Title:Innovations in Health Care Delivery Across Continuums to Affect Disparate
Health Outcomes

• Co-Leaders:

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Participating Discipline/academic units/departments: School of Nursing/Health Psychology/ Gerontology as part of the interdisciplinary DNP to PhD program

Target category: Areas of Future Opportunity and Investment

Keywords: Transitions, Communications, Self-care, Interdisciplinary, Outcomes

2. Executive Summary:

The current pandemic has clarified the role of nursing in the healthcare continuum as the nation watches nurses caring for people with acute illness from COVID-19 during in-hospital admissions including care in the emergency department, intensive care and ventilator management, COVID-19 designated units, and acute rehabilitation. Currently, we are experiencing nurse's role in preventative care with vaccination and infection control. Clearly, nurses are essential across the healthcare continuum. Although not as visible, this was important prior to the pandemic and will continue to be essential to the health and economic growth of the Charlotte Region. Healthcare employs more people than any other sector and contributes \$20 billion to the regional economy, and <u>nurses are the largest workforce in healthcare</u>. The vast majority (88%) of healthcare workers are employed by Atrium Health, CaroMont Health, and Novant Health, and the healthcare workforce is comprised of primarily women (82%) and 29% are African American: this is 6% higher than the 23% of the total workforce. The structure of healthcare is evolving.

Changes in the demographics of society will drive the evolution of healthcare as by 2030, 1 in 5 persons will be retirement age, and by 2034, those 65 and older will outnumber those under 18 years of age. Further, by the 2030s, the population will become more racially and ethnically diverse. These changes coupled with budgetary constraints (Medicare) will require innovations to shorten acute care (hospital) stays and transition care management into community care settings such as skilled care or rehabilitation facilities, nursing homes, hospice, homes, pharmacies, urgent care centers, or same day surgery centers. These transitions will necessitate strategic efforts to prevent hospital readmissions while maintaining positive health outcomes. Thus, <u>innovations in delivery of health care across the healthcare continuum are essential</u>.

Unfortunately, poor transitions across care settings result in fragmented care and poor health outcomes resulting in an annual estimated cost of \$12 to 44 billion. Persons with multiple comorbid physical and mental health problems have more episodic unplanned utilization of healthcare resources driving up the costs of care. Another group of persons identified as 'super-users,' such as diabetics with unmanaged blood sugars in life threatening ranges, visit the emergency department 10 or more times a year with resultant high hospital admission rates. These super-users account for approximately 30% of adult costs. Developing innovations that address the complexities of healthcare transitions require systematic inquiry. Nurse scientists are uniquely positioned to lead interdisciplinary research teams in this inquiry.

The Doctor of Nursing Practice (DNP), our clinical practice doctorate, has focused on clinical expertise and scholarship to improve patient outcomes in both acute and community care settings (such as clinics). Our proposed PhD program is advancing our area of distinction in capitalizing on the strengths of the nursing discipline to address the complex issues facing healthcare in our region and state. By focusing on admitting PhD students with a DNP, we are expanding opportunities that support conducting research in teams that combine the expertise of nurse scientists with the clinical knowledge of advanced practice providers. We will develop programs of research with interdisciplinary teams to bridge the delivery of health by focusing on the emerging area of research on transitions to affect disparate outcomes: innovations in communications, innovations in care coordination with families/caregivers, innovations in providing just in time care delivery by interprofessional teams, innovations in self-management, and innovations in measurement process and clinical outcomes. We believe our application details a future area of excellence in healthcare that will serve as a model for the state, region, and nation.

INNOVATION: Communication Multiple faculty are working on innovations in 3. communications including social media platforms (Cornelius, J, Neely, T, Okoro, F, Kennedy, A, Whitaker-Brown, C. (2019). Mobile Phone, Social Media Usage, and Perceptions of Delivering a Social Media Safer Sex Intervention for Adolescents. Adolescents, Health, Medicine and Therapeutics) and (Kazemi, DM, et al (2017). Systematic Review of Surveillance by Social Media Platforms for Illicit Drug Use. Journal of Public Health) use of technology such as Fitbit, smartphones and other m-health strategies have also been piloted with peer reviewed publications and small grants. More recently, the evolution of COVID-19 has resulted in use of telehealth strategies in delivery of care. Powers et al (Powers, K, Neustrup, W, Sossoman, LB. et al (2020). Journal of Interprofessional Care) used simulations in telehealth to collaborate with other healthcare professionals, and she and Townsend-Chambers are on a NSF grant submission with CCI to use AI to prevent adverse events (falls). Dr Troutman-Jordan submitted a telehealth grant to NLN to train students on using telehealth (pending). Two currently funded grants in this area: An Interactive Technology Enhanced Coaching Intervention for Black Women with Hypertension, NHLBI, 1K01HL140288-01; \$756,343; Funded 02/2018-01/2023. PI Willie M. Abel; Mentor Mark DeHaven; Advisory Board P. Crane. & National Institute of Alcohol Abuse and Alcoholism 09/2014-08/2018 Kazemi (MPI) Ge (PI) Title: Mining Patterns of Substance by Young Adults with Social Media Data. (1R21 AA023975-01) (\$275,000, (Co-PI, 20%).

