Through the prolific scholarship of our faculty members and the introduction of new academic programs that enhance our efforts to create the next generation of health care workers and build healthier communities, UTA’s College of Nursing and Health Innovation is steadily becoming one of the nation’s most dynamic centers for health care education and research.

I began my tenure as dean of the College halfway through the 2018-19 academic year. And it’s been an auspicious beginning. Research grants are way up. Our faculty are publishing prolifically in scholarly journals. Enrollment in our newest academic programs, including our undergraduate public health degree, our postgraduate public health certificate, and our doctoral degree in kinesiology, is robust. Students in these programs are doing amazing work. Several have published scholarly papers, won prestigious national awards, and landed competitive pre-doctoral fellowships.

Our ongoing programs are stronger than they’ve ever been. More than 200 students are enrolled in our Doctor of Nursing Practice degree program. In December, more than 50 of them will graduate—the program’s largest graduating class ever. Enrollment in our PhD nursing program is the largest it’s been in a long time. And the College’s overall enrollment continues to rise.

We are proud of our recent accomplishments, and we are just as excited about the future.

Toward the end of the school year, we got the green light to launch a master’s degree in public health. The program, which has an urban health concentration, prepares students to meet the demand of complex public health issues facing urban communities. Our Smart Hospital and Smart Lab simulation facilities continue to focus on new and innovative technology. Two recent additions to the robust repertoire of tools include an artificial intelligence human patient simulator and virtual reality simulation.

The College is building on its strength as a leader in simulation research. In the last year, telepresence robots have been introduced in an effort to boost instruction in telehealth. CONHI is leading the way in interprofessional simulation education by introducing new opportunities for collaboration with several other disciplines, including social work and engineering.

In 2018-19, we received one of the largest gifts in the history of the College: a $4.7 million donation from the Deerbrook Charitable Trust. The money will fund scholarships, create an endowed professorship, and will help us grow all of our gerontology-focused graduate nursing programs. It will strengthen our efforts to educate more qualified health care professionals taking care of older adults.

I am particularly proud of our growth in research funding. During the 2018-19 fiscal year, our college received more than $8 million in new external funding.

I am delighted to present the 2018-19 annual report, which showcases our unrelenting efforts to advance health and the human condition. Some of the impressive accomplishments of our faculty, staff, students, and alumni are presented in this report. There are many others that are equally impressive. CONHI is a caring, innovative, and dedicated community that makes a difference in the lives of students, in the new knowledge we produce, and in our impact on our community.

Elizabeth Merwin, PhD, RN, FAAN
Dean
College of Nursing and Health Innovation
2018-19 ENROLLMENT
27,732

Nursing
26,108
Undergraduate = 26,049
Master’s = 6,810
Doctoral = 29

Kinesiology
1,624
Undergraduate = 1,506
Master’s = 100
Doctoral = 18

2018-19 GRADUATES
5,438

Nursing
5,141
Undergraduate = 5,115
Master’s = 1,340
Doctoral = 26

Kinesiology
297
Undergraduate = 268
Master’s = 28
Doctoral = 11

2018-19 SCHOLARSHIPS AWARDED

Fall 2018
Recipient = 168
$196,824

Spring 2019
Recipient = 324
$420,733

SCHOLARSHIPS AWARDED

UNDERGRADUATE NURSING
Placements = 5,909
Sites = 102

GRADUATE NURSING
Placement = 5,658
Sites = 3,650

2018-19 CLINICAL PLACEMENTS

RANKINGS AND HONORS

ONE OF ONLY 10 institutions in the United States designated a National League for Nursing Center for Excellence in 2019

Online BSN degree ranked NO. 1 in the country by College Rank

Online accelerated BSN degree ranked NO. 1 in the U.S. by Nursing Process

 Ranked NO. 7 on the TOP 22 Online Nursing Degree Programs list by Onlineschoolscenter.com in 2019

Doctor of Nursing Practice program ranked NO. 52 in the nation and best in Texas by U.S. News & World Report

MSN program ranked NO. 50 in U.S. News & World Report’s best graduate schools in America

Graduate nursing program ranked NO. 75 in the country, according to US News & World Report

