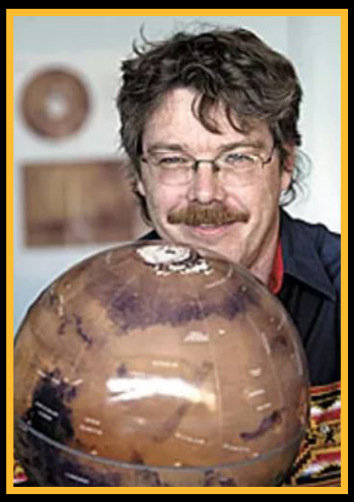
College of Letters & Science

IN FOCUS

July 2022, Vol. 12, No. 7



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Published the first Tuesday of each month by the College of Letters and Science at the University of Wisconsin-Milwaukee.

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Speaking their language: Bilingual comm student helps immigrants as a legal assistant

In one of his communication classes at UWM, his professor showed Jesus Velarde-Moctezuma and his classmates a photo of a banana leaf.

"Each one of us saw the same exact object but interpreted it very differently," he recalled. "Some people said it was a leaf. The Latinos said that it was a type of plant used specifically for making a type of cuisine, a tamale. A few from the Middle East said it was something that they use for weddings, where they place food."

He learned the lesson: People of different backgrounds and cultural experiences can perceive the exact same thing in totally different ways.

Now, Velarde-Moctezuma is bringing that lesson to his new job. He was just hired as a bilingual legal assistant at the **Odrcic Law Group**, a firm that specializes in immigration law. As a person who shares a language and a culture with many of his clients, he's able to see a banana leaf from their perspective in a way that others might not.

"I understand that, especially as a Latino, I have status. I'm a U.S. citizen. But I have family members who aren't, and I understand the struggle," Velarde-Moctezuma said.

As a legal assistant, he is responsible for preparing legal forms and documents on behalf of clients, submitting forms or cover letters to U.S. Citizenship and Immigration Services (USCIS), and interpreting English legalese for Spanish-speaking clients. The firm assists immigrants and others with obtaining visas and green cards, pursuing legal status, seeking asylum, fighting deportation, and more.

Of course the attorneys do the heavy lifting, but Velarde-Moctezuma thinks of himself and the other legal assistants as "side-kicks" with their own hefty set of responsibilities. If a form is filed incorrectly or there is a mistake in a document that he prepared, he would be at fault.

It's part of what inspires him to work so hard for his clients. Velarde-Moctezuma has seen both triumphs and heartbreaks in the course of his work.

"Our clients didn't ask where to be born. Some of these people who I speak with genuinely just want an opportunity," he said. He can't share specific information, but Velarde-Moctezuma noted his frustration when USCIS sends back a rejection notice, or denies his clients' claims.

"Some of the clients that I've been assigned have stories that break my heart. But we make progress," he said. "I call clients personally sometimes instead of emailing just to let them know that we're still working on their cases. My experience with my clients so far is really heart-warming. It gives me the drive and the motivation to keep advocating for them as much as I can with the little power that I have."

Even after he graduates, he'd like to keep working to help immigrants. Velarde-Moctezuma plans to obtain graduate certificates in Translation and Interpreting Studies from UWM with a focus on legal interpretation. He also hopes to become an immigration attorney himself one day.

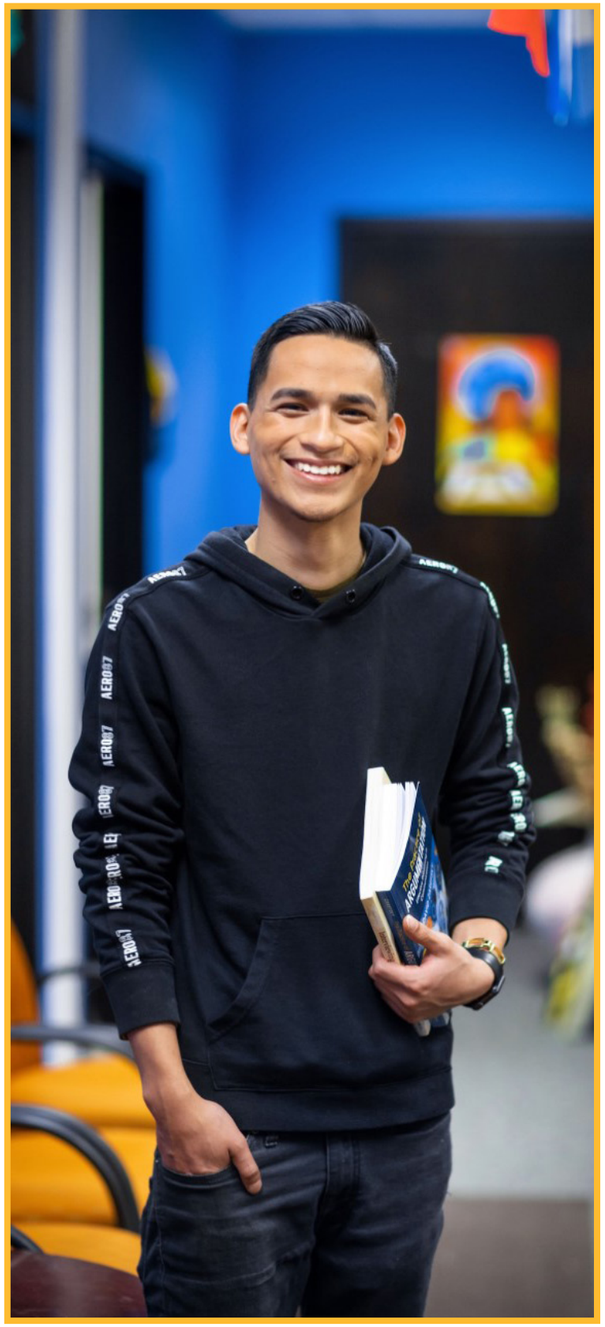
In the meantime, Velarde-Moctezuma is still working on his communication major. He was born and raised in Milwaukee and attended UWM because it was close to home and because he liked the resources for Latinx students on campus. He chose communication because he enjoyed his introductory classes in the subject, and because he wasn't good at it.

