CURRICULUM VITAE

NAME: Susan Alexander
RANK: Associate Professor
DATE OF APPOINTMENT: August 12, 2016
EMAIL: susan.alexander@uah.edu
TELEPHONE: 256-824-2428 (office)
                 256-476-5836 (cell)

EDUCATION:

Year	Degree	Institution	Major
2009	D.N.P	University of Alabama in Huntsville	Nursing
2001	M.S.N.	University of Alabama in Huntsville	Nursing
1992	B.S.N.	University of Alabama in Huntsville	Nursing

CERTIFICATIONS:

Year	Title of Certification
2019	Adult Health Nurse Practitioner Recertification ANCC# 0386827
2019	Advanced Diabetes Management Recertification ANCC# 2009001149
2003	Master of Science in Nursing Adult Health Clinical Nurse Specialist

PROFESSIONAL ACADEMIC EXPERIENCE:

2016-Present	Associate Professor	University of Alabama in Huntsville
2013-2016	Clinical Associate Professor	University of Alabama in Huntsville
2009-2013	Clinical Assistant Professor	University of Alabama in Huntsville

PROFESSIONAL EXPERIENCE:

2018-Present	Certified Registered Nurse Practitioner	Primarily Geriatrics, Inc.
2016-2018	Certified Registered Nurse Practitioner	Internal Medicine Partners, LLC
2014-2016	Certified Registered Nurse Practitioner	Riverside Family Health, LLC
2012-2014	Certified Registered Nurse Practitioner	NC Health Care Clinic
2011-2013	Diabetes Educator, Diabetes Self-Management Classes	Crestwood Medical Center
2010	Disease Specific Care Program Intermittent Reviewer (Inpatient Diabetes Programs)	The Joint Commission
2003-2013	Certified Registered Nurse Practitioner	Diabetes and Lipids Center
2003-2004	Independent Consultant Wound Care Device Study	Biofisica, LLC
2001-2003	Case Manager	Baptist Home Care Services
1999-2001	Marketing Coordinator	Hospice of the Valley
1996-1999	Case Manager	Hospice of the Valley
1992-1996	Staff Nurse	Michael A. Hennigan, MD
1992	Staff Nurse ICU/CCU	Decatur General Hospital
1991-1992	Patient Care Assistant ICU/CCU	Decatur General Hospital

SCHOLARSHIP:

Publications:

Invited:

2020   Austin, R., Monsen, K., **Alexander, S.** Capturing whole-person health data using mobile applications. *CNS: The Journal for Advanced Nursing Practice,* in press.

2020   Ng, Y.C., Mayeux, J., **Alexander, S.** (2020). Opportunities meeting needs: expanding HIV prevention beyond current clinical practice. *CNS: The Journal for Advanced Nursing Practice,* 34(3):96-98.

2019   **Alexander, S.,** O-Neal, P.V. (2019). Scientific inquiry meets the bedside: improving practices in airway management. *CNS: The Journal for Advanced Nursing Practice,* 33(3): 114-116.

2018   Black, C. B., **Alexander, S.** (2018). Data and the nurse: combining expertise in clinical domains and data analysis. *CNS: The Journal for Advanced Nursing Practice,* 32(6): 296-298.

2018   **Alexander, S.** (2018). Optimizing data generation and application in healthcare: the integral role of the nurse. *CNS: The Journal for Advanced Nursing Practice,* 32(3): 116-120.

2017   **Alexander, S.** (2017). Leadership in nursing: the importance of influence. *CNS: The Journal for Advanced Nursing Practice,* 31(6): 309-310

2017   **Alexander, S.** (2017). The business of interpersonal team relationships. *CNS: The Journal for Advanced Nursing Practice,* 31(5): 240-242.

2017   **Alexander, S.** (2017). Promoting civility in education and practice: one nurse's experience. *CNS: The Journal for Advanced Nursing Practice,* 31(2) 79-81.

2017   **Alexander, S.,** Hunter, A. (2017). Challenges in fall prevention and fall-related injuries for older adults. *CNS: The Journal for Advanced Nursing Practice,* 31(1): 20-22.

2017   Proehl, J.A., **Alexander, S.,** Manton, A. P. (2017). Integrity and transparency in reporting clinical trials. *CIN: Computers, Informatics, Nursing,* 35(1): TC1-TC2.

2017   Proehl, J.A., **Alexander, S.,** Manton, A.P. (2017). Integrity and transparency in reporting clinical trials. *Advanced Emergency Nursing Journal,* 39(1): 1-2.

2017	Proehl, J.A., **Alexander, S.,** Manton, A.P. (2017). Integrity and transparency in reporting clinical trials. *Journal of Emergency Nursing,* 43(2): 96-97.
2017	**Alexander, S.** (2017). Environmental health disparities: Urban air quality from a coupled human environment systems perspective, pp. 108-110. In *Brain Waves: A Compendium of Ideas and Views from UAH Campus Thought Leaders,* Garner, R. (ed.). Huntsville, AL: University of Alabama in Huntsville.
2017	Barnby, E., **Alexander, S.** (2017). Collaborative research: an advanced practice nurse's experience in genome research and treatment. *CNS: The Journal for Advanced Nursing Practice,* 31(4): 191-194.
2016	Delaney, C.W., Pruinelli, L., **Alexander, S.,** & Westra, B.L. (2016). 2016 Nursing knowledge big data science initiative. *CIN: Computers, Informatics, Nursing,* 34:(9): 384-386.
2016	**Alexander, S.** (2016).Ice bucket conversations: developing programs for finding out what matters most. *CNS: The Journal for Advanced Nursing Practice,* 30(4): 200-204.
2016	**Alexander, S.** (2016). Polishing your presence online: wise use of social media to enhance your reputation. *CNS: The Journal for Advanced Nursing Practice,* 30(5): 261-263.
2016	**Alexander, S.** (2016). The nurse as author: is publishing for you? *CNS: The Journal for Advanced Nursing Practice,* 30(3): 148-149.
2016	**Alexander, S.** (2016).Nurses in business: the time is now. *CNS: The Journal for Advanced Nursing Practice,* 30(2): 86-88.
2016	**Alexander, S.** (2016). Scholarship in clinical practice: an update on recommendations for DNP programs. *CNS: The Journal for Advanced Nursing Practice,* 30(1): 58-61.

