

CCN RESEARCH

Newsletter
AY 2022 - 2023

THE UNIVERSITY OF
ALABAMA[®] | Capstone College of
Nursing
Office of Scholarly Affairs

Message from the ADR - Dr. Robin Bartlett

Welcome to the 2022 - 2023 edition of our research newsletter! CCN faculty have been busy developing proposals to seek funding for their important research and scholarship activities and carrying out their funded (and unfunded) projects. The faculty have also worked hard to disseminate their work through presentations and posters at professional meetings and through publishing their research and scholarly products in journals. Some of this is highlighted in this edition, and as you will see, our faculty are productive scholars.

In this edition, you can read about the scholarly trajectories of Drs. Michael Callihan, Todd Smith, and Daniel Gibson and how these men in nursing research are working to improve the health and wellness of nurses, improve healthcare delivery in rural areas, and understand tissue response to injury.

Please take note of various events sponsored by the Office of Scholarly Affairs (OSA). Our Scholarship Showcase series has featured incredible scholars over recent months, and next year's calendar promises to be equally populated with useful presentations. OSA also hosted an interprofessional education luncheon and writing workshop in the fall. We will continue these collaborative events in the next academic year and hope to see you there! Our office celebrated our faculty who had submitted external proposals in 2022 at a luncheon in December.

Also, in this issue, please read about our undergraduate students involved in research. Many are in the CCN Research Society and are looking to collaborate with faculty.

On page 11 of this issue you can read some of the frequently asked questions related to proposal development. This information can be helpful when writing a proposal and is available on the Research tab of the CCN website. While you are on the CCN Research website, please take time to look at some of our funded projects and the many resources you can find there.

Please read about Drs. Letisha Scott, Linda Dunn, and JoAnn Oliver's publication from the *Journal of Pediatric Nursing* on the implementation of universal lipid screening among children ages 9-11. Finally, OSA appreciates all the work that goes into proposal submissions. See the list of funded projects for 2022 - 2023 on page 9.



Faculty Spotlight: Men in Nursing Research

Dr. Michael Callihan

Dr. Callihan is an assistant professor here at the Capstone College of Nursing. Dr. Callihan received his ADN (2008) and BSN (2012) from Miami University of Ohio. He earned his MSN in nursing Education from Gonzaga University in 2014 and his PhD in nursing from the University of Kentucky in 2018. Dr. Callihan is a US Navy veteran, has been an emergency department nurse, and worked as a firefighter/ paramedic throughout his career.

We recently interviewed Dr. Callihan about his journey as a nurse scientist.

Tell us about your research interests.

My research has two branches, both revolving around the application of technology to the well-being of individuals. One branch of my research focuses on the physical health of workers. I utilize motion capture, EMG, and wearable physiological technology to monitor the wellness of workers. Being one of the only nurses in the United States with formal training in biomechanics allows me to apply biomechanical principles to clinical areas of concern.

The other branch of my research is exploring fall risk reduction through the use of technology. Our team has developed a shoe-based sensor system that is capable of predicting the angles of the lower extremities from the feet up to the lower back. The application of this technology to the older population allows for the early detection in changes in gait patterns leading to falls.

Tell us about your current and upcoming projects.

I currently have three projects underway.

1. Determining the effect of a cooling vest on the experienced heat stress among helicopter-based EMS workers. In this project we will be monitoring the core temperature of flight crews with an ingestible temperature monitoring pill to determine if a commercially available cooling vest has an impact on the core temperature during flight responses. Adding to this will be qualitative assessment of the perceptions of the flight crews concerning their cognitive function and fine motor skills under normal conditions and when wearing the cooling vests. Our team will also be drawing blood samples to determine the hydration status of the crews under both conditions.
2. Our team is evaluating the efficacy of a lifting intervention on the placement of a patient into



- the prone position without the assistance of a mechanical lifting device. Our team is using EMG and motion capture technology to determine the effect our lifting intervention has on musculoskeletal injury risk factors.
3. Our team is conducting a validation study on our analysis method with the motion capture system compared to the results of the gold standard Vicon camera system.

