

# Touching Lives. Transforming Health Care.

College of Nursing and Health Innovation • 2019-20 Annual Report



## College of Nursing and Health Innovation

#### **UNDERGRADUATE NURSING**

• Bachelor of Science in Nursing

Prelicensure BSN

RN to BSN

Honors Degree Program

#### **GRADUATE NURSING**

Master of Science in Nursing

Adult Gerontology Acute Care Nurse Practitioner

Adult Gerontology Primary Care Nurse Practitioner

Family Nurse Practitioner

Neonatal Nurse Practitioner

Psychiatric/Mental Health Nurse Practitioner

Pediatric Primary Care Nurse Practitioner

- Master of Science in Nursing Administration
- Master of Science in Nursing Education
- Nursing Educator Certificate
- Post-Master's Certificate
- Doctor of Nursing Practice
- Doctor of Philosophy in Nursing

#### **KINESIOLOGY**

- Bachelor of Science in Exercise Science
- Bachelor of Arts in Kinesiology
- Bachelor of Science in Public Health
- Master of Science in Exercise Science
- Master of Science in Athletic Training
- Master of Science in Public HealthDoctor of Philosophy in Kinesiology
- Doctor of Timosophy in Kinesiology
- Graduate Certificate in Public Health Practice

#### **COMMUNITY PROGRAMS**

- FitSTEPS for Life at UTA
- MavFit Exercise and Wellness Counseling
- Little Mavs Movement Academy



The College of Nursing and Health Innovation is a National League for Nursing Center of Excellence.



The baccalaureate degree program in nursing, master's degree program in nursing, Doctor of Nursing Practice program, and post-graduate APRN certificate program at The University of Texas at Arlington are accredited by the Commission on Collegiate Nursing Education, 655 K Street NW, Suite 750, Washington, DC 20001, 202-887-6791.



The athletic trainer program in the Department of Kinesiology is accredited by the Commission on Accreditation of Athletic Training Education.



From the Dean

A Message

rom providing the critical and necessary clinical education of preparing students for the health care workforce to continuing our many research projects, there has never been a more pivotal time for The University of Texas at Arlington College of Nursing and Health Innovation community.

Few words can describe the past year and the challenges brought about by the COVID-19 pandemic. It was demanding, difficult, and yes, unprecedented. Yet, despite that our CONHI students, staff, and faculty have risen to unexpected levels of triumph and accomplishment. Their spirit to remain optimistic, dedicated, and passionate toward their pursuit of education is an inspiration. They are the reason last year, despite the challenges, was still a very successful one for our College.

Even in the midst of a pandemic, there was still much for us to applaud as we look back. In 2020, we transitioned courses all online in the spring, while maintaining the exemplary quality of teaching and innovation that we are known for.

In 2020, we also celebrated our second distinct designation from the National League for Nursing. It was the third time in recent years that the college has received this honor from the NLN, considered the premier organization for nurse faculty and leaders in nursing education. We were recognized as a Center of Excellence in the category of "promote the pedagogical expertise of faculty." This is truly a national testament to our talented and renowned faculty.

The College also continued on its path of increasing research productivity, and I am very proud of our faculty's success in their research endeavors. We have never had so many new grants funded, and during one of the most challenging years we have ever seen.

As we look forward to the months ahead, I am optimistic about the progress of vaccines, and with their availability I am hopeful we will begin to see a steady resolution to many of the challenges we experienced in 2020. I also strongly believe that we have learned even more about what we can do with technology and online education, which will allow us to integrate many new ideas that we tried in 2020 into our ongoing curriculum.

I am honored to present our 2019-2020 Annual Report, which highlights the growth, advancement, and efforts of our College. In this report you will find select highlights of our research, student success, and exceptional alumni. This is but a small sample of the myriad successes our students, staff, and faculty are achieving every day. For our community is an impressive one, and I am humbled to be a part of this growing and innovative College.

All the best.

