UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE
CARING FOR THE STATE

Without the College of Medicine, physicians in the state of Illinois would be considerably fewer and farther between. The University of Illinois College of Medicine and its four campuses train and retain physicians across the state who serve nearly 90 percent of the counties in Illinois. Our mission is to produce new knowledge in the medical sciences, develop best practices in health care delivery and educate the next generation of physicians and biomedical scientists committed to serving the needs of Illinois and the nation.

1 of 6 physicians in Illinois received their MD or resident training from the College of Medicine.

upcoming UICOMP events

White Coat Ceremony August 7, 2015 Jump Simulation • 1:30 p.m.

Harvesting Hope: Pediatric Resource Center Fundraiser September 26, 2015 Jump Simulation • 6 p.m. 309-624-9925

Robert Flinn, MD Lectureship Guest Lecture Speaker Dr. Joseph Flynn Why is it important to measure blood pressure in children? September 30, 2015 UICOMP • 6:30 p.m. 309-655-4242

Cook Well, Eat Well, Live Well August 22, 2015 • November 12, 2015 February 18, 2016 • April 28, 2016 http://peoria.medicine.uic.edu/series_events 309-672-4598

Breast Cancer Symposium October 1-2, 2015 Jump Simulation 309-655-2383 peoria.medicine.uic.edu/bcs

Celebration of Excellence November 11, 2015 UICOMP Lobby • 5:30 p.m. 309-680-8613

Living Healthy - Swain Family Lectureship Guest Lecture Speaker Dr. Richard Davidson “Well-being Is a Skill” December 3, 2015 Jump Simulation • 6:30 p.m. 309-680-8613

Pathways

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE AT PEORIA
A PUBLICATION FOR ALUMNI & FRIENDS

Learn how UICOMP enrollment may soon grow
Meet the new Senior Associate Dean of Research
Blazing a Path

Health care is the largest employer in the Peoria-area, having outpaced manufacturing, according to the Economic Development Council of Central Illinois. In fact, health care is responsible for 18 percent of all jobs in the Greater Peoria region – nearly one in every five jobs!

The University of Illinois College of Medicine at Peoria (UICOMP) is a key contributor to our healthcare economy. UICOMP was created in 1970 to generate physicians and improve the quality of medical care for downstate Illinois. We demonstrate our academic leadership by providing innovative medical student and resident education, by recruiting talented physicians, by providing direct patient care and by creating new knowledge through discovery.

However our accomplishments did not occur in isolation but rather reflect our commitment to collaboration. UICOMP’s mission statement is “Lead Collaboration to Improve Health” and our accomplishments are a reflection of collaborations with our major academic partner hospitals (OSF Healthcare and UnityPoint Health) as well as with many in our community.

This has been a very eventful year for UICOMP with many accomplishments to share:

■ Recruitment of a new Senior Associate Dean of Research, Dr. Marcelo Bento Soares
■ Creation of a new student scholarship thanks to a gift from Dr. Pushpa and Mr. Paul Joseph
■ Graduation of our first cohort of psychiatry residents
■ Implementation of nationally recognized intern preparedness program for fourth-year students
■ Welcomed the first ever simultaneous visit by the University of Illinois president and all three chancellors
■ Installed a new historic medicinal herb garden in front of the main building
■ Received funding to explore new research, including funding from the NIH for Dr. Kattah to study a new diagnostic tool for stroke.
■ Celebrated many of our faculty and students who have received outstanding awards
■ AND MOST MONUMENTAL OF ALL – learned that UICOMP will begin educating first-year medical students in Peoria beginning in 2017 or 2018!

These are just some of the accomplishments you will read about in the following pages.

But there’s so much more work yet to do. We must prepare to accept our new students with new curricula and facilities, we must learn how to better innovate in order to compete for shrinking research funds, we must also stay ahead of continuously changing mandates and regulations that dictate health care’s future. And we need your continued help as we work to provide tomorrow’s physicians and improve health.

Sincerely,

Dr. Sara L. Rusch
Regional Dean
On May 18, Timothy Killeen began his service as the 20th President of the University of Illinois. On Thursday, May 21, President Killeen, Chicago Chancellor Michael D. Amiridis, Urbana-Champaign Chancellor Phyllis M. Wise, Springfield Chancellor Susan J. Koch, College of Medicine Dean Dimitri Azar, and Regional Dean Sara Rusch met with leadership from the hospitals, local business and civic leadership; they toured the Cancer Research Center and Jump Trading Simulation & Education Center and had lunch with students and faculty; and a moderated town hall session was held in the Main Lecture Hall to discuss the U of I’s aspirations, challenges and plans to be among the best in the world.

As early as 2017, 50 to 60 additional medical students are expected to come to Peoria, marking the first time since UICOMP opened its doors in 1971 that first-year medical students will begin their medical education here. When realized, about 240 total students will be completing four years of medical school in Peoria.

The move, outlined in May during a University of Illinois Board of Trustees committee meeting, coincides with the plan that The University of Illinois College of Medicine will shift from its existing four-campus structure to boast three comprehensive four-year campuses – Chicago, Peoria and Rockford – each continuing to provide state-of-the-art medical education and clinical training to students to be the medical leaders of the next generation.

The report came in the wake of the U of I Board of Trustees approving the development of a new medical school on the Urbana-Champaign campus with a focus on engineering and bioengineering.

The consolidation of regional campuses would streamline the education process for students at the regional campuses, including improving cohort development among the classes. A transitional team was recommended to oversee the entire process. The full report can be seen at http://uishelix2.uis.edu/vod/vod/2015/UofIASAC050615.html.

Enrollment increase expected with addition of first-years

Historic Change across the College of Medicine

Students build on basic behavioral science knowledge. Courses integrate laboratory skills with didactic lectures and focus on providing an understanding from the molecular level through more complex structures and pathways that constitute “health.” Clinical experiences are introduced. Historically, first-year UICOMP students are educated in Urbana, however this is expected to change – with UICOMP students to spend all four years in Peoria - beginning by 2017 or 2018.

