

## UT scientists advance new technology to protect drinking water from Lake Erie algal toxins

By Christine Billau

**B**efore the 2014 Toledo Water Crisis left half a million residents without safe drinking water for three days, Dr. Jason Huntley's research at The University of Toledo focused on bacteria that cause pneumonia.

After the harmful algal bloom prompted the city of Toledo's "Do Not Drink" advisory, the microbiologist expanded his research projects to target microcystin.

"I live here, and I have a young son," said Huntley, associate professor in the UT Department of Medical Microbiology and Immunology in the College of Medicine and Life Sciences. "I don't want toxins in the water, and I am committed to helping the water treatment plant protect the public."

Huntley's research lab recently made major progress in his mission to create a biofilter that uses naturally occurring Lake Erie bacteria to remove microcystin released by harmful algal blooms from drinking water, reducing or eliminating the use of chlorine and other chemicals.

"We've identified groups of bacteria in Lake Erie that can be used to naturally purify water. To our knowledge, these bacteria have not been previously used to fight harmful algal blooms in other parts of the world," Huntley said.

The microbiologists successfully isolated bacteria from Lake Erie that degrade the microcystin toxin known as MC-LR — the most toxic, most common and most closely linked to liver cancer and

*continued on p. 6*



Huntley

Photo by Daniel Miller

## UT research looks at fiber as a trigger and cure for inflammatory bowel disease

By Tyrel Linkhorn

**N**ew research from The University of Toledo's College of Medicine and Life Sciences may give patients suffering from inflammatory bowel disease a better roadmap for managing their symptoms by changing the type of fiber they eat during flare-ups.

Because there's no cure for the chronic condition, patients living with Crohn's disease and ulcerative colitis — the two most common types of inflammatory bowel disease (IBD) — often rely on anti-inflammatory or immunosuppressive drugs and careful diet planning to manage their symptoms, said Dr. Matam Vijay-Kumar, the senior author on the study and director of the UT Microbiome Consortium and associate professor in the UT Department of Physiology and Pharmacology.

But even that can seem like guesswork.

"IBD can be a debilitating condition and its prevalence is on the rise. For IBD patients, there has been a puzzling question of why they report poor tolerance to certain types of dietary fibers," said Dr. Vishal Singh, a Crohn's and Colitis Foundation Fellow mentored by Vijay-Kumar at UT.

"For healthy people, dietary fibers are good," he said. "But when it comes to the IBD patients, not all-natural fibers are created equal; thus, their metabolism is distinct. We wanted to understand why."

In a study published last month in the gastroenterology journal *Gut*, a team of UT researchers demonstrated a diet rich in pectin or pectin-derived fibers may be a better alternative to the prevailing dietary fiber guidelines aimed at helping patients improve their IBD symptoms.

The study also confirmed that inulin and inulin-like fiber exacerbated colitis in lab mice.

Inulin and pectin are two of the most common refined fibers added to processed foods as a way to add texture and boost their health appeal. Both are indigestible soluble fibers, Vijay-Kumar said, but they require different bacterial enzymes to be broken down in the gut into short-chain fatty acids.

"Many patients try to avoid fiber," said Singh, the study's first author. "However, the research shows it's not about reducing

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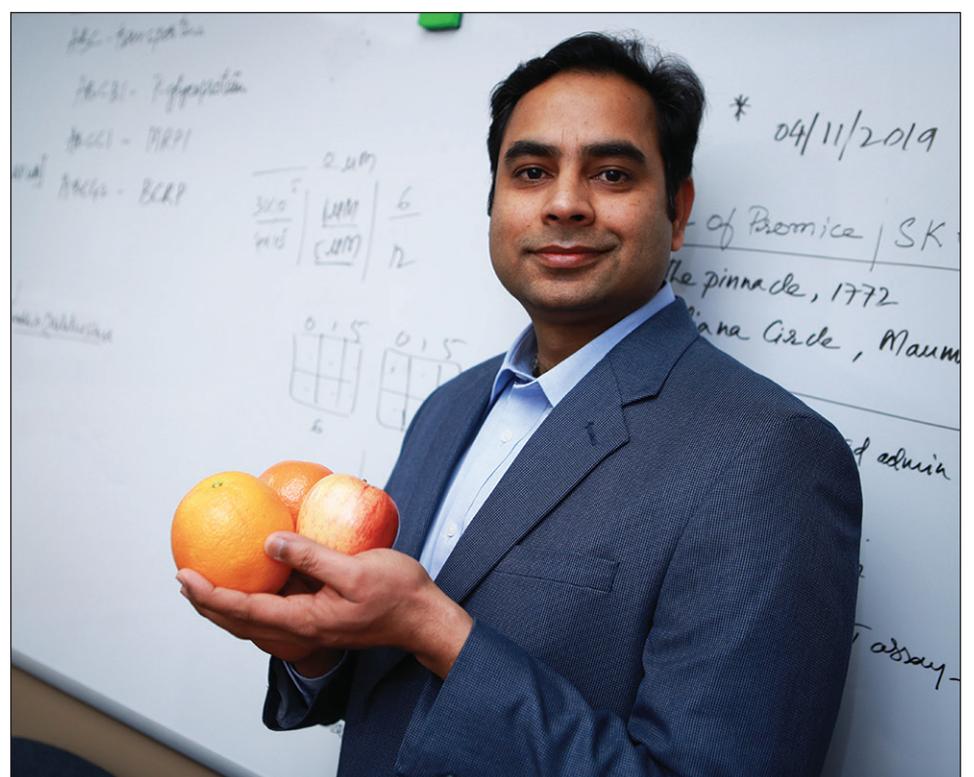