Dean Elizabeth Merwin, PhD, RN, FAAN



2019-20 ENROLLMENT

Undergraduate = **18,173** Master's = **7,064** Doctoral = **362** 



Undergraduate = 1,657 Master's = 118 Doctoral = 21





**2019-20 GRADUATES** 







**CONHI SCHOLARSHIPS** AWARDED

**FALL 2019** 

Recipients = 310

\$253,160

**SPRING 2020** 

Recipients = **277** 

\$266,582

\*total includes endowed scholarships & others from fellowships, grants, and Dream Makers



## **FACULTY**

Both on-campus and online

**NURSING** 

KINESIOLOGY

Full-time = 126 Part-time = 387 Full-time = 32Part-time = 16

2019-20 GRANT PROPOSAL SUBMISSIONS



2019-20 NEW SPONSORED PROJECTS



#### **UNDERGRADUATE NURSING**

Placements = 5,922

Sites = **108** 

**MASTER OF SCIENCE** IN ATHLETIC TRAINING

Placements = **62** Sites = **36** 

#### **GRADUATE NURSING**

Placement = 6,703

Sites = **7,382** 

## **RANKINGS AND HONORS IN 2020**

#18 in **NIH funding** among schools of nursing for 2019 (Blue Ridge Institute for Medical Research)

2 SIMULTANEOUS National League for Nursing Center of Excellence designations – new 2020 designation in category "promote the pedagogical expertise of faculty"

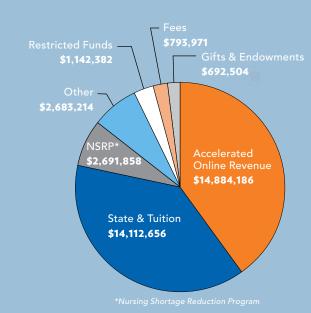
- #6 best nursing school in Texas by Nursing School Almanac
- **#1** online BSN by College Rank
- #1 online accelerated BSN degree in U.S. by Nursingprocess.org

CONHI was **ACCEPTED** into the **National Hartford Center of** Gerontological Nursing Excellence (NHCGNE)

U.S. News & World Report's 2020 "Best Graduate Schools" list ranks the College of Nursing and Health Innovation's master's program #56 in the nation and its **Doctor of Nursing Practice program** #84

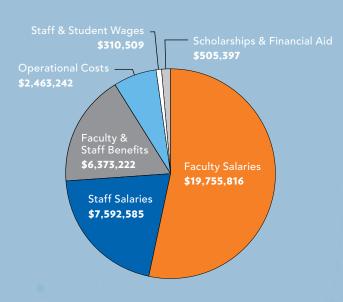
- **#20 online nursing programs** by Best Value Schools
- #7 best online MSN degree programs by Best Health Degrees

## 2019-20 SOURCE OF FUNDS



\$37,000,771

## 2019-20 EXPENDITURES



\$37,000,771

## Creativity and Innovation at CONHI's Smart Hospital

The pandemic has brought change to nearly every aspect of students' educational experience, but that hasn't stopped CONHI from developing new and creative ways to teach nursing students.

The COVID-19 pandemic created one of the biggest challenges CONHI has ever faced – how to quickly and effectively create virtual learning to train and prepare students for a career in nursing. In a time when in-person learning is limited for safety reasons, CONHI faculty have found ways to teach hundreds of students, and in some cases improve their learning experience by providing more simulated patient interactions and clinical examples than before.

In-person training at the Smart Hospital has been carefully limited to decrease the risk of COVID-19, such as through physical distancing requirements and room capacity limitations. The new precautions have limited the number of students who can be on-site at any one time.



Nursing students practice taking a history and therapeutic communication with artificial intelligence mannequin "Alex."

For those who did come on-site to the Smart Hospital, new contact tracing technology was put into place that tracked individuals' movements while they were in the facility. Protocols also were implemented for one-way traffic and a screening tool was used to check students for physical symptoms before they entered the building.

Faculty began creating videos in the hospital to use as training, including embedding errors within the video scenario and using those in their virtual classroom to teach students.

"We've really seen the creativity of our faculty shine this year. They've reimagined the use of telepresence and creatively used videos, allowing students to still experience training for clinical practice, while being at their respective remote locations. It's truly remarkable," shared Jennifer Roye, assistant dean for simulation and technology.

