CREIGHT ON

The Promise and Pitfalls of Big Data

> A Question of How We Learn

So You Want to be an Author?

Stopping the Cycle of Urban Crime

Giving Hope a Hand

Persuasion: Why we do it. What it takes to do it well. And why we should care.

Dear Friend, Dear Friend, Believe Nev, NUST Jou Just Story Jou This Story

In the Garden

Students, alumni, faculty, staff and visitors are enjoying the newly illuminated Jesuit Gardens on Creighton's campus. Cheryl and Jerry McKay of Omaha, whose daughter Claire, BS'14, graduated from Creighton in May, provided the lighting for the peaceful setting, which includes the popular grotto area.



CREIGHTON

Volume 30, Issue 2

Publisher: Creighton University; Timothy R. Lannon, S.J., President. *Creighton University Magazine* staff: Rick Davis, Director of Communications; Sheila Swanson, Editor; Cindy Murphy McMahon, Writer.

Creighton University Magazine is published in the spring, fall and winter by Creighton University, 2500 California Plaza, Omaha, NE 68178-0001. Address all mail to Marketing and Communications, Omaha, NE 68178. Postmaster: Send change of address to Creighton University Magazine, P.O. Box 3266, Omaha, NE 68103-0078.

For enrollment information, contact the Undergraduate Admissions Office at 800.282.5835, admissions@creighton.edu.

To make a gift to the University, contact the Office of Development at 800.334.8794 or visit creighton.edu/development.

For the latest on alumni gatherings, contact the Alumni Relations Office at 800.282.5867 or check online at **alumni.creighton.edu**.

View the magazine online at creighton.edu/creightonmagazine

creighton.edu

Copyright © 2014 by Creighton University Recycled and Recyclable Printed with Soy Ink

Creighton University Magazine's Purpose

Creighton University Magazine, like the University itself, is committed to excellence and dedicated to the pursuit of truth in all its forms. The magazine will be comprehensive in nature. It will support the University's mission of education through thoughtful and compelling feature articles on a variety of topics. It will feature the brightest, the most stimulating, the most inspirational thinking that Creighton offers. The magazine also will promote Creighton, and its Jesuit, Catholic identity, to a broad public and serve as a vital link between the University and its constituents. The magazine will be guided by the core values of Creighton: the inalienable worth of each individual, respect for all of God's creation, a special concern for the poor, and the promotion of justice.

Message from the University President

As I begin my final academic year at Creighton, I am energized by the formidable momentum across the campus. I also recall my first days here as a college freshman, and the excitement, nervousness and anticipation I felt. Each year as we welcome a new class, I see the same emotions on our students' faces and it takes me back to 1969. I am thrilled for them because I know how life-changing their years at Creighton will be. You can learn more about the exceptional Class of 2018 inside this issue of *Creighton University Magazine*.

You'll be proud to know that Creighton again received a No. 1 Midwest ranking, for the 12th consecutive year, in

U.S. News & World Report's "Best Colleges." The University also was the Best Master's University in the *Washington Monthly College Guide* and named among the 2015 "Best 379 Colleges" by *The Princeton Review.*

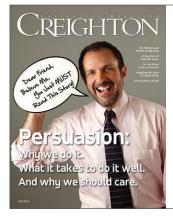
We recently honored seven professors many will remember. These faculty-mentors, after decades of dedicated service, are now emeriti members of the Creighton community: Don Doll, S.J., professor emeritus of photojournalism; W. Patrick Durow, Ph.D., assistant professor emeritus of education; M. Dennis Hamm, S.J., Ph.D., professor emeritus; Richard J. Hauser, S.J., professor emeritus of theology; Robert P. Heaney, BS'47, MD'51, John A. Creighton University Professor, emeritus; William Hutson, Ph.D., associate professor emeritus of theatre; and James E. Platz, Ph.D., professor emeritus of biology.

We have begun our second year in the BIG EAST Conference after a spectacular inaugural year. The entire University received outstanding exposure from a refreshed athletic brand and extensive coverage of men's basketball and standout Doug McDermott, BSBA'14. An integral part of our east-campus athletic/fitness/recreation corridor, the Championship Center for our student-athletes was completed and we are so thankful to our donors for their leadership and support.

I am pleased there are plans to increase collaboration among the six universities in the Wisconsin and the Chicago-Detroit Provinces of the Society of Jesus. The presidents of the universities (Creighton, Marquette, Detroit Mercy, Loyola Chicago, Xavier and John Carroll) are discussing areas for future collaboration, including sustainability, immersion opportunities and faculty development, which will benefit all of our students.

The holidays are approaching soon and I want to express my sincere best wishes for you and your families. We are so grateful for you — our alumni, parents and friends — and the many ways you are striving to make Creighton an even better university.

Timothy R. Lannon, S.J. President



Magazine Schedule Includes New Digital-Only Edition

Creighton University Magazine will be published three times during the 2014-15 academic year. In addition to this issue, a print edition will be mailed to the homes of alumni in May. A digital-only edition of the magazine will be published in February, aligning with Creighton's sustainability efforts. **Alumni will be notified via email when that issue is available.** To receive the notification, please make sure we have your latest email information on file. Please send your name, phone number, address and current email to *alumninews@creighton.edu* or call 800.282.5867. Those who update their information on or before Jan. 1, 2015, will be placed in a drawing for more than 100 Creighton prizes. Winners will be announced in the digital issue.

FALL 2014

CREIGHTON

Persuasion: Why we do it. What it takes to do it well. And why we should care......14

From the pulpit to legislative chambers to corporate offices, the ability to convince others to follow a cause, support a certain idea or purchase a specific product is a valuable skill. How do we best use rhetoric to capture an audience, sway the undecided and convert the opposition? Creighton faculty examine the art of persuasion.

The Promise and Pitfalls of Big Data......18

Big data has profound implications for consumers and a range of industries. While the use of large amounts of data may provide big promise, there are also pitfalls, such as the epic cyber attack at Target last year that resulted in millions of stolen credit card numbers. Creighton faculty take a look at the good and bad of big data.

A Question of How We Learn......22

Education has advanced peoples and civilizations since the dawn of humankind. So how do we, as humans, best learn? And what teaching methods help us achieve that goal? Creighton faculty and staff explore how the ancient philosophers viewed education and give insight into the learning process of today's students.

So You Want to be an Author?26

There's no secret formula to becoming a best-selling author. Creighton's award-winning English faculty offer some common perspectives on the hurdles writers face. These faculty also teach in Creighton's new Master of Fine Arts in creative writing program.

Dawn Irlbeck, Ph.D., and Rebecca Murray, Ph.D., of Creighton's Department of Sociology, Anthropology and Social Work, along with other faculty members, look at programs across the U.S. that have worked in reducing urban crime, and the need for empowerment and victim assistance.

Through the Mechanical Hand Project Group, Jorge Zuniga, Ph.D., assistant professor of exercise science, is using 3-D printing technology to research and design low-cost mechanical hands for those who need them, particularly children. For Zuniga, who grew up on the poor streets of Santiago, Chile, this scientific pursuit is personal.



Director of Communications — Rick Davis, richarddavis@creighton.edu Editor — Sheila Swanson, sheilaswanson@creighton.edu

Update your mailing address or send alumni news (births, weddings, promotions, etc.) alumninews@creighton.edu | 800.334.8794 or mail to Office of Development, Creighton University, 2500 California Plaza, Omaha, NE 68178



New Complex Designed with Community in Mind

A new healthcare facility at 24th and Cuming streets, designed to meet the needs of the community, will provide Creighton University health sciences students and medical residents a top-notch learning environment.

The University, its clinical partner CHI Health and other community partners recently announced the new Creighton University Medical Center (CUMC) University Campus, planned to open in late 2016. The 90,000-square-foot building will include 60 outpatient exam rooms for primary care and specialties such as women's health, behavioral health, cardiology, orthopedics and more.

The complex represents one half of what will be the co-located academic medical



center. Inpatient and trauma services now offered at the existing CUMC will relocate several miles southwest to the Bergan Mercy campus in 2017.

"This complex will feature care designed for people who need to see a doctor, but don't need a hospital," according to Kevin Nokels, president of CUMC and project director. "New to the community will be a freestanding emergency department that will provide emergency care exactly like you would find in a hospital."

The \$35 million complex, funded by CHI Health, resulted from working closely with all stakeholders, including physicians, employees, northeast Omaha community partners and elected officials.

Site preparation will begin before the end of the year, with construction starting in the spring of 2015.

Smartphone Survey Rings Up National Attention

A research survey by a Creighton University business professor has garnered national media attention and fueled the debate on whether smartphones should be required to have antitheft technology.

William Duckworth, Ph.D., associate professor of statistics, data sciences and analytics, surveyed 1,200 smartphone users between the

ages of 18 and 65 in February to determine their support of "kill switch" technology — a term commonly applied to remote-controlled antitheft technology designed to permanently disable phones when lost or stolen.

Duckworth's research showed that 99 percent of smartphone users feel that phone manufacturers and wireless carriers should give consumers the option to permanently disable their phones if they are stolen, and 83 percent believe that a kill switch would reduce mobile phone theft.

"I figured the number would be around 60 or 65 percent," Duckworth says, "but it turned out to be 99 percent. To me, any time that you get 99 percent agreement, that is pretty conclusive."

In 2012, Americans spent about \$580 million replacing 1.6 million stolen smartphones, according to *Consumer Reports.* (That nearly doubled to 3.1 million stolen smartphones in 2013.) Consumers spent another

\$4.8 billion paying for premium cell phone insurance from wireless carriers. Duckworth's research suggests that kill switch technology could save consumers much of that cost.

"At least half of smartphone owners would reduce their insurance

coverage if a free kill switch reduced the prevalence of cell phone theft," says Duckworth.

A stolen phone can sell for as much as \$800 in the U.S. or abroad, according to Duckworth, and be worth more than a computer tablet or laptop. Rendering a phone useless within minutes of being lost or

stolen would reduce the demand for stolen phones and the chance that cell phone users could be victims of related street crimes. It would also save them the substantial cost of phone replacement.

"Overall, it seems clear that Americans want the kill switch, and that industry-wide implementation of kill switch technology would improve public safety and save consumers billions of dollars," Duckworth says.

Duckworth's research has been reported in national and international media — including the Associated Press; National Public Radio; The Huffington Post; PC World; and MSNBC's "Consumer Man," Herb Weisbaum, one of the country's top consumer advocates.

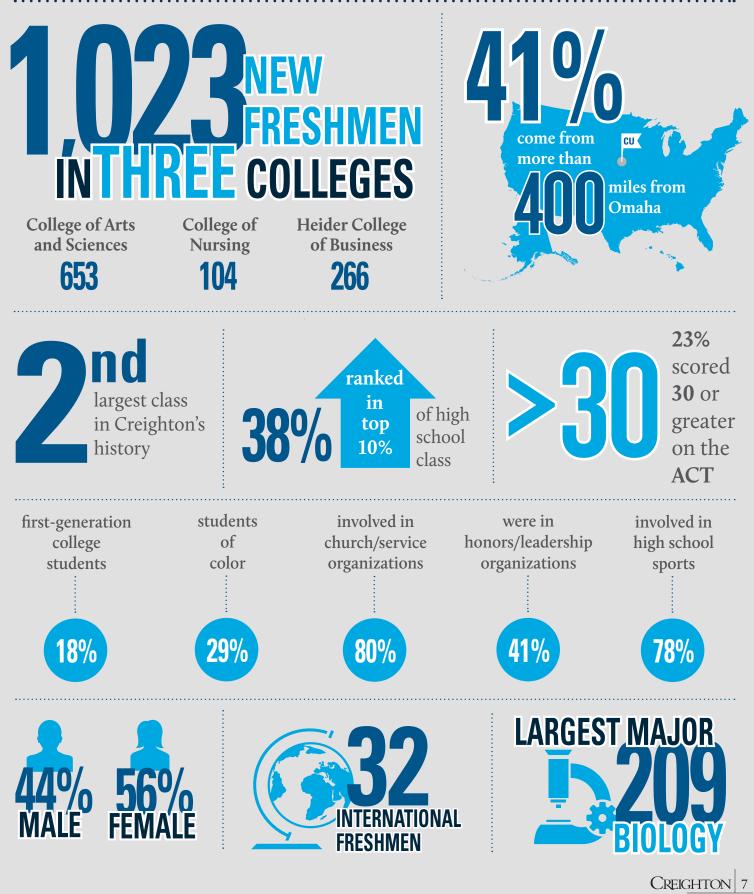
In April, major cell phone manufacturers (including Apple, Google, Samsung, Motorola and Microsoft) — along with the five biggest U.S. carriers — announced through the wireless association CTIA a voluntary

industry commitment to offer opt-in kill switch technology by 2015, at no cost to consumers.

Several bills requiring that the technology be installed in new phones have been introduced in Congress.



The Class of 2018: By the Numbers



Fall 2014

Championship Center Honors Past, Sets Stage for Future

As 400 bandana-waving, kazoo-wielding guests joined the musical group Bill Scott and Friends in a rousing rendition of "The White and the Blue," the Championship Center, Creighton's \$13 million, 42,000-square-foot gift from loyal donors and friends and an integral piece of the University's east campus athletic/fitness/ recreation complex, opened its doors in June.

Serving primarily as the practice facility for men's basketball, the center offers outstanding amenities for student-athletes in every sport, including a state-of-the-art athletic performance center with cuttingedge weight training and cardio equipment. An athletic training center features a hydrotherapy room with HydroWorx therapy pool, underwater treadmill and a polarplunge pool for treatment and recovery.

Student-athletes and coaches will be able to view game film and play-by-play performances in a combination video/lecture room, complete with theater-style chairs and a big screen. An academic resource center features offices, tutoring areas, large-group and private study rooms, open-area study tables and countertops for laptop computer use.

Assistant coaches' offices named for coaching legends Dana Altman, Tom Apke, Tony Barone, John "Red" McManus and



Creighton basketball player Devin Brooks joins Coach Greg McDermott and Bill (left) and John Scott in singing "When the Jays (Saints) Go Marching In" during the dedication of the Championship Center on June 12.

Eddie Sutton offer meeting space for recruits and their families, high school coaches and others.

The head basketball coach's office overlooks D.J. Sokol Gymnasium and Kyle Korver, BA'03, Courts, named for the former Bluejay All-American who now plays for the Atlanta Hawks. Rivaling the quality of floors found in NBA practice facilities, the courts are designed to minimize bodily stress and reduce injuries.

Athletic Director Bruce Rasmussen says the new facility conveys Creighton's



The Championship Center's practice courts are named for former Bluejay All-American Kyle Korver, BA'03.

commitment to be nationally relevant with a number of sports, a feeling echoed by BIG EAST women's basketball Player of the Year Marissa Janning.

"To any potential recruit, I would say that Creighton really does have some of the finest facilities available," Janning said. "Together, the four buildings in the complex have nearly everything a student-athlete could want or need."

More than 500 donors contributed to the Championship Center. Creighton honored all donors in June, thanking Rhonda and Howard Hawks, Wayne Ryan, Connie Ryan, Ruth and William Scott and the Scott Family Foundation for taking the lead on the project to accelerate the completion of the center, which had been slated for development in the University's long-range master plan.

"Their significant commitments are helping our athletic program reach new heights," Rasmussen said.

"Our gratitude actually extends back to before the building began to materialize," said Creighton President Timothy R. Lannon, S.J. "A gift from the Peter Kiewit Foundation allowed Creighton to purchase the land where the facilities are located."

Other buildings in the athletic complex include the Wayne and Eileen Ryan Athletic Center and D.J. Sokol Arena; Michael G. Morrison, S.J. Stadium; and the Rasmussen Fitness and Sports Center.

REIGHTON Fall 2014

"Many principles of human rehabilitation can also be utilized on animals to help them recover from common injuries and restore mobility following surgical interventions."— Kirk Peck, Ph.D., PT

Canine Rehabilitation

As a certified therapist in canine rehabilitation, Kirk Peck, Ph.D., PT, assistant professor of physical therapy, right, (with his dog, Bella) applies his knowledge of human physical therapy to restore function in animals. Although the concept might appear strange to the outside observer, consumer demand to receive the best possible care for pets has created a new market for experts in rehabilitation science. Read more.

Web Extras

SI Spotlight Shines on Creighton

Creighton All-American Doug McDermott, BSBA'14, appeared on the cover of the March 17 edition of *Sports Illustrated*. McDermott finished his collegiate career with multiple national player-of-the-year honors.

The cover photo replicated a 1977 cover featuring a collegiate Larry Bird, who McDermott passed on the all-time NCAA scoring chart his senior year. (Of course, Bird, the former Indiana State All-American, went on to a Hall-of-Fame

career with the Boston Celtics.)

McDermott, however, wasn't the only Creighton student featured on the cover. *Sports Illustrated* also selected two members of the Creighton dance team to pose alongside McDermott, Kayleigh Begley (left) and Kelsey Saddoris.

Read more about their experience and McDermott's whirlwind draft day.





Asthma and the Elderly

Robert Townley, MD'55, professor of medicine and medical microbiology and immunology at Creighton, cautions that the rising rates of asthma nationwide and the aging of the U.S. population could result in more elderly suffering from asthma. Currently, 6 to 10 percent of seniors may have asthma, according to the American Academy of Allergy, Asthma & Immunology, and asthma-related deaths are highest among those 65 and older. Read more.

> CREIGHTON 9 Fall 2014

A Legacy of Justice: Remembering El Salvador's Jesuit Martyrs

Twenty-five years ago on Nov. 16, six Jesuits, their housekeeper and her daughter were murdered at the University of Central America (UCA) by a Salvadoran death squad. Creighton is commemorating the legacy of these peaceful martyrs throughout the year. This summer, nine alumni, faculty, staff and St. John's Church members traveled to El Salvador as part of a 46-member Ignatian Solidarity Network (ISN) delegation. The group studied the lives of those who were killed and sought to understand human rights issues facing El Salvador.

Creighton Magazine interviewed two Creighton community members who are actively involved in anniversary events: Roger Bergman, Ph.D., Justice and Peace Studies program director, and Jeff Peak, assistant director of the Creighton Center for Service and Justice (CCSJ), who was part of the ISN delegation.

What makes this tragedy relevant 25 years later?

Bergman: The assassinations at the UCA remind all of us in Jesuit higher education that we are not just another university competing for students, prestige and research dollars. The six Jesuits were killed because they made a commitment to truth, human rights and peace in the midst of a long civil war. And they did so as faithful Christians who responded to the needs of the poor majority of Salvadorans suffering severe repression at the hands of a government and military supported by U.S. tax dollars. Their witness is relevant 25 years later because other injustices today also demand the commitment of our best academic and human resources.

Peak: The vision of Ignacio Ellacuría, S.J., one of the martyrs, was that universities should be at the center of the fight to change unjust structures in the world. He and his companions paid a steep price for that vision. As we commemorate the anniversary of their deaths, it's important that

universities, Creighton included, continue the vision of Fr. Ellacuría.

How do you hope Creighton's various commemorations will affect teaching and service and have an even wider impact?

Bergman: Most of our students were born after 1989, so very few know about the UCA martyrs in any depth. I hope retelling the story will cause them to think that perhaps a Jesuit education means more than a prestigious degree, that it is both a privilege and a responsibility.

