UT chemists discover how blue light speeds blindness

By Christine Billau

Blue light from digital devices and the sun transforms vital molecules in the eye’s retina into cell killers, according to optical chemistry research at The University of Toledo.

The process outlined in the study, which was recently published in the journal Scientific Reports, leads to age-related macular degeneration, a leading cause of blindness in the United States.

“We are being exposed to blue light continuously, and the eye’s cornea and lens cannot block or reflect it,” Dr. Ajith Karunarathne, assistant professor continued on p. 3

University to launch electric scooter sharing on campus

The University of Toledo is bringing electric scooters to campus.

Beginning fall semester, the University will launch its electric scooter sharing program through a company called Lime.

UT is debuting the green, alternative transportation service to benefit students, faculty and staff.

“This pioneering program offers an innovative way to more easily move around campus,” UT President Sharon L. Gaber said. “It builds on what we started with our Rocket Wheels bike sharing program. Only in this case, you need to download an app to your smartphone and pay for each ride.”

UT is starting with 125 electric scooters and plans to double that depending on demand. The battery-powered scooters will be located at multiple “hot spots” across the University’s Main Campus, with users locating and unlocking them through the free Lime app.

After reaching their destination, riders then lock the scooter with the app.

Users are charged $1 by Lime to unlock a scooter, plus 15 cents per minute.

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Picture perfect

More than 12,000 visited campus for Art on the Mall. The weather was perfect for the UT Alumni Association’s signature summer event July 29 on Centennial Mall. See more photos on p. 5.
New staff appointed to Office of the Provost

The Office of the Provost has appointed three new associate vice provosts to continue to make progress on the University’s strategic plan.

Following the recent retirement of three senior academic administrators, there was an opportunity to realign the structure of the positions in the Office of the Provost along the priorities of the University’s strategic plan, said Dr. Andrew Hsu, provost and executive vice president for academic affairs.

“In the Division of Academic Affairs, we have made excellent progress on the implementation of the strategic plan,” Hsu said. “With the appointment of these highly qualified administrators who are joining the Office of the Provost team, we will continue to make progress in the priority areas of student and faculty success.”

Dr. Denise Bartell joined the University Aug. 1 as associate vice provost for student success to replace Dr. Steve LeBlanc, who retired from that position. Bartell comes from the University of Wisconsin in Green Bay, where she served as director of student success and engagement, and associate professor of human development and psychology.

In her role, Bartell will oversee the offices of Success Coaching and Academic Support Services, and lead the University’s efforts to support undergraduate student retention and degree completion, including efforts in the areas of advising, orientation, first-year experience, academic enrichment, and the blending of curricular and co-curricular learning.

Dr. Barbara Schneider, senior associate dean in the College of Arts and Letters, and associate professor of English, has been appointed to serve as associate vice provost for faculty development, effective Aug. 20. The position is open following the retirement of Dr. Connie Shriner, who had served as vice provost for faculty development, assessment, program review and accreditation.

In her new role, Schneider will provide leadership for faculty professional development initiatives related to student success, including high-impact teaching practices and pedagogies of engagement. She will provide oversight of the Teaching Center and the Office of Classroom Support, and will be responsible for the implementation of the University’s strategic plan goals on faculty development related to student success.

In addition, Dr. Amy Thompson, director of the Center for Health and Successful Living in the College of Health and Human Services, and professor of public health, now serves as interim associate vice provost for faculty affairs. She was appointed to that role July 9. Thompson provides oversight of the faculty orientation program, the UT faculty leadership institute, and the University’s faculty awards program. She also works closely with Dr. Jamie Barlowe, interim vice provost for faculty affairs, on additional faculty initiatives related to the priorities of the University’s strategic plan.

Margaret “Peg” Traband, senior vice provost of academic affairs, was the third administrator who retired in June from the Office of the Provost. Dr. R. William Ayres has been promoted to that position.

Two deans also have taken on additional responsibilities in the Division of Academic Affairs.

Dr. Amanda Bryant-Friedrich, dean of the College of Graduate Studies, has been appointed to also serve as vice provost for graduate affairs. She serves as the liaison between the Office of the Provost, the college deans and graduate program directors. Bryant-Friedrich also monitors the implementation of strategic plan priorities as they relate to graduate student enrollment and retention.