#### **VIRTUAL SIMULATIONS**

Simulation has long been used at CONHI as a teaching modality, as it allows instructors to control the learning experience. This past year due to the pandemic, nursing students have seen the transition of many in-person simulations move to virtual simulations.

Continuing this year were the many remote and virtual simulations, in particular in our psychiatric training. The psychiatric simulations took place virtually, where students would interact with 10 standardized patient actors presenting with acute psychiatric crises.

It can often be difficult to control the types of patients the students encounter in the pediatric and obstetric hospital clinical training. Virtual scenarios provided an opportunity for all learners to take care of patients with specific diagnoses as they are learning. In the virtual experience, students care for different patient types and specifically assigned diagnoses over a five-week process.

Virtual simulations were happening in nearly every other class as well. They were often conducted online in breakout rooms where smaller groups could interact with each other, make decisions, and prioritize interventions while faculty worked through the scenario with them.

"Students may also be using avatar-based computer system and other ways to experience different clinical situations and sometimes practicing more than they would during in-person trainings and with less hospital resources," said Meagan Rogers, clinical assistant professor. "Nothing will replace the in-person experience, but the silver lining has been the increased exposure to clinical scenarios and being able to ensure our students still receive the training and experience they need to stay on track for graduation."

#### **UP NEXT AT CONHI**

One new tool on the horizon for CONHI teaching will be the use of telepresence robots, which will allow students to act as the eyes, ears, and mouth of the practitioner. In the coming months some students will be able to watch the simulated clinical experience in real-time from a remote location through the telepresence robot and determine the decision and actions that the practitioner should take.

The 2021 Community Action Poverty simulation also will go virtual and will be one of the largest simulation events at CONHI. Typically, at this in-person event students simulate the experience of what life is like at or below the poverty line, including interacting with community services, food banks, health care, and more. It also will be the first time the simulation is able to include Accelerated Online students who previously did not participate because it was an inperson event.



Junior 1 faculty take a break to share their Mav Spirit in the Smart Hospital.

"This is a really important simulation as it helps instill in them empathy and teaches them just how hard it is to live in poverty. While an in-person experience is ideal, we're proud to see it still happen virtually and to involve our online students. What a unique experience for them," said Roye.

"This has been a very challenging year overall, but our faculty, staff, and students have risen to the challenge and their perseverance has been inspiring. We can't wait to see what new innovations come next year and hopefully for some semblance of normal in the near future."

## **CONHI A National Center of Excellence**

The University of Texas at Arlington's nursing program was one of 17 nationwide to be named a 2020 NLN Center of Excellence by the National League for Nursing (NLN).

It was the third time in recent years that the College of Nursing and Health Innovation has received this designation from the NLN, considered the premier organization for nurse faculty and leaders in nursing education. UTA Interim President Teik C. Lim said the award demonstrates the college's high standards of academic excellence.

"We are extremely proud of the faculty, staff, and students in the College of Nursing and Health Innovation," Dr. Lim said. "This prestigious honor bolsters UTA's standing as a nursing academic powerhouse for Texas and beyond while demonstrating the quality of our faculty and our dedication, hard work, and commitment to academic excellence as we prepare the next generation of nurses."

NLN, an organization of 40,000 nurse educators and 1,200 member institutions, recognized the college as a Center of Excellence in the category of "promote the

pedagogical expertise of faculty." The recognition is aimed at organizations that demonstrate in concrete, measurable terms sustained excellence in faculty development, nursing education research, or student learning and professional development.

"This honor re-affirms our standing as a leading center for nursing education and health care research," said Elizabeth Merwin, dean of the College of Nursing and Health Innovation. "We are extremely grateful for this designation recognizing the passion, commitment, creativity, and hard work of our faculty and staff."







Mural in North Texas Genome
Center in the Science &
Engineering Innovation & Research
Building, created by UT Arlington
art students, October 2020

# A Moment in Time Mural on the Path to COVID-19 Testing Lab

Florence Haseltine has always been a fan of art.