2018-19 GRANT PROPOSAL SUBMISSIONS
44
$22,983,754

2018-19 SPONSORED PROJECTS
15
$8,043,963

FACULTY

NURSING = 551
KINESIOLOGY = 49

2018-19 SOURCE OF FUNDS

$35,595,897

2018-19 EXPENDITURES

$35,595,897

Colleague of Nursing and Health Innovation 2018-2019 Annual Report

THE UNIVERSITY OF TEXAS AT ARLINGTON

2

THE UNIVERSITY OF TEXAS AT ARLINGTON

2
**DOCTOR OF NURSING PRACTICE (DNP)**

**JENNIFER ALLEN**

Improving Mammography Adherence: Evaluating the Effectiveness of an Educational Reminder Brochure

**ELIZABETH BABALOLA**

Yo Puedo Hacerlo! Diabetes Self-Management Education for Older Hispanic Women

**AMY BUNDY**

Improving Access to Genetic Panel Testing for Hereditary Cancer Syndromes

**CATHERINE FITZSIMMONS**

Best Practice for Treatment of Depression in Heart Failure, LVADs, and Heart Transplant Populations

**EMILY FORBES**

Nurse Practitioner-Led Transitional Clinic

**ALLISON GILTRAP**

Hospital Admission in Active Phase Labor

**ERIN HAYTAJAN**

The Use of SMS Text Messages to Improve Patient Attendance

**MELYnda Hutchings**

An Intervention Bundle to Reduce Childhood Obesity

**SINI JOSEPH**

Chest Pain Risk Stratification in the Emergency Department Setting

**TANDY MELLARD**

Pediatric Palliative Care Symptom Documentation

**ADAOBI MOEMENAN**

Implementation of a Pharmacy-Led Medication Reconciliation on Admission to Decrease Medication Discrepancies

**CHRISTY OLLAH**

Reducing Benzodiazepine Use in Adult Mental Health Patients

**FAYSHALee ORTIZ**

Diabetes Self-Management Education Program Innovation for Low-Income Patients at a Primary Care Clinic

**OBIAMAMA OZUAH**

Decreasing Hospice Caregiver Burden With Out of Hospital DNR Forms and Advance Care Planning

**PATTI PLUMMER**

Suicide Prevention in Undergraduate Nursing Students

**BUFFY POWELL**

Project to Reduce Anxiety, Depression, and Post-Traumatic Stress Disorder in Automatic Internal Cardioverter Defibrillator Patients

**RACHEL REITAN**

The Risk of Infection and Indication of Systemic Antibiotics in Chronic Wounds

**MARTIN STANILAND**

Impact of Implementing a Diabetes Protocol on A1c and Treatment Inertia in Primary Care

**MAYANN UGOK**

Implementing an Algorithm to Promptly Address Depression Screening Results in Hemodialysis Patients

**LEAH WILSON**

Improvement in Patient Satisfaction Through Implementation of an Advanced Practice Provider-Led Cancer Survivorship Clinic

**SANDRA YOUNG**

Implementation of a Clinical Alcohol Cessation Pathway to Improve Alcohol Cessation Outcomes

**DOCTOR OF PHILOSOPHY IN NURSING (PHD)**

**KELLY KAHVECI**

Older Adult Hospital Readmission Outcomes of Transitional Care Model Compared With Home-Based Primary Care Practice

**CYNTHIA KOOKLOY**

Predicting Academic Success of MSN Students

**MEGAN MARIVELES**

Predictors of Perceived Faculty Support in Precursenice Registered Nursing Students

**WHITNEY GRAY MILDREN**

Prevalence and Risk Factors for Fear of Birth in Pregnant Women in the United States

**DOCTOR OF PHILOSOPHY IN KINESIOLOGY (PHD)**

**STEPHEN NEWHART**

Whole Body Vibration as an Innovative Intervention to Improve Physical Function and Vascular Health Within a Lifespan

**MASTER OF SCIENCE IN KINESIOLOGY (MS)**

**SAUYEH ZAMANI**

Left Atrial Function Across the Heart Failure Continuum: Novel Pathophysiologic Insight into Diastolic Dysfunction in Women with Ischemia but no Obstructive Coronary Artery Disease

**Dissertations and Theses**

**Selected Grants**

**KATHRYN DANIEL, PATTI PARKER, AND BETH MANCINI**

Accelerating Adult Gerontology Health Care; Deerbrook Charitable Trust; $4,741,556

