSS as a hub of intellectual nourishment for scholars focused on gender, race, class and power," said Tambe, who previously served as professor and interim chair in the Harriet Tubman Department of Women, Gender and Sexuality Studies at the University of Maryland, College Park. "I am eager to help strengthen a community of students and professors who are hungry to make feminist ideas work in the world."

Growing up in India and Malaysia, Tambe was inspired by feminism activism that centered on the needs of economically marginalized women. As a young scholar at Bangalore University and later pursuing her PhD in international studies at American University, she focused on how often well-meaning laws can produce unjust outcomes. Much of her research centers on how South Asian societies regulate sexual practices. Her first book, *Codes of Misconduct: Regulating Prostitution in Late Colonial Bombay*, traces the rise of Bombay's red-light district by examining how brothel workers responded to law-making and law-enforcement practices. Her second book, *Defining Girlhood in India: A Transnational Approach to Sexual Maturity Laws*, analyzes how legal age standards for sexual consent changed across the 20th century in India. It explores how the expectation of sexual innocence is distributed in uneven ways for girls across class and caste groups. She is also the co-editor of *Transnational Feminist Itineraries*, which features essays by leading gender studies scholars confronting authoritarianism and religious and economic fundamentalism.

Tambe continues serving as the editorial director of *Feminist Studies*, the oldest journal of interdisciplinary women's studies in the United States and a premier venue for feminist scholarly and creative expression. Under Tambe's leadership, the journal has shaped the canon of women's and gender studies in areas like transnational and intersectional feminist theory while also charting new territory, such as a recent special issue on feminist analyses of the COVID-19 pandemic.

Throughout her career, Tambe has viewed her scholarship through a transnational lens—one that connects the United States with other parts of the world. For example, when discussing the MeToo movement, she noted, "people like to think that the United States lit the spark of activism against sexual harassment and the fire spread around the world." But, she stressed, vibrant, digitally-driven activism against sexual violence emerged in many other regions, and she cautioned against minimizing it. Her recent work connects U.S. activism to campaigns like Latin America's Ni Una Menos movement against femicide, uprisings against sexual violence in India and South Africa's efforts to reform higher education and address the nation's rape crisis.

"There is a lot we can learn from activism outside the United States," she said. "It's our loss if we don't look beyond our borders."

As the WGSS program marks its 50th anniversary at GW this year, Tambe sees the current feminist landscape—from the MeToo and Black Lives Matter movements to the impact of the Trump administration—as historic. "We are living through a time of strikingly high public interest in social justice, and I'm excited about generating, translating and applying the excellent research in our field for policy and activist arenas," she said.

During her first year, Tambe has continued the program's tradition of engaging scholars and students across disciplines, drawing in people from various parts of campus and the country for an exchange of ideas and information. This past year, the program hosted top academics and activists for seminars on reproductive justice, women's rights and economic and social mobility across the globe.

"I hope to help lead conversations about what feminism means to different people," Tamble said, "and what it can do to create a better world."

Digital Divide: Examining Misinformation in the Information Age

Across disciplines, Columbian College researchers uncovered how false information spreads online—and how it can be stopped.

ONLINE MISINFORMATION HAS BECOME SO ever-present across social media platforms that the World Health Organization recently warned of an "infodemic"—an unprecedented glut of misleading posts and false-fact campaigns.

In several studies that span different disciplines, researchers at the Columbian College of Arts & Sciences are addressing the infodemic crisis head-on. Physics Professor **Neil Johnson** is leading a team that is examining the ways that dangerous misinformation spreads online in light of polarizing topics like the COVID-19 pandemic and the January 6 attack on the U.S. Capitol. At the same time, Assistant Professor of Media and Public Affairs **Ethan Porter** is looking at whether safeguard systems like fact-checking can be an effective tool in combating false claims.

In one study, Johnson noted that parenting communities on Facebook were targets of a powerful misinformation campaign early in the pandemic that pulled them closer to extreme groups and their misinformation. Through their example, Johnson and his team were able to trace how social media feeds the spread of misinformation. The research, which received funding from the Air Force Office of Scientific Research, was published in the journal *IEEE Access*.