INNOVATION: Care Coordination with Families/Caregivers With transitions, families or caregivers will be pivotal in navigating health care. Dr. Judy Cornelius and her team including Dr. Okoro and Dr. Whitaker Brown have examined sexual communications among African American adolescents living with parent and grandparent headed families and explored transgender women's family relationships. Dr. Lynch's work has focused on caregiver fatigue or the concept of 'compassion fatigue' (*Aging & Mental Health* 2017 and *American Journal of Health Education* 2018). Dr. Powers has extensive scientific publications on family presence during resuscitation and how to support families in these crisis situations. This has resulted in her working with scientists in Iran (Zali, M., Hassankhani, H, Powers, KA, Dadashzadeh, A, & Ghafouri, RR. (2017). Family presence during resuscitation: A descriptive study with Iranian nurses and patients' family members. *International Emergency Nursing*), being featured in *Medical Ethics Advisor* publication and receiving requests for collaboration from scientists in Poland. Her work is translatable to family presence outside of acute care.

INNOVATION: Providing Just in Time Care by Interprofessional Multiple faculty have published on the importance of interdisciplinary teams. An exemplar is: **Whitaker-Brown, C, Woods, SJ, Cornelius, JB**, Southard, E, & Gulati, S. MD, FACC (2017). Improving Quality of Life and Decreasing Readmissions in Heart Failure Patients in a Multidisciplinary Transition to Care Clinic. *Heart & Lung: The Journal of Acute and Critical Care.*) Two innovations piloted were the primary care to the bedside (Wingate, K, **Woods, S, Whitaker-Brown, C,** & Kelly, W. (2019). Preventing Rehospitalization by Bringing Primary Care to the Bedside. *The Journal for Nurse Practitioners*) and hot-spotting to identify super-users and use interprofessional team to solve complex problems (Cheng, I, **Powers, K**, Mange, D, Palmer, B, Chen, F, Perkins, B, & Patterson, S. (2020). Interprofessional education through healthcare hot-spotting: Understanding social determinants of health and mastering complex care through teamwork. *Journal of Interprofessional Education and Practice-* an interdisciplinary publication with Atrium Health Department of Internal Medicine, Atrium Health Department of Social Work, and Anesthesia (UNC). Hot-spotting has been used as a mechanism for research projects and publications. Dr. **Powers'** team received one of 2 national grants awarded by the National League for Nursing:

Teaming up for community health: Mixed methods study of an innovative interprofessional simulation intervention (\$25,000). Dr. Jordan, DNP actively practices at Novant ED and is a Fellow in the Academy of Emergency Nursing and an American Association of Nurse Practitioners Fellow and has worked with Dr. **Powers** on simulation (*MedSurg Nursing*, 2019) and disaster responders/critical care transport (*Disaster Medicine*, 2019). She has disseminated her research with her interdisciplinary colleagues from Presbyterian Medical Center, Novant, and Mid-Atlantic Emergency Medical Associates: **Jordan**, K, Steelman, S, Leary, M, Varela-Gonzalez, L, Lassiter, S, Montminy, L, & Bellow, E. (2019). Pediatric sexual abuse: An interprofessional approach to optimizing emergency care. *Journal of Forensic Nursing*. Dr. **Jordan** submitted a grant (2021) to support interdisciplinary work on recognition of child maltreatment in the ED. A new junior faculty, Dr. **Parajuli**, (hired 2020) has a robust research agenda on palliative care.

