

University researcher receives three NIH grants to study how cancer spreads

By Rebecca Schwan

The migration of cancer cells away from the primary tumor and their subsequent metastasis to distant organs is the leading cause of mortality among breast cancer patients.

Dr. Rafael Garcia-Mata, UT assistant professor of biological sciences, has received three grants from the National Institute of Health's National Cancer Institute to study how cancer cells spread in the body. His focus is on triple negative breast cancer.

"We use this type of cancer because it is highly invasive," he said. "If we can identify how this type of cancer spreads, the data can be extrapolated to other types of cancers."

Cancer cells invade other tissues and enter the bloodstream by forming actin-rich membrane protrusions called invadopodia, or "invading feet," that degrade the extracel-

lular matrix. Once in the bloodstream, the cancer cells can metastasize to form secondary tumors.

Garcia-Mata said it is his team's goal to learn how these protrusions form and to identify the upstream regulators and downstream effectors of the formations. Their study is three-pronged:

- "Regulation of Invadopodia Formation by RhoG Specific GEFs and GAPs" is funded by a three-year, \$412,911 grant and seeks to identify what signals the protrusions to begin to form.

- A two-year, \$330,544 grant supports the "RhoG Signaling in Invadopodia" project that explores the role of RhoG in invadopodia formation and cell invasion and



Garcia-Mata

continued on p. 4

Behind the scenes of Art on the Mall

By Vicki L. Kroll

In the pre-dawn hours of the last Sunday in July, the silence on UT's Centennial Mall is broken: "Y'all ready for this?" rapper Ray Slijngaard of 2 Unlimited asks as the synthesizer-driven psych-up song "Get Ready For This" blares near the Student Union.

"We have a little playlist — Amanda Schwartz in our office puts together a mixture of '80s jock jam-type/pump-you-up dance music," Ansley Abrams-Frederick, director of alumni programming, said. "We're in the bus loop and it's pitch black, and we're playing music and dancing and getting into the spirit of things. Everybody's in a really good mood; we're all looking forward to Art on the Mall."

"Everybody jump, jump, jump, jump," DJ Kool encourages in "Let Me Clear My Throat."

"Since we get to campus at 5 a.m., I try to find some music that will wake us up," Schwartz, associate director of alumni

relations, said. "I also start that day with a Monster energy drink."

C+C Music Factory's "Gonna Make You Sweat" is up next.

"Oh boy, there have been some hot ones," Abrams-Frederick recalled. "In fact, we were joking about it. Sometimes we bring a change of clothes to freshen up a bit and change."

"I'd take the heat over rain any day of the week; the rain is a killer. We always want to have a beautiful day."

Here's to a sun-filled forecast for this year's event on Sunday, July 31, from 10 a.m. to 5 p.m. on Centennial Mall. The 2016 Art on the Mall is sponsored by The Blade, Huntington, 13 ABC, Buckeye Broadband, 101.5 The River and Homewood Press.

It all began more than two decades ago when participation in the UT Hole-in-One Tournament fell off. Mary Bell, former UT Alumni Association trustee, suggested replacing the golf event with an art fair



Photo by Daniel Miller

EVENT VETERAN: Ansley Abrams-Frederick, director of alumni programming, has helped with Art on the Mall since 2003 and directed the summer favorite since 2008.

continued on p. 7

University researcher receives nearly \$2 million grant for Lyme disease study

By Rebecca Schwan

A University of Toledo microbiologist will receive nearly \$2 million in federal research funds to study *Borrelia burgdorferi*, the causative agent of Lyme disease, and develop new therapies for treating patients affected by the condition.

The National Institute of Health's National Institute of Allergy and Infectious Diseases awarded Dr. Mark Wooten, UT professor of medical microbiology and immunology, \$1,948,415 over five years to identify the mechanisms that allow *B. burgdorferi* to evade immune clearance in skin and other host tissues.

"Traditionally, it has been difficult to study this bacterium since it can only survive within animals and not in artificial cultures," Wooten said. "Our group has been able to develop advanced microscopy models that allow us to directly observe the bacteria within the skin of living mice over

extended periods of time without harming the animal. We will use these methods to continuously monitor how the infection develops, which we believe will identify the key mechanisms that allow the bacteria to evade the host's immune response.

Wooten said data gathered from the study could be used to provide new targets for Lyme disease therapies.