"By studying social media at an unprecedented scale, we have uncovered why mainstream communities such as parents have become flooded with misinformation during the pandemic, and where it comes from," Johnson said. "Our study reveals the machinery of how online misinformation 'ticks' and suggests a completely new strategy for stopping it."

Physics Professor Neil Johnson

Assistant Professor of Media and Public Affairs Ethan Porter

Johnson's team—including Associate Professor of Political Science **Yonatan Lupu** and researchers **Lucia Illari**, **Rhys Leahy**, **Richard Sear** and **Nico Restrepo**—initially looked at Facebook communities totaling nearly 100 million users that became entangled in the online health debate through the end of 2020. Starting with one community, the researchers followed threads to find a second one that was strongly entangled with the original, and so on, to better understand how they interacted with each other.

The researchers discovered that mainstream parenting communities were exposed to misinformation from two different sources within Facebook. First, during 2020, alternative health communities—which generally focus on positive messaging about a healthy immune system—acted as a key conduit between mainstream parenting communities and pre-COVID conspiracy theory communities that promote misinformation about topics such as climate change. This strengthened the bond between these communities and allowed misinformation to flow more freely.

Second, a core of tightly-bonded yet largely under-the-radar anti-vaccination communities continually funneled COVID-19 and vaccine misinformation to the parenting communities. Neither the alternative health communities nor the anti-vaccination communities were particularly large groups by Facebook's standards, meaning they could still largely escape detection by platform moderators.

"Combating online conspiracy theories and misinformation cannot be achieved without considering these multi-community sources and conduits," Johnson said.

The Fact-Checking Factor

In two other separate studies, Porter determined that fact-checking plays an important role in combating misinformation beliefs—across countries and across partisan and ideological lines.

The first—a comparative, cross-country study published in the *Proceedings of the National Academy of Sciences*—revealed that fact-checking leaves a more enduring mental imprint than false claims. Porter and co-author Thomas Wood, a political science professor at Ohio State University, examined 22 fact checks conducted simultaneously in Argentina, Nigeria, South Africa and the United Kingdom in 2020. The results, Porter said, were consistent across countries, cultures and political environments.

"While previous research has shown that factual corrections reduce false beliefs, even on politically charged topics, we've had precious little evidence about how fact checks work globally," Porter said. "This study makes clear that fact checks can reduce false beliefs against misinformation around the world, and that the reductions persist for some time."