Photo by Daniel Miller

**APPLES AND ORANGES:** Research conducted by Dr. Vishal Singh suggests foods high in the dietary fiber pectin, found in apples and extractable from orange peels, may help individuals with inflammatory bowel disease.

# UT researcher awarded \$792,000 grant to further work on new way to detect early-stage breast cancer

By Tyrel Linkhorn

**W**ithout treatment, more than 40 percent of precancerous breast lesions could develop into invasive breast cancer.

But what if scientists could more accurately predict which lesions are likely to become cancerous, or better yet, provide women a way to prevent the lesions from forming in the first place?

Dr. Saori Furuta, assistant professor in the Department of Cancer Biology, believes that might be within reach.

Furuta has spent years exploring the role nitric oxide plays in the development of precancerous lesions. Nitric oxide is a signaling molecule produced throughout the body, and abnormal levels of it in mammary cells has been implicated in the formation of early-stage cancer.

Now Furuta is investigating how nitric oxide, in its proper concentration, can suppress tumors from forming, and whether its abnormal concentrations might be able to be used as a biomarker that identifies women with or at risk of developing early-stage cancer.

“We have made great progress in diagnosing and treating breast cancer, but it remains a lethal disease. One in eight women will get breast cancer during her lifetime, making it the second leading cause of cancer death among women,” Furuta said. “The hope is that this study will not only advance our understanding of the cause of breast cancer, but also contribute to the development of new approaches to

prevention and early detection methods. Taken together, those methods could save lives.”

Furuta’s research is being funded by a multi-year \$795,000 research grant from the American Cancer Society. The study was one of 74 funded earlier this year by the American Cancer Society across the United States.

“Dr. Furuta’s goal in finding the causes of precancerous lesions could further the progress in breast cancer prevention and treatment, helping to save lives,” said Sarah Wells, executive director of the Northern Ohio American Cancer Society. “This new research grant at The University of Toledo is just one example of how the American Cancer Society is leading the fight against cancer with the support of our local community and partners.”

Furuta has already examined the link between abnormal — too high or too low — levels of nitric oxide and mammary tumor formation. This research will take that prior work a step further by investigating the mechanisms by which a normal level serves to protect breast cells.

To do that, Furuta’s lab will use a mouse model in which tumor-promoting genes have been altered so they would not be affected by nitric oxide. Researchers will be able to test whether those specific genes produce mammary tumors, similar to how they do when nitric oxide levels are abnormal.

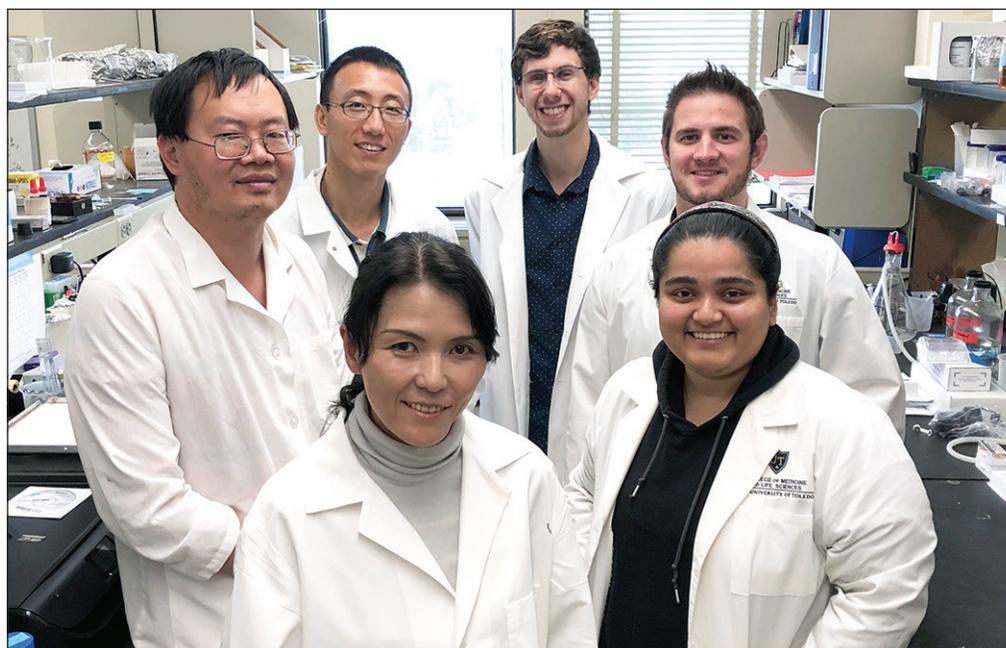


Photo by James A. Molnar

**IN THE LAB:** Dr. Saori Furuta, front left, received a \$792,000 grant from the American Cancer Society to study precancerous breast lesions with her team, from left, Dr. Xunzhen Zheng, postdoctoral researcher; Dr. Gang Ren, graduate student in the Department of Mathematics and Statistics; Matthew Bommarito, research technician; and Joshua Letson and Yashna Wallia, graduate research assistants.

