Chemists’ invention helps companies reduce water pollution

by Troy Rummler, ’12 Chemistry

After more than a decade, the results from Dr. Peter Geissinger’s research on optical fibers are moving on from university life and into the real world. And, like every scientist dreams, these fibers are going to make a difference in the world.

Geissinger’s team has partnered with Advanced Chemical Systems, Inc. (ACS) – a small, local business that helps larger businesses clean up their wastewater – to design an instrument that promises to dramatically reduce the time, money, and environmental impact of treating industrial wastewater.

Current regulations mandate that businesses treat their own wastewater to prevent toxic heavy metals from infiltrating the water supply. Failure to do so incurs heavy fines. Businesses collect samples of their wastewater and send it to a lab for analysis to ensure that they are keeping within federal, state, and local standards, and then make adjustments if necessary. Turnaround time on the results, however, is typically a couple of weeks, during which time business owners “cross their fingers,” said ACS owner Tom Dougherty. “[This technology] gives the customer peace of mind, optimizing their chemical usage as well as knowing they are in compliance with municipal or sewer districts.”

According to Dougherty, businesses excessively use treatment chemicals to make sure they aren’t fined because accurate analysis takes so long. The instrument Geissinger and ACS are developing is designed to cut down the turnaround time of analysis from weeks to minutes.

“In theory you could just drop it into Milwaukee Harbor and there you go,” said Geissinger.

Geissinger’s sensors work by lining a fiber optic cable, similar to the kind used for underground telephone and internet lines and computer network wiring, with molecules that change how they react to light based on how much metal is in the surrounding water. Light is sent down the cables, and a computer interprets how the molecules react to the light to calculate how much metal is in the water.

The idea of using fiber optics as sensors is not new, but tailoring this concept to measurements in industrial wastewater required some modifications to existing models.

“We’re using...a special material that’s known to be resistant to what is known as biofouling,” explained Geissinger. “[Biofouling] is when you throw it in the harbor and there is all this stuff in there that would accumulate on the sensor and block it from the environment.”

The research group found the answer to this problem in medicine. “The same polymer is actually used to make stents in the bloodstream because they want a material that also does not biofoul. The same material that is used in these applications, we are also using in our fiber.”

The idea for these sensors was sparked by a conversation between Geissinger, a physical chemist and now-chair of the Department of Chemistry and Biochemistry, and Dr. Alan Schwabacher, an organic chemist in the same department. That initial collaboration took place when Geissinger first arrived at UWM in 1989. The two collaborated extensively at first, but eventually their interests drew the professors in different directions. That’s when Geissinger’s students moved in to fill the gap.

continued on page 4
What happened the last time a vegetated Earth shifted from an extremely cold climate to desert-like conditions? And what does it tell us about climate change today?

John Isbell is on a quest to coax that information from the geology of the southernmost portions of the Earth. It won’t be easy, because the last transition from “icehouse to greenhouse” occurred between 335 and 290 million years ago.

An expert in glaciation from the late Paleozoic Era, Isbell is challenging many assumptions about the way drastic climate change naturally unfolds. The research helps form the all-important baseline needed to predict what the added effects of human activity will bring.

Starting from ‘deep freeze’

In the late Paleozoic, the modern continents were fused together into two huge land masses, with what is now the Southern Hemisphere, including Antarctica, called Gondwana. During the span of more than 60 million years, Gondwana shifted from a state of deep freeze into one so hot and dry it supported the appearance of reptiles. The change, however, didn’t happen uniformly, Isbell says.

In fact, his research has shaken the common belief that Gondwana was covered by one massive sheet of ice which gradually and steadily melted away as conditions warmed.

Isbell has found that at least 22 individual ice sheets were located in various places over the region. And the state of glaciation during the long warming period was marked by dramatic swings in temperature and atmospheric carbon dioxide (CO2) levels.

“There appears to be a direct association between low CO2 levels and glaciation,” he says. “A lot of the changes in greenhouse gases and in a shrinking ice volume then are similar to what we’re seeing today.”

When the ice finally started disappearing, he says, it did so in the polar regions first and lingered in other parts of Gondwana with higher elevations. He attributes that to different conditions across Gondwana, such as mountain-building events, which would have preserved glaciers longer.