"I used to not be very good at communication, and I wanted to enhance (my skills)," he said. "Learning those skills and abilities so I can enhance my speech and my credibility can really give me leverage."

In the four months that Velarde-Moctezuma has worked at the law firm, he's found those skills invaluable – particularly the "banana leaf" lesson where he learned to view things from different points of view. He finds himself empathizing with his clients, and they appreciate it.

"A lot of clients call the firm, and if I'm not there, they'll leave a message or tell the other legal assistants that I should call them back. They want to talk to me," he said. "Obviously we're not miracle workers, and the law is the law. But what we can do is do the best that we can to advocate for clients."

By Sarah Vickery, College of Letters & Science



Jesus Moctezuma-Velarde is a communication major. He was recently hired at the Odrcic Law Group, a firm that specializes in immigration law. As a bilingual legal assistant, Moctezuma-Velarde is able to communicate with his clients in their own language and build bridges to help them with their cases. Photo courtesy of Jesus Moctezuma-Velarde.

The many connections Nicole Welk-Joerger, C21's new asst. director

When she was studying abroad in Italy as an undergraduate, Nicole Welk-Joerger couldn't help but notice the parallels between her art history classes and her anthropology classes, especially with regards to Italian history. She mentioned it to her respective professors.

"They were insulted!" she laughed. "They were like, 'We are trained in our specific fields. Art history is nothing like anthropology, and anthropology is nothing like art history.' I'm sitting here in the middle thinking, you know, this would be a lot more fun if you just taught a course together."

But, that's Nicole Welk-Joerger for you. She's something of an expert at making connections.

That's why she's a great fit for her role at UWM. Welk-Joerger is the new assistant director at the university's Center for 21st Century Studies. She was hired in January and joins C21 Director Anne Basting in her endeavor to connect scholars from all disciplines, on campus and in Milwaukee, to facilitate new research and collaboration.

"The mission statement of the Center has long been 'creating a community of scholars to address the pressing issues of the time.' What I'm really passionate about ihelping to create that community," she said. "For me, it's about meeting as many people as I can across the campus as well as elsewhere, seeing those connections, and getting those people to talk to each other and see what's possible."

In addition to those responsibilities, Welk-Joerger oversees several graduate students working on projects under the C21 umbrella, and she'll also teach a course on the history of medicine in Spring 2023.

Despite being on the job for only a few months, Welk-Joerger has taken to her new role with aplomb. She spoke excitedly about the Center's Library, which is being catalogued and reorganized, and the rolling symposia she is helping organize with the C21 Director, Lead Faculty Advisor, and community partners. At special program retreats, she said, she watched as people from across disciplines met to offer their friendship and academic services to others.

"That kind of synergy and community is what I'm all about," she said. "I feel like I'm going back to that room in Rome with that art history professor and anthropology professor and thinking they should talk to each other. I'm now doing that here at UWM."

By Sarah Vickery, College of Letters & Science

Nicole Welk-Joerger is all about making connections. From her education to her farming background to her many jobs, all roads led to UWM.

Farm Kid

Welk-Joerger grew up on a dairy farm in Lancaster County, Pennsylvania. Her parents had a small operation of about 40 milking cows, and Welk-Joerger was the president of her local 4H chapter as a kid.

Her parents valued education, and Welk-Joerger is the first in her family to attend college.

"My parents needed to be well-read, and know how the weather works and also have basic biology for when they're breeding cattle and making sure the cows are safe and healthy," she pointed out in example.

Welk-Joerger, though, found herself interested more in arts and humanities. She loved languages and art, so left the farm and headed to Temple University in Philadelphia for her undergraduate education.

Interesting Research

Welk-Joerger laughs when she talks about her research. "I am a very curious person. It's hard to talk about my story because I go where I'm curious about something, and I dive deep."

During her undergraduate and Master's classes, she was interested in art history and worked with clay and glass design, in addition to learning languages and anthropology. She hoped to focus on the history mural arts in Philadelphia, but her project fell through. She was scrambling to find a thesis topic, and so returned to her farming background. Her thesis project turned into a paper on agribusinesses that worked with Amish farmers.

"There were a few Amish farmers who read that piece," Welk-Joerger laughed.