During the second year, students transition to clinical experience. Laboratory and lecture focus is on developing the fundamental knowledge base that enables the student to understand and integrate a patient’s pathology, microbiology and immunology, and pathophysiiology of health and disease.

The third year consists of clinical clerkships. In each clerkship, students develop competencies specific to the discipline as well as to the practice of medicine in general. Care of hospitalized and ambulatory patients gives students experience with both the time commitment and the emotional demands of the physician’s life.

In the fourth year, students complete a sub-internship, a specialty experience, and elective clerkships that will help them both narrow their choice of residency and acquire the clinical skills common and complementary to all medical disciplines.
Graduation

CLASS OF 2015

Fifty-four University of Illinois College of Medicine at Peoria students received their medical degrees on May 2, 2015, joining a proud tradition now more than 40 years old. In 1970, the College of Medicine in Peoria was formed and three years later in 1973, the first convocation ceremony for the inaugural graduating class of 18 students was held. Since then, the University of Illinois College of Medicine at Peoria (UICOMP) has graduated more than 1,850 medical students, many of whom continue to provide care in central Illinois today.

"Medicine is a challenge," said UICOMP Regional Dean Dr. Sara Rusch. "There will be days when you are tired, feel ignorant, or make a mistake. Remember, no one is perfect. However each day you will also have successes – a patient who smiles at you in greeting, an interesting case puzzle solved, a difficult diagnosis made and occasionally even a life saved. No other career offers so many chances to positively impact another person’s life. We wish that you will always remember the joys of medicine – problem solving, learning and caring for patients. This is what drew you to medicine and what will sustain you in your careers."

All of our students have an interesting story to tell. As their journeys continue, here’s just a couple to share: We have one student who will be training in a special rural surgery program in North Dakota; three women who were close friends throughout med school and who all matched to the same program in Southern California; a veteran of two Iraq deployments with the U.S. Army Corps of Engineers headed into a Navy residency; and another who helped support herself by running her own MaryKay business while in medical school. Congrats to all!

The Class of 2015 chose Gregory Olson to speak at graduation day. Summarizing the past four years in detail, from the interesting white coat ceremony speaker, studying for the infamous Step One (and Step Two), clinical rotations, and the match, Olson ended with a heartfelt note: “So, med school. We gave you our time, we gave you our money, and I gave you about half of my 20’s... but I think we can all agree, having graduated from UICOMP, we are all in a great position to go out, keep learning, be great doctors, and maybe even do a few of those things we mentioned on our med school admissions essays four years ago, even if they aren’t legally binding. A big thank you to all our faculty and mentors we had over the last four years for the guidance and advice. And a big thank you to all our family members too.”
UICOMP students joined thousands across the country on March 20 as they learned where they “matched” to complete residency programs in their chosen medical career path.

UICOMP students matched to 17 specialties across 21 states with 54 percent headed into primary care specialties. Also, one-third of the class will train in Illinois.

In Peoria, all residency positions were filled. UICOMP has about 260 residents enrolled in 11 residency programs affiliated with OSF Saint Francis Medical Center and UnityPoint Health - Methodist. About 12,000 students nationwide applied to the UICOMP residency programs and nearly 800 interviews were held locally.

Match Day

BY THE NUMBERS

TOP 3 LOCATIONS
Illinois = 17
Peoria = 5
Chicago area = 12
California = 5
Massachusetts = 4

TOP 5 SPECIALTIES
Internal Medicine = 9
Surgical Programs = 8
Pediatrics = 7
Medicine-Pediatrics = 5
Obstetrics & Gynecology = 4

UICOMP medical students handed out nearly 400 messages of hope, love and caring to patients and their families at OSF Saint Francis Medical Center and Children’s Hospital of Illinois this February as part of National Solidarity Day for Compassionate Care.

The endearing messages were folded into 3-D paper stars, which when unfolded, revealed short statements, such as “You are very loved” or “shine brightly” and others, like “be brave, be true” and “you are a gift.” The Gold Stars project was organized by the UICOMP students in the Gold Humanism Honor Society (GHHS).

GHHS National Solidarity Day for Compassionate Patient Care was established in 2011 to highlight the nationwide movement promoting provider-patient relationships based on caring, personalization, and mutual respect.

The Peoria chapter has been participating in GHHS National Solidarity Day for Compassionate Patient Care since its inception. The 2014-2015 student members of GHHS are Uzair Admani, Lauren Arditti, Matt Chia, Imran Chishti, Alissa Conde, Jayme Kwak, David Lauterbach, and Cesar Menchaca.

UICOMP student one of 10 nationally to present research at ACP

Xavier Pereira submitted two different abstracts to the American College of Physicians earlier this year for their national competition. One of the abstracts “Spontaneous Pulmonary Artery Rupture” was selected as a poster finalist and the other “Should we revisit our guidelines for antibiotic prophylaxis before endoscopic procedures in patients with prosthetic valve?” was one of only 10 selected nationally to be presented orally.

Pereira traveled to Boston in March to present the case findings. “It was a very interesting case…the patient unfortunately had a very negative outcome, something not common at all. The review asks whether we should consider expanding the guidelines to better select high-risk patients for antibiotics,” Pereira said of the oral research case presentation.

Pereira was not alone in Boston. Fellow UICOMP students Brian Lee and Roderick Yang also were selected to display their respective research posters in Boston. In total, there were about 100 resident and medical student posters being exhibited, Pereira said.
A study break could be dinner or a movie, but second-year medical students Sakina Karimjee and Sabirah Kasule entered a music video contest. With their classmates at the College of Medicine at Peoria, they created the video "99 Differentials" for the Memmys, a medical version of the Emmys sponsored by the University of South Carolina School of Medicine.

The music video is a satire of Jay-Z’s "99 Problems."

"What we were thinking about is the problem of patients not understanding medical language, and how the miscommunication can have an impact on them," said Kasule, who produced the video. "So we wanted to start an open dialogue on how to fix that."

Making the video was motivation to study during their hardest unit, cardiopulmonary renal anatomy and physiology.

"We were excited, and that excitement allowed us to get to the books," Karimjee said.

The contest calls for fun videos that express the experience of being a medical student, but Karimjee said they wanted to do more.