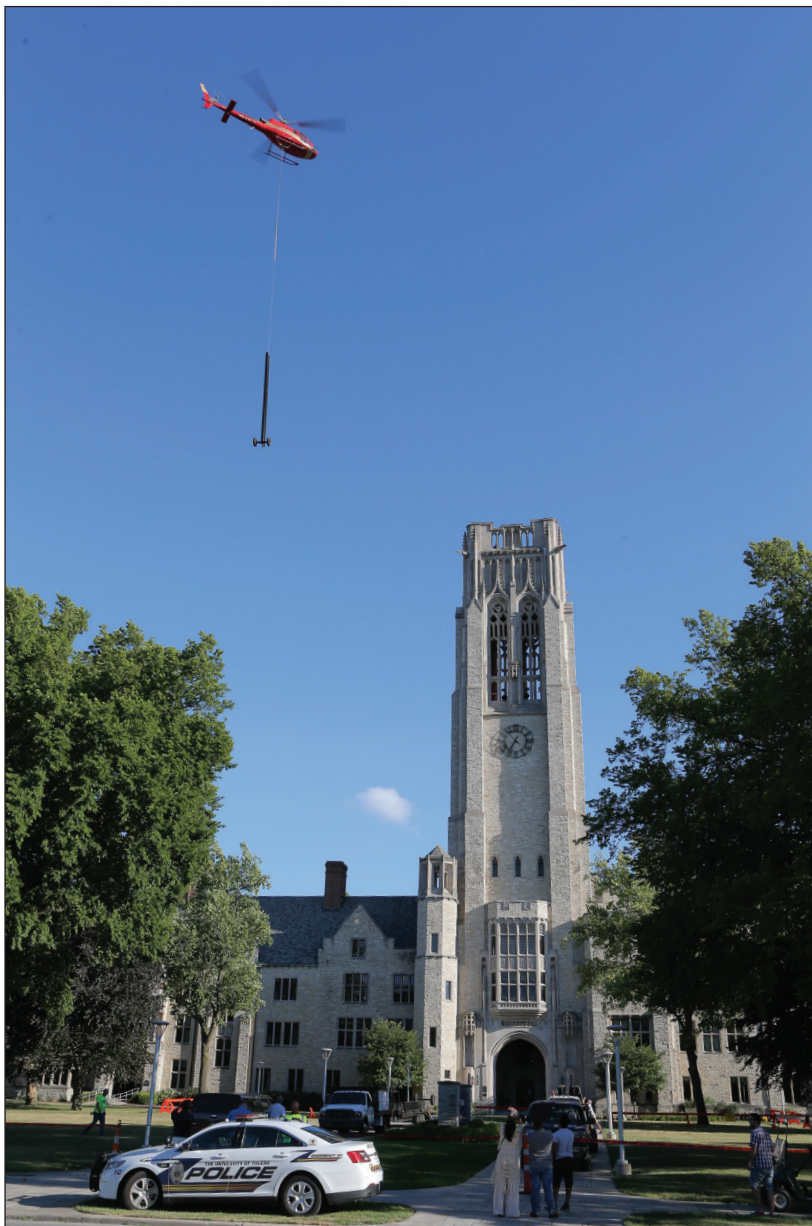
"This is further national recognition for the important research being done at The University of Toledo," Congresswoman Marcy Kaptur said. "Lyme disease affects 300,000 Americans each year, a number far greater than previously thought, and 40 percent of whom end up with long-term, serious health concerns. There are no current tests available to definitively prove if the Lyme organism is eradicated or that the patient is cured. Research such as this will help us to know more about Lyme disease."



Wooten

Photo by Daniel Miller

Tall order



W.R. Meyers Co. of Napoleon, Ohio, used a helicopter crane to deliver four tons of steel beams into University Hall's iconic tower July 15. "This structural steel framework being installed inside our iconic bell tower will support the structural concrete to ensure it will greet students for years to come," said Jason Toth, associate vice president for facilities and construction. The project inside the 85-year-old tower that is 205 feet tall is expected to be completed by mid-August.

Photo by Daniel Miller

UT rocks



Alyssa Sander, left, and Paige Leigh Beck proudly displayed a UT flag near Stonehenge in Wiltshire, England. They are studying at Imperial College London this summer through the University Studies Abroad Consortium. Sander is majoring in law and social thought, and Beck is a pre-nursing student.

Corrections

Brenda Snyder, senior researcher at the Lake Erie Center, was mistakenly referred to as "Dr." in a photo caption in the last issue of UT News. The story correctly identified her as Brenda Snyder as she does not have a doctoral degree.

A photo credit was wrong in the last issue. Rachel Nearhoof took the photograph of Dr. Willie McKether teaching the Cultural Anthropology class to incoming freshmen who are in the Multicultural Emerging Scholars Summer Bridge and Living Learning Community Program.

Former MUO trustee appointed to UT Board

By Meghan Cunningham

A former vice president for Owens Illinois Inc. has been appointed to The University of Toledo Board of Trustees.

Alfred A. Baker, who retired in 2006 from Owens Illinois, where he had served as vice president of human resources since 1992, was named by Ohio Gov. John Kasich to a term that began July 8 and will end July 1, 2025.

Baker previously served as a member of the Medical University of Ohio Board of Trustees. He joined the board in 1995 to complete an unfinished term and was reappointed to a full term in 1998. At the end of his term in 2007, Baker was the first trustee to complete his service after the 2006 merger of MUO and The University of Toledo.

Baker is a UT graduate who was a member of the 1969 to 1971 undefeated football teams with a record of 35-0. He was elected to the UT Hall of Fame in 1998.

Also joining the UT Board of Trustees as a student trustee is Lucas Zastrow, who received his bachelor's degree in exercise science from UT in May and is continuing his education to pursue a doctorate in physical therapy. He will serve a term that began July 8 and will end July 1, 2018.

