

SCIENTIA

A publication for College of Science and Health alumni



Meet some of the stellar student-athletes and recent alumni in the College of Science and Health. Read more on page 4.

Fall 2016

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THE ONLY CONSTANT IS CHANGE

DEAN GERRY KOOCHEER REVIEWS THE EVOLUTION OF SCIENCE AND MATHEMATICS INSTRUCTION

*Science and mathematics often operate on certainties. There are 25 prime numbers between 1 and 100. The Earth revolves around the sun. Cells are the basic units of life. That said, there are plenty of mutable, unknown and evolving conditions within the disciplines, which is partly what makes these fields so exciting. New processes, tools, techniques and inquiry advance our scientific knowledge regularly, and updated teaching approaches follow suit. Dean **Gerry Koocher** reflects on some of the changes he's witnessed and discusses how those transformations have affected the education of today's students.*

How have degrees in the sciences changed since you were an undergraduate?

Many scientific and technological advances have dramatically altered our knowledge base and the ways we teach in the years since I graduated from college. Look at

the cellphone in your pocket. It has far better technology and more computing power than the room-size computers I was taught to program using punch cards and PL-1 language.

In addition to more advanced scientific content, the skills students must master have also shifted. Forget about learning to calibrate an analytical balance or operate a keypunch machine. Start thinking about DNA sequencers, virtual reality devices, programmable medical devices, 3-D printers and vibration-free laser tables. Many experiments on topics ranging from the creation of molecules to the formation of galaxies can now take place as computer simulations.

Social media and perpetual internet access have driven many changes in students' preferences and approaches to learning. Students want the ability to rent a digital

textbook or view podcasts of classes 24/7/365. Faculty members are busy designing online and hybrid classes while strategizing how to avoid internet-driven distractions in class and maintain strong academic standards.

Our current students have a greater depth of scientific knowledge, access to far more advanced tools and more ways to study and explore than I ever dreamed of as an undergraduate. They will leave DePaul exceptionally well prepared to lead a new generation of scientific accomplishment and generate new products and discoveries that will surprise and delight us all.

Do you have a question for Dean Koocher? Send your question to kschagem@depaul.edu, and you may see an answer in an upcoming issue.

The Write Stuff

A new science course helps chemists become effective writers and communicators

After four years of CSH courses and two years of working as a lab technician for a chemical manufacturer, **Kelli Peck (CSH '13)** felt confident in her chemistry skills. But she couldn't say the same when it came to composing scientific reports. "I often felt bogged down and overwhelmed when beginning to write a scientific piece," she says. "What was missing most from my writing was organization."

Concerns like Peck's helped inspire **Timothy French**, assistant professor of physical chemistry and chemistry and physics education, to propose a new course, Science Writing and Communication, in tandem with Assistant Professor **Sarah Read**, who teaches in the Writing, Rhetoric and Discourse (WRD) program in the College of Liberal Arts and Social Sciences. "We co-taught this course collaboratively in every sense of the word," Read says. "We were each in class every day, and we shared the floor on equal terms, which is part of what made this course unique." Course development was supported by a Collaborative Instruction Fellow Stipend from DePaul's Office of Academic Affairs.

Looking back on his education, French notes that he had to learn scientific writing on his own through practice and trial and error. "It was always something you had to figure out along the way in your lab classes," he remembers. Professors focused on formatting issues—margins, paragraphing, figures and tables—rather than the substance of the writing itself. While those skills are important, French and Read wanted their students to dig deeper. "The philosophical commitment that shaped our approach was that it is not possible to separate doing science from writing," French says. "Writing as a scientist is part of doing science."

By the end of the Science Writing and Communication course, students were able to understand the rhetorical rationales for different sections in scientific journal articles, implement strategies to explain scientific content to nonspecialist and public audiences, interpret statistical data and convey those results effectively through writing, and so on. "I realized the importance of being persuasive in scientific writing since scientists are often the ones who challenge the status quo with their findings or ideas," Peck says. "You need to consider your audience and make their jobs as readers as easy as possible."

The students also had an opportunity to express themselves during a final scientific poster presentation. "The preference for a poster presentation is becoming more common for scientific conferences," Read says. "We thought that hosting our own scientific poster presentation would be a useful experience for their careers as practicing chemists." Faculty from the chemistry department and WRD program attended the event, and students not only shared their research, but also discussed the process of designing and drafting their posters.

Now when Peck faces the blank page, she isn't plagued by anxiety. "Sometimes what's more important than writing something incredible or grand in the first draft is simply beginning to write and refining it by the process of rewriting," Peck says, adding that she's started applying the knowledge she acquired in the class to other coursework: "I already wrote a journal article for computational chemistry using the organizational and persuasive techniques I learned."



EYE on the BALL

MEET FOUR OF THE COLLEGE'S ACADEMIC AND ATHLETIC ALL-STARS

Last year, **Gena Lenti (CSH '16)** used an Excel spreadsheet to map out every hour of her day. Extreme? Not really. The standout softball player was often on the move from 6 a.m. to 10 p.m. juggling employment at a free clinic; teacher assistant duties; research in Associate Professor Cathrine Southern's lab; meetings for Captains' Council, where she served as vice president; classes and labs; hours of practice; two games a week; plane rides to games—and that doesn't even take into account the hours she spent studying. To top it off, she maintained a 4.0 GPA while majoring in health sciences

with minors in environmental science and studies, psychology and biology.

