UIC receives papers of former Chicago Mayor Richard M. Daley

Urban Global Medicine gala to honor former ambassador

Baseball team makes series sweep

SILVER CIRCLES
Honoring outstanding teachers / pg. 5

May 2 2018
Volume 37 / Number 31
today.uic.edu

For the community of the University of Illinois at Chicago

Facebook / uicnews
Twitter / uicnews
YouTube / uicmedia
Instagram / thisisuic & uicamiridis

Photo: Jenny Fontaine

2 - student voice
4 - campus news
12 - sports
Kinjaz helps dancers follow in their footsteps

Dance crew Kinjaz performed live and taught a master class at UIC April 25 as the keynote event of Asian American Awareness Month, sponsored by the Center for Student Involvement. The Unity Team, which included a variety of dance crews from UIC, opened the event.

(Photos: Amod Mahadik)

Want to contribute a story? E-mail Christy Levy at christyb@uic.edu
UIC receives papers of longest-serving Chicago mayor, Richard M. Daley

Carlos Sadovi — csadovi@uic.edu

UIC is proud to announce that former Chicago Mayor Richard M. Daley has chosen to make UIC’s Richard J. Daley Library the repository for a large collection of papers and artifacts amassed during his 22-year mayoral tenure.

Daley’s donated papers are now available to researchers and students in the Special Collections and University Archives of his father’s namesake library. A ceremony held Tuesday at UIC honored the donation, the anniversary of his first inauguration as mayor on April 24, 1989, and celebrated his 76th birthday.

“This donation by the Hon. Richard M. Daley reinforces the Daley family’s commitment to UIC. The papers of Richard M. Daley are important source materials documenting the evolution of Chicago as a global urban center,” UIC Chancellor Michael Amiridis said.

“The documents are also important primary sources that will serve to provide integral educational opportunities to students and researchers who may want to study the history of Chicago. We are honored that the Daley family has continued to entrust UIC to be the caretakers of their archives telling the story of one of the most important families of our city.”

Re-elected five times as mayor, Richard M. Daley is the longest serving chief executive of the City of Chicago, surpassing his father’s 21-year record by a year.

Between 1989 and 2011, when he chose not to run for re-election, Daley served six terms and left an indelible imprint on the city.

During his watch, Daley took control of the Chicago Public Schools system and helped transform it from one of the worst public school systems in the country to one of the fastest improving. He turned an aging rust-belt metropolis into a global center of technology and tourism; and was instrumental in helping attract world-renowned transportation, finance and manufacturing leaders to Chicago, including the Boeing Company.

Richard M. Daley said that he could not think of a better place to donate his papers than UIC. The university holds a special place of importance for himself and his family. He said his father always believed that having his papers at UIC would be the greatest award he could receive, and he wanted to follow his father’s example.

“His greatest achievement was this university; once he did it, I was going to follow,” Daley said. “When you’re mayor, there are a lot of decisions, and I think it’s a very important record that needs to be told as to how people make these decisions that have to be made.”

Daley’s daughter, Nora Daley Conroy, said she applauded the university’s use of her grandfather’s and now her father’s documents as a learning tool. An Honors College course on the history of Chicago currently utilizes the documents of Richard J. Daley as primary source materials and plans to do the same with the younger mayor’s papers.

“I look forward to so many more students here at UIC having the opportunity to learn directly from my grandfather and from my dad,” Nora Daley Conroy said.

The donation includes more than 600 linear feet of documents, 200 linear feet of photographs, and 30 linear feet of audiovisual items. The documents already processed and available include items from the mayor’s office, such as administrative files, memoranda, reports, schedules, speeches and news releases. The photographs and AV items, as well as artifacts and other ephemera included in the collection, are not yet available, said Dan Harper, UIC lecturer and the Special Collection’s assistant archivist.

In addition to materials that touch on the day-to-day functioning of the mayor’s office, unique items include memorabilia from the 1996 Democratic National Convention held in Chicago. In addition, a report about how the city accommodated the Batman movie franchise that helped usher in new film opportunities in the city and materials from Chinese President Hu Jintao’s 2011 visit to Chicago are also included, said Harper, who is processing the collection.

Other items of interest include signed letters and photographs from sports greats like Baseball Hall of Famer Hank Aaron, former Chicago Bulls Coach Phil Jackson and the Bulls 1990s dynasty teams. Also included are items from seasoned and up-and-coming politicians, including Hillary and Bill Clinton, Al Gore, former Senator and Vice President Joe Biden, and former President Barack Obama and First Lady Michelle Obama.

In addition, there is Daley’s massive desk that sat in his City Hall office, also used by his father decades earlier, Harper said.

Daley’s items join more than 700 feet of previously donated personal papers and artifacts from his father’s own tenure as mayor. UIC’s main library is named in honor of the elder Daley, who helped create the university.