Lab tests also will be conducted on normal human breast tissue, as well as tissue from different stages of cancer to determine how the level of nitric oxide changes as cancer develops and progresses.

“Ultimately, we want to test whether proteins secreted in the blood and urine are also modified by nitric oxide and whether such analyses could be utilized in biological tests to diagnose breast cancer,” Furuta said. “Since there is no such diagnostic test

available for many types of cancers, this would be a breakthrough.”

The grant from the American Cancer Society was preceded by an anonymous \$50,000 gift from one of the members of The University of Toledo Medical Research Society to begin preliminary research.

“Utilizing the donation, we finished some of the critical experiments and re-sent our proposal,” Furuta said. “Without the generous support, this would have been impossible.”

## Dean named to DriveOhio Advisory Board

Dr. Michael Toole, dean of the UT College of Engineering, has been named to the DriveOhio Government Advisory Board.

He was appointed to the seven-member board by outgoing Gov. John Kasich.

DriveOhio is an initiative in the Ohio Department of Transportation charged with accelerating smart vehicle and connected vehicle projects in the state.

“It is an honor to serve on this board and represent The University of Toledo,” Toole said.

Toole, who was named dean of the UT College of Engineering in 2017, received a PhD in technology strategy from the Massachusetts Institute of Technology and

has focused his research on innovation in design, construction and infrastructure. He is a professional engineer and a Fellow in the American Society of Civil Engineers.

During the past year, the UT College of Engineering has offered a five-part series on autonomous vehicles in partnership with AAA of Northwestern Ohio, Toledo Area Regional Transit Authority, Toledo Metropolitan Area Council of Governments, DGL Consulting Engineers LLC and Path Master Inc.

“The UT College of Engineering’s participation in this series has given me a strong appreciation for the important research being conducted at the University

on related research topics such as cybersecurity, distributed networks, connected infrastructure, advanced materials and mechatronics,” Toole said.

DriveOhio’s mission is to serve as the state’s central hub for smart mobility — the use of technology to move people and goods from one place to another as effectively as possible.

The government organization is a single point of contact for policymakers, agencies, researchers and private companies to work together on smart transportation.



Toole

# Volunteers pack more than 200,000 meals to feed families

By Christine Billau

For the third year in a row, volunteers gathered in shifts and donned hairnets at The University of Toledo to assemble nearly a quarter of a million meals to feed families.

“We produced 202,392 meals with the help of 1,080 volunteers,” said Dr. Clint Longenecker, Distinguished University Professor and director of the Center for Leadership and Organizational Excellence in the UT College of Business and Innovation.

“These meals were shipped to Haiti to be delivered through Feed My Starving Children’s on-the-ground distribution system we have worked with for many years.”

The two-day mobile pack, part of the Feed My Starving Children program, was organized by 90 UT students who are members of the Klar Leadership Academy in the College of Business and Innovation. The academy was founded in 2015 with the support of Steven Klar, a 1969 UT business alumnus and a New York City builder and real estate developer.

“It has been great to be part of organizing and leading this global community service project and to know that we made a difference through our efforts,” said Jason Gorning, a member of the Klar Leadership Academy.

UT students, employees and alumni, as well as teams from companies around Toledo, gathered Feb. 1 and 2 in the Health Education Building on Main Campus and were split into groups to assemble nutritious rice meals with vegetable blend,

vitamins and minerals. The meals are scientifically formulated for undernourished children.

The organizers raised \$45,000 and set a goal to build 200,000 meals. Last year, volunteers made 173,000 meals.

“The University of Toledo has a global impact, and the students are the driving force behind this incredible initiative to fight hunger worldwide,” Longenecker said. “The way this event has grown in only three years is a testament to our community’s mission to solve problems and help others.”

In fact, the event has grown so much, volunteers were put on a waiting list.

“Due to overwhelming generosity, the shifts filled up quickly,” Longenecker said. “In fact, we have a backlog of people who want to join. It’s a great problem to have. We hope everyone is ready to help again next year.”

Longenecker thanked the corporate sponsors, including the Kinsey Family Foundation, Gordon Food Services, IET Inc., Menn Wealth and ProMedica.



Photo by Aanchal Senapati

**PITCHING IN:** Dr. Anne Balazs, dean of the College of Business and Innovation, left, Jamal Shaheen, a senior majoring in marketing and professional sales, center, and Dr. Clint Longenecker posed for a photo before their shift at the Feed My Starving Children event.



Photo by Dr. Clint Longenecker

**SERVICE WITH A SMILE:** Megh Kumar, a senior majoring in psychology, left, and Chelsea Corbett, a senior majoring in nursing, were two of the 1,080 volunteers who helped prepare 202,392 meals at the Feed My Starving Children mobile pack.

