

### **THE GRADUATE SCHOOL**

The University of North Carolina at Chapel Hill

200 Bynum Hall CB# 4010 Chapel Hill, NC 27599-4010

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@UNC\_GradSchool

The buttons say it all—and they were proudly worn during the first-ever Graduate-Professional Student Appreciation Week (April 1–7) at the University of North Carolina at Chapel Hill. The Graduate School and the Graduate and Professional Student Federation worked with programs campus-wide to promote the many accomplishments of Carolina graduate students.



## Carolina Dedicated to graduate education at UNC-Chapel Hill







25 Years of Collaboration **Across Campus** 

Graduate Student 🕢 Research Benefits N.C.

Royster Fellows 🗸 Make Global Connections

### TABLE OF CONTENTS



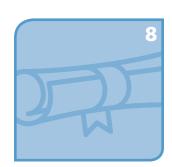
A decade of growth:
Dean Matson shares his perspective



Meet campus leader Madelyn Percy



25 years of interdisciplinary innovation



Graduate School fast facts



New fellowships honor pioneering alumnus



Impact Awards



Horizon Awards



Global connections

Friends of graduate education, both on campus and beyond, support graduate students.

Learn more about their crucial support.



The Graduate School at The University of North Carolina at Chapel Hill 200 Bynum Hall, CB# 4010 | Chapel Hill, NC 27599-4010 919-962-6326 | gradschool.unc.edu

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### Visit GRADSCHOOL.UNC.EDU for more stories



First-generation students are at risk of not completing an advanced degree—or even pursuing graduate education. Learn how student leaders and The Graduate School are supporting first-generation students.



Tamara Taggart, a health behavior doctoral alumna and Yale postdoctoral research fellow, is dedicated to improving the health of adolescents and emerging adults. Read about the support she received from UNC-Chapel Hill faculty.

Graduate education has changed a lot since Dean Steve Matson was a graduate student (so has his hair). Read about The Graduate School's role in a national initiative focused on graduate alumni careers and graduate student aspirations.



Can you concisely speak about months—or years—of research in three minutes? These students did. Watch their presentations online.



The name of our magazine has changed but our mission is the same. We will continue to highlight the many ways that graduate students, and the people who support their efforts, are making a difference in our world.

## 'IT HAS BEEN AN HONOR TO SERVE'

### As he prepares to return to the faculty later this year, Dean Steve Matson shares his perspective on graduate education at Carolina

Editor's note: After a decade of exceptional service to The Graduate School, Dean Steve Matson will step down in 2018. In this column, he shares his perspective on a decade of change and achievement at Carolina. His thoughtful leadership will be greatly missed.

It has been 10 years since I was appointed dean of The Graduate School. Much has changed in those 10 years. My hair is grayer, my children are older and now I have grandchildren. My dedication to our outstanding graduate students, though, has remained constant I have gained valuable perspective on the role and importance of graduate education in our fast-paced world. I want to share some of those thoughts as I prepare to return to my faculty position in the biology department later this year.

Graduate education has never been more important for our economy and our stature in the world than it is today. Solutions to the challenges we face often have their roots in graduate schools across the country. Our graduate schools are epicenters of discovery, innovation and dissemination of new ideas, new medicines, new strategies for tackling societal problems, new devices to make our lives better, and the list goes on and on. We must continue to view our graduate schools as national treasures and ensure that they remain the best in the world.

One of the most significant changes I've seen is that graduate schools across the country, and certainly at Carolina, have become much more than administrative units that manage the admission, enrollment and graduation of post-baccalaureate students. Graduate schools today lead change and ensure that centralized services are in place to provide professional development, support and enhance diversity and inclusion, and award (and help students identify) funding for academic needs. We depend on our partnerships with friends of graduate education, who inspire us with their own commitment to graduate students.

The fundamental importance of graduate education in the 21st century has led to significant expansion in careers requiring



Far left, Steve Matson, after receiving his doctoral degree from the University of Rochester

At left, Matson, presenting the 2018 Dean's Distinguished Dissertation Award in Humanities and Fine Arts to Gina Bombola





Far left, Steve Matson and Bruce Carney at the 2010 Royster Society of Fellows graduation celebration

At left, Matson with students in his biology lab in 2011

graduate degrees during the past 10 years; our alumni now enjoy job opportunities well beyond the professoriate. And our students are taking advantage of these opportunities. The Graduate School meets this challenge by providing interdisciplinary professional development that prepares students to compete successfully in a global job market. Consequently, the professional development program has expanded attendance has increased by more than 400 percent since 2006–07! and is constantly evolving toward even greater effectiveness.