INNOVATION: Self-management Drs. Abel, Cornelius, Crane, Okoro, Troutman-Jordan, Whitaker-Brown, and Coffman all have science focusing on self-management. Dr. Coffman and her colleagues focus on Latino immigrants, their self-prescription practices, and managing their healthcare. More recently her work focuses on access to health care services. Dr. Cornelius primarily focuses on HIV prevention in African American women. Drs. Abel and Crane, both Fellows in the American Heart Association, focus on managing lifestyle (physical activity and diet) medications and symptoms, such as hypertension, fatigue, depression, and poor sleep with a focus primarily on African American women. Drs. Crane and Abel have worked on multiple grants and publications over time. Drs Troutman-Jordan and Crane both focus on aging. Dr. Troutman-Jordan is a Fellow in the Gerontological Society of America. Dr. Okoro has a robust research agenda on self-management in African American populations, specifically focusing on diabetes: Dr. Okoro's research potential was recognized by NHLBI with a PRIDE award in in 2020-2021.

INNOVATION: Measurement Process and Clinical Outcome Drs. Crane and **Abel's** research has focused on clinical outcomes associated with heart disease. These studies were funded by the National Institute on Minority Health and Health Disparities, National Institute of Nursing Research, American Nurses Foundation, and Eakin Foundation (5 co-authored publications). Both **Crane** and **Woods** et al. (Woods -2012: R01 longitudinal study intimate partner violence) have measured inflammation, depression, and biomarkers (cytokines, cortisol, etc.) as outcome measures. Dr. **Troutman-Jordan's** team focuses on physical and mental function in aging adults with chronic conditions (**Troutman-Jordan, M, Kazemi, DM**. (2020). COVID-19's impact on the mental health of older adults. *Public Health Nursing* and **Troutman-Jordan, M**, et al. (2020). Physical Activity, Cardiovascular Health and Mood State in Older Adults, *Geriatric Nursing*).

<u>Additional investments</u> in the School of Nursing can support efforts to ensure that students who enroll in our planned interdisciplinary DNP to PhD program benefit from participating in funded research studies. Clearly, we have capacity and teams in these emerging areas. We now need significant funds for external collaborators to <u>establish a sustained record of excellence and prominence of funding in this area</u>. The School requires additional faculty lines filled by highly qualified scientists with active funding, specifically in palliative care. Funding is also needed for Research Assistants (RA), student stipends, and for research-grade equipment to enhance measurement of outcomes (for example, point-of-care devices to examine biomarkers to measure relevant clinical outcomes across populations). Finally, adequate physical space to conduct research, space for RA/students, and dedicated storage areas are a priority.

4. Transitions from acute care environments to community care and the innovations required for successful transitions align with regional and national priorities. In addition to healthcare's financial impact on the region, more than 40 health-tech start-ups are focused on technology to improve patient care and outcomes. Additionally, this proposal aligns with the University's mission which is, in part, to address the health and social needs of the greater Charlotte region.

- <u>The National Academy of Medicine</u> "The Future of Nursing 2020-2030" report in recognizing the role of the nurse in the health of the nation has developed an expert committee to consider: (a) role of the nurse improving health by addressing social determinant of health and providing effective, efficient, equitable, and accessible care for all across the care continuum, as well as identifying the system facilitators and barriers to achieving this goal; (b) employing collaborative practice models; (c) role of nurse assuring the voice of individuals, families, and communities are incorporated into design and operations of clinical and community health systems; (d) nurses as change agents in creating systems that bridge the delivery of health care and social needs care in the community;
- <u>The Agency for Health Care Research and Quality (AHRQ)</u> found that those in disparate groups did not feel their voices were considered in their transitions and Center for Medicare and Medicaid Services noted that ineffective transitions across healthcare systems increased the risk for adverse events and readmissions, thus increasing healthcare costs.
- One of the three objectives in the new NIH 2021-2025 strategic plan calls for advancing biomedical and behavior science research. Cross-cutting themes include increasing, enhancing and supporting diversity, reducing health disparities, optimizing data science, developing technologies to improve health and promoting collaborative science. Additionally, the NIH: National Institute on Aging funds research that develops interventions to maintain health, well-being and function, prevent or reduce the burden of age -related diseases (such as cardiovascular diseases and cancer, the 2 leading causes of death in Mecklenburg County and North Carolina) disorders, and disabilities; improves understanding of consequences of an aging society to inform interventions development; understands health disparities and develops strategies to improve the health status of older adults in diverse populations.
- National Palliative Care Center funding focuses on developing science in the treatment of symptoms through three primary areas consistent with this proposal: <u>Communication</u> between providers, patients, and families: <u>Symptom</u> exploration to advance knowledge and reduce suffering, and the development of new <u>Models of Care</u> that support safe and effective care transitions across the healthcare continuum to improve patient outcomes.
- Selected Grants targeting areas of Innovations: PA-14-180 NINR NIBIB mHealth Tools for Individuals with Chronic Conditions to Promote Effective Patient-Provider <u>Communication</u>, Adherence to Treatment and <u>Self-Management</u> (R01 Clinical Trial Optional); PA-17-461 NINR, NCI <u>Symptom</u> Cluster characterization in Chronic Conditions (R21); PA-20-068 AHRQ Improving Quality of Care and <u>Patient Outcomes</u> <u>During Care Transitions</u> (R01); PCORI Implementation of Effective <u>Shared Decision</u> <u>Making</u> Approaches in Practice Settings – Cycle 2 2021