What do you see as your greatest achievement thus far?

My greatest accomplishment is that I have watched undergraduate students be involved and enjoy conducting research. I have had the good fortune to publish with multiple undergraduate and graduate students; seeing their excitement makes all the work worthwhile.



What do you hope to achieve in the future?

I hope to obtain federal funding to continue my research.

What advice do you have for other researchers, especially nurse scientists?

1. Build a team. As a researcher you do not have to know everything, but you have to recognize weak areas and build a team that addresses those weaknesses.
2. Don't be afraid to work outside of your comfort zone. I do not understand all of the technologies that my team uses, but I recognize that it is not my job to have the same knowledge as everyone on my team. I recognize my strengths and let my teammates use their strengths.

Dr. Todd Smith

Dr. Smith is an Assistant Professor at the Capstone College of Nursing. In addition to earning his MSHA, MBA, and BSN, Dr. Smith holds a PhD in Health Services Administration, with a concentration in strategic management, from The University of Alabama at Birmingham (UAB), as well as Nurse Executive Advanced board certification. He regularly teaches graduate courses related to leadership, healthcare management, health services delivery systems, and nursing administration. He has published and/or works on numerous research projects related to rural health care delivery systems, leadership, health care administration, health education, and telemedicine. Currently, one of Dr. Smith's primary interests is his involvement as a co-director/co-investigator of the Technology, Education and Research in Medicine (TERM) research lab at the University of Alabama's College of Community Health Sciences.

We recently interviewed Dr. Smith about his journey as a nurse scientist.

Tell us about your research interests.

My research interests include rural health care delivery systems, leadership, health care administration, health education, and telemedicine.

Tell us about your current and upcoming projects.

I am currently working on two major projects.

1. My research team is leading an effort to significantly increase the emergency telemedicine capabilities in rural Alabama. Specifically, we have received \$1.8 million in funding through the United States Department of Agriculture Rural Development's Distance Learning and Telemedicine grant program to equip 49 ambulances with telemedicine-enabled patient monitors which can connect with 18 hospitals across 19 rural Alabama counties. With this network of telemedically-equipped ambulances and emergency departments



in rural Alabama communities, we anticipate better response times to and from patient sites, improved quality of care at the point of need, and reduced financial burden for both patients and providers. Once fully implemented, the project will offer access to higher quality and more efficient patient care by transporting patients to the most appropriate healthcare facility or enabling emergency department personnel to determine whether a patient should remain on site, potentially reducing unnecessary hospital transports and 30-day readmissions. Additionally, it will provide for the transmission of more detailed medical and video data

directly from EMS providers to emergency physicians and advanced-practice providers in emergency departments.



2. Our research team has also secured NIH funding for a pilot project to develop mental health screening and referral to treatment procedures into dental practices' workflows. Specifically, we have completed focus group sessions to identify potential implementation barriers and facilitators for integrating mental health screening and referral to treatment procedures into network dental practices. The next phase of this pilot project, starting in early spring 2023, will include the implementation of mental health screenings in five dental practices across the southeast region of the U.S.

What do you see as your greatest achievement thus far?

Receiving an NIH grant, as a principal investigator, has been my greatest achievement thus far. After working as a project director on numerous federal grants in my previous career at the University of Alabama at Birmingham, I have now been able to secure funding for my own grants that will further my dreams of enhancing the overall delivery of health care services, both locally and at the national level. Also, it has been exciting to further my teaching endeavors through publications,

including a book chapter, related to healthcare leadership, administration, and finance.

What do you hope to achieve in the future?

My research team is currently working on a major NIH grant to fund a much larger scale program to implement mental health screenings in dental practices. In addition, we are working with a major biotechnology company to further enhance our rural telemedicine program.

What advice do you have for other researchers, especially nurse scientists?

Find projects that you enable you to pursue your passions. If you don't already have a foothold in a given area, developing systematic literature review manuscripts are an excellent way to gain knowledge in a specific area and then get published in a specific research niche. Also, consider developing manuscripts specifically related to your teaching interests, which can enhance your courses and give you additional credence in your area of teaching expertise. Finally, I work best in teams and with collaborators. Seek out individuals with similar research interests and setup routine meeting with these individuals to begin developing projects for which you share similar interests.