Pete Cunningham, who worked for Richard M. Daley between 1991 and 1996 as a speechwriter and senior advisor and deputy, has been assisting UIC with its multiyear effort to enrich the collection with oral histories. Cunningham also consulted for various city agencies between 1997 and 2008 during Daley’s tenure.

Cunningham said other major highlights for Daley were the creation of Millennium Park, one of the top tourism draws in the country; the modernization and beautification of the city; and keeping “Chicago livable for working families by focusing on the basics and keeping the city affordable.”

Cunningham, who has been conducting interviews for UIC of Daley’s top staff members, said the Daley family’s donations are important to local as well as national political history.

“Both mayors embodied the philosophy that good government is good politics. They are easily the most important father-son urban leaders in American history,” Cunningham said. “Both of them loved the city and never aspired to any other job.”

According to Cunningham, most important for Richard M. Daley is that he, “inherited a city divided by race and worked very hard to build common ground. That’s why his support in the black community rose with every single election.”

Among the interviews that eventually will be available to the public is an interview with Arne Duncan, whom Daley appointed to serve as chief executive officer of the Chicago Public Schools. Duncan, who later became U.S. Secretary of Education under Obama, said Daley’s mantra to him was always to “do the right thing by children.”

Former Chicago Mayor Richard M. Daley in front of a desk that he and his father used in City Hall. The desk is part of a collection Daley donated to UIC. (Photo: Jenny Fontaine)
Former ambassador to Dominican Republic to be honored at Urban Global Medicine gala

By Sharon Parmet — sparmet@uic.edu

UIC’s department of medicine, in conjunction with the UI Health Community Clinic Network, will hold the 5th Annual Urban Global Medicine Gala on Friday, May 11 at the Willis Tower’s Metropolitan Club.

Proceeds and donations will benefit the Urban Global Medicine Program’s clinical, educational and scholarly activities in Chicago and abroad, and the UI Health Community Clinic Network and their efforts in underserved communities in Chicago. Tickets start at $150 and are available online at bit.ly/2qVMfFW

At the event, James “Wally” Brewster, former U.S. ambassador to the Dominican Republic, will receive the Global Humanitarian Award, presented by the Urban Global Medicine Program.

“We wanted to honor Ambassador Brewster because of his advocacy on behalf of sexual minorities and his concern with HIV prevention in the Dominican Republic, a country where we conduct some of our educational and scholarly activities,” said Dr. Max Brito, associate professor of medicine and associate head for urban global health in the UIC department of medicine. Brito has strong connections to the Dominican Republic, where he grew up. He teaches a yearly global medicine elective for medical students and residents in the Dominican Republic.

Brewster, an internationally recognized diplomat and human rights advocate, was appointed by President Barack Obama as the U.S. ambassador to the Dominican Republic in 2013, and he served in that role until January 20, 2017. He was the first openly gay ambassador to be appointed in the Western Hemisphere alongside his husband, the Honorable Bob J. Satawake. Ambassador Brewster has been credited with advancing the rights of the marginalized around the globe, including the stateless population of people of Haitian descent in the Dominican Republic, LGBTQ individuals, women and young girls who are the victims of human trafficking and people who have experienced gender-based violence. His expertise in increasing trade, fighting corruption and advancing public health has been recognized with numerous awards and honors.

The Urban Global Medicine program provides educational, teaching and research experiences both in the United States and around the world to UIC students, residents, fellows and faculty. The program has a strong focus on public health with the underlying goal of addressing and eliminating health disparities in underserved communities.

Campus celebrates naming of Isadore and Sadie Dorin Forum

UIC officials and members of the Isadore and Sadie Dorin family celebrated the ribbon cutting April 22 of the Isadore and Sadie Dorin Forum at UIC.

Last fall, the Isadore and Sadie Dorin Foundation donated a $3 million gift to UIC, and campus officials have recognized the foundation’s generosity with a term naming of the UIC Forum as the Isadore and Sadie Dorin Forum at UIC.

The gift will also establish a permanently endowed fund to provide scholarships to undergraduates from Cook County.

The ribbon-cutting event brought together members of the Dorin family to celebrate the impact of their gift.

“UIC is proud to be stewards of the Dorin family legacy and very grateful for the foundation’s generosity,” UIC Chancellor Michael Amiridis said.
Since 1966, the Silver Circle Award has been presented to some of UIC’s best teachers. Winners, who are honored at their college commencements, receive $500 and their names join a long list of distinguished colleagues. But what makes the award especially meaningful is its selection committee: the graduating seniors.

**By Jeff Boynés, Jackie Carey, Brian Flood, Christy Levy, Sharon Parmet, Carlos Sadovi**

What does it mean to win this award from the graduating seniors? It is indescribable. Of all the awards I have received within the span of my career, the Silver Circle Teaching Excellence Award ranks as the purest of awards. To learn that I have positively contributed to their educational journey is a highlight that I will forever cherish.