On a national level, providing extensive, professional development for graduate students has become the norm. I am proud to say that Carolina has been a leader in this area, beginning with my predecessor: Linda Dykstra. Led by a dedicated team in The Graduate School, and counseled by an advisory board, the professional development program is an essential resource for our graduate students. This year, we added a new Graduate Certificate in Business Fundamentals and joined the Center for the Integration of Research, Teaching and Learning consortium. Our students will be well-positioned for leadership roles as they embark on their careers.

To complement this effort, our new alumni survey, currently deployed in 17 programs, will provide information on the careers our students take. Never before have we had access to data like this to feed back to graduate programs for benchmarking and program enhancement. Only a centralized unit like a graduate school can

support this type of data collection and analysis effort.

The last decade has also witnessed the critical need for graduate deans to advocate for the important role of graduate education in the university and in society. The need became acute as the Great Recession began to erode the funding provided to our public universities.

Graduate deans had to master the art of advocacy at the university, local, state and federal levels to ensure that the contributions of graduate education were understood. We would all live much different lives without the discoveries and innovations that begin in our graduate schools. Just try to imagine life without a smartphone, a microwave oven and antibiotics. Graduate education is a public good, and the need to communicate that fact has never been greater.

Carolina epitomizes graduate education as a public good. It has been an honor to serve as graduate dean and to work with colleagues within The Graduate School and with faculty and staff campus-wide who are steadfast in their commitment to graduate student success. America's graduate schools are the envy of the world, and Carolina is certainly a world leader in graduate education. Together, we'll protect that distinction—and build on it—in the years to come.

> Steven W. Matson, Ph.D. Dean, The Graduate School

### A Decade of Growth in The Graduate School: Some Key Highlights

Steve Matson, formerly chair of the biology department, becomes dean of The Graduate School.

The Caroline H. and Thomas S. Royster Distinguished Professor where summer for Graduate Education is introduced.

Research Fellowships are awarded for students in academic areas research funding is limited.

The first Summer Matson, in collaboration with colleagues across North Carolina. helps create and implement Graduate Education Day at the N.C. Capitol.

The Graduate School names its first Leadership — Development Scholars; student recipients develop specific projects that contribute to the professional development of their peers.

The Graduate Funding Information Center is open for business, providing current and incoming first-year graduate students with guidance on funding opportunities.

The Harold J. Glass USAF Faculty Mentor/ Graduate Fellow Distinguished Term Professorship is introduced, providing a three-year term professorship and a corresponding graduate student fellowship.

Professional Science Master's degree programs are introduced.

The Diversity and Student Success program is introduced; the program offers several initiatives across campus.

The first Richard Bland Professional Pathways Fellowship recipients serve in internships that explore nonfaculty careers.

Certificate in Business **Fundamentals** is launched, offering students professional and practical skills to complement their academic coursework.

The Graduate

**UNC-Chapel Hill** is one of only 29 graduate schools nationwide selected to participate in the Understanding PhD Career Pathways for Program Improvement project.

2008

2009

2010

2011

2012

2013

2014 2015 2016

2017

2018

CAROLINA GRADUATE SCHOOL MAGAZINE 2018

2018 CAROLINA GRADUATE SCHOOL MAGAZINE

### **GEOLOGIST / TORTILLA MAKER / POLKA DANCER**

**Madelyn Percy's** work has taken her to Chile, France, Belize and Iceland. She has spent a total of 18 weeks in the Galapagos Archipelago studying soil fertility. At the University of North Carolina at Chapel Hill, Percy is pursuing her goal of becoming a "rock solid geoscience educator."

Percy served as the 2017-2018 president of the Graduate and Professional Student Federation (GPSF). In her leadership role, she spoke at the 2017 University Day and the launch of the Campaign for Carolina, UNC-Chapel Hill's \$4.25 billion comprehensive fundraising campaign.

In March 2017, students voted to separate the GPSF from the Student Congress — for the first time establishing independent governments for graduate and professional students and for undergraduate students. "The split has meant that there are two strong voices advocating on behalf of all students on campus," Percy said.

Percy is also a Royster Fellow. The Graduate School's interdisciplinary Royster Society of Fellows provides funding, professional development and innovative opportunities for doctoral students.