For Lenti and fellow student-athletes **Megan Podkowa (CSH '16)**, senior **Paige Skorseth** and junior **Sonia Johnson**, a whirlwind schedule comes with the territory. "The difficult part is figuring out how to reach your academic goals while still being a successful Division I athlete," says Skorseth, currently the captain of the cross-country and track-and-field teams for the second consecutive year. As a two-sport athlete, Skorseth doesn't see much downtime.

During the 2015-16 academic year, nearly one-third of DePaul's student-athletes were enrolled in CSH. Of these, 71 percent were women, which counters national gender trends: according to the NCAA, in 2014-15, there were approximately 81,750 Division I female athletes in championship sports versus 94,200 male athletes. Meanwhile, statistics on women in science, health and mathematics remain discouraging. According to a 2015 report from the National Science Foundation, as of 2013, women represented only 29 percent of the workforce in science, technology, engineering and math.

By virtue of their gender and passions, CSH female student-athletes at DePaul are bucking these trends. "While I haven't personally been insulted for being a women's basketball player or a female mathematician, I've witnessed it out in the world," Podkowa says. "People will say negative things about the WNBA, for example." Those who know Podkowa primarily as a basketball superstar are sometimes a bit shocked to discover she majored in actuarial science; they might be equally surprised to learn that Podkowa, who graduated with a 3.8 GPA, was a three-time BIG EAST All-Academic Team honoree, an eight-time member of the Dean's List, a nine-time DePaul Athletics Department Honor Roll selection and BIG EAST Women's Basketball Scholar-Athlete of the Year for 2015-16.

Despite these impressive accolades, the journey wasn't an easy one. In fact, all four young women remember struggling as freshmen. "It felt impossible," admits Podkowa. Coach **Doug Bruno (LAS '73, MA '88)** expected his players to excel not only on the court, but also in the classroom, even if that meant his athletes went directly from a four-hour practice to night class without even stopping to shower. Podkowa spent a lot of time

MEET SOME OTHER TALENTED CSH STUDENT-ATHLETES AND RECENT ALUMNI



Timothy Corwin—senior; biological sciences major; chemistry minor; men's tennis; won seven overall singles matches (2015-16); three-time ITA Scholar Athlete (2014-16); three-time member BIG EAST All-Academic Team (2014-16); Athletic Director's Honor Roll (every quarter); Dean's List (seven quarters)



Paul John (CSH '16)—health sciences major; biological sciences and chemistry minors; men's tennis; competed primarily at the No. 1 doubles position with teammate Conor O'Meara (2015-16); four-time ITA Scholar Athlete (2013-16); four-time member BIG EAST All-Academic team (2013-16); Athletic Director's Honor Roll (every quarter); Dean's List (10 quarters)



Morgan Maize (LAS '16)—psychology and sociology double major; softball; tied for first on the team with 10 home runs (2016); recorded four shutouts (2016); led the BIG EAST Conference in slugging percentage (2016); two-time BIG EAST Pitcher of the Week (2016); two-time All-BIG EAST First Team (2015-16); BIG EAST Championship All-Tournament Team (2015); BIG EAST Player of the Year (2016); NFCA Division I All-Great Lakes Third Team (2016); BIG EAST Scholar-Athlete Sport Excellence Award (2015-16); two-time NFCA Scholar Athlete (2014-15); four-time member BIG EAST All-Academic Team (2013-16); Athletic Director's Honor Roll (every quarter); Dean's List (10 quarters)



Simon Megally—senior; health sciences major; sociology minor; men's soccer; led the team in goals (2015); All-BIG EAST Second Team (2015); National Soccer Coaches Association of America Scholar All-Region Second Team (2015); three-time member BIG EAST All-Academic Team (2014-16); Athletic Director's Honor Roll (every quarter); Dean's List (three quarters)

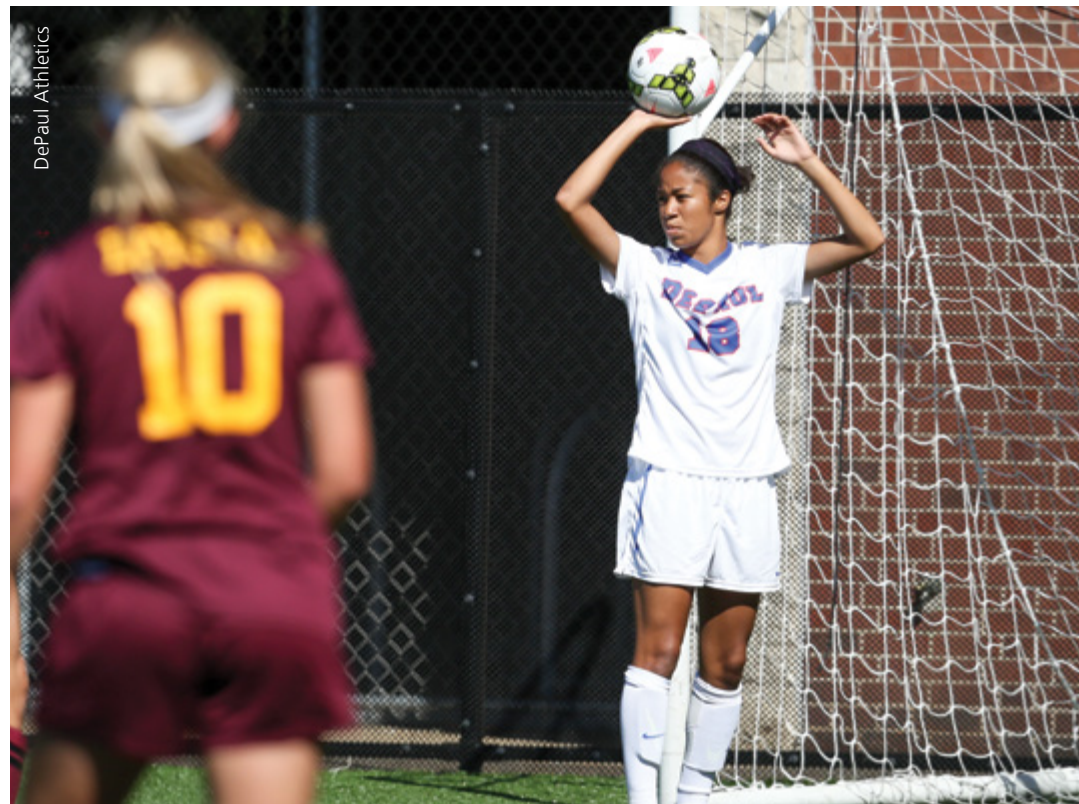
in the athletics academic advising room, and when she got an A in a particularly tough course, she couldn't wait to share the news with Bruno and **Jill Hollembeak (EdD '15)**, assistant director of athletics academic advising.

