On a chilly March afternoon, field biologist Gary Casper and his assistant Beth Mittemaier, both in waders, slogged through a marsh just off of the Good Hope Road exit on I-41 to reach submerged metal traps. The first was empty, but the next trap was occupied – a blue-spotted salamander was coiled in the bottom.

“So far, this is the only species we’ve found here,” Casper said as he tipped the creature out into his hand.

Casper, a biologist with the UWM Field Station, is in charge of conducting the first-ever comprehensive wildlife survey in Milwaukee County. The Milwaukee Estuary and its associated waterways, including the Milwaukee and Menomonee rivers, were designated an “Area of Concern” in 1987 by the EPA and Wisconsin Department of Natural Resources. As part of that and other agencies’ efforts to restore the quality of the estuary, stakeholders decided that they needed to address wildlife population impairments around the rivers.

Casper sits on the Wildlife Advisory Committee for the AOC. In order to make changes, he said, first the committee needed to understand how area wildlife has been impacted by the pollution to the estuary and the development of Milwaukee County by conducting a three-year survey.

“So some things clearly are gone. There used to be wolves in Milwaukee County, but now we’re not going to spend any time looking for them. But other things like, for example, the prairie crayfish, that was listed as ‘special concern,’” Casper said. “Now, as a result of our work, we found that they’re very wide-spread and common, so it’s possible that that ranking was in error and they’re not really of concern.”

Finding these animals takes some legwork. Casper and his team have used binoculars to search for birds; set traps to catch turtles, crayfish, and salamanders; put out trail cameras to record larger mammals like otters and foxes; built nest boxes for flying squirrels; and set up digital audio recorders to record and analyze the sounds of animals like birds and frogs. The sights and sounds give the team a good idea of how many animals and what types live in a given area.

Some of the wildlife Casper has found was unexpected.

“I think the Virginia Rail we got last year breeding in a marsh was a surprise. All of the professional birders we consulted said, ‘Don’t bother looking for them; they’re not here.’ I was happy to find a couple

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Dave Clark calls them “unexpected writers” – technicians, engineers and other employees who, with little or no training, must produce documents and reports. Their poor writing costs companies money.

“Engineers or IT people or scientists will write these proposals,” said Clark, the associate dean for the humanities in the College of Letters and Science. “They’ll do the best they can. But then there’s another person who has to go in and copy edit or rewrite the whole thing.”

Clark, who works as a writing consultant for a dozen Wisconsin companies, believes there’s a better way. With former doctoral student Tatiana Batova and help from UW-Milwaukee entrepreneurial programs, he founded Responsive Writing Solutions LLC. The company is developing customizable software to guide workers through the writing process.

They’ll be able to use templates to organize their writing, standardize documents for global use, and manage content they’ve already created.

“Our goal is to say, ‘If you get better at this, through software and training, then you can save a lot of money,’” Clark said. “You won’t have your CEO sitting up nights copy editing documents.”

He’s in the process of bringing Responsive Writing Solutions through UW IdeaVance, a program that fosters entrepreneurs within the UW System by providing grants and business mentoring. In addition, Clark and his team were recently chosen for the National I-Corps program, a National Science Foundation program that fosters entrepreneurship through training and grants. It’s quite a feat because the program almost overwhelmingly focuses on products in the science, technology, engineering and math fields. The award comes with a $50,000 grant and additional business training in Atlanta.

“I-Corps demands that businesses conduct 100 interviews with potential clients to determine the needs of the current market,” Clark said. “You try to figure out

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more populations of digger crayfish, but they’re definitely rare. The fact that they’re surviving in urban Milwaukee County is encouraging. We were happy to find that flying squirrels are hanging on even though there’s not a lot left in terms of good, quality, mature forest,” Casper said.

However, “Other surprising things were what we’re not finding. A lot of the small frogs like spring peepers and tree frogs are really rare. Salamanders in particular are almost gone from the system. I think we’re identifying the reason for that and the potential for restoring them is there, now that we know,” he added.