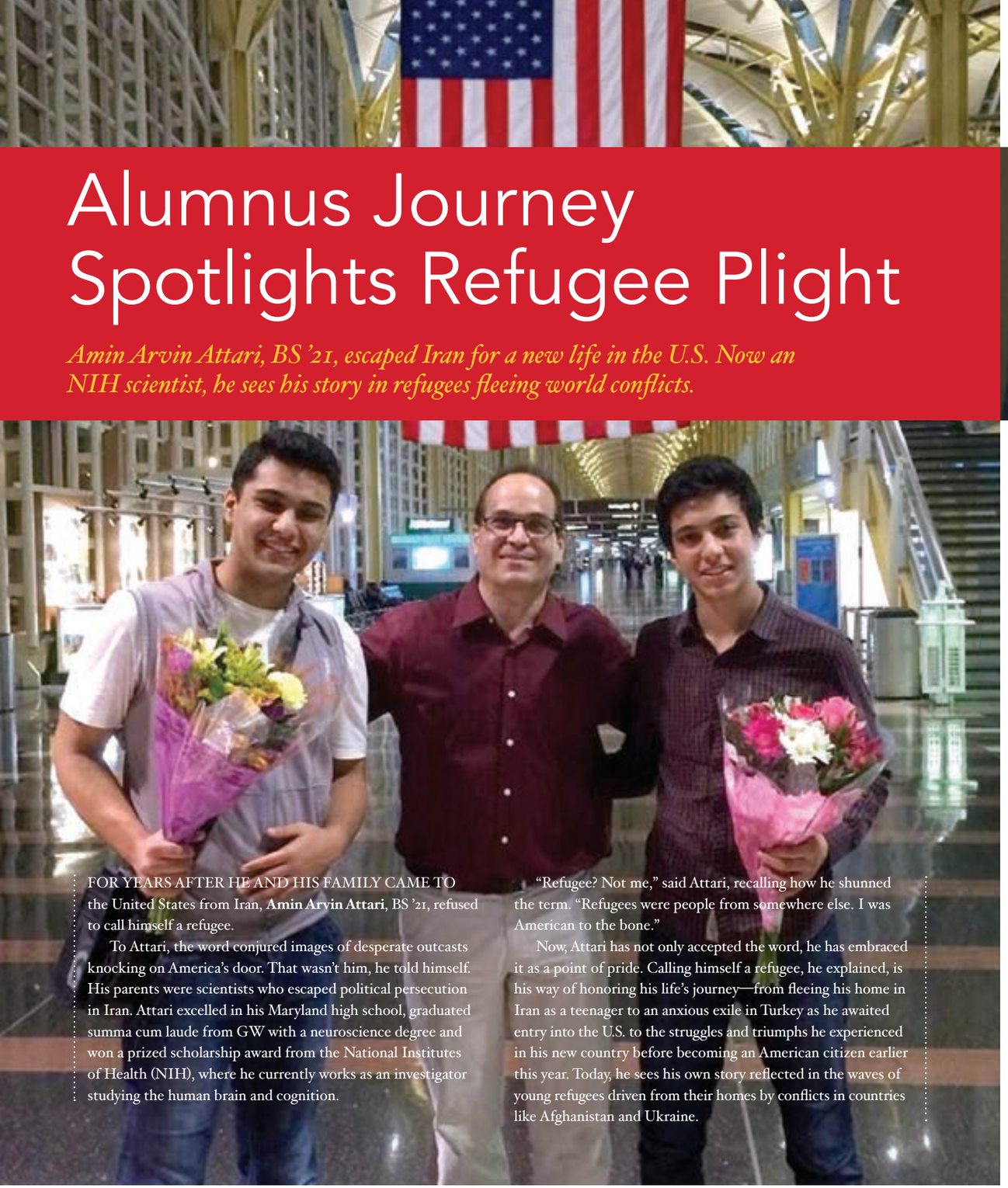
The research team partnered with fact-checking organizations operating in the countries where the experiments took place, with participants randomly assigned to see fact checks and then queried about their factual beliefs. The researchers investigated a broad array of topics, including COVID-19, local politics, crime and the economy. According to the study, fact checks significantly reduced belief in the false claims, while exposure to misinformation only minimally increased belief in the falsehoods.

In his second study, published in the *Journal of Politics*, Porter led a research team that discovered factual corrections published on Facebook's news feed can reduce a user's belief in misinformation—even across partisan lines.

Social media users were tested on their accuracy in recognizing misinformation through exposure to corrections on a simulated news feed that was made to look like Facebook's news feed. However, just like in the real world, people in the experiment were free to ignore the information in the feed that corrected false stories. Even when given the freedom to choose what to read in the experiment, users' accuracy improved when fact-checks were included with false stories.

The study's findings contradicted previous research that suggested displaying corrections on social media was ineffective or could even backfire by increasing inaccuracy. Instead, even when users were not compelled to read fact-checks in the simulated Facebook's feed, the new study found they nonetheless became more factually accurate despite exposure to misinformation. This finding was consistent for both liberal and conservative users.

"Our study finds that posting fact-checks on Facebook increases users' accuracy when it comes to encountering misinformation," said Porter, who is also affiliated with the Columbian College's Institute for Data, Democracy and Politics and serves as the cluster lead of the institute's Misinformation/Disinformation Lab. "Our results suggest that social media companies, policymakers and scholars need not resign themselves to the spread of misinformation on social media but can use corrections to rebut it."



Alumnus Journey Spotlights Refugee Plight

Amin Arvin Attari, BS '21, escaped Iran for a new life in the U.S. Now an NIH scientist, he sees his story in refugees fleeing world conflicts.