Travel schedules for Division I student-athletes are notoriously intense, which can make it difficult to keep up with coursework, lectures and labs. "Last fall, I missed every single biology test," Johnson notes. "The key is to give your professors a heads-up well ahead of time." It doesn't hurt to deliver an outstanding academic performance either; Johnson holds a 3.77 GPA. "My roommates and I love the library," she says. "We're there all the time." Since two of her roommates are also soccer players and CSH students, they motivate each other to succeed.

Johnson was rated the No. 22 high school player in her home state of Texas, but she wanted to go someplace new for college. While DePaul's location and soccer team were the initial draw, the psychology department's strong reputation added to the university's appeal. Johnson plans to pursue a career as a sports psychologist, and she recently served as a research assistant for Associate Professor Joseph Mikels' study on exercise and older adults. When Johnson was injured at the beginning of last season, she channeled sports psychology principles to help stay mentally tough. Johnson benefited from other psychology fundamentals as well, especially the relationship between anxiety and performance.

Skorseth's career goal also relates to sports. Thanks to DePaul's Pathways Honors Program (see the spring 2016 issue of Scientia at bit.ly/ScientiaCSH), the health sciences major and computational physics and biology minor has already been accepted into the Dr. William M. Scholl College of Podiatric Medicine at Rosalind Franklin University of Medicine and Science (RFUMS) in North Chicago. While she could have enrolled after her junior year, Skorseth wanted to stay at DePaul to finish out her fourth year of athletic eligibility.

For the past two years, Skorseth has been pursuing an independent study with RFUMS Professor Patrick T. Knott on asymmetric running patterns and standing postures. Her paper on the subject is being readied for journal submission. "I really like how everyone in the athletics department understands that we also need to focus on our future careers," says Skorseth, who holds a 4.0 GPA, has won numerous scholarships and was named the most outstanding performer in DePaul cross-country and track in 2015. "On the flip side, the professors are incredibly supportive of our athletic involvement."



In fact, these student-athletes say that academics and athletics often complement each other in fruitful ways. "You develop focus and goal-setting very early on when you're an athlete," Lenti affirms. "I think that really helped when I was taking tests." Indeed, she recently scored in the 95th percentile on the Medical College Admission Test. "In basketball, studying for a game is like studying for a test," Podkova says. "When you learn a new play, you might not understand it at first, so you ask questions and study it, just like you do when learning something new in the classroom."

They are all quick to emphasize that support from family, friends, coaches, teammates and faculty members contributed hugely to their success. "One of the hardest things about college is figuring out where you fit in, but I had an instant family in the athletics department," Johnson says. Lenti adds that she became friends with CSH athletes across sports because they all spent so much time in the athletics center and science buildings. "Being an athlete is difficult. Being a science major is difficult," she says. "We definitely bond over those identities, and that makes for a tight-knit community."

As Podkova heads off to Ferrol, Spain, to play on the women's basketball team Star Center-Uni Ferrol, and Lenti works on her certified nursing assistant certificate before attending medical school, both recent graduates feel confident that DePaul's academic and athletic communities prepared them to meet these next challenges. "I would love to have the opportunity to play for the WNBA," Podkova says. "But if that doesn't happen, I can start taking tests to become an actuary. In terms of looking for a job, I already have connections through DePaul alumni."

Lenti's career goals started to take shape during her freshman year, when she was playing on both the basketball and softball teams. "I took a bunch of liberal arts classes because they fit best into my schedule," she remembers. "In my religion class, we read a book about a doctor serving the poor around the world, and it really spoke to me." At the time, Lenti was also in a microbiology course, which further solidified her sense that "science plus service was calling my name."

Now, she's working in Professor Southern's lab, applying to medical schools that offer service-focused programs and coaching a 16-and-under traveling softball team. "I couldn't have asked for anything else from my DePaul experience, thanks to the combination of amazing people in the science and athletics departments," she affirms.

