Research & Innovation

TRANSFORMING HEALTHCARE, TRANSFORMING LIVES

CREATING THE NURSING LEADERS OF TOMORROW AND THE RESEARCH THAT IMPROVES HEALTH!

Published/Revised Date: March 2018
Department Contact: Diana Vergara (813) 974-6370 or vergara@health.usf.edu
At the USF College of Nursing we are actively engaged in innovative nursing science and research that builds the knowledge base and impacts advanced nursing practice, interdisciplinary practice, and health policy.

Maureen W. Groer
PhD, RN, FAAN
Gordon Keller Professor & Interm Vice Dean for Research, College of Nursing
Executive Director, Bio-Behavioral Research Laboratory
Professor, College of Medicine
USF College of Nursing ranked 22nd in National Institutes of Health Funding for 2017.
Research Areas of Expertise

• Acute & Critical Care
• Biobehavioral Mechanisms
• Biostatistics, Big Data
• Cancer Prevention & Management
• Caregiver Support
• Chronic Illness Management
• Complementary & Alternative Therapies

• Digital Interventions & Virtual Support
• Heart Health
• Microbiology, Immunology & Microbiome
• Psychoneuroimmunology
• Rehabilitation & Disability
• Sexual & Reproductive Health
• Symptom Management

Currently Funded Research Projects

• A Clinical Trial of Decision Support for End-of-Life Care Among Surrogate Decision Makers of the Chronically Critically Ill
• Accelerated Resolution Therapy for Treatment of Complicated Grief in Senior Adults
• Chronic Toxoplasma gondii, Pregnancy Reactivation, and Perinatal Depression
• Continuing to Explore Our Knowledge of Early Life Stress in the NICU
• Efficacy of MBSR Treatment of Cognitive Impairment Among Breast Cancer Survivors
• Fatigue and the Gut Microbiome of Patients Receiving Chemoradiotherapy for Rectal Cancer
• I-Corps: A Mobile Health Secondary Prevention Program for Women with Heart Disease
• I-Corps: HeartMapp, A Mobile App for Patients with Heart Failure
Currently Funded Research Projects (continued)

- Improving Dementia Caregiver Sleep and the Effect on Heart Disease Biomarkers
- Patient Outcomes of a Self-Care Management Approach to Cancer Symptoms: A Clinical Trial
- Predictors of Weight Loss Failure and Regain in Bariatric Patients
- Promoting Cancer Symptoms Self-Management in Older Adults
- Revision of the Neonatal Infant Stressor Scale
- The Microbiome as a Potential Mediator of Socio-Economic Disparities in Preterm Infant Neurodevelopmental Trajectories from NICU Discharge to School Age
- The Preterm Infant Microbiome: Biological, Behavioral, & Health Outcomes at 2 and 4 years of Age

Center of Innovation on Disability & Rehabilitation Research

A collaboration with James A. Haley Veterans Hospital in Tampa, FL, the Center of Innovation on Disability & Rehabilitation Research (CINDRR) allows college faculty and students to participate in conducting research that identifies, develops, and tests strategies for improving Veteran rehabilitation services across the continuum of care and providing long term support for Veterans with disabilities and their families.

For more information about CINDRR in Tampa, visit their website at: www.hsr鐮.research.va.gov/centers/cidrr8.cfm
Nursing Biobehavioral Research Lab

Opened in May 2009, the Biobehavioral lab consists of over 2,000 dedicated square feet of space. The laboratory contains state-of-the-art equipment, including a newly acquired Illumina MiSeq for next generation sequencing, for studying microbiome assemblies, measuring RNA transcriptomes, and conducting blood assays such as inflammatory markers, stress hormones, proteomics, and RNA and DNA analyses.

The lab also contains multiple patient rooms for conducting physical examinations, clinical measurements, and treatment interventions for health care and research purposes as well as carrelled spaces for students and technicians and an additional tissue culture room.