What do you teach? I teach health literacy.

How do you engage students in your courses? I engage each student in an independent study of their choice within the body of health literacy coursework. I get to know their strengths, passion, style of inquiry and dedication to that quest. It is always an eye-opener to see the extent of their queries, the wealth of their public health curiosity, their keen interest in global health matters, and the scope of their search. For many of them, these topics are personal. They stay engaged because they own their queries and outcomes.

What are your research interests? My life’s work has been in cancer community engagement, participatory and populations’ research primarily in the African American community.

What is your advice to graduating students? Give this work your passion. Be insistent on societal well-being. I know you will be outstanding public health ambassadors — you will save lives; you will protect our environment; you will educate and advocate for those who cannot protect themselves. Because you have been here and you are prepared to serve, our public will be better for it.

---

**FUNMI APANTAKU-ONYEMI**

Visiting clinical instructor
Community health sciences

Silver Circles: 1
Years at UIC: 30

(Photos: Jenny Fontaine)

What does it mean to win this award from the graduating seniors? This semester I teach a class called “Earth Systems,” a second class called “Stable Isotope Geochemistry” and I co-teach a class called “Climate, Contamination and Chicago.”

What do you teach? I teach health literacy.

How do you engage students in your courses? Students conduct real interviews with live supervision. Students participate in cultural training where they teach their peers and identify implicit biases. I take a co-learner role, and my students have made me a cultural expert.

What are your research interests? I am examining how experts who participate in interviewing and professional interactions.

What is your advice to graduating students? Find a job that you love. It might not be your first job and it might take years to find, but it’s worth the effort.

---

**MAX BERKELHAMMER**

Assistant professor
Earth and environmental sciences

Silver Circles: 1
Years at UIC: 4

(Photos: Jenny Fontaine)

What does it mean to win this award from the graduating seniors? The students at UIC are the best and it is nice to feel like I was able to have a memorable impact on their time here. I know there are many, many great teachers on campus and so being recognized amongst this crowd makes this honor even more rewarding.

What do you teach? I teach health literacy.

How do you engage students in your courses? I develop leaders by mentoring and discussion. Students participate in cultural training where they teach their peers and identify implicit biases. I take a co-learner role, and my students have made me a cultural expert.

What are your research interests? I am a climate scientist who studies the way that the land surface impacts the atmosphere. Gases such as carbon dioxide and methane and energy are transferred between the land and the atmosphere, and I study the processes that influence these exchanges. For example, I am interested in how forests respond to changes in snowpack, and how ice sheets transfer water and energy to the atmosphere.

What is your advice to graduating students? Find a job that you love. It might not be your first job and it might take years to find, but it’s worth the effort.

---

**KATHRYN ENGEL**

Lecturer
Psychology

Silver Circles: 3
Years at UIC: 37

(Photos: Jenny Fontaine)

What does it mean to win this award from the graduating seniors? Humbled. I have spent my entire career developing leaders — my former students are at the top of Chicago agencies and return to mentor and supervise current students. Awards initiated by our students say everything and build our program’s connections.

What do you teach? “Psychology of Interviewing,” “Fieldwork in Psychology,” “Social Services Internships in Paris Faculty-led Study Abroad.”

How do you engage students in your courses? I develop leaders by mentoring and discussion. Students participate in cultural training where they teach their peers and identify implicit biases. I take a co-learner role, and my students have made me a cultural expert.

What are your research interests? I am interested in how forests respond to changes in snowpack, and how ice sheets transfer water and energy to the atmosphere.

What is your advice to graduating students? Find a job that you love. It might not be your first job and it might take years to find, but it’s worth the effort.

---

Since 1966, the Silver Circle Award has been presented to some of UIC’s best teachers. Winners, who are honored at their college commencements, receive $500 and their names join a long list of distinguished colleagues. But what makes the award especially meaningful is its selection committee: the graduating seniors.
What does it mean to win this award from the graduating seniors?
Honestly, it means a great deal to me. It shows me that the changes I’ve implemented in my courses are beneficial to students. It shows me that I am taking the correct course of action and that students believe what I bring to the classroom is useful.

What do you teach?
During the school year, I teach ME/IE 396 and ME/IE 397, which is mechanical and industrial engineering’s senior design capstone course sequence. In the summer, I teach ME428: “Numerical Methods in Mechanical Engineering.”

How do you engage students in your courses?
I keep an open-door policy, where students can drop by frequently ask them for input and provide them various opportunities to apply new knowledge through group projects, case studies, interpretation of results and evaluation experiences.

What are your research interests?
My research is in the fields of computational fluid dynamics and high-performance computing. I specialize in high-fidelity simulations of turbulent, supersonic, and/or chemically reacting flows. I also build CNC (computer numerically controlled) machines for fun.