That’s the next step for the AOC stakeholders – to identify ways to help some of those threatened species in Milwaukee County recover, procure funding, and then begin restoring some habitats. After that begins, Casper said, wildlife surveys should continue to measure the success of the restoration projects.

One of the most hopeful signs of wildlife recovery is how involved the community has been, Casper added.

“The community connection here is really inspiring. Really, all conservation is local,” he said. “What we’re looking at is literally what’s in your backyard. It’s what your kids are able to see and play with – are they able to go catch frogs? Are they able to see some of these really pretty birds like redstarts raising young in the neighborhood woodlot? … A lot of people warn me that ‘People don’t care about those slimy frogs,’ but I’ve found the opposite is true. Once they understand what’s going on, it’s not just pretty birds and warm and fuzzy mammals they care about; they care about it all.”

Community members can help Casper with the survey by reporting their own wildlife sightings at iNaturalist.org (http://bit.ly/1ML4ruh). The effort is important because green spaces in Milwaukee help everyone, not just wildlife.
Geosciences student hikes for professor's legacy
By Sarah Vickery, College of Letters & Science

UPDATE May 5, 2016 – It is with great sadness that we must report on the passing of Dr. Thomas S. Hooyer on May 4, 2016. Deepest condolences go out to his family and friends and everyone whose lives he touched through his teaching and mentorship.

Some students buy gifts or write letters to show their professors their appreciation. James Amato raised $12,000 and hiked 500 miles to show his.

Amato completed his undergraduate degree at UWM in 2015 and is working toward his Geosciences Master’s at UWM as well. He’s the driving force behind the Dr. Thomas S. Hooyer Award, a scholarship bearing the name of one of Amato’s most beloved professors. Tom Hooyer was diagnosed with Amyotrophic Lateral Sclerosis, also known as ALS or Lou Gehrig’s disease, during Amato’s undergraduate studies.

“Tom gave me my first shot at research. He was a really good mentor to me. He’s an amazing scientist, a driven athlete, and overall a genuinely nice guy,” Amato said. “He has enjoyed hobbies that have kept him outdoors, including backpacking, skiing, and bike racing. Tom is 52, married to Anne Medeiros and the father of Nieve and Nolan.”

In summer 2013, Amato was invited to assist Hooyer with his drumlin formation research project in Iceland, where Hooyer first mentioned developing a numbness in his fingers. In the spring of 2014, Hooyer was diagnosed with ALS. The invariably fatal neurological disease causes the body’s nerve cells to break down, resulting in progressive muscle weakness until walking, swallowing, and even breathing becomes difficult.

Amato knew he had to do something.

“Every day I was confronted with a new challenge, and each time I managed a way to overcome it: severe blistering, dried up water sources, bad
Like many Wisconsin towns, the City of Cudahy was a manufacturing powerhouse – until the decline in industry also led to a decline in the town’s population and vibrancy. It’s Brian Biernat’s job to help it back to its former glory.

Biernat is the Director of Economic Development, Inspections, and Zoning in the City of Cudahy, making him responsible for retaining jobs as well as encouraging economic development and attracting new businesses to build the tax base. It’s a tall order, but his Geography major at UWM has helped quite a bit.

“Just dealing with things like the mapping, land divisions, aggregations, and the ancillary title work that goes along with that – I’m thankful that I had the educational background that I did, because I think it’s hard to hit the ground running or master these things if you don’t have a strong background,” Biernat said.

Biernat graduated from UWM in 1987 after transferring to the university from Marquette. UWM offered an educational program more in line with his interests, and the flexible schedule allowed him time to take care of his young family. And, he says, the professors were fantastic.

“I had a very good relationship with (now retired) Professor (Mick) Day. He had offered Geography Field Studies and we spent three weeks in the Wisconsin River Valley doing a number of tasks that were related to the flora, the fauna, the physical landscape,” Biernat recalled. “It was a really good hands-on experience. It was not only fun, it was a really good learning experience as well.”