For more information, contact:

Maureen Groer, PhD, RN, FAAN
Professor, Gordon Keller Professorship
Adjunct Professor, College of Medicine
Executive Director, Biobehavioral Laboratory
mgroer@health.usf.edu
(813) 974-2703
[VIDEO] USF Health highlights Nursing Biobehavioral Lab
PhD Program in Nursing Science (NUS)

Application Deadline
Priority: December 15
Space Available Basis: July 1

Theresa Beckie, PhD, RN, FAHA
Professor
Associate Dean, PhD Program
tbeckie@health.usf.edu

Cecile Lengacher, PhD, RN, FAAN
Professor
Pre-doctoral Fellowship Program Director
clengach@health.usf.edu

Admissions Requirements
- Applicants must complete both the NursingCAS and USF Graduate Application
- B.S., M.S. or Clinical Doctorate in Nursing from a regionally accredited program*
- 3.00 GPA
- Competitive GRE scores
- Clear potential for research contributions
- Curriculum Vitae
- Demonstrated commitment to doctoral study and scholarly productivity
- Evidence of potential for leadership in nursing profession
- Licensure as an RN if performing clinical work
- Three letters of recommendation
- Written statement of professional goals
- Prerequisite: NGR 7848 or equivalent prior to full time enrollment

*Applicants with degrees in other fields may also be considered

The PhD program prepares graduates to:
- Conduct original research that informs practice and health policy;
- Apply professional and research ethics and judgment in the conduct of research;
- Disseminate research findings to lay and professional audiences and identify implications for policy, nursing practice and the profession;
- Use innovative approaches to advance nursing science;
- Enact the evolving roles and responsibilities of a nurse scientist;
- Contribute to team science and interdisciplinary collaborations;
- Provide leadership to community, professional, and scientific organizations; and
- Contribute to a global, inter-professional or interdisciplinary community of scholars.
PhD Program Calendar
Starting with Fall 2017, the USF Nursing PhD program has adopted an executive format program calendar. The new format allows students to earn a PhD in Nursing Science at a pace that fits their life. With a DNP, students can complete the degree in as little as two years.

Meeting three times during fifteen week semesters, PhD courses combine intensive on-campus experiences supplemented with online and distance activities. Two thirds of course contact time occurs on campus. Fall and Spring semesters include a week-long intensive session and two weekend mini sessions. Summer semesters only include weekend mini sessions. Dates of the in-class sessions are announced in advance, and published online.

For more information, visit NurseScientist.Health.USF.edu

PhD student Sarah Perron studies effects of interruptions on cognitive load during medication administration using monitors.
Program Curriculum

Knowledge Building Core (Required) (33 credits)

NGR 7111 Disciplinary Perspectives of Nursing Science (3)
NGR 7125 Model Development for Nursing (3)
NGR 7810 Design, Measurement, and Analysis in Nursing Research I (3)
NGR 7812 Design, Measurement, and Analysis in Nursing Research II (3)
NGR 7813 Design, Measurement, and Analysis in Nursing Research III (3)
NGR 7814 Design, Measurement, and Analysis in Nursing Research IV (3)
NGR 7815 Responsible Conduct of Research (2)
NGR 7830 Scientific Inquiry Forum (1) - required each semester prior to candidacy (Minimum 4 credits)
NGR 7837 Innovative Programs in Biobehavioral Research (3)
NGR 7838 Innovative Programs in Symptom Management Research (3)
NGR 7854 Communicating Nursing Science (3)

Advance Directed Research (Minimum 3 Credits)
Specialized individual participation in research activity, including but not limited to pilot studies and other investigative activities.

Cognate (Minimum 9 Credits)
Students select a cognate area to further support the student’s area of expertise in nursing and the research problem that will be addressed by the dissertation research. Examples of appropriate areas of study for the cognate might be organizational administration, health policy, physiology, cognitive psychology, organizational psychology, gerontology, epidemiology, biostatistics, administration, applied anthropology, educational measurement or a nursing specialty.

Qualifying Examinations:
The qualifying examination is completed after the majority of core and minor coursework is completed. The purpose of the qualifying examination is to assess the student’s level of scholarship and research skills and to determine if the student possesses the critical and analytical skills necessary to undertake the dissertation research. The qualifying examination consists of a one-day written exam covering core and specialty content.

Dissertation (Minimum 12 Credits)
Students must complete and successfully defend a dissertation.
Program Entry Points and Requirements

All entry points must complete NGR 7848: Fundamentals of Statistics or an equivalent graduate statistics course prior to enrollment in PhD-level coursework.