From there, her work has taken on an agricultural bent. She's studying food sustainability, the intersection of agriculture and pharmacology in the U.S., and even how electrical lines near dairy farms affect the cattle that live there.

Education

Undergrad: Temple University, BA Art History and Anthropology; Study Abroad in Italy; McNair Scholar

Graduate: Brandeis University, MA Anthropology - "There I fell in love with science and technology studies," Welk-Joerger said.

PhD: University of Pennsylvania, PhD in History and Sociology of Science. Dissertation titled, "Feeding Others to Feed Ourselves: Animal Nutrition and the Politics of Health, 1900-2019"

Animal connection to UWM

Welk-Joerger hadn't thought of working at UWM until her research led her to an "Animals in the Archives" conference where she met Nigel Rothfels, an animal historian and the current acting dean of the UWM College of Letters & Science.

"His love and his electricity for UWM and the Center was just so inspiring. Between that and the (research) I saw coming out of the Center and Anne Basting being the director, I was like, let's go for this!" she said.

Colorful Résumé

Welk-Joerger refers to herself as a jack-of-all-trades, because she's worked in just about every one.

"I've been all over the place. I've taught at Franklin and Marshall College and Drexel University. I had a postdoc at North Carolina State University teaching agriculture history courses. I found myself at Princeton University as an environmental studies postdoc."

That's on top of her other jobs throughout her life: Art museum gallery coordinator, Segway tour guide, amusement park employee, theater and opera house usher, film photography darkroom assistant, and newspaper columnist, to name a few.

"I just tried everything and had a lot of fun doing that," Welk-Joerger said. "Those types of things were so necessary to my person and to where I am today."

It all led to UWM

"I'm just so excited that I found a job and a capacity where I can use all of those skills in various ways and connect with a bunch of people that have similar skill sets," Welk-Joerger said. "I love learning from people and I'm so excited to learn more. I've been here since January and I've barely scratched the surface."

Life, but not as we know it

UWM alum is on the hunt for alien microbes

From “Star Trek” to the **SETI program**, humanity loves to speculate on a burning question: Is there alien life somewhere out there in the vast reaches of the universe?

For **Dirk Schulze-Makuch**, the question isn’t so speculative: It’s his job. As a professor of planetary habitability and astrobiology at the Technical University Berlin, Germany, he searches for evidence of life on Mars and other extraterrestrial locations.

Schulze-Makuch, a German native who earned his PhD in geosciences from UWM, sat down to talk about his work and the possibility of intelligent life on planets beyond our own.

You earned your PhD in geosciences, but now you are an astrobiologist. How did you make the jump from one field to the other?

My PhD work was in hydrogeology with professor Doug Cherkauer in the Geosciences Department. Afterward, I took an assistant professor position at the University of Texas at El Paso to focus on hydrogeology and finding water in the desert southwest. There turned out to be quite a bit of overlap with finding life in the hyper-arid environment on Mars. With that connection, I got more and more interested in astrobiology.

Then, I received a fellowship from NASA using different kinds of methods – geophysical methods, mostly – to find water in arid environments, where the water table is very deep down. It was with the idea that on Mars, the environment would be very similar.

And where there is water, there may be life.

Yes. I am interested in extraterrestrial life and about other environments and conditions on other planets, like Mars, Venus, Jupiter’s moon Europa, and Saturn’s moon Titan. Even on exo-planets, we do some research.

When you say extraterrestrial life, I think many people picture little gray aliens. But you’re studying much smaller life, correct?

Of course, I’m also interested in more complex life, but 80 percent of my research is on microbial life. The approach that I take is that you cannot understand life without understanding the environment around it. They are so intertwined; one affects the other one.

Right now, most of my research is focused on Mars. On Mars, we would only expect microbial life. So, we are also working on life-detection methodologies. At some point, we are hoping that we will have a life-detection experiment on Mars and can send a probe. with our developed instrumentation. But it is a big challenge how to detect life in an extraterrestrial location.

One thing we do is look at the motility of microbes – the way they move, the characteristic patterns of it. Then we use algorithms to describe it. We can do that and distinguish between microbial movement and the random movement of tiny, inorganic particles because of wind or water changes. We are pretty good at detecting the difference, now. The problem we have more is how to distinguish between different types of bacteria.

How do you conduct these experiments? It’s easy to study life on Earth on Earth, but I think much harder to study life on other planets from here on Earth.

Right, that’s correct. But we can actually do quite a bit. I have in my lab a Mars simulation chamber so that we can simulate the conditions that exist on Mars. That brings us quite a bit closer to the problem.

The microbial movement will show under a microscope and we can distinguish it from a, let’s say, sand particle. If there is microbial life on Mars, it would do certain things that it would also do on Earth, so it’s somewhat comparable.

Are there Earth analogs to life on Mars?

We have conducted **studies in the Atacama Desert**. That is a very, very dry environment. In some areas, it rains maybe once every 10 years. How do microbes get their needed water over there? What those microbes do, is they are actually using the salt – there’s a lot of salt in the desert – and with the salt they can extract water directly from the atmosphere, from the relative humidity of the air. That way, they can get water even though it’s not raining at all.

