

## UWM professors land 'powerful' grant to study grid risks

By Sarah Vickery, College of Letters & Science

In 2015, Ukraine reported that hackers were able to compromise the information systems of three power utility companies, marking the world's first recorded successful cyber attack against a power grid. Cyber attacks, especially targeting infrastructure, have become an increasing concern for U.S. law enforcement agencies, security experts, and power companies alike.

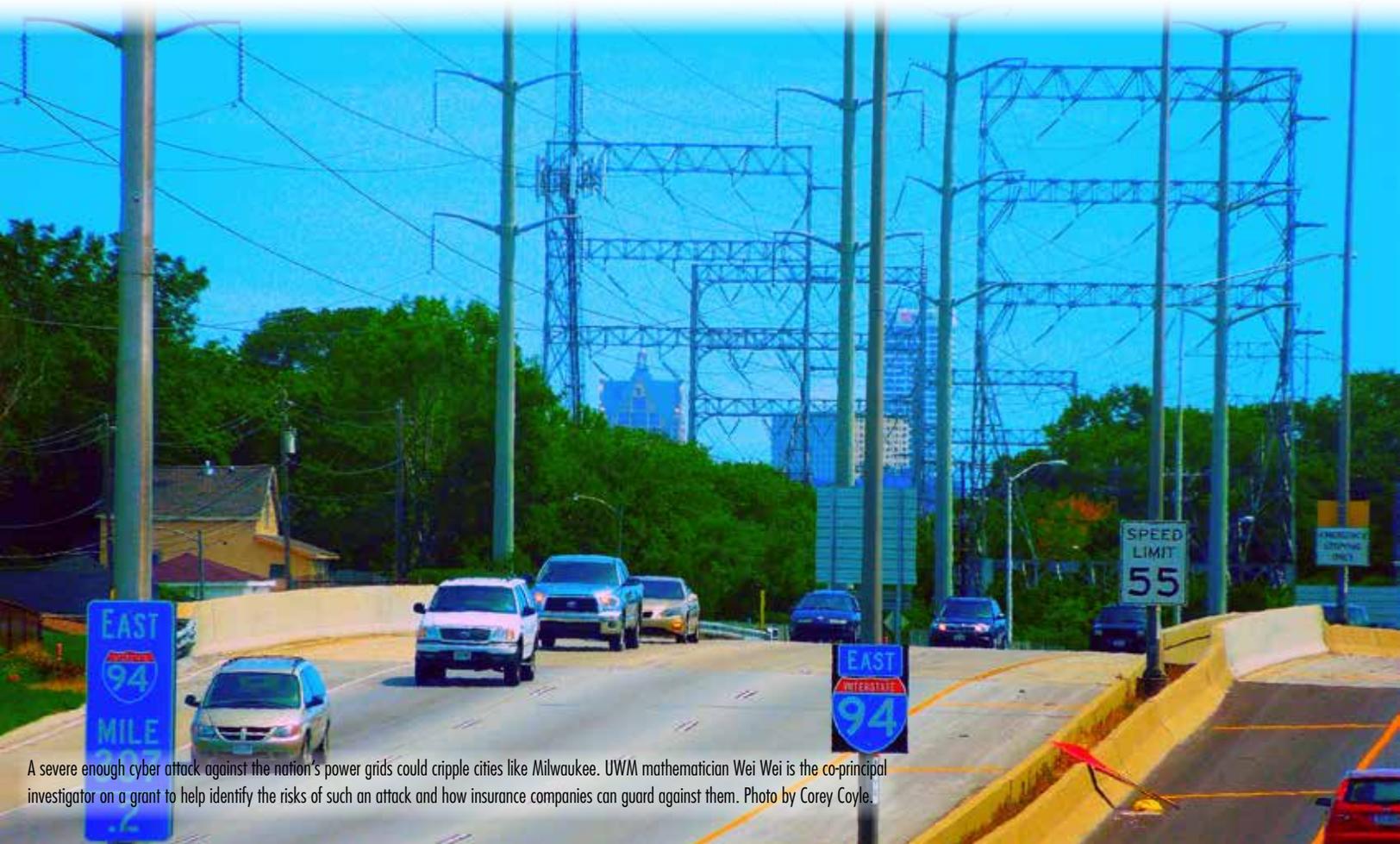
UWM Mathematical Sciences professor Wei Wei is hoping to help utility companies prepare for that risk.

Wei's research focuses on actuarial science. He is the co-principal investigator, alongside principal investigator Lingfeng Wang, an electrical engineering professor in the UWM College of Engineering and Applied Science, on a \$352,109 grant from the National Science Foundation. The grant provides funding to examine cyber security risks to the country's power grids, and how to insure against them.

There are two ways power utility companies can protect themselves from the consequences of cyber attacks. The first is to invest in front-end security, like firewalls, strong passwords, and infrastructure, to stabilize the power grid. The second is to transfer the risk of monetary damages to another party, like an insurance company. The trouble is, insurance companies are reluctant to provide services for this type of threat.

"For the past few years, people have thought that cyber risk is uninsurable," Wei explained. "It's uninsurable because we don't know much about the nature of the risk."

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A severe enough cyber attack against the nation's power grids could cripple cities like Milwaukee. UWM mathematician Wei Wei is the co-principal investigator on a grant to help identify the risks of such an attack and how insurance companies can guard against them. Photo by Corey Coyle.

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Luis de Leon enjoys the sights from the Brooklyn Bridge in New York City during his summer internship at the CBS News headquarters. De Leon worked in the station's medical unit. Photo courtesy of Luis de Leon.