That is why when the opportunity to add murals on the hallway leading to the North Texas Genome Center (NTGC) arose, the center's medical director could not pass up the chance to partner with the UTA's Art and Art History Department and their students.

Her only request: make the mural uplifting.

The end result by the art students was a creatively and beautifully presented

moment in time, the COVID-19 pandemic. The mural could not be more appropriate, as the painted hall leads to UTA's on-site COVID-19 test processing. NTGC is processing around 500 COVID-19 tests a week and was able to be transformed in just a few short months.

Fortunately, the center was already highly respected in genome sequencing for biomedical research and had many regulatory clearances needed to quickly transition to this new service, COVID-19 test processing.

certifications and our staff are experts in their field,"
Haseltine shared. "Anajane Gey Smith, our excellent
ifully presented program manager of interdisciplinary research, has
experience running large clinical labs like this one and
he mural could not be ensures we stay in compliance, while Dr. Zibiao Guo, the
oriate, as the painted senior research scientist at the center, runs the technical
UTA's on-site COVID-19 side of the lab, and Taylor Gunby runs the assays. Without
ing. NTGC is processing them, none of this would be possible.

"And now, thanks to UTA's Art and Art History Department we have a daily reminder as we walk into the lab why our work is so important, and it is going to be a historical part of the University now, in terms of what we went through during this period," she added.

With additional support from campus leadership for new equipment and the necessary supplies, Dr. Haseltine and

the laboratory staff hope to continue improving how

much they can process, with plans to increase to 1,000

"We were fortunate that we already met necessary

tests a week.



**Florence Haseltine**Medical director, North Texas Genome Center
Executive director of health research



THE UNIVERSITY OF TEXAS AT ARLINGTON

COLLEGE OF NURSING AND HEALTH INNOVATION 2019-20 ANNUAL REPORT

"I chose to transfer to UTA because of its amazing reputation and track record."

## Alyssa Tijerina

#### **NURSING AND PSYCHOLOGY JUNIOR**

Alyssa Tijerina always knew she would one day pursue a career in medicine.

Having witnessed firsthand how her family members fought different illnesses, she developed an aptitude for assessing the potential needs of patients.

"I knew from a young age that I wanted to be in the medical field and help people in general," said Tijerina, who wants to become a psychiatric nurse practitioner. "As I began to explore my career options, I decided to pursue nursing. I chose to transfer to UTA because of its amazing reputation and track record.

Her interest in both oncology and mental health led her to an internship at the Texas Center for Proton Therapy, which uses an advanced, precise form of radiation that employs protons to destroy cancer cells while minimizing damage to the surrounding tissue.

After a visit to the renowned center, she kept in touch with Gary Barlow, the center's administrative director. He offered her an internship at his center.

"I believed Alyssa's multifaceted interests, both in nursing and psychology, would be a great fit for what we do at the center," he said.

Barlow, Tijerina, and a team of professionals at the center created an internship curriculum that focuses on providing mental health support to oncology patients and their families while helping them understand their individual treatment plans.

"Alyssa is a trailblazer," Barlow said. "We know UTA students bring forward nothing but the best attitude, willingness to learn, and a passion to help others."

## Dissertations & Theses

#### **DOCTOR OF NURSING PRACTICE**

**BARBARA ALLIOD** The optimal timing of surgical antibiotic prophylaxis in the prevention of a surgical site and prosthetic join infection