Supporting Documents (Table with description followed by 2-page CVs)

Name	Title	Expertise and Contribution to this Application
Abel, W. M.	Associate Professor of Nursing	My clinical background is critical care nursing, with expertise in the care of patients with cardiovascular disease (CVD), the number one cause of death in the United States and globallyMy research agenda is focused on studying minorities with CVD and its main risk factor, hypertension (HTN) We know that 80% of CVDs are preventable. Thus, reasons for this disparity are poorly understood and frequently attributed to diverse causal factors that stem from social determinants of health. My research examines factors relevant to minority populations (such as socioeconomic status, trust in healthcare provider, depression, coping, racism, stigma, spiritual religious beliefs, etc.) that may influence poor health outcomes. Contribution : As a biobehavioral researcher, I consider the interplay of biological (<u>outcomes</u>), behavioral, and environmental contributors to health to better understand and target more active individual engagement in health care behaviors and self-care (<u>self-management</u>) activities performed independently by individuals in collaboration with health care providers to foster better CV health.
Coffman, M. J.	Associate Professor	I have developed a program of research aimed at promoting health in minority populations. Early in my career, I lived in Venezuela for 18 months learning the customs, language, and life ways of the people. This transformative experience led me dedicate my career to the healthcare needs of vulnerable populations, which lies at the core of my research program. In partnership with public health faculty, I have conducted nutrition and chronic disease education research in vulnerable populations. Contribution : With community and academic partners, I have developed expertise designing interventions focused on modifying behavioral health (self-care management) in women and children using quantitative, qualitative, and community based participatory research (CBPR) methods. The foundation of my program of research addresses health disparities in Latinx adults with chronic diseases. The Latinx population living in the Southeastern US is largely undocumented and uninsured, making access to

		consistent, quality healthcare services challenging.
Cornelius, J.B.	Associate Professor	My research has focused largely on social determinants of health with HIV prevention. I have the expertise, leadership, training, expertise and motivation necessary to successfully carry out strategies and intervention research methods for a program grant with minority populations. As a post-doctoral fellow with the American Nurses Association, I conducted focus groups and explored the sexual communication needs of African American parents and their adolescent children. In my post-doctoral fellowship at the University of Pennsylvania, I focused on intervention research methods and the sexual communication needs of African American grand parents and their adolescent grandchildren. In my role as a visiting professor at the Center for AIDS Prevention Studies (CAPS) at the University of California at San Francisco, I expanded my research to integrate technology with HIV prevention research with adolescents. In addition, I have examined the HIV prevention needs of African American transgender women and attitudes of health care providers toward the health care needs of LGBT individuals. As the PI of a previously funded R 21 grant, several university and NIH subcontracts and Co-Core Project Leader for a P20 grant, I have successfully administered funded projects (e.g. staffing, budget, IRB certifications) and established ties with community- based organizations that will make it possible to recruit and retain study participants. Contribution: I have demonstrated a record of productive research projects in the area of sexual communication and HIV prevention needs of African Americans and the integration of mobile technology as a platform of delivering HIV risk reduction information (communication) as means of transitioning to self-care.
Crane, P. B.	Professor and The Carol Grotnes Belk Distinguished Professor in Nursing	I have a consistent program of research focusing on cardiovascular disease in aging and disparate populations using quantitative methods. I focus on symptoms, specifically fatigue, sleep disturbance, and depression, comorbidities and the correlates including cytokines (IL-6, TNF α , CRP-hs). I have had over 2.5 million in funding from NIH, Foundations, and HRSA. My current research is biobehavioral and the team is