All about the carbon

To get an accurate picture of the range of conditions in the late Paleozoic, Isbell has traveled to Antarctica 16 times and has joined colleagues from around the world as part of an interdisciplinary team. They have regularly gone to places where no one has ever walked on the rocks before.

One of his colleagues is paleoecologist Erik Gulbranson, who studies plant communities from the tail end of the Paleozoic and how they evolved in concert with the climatic changes. The information contained in fossil soil and plants, he says, can reveal a lot about carbon cycling, which is so central for applying the work to climate change today.

Documenting the particulars of how the carbon cycle behaved so long ago will allow them to answer questions like, ‘What was the main force behind glaciation during the late Paleozoic? Was it mountain-building or climate change?’

Another characteristic of the late Paleozoic shift is that once the climate warmed significantly and atmospheric CO2 levels soared, the Earth’s climate remained hot and dry for another 200 million years.

continued on page 8
Restoring America’s homegrown philosophy

By Laura Hunt, University Relations

When master’s student Dan Giglio enrolled in a philosophy course taught by Robert Schwartz, he knew “right off the bat” it wouldn’t be an ordinary course. “He had a unique outlook that I hadn’t found in my other professors,” says Giglio.

Schwartz, a UWM Distinguished Professor, approaches philosophical inquiry using a method that had fallen so far out of favor that today’s students might never encounter it. But Pragmatism is back, and Schwartz has contributed to its recent revival.

A uniquely American brand of philosophy that flourished in the late 19th and early 20th centuries, Pragmatism holds that concepts and theories are best thought of as instruments that can have consequences on current problems. They contribute to a course of action, rather than lead to “telos,” an end or final outcome.

“The aim of inquiry is not the discovery of eternal truths, but the invention of tools to better meet present problems and projects,” says Schwartz.

By the 1940s, Pragmatism was all but forgotten. Many philosophers find Pragmatism unpalatable because it questions the significance of the search for permanent answers to perennial problems, an aim so deeply rooted in traditional philosophy. “Classical philosophers are looking for truths that are true at all times,” says master’s student Phil Mack of Appleton. “It’s tricky to spell out truth with Pragmatists.”

Darwin and democracy

In his recent book, “Rethinking Pragmatism,” Schwartz argues that, just as in Darwin’s day, the pragmatic method continues to offer more insight into the nature of scientific and ethical inquiry than current popular accounts.

Darwinism and other scientific milestones of the time put long-held beliefs about the physical world in serious doubt. “If what Darwin was saying was true, then there would be no telos,” says Mack.

For philosophers, Pragmatism offered a method of working on such questions, while allowing that today’s solutions were likely to be overturned as new evidence was uncovered, that better theories would have to be developed, and that new goals would have to be set.

The acid test for one of the early Pragmatists, William James, was the measure of an idea’s impact, says Giglio. “You ask yourself, is it a difference that makes a difference?”

continued on page 4
In the case of science, Schwartz uses the example of the debate in 2006 about whether Pluto is actually a planet. Through a Pragmatist’s lens, the answer is whichever works better in the context of the specific problems being investigated.

Pragmatism, he says, is not an “either/or” proposition, but rather, “it depends.” “It’s fine to say that science aims at truth,” Schwartz says. “In practice, the most we can claim is that new theories work better than the old.”

Another early Pragmatist, John Dewey, believed that revision was essential to progress – and that the ability of democracies to adjust to change was a powerful justification of their existence.

In response, he founded the “laboratory school” at the University of Chicago at which he could apply his belief that experience is more central to student learning than memorization or other established forms of educational delivery. And he championed the establishment of unions, particularly at universities.

A revival at UWM

Not only is there a resurgence of interest in Pragmatism among scholars like Schwartz, but also among students. “When I came to the department three years ago, I was the only student interested,” says Mack, who had very little exposure to it in his undergraduate years at Ripon. “Now, there is a whole group of us.”

He thinks students are becoming curious about it not just because of its underdog status, but because of its radical departure from analytic philosophy. Also, Schwartz shows students that they can practice analytic philosophy with a pragmatic filter.

Giglio chose UWM for its highly rated master’s degree program, after earning a double major in physics and philosophy from the Ohio State. He feels lucky to have discovered Pragmatism through Schwartz, and is now looking for a doctoral program that includes some scholarship in the method.