**LYNETTE ANDREWS** Improving patient satisfaction, specifically the perception of nurse responsiveness

**TERENCE BARLOW** Use of algorithms to decrease antibiotic prescribing

**FRANCIS BASEBANG** Poor glycemic control and surgical site infections

**STEPHANIE BEAVERS** Development of an evidence-based guideline for implementation of robotics in the hospital setting

**SHAMEKA BOLTON** Improving substance abuse screening of adult psychiatric patients

**RUTH BOSIRE** Reducing prosthetic joint infections using a joint wellness program bundle

**ANNA BOWE** Improving cultural competence and patient relationships at a free health care clinic

**JENNIFER BREWSTER** A diet intervention program for patients with NAFLD

**CATHRYN BROWN** Frequency of urine drug screening for opioid monitoring

**LEISHA BULLER** Developing a nursing dashboard using the Balanced ScoreCard

**COURTNEY CLEVELAND** Can palliative care mitigate moral distress among CVICU staff?

**DWIGHT DAVIS** Educational bundle on skin conditions

JUDJEE DIAZ An educational bundle for HTN management

**MONICA ELIZONDO** Super user model for nursing electronic health record (EHR) documentation

**LISA EVERETT** Workplace violence prevention in ambulatory settings

**PATRICIA FAGAN** Implementation of AACE/ACE clinical practice guidelines for Type 2 Diabetes in primary care

**JENNIFER FLIPPO** Weight words matter

**REBECCA FOSTER** Fluid balance monitoring improvement

**SUJA GEORGE** Educational bundle to improve medication compliance

**EVELYN GREEN** Implementation of adolescent depression

**VIRGINIA HARDAWAY** TAVR ambulation protocol

JUANITA HERNANDEZ Mychart Mystep Myhealth

**BRANDY HILL** Educating providers about the importance of culturally sensitive diabetes care in the Latino population

**KATHERINE HITCHCOCK** The care of septic patients

**ETHANY HOWDEN** Diabetes project

**GURMINDER KAUR** Electronic monitoring for handwashing compliance

**JIMMIE KINNEY** Admission documentation failure

**BARBARA KNOTT** Geriatric rural health: Improving diabetic outcomes

**STELLA LISK** Decreasing 30-day readmissions after transcatheter aortic valve replacement (TAVR)

PAUL MAYOMBOLA Home spirometry in lung transplant

**RACHEL MCKEEL** Influence of transformational leadership on nurse engagement

**ASHLEY MCLAUGHLIN** *Improvement of HPV vaccinations* 

**JULIE MILES** Advanced nurse's role in polypharmacy reduction

**TERESA MULLEN** Comparing the impact of telephonic and digital disease management on glycemic control in Diabetes

**REBECCA OKOCHE** Adding one-page discharge document with teach-back method for post-partum depression population

**LILIAN OMBURO** Utility of electronic alerts

Continued on next page

Dissertations & Theses continued

**CAROLINE OMORI** A bundled intervention to increase HIV testing in a community clinic

**ELIZABETH POPECK** Recognition and treatment of child abuse

**AMBER POTTER** Utilizing a nurse practitioner navigator with patients with inflammatory breast cancer

**MARITZA RUIZ** Re-streaming old ways through key stakeholders: QI project in the ED

**TANYA SANCHEZ** Skilled nursing facility: Shift-change communication process

**CAREY SAVOIE** Leaders improving job satisfaction

**EDWARD STINER** The effects of competency verification on central venous catheter maintenance bundle compliance

**JENNIFER STUART** Pressure injury prevention project

**OLAYINKA SUBERU** Prenatal breastfeeding education

**MARIAN TAYLOR** Transition of care

MICHELLE THERIOT Curbing post-partum hemorrhage

**MERILYN TUNSTALL** Parent-focused ADHD behavioral interventions

**STACIE VELASCO** *Implementing BERT in the emergency department* 

TAMARA WASHINGTON An EBP to combat obesity

**JARED WOLFE** Purposeful hourly rounding

**ZHAN YANG** Weight management project

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

**KELLIE KAHVECI** Older Adult Hospital Readmission Outcomes of Transitional Care Model Compared with Home Based Primary Care Practice

**CECILIA LIJAUCO** The Lived Experiences of Breathlessness in Adults with Chronic Heart Failure

**MEGAN MARIVELES** Predictors of Perceived Faculty Support in Pre-Licensure Registered Nursing Students

**ELESHA ROBERTS** Hypertension Self-Management Intervention: Text Messages to Improve Blood Pressure and Medication Adherence Among African American Older Adults

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

RHYS I. BEAUDRY Pathophysiology of Exercise Intolerance in Breast Cancer Survivors Treated with Anthracycline Chemotherapy

**MEREDITH N. DECKER** The Effects of Knee Joint Loading on Dynamic Tasks in Individuals Several Years Post-ACL Reconstruction