This might be a good analog to Mars. We can imagine life might be hanging on on Mars in the same way. It’s an adaptation trait. We know that on Mars there’s a lot of salt – for example, in the southern highlands of Mars. We think that maybe there are microbes embedded in the salt, perhaps a few centimeters or millimeters below the surface, and that way they get water.

Of course, you have to keep in mind that the environment is quite a bit more extreme on Mars than in the Atacama Desert. It’s still very difficult. Nothing is easy. It would be a challenge for the microbes, and it will be a challenge for us to find it and prove it.

After your time at University of Texas-El Paso and other stints at American universities, you’re now a professor of astrobiology in Germany. Do you have a current research project that you’re working on?

We have several. One of my students works on the motility and behavior pattern of microbes. One of my postdocs is working on brines and salt solutions. We test out our favorite microbes – how much salt they can take and still survive. We actually have a record-holder. One particular yeast species can take the highest concentration of salt and still make a living.

Astrobiologist and UWM alum Dirk Schulze-Makuch hopes to find signs of microbes on Mars.

One of my other students is comparing K-stars and G-stars. Our sun is a G-dwarf star, but there are a lot of K-dwarf stars out there that are less luminous than our sun, but may be preferable for having life-hosting planets around it.

In addition to your research papers, you’ve also authored several books. Can you tell us about your most recent book, The Cosmic Zoo?

I’m interested not only in microbial life, but also complex life and the evolution toward intelligence, and possibly technological intelligence. For *Cosmic Zoo,* I partnered up with William Baines. He is a biochemist. We said, how is it that humans became the dominant species on our planet? And if you rewound the tape of life, would it wind up again like that? So, we looked at all of the different evolutionary transitions, from single-cellular life to multicellular life, from prokaryotes to intelligent life. We looked at various kinds of intelligent life – like dolphins, apes, and octopuses. But there was only one species, us, that became technologically intelligent. And we wondered why that is and if it could happen again.

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Extraterrestrial life

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What we came up with is that there are multiple pathways to overcome those transitions like the one from single-cellular to multicellular life, and we think that if life originates on some other planet in the universe, and if that planet stays habitable long enough, then eventually there will be complex life on that planet.

That doesn't mean technologically advanced life. We don't know that really, because it's only happened once on Earth. But, animal or plant-like life, we would expect.

In your opinion, is there a possibility that other life, analogous to humans, is out there somewhere in space?

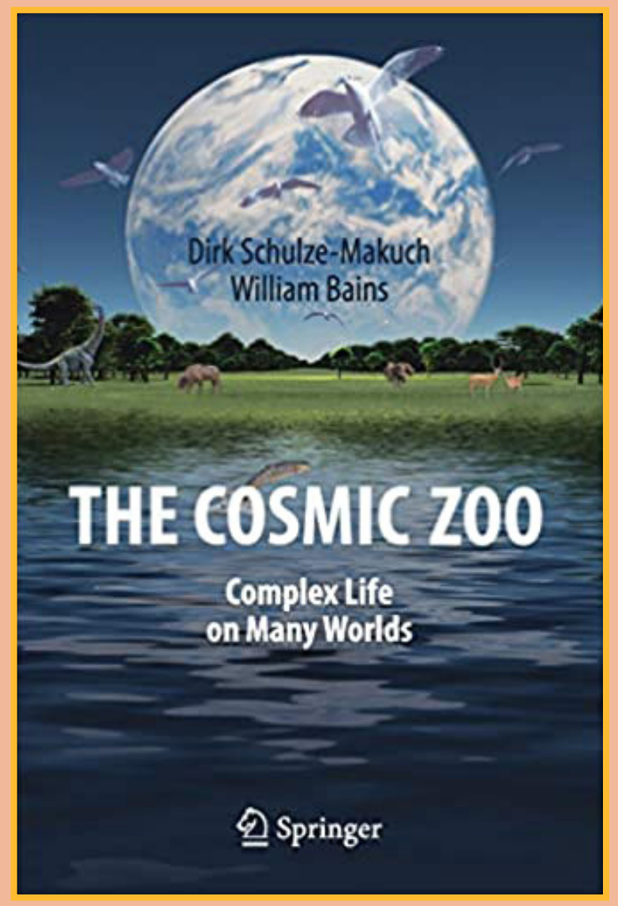
Given this huge size of the universe – we have discovered by now more than 5,000 exoplanets and we think there will be billions out there – I would think that this is very likely.

Of course, the question is, how far away that life would be. The universe is incredibly big. It may be at such a distance that we will never know (about it). But I would be very surprised if we were the only ones thinking, why are we here and what is our place in the universe?

It might not be human, though. It might still be intelligent, but it might look very differently or act very differently. Also, we have had intelligent life on our planet for a relatively long time. The first octopus was already around more than 350 million years ago. We have dolphins that are very smart. Elephants, actually, are pretty smart too. There are apes, obviously, as well, and some birds that are very smart too, like crows or parrots. Of all of these, none have evolved to this stage of technological intelligence. We can't really figure out why. So perhaps, after all, we are something quite special.

Stephen Hawking has famously said that if there is intelligent life out there, there's a risk it would come to destroy us. What are your feelings about that?