A graduate of Sylvania Southview High School, Zastrow has been active in a number of student organizations, including the Mortar Board National Honors Society, Sigma Phi Epsilon Ohio Iota Chapter, Presidential Ambassadors, and the Bridge, which makes lunches for the needy in the Toledo area.

UT Medical Center honored for organ donation education programs

By Rebecca Schwan

The University of Toledo Medical Center is recognized by the national Health Resources and Services Administration as a platinum-level partner for its efforts to promote organ, eye and tissue donation as part of the national Workplace Partnership for Life Hospital Campaign.

"The goal of the initiative is to educate the public about organ and tissue donation and increase the number of registered donors and ultimately save more lives," said Kristin Calkins, UTMC trauma services director. "We work to educate our staff members, students and members of the community about the importance of organ donation and encourage them to notify their family of their wishes."

Participating hospitals are evaluated annually based upon the number and type of donation education events and activities. More than 1,000 hospitals nationwide participated in the initiative, registering nearly 44,000 donors.

"We partnered with Life Connection of Ohio and Community Tissue Services to hold a number of educational events on campus this year," said Valerie Augustyniak, UT communications student and campaign manager. "It's exciting to see the continued success of the program and to know we are helping to make a difference for individuals waiting for a transplant."

This is the fourth year UTMC has participated in the campaign. The hospital earned gold-level status in 2013, 2014 and 2015.



UT to use verification service for employment, income

Starting Aug. 1, the University will use JobTrax Inc. to provide automated verifications of employment and income.

When employees need to have current employment or salary confirmed, they will direct third parties to verifyjobhistory.com.

"This will streamline the verification process when employees are applying for loans, a home mortgage or apartment lease, and it is completely secure," Dorene Spotts, fiscal manager in the Controller's Office, said.

Employees will provide the third party with UT's code: 2419.

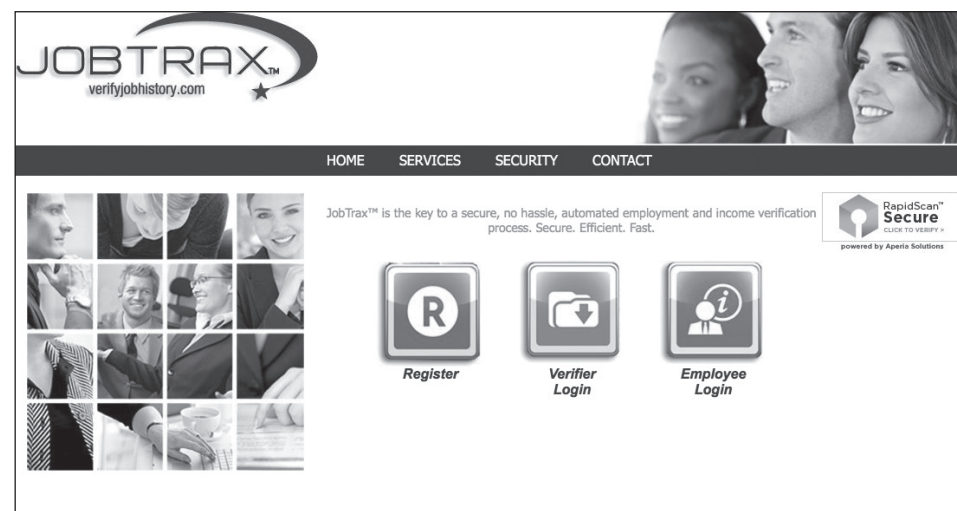
An employee also will need to supply either his or her Rocket number or full name and date of birth.

"That information is needed for employment verification," Spotts said. "For income verifications, employees control who has access to their information."

To provide access for income authentication, employees would go to verifyjobhistory.com, create an account, and generate an authorization code to provide the third party.

"Creating an account is only necessary for salary verification," Spotts stressed.

With the switch to JobTrax's automated service next month, the Human Resources and Talent Development Department and the Payroll Department will no longer handle requests for employment and income verifications.



In memoriam

Carol L. Butler, Swanton, a former secretary at UT, died July 14 at age 85.

Barbara J. Ervin, Sylvania, who taught at the Kobacker Center for Toledo Public Schools for a time, died July 8 at age 73.

George T. Gill, Toledo, a custodial worker, died July 2 at age 61. Gill joined the MCO staff in 1993.

Joella Webb, Toledo, a former member of the Satellites Auxiliary, died March 28 at age 56.

Patricia L. Yonkee, Greenwood, S.C., an employee benefits specialist in Human Resources at MCO from 1983 to 1995, died June 23 at age 84. A UT alumna, she received a bachelor's degree in pharmacy in 1953.

Louis M. Zovac, Toledo, who volunteered with the Satellites Auxiliary, died July 12 at age 87.

UT Human Donation Science Program celebrates milestone

By Rebecca Schwan

The only academic program in the country designed to prepare individuals to coordinate and oversee the organ and tissue donation and transplantation process will graduate its 100th student in August.

The graduation celebration and awards night will be Tuesday, July 26, at 6 p.m. at Heatherdowns Country Club and earlier that day, the senior capstone case studies will be presented at 9 a.m. in Collier Building Room 1050 on Health Science Campus.