**CHADWICK T. FUCHS** Understanding Components of Motor Imagery Ability and the Association with Motor Proficiency in Children and Young Adults

**TYLER GARNER** Trunk Control in Manual Wheelchair Users in Static and Dynamic Conditions

**XIAN LIU** Dysregulated Calcium Signaling in Cardiomyocytes from Diabetic Atrial Fibrillation to Chemotherapy-Induced Cardiac Hypertrophy

**RYAN ROSENBERRY** Examining the Influence of Skeletal Muscle Oxygen Metabolism on Microvascular Reperfusion in Response to Acute Ischemia

**JAKE T. SAMUEL** Development and Clinical Application of a Novel Left Ventricular Diastolic Stress Test

**BEN E. YOUNG** Novel Mechanisms of Peripheral Vascular Dysfunction in Patients with Type 2 Diabetes

**XIAOXIA ZHANG** Brain Health and Active Living: A Social Ecological Approach

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

**RAUCHELLE E. RICHEY** Cerebrovascular Function in Adults with Depression





Berford Moncriffe and Laud Dei MASTER OF PUBLIC HEALTH STUDENTS

Berford Moncriffe and Laud Dei returned to school to fulfill their shared passion for improving health outcomes in their communities.

UTA's Master of Public Health (MPH) degree is a student-centered, practice-focused program for the working professional that builds their skills and enhances their practice.

A practicing pharmacist for 18 years, Moncriffe, left, wanted to do more to help the community at large.

"What made UTA's MPH stand apart from other programs was its focus on urban health," he said.

UTA offers the only MPH concentration in urban health in Texas and one of the few in the U.S.

Dei, right, was attracted to urban health as well, although he was no stranger to the field of public health. The Ghana native received his graduate education in the United Kingdom, with postgraduate degrees in global health and health services research.

"What made UTA's MPH stand apart from other programs was its focus on urban health."





## Kyrah Brown

#### ASSISTANT PROFESSOR OF PUBLIC HEALTH

Kyrah Brown's research lab uses a combination of community-based participatory methods, secondary data analysis, and evaluation science to investigate social and health system factors that disproportionately impact the health and birth outcomes of Black women.

The Maternal and Child Health (MCH) Equity Lab's primary research focus is to investigate the individual-, community-, and systems-level factors that shape women's health and birth outcomes. The lab, which seeks to understand how those complex interactions can be addressed to reduce racial disparities, also provides a training ground for UTA undergraduate and graduate students to hone their skills and improve their job prospects.

"Persistent racial and social inequities in maternal and child health remain a significant public health issue," Dr. Brown said. "These inequities are driven largely by the conditions in which women are born, grow, live, work, and age. Black women, in particular, tend to experience higher rates of preventable chronic health conditions, maternal health complications, and adverse birth outcomes compared to other racial groups."

"Persistent racial and social inequities in maternal and child health remain a significant public health issue."



## Zui Pan & Gabriela Mustata Wilson

#### **NAI SENIOR MEMBERS**

In August, the National Academy of Inventors (NAI) selected Zui Pan, top, and Gabriela Mustata Wilson, bottom, as Senior Members of the organization, an honor that recognizes their achievement as inventors. The NAI Senior Member Advisory Committee chose them for their "success in patents, licensing, and commercialization" and for producing "technologies that have brought, or aspire to bring, real impact on the welfare of society."

This distinction given to Dr. Pan and Dr. Mustata Wilson exemplifies the research excellence CONHI is known for. Our faculty's academic achievement, significant impact on society, success in issued patents, and relentless effort in teaching and mentoring young inventors makes CONHI and UTA a leader among those educating the next generation of inventors.

Pan is an associate professor of kinesiology and has a lab that researches calcium signaling in cancer and other diseases.

Mustata Wilson is a professor of kinesiology and co-director of the Multi-Interprofessional Center for Health Informatics.

The mission of NAI is to recognize and encourage inventors with patents issued from the U.S. Patent and Trademark Office, enhance the visibility of academic technology and innovation, encourage the disclosure of intellectual property, educate and mentor innovative students, and translate the inventions of its members to benefit society. The Senior Member Program allows the organization to expand its reach and further its goals in recognizing the contributions of inventors around the globe.