He does have a point. If there is technologically intelligent life out there, then it is likely a social predator. I believe that because predators are usually more intelligent than prey. And social, because … if you think about what a single human could do, that's really very limited. But because we work so well together, we can achieve a lot and build a spaceship, for example.



So, assuming that a technologically advanced alien exists, and would likely be social predators, they could in principle be a danger for us because even if there's no ill will, there might be just a misunderstanding with communication. Think about it: For most animals, if they show their teeth, it's a sign of aggression. But, for humans, we show our teeth and smile to show our affection.

So, I think Stephen Hawking has a point that we have to be very careful. We should not automatically assume they are friendly to us.

By Sarah Vickery, College of Letters & Science

UWM honors top undergrad researchers

UWM's award-winning undergraduate research program encourages and highlights the work of students all over campus. Every year a number of these researchers are chosen to receive the Senior Excellence in Research Award.

The 2021-2022 winners were honored at an in-person event in Mitchell Hall 195 in May. Each student had the opportunity to share outcomes of the research projects and creative activity they worked on over this academic year, as well as to share what they have learned overall from their undergraduate research journeys.

In addition to being active in research, the awardees met monthly to discuss their progress and encourage others to take part in undergraduate research through class visits, presentations and media interviews.

Nathan Tennies (left) and Filipe Alberto (UWM Photo/Elora Hennessey)

Winners included Meghan Berger and Mary Widener in the Peck School of the Arts; Sanya Kathuria from the College of Health Sciences; and Jessie Van Dyck from the School of Architecture and Urban Planning.

The final winner hails from the College of Letters & Science. Nathan Tennies has combined his interests in mathematics and biological sciences in his research. Tennies, who works in the lab of Filipe Alberto, associate professor of biological sciences, is developing a web app to track and analyze data about how temperature fluctuations affect giant kelp off the central and south California coast. These kelp provide a key ecological habitat for aquatic life in the area. Using his mathematics skills, Tennies is developing ways of displaying markers, for example, that might indicate where previous research has been done with a link to the results. He's hopeful that other undergraduate researchers will continue adding to the project's findings.

Tennies said he's been interested in biology since he was a child. His mom likes gardening and his dad has a small farm and he had a lot of exposure to nature through 4-H and the Boy Scouts. At UWM, he started working in the Janssen Lab at Freshwater Sciences, which led to his interest in aquatic plants. "Filipe's lab was the next logical step since he's the only aquatic botanist on campus." After adding a mathematics major, he started doing modeling of data about aquatic plants. Working in Alberto's lab has given him a way to explore this with his interest in aquatic botany.

This spring he also worked on a field research project in the Yucatan Peninsula. The goal of the project is to develop a metric for understanding the dwarf mangroves around Laguna Bacalar. He is working with Heidi Jeter of the School of Freshwater Sciences on two articles about that research.

He wanted to do undergraduate research as preparation for a future academic career.

"I have a whole research mindset now; I have a pretty decent understanding of what it's like to work in labs and know that I really like it. Through the research, I've received opportunities to present at conferences, including one on the interface of biology and mathematics."

In addition to other conferences, he will be presenting on his web app this summer at the annual meeting of the Society for Industrial and Applied Mathematics. "It should be a great opportunity to network and learn, with some of the conference subthemes being Life Sciences and Mathematics of the Planet Earth."

By Kathy Quirk, University Relations

UWM grads help provide domestic source of critical medical diagnostic material

A UW-Milwaukee chemistry professor and graduates of his lab are helping two Wisconsin companies produce a vital material that was until recently available **only from foreign sources**.

The material is molybdenum-99, the parent of technetium-99m, the most widely used radioisotope in the world for diagnostic medical imaging, according to UWM Chemistry Professor Mark Dietz. (The materials are often abbreviated as Mo-99 and Tc-99m.)

About 10 years ago, after repeated disruption to supplies of Mo-99 from abroad, the Department of Energy began to encourage the development of new approaches to the production of this critical radioisotope in the U.S.

Two Wisconsin companies – NorthStar Medical Radioisotopes in Beloit and SHINE Medical Technologies in Janesville – took up the challenge of producing the needed Mo-99 domestically. (Foreign companies were using the raw material from highly enriched, reactor grade uranium, which raised some concern about nuclear proliferation.)

However, the companies needed chemists who were skilled in separations involving radioactive materials. Over the last four years, five graduates of Dietz's research group, all trained in this highly specialized work, have been hired by these two companies, one on a temporary basis and four others permanently – two by each company.

"UWM and its graduates have contributed to Wisconsin employers' ability to solve an issue of national importance," Dietz said.

Millions of medical imaging procedures

The medical isotope derived from Mo-99 is the workhorse of nuclear medicine. It is used in more than 40 million medical imaging procedures each year for heart patients and cancer diagnosis.

Cory Hawkins, a UWM alum who now works for the therapeutics division at SHINE Technologies, says it is fulfilling work. Hawkins' division is focused on production of lutetium-177 for cancer-targeted radiotherapy.

"It makes me feel good that we are developing diagnostics and therapeutics that can help the critically ill and that we can also fill in a supply gap," Hawkins said.

SHINE has a four-phase vision to build a profitable business and ultimately bring nuclear fusion power to market, he added. The current phase 2 involves radiopharmaceutical production.

