In the United States, African Americans make up about 13 percent of the population, but hold less than 10 percent of the seats in government.

That's a problem, according to a new paper by UWM Africology professor Nolan Kopkin, because “What comes out of this research is that if we’re able to increase black representation in Congress, then we can probably provide black Americans with more economic and political outcomes that are more similar to those of whites,” he explained.

Kopkin’s paper, “Substantive Black Political Representation: Evidence from Matching Estimates in the United States House of Representatives,” was published in the Review of Black Political Economy in December. In it, he compares the voting records of black representatives to their white peers to determine how much their race affects the way they vote on bills.

That's substantive representation – “the tendency of the elected official to advocate on behalf of certain groups based on his or her own identity,” Kopkin explained. A black congressman might be more likely to vote with the black caucus on civil rights bills, for example, or a congresswoman might be more likely to take the “female position” on a bill regarding gender equality.

Race, representation, and the results

It turned out that race does play a role, usually in ways that would benefit black Americans.

“We do see that black representatives tend to vote much more in favor of policies that are more in line with what African Americans want, even among people of the same political parties,” Kopkin said.

To determine how much a representative’s race factors in their voting, Kopkin looked at black representatives’ votes from the 1980s to today. Since African American representatives overwhelmingly identify as Democrats, he matched each with a white Democrat who presided over a demographically similar congressional district so that he could control for factors like constituents’ ages, race, gender, and incomes. With both the demographics and the party accounted for, any other differences in voting could be attributed to the race of the representative.

Then he looked at voting records, paying particular attention to bills designated important by the Leadership Conference for Civil Rights (LCCR), the Americans for Democratic Action (ADA) and Congressional Quarterly. The LCCR follows issues pertaining to civil rights like free speech and voting access. The ADA marks votes they think are important to what they define as a liberal agenda, like funding education or decreasing military spending, and Congressional Quarterly highlights the big issues affecting all Americans, such as health care or tax bills.

The current African American representatives from the 115th Congress usually vote in ways that benefit black Americans, according to a new paper by Africology professor Nolan Kopkin. Photos courtesy of the U.S. government.
Novelist Callanan finds a home in Milwaukee and at UWM

By Greg Walz-Chojnacki, University Relations

He’s tried the East Coast. He’s tried the West Coast. But Liam Callanan, an associate professor of English, is firmly ensconced in the “mid-coast.”

Callanan, who call himself an “evangelist” for Milwaukee, is given to such observations as “Milwaukee is the new Seattle.” He’s even given the city a cameo in his forthcoming novel, “Paris by the Book,” which is scheduled to publish April 3.

A trip to Paris with his children offered inspiration for the work. One of their activities was tracing the steps of characters from favorite movies and books, such as “Hugo,” “The Red Balloon” and the Madeline books by Ludwig Bemelman. The itinerary is echoed in one of the novel’s episodes.

Callanan is the author of three novels and a collection of short stories, but he’s also a highly-regarded teacher who won the Distinguished Undergraduate Teaching Award last fall. He teaches in the graduate Creative Writing program and has served as the program’s coordinator and the English department’s chair.

He says he was bitten by the teaching bug when working on his master of fine arts in writing at George Mason University, where he also began teaching.

He doesn’t adhere to the “feet of the master” style where the great one reveals all, but rather thinks of himself as a more of a personal trainer. He offers his own training for a marathon as an analogy.

“I asked a running coach to watch me run to see if I was doing anything wrong,” he recalled. “He said, ‘I’m not going to change the way you run; you run how you run.’ People write how they write; I don’t want to take away anyone’s voice. I want to help them get to the point they want to get to.”

Callanan’s interest in his students’ success has led him to take an entrepreneurial approach to literature.

“I’m very interested in literature not being locked up in the ivory tower, and getting it on the sidewalks and on the streets,” he said.

Over the years he’s launched several community initiatives, some of which are ongoing.

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Chemistry PhD alum finds justice is in his DNA
By Sarah Vickery, College of Letters & Science

Don’t believe everything you see on CSI shows, Vincent Purpero warns. For starters, there is no mood lighting in the Wisconsin State Crime Lab.

He would know; Purpero, a UWM alum who graduated with his PhD in chemistry in 2006, works in the lab as a DNA analyst who is responsible for analyzing evidence collected from crime scenes around the state. He and his colleagues scour clothing, weapons, and other materials searching for blood, semen, saliva, or other substances containing DNA that might point to a perpetrator.

“These are felonies that we work here, so a lot of times very heinous crimes,” Purpero said. “Besides making positive associations with DNA, we can also exonerate wrongfully-accused individuals, and are able to be a factor that can help stop future criminal activity.”

The Wisconsin State Crime Lab provides the science that supports justice. The lab tests crime scene evidence materials for the presence of controlled substances, tests body tissues for drugs or alcohol, helps to maintain and add to the state’s fingerprint database, analyzes firearms and ballistics, and conducts DNA testing.

And DNA testing is where Purpero shines.

“We analyze items of evidence for the presence of biological materials. We try to extract, isolate, and amplify the DNA that we do find,” he explained. “We have specific tests that make sure that it’s human DNA. We take that crime scene evidence and we compare (that DNA) to standards that individuals submitted. We add statistical weight to our findings of the evidentiary samples and make comparisons to the submitted standards.”

DNA testing is a very accurate science, so much so that cases in which probative genetic evidence is found rarely go to trial. Occasionally, though, Purpero will be called on to testify in court as an expert witness to explain how his findings – or sometimes a lack thereof – implicate or exonerate a defendant.

In court, those inaccuracies in the CSI shows come in to play.

“It’s known as the ‘CSI effect,’ where people expect certain results to be seen; otherwise, they’re not going to convict,” Purpero said. “We don’t make any arrests or walk around with gun holsters. We don’t have quite the instant results that they like to show. … There’s lots and lots of paperwork we have that is mysteriously never shown in the shows.”