## Selected Grants\*

#### MARCO BROTTO

Loss of Numb in Muscle Dysfunction in Aging; Subaward with Bronx Veterans Medical Research Foundation Inc. via National Institutes of Health: \$585.249

Regulation of Store-Operated Calcium Entry during Muscle Aging; Subaward with The Ohio State University via National Institutes of Health; \$759,089

#### **PAUL FADEL**

Mechanisms of Exercise Intolerance in Heart Failure with Preserved Ejection Fraction: Precision Therapy Based on Patient Specific Pathophysiology; Subaward with The University of Texas Southwestern Medical Center via National Institutes of Health: \$210.512 and \$601.070

#### **JODY GREANEY**

Peripheral and Central Mechanisms of Neurovascular Dysfunction in Human Depression; National Institutes of Health; \$496,582

#### **ELIZABETH MERWIN**

Reducing Health Disparities in SMI, Rural, and Minority Populations; National Institute on Minority Health and Health Disparities; \$1,258,324

#### MICHAEL D. NELSON

Mechanism and Modulation of Sex Differences in Myocardial Steatosis Induced Left Ventricular Dysfunction; National Institutes of Health; **\$2,038,806** 

\*current amounts awarded to UTA through FY 20

Mechanisms of Exercise Intolerance in Heart Failure with Preserved Ejection Fraction: Precision Therapy Based on Patient Specific Pathophysiology; Subaward with The University of Texas Southwestern Medical Center via National Institutes of Health; \$273,869

#### **DANIEL W. TROTT**

T cells mediate age related arterial dysfunction; National Institutes of Health; \$253,800

#### **VENU G. VARANASI**

R56—Printing and Regenerating Fractured Bone Using Antioxidant Materials; National Institute of Dental and Craniofacial Research: \$427.584

#### YAN XIAO

PROMIS Learning Lab: Partnership in Resilience for Medication Safety; Agency for Healthcare Research and Quality; \$1,250,000

SCH: INT: Collaborative Research: Novel Computational Methods and Models for Continuous Objective Multimodal Pain Assessment Sensing System (COMPASS); National Science Foundation; \$171,560

#### JINGSONG ZHOU

Preserving mitochondrial function for alleviating ALS progression; National Institutes of Health; **\$915,017** 

# Research Laboratories

#### NURSING

MARCO BROTTO LABORATORY works to devise new strategies to diagnose and treat musculoskeletal diseases.

KATHRYN DANIEL LABORATORY (i.e., Smartcare Apartment) focuses on technology development to assist older adults in safe independent living in the community.

KRISTIN GIGLI LABORATORY conducts research, advocacy, and education to improve pediatric health outcomes by optimizing care delivery systems utilization of nurse practitioner and through evaluation of health policies.

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

**ELIZABETH MERWIN LABORATORY** focuses on improvements in health outcomes and reduction of health disparities in rural, minority, and vulnerable populations, using large, national health care datasets for population health studies.

**JESSICA SMITH LABORATORY** focuses on generating knowledge about how nursing resources could be modified to result in safer care for rural communities.

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

#### **UTA HEALTHCARE INNOVATION LABORATORY**

led by Yan Xiao develops and tests innovative technology solutions for healthcare delivery to improve quality, safety, and engagement in health.

#### KINESIOLOGY

APPLIED PHYSIOLOGY AND ADVANCED IMAGING **LABORATORY** led by Michael Nelson focuses on questions relating to human health and cardiovascular disease.

**BONE VASCULAR AND MICROCIRCULATION** LABORATORY led by Rhonda Prisby examines the interaction between blood vessels and bone in states of health and disease.

### **DEVELOPMENTAL MOTOR COGNITION LABORATORY**

led by Priscila Tamplain investigates the development of motor behavior in children and adolescents.

**HUMAN NEURAL CARDIOVASCULAR CONTROL LABORATORY** led by Paul Fadel investigates neural cardiovascular control in human health and disease.