## IBD research

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fiber in general, but getting the right kind into your system.”

Singh and his fellow researchers said the finding could assist patients in developing a better diet for managing or preventing flare-ups.

“Following strict dietary guidelines is not new for IBD patients. Physicians often recommend patients limit or avoid a group of foods that contain fermentable carbohydrates, commonly known as the low-FODMAP diet,” Vijay-Kumar said.

“Pectin is not included in that diet, but our research shows it brings a clear benefit.”

The study was supported by the Crohn’s and Colitis Foundation, and the National Cancer Institute of the National Institutes of Health.

In the study, researchers examined the role played by bacteria that naturally reside in the gut. They demonstrated that inulin promoted accelerated growth of one particular harmful bacterial strain, while pectin did not.

They also found that a brief period of fasting may boost the body’s production of a physiological inflammation inhibitor that can protect against the inflammatory reaction caused by the gut bacteria processing inulin.

“For me, this study connects very well from bench to bedside,” Singh said. “If an IBD patient is noticing complications after eating some type of food, they can look to see if it is rich in inulin or inulin-type fibers. If it is, they can switch to foods enriched with pectin.”

Pectin is found naturally in a variety of foods, including apples. It also can be derived from other natural sources, such as orange peels, and used as a food additive.

Though the study looked only at pectin and inulin, the team hopes to conduct similar studies on a wide variety of dietary fibers present in processed foods with the goal of learning more about how different types of fiber cause or reduce colonic inflammation.

## UT's Center of Muslim Women to be topic of Feb. 19 lunch

By Chase M. Foland

Last fall, the UT Women's and Gender Studies Department opened the Center of Muslim Women.

The center is housed within the Women's and Gender Studies Department in University Hall.

Campus and community members are invited to learn more about the center Tuesday, Feb. 19, from noon to 1 p.m. during a lunch program hosted by the Catharine S. Eberly Center for Women. The free event will be held in Tucker Hall Room 015.

The center is a college-based entity serving the University and community as a resource center, a hub for programming, a research forum, and a gathering and support space for all UT students, faculty, staff and



Abdel-Halim

UT associate professor of women's and gender studies, and director of the center. "We hope that it also creates interaction with all professional groups and individuals

local residents interested in Muslim women's issues.

"The center shall promote an understanding of Muslim women's rights domestically and internationally," said Dr. Asma Abdel-Halim,

who have an interest in women's issues and gender in Islam."

Abdel-Halim said the center's creation was possible with the support of Dr. S. Amjad Hussain, UT professor emeritus of thoracic and cardiovascular surgery, and former member of the University Board of Trustees; Dr. Sharon Barnes, professor and chair of the UT Department of Women's and Gender Studies; and Charlene Gilbert, dean of the UT College of Arts and Letters.

A hope for the center is to create an inclusive environment working on different objectives, including but not limited to assisting students studying women in Islam to connect with experts at the University and in the community.

"The center is intended to utilize faculty and staff expertise in Muslim women's status, gender and feminist issues to build a resource site for sharing knowledge and in-depth discussion of Muslim women, their issues and their lives," Abdel-Halim said. "It is also intended to assist Muslim women students, faculty and staff in taking their place in the community, and to dismiss myths about them, their religion and their traditions."

In addition, Abdel-Halim said the center will raise awareness about complex, intersectional issues of gender, religion, global location and culture among Muslim people.

For more information on the center, contact Abdel-Halim at [asma.abdel-halim@utoledo.edu](mailto:asma.abdel-halim@utoledo.edu).

## Celebrating Year of the Pig



Shivam Vishwasrao, a freshman majoring in computer science engineering, left, and Chen Tiew, a senior majoring in business, practiced the art of Chinese paper cutting last week at the Chinese New Year Spring Festival. About 350 people stopped by the Thompson Student Union Auditorium Feb. 6 to celebrate the Year of the Pig, according to Xinren Yu, international program coordinator in the UT Confucius Institute.



Photos by Daniel Miller

Landon Shrider, a senior majoring in criminal justice, tied a lucky Chinese knot during the Chinese New Year Spring Festival. The annual event was sponsored by the UT Confucius Institute.

## Health Science Campus Artist Showcase to open Feb. 18

The 14th annual Health Science Campus Artist Showcase will take place Monday, Feb. 18, through Wednesday, April 10, on the fourth floor of Mulford Library.

This year's exhibit features work from more than 30 artists who are students, faculty and staff in the health sciences from Health Science and Main campuses, as well as UT Medical Center.

On exhibit will be a variety of 2-D and 3-D artwork, including paintings, drawings, photography, sculpture and mixed media.

An artist reception will be held Friday, Feb. 22, from 4 to 6 p.m. on the fourth floor of Mulford Library.

Dr. Paul Brand, UT associate professor emeritus of physiology and pharmacology, will speak at 4:30 p.m. at the reception.

His talk is titled "Create Your Own World."

"I paint and draw first for the simple pleasure of putting color on paper, and then

to create paintings that stand out because they fuse realistic images and strong abstract designs," Brand said.