Dr. Daniel Gibson



Dr. Gibson is an Assistant Professor in the role of Biotechnology Researcher. He received his BS in Mechanical Engineering, MS in Biomedical Sciences, and Ph.D. in Biochemistry and Molecular Biology from the University of Florida. Dr. Gibson's research focus is in Tissue Biology and covers projects ranging from the tissue response to injury in the eye and skin, diagnostics, chronic skin wounds, bacterial biofilms, and technologies to maintain skin integrity. Dr. Gibson also has passions for medical device design and commercialization.

We recently interviewed Dr. Gibson about his journey as a scientist in the biomedical field working with nurse scientists.

Tell us about your research interests.

Nearly every element that touches on human health and behavior is now studied at the molecular or cellular level, but one major gap still exists. How do these pieces fit together to create the complex system of interactions that we call biological life? My research interests were born out of my experience with robotics and control systems in my engineering education melded with my childhood fascination with biology which was



sparked by a couple of books that my parents had given me. As an undergraduate mechanical engineering student, I was fascinated in the “chain”-like propagation of signals that could lead to otherwise inanimate matter to be nearly living. Through some extracurricular activities, I was introduced to the field of Biotechnology, whereby living systems are controlled to produce medicines, drugs, and other molecules for industrial use. Biotechnology provided, for me, what I anticipated to be a “life-long source of problems to solve, some of which might just save the life of a loved one or myself some time.” My graduate education exposed me to the complex system of wound healing, and most of my research has focused on either determining and controlling the factors causing scarring in the eye, or those impairing the healing of chronic skin wounds. I am particularly interested in generating new measurement technologies and techniques to better explain or mitigate biological variance. Why does the same wound heal perfectly in some, but cause debilitating scarring in others? Why do some grafts engraft and others necrose? There are hidden causes, and I want to both shine a light on them and to make tools for clinicians so that they can provide catered care with good outcomes for all.

Tell us about your current and upcoming projects.

As most junior faculty members, I have to somewhat align my interests with current funding opportunities; though I do still have a pet project that I am nurturing. One project is aimed at understanding why some chemical injuries can heal, but then even decades later, come back even without a repeated exposure. I am applying the theory of dynamic reciprocity as a possible means to explain this. The initial chemical injury kills many of the cells in the tissue and modifies the extracellular matrix. My study is focusing on the role of the modified matrix in chronicity. The potential impacts of this study touch on problems of diabetic healing, tissue grafts, tissue engineering, and likely aging as well. I am actively generating preliminary data and expanding my network of collaborators to give this project its best chance at success. At the same time, my pet project is using systems biology and physical biology models to design and implement studies aimed at identifying what determines the fate of a tissue after injury. I have studied scarring in the eye after surgical injury and am now working on a clinical study of diabetic foot ulcers.

Are there signals in the wound fluid that can let the provider know what the wound needs? I want to know, and I want to design point-of-need devices to provide timely answers to the care providers.

What do you see as your greatest achievement thus far?

I have been researching and developing my research plan for about 17 years now (including my work in graduate school), and it is my successes that keep me motivated. I don't hold any one of my achievements higher than another; they are all precious to me. However, the achievements that have been most motivating have included both my point-of-care protease assay and my custom, patient-individualized, post-surgical vaginal stent. The key aspect about both achievements was the interaction with clinicians to help understand the problem, the toil to design something that fit the needs, the prototyping, and ultimately the use of the products on patients. The stents do stand out a bit, because we did receive a very heart-felt letter from one patient describing what our contributions had done for her life. The full cycle from problem to solution, and ultimately to grateful beneficiary was exhilarating; I want others to experience the same thing.

What do you hope to achieve in the future?

Technology is the way we do things; new technology is doing things in a new way. I intend for my near-term projects to evolve into new ways of doing things. I hope that my discoveries in the causes of delayed healing in wounds will lead to the development of tools that enable more cost-effective treatments that can be utilized in austere environments. A tool enabling such equitable wound care can be leveraged to other applications of equitable medicine.