“I just fell in love with philosophy,” he says. “But at times, I worried I was wasting my time because it was impractical to apply it to everyday life. Philosophy offers some fun puzzles, but Pragmatism allows me to look at those puzzles in a more applicable way.”

Wastewater analysis

“IT’s really the [student’s] motivation and independence that’s the key for the progress,” Geissinger commented. “I have been lucky with my students who take ownership of the project. It’s sort of a corny phrase, but that’s really what it’s all about – a student who realizes ‘This is my project and I’m responsible to drive it forward.’” Geissinger added, “This is tremendously rewarding for me as an advisor to see this in my students.”

Geissinger said he has enjoyed acting as a guide for his researchers, giving them the time they needed to do thorough research. When certain experiments failed or ideas hit dead ends, he saw successful students pick themselves up and try something new. As time passed some students would find a new way to apply what they had previously abandoned.

As is inescapable in higher education, the group also needed financial aid to get their research off the ground. Geissinger successfully applied for several grants from the National Science Foundation. His group has also been the recipient of two grants from the UWM Research Foundation: a Bradley Catalyst grant which fueled the more basic research and a Gap grant, which helped the project stay afloat until a working relationship with ACS could be established.

“Development is not cheap,” said Geissinger. “Hopefully we can sell the product inexpensively in the end, but [for] development you have to do some investment.”
Rebecca Dunham wins Lindquist & Vennum Prize for Poetry

By Deanna Ding, Letters & Science

Milkweed Editions announced that UWM Associate Professor of English Rebecca Dunham is this year’s recipient of the Lindquist & Vennum Prize for Poetry.

The Prize is awarded by Milkweed Editions, an independent, nonprofit book publisher in Minneapolis that focuses on transformative literature, and the Lindquist & Vennum Foundation. Poets from North Dakota, South Dakota, Minnesota, Iowa, and Wisconsin are eligible to enter unpublished, book-length collections into the poetry competition.

In addition to the $10,000 prize, Dunham received a contract for publication of her work, “Glass Armonica,” which will be published in December 2013.

“Glass Armonica” was one of five final manuscripts selected by editors at Milkweed Editions. The winner was ultimately chosen by independent judge, G.C. Waldrep, an award-winning poet.

Of Dunham’s writing, Waldrep stated, “Dunham’s searing third collection glows like a magma vent underwater. These exquisitely crafted poems offer a prismatic portrait of the female body in the act of being touched: the eponymous vessel, half-filled with water, that sounds when struck. Dido is here, and Elizabeth Bishop; Lavinia Dickinson and Gertrude Stein; Daphne du Maurier and the women treated for ‘hysteria’ by 19th-century male physicians. In the title sequence – a sonnet crown – the speaker recalls being sexually molested at summer camp when she was ten, and the long legacy of silence that particular touch evoked. Here is photography and the speculum, the unpeeling and the razor held to the skin, the braiding of hands and ‘the bandage lovingly applied.’ Dr. Franz Mesmer plays his star female patient ‘like a glass armonica, pulling tone upon / tone from her, for hours.’ ‘Not beauty,’ these lush yet stymic poems remind us, but ‘ravaging need / —its strange and sudden // promise’ flayed, ‘field / of loosestrife threshed to a fine flame.’”

“Glass Armonica” also won the 2012 poetry prize given by So to Speak: a feminist journal of language and art.

Dunham holds degrees in English and creative writing from the University of Virginia, Hollins University, George Mason University, and the University of Missouri. At UWM, she teaches upper-level and graduate courses in poetry writing and 19th and 20th century American literature, and she advises students in the creative writing track of the graduate program.

She is the author of two collections of poetry, The Miniature Room (a 2006 T.S. Eliot Prize winner) and The Flight Cage, and has been widely published in journals. Her past awards include a Jay C. and Ruth Halls Fellowship in Poetry at the Wisconsin Institute for Creative Writing and a National Endowment for the Arts fellowship.

After dabbling in fiction writing, in January 2013, Dunham’s first short story was picked up for publication by the journal Prick of the Spindle.

Video Stories

Alumnus Angela Pittman Taylor (Mass Communication) was once an intern at Robert W. Baird. Now, she’s a First Vice President and supervises interns. http://youtu.be/dKLuyOTpNZ4

Encyclopedia of Milwaukee receives $250,000 NEH grant
By Deanna Ding, Letters & Science

UWM’s Encyclopedia of Milwaukee (EMKE) project was one of only 205 humanities projects across the country to receive funding from the National Endowment for the Humanities.

