

January, 2023

CURRICULUM VITAE

Name: SHEILA ANN ALEXANDER, PhD, RN

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3500 Victoria Street
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EDUCATION

Undergraduate

1984-1989 University of Pittsburgh B.S.N. Nursing
Pittsburgh, PA

Graduate

1996-2004 University of Pittsburgh PhD Nursing
Pittsburgh, PA

2002 National Institute of Nursing Research/ Summer Genetics Institute
Georgetown University
Washington, D.C.

APPOINTMENTS AND POSITIONS

Academic

1999-2004 University of Pittsburgh Research Associate
School of Nursing
Department of Acute/Tertiary Care
Pittsburgh, PA

2005 - 2014 University of Pittsburgh Assistant Professor
School of Nursing
Department of Acute/Tertiary Care
Pittsburgh, PA

2012 - 2014 University of Pittsburgh Assistant Professor
School of Medicine Secondary Appointment
Critical Care Medicine
Pittsburgh, PA

2014 - present University of Pittsburgh Associate Professor
School of Nursing
Department of Acute & Tertiary Care

	Pittsburgh, PA	
2014 - present	University of Pittsburgh School of Medicine Critical Care Medicine Pittsburgh, PA	Associate Professor Secondary Appointment
2018 - 2022	Clemson University School of Nursing College of Behavioral, Social and Health Sciences Clemson, SC	Adjunct Professor
2022-present	University of Pittsburgh School of Nursing Department of Acute & Tertiary Care Pittsburgh, PA	Interim Department Chair

Non-Academic

1988 – 1989	University of Pittsburgh Medical Center, Montefiore University Hospital, Pittsburgh, PA	Clinical Nurse III Neuro/General Surgical Unit
1989 – 1996	University of Pittsburgh Medical Center, Presbyterian University Hospital, Pittsburgh, PA	Clinical Nurse III / Charge Nurse Neurovascular Intensive Care Unit
1996 – 1999	University of Pittsburgh Medical Center, Western Psychiatric Institute and Clinic, Pittsburgh , PA	Assistant Nurse Clinical Manager Geriatric Program

LICENSURE AND CERTIFICATION

Expires 10/31/22	RN Licensure	RN 303668-L	Pennsylvania
2012-2016	Emergency Neurological Life Support Certification		

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

1992 - present	American Association of Neuroscience Nurses
2010-2018	Clinical Practice Guidelines (CPG) Editorial Board Member
2012, 2015,	
2018-present	Grant Review Committee
2017-2022	Abstract reviewer
2019-2022	Clinical Science Committee Neuroscience Research Agenda Task Force
1998 - 2004	Doctoral Nursing Student Organization

1999 - 2000 Vice President
 2000 - 2002 President

1999 -present Sigma Theta Tau, National Honor Society in Nursing (Eta Chapter)
 2005-2012,
 2014, 2016 Member, Grant Review Committee
 2010-2011 Chair
 2005-2007 Governance Committee
 2007-2009 President

2000- present Society of Critical Care Medicine
 2006-present Abstract Reviewer
 2000-present Nursing Section
 2006-present Research Committee
 2018-2020 Chair Elect
 2020-2021 Chair
 2021-present Immediate Past Chair
 2006-present Neuroscience Section, member
 2006-2015 Research Committee/Scientific Review Committee
 2012-2015 Vice-chair/Chair/Immediate Past Chair
 2008-2012 Practice Survey Committee
 2010-present Moderator, Professor Walk Rounds at annual congress
 2011-2014 Benchmarking Committee
 2012-2014 Vice-chair/Chair
 2012-2019 Norma J. Shoemaker Nursing Excellence Award Committee
 2014-present Research Section Member
 2014-2020 Research Section Steering Committee Member
 2016 Secretary/Treasurer
 2017-2020 Chair-Elect/Chair/Immediate Past Chair
 2015-2016 Research Clinical Trials Taskforce
 2015-2019 Congress Planning Committee
 2016-present Discovery Research Network Steering/Oversight Committee
 2021-2022 Chair-Elect
 2022-2023 Chair
 2023- present Immediate Past Chair
 2017-present Critical Care Knowledge Assessment Program (MCKCAP)
 2018-2020 Chair-Elect
 2020-2021 Chair
 2021-2022 Immediate Past Chair
 2018-2020 SCCM Critical Care Research Methodology and Career Trajectory Foundation Course,
 Planner, Moderator and Faculty
 2021-present Council member
 2021-present Audit committee member
 2022 Diversity, Equity, and Inclusion in Awards Taskforce
 2023-present SCCM Editor-in-Chief Search Taskforce