What advice do you have for other researchers, especially those in the biomedical field looking to collaborate with nurse scientists?

I challenge all researchers to reach out to unlikely allies and to learn about their problems. Tough-out the communication barrier that exists between academic disciplines. Nurse scientists sit at a nexus that they might not realize, in that they are an essential conduit



for experts from non-health-related fields. I know that each nurse scientist can collect data via surveys. I hereby challenge each one of you to learn about an advanced technology that you do not know about and find a partner to implement it in your next study. Problems still exist because what we are doing isn't working; try something new. Try something hard, have a partner to help carry the burden. In my experience, the exhilaration of a successful study or intervention with a new technology is like nothing else. Dare to become molecular nurses!

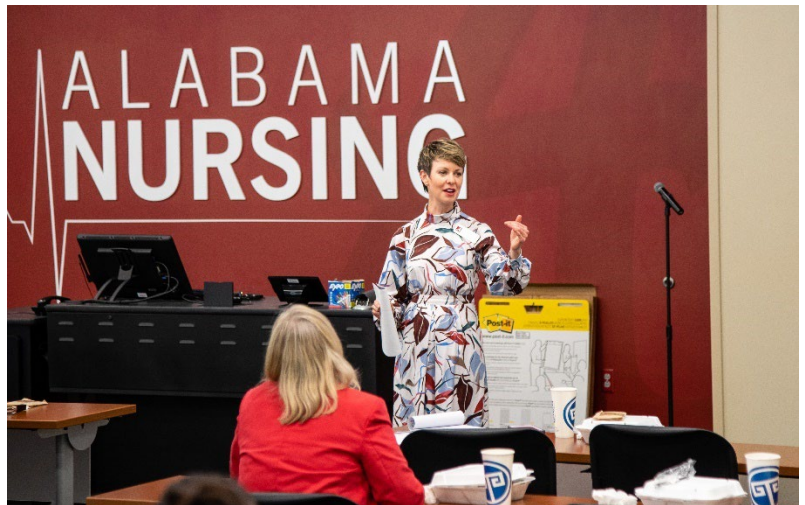
OSA Events

The Office of Scholarly Affairs (OSA) offers events throughout the semester to enhance the scholarly efforts of the College. OSA works with faculty to provide a way to disseminate work to peers and across campus and collaborates with other research offices across campus to provide faculty with interdisciplinary opportunities.

Interprofessional Education Luncheon

The Capstone College of Nursing hosted an interprofessional luncheon in November focusing on revitalizing interprofessional education (IPE) on campus. This was an opportunity to learn about the history of IPE at The University of Alabama, brainstorm the future of IPE, and develop an IPE committee. Dr. Suzanne Prevost spoke on past IPE initiative. Dr. Susan Welch led a small group session on current IPE opportunities within various colleges across campus. Faculty from the College of Community Health Sciences, College of Human Environmental Sciences, School of Social Work, and College of Arts and Sciences spoke about their current IPE practices.

For more information about the IPE initiative, contact Susan Welch (srwelch@ua.edu). Faculty interested in planning an interprofessional event should contact Courtney Greene (cegreene1@ua.edu).



Dr. Susan Welch leading an activity at the IPE Luncheon

Scholarship Showcases

OSA offered several Scholarship Showcases over the year based on a survey of faculty interests. To kick off the fall semester, a faculty spotlight was held for CCN faculty to present their research interests, especially new faculty, in order to build collaborations within the College. In November, Drs. Amy Lee and Robin Bartlett presented on "Disseminating Scholarship: Publishing 101." Dr. Andrea Sartain also presented on her project Achieving Success: Educational Strategies to Promote College Readiness in December, which was funded by the CCN Summer Seed Grant Saxon Endowment. OSA also brought in a visiting speaker from outside the University. Dr. Marita Titler, internationally recognized leader in evidence-based practice, spoke to faculty about the common pitfalls of grant writing.