Christine Scalora, senior student editor of *Carolina Graduate School Magazine*, spoke to her on a number of topics.

## What has been your greatest accomplishment in graduate school?

"Learning how to be a scientist. I have really become so much better at framing questions and figuring out how to ask questions so I can approach things in a scientific way and that has in turn affected everything I do. That's made me a better manager. That's made me a better leader. That's made me a better tortilla maker."

Tell me about your research.

"I'm trying to understand how rock becomes soil. We know that over time a rock will be eroded and weathered, and can then eventually form a soil. But where we're a little unclear is how rock minerals become soil minerals and in turn how that affects the fertility of the soil."

## How has The Graduate School helped you achieve your research and teaching goals?

"The Graduate School has been truly spectacular. I think the resources that are provided to us as graduate students are, bar none, some of the best in the country. I've definitely made use of a lot of the professional development workshops. Dean [Steve] Matson has always been a great supporter. Dr. Hoi Ning Ngai, who is the associate dean of student affairs, has been a really great mentor."

## What has your experience been like as a Royster Fellow?

"It's been great. The best thing about the Royster Society is that it takes you out of your little silo and forces you to interact with other people and understand what their perspectives are."

### **Education**

Geological sciences doctoral student at UNC-Chapel Hill

Majored in geology and anthropology at the University of Texas-Austin

## **Campus** involvement

2017–18 GPSF president2017 University Day speakerCampaign for Carolina launch speaker

### **Hobbies**

Reading, making tortillas, hiking, polka dancing

## Why did you decide to get involved with GPSF?

"I really believe in the GPSF's mission. I think that in so many cases, we think about how undergraduates face challenges at the university but we don't think about graduate and professional students. The GPSF has consistently done a really great job of advocating on behalf of graduate and professional students."

## What do you hope to do after you graduate?

"I absolutely love teaching. Before starting at UNC, I taught high school, and I did not leave that job lightly. I cried really hard on my last day because it was the best job I've ever had. At this point I see myself teaching at a research institution. There are a couple really interesting positions in the federal government working in some of the national laboratories that would also be great."



CAROLINA GRADUATE SCHOOL **MAGAZINE** 2018 2018

# FARS

### of Interdisciplinary Innovation

### Weiss Urban Livability Fellowship first of its kind at UNC

hirley and Charles Weiss, longtime faculty members at the University of North Carolina at Chapel Hill, dedicated the majority of their lives to traveling the world and problem solving. During a vacation trip to Houston, the Weisses began formulating an idea on an airplane napkin to tackle local and national challenges in urban areas. With the goal of making cities more livable, accessible and affordable, the Weisses created the Weiss Urban Livability Program within The Graduate School. The interdisciplinary program focuses

on groundbreaking research, innovative community projects and collaborative symposiums. Twenty-five years later, more than 200 graduate students from more than 20 academic disciplines have received fellowships through the Weiss program.

Weiss fellowships help recruit outstanding first-year master's degree students to UNC-Chapel Hill, offering a stipend, tuition and health insurance for one year. The program also incorporates generous access to on-campus music, theater and performing arts events. These added benefits were of great importance to the Weisses.

In the 1950s, the couple moved to Chapel Hill in hopes of establishing a "forever home" in an area where innovation was prevalent. Charles Weiss became the fifth faculty member of the sanitary engineering department within what is now the Gillings School of Global Public Health. He specialized in aquatic biology and taught full-time. Shirley Weiss became a professor in the University's city and regional planning department in 1973. She led the University in a number of research projects centered on developing sustainable communities throughout the state and ushered in the next generation of urban livability researchers.

Matthew Cohen-Price, a current fellow and first-year master's degree student in

city and regional planning, said the Weiss fellowship was a major financial factor in selecting UNC-Chapel Hill for his graduate education. He added that even before arriving in Chapel Hill, he believed that addressing



the challenges of city life required an interdisciplinary approach. The Weiss Urban Livability Program introduced him to a new way of extending that approach: livability.

"From a planning standpoint, anyone who lives in a city should be able to take part in all of the urban amenities that come with living in a city, whether that's public transit or parks or affordable housing," Cohen-Price said. "The fellowship has given me an incredible forum to have great conversations about complex urban problems from an interdisciplinary lens with students

from fields as diverse as sociology, art, social work and geography."

Erica Wood, a first-year public health master's degree student in environmental sciences and engineering, said



that being a Weiss fellow has had a positive impact on her environmental health research on well water in urban areas.