		interprofessional and collaborative. I joined UNCC August of 2020 as the Belk Chair in the School of Nursing and the Director of the Academy of Clinical Research and Scholarship (ACRS). I am currently working to build teams and collaboratives. I have extensive experiences in recruitment of women and men and minorities, grant management, mentoring faculty and students, consulting, leadership, and working with interdisciplinary research teams. Contribution –my research career has focused on building teams and developing junior scientists. I have started a nursing PhD program at UNCG and the PhD program was part of my responsibility in my previous role as Associate Dean of Research (ADR). I have taught multiple courses in the PhD programs and have mentored faculty in teaching doctoral students. I have chaired 12 dissertations to date and my students have received external scholarships and awards including Johnson and Johnson, Southern Nursing Research Poster Awards, and Southern Nursing Research Biobehavioral Best Abstract Award. Most have published their dissertations in prestigious journals such as <i>Nursing Research, Journal</i> <i>of Cardiovascular Nursing</i> , and <i>Heart and Lung</i> . During my previous tenure as ADR, I increased funding from 1.3 million to 5 million by building teams, increasing grantsmanship, and making important collaborations to capitalize on strengths. I will use similar strategies through my role as Director of ACRS by forming NIH working groups, developing external NIH funded partnerships to enhance the production of fundable grants, and working closely with the Director to provide support for research productivity. Further, I will continue my funded research on biobehavioral mechanisms
Jordan, K.	Clinical Associate Professor	I have been an advanced practice nurse in emergency care for over thirty years. I maintain an active clinical practice as a nurse practitioner in emergency care and am the Director of the Advanced Practice Provider Fellowship in Emergency Medicine at Mid-Atlantic Emergency Medical Associates, Charlotte, North Carolina. I am a nationally certified Family Nurse Practitioner, Emergency Nurse Practitioner, and Sexual Assault Nurse Examiner for Pediatrics. I am also a Fellow in the Academy of Emergency Nursing and the

		American Association of Nurse Practitioners. I have a deep passion for caring for the underserved and vulnerable populations, particularly children and adolescents. Specifically, I have done a large amount of work in the specialized field of child maltreatment, including direct patient care, education at the local and national levels, evidence-based research, advocacy, and publications. I have also developed and led an interdisciplinary child maltreatment team in an acute care setting (Novant) and have been awarded several funded research grants in this specialized area. Contribution: I most recently submitted a grant to continue my work in extending the knowledge of interdisciplinary teams in the emergency department in recognizing and treating potential child maltreatment. As the Co-lead I will serve as a liaison with faculty and Novant and will foster communication to advance collaborations. I will also serve as a consultant to teams of researchers in interdisciplinary science affecting transitions with emphasis on the ED and pediatric populations.
Kazemi, M. D.	Professor	I have the expertise, in the assessment and prevention of substance abuse among youths, young adults and vulnerable populations. I have specific training in the adherence in the use of brief motivational intervention (BMI) to treat substance use problems. I laid the groundwork for this research by developing enhanced and expanded interventions informed by theoretical constructs (real-time, BMI) in conjunction with developing cutting edge technology (mHealth) to prevent substance abuse among vulnerable populations. My most recent research with current BMI program participants supports the value of mobile application to enhancing the appeal and reach of the BMI intervention to college students. Contribution: I have extensive experience in leading research teams and conducting interventional studies for self-care using m-health with disparate populations.
Lynch, S. H	Associate Director, Undergraduate Programs & School of Nursing	I have expertise in family caregiving, burnout, and higher education research. I have been involved in grants that explored caregiver burden, burnout, and stress among various populations. I have guided doctoral student projects involving interventions that address