Many cases are routine, but Purpero occasionally works with evidence from crimes that make that news. Recently he worked on a case where a cognitively-disabled woman was sexually assaulted. Purpero and his colleagues were able to find a DNA match for the perpetrator in CODIS, the Combined DNA Index System run by the FBI, and the violent offender was brought to justice. The television stations in Madison carried the story.

“We have so many different kinds of cases here: burglaries, property crimes, criminal paternity cases. We have the sex assault kit initiative where we have to process all of the sex assault kits that have been taken off the shelves from all the agencies around the state. We have homicides,” Purpero said. “They’re not all high-profile, but they’re all in need of us to work them.”

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Two bags of cough drops sit open on the desk of UWM’s Uk Heo, but the distinguished professor of political science isn’t sick. He’s just busy: giving talks, doing media, and writing his sixth book. That’s what happens when you’re an expert on North Korean and South Korean politics, U.S. foreign relations and the nuclear arms race.

The cough drops keep Heo’s vocal cords in shape. His painstaking research process and analytical skills do the rest of the work. He said he’s writing book No. 6 faster than he’s written anything in his 22-year career.

“If anything new happens on the Korean Peninsula while I am writing and my book is outdated, then it will not be meaningful,” Heo said. He strikes a calm, matter-of-fact tone whether he’s describing his writing process or authoritarian dictators like North Korea’s Kim Jong-un.

Politics on the Korean peninsula are keeping all the experts busy. In early March, North Korean dictator Kim Jong-un reportedly made an offer, relayed through the South Korean national security advisor, to have a meeting with U.S. President Donald Trump. He indicated that North Korea’s increasingly sophisticated nuclear weapons program would be “on the table” for discussion. (In September 2017, North Korea startled the world with an underground nuclear test so powerful it literally displaced a mountaintop.)

These would be the first talks between a sitting American president and leader of the Hermit Kingdom, a moniker North Korea has earned for its secrecy, rigid military dictatorship, and relative lack of industrial or technological development in many sectors. In late March, the world learned that Kim had secretly traveled to Beijing to meet with China’s leader – and that North Korea was evidently expanding its nuclear capabilities.

Heo says that if North Korea can develop a nuclearized missile reliably capable of reaching the mainland United States, “I would call it a game-changer.”

Like many in the foreign policy community, this political affairs expert isn’t sure when or if the Trump-Kim meeting will occur.

“I am not sure anyone can answer that question,” Heo said. “The outcome of Kim’s visit to China will have significant implications. If China sides with North Korea and reduces the pressure, a possibility due to the current trade war, Pyongyang is unlikely to meet Washington’s expectations, making the meeting less likely.”

Instead, Heo is looking to the past for insight into North Korea’s future.

“What I’m interested in is why North Korea wanted nuclear weapons in the first place. Unless we understand their intention, we cannot come up with a good solution. In order to understand what North Korea wants, why China behaves the way that it does, what South Korea wants, you have to see things from their perspective.”

Yet it’s difficult to see much of anything from North Korea’s perspective. The Kim family has retained firm control of the “Hermit Kingdom” for three generations, dating back to 1948. “There’s no human intelligence coming from North Korea,” Heo said. “It’s a completely controlled and closed society.”

Heo relies on history and political science theories to explain why the regime prioritizes missiles while its economy ranks somewhere near those of Azerbaijan and Andorra, and famine and drought plague many of its 25 million citizens.
Biology student searches scat and genetics to track hares

By Sarah Vickery, College of Letters & Science

Genelle Uhrig is working toward her Master’s in Biological Sciences under professor Emily Latch, and you can usually find her in the lab sorting through snowshoe hare scat. She’s researching the animals’ population density and genetic diversity in Michigan’s Upper Peninsula by analyzing the genetic material they leave behind in their droppings.

So what exactly are you trying to do with these snowshoe hare droppings?

We’re using fecal pellets to conduct a demographic and genetic study of snowshoe hare. In Michigan and across the southern edge of their range, snowshoe hare populations are declining, largely due to climate change. Snowshoe hare undergo a pelage, or fur, color change from white in the winter to brown in the summer. This pelage change occurs based on day length, which stays consistent from year to year. With the changing climate, snow is coming later in the year and not staying quite as long in the spring, so there’s an environmental mis-match. You have white snowshoe hare on brown ground and they’re more obvious to predators.

Although snowshoe hare are absent from many areas in which they once occurred, no formal demographic study has been done on the remaining populations. How many snowshoe hares are at each site? This will provide much needed data about the status of remaining populations. On the genetic side, we are concerned that genetic variation is being lost in declining populations. As diversity is lost, so is the possibility for the hares to adapt to the changing climate. We want to know if the populations are declining, and if so, are there any genetic consequences due to that decline?

How does their scat come into play?

Snowshoe hare, and really all species, are shedding DNA all the time. As food passes through the digestive system, it grabs epithelial cells and carries them out along with the scat. Those cells are on the outside of each pellet and we either swab the outside or crush the pellet to extract the DNA. Then we can determine unique individuals using genetic techniques and use that information in further analyses.

Although it may not sound appealing to work with animal poop, their pellets are actually kind of cute. They’re just little round, brown, hard balls. Working with scat, especially from organisms that are rare or elusive, is a great way to detect whether they’re in an area or study the animal and population without ever having to handle the animal. Collecting scat allows us to identify individual animals in a population, so we can learn about everything from the health of an individual animal to population demographics to connectivity between populations at a landscape scale.

Why is this research important?