Peak: Creighton students do things such as advocate for just, humane, comprehensive immigration reform and this has tangible implications for many of the families that I met in El Salvador. We have students advocating for economic justice for those in poverty, and this too can have global implications.

How do you share the significance of this event so it's meaningful to students?

Bergman: Since 2005, 15 Justice and Peace Studies (JPS) seniors have received the Ignacio Ellacuría, S.J., Outstanding Student Award from the JPS program and the Creighton Center for Service and Justice. The award calls attention to the continual need to commit our intellectual and leadership talents to the common good and solidarity with the poor, each in our own way and according to our individual



Brian Kokensparger, a faculty member in the Department of Journalism, Media and Computing in the College of Arts and Sciences, reflects on the violent deaths that occurred 25 years ago in El Salvador. The memorial rose garden was planted in the yard of the former Jesuit residence at the University of Central America by the husband of Elba Ramos, the housekeeper who was slain.

circumstances. Also, this fall I am teaching an in-depth seminar on the martyrs. Living with that story for one semester should allow each student ample reflection on what a Jesuit education means.

What was the most powerful aspect of the trip to El Salvador this summer?

Peak: I didn't need to join the ISN delegation to El Salvador to experience injustice. I can walk around campus and hear stories of injustice. I can walk off campus and hear stories of injustice. Because I went, though, I experienced a powerful reminder of the interconnectedness of the world. Martin Luther King Jr. was right when he said, "Injustice anywhere is a threat to justice everywhere."

I walked on holy ground in El Salvador and my work with Creighton students is now more deeply rooted than ever in the faith that does justice. Not every student knows the story of the Salvadoran martyrs, but hopefully as I recount my experiences from the trip, it will inspire another generation to want to live in a more just world.

For more on Creighton's commemorative plans, visit *creighton.edu/jesuitjustice.*

health briefs

Urology Residency Nation's First in 10 Years

Creighton University and CHI Health Alegent Creighton Clinic have established a urology residency program at the School of Medicine. The Creighton program is the nation's first new urology residency in 10 years.

Urology is a competitive specialty, with 123 programs across the country producing



about 280 urologists a year. Currently, more urologists are retiring than are being trained and a shortage of urologists by 2020 is predicted.

The new residency program is the first Creighton has added

since 2005 and becomes the 16th medical specialty or subspecialty residency or fellowship the University offers. The urology program was approved for one resident each year for the four-year program. Larry Siref, M.D., is directing the program and the first resident will match in January 2015.

New Health System Name Imagines Better Health

CHI Health is the new name for the regional health system formed by the combined CHI Nebraska and Alegent Creighton Health network. *Imagine Better Health* is CHI Health's new tagline.

Alegent Creighton Health was the name of the faith-based health care system



formed in 2012 when Creighton

University and Alegent Health finalized their clinical and academic partnership.

The newly named CHI Health is the largest healthcare network covering Nebraska, southwest Iowa and northern Kansas. It includes 15 acute-care hospitals, an academic medical center, Level 1 trauma center, two freestanding inpatient psychiatric facilities, a Commission on Accreditation of Rehabilitation Facilitiescertified rehabilitation center, an American College of Surgeons-verified burn center and two networks of multi-specialty clinics with nearly 200 locations.

The Creighton name remains attached to the academic medical center: CHI Health Creighton University Medical Center. Alegent Creighton Clinic (the physician practice group) now is CHI Health Alegent Creighton Clinic.

CHI Health is affiliated with Coloradobased Catholic Health Initiatives, one of the nation's largest faith-based nonprofit health systems.

Nursing Professors Cited in Simulation Study

College of Nursing professors Kim Hawkins, Ph.D., Maribeth Hercinger, Ph.D., Julie Manz, Ph.D., Martha Todd, Ph.D., and Mary Tracy, Ph.D., played a key role in a national simulation study commissioned by the National Council of State Boards of Nursing (NCSBN). They were recognized for developing the Creighton Competency Evaluation Instrument, which was used in the study to evaluate student performance.

The study provided substantial evidence that substituting high-quality simulation experiences for up to half of traditional clinical hours in nursing education produces comparable educational outcomes and graduates who are ready for clinical practice.

EMS Strengthens Ties With Saudi Arabia

Creighton's Emergency Medical Services (EMS) program, celebrating its 40th anniversary as well as 20 years since conferring its first bachelor's degree, is known around the globe.

"Creighton's program was among the first to be accredited," says Mike Miller, assistant professor and director of the EMS program. "Almost 600 EMS programs now seek accreditation from the Commission on Accreditation of Allied Health Education Programs. Creighton was No. 17."

Four years ago, Creighton began to nurture a connection with King Saud University (KSU) in Riyadh, Saudi Arabia, and the Prince Sultan bin Abdulaziz College of Emergency Medical Services, which was created to meet Saudi Arabia's growing need for trained EMS professionals.

EMS alumnus and former instructor

William Leggio, BSEMS'09, MS'10, EdD'13, teaches emergency medical technician (EMT), paramedic and critical care provider courses at KSU, directs the simulated education program and has helped develop the EMS Forum, an international gathering of EMS experts. This fall, KSU is sending 18 EMS students to Creighton for nine months for a clinical internship.

Over four decades, thousands of individuals have completed Creighton's certificate-level EMT course; paramedics



After giving a presentation at King Saud University in May, William Leggio, left, receives a gift from Khalid Fouda Neel, dean of Prince Sultan bin Abdulaziz College for Emergency Medical Services, center, and Badran Al-Omar, rector of King Saud University.

with advanced preparation number in the hundreds. Creighton has conferred 207 bachelor's-level and 22 associate-level degrees — for a total of 229 degrees.

CAD/CAM Technology Advances Dental Training

The new Wilwerding-Di Lorenzo Digital Technology Center brings cutting-edge computer-aided design and computer-aided manufacturing (CAD/CAM) technology to students in the School of Dentistry. CAD/CAM technology generates high-quality dental restorations, often in only one patient visit, and is increasingly used in dental practices.

The center was established with a lead gift from alumnus Arne Ness, DDS'77, in honor of his classmates and longtime faculty members Terry Wilwerding, DDS'77, and Scott Di Lorenzo, DDS'77.

Creighton Students Named Fulbright, Goldwater Scholars

Sponsored by the U.S. Department of State, the **Fulbright Program** was created by Congress in 1946 to help build international cooperation. It is the largest international exchange program in the country, offering opportunities for students, scholars and professionals to undertake graduate study, advanced research, university teaching and teaching in elementary and secondary schools. Approximately 7,500 grants are awarded annually for study in 155 countries. This past academic year, two Creighton students, who graduated in May, received the award.

The highly competitive **Goldwater Scholarship Program** was established in 1986 to provide a continuing source of scientists, mathematicians and engineers bound for research careers. Only 283 college sophomores and juniors received awards in 2014, including three from Creighton University, placing Creighton in an elite group of 25 private institutions to have produced seven or more scholars in the past five years, and the No. 1 producer of Goldwater scholars among Catholic universities for that time period.

Mary Wade, BS'14, Rapid City, S.D., Fulbright

This mathematics and economics major learned firsthand about struggling economies and corruption in post-communist Balkan states through study at the American University in Blagoevgrad, Bulgaria. The former intern for the Federal Reserve Bank of Kansas City will return to Bulgaria in 2015, to begin graduate studies in economics and teach English to high school and university students. Wade is a member of Alpha Sigma Nu and Phi Beta Kappa national honor societies and was in the Honors Program.

Alexandrea Swanson, BA'14, Bellevue, Neb., ► Fulbright

The international relations and German major studied abroad twice during her undergraduate career — in Marburg, Germany, and Madrid, Spain — and maintains an interest in the United Nations. She was president of Pi Sigma Alpha, the national political science honor society and the only honor society for college students of political science and government in the United States. Swanson is spending 11 months teaching English to high school and university students in Europe.



12 CREIGHTON Fall 2014



Jennifer Hartjes, St. Paul, Minn., Goldwater

Hartjes plans to pursue a doctorate in nutritional biochemistry, conduct research in molecular nutrition and teach on the university level. Her research at Creighton focused on the creation of dental materials that could help prevent the demineralization of tooth enamel. She is co-captain of the women's tennis team, a member of the Honors Program, a Center for Undergraduate Research and Science ambassador and a volunteer for Tennis Buddies, a Special Olympics program.

Patrick Bruck, Manilla, Iowa, Goldwater >

The biology major plans to pursue a doctorate in microbiology and immunology and research infectious diseases and potential treatments. At Creighton, he researched the development of novel prophylactic HIV-1 treatments and antiretroviral drugs, examining their cytotoxicity, drug delivery and efficacy in preventing HIV-1. Bruck is treasurer of Phi Sigma Biological Honor Society and the Biology Club, and a member of the National Society of Collegiate Scholars, Magis Ambassadors and FACE AIDS.





Emma Hoppe, Lincoln, Neb., Goldwater

Her goal is to conduct research in autoimmunity and cancer therapies. At Creighton, Hoppe's research has focused on biological and molecular genetics as well as evolutionary genetics — projects that use protein tissue inhibitors of matrix metalloproteinase, important in embryogenesis and cancer metastasis. The biology major is in the Honors Program, is a senator in the College of Arts and Sciences and an advisor to the Campus Planning Committee.

> CREIGHTON 13 Fall 2014

Persuasion: Dear Friend, Bolieve Ne, NUST You Just NUST Bolieve This Story! Read This Story!

Why we do it. What it takes to do it well. And why we should care.

By Rosanne Bachman

As humans, we are hard-wired to persuade," says Jeffrey Maciejewski, Ph.D., of Creighton's Department of Journalism, Media and Computing. "We can't help ourselves — it's part of who we are. We're a social people, and persuasion helps us to live in harmony. We continually try to move ourselves and others to action.

Jeffrey Maciejewski, Ph.D., has spent the past several years exploring why we spend nearly all of our waking hours either persuading ourselves of one thing or another, or persuading each other. Persuasion, he says, is a stepping stone on the pathway to harmony.

"Inwardly, when we convince ourselves to think or act in a certain way, it harmonizes the operations of the mind. Reason and will are functioning together, and we are able to control our emotions and our passions. And outwardly, when we use the gift, it is expressive of God's love — a tool that we have been given to get along with each other."

Maciejewski says that being able to have an impact on others makes us feel good, because it makes us feel loved. There is validation in being able to influence another's thoughts or actions.

"Just look at social media," he says. "Teens, especially, seem to be preoccupied with building 'followers' and getting 'likes' on their social media comments, a huge cultural phenomenon. Perhaps people are just not feeling loved enough. Despite their personal relationships, they're not feeling a sense of community and belonging. So, they turn to social media, and they get that cup filled."

Maciejewski says that the enormous human capacity to love and to be loved motivates a large part of what we do on a continual basis. When we are successful in persuading someone of something, there is a part of us that gets filled a little. We feel gratified. In a world where nobody seems to listen, we have proof — we have "likes" that prove that we have been heard.

Personality Counts

In a society where effectively persuading others can lead to increased sales, job promotions, social reform and political office, skills that can induce widespread action are highly prized.

"In business, we love and need action. That's what it's all about," says Jennifer Metzler, director of the Creighton Business Institute. "Persuasive skills are a tremendous asset."

Metzler has 30 years of experience analyzing needs, designing curriculum and developing experiential learning opportunities for adult learners and the companies for which they work. This year, the institute began training employees of Inwardly, when we convince ourselves to think or act in a certain way, it harmonizes the operations of the mind. Reason and will are functioning together, and we are able to control our emotions and our passions. And outwardly, when we use the gift, it is expressive of God's love — a tool that we have been given to get along with each other.

66



Jeffrey Maciejewski, Ph.D. Associate Professor Journalism, Media and Computing one of Omaha's Fortune 500 companies how to organize persuasive speeches that motivate people to action.

"We may be hard-wired to want to obtain buy-in from others," Metzler says, "but only through education and training do we develop the techniques to do it well.

"Those who can persuade others draw on an understanding of basic human needs and an ability to understand how the other guy feels, to be open to his viewpoint and anticipate how he might react to certain arguments."

When it comes to identifying qualities common to effective persuaders, Metzler places personality at the forefront.

"You need humility, empathy, sincerity and that truthful, honest approach. Having those core values within your personality are the most important part of the mix. Of course, you also need a healthy dose of passion."

Behavioral scientists argue that it takes more than a pleasing personality to influence consumer behavior. When it comes to resonating with the masses, knowledge of predictable human behaviors can make the job of persuading easier.

Crafting messages based on how people are most likely to respond has morphed from an art into a science in recent years, fueled by the master of influence, Robert Cialdini, Ph.D., author of the best-selling book *Influence: The Psychology of Persuasion.*

Cialdini, who spoke at the Creighton Business Institute in May, is a psychologist and former professor who maintains that organizations can apply techniques that stack the odds in favor of messages being heard and actions being taken.

His oft-quoted six theories of influence include: reciprocity (people tend to repay favors); commitment and consistency (people's actions tend to match their thoughts); social proof (people do things they see other people doing); authority (we tend to obey authority figures); liking (we are more likely to buy if we like the salesperson); and scarcity (having a limited time in which to act increases demand).

A speaker of national renown, Cialdini informs practitioners and students using examples of the successful application of his theories. To explain "social proof," he recounts how he helped a major hotel chain "go green," by convincing guests to reuse towels and save water. When cards placed in hotel rooms carried the message, "75 percent of customers who stay in this hotel reuse their towels," reusage of towels increased by 26 percent. And when the message was even more personalized — "75 percent of people who stayed in this room reused their towels"— reusage increased even more, to 33 percent.

Cialdini says it goes to show that people identify with and imitate other people (social proof).

Research, as well as the success of Cialdini's book (*Influence* has been translated into 26 languages), would indicate that his theories have merit.

But just because something works, doesn't mean that using it will always be ethical.

"Without ethics, persuasive techniques can be used in manipulative ways," says Metzler. "For example, using Cialdini's principle of scarcity, a marketer could say, 'Get your tickets now, there are only 10 seats left,' when in fact, there are 30 seats left. Scarcity becomes an effective tactic, albeit an unethical one."

"Marketers should lead with ethical values and use persuasion techniques to achieve the greater good," Cialdini says. "Teams thrive with an interdisciplinary mindset and ethical and moral courage that fosters creative, diverse and innovative thinking."

Tipping the Scales

Perhaps nowhere are persuasion skills or a lack of them — more evident than in the courtroom.

"If there is one distinguishing trait that effective litigators share it is an overall awareness of the situation," says Creighton law professor Sean Watts. "The most persuasive people are hyper-aware, all of the time, socially aware and self-aware.

"In a legal sense, no one line of arguments works all the time. The best persuaders are nimble in their approach, continually evaluating a situation and constantly assessing what it calls for."

Watts says that a major determinant of effectiveness is confidence. Attorneys who are easily intimidated are at a decided disadvantage in persuading judges, juries and other attorneys.

"Every individual has to figure out ways to compensate for a lack of confidence," he says. "I determined early on that my own way to compensate was over-preparation. I always

Want to be more persuasive?



Ensure that your words are helpful and true. Persuasion skills are gifts that we have been given to strengthen our interconnectedness, and we can use them to better society as a whole. — Jeffrey Maciejewski



Establish a connection.

Be cognizant of body language that may govern how others respond to you. Let your goodness shine through. Warmth indicates trustworthiness. — Lee Budesheim



Put yourself in the other guy's shoes.

Strive to understand. Be open to another's views, and anticipate how he might react to your arguments. Look for common ground. Give credit where credit is due. – Jennifer Metzler



Be nimble. Pay attention.

The best persuaders are nimble in their approach, continually evaluating a situation and constantly assessing what it calls for. – Sean Watts tried to be the best-prepared person in the room. For me, it increased confidence."

It's All in the Self-Talk

Human beings continually speak with themselves as they constitute thought, a concept regularly visited by the theologian and philosopher Thomas Aquinas, says Maciejewski. "Even as I am communicating with you now, I am having an internal conversation with myself, anticipating your response and then my response, and then your likely response, and so on."

Watts says that internal dialogue begins long before an attorney enters the courtroom or the trial begins. "Even during the process of jury selection, able attorneys are going over their arguments in their heads, searching for the jurors most likely to respond positively to their persuasive arguments."

Bringing Others Around

So why does it feel like second nature to us, to want to convince others of our own points of view? Three reasons, says Lee Budesheim, Ph.D., social psychologist and associate professor of psychology.

"First, as humans, we have a tremendous need to be accepted. One of our hallmarks as humans is that we exist in groups, and we have evolved to survive in our group by cooperating, helping our group to function well and thrive. We are motivated to form connections and be accepted, probably for safety, originally.

"As soon as we form these groups, however, we pit ourselves against other groups. One of the most profoundly negative things we do in groups is to ostracize or exclude others from our group. It's socially painful. It hurts to be excluded, and the motivation to avoid that hurt is powerful. So, we need to be good at persuading others to let us belong."

The second reason, according to Budesheim, is that humans have a significant need to be right.

"We possess a lot of brainpower, and our brains are constantly looking for cause and effect in the world," Budesheim says. "We're curious about why things happen, and we're constantly trying to figure out what causes what. Developing an understanding of those connections gives us psychological power to control our lives and understand what is

16 CREIGHTON Fall 2014 going on. It's reassuring to us to know that we can figure things out.

"In some cases, it has been demonstrated that we would rather be right than feel good. Through a process of self-verification, we strive to verify that what we believe of ourselves is actually true. When we persuade others to come around to our way of thinking, we are verifying that what we believe is right. This need is so strong, that people with a low self-image can actually prefer to be around people who don't like them much, because those people reaffirm their negative self-image."

The third reason, according to Budesheim, is that humans are strongly motivated to serve their own interests, something that has also evolved out of an instinctive need to survive.

"If someone can persuade us that he or she is watching out for our best interests, it can be highly persuasive. One example I can think of is Adolf Hitler, who rose to power persuading huge numbers of people that he was their advocate. Early on, at least, people saw him as competent and impassioned. It was persuasive."

Persuasive People

Like Watts and Metzler, Budesheim says that persuasive people have personalities that work in their favor, but he sees the winning combination as warmth and confidence, working in tandem.

"Warmth indicates trustworthiness. People want to know, is this someone I can trust? And confidence is an indicator of competence, the ability and power to get things done. People who have both exude a kind of agreeableness and charisma," he says. "If you take a snapshot of them, you can even see it on their faces. They know how to win people over, and they can do it in just about any situation."

Jeffrey Maciejewski, Ph.D., has researched Catholic communication, Catholic media ethics, human nature and persuasion. He is the author of *Thomas Aquinas on Persuasion: Action, Ends, and Natural Rhetoric.* Sean Watts, Creighton law professor, served as a U.S. Army officer in assignments including tank platoon leader, tank company executive officer, military criminal defense counsel and professor of law at the Army JAG School and West Point. Jennifer Metzler has more than 30 years of experience working with adult learners in a business environment. She is director of the Creighton Business

Institute in the Heider College

of Business.

T. Lee Budesheim, Ph.D.,

is a social psychologist who studies the social and cognitive processes underlying how we process information to form impressions of others. He has researched how voters count or discount physical appearance in forming judgments about female candidates.

And it goes beyond their words.