## Journalism student lands internship for a healthy look at CBS

By Sarah Vickery, College of Letters & Science

When he arrived in New York City for his internship, Luis de Leon had to list his preferences – he could choose to work in CBS' evening news division, on the “60 Minutes” or “48 Hours” teams, or any of the other myriad departments.

He chose the Medical Unit, despite having no medical background or training.

“I was a little nervous – I hope I didn't just throw myself into something weird in an internship I really want to take advantage of,” de Leon said. “It turned out being the best thing I ever did.”

De Leon spent the past summer in the headquarters of CBS News interning under the network's chief medical correspondent, Dr. Jon LaPook. Every day, he, LaPook, and the unit's two producers would scour medical journals and studies for new health discoveries and trends. They would arrange and conduct interviews that would later be shown on air and wrote scripts for the broadcasts. On occasion, de Leon would venture out with a photographer to tape interviews to be used during the news segment.

In essence, de Leon said, “I literally got to be the third producer. ... It was shocking to me that they trusted me like that right away. That was pretty neat.”

Their trust was well-placed; as a Journalism, Advertising, and Media Studies major, de Leon has worked hard to develop his technical skills. He's interned at local stations, including Fox 11 in Green Bay and at Milwaukee PBS. Even in high school, where he had aspirations to be an on-air meteorologist, de Leon would call news stations and ask to shadow someone in the studio for a day.

He chose UWM for its Atmospheric Science program and because he wanted to join Panthervision, the university's award-winning, student-run news broadcast at the time de Leon matriculated. After a few science courses, de Leon realized meteorology wasn't in the cards, but journalism was.

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# English alumna at *Vanity Fair* celebrates first bylines

By Sarah Vickery, College of Letters & Science

*Vanity Fair* magazine is among the top publications in the U.S. Covering pop culture, current affairs, and fashion, the magazine has a circulation of more than 1 million readers.

It's KrisAnne Madaus' job to ensure every page is perfect. Madaus majored in English at UWM and graduated with her Bachelor's in 2014 before getting her Master's at the New School in New York City. Today, she's a production assistant at *Vanity Fair*. She talked with UWM about her job and her recent bylines – including a story on Heidi Klum's Halloween party (<http://bit.ly/2zGLF1z>).

## How did you get started at *Vanity Fair*?

It was a complete surprise to me. The one thing I have learned is that the more you network with people, the more opportunities you get. During my time at the New School, I worked as my thesis adviser's research assistant. I learned that her husband writes for *Vanity Fair*. Near the end of the semester before I graduated, I got an email saying that there was an opening at the magazine, and my thesis adviser kindly recommended me for the position. Of course, I had to interview like anyone else, but I truly believe that networking with people got me here.

## What does a production assistant do?

I support the production department, including the production director and the associate managing editor. My job is to take each page of the magazine through every stage. It starts with the writer sending us the text, which we clean up for stand-out errors, and then we send it to other departments like copy and research. From there, we merge art with text using InDesign and InCopy to get ready for the print process.

## And now you've started writing for the magazine too.

Another part of my regular job is to write for a little bit for print. I don't get a byline for these things. It's just things that regularly occur in the magazine, like contributor's notes or table of contents entries. For these, I reach out to some of our writers and photographers and interview them.

Other than that, the things that I've had published on web were things that I've personally pitched - the Heidi Klum interview for her Halloween party, and then a small article about an interior design book.

## Heidi Klum, the model and businesswoman, Heidi Klum?

The phone interview was really fun. I was incredibly nervous. She is very much a professional though, and I barely had to prompt her. She kept going on, which is exactly what you want in an interview. She was talking about her childhood in Germany, and I was like, this is going a little off-topic, Heidi, so let's bring it back in – and that was all the direction I had to give her. It's a fun moment to look back on.

## How was it seeing your byline for the first time?

I've had my fiction published before in small literary magazines, but having my name on *Vanity Fair* is something that extends way beyond my literary community. My mom knows what *Vanity Fair* is, and people who aren't necessarily readers or writers know the name.



KrisAnne Madaus ('14, BA English) smiles in the *Vanity Fair* offices, located in the World Trade Center building (left). Photo courtesy of KrisAnne Madaus.



# Econ professor helps students become financially savvy

By Greg Walz-Chojnacki, University Relations

Rebecca Neumann specializes in international finance and macroeconomics, but she also devotes a lot of time to an issue that hits closer to home: preparing students for a life of financial security.

Neumann, an associate professor of economics, designed and teaches “The Economics of Personal Finance,” a one-credit, seven-week short course that gives UWM students the basic skills they need to come to grips with their financial situation and, more importantly, to plan for their futures. More than 3,100 students have taken the course so far.

“We teach the fundamental concepts and techniques of personal finance,” Neumann says. “Students start by tracking their expenses in detail, which gives them the basis for developing a budget.”

She’s a big proponent of saving, urging to students to “pay yourself first” by treating savings as a regular expense in their budgets.

From these basics, students go on to learn about managing debt, including credit cards. They are required to learn and keep track of their credit ratings. The course also encourages a longer view of personal finance, with discussions about investing and insurance.

Many of the students who take the course are Lawton Scholars, who are required to take it as a condition of their award. Neumann thinks it would be good for all students, many of whom are dealing with managing debt, income and expenses for the first time.

Neumann was recognized for her work, receiving the 2016 Governor’s Financial Literacy Award last February. She knows from personal experience that such knowledge is not always easy to come by.

“My father was an accounting professor, but he spoke very little about his own financial matters,” Neumann recalled. “[My siblings and I were] each given a bank book and, rather than giving us an allowance directly, he’d enter credits and debits.”

Neumann, a saver by nature, accumulated a substantial account.