Refereed Journal Articles:

2021	Beale, N., Carroll, W., Aldrich, K., **Alexander, S**., Baernholdt, M., Fields, W. The fingerprint of nursing: what a unique nurse identifier means for our future. *AJN, American Journal of Nursing.* In press.
2020	Ulrich, V., **Alexander, S.,** Bos, A.J.G. (2020). Quality of life and mortality of Brazilian nonagenarians and centenarians with urinary incontinence: urinary incontinence in 90+ Brazilians. *Pan-American Journal of Aging Research.* .8:1-9. https://doi.org/10.15448/2357-9641.2020.1.38763

2020   **Alexander, S.,** Naeger, A., Newchurch, M**.** Understanding of the impact of air quality on population health: the potential of geostationary satellite instruments to increase knowledge of atmospheric chemistry. *One Health Newsletter, 12(1). http://www.vet.k-state.edu/OneHealth/Vol12-Iss1/air_quality.html*

2020   Sano, J., **Alexander, S.** Using an evidence based approach for EHR downtime education in nurse onboarding. *CIN: Computers, Informatics, Nursing.* 38(1): 36-44.

2020   **Alexander, S.,** Kaulfus, A., Phillips, C.E., Baron, B., McHenry, J.N., Nair, U. Utility of a low-cost, dense sensor network for the study of air quality impact upon human health in urban and rural areas. *Annual Review of Nursing Research,* 38(1): 1-14.

2020   Amiri, A., Mahalingam, B., Derbes, A., Haney, J., **Alexander, S.,** Orman, W. The impact of chronic ambient exposure to $PM_{2.5}$ and ozone to prevalence rates for asthma and COPD mortality in the southeastern United States. *Annual Review of Nursing Research,* 38(2): 15-33.

2019   Riordan, J., **Alexander, S.,** Montgomery, I. (2019). Use of technology to increase physical activity in female veterans and soldiers ages 19-64. *Journal of the American Association of Nurse Practitioners;* 31(10): 575-582.

2019   Hatwood, C., **Alexander, S**., Imsand, E. (2019). Nurse researchers move to the cloud: protecting sensitive data in cloud-based storage environments. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice.* 33(4): 164-166.

2019   Sullivan, V. H., Hays, M. M., & **Alexander, S**. (2019). Health Coaching for Patients With Type 2 Diabetes Mellitus to Decrease 30-Day Hospital Readmissions. *Professional Case Management*, *24*(2), 76–82.

2018   Alford, D., **Alexander, S.,** Barr, R. (2018). Optimization of clinical decision support tools for the care of older adults with diabetes mellitus type 2. *CIN: Computers, Informatics, Nursing,* 36(6): 259-264. doi: 10.1097/CIN.0000000000000452

2018   University of Alabama in Huntsville, College of Nursing Writing Team. **Alexander, S**. Co-writer (2018). *Striving for excellence: Creating environments that promote the pedagogical expertise of faculty*. National League for Nursing Center of Excellence in Nursing Education.

2018   Ng, Y. C., **Alexander, S.,** & Frith, K. H. (2018). Integration of mobile health applications in health information technology initiatives: expanding opportunities for nurse participation in population health. *CIN: Computers, Informatics, Nursing,* 36(5), 209-213. doi:10.1097/cin.0000000000000445

2017   Kaulfus, A., **Alexander, S.,** Zhao, S., O'Keefe, L., Oster, R., Bartlucci, A. (2017). The inherent challenges of using large datasets in healthcare research: experiences of an interdisciplinary team. *CIN: Computers, Informatics, Nursing.* 35(5)221-225.

2017   Hoy, H., **Alexander, S.**, Frith, K.H. (2017). The Effect of transplant education on nurses attitudes toward organ donation and advocacy for transplantation: instrument development. *Progress in Transplantation,* 27(2): 175-179.

2015   Slaughter, A., Frith, K.H. **Alexander, S.,** O'Keefe, L., & Stoll, R. (2015). Promoting best practices for managing acute low back pain in occupational environments. *Workplace Health & Safety.* 63(9):408-14.

2013   Maskey, M., **Alexander, S**., Conover, H., Gamble, J., Hoy, H., & Fraley, A.M. Powerin transplant professional collaborations with web and mobile apps. (2013). *Computers Informatics Nursing (CIN Plus).* 31(8): 351-5.

2013   **Alexander, S**., Hoy, H., Maskey, M., Conover, H., Gamble, J., & Fraley, A.M. (2013). Initiating collaboration among organ transplant professionals through web portals and mobile apps. *Online Journal of Issues in Nursing,* May 13; 18(2): 7.

2012   Hoy, H., **Alexander, S**., Roberts, L.J., Wells, N., Pinson, C.W., & Feurer, I.D. (2012). The Negative effect of pre-transplant body mass index on health-related quality of life after lung transplantation. *Progress in Transplantation,* 22(4):2-6.

2011   Hoy, H., **Alexander, S**., & Frith, K.H. (2011). Effect of transplant education on nurses' attitudes toward organ donation and plans to work with transplant patients. *Progress in Transplantation*. 21(4): 317-321.

2011   Hoy, H., **Alexander, S**., Payne, J., & Zavala, E. (2011). The role of advanced practice nurses in transplant center staffing. *Progress in Transplantation,* 21(4): 294-298.

2011   **Alexander, S**., Frith, K.H., O'Keefe, L., & Hennigan, M.A. (2011). Implementation of customized Health information technology in diabetes self-management training programs. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice,* 25(2): 63-70.

Book Chapters:

2019   **Alexander, S.,** & Shirey, M. (2019). Advanced nursing practice: pathway to entrepreneurship, pps. 415-430. In *Foundations of Clinical Nurse Specialist Practice, (3rd ed).* New York: Springer.

2012   **Alexander, S**., & Hoy, H., (2012).Supporting learner success: Pre-enrollment through outcomes evaluation. In *Distance Education in Nursing (3rd ed).* New York: Springer Publications.