A longstanding participant in the Health Science Campus Artist Showcase, Brand paints diverse subjects, most often landscapes, but also still-life and abstracts, using watercolors, acrylics, pastels or charcoal. He has four works in this year's exhibit.

"I love watercolors for their luminous, fresh appearance, acrylics for their immediacy and simplicity, pastels for their intense colors and ease of application, and charcoal for the range of values and richness," he said.

For the past two decades, paintings by the award-winning artist have been featured at several juried shows. In addition, Brand has taught art classes at the Toledo Botanical Gardens, Toledo Museum of Art and Art Supply Depo.

Like the exhibit, the reception and lecture are free and open to the public. Visitors can view the artwork during regular library hours: Monday through Thursday from 7:30 a.m. to midnight; Friday from 7:30 a.m. to 7 p.m.; Saturday from 9 a.m. to 9 p.m.; and Sunday from 9 a.m. to midnight.

For more information, visit [libguides.utoledo.edu/hscart](http://libguides.utoledo.edu/hscart) or contact Jodi Jameson, assistant professor and nursing librarian at Mulford Library, and member of the artist showcase committee, at 419.383.5152 or [jodi.jameson@utoledo.edu](mailto:jodi.jameson@utoledo.edu).



# 2019 Health Science Campus ARTIST SHOWCASE

*Explore the creativity of your fellow students and colleagues*

**Mulford Library, 4th Floor**  
**February 18 – April 10**



*Join us for an Artist Reception*  
**Friday, February 22, 4 – 6pm**

Featuring a lecture entitled  
"Create Your Own World" by  
award-winning artist and  
UT associate professor emeritus,  
Paul H. Brand, Ph.D.

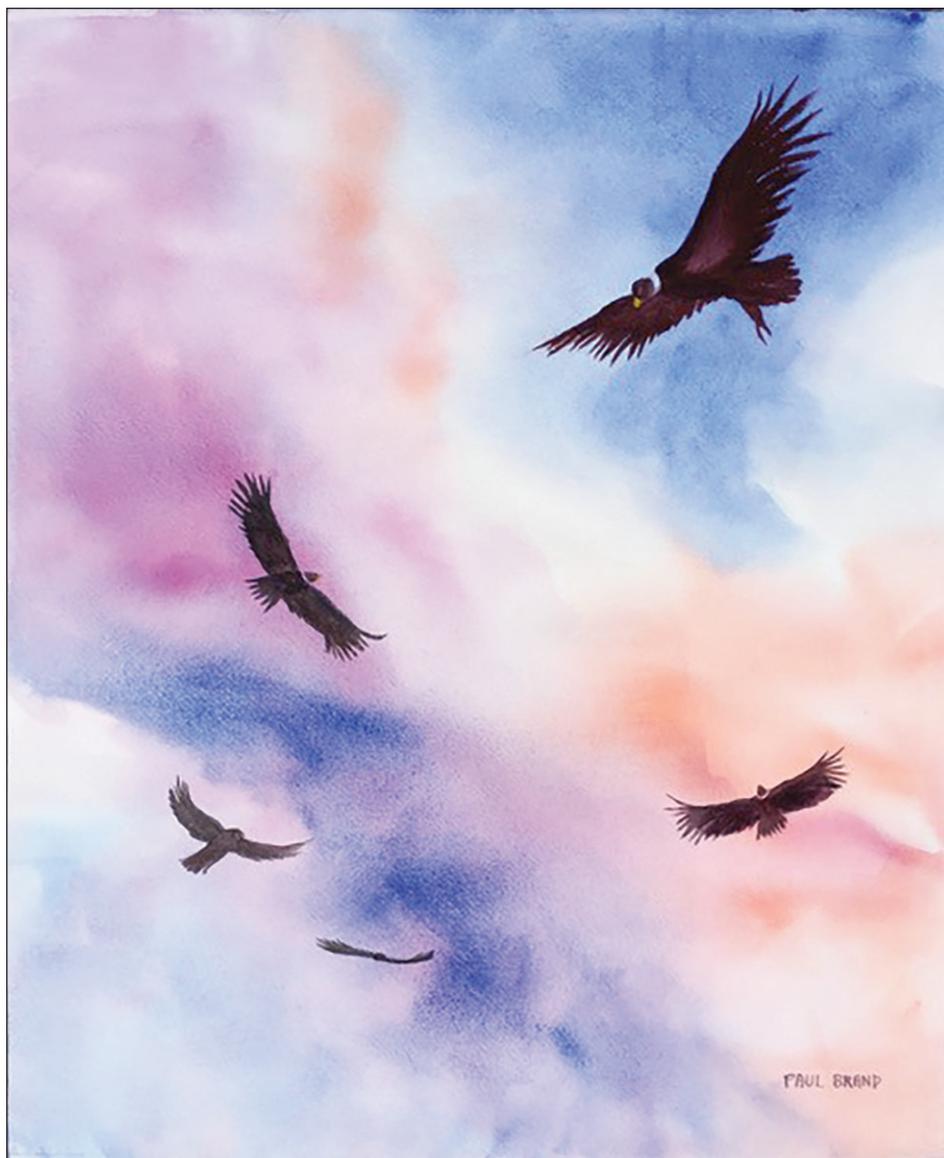
*Light refreshments will be provided.*

For details, visit <http://libguides.utoledo.edu/hscart>

**Questions?** Contact Jodi Jameson (419.383.5152 / [jodi.jameson@utoledo.edu](mailto:jodi.jameson@utoledo.edu))



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"Condors," a watercolor by Dr. Paul Brand, is included in the Health Science Campus Artist Showcase, which will open Monday, Feb. 18, on the fourth floor of Mulford Library.