The University of Toledo's Master of Science in Biomedical Science Human Donation Science Program prepares individuals to facilitate the organ donation process from beginning to end. They serve as a liaison between the donor's family, medical staff, organ procurement organization and transplant center.

"It's the best job in the world," said Rachel Baczewski, certified procurement transplant coordinator at Life Connection of Ohio and 2013 graduate of the program. "It's so rewarding to know that I'm providing comfort to families who have lost a loved one and assisting in saving the lives of other patients. Each family gets a piece of my heart."

Coordinators must pull together a team of medical professionals, facilitate medical testing, and ensure all laws are followed while compassionately and diplomatically communicating with the donor's family.

"It's a tough job and organ procurement organizations were seeing a high level of turnover among their coordinating staff," said Linda Miller, assistant professor and director of UT's Human Donation Science Program. "We wanted to see better training programs and higher retention rates. We developed this program as a result."

Students enrolled in the Human Donation Science Program receive a multidisciplinary education covering all components of organ donation and complete coursework in medical science, management, human resources and law. They also receive clinical training and complete two internships prior to graduation.

"I wanted the opportunity to advance in the field of organ donation, so I left my job in North Carolina to come to UT for this program. It was the best decision I ever made," said Lori Rankin, a student in the program. "I feel I have an even better educational foundation, and I have received excellent training for every aspect of the job."

Ali Morgillo, senior coordinator at Life Connection of Ohio agreed. She said students who have graduated from UT's program are better equipped to handle the challenges of the position.

"The program really prepares students for the realities of the job. They have critical clinical background and relationship-building skills and are flexible and driven to do well. They are more successful as a result," she said.

Eighty percent of the graduates from the program, now in its 13th year, remain employed in the field. Many have been promoted to leadership and research positions. There are only 58 organ procurement organizations in the United States, resulting in a small network of coordinators who come to know each other well.

"When an employer sees that someone is a graduate of UT's program, they take notice. It makes us very marketable," said Rankin, who is already pursuing new employment leads.

"Half of our coordinators graduated from the Human Donation Science Program," said Kara Steele, director of community services for Life Connection of Ohio. "We are seeing a continual increase in the number of registered donors, which should translate into an increase in transplants, and that ups the demand for highly skilled coordinators to facilitate the donation process."

Ohioans can make the decision to be an organ donor when obtaining or renewing their driver's license.

"It's the best way for someone to make their final wishes known," Morgillo said. "It makes the donation process easier on families when they know it was part of their loved one's plan to donate their organs."



Lori Rankin moved to Toledo to enroll in UT's Human Donation Science Program.

It also makes it easier on the coordinators, who see a lot of sadness as a part of consulting with donor families.

"Before I go to work, my daughter tells me to make people happy and fix them," said Samantha Muir, certified procurement transplant coordinator at Life Connection of Ohio and 2013 graduate. "Getting a letter of appreciation from a donor or recipient family, to hear how you have made an impact on their life, makes the long hours and emotional days worthwhile."

UT College of Medicine to welcome new students in traditional ceremony

By Rebecca Schwan

The University of Toledo College of Medicine and Life Sciences will recognize new students by presenting them with their traditional doctor's white coats during a welcome ceremony Thursday, Aug. 4, at 10 a.m. in Nitschke Hall Auditorium.

Dr. Christopher Cooper, executive vice president of clinical affairs and dean of the College of Medicine and Life Sciences, will officiate the ceremony in which 175 medical students will receive their white coats. More than 75 percent of the new students are Ohio residents and one-third are from northwest Ohio.

"White coat ceremonies mark the beginning of a medical student's journey into the medical profession," Cooper said. "The coat symbolizes their achievement of being selected to medical school and their commitment to professionalism, continuing education, and serving others through medical care."

The annual ceremony will conclude orientation week for the medical students.

Researcher

continued from p. 1

identifies Rho-G-specific downstream effectors involved in their formation.

• "A Novel RhoG Protein Interaction Network in Invadopodia" seeks to learn more about 10 highly interconnected genes and their roles in the formation of these cancer-spreading pathways. The lab will receive \$147,500 over two years for this portion of the research.

"Deregulation in Rho GTPase signaling has been associated with all stages of cancer, and once we understand the role these proteins play in how these invadopodia form, we can begin to research treatments to prevent or slow their progress," Garcia-Mata said.

UT scientists, students help U.S. Geological Survey develop model to predict algal bloom toxins

By Christine Long

Water quality researchers and students at The University of Toledo Lake Erie Center who make daily E. coli forecasts for the public beach at Maumee Bay State Park are helping the U.S. Geological Survey (USGS) develop a model to estimate the level of harmful algal blooms in Ohio waters.

Sampling is underway for the USGS-led project at seven water treatment plant intakes and four recreational sites throughout the state, including the public beach at Maumee Bay State Park.

A USGS scientist joined the UT team to collect samples and other data earlier this month.

“We are helping the USGS build a database in order to be able to make real-time predictions for toxins, like microcystin, in Lake Erie and inland lakes in northeast and southwest Ohio using environmental factors such as turbidity, pH, phycocyanin and water level change, instead of waiting for test results,” Pam Struffolino, UT Lake Erie Center research operations manager, said. “The goal is to use the standard toxin-measuring methods to verify the model — similar to how we developed our swimming safety nowcasts for bacteria levels.”