"The social psychologist Dr. Amy Cuddy, of Harvard, has researched the way in which powerful people have larger, more open body postures, and people who do not assume that power have smaller, more closed body postures," Budesheim says. "By changing even our physical stance, we may be sending messages of power or weakness."

Handle with Care

66

You need humility,

empathy, sincerity

and that truthful,

honest approach.

Having those core

values within your

personality are the

most important

part of the mix. Of

course, you also

need a healthy

dose of passion.

Jennifer Metzler

Director

Creighton Business Institute

How we talk to and influence one another is one of the great under-researched things of all time, according to Maciejewski, who says it is at the heart of all we do, and that the stakes are high.

"Different cultures and different traditions recognize it. The Buddhist psychologist Tara Brach refers to 'mindful speech' and how the Buddha taught that communication must be helpful and true. It holds many parallels to Aristotle and the links to human nature."

"Some people are drawn more naturally than others to tasks that require persuasion," says Watts. "Some are more inclined to persuade naturally; others are able to intuit how to do it. But as an educator, I have to believe that people can be taught many of the skills that lead to good persuasive ability."

"Absolutely, effective persuasion can be learned," says Metzler. "To persuade is to strengthen commitment, so in a pure business sense, persuasion is a crucial skill required in leading an organization."

"Any activity involving humans is usually a complex mix of thoughts, emotions and behaviors," says Budesheim, "but for humans to adapt a skill in forging social relationships, it has to be effective.

"The bottom line is, we employ persuasion because it works, and we continue to perfect it because we have great need for it."



The Promise Ditfalls

hen Ravi Nath, Ph.D., went shopping at a Target store last December, the Creighton professor had no idea he'd also be buying clothing material in Beijing. He didn't, but someone did, using his credit card number to make the illegal purchase overseas.

Nath was a victim in one of the biggest retail cyber attacks in history when perhaps more than 100 million Target customers had their credit and debit card records compromised, as well as their names, mailing addresses, phone numbers and email addresses. The attack went undetected for 19 days. Hackers used malicious software — "malware" — to steal transaction data from the magnetic strips of credit and debit cards at point-of-sale (POS) systems.

For Nath, chair of the Department of Business Intelligence and Analytics in Creighton's Heider College of Business, the fix was easy enough — the charge was negated and he was issued a new card.

["]It's not that I was concerned that I'm going to lose a lot of money, because my credit cards have protection," says Nath, who also holds the Jack and Joan McGraw Endowed Chair in Information Technology Management. "I knew we'd be taken care of. It's more of a hassle because you have to cancel it and use a backup card. A lot of bill-paying was tied to it. It's just an inconvenience."

More such inconveniences — and worse — appear on the way.

Soon after the Target breach was made public, Neiman Marcus revealed that about 1.1 million of its customers' cards were exposed during a data breach from July to October 2013. More recently, credit card breaches have been reported by Home Depot, Sally Beauty, Marriott, Holiday Inn and Sheraton.

According to ID protection company LifeLock, the Department of Justice estimates that approximately 16.6 million Americans were victims of identity theft in 2012, sustaining more than \$24 billion of economic losses. And it looks only to get worse. Reuters Media in January reported that the FBI warned U.S. retailers to prepare for more cyber attacks after discovering about 20 hacking cases in 2013.

lt's not just the 16 digits on our Visa card that the bad guys are after, either. Our lives are being captured in bytes — "Big Data" — at an astonishing rate.





According to a report by management consulting firm McKinsey Global Institute, global enterprises stored more than seven exabytes of new data on disk drives in 2010 while consumers stored more than six exabytes on PCs and laptops. One exabyte of data is more than 4,000 times the amount of data stored in the U.S. Library of Congress.

Into these electronic warehouses go our Social Security, credit card and bank account numbers; a record of every phone call we make; the blood pressure readings from our last physical; our tax return figures; shoe size and book preferences; every inane video we "like" on Facebook; our address, mother's maiden name and name of the first concert we ever attended; and our DNA and genealogical lineage.

Some of this is good news. If you're vacationing in the Outback and get bitten by a snake, it's possible that the hospital you're whisked to could have your complete medical history available before you get into the ER. They'll know what medicines you're allergic to even if you're unable to tell them.

But all this data can be used for nefarious ends, too, and not just by hackers. More than a few people take issue with Uncle Sam peeking at their big data.

"The hacking is coming from more places and it's more sophisticated and there is more of it every day," says John Wingender, Ph.D., chair of the Department of Economics and Finance. Among his research is studying how companies are financially affected by security breaches. "There's no reason for me to think there will be less hacking next year. I'm



Ravi Nath, Ph.D., the Jack and Joan McGraw Endowed Chair in Information Technology Management, says consumers can take steps to protect their personal information. The Federal Trade Commission offers tips at consumer.ftc.gov/topics/privacy-identity. going to guess there will be more hacking attempts.

"We're in the early stages of finding out all about data, data collection, data mining, data breaches," Wingender says. "It's a whole new frontier."

Bad News for the Bottom Line

So what's the fallout for Target and other companies who leave themselves open to hackers?

Wingender and fellow Creighton faculty member Edward Morse, professor of law, and Vasant Raval, DBA, professor of accounting, studied how security breaches impacted a company's stock market price. The trio studied data from breaches spanning a 10-year period across a range of industries. As would be expected, abnormal negative stock price returns followed a breach. And those negative returns persisted over several ensuing years.

That said, Wingender and company found that the source of a data breach might moderate the price decline — those companies that could have done more to avoid getting hacked were punished with steeper stock price drops.

Target's fourth-quarter earnings report released in late February showed a 50 percent profit decline in the last three months of 2013 and a drop of more than one-third for the year. Target stock fell 9 percent in the two months following announcement of the data breach.

Was Target doing enough to protect its customers? The store has admitted it ignored early warning signs of the breach. But, Wingender says, Target in September 2013 also had received PCI Data Security Standard (PCI DSS) certification, indicating it had in place prevention, detection and response processes for payment card data.

That's part of a growing trend in data protection.



"Data brokers

collect and store

billions of data elements

covering nearly every

U.S. consumer."

Federal Trade Commission report, released

in May, calling for more transparency and

accountability from data brokers, companies

that obtain and share vast amounts of

consumer information. typically without

consumer knowledge. (More

information: ftc.gov)

"The biggest changes that are happening now are risk management in the cyber area," Wingender says, which includes developing policies and protocols and installing software for managing risk against data breaches.

Yes, it's a big expense. But the fallout from a breach can be far more. Target reported spending \$61 million on the data breach, that going toward investigations, credit-monitoring and identity-theft protection services to customers,

increased staffing in call centers and legal expenses. Fortunately for the company, that was offset by a \$44 million insurance receivable.

Wingender would like to expand his study to see if companies who earn data security certification see a moderation in the financial hit they take after a breach. "I see that as a positive thing," he says.

Trust Us

So Target's stock prices might fall, but will shopping slow at its brick-and-mortar and online sites?

Cindy Corritore, Ph.D., professor of business intelligence and analytics, anticipates a short-term hit, but nothing longlasting.

"People will still go to Target because they assume it won't happen to them," Corritore says. "Not only are we bad at assessing risk, but we're also bad at remembering it."

While Target's breach affected in-store shoppers, it's probably fair to say that most people associate data theft with online purchases. That's where Corritore has focused research, studying the factors that impact online trust among university students. Users make quick judgments on whether to trust a site based on three factors, she says: credibility (honesty, expertise and reputation), ease of use and risk. A site only has about 5 to 10 seconds to win that trust.

"A fleeting first impression," Corritore says. The impact of misplaced trust can last a lot longer.

It's for Your Own Good

Depending on his mood, Nath sometimes just says no when a clerk asks for his ZIP code or ID when using a credit card to make a purchase.

"I try not to give out any more information than I have to give out," Nath says. "They say, 'This is for your protection.' I say, 'Not quite."

> Legally, stores can't ask for such information if presented with a signed card. Nath says companies are trying to protect themselves just as much by asking you about ... you.

But what happens if a company already knows answers to questions you were never asked? Wingender experienced that recently when logging into a bank website. To verify his identity they asked him five questions — ones the bank had never asked him previously — and provided him with five answers to choose from, one of them correct. Like what car did he drive? What was his pet's name? He figures the bank mined databases

such as the DMV or humane society and matched them to his record.

"I was shocked," Wingender says. "They had the answers."

Looking for Trends

Big data actually isn't anything to fear, Nath says: "Big data by itself doesn't have much value."

Billions of bytes are meaningless — until they are analyzed. That means people looking for patterns and trends or trying to predict outcomes. And there's far more data than there are analysts.

"There's always a tendency on the part of businesses or anybody to say, 'If I can capture it, collect it, let's do it," Nath says. "With a lot of the data, my sense is even though they are collecting, they are not doing much with it. Not really analyzing it to the fullest extent they can. There's a huge shortage of talent in that area. That's something the universities are working on."

Including Creighton, which in August began offering a master's level certificate in business analytics after delivering classes in the area for years.

"The job market is fabulous," Nath says. "Almost all companies are looking for people who have some understanding of business analytics."

Analyzing Big Data

Among those ahead of the analytics curve is Terry Clark, Ph.D., a professor of political science in the College of Arts and Sciences, who uses "fuzzy math" to study people.

He also directs Creighton's master's degree program in research design and analysis, which trains students in big data and the emerging field of data science. "In its four years," he says, "the program has placed a significant number of students in business and the U.S. intelligence community."

Recently, Clark has begun using math to analyze social networks in hopes of learning who's talking about human trafficking or even cyber attacks. He also proposes an analysis of social media data to help Creighton attract students. Specifically, he wants to

search social network data to find out who's talking about the school, what they're saying and where they're at.

"You can get right down to a city block if you want to or zoom out to an entire state or entire country," Clark says.

All from data "scraped" off social networks posted for the world to see. "This is where it's big data," Clark says.

The problem is making sense of it. He compares all the data to a giant ball of yarn.

"And you won't be able to figure out one thread from another," he says. "This is the problem that the U.S. government and industry has actually had for decades, and in some cases 50 or more years. We have too much information."

Clark uses mathematical algorithms to help him unravel that data and get at only what interests him. Like who's talking about Creighton and what they're saying.

"This is so exciting because, to be honest with you, this is a moving target and the amount of work that has been done is staggeringly small. What has been done is either classified in government or it's proprietary in places like Yahoo and you're not going to get at it."

Once he gets all that information comes the big question: "The real issue is what do I want to do with it?"

Just a Little Bit

Big-ticket items on your bank statement are likely to catch your eye. Chances are you know if you bought a 72-inch LCD at Best Buy last week.

But what about a charge for \$5.78? You might skim right

"The prevalence of cyber technology has created virtual windows into our lives."

Weysan Dun, retired FBI agent, who spoke at Creighton this spring; it's estimated that the total cost of cybercrime was \$113 billion in 2013, he says.

over that when balancing your checkbook. It's a recent trend of hackers, says Wingender.

"Instead of taking all the money out of the bank," he says, "they take like \$4.26 or \$6.30 and even have some fake invoice that it's credited to. They do that once, twice, three times then, boom, they empty your account. That's a big change from where we were 10 years ago. We all have to be checking our accounts carefully."

But even if we don't, there's a chance the bad guys will get caught.

A few years ago, Clark says his credit card number found

its way to someone in California. At the same time he was using his card to pump gas in Papillion, Neb., someone else was using his card to make a purchase at a Wal-Mart in

California.

The bank's fraud unit discovered the anomaly. It put a hold on his card, called Clark and made sure he wasn't capable of bilocation. Within 36 hours, the charges had been reversed and Clark was issued a new card.

Technology had become an ally, not an enemy.

"There's no way that this is not primarily being done by computers," Clark says of

fraud detection. "It's impossible to find fraud for humans without the assistance of a lot of stuff. For sure, without a computer it's a hopeless task."

Big Brother, Big Bother

You might not mind if your favorite department store tracks your purchases so it can offer you good deals on socks. But what's your comfort level once Uncle Sam starts tracking your big data?

Many people began asking themselves that in the summer of 2013 when it was revealed that the Foreign Intelligence Surveillance Court ordered Verizon to provide the National Security Agency (NSA) with a record of every Verizon customer's call history — every call made, the time and duration of the call, and other identifying information — for a three-month period. Later, it was claimed the NSA had direct access to data held by Google, Facebook, Apple and other tech companies.

What is and isn't being tracked — by the government or unfriendlies? Nath points out that phones and cars can be tracked via GPS and that insect-sized drones could be recording video of individuals in their backyard.

"We don't even know what is being done," Nath says. "It's the unknown that concerns me. If you want to be completely anonymous, you simply can't use technology at all. Throw away the computer, throw away your mobile phone and throw away your car. On the other hand, why should it bother you if you haven't done anything wrong? But that's a slippery slope."

Regulations restricting what the government can and can't collect, Nath says, are "simply not keeping up with the technology."

A Question of How We Learn BURGER

Ayana Edmonds, a computer science major from Omaha, is pictured in the Reinert-Alumni Memorial Library. Says Edmonds, "I learn best by reading and then reflecting on, reciting and reviewing the material to make sure it sticks in my long-term memory."

22 CREIGHTON Fall 2014 The scene is 5th century Athens. A man stands before a crowd of onlookers, pausing for effect. A murmur arises among the throng; with the raise of his hand, the crowd is drawn to silence. Finally, he speaks: "Is the pious loved by the gods because it is pious, or is it pious because it is loved by the gods?"

Attributed to Socrates, a character in Plato's dialogue *Euthyphro*, this famous question endures, but mostly as a catalyst for more questions: Are there moral standards independent of a god's will? Could a god's freedom, therefore, be limited? Does morality exist as a separate entity unto itself (that is, separate from the gods)?

In a conference room some 25 centuries later, and halfway around the world, another wise person stands before a crowd of onlookers. She, too, poses a question: "If students engage in retrieval practice, will they retain that information for a longer period of time?"

The speaker is Maya Khanna, Ph.D., associate professor of psychology, and in her attempts to find the answer and present the results, other questions arise: Does it make a difference if the quizzes are graded or ungraded? How about if they are scheduled or surprise (pop) quizzes? What impact does a cumulative final exam have on overall content retention?

These scenes, depicting vastly different times and places, are remarkably similar in both presenters' approaches: the sound pedagogical method of learning by posing and answering questions.

Though the former scene depicts a philosopher posing a question in the forum, and the latter a Creighton professor framing a question for a Scholarship of Teaching and Learning (SoTL) research study, the audience and the venue make no difference. Both presenters understand that there is power in pursuing a well-formed question, and this power drives the educational process.

At Creighton, SoTL both formally (as its original embodiment in a Carnegie Foundation initiative) and informally (as it takes place in classrooms and faculty departmental discussions) touches every sector of the University, including those areas one may be surprised to discover.

The Socratic method is a storied pedagogical technique, surviving centuries of scrutiny.

"For my profession, for teaching philosophy, it's still the most effective in 1599, and even followed up with standardized testing to determine how closely they hit the mark.

"One of the things that the Jesuits learned, and have known all along, is that learning is slow. It takes time," says Tom Simonds, S.J., an associate professor in the education department. "It also involves repetition, going over the same material multiple times, just as St. Ignatius has you do in the *Spiritual Exercises*."

Before undertaking collaborative learning techniques (which in themselves can be highly effective), he still sees the first step to learning as an individual process.

"The students have to learn how they best learn, and they need solitude. They need time to be alone with that book, connect with the material. That's another thing that comes out of the *Spiritual Exercises*."

From this line of progression, one might think that scholarly research about teaching and learning is limited to Jesuits and professors in the humanities and education. This is not true. Even in

The Socratic method evolved over centuries, in various flavors and nuances. One such manifestation embodied itself in Jesuit education, and therefore passed down to Creighton University.

teaching method," says William Stephens, Ph.D., a professor in classical and Near Eastern studies and philosophy. "One thing that is valued is to try new methods, try new techniques, try new technologies in teaching and learning, but this old method works really well, and there's a reason for it. It's time-honored, because it's been tested over and over again."

The Socratic method evolved over centuries, in various flavors and nuances. One such manifestation embodied itself in Jesuit education, and therefore passed down to Creighton University. The official name was the *Ratio Atque Institutio Studiorum Societatis Iesu* ("The Official Plan for Jesuit Education"). Though not the only attempt to standardize curricula, the Jesuits collaborated to develop the *Ratio Studiorum* as a curriculum plan the natural sciences, a keen attention to how students learn returns dividends, sometimes on a national scale.

G intaras Duda, Ph.D., associate professor of physics, employs problem-based learning as a pedagogical method to teach quantum physics, and gathers data to determine the efficacy of his approach. He is particularly interested in developing scientists as reflective practitioners.

"You look at the literature and you ask, 'What are the students doing who are deeply and effectively learning?' They are the students who are always sitting down, probing their understanding, asking themselves questions. This is how we learn."

His research in SoTL focuses on how

best to facilitate this reflective process. In addition to numerous publications, his efforts were noticed regionally and then nationally as he received the National Professor of the Year award from the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education (CASE).

Couple these studies in traditional classroom environments with the explosion of online and distance courses, and we identify still more opportunities to frame solid questions and learn from the answers. Luckily, today's researchers have numerous online tools to help them.

onna Ehrlich, Ph.D., and Jeff Ehrlich, Ed.D., who teach and consult, respectively, in the Interdisciplinary Ed.D. Program in Leadership, are investigating how leadership can be taught and learned in an entirely online program. One of their projects focuses on how storytelling can learning and which methods the students reported were the most helpful.

"The key finding of our study was that older students indicated they found prerecorded videos of the professor lecturing helpful for their learning," Fr. Simonds says. "Younger students, on the other hand, saw these prerecorded videos as tasks to be checked off a list, and preferred the more interactive learning possible through posting and responding on a discussion board asynchronously."

None of these studies has been done in a vacuum, or without University support. Mary Ann Danielson, Ph.D., associate vice provost for Academic Excellence and Assessment, described the beginnings of Creighton's connection with the Carnegie teaching and learning initiatives.

"It began in the year 2000, when Creighton offered programming under a Carnegie Foundation grant," she says.

The first one was called "Campus Conversations." These conversations blossomed along with the Carnegie

Creighton faculty and staff who have participated in the Scholarship of Teaching and Learning program have done so because they care about what and how their students are learning, and hope to make the learning experience even better.

be used in the curriculum. In course discussion forums, their students tell stories about events in their lives where leadership skills (or lack thereof) came into play.

"The students enjoy the experience," says Donna Ehrlich. "But how do you know students learned anything? The plot of the story should change as the learning takes place. That is the focus of our SoTL research study."

Fr. Simonds has also studied learning in an online environment. He and Barbara Brock, Ed.D., professor of education, collaborated on a study focusing on the question about which resources (such as online discussions, video lectures and live conferencing sessions) they as instructors thought would be most helpful for student Foundation, and new initiatives arose. In 2001, Amy Haddad, Ph.D., director of the Center for Health Policy and Ethics and holder of the Dr. C.C. and Mabel L. Criss Endowed Chair in the Health Sciences, applied for and was accepted as a prestigious Carnegie Scholar and landed in the middle of a movement.

She joined 30 other national Carnegie Scholars — representing a wide variety of disciplines and institutions — in a one-year residency at the Carnegie Foundation. During this whirlwind year, she collaborated with other scholars from around the country and also pursued an individual SoTL project.