# Lake Erie Center talk to focus on saving birds in urban areas

By Christine Billau

**W**e often hear about the psychological benefits of reconnecting with nature. Take a walk. Listen to birds chirping. Plant flowers.

Bringing people back into harmony with nature also can save wildlife.

The University of Toledo Lake Erie Center is hosting a free, public event about community-level solutions to wildlife conservation in an increasingly urban landscape.

Matthew Shumar, program coordinator for the Ohio Bird Conservation Initiative and co-editor of “The Second Atlas of Breeding Birds in Ohio,” will give a talk titled “It Takes a Village” Thursday, Feb. 21, at 7 p.m. at the Lake Erie Center, 6200 Bayshore Road in Oregon.

The avian ecologist plans to speak about the Ohio Bird Conservation Initiative’s Lights Out program designed to



Shumar

address light and glass issues that threaten birds in urban areas.

“Artificial lighting has become a major concern for migratory bird populations,” Shumar said. “Birds attracted to bright lighting often fatally collide with buildings, and it is estimated that between 365 and 988 million birds are killed by collisions each year in the United States.”

“Programs like the ones led by Matt are making a measurable difference in human impacts on migratory birds,” said Dr. Henry Streby, ornithologist and assistant professor in the UT Department of Environmental Sciences. “Often the hardest part is gaining the attention of the public and policymakers about small changes that can make big differences for conservation. That’s the hard work that Matt and his colleagues are taking on.”

Streby studies rare songbirds and red-headed woodpeckers. His groundbreaking migration research revealed the key to population declines in golden-winged warblers.

The Ohio Bird Conservation Initiative is a collaboration of nonprofit groups, businesses, citizens, and state and federal agencies working to advance bird conservation efforts.

Shumar’s talk is part of the Lake Erie Center’s Public Lecture Series.

A shuttle will be available to transport passengers from UT’s Main Campus to the Lake Erie Center and back. The shuttle will depart at 6:15 p.m. from the south side of Bowman-Oddy Laboratories, 3100 West Towerview Blvd. Passengers must reserve a spot. Email lakeeriecenter@utoledo.edu or call 419.530.8360 to make a reservation for the shuttle.

## Drinking water

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other diseases — at a daily rate of up to 19 parts per billion (ppb).

Water analysts and toxicologists measure microcystin and other contaminants using the metric of ppb; one ppb is one part in 1 billion. These ppb numbers are important for human health because the U.S. Environmental Protection Agency recommends that young children not drink water containing more than 0.3 ppb of microcystin and adults not drink water containing more than 1.6 ppb of microcystin.

“The bacteria we’ve identified can degrade much more toxin than was reported in the 2014 water crisis,” Huntley said. “Based on recorded toxin levels in Lake Erie in recent years, these rates would be able to effectively remove microcystin from water supplies.”

None of the 13 microcystin-degrading bacterial isolates has been associated with human disease, so their use in future water-purifying biofilters is unlikely to be a public health concern. The identified bacteria are *Flectobacillus major*, *Pseudomonas lutea*, *Agrobacterium albertimagni*, *Leadbetterella byssophila*, *Pseudomonas putida*, *Flectobacillus major*, *Pseudomonas hunanensis*, *Runella slithyformis*, *Porphyrobacter sp.*, *Pseudomonas parafulva*, *Sphingobium yanoikuyae*, *Pseudomonas fluorescens* and *Sphingobium yanoikuyae*.

The research is published in the February issue of the Journal of Great Lakes Research.

Researchers in Australia, China and other countries also have identified bacteria that can chew up and break down microcystin from algal blooms; however, Huntley said those specific types of bacteria were not found in any of his Lake Erie studies.

Thirteen water samples used for the study were collected from visible algal blooms in the summers of 2014 and 2015 in the western basin of Lake Erie. The scientists added MC-LR to each water sample every three to four days for approximately four weeks, alongside a control group that did not receive additional MC-LR.

The lab used multiple approaches to confirm the microcystin degradation results, including mass spectrometry and the ELISA test, which is the standard method water treatment plant operators use to measure microcystin concentration during algal bloom season.

His lab is now in the process of identifying the enzymatic pathways the bacteria use to break down microcystin.

Currently, municipal water treatment plants remove or degrade microcystin using methods such as chlorination, ozonation, activated carbon adsorption and flocculation.