"We wanted to send a message and use it as a social commentary," said Karimjee, the video producer. "Even if we don’t win, we want to get the message out and start a conversation."

In the video, physicians try to diagnose a patient who doesn’t understand the medical vocabulary, while hospital staff rap and dance to lyrics written by Karimjee and Kasule.

"In order to be good doctors, there’s more than just science. We have to be humans, too," Kasule said.
NEW STUDY MAY LEAD TO QUICKER DIAGNOSES OF CERTAIN STROKES

UICOMP and INI collaborate as one of three national sites to participate in 5-year, $5 million NIH study

Story By David Haney, UICOMP
Photography by Jim Carlson, OSF Saint Francis Medical Center

Donald Gaylord will never forget the September night he awoke with what he thought was just the flu. Literally falling out of bed on his way to the bathroom, Mr. Gaylord was struck first by the loss of balance immediately followed by severe vomiting. Returning to bed soon thereafter with the help of his wife, Linda, Mr. Gaylord said he then felt a sharp pain in his head.

“That was about the last thing I remember for nearly 16 days,” the septuagenarian said recently from the comfort of his rural central Illinois home.

Little did Mr. Gaylord know at the time that he was suffering from something much worse than the flu, and that a series of simple head movements, which now are part of a new study underway at just three sites nationally including Peoria, would help diagnose the underlying cause.

Rushed by ambulance that night to OSF Saint Francis Medical Center, Mr. Gaylord underwent a series of diagnostic tests to determine why he was feeling the way he was. Nothing serious was found.

Mr. Gaylord easily could have been diagnosed as having vestibular neuritis, a disorder affecting the inner-ear nerve. Vestibular neuritis often is caused by a virus or infection and typically triggers vertigo, either as a single episode, a series of attacks, or even persistent.

Certainly, the symptoms fit. He did have continuous vertigo. And nothing serious initially was detected from an MRI.

In the Intensive Care Unit, Mr. Gaylord then met Dr. Jorge Kattah, the Chair of Neurology for the University of Illinois College of Medicine at Peoria and a neuro-ophthalmologist and vestibular neurologist at the Illinois Neurological Institute who specializes in neuro-ophthalmology and orbital diseases.

Dr. Kattah and Dr. David Newman-Toker at Johns Hopkins University have led the way in research documenting how the use of a series of head thrusts and studying eye movements can determine whether the vertigo a patient is experiencing actually could be due to a stroke.

“The symptoms are the same – vertigo, severe nausea and vomiting – you will think this is caused by an inner ear problem, and usually it is, but you also can have a stroke affecting the connections between the inner ear and the brain causing the same symptoms,” says Dr. Kattah. “The interesting part is that the eye examination may be more sensitive than MRI in the first 48 hours.”

Using what would appear to be a series of simple head movements and thrusts, and incorporating a head impulse test device – a pair of tightly-fitting goggles outfitted with a small camera and sensors – they tracked and measured Mr. Gaylord’s eye movement. The results indicated he was not suffering from vestibular neuritis, but instead a cerebellar stroke, Dr. Kattah said.

Dr. Kattah’s collaborator, Dr. Newman-Toker is the lead investigator, on a 5-year, $5 million study funded by the National Institutes of Health, that will place the head impulse testing device in the Emergency Department of three sites to help assist in assessing patients who present with similar symptoms. Those three sites are: OSF Saint Francis Medical Center in Peoria (headed by Dr. Kattah), the University of Michigan in Ann Arbor and Johns Hopkins University in Baltimore, where Dr. Newman-Toker practices.

Dr. John Hafner, an emergency medicine physician who is the Peoria site co-investigator in the study, called the addition to the Emergency Room “a game changer” in the way they can assess and treat patients.

“Having another diagnostic tool at our fingertips to better diagnose and treat possible stroke is revolutionary and I think a game-changer for our patients,” says Dr. John Hafner, program director for UICOMP’s Emergency Medicine Residency Program at OSF Saint Francis Medical Center.

In the case of Mr. Gaylord, he experienced massive swelling of the brain as a result of the stroke a few days while in the ICU and eventually needed neurosurgical intervention.

“If a patient is discharged with a misdiagnosis of vestibular neuritis and they have a cerebellar stroke, there would be a risk that cerebellar edema occurs in the ensuing hours, and untreated cerebellar edema carries a serious mortality risk,” said Dr. Kattah.

In short, Mr. Gaylord was lucky. He recognizes that.

“I was told that I was very fortunate,” says Mr. Gaylord. “I’m just grateful to be here, to have fully recovered, and thankful for the wonderful care I received.”
RESIDENT RESEARCH DAY

More than 50 research posters were displayed in May as part of the 11th Annual Research Symposium. Among them, case studies of rare diseases; one from Emergency Medicine involving synthetic cannabinoids; cervical artery dissection as a consequence of chiropractic manipulation of the neck; promoting healthy eating and active play, a community-based educational program for early childhood health behaviors; providing education on primary risk factors for stroke to black females 18 years and older; and many more.

Traditionally, this event had been known as Resident Research Day, however, in more recent years, nursing and pharmacy also have put their research findings on display. Keynote Speaker Dr. Brian McIntyre, Co-Chairman of the Peoria Institutional Review Board and Associate Professor of Clinical Psychology in the Department of Psychiatry and Behavioral Medicine at UICOMP led discussion regarding the conduct of research on vulnerable populations.

PLATFORM PRESENTATIONS
- 1st Place Jessica Garcia, MD, Pediatrics
- 2nd Place Sheraden Seward, MD, Pediatrics

RESIDENT POSTER PRESENTATIONS
- 1st Place Megan McManus, Occupational Therapy
- 2nd Place Jessica Garcia, MD, Pediatrics
- 3rd Place Edmundo Martinez, MD, Pediatrics
- 4th Place Imad Qayyum, MD, Surgery
- 5th Place Juntira Laothavorn, MD, Behavioral Health

STUDENT RESEARCH DAY

The 3rd Annual UICOMP Student Research Day was a great success with over 40 posters presented at the event. The judges were impressed by the caliber and quality of both the research presentation and clinical vignettes. Congratulations to the award recipients:

1ST ANNUAL DISTINGUISHED MENTOR AWARD
Al Masi, MD MACR

BEST LITERATURE REVIEW AWARD
Chao-Wei Tsai – “Electronic Best Practice Advisories (BPAs) Improve Compliance to the Surviving Sepsis Campaign Antibiotics Guideline in the E.D.”