Clinical Doctorate to PhD (Minimum 45 Credit Hours)
Students entering with an approved clinical doctorate may not need to complete the Advanced Directed Research or Cognate courses. Clinical Doctorate students must still fulfill the qualifying exam and dissertation research requirements.

Masters to PhD (Minimum 57 Credit Hours)
Students must complete the full curriculum as listed. Credits may be transferred, as per committee and program approval.

Bachelors to PhD (Minimum 87 Credit Hours)
A minimum of 30 hrs beyond the MS-PhD curriculum is required. The additional coursework must be approved by the student’s supervising committee. These 30 hours should provide students with the foundational knowledge to conduct their proposed research. Students may complete the requirements for a Master’s degree as they work towards completing the PhD. In such cases, students can only select concentrations currently available in the college and as approved by the PhD program and must abide by all Master’s degree curriculum and progression policies.

Alternatively, students may opt for a tailored plan of study developed in collaboration with their advisor and supervising committee. A minimum of 18 hours must be in an identifiable area of emphasis. Examples include entrepreneurship, informatics, medical sciences, and public health.

For assistance with the application process, please contact:

Mark Freeman, BA
CRNA & Doctoral Student Advisor
mfreeman@health.usf.edu
(813) 396-9229
Financial Aid Opportunities

**USF Graduate Fellowship**
Offers a stipend and paid in-state tuition for the first two semesters. Must be newly admitted full-time-enrolled PhD Nursing students. All new applicants are automatically considered, no application is required.

**College of Nursing Research Fellowship**
Offers a paid research assistantship appointment and paid in-state tuition for 2 years for newly admitted full-time PhD Nursing students. This fellowship is available every other year. All new applicants are automatically considered, no application is required.

**College of Nursing Dorothy Benjamin Research Fellowship**
Offers a paid research assistantship appointment and in-state tuition for 2 years – only offered once every two years; requires full-time enrollment. Also provides small expense account for research posters, etc. Student’s research must be in an area that, “improves the care for individuals with Alzheimer’s disease or other memory disorders.” Submit a one-page essay on how your research plans match the donor’s intention. Deadline is July 1st for a fall semester start. Submit to the College of Nursing Office of the Associate Dean for Research and Innovation.

**College of Nursing Vardell Endowed Scholarship**
Offers $7,500/year based on financial need. Must be full-time enrolled and practicing nursing in Pinellas County and/or promise to practice nursing in Pinellas County upon graduation. Submit a one-page essay on how your plans match the donor’s intention of “…promoting nursing education and practice in Pinellas County.” Deadline is July 1st. Submit to the College of Nursing Office of the Associate Dean for Research and Innovation.

**Jonas Nurse Leader and Jonas Veterans Healthcare Scholars**
Offers $20,000 in total funding over 6 academic semesters and up to $2,500 to attend AACN leadership conference. Nominated students will provide an essay; committee selection will be announced on or before June 1st. Offered every other year.

**Graduate Assistantships**
The College of Nursing offers graduate teaching assistantships and research assistantships to qualified students. Each graduate assistantship includes a full in-state tuition waiver, stipend, and health insurance plan. Availability may vary per semester.
Financial Aid Opportunities continued

**Nurse Faculty Loan Program**
Number of awardees varies each year due to federal release of funds; US citizen only. Up to $12,000/year with up to 85% loan forgiveness upon graduation provided the applicant secures a full-time faculty position at a university or college in the U.S.A. This is offered on a first-come, first-served basis.

**State of Florida Nurse Educator Program**
Offers $3,500/semester for 6 consecutive semesters for new fall admits who enroll full-time. Requires a commitment to teach three years in the State of Florida post-graduation. Application available [here](#).

*The USF Office of Graduate Studies offers additional financial aid opportunities. For more information, please visit their [website](#).*
Selected Publications


Previous PhD Students
• Johanna Wilson. Prognostication and decision making analysis in high risk cardiac patients.

Current PhD Student Research
• Bradlee Jenkins. Evaluating technology based intervention for patients with pulmonary disorder.