#### **INTEGRATIVE IMMUNOLOGY LABORATORY** led by Daniel Trott focuses on how the immune system interacts with

other tissues to regulate cardiovascular and metabolic function.

#### INTEGRATIVE VASCULAR PHYSIOLOGY LABORATORY

led by Matthew Brothers investigates the mechanisms of impaired autonomic and vascular function in selected at-risk/ diseased populations.

#### MATERNAL AND CHILD HEALTH EQUITY LABORATORY

led by Kyrah Brown examines the factors that shape the birth outcomes and health of Black women across the lifespan.

**MOVEMENT AND PHYSICAL ACTIVITY EPIDEMIOLOGY** LABORATORY led by Xiangli Gu seeks to improve the health and well-being of children and adolescents.

**NEUROMUSCULAR DISEASES LAB** led by Jingsong Zhou focuses on Ca signaling and mitochondrial function in striated muscle pathophysiology and neuromuscular diseases, particularly Amyotrophic Lateral Sclerosis (ALS).

#### **NEUROVASCULAR PHYSIOLOGY LABORATORY** led

by Jody Greaney studies the neurovascular dysfunction in depression to address depression-associated cardiovascular disease.

**NICOTINE AND TOBACCO RESEARCH LAB** led by Ziyad Ben Taleb focuses on emerging tobacco products like hookahs

and e-cigarettes and their effects on health.

#### PHYSICAL ACTIVITY AND WEARABLE SENSORS

**LABORATORY** led by Yue Liao promotes active living using wearable sensors for chronic disease prevention.

**SOCIAL DETERMINANTS OF HEALTH LABORATORY** led

by Yeonwoo Kim investigates how neighborhood environments impact health outcomes and behaviors.

#### THERAPEUTIC INTERVENTIONS RESEARCH LAB led

by Cynthia Trowbridge investigates the clinical efficacy and therapeutic intervention in athletic injury.





## Lauren Elizondo

#### ('05 BSN) ICU NURSE

Lauren Elizondo is a registered nurse for Baylor Scott & White, where she's worked as a floating ICU nurse for the last 15 years. While the hospitals she serves have seen an increase in COVID-19 patients over the last few weeks. her job, she said, has remained the same.

"Gowning up and doing contact precaution is not new to nursing," said Elizondo, who lives in Arlington. "I feel safe and secure because of the protective steps that are in place."

The hardest thing so far is that the protective precautions create a literal barrier between her and her patients.

"To care for a patient, touch is a very big thing," Elizondo said. "Our time in the room can be very impersonal when you're trying to talk through a mask and limit the time you're in there. It distances the patients from you."

Elizondo is, above all, grateful for the job she still loves doing.

"My job is very fulfilling," she said. "I'm thankful that I'm still needed—that I still get to go to work and take care of people."



## **Courtney Kinnear**

#### ('16 BSN, '19 MSN) ER CHARGE NURSE

Kinnear is an emergency room registered nurse at Texas Health Presbyterian of Rockwall, where she also serves as charge nurse. Part of her job is assigning nurses to patients in a nine-bed ER that sees about 60-80 patients a day.

Since COVID-19, a lot about her day-to-day role has changed. The hospital has reorganized its emergency room, added negative pressure rooms, and taken over a seven-room pre-op area to use as a respiratory hallway.

"The hardest part is the unknown," said Kinnear, who lives in Royse City. "We don't know when it's going to hit our area, how hard it will be, or how long it will last. When this first hit our country, it was hard watching the brave nurses, doctors, and PA/NPs that I work with have so much anxiety and fear of what was to happen."

Kinnear said encouragement from the community is bringing her the most joy right now.

"The amount of support people are showing for health care workers is amazing," she said. "The nursing profession seems to have renewed respect from the community."

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# **Student** Organizations

#### **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

## **BLACK STUDENT NURSING ASSOCIATION** functions as a support and networking group for African-American

professional relationships.

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.

HISPANIC STUDENT NURSING ASSOCIATION builds partnerships between students, family, community, and CONHI 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.

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.

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.



2019 Health Innovation Constituency Council historian Sarah Kolf presents during their general meeting.







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