CLINICAL VIGNETTE POSTER CATEGORY
- First Place: Amanda Mulcrone, “All DRESSED Up: An Unusual Presentation of Sulfasalazine Hypersensitivity”
- Second Place Tie: Cesar Menchaca, "Mycobacterium neoaurum: The Unique finding of an 'opportunistic' Pathogen in an Immunocompetent Host" and Brian Lee, "Septicemia in a patient with crusted (Norwegian) scabies: a case report"

RESEARCH POSTER CATEGORY
- First Place Tie: Fiona E. Malone, "Endotoxin and Ab Tolerance in a Mouse Model of Alzheimer’s Disease” and Chad M. Lampe, “Unravelling the Role of Cathepsin B in the Nucleus of Tumor Cells"
- Third Place: Nicole Miller, "Bupivacaine liposome injection allows total knee arthroplasty (TKA) patients a shorter length of stay in the hospital and a reduction in pain”

Medicines prior to the 20th century were largely derived from plants based on a trial and error method of sampling. Certain substances or extracts were found to be effective in treating specific diseases, but often the benefits were exaggerated to include a wide spectrum of unrelated disorders.

Over 40 percent of prescription drugs sold in the United States contain at least one ingredient derived from nature. The plant kingdom is a rich source of active chemical compounds. Herbs may be defined as any plant used for flavor, fragrance or medicinal purposes, encompassing some 25 percent of known flowering plants. As our knowledge of chemistry and methods of synthesis developed, most drugs are now produced artificially, although often based on observations from plants or animals from nature.

The inspiration for a medicinal garden at UICOMP originated from a visit to the College of Physicians in Philadelphia, which has a large medicinal plant garden with each of the plants labeled with its common name, botanical name and medicinal uses. Several medical schools have similar gardens, including Indiana, Harvard, Temple and UCLA. University of Illinois at Chicago has the UIC/NIH Center for Botanical Dietary Supplements Research with the Atkins Medicinal Plant Garden.

The possibility of creating such a garden at the UICOMP was discussed with Regional Dean Dr. Sara Rusch and Dr. Norman Meyn, a UICOMP graduate and Master Gardener. A presentation was made to the Executive Committee. It was agreed to proceed with a small version measuring 8 by 4 feet with adjacent tiles to limit spreading plants.

A list of plants was developed and collected by Linda Gavin, Joyce Hakes and Pinky Riffle, who are expert gardeners. On May 22, Dr. Campbell and Dr. Meyn constructed the garden box and filled it with soil. On May 28, planting day, the above five assisted by Gwen Bomarito and Judy Ziembka installed the tiles and did the planting.

This project was privately funded with the medical school contributing the irrigation support. The resulting garden off the entrance to the medical school is very attractive and interesting. We hope that it will serve an educational purpose, as well, to stimulate interest in medical history and pharmacology.
Dr. Marcelo “Bento” Soares, PhD, is the new Senior Associate Dean for Research and Head of the Department of Cancer Biology and Pharmacology at UICOMP. His job is to oversee not just the College of Medicine’s cancer research programs but all research, including recruitment of new researchers to UICOMP. Pathways stopped by his office to ask a few questions.

Q: What did you see in UICOMP that attracted you here?

A: It was the opportunity to act beyond the role of head of a laboratory and director of a cancer research program. This is an opportunity to leave a legacy in both research and education in a prominent medical school that is still growing. It offers an invaluable opportunity to contribute to its culture, to foster intellectual synergism among researchers and physicians, to develop a cancer research program, to build a department and mentor junior faculty, to contribute to the education of medical students and training of residents and fellows. It also gives me the opportunity to work with the senior leadership to address important issues pertaining to promotion and tenure that have a major impact on collaborative research involving junior faculty.

Q: Your education and a good deal of your early work focused on genetics. Why and when did you shift to cancer research?

A: Genetics was my passion since high school. I thought that I would go to medical school but when I began studying genetics, I just totally fell in love with it. I got a Master’s degree in genetics, and then I went to Columbia University for a PhD in genetics and development. I ended up being recruited back to Columbia University as faculty to help start a genome program in 1989. The Genome Project started in 1990, so that was at the very beginning of the Human Genome Project. I ended up developing technology that expedited the whole process of gene discovery by large-scale sequencing and that facilitated a number of efforts nationally and internationally resulting in the discovery of a number of disease-causing genes. This was a once in a lifetime opportunity: to be a part of a community that was generating data in unprecedented amounts that could have such an impact on health. It was exciting. My efforts in genomics later were funded by the National Cancer Institute and had to do with identifying genes expressed in human diseases that was generating data in unprecedented amounts that could have such an impact on health.

Q: On the research front...developing new collaborations to further your own research and education?

A: On the research front...developing new collaborations to further my own research program, building the department, recruiting faculty to establish new areas of investigation in cancer microbiomics, cancer immunology, cancer metabolism, and cancer computational genomics are some. But we must foster development among faculty, across the medical school, the other UI-campuses, and strengthen research partnerships with OSI, UnityPoint, INI, Illinois CancerCare, and IPMR, as well as enrich the training environment for our medical students, residents, fellows and postdoctoral scientists.

On the education front...development of a new curricula for the medical school, to make it more integrated, more oriented on team-based and lifelong learning, but also contributes to the development of training opportunities that ties compassionate care attitudes and mindfulness into the organization. Together we can develop initiatives and training programs that can be transformative to making our students and residents more compassionate to their patients. This may have an impact for generations to come. Lastly, I have the responsibility to attend to all research compliance matters, to strive to increase the diversity of our review panels, and to ensure that we will continue to abide to the most impeccable standards of ethics and of responsible conduct of research.

Q: You talk a lot about collaboration. What’s one obstacle you face and how might we approach bridging this problem?