Dr. Athilingam highlighted in March 2015 Florida High Tech Corridor magazine for HeartMapp sensor-enabled technology.
Theresa M. Beckie, PhD, RN, FAHA
Professor

Research Interests
Women’s cardiovascular health, behavior change interventions; quality of life; depressive symptoms and psychosocial risk factors; genetic determinants of heart disease; cardiac rehabilitation; secondary prevention; mobile health technology

Current Research Projects
Principal investigator, A mobile health secondary prevention program for women with heart disease, funded by NSF.

Co-investigator, Cardio-oncology intervention on cardiovascular health in women with breast cancer, funded by USF Women’s Health Collaborative.

Co-investigator, Apixaban for early prevention of embolic stroke and hemorrhagic transformation, funded by Bristol Meyers Squibb.

Selected Publications


Previous PhD Students
- Sierra Gower. Effect of intra-operative tight glycemic control on surgical site infection rates in patients undergoing coronary artery bypass graft surgery.
- Jennifer Cline. The association between FAMC polymorphism and coronary heart disease in women.
- Pao-Chu Hsu. Prenatal stress, depression, and Herpes viral reactivation.
- Allyson Radford. Depression in female veterans.
- Lisa Huhn Parnell. Potential protective effect of Rhesus D positive blood factor on Toxoplasma-related depressive symptoms in pregnancy.

Dr. Beckie discusses 2016 AHA findings and statement on women’s heart health with FOX13.

CLICK TO VIEW
Harleah G. Buck, PhD, RN, FPCN, FAAN
Associate Professor
Coordinator, Chronic Illnesses Initiatives

Research Interests
Dyadic decision making in heart failure self-care; technology usage in community based heart failure management; conceptual and measurement issues in multiple chronic conditions research; health care innovation.

Current Research Projects
Principal investigator, The Heart Assistant: A telehealth intervention to improve heart failure self-care, clinical outcomes and quality of life in patients and their informal caregivers.

Co-principal investigator, Phase II Proposal NSF I/UCRC Center for Health Organization (CHOT), funded by the National Science Foundation.

Selected Publications


Previous PhD Students
• Jacqueline Gordon. Postoperative glycemic control in the cardiac surgery.
• Meredith Mackenzie. Testing model of outcomes in hospice heart failure patients and families.
• Lindsey Peterson. End of Life Decision-making in Families.

Current PhD Student Research
• Kristin Levoy. Advanced care planning. [Robert Wood Johnson Scholar].

Call for Action:
Nurses Lead and Transform Palliative Care
Approved by ANA Board of Directors
March 13, 2017

Developed in Partnership With Organizational Affiliate Hospice and Palliative Nurses Association

As co-chair of the Palliative and Hospice Nursing Professional Issues Panel, Dr. Buck led the development of the Call to Action on the future of palliative care nursing.
John M. Clochesy, PhD, RN
Professor
Director, Faculty Mentorship
Associate Dean, PhD Program

Research Interests
Empowering patients to reduce health disparities; simulation and virtual reality to support health providers and consumers; culturally relevant curriculum and instruction.

Current Research Projects
Co-investigator, Randomized controlled trial of decision support for end-of-life care among surrogate decision makers of the chronically critically ill, funded by National Institute of Nursing Research.

Co-investigator, Promoting cancer symptom management in older adults, funded by National Institute of Nursing Research.

Selected Publications


Previous PhD Students

Current PhD Student Research
- Samia Ozorio Dutra. Methods to improve quality of healthcare.


[VIDEO] eSMART-HD: Electronic Self-Management Resources Training to Reduce Health Disparities
Allyson R. Duffy, PhD, RN
Assistant Professor

Research Interests
Psychoneuroimmunology; Toxoplasma gondii; Women's health; Maternal-Child health.

Current Research Projects
Co-investigator, Chronic Toxoplasma gondii, pregnancy reactivation, and perinatal depression, funded by the National Institutes of Health.