Climate change is here, it’s happening, and we want to better understand the effects of it on wildlife. Snowshoe hare are important because people subsist on them (like the Native American tribes with which we collaborate) and the hares interact with other organisms in the food chain of their ecosystem. If they were gone, then predators that depend on them as food, like the threatened Canada lynx, would be negatively impacted. Any other prey animals that co-exist with hares would also be impacted by increased predation. Conserving snowshoe hare is important for maintaining the balance of the ecosystems they inhabit.

What can the DNA tell you about the hares’ populations?

Just like each individual has unique DNA, populations each have their own unique genetic signatures. We can compare DNA from different populations and if they are genetically similar, individuals might be moving between populations, exchanging their DNA. So by comparing populations across a landscape, we can better understand how they are connected and how snowshoe hare are moving across the landscape. The converse is true, too. If a population is genetically distinct from others, it might indicate that it is not connected to other populations. Small and isolated populations are in danger of declines and extinction, and so we can identify such populations and take management action to bolster them.

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North Korea

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Heo looks back to the Korean War, when Kim Jong-un’s grandfather, Kim Il-sung “almost lost his country” when U.N. troops advanced north to the Yalu River, which borders North Korea and China. The siren song of nuclear power, urged on by Joseph Stalin, became a kind of “regime insurance” for the Kim dynasty in its early days even after the U.N. and U.S. left North Korea.

Peninsular geography further complicates matters. Seoul, South Korea’s economic and population center, sits about 40 miles from the Korean Demilitarized Zone. If the north demonstrates a credible ability to strike the mainland U.S., Heo said, America has two possible paths: “To get seriously involved in the Korean Peninsula or to pull out.”

More than 28,000 American troops are stationed in South Korea today. If and when U.S. troops leave, a wealthy and democratic South Korea would be deeply vulnerable to monetary demands and military aggression from the north.

Heo hopes his book will offer policymakers a new way to view the unfolding crisis and propose non-military solutions. “I’m trying to learn from history, apply theories and come up with potential policy solutions. The U.S. could simultaneously sign intertwined treaties with North Korea, South Korea, Russia and China so none of them can use force against each other. Use that for a security guarantee, and then you talk about North Korean economic aid to dismantle North Korea’s nuclear program.”

He cautions that this can happen only after treaty members verify that North Korea’s nuclear program is completely dismantled. Trust is an issue between the U.S. and Pyongyang, and this is why any policy solution must be negotiated with participation from other world leaders. Trump’s recent decision to name John Bolton his new national security advisor only raises the temperature.

“Bolton’s appointment sends a signal to North Korea that Trump’s administration is different from previous ones. Trump is also implying that unless North Korea meets American demands, they may face use of force. So, he is increasing pressure.”

An international outlook defines Heo’s own “compatriotic” perspective. Born and raised in a South Korean military family: “I care about North Korean citizens and see them as fellow Koreans. They did not choose to be North Korean. They were born there and they are the ones paying the price.

“When you consider what the authoritarian regime does to its own people, it’s easy to imagine what they might do to others. That is why I agree with the view that North Korea is a prime enemy and security threat.”

Snowshoe hares

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What have their droppings revealed so far?

The story is still unfolding – last year, we collected 269 pellets across seven populations. From those, we identified 55 individual hares (because some scats are from the same animal). Some of our sampling sites had no pellets, and thus maybe do not have any snowshoe hare at all. Some sites had many pellets, but only represented one or a few individual animals. Others revealed many individuals in a population. From these larger populations, we identified some that are well connected, where snowshoe hare are moving between populations. Other populations do not seem to be connected. We’re collecting pellets at nine more sites this year, so we’ll get a better picture of what’s going on later this year.

Was this what you wanted to be doing when you grew up? I imagine most kids don’t declare a desire to work with scat.

Genetics was not even in my realm until I did a small pilot study with snowshoe hare using genetic techniques as an undergraduate. I had no idea up to that point that scat could provide such a wealth of information. When starting on my academic journey, I knew that I wanted to conserve wild populations and I was drawn to the applied portion of it. Genetics provides a way to look at the finer scale repercussions of species declines and can inform how to best conserve species.
When children have significant difficulty reducing their fears and anxieties, the solution can be a surprisingly natural one: play, humor and silliness.

A team of UWM students is exploring that approach for children with Williams syndrome, a genetic disorder that affects some 30,000 children in the United States. They’re working under the guidance of clinical psychology professor Bonnie Klein-Tasman using the facilities and assorted toys in UWM’s Child Neurodevelopment Research Lab.

Children with Williams syndrome can struggle with anxieties and fears more often than most kids. Many are hypersocial, displaying an unusually affectionate behavior with intense eye contact. Other concerns include cardiovascular problems, hyperactivity and learning disabilities, though their strong interest in interacting with others and good verbal skills often mask significant developmental delay.

“Kids with Williams syndrome receive special education services in school for their cognitive deficits and hyperactivity symptoms,” says clinical psychology graduate student Brianna Yund, “but many families struggle with the impact of the phobias on daily life, and few clinicians are trained in treating anxieties in children with intellectual disabilities. Our study is intended to fill that gap.”

The team hopes the results could be applicable beyond Williams syndrome cases, too.

A behavioral play therapy for reducing their phobias has already been developed, but it lacks a detailed how-to manual. Klein-Tasman’s team will create that manual and share it with practitioners through a web portal, allowing for a systematic evaluation of the intervention’s success.

A traditional strategy for treating phobias – say, of loud noises or receiving shots at the doctor’s office – involves gradually increasing levels of exposure to the object of fear. But this exposure therapy often causes discomfort, which is why many parents of young children don’t embrace it.

“Behavioral play therapy combines exposure therapy with humor in a playful setting,” says graduate student Nathanael Schwarz. 

An intervention for hair-combing anxiety may start with pretend play: The therapist combs a doll, then exaggerates the brushing movements and makes silly noises while chasing the doll around the room. Next, the therapist may comb her own hair, and eventually the child’s. But if that generates signs of distress, the therapist backs up to less aversive behavior until the child is comfortable again, and perhaps silly herself.