2000-2018 Eastern Nursing Research Society
 2005-2009 Abstract Reviewer

2001-present American Association of Critical Care Nurses
 2005-2008 Member, Grant Review Committee

2010-2013	Member, Grant Review Committee
2001-2009	Association of Clinical Research Professionals
2004-present	International Society of Nurses in Genetics
2005-2008	Member, Policy and Procedure Committee
2006-2016	Abstract Reviewer
2006-2009	Annual Conference Planning Committee
2009	Conference Planning Committee Co-chair
2007-2009	
2019-present	Research Committee
2009-2011	Member-At-Large
2011-2014	Chapters Taskforce
2012-2018	Education Committee
2012-2014	Co-chair
2014-2015	Annual Conference Planning Committee
2013-2016	President Elect/President/Immediate Past President
2005-2017	Council for the Advancement of Nursing Science
2009-2017	Abstract Reviewer
2007-present	National Neurotrauma Society
2010-2012	Abstract Reviewer
2007-present	Women in NeuroTrauma Research (WINTR) member
2010-present	Neurocritical Care Society
2011-2012	Conference Planning Committee
2012-2013	Moderator, Professor Walk Rounds at annual congress
2012-present	Women in Neurocritical Care (WINC) member
2013-2016	Abstract Reviewer
2018-2019	Thought Leader/Faculty, 5 th Annual Neurocritical Care Research Conference: The future of Neurocritical Care Research- Looking for a Blue Ocean.
2020-present	Neurocritical Care Society Curing Coma Campaign/NINDS Common Data Elements for Coma and Disorders of Consciousness: Biospecimens Workgroup member
2015-present	American Nurses Association/Pennsylvania State Nurses Association
2018-present	Association of Women in Science

HONORS

1999	Sigma Theta Tau, International Honor Society of Nursing member
2004	Elizabeth Lloyd Noroian Scholarship, University of Pittsburgh School of Nursing
2008	Sigma Theta Tau, International Honor Society of Nursing Eta Chapter Leadership in Nursing Research Award
2009	Research Award, Neurology Specialty, Society of Critical Care Medicine.

- 2009 Semi-finalist, Robert Wood Johnson Nurse Faculty Scholars Program
- 2010 Presidential Citation for outstanding contributions to the Society of Critical Care Medicine
- 2010 Fellow, Provost Faculty Diversity Seminar
- 2011 Dean's Distinguished Teaching Award Recipient
- 2011 Abstract Presentation Judge, 9th Annual Safar Symposium
- 2012 International Society of Nurses in Genetics Founders Award for Excellence in Education
- 2015 Presidential Citation for outstanding contributions to the Society of Critical Care Medicine
- 2016 Fellow, Academy of Critical Care Medicine
- 2016 Presidential Citation for outstanding contributions to the Society of Critical Care Medicine
- 2016 Abstract Presentation Judge, 14th Annual Safar Symposium
- 2017 PA Nightingale Award for Nursing Research Awardee
- 2018 Thought Leader/Faculty, 5th Annual Neurocritical Care Research Conference: The future of Neurocritical Care Research- Looking for a Blue Ocean.
- 2018 Presidential Citation for outstanding contributions to the Society of Critical Care Medicine
- 2018 Most Valuable Professor, Women's Basketball team
- 2019 Abstract Presentation Judge, 17th Annual Safar Symposium
- 2019 University of Pittsburgh Women in Academic Leadership (WIN-AL) program
- 2019 Presidential Citation for outstanding contributions to the Society of Critical Care Medicine
- 2019-2020 International Neuroscience Nursing Research Symposium speaker (annual)

PUBLICATIONS

Refereed Articles (* = data-based)