The $250,000 grant for the period 2013-2015 was the largest awarded within the State of Wisconsin and will support the research and development of both a printed volume and an interactive website chronicling the history of the Greater Milwaukee area from pre-settlement times through the present.

The coffee table book and the website are intended to become a first stop resource for K-12 teachers and students, the media, historians and scholars, and even families conducting genealogy research. It is also expected that the website content will continue to accrue and grow beyond the final publication date; people will be able to leave feedback, updates and corrections which a moderator will review and use to document ongoing revisions.

The collaborative project has many partners and contributors including the history and urban studies programs at the University of Wisconsin-Milwaukee, the history department at Marquette University, the Milwaukee County Historical Society, local historian and writer John Gurda, and national historian Kenneth Jackson from Columbia University.

“Major metropolitan areas are distinguished by cultural and physical landmarks like theaters, museums, zoos, and sports arenas. A comprehensive and publicly-accessible urban history encyclopedia is a new kind of cultural landmark that signals Milwaukee’s importance in the region and nation,” said project leader Amanda Seligman, a professor of history and urban studies at UWM.

Other U.S. cities that have already completed or are in the process of completing their own “encyclopedia” include Chicago, Louisville, New York, Los Angeles, Indianapolis, Cleveland, and Philadelphia.

The funding will supplement existing support from the participating campuses and private donations to finance the research process and the creation of the interactive web platform.

Project updates are being posted on the project’s Facebook page at https://www.facebook.com/EncyclopediaofMilwaukee/.

Alumnus Nathaniel Sharadin wins $25,000 Newcombe Fellowship


The Newcombe Fellowship is the nation’s largest and most prestigious such award for Ph.D. candidates in the humanities and social sciences whose dissertations address questions of ethical and/or religious values and comes with an award of $25,000.

Sharadin is currently a doctoral candidate in philosophy at the University of North Carolina at Chapel Hill with a dissertation topic of “Understanding Reasons.” Sheridan was one of only twenty-two recipients world-wide from an applicant pool of over 600 individuals.

Two students win $15,000 foreign language fellowships

Undergraduates Chelsea Ballas, a Global Studies/Business major, and Matthew Leser, an Urban Studies major, each received $15,000 from the UWM Center for Latin American and Caribbean Studies in federal Foreign Language and Area Studies (FLAS) fellowships for intensive study of Brazilian Portuguese and Latin American Area Studies during the 2013-14 school year.
WUWM has been recognized with 22 journalism and broadcasting awards for stories and interviews broadcast in 2012. The Associated Press (AP), Milwaukee Press Club, Wisconsin Broadcasters Association (WBA), and Northwest Broadcast News Association (NBNA) presented the awards.

Awards were given in a variety of categories including: Investigative, Newscast, Feature, Series, Interview and Commentary. The awards cover broadcasts on WUWM News and Lake Effect.

The Associated Press presented WUWM with three awards for excellence in reporting and broadcasting in Wisconsin. The Milwaukee Press Club recognized WUWM with seven awards for excellence in Wisconsin journalism. The Wisconsin Broadcasters Association presented WUWM with eight awards for exceptional news and talk broadcasting. The Northwest Broadcast News Association recognized WUWM with four awards.

2012 Associated Press Awards recognize excellence in reporting and broadcasting in Wisconsin:

- Best Newscast: “7am News June 6, 2012,” WUWM News
- Continuing Coverage: “Sikh Tragedy,” WUWM News
- Feature: “Orangutans Hop on the iPad Bandwagon,” Stephanie Lecci

UWM competes in the Large Market Radio division for the 2012 Northwest Broadcast News Association Awards, a regional competition for six states – Minnesota, Iowa, Nebraska, North Dakota, South Dakota and Wisconsin. WUWM received:

- Award of Merit – Newscast: “7 am News June 6, 2012,” WUWM News
- Award of Merit – Series: “Project Milwaukee: Help Wanted,” WUWM Radio
- Award of Merit – Websites: WUWM.com
- Award of Merit – Broadcast Writing: Susan Bence