To begin the spring semester, UA Libraries presented on NIH's new policy on Data Management and Sharing Plans. Drs. Mercy Mumba, Keri Barron, and Christina Glenn and current PhD student Shakia Brantley presented on their project STEP UP: A Culturally Sensitive Approach to Engaging African American Young Adults in The All of Us Research Program in March. To close out the year, Drs. Shameka Cody and mercy Mumba presented to faculty about best practices when working with community partners.

Faculty with ideas for a Scholarship Showcase or practicing upcoming conference presentations should contact Courtney Greene (cegreene1@ua.edu). A calendar of upcoming events and recordings of recent Scholarship Showcases are available on the website under [research news and events](#).



CCN Prewriting Workshop

The Behavioral and Prevention Writing Core hosted the CCN Writing Prewritekshop in November. The purpose of the Prewriting Workshop was to help writers with time management/prioritizing, provide tips for successful writing groups, and to provide an opportunity for you to form writing groups with your peers. Drs. Shameka Cody, Cheryl Hines, and Robin Bartlett and Mangala Krishnamurthy spoke on participating in successful writing groups. Faculty also had the opportunity to participate in a guided collaborative writing group breakout session.

The Writing Prewritekshop was a precursor to the Spring 2023 Writing Update Session and the Fall 2023 CCN Writing Retreat. Faculty should look for more information about these events soon. If you have questions, please contact Dr. Shameka Cody (slcody@ua.edu).

Engaging in Scholarship

OSA hosts Engaging in Scholarship sessions each semester to help clinical-track faculty and instructors grow their scholarly efforts. In October, Dr. Michael Callihan led a session on how to get started with clinical projects and research. He also spoke on finding collaborators across campus who are seeking partners who know about clinical problems, who have access to clinical settings, and who want to collaborate. In January, the session focused on how the Office of Scholarly Affairs can be a resource for the clinical-track faculty and instructors interested in research and scholarship.

Celebratory Luncheon for Funding Submissions

The Scholarly Affairs Committee hosted the first annual Celebratory Luncheon for Funding Submissions in December. This was held in recognition of the hard work that is required for submissions of externally funded proposals. All faculty who were a part of an external grant submission for 2022 were invited to attend the luncheon and be recognized for their effort. The Scholarly Affairs Committee hopes to continue this celebration each December.



CCN Research Society

The purpose of the CCN Research Society is to create a culture of undergraduate nursing students engaged in research-related activities. Students are paired with faculty mentors and students begin to learn the various phases of the research process. The goal is to increase the number of students who develop and conduct independent research projects.

The CCN Research Society is a student-led organization and holds monthly meetings where faculty and students share ongoing research and clinical practice projects. Senior members of the CCN Research Society who attend meetings regularly and are in good standing, wear an honor cord at graduation to recognize their membership and efforts in promoting a culture of research and scholarship at CCN.

This year's officers are Megan Butterworth, Caroline Myers, Morgan Phillippi, Ashley Vogt, Marissa La Venuta, and Cole Gwin.

If you are interested in serving as a mentor or if you are interested in speaking about your research at a club meeting, please contact Dr. Paige Johnson (ptjohnso@ua.edu). If you are an undergraduate student who would like to become involved with the CCN Research Society and would like more information, please email ccnresearchsociety@gmail.com.



“CCNRS is an amazing opportunity for students in both lower and upper divisions to learn more about research in nursing and connect with professors who do research here at CCN! Research is such a vital part of healthcare, with nursing standards based on evidence-based practice. CCNRS is a great way to get involved with research, understand more about the research process, and learn more about why different aspects of nursing are done a certain way based on what evidence has shown!”

-Megan Butterworth



Funded Proposals

The Office of Scholarly Affairs wants to highlight the hard work faculty and staff put into submitting proposals. Below is a list of funded proposals for the 2022-2023 academic year. Whether or not they were funded, thank you to all who submitted proposals! Your work is advancing the research and scholarship efforts of the College.