Dr. Christopher Ingersoll, dean of the College of Health and Human Services, has taken on additional responsibilities as vice provost for health science affairs. He serves as the liaison between the Office of the Provost and the deans of the four health science-related colleges, and he monitors the implementation of college-level strategic action plans as they relate to the University’s strategic plan.

Ribbon-cutting ceremony Aug. 9 to celebrate Parks Tower renovations

By Christine Billau

The largest residence hall on The University of Toledo campus is reopening for the 2018-19 academic year after undergoing a $12 million upgrade.

A ribbon-cutting ceremony to celebrate the transformation of Parks Tower will take place Thursday, Aug. 9, at 4:30 p.m. followed by an open house that will end at 6:30 p.m.

Parks Tower, which will house 668 students this academic year, features new elevators, bathrooms and plumbing fixtures, as well as a new entry vestibule and reinvented main lobby that includes multiple social spaces. The University also added a new fitness center, new furniture for all rooms, program space, quiet zones and kitchenettes. Lounges on each floor were overhauled and redesigned.

“This investment in Parks Tower shows the ongoing commitment of the University and its leadership to listen to our students and provide them with the environments that will help them to be successful not only in the classroom, but also outside the classroom,” Jason Toth, associate vice president for facilities and construction, said.

“We invested in critical maintenance initiatives while also focusing on the needs of the students,” said Valerie Walston, associate vice president for student affairs and director of residence life. “Parks Tower is a welcoming environment for our vibrant campus community.”

Built in 1971, Parks Tower was the University’s first large-scale residence hall. Parks Tower was renovated during the 2017-18 academic year. It houses first-year students.

“From the thoughtful furniture selections and kitchenette additions to the overall improvement of how space is used, these renovations are designed to improve student success and make students feel both comfortable and supported,” Matthew Perry, associate director for residential education, said.

Tours and refreshments will be available during the grand opening.

“The open house is an opportunity for incoming students to see their new home that features the amenities they want,” Bradley Menard, UT director for housing, said. “We also have heard from many alumni throughout the summer who plan to be here to see the changes because Parks Tower is the place they started their college experience, met lifelong friends, and made wonderful memories.”

Parks Tower residents will begin moving in Wednesday, Aug. 22.
Tradition continues

First-year medical students recited the pledge of ethics during the white coat ceremony Aug. 2 in Nitschke Auditorium. A total of 175 students received their white coats. Nearly 75 percent of the new students are Ohio residents, and more than 30 percent are from northwest Ohio. In addition, nearly 10 percent of the class studied at UT: A quarter of the incoming students have master’s degrees, half of which are from the University. The annual ceremony concluded orientation week for the medical students.

Blue light

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in the UT Department of Chemistry and Biochemistry, said. “It’s no secret that blue light harms our vision by damaging the eye’s retina. Our experiments explain how this happens, and we hope this leads to therapies that slow macular degeneration, such as a new kind of eye drop.”

Macular degeneration, an incurable eye disease that results in significant vision loss starting on average in a person’s 50s or 60s, is the death of photoreceptor cells in the retina. Those cells need molecules called retinal to sense light and trigger a cascade of signaling to the brain.

“You need a continuous supply of retinal molecules if you want to see,” Karunarathne said. “Photoreceptors are useless without retinal, which is produced in the eye.”

Karunarathne’s lab found that blue light exposure causes retinal to trigger reactions that generate poisonous chemical molecules in photoreceptor cells.

“It’s toxic. If you shine blue light on retinal, the retinal kills photoreceptor cells as the signaling molecule on the membrane dissolves,” Kasun Ratnayake, a PhD student researcher working in Karunarathne’s cellular photochemistry group, said. “Photoreceptor cells do not regenerate in the eye. When they’re dead, they’re dead for good.”

Karunarathne introduced retinal molecules to other cell types in the body, such as cancer cells, heart cells and neurons. When exposed to blue light, these cell types died as a result of the combination with retinal. Blue light alone or retinal without blue light had no effect on cells.

“No activity is sparked with green, yellow or red light,” Karunarathne said. “The retinal-generated toxicity by blue light is universal. It can kill any cell type.”

The researcher found that a molecule called alpha tocopherol, a vitamin E derivative and a natural antioxidant in the eye and body, stops the cells from dying. However, as a person ages or the immune system is suppressed, people lose the ability to fight against the attack by retinal and blue light.