What is your advice to graduating students?
I want students to remember that as engineers, we design and develop the products and processes that surround us. Use your education, your creativity, and your minds to make the world a better place.

What does it mean to win this award from the graduating seniors?
I am honored by the students’ nomination. It is a heartfelt award and provides me with a sense of appreciation and accomplishment. I have taught these students in three out of their four semesters and have formed a close teacher-student relationship. I will always remember the students who make up this first graduating class from the Springfield campus of the UIC College of Nursing.

What do you teach?
I currently teach “Professional Nursing 1,” “Pathophysiology and Pharmacology,” and “Acute Care Nursing and Care Management” at the Springfield campus.

How do you engage students in your courses?
I use humor, give compliments and provide frequent feedback to students. I adapt my teaching approach based on each course and the students’ learning styles. I respect and value the students’ perspective and frequently ask them for input and provide them various opportunities to apply new knowledge through group projects, case studies, interpretation of results and evaluation experiences.

What are your research interests?
My research interests are in safe medication practices, and influencing and affecting health care policy through grassroots efforts.

What is your advice to graduating students?
My advice to the graduating students is to smile, be accepting, and treat everyone with respect; acknowledge what you don’t know and seek the answer; communicate clearly and ask for clarification; promote an environment to change the lives of those that are confronted with social and economical inequities; and participate in influencing health care policy.
What does it mean to win this award from the graduating seniors?

It’s the highlight of my academic career so far. I’ve had some good days with research, conferences and other things over the years, but nothing has affected me as much as winning this award. I really enjoy teaching and I try to put a lot of thought and effort into it, so having the seniors recognize that is really special.

What do you teach?

I teach FIN 301 (“Introduction to Managerial Finance”), the first finance course people can take at UIC.

How do you engage students in your courses?

I let everyone know up front that finance, and the terminology that people use in finance, isn’t as complicated as it looks, and I try to use real-world examples and concepts whenever I can. Since finance can be a little dry, I tell jokes and stories to keep everyone’s attention. I also try to change up the format from time to time by showing videos, bringing in guest speakers, or creating little mysteries at the beginning of class that pay off by the end.

What are your research interests?

Most of my research focuses on financial decision-making in corporations. I have a few papers dedicated to how U.S. firms use offshore subsidiaries to avoid taxes, and how those actions influence other decisions (such as whether to acquire other firms or bring offshore money back to the U.S.), almost as a “side effect” of the decision to avoid taxes.

What is your advice to graduating students?

Trust your gut. Doing the right thing is usually harder than other choices available to you, but it’s worth it. Also, be generous with your time and knowledge and don’t act territorial and “pull the ladder up” when you achieve success. I think the key to success in the future is going to be your approach to work and solving new problems.

What does it mean to win this award from the graduating seniors?

To paraphrase John Dewey, “Education is not preparation for life, education is life.” And it is in this spirit that I cherish the honor of being recognized by my students.

What do you teach?

I teach ED416, ED 450, ED 417 and ED 451 (“Teacher Competencies and Performance Based Assessment I and II”) that include weekly seminars and extensive field supervision of our senior elementary teacher candidates.

How do you engage students in your courses?

My instruction endeavors to create “exceptional student experiences” by developing effective teacher practices while reflecting upon emerging and evolving personal and professional identities. Integrating one’s inner and outer experiences is a dynamic process wherein intrinsic values and beliefs are consciously considered as students face extrinsic challenges.

What are your research interests?

My research focuses on improving teacher effectiveness and on facilitating meaningful reflective practice. I have fashioned an inquiry process that synthesizes philosophical exploration, literary analysis and autobiographical anecdotes to further explore the intrinsic values, beliefs and pathways that define and inform one’s personal and professional identities. My research, like my teaching, focuses on the critical role that one’s personal identity plays in his or her professional life.

What is your advice to graduating students?

May the vision, drive and sense of mission that brought our graduates to the UIC College of Education and has sustained them through the rigorous teacher preparation program continue to sustain and motivate them. I encourage them to preserve and safeguard their passion for teaching and learning. It’s a gift of a lifetime.

What does it mean to win this award from the graduating seniors?

I am retiring at the end of this semester, and this award is the best possible going-away gift. I began teaching because I wanted to make a difference in students’ lives, and this award is meaningful to me because it comes from students. I know that every moment we have with students is precious, amid their many responsibilities and obligations, and I hope that I have been able to organize that time in a way they find useful and valuable as they start the next phase of their careers in health care or continue their studies.

What do you teach?

I focus on teaching courses in health information management. I teach online and classroom-based blended courses for undergraduate and post-baccalaureate students on the legal aspects of health information management, human resources management, health information research and independent study.