“Anecdotal evidence suggests that kids respond very well to this approach because they love to be silly,” Schwarz says. “With the larger amount of data we will now collect, we can evaluate this intervention more systematically.”

Yund and Schwarz have a central role in researching and evaluating the new therapy and will assist Klein-Tasman and UWM graduate EJ Miecielica in developing the manual. The Williams Syndrome Association is funding the study through a grant and will assist with the recruitment of eight children, ages 4 to 10, who will be treated at UWM in 2018. The association will also help disseminate the new manual.

“Very few studies have evaluated interventions for anxiety in young children with developmental disabilities,” Klein-Tasman says. “That’s why we hope our work will also inform the treatment of phobias in children with other conditions, such as autism spectrum disorders.”
Ionel Popa (Physics) and his coauthors’ recently-accepted article in Macromolecules was selected for the cover of the current issue. Macromolecules is a peer-reviewed scientific journal that has been published since 1968 by the American Chemical Society. The article introduces a new force-clamp rheometry technique, which can be employed to study the dynamics of protein hydrogels. These new materials are very promising for artificial skin and organs, as well as a new way to study the elasticity of biomaterials. [https://bit.ly/2pwLd3p](https://bit.ly/2pwLd3p)

Clark Evans (Atmospheric Science) was selected for the inaugural class of the American Meteorology Society’s Early Career Leadership Academy, which aims to build and sustain a diverse network of early career leaders in weather, water, and climate science.

Margie Mika (English and UWM Writing Center) is the winner of the 2018 Robert Marrs Award from the Midwest Writing Centers Association (MWCA). She was honored at the MWCA Annual Meeting in Omaha, Nebraska, in March.

Dawn Erb (Physics) was selected as a Kavli Fellow by the National Academy of Science Frontiers of Science Program. The Academy’s Frontiers of Science symposia brings together outstanding young scientists to discuss advances and opportunities in a broad range of disciplines. Participants are selected from among recipients of prestigious fellowships, awards, and other honors, as well as from nominations by NAS members and other participants. [https://bit.ly/1VI2L7e](https://bit.ly/1VI2L7e)

Graduate student Kevin Prince’s (Atmospheric Science) research into South American cold air outbreaks was awarded one of two graduate student awards out of 200 entries in the American Meteorological Society’s 18th Student Conference poster competition held in January in Austin, Texas, in conjunction with the 98th Annual Meeting of the American Meteorological Society.

The student-run UWM news website Media Milwaukee won a state open records award for the work that students Talis Shelbourne and Jennifer Rick (Journalism, Advertising, and Media Studies) have done on sexual harassment and sexual assault allegations. The award is given out by the Wisconsin Freedom of Information Council, which consists of the state’s major media associations. Media Milwaukee was the only student news site to win an award this year. [https://bit.ly/2IcdIeH](https://bit.ly/2IcdIeH)


Student Kirill Shnilovich (Physics) is the first UWM student ever to be accepted to present his undergraduate research at the Council on Undergraduate Research “Posters on the Hill” event in Washington, D.C. in April. Kirill works in the Lab for Advanced Biopolymers and Nanomechanics of Proteins with Assistant Professor Ionel Popa and focuses on mathematically modeling protein-based hydrogels, which have biomedical applications as artificial tissue and drug-delivery systems.

John Berges (Biological Sciences) has become a Fellow of the Higher Education Academy, the United Kingdom’s professional institution promoting excellence in higher education. The Academy emphasizes evidence-based teaching methods and is responsible for the UK Professional standards Framework for higher education practitioners.

Gladys Mitchell-Walthour (Africology) received the Rodney Higgins Best Faculty Paper Award at the National Conference of Black Political Scientists on March 16 in Chicago. Her paper used an intersectional approach to examine Bolsa Familia beneficiaries’ political opinions in Brazil.

March 29
Geosciences Colloquium: Charles Darwin, Geologist, and the Origin of Darwin’s Boulders, Tierra del Fuego. Lubar N120. 3:30 p.m. Edward Evenson, Lehigh University.

United We Read: Faculty/Student Reading Series. Boswell Book Company, 2559 N. Downer Ave. 7 p.m. Brenda Cardenas, Mollie Boutell, Su Cho, and Erich Wegenkel.

March 30 - May 4
Planetarium Show: Indigenous Voices - Sharing the Wisconsin Sky. Manfred Olson Planetarium. Fridays at 7 p.m. and 8:15 p.m. Tickets are $5. http://bit.ly/2F1fmkd

March 30
Geography Colloquium Series: Mapping prejudice – tracing the history of racial covenants in Minneapolis. AGS Library. 3 p.m. Kevin Ehrman-Solberg, University of Minnesota.

Philosophy Colloquium: Bridging the Divide – Imagining Across Different Experiential Perspectives. Curtin 175. 3:30 p.m. Amy Kind, Claremont McKenna College. https://bit.ly/2CEBR9u

Anthropology Colloquium: Gast Farm – The Archaeology of People and Place in the Mississippi River Valley. Sabin G90. 3:30 p.m. Professor Bil Green, Logan Museum of Anthropology at Beloit College, discusses the Woodland communities who lived in the Mississippi River Valley 1000 – 2000 years ago.

April 4
The Irish In Latin America. Irish Cultural Heritage Center, 2133 West Wisconsin Avenue. 7:00 p.m. Exhibit and presentation by History Professor Aims McGuinness.

April 5
Geosciences Colloquium: Our Goals for Lunar Science and Exploration. Lubar N120. 3:30 p.m. Brett Denevi, Johns Hopkins University.

Building Resilient Communities: Lessons Learned from a Global Health Crisis in Haiti. Curtin 175. 5:30 p.m. Sponsored by the Center for International Education.