2012 Milwaukee Press Club Awards:

- Gold Award – Best Documentary, Investigative or Public Affairs Story or Series: “Mining Sand in Wisconsin,” Susan Bence
- Gold Award – Best Sports Story or Series: “Living History League Honors Women’s Professional Baseball,” Stephanie Lecci
- Silver Award – Best Documentary, Investigative or Public Affairs Story or Series: “Death and Dying in the 21st Century,” Stephanie Lecci
- Silver Award – Best Feature Story or Series: “Not Just High School Theater,” Mitch Teich
- Silver Award – Best Sports Story or Series: “Tuesday Night Lights,” Mitch Teich
- Silver Award – Best Writing for Radio News: Ann-Elise Henzl
- Bronze Award – Best Writing for Radio News: Erin Toner

The Wisconsin Broadcasters Association recognizes exceptional broadcasting through a statewide competition. WUWM competes in the Large Market Radio Division against other News and Talk stations:

- First Place - Best Interview: “Sons of Slain Sikh Leader Recall their Father and his Faith,” Ann-Elise Henzl
- First Place - Best Editorial/Commentary: “The End of ‘Pinktober’,” Pam Parker
- Second Place - Best Newscast: “June 6, 2012 Morning Newscast,” WUWM News
- Second Place - Best Use of Audio in Radio News: “Not Just High School Theater,” Mitch Teich
- Second Place - Annual Special Award Category: “Election Coverage: 2012 – Year of Elections,” WUWM News
- Second Place - Best Editorial/Commentary: “One Man’s Meat is Another Man’s Poison,” Judy Steininger
- Third Place - Best Feature: “Wisconsin Politics Gone Wild,” WUWM News
Ice code  continued from page 2

“These natural cycles are very long, and that’s an important difference with what we’re seeing with the contemporary global climate change,” says Gulbranson. “Today, we’re seeing change in greenhouse gas concentrations of CO2 on the order of centuries and decades.”

Ancient trees and soil

In order to explain today’s accelerated warming, Gulbranson’s research illustrates why glaciers alone can’t tell the whole story.

Many environmental factors leave an imprint on the carbon contained in tree trunks from this period. One of the things Gulbranson hypothesizes from his research in Antarctica is that an increase in deciduous trees occurred in higher latitudes during the late Paleozoic, driven by higher temperatures.

What he doesn’t yet know is what the net effect was on the carbon cycle.

While trees soak in CO2 and give off oxygen, there are other factors to consider, says Gulbranson, like the soil. CO2 emissions also come from soil (as microbes speed up their consumption of organic matter with rising temperatures).

“The high latitudes today contain the largest amount of carbon locked up as organic material and permafrost soils on Earth today,” he says. “It actually exceeds the amount of carbon you can measure in the rain forests, for example. So what happens to that stockpile of carbon when you warm it and grow a forest over it is completely unknown.”

The two scientists’ work is complementary. Dating the rock is essential to pinpointing the rate of change in the carbon cycle, which would be the warning signal we could use today to indicate that nature is becoming dangerously unbalanced.

“If we figure out what happened with the glaciers,” says Isbell, “and add it to what we know about other conditions – we will be able to unlock the answers to climate change.”

Passings

**Herb Blau**, Distinguished UWM Professor of English from 1978-2000, died May 3, 2013, in Seattle. Herb was one of the founders of the Modern Studies program at UWM, a central force at the Center for 20th Century Studies (now the Center for 21st Century Studies), and an internationally celebrated scholar of Beckett, contemporary theatre, critical theory, and more. After leaving UWM, he became the Byron W. and Alice L. Lockwood Professor in the Humanities (English and Comparative Literature) and Adjunct Professor in the School of Drama, at the University of Washington, until his recent retirement at 87.

His formal education began in the sciences at New York University where he earned a bachelor’s degree in chemical engineering. He went on to earn his master’s in drama and a Ph.D. in English and American literature from Stanford University. He co-founded The Actor’s Workshop in San Francisco and was co-director of the Repertory Theater of Lincoln Center in New York. He gained added fame for a production of *Waiting for Godot* staged at San Quentin State Prison.