How do you engage students in your courses?

I find that students engage with courses when real-world examples and case studies are used to link lessons to relevant issues in the field and when technology is used to enable hands-on application.

What are your research interests?

I focus on curriculum development and research on the value of interprofessional collaboration in a health care setting.

What is your advice to graduating students?

I advise students to look for opportunities to take on a leadership role in health care, and to develop confidence and comfort articulating the value of your HIM expertise on a team. Step up. Don’t wait for someone to knock on your door with an invitation to collaborate. Be assertive and say, “I can help with that.”
Assistant professor
Music
Director of bands

What does it mean to win this award from the graduating seniors?
These graduating seniors are the first class of freshman that I had a hand in recruiting. I feel personally responsible for their success here at UIC and as they move forward in the future. I am incredibly honored that they took the time to write on my behalf.

What do you teach?
I teach the UIC Wind Ensemble, conducting, orchestration, chamber music, and I have taught saxophone.

How do you engage students in your courses?
I teach many courses and each course has an entirely different format. Overall, I care deeply about the art form is my life's work and for the material that I have to offer my students. I also believe that this is apparent in my demeanor throughout the day, and influences my preparation, presentation and connection to the material. I hope that the students feed off this energy and can, therefore, make stronger connections to what is being taught.

What are your research interests?
My interests lie in conducting and performance. I also do extensive work in orchestration and arranging for large and small ensembles. Lastly, I work in the development of conducting pedagogy.

What is your advice to graduating students?
Remember that good work is always rewarded. It may take time. In the world of the arts, you will hear the word “no.” You will have hardships. But good and persistent work will have its payoff. And you will find your success. Know that you will impact so many people throughout your lifetime with your work. And finally, remember that your work is not for you. It is for the world around you. Use your work to make the world around you the best that it can be.

What does it mean to win this award from the graduating seniors?
It’s a real honor. One of the things that makes UIC unique and impressive is our undergraduates. I really enjoy talking to students as they’re figuring out their career, and life, paths. Students here tend to be very engaged with their communities outside of campus.

What do you teach?
I teach “Cognitive Neuroscience” and its lab course for undergrads, and a graduate seminar in “Advanced Cognitive Neuroscience.”

How do you engage students in your courses?
My lab course is very hands on — the students become experts in running experiments to measure behavior and brain activity. They conduct all of the studies themselves — both as experimenter and subject — which is far more instructive than anything I could tell them from a podium. In a larger lecture format, I try to help students see the connections between what we’re learning and their lives.

What are your research interests?
I am mainly interested in understanding the neural circuits that guide our choices. The prefrontal cortex plays an important role in how we make decisions and is interesting because it doesn’t fully mature until early adulthood. This means the very time that people often start using drugs and alcohol coincides with the period that they can do serious harm for adaptive decision-making in the long term.

What is your advice to graduating students?
Keep an open mind to find the problems you truly care most about. Ultimately, you will be more successful if you wake up every day excited about the work you are going to do. Also, turn off devices so you can engage with real people, and don’t sacrifice sleep.

What does it mean to win this award from the graduating seniors?
It confirms for me that I have chosen the right path. I came to UIC as a Ph.D. candidate determined to devote my career to undergraduate education. That our students think of the time they spent studying with me as a memorable and valuable part of their undergraduate experience is incredibly affirming.

What do you teach?
I teach first-year writing courses on the political use of space in Chicago; general education courses on gender, sexuality, and literature; honors core courses in critical media studies; and writing-in-the-discipline courses in English and gender and women’s studies.

How do you engage students in your courses?
I aim to create a collaborative learning environment and encourage my students to demonstrate intellectual curiosity. In courses designed for more advanced learners, students share a great deal of responsibility in co-designing course materials through creative projects and in-class sharing sessions. For students in my first-year writing courses, I often motivate and encourage by sharing stories of how I developed my own study habits as a first-generation college student.

What are your research interests?
My research and teaching interests include rhetoric and writing, Transatlantic modernism, women’s literature, feminist and queer theory, feminism and social change, the history of sexuality, and critical media studies.

What is your advice to graduating students?
I want to urge our graduating seniors to harness the power of their education for creating social change through meaningful career choices. Our students are in possession of the grit, determination, intelligence, and know-how to make the world a better place for us all.
MICHAEL SICILIANO
Assistant professor
Public administration

What does it mean to win this award from the graduating seniors?
It’s a huge honor for me. The students at UIC are amazing, and I learn so much from talking with them about their experiences, challenges and triumphs. They really inspire me and push me to look for new ways to improve my teaching.

What do you teach?
For undergrads, I teach a 200-level course entitled “Introduction to the Policy Process.” At the graduate level, I teach courses on policy analysis, collaborative management, social network analysis and advanced data analysis.