“Those techniques are not ideal because of high costs, limited removal efficiencies,

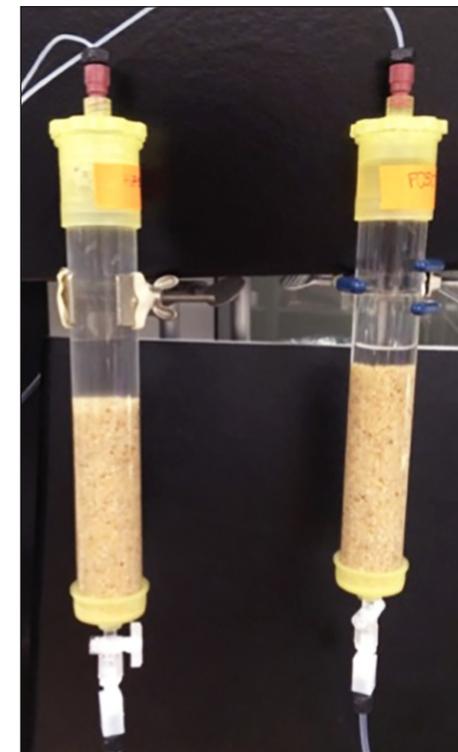
and they lead to the production of harmful byproducts or hazardous waste,” Huntley said. “Biofilters are a cost-effective and safe alternative to the use of chemicals and other conventional water treatment practices.”

“We’re very excited about the research and the findings,” said Andrew McClure, administrator for the city of Toledo’s Collins Park Water Treatment Plant. “We’ve had preliminary talks with Dr. Huntley about ways we can implement it as a treatment technique in our plant’s process.”

Huntley’s team is developing and testing biofilters — water filters containing the specialized bacteria that degrade microcystin toxins from lake water as it flows through the filter. Huntley holds a provisional patent on this technology.

The research was supported by grants from the Ohio Department of Higher Education through the state’s Harmful Algal Bloom Research Initiative, which consists of 54 science teams at universities across the state seeking solutions to address toxic algae in Lake Erie.

“This is another great example of how Ohio Department of Higher Education-funded research is producing solutions that directly benefit Ohio EPA and those water treatment plant operators responsible for managing our drinking water,” said Dr. Chris Winslow, director of Ohio Sea Grant and Stone Laboratory at Ohio State University.



**PURIFICATION PROCESS:** The lab-scale biofilters used during Dr. Jason Huntley’s research are sand filters that contain biologically active bacteria that break down microcystin toxins.

## The beat goes on: UT spotlights American Heart Month

February is American Heart Month, and The University of Toledo is increasing awareness about heart disease while also shining a spotlight on resources available for campus community members to improve their overall well-being.

“Heart disease is the leading cause of death for men and women in the United States,” said Vicki Riddick, senior wellness officer. “Our goal is to offer programs that raise awareness for students, faculty and staff, and create opportunities for people to make healthier choices.”

According to the American Heart Association, more than 100 million Americans have high blood pressure. Guidelines published in November redefined high blood pressure as a reading of 130 on top or 80 on the bottom. The standard used to be 140 over 90.

The University of Toledo Pharmacies and Healthy U are introducing blood pressure screenings on Main and Health Science campuses beginning in February. These will take place from noon to 2 p.m.:

- On Health Science Campus in the Pinnacle Lounge on Tuesdays, Feb. 12, March 12 and April 9.
- And on Main Campus in Carlson Library Room 1009 on Tuesdays, Feb. 19, March 19 and April 16.



A healthy diet and lifestyle are the best weapons to fight heart disease. Riddick said it is recommended to eat an overall healthy dietary pattern that emphasizes:

- A variety of fruits and vegetables;
- Whole grains;
- Low-fat dairy products;
- Skinless poultry and fish;
- Nuts and legumes; and
- Nontropical vegetable oils.

Healthy U along with UT Medical Center clinical dietitians are offering a free cooking demo Tuesday, March 5, from noon to 1 p.m. in Collier Building Room 1220. This interactive presentation will highlight healthy food items and show participants how to prepare quick meals that also are nutritious.

Additionally, save the date for the Toledo Heart Walk: Saturday, May 18.

For even more tips on preventing heart disease and living a healthy lifestyle, visit the American Heart Association website at [heart.org/en/healthy-living/healthy-lifestyle](http://heart.org/en/healthy-living/healthy-lifestyle).

## ‘Maps Behind the Movement: African-American Freedom Struggles’ topic of Feb. 15 talk

By Bailey Sparks

Whether spectacular moments in formal protest or daily acts of defiance, civil rights struggles often involve the strategic planning and mobilization of resources, bodies and information.

Dr. Derek H. Alderman, professor of geography at the University of Tennessee in Knoxville, examines the African-American freedom struggle as geographical work.

He will discuss “The Maps Behind the Movement: African-American Freedom Struggles as Geographic Work” Friday, Feb. 15, at 2:30 p.m. in Snyder Memorial Building Room 2110.

According to Alderman, as part of the fight for equality, African Americans have long participated in (counter) mapping; collecting and analyzing social and geographical data and intelligence; spatial planning; and various forms of place (re)making.

“I offer a series of vignettes that demonstrate the different kinds of geographical work and various kinds of mapping that African Americans have engaged in as they have sought to take control of their own lives and spaces in the face of rampant racism,” Alderman said.