Fascinated by nuclear science

Hawkins, who grew up in the state of Oregon, had an interest in chemistry and nuclear science from an early age. He was fascinated by articles on the atomic age in a set of encyclopedias in his parents' garage.

When he arrived at UWM as a graduate student, he heard about Dietz's lab at a chemistry department event. "It just went on from there. I joined his group and hit the ground running on research and didn't look back."

He eventually went on to earn his doctorate in chemistry, a postdoc at University of California- Irvine and taught for four years in Tennessee before returning to Wisconsin and joining SHINE.

Chemistry is favorite subject

Another UWM graduate, Mohammed Abdul Momen, who also works for SHINE, came into the field because he was interested in environmental issues and the safe handling of nuclear materials.

Momen grew up in Bangladesh, where chemistry was his favorite subject in school. After doing his undergraduate work in Bangladesh, he eventually gravitated to UWM. Friends had recommended the university, and Dietz's lab fit with his interest in applied chemistry.

He learned valuable skills.

"It prepared me for learning about separation processes and the kind of job I have now," Momen said. "One important thing is Dr. Dietz's skill set. He is very well-known radiochemist and so helpful to his students. Everybody in the field knows him."

Teamwork and collaboration

James Wankowski said that the work he did in Dietz's lab was more academic than what he does now at NorthStar Medical Radioisotopes, a product-oriented and highly regulated business. But he uses the teamwork and collaboration stills he learned at UWM every day.

"When I was first here, this was just a small start-up. I had to wear a lot of different hats," he said. The company has grown from fewer than 75 employees to more than 250.

"This is cutting-edge work. We're paving a path and walking down it."

Television inspired his interest in chemistry in his younger days, Wankowski said. He loved shows like "CSI: Crime Scene Investigation" and went to Carroll University with the idea of getting a degree in that field. However, when he found jobs were scarce, he branched out to follow interests in inorganic chemistry and analytical chemistry at UWM, where he worked in Dietz's lab and earned his doctorate in 2017.

NorthStar has a focus on developing and creating products in an environmentally sound way, and that's an important part of Wankowski's work.

UWM chemistry professor Mark Dietz and alumni of his lab got together recently for lunch. From left are Kevin Wolters, James Wankowski, Mohammed Abdul Momen, Dietz, Michael Kaul and Cory Hawkins. All trained at UWM in the highly specialized work of separations involving nuclear material, a critical skill for Wisconsin companies. (UWM Photo/Elora Hennessey)

"My project is essentially taking this critical and expensive raw material and helping us re-use it to benefit our customers and the patients they serve."

Valuable skills

Kevin Wolters, who completed his doctorate at UWM in December 2021, worked in Dietz's lab and took a long-term temporary position with SHINE Technologies for two and a half years with his professor's recommendation.

He eventually took a position at Sterling Pharma Solutions in Germantown that involves helping develop drugs. He completed his doctoral degree on weekends while working there. While he's not directly working with radioisotopes now, Wolters said he feels his experiences at UWM prepared him for his current job.

"It helped a lot. One thing Dr. Dietz taught us was to be hands-on and self-sufficient. That really helped me develop as a scientist," Wolters said.

Hawkins appreciated the teamwork and the opportunities to do presentations.

"Other than the technical aspect, there was the discipline and networking. UWM gave me the opportunity to work with a diverse population of students and staff, and that has really helped me in my career."

Research as an undergrad

Michael Kaul was exposed to the research as an undergraduate at UWM. "I had always been fascinated by radiochemistry, so when I learned more about his research and discovered there was access to a radiation lab at UWM, I pursued a SURF grant to explore this field of research more."

He went on to pursue a doctorate in the field and landed a job at NorthStar Medical Radioisotopes as a process chemist. "The opportunities that were available at UWM greatly influenced my career and gave me relevant experience to prosper in the field of nuclear medicine."

James Harvey, chief science officer of NorthStar Medical Radioisotopes, got to know Dietz earlier in both of their careers and has stayed in touch as his firm looks to recruit researchers for its cutting-edge work.

"We're very impressed with the graduates who have come out of Dr. Dietz's lab," he said.

"They have the skill sets we need in advancing radio imaging manufacturing. They're well-rounded and hit the ground running."

By Kathy Quirk, University Relations

In the Media and Around the Community

Connections made by **Chia Vang (History**) in Argentina while conducting research on the Hmong Diaspora led to the production of a short **video story** about Kykeo's journey from Laos to Argentina. Created by the United Nations, it was recently released to mark World Refugee day on June 20.

The Catholic Herald profiled **Bart Adrian (Atmospheric Science)** in an article exploring how faith has informed his teaching and career. Adrian also delivered the final set of Science Bag shows of the Spring 2022 season in April, and spoke to **Fox6 News** about the presentations.

People who have built homes on the Lake Michigan shoreline, tearing down trees and plants that used to protect the banks, now find their homes in danger. **Neal O'Reilly (Conservation and Environmental Science)** explained how on **Fox 6 News** and on **Wisconsin Public Radio**.