How do you engage students in your courses?
I use several techniques to create tangible pathways between the classroom material and the policy issues my students confront in their own lives. These range from short interactive exercises and blog posts to more in-depth case studies of current events.

What are your research interests?
My research is interested in how humans and organizations cooperate and form networks to address complex policy problems. I build statistical models to understand the factors that facilitate and constrain collaboration and examine the effect of network structure on individual and collective behavior. My work currently focuses on public school systems, local government service provision and emergency response operations.

What is your advice to graduating students?
To remain civically engaged. Use your passion, skills, and knowledge to make positive changes in your community. Find an issue you care about and chip away at it. Making a difference in your community doesn’t require tons of time or the perfect skillset, it just requires you to care, to show up, and to use your voice.

LESLEY WO-MEI FUNG
Professor
Chemistry

What does it mean to win this award from the graduating seniors?
Humbling and energized. It is a recognition and confirmation of my teaching approach.

What do you teach?
General Chemistry (CHEM 124); Biochemistry I (BIOS/CHEM 452); Biochemistry Lab (CHEM 455); Independent Studies (CHEM 492); Supervised Research (CHEM 499); Ph.D. Research (CHEM 599).

How do you engage students in your courses?
I believe that the research activities in my lab are an important component in my teaching, both classroom and research teaching. Research provides me excitement about the subject. Students learn the most when they are excited about the subject. I emphasize concepts and ask the students not to memorize what is in the textbook, lecture notes, research papers, etc., but to understand them so that they can use them with ease. I also promote active teaching/learning.

What are your research interests?
We have two broad research topics in our lab. One is on a brain protein called spectrin. We study its structure and function, including spectrin tetramerization and spectrin as a substrate for the enzyme caspase-3. The aim is to understand certain neuronal functions on a molecular level. The other area is on antibiotic development. We have identified a class of compounds that appears to stop bacterial growth quite efficiently. Now, we want to know the mode of action for these compounds. We also study bacterial enzymes essential to bacterial growth. Inhibitors for these enzymes are molecules with the potential to become antibiotics.

What is your advice to graduating students?
Do not just repeat what others say, but understand it so that you say it in your own way.
Do prostate cancer cells have an Achilles’ heel?

By Jackie Carey — jmcarey@uic.edu

UIC researchers describe new ways to selectively kill prostate cancer cells by exploiting the cells’ revved-up metabolism. They report their findings in the online journal, eLife.

In prostate cancer, the loss of a tumor suppressor gene called PTEN is very common. Without a functional copy of this gene, cancer is much more likely to develop. One of the downstream effects of the loss of PTEN is increased activation of an enzyme called protein kinase B, also known as Akt. Akt has multiple roles in the cell, including driving metabolism and cell proliferation — both of which are amped up in cancer cells, contributing to their out-of-control growth and spread. Hyperactivation of Akt can also make cancer cells resistant to chemotherapy, but efforts to develop drugs to suppress Akt in cancer cells have fallen short due to toxicity.

The activation of Akt also produces elevated levels of reactive oxygen species, or ROS. These are byproducts of metabolism that can cause damage to cellular structures, including DNA.

Nissim Hay, professor of biochemistry and molecular genetics in the UIC College of Medicine, believes that these elevated ROS levels can be exploited to kill cancer cells.

“ROS levels are high in cancer cells, which normally helps them grow and proliferate,” said Hay, who is a corresponding author on the paper together with UIC research assistant professor of biochemistry and molecular genetics Veronique Nogueira. “But, we have shown that by pushing ROS levels up above a certain threshold, they become toxic, and we can selectively kill off the cancer cells while leaving normal cells unharmed.”

To boost ROS levels in cancer cells, Hay and colleagues suppressed ROS scavengers using a natural compound found in cruciferous vegetables, such as broccoli and cauliflower, called phenylethyl isothiocyanate, or PEITC.

In a mouse model of PTEN-deficient prostate cancer, PEITC, combined with a drug called rapamycin, almost completely eradicate tumors. Treated mice also showed no recurrence of cancer six months after the treatment stopped.

Next, the researchers targeted another downstream metabolic consequence of Akt hyperactivation: an enzyme called hexokinase 2, or HK2. They found that when they deleted the gene for HK2 in the mouse model of prostate cancer, the cancers in those mice stopped growing. The researchers saw similar results in human prostate cancer cells, where the deactivation of HK2 helped restore prostate cancer cell sensitivity to chemotherapy.

Nissim Hay, professor of biochemistry and molecular genetics (Photo: Kathryn Marchetti)

“The increased metabolism of cancer cells presents a sort of Achilles’ heel that we have several ways to exploit in order to very selectively kill these cells while normal cells are left alone,” Hay said. More research is needed to determine how best to develop these findings into treatments, Hay explained.

Krushna Patra is a co-author on the paper.