Book (authored/edited)

2018   **Alexander, S.,** Frith, K.H., & Hoy, H. (2019). *Applied Clinical Informatics in Nursing, 2nd ed.* MA: Jones and Bartlett Learning.

2014   **Alexander, S.**, Frith, K.H., & Hoy, H. (2014). *Applied Clinical Informatics in Nursing.* Burlington, MA: Jones and Bartlett Learning.

Conference Proceedings

2018   Moore, T., Newchurch, M. **Alexander, S.** (2018, April). In *TEMPO Early Adopters Workshop: Meeting Summary.* Western States Air Resources Council (WESTAR) and Western Regional Air Partnership (WRAP). Fort Collins, CO.

2012   **Alexander, S.** & Hoy, H. (2012, May). Barriers to using technology for diabetes self-management in the older adult. Published in *CHI 2012: Emerging Technologies for Healthcare & Aging Workshop,* Austin, TX.

Supervision of Student Research/Projects:

2021   Simmons, J. Integrating mHealth technology to improve self-management activities in patients with type 2 diabetes mellitus. In process.

2021   Camp, S. Telehealth support to decrease veterans' risk for type 2 diabetes mellitus. In process.

2020   Knisley, J. Development of an evidence-based clinical practice protocol for home warfarin management in patients with left ventricular assist devices. Graduated Fall, 2020.

2020   Ubaka, G. Reducing hospital readmission due to ambulatory care sensitive conditions: impact of targeted monitoring by ambulatory care registered nurses. In process.

2020   Gildersleeve, K. Implementing a brief nonpharmacological smoking cessation program among mentally ill patients residing in a transitional care facility. Graduated Fall, 2020.

2019   Hatwood, C. Cybersecurity best practices for management of protected health information in research environments. Graduated Spring, 2019.

2018   Buan, I. An algorithm for escalating clinical scenarios in telemedicine for geriatric residents in senior living communities. Graduated Fall, 2020.

2018   Likembi, N. E. Improving the accuracy of risk prediction for pressure ulcers in residents of long-term care. Graduated Fall, 2019.

2018   Sano, J. Using a best practice approach for EHR downtime guidance in onboarding of newly hired nurses. Graduated Fall, 2018.

2018   Hull, M. Implementation of an electronic health record notification system for reduction of pessary complications. Graduated Spring, 2020.

2018   Fournace, L. Securing payment for services provided by advanced practice nurses: framework for organizations. Graduated Spring, 2020.

2017   Alford, D. Optimization of clinical decision support systems for patients with type 2 diabetes. Graduated Fall, 2017.

2017   Riordan, J. Evaluation of mobile application to increase physical fitness in female veterans. Graduated Fall, 2017.

2015   Revell, C. Using the Health Belief Model for patients with Type II Diabetes: a provider preventative tool for advanced practice nurses. Graduated Fall, 2015.

2015   Reynolds, M. Evaluation of cultural and programmatic influences of health literacy knowledge in pre-licensure nursing students. Graduated Fall, 2015.
2014   McPeters, S. Promoting organizational membership in professional nurses. Graduated Fall, 2014.

2014   Linsky. R. Evaluation of an evidence-based fall prevention education program for community - dwelling older adults. Graduated Spring, 2014.

2012   Wofford, J. An evidence-based heart failure program designed to reduce 30-day readmissions. Graduated Fall, 2012.

Presentations:

Invited:

<u>*Local*</u>

2015   **Alexander, S.** (2015, September). *NPAA Update*. Presented at the North Alabama Nurse Practitioners Association Annual Symposium, Huntsville, Alabama.

2012   **Alexander, S**. (2012, September). *Diabetes update.* Presented at CE Saturday, University of Alabama in Huntsville, College of Nursing.

2012   **Alexander, S**. (2012, February). *Continuous glucose monitoring systems: a novel therapeutic approach in the management of diabetes mellitus.* Presented for the Undergraduate Honors Forum, University of Alabama in Huntsville.

2012   **Alexander, S.** (2012, September). *Advanced practice nursing: an overview.* Presented for the Health Careers Day, University of Alabama in Huntsville.

2011   **Alexander, S**. (2011, November). *Diabetes update.* Presented for the American Association of Critical Care Nurses, Huntsville, Alabama.

2011   **Alexander, S.** (2011, June).*CSI3: Clinical simulation, investigation, implications, interventions.* Presented to BSN Nursing students,, University of Alabama in Huntsville, College of Nursing

2011   **Alexander, S.** (2011, April). *Treating diabetes in the United States.* Presented for the Agency of International Development, Community Connections Program, University of Alabama in Huntsville

2008   **Alexander, S**. (2008, June). *Diabetes update.* Presented to the Office Nurses Association, Decatur, Alabama.

2006   **Alexander, S**. (2006, May). *Diabetes update.* Presented to the Office Nurses Association. Decatur, Alabama.

2006   **Alexander, S**., Hennigan, M. (2006, December). *Diabetes update.* Presented to the University of Alabama at Birmingham, School of Nursing.

2005   **Alexander, S**. (2005, December). *Ankle brachial index measurement.* Presented to the staff of the Diabetes and Lipids Center, Decatur, Alabama.

2004   **Alexander, S**. (2004, April). *Update on lipid management therapies.* Presented to the
           Office Nurses Association, Decatur, Alabama.

<u>*State*</u>

2019   **Alexander, S.,** Prevallet, B., Naeger, A., Nair, U., Gilder, R. (2019, September).
           Environmental factors and readmission exclusions. Alabama Hospital Association
           Quality Task Force, Montgomery, Alabama.

2019   Adams, E., & **Alexander, S**. (2019, February). Promoting rigor in the DNP Project.
           Presented at the 2019 University of Alabama System DNP Intensive, Huntsville, AL.

2018   **Alexander, S**. (2018, April). *Transforming Healthcare through Leadership, Policy,
           and Collaboration.* Presentation at the Joint DNP Intensive, Birmingham, AL.

2017   **Alexander, S**. (2017, October). *Legislative Update in Alabama:* Presentation at the
           Nurse Practitioner Alliance of Alabama 11th Annual Meeting, Birmingham, AL.

2017   **Alexander, S.** (2017, July). *Nurse Practitioner Alliance of Alabama: Legislative
           Update.* Presentation at the Central Alabama Nurse Practitioner Association,
           Birmingham, AL.