April 6 - 27
Science Bag: The Science of Remembering and Forgetting. Physics 137. Fridays at 7 p.m. and at 2 p.m. on April 15. Psychology Professor Debbie Hanula. http://uwm.edu/science-bag

April 6 - 15
Latin American Film Series. Fourteen films and all are free an open to the public. Union Cinema. See https://bit.ly/2J1yZIk for list of films and show times.

April 6
Geography Colloquium Series: The Tale of Two Cities – A Feminist Critique of Economic Development and Neoliberal Multiculturalism in Milwaukee. AGS Library. 3 p.m. Yui Hashimoto, UWM.

April 11
Women’s & Gender Studies Feminist Lecture Series. Golda Meir Library 4th Floor Conference Center. 3:00 p.m. Trina Robbins, Feminist Comics Artist and Historian of Women Comics Artists, presents “Up From Underground.”

April 13
Neuroscience Colloquium: Alzheimer’s disease pathology is determined by APOE genotype and sex: Evidence from a unique mouse model. Lapham N101. 2 p.m. Mary Jo LaDu, University of Illinois at Chicago.

April 15
Planetarium Show: Music Under the Stars. Manfred Olson Planetarium. 2:00 p.m. $5 admission. The UWM Collegium Musicum, directed by Tim Sterner Miller, will perform early music from the Middle Ages and Renaissance on period instruments along with a guided tour of the stars.


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April 16
5th Annual UWM International Dessert Competition. 3:30 p.m. Students should register to compete at https://uwmdessertcompetition.weebly.com by April 9. Attendees who wish to observe and sample do not need to register.

April 18

Luar na Lubre: a Musical Voyage from Celtic Galicia to Latin America. Curtin 175. 4 p.m. Talk and music demo by Bieito Romero. Sponsored by the departments of Spanish & Portuguese and Anthropology and the centers for Celtic Studies and Latin American & Caribbean Studies.

April 20
Geography Colloquium: Uncertainties analysis of spectral mixture analysis. AGS Library. 3 p.m. Yingbin Deng, UWM.

April 23
History Department McGaffey Lecture Series: Minds Under Siege – Diaries of the Leningrad Blockade. Greene Hall. 3:30 p.m. Alexis Jean Peri, Boston University. http://uw.edu/history

April 24
Film Premier: Anne Morgan’s War / L’autre chemin des Dames. 4th Floor Library Conference Center. 7 p.m. Shown in conjunction with photography exhibit “Anne Morgan’s War: American Women Rebuilding France 1917-1924.” https://bit.ly/2HYumNB

April 26
Geosciences Colloquium: SETI: The Search for Extra-Terrestrial Intelligence – Perspectives of an Earth Scientist. Lubar N120. 3:30 p.m. Donna Jurdy, Northwestern University.

2018 Maps and America: The Arthur Holzheimer Lecture Series. AGS Library. 5:30 p.m. Carme Montaner, Institute Cartografic i Geologic de Catalunya/Spain, presents “Franciscan Cartography of the Peruvian Amazon in the Second Half of the Eighteenth Century.”

April 27-29
Italian Film Festival. UWM Union Theater. 7 p.m. Enjoy nine recent films shown in Italian with English subtitles. Free and open to the public. Show times at https://bit.ly/2ucCat7.

April 27

Geography Colloquium Series: The UWM Field Station – Properties, Programs and Research. AGS Library. 3 p.m. Gretchen Meyer, UWM Field Station.

Math lurks beneath the surface of the physical world in everything from earthquakes to storms. Paul Roebber (Mathematical Sciences) discusses why understanding the physical/mathematical relationships between the world and the future is essential to the task of making predictions. https://youtu.be/9kpbJuPndEM

Our ability to learn and remember is central to our experience of the world and sense of who we are. Fred Helmstetter (Psychology) describes how we use molecules, cells and circuits in the brain to store and retrieve information. https://youtu.be/hU7xd-MpmMA
Alumni Accomplishments

Robert Rosinsky (‘76, MS Psychology) was chosen for the P.J. Trevethan Award during the 2018 Goodwill Industries International CEO Recognition Banquet. The award honors a Goodwill CEO for outstanding contributions in training Goodwill personnel. Rosinsky is the CEO of Goodwill Manasota, Florida.  

Jared Pinkus (‘11, BA Political Science and Urban Studies) will become Sauk County’s new community liaison, responsible for highlighting the county as a pleasant place to live, work, and visit. He was hired by the Sauk County board and will leave his position with the Denver Office of Economic Development for the new role. [http://bit.ly/2os5MYi]

Margaret Spiegel (‘16, MA History) has a new position as the curator at Nelson Pioneer Farm, a historical farm and museum showcasing Iowa farm life in the 1800s. She hopes to revitalize the museum and increase visitor traffic during her tenure.  

Andrea Wolf (‘09, MA Economics) joined First Business Financial Services, Inc. as the Vice President – Commercial Lending in the company’s Milwaukee office. She brings 10 years of industry experience to the job.  
[http://bit.ly/2CO0lgH]

Megan Schelwat (‘13, BA Journalism, Advertising, and Media Studies) joined the Grafton Area Chamber of Commerce as the special events and tourism promotion director. She is now responsible for planning and executing annual city events. [http://bit.ly/2HUh3yA]

Wayne Wiegand (‘70, MA History) will be featured this spring in the Houston Public Library Quarterly Author Series, highlighting a notable author each season. Wiegand will discuss his work, The Desegregation of Public Libraries in the Jim Crow South: Civil Rights and Local Activism. [https://bit.ly/2FYCCkf]

Mike Groth (‘01, BA Economics) joined First Business Bank’s Milwaukee office as an SBA Portfolio Manager. He was previously a portfolio manager with Byline Bank. [http://bit.ly/2oUbgiM]

Timothy Jarome (‘13, PhD Psychology) accepted a position at Virginia Tech as an assistant professor of animal and poultry sciences in the Virginia Tech College of Agriculture and Life Sciences.  