Letters & Science student **Colin Moores** passed away on April 16, 2013 at the age of 27. Colin was studying geography and had a strong sense of curiosity. Professor Ricardo Vasconcelos noted that Colin’s contributions to his class, “Music of Brazil and Other Portuguese-Speaking Countries,” were always very clear, and that he was particularly appreciative of Colin’s constant generosity in class meetings, his contribution to debate, and of how Colin always found the kindest comments and questions to ask his colleagues, helping them in their work.
Summer fun at the Planetarium

Campus remains active during the summer and presentations continue at the UWM Manfred Olson Planetarium throughout June and July.

Friday Night Lunar Light

Lunar Light is the featured Friday night show. It opens on June 21 and runs every Friday through July 19 except for July 5. The show focuses on our Moon, which has captivated our imagination enough to explore it with humans and machines.

The live presentation will highlight Earth-Moon-Sun interactions that result in dramatic events such as lunar and solar eclipses, ocean tides, and different phases of the Moon. The presentation will include Greek myths associated with the Moon. As always, there is a portion of the program that focuses on stars and constellations projected on the dome to simulate both a city and country sky. A 10-minute Q&A session will follow the show to answer questions from the audience.

Showtime is 7:00 p.m., and general admission is $2 per person.

Families are welcome, but please note that the shows are not recommended for children under the age of five.

Take a Break

AstroBreaks are free planetarium shows from 12:15-12:45 p.m. on select Wednesdays throughout the year. Over the summer, AstroBreak shows will take place on June 12, 19 and 26, and July 10 and 17. The theme for the summer shows is black holes and neutron stars.

In June, audience members can learn about the formation of black holes, how scientists find them, and the history of black hole exploration. July attendees will delve into one of Stephen Hawking’s most celebrated contributions - the concept that black holes evaporate - and neutron stars which hold the densest matter observed in our universe.

See the Planetarium web site for more information: planetarium.uwm.edu

In the media and around the community

Over forty UWM composition instructors and Milwaukee Public School High School English teachers gathered for the third annual “Bridging the Gap Between High School and College Writing” Teachers Forum on March 7. Participants shared ideas developing projects that bring MPS students and UWM students into dialogue with each other about writing.

Climatewire, a publication dedicated to coverage of climate policy and its effects on business, the environment and society, recently featured a story based on Mark Schwartz’ (Geography) latest publication, “The False Spring of 2012, Earliest in North American Record.”

Kamran Diba (Psychology) presented “Neuronal Coordination in Memory Circuits” at the Integrative Neuroscience Research Center held at Marquette University, and “Neuronal Coordination in Memory Circuits” at the Applied and Computational Math Seminar.

Han-Joo Lee, Flint Espil, Chris Bauer, Samantha Bilkey, Sarah Zupek, Tajsha Koester, and Douglas Woods (Psychology) presented “Response Inhibition Training for Children with Trichotillomania” at the Annual Convention of the Trichotillomania Learning Center, Newark, New Jersey.

Diane Reddy, Ray Fleming, Danielle Jirovec, Laura Pedrick, Heidi Pfeiffer, and Leah Stoiber (Psychology) presented “Increasing student success in higher education through U-Pace instruction” at the Higher Learning Commission, Collection of Papers on Self-study and Institutional Improvement.

Danielle Jirovec, Heidi Pfeiffer, Diane Reddy, Ray Fleming, (Psychology) Laura Pedrick, and Dylan Barth presented “Applying learning science to increase student success, at the Office of Professional and Instructional Development Conference in Madison, Wisconsin.

continued on page 10
A number of students and faculty from the Department of Psychology presented at the National Conference on Pediatric Psychology held in New Orleans:


Hannula, D.E. and Le Veque, J.F. (Psychology) presented “Eye-movement-based relational memory effects precede explicit deadline-based recognition responses” at the 20th Annual Meeting of the Cognitive Neuroscience Society. At the same meeting, Deborah and Jeremy also presented “Dissociation of item-specific and relational memory in schizophrenia using simultaneous eye tracking and fMRI methods” with their research colleagues.

The following conference papers and talks were presented at the annual convention of the Anxiety and Depression Association of America by students and faculty in the Department of Psychology:


continued on page 11
Media and community  
continued from page 10

Fred Helmstetter (Psychology) presented the 2013 Leaton Lecture at the Department of Psychology and Brain Sciences at Dartmouth College on March 29th.