“That is when the real damage occurs,” Karunarathne said. The lab currently is measuring light coming from television, cell phone and tablet screens to get a better understanding of how the cells in the eyes respond to everyday blue light exposure.

“If you look at the amount of light coming out of your cell phone, it’s not great but it seems tolerable,” Dr. John Payton, visiting assistant professor in the UT Department of Chemistry and Biochemistry, said. “Some cell phone companies are adding blue-light filters to the screens, and I think that is a good idea.”

To protect your eyes from blue light, Karunarathne advises to wear sunglasses that can filter both UV and blue light outside and avoid looking at cell phones or tablets in the dark.

“Every year more than two million new cases of age-related macular degeneration are reported in the United States,” Karunarathne said. “By learning more about the mechanisms of blindness in search of a method to intercept toxic reactions caused by the combination of retinal and blue light, we hope to find a way to protect the vision of children growing up in a high-tech world.”
UT professor’s film on Flint water crisis receives PBS distribution

By Angela Riddel


Hey worked with the nonprofit service organization Crossing Water to highlight the continuing needs and challenges facing the residents of Flint and the social service volunteers who help them.

The film will broadcast regionally for the first time on WNED in Buffalo, N.Y., Saturday, Aug. 11, at 5 p.m.

Katherine Larsen, senior director of radio/TV programming for WNED, said Hey’s film is a “great program on an ongoing issue. Clean water is vital to our communities, especially in the Great Lakes region.”

Flint made national news in 2014 when the city’s emergency manager switched the source of the city’s water, plaguing residents with a host of immediate and toxic problems, including deadly bacteria, outbreaks and deaths from Legionnaires’ disease, and the widespread presence of lead in the city’s drinking water.

In the film, Hey highlights the work of Crossing Water, which brings together social workers and other volunteers to provide water, services, and access to resources to the hardest hit residents of Flint. Hey weaves together multiple stories of Crossing Water volunteers, staff and Flint residents, creating a portrait of what it is like to live within an ongoing systemic disaster.

Michael Hood, executive director of Crossing Water, called the film “a sobering story of the Flint water crisis.”

Hey believes all Americans should care about Flint because it’s a crisis that is indicative of the future for many U.S. communities. According to CNN, more than 5,300 municipalities around the country are in violation of lead rules.

“Eventually, systems will fail in any community, systems essential to human life like water and power. We can’t ignore that we are all vulnerable to such collapse, wherever we live in America,” said Hey, who is head of the Film/Video Program in the Department of Theatre and Film in the College of Arts and Letters.

Hey directed the documentary, which she co-produced with Lee Fearnside, associate professor of art at Tiffin University.

Learn more about the film and watch a trailer at crossingwater.movie.

Poetic rap

Webster, a French-Canadian hip-hop artist, gave a creative writing workshop in Memorial Field House. He emphasized the innovative use of French through rap. The Québec native also performed in concert at Phoenixia Cuisine while on campus. His visit was sponsored by the Department of World Languages and Cultures.
A polar bear bench was among the cool seating options for sale during Art on the Mall. The functional work was sculpted from Colorado marble by Scott McMunn of Swanton, Ohio.

Aaron Bivins, a 1997 UT alumnus, worked on a painting during the 26th annual juried art fair. He was one of 115 artists on Centennial Mall for the July 29 event.

Kayla Kirk, who graduated with a bachelor of fine arts degree in art and a bachelor of arts degree in art history in 2017, showed Ethan Phillips, 7, how to make a pot. Faculty, students and alumni from the UT Ceramics Program in the Department of Art staffed the popular interactive art station.

Jan Kusowski looked at handbags created by Tara Hubbard. Art on the Mall is presented by the UT Alumni Association.
Students at The University of Toledo made a tremendous impact on the lives of homeless veterans in spring semester. A little more than $60,000 was raised at this year’s Songfest, a UT tradition dating back to 1937 where students from organizations on campus unite in a friendly song and dance competition to raise money for those in need.

This year, students competed to raise funds for Veterans Matter, an organization based in Toledo dedicated to finding homes for veterans. For the state of Ohio, Veterans Matter has mainly served veterans in Toledo, Dayton and Cincinnati. However, the money raised by students at UT’s Songfest has allowed the organization to expand to the Cleveland and Columbus areas.