Craig Leffler (‘67, MA Political Science) and his wife, Maggie Balacki, showed off the beautiful interior of their home in Capital Gazette’s Lifestyle section. [http://bit.ly/2FpnGK]

Jodi Hogerton (‘07, BA; ’11, MA Spanish) was appointed the new marketing manager of FullTilt Marketing in Orlando, Florida. She brings seven years of industry experience with her. [http://bit.ly/2I9075U]

Kyle Danowski (‘13, BA Journalism, Advertising, and Media Studies) was named the President and Executive Editor of ProPRcopy, a Milwaukee-based content creation company. [http://bit.ly/2It2BOA]

Kim van Alkemade (‘97, PhD English) is one of the featured authors discussing her latest novel, Bachelor Girl, with ELLE Canada’s managing editor at Books in Bloom: An Elle Canada Author Event presented by Simon & Schuster in April.  
[https://bit.ly/2udwm2I]

Brittyn Calyx (‘17, BA Conservation and Environmental Science) will present at Transforum: Providing Competent and Ethical Health Care to Trans People, a health care conference presented by Oakton Community College discussing enhancing quality of health care for the LGBTQ community, in April. [http://trib.in/2G3dGUW]
Planetarium shows American Indian perspectives of the night sky
By Matthew Wamser, University Relations

Each of Wisconsin’s 12 Native American nations has its own word for “star.” They share one night sky, but each nation has a distinct way of looking at the cosmos.

UWM’s Manfred Olson Planetarium is presenting “Indigenous Voices: Sharing the Wisconsin Sky,” a series of programs that will celebrate the individual languages, cultures and perspectives of six Wisconsin nations: the Ho-Chunk, Menominee, Ojibwe, Oneida, Potawatomi and Stockbridge-Munsee.

Each presentation will feature the origin story of the six nations, traditional music, images and star stories during indoor stargazing. In addition to the UWM hosts, guest speakers from various parts of Wisconsin will share their stories. The series will be presented every Friday from March 29 through May 4, at 7 and 8:15 p.m. Tickets are $5 and can be purchased in advance at the planetarium website.

No one anticipated the project’s scope when Jean Creighton, director of the planetarium, initially reached out to UWM’s Electa Quinney Institute for American Indian Education about a collaboration.

“So much of that cultural heritage has been lost. It was sobering for everyone,” Creighton said. “We had to shift our focus to rediscovery and to saving what we can. We couldn’t find many constellation stories. Even finding the word for stars in some languages was very hard. This project became about holding on to things that might have been lost forever.”

Through the institute, a group of Native American undergraduate students conducted research to document their nations’ celestial words and stories.

“Some students were raised knowing bits of their language. Others had to connect with elders from their communities,” said Margaret Noodin, director of the institute and associate professor of English, who organized and guided the research. “Because of the process of colonization and settlement, Wisconsin’s nations have retained their traditional language and ecological knowledge at different levels.”

Noodin, the students and Bernard Perley, an associate professor of anthropology who worked on the project, will speak during the shows to share their findings. During each program, there will be samples from the languages of all six nations. Depending on the guest speaker, each program will also have an emphasis on a particular nation or theme.

“Very frequently, people think of Native American culture as part of the past,” Noodin said. “This show connects the past to the present in a really meaningful way. Hopefully, people come away with the understanding that Native Americans are a part of our city and our state. We look forward to sharing the night sky with everyone.”

L&S presents a new degree option for GIS professionals

Beginning in Fall 2018, geography students pursuing the Master of Science degree will be able to choose a track in Geographic Information Science (GIS).

This professional track is ideal for students who plan to seek employment in the field of GIS and who do not intend to seek a doctoral degree in the field. GIS professionals are highly sought after for their research and development skills in GIS technologies. Typically GIS professionals produce and manage complex databases, program applications, conduct data analysis, and manage large-scale projects. Employers from a broad range of industries - agriculture, mining, health care, retail trade, city and regional planning, transportation, and criminal justice to name a few – are hiring at a variety of levels: GIS Analysts, Administrators, Managers, and Coordinators. Students prepare for employment by completing an internship prior to graduation.

For more details, see http://uwm.edu/geography/graduate/degree-program/mams-in-geography/.
Nobel laureate Frank visits UWM

By Laura Otto, University Relations

With a transformational method of imaging biomolecules that he helped to develop, Joachim Frank, who won the 2017 Nobel Prize in chemistry, found that molecules inside of human cells – the cellular machinery that powers our bodies – are in a constant state of motion.

He realized the potential of the imaging method, cryo-electron microscopy (Cryo-EM), after his lab created three-dimensional pictures of a biomolecule called a ribosome making proteins inside of a cell. The imaging has touched off a revolution that allows scientists to see, for the first time, “movies” of the basic processes of life that will benefit medicine.

“I knew then I could really contribute something to biology,” Frank said in a lecture he gave at UWM March 9. “I got resolutions that had never been achieved by anyone else.” The Columbia University professor came at the invitation of UWM distinguished professor of physics Abbas Ourmazd who has published recent papers with Frank.

Frank shared the Nobel with Richard Henderson of Cambridge University and Jacques Dubochet of University of Lausanne in Switzerland, for developing Cryo-EM. It allows scientists to view the movement of biological molecules using beams of electrons instead of light to take “snapshots” of samples after freezing them very quickly to preserve their natural shape.

Biomolecules change their atomic structure continuously as they accomplish cellular tasks like turning genes on and off, mediating chemical reactions, signaling other cells, and controlling cellular gateways. The Cryo-EM imaging method produces multitudes of random, unsorted two-dimensional views that must be ordered and mathematically reconstructed. Frank created computational software that turned the blurry 2-D pictures taken with an electron microscope into detailed 3-D images.