Clockwise from top left: Paige Skorseth, Megan Podkova (CSH '16), Gena Lenti (CSH '16), Sonia Johnson

TALENT SHOW

CSH FACULTY AND STAFF REVEAL THEIR SECRET HOBBIES AND INTERESTS

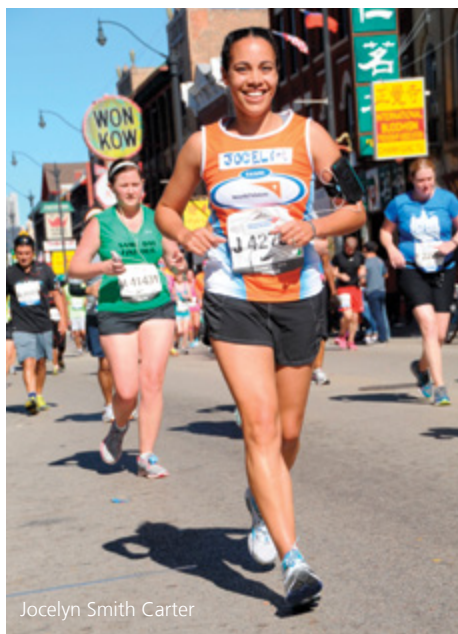
You might not know it based on their professional resumes, but CSH faculty and staff are an artistic, athletic and adventurous bunch. When the weekend rolls around, beloved members of the CSH community exchange lab coats for running shorts, pipettes for paintbrushes and dry-erase markers for guitar picks. "It's nice to have something separate from the 'life of the mind,' which preoccupies most of my time," says **Liam Heneghan (LAS MA '13)**, professor and chair of the department of environmental science and studies, who took up the tin whistle at 50 years of age. "I bet that's true for a lot of faculty."

Indeed. Read on to discover the hobbies that keep the CSH community alive and kicking.

THE SPORTING LIFE

"There are many runners on the faculty," notes **Jocelyn Smith Carter**, director of clinical training and associate professor, who has completed several marathons and other endurance events. Others who pound the pavement include **Erin Berkowitz (MED '14)**, director of advising, who was training for her 11th marathon in six years when this issue went to press, and **Carolyn Martineau**, senior instructor, who has run 13 marathons, including five world majors at Boston Marathon-qualifying pace (3:40 or below). "I teach an exercise physiology course in the biology department, including a unit on how human anatomy and physiology are adapted for endurance running," Martineau says. She's also an amateur poet who had one of her poems selected for a recent exhibit at the Chicago History Museum.

Those who favor shorter sprints include **Kyle Petersen**, associate professor, and **Nicole Hack (LAS '04)**, chemistry department assistant, both longtime soccer players. Petersen plays in a men's league on Sundays, while Hack frequently hosts women-only pickup sessions. "My involvement in Chicago's soccer community focuses on giving women



Jocelyn Smith Carter



Carolyn Martineau



Kyle Petersen (fourth from right in the back row)

more playing opportunities and a louder voice in the male-dominated soccer culture," she says. Hack co-founded CF97 Sirens, a group of women who support the Chicago Fire Soccer Club, runs a women's soccer Facebook group and previously worked for an adult soccer league. Meanwhile, **Kim Amer**, associate professor, racks up points at Midtown Tennis Club. She has played tennis twice weekly for the past two decades

Kathryn Grant, professor, who is learning to sail on her friend's catamaran, may want to pick up a few tips from **Karen Larimer**, assistant professor, who crews on a sailboat racing team out of Belmont Harbor every Saturday. Meanwhile, Sundays find **Sarah Richardson**, lecturer, canoeing, hiking or walking. Back in 2000, she made a New Year's resolution to get out into nature more often, and she's stuck to it ever since.

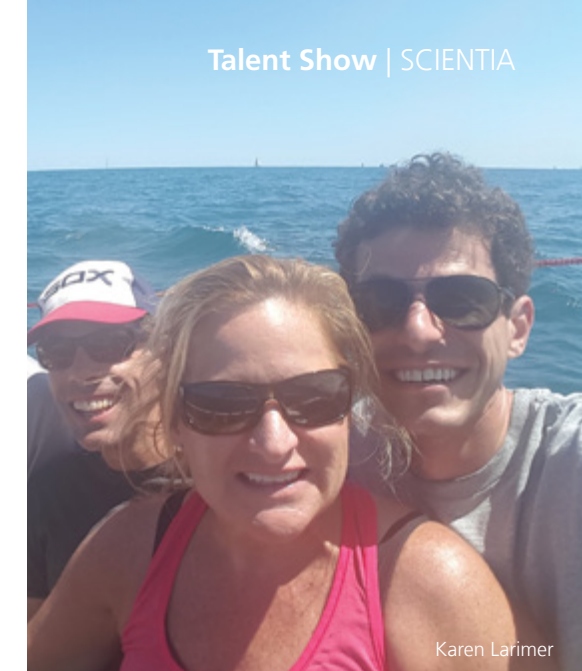
ARTS AND CRAFTS

Perhaps it's time to open an art gallery in McGowan South. The space could feature the acrylic paintings of **Marjorie Kozlowski**, interim assistant director for the Rosalind Franklin site and assistant clinical professor; the drawings and paintings of **Olya Glantsman (CSH MA '05, PhD '13)**, instructor; photographs from Business Administrator **Thelma Majalca's** travel website, *fernveh.com*; the wood-carved rocking horses of **Jan Costenbader**, senior instructional technology consultant and adjunct faculty; and felting works from **Naomi Leighton**, environmental science and studies department assistant, who has knitted, sewn, crocheted and embroidered but particularly loves the texture of felt.