“When I realized he wasn’t paying interest, I said I wanted to take my credits and put the money in a bank account, which would.”

Her father approved.

Neumann’s role as UWM’s financial literacy guru came about somewhat unexpectedly. In 2007 the university was approached by Milwaukee lawyer and philanthropist Bill Hotz, who as a member of Make a Difference Wisconsin (recently renamed SecureFutures) was involved in getting financial literacy classes established in Milwaukee area high schools. Hotz proposed establishing a financial literacy course for UWM students, and Neumann responded by designing and teaching Econ 110.



Rebecca Neumann, associate professor of economics at UWM, talks about personal finances with Syniece Johnson (left) and Antwoyne Walker at Lynde and Harry Bradley Technology and Trade School. In addition to teaching a financial literacy course at UWM, Neumann talks with students at Bradley Tech as a “money coach.” (UWM Photo/Troye Fox)



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# UWM biologist studies birds that break all the mating rules

By Laura Otto, University Relations

What can the mating behavior of birds tell us about evolution, climate change and species survival? For Peter Dunn, UWM distinguished professor of biological sciences, bird-watching offers clues to overarching ecological questions. He wants to know the purpose behind bird preferences such as feather brightness and why some birds follow the same mating playbook, while others deviate. He and Professor Linda Whittingham are now in their 21st year of studying tree swallows at the UWM Field Station, a 320-acre wetland near Saukville. This has given the ornithologists a long-term perspective on the birds they study, which include common yellowthroats and tree swallows.

## What attracted you to this work?

When I first became interested in bird behavior I was drawn in by birds that have a lek mating system, like the greater prairie chicken. In the lek, the males give a public display out in a field, which attracts the females. The males all hang out in this group, just strutting their stuff for the females. Some get multiple mates and other don't get any. It's like a bar scene where the guys are showing off and the females gather to check them out.

After mating, the females go off and build a nest and raise the young all by themselves. The males do not provide any parental care. This is unusual. Ninety percent of birds are monogamous and they raise their young together. So, what originally interested me was the question of why are some birds like that and others are not.



UWM Biologist Peter Dunn studies the mating behaviors of tree swallows like the one in flight above. Photo by Magnus Manske.

## How do you find and study the other 10 percent?

Linda and I have been studying mating behavior in tree swallows since 1997. When they nest, there's a male and a female and they appear to be monogamous. But when we did the genetic analysis, we found out there's actually a lot of fooling around.

Analysis showed the male tending the nest may not be the parent. He only sires about half the young. The female needs the help of the male to raise the young, but she doesn't necessarily want his genes. In fact, 80 percent of the females have extra partners – that's about the highest rate of any bird in North America!

## What is luring the females into promiscuity?

We did a study just last year where we took magic marker and made some of the males duller. What we found is, if you dull a male, he isn't as attractive to females. So he can't get any of these "extra matings." We showed experimentally that it's really the color of the male that leads to the extra-pair mating. We also found that the extra-pair sires had brighter plumage than the within-pair male they cuckolded. These results suggest that extra-pair mating behavior is driven by reproductive benefits to both males and females.

## You've done a lot of work on the differences between males' and females' plumage. What else have you found?

Why many males and females are different in the brightness of their features has been a perennial question since Darwin. So, in 2015 we did a study, looking at nearly 1,000 species, and we found that, while males often have brighter feathers than females for purposes of attracting a mate, natural selection has been equally important over time in determining feather colors.

[Continued on page 14](#)



Peter Dunn, UWM distinguished professor in biological sciences, has been studying the mating habits of tree swallows and other birds at the UWM Field Station in the Cedarburg Bog for more than 20 years. The work has yielded some surprising discoveries. (UWM Photo/Pete Amland)



## Video Stories

As a stay-at-home mom with three kids, Sociology major Sara McNallie didn't have time to finish her studies in the classroom - so she's getting her degree online. [https://youtu.be/i\\_17GxI5xZw](https://youtu.be/i_17GxI5xZw)

## CBS internship

[continued from page 2](#)

"The JAMS program really pushes you to do a good story," de Leon said. "People around the country will notice that you're using everything you possibly can to your advantage. ... They don't care if you're pretty and look great on camera or if you're at a well-funded, good-looking student-run studio. They see that you're trying to make as much as you can out of what you have, and they'll appreciate that. I think that's why I got the internship with CBS."

In addition to working with Dr. LaPook, de Leon's internship also required him to attend speaker and writing workshops with his fellow interns, as well as collaborate with them to prepare a three-minute feature piece. The group met some of the network's flagship anchors and correspondents like Anthony Mason, Scott Pelley, and Jim Axelrod.

The best part of the internship was how all of the CBS crew supported the interns, de Leon said.

"Their willingness and openness to helping me, and letting me in on whatever they were doing was the best," he said. "There would be meetings with one of the more famous correspondents and I'd be like, can I come? Yeah! ... The fact that I was even in New York and had the opportunity to be around this talent [was amazing]."

The experience built his talents as a scriptwriter, researcher, and interviewer, he added. One of the most interesting pieces he worked on had de Leon traveling to Connecticut to talk with a widow whose husband was killed in a train accident. The story covered the Federal Railway Administration's decision to discontinue sleep apnea screenings for conductors.

De Leon also helped LaPook and his team produce stories ranging from the introduction of a new vaccine delivery method to the shooting of Congressman Steve Scalise, who was wounded during a shooting at a baseball team practice in June.

These days, de Leon is putting his skills to use as an intern in UWM's University Relations department. He's applying for jobs for after graduation in May, and hopes he can work at the same Fox affiliate he interned for previously in Green Bay.