“Veterans Matter is of the utmost importance to me,” said Patrick Ryan, recent UT graduate and one of the philanthropy chairs for the Blue Key National Honor Society at Songfest. “I saw the life-changing impact that Veterans Matter was having and knew that my college career wouldn’t be complete without taking every opportunity to participate and help serve those who have served us.”

Since its establishment in 2012 in collaboration with the U.S. Department of Veterans Affairs’ Homeless Veterans program, Veterans Matter has helped house 2,183 veterans and their families. Veterans Matter allows homeless veterans to receive housing in a short period of time rather than waiting 30 to 60 days to obtain a deposit. Donations are used as a deposit or first month’s rent allowing veterans and their families to move in as soon as possible.

“The University of Toledo has been this amazing power of compassion in the community in partnership with 1Matters and Veterans Matter,” said Ken Leslie, the founder of both organizations. “It thrills me that The University of Toledo students will be housing the veterans in Buckeye territory.”

By partaking in the event and almost tripling their initial goal for fundraising, these students and their hard work are ensuring that this winter, veterans and their families will have a warm place to call home, Leslie explained.

“It’s incredible to me that we, at The University of Toledo, were able to rally around a cause that resulted in changing the lives of 80 families, ultimately doubling to 160 with a funding match from First Nation Group, a business dedicated to providing leading respiratory equipment and support to the Veterans Administration, Department of Defense and other federal treatment facilities.”

Songfest was a huge team effort, Ryan added, and wouldn’t have achieved success without the help and hard work of Mortar Board National Honor Society, Blue Key National Honor Society, and all of the organization leaders and their teams that participated.

Ryan would like to share his gratitude toward those he worked alongside who devoted much of their time to the event: Rachel Hopkins, fellow philanthropy co-chair; Amber Gasparini, Jana Choberka, Patrick Ryan, Cory Black and Rachel Hopkins.

CHECK IT OUT: Blue Key National Honor Society and Mortar Board National Honor Society raised a little more than $60,000 at Songfest and thanks to a funding match from First Nation Group, presented a check for $120,056.18 to Veterans Matter. Ken Leslie, founder of Veterans Matter and 1Matters, second from left, accepted the check and posed for a photo with, from left, Amber Gasparini, Jana Choberka, Patrick Ryan, Cory Black and Rachel Hopkins.

Scooter

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The Lime app shows real-time scooter locations, making it easy for users to find a scooter throughout campus. Every evening, all scooters will be collected by Lime, fully charged, and returned to their original hot spots for use the next day.

The 250-watt motored scooters, which have a maximum speed up to approximately 14.8 miles per hour and are equipped with safety features, will be limited to on-campus use only.

“Because Lime assumes all responsibility for the scooters and their maintenance, the new program will not cost the University anything,” said Larry Kelley, UT executive vice president for finance and administration, and chief financial officer.

“Along with our partnership with TARTA, this scooter sharing program is yet another example of how UT is striving to provide an exceptional experience for our students.”
Step right up to the 43-hour shoe sale! The Satellites Auxiliary and the UT Retirees Association in conjunction with Outside the Box Shoes will hold the sale from 7 p.m. Wednesday, Aug. 8, through noon Friday, Aug. 10, in UT Medical Center’s Four Seasons Bistro Atrium.

Brand names will include Clarks, Klogs, Skechers, Merrell, Spira, New Balance, Danska, Alegria and more.

“This sale happens twice a year, and our employees are grateful for cushioning their soles every six months,” Lynn Brand, president of the Satellites, said.

Cash, check, credit cards and payroll deduction will be accepted.

Profits will benefit the auxiliary’s and association’s campus scholarships.

The Satellites Auxiliary promotes education, research and service programs; provides support of patient programs in accordance with the needs and approval of administration; conducts fundraising events; and offers volunteer services.

For more information on the shoe sale, contact Brand at lynn.brand@utoledo.edu.

Compliance training reminder

Twelve-month faculty and staff should complete their assigned compliance course work by Friday, Aug. 31. Nine-month and part-time employees should complete their compliance course work by Wednesday, Oct. 31.

Course work:
• Tools for an Ethical Workplace
• HIPAA Update

Access course work assigned to you by logging in to myUT, clicking on the Employee (or Affiliate) tab at the top of the screen, and scrolling down to the Training and Career Development section. Please read instructions before starting.