2017   **Alexander, S.** (2017, February). *Nurse Practitioner Alliance of Alabama: present
           challenges to providing care in Alabama.* Presentation at the State of Alabama
           Association of Colleges of Nursing, Birmingham, AL.

2015   **Alexander, S.** (2015, November). *Nurse Practitioner Alliance of Alabama: update on
           annual activities.* Presentation at the Nurse Practitioner Alliance of Alabama Annual
           Meeting in Birmingham, AL.

2015   Frith, K., & **Alexander, S.** (2015, May). *Using distance learning to educate students
           about human factors in computing.* Presentation at the UA System Scholars Institute
           at the University of Alabama at Birmingham.

2014   **Alexander, S.** (2014, August) *Nurse Practitioner Alliance of Alabama: update on
           annual activities.* Presentation at the Wiregrass/Nurse Practitioner Alliance of
           Alabama Annual Meeting in Panama City Beach, FL.

2014   **Alexander, S**. (2014, April). *Education principles for a partnership in asthma care.*
           Presentation at the Asthma Educator Institute Course of the American Lung
           Association (Alabama Chapter) in Huntsville, AL.

2021   Naeger, A., Newchurch, M., Liu, X., Just, A., **Alexander, S.** *The NASA TEMPO mission: revolutionary air pollution observations for environmental health applications.* Presented January 12, 2021, to the American Meteorological Society 101st Annual meeting. Held online due to COVID-19 travel restrictions.

2020   **Alexander, S.**, Naeger, A., Newchurch, M. *Trace Gas Pollution and COVID-19.* Presented May 19, 2020, to the MAIA-TEMPO Early Adopters Workshop. Held online due to COVID-19 travel restrictions.

2019   **Alexander, S.,** Prevallet, B., Naeger, A., Nair, U., Gilder, R. *Applications of TEMPO proxy data in healthcare use cases.* Presented September 26, 2019, to the Alliance of Nurses for Healthy Environments, Mt. Rainier, Maryland.

2019   Naeger, A., Newchurch, M., **Alexander, S.**, Berndt, E., Duran, E., (June 6, 2019). *Synthetic TEMPO data products at NASA SPoRT for air quality and public health communities.* Presentation at TEMPO Science Team Meeting in Madison, WI.

2018   **Alexander, S.,** Newchurch, M. (April, 2018) *TEMPO applications to air quality and health.* Presentation at Tropospheric Emissions: Monitoring of Pollution (TEMPO) Applications Workshop in Fort Collins, CO.

2018   Bartolucci, A., Kaulfus, A., **Alexander, S.,** Zhao, S., Oster, R., O'Keefe, L. (May, 2018). *Challenges of dealing with data registries.* Presentation at Keryx Biopharmaceuticals Annual Sessions in Boston, MA.

2014   **Alexander, S.** (2014, September). *Diabetes and the transplant patient.* Presentation at the 10th Annual Transplant Nurse Practitioner Symposium in Nashville, Tennessee.

2012   **Alexander, S**. (2012, September). *Diabetes and the transplant patient.* Presentation at the 8th Annual Transplant Nurse Practitioner Symposium in Nashville, Tennessee.

   Media Contributions:

2019   Baker, E. (Producer). (2019, October 10). *Revolutionary NASA Satellite Providing Better Data on Air Quality.* [Television Broadcast]. Huntsville, AL. WHNT –CBS News Affiliate. Available online at: https://whnt.com/2019/10/10/revolutionary-nasa-satellite-providing-better-data-on-air-quality/

Peer-Reviewed:

<u>*Local*</u>

2011   Hoy, H., **Alexander, S**., Maskey, M. (2011, November). *Web-based mobile application in organ transplantation.* Presented at the Sigma Theta Tau International Beta Phi Chapter Annual Research Day, in Huntsville, Alabama.

<u>*State*</u>

2019   **Alexander, S.,** Gilder, R. (2019, October). *Use of hospital services for mental health and substance abuse disorders by older adults in Alabama.* Presented at the UA System Behavioral Health Symposium, in Birmingham, Alabama.

2011   **Alexander, S**. (2011, May). *Use of mobile technology applications in caring for the patient with diabetes.* Presented at the University of Alabama System Scholars Institute, Innovations Forum, in Tuscaloosa, Alabama.

<u>*National*</u>

2019   **Alexander, S.,** Tinnirello, T. (October, 2019). *Health data analysis using Google Cloud Platform (Satellite).* Presented at New Applications in the Use of Satellite Data Monitoring for Population Health, in Huntsville, Alabama.

2019   Naeger, A., Newchurch, M., **Alexander, S.,** Miller, C.C. NASA SPoRT Team, TEMPO Team. (October, 2019). *TEMPO Early Adopters.* Presented at New Applications in the Use of Satellite Data Monitoring for Population Health, in Huntsville, Alabama.

2019   **Alexander, S.,** Newchurch, M., Naeger, A., Klubert, D. (February, 2019).*New applications in the use of satellite data monitoring of air quality for population health, exposure risk estimation, and public outreach.* Presented at Transportation, Air Quality, and Health Symposium, Center for Advancing Research in Transportation Emissions, Energy, and Health (CARTEEH) in Austin, Texas.

2019   Naeger, A., Newchurch, M., **Alexander, S.,** Berndt, E.. (2019, January). *Application of synthetic TEMPO products to investigate air quality impacts on community-level public health.* Presented at HAQAST5, NASA Health and Air Quality Applied Sciences Team Meeting, in Phoenix, Arizona.

2019   Newchurch, M., Chance, K., **Alexander, S.,** Naeger, A. (2019, January). *Applying TEMPO and TOLNet to explore air-quality processes affecting health.* Presented at

HAQAST5, NASA Health and Air Quality Applied Sciences Team Meeting, in Phoenix, Arizona.

2019   Alexander, S., Kaulfus, A., Phillips, C., Nair, U.U. (2019, January). *Utility of a low-cost, dense sensor network for the study of air quality impact upon human health in an urban area.* Presented at the American Meteorological Society Annual Meeting, in Phoenix, Arizona.