1. Lovasik, D., Kerr, M.E., **Alexander, S.** (2001). Traumatic brain injury (TBI) research: A review of clinical studies. *Critical Care Nursing Quarterly*, 23(4), 24-41. PMID: 11852948.
2. *Lorenzi, L., Kerr, M.E., **Alexander, S.**, Crago, E., Yonas, H. (2003). Influence of delaying treatment

after symptoms develop from subarachnoid hemorrhage (SAH) on outcome. *Journal of Neuroscience Nursing*, 35 (4), 210-214. PMID: 12942655

3. ***Alexander, S.**, Kerr, M.E., Yonas, H., Marion, D.W. (2004). The effects of admission alcohol level on CBF and outcomes after severe TBI. *Journal of Neurotrauma*, 21(5), 575-583. PMID: 15165365
4. *Kerr, M.E., Kamboh, M.I., Kong, Y., **Alexander, S.**, Yonas, H. (2006). Apolipoprotein E genotype and CBF in traumatic brain injured patients. *Advances in Experimental Medicine and Biology*, 578; 291-296. PMID: 16927707
5. ***Alexander, S.**, Kerr, M.E., Kim, Y., Kamboh, M.I., Beers, S.R., Conley, Y. (2007). APOE 4 allele presence and functional outcomes after severe traumatic brain injury. *Journal of Neurotrauma*, 24(5), 790-797. PMID: 17518534
6. *Lantern, L., Ruigrok, Y., **Alexander, S.**, Tang, J., Biroli, F., Dunn, L.T., Poon, W.S. (2007). Meta-analysis of APOE genotype and subarachnoid hemorrhage: clinical outcome and delayed ischemia. *Neurology*, 69(8), 776-84. PMID: 17709709
7. *Barr, T., **Alexander, S.**, Crago, E., Horowitz, M.B., Yonas, H., Kerr, M.E. (2008). Endovascular coiling versus surgical clipping and outcomes after SAH. *Neurosurgery Quarterly*. 18(1); 16-21.
8. **Alexander, S. A.**, Beach, M. (2008). Genes and acute neurologic disease and injury: A primer for the neurological intensive care nurse. *Critical Care Nursing Clinics of North America*.20(2);203-12. doi: 10.1016/j.ccell.2008.01.001.PMID: 18424349
9. ***Alexander, S. A.**, Kerr, M.E., Balzer, J., Horowitz, M., Kassam, A., Kim, Y., Hoffman, L., Conley, Y. (2008). Cerebrospinal fluid apolipoprotein E, calcium and cerebral vasospasm after subarachnoid hemorrhage. *Biological Research for Nursing*. 10(2); 102-112. PMID: 18829593
10. *Gallek, M., Sherwood, P., Horowitz, M. B., Kassam, A., Conley, Y., **Alexander, S.** (2009). APOE genotype and functional outcome following aneurysmal subarachnoid hemorrhage. *Biological Research for Nursing*. 10 205-212. doi: 10.1177/1099800408323221. PMID: 19017669. PMCID: 2744368.
11. Carwile, E., Wagner, A., Crago, E., **Alexander, S.** (2009). Estrogen and Stroke: A review of the literature. *Journal of Neuroscience Nursing*.41(1): 18-25. PMID: 19368068.
12. Presciutti, M., **Alexander, S.**, Schmidt, M. (2009). Neuro-monitoring in intensive care focus on microdialysis and nursing implications. *Journal of Neuroscience Nursing*. 41(3): 131-139. PMID: 19517763
13. *Puccio, A. M., Hoffman, L. A., Bayir, H., Zullo, T. G., Fischer, M. Darby, J., **Alexander, S.**, Dixon, C. E., Okonkwo, D. O., Kochanek, P. M. (2009). Effect of Short Periods of Normobaric Hyperoxia on Local Brain Tissue Oxygenation and Cerebrospinal Fluid Oxidative Stress Markers in Severe Traumatic Brain Injury. *Journal of Neurotrauma*, 36; 1241-1249. doi: 10.1089/neu.2008-0624. PMID: 19505175. PMCID: 2850254.
14. ***Alexander, S. A.**, Poloyac, S. M., Hoffman, L., Gallek, M., Ren, D., Balzer, J., Kassam, A., B., Conley, Y. (2009). Endothelial Nitric Oxide Synthase Tagging Single Nucleotide Polymorphisms and Recovery from Aneurysmal Subarachnoid Hemorrhage. *Biological Research for Nursing*. 11 (1): 42-52. doi: 10.1177/1099800409334751. PMID: 19419976. PMCID: 2938012