"What I most see in myself and other refugees is hope and determination."

— AMIN ARVIN ATTARI, BS '21

FOR YEARS AFTER HE AND HIS FAMILY CAME TO the United States from Iran, **Amin Arvin Attari**, BS '21, refused to call himself a refugee.

To Attari, the word conjured images of desperate outcasts knocking on America's door. That wasn't him, he told himself. His parents were scientists who escaped political persecution in Iran. Attari excelled in his Maryland high school, graduated summa cum laude from GW with a neuroscience degree and won a prized scholarship award from the National Institutes of Health (NIH), where he currently works as an investigator studying the human brain and cognition.

"Refugee? Not me," said Attari, recalling how he shunned the term. "Refugees were people from somewhere else. I was American to the bone."

Now, Attari has not only accepted the word, he has embraced it as a point of pride. Calling himself a refugee, he explained, is his way of honoring his life's journey—from fleeing his home in Iran as a teenager to an anxious exile in Turkey as he awaited entry into the U.S. to the struggles and triumphs he experienced in his new country before becoming an American citizen earlier this year. Today, he sees his own story reflected in the waves of young refugees driven from their homes by conflicts in countries like Afghanistan and Ukraine.

Attari (left) and his brother Kian (right) were reunited with their father, Dr. Mohammad K. Attari (center) in 2015 at Ronald Reagan Washington National Airport. (Photos courtesy Amin Arvin Attari)

"I share a lot with these teenagers," he said. "I speak the same language, experienced the same religious and political oppression and was as uncertain and afraid as every one of them. But what I most see in myself and other refugees is hope and determination."

Since the 1979 Islamic revolution, Iran has experienced a steady flow of refugees exiting the country. In 2020, more than 15,000 people fled Iran and applied for asylum in other nations, according to the United Nations High Commissioner for Refugees (UNHCR). Today, about 385,000 Iranian immigrants live in the U.S.

The Long Journey to Freedom

Attari's journey began in Mashhad, the second largest city in Iran and the site of religious pilgrimages to the Holy Shrine of Imam Reza, the largest mosque in the world. Both of his parents are scientists—his mother a physicist who left her studies to raise her three sons, and his father a physician and public health expert. Following their intellectual example, Attari was a quizzical youth, devouring Sherlock Holmes mysteries and puzzling through math equations at the kitchen table with his mom. "My parents inspired me with their love of math and science. They taught me to think for myself," he said. "Even as a child, I questioned everything."

But that curiosity put him at odds with his hardline teachers, who often expelled him from classes for challenging lessons. At home, his father was under government scrutiny for raising public health concerns and giving interviews to Western media outlets like the BBC and Voice of America. When prosecution seemed imminent, Attari's father left the country for Turkey in 2010, finally making his way to the U.S. in 2013.

At home, Attari's family struggled financially while they awaited news from his father. Attari said he was wracked with anxiety as he approached mandatory military service at 18. Deciding they could wait no longer, Attari followed the same route as his father, leaving for Turkey by himself in 2014.

"I was a super-confident, independent kid," Attari said. "I thought I could survive living in a cave if I had to."

But life as refugee was more harrowing than Attari expected. The nearly 40,000 Iranian refugees living in Turkey face hardships like unemployment and discrimination, few legal protections and the constant fear that they'll be abducted by Iranian intelligence agents, UNHCR reports. Unable to speak the language, Attari found himself isolated and depressed. As months ticked by and he waited for his family to join him, he considered giving up and returning to Iran.

"The worse part was the waiting," he said. "I just sat in my room. I didn't study, I didn't have friends. It was like my life was slipping away."

After months alone, Attari's mother and younger brother were able to travel to Turkey. But their waiting continued for weeks while the U.S. embassy processed their visa applications. In 2015, Attari and his brother landed at John F. Kennedy airport in New York and reunited with his father in Maryland. His mother arrived in the U.S. soon after.