And after that? He might just return to CBS someday – this time as an anchor.



Journalism student Luis de Leon checks camera angles as he prepares to tape a segment for a newscast. Photo courtesy of Luis de Leon.

# Student pursues political passions in Sen. McCain's office

By Aaron Gash, College of Letters & Science

This past summer, Elliott Evans, a political science major at UWM, completed a career-shaping internship with the office of Arizona Senator John McCain in his home city of Phoenix.

"I was home [in Arizona] for winter break, and I was just kind of looking for something to do over the summer," said Evans. "Since I'm a political science major, I thought that interning for Senator McCain would be something that's worth doing."

"Generally, we answered the phones and organized files," he added, "[but] there was a lot of stuff that we had to deal with that was out of the ordinary for other interns in previous summers."

For example, Congress proposed several versions of a health care bill that would have revised, or all together repealed, the standing Affordable Care Act law. Then, in July, Sen. McCain announced that he had been diagnosed with glioblastoma, a cancerous brain tumor. McCain told reporters that his prognosis was "not good."

"The massive overflow of voice messages and questions about important legislative actions such as the health care bill were definitely out of the ordinary," said Evans.

He singled out answering the phones as one of the more difficult aspects of the internship.

"There were people that were calling in [who] were saying some pretty mean stuff even after [McCain's] diagnosis, and that was pretty sad," said Evans. "But it just goes to show how politicized everybody in the country is."

Although he wasn't able to divulge specifics, Evans cited his interactions with constituents as one of the more interesting duties that he handled as an intern.

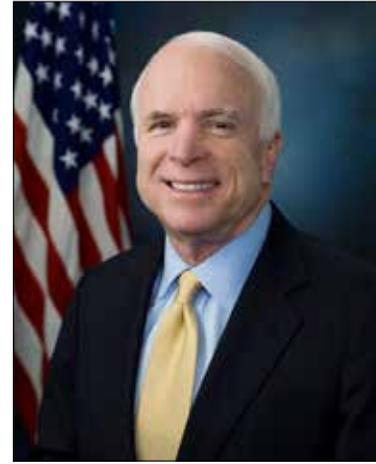
"It was really cool to hear people's stories and see how you [could] help," said Evans. "It was also very eye-opening seeing how sometimes you can't help and seeing what people go through."

Though Evans is a political science major, working for McCain actually pushed him in a different academic direction. After experiencing the chaotic nature of governmental operations in today's age, he has found himself feeling more passionate about other fields.

"The internship definitely opened my eyes to so many different aspects that go into politics," Evans said. "It kind of directed me away from politics but more towards business and law. I'm probably going to work in the business side of things for a couple years until I decide which route of graduate school to pursue. I'm either going to get an MBA or my law degree, but I don't think I would ever consider myself for political office."

While interning for McCain may not have convinced Elliot Evans to run for office, he still enjoyed the experience.

"[McCain] is an American hero and everything that he's done for this country is amazing," said Evans. "Working in his office and seeing where he goes gave me a stronger appreciation for everything that he does, and it was just impressive to see the actual physical space where he and his staff work to make such a big impact on our country."



United States Senator John McCain (R-Arizona)



UWM Political Science major Elliott Evans (third from left) gathers with his fellow interns during a party in the summer of 2017. Photo courtesy of Elliott Evans.

# ★ Alumni Accomplishments

**David Michael Williams ('01, BA English)** released his new book, *If Souls Can Sleep*, in January. The book follows two rival factions of people gifted with the ability to walk in dreams, and much of the action takes place in Milwaukee. <http://fondul.ac/2F5Xkd1>

**Walker J. J. Stutzman ('09, BA English)** was elected as a shareholder of the law firm of Wel Riley, S.C. in Eau Claire, Wisconsin. He is a member of the firm's litigation practice group and focuses on worker's compensation defense and labor and employment law. <http://bit.ly/2E1s0LZ>

**Brynna Wade-Gardner ('17, BA Communication)** delivered the address at the 42<sup>nd</sup> annual Martin Luther King Scholarship Coalition Celebration in Milwaukee in January. Wade-Gardner is a four-time recipient of MLK scholarships. <http://bit.ly/2mgf0M3>



Dr. Mary Gavinski ('80, BS Biology)

**Mary Gavinski ('80, BS Biology)** was chosen for an Executive Leadership award in *BizTimes* annual Health Care Heroes awards. Dr. Gavinski is an internist and geriatrician with Community Care, Inc. in Brookfield, Wisconsin, where she serves as the chief medical officer. Gavinski was instrumental in developing the Program of All-Inclusive Care for the Elderly (PACE) in Milwaukee, considered among the gold standards for elder care. <http://bit.ly/2C7ZzyW>

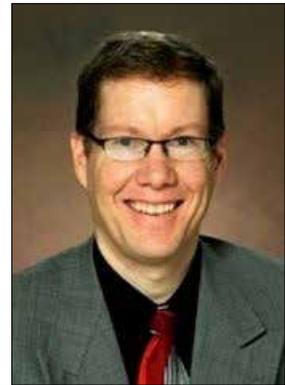
**Dana Dossett ('15, MS Nonprofit Management and Leadership)** joined the crew of the women-founded, women-run nonprofit theater group Renaissance Theaterworks in Milwaukee where she will serve as the part-time development manager. She was previously the grants and communications coordinator for The Women's Center in Waukesha. <http://bit.ly/2Do4k8c>

**Karl Metzger ('10, BA International Studies)** joined Guardian Business Solutions in Brookfield, Wisconsin as a solutions consultant. The company provides data collection and technology services for manufacturers. <http://bit.ly/2G8Q0yI>