Biernat graduated into a slumping economy, but he was able to find work with a defense contractor called General Dynamics. Fortunately for the world but unfortunately for Biernat’s job prospects, the Berlin Wall came down shortly after and the defense business began to dry up.

“I found myself returning the family to Milwaukee and was fortunate to find myself with the Department of City Development with the City of Milwaukee,” he said. “It kind of brought me back to at least the periphery of my interest in urban studies and the experience I had in undergraduate school.”

Biernat put in nine years with Milwaukee, did a stint in the private sector, and then took a job with the Village of Saukville as the community development director and planner before settling into his position in Cudahy five years ago.

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Trevor Jung made some wonderful memories during his internship, but the highlight was probably delivering poultry alongside Milwaukee Mayor Tom Barrett.

“I got to hand out turkeys to families for Thanksgiving. That was so neat because you got to see the real sincerity of Mayor Barrett,” Jung said. “That’s what being the leader of a city is all about – that service mindset.”

Jung, an Urban Studies major also working for a certificate in Urban Planning, recently ended a five-month internship in the Milwaukee Mayor’s office. He worked part-time in the Constituent Relations Department, fielding phone calls from concerned residents about everything from snow plowing schedules to finding shelter on cold winter nights. The experience he gained will supplement his UWM education.

“To be able to refer them to the proper department, to be able to know how city government works, was a big part of the job. That was exciting for me, because the dream for me is to work in local government,” Jung said.

That aspiration was what initially drew him to his Urban Studies major. Jung was adopted from Russia when he was two years old and grew up with his father in Racine, Wisconsin. He loves his hometown with a passion, and even sits on the board of Visioning a Greater Racine, a group working to create a community-based vision for the future of the city. Jung would like to eventually work in the Racine city government.

Gaining experience by working in Milwaukee’s government was a natural fit. Jung decided to apply for the internship after a friend suggested that he look into working at City Hall. From September to January, he manned the phones each morning and then took the Green Line back to UWM for his classes in the afternoon.

It was one thing to take urban studies classes and quite another to work directly for an urban population.

“I’m so grateful that I did the internship, because I got to see the real stories behind the theory. You talk about segregation, you talk about public housing. You talk about homelessness, economic development, and transportation, in these Urban Studies classes,” Jung said. “When you sit in your little cubicle in the Mayor’s office answering phones, you hear people call in the wintertime wanting to know if there’s any heating shelters near them. It puts things in perspective. You’re not just studying these things to be enlightened; you’re studying these things because these are real problems that need to be addressed.”

Of course, it was fun working alongside the mayor as well.

“I think you get caught up and think about him as this untouchable guy in City Hall who you hear about him on the news. But he’s such a nice guy,” Jung said with a laugh.

Some of the issues he helped deal with in the mayor’s office hit closer to home than he anticipated. Jung sat in on several press conferences when Barrett was discussing proposed legislation that would allow people to carry guns on UW System campuses. Jung is a member of the UWM Student Association – he was just elected Vice President of Student Affairs – and dealt with the issue not only from a local government standpoint but also from his student government view.

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Alumni Accomplishments

Rene Steinke ('93, PhD Creative Writing/English) received a 2016 Guggenheim Fellowship for Fiction. Rene is the author of three novels, one of which was a finalist for the National Book Award in 2005. [http://bit.ly/1YheI1J]

Michael Lappen ('95, BA Psychology) was named the next administrator of the Milwaukee Behavioral Health Division. He is currently the director of the Ozaukee County Department of Human Services. [http://bit.ly/263ZHX0]

Raquel Rutledge ('90, BA Journalism, Advertising, and Media Studies), a reporter with the Milwaukee Journal Sentinel, won a James Aronson Award for her series “Gasping for Action” which details the hazards of the flavoring chemical diacetyl. [http://bit.ly/23fizU2]

Unexpected writing help  continued from page 2

what the problem is in a quantifiable and objective fashion. Having done that, you are better prepared to build a product.”