2015   Kaulfus, A., Nair, U. **Alexander, S.,** Christopher, S., Biazar, A.P. (2015, January). *Combined impacts of urban pollution and wildland fire emissions on human health.* Presented at the American Meteorological Society Annual Meeting, in Phoenix, Arizona.

2012   Hoy, H., **Alexander, S**., Maskey, M. (2012, January). *Making technology work for you.* Presented at the Annual Symposium for the North American Transplant Coordinators Organization, in Miami, Florida.

2011   **Alexander, S**., Hoy, H. (2011, April). *Climbing mountains: DNP students' perspectives on the pursuit of a terminal degree.* Presented at the National Organization of Nurse Practitioner Faculty 37th Annual Meeting, Albuquerque, New Mexico.

2009   **Alexander, S**. (2009, October). *Applying health information technology systems in a diabetes self-management training program.* Presented to the American Medical Group Association, Diabetes Best Practice Symposium, in Detroit, Michigan.

2009   **Alexander, S.** (2009, January). *The role of change agent in an organization: keys to success.* Presented to the National Association of Transplant Coordinators Annual Conference, Fort Lauderdale, Florida.

International

2011   Hoy, H., **Alexander, S**. (2011, December). *Development of a web-based mobile application for use in organ transplantation.* Presented at the 7th Annual International Medical Automation Conference of the Automated Health System, in Dulles, Virginia.

Abstract/Poster Presentations (Refereed):

Local

2019   Alford, D., **Alexander, S.,** Barr, R. (2019, March). *Optimization of clinical decision support tools for the care of older adults with diabetes mellitus type 2.* Presented to the 5th Annual Research Horizons Poster Session, University of Alabama in Huntsville

2018   Derbes, A., **Alexander, S.** (2018, September). *Health outcomes from aggregate particulat matter.* Presented to the Honors Capstone Research Summer Program, 2018, University of Alabama in Huntsville.

2010   Mcabee, J., Frasier, D., Burt, K., **Alexander, S.**, Anderson, F., Graham, S., Schultz, M., & Wilson, J.A. (2010, November). *The effects of implementing the Synergy Model on nurses knowledge, acceptance, and application of professional nursing practice.* Presented to the Sigma Theta Tau Beta Phi Chapter Annual Research Day, University of Alabama in Huntsville, College of Nursing.

2010   Mcabee, J., Frasier, D., Burt, K., **Alexander, S.,** Anderson, F., Graham, S., Schultz, M., & Wilson, J.A. (2010, September). *The effects of implementing the Synergy Model on nurses knowledge, acceptance, and application of professional nursing practice.* Presented to the Annual Magnet Research Day, University of Alabama at Birmingham Medical Center.

National

2018   Riordan, J., **Alexander, S.,** Montgomery, I. (2018, June). *Use of mobile technology to increase physical activity in female veterans and soldiers.* American Association of Nurse Practitioners, Denver, Colorado.

2018   Alford, D., **Alexander, S.,** Barr, R.T.(2018, May). *Optimization of clinical decision support systems in Type 2 diabetes.* American Nurses Informatics Association, Orlando, Florida.

2017   Hoy, H., **Alexander, S.** (2017, April). *How do acute care nurse practitioner DNP students differ from non-nurse practitioner DNP student?* 1st Annual National Conference for Nurse Practitioners in Acute Care, Miami, Florida.

2010   McAbee, J., **Alexander, S.,** Cretul, J. (2010, March). *Multilevel implementation of the Synergy Model in a STICU.* National Association of Clinical Nurse Specialists Annual Meeting, Portland, Oregon.

International

2018   Newchurch, M., Kuang, S., Wang, B., **Alexander, S.,** Naeger, A., Lefer, B., …Chance, K. (2018, December). Integrating Ground-based in-situ and ozone lidar network measurements with future geostationary satellite observations to maximizing data utility and societal benefits. Presented to the American Geophysical Union Fall Meeting 2018 in Washington, DC.

2017 Sullivan, V., Hays, M.P., **Alexander, S.** (2017, May). Reducing hospital readmissions in patients with Type II diabetes. Presented to the American Association of Clinical Endocrinologists, 26th Annual Scientific Sessions in Austin, Texas.

2016 **Alexander, S.**, & Fulton, J. (2016, August). Practical tips for getting DNP manuscripts published. Presented to the International Academy of Nursing Editors Annual Conference London, G.B.

2016 Revell, C., **Alexander, S.**, Talley, B., Mobley, S. (2016, May). Using the Health Belief Model for patients with Type II diabetes: a provider education tool for advanced practice nurses. Presented to the American Association of Clinical Endocrinologists 25th Annual Scientific & Clinical Congress in Orlando, Florida.

Local

2012 Hale, E., **Alexander, S**., Hennigan, M.A., & Frith, K.H. (2012, September). *The effects of GLP-1 agonists on the C-peptide levels of patients with Type 2 diabetes.* Presented for the Summer Research and Creative Experience for Undergraduates, University of Alabama in Huntsville, Department of Chemistry.

State

2015 Reynolds, M., **Alexander, S.** (2015, May). *An Evidence-Based Intervention to Improve Awareness of Patient health literacy in pre-licensure nursing students.* Presented for the UA Systems Scholars Institute, University of Alabama at Birmingham.

2009 **Alexander, S.** (2009, April). *Application of customized health information technology in a diabetes self-management training program.* Presented for the 1st Annual DNP Intensive, University of Alabama at Birmingham.

National

2010 McAbee, J., Frasier, D., Burt, K., **Alexander, S**., Anderson, F., Graham, S., Schultz, M., & Wilson, J.A. (2010, March). The effects of implementing the Synergy Model on nurses' knowledge, acceptance, and application of professional nursing practice. Presented to the National Association of Clinical Nurse Specialists Annual Conference in Portland, Oregon

Contracts and Grants Submitted:

2021 **Alexander, S.**, Frith, K.H. Improving Big data and Artificial Intelligence in COVID-19 and Beyond through Interface Ontology Applications: Human Inelligence is the

Secret Ingredient. Submitted January 22, 2021, to Distinguished Speaker Series, University of Alabama in Huntsville, Academic Affairs. ($500.00). Pending.