Selected Publications


Maureen Groer, PhD, RN, FAAN
Professor & Interim Vice Dean for Research
Executive Director, Biobehavioral Laboratory
Adjunct Professor, College of Medicine

Current Research Projects
Principal investigator, Chronic Toxoplasma gondii, pregnancy reactivation, and perinatal depression, funded by the National Institutes of Health.
Principal investigator, The preterm infant gut microbiome: Biological, behavioral, and health outcomes at 2 and 4 years of age, funded by the National Institutes of Health.
Site principal investigator, The microbiome as a potential mediator of socio-economic disparities in preterm infant neurodevelopmental trajectories from NICU discharge to school age, funded by the National Institutes of Health.

Selected Publications


Previous PhD Students
• Lisa Huhn. Relationship of RH factor to Toxoplasma gondii related depression in pregnancy.
• Ivonne Hernandez. Acculturation, self-efficacy and breastfeeding behavior in a sample of Hispanic women.
• Jessica Gordon. Skin to skin contact and oxytocin secretion in lactating mothers of premature infants.

Current PhD Student Research
• Lauren Wright. Psychoneuroimmunology.

[VIDEO] Dr. Groer leads five year study to examine connection between digestive tract microbes and health and development.
Ming Ji, PhD
PhD
Professor, Biostatistics

Research Interests
Big data; randomized controlled trials; medical diagnostic and screening tests; health behaviors.

Current Research Projects
Site principal investigator, Predictors of weight loss failure and regain in bariatric patients, subcontract with Kaiser Permanente Center for Health Research, funded by the National Institutes of Health.

Co-investigator, The preterm infant microbiome: biological, behavioral, and health outcomes at 2 and 4 years of age, funded by the National Institutes of Health.

Co-investigator, Reorientation intervention for delirium in the ICU, funded by the National Institute for Nursing Research.

Selected Publications


Cecile Lengacher,
PhD, RN, FAAN, FAPOS
Professor, Pre-doctoral Fellowship Program Director

Research Interests
Psychoneuroimmunology; psycho-oncology; complementary therapies research; symptom management in cancer survivors.

Current Research Projects
Principal investigator, Efficacy of MBSR treatment on cognitive impairment among breast cancer survivors, funded by the National Cancer Institute.

Selected Publications


Previous PhD Students
- Carly Paterson. Sexual functioning & body image in younger breast cancer survivors.

Current PhD Student Research
- Carissa Alinat. Genetic association between single nucleotide polymorphisms in breast cancer patients.
- Jennifer Miller. Depression and cognitive impairment among breast cancer patients.

Dr. Lengacher discusses mindfulness-based stress reduction research for breast cancer survivors with News13 Orlando.
Zhan Liang  
*PhD, RN*  
**Assistant Professor**

**Research Interests**  
Critically ill adults; non-pharmacological symptom management; supportive & palliative care; delirium.

**Current Research Projects**  
Principal investigator, Effects of patient preferred music intervention on physiologic & psychological measures and weaning outcome, funded by the University of South Florida College of Nursing.  
Co-investigator, Reorientation intervention for delirium in the ICU, funded by the National Institute for Nursing Research.

**Selected Publications**


Denise Maguire, PhD, RN, CNL, FAAN
Associate Professor

Research Interests
Neonatal Abstinence Syndrome; mothers with substance addictions.

Current Research Projects
Principal investigator, Interactions between infants with neonatal abstinence syndrome and their mothers, funded by Southern Nurses Research Society.

Principal investigator, Intervention to improve feeding success in infants with neonatal abstinence syndrome, funded by the USF Women’s Health Collaborative Foundation and the Children’s Board of Hillsborough County.

Selected Publications


Previous PhD Students
• Mary Kutash. The relationship between nurses’ emotional intelligence and patient outcomes.

Current PhD Student Research
• Genevieve Cline. Neonatal abstinence syndrome.
• Andrea Shimko. ICU sleep environment.

Dr. Maguire coaches mothers to care for their infants with neonatal abstinence syndrome and investigates the impact of GI distress on withdrawal behaviors.

Previous PhD Students
• Debbie Devine. Outcomes of womens health integrative health program in the VA.
• Allyson Duffy (Post-Doctoral). Prevention of patient falls in acute rehabilitation.