Along with providing solutions for Wisconsin businesses, Clark expects Responsive Writing Solutions to help train UW-Milwaukee graduate students in technical writing and offer writing-intensive internships to undergraduates.

Ultimately, he said, the company will be able to take a comprehensive look at any organization and its writing needs, and recommend the right solutions – be it software, help from a professional writer, or both.

“This will be something that we can scale,” he said. “I can go into an organization and say, ‘OK, tell me about the templates you work in. Tell me about the proposals you write.’ We’ll develop a solution that is specific to them and that will allow their unexpected writers to benefit from the same kinds of tools professional writers use.”

Urban studies internship  continued from page 6

Jung ended his internship with a greater understanding of the concepts he learned in class, and an appreciation for the efficacy of local government.

“I’d say the takeaway is that local government can only work if it’s open, and if it’s accessible. The only way we can solve problems in the city is by hearing from people that these problems exist,” Jung said. “I think half the job of the Mayor’s Office isn’t necessarily policy, not necessarily the budget, but being receptive to people’s concerns and responding to them. I would say that government is an arm of the people.”

He’d like to put that observation into practice one day after he graduates in 2018 and returns to Racine.

“I’ve always been about, how am I going to continue to serve Racine?” he said. “Just like Milwaukee, with as many challenges as it has, it has just as many opportunities. I want to go back and tap into those opportunities. With my education at UWM I think I’ll be able to do that.”

Trevor Young spent each morning of his fall semester in the Milwaukee City Hall, answering phone calls from constituents.
Upcoming Events

Apr. 28

Apr. 29


Sociology program: Intersex and the Power in a Name. 2 p.m. 4th Floor Conference Center, Golda Meir Library. Georgiann Davis, University of Nevada-Las Vegas.

Communication Professional Development Seminar - Communicating, Retaining, and Memorializing the Relationship: The Interface Between Relationships and Digital Technologies. 3 p.m. Merrill 131. Leah Lefebvre, University of Wyoming.

Anthropology Colloquium: The Network Science Revolution. 3:30 p.m. Sabin G90. John Terrell, Field Museum.


Planetarium Show: ¡Se fue la luz! A Night Under the Caribbean Sky. 7 p.m. Manfred Olson Planetarium. Cosponsored by the Center for Latin American and Caribbean Studies. Tickets are $3. Show runs every Friday at 7 p.m. through May 6. http://bit.ly/1Rrm68Y


Apr. 30

Japanese Program: Spring Festival. 10 a.m. Union Ballroom. Japanese students present movies and speeches.

May 3

May 5


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People in print


Upcoming events

May 6
Mathematical Sciences Colloquium: Computational Methods for Extremal Steklov Problems. 2 p.m. EMS E495. Chiu-Yen Kao, Claremont McKenna College.

May 6
Neuroscience Seminar: Advancing Neuroscience Research via Development and Application of a Multi-faceted Mass Spectrometry (MS)-based Analytical Platform. 2 p.m. Lapham N101. Lingjun Li, UW-Madison.

May 10

May 11
Furrow Magazine Launch Party. 5 p.m. Art Bar, 722 E. Burleigh St., Milwaukee. Furrow Magazine launches the 2016 edition featuring undergraduate writing. furrowmag.org/events/

May 13
Atmospheric Sciences Colloquium: Observations of an elevated MCS environment during the PECAN field campaign. 2 p.m. EMS 495.
Jessica McBride (Journalism, Advertising, and Media Studies) was a guest on Wisconsin Public Radio in April to discuss how conservative talk radio might have influenced the results of the Wisconsin primary election. ([http://bit.ly/1qw7c93](http://bit.ly/1qw7c93)) She also penned a column for OnMilwaukee regarding the UW System budget cuts. ([http://bit.ly/1qIT0cC](http://bit.ly/1qIT0cC))

Guangliang Ye (‘06, PhD Economics), John Heywood (Economics) and Zheng Wang (’14, PhD Economics) visited the Forbidden City in Beijing, China, in March. Heywood was a keynote speaker at the Industrial Organization and Competition Policy Workshop at the University of International Business and Economics in Beijing. Two of his former PhD students participated in the workshop, and invited him to tour the Forbidden City together. Both Ye and Wang currently teach at universities in Beijing.