2020   Newchurch, M., Naeger, A., **Alexander, S.** TROPOMI NO2 Measurements Quantify Efficacy of Constraining Human Activity to Reduce COVID-19 Impacts. Submitted April 15, 2020, to FastGRANTS. ($199,724). Unfunded.

2020   Newchurch, M., Naeger, A., **Alexander, S.** TROPOMI NO2 Measurements Quantify Efficacy of Constraining Human Activity to Reduce COVID-19 Impacts. Submitted April 10, 2020, to NASA HQ, Science Mission Directorate, Earth Science Division, NASA Research Announcement, ROSES-A28-NNH2OZDA001N-RRNES. ($199,986). Unfunded.

2020   Morgan, T.C., **Alexander, S.** Ensuring Quality Outcomes in Primary Care: A Targeted Educational Program for Family Nurse Practitioner Students. Submitted March 17, 2020, to the American Association of Nurse Practitioners, ($5,000). Pending.

2019   Nair, U., Fall, S., Foster, S., Kimball, S., Menon, V., (**Alexander, S.-Consultant**). Bridging Critical Gaps in Environmental Prediction through Harnessing of the Data Revolution. Submitted January 24, 2020, to National Science Foundation, proposal #NSF 20-504. ($3,999,537.00). Unfunded.

2019   **Alexander, S.,** Newchurch, M., Naeger, A. New Applications in the Use of Satellite Data Monitoring for Population Health. Submitted April 9, 2019, to NASA ROSES E.2 Technical Workshops, Conference, Symposia. Proposal #19-TWSC19-0001. ($35,000). Funded.

2019   **Alexander, S. (PI),** Newchurch, M. New Application in Use of Satellite Data Monitoring for Population Health, Exposure Risk Estimation and Public Outreach. Submitted August 12, 2018, to National Institutes of Health/National Institute of Environmental Health Sciences. $4,000. (Funded).

2018   **Alexander, S. (PI).** Nurse Faculty Loan Program. Submitted to the U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, Division of Nursing and Public Health. HRSA-19-004, Submitted November 21, 2018, ($104,944). Funded.

2018   **Alexander, S. (PI),** Derbes, A. Hospital Readmissions Reduction Program. Submitted . April 10, 2019, to the Honors Capstone Research Project, Honors College, University of Alabama in Huntsville, $3,200.00 (Funded.)

2018   **Alexander, S.(PI)** Use of a Cloud Platform to Support Multidisciplinary Environmental Health Research. Submitted June 15, 2018, to GCP Research Credits Program. $15,533. (Funded)

2018   **Alexander, S. (PI),** Newchurch, M. A Cloud Computing Platform as Information Technology Infrastructure in Multidisciplinary Environmental Health Research. Submitted January 6, 2018, to Research Infrastructure Funding Program, UAH Office of the Vice President for Research. $31,676.00. (Funded).

2017   Biazar, A.P., Hain, C., Khan, M., Zhao, S., McNider, R., Adelman, Z., **Alexander, S.,** Avise, J., Dornblaser, B., Koshak, W., Pleim, J., Zavodsky, B.   Use of Remote Sensing Data to Improve Air Quality Decision Support Systems Used to Protect Public Health. Submitted November 18, 2017, to National Aeronautics and Space Administration (17-HAQ17-0054). $870,753.00. (Funded).

2017   Newchurch, M., **Alexander, S.,** Berndt, E., Hu, L., Johnson, M., Luvall, J., Miller, C., Naeger, A., Wang, L., chance, K., da Silva, A., Jones, K. Keating, T., Liu, X., Moore, T., Biazar, A.P., Sun, K., Westenbarger, D., Zavodsky, B., Vaidyanathan, A. Development and Application of Proxy TEMPO Products to Accelerate Use in Operational Public Health and Air-Quality Decision Support. Submitted November 18, 2017, to National Aeronautics and Space Administration (17-HAQ17-0054). $960,980.00. (Unfunded).

2017   **Alexander, S.,** Christopher, S. Combining Multidisciplinary Datasets to Yield New Insights about the Impact of Air Quality upon Health Outcomes in Cardiopulmonary Disease. Submitted September 22, 2017, to LMI Academic Partnerships Program. $49,999 (Unfunded).

2017   **Alexander, S.** Nurse Faculty Loan Program. Submitted to the U.S. Department of Health and Human services, Health Resources and Services Administration, Bureau of Health Workforce, Division of Nursing and Public Health, HRSA-18-010. $181,894.00 Submitted November 27, 2017. (Funded).

2017   **Alexander, S.,** Nair, U. An Interdisciplinary Collaboration to Address the Public Health Impact of Air Quality Changes in Alabama. Submitted March 27, 2017 to UAH, Office of Vice President for Research, Individual Investigator Distinguished Research Program. $48,248.00. (Funded).

2017   **Alexander, S.,** Nair, U., Biazar, A. Integration of Healthcare Datasets and Environmental Monitoring Sensors to Enhance UAH Research Infrastructure. Submitted January 17, 2017 to UAH, Office of Vice President for Research, Research Infrastructure Funding program. $82,845.00. (Unfunded).

2017   Nair, U., Newchurch, M., Biazar, A., Lee, S., **Alexander, S.** Research and Educational Facility for Atmospheric Gases and Aerosols Measurements. Submitted January 17, 2017, to UAH, Office of Vice President for Research, $60,000. (Unfunded).

2016   **Alexander, S. (PI).** Nurse Faculty Loan Program. Submitted to the U.S. Department
            of Health and Human Services, Health Resources and Services Administration,
            Bureau of Health Workforce, Division of Nursing and Public Health. HRSA-17-066,
            November 2, 2016, $146,790.00 Funded.

2015   **Alexander, S. (PI).** Nurse Faculty Loan Program. Submitted to the U.S. Department of
            Health and Human Services, Health Resources and Services Administration, Bureau of
            Health Workforce, Division of Nursing and Public Health. HRSA-16-065, November 30
            2015, $110,138.00. Funded.

2015   Frith, K.H., Jovanov, E., Milenkovic, A., **Alexander, S.,** Price, J.L. Fall Prevention in
            Community Dwelling Older Adults. Submitted to the University of Alabama in
            Huntsville, Office of Vice President for Research.. $5,000. Funded.