Allen, Rebecca (Principal), Cox, Jennifer (Co-Principal), Eyer, Joshua (Co-Principal), Jacobs, Mary (Co-Principal), Jarrett, Matthew (Co-Principal), **Mumba, Mercy** (Co-Principal), McKinney, Robert (Co-Principal), Witte, Tricia (Co-Principal). "Responding to the Deep South's Opioid and Substance Use Crisis (ReDO)," Sponsored by Health Resources & Services Administration (HRSA), Federal, \$450,000.00. (September 1, 2022 - June 30, 2023).

Bartlett, Robin (Principal). "NRSA Training Core, Jesse Rattan", Sponsored by National Institutes of Health, Federal, \$50,740. (July 1, 2022 – June 30, 2023).

Bartlett, Robin (Principal), **Lester, Brandi** (Co-Principal), **Mumba, Mercy** (Co-Principal), **Montgomery, Michele** (Co-Principal), **Johnson, Paige** (Co-Principal). "Health Sciences & Technology Academy - Alabama Administrative Supplement," Sponsored by NIH-National Institute of General Medical Sciences - NIGMS, Federal, \$87,183.00. (January 1, 2023 – December 31, 2023).

Bray, Leigh Ann (Principal). "Patient-centered REproductive telehealth counSeling interVENTion development and Evaluation for Men with Cystic Fibrosis (aka PRESERVE - Men with CF)," Sponsor (UAB-Subcontract) Prime Sponsor Cystic Fibrosis Foundation. \$17,424. (December 1, 2022 – May 31, 2023).

Callihan, Michael (Principal), **Cole, Heather** (Co-Principal). "The effect of a cooling vest on core temperatures among helicopter emergency medical crews," University of Alabama, 2023 Office for Research & Economic Development Small Grants Program, \$6,000. (January 1, 2023-December 31, 2023)

Carter, Patricia (Principal). "UA Nurse Faculty Loan Program Supporting EdD, DNP, and PhD Students," Sponsored by Health Resources & Services Administration (HRSA), Federal, \$776,565.00. (July 1, 2022 - June 30, 2023).

Cody, Shameka (Principal), Newman, Sharlene (Co-Principal), Bui, Chuong (Co-Principal), **Townsend, Haley** (Co-Principal), **Mumba, Mercy** (Co-Principal), Payne-Foster, Pamela (Co-Principal). "Breaking the Barriers to Opioid Prevention, Treatment and Recovery in Minority Rural Communities in Alabama," Sponsored by Health Resources & Services Administration (HRSA), Federal, \$1,000,000.00. (September 1, 2022 - August 31, 2025).

Gibson, Daniel (Principal). "Assessing Protease Activity," Sponsored by NOxy Health Products, Industry, \$34,998.00. (May 15, 2022 - December 31, 2022).

Horton, Abby (Principal), **Johnson, Paige** (Co-Principal). "Global Nursing Education Rural Health Literacy Project," Sponsored by Matson Halverson Christiansen Hamilton Foundation - MHCH, Foundation/Nonprofit, \$2,500.00. (September 1, 2022 – December 15, 2023).

Jacobs, Mary (Principal), **Mumba, Mercy** (Co-Principal), Allen, Rebecca (Co-Principal). "Culturally Sensitive Assessment of Decision-Making and Functional Capacity in Older African Americans," Sponsored by University of Alabama at Birmingham - UAB, Federal, \$29,998.00. (July 1, 2022 - June 30, 2023).

Lavender, Catherine (Principal), **Lee, Amy** (Co-Principal), Steiner, Ashley (Co-Principal), Hites, Lisle (Co-Principal), Crowther, Martha (Co-Principal), Friend, Mary (Co-Principal), Culmer, Nathan (Co-Principal), Elsayed, Tamer (Co-Principal). "Reducing Maternal Health Disparities in Rural Alabama," Sponsored by Health Resources & Services Administration (HRSA), Federal, \$1,514,100.00. (July 1, 2022 - June 30, 2023).