The current housing crisis in Milwaukee is the result of decades of redlining, blockbusting, and racist housing covenants, **Anne Bonds (Geography)** said on **TMJ4 News**. The piece, originally published in the Milwaukee **Neighborhood News Service**, was also republished on **PBS Wisconsin** and **Wisconsin Public Radio**.

Phys.org reported on a study co-authored by **Aki Roberts** and **John Roberts (both Sociology)** suggesting that police violence, especially against Black people, decreases police agencies' effectiveness by reinforcing citizens' cynicism with policing.

Kimberly Blaeser (English and American Indian Studies) was featured in the National Endowment for the Arts publication **American Artscape Magazine** about her founding of In-Na-Po (Indigenous Nations Poets). She discussed the organization's mission, the significance of Indigenous poetry, and In-Na-Po's inaugural retreat at the Library of Congress in April.

When will inflated prices finally drop? **Rebecca Neumann (Economics)** predicted on **TMJ4 News** that consumers will not see relief until fall at least.

Recent graduate **Sakina Schaub ('22, BA English)** was quoted in the **Wisconsin Muslim Journal** about her role as a coordinator for the Islamic Resource Center's summer reading program.

Sonia Khatchadourian (English) gave a presentation entitled, "Strategies to Adapt Technical Information for a Non-Technical Audience," on June 3 at the inaugural national conference on Writing in the Health Professions.

Sit at a bus stop in Milwaukee and you might see a mural depicting the grief left in the wake of gun violence. **Leslie Harris (Communication)** talked with the **Milwaukee Journal Sentinel** about a new oral history project called Voices of Gun Violence in Milwaukee.

The **Wisconsin Jewish Chronicle** spoke with **Rachel Baum (Jewish Studies)** about how digital technologies not only help preserve the testimonies of Holocaust survivors, but also educate students about the Shoah.

In an article published in **Milwaukee Magazine**, alumnus **Brice Lee Smith ('10, PhD History)** recounted how he documented the 1961 "Black Nite Brawl" with interviews from participants for an oral history project he completed while at UWM.

Kathy Dolan (Political Science) said it's too soon to tell how debates over abortion access in Wisconsin will affect the November election, but that the issue will motivate voters, on **TMJ4 News**.

PhD candidate **Joshua Swigart (Geosciences)** is creating a process to decontaminate "produced" water from oil drilling. **Spectrum 1 News** reported on his work.

Sara Benesh (Political Science) told the Associated Press that she predicted political turmoil for Wisconsin as the state determines whether its 173-year-old abortion ban is enforceable in the wake of the Supreme Court's overturn of Roe v. Wade. The article was republished in several outlets including the **US News and World Report** and referenced on **CBC Radio**. Benesh also told **CBS 58 News** that the future of abortion services in Wisconsin depends heavily on the outcome of the November governor's race.

Alumni Accomplishments

Duncan Brown ('04, PhD Physics) was appointed the new vice president for research at **Syracuse University**. He takes over the position in August, and will be responsible for overseeing extramural funding, supporting the university's research centers and institutions, and assisting scholars and researchers in their pursuits. Brown is currently the the Charles Brightman Endowed Professor of Physics at Syracuse.

Jeromey Hodson ('22, BA Journalism, Advertising, and Media Studies) is starting his new job as a reporter for **The Sun Prairie Star**. He earned several journalism awards during his time at UWM and now returns to his hometown to report on local news.

Lavonne Cornell-Swanson ('01, PhD Anthropology) was named the vice chancellor for academic affairs and provost at the **University of Wisconsin-Stevens Point** in June. As provot, she will be the university's chief academic officer and oversee its schools and colleges. She was most recently the associate provost for faculty and student affairs at St. Cloud State University in Minnesota.

La Vonne Cornell-Swanson

Ben Hubing ('21, MA History) authored a book exploring the 1964-1976 presidential campaigns of then-Alabama Governor George Wallace. The book, "George Wallace in Wisconsin," was reviewed in the **Milwuakee Journal Sentinel**.

Jay D. Rosencratz ('86, BA Political Science and Economics; '89 Masters in Human Resources and Labor Relations) was promoted to Chief Strategy Officer for **Pappas DeLaney**, a talent development and coaching firm in Milwaukee. Rosencratz has 30 years of business experience and has been with Pappas DeLaney since 2013, where he previously was the managing director.

Wendy Parks ('93, BA Journalism, Advertising, and Media Studies) received the **Ragan Communications and PR Daily's Top Women in Communications Award** in the "Trailblazer" category. Parks, the Vice President of Public Relations, Communications and Marketing at College of DuPage in Illinois, was recognized for her contributions to the communication industry and her dedication to advancing the College of DuPage's mission.

Michael Zell ('93, BA Philosophy and History; '95, MA Philosophy) was appointed by Wisconsin Gov. Tony Evers as a **Portage County Circuit Court Branch judge** to replace a retiring judge. Zell was previously an assistant state public defender and has a long law career practicing both publicly and privately in Wisconsin.

Rachel Wahlin ('20, BA Communication) was hired by the architecture and interior design firm **Plunkett Raysich Architects** as a marketing coordinator in the Client Relations department. Wahlin, a published author, will be responsible for contributing to the firm's marketing strategies.