Attari's introduction to high school in America was a blur of new experiences. "I was excited about everything—riding that yellow school bus, being able to take a class in theater, even getting up to go to school on a Monday morning," he laughed. At GW, he enthusiastically explored political science, philosophy and psychology courses before settling on a neuroscience degree.

"From the very first lecture, he struck me as incredibly eager to learn," said Professor of Cognitive Neuroscience **Sarah Shomstein**, who recalled Attari staying after classes to discuss theoretical questions about the brain. "A mind like [his] deserves to be nurtured."

After graduation, Attari was inundated with fellowship offers from political think tanks and institutions in Washington, D.C. But he chose to follow his passion for science to NIH, where he'll soon begin an agency-sponsored PhD program.

Attari and his family still maintain Iranian traditions like enjoying a walnuts-and-pomegranate stew called fesenjoon and celebrating Nowruz, the Persian New Year, in March. After his naturalization ceremony, Attari said he could finally embrace his varied identities—refugee, new American citizen and scientist. It was a message he hoped would inspire other struggling young refugees. "Despite our past," he said, "our futures are bright."

parting shots

Student Art Shines at NEXT 2022

THE CORCORAN SCHOOL OF THE ARTS & DESIGN'S FLAGG BUILDING was the site of the triumphant in-person return of the school's annual showcase of student work after two years online. NEXT featured more than 70 physical exhibits, 30 performances and presentations and over 100 virtual showcases by undergraduate and graduate students in the fine arts, design, theatre, dance, music, interior architecture, museum studies and art history.

"It was moving to see visitors responding to the students' work—the art sparked conversations and connections between people. That connection is what we've missed these last two years. It was especially powerful for students to see the impact of their work."

—LAUREN ONKEY, DIRECTOR,
CORCORAN SCHOOL OF THE ARTS & DESIGN

Sabrina Godin's "Individual Survival"

Kaitlin Santiago's "Gender in Bloom"

Maren Magyar explores femininity and her Ukrainian roots in "Buffering, Parts 1-2."

NEXT featured artwork by more than 100 students.

Dancers perform Nateé Himmons' "Humanity."

Adele Yiseol Kenworthy (left) interacts with guests among foraged plant material in "what is something you always wished I asked and knew about you?"

Opening Night gala at the Corcoran's Flagg Building

A Celebratory Sendoff to the Class of 2022

WITH FACULTY, FRIENDS AND FAMILY LOOKING on, members of the Class of 2022 were celebrated for their achievement during four days of graduation festivities in May. The CCAS doctoral, master's and undergraduate ceremonies at the Charles E. Smith Center and the Lisner Auditorium were a welcome return to in-person activities after two years of virtual recognition due to the COVID-19 pandemic. This year's CCAS graduating class was made up of 2,208 students, which included 108 graduates receiving their doctorate, 800 awarded a master's and 1,304 graduates receiving their baccalaureate. Congratulations Class of 2022!

"May we let our feelings and experiences be bridges of connection to others. May the work always bring us closer to ourselves, even when it's uncomfortable, and in that way, to our communities and our worlds."

— MAYA THOMPSON, MA AMERICAN STUDIES, DISTINGUISHED MASTER'S DEGREE SCHOLAR

"Your resilience in the face of difficulty, your adaptability to new ways of learning and your dogged determination to get to where you sit today, makes your achievement all the more noteworthy."

— PAUL WAHLBECK, CCAS DEAN

"We must have the courage not only to remake ourselves as individuals but to situate ourselves within a historical trajectory that looms larger than any one of us. What we will choose to care about—what we will choose to fight for—will be our daily predicament."

— DARIUS COZART, BA POLITICAL SCIENCE, DISTINGUISHED UNDERGRADUATE SCHOLAR

"What gift of labor and love will you give to your community, however you define it, wherever and whenever it may arise? Let it be gifts that transform and lift up, from little acts of kindness to bold strokes of action."

— SARAH WAGNER, PROFESSOR OF ANTHROPOLOGY

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Columbian College of Arts and Sciences
Phillips Hall, Suite 212 • 801 22nd Street, NW
Washington, D.C. 20052

www.columbian.gwu.edu
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