Peter Tase (’06, BA Italian) had harsh words for the doctors of Paraguay in an opinion piece for the [Eurasia Review](http://bit.ly/1WuxRPA).

Milwaukee Magazine outlined how Patrick Brady (Physics) and his team devised a way to detect merging black holes using UWM’s supercomputer. ([http://bit.ly/1VsMJ1L](http://bit.ly/1VsMJ1L))

Student Tisia Muzinga (Journalism, Advertising, and Media Studies) had some strong words for Republican candidate for president Donald Trump after his moderators did not take her question during his town hall held at UWM. She wrote an editorial for the Milwaukee Courier. ([http://bit.ly/1Sda2Zq](http://bit.ly/1Sda2Zq))

Thomas Holbrook (Political Science) gave his political analysis of candidates Ted Cruz and Bernie Sanders’ win in the Wisconsin primaries for [The Straits Times](http://bit.ly/1VsPLDl).

Sarah Caudill (Physics) received a glowing write-up in The Daytona Beach News-Journal after she visited her alma mater, Stetson University, to give a presentation about the discovery of gravitational waves. Caudill was part of the UWM team who worked on the discovery. ([http://bit.ly/1WuB95p](http://bit.ly/1WuB95p))

UWM Student Association president Mike Sportiello (Chemistry and Philosophy) penned an open letter, appearing on Huffington Post, about his thoughts on Republican presidential nominee frontrunners Donald Trump and Ted Cruz. ([http://huff.to/25B6d7r](http://huff.to/25B6d7r))

Trump also drew ire from Richard Grusin (English), who penned an open letter to UWM Chancellor Mark Mone protesting the university renting space to Fox News for a town hall for Trump, as reported in the Milwaukee Journal-Sentinel. ([http://bit.ly/15vMP1L](http://bit.ly/15vMP1L))

Kathleen Dolan’s (Political Science) prediction for a high turnout in the Wisconsin primary election proved true. She told the Public News Service that the vote would draw large numbers. ([http://bit.ly/1TUuaSt](http://bit.ly/1TUuaSt))

It’s hard to say goodbye to a good friend, especially one as talented as writer Jim Northrup, but Meg Noodin (English) had kind words as part of a touching tribute to Northrup printed in the Duluth News Tribune. ([http://bit.ly/1MwFDpl](http://bit.ly/1MwFDpl))

The nation has been in an uproar over a North Carolina law that mandates that transgender people use the bathroom of the sex they were assigned at birth. Cary Gabriel Costello (Sociology) gave his opinion on the law on TMJ4. ([http://bit.ly/1SwEqlhE](http://bit.ly/1SwEqlhE))

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weather - the list goes on. There were several occasions I just wanted to give up, but those were the times I found inspiration to move forward through Tom and his situation,” Amato said.

“Among the hardships there were plenty of pay offs. You would just see the most amazing things on the trail, just spectacular views every day,” he added. “Some of my highlights were summiting Mt. Whitney, the tallest peak in the lower 48 states, as well as ascending Forester Pass, the tallest point on the PCT. I met some amazing people on the trail, some people that really touched my heart.”

Amato set an original goal to raise $3,000, but donors soon outstripped his expectations and raised $12,000 during the initial fundraiser.

“We got support from everybody: family and friends, students, faculty, and coworkers, just a variety of people,” he said.

Since then, more have donated to the scholarship fund, which will support domestic and international field research for undergraduate and graduate Geosciences students. Today, a donation page is available at https://uwm.edu/geosciences/give/ and the first awards will be handed out this spring.

Hooyer has a hard road ahead of him, but his legacy will support Geosciences students for years to come. It’s Amato’s way of not only honoring a beloved professor but also sharing his love of his studies and giving back to the Geosciences Department.

“I hope this scholarship gives other students an opportunity like I had,” Amato said.