"Tackling topics through different perspectives is what adds to the richness of this program," Wood said.

Travis Moe, a second-vear master's degree student in the School of Social Work



describes the program as one that brings together thoughts, perspectives and talent from across disciplines to work on major projects that can impact community members.

"The Weiss fellowship reminded me that if you want things to be different, be proactive," Moe said. "You can help improve your community by taking initiative."

Weiss fellows work on annual class projects ranging from working with communities after natural disasters to creating mentorship programs for local children. The graduate students work tirelessly on these group projects in addition to their full-time academic schedule and research assistantships.

Last year, Katherine Hysmith, a secondyear master's degree student in American

studies, spearheaded the Weiss fellows' 2016-2017 group project: the Foodways Walking Tour. The Weiss fellows wanted to focus on community members who utilized food to make an impact — such



KATHERINE HYSMITH

as Vimala's Curryblossom Café, a restaurant that prioritizes social justice and sustainability. "We stopped at Vimala's—she [the

owner] gives away a lot of free food to students and people who are in need," Hysmith said. "We stopped by, surprisingly, the McDonald's on Franklin Street because it's a historic site for African-American community building."

Travis Crayton, a dual master's degree

student in public administration and city planning, has been a part of the Weiss program for three years. The senior fellow serves as a project manager who is responsible for seminar coordination, syllabus

TRAVIS CRAYTON

creation and program event planning.

"I'm also a student and that really helps foster a very collegial dialogue among fellows who come in from different disciplines," Crayton said.

The Weiss senior fellow also serves as a mentor for new Weiss fellows entering in

"In terms of a mentorship, I think it's really beneficial when you have a senior fellow who's been here a year when most fellows are just moving to our community," Crayton said. "It's helpful to have someone who can sort of acclimate you to a new community that you're going to be a part of for at least the next few years."

Crayton also said that Charles Weiss, at age 99, continues to play an active role in the program. Charles Weiss has a vibrant personality and meets with the fellows each semester to offer professional advice and encouragement.

"He always has this wonderful sense of humor and just makes everybody sort of feel really comfortable in the room to be able to have a conversation with him," Crayton said. "That's something that I think is fascinating." -By Lauren Houston

Anita Brown-Graham becomes the first Floyd B. McKissick Resident Scholar, an honor granted to a graduate student in honor of Floyd B. McKissick, an urban livability expert and the first African-American student admitted to the UNC-Chapel Hill School of Law.

The Weiss Urban Livability Program is

research and project management.

launched and is the first campus initiative of

its kind to focus on interdisciplinary learning,

The Graduate School, led by Dean Linda Dykstra, adds the senior fellow as a regular feature of the program.

The Graduate School offers Weiss Urban Livability Fellowships to help recruit outstanding first-year master's degree students.

Shirley and Charles Weiss are honored with the UNC-Chapel Hill Distinguished Alumna and Alumnus Awards at University Day.

Shirley Weiss passes away.

Giving Is Good for the Soul, a book on the lives and impact of Shirley and Charles Weiss, is published.

More than 200 Weiss fellows representing more than 20 academic areas have successfully completed the program.

Weiss fellows (left to right) Matthew Cohen-Price, Jordan Clark, Travis Crayton, Erica Wood, Josh Fernandez, Stephanie Kennedy, Andrea Goodwin and Ina Dixon meet monthly to discuss urban livability and plan their annual community project.



CAROLINA GRADUATE SCHOOL MAGAZINE

Charles and Shirley Weiss created a program

within The Graduate School that has helped

in 1958, top, and on the UNC-Chapel Hill

campus, below.

usher in the next generation of urban livability

researchers. They are pictured in Machu Picchu

2018

2018

### **GRADUATE SCHOOL FAST FACTS**

Graduate students make up 29%

The Graduate School is

MEETING THE CHANGING NEEDS

of graduate students in many ways.

of Carolina's total student enrollment

**Directing funding** to more than **600** doctoral and master's degree students (2017–18) campus-wide.

Providing specific programs to support first-generation, international, underrepresented minority, military-affiliated and LGBTQ+ graduate students.

Supporting more than **80 academic programs** offering more than **160 different graduate degrees.** 



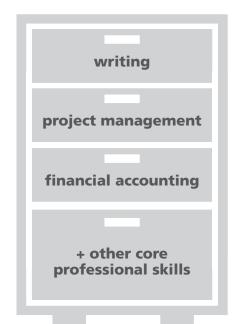
### SPOTLIGHT ON PROFESSIONAL DEVELOPMENT

Our programs in academic and professional development began in 2006–07. From then to now, the number of graduate student attendees has grown 419%.