Speaking of knitting, **Craig Klugman**, professor, picked up knitting needles a year ago and hasn't looked back; he's even knitted an anatomical heart, which was especially difficult due to its tiny stitches. "I love that knitting quiets and focuses the mind," he says. "I was initially inspired to try it after colleagues who knit at academic meetings told me it helped them pay better attention to the speakers, and I've found that's true." Fellow knitter **Mary Bridget**



Nicole Hack (LAS '04), right, with a teammate



Karen Larimer



One of Thelma Majalca's travel photos



Jan Costenbader



Marjorie Kozlowski's paintings

Kustusch, assistant professor, agrees. "I don't know what I would do during meetings and conferences if I didn't knit," she says.

Margaret Workman, instructor and laboratorian, sews and makes quilts, including a spectacular chemistry-inspired quilt that used a fabric called "Brainiac." That particular quilt was raffled off during a fundraiser for the American Chemical Society and the Chicago chapter of Iota Sigma Pi, a national honor society for women in chemistry.

MUSIC MAVENS

All they need is a band name. Between **Andrew Carroll**, assistant professor, on bass; **Michael Roberts (MED '02, MBA '09)**, assistant dean for academic services, and **Eric Norstrom**, assistant professor, on guitar; Kustusch on vocals and Heneghan on the tin whistle, CSH is ready to rock. You may have caught Carroll's band, No Alternative, covering the hits at a wedding, street festival or charity event. Roberts claims he's not a musician, but he's jammed on the guitar for 15 years now, and he leads an Explore Chicago course on the city's blues music scene for DePaul freshmen. For Norstrom, who has played guitar for 20 years, music is a way to both relax and brainstorm: "It's a nice occasional break from science, and it helps clear my mind to work on problems from new angles." Kustusch sang in a gospel choir as an undergraduate and sings, as well as cantors, at St. Benedict Parish.

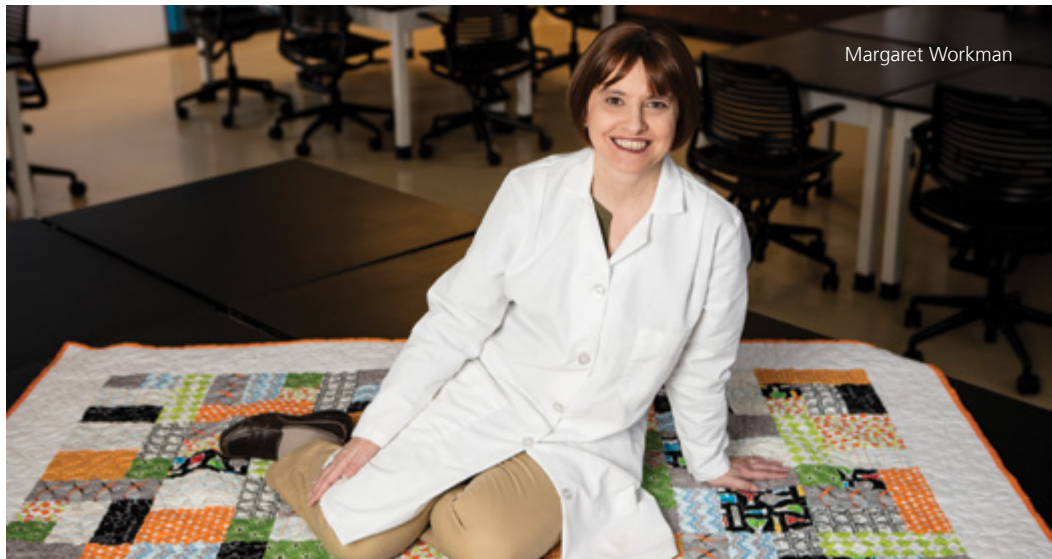
When he turned 50, Heneghan couldn't afford a Ferrari, so he settled for a less expensive midlife crisis. In Heneghan's native Ireland, the tin whistle is also called the penny whistle because it's so cheap. "I started taking lessons that summer, and I'm really rather fanatical about it, but not particularly good, mind you," he says. Nonetheless, after weekly lessons and daily practice for the past several years, Heneghan can play many of the traditional tunes and has even started writing his own songs, including "Fruit Fly on the Guinness Tap" and "The Cuckoo's Spit."



Mary Bridget Kustusch's niece in one of her knitted creations



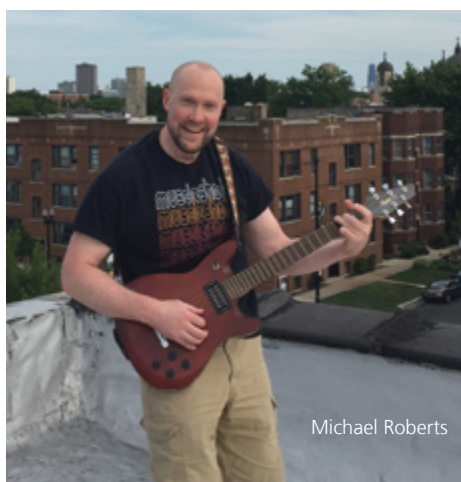
Craig Klugman's dog sweater



Margaret Workman



Andrew Carroll (second from left) with No Alternative



Michael Roberts



Photo credit: Padraic Heneghan

Liam Heneghan

ODDS AND ENDS

Sandra Virtue, associate professor, co-director of the neuroscience program and director of online learning, volunteers with Sit Stay Read, a nonprofit that pairs low-income students with reading buddies of the human and furry varieties. "The unique aspect of this program is that the volunteers bring their dogs into the classroom, and the students read stories to the dogs," explains Virtue, who has served on the organization's executive board and literacy advisory board. "It creates a nonthreatening environment for struggling readers and makes it so fun."