"Our experiences as Carnegie Scholars took us out of our disciplinary silos," Haddad says. "I came back wanting to do the same thing here. That was also the Carnegie Foundation's intent, for us to bring it back, start up this sort of movement — I really think of it as a movement."

A new question was framed: How do we sustain these fledgling efforts? The Carnegie response was to create clusters of institutions, all collaborating in their efforts to give life to this newest manifestation of a very old practice. Then Haddad assembled a group of mostly faculty members, the "Cognitive and Affective Learning Group," that culminated in a yearlong study called the "Life of the Mind Project."

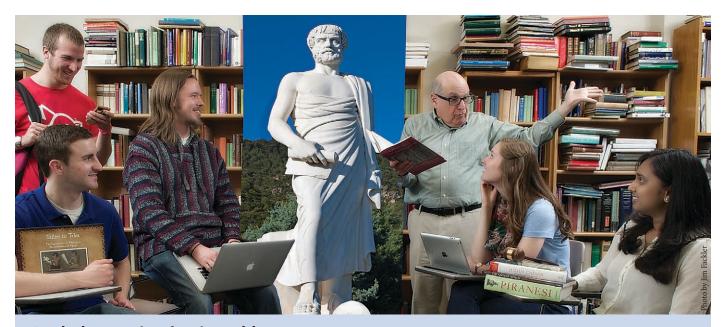
"What most impressed me about the Carnegie approach was that teaching and learning were never separated in any of the discussions," Haddad says. "Some research methods only focus on teaching, but the Scholarship of Teaching and Learning focused on that place where the two intersect."

She was also deeply impressed by the intersections between the disciplines represented by her cohort of Carnegie Scholars. "I was struck by a revelation that people in completely different disciplines often have the same questions, maybe just in different clothes."

S ince then, several Creighton faculty and staff members have participated formally in SoTL, and dozens more informally in scholarly research about how changes made in the classroom affect student learning. Studies that were historically conducted using simple observation are now conducted with brain scans and magnetic imaging equipment. This area of human cognition continues to dominate studies about the physiological processes that occur when students learn and teachers teach.

This is the primary area of research for Khanna, the psychology professor. Additionally, she has joined C. Timothy Dickel, Ed.D., professor of education, in analyzing data from a new iPad program conducted by the College of Arts and Sciences. They have focused on how to assess behavioral changes among students using iPads in relation to other forms of technology (such as laptop computers).

In researching cognitive learning



A whole new (ancient) world: Leonard Greenspoon, Ph.D., professor and Klutznick Chair in Jewish Civilization, had students in his honors class share their knowledge about the ancient world through projects using "modern" media. Submissions included a children's book, YouTube video, superhero novel, video game and board game, among others. "Every project succeeded in combining authentic and reputable knowledge about the ancient world with at least one modern medium that is attractive and accessible to today's general audiences," Greenspoon says. Pictured above are Tim McDermott, Henry Bass, David Martin, Aristotle (banner), Greenspoon, Erin Rossiter and Manaswita (Manny) Tappata. **Read more**.

theory, Khanna is joined by Matthew Huss, Ph.D., professor of psychology, in researching cognitive issues in education. For example, Huss researches the question of how technology devices that students bring with them into the classroom affect cognitive load.

Both Khanna and Huss agree that though students claim to be good multitaskers, the students are actually engaging in the practice of task-switching, which requires more cognitive overhead and may therefore be a barrier to learning. Perhaps aided by his inquiry into cognitive load and learning, Huss was recognized as Nebraska's Professor of the Year, joining Duda in a one-two punch success story for the importance of excellent teaching and research.

eaching and learning are not just the bailiwick of academics, though. It is widely recognized that they occur in all other facets of students' lives, including clinical settings and student life experiences.

Kathleen Flecky, OTD, associate

professor of occupational therapy, has been a recent rock star in the SoTL world, having served as a mentor during the last two IISSAM (International Institute for SoTL Scholars and Mentors) institutes, and pursuing scholarly research questions in the areas of student engagement, faculty-student partnerships and community-based service-learning. All were levied in a clinical classroom setting.

"I had this complex service-learning research question, and I was gearing it toward a kind of hybrid course: How do you do service-learning in a distance course?" she explains. Flecky believes that good SoTL research always arises out of a passion for the question. She points to current efforts by many of her peers, in all Creighton health science programs, who are doing great research about teaching and learning in clinical settings.

Joe Ecklund, Ph.D., director of academic success in the EDGE Program, is analyzing data collected through EDGE 130, a course offered in the spring semester to students who did not meet their academic goals in previous semesters due to poor grades and attendance habits.

He gathered quantitative and qualitative data to try to determine what motivates students and to assess how specific teaching approaches and learning activities affect student motivational patterns. These results, though captured in a classroom course, could then be applied to similar student success initiatives and activities outside the classroom by practitioners throughout the University.

Today, when Creighton professors walk into their classrooms (or login to their courses), when physicians, nurses and other healthcare professionals walk into their clinics, when student support staff members walk into their "service centers," will they be bringing the best methods available to those encounters? How do they know? And will those methods be equally effective tomorrow? Next year? In 10 years?

The only way to find out is to keep asking — and trying to answer — the right questions.

So You Want to be an Author?_{By Robyn Eden}

It's a thought that flits through the mind of everyone who has ever had a love affair with written language — whether it's writing the family's annual Christmas letter or dreams of winning a Pulitzer for the next great American novel. "You ought to write a book."

For many, the thought is fleeting. Writing a book, in one respect, is a lot like climbing Mount Everest: It's easy to think about, but hard to do.

But for 14 serious writers who came to Creighton last fall, getting their books written and published is a primary objective. They are the first students in Creighton's new Master of Fine Arts in creative writing degree program. The Master of Fine Arts is the terminal degree for creative writing students.

The MFA in creative writing program grew out of the University's established creative writing programs, which offer both undergraduate and graduate degrees as well as a certificate. Students have the benefit of being taught and mentored by award-winning authors and educators, including Brent Spencer, Ph.D., MFA; Susan Aizenberg, MFA; Mary Helen Stefaniak, MFA; and David Philip Mullins, MFA. They all have had their own unique journeys to becoming successful authors, and they offer some common perspectives on the hurdles writers face.



Brent Spencer, who heads the MFA program and is the acclaimed author of *The Lost Son, Are We Not Men*? and *Rattlesnake Daddy: A Son's Search for his Father,* says overcoming his own self doubts was a major obstacle to becoming a published author, one many writers face.

"I had to keep working and writing," he says. "It's like a rodeo. You have to stay on the horse for the full eight seconds. You have to finish what you start."

Susan Aizenberg, whose poetry collection, *Muse*, won a Nebraska Book Award, agrees. "When I was growing up, there weren't many role models for women poets," she says. "I didn't know that little girls from Brooklyn could be poets."

Aizenberg recalls being, for many years, too shy to share her writing. "It took a while to work up the courage to go to a creative writing class," she says. That writing class and the ones that followed gave her confidence and she began to publish her poems in small literary journals. Her latest collection, *Quiet City*, is scheduled to come out in January.

"There are a lot of people who have talent but don't have the discipline and perseverance," says Mary Helen Stefaniak, author of the prizewinning *Cailiffs of Baghdad, Georgia.* "People don't realize the steps you have to take."

She quotes best-selling author Jane Smiley, who cautions that you must be teachable and able to read your own material not as a reader, but a writer.

"Too many people think that if you have talent you will succeed," Stefaniak adds, "but there are a lot of talented people who don't know how to get past the difficult parts."

Writing, in Spencer's words, "is a boring process. It's maddening. And it's tiring." Often people don't realize that good writing means revision — lots and lots of revision.

"The first draft gives you the gift you can nurture and you are lucky if it does that," Stefaniak says. "So much of writing is problem-solving." boo by Time Period

Balancing family life with finding time to write, Ted Wheeler was drawn to Creighton's MFA program in hopes of having his novel, *The Uninitiated*, published.

"Too often aspiring writers take on subjects that are not can't-put-it-down narratives, that are of interest only to themselves," Hansen says, adding, "William Faulkner used to remind students, 'You are writing for strangers.' You have to give them a reason to buy your book or continue reading, and that doesn't come with just the exercise of a fine writing style."

Spencer agrees. "A common problem is that not enough is happening in the story — only artful writing," he says. "The writer's job is to disappear and all the reader sees are the characters. The characters have to be real and you have to live their lives."

"Too many aspiring writers think that they can become writers just by loving stories," Mullins says. "It's all about the minutia of the stories. You must love putting down words and tweaking them."

Mullins says a lot of writers get too impatient to see their work published. "You need to resist the urge to publish that

first piece," he says. "Too often, writers expect publication and then don't get it, or they get their work published but realize later it's not their best work and first impressions do count in the publishing business."

Mullins and his colleagues agree on what prevents most people from writing — or finishing — that book.

"Life stops most people," he says. "Working, getting the laundry done, playing with the kids. They try to squeeze writing in and if it can't be squeezed in they put it off."

Big mistake. Successful writers practice their craft every day, the authors explain. They build it into their schedules. They make it the top priority.

"You have to find the time," Spencer says. "Even if you are working two or three jobs."

Mullins also cites Faulkner, who said, "I write only when I am inspired, but I make sure I am inspired every day." Besides writing as regularly and

frequently as possible, what else should aspiring writers be doing? The Creighton authors answer as one: Read!

"Read everything! Devour it! Especially the kind of books you want to write," Spencer advises.

S o, assuming you have the desire, the inspiration, the dedication, patience and the perseverance to finish that book, is there a chance you will see it published? Yes, the authors agree.

Hansen cites former book editor and director of the Iowa Writers' Workshop Jack Leggett, who said, "Publishing is a business that rewards survivors." Hansen says Leggett meant that the unpublished who persist in their craft and learn to improve eventually do accomplish their dream, and those who

David Philip Mullins, who has won numerous awards for his short stories, including the collection *Greetings from Below*, agrees with his colleagues and warns that budding authors need to have thick skins and be able to handle rejection slips.

"No matter how good you are, the publications out there only accept a few stories a year, and they get thousands submitted." Rejections aren't personal, he counsels.

Creighton alumnus Ron Hansen, BA'70, MFA, the Gerard Manley Hopkins, S.J. Professor of the Arts and Humanities at Santa Clara University and author of several novels, including National Book Award finalist *Atticus*, believes the biggest mistake aspiring writers make is "choosing the wrong story, or no story, to tell."





Students in Creighton's MFA in creative writing program are taught and mentored by award-winning authors and educators, including, from left, Brent Spencer, Mary Helen Stefaniak, Susan Aizenberg and David Philip Mullins. **Read more about these faculty members here.**

writers think that they

can become writers just

by loving stories. It's all

about the minutia of the

stories. You must love

putting down words and

tweaking them."

David Philip Mullins

get published and stay at it may develop an audience over time.

In today's world, writers have to be more than writers. They have to be marketers. There are a lot of publishing options out there. There's the traditional agent who will shop your book on the market. There are a myriad of self-publishing and distribution outlets.

"It's important for a writer to be true to a vision and voice," through correspondence says, "but it also helps to have a good sense of a book's potential audience when presenting it to an agent." "Too many aspiring"

Publishers want to develop a brand, he says. They need to know you are not a one-shot wonder, so you always have to be looking ahead to the next project.

Getting the novel he has been working on for four years published is one reason that drew Ted Wheeler to Creighton's MFA program. Married and the father of two little girls, he knows Creighton's professors can help him navigate the publishing waters and find the right agent.

"You don't always know what you don't know," he says. "There are a lot of options, but there is a lot of competition."

The MFA program, he says, is for serious writers who want to write professionally or teach. Wheeler has already published 25 short stories in different journals and has won awards. The MFA writers form a community and help each other with editing and critiquing. Wheeler sees long-term advantages of the program.

"What I lacked was a community of writers. You need that network and connections. There is only so much you can learn in two years, and you have to have that supporting network throughout your productive life," Wheeler says.

He has a goal to finish his novel, *The Uninitiated*, this summer. It is a coming-of-age story about two boys set in

Omaha around World War I against a backdrop of machine politics and race riots.

Unlike other MFA programs in the area, Creighton's is a residential program, according to Aizenberg.

"In some programs, you only meet with the professors twice a year for 10 days or two weeks. Then you go home and work through correspondence," she explains. Creighton's MFA is the only full-time residential program in the area that develops a

community of writers with weekly workshops, she says.

S pencer says the MFA program was needed because "our undergraduate program has grown and become very successful. But we were seeing a lot of talented students moving on to get their MFA elsewhere. We needed to give them an option to stay here for more professional development."

Spencer and several of his colleagues are graduates of and have taught at the renowned

lowa Writers' Workshop. He envisions the Creighton MFA program becoming one of the

best in the Midwest.

Hansen says he is a firm believer in the value of a residential MFA program.

"The friendships one makes in a creative writing workshop may last 40 years, as they have with me," he says. "Reading and commenting on the work of your classmates hones your abilities as a fiercely honest editor and critic of your own efforts."

Editor's note: We would be remiss if we didn't salute another talented writer, the author of this article, Robyn Eden, who retired this June after 27 years in Creighton University's Marketing and Communications Office. We wish her all the best!

From Physics Major to Award-Winning Author

How does a Creighton physics graduate living in Kitchener, Ontario, end up writing science fiction novels for young adults?

Erin Noteboom, BS'95, didn't consider a career as a writer when she graduated as a physics major from Creighton in 1995. She had earned a National Science Foundation Fellowship and in her words, "set off to do physics at Los Alamos." A major health scare a couple years later had her rethinking her direction in life.

She had always liked to write. At Creighton, she had worked with professor Brent Spencer on a poetry summer project. Her first book of poetry, *Ghost Maps*, was based on her conversations with a World War II veteran who had lost a leg at the Battle of the Bulge.

"He never wanted to talk about it," she says. "The book was about not talking about it." Noteboom, who writes fiction under her married name,

Erin Bow, decided to write fiction when she reached her 30s. <u>"We had</u> done seven cities in five days

promoting *Ghost Maps*," she says. "As the plane took off, I saw its shadow on the ground. It reminded me of a fairy tale image of a fantasy world."

Her first novel, *Plain Kate*, was written in 2003. She got an agent in 2006, sold the book in 2008 and it appeared in 2010. The road to publication can be a long one, she says. "I had failed to write novels before. There are always one or two that you have to leave in the trunk," she says.

But for Noteboom, the road wasn't as bumpy as some authors experience. She had no trouble getting an agent. "I researched agents, picked the one I wanted, and got the one on the top of my list," she says. She received five bids for *Plain Kate*, and sold it for six figures.

It received the 2011 TD Canadian Children's Literary Award as the year's best work in Canadian children's literature. The *New York Times* Sunday Book Review said the novel "demonstrates a mature, haunting artistry." Noteboom dedicated the book to her young sister, who drowned, and the reviewer wrote: "That unassuageable longing is the wish at the heart of this outstanding novel." The book was also translated into French and Portuguese.

She has written two others, all aimed at the young adult, science fiction audience that are fans of the Harry Potter series made famous by J.K. Rowling. Her most recent, *Sorrow's Knot*, came out last November, published by Arthur A. Levine Books.

Noteboom, who keeps her hand in physics with a "half-time gig at the Perimeter Institute for Theoretical Physics," has this advice for aspiring writers.

"Do it. Even if people tell you not to. And finish your stuff. So many writers get halfway through and get stuck and never learn to write a whole story. Everybody gets stuck. You have to push your way through."

You also have to get used to living hanging by your fingernails, she says. It can be scary. Her next project is about "a science fiction boarding school hostage drama ... with goats."

"I don't know what the marketers are going to do with that," she says. "But I'm hopeful."



Calling Alumni Authors & Book Lovers

Alumni can share news of their latest novel or join together in a love of reading through the Alumni Association's "Alumni Book Club" – *alumni.creighton.edu/book-club.* Alumni authors can share the titles and brief descriptions of their books on the site by filling out a form at *alumni.creighton.edu/alum-authors.* The Book Club features a different book quarterly (those written by alumni and non-alumni), and provides for online discussion. **Happy reading!**



More Online

A Writer's Journey:

A childhood love for Raggedy Ann Stories and the encouragement of a Creighton English professor leads this former advertising copywriter for *Better Homes and Gardens* to write her first novel. **Read story here.**

Zombies Bring Family Together:

A Creighton cancer researcher and professor has written two books and begun a third, which, at the urging of her two sons, feature zombies. **Read story here.**

Reading Great Literature:

Paul Lakeland, the Aloysius P. Kelley, S.J. Professor of Catholic Studies and director of the Center for Catholic Studies at Fairfield University, discussed the transformative effects of reading great literature on Creighton's Catholic Comments podcast. **bit.ly/cu_CatholicComments**

(Catholic Comments is a weekly audio program produced by Creighton's Center for Catholic Thought and hosted by theology professors John O'Keefe, Ph.D., and Wendy Wright, Ph.D.)

> CREIGHTON 29 Fall 2014

omicide rates have gone down, according to the most recent figures released by the Bureau of Justice Statistics. While this is good news for police and the general public, experts in the field of criminology, social justice and urban environments aren't exactly sure whether we should be celebrating.

"Typically during a recession, we see an uptick in crime, but we're not seeing that, and it's a little perplexing to people like us who study this stuff," says Rebecca Murray, Ph.D., chair of the Department of Sociology, Anthropology and Social Work at Creighton.

"My hope is that what we're seeing reflects an effort across the country to improve the relationship between police departments and community groups in poorer urban areas — something we didn't have in the 1990s, when there was a huge difference between those who policed areas of cities affected by high-crime rates and the ethnic minorities who lived there."

Dawn Irlbeck, Ph.D., a colleague of Murray's in the department, attributes the homicide-rate decline in several major cities to state and local programs that are aimed at providing economic assistance and greater educational opportunities to individuals in poorer areas.

When people feel they have worth, she says, such as through employment or ownership of property, they are more likely to take care of their neighborhoods and less likely to commit violent acts.

"You see lower crime rates in groups that have a 'collective efficacy,' where there's a lot of home ownership and people feel more invested in their community and look out for each other," says Irlbeck, author of the upcoming book *Racial Profiling and Vehicle Searches.*

The book reports the results of a first-of-its-kind federal study led by lrlbeck. The study examined traffic stop interactions between state troopers and minority and non-minority motorists, in order to better understand the factors that increase the likelihood of a vehicle search for minority motorists.

Irlbeck is also a co-author, with Murray, of the 2011 book *Mission-Based Policing: Advances in Police Theory and Practice*, which was nominated for the Outstanding Book Award by the Academy of Criminal Justice Sciences. The book analyzes three types of policing:

- The book analyzes three types of policing:
- community-based policing, where police cooperate with neighborhood groups;
- problem-oriented policing, where police focus on eliminating social problems like gangs and drugs;
- and hotspot policing, where police target urban "hotspots" a few buildings, intersections and street corners that seem to generate the most criminal activity.

Programs That Have Worked

One of the roadblocks to finding a solution, the Creighton professors say, is the way we often view crime as Us vs. Them: black vs. white, police vs. criminals, police vs. people who live in a community.