A: Promotion. When it comes to promotion and tenure – and not just at this University – there is an over-emphasis on demonstration of intellectual independence. Research of human diseases has become multidisciplinary. Hence, we ought to foster development of intellectually synergistic interdisciplinary collaborations and at the same time revise promotion and tenure criteria to recognize individuals who make substantive contributions to multidisciplinary teams.

Q: Can you share a little bit of your hopes and plans moving forward in the areas of research and education?

A: Previous to coming to UICOMP, Dr. Soares was at Northwestern University where he was the Director of the Cancer Biology and Epigenomics Program at the Stanley Manne Children’s Research Institute and the Scientific Director of the Falk Brain Tumor Center at the Ann and Robert H. Lurie Children’s Hospital of Chicago. He brings nearly three and a half decades of research work in genomics, genetics and cancer biology. Dr. Soares, a graduate of Columbia University, is world renowned for his contributions to the Human Genome Project, and in particular for his work for the development of publicly available databases of Expressed Sequence Tags while at Columbia University and at the University of Iowa. Over the last 15 years, Dr. Soares has dedicated his expertise in genetics and genomics to cancer research, including chondrosarcoma, osteosarcoma, breast cancer, prostate cancer, and most especially pediatric brain tumors.
The open door policy in Dr. Pushpa Joseph’s office is unwritten but widely known among medical students.

Over the past 10-plus years at the University of Illinois College of Medicine at Peoria, Dr. Joseph has taught, mentored and counseled hundreds of medical students who have come through the doors to her pathology lab and office.

“I just got a letter from a former student who is finishing up his Internal Medicine residency in Ohio,” Dr. Joseph said recently. “He was one of my advisees—I remember him telling me during his second and third year that he was unsure about medicine and that his true passion was Russian literature. I told him ‘you can be a physician and give back a lot and still do the Russian literature — just on the side, more as fun.’ He said in his letter that he had never forgotten what I said. That was really nice to hear.”

She continued, “to see many of our students start out being so nervous and to watch them blossom and become confident — it’s so very rewarding to witness.”

In that continued spirit of giving to students, Dr. Joseph, and her husband, Paul Joseph, have made a generous gift to the College of Medicine by donating $100,000 to establish a new scholarship for UICOMP students.

Called the Dr. Pushpa and Paul Joseph Scholarship for Medical Students, the grant will go to a medical student in Peoria completing the second year of medical school. Specifically, the scholarship will be awarded to a student, who despite facing unforeseen personal adversity, continues to succeed and maintain a positive, unselfish and empathetic attitude.

“Tm always amazed at the personal adversity some students go through, and yet they manage to persevere — they continue to succeed in their studies and class work, help fellow classmates, and continue to maintain a positive attitude,” said Dr. Joseph. “The passion they exhibit and share is nothing short of amazing.”

It is incredibly rewarding to be able to help our students through the creation of this scholarship, the Josephs said.

Dr. Joseph, an Associate Professor of Clinical Pathology and the Associate Curriculum Director for the Department of Pathology, has been a faculty member at UICOMP for more than 10 years. During that time, she has taught, mentored and counseled hundreds of medical students. Previously, Dr. Joseph was the director of the Cytogenetics lab at OSF Saint Francis Medical Center. A graduate of St. John’s Medical College in Bangalore, India, she trained under Dr. Ronald Kovakski in the Pathology Residency program formerly offered at OSF. She is highly regarded among the medical students, having received the Dr. Raymond B. Allen Golden Apple Award nine times and the Leonard Tow Humanism in Medicine Award twice.

Paul Joseph, who holds degrees from the University of Illinois, Carnegie-Mellon University, George Washington University and the Indian Institute of Technology in Engineering, is a retired Caterpillar, Inc. executive, where he held many positions, including President of Cat Logistics for the Americas and the Asia Pacific region.

The Josephs have been married for 34 years and have two grown children and two grandchildren. Their son, Arun Joseph, is a graduate of the University of Iowa and UICOMP. Their daughter, Elizabeth Joseph Arcot, is a graduate of the University of Illinois at Urbana-Champaign and the University of Iowa College of Law.
The 2nd Annual Theresa Tracy Trot, the primary fundraiser for the Theresa Tracy Strive to Survive charitable foundation, raised more than $34,000 to battle pancreatic cancer. Nearly 500 people registered and 150-plus volunteered for the 4-mile run and 2-mile walk held in East Peoria. Funds raised from the event were split with $17,044 given to the University of Illinois Foundation specifically for pancreatic cancer research at UICOMP. The specific $44 ending amount is intentional. The not-for-profit was set up in memory of Theresa Ann (Naramore) Tracy who after battling pancreatic cancer passed away in 2010 at age 44. The mission of Theresa Tracy Strive to Survive is to increase survivability of pancreatic cancer through awareness and to support the advancement of a cure.

“Our all-volunteer organization puts forth such a passionate effort throughout the year in the fight against pancreatic cancer, and with little to no advancement in treatment or a cure of one of the most deadly forms of cancer, we are extremely grateful for another successful event that led to our ability to split over $34,000 in funding between two outstanding recipients who share a common goal with us,” said John Kahl, President of Theresa Tracy Strive to Survive. The next Theresa Trot is Sept. 7, 2015. Learn more about Theresa Tracy Strive to Survive by visiting www.theresatracytrot.com.

“We believe our discoveries in the lab will lead to new methods for treatment of this devastating disease, improve patients’ quality of life, and extend the lives of many,” said Christopher Gondi, PhD, a researcher at the College of Medicine whose work focuses on pancreatic cancer.

WALK FOR THE MIND
September 26, 2015

The 12th Annual Mark Linder Walk for the Mind raised $50,000 a second straight year for brain cancer research at the University of Illinois College of Medicine at Peoria. Nearly 700 people, including about 50 brain cancer survivors, participated in the September 27 event held along the Peoria Riverfront.