Or click on the link in the reminder emails from the address “University of Toledo [mail to: donotreply@lawroom.com]” to access your course work.

For assistance, contact Keenen Fisher in Human Resources at 419.530.1435 or keenen.fisher@utoledo.edu, or Dave Cutri, executive director for internal audit and chief compliance officer, at 419.530.8718 or david.cutri@utoledo.edu.
Rockets name new softball coach

By Will Edmonds

Joe Abraham has been named the head softball coach at The University of Toledo.

Abraham is the 11th coach in program history and comes to Toledo after serving seven years as the head softball coach at Hillsdale College.

“We’re extremely excited to bring in Joe Abraham as the new head coach of our softball program,” UT Vice President and Athletic Director Mike O’Brien said. “Joe has a successful track record at each of his collegiate stops. I am certain that he’s the right person to further push our program and student-athletes to new heights. His accomplishments at Hillsdale were remarkable, and his dedication to education, character-building and personal accountability make him the perfect fit for Toledo.”

Abraham replaces Kristen Butler, who accepted the head coaching position at Rutgers following the end of the 2018 season.

Abraham said he is eager to get to work at Toledo, adding that the position checked all the marks for his career aspirations.

“I’m excited as I could be about coming to Toledo,” Abraham said. “This is the perfect program because of its geographic location, its membership in the Mid-American Conference, my familiarity with northwest Ohio area high school coaches, and the great support of the UT administrative staff. Mike O’Brien and [Senior Associate Athletic Director] Kelly Andrews, along with their staff, were very professional. I’ve said many times one of the only reasons I would leave Hillsdale would be to take a Division I coaching job in Ohio. I’m very excited to get started.”

Abraham compiled a 158-136 record at Hillsdale (86-71 Great Lakes Intercollegiate Athletic Conference, 14-8 Great Midwest Athletic Conference) from 2012 to 2018. He was named the Great Lakes Intercollegiate Athletic Conference Coach of the Year in 2016 after leading his team to a 26-12 (19-7 GLIAC) record. The Chargers experienced only one losing season during his seven years at the helm.

Abraham’s tenure at Hillsdale was topped off this past season when the Chargers claimed their first Great Midwest Athletic Conference title and advanced to the NCAA Division II Midwest Regional.

Off the field, the Hillsdale softball program has maintained one of the highest grade-point averages of any varsity program over the past five years.

Before his tenure at Hillsdale, Abraham spent time at Division III Whitworth University, where he was head coach from 2008 to 2011.

Prior to his time at Whitworth, Abraham founded the Buckeye Heat travel softball team in Columbus, Ohio, in 1999. He spent 10 seasons coaching at various age levels and put together an overall record of 428-115, sending dozens of players to college teams around the country.

Abraham also served as coach for the United States softball team at the International Cup tournament, which competed in Holland from 2004 to 2006. He spent seven seasons coaching Thomas Worthington High School in Ohio, where he rang up a record of 103-52. His prep teams won three league championships in a six-year span and achieved a top-10 ranking in the state of Ohio for the first time in school history in 2005.

A native of Columbus, Ohio, Abraham graduated from Ohio State University with a bachelor’s degree in print journalism and political science. He went on to Capital University Law School, where he graduated cum laude in 1996, practicing law from 1996 to 2008.

Abraham inherits a Toledo softball program that is coming off a breakout season. UT reached 30 wins for the first time since 1995, finishing the 2018 campaign with a 35-23 (16-7 Mid-American Conference) record and a share of the MAC West Division title. First baseman Bailey Curry became the first Toledo softball student-athlete to earn MAC Freshman of the Year. Curry and junior pitcher Kailey Minarchick were each named to the First-Team All-MAC squad as well, while senior Ashley Rausch made the second team, and freshman Kylie Norwood was selected to the All-Freshman squad.

Go Rockets!

Campers at the UT Early Learning Center celebrated Rocket Pride Day July 27 with some special visitors. Rocky and a few members of the women’s basketball team played games and danced with the children, as well as signed autographs. Located at 1932 Birchwood Ave., the center offers care for infants through preschool and children from 5 to age 10 during the summer. To learn more about the programs accredited by the National Association for the Education of Young Children and Ohio’s Step Up to Quality, go to utoledo.edu/centers/earlylearn.