**JODY GREANEY**

Peripheral and Central Mechanisms of Neurovascular Dysfunction in Human Depression; National Institutes of Health; $745,815

**ELIZABETH MERWIN**

Reducing Health Disparities in SMR, Rural, and Minority Populations; National Institute on Minority Health and Health Disparities; $532,271

**DANIEL TROTT**

T Cells Mediate Age-Related Arterial Dysfunction; National Institutes of Health; $634,500

**VENU VARANASI**

Printing and Regenerating Fractured Bone Using Antioxidant Materials; National Institute of Dental and Craniofacial Research; $432,564

**YAN XIAO**

PROMIS Learning Lab Partnership in Residence for Medication Safety; Agency for Healthcare Research and Quality; $2,500,000

**JINGSONG ZHOU AND MARCO BROTTRO**

Preserving Mitochondrial Function for Alliating ALS Progression; National Institutes of Health; $2,078,211

**PAUL FADEL**

Mechanisms of Exercise Intolerance in Health Failure; UT Southwestern National Institutes of Health P01 Subaward; $823,936

**MICHAEL NELSON**

Mechanisms of Exercise Intolerance in Health Failure; UT Southwestern National Institutes of Health P01 Subaward; $954,813

**MARK HAYKOWSKY**

Mechanisms of Exercise Intolerance in Health Failure; UT Southwestern National Institutes of Health P01 Subaward; $1,726,832

**ZUI PAN**

An Inverted Nikon AR Laser Scanning Confocal Microscope; National Institutes of Health; $449,340

**Improving care for an aging population**

Americans are getting older and living longer. The population of adults 65 and older is expected to double by 2050, rising to 83.7 million, according to the U.S. Census Bureau. This demographic shift will increase the demand for health care professionals who specialize in gerontological care as well as for additional research into healthy aging.

The College of Nursing and Health Innovation has been a leader in this field, particularly through research in areas like heart failure, osteoporosis, and cancer. The College recognizes that compassionate care across the age continuum is a critical need and has made the education of adult gerontology nurses a priority.

During the 2018-19 academic year, these efforts were enhanced with support from the Deerbrook Charitable Trust. The Trust’s transformational gift of $4.7 million will allow the College to grow its gerontology nursing programs by providing scholarships, creating an endowed faculty position, and expanding opportunities for disseminating knowledge on healthy aging. The Trust was drawn to UTA because of its leadership in the nursing field and because of its impressive record in seeking to improve the quality of care for the aging population.

Kathryn Daniel, an associate professor of nursing and director of the Adult Gerontology Nurse Practitioner program, says the gift will make it possible for the College to double the number of students receiving scholarships next year.

Addis Dean Elizabeth Merwin, “This will help us meet a critical need in the health care space. It further re-affirms our position as a leader in gerontological nursing excellence.”
The Arlington Nursing Students Association is the local chapter of the National Student Nurses’ Association, a national organization of student nurses that provides a gateway to professional nursing organizations.

The Asian-American Student Nursing Association serves as a liaison between the Asian-American community, nursing students, faculty, staff, and professionals.

The Athletic Training Student Association seeks to promote and advance the athletic training profession, encourages the exchange of ideas, and develops and maintains professional relationships.

The Black Student Nursing Association functions as a support and networking group for African-American students. It forges a bond among nursing students, encourages a positive self-image, and assists in student recruitment.

The Health Innovation Constituency Council represents all College of Nursing and Health Innovation students and serves as a liaison to faculty and professionals.

HISPANIC STUDENT NURSING ASSOCIATION builds partnerships between students, family, community, and the College to promote the successful development of Hispanic students as professional nurses.

KAPPA DELTA PI recognizes excellence in education and elects to membership those who exhibit the ideals of scholarship, high personal standards, and promise in teaching and allied professions.

The Male Student Nursing Association promotes nursing as a career path for male students and supports current students, providing social and service opportunities.

MAVERICKS FOR PUBLIC HEALTH strives to help students, faculty, and staff become more aware of their own health, understand how to take charge of their health, and to better care for others.

The Nursing Mentor Program builds relationships among nursing students by offering guidance and support through peer mentorship, leadership, and opportunities for personal and professional growth.