**Samantha Willis ('13, BA Art History)** has made waves in Milwaukee's famed craft brewing industry by being one of just two women in the city to claim the job title "brewer." Willis was featured in the *Milwaukee Journal Sentinel* for the impact she has had on the city's beer scene. <http://bit.ly/2DvHeNt>

**John Bitzan ('97, PhD Economics)** was named associate dean for accreditation and research in the North Dakota State University College of Business. He assumed his new role on Jan. 2 and is responsible for working with the dean and department chairs to ensure the college's accreditation, among other duties. <http://bit.ly/2n3rUgK>

**Suzanne Leonard ('05, PhD English)** recently published her book *Wife, Inc.: The Business of Marriage in the Twenty-First Century* through NYU Press. The book explores how women's roles in marriages have changed from bread-makers to bread-winners using examples from popular culture. <http://bit.ly/2Bsjfjy>



Dr. John Bitzan ('97, PhD Economics)

## Scholarship deadlines are approaching - apply now!

The College of Letters & Science is currently accepting scholarship applications for the 2018-19 school year for students who will be sophomores, juniors and seniors next year. The deadline to apply is **March 1, 2018**.

To apply, complete the universal application form and you will be considered for any scholarships for which you meet the criteria.

Additional instructions on how to apply as well as a full list of scholarships are available at [uwm.edu/letters-science/scholarships/continuing-student-scholarship](http://uwm.edu/letters-science/scholarships/continuing-student-scholarship).





# Upcoming Events

## January 30-April 5

**Emile H. Mathis Gallery Exhibition: ReVisioning the UWM Art Collection.** Emile H. Mathis Gallery (Mitchell 145). Open 10 a.m.-4 p.m. Monday-Thursday. Free.

<http://bit.ly/2naRgtb>

## February 2

**Geography Colloquium: Property, Race, and the Carceral State.** 3 p.m. AGS Library. Anne Bonds, UWM.

**Science Bag - Lightning and Electricity: Shocking Truths.** 7 p.m. Physics 137. Bart Adrian, UWM. Free and open to the public. Show runs Fridays Feb. 2-23 and Sunday, Feb. 11.

<http://uwm.edu/science-bag/>

**Planetarium Show: Hubble's Cosmic Quest.** 7 and 8:15 p.m. Manfred Olson Planetarium. Tickets are \$5. Show runs Fridays Feb. 2-March 2 and at 2 p.m. on Feb. 18.

<http://bit.ly/2DHIGOE>

## February 7

**Women's & Gender Studies Lecture: Against the Evils of Democracy – Fighting Drug Wars and Femicide in Mexico and the Americas.** 3:30 p.m. 4th Floor Library Conference Center. Melissa W. Wright, Penn State University.

## February 8

**Geosciences Up-Goer Five Challenge.** 3:30 p.m. Lubar N120. Explain hard scientific concepts using the 1,000 most common words. Sign up by emailing [bowlesj@uwm.edu](mailto:bowlesj@uwm.edu).

<http://bit.ly/2EkEjUZ>

## February 9

**Ctr. for 21st Century Studies Symposium: Race and Free Speech on Campus – Then and Now.** 1 p.m. Curtin 175. Angela Lang (ACLU), Carolyn Rouse (Princeton University), Rob Smith (Marquette University), and Johnny Eric Williams (Trinity). <http://bit.ly/2Bs8fvH>

**Neuroscience Colloquium: Exercise Effects on the Brain and Cognition – A Systems Perspective.** 2 p.m. Lapham N101. Michelle Voss, University of Iowa.

**Anthropology Colloquium: Plumbing the Depths – Violence and Warfare in Our Earliest Pasts.** 3:30 p.m. Sabin G90. Nan Kim, UW-Madison.

## February 11

**Archaeology Lecture – Monumental Construction at Mycenae: Implications of Late Bronze Age Stone Working.** 3 p.m. Sabin G90. Nicholas Blackwell, Indiana University-Bloomington. Free and open to the public.

<http://bit.ly/2na727S>

# FEBRUARY 2018

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**Science Bag - Lightning and Electricity: Shocking Truths.** 2 p.m. Physics 137. Bart Adrian, UWM. Free and open to the public. Show runs Fridays Feb. 2-23.

<http://uwm.edu/science-bag/>

## February 13

**Dean's Distinguished Lecture in the Humanities - Does the U.S. need Public Universities?** 4 p.m. 4th Floor Library Conference Center. Chris Newfield, University of California-Santa Barbara. <http://bit.ly/2GhEktu>

## February 15

**Geosciences Colloquium: Alaskan Tidewater Glacier Cycle – Can Sediment Flux overcome Climate Change?** 3:30 p.m. Lubar N120. Ellan A. Cowan, Appalachian State University.

<http://bit.ly/2BtFu1m>

## February 16-25

**Festival of Films in French.** 7 p.m. Union Cinema. The 21st annual Festival of Films in French shows 14 films in French with English subtitles shown at various times throughout the week. Free and open to the public. For a complete list of films and showtimes, visit <http://uwm.edu/french-film-festival/>.

## February 18

**Planetarium Show: Hubble's Cosmic Quest.** 2 p.m. Manfred Olson Planetarium. Tickets are \$5. <http://bit.ly/2DHIGOE>

## February 23

**Geography Colloquium Series: 1000 Years of the Spaces of Hop Cultivation.** 3 p.m. AGS Library. Jennifer Jordan, UWM.

**Rhetorical Leadership Lecture: The Promise of Race and the Whiteness of Nation.** 3 p.m. Enderis 103. Lisa Flores, University of Colorado-Boulder. Sponsored by the Communication Department.