15. * Chuang P, Conley YP, Poloyac SM, Okonkwo DO, Ren D, Sherwood PR, Hravnak MT, **Alexander S.A.** (2010) Neuroglobin genetic polymorphisms and their relationship to functional outcomes after traumatic brain injury. *Journal of Neurotrauma*. 2010; 27 (6):999-1006. doi: 10.1089/neu.2009.1129. PMID: 20345238. PMCID: 2943497.
16. * Hoh, N. Z., Wagner, A. K., **Alexander, S.**, Clark, R., Beers, S. R., Okonkwo, D. O., Ren, D., Conley, Y. P. (2010) BCL2 Genotypes: Functional and Neurocognitive Outcomes after Severe Traumatic Brain Injury. *Journal of Neurotrauma*. 27(8): 1413-1427. doi: 10.1089/neu.2009.1256. PMID: 20504155. PMCID: 2967822. PMCID: 2967822.
17. Barr, T., **Alexander, S.**, Conley, Y. (2011). Gene Expression Profiling for Discovery of Novel Targets in Human Traumatic Brain Injury. *Biological Research for Nursing*. 13(2): 140-53. doi: 10.1177/1099800410385671. PMID 21112922
18. *Thampatty B.P., Sherwood P.R., Gallek M., Crago E.A., Hricik A.J., Kuo C.J., Klamerus M.M., **Alexander S.A.**, Bender C., Hoffman L.A., Horowitz M.B., Kassam A.B., Poloyac S.M. (2011) Role of endothelin-1 in human aneurysmal subarachnoid hemorrhage: Associations with vasospasm and delayed cerebral ischemia. *Neurocritical Care*. 15(1): 19-27. doi: 10.1007/s12028-011-9508-9. PMID: 21286855. PMCID: 3134137.
19. *Gallek M., **Alexander S.**, Crago E., Sherwood P., Horowitz M., Poloyac S., Conley Y. (2013) Endothelin-1 and Endothelin Receptor Gene Variants and Their Association with Negative Outcomes Following Aneurysmal Subarachnoid Hemorrhage. *Biological Research for Nursing*. 15(4): 390-7. doi:10.1177/109980041245964. PMID: 22997346. PMCID: 3758781.
20. *Conley, Y.P., Okonkwo, D., Deslouches, S., **Alexander, S.**, Puccio, A., Beers, S., Ren, D. (2014). Mitochondrial Polymorphisms Impact Outcomes after Severe Traumatic Brain Injury. *Journal of Neurotrauma*. 31(1): 34-41. doi: 10.1089/neu2013.2855. PMID: 23883111. PMCID: 3880110.
21. *Kantor, E. Bayir, H., Ren, D., Provencio, J. J., Watkins, L., Crago, E., Horowitz, M.B., Ferrell, R.E. Conley, Y.P., **Alexander, S., A.** (2014). Haptoglobin Genotype and Functional Outcome after Aneurysmal Subarachnoid Hemorrhage. *Journal of Neurosurgery*. 120(2) 386-90. DOI: 10.3171/2013.10.JNS13219. PMID 24286153. PMCID: 4544750.
22. ***Alexander, S.**, Ren, D., Gunn, S., Kochanek, P., Tate, J., Ikonovic, M., Conley, Y. (2014) Interleukin-6 and apolipoprotein E as predictors of acute brain dysfunction and survival in ICU Patients. *American Journal of Critical Care*. 23(1): 49-57. doi: 10.4037/ajcc2014578. PMID: 24382617. PMCID: 4809634. Highlighted in AJCC ‘Evidence-based review and discussion points’ with interview by guest editor R. Hickman.
23. Li, Z., & **Alexander, S.A.** (2015) Current Evidence in the Management of Post-stroke Shoulder Pain. *Journal of Neuroscience Nursing*. 47(1): 10-19. doi: 10.1097/JNN.000000000000109. PMID 25503543.
24. *Gallek, M.J., **Alexander, S.A.**, Crago, E., Sherwood, P.R., Klamerus, M., Horowitz, M.B., Poloyac, S.M., & Conley, Y. (2015) Endothelin-1 gene polymorphisms influence cerebrospinal fluid endothelin-1 levels following aneurysmal subarachnoid hemorrhage. *Biological Research for Nursing*. 17(2):185-90. doi: 10.1177/1099800414536261. PMID: 24852947.
25. Gopalakrishna, A. & **Alexander, S. A.** (2015). Understanding Parkinson disease: A complex and multifaceted illness. *Journal of Neuroscience Nursing*. 47(6):320-26. doi: 10.1097/JNN.000000000000162. PMID: 26528949.