And...new for the 2017–18 academic year, a **GRADUATE CERTIFICATE IN BUSINESS FUNDAMENTALS**,

providing graduate students with courses in:



## A Lifetime of Moving Forward, Giving Back

SUMMER RESEARCH FELLOWSHIPS HONOR PIONEERING STATISTICIAN, SOCIAL JUSTICE ADVOCATE RAM GNANADESIKAN

Ram Gnanadesikan, a doctoral alumnus of the University of North Carolina at Chapel Hill, wanted to help young, vibrant minds succeed. Throughout his life, he achieved this goal and his family continues to honor his legacy.

He passed away on July 6, 2015, but his wife, **Mrudulla Gnanadesikan**, made sure that his memory lives on through the area that he valued most: education. She established two Ram Gnanadesikan Summer Research Fellowships within The Graduate School for summer 2018.

"He was always interested in nurturing younger generations," Mrudulla Gnanadesikan said. "He felt strongly that the future of any intellectual endeavor depended on the support and encouragement of the next generation of researchers, particularly from underrepresented communities."

In 1953, as a young researcher himself, Ram Gnanadesikan came to the United States from Chennai, India, to pursue his doctorate in statistics at UNC-Chapel Hill. When he arrived during that racially charged time, the nation and the University were experiencing civil unrest. Inspired by the empowering life lessons of Mahatma Gandhi, Gnanadesikan made an impactful difference on UNC-Chapel Hill's campus. When the first African-American students were admitted to the University, finding housing was a significant challenge. Gnanadesikan played a key role in opening the doors for them at the International House, a safe haven for minority students. For his contributions and leadership at the University, he was elected to the Order of the Golden Fleece, the oldest and highest honorary society at UNC-Chapel Hill.



Ram and Mrudulla Gnanadesikan

Ram Gnanadesikan started his career at Procter & Gamble Co., but was soon recruited by the research arm of Bell Telephone Labs (now Nokia Bell Labs) in Murray Hill, N.J. After a long career there, he moved to Bellcore (now Telcordia Technologies), the research division of the companies. During those years, he developed groundbreaking techniques in graphical data analysis and innovative methodologies to solve significant interdisciplinary problems. He retired from industrial research to pursue his second passion, teaching, and joined Rutgers University as a distinguished professor in the statistics department. He retired in 1998.

Mrudulla Gnanadesikan was the first female to receive a doctoral degree from Purdue University's statistics department. She later taught at Fairleigh Dickinson University and was active in statistics education. She participated in the Quantitative Literacy Project, an initiative funded by the National Science Foundation that developed an early focus on active learning at the pre-college and undergraduate levels.

They met at a statistics conference in 1963 and married in 1965.

"Dr. Ram Gnanadesikan worked hard to help others succeed — as a graduate student at Carolina and throughout the rest of his remarkable life," said Steve Matson, dean of The Graduate School. "Both Drs. Ram and Mrudulla Gnanadesikan had careers of extraordinary accomplishment. We're grateful to Mrudulla for creating opportunities for graduate students in her husband's memory."

-By Lauren Houston

The Graduate School's **Summer Research Fellowships** provide support to doctoral students who normally do not have funding during the summer, so they may focus exclusively on their dissertation research. The Graduate School matches each private gift of \$2,500 to create a fellowship, which is named to honor the fellowship benefactor or the individual they designate.

### **Graduate students**

are directing their great ideas, commitment and hard work toward helping citizens and communities throughout North Carolina. That's definitely worth recognizing. The Graduate School established

### IMPACT AWARDS,

generously funded by the Graduate
Education Advancement Board, to
honor graduate student and alumni
research that directly benefits North
Carolina. Seventeen individuals
are 2018 Impact Award honorees.
We're featuring three
outstanding projects
here...

10

## Cassandra Johnson **NUTRITION**

The U.S. Department of Agriculture categorizes food insecurity by focusing mostly on reductions in food intake. Doctoral alumna Cassandra Johnson developed a new alternative measure, named the Four Dimensional Food Insecurity Scale (4D-FIS), that captures additional aspects of food insecurity. She then determined severity of food insecurity using both measures and compared them. Her team interviewed 109 black, Latina and white female caregivers living in urban and rural areas of North Carolina. Johnson's findings indicate that the 4D-FIS may better capture the full range of food insecurity experiences.