- Mugoya, George (Principal), Lee, Hee (Co-Principal), **Mumba, Mercy** (Co-Principal), Jackson, Mary (Co-Principal), Cook, Ryan (Co-Principal), Fye, Heather (Co-Principal), Burnham, Joy (Co-Principal), Hopson, Laura (Co-Principal), Lund, Emily (Co-Principal), **Horton, Abby** (Co-Principal). "Promoting Mental Health Services and Equity (PROMISE)", Sponsored by United States Department of Education, Federal, \$5,060,937. (April 1, 2023 – March 31, 2028).
- Mumba, Mercy** (Principal), **Barron, Keri** (Co-Principal), **Ezemenaka, Christina** (Co-Principal), Brantley, Shakia (Co-Principal). "STEP UP: A Culturally Sensitive Approach to Engaging African American Young Adults in The All of Us Research Program," Sponsored by American Association of Colleges of Nursing, \$8,999.55. (October 1, 2022 – June 20, 2023).
- Mumba, Mercy** (Principal), Garza, Jaime (Co-Principal), Tice, Johnny (Co-Principal), Casper, Deborah (Co-Principal), Mugoya, George (Co-Principal), Jaiswal, Jessica (Co-Principal), **Andrabi, Mudasir** (Co-Principal), Witte, Tricia (Co-Principal). "The Minds and Mentors Paraprofessional Training Program II (MiMP-TP II)," Sponsored by Health Resources & Services Administration (HRSA), Federal, \$2,107,073.00. (September 1, 2022 - August 31, 2023).
- Mumba, Mercy** (Principal), Glenn, Andrea (Co-Principal), Albright, David (Co-Principal), Mugoya, George (Co-Principal), Allen, Rebecca (Co-Principal). "R33: A Mindfulness and Peer Mentoring Program to Improve Adherence to Medications for Opioid Use Disorders," Sponsored by NIH-National Center for Complementary and Integrative Health - NCCIH, Federal, \$1,941,978.00. (September 1, 2022 - August 31, 2023).
- Mumba, Mercy** (Principal), Jaiswal, Jessica (Co-Principal), Eyer, Joshua (Co-Principal), Key, Betty (Co-Principal), Mugoya, George (Co-Principal), **Wedgeworth, Monika** (Co-Principal), Witte, Tricia (Co-Principal). "Minds and Mentors Paraprofessional Training Program," Sponsored by Health Resources & Services Administration (HRSA), Federal, \$2,228,408.00. (September 1, 2022 - August 31, 2023).
- Oliver, JoAnn** (Principal), **Hooper, Gwen** (Co-Principal), Newman, Sharlene (Co-Principal). "AC3-African Cancer Genome Cohort (ACGR) to promote health equity among patients of African Ancestry: characterization of genetic and molecular drivers," Sponsored by Fox Chase Cancer Center, Industry, \$154,312. (March 1, 2023 – February 28, 2025).



FAQs for Proposal Submissions

How do I let the Office of Scholarly Affairs know about my proposal?

Under Proposal Development on the Research tab of CCN's website, there is a link to let our office know when you are looking to submit a proposal. This can be used to request services from OSA as well.

<https://nursing.ua.edu/research/proposal-development/>

What should I do when I hear the status of my proposal?

Under Proposal Development on the Research tab of CCN's website, there is a link to notify OSA when the status of your submission changes. <https://nursing.ua.edu/research/proposal-development/>

When is the proposal due to Lauren Calhoun to be entered in Cayuse?

The proposal is due, in order to be completely approved in Cayuse, 5 business days prior to the sponsor deadline. However, that information is due to Lauren Calhoun **9 business days prior to the sponsor deadline** so there is time for her to enter information for faculty and then time for all the various investigators, department chairs, and deans to review and certify.

How do I create an IPF in Cayuse to be compliant with University review?

Lauren Calhoun will create the IPF for you. Just complete the survey under Proposal Development on the Research tab of CCN's website to provide the information needed. Then, look for the email you will receive from Cayuse so you may certify the IPF. <https://nursing.ua.edu/research/proposal-development/>

Is Proposal Discussion & Review Group (PDG) required?