2015   O'Keefe, L.C. (PI), Hoy, H., Frith, K.H., **Alexander, S.,** Maskey, M., & Adams, M.
            Mobilizing advanced nursing education for rural and underserved populations. Submitte
            to U.S. Department of Health and Human Services, Health Resources and Services
            Administration, Bureau of Health Workforce, Division of Nursing and Public Health.
            Advanced Nursing Education Program, HRSA-15-046, February 12, 2015, $1,010,788.
            (Unfunded.)

2014   CNH-L: Urban air quality from a coupled human environment system perspective. Nair,
            U. (PI). Biazar, A.P., Christopher, S., Griffin, R., Knight, K., Estes, M., Wu, Y.,
            Alexander, S. Submitted to NSF (proposal #1518522) November 18, 2014. Unfunded.
            ($1,799,960).

2014   Mining big data to improve human health. **Alexander, S.(PI),** Nair, Udaysankar, Maske
            M. Hoy, H. University of Alabama in Huntsville, Office of Vice President for Research.
            Submitted August 8, 2014. Funded ($5,000).

2013   Impact of smoke from wildland fires upon urban population in Houston, Texas. Nair, U.
            (PI), **Alexander, S.,** Keiser, K. U. Department of Land Management. Submitted
            December 11, 2013. Unfunded. ($279,268).

2013   Creation of a multidisciplinary incubator program to solicit funding through health
            information technology proposals. **Alexander, S.** (PI). Hoy, H. Word-Allbritton, A.,
            Ramachandran, R., Maskey, M., Nair, U. University of Alabama in Huntsville, Office of
            Vice President for Research. Submitted August 2, 2013. Funded ($5,000).

2012	Technology as a medium to effectively and efficiently educate nurses about organ donation and transplantation. Hoy, H. (PI), **Alexander, S.**, & Frith, K. Funded by NATCO 5/18/2012. ($5,838).
2012	Summer Research and Creative Experience for the Undergraduate. College of Nursing student Julie McDaniel. **Alexander, S.,** Frith, K.H. "Effect of Guided Relaxation and Biofeedback on Perceived Test Anxiety and Physiological Indicators of Stress." June, 2012-September, 2012. $5,000. Funded.
2011	Summer Research and Creative Experience for the Undergraduate. College of Nursing student Elizabeth Hale. **Alexander, S**., Hale, E., Hennigan, M.A., & Frith, K. H. "The Effects of GLP-1 Agonists on C-peptide Levels of Patients with Type 2 Diabetes." June, 2011-September, 2011. $3,000 (Stipend awarded to student).
2011-2012	UAHuntsville Research Infrastrucure Investment Grant Program. Hoy, H. (Principal Investigator), **Alexander, S**., Maskey, M., & Conover, H. "Development of a Web-Base Mobile Technology Application for Healthcare Providers in Transplant Care." May, 201 April, 2012. $74,910. Funded.
2011-2012	Junior Distinguished Faculty Research. Hoy, H. (PI), **Alexander, S.**, Frith, K. (Mentor). "The Effect of Transplant Education on Nurses' Attitudes towards Organ Donation and Plans to Work with Transplant Patients." December, 2011-December, 2012. $10,138. Funded.

TEACHING:

NUR 610-03: Family Nurse Practitioner I (Post-MSN certificate program)

NUR 734: Advanced Experiential Clinical

NUR 742: Program Evaluation in Nursing

NUR 729: Evidence-Based Practice Design & Translation

NUR 737: Interdisciplinary Leadership and Role Development for Practice Excellence

NUR 740: Advanced Health Policy

NUR 739: Scholarly Practice Project

NUR 738: Scholarly Project Development

NUR 660, NUR 661, NUR 662, NUR 663: Clinical Nurse Specialists: Clinical Track Supervision

NUR 610, NUR 611, NUR 612: Family Nurse Practitioner I, II, III: Course Management and Clinical Track Supervision (Traditional and Post-MSN Tracks)

NUR 602: Scholarly Inquiry for the Advanced Practice Nurse

NUR 605: Advanced Health Assessment

NUR 606: Advanced Pathophysiology

NUR 607: Pharmacology in Advanced Practice

NUR 419: Scholarly Inquiry in Nursing (RN-BSN)

NUR 407: Professional Practice in Nursing: Clinical Course Supervision

NUR 307: Scholarly Inquiry in Nursing (BSN)

SERVICE:

University:

2020	Faculty Senate
2020	Finance and Resources Faculty Senate Subcommittee
2020	UAH University Research Council
2019	UAH Graduate School Recruitment, Huntsville Hospital Lunch 'n Learn. (2019, March 8).
2018-2019	UAH Dean's Fifth Year Review Committee for Dr. William Wilkerson
2019	Focus Group: Office of Technology Commercialization
2018	UAH Library Placement Committee
2017-2018	Early Promotion to Nursing Program, Adopt-a-School Initiative (March, 2017). Decatur Heritage Christian Academy

2017	UAH OVPR New Faculty Funding Program Review Board
2015-2016	Joint Doctor of Nursing Practice Coordinating Committee Member: UA, UAB, & UAH Curriculum Subcommittee Member
2014-2015	University Graduate Council Member
2014-2015	Graduate Handbook Sub-Committee Member
2014-2015	New Faculty Research Fund Committee Member
2014-2015	Graduate Dean Search Committee Member
2014-2015	DNP Coordinating Committee
2013-2014	Learning Management System Task Force
2013-2014	University Graduate Council Member
2013-2014	University Commencement Committee Member
2013-2014	DNP Coordinating Committee Member
2012-2013	University Graduate Council Member
2012-2013	Chief Information Officer Search Committee Member
2012-2013	University Commencement Committee Member
2011-2013	University Commencement Committee Member

College:

2016-2020	College of Nursing Appointment, Promotion, & Tenure Committee
2018-2019	College of Nursing Appointment, Promotion, & Tenure Committee (Secretary)
2016-2018	College of Nursing Faculty Search Committee
2015-2016	College of Nursing Reappointment Committee Member
2015-2016	College of Nursing DNP Admissions Chair Committee