“Site-specific models are needed to estimate the serious public health concern from toxin concentrations at a water intake or beach,” said Donna Francy, a USGS hydrologist and water-quality specialist. “Models help estimate toxin concentrations so that swimmers and boaters can be warned and water treatment plants can take measures to avoid or appropriately treat the raw water.”

Scientists are scheduled to collect data at the sites several times a week through algal bloom season this year. This marks the third year of collecting samples for the project.



Photo by Donna Francy

WADING IN: Kevin Corbin, UT senior, left, Ryan Jackwood, UT PhD student, and Jessica Reker, a senior at Xavier University, collected water samples at Maumee Bay State Park.

Smooth operators



Workers from Mosser Construction Inc. of Fremont and Maumee last week smoothed the concrete poured for the wider sidewalk on the David Leigh Root Bridge on Stadium Drive. The construction project that features UT's signature lannon stone is scheduled to be complete by mid-August.

Photo by Daniel Miller

The Blade and Huntington present the 24th Annual UT Alumni Association Outdoor Juried Art Fair



ART ON THE MALL

JULY 31, 2016
10 A.M. - 5 P.M.

FREE ADMISSION

Original art, jazz, food and a children's area
On the Main Campus of The University of Toledo



THE BLADE



Art on the Mall

continued from p. 1

that would bring graduates and community members to the University's gorgeous grounds. She aced it.

"We are very fortunate. Many alumni associations around the country are looking for a signature event that draws a large number of alumni and friends back to campus, and ours is now in its 24th year," Dan Saevig, UT associate vice president of alumni relations, said. "Art on the Mall brings people onto our beautiful campus, in many cases, for the first time since graduation, and showcases the work of our artists, most of whom have ties to the University."

More than 12,000 annually frequent the juried art fair, where an average of 110 artists set up booths.

"Centennial Mall is transformed for Art on the Mall: It's got music floating in the air, the food smells great, you've got all these tents, and the people are excited, kids and families, older people — it's a very welcoming atmosphere," Abrams-Frederick said.

"We invite everybody to come back. You don't have to buy anything. Lay in the grass; people watch. It's an awesome place to people watch, and I think event guests know that and they come back each year. They can park for free; plus, there is no admission fee, so they have more money to spend at the show if they want to — there are a lot of positives."

And Abrams-Frederick would know: She has helped with The University of Toledo's marquee event since 2003 and overseen it since 2008.

Each year, her work on the show begins in January. That's when artist applications become available through April, and sponsorship development starts.

"Initially, it's a two-person job," Abrams-Frederick, a 1992 graduate of the UT College of Arts and Sciences, said. "I couldn't do this without the assistance of Shirley Grzecki, events coordinator, who keeps all of the artist information organized."

As the artful day draws near, co-workers in the Alumni Relations Office get in on the action, and more than 150 volunteers help make it all happen.

"The volunteers do a really nice job for us," Abrams-Frederick said. "Pop sellers, shuttle drivers on golf carts, greeters who stand at each mall entrance and hand out programs and answer questions, artist relief

— they walk around and talk to artists, pass out water, they'll sit at their booth for them if they want to take a break, get something to eat, use the restroom or even get inside a little bit. In the children's area, we have volunteers who will help the kids with activities, blow up balloons, face paint. We have event setup and teardown. And we have volunteers checking IDs and serving beer in the beer garden."

"I've been helping with Art on the Mall for 10 years," Sally Berglund, administrative secretary with the UT Foundation and 1990 graduate of the former Community and Technical College, said.

"I usually am a greeter or artist relief. It's great to see all the things that people create."

"The diversity of the artists and the attractiveness of UT's beautiful campus are some of the things that make this event so special," Marcus L. Sneed, associate director of alumni relations, said. This summer will be the eighth time the 2007 alumnus of the College of Business and Innovation will pitch in.

Overseeing the event has its perks.

"You get to see the latest, greatest creations that the artists came up with this year. In the jury process, you'll see images come through and notice new techniques," Abrams-Frederick said. "And they do change: The artists have a new process that they're trying, or they have a new theme, different color scheme. It's really cool to see the differences over the years."

What has she learned from running the show?

"Events are fun because they change all the time. You can do the same event 10 times, and you will have different results, experiences and outcomes," Abrams-Frederick said. "People make up a big part of that — different personalities, people's ideas or expectations might not be the same, so there are always changes. And the one thing that it continually reminds me: You



CROWD-PLEASER: UT's Centennial Mall is packed for Art on the Mall, which has become a summer tradition.

Top photo by Stacey Mazur, bottom photo by Daniel Miller

have to be able to roll with it. Everything is fluid.

"Centennial Mall is a living, breathing thing, and it changes — the location, the land, the shrubbery — it all changes from year to year," she said, adding that construction projects also can pose challenges.

"The nice thing is: We work with great people on campus — Facilities, Grounds, Student Union staff — who are trying hard to put our best face forward. They all have this feeling that this is an important event, that we're bringing in a lot of people from the community to campus, we all need to work together."