In his lecture, which drew an audience of about 250, he traced the steps involved in perfecting Cryo-EM and also described recent collaborative work between his lab at Columbia University and the Ourmazd group.

People in print


Vervet monkeys carry a virus similar to HIV in humans, but they rarely get simian AIDS. Trudy Turner (Anthropology) went on WUWM to explain why. [http://bit.ly/2oedYBt](http://bit.ly/2oedYBt)

Changing demographics have impacted breakfast’s tradition as the “most important meal of the day,” Martha Carlin (History) said in a Milwaukee Journal Sentinel article exploring ready-to-eat cereal. [http://bit.ly/2owHmls](http://bit.ly/2owHmls)

Kim Blaeser (English) helped Milwaukee kick off The Big Read initiative, “Wisconsin Reads “The Round House,”” at the beginning of March by reading her own poetry and introducing the book that the community was encouraged to read together in March. [http://bit.ly/2sSAoN4](http://bit.ly/2sSAoN4)

The city of Madison got to know Chelsey Dequaine (’12, BA Journalism, Advertising, and Media Studies) when she was featured on In Business Madison’s website for her role as the director of social media strategy at designCraft Advertising. [http://bit.ly/2FqYjG6](http://bit.ly/2FqYjG6)


The Hubble Space Telescope has been instrumental in space exploration for the past 50 years, Jean Creighton (Planetarium) told WUWM. ([http://bit.ly/2CfY6ae](http://bit.ly/2CfY6ae)) She also appeared on WISN12 to give background about Wisconsin’s one-off meteor show in early March. ([http://bit.ly/2Fice0o](http://bit.ly/2Fice0o))

Mark Schwartz (Geography) presented, “Phenology: Tracking Seasonal Transitions in a Changing Climate” at the Winnebago County Master Gardener Association’s conference ‘Winter Escape, Summer Dreams” in February. He also appeared on CBS 58 News for his role in developing a phenology tracker to predict the arrival of spring. [http://bit.ly/2D1BMNg](http://bit.ly/2D1BMNg)


The Digital Yiddish Theatre Project is Joel Berkowitz’s (Jewish Studies) brainchild and has grown from a small idea to a respected national collaboration effort, the Jewish Chronicle reported. [http://bit.ly/2osGP4X](http://bit.ly/2osGP4X)

Karyn Frick (Psychology) discovered that a single treatment of the hormone estradiol, a form of estrogen, has significant impact on women’s brains in the formation of memory, which has implication for dementia and Alzheimer’s diagnoses, according to an article from the Yale School of Medicine. [http://bit.ly/2FsIDJW](http://bit.ly/2FsIDJW)

Karyn Frick


Most of the area’s job growth has taken place in the Milwaukee suburbs and current public transportation can’t connect Milwaukee city residents, Marc Levine (History) told the Milwaukee Journal Sentinel for an article examining outcome disparities among low-income residents of various Wisconsin counties. [http://bit.ly/2F0VL4H](http://bit.ly/2F0VL4H)

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With every camera equipped with a cellphone and the Internet as a platform, many people are grappling with how “citizen journalists” should treat traditional journalistic ethics, David Allen (Journalism, Advertising, and Media Studies) said in a 1130 WISN piece exploring the questionable practices of a citizen journalist in Sheboygan, Wisconsin. https://ihr.fm/2FcEx4y

The area in Oshkosh, Wisconsin, where UWM Cultural Resource Management scientists are uncovering Native American artifacts is exactly where one would expect to find the remains of a Native American village, Jennifer Haas (Cultural Resource Management) told ABC 2 News (http://bit.ly/2Fa5m9s) and Wisconsin Public Radio (http://bit.ly/2FvB4xc).

How should the Milwaukee city government address the problem of lead in the city’s drinking water? Noelle Chesley (Sociology) and John Berges (Biological Sciences) had some ideas they suggested in an op-ed piece for Urban Milwaukee. http://bit.ly/2D1wlxQ

The Nonprofit Management program was included in a comprehensive compilation released by TopNonprofits.com listing nonprofit management degree programs in the U.S. http://bit.ly/2FlFjld

The Shepherd Express gave a glowing review of the late Arpine Khatchadourian’s (Comparative Literature) posthumously-published study of the genre of the Armenian epic, entitled David of Sassoun. http://bit.ly/2oUl8Lm


“Korean tiger mom” and graduate student In-Jee Lee (Nonprofit Management) helps refugees like Kabayiza Ntirenganya settle in Milwaukee, the Milwaukee Neighborhood News Service reported. http://bit.ly/2FnugCm

A Picasso stolen from a Milwaukee art gallery is a heartbreaking loss because the piece was so unique, Leigh Mahlik (UWM Art Collection and Emile H. Mathis Gallery) told Fox6 News. http://bit.ly/2tufq7T

Sony Pictures is releasing their film “Slender Man” later this year despite a court case in Waukesha, Wisconsin involving the fictional villain. Doctoral student Joni Hayward (Film Studies) told Milwaukee Record that not since “Heavenly Creatures” has a film so closely tied to a true crime case invited such controversy. http://bit.ly/2Dcrr1h

Current Wisconsin Attorney General Brad Schimel (’87, BA Political Science) has kicked off his re-election campaign, WisPolitics reported. http://bit.ly/2FFMMW7

The Yerkes Observatory is facing several problems, including light pollution and aging technology, that are contributing to its possible closure, Jolien Creighton and John Friedman (both Physics) told WUWM. http://bit.ly/2DrodHf

How do you make Milwaukee streets safer? One school of thought says to increase community engagement through block clubs, which is exactly what Jonatan Zumiga (’15, BA Urban Studies) has done as the Community Outreach Manager of Layton Boulevard West Neighbors, the Milwaukee Journal Sentinel reported. The article also called on Amanda Seligman (History) to explain the role of block clubs in urban areas. http://bit.ly/2pbXSaU


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“Poetry Everywhere” was one of the marquee efforts – animated poetry readings created collaboratively with students and faculty from Peck School of the Arts and the English department. Working with a transit video company, they were able to place the poetry videos on public bus systems around the nation. The video company has since folded, but the project lives online.