SOCIETY OF KINESIOLOGY SCHOLARS is dedicated to health and fitness through activities, athletics, fundraising, and various community outreach programs.

ARLINGTON NURSING STUDENTS’ ASSOCIATION is the local chapter of the National Student Nurses’ Association, a national organization of student nurses that provides a gateway to professional nursing organizations.

ASIAN-AMERICAN STUDENT NURSING ASSOCIATION serves as a liaison between the Asian-American community, nursing students, faculty, staff, and professionals.

ATHLETIC TRAINING STUDENT ASSOCIATION seeks to promote and advance the athletic training profession, encourages the exchange of ideas, and develops and maintains professional relationships.

BLACK STUDENT NURSING ASSOCIATION functions as a support and networking group for African-American students. It forges a bond among nursing students, encourages a positive self-image, and assists in student recruitment.

HEALTH INNOVATION CONSTITUENCY COUNCIL represents all College of Nursing and Health Innovation students and serves as a liaison to faculty and professionals.

Research Laboratories

NURSING

INTEGRATED CARDIOVASCULAR EXERCISE PHYSIOLOGY AND REHABILITATION (ICARE) LABORATORY examines the biological mechanisms for the decline in health-related fitness and function in individuals at risk for or with heart failure.

MARCO BROTT Laboratory works to devise new strategies to diagnose and treat musculoskeletal diseases.

ZUI PAN Laboratory focuses on intracellular calcium signaling and its pathophysiological implications in human diseases.

VENU VARANASI LABORATORY conducts research on the effects of oxidative stress as it relates to traumatic injury repair and tissue regeneration.

KINESIOLOGY

APPLIED PHYSIOLOGY AND ADVANCED IMAGING LABORATORY focuses on questions relating to human health and cardiovascular disease.

BONE VASCULAR AND MICROCIRCULATION LABORATORY examines the interaction between blood vessels and bone in states of health and disease.

DEVELOPMENTAL MOTOR COGNITION LABORATORY investigates the development of motor behavior in children and adolescents.

HUMAN NEURAL CARDIOVASCULAR CONTROL LABORATORY investigates neural cardiovascular control in human health and disease.

INTEGRATIVE IMMUNOLOGY LABORATORY focuses how the immune system interacts with other tissues to regulate cardiovascular and metabolic function.

INTEGRATIVE VASCULAR PHYSIOLOGY LABORATORY investigates the mechanisms of impaired autonomic and vascular function in selected at-risk/diseased populations.

MATERNAL AND CHILD HEALTH EQUITY LABORATORY examines the factors that shape the birth outcomes and health of Black women across the lifespan.

MOVEMENT AND PHYSICAL ACTIVITY EPIDEMIOLOGY LABORATORY seeks to improve the health and well-being of children and adolescents.

NEUROVASCULAR PHYSIOLOGY LABORATORY studies the neurovascular dysfunction in depression to address depression-associated cardiovascular disease.

NICOTINE AND TOBACCO RESEARCH LAB focuses on emerging tobacco products like hookahs and e-cigarettes and their effects on health.

THERAPEUTIC INTERVENTIONS RESEARCH LAB investigates the clinical efficacy and therapeutic intervention in athletic injury.
For as long as she can remember, Fatima Barker has always wanted to be a nurse. But first she had to take a detour.

In her native Philippines, her aunt and benefactor steered her toward physical therapy because she figured it would be easier to find a job. When Barker relocated to the United States, however, she ran into some challenges getting her license transferred.

So when she went back to chasing her dream of becoming a nurse, she set her sights on UTA because of its diverse student body and the nursing program’s reputation.

“I feel like UTA is the best place to go for nursing school,” says Barker, who will graduate in December 2019. She aspires to become an operating room nurse and earn a doctorate. “Aside from the faculty support, the College is one of the largest producers of nurses in the United States. And it has a high passing rate for NCLEX. I know I’m in good hands for my future career.”

Since coming to UTA, Barker has worked aggressively to take advantage of the College’s many extracurricular opportunities. She is the president of the Health Innovation Constituency Council, an umbrella organization of the College’s student groups; volunteer chairperson of the Hispanic Student Nursing Association; and CONHI’s representative in UTA’s Student Congress.