“I know Mark would have been so pleased to see how successful the Walk has become. He had a mission and it was his vision to make this a success,” said Peggy Flannigan, chair of this year’s Walk for the Mind. In an effort to reach out to brain cancer survivors and help raise funds for brain cancer research, Mark Linder founded the Walk for the Mind in 2003. That first walk attracted over 150 walkers and raised more than $12,000 for research programs. While Mark died in 2005 at age 31 from brain cancer, the Walk continues and to date has raised nearly $400,000 for research.

“This is research we hope will lead to breakthroughs originating here in the laboratory at the College of Medicine and then someday translate to brain cancer treatment at the Illinois Neurologic Institute here in Peoria,” said Dr. Andrew Tsung, a surgeon scientist for UICOMP and Director of the Brain Tumor Center. The Mark Linder Walk for the Mind will be held on Sept. 26, 2015. Learn more about the Walk by visiting www.marklinderwalkformind.org.

When new and potentially more effective medications start to gain traction at an academic-based medical institution, a pharmacy often will conduct a drug utilization evaluation or DUE to determine the relative value of the new approach in comparison to the standard of care.

Such was the case at UICOMP and OSF HealthCare with a new drug aimed at improving postsurgical pain control following total knee replacement surgery.

“The real story is that we did a great study with OSF which has resulted in helping save the hospital money and nationwide acclaim as many of our poster presentations on this work won awards this year at a variety of conferences,” said Carl Asche, the study’s co-lead and Director of the Center for Outcomes Research at UICOMP, which provided the data analysis on EXPAREL® (bupivacaine liposome injectable suspension).

“Our analysis found notable improvements in postoperative mobility and length of hospital stay associated with EXPAREL, which in turn resulted in meaningful reductions in cost of care,” Asche said. The results initially were presented at the 27th annual meeting and expo of the Academy of Managed Care Pharmacy in San Diego.

Dr. Carmen S. Kirkness, PT, PhD, who co-led the study, added: “While our results were specific to a single institution and surgery type, we believe our methodology could serve as a model for minimizing the biases which often confound drug utilization evaluation studies, and help other institutions accurately assess the utility of EXPAREL.”

Dr. Asche and colleagues compared two matched cohorts of 134 patients who received either an EXPAREL-based regimen or the standard of care (continuous nerve block with ropivacaine and/or local infiltration with varying combinations of ketorolac, ropivacaine, epinephrine and morphine sulfate).

Key findings associated with the use of EXPAREL included:
- Shorter length of hospital stay
- Greater chance for early discharge
- Greater mobility after surgery
- Savings of $366 per patient on direct hospital costs
- Savings of $1,044 per patient on direct hospital costs

The Center for Outcomes Research received awards for the research at the International Society of Pharmacoeconomics and Outcomes Research, AMCP, American Physical Therapy Association and the UICOMP student research day.

COR and MS Research

Multiple sclerosis is a rare disease that affects the central nervous system, has a significant impact on health related quality of life, and places a high financial burden on persons who have the disorder.

Recently, a collaborative effort between the Illinois Neurological Institute (INI), Central Illinois MS Council, Center for Outcomes Research and the Department of Medicine at the University of Illinois College of Medicine Peoria led to the creation of a community-based MS Research Advisory Committee. The committee will allow people with multiple sclerosis to discuss and prioritize research areas of greatest importance.

The collaboration already has led to one paper currently under review for publication on the comborabilities of MS patients treated at the INI Multiple Sclerosis Center and a paper in development on the MS Flow Sheet Project, which evaluates the cost-benefit of integrating an MS registry within an electronic medical record (EMR) for the management of MS. The hypothesis: use of the database will result in a cost reduction while improving patient outcomes.

Funding from the Central Illinois MS Council supports the MS Flow Sheet Project, and funding from the Patient Centered Outcomes Research Institute (PCORI) supports the project to develop a patient-led MS research community. Those interested in attending the conference-style event this fall to bring patients, researchers, and others together should contact Bonnie Paris, PhD at (309) 671-8424 or bparis@uic.edu with any questions.

COR AND MS RESEARCH

TO BREAKING NEW GROUND IN OUTCOMES RESEARCH
Pathways

Central Illinois patients who may be recurrently suicidal, face chronic instability in their interpersonal relationships, or historically may be viewed as “difficult or unteachable” are getting help under a growing program and clinic with the University of Illinois College of Medicine at Peoria and UnityPoint Health - Methodist. The College of Medicine’s Psychiatry Residency Program, based at Methodist, is among perhaps just four residency programs nationwide teaching physicians-in-training about Dialectical Behavior Therapy, or DBT, using a hands-on, clinical approach. The cognitive-based therapy is the “gold standard” treatment for patients diagnosed with borderline personality disorder, and is gaining in use for other disorders such as substance use and bulimia.

“Dialectical Behavior Therapy is not new but is of growing importance in providing the full complement of care to persons with mental health problems,” says Jean Clore, PhD, a licensed clinical psychologist and assistant professor of clinical psychology in the UICOMP Department of Psychiatry and Behavioral Medicine who specializes in DBT as well as neuropsychological and psychological assessments. “Training residents in DBT prepares them to help a broader spectrum of patients.”

Research has shown DBT to reduce inpatient hospitalization stays, suicide attempts, and anger and aggressive behavior among other problems, she said.

DBT teaches patients how to regulate their rollercoaster emotions as well as how to tolerate stressful situations through various coping mechanisms and communications skills. It is a year-long treatment that includes both weekly individual and group therapy, and requires a team of therapists. Most psychiatry residency training programs provide classroom teaching about DBT, but “it is an intensive treatment to deliver requiring more time and resources than most residencies have to dedicate to psychotherapy training,” adds Dr. Clore.

Dr. Clore started a pilot DBT clinic at the UICOMP Psychiatry and Psychology Outpatient Center early in 2013 that has since expanded, now becoming part of the mandatory curriculum for third-year psychiatry residents, and offers fourth-year residents the option of an additional year-long elective. “Just from the seven months I’ve been involved with the program, I’ve seen a lot of positive outcomes and significant quality of life improvements among patients,” said Patrick Gibbons, a third-year psychiatry resident. “To me, that is the most exciting part, when patients come to us with a lot of emotional suffering and then to see a lot of improvement … I think it’s given me a better understanding of my patients as well as medicine management.”