Criminology researchers have noted that cities that have shown some success in decreasing crime have experimented with programs that blur the "Us-vs.-Them" line — where police work alongside community leaders to reach out to those who are at the greatest risk for potentially engaging in criminal behavior.

Some cities have achieved positive results by showing an increased police presence. Others have appealed straight to youthful offenders, asking them to give up their weapons in an effort to make their communities safer. The Creighton professors cite these programs as "doing it right."

Boston: Operation Ceasefire

After 73 young men (under age 24) were killed in 1990, Boston sought ways to curb gun violence. Operation Ceasefire — also called the Boston Gun Project — focused on specific crime-prone neighborhoods and on gang-involved youths who police believed were responsible for many of Boston's youth homicides.

The program began in 1995 and was a collaboration between the Boston Police Department's Youth Violence Strike Force and community leaders. Both groups confronted gang members and let them know they'd be under intense scrutiny until the violence stopped. Within two years, the number of youth homicides dropped to 10, with one handgun-related youth homicide occurring in 1999 and 2000.

The Operation Ceasefire strategy has been replicated in other cities, including Los Angeles and Denver, which included a guns-for-tickets

Criminology researchers have noted that cities that have shown some success in decreasing crime have experimented with programs that blur the "Us-vs.-Them" line — where police work alongside community leaders to reach out to those who are at the greatest risk for potentially engaging in criminal behavior.

exchange program that the Denver Police Department ran in conjunction with the Denver Nuggets, Colorado Rockies and Denver Broncos professional sports teams.

Operation Ceasefire was an initial success because police made gang members listen to leaders in their community, who urged them to stop, says Irlbeck: "The gang members were then asked to spread the news to other gang members. This gave their message legitimacy. Gang activities decreased, and things started to get better."

Newark and Philadelphia: Foot Patrol Experiments

In 1978, Newark increased foot patrol in various areas of the city in an effort to increase perceptions of neighborhood safety. Studies later indicated that the foot patrols had little effect on crime rates, yet they did reduce the fear of crime — residents saw their communities as safer and better places to live, and were more satisfied with police services.

Thirty years later, that experiment was replicated in Philadelphia: During the summer of 2009, 200 foot-patrol officers worked in 60 violent-crime hotspots and reported a total of 53 violent crimes had been prevented.

The Newark and Philadelphia trials suggest that community-based policing works, says Murray.

"Police have a role not only in crime prevention, but in community building," she says. "Ideally, police should live in the neighborhood they serve, so they get to know what the school system is like, who the business owners are and who might be the

The Statistics

According to the most recent reports *Homicide Trends in the United States* (2011) and *Criminal Victimization* (2012):



The homicide rate in the U.S. declined by 49 percent between 1992 and 2011. The 4.7 homicides per 100,000 residents in 2011 was the lowest level since 1963.

Young adults, ages 18 to 24, have the highest homicide rate of any age group. But from 2002 to 2011, homicides among this group also saw the greatest rate of decline — down 22 percent.



23%



The rate of homicides involving a firearm decreased by 49 percent from 1992 to 2011.

Large cities — those with 100,000 or more residents experienced the largest decline in homicide rates from 2002 to 2011, with a 23 percent decrease.



The rate of aggravated assaults increased about 3 percent from 2011 to 2012. Violent crime rates increased slightly in 2012 for blacks but remained stable for whites and Hispanics. people most likely to be involved in crime. Plus, it reduces the likelihood of police brutality."

Unfortunately, she adds, foot patrols are not cost efficient in large cities. Plus, police departments may have trouble finding officers who want to live in impoverished areas.

➡ New York City: More Cops on the Street

In the early 1990s, New York City expanded its police force by 33 percent and introduced a computerized system to track crimes and complaints. Officers began aggressively enforcing gun laws, drug offenses and petty crimes. The result: Urban crime fell by 75 percent. Misdemeanor arrests increased sharply, yet the number of serious crimes declined.

"New York City's crime rate reduction surpassed the national average," Murray says. "But you also have to ask the question: Were there more arrests because there were more police, or did the crime rate really go down?"

Los Angeles: Gang Reduction Program

In 2006, the Urban Institute monitored a \$10 million, multi-year, federal initiative to reduce gang crime in Los Angeles, Milwaukee, North Miami Beach and Richmond, Va. The institute found the most significant reduction in crime levels occurred in Los Angeles, because its Gang Reduction and Youth Development program was supported citywide with local funding by community groups working together with the police department.

Omaha: African-American Empowerment Network

Launched in 2006, the Empowerment Network is a collaboration of neighborhood groups, educational institutions, faith-based communities, government agencies and businesses.

The organization's goal is to address poverty, economic and educational gaps, and quality of life disparities by generating business opportunities, creating strong families, educating children and rebuilding thriving neighborhoods.

Irlbeck credits the Empowerment Network's summer jobs program with a substantial decrease in Omaha's homicide rate in summer 2013.

"The program focused on putting hard-core guys with criminal records to work," she says. "I heard a lot of anecdotal evidence about how good these guys felt working.

"When you have a job, you feel good about yourself. You feel proud to have walking-around money and your ability to pay your bills. Think of it: If you live in an area where there are no jobs and you want to be cool and be respected — if you can't earn respect in a legitimate way, you'll do it in an illegitimate way."

The Key is Empowerment

Raneta Lawson Mack, professor of law at Creighton, believes teaching children lessons in self-respect is the key to helping them embrace a lawful, productive life.

"It's so important to stress to everyone that, 'You are valuable to society," she says. "High school students who aren't cut out for college should have programs that teach job skills. And then having jobs available for them will help them see that there is an opportunity to break out of the cycle of crime, and out of the thinking that no matter what they do, they'll always be a criminal."

Mack is the author of *A Layperson's Guide to Criminal Law* (1999) and *The Digital Divide: Standing at the Intersection of Race and Technology* (2001).



Dawn Irlbeck, Ph.D., left, and Rebecca Murray, Ph.D., are co-authors of the book *Mission-Based Policing: Advances in Police Theory and Practice*. The book analyzes three types of policing: community-based policing, problem-oriented policing and hotspot policing.

She recently wrote *The Report of Cybercrime Laws in the United States* for the International Association of Penal Law.

Kevin Graham, Ph.D., associate professor of philosophy, sees urban crime as more than a problem of police and lawbreakers. Graham is the author of *Beyond Redistribution: White Supremacy and Racial Justice* (2011), which argues that social justice occurs only when every member of society is able to help shape the social conditions under which he or she lives.

"One of the symptoms of urban crime is the loss of respect for human life," Graham says. "In philosophy, we consider the sense of respect for the self as the flipside of respect for others. If that idea starts to break down, then bad things are going to happen. When there's not a high priority placed on respecting humanity, then humanity is headed in a bad direction."

Helping the Victims

In addition to studying criminal methodology and statistics, Creighton researchers are involved with helping those who are victimized by crime.

Irlbeck and Murray are collaborating on several key projects, including the Nebraska State Victim's Assistance Academy — a comprehensive certificate program aimed at training professionals who interact with crime victims, such as counselors, physicians, hotline workers, law enforcement personnel and others.

The Creighton professors received a three-year federal grant in 2012 to create the academy. (The grant runs out in October and Murray is seeking private funding to continue the academy.) The first five-day academy was held in fall 2013 at Creighton, with 50 participants. A second academy was held this summer at the University of Nebraska at Kearney.

"We surveyed those first graduates of the program, and they say they received training here that they had not experienced anywhere else. It's really made a difference in their ability to assist others," Murray says.

Irlbeck and Murray are also analyzing data collected under the federally funded Byrne Criminal Justice Innovation Grant, a study of

how communities are affected by high-risk probationers who return to high-risk areas. And they are analyzing the effectiveness of juvenile detention in Douglas County (Neb.) as part of the Juvenile Detention Alternatives Initiative, a national project sponsored by the Annie E. Casey Foundation. The foundation's mission is that all youth involved in the juvenile justice system have opportunities to develop into healthy, productive adults.

"The program is part of a national effort to examine the juvenile justice system," Irlbeck says. "Sometimes, sticking a small-time thief in a hard-core environment just gives kids the potential to learn how to become better criminals."

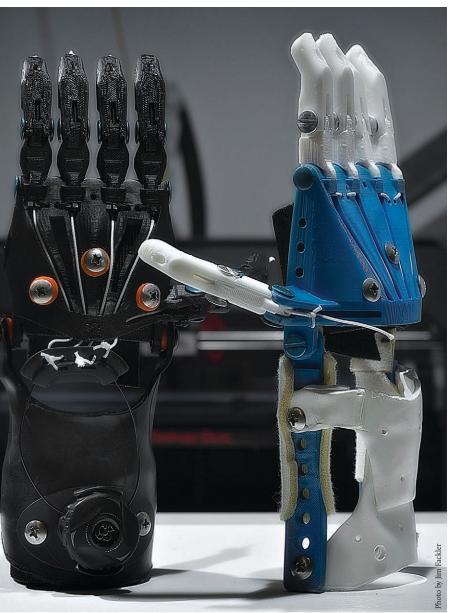
Researchers agree that the best way to combat crime is to convince youngsters that they can break the cycle of poverty and hopelessness that often leads to choosing a path of criminal behavior.

"Laws and programs can't do everything," Mack says. "People have to want to choose to do the right thing. That's what early childhood education does — it helps kids understand early on and instills the idea that, 'Yes, I'm going to do something positive with my life.'

"We'll never end crime 100 percent, but we can certainly cut into the percentage of those who are incarcerated."

Giving Hope a Hand

Creighton researchers and students use 3-D printing technology to develop low-cost mechanical hands



34 CREIGHTON Fall 2014 He heard the radio report during his morning commute to Creighton -astory about creating prosthetic hands using 3-D printer technology.

Jorge Zuniga, Ph.D., an assistant professor of exercise science, thought of his 4-yearold son, Jorgito, who loved to play ball and then a childhood playmate in his native Chile who couldn't, because he was born without a hand.

Children like that should have a hand, Zuniga thought. And he was determined to give them one.

Thus was born the Mechanical Hand Project Group, a project that melds Creighton University's interdisciplinary approach to research and education with its service mission. The ultimate goal is to research and design mechanical hands for those who need them, particularly children, and to do it free or at minimal cost.

Students and faculty members from the departments of exercise science, occupational therapy, physical therapy, physics, and journalism, media and computing are involved, offering different perspectives and expertise.

They are drawn by Zuniga's passion and inspired by his vision.



Jorge Zuniga, Ph.D., models a mechanical hand created by the Mechanical Hand Project Group at Creighton. Read more about Zuniga.

"This technology will change things for people," Zuniga says. "I want to take the knowledge from the laboratory and into homes, so people can start making these things themselves. I want to focus on the research and development so moms and dads of these children can make and fix the hands themselves."

In the U.S., there are more than 32,000 children born annually without hands due to Amniotic Band Syndrome, a term covering a wide range of congenital abnormalities, Zuniga says. A child's size and growth patterns affect their prosthetic needs, as does the family bank account.

The cost for a body-powered mechanical hand ranges from \$5,000 to \$11,000. For more sophisticated prostheses, ones that convert muscle impulses into movements, the cost jumps to anywhere from \$30,000 to \$50,000. Meanwhile, the cost of 3-D printers has decreased dramatically since 2010, dropping from \$20,000 to between \$1,500 and \$3,000, Zuniga says. The actual cost of the hand is less than \$100.

After hearing about the technology, Zuniga immediately began collaborating with pioneers in 3-D prosthetics. They included Ivan Owen of Bellingham, Wash., creator of Robohand; Andreas Bastian of Rice University, currently developing an open source 3-D printer for applications in tissue engineering and regenerative medicine; and Jon Schull, Ph.D., a professor in the School of Interactive Games and Media at the Rochester Institute of Technology. He has also consulted with orthopedic physicians at the Shriners Hospital for Children in Chicago. Zuniga is particularly interested in developing different prototypes that will allow youngsters to participate in sports, "hands" that will withstand forceful impacts and turn at angles that allow them to pick up and throw a ball.

He sought support from his department head, Tom Baechle, Ed.D., and College of Arts and Sciences Interim Dean Bridget Keegan, Ph.D., who were eager to help.

"Dr. Zuniga's passion is contagious and his dedication is inspirational," Keegan says. "His work is directed at helping those most in need and making a real and tangible difference in the lives of children. His research is interdisciplinary, involving students from multiple departments. He shares his passion for scholarship and shows them how their research has a profound practical impact."

In conjunction with designing mechanical hands, the team is looking at creating more cost-efficient splints. Alfred Bracciano, Ph.D., associate professor of occupational therapy, says the 3-D technology has the potential to alter the OT curriculum in this area.

"Splinting has historically been almost a trial-and-error process using the patient's hand to mold the material to it," Bracciano says. This can be costly, he explains, due to limitations of the materials and the need for refining splints/ orthosis to ensure appropriate fit and function.

The new technology can accommodate individual characteristics of a person's hand in essentially a virtual environment.

"We can manipulate and modify the splint before actually building and fitting it," Bracciano says. Adjustments can be made while exploring the biomechanics and forces that will be placed on the orthotic structure as well as on the anatomical structure, he says.

Michael Cherney, Ph.D., physics professor and director of Creighton's Energy Technology Program, printed the first prototypes of the

mechanical hand. Tim Guthrie, professor in the Department of Journalism, Media and Computing and director of the graphic design program, is also involved. Guthrie had previously been doing 3-D modeling in an animation class he taught, and has used it in creating his own art projects.

Students like Marc Petrykowski, an exercise science major from St. Paul, Minn., are excited to be part of the project.

"I have a passion for engineering, and Dr. Zuniga encourages us to use our imagination and is always open to ideas and improvements," he says. "Plus the smiles that we see on the children and their parents are priceless."

Did You Know?

More than 32,000 people are born annually (in the U.S.) without hands, due to Amniotic Band Syndrome

The cost for a body-powered mechanical hand ranges from \$5,000 to \$11,000 and more sophisticated prostheses jump to \$30,000 to \$50,000

The cost to produce a prosthetic hand via 3-D printing is less than \$100

Keeping the Fire Ali Broane Bachana

Sara and Jason Beste let their passion for helping the impoverished and vulnerable in southeast Africa fuel their work as physicians with Partners in Health.

reighton graduates Sara and Jason Beste know what it means to experience happiness in the midst of extreme challenge.

Jason Beste, BA'03, MD'08, says spring break service trips arranged through the Creighton Center for Service and Justice and a year on the Pine Ridge Indian Reservation inspired him to pursue medical school and a life of serving the marginalized.

While serving at Pine Ridge, Jason first read *Mountains Beyond Mountains*, about Partners in Health (PIH), an organization known for its social justice approach to healthcare and one with which he would later work. After a year at Pine Ridge, he returned to Omaha and medical school.

Sara (Franzen) Beste, MD'09, also felt called to a life working with vulnerable populations.

"I happened to be born into a middle-class American family, but just as easily could have been born into another corner of the world, into a life of poverty or oppression," Sara says. "While I can't change the fact that I was arbitrarily given



While walking in the remote village of Neno, Sara Beste encounters a group of local children and stops to sing the alphabet.

this particular life of blessing and opportunity, what I can do is to use my life, gifts and energy to bless others and work for justice."

Sara and Jason met at Creighton medical school, and their shared passion for a life of medical service reinforced their individual decisions to pursue global health. After graduation, they went on to residencies in New York City — Jason in internal medicine at Montefiore's Social Medicine Program, and Sara in pediatrics at the Children's Hospital at Montefiore. They were married in 2009.

Midway through Jason's final year of residency, he received an offer from PIH, to work in a rural village in Malawi, a small, landlocked country in southeast Africa. A year behind Jason in training, Sara was about to begin her final year of pediatric residency. The couple knew that life on different continents would mean loneliness and frustration, but they knew that Jason could not turn down the opportunity.

"Living seven time zones apart, with horrible Internet, and barely getting to see each other was not ideal, but we knew it was the right decision," Sara says. When Sara graduated the following year, PIH offered her the opportunity to join Jason in Malawi as a pediatrician in the village of Neno.

"In Neno, most people live in mud huts, with only the clothes on their back, and often no shoes. Their diet consists mostly of a corn flour-based porridge, with little else," Sara says.

The Bestes were three hours from the nearest airport, grocery store and referral hospital. Hospital supplies were limited. They often could not test for or treat the conditions they encountered.

In such a poor and remote district, Sara saw more children die in her first three months on the job than she had in three years of residency.

"People shouldn't be dying from malaria, or diarrhea, or malnutrition or childbirth. They were dying mostly because they were poor and lived in a poor country. I would often look at these women sitting on the beds next to their dying children and think how unfair it all was."

Such struggles, they say, were also balanced with instances of amazing recoveries and the feelings of intimacy they experienced with the people of their village. The personal and



Jason Beste examines a baby and his mother at an outreach clinic in a neighboring village, as a translator looks on.

raw nature of being a doctor in those circumstances made them "fall back in love with medicine," feelings they had nearly lost during the tough years of residency.

"We often wondered who would feel drawn to this type of life," Jason says. "It really made no sense. You're far from family, not making much money, dealing with broken systems and seeing patients die daily despite all of your efforts. Yet, it feels right. It cannot be explained by logic."

Despite seeing scores of emaciated people suffering from HIV and tuberculosis; numerous child deaths; working conditions that lacked nurses and medications; and being overwhelmed and far away from family, Sara had an epiphany of the meaning of consolation.

She wrote to a family member, "It just feels good ... and right ... it's a weird thing to feel, this consolation, because our culture makes us think that only when all of our needs are met and we are comfortable and everything is going our way can we truly be 'happy.' I didn't know that when I was the most homesick, hot, exhausted, lonely and depressed I've ever been, that I could also be happy."



Jason Beste, BA'03, MD'08, and Sara (Franzen) Beste, MD'09, with Paul Farmer, M.D., founder of Partners in Health. The Bestes returned to Creighton in February to share their experiences working as physicians in a rural village in southeast Africa. Jason spent two years on assignment in Malawi and is currently pursuing an infectious disease fellowship and master's degree in public health at the University of Washington. Sara joined him in Malawi for one year and is currently working on a pediatric global health fellowship through the University of Massachusetts that will take her back to Africa later this year.



Alum Items

George Blue Spruce, DDS, Surprise, Ariz., recently received lifetime achievement awards from the Henry Schein (Shills Memorial Fund) in Philadelphia and the Association of Federal Health Professionals, also known as the Association of Medical Surgeons of the United States, in Seattle.

Dr. Joseph P. Drozda Jr., ARTS, Chesterfield, Mo., was awarded the American College of Cardiology's Presidential Citation in recognition of his work in healthcare quality improvement in the national quality arena. Drozda continues to work as director of outcomes research at Mercy Health, a four-state health system headquartered in St. Louis, where his major efforts are in establishing a system of post-market medical device surveillance and research. This work won a Mercy Innovation Award and the 2014 Most Innovative Use Case Award from the Intelligent Health Association.

Dr. Christian R. Hirsch, MA, Kalamazoo, Mich., received the 2014 Lifetime Achievement Award from the National Council of Teachers of Mathematics (NCTM) in April. The award honors NCTM members who have exhibited a lifetime of achievement in mathematics education at the national level. Hirsch is currently professor of mathematics and distinguished faculty scholar at Western Michigan University in Kalamazoo.