Passings

John S. Stavish, 62, died unexpectedly on March 31. The son of Shirley (Scotland) and Anthony W. Stavish, Sr., both of whom passed before him, he is survived by brothers Andrew and Anthony, Jr.; by stepmother Ranae Zautcke Stavish; and by many friends, colleagues, and extended family – in particular by his nieces and nephews Eleonor (Thomas) Paese; Haley Thomas; and William, John, and Elizabeth Ostermeyer, to whom he was a doting and cherished uncle. John was born Nov. 24, 1959, in Pittsburgh, Pennsylvania. He soon moved with his family to Milwaukee, and spent the rest of his life living and working here. He graduated from Brookfield Academy ('77) and from the University of Wisconsin - Milwaukee ('83), where he majored in political science. He forged a successful career in sales, offering enthusiasm, focus, and determination that served his customers well, and enjoyed golf, vintage cars, and fall trips to deer camp.

Planetarium Events

All planetarium shows, unless otherwise noted, are appropriate for ages 4 and up. Mask-wearing is strongly recommended.

July 8, 15, 22, and 29

Life of a Star. 7-8 p.m. In this live, interactive show, marvel at the dramatic changes of stars as they transform from stellar nurseries to exotic objects such as white dwarfs, neutron stars, and black holes. **Tickets** are $5-6.

July 9, 16, 23, and 30

Summer Stars. 2-3 p.m. Find popular summer constellations in the night sky and learn the stories behind them, such as the Big Bear, Hercules, and the Summer Triangle. **Tickets** are $5-6.

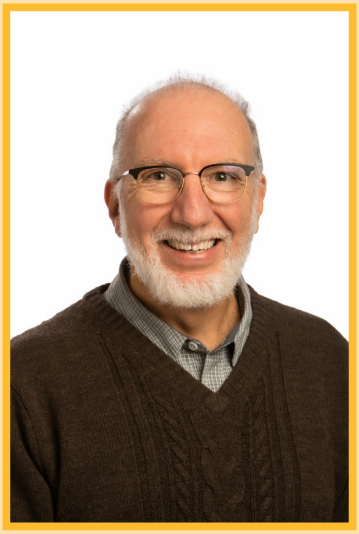
July 13

Full Moon Canoe. In partnership with the Urban Ecology Center, paddle down the Milwaukee River with UWM's Planetarium Director, Jean Creighton. While enjoying the full moon above you'll learn about our nearest celestial neighbor, other exotic moons in the solar system, and more intriguing objects scattered through space from an expert astronomer. Meet at the Milwaukee Rowing Club Boathouse (1990 N Commerce St.). Registration and non-refundable payment required by 5 p.m. on July 12. Personal boats are not allowed. **Tickets** are $35-45.

July 20

Exploring Exoplanets with the James Webb Telescope. 3:30-4:30 p.m. Online via Zoom. In partnership with the Milwaukee Public Library, this event explores the James Webb telescope. NASA's successor to the Hubble Telescope was launched on Dec. 25, 2021. As the largest, most powerful space telescope ever built, the James Webb Space Telescope will serve as the premier deep space observatory for the next decade. Learn about our ever-expanding view of the universe and the search for new and exciting worlds beyond our solar system. This event is FREE. Register **here**.

Leadership changes in L&S



In April, UWM Provost Johannes Britz was selected as the interim academic and student services leader for UW System. College of Letters & Science Dean Scott Gronert was named Interim Provost and Vice Chancellor of Academic Affairs at UWM to fill the vacancy.

In turn, UWM professor of history Nigel Rothfels was named Acting Dean of the College of Letters & Science, effective June 13. Rothfels joined the UWM History Department in 1998 as an adjunct assistant professor. Over his years of service, he has worked as the Director of the Edison Initiative in the College of Letters & Science (2000-2008) and the Director of the Office of Undergraduate Research (2008-present). He holds full professor status and has also served as the chair of the History Department and as chair of the University Committee.

People in Print

Min Gyu Kim (Physics), Andi Barbour, Wen Hu, Stuart B. Wilkins, Ian K. Robinson, Mark P. M. Dean, Junjie Yang, Choongjae Won, Sang-Wook Cheong, Claudio Mazzoli, and Valery Kiryukhin. 2022. Real-space observation of fluctuating antiferromagnetic domains. **Science Advances**, 8(21).

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Jolie A. Gareis, Erin I. Larson, Marcelo Ardón, **John Berges (Biological Sciences)**, ... and Michael J. Vanni. 2022. Using Wikipedia Assignments to Teach Critical Thinking and Scientific Writing in STEM Courses. **Frontiers in Education**, 7: 905777.

John S. Heywood (Economics), Zerong Wang, and Guangliang Ye. 2022. R&D Rivalry with Endogenous Compatibility. **Manchester School**, 90(3), 354-384.

Stuart A. Moulthrop (English). 2022. Victory Garden 2022. Vancouver, Washington: **The Next** (Electronic Literatrure Organization).

Evan Seitz, Francisco Acosta-Reyes, Suvrajit Maji, **Peter Schwander (Physics)**, and Joachim Frank. 2022. Recovery of Conformational Continuum from Single-particle Cryo-EM Images: Optimization of ManifoldEM Informed by Ground Truth. **IEEE Transaction on Computational Imaging**, 8: 462-478.