Primary goals are to decrease life-threatening behaviors, therapy-interfering behaviors and increasing mindfulness, distress tolerance, interpersonal effectiveness and emotion regulation skills. Morgan Beckman and Norleen Simangan, both fourth-year residents, started a weekly, evening advanced DBT group in July 2014. “The patients desired it,” said Beckman. “The group meeting gave them an opportunity to continue improving the skills they learned from individual treatment. There’s definitely a need in the community for more DBT.”

Both say they are better doctors for the training. “I think we have become better physicians and more effective in crisis situations,” said Simangan. “It’s a unique experience; we’re really lucky – not just the community – but also for anybody who comes here to train.”

Said Beckman: “I use this with probably half of my medicine patients throughout the day. I don’t think I would be as good a doctor without it.”

“I think it’s more than unique, I look at it as more of ahead of the time – I think this will catch on and be incorporated more into residency training,” said Gibbons.

Psychiatry Residency Hits Milestone

Six years since planning began for the Psychiatry Residency Training Program between the College of Medicine and UnityPoint Health – Methodist was realized in June when the first set of psychiatrists graduated from the four-year program. The residency has directly impacted the mental health care available in central Illinois. Since 2008, the College of Medicine’s Department of Psychiatry and Behavioral Medicine has expanded, to include the 16 resident physicians now in the program who live, train and provide psychiatric clinical care in the Peoria area. Along the way, new and expanded mental health treatment options, including five additional outpatient sites, also resulted.

“Six years since planning began for the Psychiatry Residency Training Program between the College of Medicine and UnityPoint Health – Methodist was realized in June when the first set of psychiatrists graduated from the four-year program.”

Dr. Stephen Krieg, one of the first four psychiatry residents to graduate from the UICOMP program. “I think one of my favorite things about being in the first psychiatry residency class was observing the program expand and thrive with each entering new class of residents.”

“Future growth is also planned. TMS, or Transcranial Magnetic Stimulation, will be offered beginning this fall, which provides a non-invasive, no-medicine treatment option for depression. Graduate fellowship training programs for physicians to specialize in child-adolescent and geriatric psychiatry, including forensic psychiatry – experts who provide testimony, analysis or recommendations in legal or criminal cases – is in the planning stages.”

“The growth of our psychiatry department and psychiatry residency will help us fill critical mental health needs for patients in Peoria and across the region. Methodist’s leadership and support have been critically important and Dr. Finkenbine has done an exceptional job of putting this together,” said Regional Dean Dr. Sara Rusch.

UICOMP among few medical schools in the U.S. to teach behavioral therapy program to psychiatry residents

“Training residents in DBT prepares them to help a broader spectrum of patients.”

— Dr. Jean Clore
A past issue of Pathways highlighted UIComp’s Dr. Matthew Bramlet who was taking 3-D printing into the operating room, almost quite literally. In November, Dr. Bramlet presented a study at the American Heart Association Scientific Sessions involving a 9-month-old girl, a 3-year-old boy and a woman in her 20s, all of whom were patients of his in Peoria and all of whom had complex congenital heart defects. In each case, surgeons were aided in the planning of reconstructive heart surgery by the creation of 3-D heart models from 2-D images from the patients. The models gave them a view of structural abnormalities not detected in traditional imaging.

You also may have read about Dr. Bramlet’s “heart library,” which at the time was just getting underway. Thanks to the NIH 3D Print Exchange, Dr. Bramlet has uploaded replicas of more than a dozen hearts for others to download, print and learn. “We are using these models for actual surgical planning – which I think is just a tremendous, incredible use for our patients – but there’s also a lot of opportunities for sharing this information with the world in a type of library format,” says Dr. Bramlet. “There aren’t anatomic models that describe congenital heart disease, or all the variations of tetralogy of fallot, truncus arteriosus, or total anomalous venous return as examples. It’s all been in pictures and textbooks. To be able to actually hold that model in your hand is a new kind of library – that is what we’re striving to achieve. For example, take something as simple as an Atrial Septal Defect (ASD) – something I’ve read about in textbook after textbook and have seen in thousands of echoes. When we print out an ASD, and I was able to hold it in my hand, I learned something new. Now we’re able to put on the NIH 3D Print Exchange that will allow anybody to go online, download the file, and print it out.”

O n the last cover of Pathways, you may have noticed the computer screen from the control room in Jump’s Virtual Operating Room. What were the images?

VirtuSense Technology is focused on improving patient safety and outcomes. VirtuSense uses a 3D motion capture-and-analysis system to quantify what healthcare professionals see in their delivery of care. The goal is to help create better, safer surgical environments. Jump Simulation provided the clinical feedback necessary prior to launching the VirtuOR service in real ORs. As a result, VirtuSense successfully engaged its first hospital client by establishing performance baselines, setting success targets, and helping to achieve their goals—including reducing the pre-op time by over 30 percent and OR door opening by 50 percent. The benefits generated by the VirtuOR service include less waiting time for surgeons, as well as maintaining the effectiveness of the OR ventilation system to clear potential contaminants for surgical site infections on patients.

When the Altrusa Club of Chillicothe was looking for a charitable organization to give to this past Christmas, in lieu of getting each other a gift, they decided on the Pediatric Resource Center.

“We just liked the idea of helping the children – anything we could do to make it easier for them,” said Altrusa Club board member Jane Funk, adding that the goals and the mission of the service organization matched with the PRC, which provides care and treatment to children who are suspected victims of abuse and neglect.

Each year, Altrusa raises money that go to helping Chillicothe-area students with scholarships, families with food baskets and much more. This was the first year that Altrusa has given money to the PRC. The outpouring was amazing – with nearly $1,500 donated in cash, gift cards and stuffed animals mostly from their own pockets for the children and family of those seen at the PRC.

But the giving didn’t stop there. Funk’s two grandchildren, 12-year-old Abby Petran and 9-year-old Katie Petran, overheard the need and took to what they know. Abby cut and tied dozens of fleece blankets as well as knitting several baby hats and scarves; Katie wove together more than 50 friendship bracelets so they could be given money to the PRC. The outpouring was amazing – with nearly $1,500 donated in cash, gift cards and stuffed animals mostly from their own pockets for the children and family of those seen at the PRC.