Joseph LeRoy, biology department assistant, has put his science training to good use making his own beers. "I use my background in biology and chemistry to understand more complex methods and theories," LeRoy says. "It's rewarding because after about six hours of tedious and hypersensitive work, you wait two months to find out whether you've screwed up or not. It doesn't always come out perfect, but when you get it right, it's pretty exciting."

Bridget Tenner, associate professor, dabbles in wheat-related projects as well, baking different kinds of bread throughout the year. "We are a bread-loving household," she says. "My mother taught me to bake when I was a child, and I've come back to it with gusto in the past few years."

John V. Dean, professor and chair of the Department of Biological Sciences, has a dozen bonsai trees in his backyard. It's a hobby he's cultivated—pun intended—since he was 15 years old.

We couldn't share the hobbies of CSH faculty and staff without mentioning **Dean Gerry Koocher's** birds: Joey, an orange-winged Amazon parrot; Goethe, an African grey parrot; and Sylvia, a blue-and-gold macaw. "Our first parrot was practice for having a child, and that daughter is now 35," Koocher quips. "Her first word was 'birdie.'" Joey, the oldest parrot, is 70 years old—yes, that's human years—while Goethe is 28 and Sylvia is a teenager with a 3-foot wing span. "They love to mimic humans as a way to attract attention," Koocher says. "One of their favorite phrases is, 'Is it good?,' which they say when they want a bit of human food."



Sandra Virtue and friends



Bridget Tenner's leaf bread



John V. Dean's bonsai trees



Dean Gerry Koocher with Joey and Goethe

LEVELING WITH

LEAD

Flint, Mich., isn't the only city dealing with lead issues. As of Sept. 1, more than 30 percent of Chicago Public Schools built before 1986 showed elevated levels of lead. In July, the Chicago Park District began testing the water fountains at the city's public parks after an investigative team from WLS-TV uncovered lead levels in excess of federal standards at two locations. In addition, the Chicago Tribune recently revealed that nearly 200 public water systems in Illinois showed dangerously elevated lead levels at least once in the past 12 years.

Though Chicago's lead concerns are a far cry from Flint's crisis, which was deemed a federal state of emergency after corroded pipes contaminated the city's water supply, public health fears are real and valid. **Jim Montgomery**, associate professor of environmental science and studies, explains why in this interview.

Why is lead so dangerous and who is most at risk? What are the possible health outcomes from lead exposure?

Lead is dangerous because it is a neurotoxin that causes irreversible damage to the developing brains and nervous systems of young children. Children under age 6 are most at risk for lead poisoning. Young children exposed to lead may display cognitive, behavioral and physical problems, including hyperactivity, reduced attention span, irritability, loss of appetite, constipation and difficulty sleeping. Chronic lead exposure in adults may result in reduced

kidney function, tremors, increased blood pressure and risk of hypertension, decreased cognition and hearing, and increased cardiovascular mortality. It may retard fetal growth in pregnant women. One important point to remember is that there is no "safe" level of lead, and it is now thought that exposure to even low levels of lead can be deleterious to human health. Lead poisoning is preventable, and it is not contagious.

What are the most common ways individuals are exposed to lead?

Sources of lead include lead paint, household dust, soil, water, workplaces, old painted toys and furniture, home remedies, foods and liquids stored in lead crystal or lead-glazed pottery, and hobbies that use lead solder. Exposure pathways include ingestion, inhalation of lead dust, absorption through the skin and mother-to-fetus blood transfer. Lead is still commonly found in homes built before 1978, when lead-based paint and leaded gasoline were both widely used. Both are now banned in the United States.

Parents of children under age 6 should be particularly aware of potential lead hazards, including lead water-service lines, lead-based paint on exterior and interior residential surfaces and the potential for lead in the soil around their home. If the levels are within the Centers for Disease Control and Prevention's federal guidelines, then there is no reason to panic, but given that there is no safe level of lead, parents should always be vigilant of the exposure

pathways and monitor changes in their children's behavior.

Why is lead so difficult to eliminate from our lives? Can we protect ourselves against lead exposure? How?

Lead is ubiquitous in the environment. As a heavy metal, it does not degrade. Its health impacts have been known since ancient times. That said, we can protect ourselves against exposure by doing the following:

- Wash fruits and vegetables before eating.
- Exercise caution in controlling lead-based paint dust if renovating a home and always wear a dust mask.
- Wash children's toys frequently.
- Remove shoes at the door and hose the front steps.
- Minimize dust using a HEPA vacuum and wet-wash hard surfaces.
- Cover exposed, bare soil with mulch or vegetation.
- Have water and soil tested for lead.
- Test children under age 6 for elevated lead levels.
- Wash pets frequently and brush them outside.
- Replace lead water-service lines.
- Install a filter rated to remove lead on sink taps.