She is also a member of all of the College’s seven student nursing organizations because it teaches her to understand and appreciate other cultures.

“I feel like UTA is the best place to go for nursing school ... I know I’m in good hands for my future career.”

Fatima Barker
Senior nursing student

Claudy Jean Pierre
SEEKING TO EXPAND HEALTH CARE ACCESS IN HAITI

In Haiti, the poorest country in the Western Hemisphere, most people pay out of pocket for medical expenses. Many who can’t afford it die. There are only 25 doctors for every 100,000 people and a limited number of hospitals. High rates of poverty limit access to health care, exacerbating widespread chronic conditions like diabetes.

Claudy Jean Pierre, a native of Haiti and member of UTA’s inaugural class of Master of Public Health students, is on a mission to expand access to health care back home.

He spent part of last summer conducting listening sessions with dozens of women in his hometown of Grand-Goâve in an attempt to get a sense for their health care needs.

“Ninety-five percent of them say they have poor health,” says Jean Pierre, who graduated from the College with a bachelor’s degree in public health last May. “Many of them have experienced heart attacks. Many of them have experienced complications while pregnant. They don’t go to the doctor because they don’t have the money. One said she had four children and there were complications with each of them.”

Jean Pierre is working to address these challenges by recruiting health care professionals, including gynecologists and nurses, to come to Grand-Goâve early next year for a health fair and a series of clinics.

“I’m reaching out to doctors I know,” he says. “I’m trying to do the basics to help prevent the problems from getting worse. A lot of women have infections and don’t know. They only find out when they have a chance to see the doctor.”

No one, he says, should have to die because they don’t have the money for health care.

“I’m trying to do the basics to help prevent the problems from getting worse. A lot of women have infections and don’t know. They only find out when they have a chance to see the doctor.”

Claudy Jean Pierre (‘19 BS, Public Health)
Graduate public health student
Donnalee Pollack
WORKING TO IMPROVE THE DIAGNOSIS AND TREATMENT OF WOUNDS

Donnalee Pollack always knew she would pursue a nursing PhD. When she started searching for a university, one name kept coming up: UTA.

Now in her third year, Pollack says the program has exceeded her expectations.

She raves about the Friday lunch sessions, which feature renowned researchers; her classes; and the warmth and availability of her professors.

“I consider myself very lucky to be here,” says Pollack, a nurse practitioner who specializes in wound care at the Veterans Affair Medical Center in Dallas. “I have enjoyed every single one of my classes. Every one of my professors has made themselves available. There have been times when the only time I could talk to a professor was on the weekend or Friday night at seven, and they make themselves available. It’s just been a terrific experience.”

Pollack’s primary research interest is the prevention of pressure ulcers in veterans with spinal cord injuries. She works closely with her research adviser Marco Brotto, the George W. and Hazel M. Jay Professor of Nursing and director of the College’s Bone-Muscle Research Center. Together they are seeking innovative ways to identify biomarkers that will improve the diagnosis and treatment of wounds.

Pollack has had a successful run at UTA. Over the summer she presented a poster as a Rising Star of Research at the International Sigma Theta Tau conference. And in 2018, she was named a Jonas-Smith Trust Veterans Healthcare Scholar for 2018-20. Jonas Scholars are an elite group of doctoral nursing students who complete rigorous research for their dissertations.

Ultimately, she says, she’d like to stay at the VA and combine clinical practice with research. She’d also like to do a little teaching.

“UTA is my number one choice,” she says. “I feel I should be giving back and assisting in helping alleviate the coming nursing shortage, and contributing to the progress of nursing science.”

“I consider myself very lucky to be here. Every single one of my professors has made themselves available.”

Donnalee Pollack
PhD nursing student

Paul Fadel
ARCHITECT OF CONHI’S RESEARCH INFRASTRUCTURE

In 15 years in academia, Paul Fadel, a professor of kinesiology and an expert in neural control of the cardiovascular system, has published nearly 150 scholarly articles and attracted more than $10 million in grants.

Dr. Fadel, who joined UTA in 2015, brings his strong research profile to his position as the College’s associate dean for research. In this capacity, he is responsible for overseeing CONHI’s growing research foundation.