Dr. John E. Tidwell, MA, Lawrence, Kan., received an honorary doctor of literature degree from Washburn University in Topeka, Kan., in May. Tidwell is a member of the University of Kansas English faculty.

Girard P. Miller, BA, 3 Minneapolis, was elected chair of the board of the Cristo Rey School in Minneapolis.

> Howard K. Schraeder, BSBA, Springfield, Ill.,

was promoted to electric divisionsuperintendent of distribution and general service for the city of Springfield - City, Water, Light and Power.

Kenneth R. Ronzo, DDS, Rochester, N.Y., received a Master of Science in Multidisciplinary Studies from the Rochester Institute of Technology. Ronzo currently serves on the board of directors for the New York State Dental Association (seventh district).

John T. Kalange, DDS, Boise, 86 Idaho, recently completed a validation process and received FDA 510K premarket approval to manufacture, market and distribute a proprietary orthodontic microimplant. Additionally, Kalange has received United States Patent and Trademark provisional patenting on the same device.

Mark R. Miller, BSPha, and Cynthia Rothfuss Miller, BSPha, Grand Island, Neb., are the owners of U-Save Pharmacy NW in Grand Island. Robert J. Kmiecik, BS'84, JD, Omaha, wrote and published the novel Saved ... for Now.

Denise Turner Riley, BSMth, Raleigh, N.C., has joined MetLife as a vice president in global information technology.

Lori Lenz Arp, BSBA, Clive, lowa, was promoted to assistant secretary at EMC Insurance Companies in Des Moines, Iowa, acting as the reinsurance accounting supervisor for EMC Reinsurance.

Lorraine Dutton Gardner, BA, Springfield, Mo., is a doctoral student in the adult and lifelong learning program at the University of Arkansas. Dr. Daniel Schulte, BA, Phoenix, was elected 2014 president of the Arizona Psychological Association.

93 James M. Backes, BSPha'91, PharmD, Shawnee, Kan., was promoted to full professor with tenure at the University of Kansas

SHARE YOUR NEWS

Earned a promotion? Had a bouncing new baby? Received

Submit your news: alumninews@creighton.edu | 800.334.8794

Tell us what's new in your life.

special recognition? If so, we want to know about it!

Have you started a new job? Recently married?



2014 Athletic Hall of Fame Inductees

> Rusty T. Komori II, BA'91 • Men's Tennis

Leads Creighton in all-time singles wins for men's tennis at 81. Komori ranks No. 1 overall, No. 1 in singles and No. 8 in doubles victories. Team captain (1990, 1991).

> Korie Lebeda, BSBA'09 • Volleyball

No. 1 in Creighton history with 5,281 career assists, and set a Missouri Valley Conference record by averaging 13.34 assists per set during her freshman year. Named to the All-Missouri Valley Conference Team three times.

> Laura Spanheimer Dechant, BS'05, DPT'08 • Women's Basketball

Two-time Missouri Valley Conference Defensive Player of the Year (2003, 2004), ranks first in steals (369), seventh all-time in points scored (1,588) and eighth in games played (125).

Medical Center School of Pharmacy in Kansas City, Kan. Veronica S. Young, PharmD, San Antonio, has been named the inaugural director of interprofessional education and community engagement at the University of Texas College of Pharmacy in Austin, Texas.

Meaghan M. Shaughnessy, **BA**, Denver, joined Regis University as an assistant professor of business law this fall. Prior to her academic career, Shaughnessy practiced law at the Denver office of Arnold & Porter, LLP, a Washington, D.C.-based

law firm, from 2002-2010. Michael J. Fleming, BA,

Leawood, Kan., was recently named to the top 100 trial lawyers of 2014 by the National Trial Lawyers Association. Deborah Hutter Goss, MD, Rivervale, N.J., recently published the book Catch Your Breath: Getting Back to Better Breathing. Laura Rodman Huaracha, BA, Beach Park, Ill., is associate professor of communication and digital media at Carthage College in Kenosha, Wis. In 2013, she presented at four major conferences and had two photography pieces exhibited/published: "For Uncle John" in Photographer's Forum magazine and "The Rescue" at the Women Caucus of Art. Stories We Tell Exhibit at the Phoenix Gallery in New York.

Dan V. Manning, PharmD,

Dan v. Was promoted to senior director and head of rare diseases medical science liaisons at Genzyme-A Sanofi Company, which is headquartered in Cambridge, Mass.

Ellen-Elizabeth B. Lee, BSBA, Takoma Park, Md.,

38 CREIGHTON Fall 2014

2014 Alumni Merit Award Recipients

Creighton University congratulates these outstanding graduates who were recognized with Alumni Merit Awards during Alumni Homecoming Weekend. Read more about the recipients at alumni.creighton.edu.



COLLEGE OF ARTS AND SCIENCES James Van Leeuwen, BA'96,

Ph.D.



COLLEGE OF PROFESSIONAL STUDIES Rev. Moses Luba Loli, BSEMS'08



SCHOOL OF LAW <u>John M</u>cKay, JD'82



HEIDER COLLEGE OF BUSINESS Nancy Felker, BSBA'74, MBA'81



GRADUATE SCHOOL Rev. Steven Boes, MS'94



SCHOOL OF MEDICINE James Laumond, MD'64



COLLEGE OF NURSING Karen Monsen, BSN'78, Ph.D.

ALUMNI

HOMECOMING

WEEKEN



SCHOOL OF DENTISTRY Martin Halbur, DDS'76



SCHOOL OF PHARMACY AND HEALTH PROFESSIONS Robert Greenwood, BSPha'77

Make plans to attend the 2015 Alumni Homecoming Weekend! September 17-20

Learn more at alumni.creighton.edu/weekend and keep up to date with all the plans for Alumni Homecoming Weekend through the Bluejay Buzz!



Follow us on Twitter twitter.com/CreightonAlumni #weekend

> CREIGHTON 39 Fall 2014

traditions

Aloha Spirit: Lu'au a Campus and Cultural Tradition

The food is fabulous (delectable favorites by noted chef Russell W. J. Siu, such as coconut-scented sweet potato mash, shichimi seared chicken and mahi mahi with ginger sauce); the entertainment is marvelous (every dance more beautifully and colorfully choreographed than the one before); and the logistics run like clockwork (picture a long line of laptops with techy students effortlessly checking in 1,000 guests).

But what makes this annual Creighton tradition so enjoyable is the "Aloha Spirit" of hospitality that host students grew up with and so effortlessly lavish on guests at the annual lu'au.

"Every direction you turn, people are relaxed and smiling," says Michon Marcil Abts, BA'80, MS'87, who attended the 2014 event. "From the greeters, to the food servers, to the emcees and entertainers, there is a sense of graciousness and congeniality."

The theme of this year's lu'au was "Na Pua Nani O Hawaii" — the Flowers of Hawaii. The 110 tables set up in the Kiewit Fitness Center held bouquets of anthurium, ginger and tropic fleurs.

"The students from Hawaii are proud of where they come from and want to spread the spirit of Aloha with their Creighton family," says Maile Kagawa Lam, BS'74, MS'77, of Honolulu and whose three children graduated from Creighton. "While the event allows students to share their culture through food and music, it is the planning and preparation that allow them to work together and strengthen their sense of 'ohana' — or family — with each other."

In a letter to the club following the 2014 event, Hawaii Gov. Neil Abercrombie wrote, "As the Hui 'O Hawaii Club has grown, it has admirably broadened beyond providing a place for students from the islands to gather in support and camaraderie, to sharing the Aloha Spirit in all its graciousness with others in the university and the community. The cuisine of Chef Siu is an ideal vessel for sharing the beauty of our proudly diverse island culture."

Since the club's founding in 1948, members have encouraged each other's success at a university 3,800 miles from home, helping one another acclimate to Nebraska winters, rigorous academics and mainland customs.

And in the past two decades alone, students from Hawaii have earned more than 800 Creighton degrees.

Do you have a Creighton tradition you would like us to feature? Send your ideas to Rick Davis at *richarddavis@creighton.edu*.



was promoted to vice presidentsenior portfolio manager community development finance (affordable housing) division at Capital One Bank in McLean, Va.

DOD Jay P. Slagle, BSBA'89, MHSA, Omaha, wrote and published the children's book Jack and Noah's Big Day.

Dr. Jennifer L. Eimers, MA, Marshall, Mo., has been named dean of graduate studies at Missouri Valley College in Marshall.

02 Jabob M. Steinkemper, JD, and Molly Wickham Steinkemper, JD'03, Omaha, have opened Steinkemper Law, PC, LLO, in Omaha. The law firm specializes in workers' compensation and personal injury. Capt. Angela Morrison Swan, BA, Litchfield Park, Ariz., received her Doctor of Philosophy in criminal justice from Capella University.

Andrew J. Consbruck, BS'01, DPT, and Tammy J. Consbruck, OTD'03, Gretna, Neb., opened Dynamic Physical Therapy in Gretna. Dr. Jessica Garcia, BSEMS, Corpus Christi, Texas, graduated from Christus Spohn Family Medicine Residency in Corpus Christi in January and started her palliative medicine and hospice fellowship in February at the University of Texas Health Science Center in San Antonio. Douglas R. Lederer, MBA, JD, Omaha, has joined the law firm of Carlson Burnett LLP in Omaha. Lederer works in the areas of estate planning, estate litigation, family law and juvenile law. Benjamin T. Peterson, DDS, Ontario, Ore., was named Ontario, Oregon's "Man of the Year" for his community service efforts.

David R. Conklin, JD, West Jordan, Utah, was elected as a shareholder of the law firm Kirton McConkie in Salt Lake City. Conklin is a member of the firm's intellectual property section.

Erin Swanson Russell, BA'02, MA, Omaha, received the Leader for Life Award from Creighton University at the annual fundraiser for women's athletics.

Brian M. Kurtz, PharmD, BSHS, Ypsilanti, Mich., traveled with a group of colleagues from the University of Michigan and medical team members from Henry Ford Medical Center in Detroit to operate a medical clinic in Migori, Kenya. Kurtz provided pharmacy-related services to the patients in the clinic and worked with a team of local Kenyan pharmacists to provide medication expertise and community pharmacy services to patients in need of medications.

Weddings

Q4 Renee T. Lamoureux, BSBA, and Tyler Yost, May 18, 2013, living in Omaha.

O7 Angela M. Boyer, BA'04, JD, and Brian M. Zimmer, Oct. 19, 2013, living in Lincoln, Neb. Mylinh H. Trinh, MD, and Jonathan F. Aquino, BS'06, March 1, 2014, living in Phoenix.

Births

99 Dr. Tin H. Tran, BS, and Christine A. Tran, MSN'06, Omaha, a son, Joseph Kelly, Dec. 27, 2013. John-Paul Vaughan and Deborah Winarski Vaughan, BS, Lockport, Ill., a son, John-Paul Robert, Aug. 2, 2013.

OO Gregory P. Armendariz, BS'98, MSC, and Kristin Eickhorst Armendariz, BSEvs'98, Papillion, Neb., a daughter, Abigail Grace, Feb. 10, 2013. David A. Wagenknecht and Heather Miller Wagenknecht, BA, Batavia, Ill., a son, Briggs Daniel, Aug. 12, 2013.

Nolan R. Harms, BS, and Amy Harms, Seward, Neb., a daughter, Nevaeh Grace, March 3, 2014.

O4 Timothy E. Burk and **Shay Graves Burk, BA**, Hastings, Neb., twin daughters, Cora Elizabeth and Annabeth Joy, March 4, 2014. **John U. Campbell, BSAtS**, and **Molly McCartney Campbell, BA'06, JD'09**, San Antonio, a son, Warren Joseph, Feb. 18, 2014. Daniel H. Janulewicz and **Melinda "Lindi" Johannsen Janulewicz, BA**, Omaha, a daughter, Matilda "Tilly" Mae, Dec. 6, 2013.

O6 Michael Beau Hamilton, DDS, and Alison Hund Hamilton, BA'02, Dallas, a daughter, Juliet Louise, Feb. 24, 2014.

O7 Robert T. Terp, BSChm, and Patricia A. Schwartz Terp, BS, MD'11, Omaha, a son, Braeden Alan, Jan. 15, 2014.

Brian J. Blackford, BA'05, JD, and **Angela D. Jensen-Blackford, BA'05,** Omaha, a daughter, Aurora Lois, Jan. 2, 2014. Jeff Swetnam and **Erin Manion Swetnam, JD**, Superior, Colo., a son, Michael Jeffrey, Aug. 2, 2013.

09 James E. Hougas III, BSChm'05, MD, and Anne E. Hougas, Great Falls, Mont., twin daughters, Helen Josephine and Margaret "Greta" June, Dec. 19, 2013. Lawrence J. Johnson Jr., JD, and Amy Adams Johnson, JD'07, West Des Moines, Iowa, a daughter, Madeline Lucy, Feb. 25, 2014.

13 Jake Miller and **Ashley Shrader Miller, MA,** Papillion, Neb., a son, Max, Dec. 21, 2013.

Deaths

39 Dorothy Kalamaja Irwin, SJN, Omaha, Feb. 23, 2014. Ret. Col. James T. Kisgen, JD, Northport, Ala., Jan. 4, 2014. Elizabeth "Betty" Van Ackeren Maire, SJN, Milwaukie, Ore., Jan. 25, 2014.

41 Clara Hesse Hale, SCN, Sequim, Wash., Feb. 6, 2014.

42 Leo W. Tucker, BA, Grosse Pointe Farms, Mich., Dec. 7, 2013.

William J. Morrissey, BSM'42, MD, Phoenix, Dec. 27, 2013.

4.6 Katherine McDevitt Armstrong, BusAdm, Omaha, Feb. 27, 2014. Margaret "Marge" Davenport Evans, SCN, Omaha, Feb. 13, 2014. John D. Gaughan, BSC, Las Vegas, March 12, 2014. Melvin Tatelman, DDS, Omaha, Dec. 30, 2013.

James D. Hunter, BSC, Tucson, Ariz., Jan. 22, 2014.

4.8 Richard M. Dustin, JD, Omaha, Dec. 24, 2013. Dr. Richard E. Elston, ARTS, Spokane, Wash., Dec. 25, 2013.

49 James M. Radcliffe Sr., BSC, Ruidoso, N.M., Nov. 21, 2013.

50 Dr. James M. Crampton, BSPha, Omaha, May 17, 2014. Peter M. Graff, BSC, McCook, Neb., Dec. 7, 2013. Lawrence L. Hoffmann, BSC, North Platte, Neb., Jan. 10, 2014. William "Bill" F. Millea, BSC, Omaha, Jan. 5, 2014.

51 Patricia Hineline Cline, SCN, Missoula, Mont., Nov. 29, 2013.

52 Geraldine Smith Eadie, BS, Modesto, Calif., Feb. 19, 2014. John W. Quinn, BusAdm, Omaha, Jan. 9, 2014. Kenneth E. Shreves, JD, Sun City, Ariz., Jan. 10, 2014. Hon. John Verklan Jr., JD, Crest Hill, Ill., Feb. 11, 2014.

53 Eugene C. Corcoran, BSC, Omaha, Dec. 18, 2013. Alice Duesing Rausch, BSC, Alpharetta, Ga., Dec. 22, 2013.

54 John S. Hoffman, BS, Huntley, Ill., Feb. 2, 2014. Ruth Joanne Wakefield Jordan, SCN, Omaha, March 7, 2014. John F. Kelly, MD, Fort Dodge, Iowa, Feb. 10, 2014. John J. Thull, BSPha, Paradise Valley, Ariz., Dec. 15, 2013.

In Remembrance

We remember Creighton University faculty and Jesuits who have recently died. *

Mary S. Byers

Former assistant professor of English; March 22, 2014

Richard Booth, M.D. *Professor emeritus of medicine; May 24, 2014*

Mieczyslaw "Mitch" Cegielski, M.D. Former clinical professor, School of Medicine; July 12, 2014

Dick Ott, S.J. *Chaplain, Creighton University Medical Center; July 15, 2014*

Pat Malone, S.J. *Pastor of St. John's Church; July 22, 2014*

Michael Proterra, S.J. *Former dean of the College of Arts and Sciences; Aug. 28, 2014*

* Faculty and Jesuits who are Creighton alumni are listed in the Alumni Deaths section of *Creighton University Magazine*.



Who showed you the ropes and gave you insight into your profession?



The Creighton EDGE Mentoring Program is recruiting **alumni mentors** for our undergraduate and pre-professional students.

Consider this opportunity to give back.

To register, visit blogs.creighton.edu/edge/mentors

5 Sr. M.V. Del Grande, MA, Louisville, Ky., March 7, 2014.

56 James F. LaBenz, BusAdm, Sun City, Ariz., Jan. 30, 2014. **Clarence J. Wilsey, BSPha,** Kearney, Neb., Jan. 25, 2014.

57 Everett N. Jones Jr., MD, Boise, Idaho, Dec. 20, 2013. James L. Spellman Sr., BS'55, JD, Des Moines, Iowa, Jan. 12, 2014.

59 Richard M. Cartwright, ARTS, Arlington, Neb., March 7, 2014. Mary Courtney Markham, ARTS, Harrison Township, Mich., March 13, 2014. William J. Orester, JD, Lincoln, Neb., Jan. 14, 2014. David M. Rossiter, ARTS, Omaha, Feb. 28, 2014. John L. Siech, BSPha, Tripoli, Iowa, Feb. 13, 2014. Joe J. Tribulato, BSBA, Van Nuys, Calif., Nov. 28, 2013. James E. Wenzl, MD, Oklahoma City, Jan. 9, 2014.

Eugene A. Merecki, MD, Cambridge, N.Y., Nov. 19, 2013. John N. Moran, BSBA, Omaha, Feb. 8, 2014. Mary Bruning Morehouse, SJN, Omaha, Jan. 17, 2014. Geraldine Brady Weber, BA, Red Bank, N.J., Feb. 2, 2014.

61 Ret. Lt. Col. Bernard E. Meurrens, BSBA, Prescott, Ariz., Dec. 25, 2013. Carol Carroll

CREIGHTON

Fall 2014

42

Reilly, BusAdm, Shawnee, Kan., Feb. 3, 2014.

62 Dave A. Douma, DDS, Bozeman, Mont., Jan. 27, 2014. Charlie I. Scudder Jr., JD, Omaha, Jan. 2, 2014.

63 Gilbert C. Swanson Jr., ARTS, Longmont, Colo., Dec. 30, 2013. Sr. Dorothea Turner, RSM, MSEdu, Omaha, Jan. 20, 2014.

64 John A. Casillas, BA, Pueblo, Colo., Feb. 21, 2014. Joseph B. Devin, MD, La Jolla, Calif., Feb. 23, 2014. E. Newton Kelley, DDS, Ashland, Neb., Feb. 9, 2014. Sr. M. Emily Peetz, OSU, MA, Louisville, Ky., Jan. 2, 2014.

65 Dr. James M. Boland, BA'63, MSGuid, Puerto Vallarta, Mexico, Jan. 3, 2014. John F. Shannon, BS'52, MA, Avalon, Calif., Dec. 10, 2012.

66 Harry T. Ambrose, MBA, Williamsburg, Va., Feb. 20, 2014. Mary Stafford Noonan, BSMT, North Platte, Neb., March 25, 2014. Helen Peter Pratkelis-Kelberer, BA, South Bend, Neb., Feb. 2, 2014.