2015-2016	DNP Coordinator
2013-2014	RN-BSN Sub-curriculum Committee Chair
2013-2014	Doctor of Nursing Practice Task Force Member
2013-2014	MSN Admissions and Progression Committee Chair
2012-2013	RN-BSN Sub-curriculum Committee Chair
2012-2013	MSN Curriculum Transformation Task Force Chair
2012-2013	Doctor of Nursing Practice Task Force Member
2012-2013	MSN Admissions and Progression Committee Chair
2011-2012	RN-BSN Sub-curriculum Committee Chair
2011-2012	MSN Curriculum Transformation Task Force Chair
2011-2012	MSN Admissions and Progression Committee Chair
2011-2012	Doctor of Nursing Practice Task Force Member

Professional:

2021	HIMSS End User Product Testing
2020-2021	HIMSS21 Reviewer: Academic, Professional Development, Workforce Preparation Category
2020-2021	International Student One Health Alliance, Program Mentor.
2020	Greater-Birmingham Alliance to Stop Pollution (GASP) Advisory Council
2019	UA System Behavioral Health Conference, *Clinical Sessions in Behavioral Health.* Session co-chair (2019, October 28). Birmingham, AL.
2019	Promotion and Tenure Committee External Peer Reviewer, University of Southern Maine
2019	American Meteorological Society, *New Directions for Satellite Data: Applications in Health, Air Quality, Environmental Management, and Public Outreach.* Session co-chair (2019, January 8). Phoenix, AZ.

2018	International Biomedical Engineering Society Annual Meeting. *Biomedical Engineering Education.* Session co-chair. (2018, October 12).
2018	National Science Foundation, Peer Review Panel for Cyber-Physical Systems (Medium), Program Director Sylvia Spengler, Alexander, VA. (2018, July 17-18).
2016-2018	North Alabama Health Education Center DSME Chairperson-Advisory Board
2017-2017	Alabama Health Action Coalition, Steering Committee
2016-Present	*CIN Plus:* Editor-in-Chief
2016-Present	*Policy, Politics, and Nursing Practice* Peer Reviewer
2016-Present	*Big Data Nurses in Health IT Policy Workgroup* Member
2017-Present	Nurse Practitioner Alliance of Alabama, Immediate Past-President
2017-Present	Nurse Practitioner Alliance of Alabama, Executive Board
2015-Present	*Applied Clinical Informatics* Peer Reviewer
2015-2017	Business Council of Alabama Healthcare Committee
2015-Present	*CNS: The Journal for Advanced Practice Nursing* Column Editor
2015-Present	*CIN: Computers, Informatics, Nursing:* Editorial Board
2015-Present	*Journal of Nurse Practitioners* Peer Reviewer
2015-Present	*Clinical Nursing Research* Peer Reviewer
2015-2017	State of Alabama Governor's Task Force on Improving Health Care In Alabama
2015-2017	Alabama Board of Nursing Advisory Council for Advanced Practice Nurses
2014-Present	Center for Aging Huntsville, Alabama Scientific Advisory Board Member
2014	Promotion and Tenure Committee External Peer Reviewer Duke University School of Nursing
2014-Present	*CIN: Computers, Informatics, Nursing* Peer Reviewer
2014-2017	Alabama Board of Medical Examiners NP Advisory Committee Member

2014-2018	Alliance of International Nurses for Improved Health Literacy Steering Committee Charter Member
2013-2017	Nurse Practitioner Alliance of Alabama President
2013-2018	Nurse Practitioner Alliance of Alabama Steering Committee
2013	Nurse Practitioner Alliance of Alabama By-laws Committee
2012-2013	Health Resource and Services Administration Registered Grant Reviewer
2011-2013	American Nurses Credentialing Center Adult Gerontology Clinical Nurse Specialist. Content Expert Registry
2011-Present	*Online Journal of Issues in Nursing* Editorial Review Board
2011-2013	Elsevier Health Sciences Test Item Writer. Advanced Practice Nursing Exams
2011	*In Celebration of Nursing: A Symposium for Nurses* Program Planner
20102016	*Multimedia Educational Resource for Learning & Online Teaching* (MERLOT) Health Sciences Peer Reviewer
2010-2012	Sigma Theta Tau International Faculty Counselor—Beta Phi Chapter. Member of International Nurse Leader Review Committee
2010	*In Celebration of Nursing: A Symposium for Nurses* Program Planner
2010	Alabama Medicaid Agency Health Information Exchange Workgroup Member
2009-Present	McMaster Online Rating of Evidence (MORE) Sentinel Reader
2009	*In Celebration of Nursing: A Symposium for Nurses* Program Planner

Memberships

Nurse Practitioner Alliance of Alabama

National Organization of Nurse Practitioner Faculty

American Association of Nurse Practitioners

Healthcare Information and Management Systems Society

HONORS AND AWARDS:

2020	UAH Office of the Provost Faculty Award for Excellence in Research. Nominated by UAH College of Nursing. Award selection deferred due to campus closings resulting from COVID-19 outbreak.
2018	*American Journal of Nursing (AJN)* Book of the Year Award, First Place. *Applied Clinical Informatics for Nurses, 2nd Ed.* Alexander, S., Frith, K.H., & Hoy, H., Eds.
2018	Selected as a National League for Nursing Center of Excellence for Promoting the Pedagogical Expertise of Faculty. National League for Nursing Review Panel. 2018-2022
2015	Suzanne B. Smith Mentoring Award, International Academy of Nursing Editors
2014	Early Career Development Investigator Centers for Excellent P50 Proposal: Environmental Health Disparities Research University of Tennessee-Memphis Health Sciences Center
2014	Faculty Scholar Spotlight Award University of Alabama in Huntsville
2013	State Award for Excellence American Association of Nurse Practitioners
2013	Omicron Delta Kappa University of Alabama in Huntsville
2012	Outstanding Nurse Practitioner Regional Award Nurse Practitioner Alliance of Alabama
2010	Phi Kappa Phi University of Alabama in Huntsville
2009	Dean's List, School of Graduate Studies University of Alabama in Huntsville
2003	Outstanding Student Adult Nurse Practitioner Track University of Alabama at Birmingham
2001	Honor Scholar for Adult Health CNS Graduate program University of Alabama i Huntsville