Traditionally, coastal residents and municipalities have fought shoreline erosion with bulkheads, groins and jetties. Living shorelines are currently gaining popularity as a sustainable and effective alternative. In North Carolina, living shorelines typically incorporate salt marsh grass bordered by hard materials such as oyster reefs or rocks. Recent master's degree alumna Kathleen Onorevole analyzed another potential benefit of living shorelines: moderating nitrogen concentrations. A range of human activities can contribute to nitrogen loading in estuarine and marine habitats, where nitrogen can fuel rapid algae growth posing risks to human health and aquatic life. Onorevole quantified the development of denitrification in living shorelines over time by conducting seasonal field sampling at four living shorelines, constructed up to 20 years earlier. Her findings showed that denitrification rates increased during the first seven years following construction and were sustained afterward.

## David Gorelick ENVIRONMENTAL SCIENCES and ENGINEERING

In an effort to identify additional ways to maintain sufficient urban water supplies during droughts, doctoral student David Gorelick analyzed a potential low-cost drought mitigation option: raw, or untreated, water transfers between water utilities that lay along the same river. Gorelick and his collaborators compared computational modeling results with and without weekly raw water transfer sales from Durham to Raleigh. Through an ongoing collaboration with UNC-Chapel Hill professor Gregory Characklis, necessary modeling data were provided by the four major water utilities of the Triangle. Findings demonstrated that raw water transfers between Raleigh and Durham could help to maintain regional supply reliability during droughts, and that Durham could maintain satisfactory levels of supply reliability.



11

CAROLINA GRADUATE SCHOOL **MAGAZINE** 2018 2018

When Dean Steve Matson announced the first-ever **HORIZON AWARDS** in 2017, he said this about the name: "You likely picture something promising that is on the way or a journey to be eagerly anticipated. Those are the ideas behind The Graduate School's new Horizon Awards."

These honors recognize graduate student and alumni discoveries with future potential to benefit North Carolina—and are a powerful complement to Impact Awards. Five individuals are 2018 Horizon Award honorees, and we are featuring three outstanding projects here...



### Ashley Bone

12

#### MICROBIOLOGY and IMMUNOLOGY

Despite high rates of vaccination, whooping cough has reemerged as an urgent public health threat. According to the U.S. Centers for Disease Control and Prevention (CDC), cases peak every few years; the last peak was in 2012, when state health departments reported nearly 50,000 cases to the CDC. Whooping cough, also known as pertussis, is a highly contagious respiratory disease caused by the bacterium *Bordetella pertussis*. During the 1940s, a whole cell vaccine was introduced that dramatically reduced cases of whooping cough. Due to safety concerns, this vaccine was replaced with an acellular vaccine that has been shown as less robust. Additionally, recent animal model studies have demonstrated that both vaccines fail in preventing the *Bordetella* bacteria from colonizing the respiratory tract. Doctoral student Ashley Bone and her research collaborators have made a major advance in understanding *Bordetella* virulence. She hopes her continuing work will help identify new vaccine components.

To view stories on all 22

IMPACT AWARD and
HORIZON AWARD

recipients for 2018, go to **gradschool.unc.edu/impact2018** 



## Stephanie Cone BIOMEDICAL ENGINEERING

Nearly 250,000 anterior cruciate ligament (ACL) injuries are estimated to occur annually in the United States, and the rate of pediatric ACL injuries has been documented as increasing during the past decade or so. Current treatments for pediatric ACL injuries are associated with recurring injuries and chronic arthritis in the long term. Researchers need more information on how the healthy ACL grows to create better treatments for children and adolescents. Doctoral student Stephanie Cone worked with the UNC-Chapel Hill School of Medicine and the N.C. State University Comparative Medicine Institute, collaborating with scientists, researchers and orthopedic surgeons on animal model studies. Her imaging studies, using high-resolution MRI scanners at the UNC Biomedical Research Imaging Center, have increased understanding of how pediatric ACL injuries are different from adult injuries.