67 Richard P. Daly, BA, Denver, March 21, 2014. Dwylan R. Gearhart, BA, Council Bluffs, Iowa, Dec. 16, 2013. Alfred M. Mick, MD, Portland, Ore., Jan. 18, 2014. **Thomas A. Tinley, BA'62, MA**, Chicago, Feb. 11, 2014.

Duane M. "Max" Katz, JD, Omaha, Feb. 7, 2014. **Richard G. Norris, JD**, Springfield, Ill., Jan. 10, 2014.

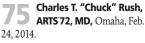
69 John Bluvas, MBA, Omaha, Jan. 30, 2014. Clifford E. Chase, BA, Seattle, Feb. 17, 2014. John J. McMenamin, BSPha, New Braunfels, Texas, Feb. 15, 2014.

70 Ret. Lt. Col. Dr. Robert R. Johnson, BSBA, North Platte, Neb., Jan. 9, 2014. Patricia Serlet Susami, BS, Milwaukee, Dec. 3, 2013. Gary J. Wilwerding, BA, Omaha, Jan. 22, 2014.

W. Louis DeVan Jr., BSBA, Joplin, Mo., Jan. 9, 2014.

72 Lois Rueschhoff Roubal, SJN, Omaha, March 2, 2014. Gary L. Tomaszewski, BSRT, Tallahassee, Fla., Dec. 14, 2013.

73 Kathleen Krohn Fitch, BSBA, Omaha, March 17, 2014. Mark F. Hermanek, BSBA, Omaha, March 4, 2014. Sr. Agnesmarie Slaight, MSEdu, O'Neill, Neb., Jan. 13, 2014. **Steven J. McPherson, BSBA,** Ashland, Neb., Feb. 7, 2014.



T8 Edward T. Beitenman, BSBA, Las Vegas, March 2, 2014. Christopher Lee, JD, New London, N.H., Feb. 10, 2014.

822 William E. Robinson, BSMth, Omaha, March 2, 2014.

366 James W. Porter, DDS, Highlands Ranch, Colo., Jan. 2, 2014.

90 Jeanne Kemmy Longenecker, JD, Papillion, Neb., Feb. 6, 2014.

92 Kristen E. Head, JD, Montrose, S.D., Dec. 15, 2013. **Curry J. May Jr., JD,** Atlanta, March 3, 2014.

 Philip T. Jorgensen, BS, Ralston, Neb., Feb. 17, 2014.
 Paulette J. Haley, MS, Norfolk, Neb., Jan. 30, 2014.

B Lexie W. Lamere, ARTS, South Sioux City, Neb., Jan. 3, 2014.

Is Altruism an Inherent Trait of Human Beings?

By Richard O'Brien, MS'58, MD'60 University Professor Emeritus

There is a good deal of evidence that human beings have an innate drive to help others who are in need. Is altruism a natural part of human existence?

That altruism is a common human drive is evidenced by its recognition and promotion by many religions. The importance of helping others is enshrined in religious traditions around the world. Life is believed to be a gift from God. It is therefore our duty to protect and to preserve this divine gift. Health is viewed as our natural state and is to be preserved.

Judaism teaches that we are stewards of and responsible for our own lives and those of others: Leviticus commands us "Love your neighbor as yourself." Christians are commanded to "Love one another." Jesus' numerous acts of healing are examples of this, as is the story of the good Samaritan. Islam teaches that we are to preserve and protect the "precious gift of life." Eastern religions also invoke the sanctity of life and the importance of protecting it.

Even secular (nonreligious) humanism may be cited, too, as acknowledging the value of life and health. Karl Marx points out that religion accepts suffering as part of human life and suggests that atheism frees mankind to fight suffering. Several of the former Soviet

Socialists Republics declared health a basic human right.

There is also good reason to believe that this desire to help others antedates the modern Abrahamic religions. Perhaps the oldest examples of human caring for those suffering have been found in the Shanidar Cave in Iraq. Neanderthal skeletons have been found that show signs of injuries that healed but must have left those who suffered them incapacitated, implying strongly that they were then cared for by others. And this apparently extended to concern and care about their afterlife because they were given ritual burials.

Religious or humanistic motives may be expressions of an innate biologic need to help others. Man evolved as a communal animal with the need to preserve the health and well-being of the community, which is dependent on the well-being of the individuals that comprise it. Thus, the drive to help others has evolutionary value, assuring the survival and flourishing of the human species. This is also manifest in other communal animals that assure species survival by cooperation and commitment to others of the species.

Richard Dawkins, in his book *The Selfish Gene*, and James Wilson, in *The Moral Sense*, both suggest that altruism or a desire to help others has value in preserving genes and cultures and, in consequence, the lives and health of human beings and members of other species. Dawkins cites a number of examples of cooperative behavior in animals other than humans.

This certainly exists in the great apes.

There are numerous reports of primates caring for each other. Apes have been observed removing foreign objects from others' eyes, removing splinters and consoling group members grieving the loss of an infant.

In response to the question of whether humans have an innate drive to help others, the answer is clearly yes, and this is also true of other animal species.

In humans, this drive may explain why some choose helping professions, why many individuals volunteer their time and services, why many engage in philanthropy and why the government supports programs to provide food, income, healthcare and other services to those in need.

Even though we can readily conclude that there is an innate human desire to help others in need, it must be acknowledged that not all humans possess this altruistic spirit. We are all familiar with people who are not so motivated and pursue their self-interest, often to the detriment of others. But fortunately, these people seem to be a minority and usually are easily identified.

About the author: O'Brien is a former dean of the School of Medicine and vice president for Health Sciences at Creighton. He founded Creighton's Center for Health Policy and Ethics. He became university professor emeritus in 2011, but he remains an active member of the Creighton community. The content of this piece is significantly derived from his article "Choosing medicine: Motive, incentive, obligation," originally published in the journal The Pharos of Alpha Omega Alpha in 1995.

Canine Rehabilitation

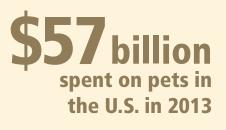
By Kirk Peck, P.T., Ph.D.

Evidence that human injuries have been treated by various rehabilitative techniques is nearly as old as medicine itself. Hippocrates prescribed diet, exercise, massage and spinal traction to treat pain and restore function, and Claudius Galen is famous for treating injured Roman gladiators.

In the U.S., the practice of physical therapy largely grew out of a need to rehab individuals impacted by outbreaks of polio in the early 1900s and 1950s, and, on a larger scale, of treating military personnel during both World Wars. Physical therapists began treating animals in North America in the 1970s with significant growth over the past 15 years.

My work in the area of animal therapy has primarily focused on canines which shares many similarities to treating humans. The differences lie in a working knowledge of functional anatomy, physiology, biomechanics and differential pathologies.

However, many of the same PT interventions used on humans can be just as easily applied to canine injuries, including manual therapy to increase mobility in joints and soft tissues; physical agents such as electrical stimulation, hydrotherapy, and laser to promote healing and reduce pain; and therapeutic exercise to restore daily function. More advanced techniques are required to treat neurological disorders,



and also return canines to competitive agility, flyball, herding, dock diving and obedience. In addition, working breeds serving the military, K-9 police patrols and those providing assistance to individuals with physical limitations may also encounter injuries in need of professional care.

Since 2005, I have worked with members from the professions of massage therapy, chiropractic and occupational therapy to regulate language allowing for the practice of pet therapy in Nebraska. Legislative Bill 463 was passed in 2009 which provided statutory authority to treat animals with additional educational competencies to be outlined in rules and regulations.

After several years of working with the State Board of Veterinary Medicine and Surgery, testifying at public hearings, and signage by the Nebraska Department of Health and Human Services and the governor, the Nebraska regulations for licensed animal therapists went into effect. The new regulations allow pet owners the Of the \$57 billion, \$14.4 billion was spent on veterinary care and \$13.1 billion for supplies and over-the-counter medicines

Source: American Pet Products Association

opportunity to consult qualified licensed physical and occupational therapists, chiropractors and others for professional services for their pets. Nebraska is now one of only a few states that provides an opportunity for non-veterinarians to treat animals.

As president of the Animal Rehabilitation Special Interest Group (ARSIG) of the American Physical Therapy Association, I represent over 350 physical therapists and physical therapist assistants in the U.S. who not only treat dogs, but cats and horses as well. A primary goal of the ARSIG is to help address increasing consumer demand for access to the benefits provided by physical therapists. The challenge, however, is to attract more therapists with an interest in this unique area of clinical practice. I am encouraged that interest in animal rehabilitation will grow because more and more students in physical therapy programs across the country are expressing an interest in also working with animals.

Asthma and the Elderly

While asthma affects 1 in 11 children in the United States, the disease is also common among adults, and asthma-related deaths are the highest among those 65 and over.

Why some people get asthma and others don't is not fully understood, but age, race, gender and financial status all seem to be factors, to some degree. For instance, the prevalence of asthma is higher among children than adults. It's also higher among African-Americans than Caucasians. And those living below the federal poverty level have higher rates of asthma than those who don't.

What is known is that asthma rates are increasing nationwide. In the last decade, the proportion of people with asthma in the U.S. grew by nearly 15 percent, according to the Centers for Disease Control and Prevention (CDC). Nearly 25 million



Americans suffer from the chronic disease. Robert Townley, MD'55, says the elderly are often "ignored" in the fight against asthma. But the Creighton professor of medicine and medical microbiology and immunology warns that this group should not be overlooked. Proportionately, the death rates from

asthma are highest among the elderly,

particularly African-American women. (In

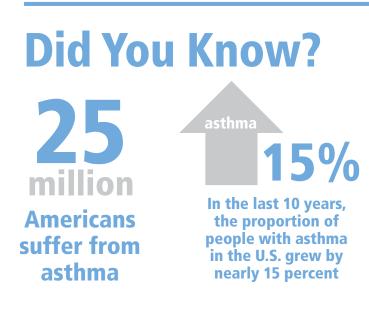
fact, according to the CDC, African-Americans

Townley

are two to three times more likely to die from asthma than any other racial or ethnic group.) And the U.S. Department of Health and Human Services' Administration on Aging reported that in 2005 more than 2.6 million Americans age 65 and older had asthma. This is also the fastest-growing age group in the country.

"Asthma is an increasing problem in the elderly population," Townley says. "But elderly asthmatic patients have been excluded from many clinical trials. Research in every aspect of asthma in elderly people is needed."

Townley says that in children, more than 80 percent of asthma is triggered by allergic reactions — to things like dust mites, pet dander, pollen or mold. That type of "allergic-asthma" can continue into adulthood. But, he says, asthma can first appear at any age, even among those in their 70s or 80s.





"Asthma in elderly people often presents differently than in the younger population," Townley says.

For those who develop asthma in latter middle age and beyond, their symptoms are usually not triggered by allergies. Instead, Townley says, their asthma seems to be triggered by faulty immune system responses to "non-allergic" factors, such as viral infections or even the common cold.

Townley and his colleagues at Creighton are studying the triggers of asthma at the cellular level. One protein — Interleukin 13 (or IL 13) — seems to have a major connection to asthma. "We've found that if we can block IL 13, we can improve breathing in people with severe asthma," Townley says. IL 13 is activated by another protein — IL 33 — which is found in the epithelial cells that line cavities in the body like our sinuses and lungs. When a cold virus attacks the lining of our nose or throat, a series of reactions occurs that can trigger an asthmatic reaction. "Epithelial cells are in contact with the external environment," Townley explains. "That's where IL 33 comes from, and IL 33 turns on the cells that make IL 13."

The result can be an asthma attack, during which the muscles of the airways tighten, inflammation increases and glands fill the airways with an abundance of mucus — resulting in wheezing, coughing, chest tightness and shortness of breath.

This can be especially troublesome for the elderly, Townley says, because their respiratory muscles and lung elasticity are often weaker due to age. The obstruction can also become more progressive and irreversible over time.

In addition, it's often more difficult to diagnose asthma in elderly patients, because they may have a variety of illnesses that include similar symptoms or simply because they attribute symptoms like shortness of breath to old age.

"The elderly don't always perceive a shortness of breath, for instance," Townley says. "And because of other coexisting diseases that may be present, asthma in the elderly is under-diagnosed and undertreated."

As the baby boomers age, the problem could become more acute. According to a study published in the May 2012 issue of the *Annals of Allergy, Asthma & Immunology,* only 53 percent of asthmatic baby boomers surveyed used prescribed inhalers.

"It is alarming that such a large percentage of older people with asthma are letting their disease go untreated," says allergist Andrew Smith, M.D., lead author of the study.

"And in 2020, 20 percent of our population will be over age 65," cautions Townley.

All the more reason, he says, to include more elderly in future asthma research studies.



A Cover of Secrecy

Their assignment was shrouded in mystery. A purposely vague email from Creighton's dance team moderator asked two members to meet at her office, in uniform, the following week — on March 5 — at a specified time.

"She couldn't tell us many details," remembers Creighton senior Kelsey Saddoris, one of the two who received the message. "But she said it would be an event we would LOVE!"

By the time Saddoris and teammate Kayleigh Begley met moderator Alynne Wize at the Reinert Alumni Memorial Library, the suspense was killing them.

"Can you tell us what it is now?" begged Begley.

"No," Wize responded. "First, you have to give me your cell phones."

The intrigue reached a fever pitch, as Wize led the two Creighton students outside the library and ... FINALLY ... shared the secret.

They were going to be in a major photo shoot! ... For the cover of *Sports Illustrated*!

... With Creighton All-American Doug McDermott!

"We started freaking out and screaming," says Saddoris, laughing.

"The people in the library were looking out at us like we were crazy," Begley adds.

Saddoris and Begley were immediately whisked off to the Vinardi Athletic Center (Old Gym), where the photographer and his assistants were putting the final touches on the setup.

"They knew exactly what they wanted," says Begley. Saddoris and Begley flanked Doug McDermott in a pose that re-created a past *Sports Illustrated* cover featuring a collegiate Larry Bird.

"They had the Larry Bird cover pulled up on an iPad, which they propped up in front Watch a behind-the-scenes video of the *Sports Illustrated* photo shoot here.

of us so that we could see it," says Saddoris.

Wize says Saddoris and Begley were selected by *Sports Illustrated*, through an Associated Press photo that featured the two dancers. "Rob Anderson (CU Sports Information director) and I had to identify them from the photo," says Wize, who admits being purposefully coy in her email because they were "sworn to secrecy."

The duo described McDermott — one of Creighton's most decorated athletes of all time — as "very easy-going, very down to earth." The shoot wrapped up in about 45 minutes, and then the hardest part began. They had to keep "The Secret" until the magazine became public the following Wednesday.

When the magazine finally came out over Creighton's spring break — they were overwhelmed by the reaction. Begley, a sophomore from Omaha who had stayed in town over break, was besieged by interview requests from local media.

"I was kind of blown away by how huge it got, at least within the Omaha community and the Creighton community," Begley says. "It definitely blew up!"

Saddoris received an email from her mother, who was in Mexico at the time with Kelsey's brother for his spring break trip.

"She had seen it on Twitter," Saddoris says, "and she was like, 'Is this you?"

The news included some good-natured ribbing for Kelsey's brother, Jordan, a basketball player at Ankeny High School in Iowa who graduated in May.

"His government teacher Tweeted: 'No pressure, Jordan Saddoris, but your sister has now been on the cover of *Sports Illustrated*."

Jordan, who has committed to playing at Central College in Pella, Iowa, received a surprise graduation gift from his sister — a copy of the *Sports Illustrated* issue signed by McDermott.

Saddoris, a pre-med major, has her sights set on earning an M.D. and Ph.D., and eventually working in the field of genetics. Begley plans to major in business and possibly attend law school. Being a part of the dance team is a major commitment, too.

The team practices three days a week, in two-hour sessions, during the basketball season — and participates in fitness training arranged by Creighton's Department of Exercise Science. The dance team performs at men's and women's basketball games, volleyball matches, baseball games and the homecoming men's soccer match. They also make appearances at special events for the University and participate in service work, such as teaching a dance class at the Boys and Girls Club of Omaha.

"It's pretty much year-round," says Saddoris. "We start with volleyball in the fall and continue through finals week with baseball. But I love it. It's a chance to keep dancing and support Creighton."

Saddoris started taking dance lessons when she was 4. Begley also started performing at age 4, but as a baton twirler. Her team at Sue's Stepper-ettes in Omaha represented the United States at world competitions, winning the gold medal in Belgium (2009) and Switzerland (2012).

Begley took this year off from the dance team to compete in another world competition. Both say this past year was special — with Creighton's entrance into the BIG EAST Conference, and the attention and excitement surrounding the success of the men's basketball team.

"And then to top it off with the cover of *Sports Illustrated*," Saddoris says. "This has been great for Creighton!"

Bullish on Creighton

As a consensus National Player of the Year and a three-time All-American, Doug McDermott's impact on Creighton University and Bluejay basketball will never be forgotten.

But McDermott, now a member of the Chicago Bulls, said Creighton also had an impact on him — as a player and a person.

"Overall, it was just a great experience on and off the floor," McDermott said from Chicago this summer while preparing for the start of the NBA season. "I met a lot of



really great people throughout my four years. I made a bunch of friends that I'll have forever, and a lot of my teachers I'll stay close with for the rest of my life.

"And, obviously, on the court, there are some great memories."

McDermott was selected in the first round of the NBA Draft by the Denver Nuggets as the 11th overall pick, and was immediately traded to the Bulls.

"It was pretty crazy," McDermott said of draft night. "I didn't really know where I was going to end up, so it was very stressful."

McDermott had worked out with the Lakers, Celtics, Hornets and Magic, so he thought one of those teams may draft him. The Magic had the third pick; the Celtics, the sixth; the Lakers, the seventh; and the Hornets, the ninth.

When those teams passed over McDermott, his agent got on the phone with the Bulls, who notified him they

were arranging a deal to get Denver's No. 11 pick. Philadelphia selected Elfrid Payton as the 10th overall pick, punching McDermott's ticket to Chicago.

"Once that Philly pick was over, I pretty much knew it was a done deal," said McDermott, who wore a Nuggets baseball cap while shaking hands with the NBA commissioner after his name was called. "I got a Denver hat, but I knew I was going to the Bulls."

McDermott is glad to have landed with Chicago, which finished second in the Eastern Conference Central Division last season and made the playoffs. "It was just unbelievable how it all worked out on draft night. I couldn't have asked for a better team."

The Bulls open the 2014-15 season Oct. 29 against the New York Knicks.

McDermott passed up the draft after his junior season to return to Creighton for his senior year. He finished his collegiate career as one of the most prolific scorers in NCAA Division I men's basketball history; his 3,150 career points rank fifth on the all-time scoring list. Determined on the court, McDermott was equally determined to attend Creighton's graduation ceremony in May — where he was one of three students honored with the prestigious Spirit of Creighton Award.

He had just finished his on-court work at the NBA Draft Combine in Chicago, flew back to Omaha for graduation and then flew back to Chicago.

"It was a quick trip, but walking across that stage and being able to reflect on the last four years was really special."

With all the honors and accolades, McDermott says one title still feels a bit new: Creighton alumnus.

"It's weird to hear that," McDermott said with a laugh. "It's pretty cool. People take great pride in being a Creighton graduate, and I definitely do too. You really feel like you're part of a family."