## People in print

**Bonnie Klein-Tasman (Psychology)** and Carolyn B. Mervis. 2018. Autism Spectrum Symptomatology Among Children with Duplication 7q11.23 Syndrome. *Journal of Autism and Developmental Disorders*, pp. 1-13. <http://bit.ly/2CSATeN>

**Richard A. Leson (Art History)**. 2018. “Partout la figure du lion”: Thomas of Marle and the enduring Legacy of the Coucy Donjon Tympanum. *Speculum*, 93(1): 27-71. <http://bit.ly/2AHNSKe>

**M. X. Chen (Physics)**, Wei Chen, Zhenyu Zhang, and **Michael Weinert (Physics)**. 2017. Effects of magnetic dopants in (Li<sub>0.8</sub>M<sub>0.2</sub>OH)FeSe (M=Fe, Mn, Co): Density functional theory study using a band unfolding technique. *Physical Review B*, 96(24). <http://bit.ly/2CR7lxk>

**Sung Soon Kim, Sandi Wibowo, and Dilano Saldin (all Physics)**. 2017. Structure of Single Particles from Randomly Oriented Ensembles Using an X-Ray Free Electron Laser. *Biomedical Journal of Scientific and Technical Research*, 1(7). <http://bit.ly/2FiOZ6X>

**Seyedali Baniadr and Jian Chen (both Chemistry and Biochemistry)**. 2017. Infrared actuation-induced simultaneous reconfiguration of surface color and morphology for soft robotics. *Scientific Reports*, 7. <http://go.nature.com/2mccM0s>

**Blain E. Neufeld (Philosophy)** and Lori Watson. 2018. The Tyranny - or the Democracy - of the Ideal? *Cosmos + Taxis*, 5(2): 47-61. <http://bit.ly/2FgaZys>

**Jeffrey Sommers (Africology and Global Studies)** and Vidvuds Beldavs. 2017. The emerging field of space economics; theoretical and practical considerations. *The Space Review*. <http://bit.ly/2BtKvql>



Richard Leson

**Nolan Kopkin (Africology)**. 2017. Substantive Black Political Representation: Evidence from Matching Estimates in the United States House of Representatives. *Review of Black Political Economy*, 44(3): 203-232. <http://bit.ly/2u5aTYs>

**Nolan Kopkin (Africology)**, Mirinda L. Martin, and Danielle Hollar. 2017. Improvements in standardised test scores from a multi-component nutrition and healthy living intervention in a US elementary-school setting. *Health Education Journal*, 1-15. <http://bit.ly/2m8VRuU>

**Sukanya Chakrabarti, Philip Chang (Physics)**, Richard O’Shaughnessy, Alyson M. Brooks, Sijing Shen, Jillian Bellovary, Wojciech Gladysz, and Chris Belczynski. 2017. The Contribution of Outer H I Disks to the merging Binary Black Hole Population. *The Astrophysical Journal Letters*, 850(1). <http://bit.ly/2qGsPbg>



Nolan Kopkin

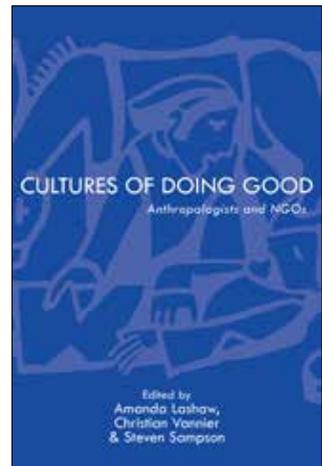
Spencer Caldwell and **Philip Chang (Physics)**. 2017. The Accelerating Pace of Star Formation. ArXiv e-prints. <https://arxiv.org/abs/1711.07512>

**Philip Chang (Physics)**, James Wadsley, and Thomas R. Quinn. A moving-mesh hydrodynamic solver for CHANGA. *Monthly Notices of the Royal Astronomical Society*, 471: 3577-3589. <http://bit.ly/2FgRPJu>

**Erica Bornstein (Anthropology)**. 2017. How to Study NGOs Ethically. *Cultures of Doing Good: Anthropologists and NGOs*. University of Alabama Press.

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**Shaon Ghosh, Deep Chatterjee, David L. Kaplan, Patrick R. Brady (all Physics)**, and Angela Van Sistine. 2017. Hunting Electromagnetic Counterparts of Gravitational-wave Events Using the Zwicky Transient Facility. *Publications of the Astronomical Society of the Pacific*, 129(981). <http://bit.ly/2CPJWMR>



# In the Media and Around the Community

Lonely people are more drawn to Facebook than non-lonely people, according to a **Communication Department** study that was cited in a Smosh article about cutting back on social media. <http://smo.sh/2CdHVai>

Racism and xenophobia are not new phenomena in American culture, **Rachel Buff (History)** wrote in an essay exploring the historic organizations formed to protect immigrant rights. The piece was published on the Jewish Currents website. <http://bit.ly/2BVrmDv>

One Christian scientist claims that **Erik Gulbranson and John Isbell's (Geosciences)** discovery of prehistoric forest fossils in Antarctica is proof of a Biblical flood, but other scholars argued in *Newsweek* that this particular evidence doesn't support that story. (<http://bit.ly/2Dhb83L>) Gulbranson was also featured in a photo on CNN for his part in the discovery. (<http://cnn.it/2me1mco>)

**Isbell** made news again on WISN 12 when he and his graduate student, **Libby Ives (Geosciences)** planted a UWM flag on Mt. Butters on the Shackleton Glacier in Antarctica. <http://bit.ly/2mJMhzi>

**David Kaplan (Physics)** was part of an international team that detected radio waves generated by the collision of two neutron stars in a galaxy 120 million lightyears away. The discovery was featured on SpaceRef.com (<http://bit.ly/2BTGp0i>) and on R&D (<http://bit.ly/2BCdpG3>).