## Shan McDonell NUTRITION

Obesity is an established risk factor for breast cancer and is associated with its spread, which causes 90 percent of deaths associated with breast cancer. The exact mechanisms linking obesity and the spread of cancer to distant areas of the body, known as metastasis, are unknown; however, the lab of professor Stephen Hursting has produced research suggesting inflammation as a key factor. Working within Hursting's lab group, M.D./ Ph.D. student Shan McDonell developed a mechanism to test an anti-inflammatory compound's effectiveness in reducing obesity-related increases in metastasis. McDonell's current project is further evaluating how anti-inflammatory drugs decrease metastatic capabilities of breast cancer cells, and what genes might be important in this process. Taken together, his work has strong implications for one day identifying gene targets that will help break the link between obesity and breast cancer metastasis.



CAROLINA GRADUATE SCHOOL **MAGAZINE** 2018 CAROLINA GRADUATE SCHOOL **MAGAZINE** 1

## **NEW GLOBAL CONNECTIONS**

Royster Global prepares students for international job market, collaboration

The Royster Society of Fellows attracts exceptionally talented graduate students from around the world to the University of North Carolina at Chapel Hill. The fellowship program also prepares them for unprecedented global learning opportunities.



JENNIFER GEF

International education is important for graduate students because it has the potential to amplify all they do as researchers and scholars, said **Jennifer Gerz-Escandón**, associate dean for interdisciplinary education and fellowship programs in The Graduate School.

"We live in a world where local has become global," Gerz-Escandón said. "You only have to look around Chapel Hill to appreciate the wealth of languages you hear spoken."

The Graduate School is dedicated to global education both in Chapel Hill and abroad. One of the newest efforts is the Royster Global initiative, through which The Graduate School prepares students for global learning and career opportunities. Last summer, The Graduate School's Royster Society of Fellows invited doctoral students from King's College London (KCL) to visit UNC-Chapel Hill for the inaugural Royster Global international conference. Students from both universities discussed various aspects of global education, including preparing for a global job market. This year, Royster fellows will visit KCL to continue the conversation. Collaborations with other international universities are planned in the future.



MARSHA COLLINS

Royster Distinguished Professor **Marsha Collins** said collaboration and teamwork, essential in any profession, are increasingly happening across national lines.

"Everything occurs in a global context and our graduate students—really all of our students—are not only citizens of one or more countries or nations. They really are citizens of the world," she said. "So the more

experience and the earlier it comes, I think the better it's going to be for everyone."

First-year Royster fellow **Ben Lee**, an occupational science doctoral student who studies adults who have been diagnosed with schizophrenia, will attend the summer 2018 KCL conference themed "Civil Society and the Role of the University" in London.

Lee grew up in New Zealand, studied in Australia and France, and worked in India. He has always been interested in learning about different cultures, languages and ways of life.

"Human diversity is something I continually find myself in awe of," Lee said. "Traveling has taught me to be open and enthusiastic about learning about difference and appreciate a wider range of perspectives, and I think this trait will serve me well in any career path I pursue."

Carlee Forbes, an art history doctoral student and a Royster fellow, will also travel to London for the conference. She studies colonial-era Congolese art and is currently conducting research in Belgian museum collections and archives through a Fulbright-Hays Doctoral Dissertation Research Abroad Fellowship. Her research has taken her across the United States, and to Amsterdam, Ghana and

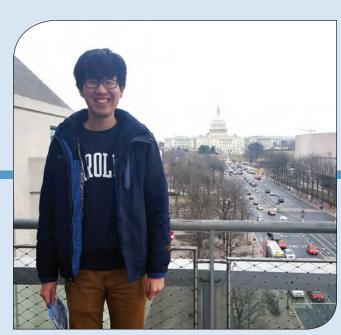
the Democratic Republic of Congo. Forbes, originally from Michigan, works with scholars from around the world in her research.

"Each time we are gathered or exchange information, I recognize that we have so much to learn from each other," Forbes said. "These lessons can be in terms of methodology, writing, resources, presentation styles, or almost anything. Interacting with international scholars has definitely challenged my scholarly perspective many times."

**Colin Post,** a doctoral student in information and library science, participated in last year's conference and will travel to London this summer. Post, a Royster fellow, is looking forward to continuing the conversation with a group of talented and insightful individuals from both universities.

"I'm also looking forward to meeting with some of the faculty at KCL in my particular area of research," Post, a Michigan native, said. "I think making these connections will usefully inform my dissertation research, and also help me later on in my career by building a strong professional network." 

— By Christine Scalora



New Zealand native Ben Lee in Washington, D.C.