It's time to
take a cold,
hard look at
lead exposure
in Chicago

MS. MAXIMIZER

Meet an alumna whose idea of success is helping others reach their full potential

Certified executive coach **Monika Black (CSH PhD '12)** is the type of person who hears "yes" when others hear "no." Where most people see obstacles, she sees opportunities and options. This fearless tenacity and optimism, not to mention a tough-as-nails work ethic, laid the foundation for Black's entrepreneurial career path and gave her the gumption to achieve three advanced degrees. Black is the co-founder of TandemSpring, a consulting firm that helps organizations and their employees leverage their strengths, as well as chief strategy officer at DyMynd, which empowers women to become financially savvy. Both companies use strengths-based assessments to guide clients in meeting their personal and professional goals.

Black is a maximizer—it's her primary strength, and it shows in everything she does. As an undergraduate at the University of Michigan, she was discouraged from majoring in pre-med because she was a standout track star in the high jump. "They told me it was going to be really difficult for me to manage everything," she remembers. Black didn't even blink. Not only did she excel in her classes—including her favorite course, organic chemistry—but also she was a four-time All-American, three-time track-and-field captain and winner of the Big Ten Medal of Honor for excellence on and off the field. Black remembers fans complaining that she didn't run a victory lap after winning her event at the Prefontaine Classic at the University of Oregon because, true to form, she was sitting on the track writing a paper.

"I love to work, and I love to work hard," Black says. She regularly puts in 10- to 12-hour days, but it's clear that this effort brings her joy, whether she's leading a workshop, coaching a client



one on one or aligning an organization's strategies with its stated goals. "Helping people reach their full potential in life—that's what motivates me," she says.

As a doctoral student in DePaul's community psychology program, Black found the tools to articulate her vision: "I'm always trying to understand the research and the data, but I also want to know, 'What do those numbers mean for the people actually living that experience?'" She uses this ecological framework to help her clients recognize the overlapping influence of personal, environmental and social factors on their dreams, abilities and achievements.

Listening is also key. Black strives to listen beyond the words to hear the emotional tenor or ellipses in her clients' stories. As they share their experiences with Black, they often come to a moment of clarity. "One widow realized she'd been told that 'money isn't for women' her entire life, and now that's an emotional obstacle preventing her from managing her family's money," Black says. "Another woman said she prefers credit unions to traditional financial institutions because the latter have never taken her seriously as an individual of high net worth."

Black stresses that women of any means have the capability to be the CEO or CFO of their own lives, in part, by aligning their values with their financial plan. "That doesn't have to be something you put on hold until you make money," Black notes. As a case in point, she serves on the advisory board for The Theatre School at DePaul and also teaches in both the psychology department and the peace, justice and conflict studies department. Unsurprisingly, she encourages her students to match their strengths to their passions. "We can't keep telling our students, 'not yet,'" she says. "I don't think they should wait to start making an impact in areas that matter to them."

Four Awesome Monika-isms

Keep Your Engine Fueled.

Many of us are taught to take care of others, and then we wonder why we burn out. Take care of yourself first so that you can be of further service to others.

Know That You Have Everything You Need.

You were enough yesterday, which is more than enough for today. Tomorrow you are certain to be nothing short of amazing. Know that, and don't let anyone tell you otherwise.

Keep It Simple.

The path to radical transformation is paved with simple truths.

Know What Game You Are Playing.

Your life should not be about climbing the corporate ladder; it should be about becoming your truest self. You will win at the game of life once you are truly successful at being you.

LAB NOTES



DEPAUL DYNAMOS

Internal awards and honors are streaming in. Professor **Susan McMahon** (CSH MA '92, PhD '96) and Professor **Kathryn Grant** were inducted into the Society of Vincent de Paul Professors. The college honored Professor **Kenshu Shimada** (above), a paleobiologist who has published nearly 100 papers during his career, with the 2016 CSH Excellence in Research Award. **Erin Berkowitz**, director of advising, won the Gerald Paetsch Academic Advising Award. Associate Professor **Bernhard Beck-Winchatz** is vice president-elect of the Faculty Council.

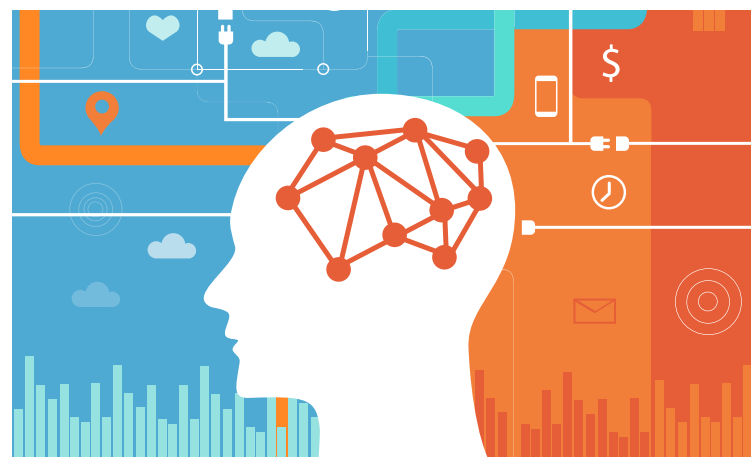
APPLAUSE PLEASE

Faculty members are also racking up external awards and honors. Professor McMahon, associate dean for research and faculty development and Vincent de Paul distinguished professor, was elected president of the Society for Community Research and Action, Division 27 of the American Psychological Association. Fellow psychologist Professor **Joseph Ferrari**, also a Vincent de Paul distinguished professor, received the 2016 Distinguished Italian American Psychologist Award from the Italian American Psychological Society. Assistant Professor **Joseph Tariman** was inducted as a fellow of the American Academy of Nursing in October.