In the Media

Amy Casey is working on her Master’s degree from the UWM School of Education, but her paper written for a Journalism, Advertising, and Media Studies class ended up in the Wisconsin Lawyer. http://bit.ly/1VJsnRu

Marc Petrocci (Economics) and Susan Cartell (Political Science) are both leaving the Milwaukee Ballet after this current season. They were saluted in the TapMilwaukee section of the Milwaukee Journal Sentinel. http://bit.ly/1rpUSaP

UWM undergraduates participated in a research conference sponsored by the Federal Reserve Bank of Dallas in early April. Evan Andrew (Economics) presented his paper (co-authored with Alex Glover) titled “Ultimatum Bargaining: An Experimental Study on Rational Thinking.” Others attending the conference (and serving as discussants) were Stan Porubcan, Chris Berg, Jordan Garvin, and Haley Wadel (all Economics).

Marc Levine’s (History) research was cited in The Badger Herald in an editorial focusing on Wisconsin’s economy, job creation, and apparent lack of skilled labor shortage. http://bit.ly/1Tn73Oi

Now that scientists have detected the gravitational waves emitted by merging black holes, be prepared for a surge in detections: binary black holes are merging at the rate of a few per hour, Jolien Creighton (Physics) said in Discover. http://bit.ly/22TAsSJ
Laurels and Accolades

A tip of the (chef’s) hat to the winners of the Third Annual International Dessert competition. Hosted by the Foreign Language programs at UWM, the competition invites students to explore the culinary delights of other cultures by baking international desserts for a chance to win prizes.

UWM Chancellor Mark Mone gave a brief speech and congratulated winners alongside UWM Provost Johannes Britz. College of Letters & Science Dean Rodney Swain served as a judge, along with food critic Nancy Stohs and Rocket Baby Baker owner Shannon Trenholm, for individual entries. UWM alumnus Brendan Fleming (Spanish and Global Studies) with Aramark and Stephanie Collins and Samantha Henneberry with Colectivo Coffee judged the team entries.

Individual winners were:
1. Mckenzie Ross: **Gluten-free Black Forest cake** (Germany)
2. Luke Mariani: **Baklava** (Lebanon)
3. Hannah Blija: **Alexander Cake** (Latvia)

Team winners were:
1. Kejia Huang & Abbey Palmer, Team Bei-waukee Bakers: **East Meets West Pound Cake/Zhong Xihébì** (China & US). The Bei-waukee Bakers also won the **People’s Choice Award**.
2. Sophie Keehan & Daniel Pawlowski, Team JEDi: **Black Forest Cake** (Germany)
3. Samantha Herron & Nicole Latzig, Team Beck: **Cannoli Cake** (Italy)

Luke Mariani came in second place for his Lebanese baklava.

Nicole Latzig (left) and Samantha Herron took third place for their Italian cannoli cake.

Geography alumnum

Redeveloping an industrial town is not without its hurdles.

“Trying to maintain interest in development in a community, irrespective of what the macro economic conditions affecting a community may be – I think that’s the greatest challenge,” Biernat said. “We are getting more interest in commercial, multi-family, residential, and manufacturing development in Cudahy and the South Shore. That’s gratifying. We’re still very much in the process of transforming Cudahy from a primarily industrial community to a more balanced community, in terms of manufacturing, business retail, and new, more contemporary residential options.”

Biernat’s current project is overseeing the development of a mixed-use building going into the heart of downtown Cudahy. He hopes the new building will be a catalyst to attract more businesses to the area.

It’s the kind of work Biernat always envisioned himself doing, and he encourages current students to follow their own passions when it comes time to pick their careers.

“It’s cliché, but you really have to pursue employment and career activities that please you and make you happy. Ultimately, you have to find a good deal of satisfaction in what you do for a living,” Biernat said. “I had to go with my instincts and my instincts told me that I would be happier if I pursued my interests from school. I always wanted to do my best to parlay my educational experience into securing a career that would parallel those interests.”