Last year, students from the **Journalism, Advertising, and Media Studies** department tracked down photos of Wisconsin men killed in action during the Vietnam war, paving the way for a similar project to begin in Illinois. <http://bit.ly/2C7liqb>

**Arnold Kaufman (emeritus Psychology)** was one of the “allies then and now” celebrated at the opening preview for the “Allied in the Fight: Jews, Blacks, and the Struggle for Civil Rights” exhibit at Jewish Museum Milwaukee in January. <http://bit.ly/2DqYE44>

What can the rise and fall of IBM tell us about American greatness? **Thomas Haig (History)** discussed the topic in a piece for *Communications of the ACM*. <http://bit.ly/2C4Tp3g>



Niloy Bose

The recent tax-overhaul bill may spark the economy short-term, **Niloy Bose (Economics)** said in a *Milwaukee Journal Sentinel* article. <http://bit.ly/2qjuRxZ>

A new study by **Adam Greenberg (Psychology)** seeks to understand and mitigate the effects of a cognitive side-effect of chemotherapy known as “chemobrain,” WUWM reported. <http://bit.ly/2mdVPTa>

Research by **Paul Roebber (Atmospheric Science)** shows that the massive ice storm that hit the northeastern United States in 1998 was on an unprecedented scale, according to *The Malone Telegram*. <http://bit.ly/2EmNluc>

**Jonathan Anderson ('09, BA Political Science and Journalism, Advertising, and Media Studies; '13, MA Media Studies)** invites his audience to consider whether the Wisconsin legislature had legitimate reasons to deny some open records requests in an article for the *Wisconsin State Journal*. <http://bit.ly/2CPpD27>



Student **Ed Makowski (Journalism, Advertising, and Media Studies)** made a ‘dam’ good documentary studying the return of beavers to the Milwaukee River. The *Milwaukee Journal Sentinel* featured his work and quoted Makowski heavily in their own article about releasing the animal back into the environment. <http://bit.ly/2D8OrPo>

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## In the Media

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The **Mathematical Science** Department's remedial math courses are a key component in improving graduation rates for students of color, the *Milwaukee Journal Sentinel* reported. The story featured **Rondell Johnson** ('17, BA Journalism, Advertising, and Media Studies) and **Monique Alcantar** ('17, BA International Studies). <http://bit.ly/2mpWujA>



Gladys Mitchell-Walthour

Racism is allowed to flourish if teachers turn a blind eye, **Gladys Mitchell-Walthour** (**Africology**) warned in an essay detailing her young daughter's experience with cruel classmates published on NewBlackMan (In Exile). <http://bit.ly/2F7Luzf>

**Rebecca Neumann** (**Economics**) went on WUWM to talk about her financial literacy class designed to teach students how to manage their money. <http://bit.ly/2DE1xp3>

All of the collisions of black holes across the universe create a jumble of low frequencies scientists can detect, **Xavier Siemens** (**Physics**) told PBS. <http://to.pbs.org/2B7Goka>

Five hundred years after Martin Luther published his famous 95 *Theses*, Reformation expert **Merry Weisner-Hanks** (**History**) went on WUWM to shed light on one of the most pivotal moments in religious history. <http://bit.ly/2E1EeWn>

**Shale Horowitz** (**Political Science**) talked about the implications of North and South Korea collaborating to field teams during the 2018 Winter Olympics on WTMJ Radio. (Jan. 18, 2018 starting at 2:15). <http://bit.ly/2DFb1Dy>

UWM faculty members, including **Noelle Chesley** (**Sociology**) and **W. Hobart Davies** (**Psychology**), have teamed up to create TecHealth, an initiative to develop interdisciplinary and inter-institutional approaches to tackling problems that straddle the realms of health and technology, UWM's College of Health Sciences announced. <http://bit.ly/2rFv5jl>

In alignment with their mission to advance mission leaders, the TEMPO Milwaukee Foundation served as a "client" for the Journalism, Advertising, and Media Studies Advertising/PR Campaigns class this semester. Program Development Manager Marti Harm has worked with instructor Rachael Jurek and students Kennedy Metoxin, Sam Ostrowski, Lizzy Sitkin, and Allie Weiher to develop a communications plan for the Foundation and a new grant. The students gained valuable experience by applying communications theories to a real campaign.

TEMPO Milwaukee is a community organization dedicated to furthering the impact of women leaders in Milwaukee.

## Financial literacy

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That relationship led to Neumann's involvement in SecureFutures. She now serves on the board of directors and volunteers in the organization's Money Coach program.

Neumann has found the work in high schools particularly compelling.

"It's been eye-opening," she says. "I've gone across the gamut of high schools, from Shorewood High to Washington High. I see kids who are working full-time jobs, even supporting their families – while in high school. I think back to my high school years – I couldn't even have imagined that."

Neumann tries to help the students set goals. Many want to go to college, for example, and she sees some financial coaching as a way to help them meet that goal. She feels she's been drawn into a vacuum of information, a yawning gap between what students need to know and what they are likely to be taught.

"There's nowhere else students are getting this information," she says. "There's discussion about mandating financial literacy, but it's still not part of a basic curriculum. It's so easy to get into trouble, but even having some sense of 'OK, I'm getting myself into trouble' gives them a choice."

Ultimately, Neumann is motivated by what she sees as a peculiar code of silence that seems to have been built up around personal finance.