For Abby, it was enjoyable to be able to give and “to know someone cares for them,” she said.

Stephanie Johnson, Executive Director for the Pediatric Resource Center, said the girls’ handmade gifts were loved by all.

“The kids just loved them,” said Johnson about Katie and Abbie’s donations, adding they help reduce kids’ stress, many of whom are being evaluated due to injuries and health concerns from child abuse and neglect.

“Each child seen at the Pediatric Resource Center receives a toy to comfort them during their time here,” said Johnson. “The hats, blankets and friendship blankets are a welcome addition to the child-centered medical care that is the hallmark of PRC services for this vulnerable population. And we are so thankful to the Petrans, to Jane Funk and Chillicothe Altrusa for helping us in our mission.”

Giving from hearts, hands and pockets

September 26, 2015

Save the date for the Pediatric Resource Center Harvesting Hope annual fundraising event, which helps support the valuable services PRC provides for abused and neglected children.

In the News
**CHANGING FACES IN LEADERSHIP**

**Glenn Miller, MD**

Dr. Miller, former longtime Assistant Dean of Pre-Clinical Curriculum and Evaluation and Clinical Professor of Family and Community Medicine, officially retired last year but even before he left agreed to return to teach. Dr. Miller, a member of the UICOMP faculty since 1990, has served many roles, including course director for the family medicine clerkship and introduction to clinical medicine, and director of the pre-doctoral education program in the Department of Family and Community Medicine. The number of boards and committees, both within UICOMP and outside the University, he has participated on are numerous. Dr. Miller has been an integral component to shaping and improving curriculum and the education medical students receive at UICOMP over the past 25 years. Working as a rural family practitioner for a decade in rural Stark County prior to coming to UICOMP, Dr. Miller still provides house call visits to some of his remaining patients. His attention to detail is second to none. His dedication is evident in his many accomplishments and work ethic.

**Roger Geiss, MD**

Dr. Geiss, Chair of the Department of Pathology, retired in May. Since joining the UICOMP faculty in 2004, Dr. Geiss was named “Best Instructor” by students more than 20 times. Last year, he was presented with the Michele Rabile Distinguished Teaching Award in Undergraduate Medical Education, a national honor awarded by the Association of Pathology Chairs. Dr. Geiss received his medical degree from Cornell University Medical College, and after residency and fellowship training at the University of Chicago and the University of Arizona, began his career in academic pathology at West Virginia University School of Medicine. He has held medical school faculty positions at Creighton University and the University of Mississippi. Dr. Pushpa Joseph was named Interim Chair of Pathology in June.

**Elsa Vazquez-Melendez, MD**

Dr. Vazquez-Melendez, Assistant Professor of Clinical Medicine and Physician Surgeon, was named Assistant Dean for Diversity & Inclusion. In this new position, Dr. Vazquez-Melendez works with faculty, medical students, residents and the community to increase the number of people from underrepresented groups pursuing careers in academic medicine; to help with student recruitment; to increase diversity among residents and fellows; and recruitment of diverse faculty; including helping to generate physicians who are culturally competent and prepared to compassionately and effectively care for patients from diverse backgrounds. Dr. Vazquez-Melendez has been a UICOMP faculty member since 2008.

**Steven Thompson, MD**

Dr. Thompson, Clinical Assistant Professor of Obstetrics and Gynecology, was named Interim Chair of the Department of OB-GYN in February, replacing Dr. Salvatore J. LoCoco who has held that position since May of 2009. Dr. LoCoco remains a UICOMP faculty member and is the UICOMP Section Chief of the Division of Gynecologic Oncology. Dr. Thompson, who joined the Department in 1995 as a volunteer faculty member, became UICOMP Department Vice Chair and Clinical Assistant Professor in July 2014.

**Josephine Dorsch, AHIP, FMLA**

Jo Dorsch retired as the Regional Head Librarian and Professor at the Library of the Health Sciences in Peoria in May. Jo came to librarianship as a second career after having taught high school English. In her 30-plus years with the University, she never lost that love of teaching and her focus on the students. She is also known for her emphasis on reaching out to the community. Jo was recently recognized for her dedication to medical librarianship by being named a Fellow of the Medical Library Association in 2013 and the 2014 Distinguished Librarian of the Year by the Midwest Chapter of the Medical Library Association.

**Marcelo Bento Soares, PhD**

Dr. Soares, Professor and Head of the Department of Cancer Biology and Pharmacology, and Senior Associate Dean for Research, joined UICOMP in February. His bio along with a Q&A can be found on Pages 16-17.

**Elaine Hardy, PhD**

Elaine Hardy was named the new director of the Peoria regional campus of the College of Nursing. An accomplished educator who was most recently assistant professor at Illinois State University, Hardy received her Ph.D. in nursing science from UIC. She replaces Kathy Baldwin, who served as program director from 2008 to 2014 before her retirement. She serves as a manuscript reviewer for the Journal of Cancer Education; founded the Central Illinois chapter of the Black Nurses Association; and previously served as co-chair of the Women’s Health & Transitions in Childbearing Section of the Midwest Nursing Research Society. Her clinical practice is community-based, focusing on outreach and mentoring women of color in various community groups.

**ATHENA Award**

**Theresa Lynch, MD**

Dr. Lynch, Clinical Associate Professor of Internal Medicine, received the ATHENA Young Professional Award from the Peoria Area Chamber of Commerce. The ATHENA Young Professional Award was awarded to an emerging role model for women in the Greater Peoria area. Dr. Lynch completed residency training in Internal Medicine-Pediatrics at Rush University Medical Center where she served as Medical Director of the Med-Peds Ambulatory Clinic and med-peds faculty. She joined UICOMP in 2008 as Medical Director of the OSF Sisters Clinic. In 2011, she became the Program Director for the UICOMP Internal Medicine Residency Program. She is actively involved in resident and student education for various inpatient and ambulatory internal medicine and pediatrics services and has a special interest in Quality Improvement and Patient Safety.