	Operations	hospice and palliative care populations specifically including provider burnout, pain management, and assessment of early access to hospice and palliative care. In addition, I am a collaborator with a multidisciplinary research team across the University examining the evaluation student outcomes for those in online courses or disciplinary programs. Contribution : This unique experience working with various teams to develop strong, sustainable research and programs for various research proposals allows me to effectively review and evaluate proposals and make recommendations for improvement that impact clients, health care providers, faculty and students and to serve on teams examining caregiving.
Okoro, F.	Assistant Professor in Nursing	I am an expert in self-management support for African Americans with chronic illnesses such as diabetes and cardiovascular diseases. I have two university-funded grants to conduct qualitative studies on experiences of a peer-led self-management program for African Americans with Type 2 diabetes. I received funding from Sigma Theta Tau International Foundation to study African American preferences in a peer support program for people with diabetes. I received th PRIDE-CVD 2020-2021 mentorship training program for minority faculty to increase diversity in biomedical research. My research focuses on improving adherence to risk reduction strategies against cardiovascular diseases through a web-based education intervention in African Americans with type 2 diabetes. Contribution : Research focuses on improving health outcomes in African Americans with chronic illnesses, type 2 diabetes, and also those who have been disproportionately affected by COVID-19 infection. Specifically, I focus on m-health (web-based strategies) and self-care.
Parajuli, J.	Assistant Professor	I have research experience in cancer, dementia, and other chronic conditions in older adults. Currently, I am specifically focused on research to improve palliative care utilization and advanced care planning among older adults with cancer. I led a systematic review focused on 'Barriers to palliative care and hospice care utilization in older adults with cancer" and found that there are several sociodemographic barriers, provider-related

		barriers, and health insurance related barriers to palliative care utilization in this population. My long- term goal is to improve the quality of life of patients with cancer. I most recently received the Faculty Research Grant (FRG) 2021-2022 at UNC Charlotte focused on my research on "Factors affecting advance care planning in older adults with cancer". Contribution: My extensive research experience and certifications in palliative care and statistics will enable me to successfully conduct the FRG Using pilot findings from the FRG, I am planning to seek external funding from various foundations/organizations including the American Cancer Society and the National Institute of Health (NIH) focusing on palliative care with interdisciplinary teams.
Powers, K.	Assistant Professor	My research focus is on interventions to improve delivery of quality and patient/family-centered healthcare, with a focus on innovative methods for improving both nursing care and the care provided by diverse interprofessional teams. I have received internal funding via two UNCC Faculty Research Grants (FRG) and one School of Nursing grant to examine nurses' practice of family presence during resuscitation (FPDR) in high acuity settings. Other research conducted to improve nursing care quality has centered around innovative technology and simulation. I have published multiple manuscripts on studies conducted to evaluate simulations, including those enriched with technology (telehealth, video simulation) and have presented on simulation at national (American Association of Critical- Care Nurses) and international conferences (International Association for Clinical Simulation and Learning). In 2020, I was awarded one of two National League for Nursing research grants (\$25,000) to investigate an innovative interprofessional simulation intervention to improve teamwork and care related to social determinants of health. I have been successful in conducting research to improve practice quality via such interprofessional education (IPE) interventions. One of my efforts in this area include creation and evaluation of an online graduate-level IPE course augmented with realistic video simulations for nursing, social work, health psychology, and public health students, as part of my role as investigator on a \$1.8M Health Resources

		and Services Administration grant (HRSA-17-070, PI: Kulkarni, social work). I am also involved in an ongoing healthcare hotspotting initiative which pairs interprofessional health students (nursing, medicine, pharmacy, social work, health psychology)with super- user patients who have complex needs. Findings published in the <i>Journal of Interprofessional Education</i> <i>and Practice</i> demonstrated significant reductions in emergency and inpatient care over 6 months with substantial cost savings. Contribution : I will continue to lead endeavors in champion family and caregivers voices in care and in interdisciplinary work to improve health outcomes in my research. I am currently working on developing a large external grant to support this endeavor. As co-lead, I will work to lead the innovations teams in significant collaborations with Atrium Healthcare to facilitate meaningful research and funding in transitions to affect disparate outcomes.
Townsend- Chambers, C.	Lecturer/Learning Resource Center Director	I have vast experience in public health nursing. I have a consistent program of research focusing on vulnerable populations such as the LGBT, women and people of color. My Accomplishments in scholarship include receiving a Scholarship of Teaching and Learning grant of \$9,875.00 with Dr. Marie Thomas and Dr. Kathleen Jordan in 2016 for Implementation Of Simulation Using High Fidelity Manikins: An Intervention to Enhance Learning and Performance for Advanced Practice Nurses in Pediatrics. Contribution : Communication m- health- My current scholarship is a collaborative effort with nursing and social work colleagues Dr. Jamie Brandon and Dr. Kelly Powers, Teaming Up for Community Health (TUCH): A Mixed Methods Study of an Innovative Interprofessional Simulation Intervention. National League for Nursing (NLN) Annual Nursing Education Research Grant \$25,000. Recently in May of 2020, I obtained my Doctorate of Nursing Practice fulfilling a lifelong achievement as a first-generation college student. though unfunded, in 2020 I collaborated with UNCC colleagues to apply for the following grants :National Science Foundation Future of Work at the Human Technology Frontier: Core Research (FW-HTF-RM) Minimizing cognitive overload of nurse workforce via intelligent cognitive assistants Role: Co-Investigator: Amount requested:

		\$1,497,136 and National Science Foundation Convergence Accelerator: Future of Work at the Human-Technology Frontier (Track B) (NSF 19-065) AI-based multi-level skill analysis and assessment for personalized training of skilled workers Role: Co- Investigator: Amount requested: \$4,790,072
Troutman- Jordan, M.	Associate Professor	My research has included quasi-experimental investigation of psychoeducational groups to enhance creativity in older adults to promote successful aging; focus group research to explore meaning of successful aging in various racial groups; investigation of health outcomes of the Eat Better, Move More nutrition and physical activity intervention; and mixed methods research to understand successful aging, wellbeing, and gerotranscendence in older adults with chronic health conditions. I have experience with community-based research, and facilitating psychoeducational and exercise groups with older adults. Contributions : I have conducted multiple studies in community sites, including senior centers and assisted living facilities. My research continues to focus on innovative technologies, including telehealth, and measures of clinical outcomes (function) in aging adults. As a senior faculty member, I will assist in leading more junior interdisciplinary teams in designing methodologically sound studies.
Whitaker- Brown, C. D.	Clinical Associate Professor	I am a Family Nurse Practitioner and a Psych-Mental Health Nurse Practitioner. As a Family Nurse Practitioner, I have spent more than 10 years providing specialized care to heart failure patients at Sanger Heart and Vascular Institute's Heart Failure Clinic-Atrium Health. I hold a special certification as a Certified Heart Failure Nurse (CHFN) and my primary clinical appointment is focused on the management of heart failure patients in outpatient settings. To complement my clinical work, I obtained a post Master's Certificate as a Psychiatric Mental Health Nurse Practitioner. I am also a nurse researcher, and my scholarly pursuits are very aligned with my clinical practice. As such, my research promotes the implementation of patient- centered strategies to improve the quality of life of adults living with heart failure. My research around quality of life and heart failure has resulted in multiple publications, and my findings have been shared at the

		local, national and international levels. Contributions : I work with PhD scientists, Dr. J. Cornelius and SJ Woods and published an exemplar article on the importance of interdisciplinary teams. My expertise is understanding the intersection of the role of the scientist and the clinician and the patient. I will also continue to be a part of the research teams to develop self-care innovations for those with heart failure to improve their quality of life.
Woods, S. J.	Professor	I have a broad and diverse clinical background in nursing and extensive research experiences, including conducting bio-behavioral longitudinal research, and analysis and interpretation of quantitative and qualitative data. My overall program of research has centered on the complicated acute and long-term physiologic, immunologic, and psychosocial responses to intimate partner violence and trauma, including early onset of chronic diseases as a result of trauma and violence as a child and adult. I recently completed a 5-year longitudinal study funded by NINR/NICHHD that examined the trajectory of change and model of relationships among and between intimate partner violence, childhood maltreatment and lifetime trauma, resilience, sleep, depression, and PTSD symptoms on physiologic, immunologic, and physical health outcomes in battered women over a 24-month period (7 data periods). I have received approximately \$2.4 million in federal funding to support my research. Contribution : As a senior scientist I will serve a consultant to teams to support their success in grantsmanship and conduct of research. As PI, I also have experience with the development and implementation of retention strategies; the retention rate for the above noted R01 study was 82% over 2 years and 7 data collection time points with a vulnerable population. I have developed interdisciplinary research partnerships and conducted research in clinical and community settings. Thus, this will is a strength I bring to this endeavor. I also have experience analyzing and interpreting longitudinal data. I was part of a team that started a joint PhD in Nursing program between The University of Akron and Kent State University. I have supervised many graduate students as they completed their Capstone Projects, Scholarly Papers for their Doctor of Nursing Practice

	degree (DNP), or dissertations. I have consistently mentored junior faculty in successful grant-writing for small regional and internal research grants. I have extensive experiences in recruitment of women and men and minorities, grant management, mentoring faculty and students, consulting, leadership, and working with interdisciplinary research teams. I will contribute expertise in bio-behavioral research, innovations in measurement process and clinical outcomes, providing just-in-time care by interprofessional teams, grant writing
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