He’s always coming up with ways to get his students’ work in the public eye.

“In April, we do ‘Eat Local :: Read Local,’ a project in which we put poems and flash fiction in the hands of diners at local-centric restaurants,” Callanan said. “It’s local writers writing for local diners in restaurants with a local focus.”

The project distributes about 10,000 cards in Milwaukee and Madison. Callanan hopes to expand elsewhere in the state.

Also, keep an eye out for “The Literary Circular,” micro-fiction and short poems appearing on the cup sleeves at The Grind coffee shops on the UWM campus.

Though he says he and his family are “woven into Milwaukee,” he’s hardly homebound. “I have hugely itchy feet,” he says. “If I wasn’t a writer, I’d probably be a flight attendant.”

Beyond being a novelist, Callanan is also interested in, and teaches, “creative nonfiction,” encouraging people to use some of the tools of fiction to engage readers in nonfiction writing.

He is currently doing the research for a nonfiction work himself, a biography of Lester Maitland, a contemporary of Charles Lindbergh who was the first person to fly from North America to Hawaii.

“I’m fascinated by the trajectory of his life,” Callanan says. “He’s a Milwaukee boy – he went to Riverside High School – and later in life became an Episcopal priest.”

Added bonus: Callanan’s research will take his itchy feet on the road.

Caroline Seymour-Jorn (Comparative Literature) presented a paper on “Arabic Literature in Translation” at Kenyon College on Feb. 26.

Wisconsin Gov. Scott Walker introduced some school safety measures in March, but Kathy Dolan (Political Science) told WUWM that it’s unsurprising that none of his proposals include gun control. [http://bit.ly/2Ixi3Jc](http://bit.ly/2Ixi3Jc)

Eliminating humanities programs at some regional UW System universities could put a liberal arts education out of reach for some students, Nicholas Fleisher (Linguistics) wrote in an essay repurposed for the Academe Blog. [https://bit.ly/2pxaSZM](https://bit.ly/2pxaSZM)

March Madness extends to the often-erratic weather that defines the month, Mike Westendorf (Innovative Weather) told the Milwaukee Journal Sentinel. [https://bit.ly/2FX4wZN](https://bit.ly/2FX4wZN)

Erik Gulbranson (Geosciences) was one of the scientists to discover five fossil forests in Antarctica, which might provide clues about a massive extinction event far in our Earth’s past, National Geographic reported. [https://bit.ly/2DA3RM2](https://bit.ly/2DA3RM2)
Black representation  

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Kopkin determined that black representatives were roughly 4 percent more likely to vote in line with the black caucus for LCCR key votes than their white peers, 5.5 percent more likely on bills highlighted by the ADA, and 8 percent more likely on important votes as designated by Congressional Quarterly.

“I thought that was significant. You actually see the largest difference on bills pertaining to the most important issues that are facing the country,” Kopkin said. “You would think that the Democrats would be more in agreement on these things, but they’re not.”

For instance, “There was one bill that provided for unlimited punitive damages for discrimination based on sex, religion, or disability. In that case, blacks voted unanimously to push this bill and actually, the majority of white Democrats opposed it,” he added.

Conclusions and Congress

Based on his results, Kopkin thinks that the House of Representatives could have a substantial impact on the lives of black Americans if there were more black representatives in Congress. The problem, he says, is getting them there. He sees several ways forward.

“One way would be to increase the interest among African Americans in running for office. If you get a lot more black political candidates, some of them will win,” Kopkin said. “Another way is through electoral reform. If we were to implement automatic or universal voter registration – where citizens are automatically registered to vote without having to fill out paperwork, especially in minority communities – that might help.”

Another method is to redraw congressional districts to eliminate racial gerrymandering. The United States Supreme Court recently struck down North Carolina’s congressional map, saying that the state had unconstitutionally packed black voters into two districts to reduce their voting power. The Court is set to hear a case on racial gerrymandering in Texas later this year.

“White voters shouldn’t be afraid that a black representative would neglect their interests in favor of African American constituents,” Kopkin said. Just because a bill would benefit black people does not mean that it would negatively impact whites.

And, of course, he said, we all need to vote.

“Almost half of the voting-age population didn’t vote in the last election, and only about a third voted in the last midterms,” he added. “In order for our democracy to run properly, you can’t have a minority of citizens voting. That means you’re doing it wrong.”

DNA analysis  

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The work is a satisfying job that resulted from an unconventional career trajectory. Purpero majored in biochemistry at UW-Madison and worked in a meat plant testing food products for bacteria after his graduation in 1997. He and his friends at the job couldn’t see a long-term future for themselves in the meat industry, so Purpero entered UWM to work on his graduate degree. He made fast friends with his PhD advisor, Graham Moran. The two still meet once or twice a year to go mountain biking together.

Purpero entered a postdoctoral position researching enzymology at the University of Minnesota upon earning his degree, and eventually returned to Wisconsin to work at a small biotech company as a protein purification scientist. The depth of his molecular biology background relating to those two fields – enzymology and protein purification – turned out to be perfect when Purpero applied for the DNA analyst position five years ago.

He’s enjoyed the job ever since, especially because Purpero’s father retired as captain of detectives in the Milwaukee Police Department. Purpero jokes that law enforcement is now a family business. “It seems to run in the DNA.”