"Without the efforts of our sponsors, volunteers and so many UT staffers, a major undertaking like this would not be possible," Saevig said. "The way the Toledo community responds to Art on the Mall each year is truly special."

"It's just an adrenaline rush; it's a long day, but it's an awesome day. And after it's all done, we've been known to actually dance in the office," Abrams-Frederick said then laughed.

Cue up Tag Team's "Whoomp! (There It Is)": "Party people!"

Professional debut

Former Rocket Sathika Ruenreong talked with Ron Vail, a UT donor and member of the Highland Meadows Golf Club who was her caddy, during the recent LPGA Marathon Classic at Highland Meadows in Sylvania. She shot a three-over par 74 on the second day on the par-71, 6,506-course after carding a five-over par 76 the first day. While Ruenreong didn't make the cut in her first appearance in a professional tournament, the Kanchanaburi, Thailand, native had her own cheering section as several Rocket fans sported "Holey Toledo" T-shirts at the event. The four-time first-team All-Mid-American Conference selection is slated to compete in the 2016 United States Women's Amateur Aug. 1-7 at Rolling Green Golf Club in Springfield, Pa.









Photos by Daniel Miller

Power couple



Photo by Mike O'Brien

2016 HOME SCHEDULE

 09.10 MAINE	 09.17 FRESNO STATE	 10.15 BOWLING GREEN
 10.22 CENTRAL MICHIGAN	 10.27 OHIO	 11.16 BALL STATE

Jason and Nicole Candle posed for a photo July 16 at Comerica Park. The UT football coach threw out the first pitch before the Detroit Tigers played the Kansas City Royals. Nicole, who is a major gifts officer with the UT Foundation, was there to cheer on her husband. The 2016 Toledo football season features six home games; University employees receive half off their ticket purchases, and UT students are admitted free with an ID. For more information, go to utrockets.com or the ticket office located in the Sullivan Athletic Complex in Savage Arena, or call 419.530.GOLD (4653).

Value of scientific discoveries magnified for local students through UT program

By Sanya Ali

Students in grades three to 12 have a fascinating opportunity to see the world at micro-level thanks to The University of Toledo's SCOPE program.

SCOPE stands for Scientists Changing Our Pre-college Education. The program, started in 2011, has expanded to almost 80 sessions in about 20 schools, one teacher virtually using UT's scanning electron microscope from as far away as Atlanta. The program began with a grant given by the National Science Foundation, which went toward the microscope used in many of the programs, in addition to promoting the scientific research at the University.

Last spring, science professionals in SCOPE worked with the children from Summit Academy, a school specialized for students with alternative learning needs, including those with social and learning disorders such as attention deficit hyper activity disorder and autism.

The students used an almost \$500,000 scanning electron microscope to look at samples such as the heads of various insects, spores from organic matter, and bacteria. Students examined the specimens, loaded and introduced by Dr. Pannee Burckel, scientific instrument specialist in the UT Chemistry Department, at the lab on campus, as they were projected on the Smartboard in the classroom. At one point, the children wore 3D glasses to help them analyze the images from the microscope.

"We had a blast at the Summit Academy with the students," said Dr. Kristin Kirschbaum, director of the Instrumentation Center and creator of SCOPE. "They were so excited and lively, and many of them told us — during and after the session — that they want to become scientists or asked what it takes to become a scientist."

Cassandra Pittman, UT student and SCOPE project manager, taught students how they could use the microscope from their classroom. Within SCOPE, Pittman also is responsible for reaching out to schools about the program, preparing samples, teaching sessions, and creating lesson plans. Each program is designed in conjunction with the teachers at the school based on the class focus.

Samples inserted into the chamber of the cyber-enabled microscope in the Instrumentation Center can be seen on screens controlled by students in any classroom, no matter how far away the school. Through SCOPE, students gain exposure to the research done at UT, the opportunity to see cells and nuclei outside the pages of the textbook, and the ability

to use the expensive equipment available at the University from the comfort of their classrooms.

Other types of programs geared toward older students might make use of the confocal microscope, a light-based microscope in the Biological Sciences Department in the College of Natural Sciences and Mathematics, that creates images using laser technology. By projecting different color fluorescents onto each sample, students are able to see distinct aspects of that sample highlighted.

Dr. Rafael Garcia-Mata, assistant professor of biological sciences, led one of these high school-oriented sessions in April. Garcia-Mata spoke to students at Northwood High School as they examined the HeLa cell, made viewable thanks to the confocal microscope.

The HeLa cell was the first of what is known as the immortal cell line, meaning they can be examined now, 65 years after the initial collection from Henrietta Lacks in 1951. Students at Northwood read a book on Lacks and the unlawful extraction of this cell and, as part of a school project uniting English and science, had the opportunity to view samples of the cell at UT.

"Many Nobel Prizes were awarded based on work done on the HeLa cell," Garcia-Mata said.

Students using this equipment through the UT SCOPE Program also can see what Dr. Tomer Avidor-Reiss and his student, Atul Khire, saw when they discovered a new structure in fruit fly sperm called the PCL. For younger kids, the lessons are all about the discovery, while older students are taught the value of the stories behind the findings.