Current PhD Student Research

Selected Publications


Drs. Susan McMillan (seated, left) and Gail Powell-Cope (standing, center) collaborate to mentor pre- and post-doctoral fellows at the USF College of Nursing and James A. Haley Veterans Hospital.
Laura Redwine,
PhD
Associate Professor
Assistant Dean of Research & Innovation

Research Interests
Mechanisms of integrative modalities; psychosocial factors for people at risk for cardiovascular disease; psychological distress; positive psychosocial factors and health.

Current Research Projects
Principal investigator, Autonomic and immunovascular mechanisms of antihypertensive effects of Taichi, funded by the National Institutes of Health.

Selected Publications


**Carmen Rodriguez, PhD, RN, ANP-BC, AOCN**

**Associate Professor**

**Research Interests**

Sudden speechlessness; communication interventions; symptom management; head and neck cancer.

**Current Research Projects**

Principal investigator, New communication technology for suddenly speechless hospitalized patients, funded by National Institute on Deafness and other Communication Disorders.

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**Selected Publications**


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Dr. Rodriguez assists simulated patient in using her new communication technology for suddenly speechless patients.
**Meredeth Rowe,**
*PhD, RN, FGSA, FAAN*  
*Professor*

**Research Interests**
Physiologic consequences of stressful life situations and development of novel interventions, particularly using technology.

**Current Research Projects**
Principal investigator, ASLEEP intervention for children with autism: Pilot study

Principal investigator, Improving dementia caregiver sleep and the effect on heart disease biomarkers, funded by the National Institute on Aging.

**Selected Publications**


**Previous PhD Students**
- Glenna Brewster. Sleep, depressive symptoms and cognition in older adults and caregivers of persons with dementia.

[VIDEO] Meredith Rowe discusses her CareGenesis technology

[CLICK TO VIEW] CareAlert™ tool highlighted by National Institute of Nursing Research

Cindy Tofthagen, PhD, ARNP, AOCNP, FAANP, FAAN
Associate Professor
Concentration Director, Oncology

Research Interests
Oncology symptom management including neuropathic pain and chemotherapy-induced peripheral neuropathy; innovative models of chronic disease management.

Current Research Projects
Principal investigator, Accelerated Resolution Therapy for treatment of complicated grief in senior adults, funded by National Institute on Aging.

Principal investigator, Group acupuncture for treatment of neuropathy from chemotherapy: A randomized, controlled trial.

Selected Publications


Dr. Tofthagen speaks with patients suffering from peripheral neuropathy.

Previous PhD Students
- Abdel Rahman Alkhalouf. Predictors of opioid induced constipation in people with cancer.
- Pinky Budhrani. Pilot investigation of sleep, race/ethnicity, and psychological and physical symptoms among breast cancer survivors.
- Carly Paterson. Sexual functioning and body image in younger breast cancer survivors.
- Sara Tinsley. Quality of life for patients with Acute Myeloid Leukemia and High Risk Myelodysplastic Syndrome.

Current PhD Student Research
- Michelle Hill. Investigating effect of meditation on neuroplasticity in cancer.
Constance G. Visovsky, PhD, RN, ACNP-BC, FAAN
Associate Professor

Research Interests
Chemotherapy induced neuropathy; oncology; physical activity and exercise.

Current Research Projects
Principal investigator, Evidence for exercise in Taxane-Induced neuropathy, the National Institutes of Health.

Selected Publications


Previous PhD Students
- Sara Tinsley. Predictors of quality of life with Acute Myeloid Leukemia and High Risk Myelodysplastic Syndrome.
- Nadine Matthie. Sickle cell disease: The role of self-care management.

Current PhD Student Research

Dr. Visovsky and student Sara Dominic develop peripheral neuropathy measurement tools
Hsiao-Lan Wang,  
PhD, RN, CMSRN, ACSM EP-C  
Associate Professor

Research Interests  
Cancer symptom management; self-management interventions; translation; exercise physiology

Current Research Projects  
Principal investigator, PAfitME – Use of telehealth to personalize & monitor exergame prescriptions, funded by National Science Foundation Innovation Corps Programs.

Principal investigator, PA²fitME: A palliative approach to increase physical activity in cardio-oncology patients and their informal caregivers, funded by the College of Nursing, University of South Florida.

Selected Publications


Dr. Wang develops a physical activity intervention that is personalized based on fitness capacity and behavioral perception.