‘Incompatible’ donor stem cells cure adult sickle cell patients

By Jackie Carey — jmcarey@uic.edu

Doctors at the University of Illinois Hospital have cured seven adult patients of sickle cell disease, an inherited blood disorder primarily affecting the black community, using stem cells from donors previously thought to be incompatible, thanks to a new transplant treatment protocol.

The doctors report on the new technique in the journal Biology of Blood and Marrow Transplantation.

With the new protocol, patients with aggressive sickle cell disease can receive stem cells from family members if only half of their human leukocyte antigen (HLA) markers match. Previously, donors had to be a family member with a full set of matching HLA markers, or a “fully-matched” donor.

HLA markers are proteins on the surface of cells that help to regulate the immune system. The human body uses these proteins to identify which cells belong in the body and which cells do not. Because HLA markers are inherited from parents, family members are the most likely to have matching proteins. In transplants, matching HLA markers between the patient and the donor help to limit the risk that the patient’s body will reject the donor cells.

While doctors always try to find a closely matched donor for patients who need a stem cell transplant, only 20 percent of sickle cell patients have a family member with a full set of matching HLA markers.

“We have made great strides curing adults with sickle cell disease with stem cell transplants, but the unfortunate truth is that the majority of these patients have, until now, been unable to benefit from this treatment because there are no fully-matched HLA-compatible donors available in their family,” said corresponding author Dr. Damiano Rondelli, the Michael Reese Professor of Hematology and director of the Blood and Marrow Transplant program at the University of Illinois at Chicago.

Rondelli and his team run the largest adult sickle cell program in the Chicago area and pioneered the use of chemotherapy-free fully-matched stem cell transplants for sickle cell patients nearly six years ago.

Now, by allowing for “half-matched” donors, the new treatment protocol, which uses only a small dose chemotherapy, significantly increases the number of potential donors for each patient.

The doctors screened 50 adult sickle cell patients as candidates for a half-matched stem cell transplant between January 2014 and March 2017. Ten patients received a transplant. Following two unsuccessful transplants, the doctors adopted the new treatment protocol, which included modifications to a process first developed at Johns Hopkins University.

“We modified the transplant protocol by increasing the dose of radiation used before the transplant, and by infusing growth factor-mobilized peripheral blood stem cells instead of bone marrow cells,” Rondelli said. “These two modifications helped ensure the patient’s body could accept the healthy donor cells.”

Of the eight patients who underwent the revised transplant, one experienced chronic graft-versus-host disease following the transplant and died of unknown causes.

The other seven patients are alive and maintain 95 percent or higher stable engraftment – acceptance of donor cells – with improved blood work at least 12 months following the transplant.

“These patients are cured of sickle cell disease,” Rondelli said.

“The takeaway message is twofold. First, this transplant protocol may cure many more adult patients with advanced sickle cell disease,” he said.

“Second, despite the increasing safety of the transplant protocols and new compatibility of HLA half-matched donors, many sickle cell patients still face barriers to care – of the patients we screened, only 20 percent underwent a transplant.”

Rondelli says that medical insurance denial accounted for 20 percent of the lack of access to the transplant. Other factors included personal decisions and high rates of donor-specific antigens in patients who had received frequent blood transfusions.
Marvin Slaughter
UIC student earns national civic honor

By Brian Flood — bflood@uic.edu

Marvin Slaughter is dedicated to ensuring that higher education remains a priority for policymakers in Illinois. As the UIC junior witnessed the state’s budget impasse affect students and faculty in recent years, he sought out several roles to encourage funding in support of the university and public higher education. Slaughter’s efforts, both on and off campus, recently earned him a 2018 Newman Civic Fellowship by Campus Compact, a national nonprofit coalition of more than 1,000 colleges and universities. He is among 268 students who will make up the organization’s fellows cohort this year.

UIC Chancellor Michael Amiridis, who nominated Slaughter for the award, called him a “servant leader dedicated to increasing civic engagement amongst college students through political advocacy and empowering the voice of students.”

Slaughter has worked with Illinois Connection, the legislative advocacy network of the University of Illinois Alumni Association, and the University of Illinois System’s Office of Government Relations to advocate in Springfield, on Capitol Hill and in district legislator offices across the Chicagoland area.

“My catalyst for my work related to higher education funding was witnessing close personal acquaintances unable to continue furthering their education due to the uncertainty surrounding MAP grants at the time,” said Slaughter, who is dual majoring in political science and economics in the College of Liberal Arts and Sciences. “It has been a personal pleasure to advocate on behalf of students who need this funding to better their lives, the lives of their families, and their communities.”

Slaughter, a member of the Honors College, serves as president of the UIC Student Advocacy Coalition, where he leads the faculty-student alliance in grassroots government relations efforts, as well as campus-based initiatives to encourage more student civic engagement, such as voter registration and early voting.