"Telling the students the story behind the discovery of what they see with their own eyes in the SCOPE program helps them to experience the triumph of science and imagine if they would like to be part of something similar in the future," Avidor-Reiss, associate professor of biological sciences, said. "One of our goals is to fascinate the students; not enough people go into the sciences."



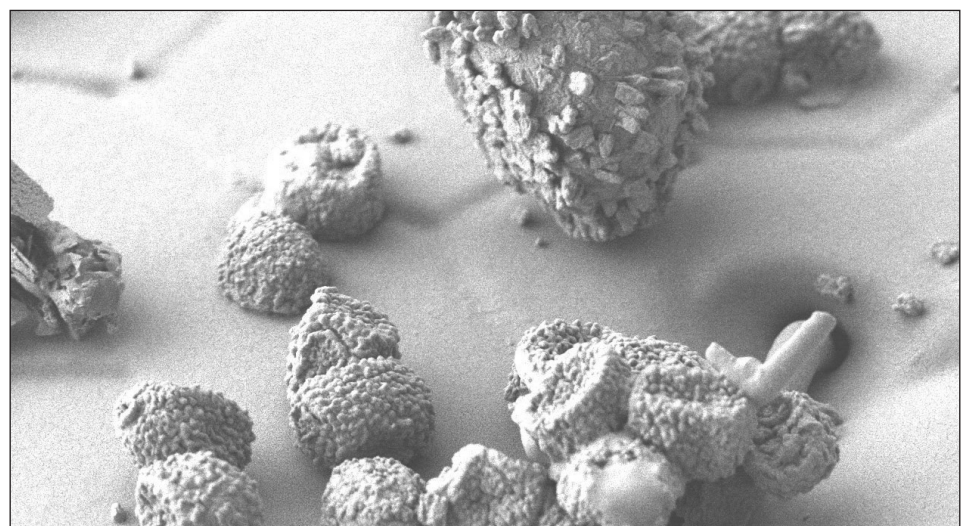
Photo by Daniel Miller

IN THE CLASSROOM: Cassandra Pittman, UT student and SCOPE project manager, explained to students at the Summit Academy how they could use the University's scanning electron microscope from their school.



Photo by Deborah Lavelle-Keller

3-D LEARNING: Students at Summit Academy wore 3-D glasses to view images created using UT's scanning electron microscope. Dr. Kristin Kirschbaum, director of the UT Instrumentation Center and creator of SCOPE, is in the center in the back row.



EXTREME CLOSE-UP: This image was taken by a Summit Academy student with the scanning electron microscope and shows several types of pollen on the eye of a ladybug.

U.S. Army promotes University grad/former UT professor to rank of colonel

By Christine Long

An Army ROTC Rocket Battalion alumnus and former military science professor at The University of Toledo was promoted to the rank of colonel by the U.S. Army in a ceremony at his alma mater earlier this month.

Col. Jonathan Beasley works at the Pentagon on the Joint Staff as director of current operations for the Joint Improvised-Threat Defeat Agency. The Joint Staff assists the chairman of the Joint Chiefs of Staff, the principal military advisor to the president, secretary of defense and the National Security Council.

“I chose to come back to UT for the ceremony because this is my home,” Beasley said. “My career started here in 1994, and I was promoted to lieutenant colonel here in 2007. It only seemed fitting to have this promotion here.”

The native of Lambertville, Mich., graduated from the UT Army Reserve Officer Training Corps (ROTC) in 1994 with a bachelor’s degree in political science and geography. He returned to UT from 2009 to 2012 as military commander of the U.S. Army ROTC Rocket Battalion and professor of military science. He earned a master’s degree this year

from the Dwight D. Eisenhower School for National Security and Resource Strategy at Fort McNair. Beasley graduated from Bedford High School in 1989.

His tours of duty include Kosovo in 1999, Iraq in 2006, and Afghanistan in 2004 and 2008.

Beasley lives in Virginia with his wife, Robin, and their four children.

“It is a privilege to be able to witness Lt. Col. Jonathan Beasley be promoted to colonel here at UT where he first earned his commission 22 years ago,” said Master Sgt. Johnnie Fields, UT senior military instructor. “We are honored to celebrate his achievement. It gives great credence to his leadership abilities and potential, as well as to everything that the UT ROTC program represents as a way to instill discipline and leadership skills. Our focus is education and commitment to serving our country.”

The highest ranking alumnus of the UT ROTC program is retired Maj. Gen. David W. Foley from the commissioning class of 1970. More than 2,000 lieutenants have been commissioned through the program since 1947.



Photo by Mike Iozzo

MOVING UP: Col. Jonathan Beasley returned to his alma mater to be promoted to the rank of colonel. His wife, Robin, helped during the ceremony, which was watched by his sons and others.