Members of the Department of Psychology presented at the 38th Annual Conference for the Association for Women in Psychology in Salt Lake City, UT, March 2013:
- Katie Ports, Diane Reddy, and Anjali Rameshbabu – Barriers and facilitators to HPV vaccination: Perspectives from Malawian women.
- Danielle Jirovec, Katie Ports, and Diane Reddy – HPV vaccination: Increasing intentions to vaccinate and closing the gender gap.

Deborah Hannula (Psychology) presented “An eye movement based approach to the investigation of memory” at the Winter Conference on Neural Plasticity.

Faculty and students of the Department of Psychology presented posters at the 27th National Conference for Undergraduate Research held at UW-LaCrosse:
- Whitney D. Qualls, Amy R. Goetz, and Han-Joo Lee – Attention Modification in the Treatment of Generalized Social Anxiety Disorder.
- Ray Fleming, Diane Reddy, Laura Pedrick, and Dylan Barth presented “U-Pace: A new technology-enabled approach for online Instruction” at the Sloan-C 6th Emerging Technologies for Online Learning Symposium in Las Vegas, Nevada.

Ray Fleming, Diane Reddy, (Psychology) Laura Pedrick, and Dylan Barth presented “Measuring fundamental processes critical to deep learning in the SoTL” at the 2013 SoTL Commons Conference in Savannah, Georgia.


Laurels and Accolades

Congratulations to the Letters & Science faculty members who were chosen for funding in the 2013-2014 Research Growth Initiative, an internal seed-funding competition aimed at enhancing the university’s research and scholarly work and supporting the state’s economic development through innovation:

- George Barganier, Assistant Professor, Africology – Fanon’s Children: The Black Panther Party and the Rise of the Crips and Bloods
- Julie Bowles, Assistant Professor, Geosciences – The Long Valley Volcanic Field: Constraining the Geomagnetic Field and Local Volcanic Processes
- Madhusudan Dey, Assistant Professor, Biological Sciences – Mechanistic Insights into Ire1-HAC1/Xbp1 Signaling Pathway (Co-PI: David Frick, Chemistry and Biochemistry)
- Peter Dunn, Professor, Biological Sciences – Immunogenetics of an endangered bird
- Jennifer Gutzman, Assistant Professor, Biological Sciences – Regulation of cell shortening during brain morphogenesis
- Weon Shik Han, Assistant Professor, Geosciences – Thermophysiologically Driven One, Two, and Three-Phase Fluids Transitions of Geologically Stored Supercritical CO2: Combination of Theoretical, Numerical and Field Studies (Co-PI: Chang Soo Kim, Materials Science and Engineering)
- Fred Helmstetter, Professor, Psychology – Dissecting cortical-subcortical interactions in the regulation of fear memory with optogenetics (Co-PIs: Devin Mueller, Psychology; Ramin Pashaie, Electrical Engineering)
- Gerlinde Hoebel, Assistant Professor, Biological Sciences – Cross-modal interactions and leader preferences
- Istvan Lauko, Associate Professor, Mathematical Sciences – Novel optical detection of discrete layers in Lake Michigan ecosystem structure (Co-PIs: Carmen Aguilar-Diaz and Russell Cuhel, Freshwater Sciences)
- Lindsay McHenry, Associate Professor, Geosciences – Hydrothermal Alteration of high Fe Icelandic Basalts, Analog for Mars Aqueous Processes (Co-PI: Barry Cameron, Geosciences)
- James Moyer Jr, Associate Professor, Psychology – Neurobiological Analyses of Aging-Related Deficits in Cognitive Flexibility (Co-PI: Jeri-Anne Lyons, Biomedical Sciences)
- Anne Pycha, Assistant Professor, Linguistics – Explaining phonological patterns with memories
- Paru Shah, Assistant Professor, Political Science – Candidate Characteristics in Local Elections: Developing a Data Curation Community
- Tanya Tiffany, Associate Professor, Art History – Visual Culture and Feminine Devotion in the Early Modern Spanish Empire
- Anastasios Tsonis, Distinguished Professor, Mathematical Sciences – Climate models: A new Babel? (Co-PI: Kyle Swanson, Mathematical Sciences)
- Dexuan Xie, Professor, Mathematical Sciences – New Nonlocal Continuum Electrostatic Models and Their Fast Numerical Solvers
- Zengwang Xu, Assistant Professor, Geography – Modeling the diffusion and intervention of H5N1 in a realistically connected population in Milwaukee city: a social spatial network approach

In the April edition of In Focus, we told you about the regional Mark of Excellence awards won by our Journalism students from the Society of Professional Journalists. This month, we are delighted to update the information – Kaitlin Sharkey is the national winner for online sports reporting in the large school division for her story, “Fields Apart: City, suburban football programs are a study in contrasts.” Jordan Johansen was a national finalist for online feature reporting in the large school division for “The Gift of Gab: Wisconsin man becomes advocate for ALS research.”