Event planning and logistics, research on Illinois political trends, and surveying campaign contributions are among Slaughter’s current duties as an intern with the Illinois Campaign for Political Reform, a non-partisan public interest and advocacy group. He formerly interned for State Sen. Michael E. Hastings. He is also a member of UIC Provost Susan Poser’s Student Advisory Board and serves as an ambassador for the Honors College and UIC, with the latter considered one of the highest student honors at the university. Slaughter, a native of Markham, Illinois, says that at an early age he recognized the important role education plays in transforming economic circumstances.

While at Hillcrest High School, he was president of the school’s National Honor Society chapter, completed over 250 community service hours, and helped establish a mentor program to prepare local grammar school students for their transition to high school.

“My experience with ‘Project Bridging the Gap’ helped me to recognize my passion for ensuring students had the tools needed to be successful academically, and that passion has carried over to my current college career and my work with advocacy,” he said. “The notion of giving back to my community has been a part of my foundation as a person.”

Slaughter’s other notable honors include the Chancellor’s Student Service and Leadership Award, and the President’s Award Program Honors, which is the most prestigious four-year tuition and housing scholarship given to exemplary incoming first-year Honors College students.

Through the fellowship, Campus Compact provides a variety of learning and networking opportunities, including a national conference of Newman Civic Fellows in partnership with the Edward M. Kennedy Institute for the U.S. Senate. The fellowship also offers access to exclusive scholarship and post-graduate opportunities.

The Newman Civic Fellowship program, which is named in tribute to Campus Compact co-founder Frank Newman, is supported by KPMG Foundation and Newman’s Own Foundation.
SPORTS

Baseball completes series sweep versus Milwaukee

By Dan Yopchick — yopchick@uic.edu

UIC continued its dominance on the mound Sunday with a 2-0 shutout of the Milwaukee Panthers for a three-game series sweep.

Sophomore Jacob Key started the game for the Flames (23-14, 11-7 Horizon League) and he was nothing short of brilliant. The Murfreesboro, Tennessee, native allowed only two hits in seven scoreless innings of work. After a two-out single in the first from the Panthers (16-22, 9-9 Horizon League), Key retired 13 consecutive hitters through the fifth inning. Milwaukee opened the sixth with a base hit, but Key retired the next two before his catcher Aaron Ackerman threw out the runner to end the sixth.

Noah Masa and Alex Padilla combined to throw the final two innings in relief. Neither gave up a hit and both struck out one. Padilla picked up the game’s final two outs to earn his sixth save of the season.

Dominic Smith continued to swing a hot bat as he drove in UIC’s two runs, both on two-out base hits, and both to score Thomas Norton.

Following a two-out single in the top of the first, Key retired seven straight hitters through the top of the third, then the offense gave him the first edge of the day. Norton opened the home-half of the third with a base hit to the opposite field in right. The third baseman was at third following a passed ball and an infield single by Matt Bottcher. He scored when Smith laced a base hit through the left side. The Flames were poised to add another run when Scott Ota hit a ball destined for center field.

Norton ignited the offense once again in the bottom of the fifth. The junior walked to begin the inning and he moved to second on a sacrifice bunt from Ryan Lin-Peistrup, and third on Derrick Patrick’s grounder to second base. Norton then scored for the second time Sunday when Smith ruffled a base hit to right field with two away and two strikes in the count.

That was plenty of firepower for Key. He surrendered a second base hit, a single, to open the sixth inning, but got fly balls to Patrick in center and Smith in left for the first two outs.

Key’s outing was complete after seven scoreless innings and 75 pitches.

The Flames host the Benedictine Eagles at 6:35 p.m. Wednesday.

Flames take series from Wright State

By Jenn Zoellick — jennz@uic.edu

The softball team (25-18, 14-4 Horizon League) took home a pair of thrilling victories over Wright State (15-30, 9-10 HL) Saturday to take the series 2-1. The Flames beat the Raiders in game one, 11-1 (5), and took home an extra-innings victory in game two, 3-2 (9).

UIC outhit the Raiders, 17-7m across the two games, as six Flames ended the day with multi-hit performances. Lexi Watts, Kayla Wedl and Skylee James knocked three hits apiece, while Tiana Mack-Miller, Taylor Cairns and Claire Crane ended the afternoon with two each. Alyssa Griman tallied one hit, a three-run bomb in game one over the right field fence as part of a nine-run third inning.

In the first game, Watts, James and Crane had two hits each. Mack-Miller, Griman, Wedl, Willis and Maddie Spinks all recorded one hit. Griman’s homer gave her three RBI in the game, while big hits from Mack-Miller and Crane gave them two RBI apiece.

The Flames collected seven hits in game two, as Wedl and Cairns tabbed two apiece.

The Flames host Youngstown State in a series Friday and Saturday.