Hot topics



Photo by Dr. Dan Hammel

Several students from Scott High School posed for a photo with Toledo Mayor Paula Hicks Hudson, center, in June at the conclusion of a two-week workshop related to “Advancing Geospatial Technologies in Grades 9-12,” which is funded by a three-year research grant from the National Science Foundation. Last year, Dr. Beth Schlemper, UT assistant professor of geography and planning, received a \$500,000 grant for the project that includes the summer workshops designed to improve scientific inquiry skills and introduce high school students to potential careers in science, technology, engineering and math. During the recent workshop, 17 students conducted research in the community and presented their findings on crime, housing, parks and gardens, and community assets and needs to city leaders. UT faculty who helped with the workshop were, from left, Dr. Victoria Stewart of the Department of Curriculum and Instruction, Schlemper, and Dr. Kevin Czajkowski and Dr. Sujata Shetty of the Department of Geography and Planning. “We hope the students gain greater knowledge of their community and also become aware of the careers they could have,” Schlemper said.



Photo by Jasmine Smith

Toledo Farmers' Market returns to Health Science Campus

By Rebecca Schwan

It's prime growing season, and fresh, locally grown fruits and vegetables soon will be available for purchase on UT's Health Science Campus.

The first Toledo Farmer's Market of the season will be Wednesday, July 27, from 11 a.m. to 1 p.m. in a new location this year where vendors will set up in the loop drive in front of the Block Health Science Building and the Center for Creative Education. The biweekly sale will be held through mid-October, weather permitting.

Wellness Coordinator Jocelyn Szymanski says hosting the market on Health Science Campus encourages healthy eating among students, staff and members of the community.

"The biweekly timing of the markets is perfect for keeping your home stocked with in-season produce," she said. "Shoppers also can pick up fresh baked goods, and the crowd-favorite popcorn also will be back this year."

Cash, credit cards and Ohio Direction/Supplemental Nutrition Assistance Program cards are accepted.

Dates for the market are subject to change. Shoppers are encouraged to visit rocketwellness/healthyu/events for the most up-to-date information.



NEW LOCATION!

This year the Farmers' Market will be held in the loop out in front of the Block Health Science Building and the Center for Creative Education

Returns to HSC beginning

Wednesday, July 27
11 a.m. – 1 p.m.

Be sure to stop by every other Wednesday for a great variety of locally grown fresh fruits, vegetables, flowers and more!

Cash, credit cards and Ohio Direction/SNAP cards accepted.



Branching out



Photo by Laurie Flowers

Business Services Officer Laurie Flowers took this photo of University Hall's tower from the southern edge of Centennial Mall just east of the Snyder Memorial Building.

UT NEWS

UT News is published for faculty, staff and students by the University Communications Office weekly during the academic year and periodically during the summer. Copies are mailed to employees and placed in newsstands on the Main, Health Science, Scott Park and Toledo Museum of Art campuses. UT News strives to present accurate, fair and timely communication of interest to employees. Story ideas and comments from the UT community are welcome. Send information by campus mail to #949, University Communications Office, Vicki Kroll. Email: vicki.kroll@utoledo.edu. Fax: 419.530.4618. Phone: 419.530.2248. Mailing address: University Communications Office, The University of Toledo, Toledo, OH 43606-3390.

VICE PRESIDENT FOR ADVANCEMENT: Samuel McCrimmon

EDITOR: Vicki L. Kroll

GRAPHIC DESIGNERS: Michelle Hoch-Henningsen, Benjie Wilhelm

PHOTOGRAPHERS: Carmelo Armento, Daniel Miller, Rachel Nearhoof

CONTRIBUTING WRITERS: Sanya Ali, Amanda Benjamin, Meghan Cunningham, Christine Long, Josephine Schreiber, Rebecca Schwan, Jen Sorgenfrei, Christine Wasserman

EDITORIAL ASSISTANTS: Laurie Flowers, Joanne Gray

DISTRIBUTION ASSISTANT: Tyler Mattson

Read UT news at utnews.utoledo.edu and myut.utoledo.edu.

The University of Toledo is committed to a policy of equal opportunity in education, employment, membership and contracts, and no differentiation will be made based on race, color, religion, sex, age, national origin, sexual orientation, veteran status or the presence of a disability. The University will take affirmative action as required by federal or state law.



“ IF YOU WANT PURPOSE IN LIFE, YOU FIND THAT AT UT. IT’S A GREAT PLACE TO THRIVE IF YOU ARE ADAMANT ABOUT LEARNING NEW SKILLS AND PERSONAL DEVELOPMENT. ”

Sean

US Army Specialist, Ohio National Guard
Finance major, College of Business and Innovation



THE UNIVERSITY OF
TOLEDO



PURPOSE TO A GREATER DEGREE

HONOR AND A CALL TO SERVICE LED SEAN TO THE UNITED STATES ARMY AFTER HIGH SCHOOL.

He developed discipline for duty and established a purpose by serving his country. These traits have carried over to his life as a UT student in the College of Business and Innovation.

Using his GI benefits, Sean is achieving high success in the finance program. And he continues to answer the call to service through his work in UT’s Student Veterans of America chapter and the Military Service Center — where he is helping other members of the armed forces achieve their educational goals.

LEARN MORE ABOUT HOW UT HELPS CURRENT MILITARY MEMBERS AND VETERANS LIKE SEAN TO FIND THEIR PURPOSE AT

 UTOLEDO.EDU/GREATERDEGREE