BRAGGING RIGHTS

You may have heard of the Crosstown Classic, but do you know about the Cross McGowan Classic? It's the annual Team Bio versus Team Chem softball game for faculty, staff and students. This year, Team Bio pulled out the win.

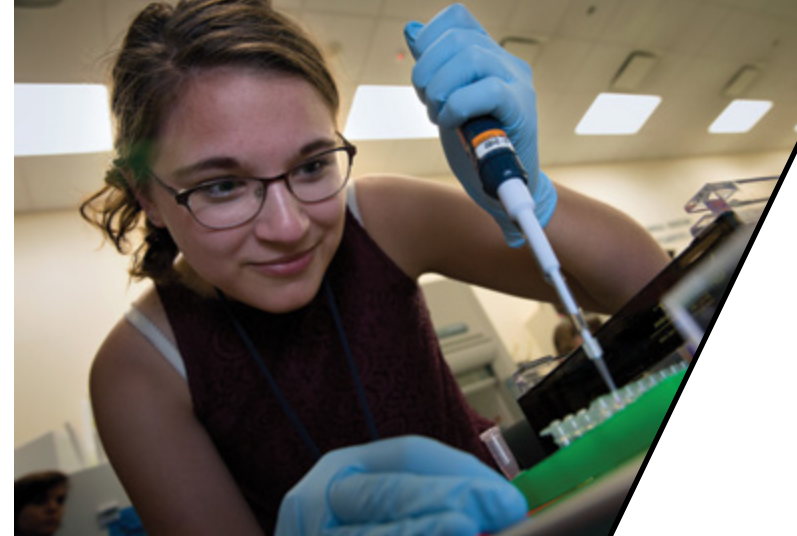


NOW PRESENTING NEUROSCIENCE

The college now offers an interdisciplinary BS in neuroscience degree that draws from the natural, behavioral and computational science fields. Those who major in this field will study the function of the nervous system on a cellular and molecular level, examine how the nervous system produces behavior and cognition, and discover the role of computer science and mathematics in new neuroscience-related technologies and therapies.

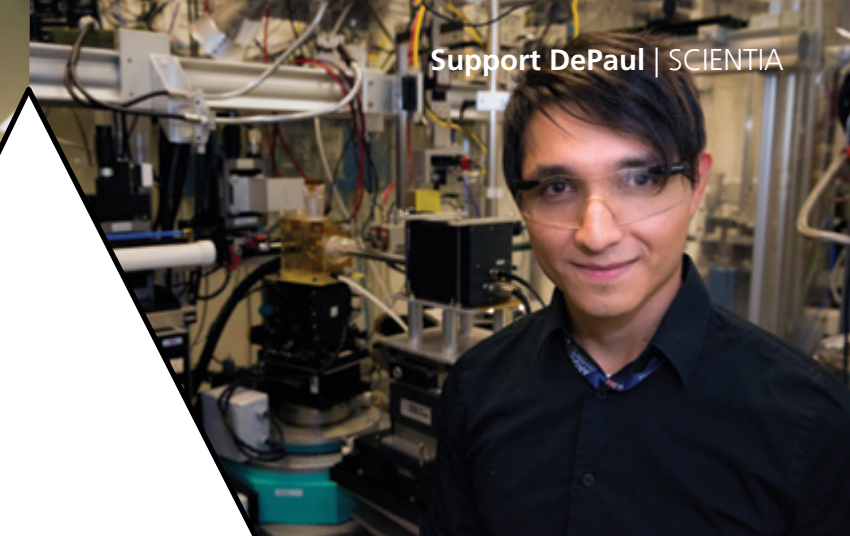
MOVING ON UP

Four faculty were recently promoted to associate professor with tenure: **Christopher Drupieski** in mathematical sciences, **Young-Me Lee** in nursing, and **Windsor Aguirre** and **Jingjing Kipp** in biological sciences.



"Our primary project for the summer was to extract, prepare and analyze the DNA of lichens, specifically *Pseudocyphellaria glabra*, that were collected in Australia and Tasmania this past winter. This experience gave me the chance to learn about a whole new area of science, and it has steered my future career path toward incorporating DNA work into my studies."

—Chloé Williams, *The Field Museum*



"One thing I learned from my experience is that no one is an expert at everything. Sometimes you have to struggle a little before finally coming to a solution, and most of the time, the answer you're looking for won't be in any of the manuals. I became a more efficient problem-solver thanks to this fellowship."

—Fabricio Marin, *Argonne National Laboratory*

SUMMER SCIENCE

This past summer, 12 CSH students received funding to perform research, assist scientists and gain hands-on experience at sites throughout Chicago. The students were supported by the Dean's Undergraduate Research Fellowship.



"At the Shedd Aquarium, I was allowed to carry out a nearly independent research project. The purpose of my project was to analyze and compare insect populations in different secluded areas of the Shedd gardens. When I ran into problems, I immediately conducted my own research to come up with a way to fix it. It was really inspiring to carry out the entire scientific process on my own."

—Kirby Karpan, *Shedd Aquarium*



"My fellowship at the Lincoln Park Zoo taught me a lot about wildlife living in an urban environment. I was responsible for tracking the populations of black-crowned night herons, turtles and garter snakes. I'm grateful that this fellowship provided me with an opportunity to gain experience handling animals and understand how to use data collected from animals."

—Joey Gagliardi, *Urban Wildlife Institute, Lincoln Park Zoo*

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