"I just would like to make the money side of things – financial literacy, personal finance – something we talk about," she says. "Let's take it out of the list of taboo subjects."



# Laurels, Accolades, and Grants

Nyasha Stone (Journalism, Advertising, and Media Studies) was featured on 88.9 RadioMilwaukee for organizing a concert to benefit the homeless shelter HopeHouse of Milwaukee. <http://bit.ly/2D3ceUM>

## Cyber security

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For comparison, think about car insurance, he said. Companies have collected a lot of data about driving habits based on driver age, car model, location, and more. Using that data, they can gauge the average amount of money a car accident might cost, and they can set their premiums accordingly.

“When it comes to cyber security and cyber risk, we don’t have that much data. It’s relatively new,” Wei said. “And when we don’t have data, we can’t build the statistical model as we did for traditional insurance business. That’s the difficulty, but we can’t wait until we accumulate enough data.”

That’s the driving point behind Wei and Wang’s grant.

“We think we can directly look into each utility company, or utility companies of the same nature, and look at their structures and self-protection strategies. Based on that, we can project the potential loss [in the event of a cyber attack],” Wei said.

The first part of the project is up to Wang. He and his students will examine existing power grid infrastructure and the security measures utility companies already have in place to address cyber threats. Then they’ll come up with scenarios of what might happen should hackers breach those security provisions.

Though it’s unlikely, the results of such an attack could be catastrophic. Power grids span broad regions and if certain parts of the grid fail, it could result in rolling blackouts affecting huge swaths of the country. And losing power goes beyond being unable to turn on the lights; hospitals could lose the function of life-saving medical equipment, financial institutions could lose access to vital business transactions, and traffic would be a snarled mess, for starters.

The second part of the project is Wei’s department.

“For each scenario, [we calculate] the potential losses, and then we construct a probabilistic model to quantify that,” Wei said. “Based on that, we can apply some actuarial techniques to give the insurance premium.”

He and Wang are also researching the idea of introducing incentives, much like good-driver discounts in auto insurance, based on how much utility companies invest in security measures like firewalls and infrastructure.

By the end of the grant, Wei and Wang hope to have made cyber insurance a more palatable prospect for wary insurers.

“We hope to get a clear picture on how those risks interact with each other, and then we want to build an actuarial model to instruct practice. If that works out, we can also generalize this model to other fields of the same nature, like Internet-based cyber risk and all of those dependent events. That model can also interact with existing models for traditional catastrophic events, like hurricanes or earthquakes,” Wei said.

“We also want to provide some insight for the utility companies themselves,” he added. “Currently, many companies are not willing to invest in self-protection. They think they’ll just take the chance. By building such a model we could let them realize how risky those cyber events are.”



Wei Wei (left) and Lingfeng Wang (above) recently won a grant to study cyber security and power grids.



Dr. **Marilyn E. Miller** passed away on Jan. 15 at age 93 after a full life of accomplishments. Dr. Miller was a former Secretary of the University at UWM, part of a 42-year career that began when she accepted a faculty position in the Psychology Department. Throughout her tenure at the university, she was highly-regarded by her students and colleagues and won numerous awards and honors for her teaching. Dr. Miller was also considered among UWM’s “Founding Mothers,” a contingent of women who championed equality in the then-male dominated academic hierarchy.

Dr. Miller’s full obituary is available at <http://bit.ly/2GgMuCF>.

## Alum at *Vanity Fair*

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Going forward, I would like to write more for web. I love my job very much, but I did go to school for writing. I’ll be brainstorming and making pitches.

### What are the elements of a good pitch for an article?

A subject line that an editor won’t ignore is a good start. You have to remember the sheer volume of emails these editors get daily. You need something that stands out. I also include my word count, the deadline, and what date I want it to run – all the facts.

When I pitched Heidi Klum, it wasn’t as hard. She’s a celebrity, so people are already paying attention. Beyond that, you want to make the editor feel like you know what you’re doing with the pitch. For example, I had already reached out to Heidi’s publicist to see if she would be interested in doing a one-on-one with us, to make sure that if my editor said yes it was a solid deal and we wouldn’t have any issues moving forward.

### Do you ever have moments where you think, ‘I can’t believe they hired me’?

Pretty much everyone who works at *Vanity Fair* has a degree or background in journalism. A lot of them have wanted to work here their whole life. I just showed up. I feel a little bit of guilt for that, but I am qualified. I’m a writer. I’m good at my job and I know what I’m doing. But I think that not planning to be there gives me a bit of a different perspective.

[You need] persistence. You will get rejected a lot. It’s a very tough field, and when you jump into it with no background, like I did, you’re not going to understand a lot. You just have to keep going.



KrisAnne Madaus enjoys the ferry ride from Brooklyn during her morning commute. Photo courtesy of KrisAnne Madaus.

## Bird biology

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We correlated the colors with lifestyles and where the birds live. One finding was that evolutionary change has most often led to similar, rather than different, plumage in males and females. Another was the difference between genders is related to mating behavior: In non-monogamous birds, you’re more likely to get brighter male plumage. In monogamous pairs the feather coloring is more alike.

### What are the advantages you’ve had by using the field station over the years?

It’s undisturbed, so you can record long-term change, like insect abundance. The wind speed is decreasing over a long period of time and the Field Station data confirms that. The slower wind speed increases the food available to swallows and may be helping their reproduction. That type of study could not be done without undisturbed habitat nearby.

Most of the 80 nesting boxes there are occupied by tree swallows, although there are also some bluebirds and house wrens. It’s allowed us to take some data on onset of spring. The swallows have been laying their eggs nine days earlier than in the 1960s.