Michigan native Carlee Forbes in Belgium



Michigan native Colin Post in England

## Other ways The Graduate School supports global education

- ◆ The Preparing International Teaching Assistants Program (PITAP) offers training to help international students prepare to teach in U.S. classrooms.
- Summer Research
  Fellowships and OffCampus Dissertation
  Fellowships support
  students conducting
  research abroad. For
  example, the Georges
  Lurcy Fellowship is
  for doctoral students
  studying in France.



## **MAKING A DIFFERENCE**



GEAB members pictured above: (back row, left to right) Burnet Tucker, Ken Smith (chair of the GEAB), Don Buckley and Charles Stewart; (next row, left to right) Judith Thorn, Harold Glass and David Lewis; (two front rows, left to right) Blair Kutrow, Anne York, Drusilla Scott, Fran Hoch, Verla Insko, Penny Aldrich, Andrew McMillan Jr., Carol Smithwick and Paul Hoch

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## **Graduate Education Advancement Board members provide guidance**

and advocacy on key initiatives within Carolina's graduate education community. They provide funding—through the annual Impact Awards and Summer Research Fellowships, to name just a few focused areas—that goes directly toward students' academic needs and professional goals. Members meet with graduate students, faculty members and administrators campus-wide in biannual meetings and serve as ambassadors of graduate education within their communities in North Carolina and beyond.



The Graduate School recently recognized **Harold E. and Holly Glass** for their many contributions to graduate education at the University of North Carolina at Chapel Hill. The Glasses established the Harold J. Glass USAF Faculty Mentor/Graduate Fellow Distinguished Term Professorship within The Graduate School in 2014, providing a three-year term professorship for a faculty member and a corresponding fellowship for graduate students the professor selects to mentor. At an April 4 dinner honoring the Glasses, Dean Steve Matson spoke of the professorship as innovative in its focus on faculty mentorship. Pictured (left to right) are Annegret Fauser, current Glass distinguished professor and an award-winning musicologist; Harold Glass; Holly Glass; and Jennifer Walker, the 2017–18 Glass fellow and doctoral student in musicology.

## BUILDING TOWARD AN IMPORTANT GOAL, THANKS TO OUR GENEROUS FRIENDS

The Campaign for Carolina officially launched in the fall 2017 and is now well under way. Since the last campaign ended in 2007, both Carolina and The Graduate School have continued to evolve to meet new needs and address new challenges.

For The Graduate School, alumni and friends have responded generously to support the interdisciplinary

and pan-university initiatives we are uniquely qualified to deliver for the graduate education community.

We are especially encouraged by the progress toward our campaign goal and by the response to the first-ever GiveUNC, which set the record for the most Graduate School donors in a single day.

THANK YOU!



 $\cdot$  the <code>CAMPAIGN</code> for <code>CAROLINA</code>  $\cdot$ 



CAROLINA GRADUATE SCHOOL **MAGAZINE** 2018 2018 2018 2018

### A WEEK TO REMEMBER

UNC-Chapel Hill thanks graduate students for all they contribute to Carolina and beyond

The Graduate Student Recognition Celebration was a major highlight of Graduate-Professional Student Appreciation Week at the University of North Carolina at Chapel Hill (April 1–7). The Graduate School sponsors the annual recognition event, bringing the campus community together to celebrate graduate student achievement — and to thank the network of supportive faculty and staff members, administrators, fellow students, alumni and friends of graduate education. Chancellor Carol L. Folt and Dean Steve Matson shared their appreciation for graduate students and their contributions to

teaching, research and outreach to communities throughout North Carolina and beyond.

The Graduate and Professional Student Federation (GPSF) held its annual Graduate Research and Policy Expo during that week. Matson commended the GPSF during the recognition event for its leadership in planning the expo and for coordinating awards that honor departmental student services managers and graduate student mentors. For highlights from the week, visit gradschool.unc.edu and and click on our *Carolina Graduate School Magazine* icon.





Clockwise from top left: Dean Steve Matson presents the Dean's Award for Significant Contributions to Graduate Education to Graduate Education Advancement Board (GEAB) chair and Carolina alumnus Ken Smith.

Javonte Lipsey, master's degree student and GPSF Graduate Research and Policy Expo honoree, discusses his research with Penny Aldrich, a member of the GEAB. Nancy Quick, recent doctoral alumna and 2018 Impact Award honoree, stands by her poster. Temperance Rowell and Madelyn Percy of the GPSF present the Graduate Student Awards for Excellence in Mentorship.





## The Graduate School

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20

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