These vignettes cross a range of historical periods, case studies and political contexts — from efforts to escape slavery to the navigation of Jim Crow segregation to famous and less known campaigns of the civil rights movement and to more contemporary place-claiming struggles.

Alderman calls for the help of professional geographers and other scholars, asking that they consider ways to make civil rights more central to geographic research, teaching and outreach while also recognizing the role that space and place played in the African-American freedom struggle.

His presentation is sponsored by the American Association of Geographers/Gamma Theta Upsilon Visiting Geographical Scientist Program.

For more information about this free event that is part of the 2019 Spring UT Geography and Planning Colloquium Series and the University’s celebration of Black History Month, contact Dr. Patrick Lawrence, UT professor and chair of geography and planning, at [patrick.lawrence@utoledo.edu](mailto:patrick.lawrence@utoledo.edu).



The University of Toledo Medical Center  
**Blood Drive**  
Morse Center

**Thursday, Feb. 14**  
**9:30 a.m. to 3:30 p.m.**



## UT NEWS

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# Inaugural class of Toledo Fire Department paramedics among this year's inductees to UT Emergency Medicine Wall of Honor

By Tyrel Linkhorn

The University of Toledo added 14 names to the Emergency Medicine Wall of Honor at the eighth annual induction ceremony. Inductees included the first group of Toledo firefighters to be certified as paramedics.

This year's other honorees are a longtime clinical nursing educator and an emergency medical services outreach education coordinator.

The Feb. 5 ceremony in the Collier Building included a welcome from UT President Sharon L. Gaber. Dr. Kristopher Brickman, professor and senior associate dean for innovation in the College of Medicine and Life Sciences, and Dr. Christopher Cooper, executive vice president for clinical affairs and dean of the College of Medicine and Life Sciences, also gave remarks.

"[The Wall of Honor is] a symbol of our tremendous respect for the nurses, paramedics, firefighters and other first responders who routinely put themselves in harm's way to ensure our safety," Gaber said. "Today's honorees have demonstrated not only exceptional training and clinical experience, but also have shown compassion in dedicating their work to helping others."

"This award recognizes people who have been instrumental in developing and defining what emergency care is in our region," Brickman said. "We want to honor some of our unsung heroes of emergency medicine who have helped save lives and made a real difference in our community."

The Emergency Medicine Wall of Honor, made possible through funding from IPI Insta-Plak Inc. and The Blade, was established in 2011 to celebrate the achievements of those who are committed to service within the emergency medicine community.



Photo by Daniel Miller

**LEADING THE WAY:** Members of the Toledo Fire Department paramedic class of 1974 were inducted to the UT Emergency Medicine Wall of Honor.

Each year, nominations are submitted by a committee of community stakeholders and reviewed by a multidisciplinary selection committee. This year's group is larger because of the inclusion of all 12 members of the Toledo Fire Department's first paramedic class.

"Those firefighters were a unique group of people who basically were out there doing something that nobody else had done before," Brickman said. "For our region, they were the pioneers."

The honorees this year are:

- Patricia Rice Yancy, registered nurse. Yancy, who earned master's degrees in education and public health from UT after completing a bachelor's degree in nursing from Mary Manse College, initiated several training courses for nurses, including critical care and flight nurse programs. She has been instrumental in training thousands of nurses, doctors and other pre-hospital employees throughout her



Yancy

- Patricia Ann Ambrose, paramedic. Ambrose was the EMS outreach education coordinator for Mercy Health St. Vincent Medical Center Life Flight and Mobile Life. She also was a lifelong EMS and life support educator, including playing an integral role in the paramedic education program and the former

Medical University of Ohio. Ambrose died in 2018.

- Members of the Toledo Fire Department paramedic class of 1974. They are William Brown, Michael Condon, James Dugan, David Hilton (posthumous recognition), Alan Janney, Paul Johnston, Renzo Meraldo, James Markland, Ralph Mungons, Samuel Reynolds, Barney Rouster (posthumous recognition) and Daniel Thedford. The 1974 class was the first group of firefighters to train as paramedics in Toledo as part of a joint project with the former Medical College of Ohio. They were pioneers in their field and are uniquely responsible for building and advancing emergency medical services in Lucas County.

A plaque for each honoree was added to the wall, located in the Emergency Department of The University of Toledo Medical Center, near the ambulance entrance.

## UT employees: W-2s available

The UT Payroll Department has processed W-2s for the 2018 tax year.

Those who chose to receive their W-2s electronically can log in to the myUT portal at [myut.utoledo.edu](http://myut.utoledo.edu) and look in the employee tab under tax forms.

University employees who opted for a paper copy should check their mail; W-2s were picked up by the U.S. Postal Service Jan. 28.

## In memoriam

**Dr. Robert F. Baugh**, Lambertville, Mich., died Feb. 2 at age 87. He was a community-based faculty member in the Department of Family Medicine at MCO from 1985 until the mid-1990s.

**Mary Jane Stanish**, Portland, Conn., who was a volunteer with the Satellites Auxiliary, died Dec. 20 at age 88.