Clinical Health Psychology doctoral student Ross LaFleur was awarded a Sigma Xi grant for his Master’s thesis research.

Nicole Nowak-Saenz (Psychology) received the Organization for the Study of Sex Differences 2013 Travel Award.

continued on page 13
Bonnie Klein-Tasman, with Natalie G. Brei (Psychology), was awarded a Sigma Xi Grant-in-Aid of Research for "Parenting Stress and Autism Spectrum Disorder Symptomatology."

Chris Larson (Psychology), along with Fred Helmstetter and Shawn Cahill, were awarded monies from the Clinical & Translational Science Institute, Medical College of Wisconsin, for “Characterizing the neural basis of extinction of conditioned fear as the critical component in exposure therapy for PTSD.”

Undergraduate James Peranteau, an International Studies major, has been awarded a Boren Scholarship, which he will use for study abroad in Jordan. Boren Scholarships provide up to $20,000 to study abroad in areas of the world that are critical to US interests and underrepresented in study abroad.

Congratulations to the L&S faculty and staff who received 2013 SAC Excellence Awards. This recognition, given by the Student Accessibility Center, honors individuals who work tirelessly to eliminate barriers for students with disabilities in their pursuit of an education. Congratulations to Raymond Fleming (Psychology) and Lanlan Han (Chemistry).

The biannual Research in the Humanities Award recognizes a publication that serves as testimony to the author’s comprehensive grasp of the subject(s) of inquiry and research and, in turn, outstanding scholarship. The 2013 award-winning faculty are Tanya Tiffany (Art History) and Barrett Kalter (English).

Casey O’Brien (Women’s Studies) was one of the recipients of the first UWM Community Engagement and Leadership awards, recognizing her engaged scholarship, personal commitment to community, and excellence in service learning with UWM courses. To strengthen UWM’s connection with Milwaukee Public Schools and the service-learning component of Women’s Studies 150 (Multicultural America), Casey developed a curriculum called “StandUp Girls,” which is offered at La Escuela Fratney and Clark Street Schools for fourth and fifth grade girls. UWM students in her Women’s Studies class lead groups at both schools, where they work on building confidence, positive relationships, teamwork and leadership skills.

In early 2012, thanks to collaboration among scholars at UW-Milwaukee, Marquette and the Universidad Nacional Autónoma de México (UNAM), a remarkable document was re-discovered in the American Geographical Society Library at UWM.

The Lienzo de Santa Catarina Ixtepeji, seven feet in length, is a painting on cloth of the history of Santa Catarina Ixtepeji, a town which still exists in the northern mountains of Oaxaca, Mexico. Dating from the late seventeenth/eighteenth century and with written text in Zapotec and Spanish, the document was used to demonstrate the land rights of the local ruler.

Join Visiting Scholars Michel R. Oudijk and Sebastian van Doesburg from UNAM, specialists in indigenous Mexican documents, who identified the Lienzo as a formerly lost pictorial that they had sought for more than 10 years.

Oudijk and van Doesburg will talk about the Lienzo’s content, their research methods, and about recuperation of historical memory in indigenous communities.

Sponsored by the American Geographical Society Library and the Center for Latin American and Caribbean Studies.

Ancient “Lost” Mexican document found at UWM

Join us to learn more

Thursday, June 6 @4 pm OR Tuesday, June 11 @12 pm

American Geographical Society Library in the UWM Library (3rd Floor), 2311 E. Hartford Avenue
L&S People in Print


Ruth Beerman and Phil Rippke (Communication) accepted positions as temporary full-time instructors in Communication Studies at Bloomsburg University of Pennsylvania.

Lindsay Harness (Communication) accepted a Visiting Assistant Professor position at Lewis & Clark College, in Portland, Oregon.


Alumni Updates

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