Yes, PDG review is required for all internal and external proposal submitted through CCN. If you are on a proposal submitted outside the College, you can still go through PDG if you would like. However, if your effort on a proposal submitted outside the College is 10% or greater, PDG review is required.

How do I create a budget?

OSA provides budget resources and consultations. Contact Lauren Calhoun to set up an appointment. Budget resources are available at <https://alabama.app.box.com/s/yfgmxuz6s75m43e45illb6zr0a8jshs0/folder/127202119568>.

How do I request statistical help?

Dr. Christina Glenn can provide statistical consultations. Her availability and a link to request an appointment are available at <https://nursing.ua.edu/research/contacts-resources/>.

How do I request Graduate Research Assistant (GRA) help?

GRAs are available to help faculty with various research needs. There is a link to request GRA assistance at <https://nursing.ua.edu/research/contacts-resources/>.

Where should I look for funding opportunities?

OSA lists several funding sources on the website at <https://nursing.ua.edu/research/find-funding-2/>. Lauren Calhoun also sends a weekly Funding Opportunity Digest. Contact Lauren Calhoun if you do not receive this funding opportunity email.



Publication Highlight

Scott, L., Dunn, L., & Oliver, J. (2022). Increasing lipid screenings in children 9-11 years old at a federally qualified health center - A quality improvement project. *Journal of Pediatric Nursing*, 67, 1–6.

<https://doi.org/10.1016/j.pedn.2022.07.007>

In *Increasing Lipid Screenings in Children 9-11 Years Old at a Federally Qualified Health Center - A Quality Improvement Project*, Drs. Letisha Scott, Linda Dunn, and JoAnn Oliver developed and implemented an educational intervention to increase medical providers' knowledge about hyperlipidemia and their use of lipid screenings. According to the American Heart Association, coronary heart disease is the cause of one out of seven deaths in the United States. Children can be at risk of cardiovascular disease because of medical conditions (e.g., chronic kidney disease) and other risk factors (e.g., family history). Furthermore, changes due to hyperlipidemia can occur when children are only two years old. Thus, the National Heart, Lung, and Blood Institute (NHLBI) issued guidelines in 2011 recommending universal cholesterol screening for children ages 9-11 years old.

The literature review conducted by Scott and colleagues included articles describing the importance of screening children for cardiovascular disease risk factors early on in life. Scott and colleagues also note the lack of adherence to the screening guidelines by health care providers. However, there is evidence that lipid screening rates can be improved through educational interventions focused on the 2011 NHLBI guidelines. Federally Qualified Health Centers (FQHC) serve minority, uninsured or Medicaid insured, and low-income populations, who also have an increased risk of hyperlipidemia. Thus, Scott and colleagues examined if an educational intervention increased pediatric lipid screenings and provider knowledge of hyperlipidemia at an FQHC.

Providers who cared for 9-11-year-old children at a FQHC in the southern U.S. were recruited to participate in the quality improvement initiative. These providers were given a PowerPoint presentation describing how to apply the 2011 NHLBI guidelines, facts about cardiovascular disease risks, and the importance of universal lipid screenings. Participants also received the 2011 NHLBI Dyslipidemia Treatment Algorithm. Handouts and instructions regarding screening were provided as well. Data were collected after the intervention was implemented for six weeks using a pre- and post-survey examining the change in providers' knowledge. Patient's charts were also reviewed to examine changes in the number of lipid screenings.

The results demonstrate a statistically significant increase in lipid screenings, with a shift from 7.8% pre-intervention to 39.2% post-intervention. Furthermore, there was a statistically significant increase of providers' knowledge from pre-test to post-test on topics such as the prevalence and age of onset of hyperlipidemia, repeating abnormal screenings, and what types of screenings should be utilized (i.e., fasting or non-fasting). Participants' confidence in treating children with hyperlipidemia also increased from pre-test to post-test. While only 14% of the providers used the 2011 NHLBI guidelines before the intervention, 71% of participants plan to utilize the treatment algorithm post-intervention. While additional research is needed, the findings from this study show that universal lipid screening may be beneficial for identifying coronary artery disease among children and lowering cardiovascular risks.

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