The Ancient World Neets Modern By Leonard Greenspoon, Ph.D. Professor & Klutznick Chair in Jewish Civilization

hen modern universities began, in the 11th and 12th centuries, classical and theological studies were at the center of the curriculum. Media studies — which look at how ideas and information are transformed as they are transmitted — first appeared on university campuses in the 1960s, making them among the most recent additions to higher education.

Can these approaches, one very old, the other quite modern, be combined? If so, what does it look like? These were among the questions that impelled me to develop a new course for honors students, titled "The Ancient World in Modern Media."

Twenty-three students signed up for the inaugural class in fall 2013, and, as it turned out, there were 23 different visions of how to portray antiquity for today's public.

The Preparation

To prepare students for their projects and presentations, we made extensive use of a very traditional educational medium, the printed book — and supplemented that with historical reports and "new media."

The goal: To help the students develop presentations that would educate and entertain.

So, for instance, students read translations of treatises written by the prolific Roman politician Cicero in the first century BCE, as well as a historical novel by Steven Saylor, featuring a young Roman sleuth named Gordianus.

We studied ancient civilizations through social history — with an emphasis on the everyday life of people at the time — as well as traditional political history, with its focus on military, economic and governing elites.

To get to better know today's audience, we examined a report by the prestigious McArthur Foundation on the expansive use of mass and multimedia technology, especially on the part of younger individuals. In the process, we raised questions of technology, and also of ethics.

We looked at representations of the ancient world in modern media, such as YouTube. We didn't spend a lot of time on what might be called traditional purveyors of such information, such as the BBC or the History Channel. Instead, we looked at shorter clips, some of which came from unlikely individuals and groups such as the English comedian Eddie Izzard and the heavy metal group Iron Maiden.

Students began to consider how education and entertainment could be packaged together in mutually supportive ways. Comedy and music, for example, could be used to convey knowledge about the ancient world to a wide range of audiences today. (However, it didn't take students long to recognize that highly entertaining videos are not always filled with factual information of equally high caliber.)

During the last weeks of class, every student made a 10-minute presentation: each incorporating a particular time, place or phenomenon of antiquity; one or more modern media; and one method or approach to study and analysis.

The range of projects was impressive: video games on ancient warfare, cookbooks, children's books, board games and videos on everything from how gladiators trained and fought to how Romans relaxed and partied.

Every project succeeded in combining authentic and reputable knowledge about the ancient world with at least one modern medium that is attractive and accessible to today's general audiences.

We were looking at ways in which humans convey their conceptions about who are ancestors were, what they did and why they accomplished or failed to accomplish their stated goals. When these concepts are conveyed thoughtfully and accurately, we are all enriched.

I am gratified that my students grasped these ideas in the abstract and then carried them out through specific projects. This is a credit to the students and to Creighton University, which allows for and actively supports such pursuits. For this, we should all be proud.

The Projects

Children's Book

For political science major Erin Rossiter from Spencer, Iowa, the impetus for her project came from something she learned in the course: Until recently, study of the ancient world focused almost exclusively on the adult males who formed the ruling elite.

"The study of children is a relatively modern field of research, including the study of children in ancient Greek societies," she says.

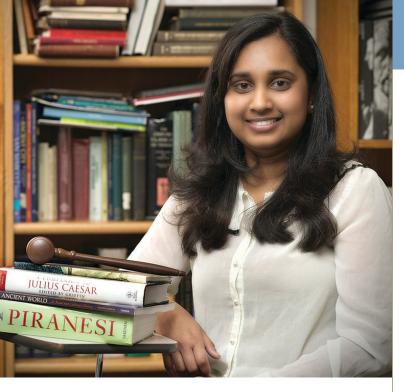
Rossiter, who also is an English major, wrote a children's book, complete with hand-colored illustrations. The book was written about children in classical Athens and for today's primary school children. She chose a young boy named Anatolios as her main character. Through him, she was able to explore many facets of children's lives in the ancient world, especially their education.

Rossiter uncovered the many subjects that Anatolios would study, from favorites such as writing and swimming, to playing the lyre, at which Anatolios had to work especially hard. Along the way, Rossiter's audience learns that even in democratic Athens, all was not equal: girls did not have the same opportunities as boys for formal education, and Anatolios' family employed slaves for many tasks.

The book also has an underlying message of hope. "My book hopefully conveys a message of never giving up, through Anatolios' struggles with the lyre," she says.



Name:Erin Rossiter
Political science and English majorProject:Children's book about children in classical Athens



Name:Manny Tappata
Biology majorProject:Examined ancient law parodying "Judge Judy"

Judge Manny

Manaswita (Manny) Tappata, a biology major from Iowa and a member of Creighton's Mock Trial Team, examined ancient law in a YouTube video parodying the popular daytime television show "Judge Judy."

Her "Judge Manny" video consisted of three different trials, tried under three different law codes: the Draconian Law of Athens, Hammurabi's Babylonian Code and the Roman Law of the Twelve Tables.

Since "Judge Judy" tries small-claims civil cases, "Judge Manny" also heard relatively low-level cases: three scenarios that had women accusing men of stealing an apple, pushing the plaintiff into the water and breaking her arm, and starting a fire that burned some of the plaintiff's property.

As part of her mock trial experience, Tappata says she has "spent a lot of time in court," so the "Judge Manny" video felt like a natural fit.

"Choosing a topic I knew a lot about in the modern world made it easy for me to examine the similarities and differences between law today and law in the ancient world," Tappata says.

All of the activities expected from "Judge Judy" — from the judge's formal entrance at the beginning of each trial to personin-the-street reactions at its close — were replicated in Judge Manny's court.

Each trial was conducted according to a different legal system, which varied from very strict to fairly lenient. Moreover, these trials accurately illustrated another point: in ancient societies, where class divisions were most pronounced, an upper-class person could commit even a serious crime against individuals of a lower class with only minimal consequences. No "equality under the law" was envisioned.

Superhero Novel

Tim McDermott, a psychology major from Denver, can trace the inspiration for his project to the movie *Watchmen* — which he saw with his brother shortly after it premiered in March 2009.

"I immediately fell in love with the story, which provided an alternative history of the period when the Cold War was at its height," he says. "I had never before seen a realistic superhero movie with relevant themes about politics, power and American society."

After seeing the movie, McDermott began reading the graphic novel by Alan Moore upon which the film is based. When McDermott applied to Creighton, he even crafted his essay as an analysis of one the heroes from this group.

It isn't that surprising, then, that when McDermott thought about a project for the course, he immediately "decided to create my own superhero tale and set it in the ancient world." He titled his novel *Wondermen: Superheroes of the Ancient World* — based on the characters developed for *Watchmen*.

Each of McDermott's characters, all of whom were active in the Babylonian Empire of the late seventh century BCE, has an appropriately exotic name: The Hero, Dybbuk, Midnight, Golden Gidim, Master Nabonassar and Amun-Semerkhet. Initially

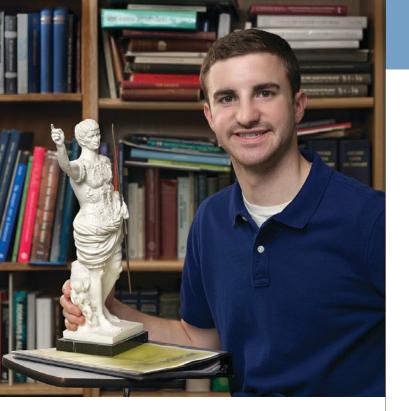
they use their assorted powers in support of the Babylonian king, Nebuchadnezzar. After the monarch disbands them, however, they resort to fighting among each other with decidedly tragic consequences for almost everyone involved.

Underlying McDermott's thoroughly entertaining storylines were some serious considerations about the nature of "heroes" and the "heroic" and the ways in which creators of media appropriate or build on the work of previous authors and artists, which they transform through meaningful sampling and remixing.



Name: Ti Ps Project: Su an

Tim McDermott Psychology major Superhero tale set in the ancient world



Name:David Martin
Theology and psychology majorProject:Recreated two ancient battles in a video game

Video Game

David Martin, from Burlington, Wis., double majoring in theology and psychology, says he was absolutely "captivated" when the computer game "Age of Empires II: The Age of Kings" was released in 1999.

The game comes loaded with five campaigns, but none is ancient.

Therefore, Martin combined his interest in ancient history with his prowess in gaming to recreate two important battles from the Greek-Persian wars: Marathon, in 490 BCE, and Thermopylae, in 480 BCE. Both of these battles have appeared elsewhere in popular culture, but not always with accurate portrayals.

Martin carefully researched a primary ancient source for these campaigns, the Greek historian Herodotus (often referred to as the "father" of history) and compared his account with what can be learned from other historical sources. In this way, he arrived at a realistic representation of what actually occurred when the Greek and Persian armies met and fought it out.

"I used the constructs of the game that were already invented in order to expand upon the tactics of these battles," Martin says. "A textbook can tell the reader only so much. Having something to physically visualize history allows users to tangibly interact with what they are learning and goes a long way toward advancing the pursuit of knowledge."

Board Game

Henry Bass, BA'14, a psychology major from Dallas, developed a board game with a complex ancient-world theme.

The game, he says, "demonstrates how different cultures would claim that their gods were not much different from another culture's in order to facilitate a smoother transition when conquering a civilization."

The game, titled "Roman Rebellion," works this way: As the Roman Empire conquers land after land, it seeks to prevent rebellion by convincing the conquered peoples that their gods are the same as the Romans'.

Standing in opposition, as it were, to the Romans are the foreign deities themselves, who use their unique divine powers to incite rebellion against the Romans and defend their people against Roman corruption.

Among the characters leading the Roman conquest of the world are Julius Caesar, Marcus Agrippa and Octavian. Those in rebellion against Rome include gods such as Apollo, Osiris and Mercury.

Players come together to form teams that carry out missions.

"The game provides a fair and educational representation of the way in which comparative mythology affected the ancient world, yet does so in a fun and entertaining way," Bass says.



Name: Henry Bass, BA'14 Psychology major Project: Created board game titled "Roman Rebellion"

Meet Creighton's H



Susan Aizenberg, MFA

Specializes in poetry

Examples of work:

- > Quiet City coming in 2015
- > Muse
- > The Extraordinary Tide: New Poetry by American Women - co-editor
- > Peru/Take Three

Among awards won:

- > The Glenna Luschei Prairie Schooner Award
- > Nebraska Book Award for Poetry (Muse)
- > Larry Levis Prize (Muse)
- > Nebraska Arts Council Distinguished Artist Award

"People write for different reasons. Sometimes what people think a writer's life is, is not what it is. In poetry, one of the challenges is, unless you have a trust fund and few responsibilities, it's hard to do. You have to need to do it. For people for whom this is true, there is no stopping."

David Philip Mullins, MFA

Specializes in short stories, novels

Examples of work

- > Greetings from Below
- > Arboretur
- > First Sight

Among awards won:

- > The International Walter Scott Prize for Short Stories (Greetings from Below)
- > Mary McCarthy Prize in Short Fiction
 (Greetings from Below)
- > Notable Western Story of the Year
 (First Sight)

"I have a symbiotic relationship with students. Students will tell me something about their work and it triggers something in my own. I get to do what I want and love to do writing, teaching, publishing. I come in here every day happy to be here."



aculty Authors



Brent Spencer, Ph.D., MFA

Specializes in fiction writing, screenplays, poetry, short stories

Examples of work:

- > Rattlesnake Daddy: A Son's Search for His Father
- > Are We Not Men?
- > The Lost Son
- > Baghdad Rules (screenplay co-written by Jonis Agee)

Among awards won:

- > Winner of the Midwest Book Award and Nebraska Book Award for 2012 (Rattlesnake Daddy)
- > Are We Not Men? chosen by The Village Voice as one of the 25 best books of 1996
- > Gold Level Award winner presented by California Film Awards (Baghdad Rules)

"Students want everything to happen at once. We try to show them that it comes in stages. There is no magic formula."

Mary Helen Stefaniak, MFA

Specializes in novels, short stories

Examples of work:

- > The Cailiffs of Baghdad, Georgia
- > The Turk and My Mother
- > Self-Storage

Among awards won:

- > 2011 Anisfield-Wolf Book Award for Fiction (*The Cailiffs of Baghdad, Georgia*), often called the "Black Pulitzer" for recognition of books making important contributions to understanding of racism and appreciation of the rich diversity of human cultures
- > John Gardner Book Award for Fiction (The Turk and My Mother)
- > Chicago Tribune's Best Fiction of 2004 (The Turk and My Mother)

"Make yourself a regular writing schedule. You have to be hard-nosed and determined to set aside the time to write. Everything wants to keep you from it. You need to practice it just like a musician. If you do, the words will come."



Family Time Leads

to Zombie Books

Laura Hansen and her husband, Dave Reed, center, discuss her recent work with sons Charlie (left) and Jack.

Creighton cancer researcher becomes self-published author

By day, she is a cancer researcher and professor in Creighton's biomedical sciences department. At night, Laura Hansen, Ph.D., writes about teenage zombies.

For Hansen, who normally spends her time writing research grants and mentoring students in labs, writing fiction for teenagers is a chance to bond more closely with her family, including teenage sons Charlie and Jack. Like many parents, Hansen and her husband, Dave Reed, Ph.D., director of computer science and informatics at Creighton, enjoyed reading with their children when they were younger, but found those moments fleeting as the boys grew. So Hansen suggested they all write a story together.

"At first, the 16-year-old stomped off and the 13-year-old said if it wasn't about hamsters it probably wasn't worth it," Hansen remembers. So she wrote a scene about Charlie stomping off and read it aloud to the family.

"It got everyone's attention," she says. "They liked being the characters in the story, and they wanted to know what happened next." When the family went to bed, Hansen stayed up and wrote.

Because Charlie only wanted to read about zombies, that became the main focus of the stories. For six weeks, the family read chapters aloud each night. Thus was born *Cruise of the* Undead, which then led to Avalanche of the Undead.

Hansen bought a dozen or so books on fiction writing, and spent hours honing the craft by writing and rewriting chapters in various ways, focusing on scenes, dialogue and other aspects before she hired an online editor.

"I set a quota of 1,000 words a night," she says. She admits that's "kind of obsessive," and that sometimes she has fallen asleep before reaching her quota, but she insists that you must have discipline to be a writer.

Hansen says writing the books has brought the family closer together. As a mom, she says she loved capturing the boys' personalities and interaction in a way no snapshot ever could. Aimed at the young adult audience, the stories are fast-paced, have a little romance and feature attractive locations.

The books are self-published, and Hansen and her family have paired with Dakota News to help with distribution.

Hansen is working with another author she met through a local bookstore to form Midwest Children and Young Adult Authors, pooling marketing efforts and promoting interest in children's literacy. Ten percent of gross sales go to local schools. To date, proceeds have funded a \$500 scholarship for a Bellevue, Neb., student who wants to go into education. Hansen says it is a good way to give back to the community and schools, and she hopes to fund an additional scholarship in the future. Her third zombie book is in the works.

From Raggedy Ann to the Halls of Creighton: One Writer's Journey

By Jean Luckett Harkin, BA'61

What states of mind impel a reader to become a writer? And where does the language come from? Do curious minds produce better writers? These are questions Edward P.J. Corbett, an English professor at Creighton in the 1950s and 1960s, would have investigated when freed from his duties teaching creative writing to sophomore English majors like me.

I was a lucky child; my mother and grandmother read to me from Raggedy Ann Stories by Johnny Gruelle, a writer, illustrator and cartoonist. The adventures of Raggedy

Ann, leader of the nursery dolls, and her comrade, Raggedy Andy, struck a quivering nerve in my childhood imagination. Each time I heard or read a story about Raggedy Ann, a kind gentle rag doll, with shoe-button eyes, red-yarn hair and a candy heart that says I love you, I wanted to sit down afterward and grab pencil and paper to write my own stories.

Gruelle knew how to fascinate a little girl with imaginative adventures, and his easy, yet fanciful, language gave me the urge to write. Thereafter, my younger brother and I wrote many childhood "novels," stapled together with construction paper covers and illustrated with pencil-and-crayon drawings.

Corbett became my guide to lead my writing to the next level. That first day in class at Creighton, he walked in looking exactly the image of a tweedy, pipe-smoking English professor. He was

scholarly and serious about style and logic in writing, yet he had a twinkle in his eye and an unexpected, booming laugh. During class discussions, he often looked at the ceiling. Perhaps he was thinking, "Deliver me, God!"

Corbett had a "candy heart," too. He was always kind in his critiques and suggestions. I read later that he considered students' writing failures to be caused by their lack of knowledge. He gently nudged us toward researching our stories, reading the masters of literature and expressing ourselves more clearly.

Encouragement was his forte. I remember that he asked me one day in my senior year, "When are you going to write a novel?" I answered, "When I have something to say."

Corbett died nine years before I seriously began to write a novel. I wish I could now tell him, "I did it!" I hope he would consider my novel several notches above the silly stories I presented in sophomore English. At least I could tell him, "I did what you said — I wrote what I knew and researched the rest." Gruelle died before I was born, years before I saw my first

Raggedy Ann book. I wonder if Corbett read Gruelle's stories or enjoyed his illustrations. What if I could have both men return to earth for a chance to meet each other!

l imagine Corbett, the rhetorician with sweet-smelling pipe in hand, complimenting Gruelle: "Good writing is writing that achieves the desired effect on the target audience. How did you pull that off so well?"

"I began by telling those stories to my daughter, Marcella. They were all about the dolls she loved, and especially the rag doll she found one day in an attic trunk."

"Raggedy Ann, I presume." Corbett puffs a smoke ring toward the ceiling.

"Yes. Later came Raggedy Andy, and Marcella just kept me going with her fantastic imagination. We played off each other. Eventually I had to put the stories down in writing."

"Thereby hangs a tale." Corbett laughs at his quote from Shakespeare.

"And what about your books, professor?"

"Well, first there was *Classical Rhetoric for the Modern Student*, then *The Writing Teacher's Source Book*. All academic." "I see. I'm sure I could have learned a lot from you." "And I, from you."

I was lucky to have learned from both.

About the author: In addition to a B.A. in English from Creighton, Jean Luckett Harkin holds a master's degree in teaching from Drake University. After graduating from Creighton in 1961, Harkin worked as an advertising copywriter for *Better Homes and Gardens* magazine in Des Moines, Iowa. She has worked as a journalist and photographer, and began writing fiction in 2007 when she joined a writing group in Portland, Ore., where she currently lives with her husband, John. She hopes to publish her first novel, *Promise Full of Thorns*.



Jean Luckett Harkin



ALUMNI SCHOLARSHIPS

ENROLL Today!

Space is limited

ENROLLMENT TERMS

- Spring 2015
- Summer 2015

LIFELONG LEARNERS Scholarship Program

For a limited time, Creighton is recognizing alumni by offering a 25 percent tuition scholarship when admitted into a qualifying graduate degree or certificate program at Creighton University. Don't miss this opportunity to continue your journey as a lifelong learner.

Continue your journey

For programs and eligibility guidelines, visit the Office of Graduate and Adult Admission at

creighton.edu/alumni-scholarship alumnischolarship@creighton.edu | 402.280.2424 | 800.637.4279