“Having my own research program and understanding the process involved in running a research program has helped me in my role as associate dean for research,” says Fadel, who is also director of the College’s Human Neural Cardiovascular Control Laboratory. “It enables me to identify with other researchers and have a strong understanding of what is needed.”

He is proud of the strides the College has made in research in recent years. Publications and grant funding are up. Last year, CONHI faculty attracted nearly $11 million in research grants. The roster of world-class faculty continues to rise. In recent years, several leading researchers have joined the College, including experts in fields such as esophageal cancer, patient safety, heart failure, and bone and muscle diseases. Fadel is particularly delighted that most of the College’s research efforts are now concentrated in the Science & Engineering Innovation & Research (SEIR) building, a 229,000-square foot, state-of-the-art facility that opened in fall 2018.

None of these accomplishments would be possible, he says, without a commitment from UTA’s administration.

“Research is a priority for the University, and our president leads the way,” Fadel says. “I have always felt supported in my research efforts here at UTA. I feel that everyone is taking steps to support research and enhance our infrastructure. That’s definitely part of why we’ve been so successful.”
Many nursing courses don’t differentiate between older and younger adults, says Kathryn Daniel, an associate professor of nursing at the College.

The problem, she says, is that some things don’t always work with older adults. “That has been a source of frustration for me, that others don’t see them differently,” says Dr. Daniel, who has been involved in the care of older adults for 35 years. “What works for a 50-year-old or a 55-year-old does not work for an 80-year-old, especially when it comes to technology.”

This is a critically important time for geriatric care. The U.S. Census Bureau estimates that 10,000 baby boomers turn 65 each day.

“More people are living to an advanced age than ever before in the history of the world,” says Daniel, an award-winning faculty member and a Fellow of the American Academy of Nursing.

To this end, the College is expanding its gerontological nursing program with a $4.7 million grant for scholarships and experienced faculty. Daniel, who directs the gerontology nursing program, is at the forefront of these efforts.

“We’re trying to expand our capacity and footprint in gerontological nursing in Texas,” she says. “We want to make an impact on gerontological nursing excellence whether at the master’s, nurse practitioner, or PhD level so our students can be advocates and leaders in the care of older adults in Texas and beyond.”

Sara Washington

BELoved Teacher and Community Health Educator

Even as a youngster, Sara Washington knew she wanted to spend her working life helping people. And she’s been doing that for the last 42 years as a nurse, professor, and community health educator.

Washington, who serves as the College’s lead faculty for the Accelerated Online Nursing Foundations course, is an award-winning faculty member who works tirelessly to motivate students.

She is beloved by students for her compassion, approachability, and unwavering commitment to their success. Washington, who was named Professor of the Year earlier this year by the Arlington Sunrise Rotary Club, sees her role as nudging students to excel. “I always try to encourage students,” she says. “That’s been my method from years ago, being a facilitator and helping individuals to reach their goals.”

She uses a variety of quotes to motivate her students, including a saying by legendary Dallas Cowboy coach Tom Landry: “The job of a football coach is to (require) men to do what they don’t want to do in order to achieve what they’ve always wanted to be.”

Washington is more than a great teacher; she’s passionate about service. She has served as faculty advisor for UTA’s Black Student Nursing Association. A certified childbirth educator, she also teaches childbirth education classes at a health care facility.

Even though she spends a limited amount of time with patients, she considers the students an extension of her. “I try to remember that I take care of patients through students,” she says. “When students go into patients’ rooms, they’re thinking about how they can put the patients first.”

“I try to remember that I take care of patients through students. When students go into patients’ rooms, they’re thinking about how they can put the patients first.”

Sara Washington, MS, RN, CNE
Assistant clinical professor of nursing
Mary Cazzell
GUIDING FRONTLINE NURSES IN THEIR RESEARCH ENDEAVORS

As director of nursing research and evidence-based practice at Cook Children’s Medical Center in Fort Worth, Mary Cazzell shepherds research studies that have a direct impact on patient and nursing outcomes.

Dr. Cazzell, who worked as a bedside pediatric nurse for 27 years before coming to UTA in 2005 for her doctorate, has a passion for steering nurses toward research and directly applying those research findings in the workplace.

She initially did not intend to conduct research in the clinical setting. After getting her PhD in nursing in 2009, she joined UTA as an assistant professor of nursing and quickly earned a reputation as a prolific, well-funded researcher and respected teacher of undergraduate nursing students.

In 2013, the chief nursing officer at Cook Children’s encouraged her to apply for her current position.

“I learned how to be an extremely strong researcher at UTA and brought those skills here to Cook Children’s.”

Mary Cazzell, PhD, RN (DRPh, Nursing)
Director of nursing research and evidence-based practice,
Cook Children’s Medical Center

Brian Prejean
HUMAN PERFORMANCE SCIENTIST

At KBR Inc., an engineering company that provides a range of contractual services to NASA, Brian Prejean works closely with engineers to develop exercise equipment for long duration space flights.

Prejean, a 2018 graduate of the College’s kinesiology PhD program, is a human performance scientist in NASA’s Human Physiology, Performance, Protection, and Operations lab. In his role, he works to minimize mass and volume while striving to develop exercise equipment that combines resistance and aerobic exercise capabilities in a weightless environment.

“I’m really excited to be able to operate in the industry in an exciting field like this, particularly at a time when we’re trying to do more with lunar and deep-space exploration,” he says.

Dr. Prejean came to UTA to pursue graduate work in kinesiology after a stint as a personal trainer. He chose UTA, he says, because it was the best fit for his ambition of becoming a human performance scientist. A conversation with Mark Ricard, a professor of kinesiology and director of the CONHI’s Applied Biomechanics Lab, further helped him narrow his focus.

He credits his UTA kinesiology professors with helping prepare him for his current role, including Dr. Ricard, Priscilla Cacola, and Cindy Trowbridge, who were his mentors in graduate school; Barry McKeown and Abu Yilla, who enabled him to gain invaluable experience through their exercise physiology and research methods courses; and department Chair David Keller, who encouraged him to stick around for his doctorate.

As a graduate student, he landed a teaching assistantship that exposed him to a broad range of learning opportunities within the department, including scholarly techniques, the use of state-of-the-art equipment, and human performance analyses.

“Most of the equipment I learned to use at UTA are almost the exact same machines we have here.”

Brian Prejean (TR PhD, Kinesiology and Exercise Science/Biomechanics; TS MS, Exercise Physiology)
Human performance scientist for a NASA contractor

Mary Cazzell
GUIDING FRONTLINE NURSES IN THEIR RESEARCH ENDEAVORS

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In 2013, the chief nursing officer at Cook Children’s encouraged her to apply for her current position.

“I learned how to be an extremely strong researcher at UTA and brought those skills here to Cook Children’s,” she says.

Cazzell says her mission is to engage frontline nurses in conducting nursing scholarship at all levels. Approximately 15% of nurses at Cook Children’s are enrolled in advanced nursing education, including many who study at UTA. She developed a program called Satellite Scholars that funds their research proposals, which are developed as part of their academic coursework. Cazzell guides and mentors the nurses through the stages of research. Many of their research studies have sparked changes in clinical practice, improved patient and family outcomes, increased nurse satisfaction, and financial savings for Cook Children’s.
As a child, Mayra Garcia aspired to become a physician. Then she started visiting her grandmother at the hospital.

“I would see the nurses in action,” says Dr. Garcia. “I saw how they impact care.”

Their work made a lasting impression, and she knew she wanted to be a nurse. Choosing UTA was easy.

“UTA has connections with lots of big hospitals in Dallas,” says Garcia, who graduated with a bachelor’s in May 2009. “I was part of a cohort of 100 students. We all went to school together. We became like a family. I really enjoyed that.”

At UTA, Garcia was a McNair Scholar, a program designed to increase the number of people from underrepresented groups with doctorates. Garcia later received a Doctor of Nursing Practice degree at another university.

After graduation, she joined the emergency room at Children’s Health, where she remains. She works as a clinical nurse specialist, an advanced practice nurse who works to improve patients’ outcomes and helps to lead projects across the system for general surgery and general pediatrics.

She has a keen interest in pediatric research and community work. As an emergency room nurse, she noticed how well she connected with Spanish-speaking families and how their health outcomes seemed to be so much better.

Seeking to connect more with the community, she discovered the Dallas chapter of the National Association of Hispanic Nurses and was elected president last year. Membership has doubled under her watch.