26. *Giorgino, M.M., Kress, T., **Alexander, S. A.** & Beach, M. (2015). Emergency preparedness education for nurses: Core competency familiarity measured utilizing an adapted emergency preparedness information questionnaire (EPIQ). *Journal of Trauma Nursing*. 22(5); 240-8. doi: 10.1097/JTN.000000000000148. PMID: 26352654
27. *Hoffman, S.L., Kaufman, R., Ferrari, S., **Alexander, S.**, Rosenzweig, M., & Wesmiller, S. (2016). Beyond BRCA: A pilot program to assess and improve knowledge of pharmacogenomic testing among advanced practice providers in a breast cancer treatment setting. *Journal of the Advanced Practitioner in Oncology*. 7, 382-9. doi:10.6004/jadpro.2016.7.4.2
28. *Khalil, H., Sereika, S.M., Dai, F., **Alexander, S.**, Conley, Y., Gruen, G., Meng, L., Siska, Pl, Tarkin I., & Henker, R. (2016). OPRM1 and COMT gene-gene interaction is associated with postoperative pain and opioid consumption after orthopedic trauma. *Biological Research for Nursing*, 19(2); 170-179. doi: 10.1177/10990800416680474.
29. *Osier, N.D., Bales, J.W., Pugh, B., Shin, S., Wyrobek, J., Puccio, AM., Okonkwo, D.O., Ren, D., **Alexander, S.**, Dixon, C.E., Conley, Y.P. (2017) Variation in PPP3CC is associated with long-term recovery after severe brain injury. *Journal of Neurotrauma*, 34(1); PMID: 27225880 doi:10.1089/neu2015.4343
30. Osier, N. D., Pham, L., Savarese, A., Sayles, K., & **Alexander, S.** (2016) Animal models in genomic research: Techniques, applications and roles for nurses. *Applied Nursing Research*, 32; 247-56. Doi:10.1016/j.anpr.2016.07.016.
31. *Osier, N.D., Pham, L., Pugh, B.J., Puccio, A., Ren, D., Conley, Y.P., **Alexander, S.**, & Dixon, C.E. (2017) Brain injury results in lower levels of melatonin receptors subtypes MT1 and MT2. *Neurosci Lett*. 650; 18-24. doi: 10.1016/j.neulet.2017.03.053. Epub 2017 Apr 2. PMID:28377323
32. **Alexander, S.A.**, Kalmakis, K., Stewart Fahs, P. S., Groth, S. W. & Chasens, E. R. (2017) Biological markers in nursing research. *Journal of Nursing Measurement*, 25(2); 275-91. <http://dx.doi.org/10.1891/1061-3749.25.2.1>
33. *Smithburger, P.L., Korenoski, A.S., **Alexander, S.A.**, & Kane-Gill, S.L.(2017). Perceptions of family members, nurses, and physicians on involving the patients' families in delirium prevention activities: A qualitative study. *Critical Care Nurse*, 37 (6): e1-e9. doi: 10.4037/ccn2017485.
34. *Smithburger, P.L., Korenoski, A.S., Kane-Gill, S.L., & **Alexander, S.A.** (2017). Perceptions of family members, nurses, and physicians on involving patients/families in delirium prevention. *Critical Care Nurse*, 37(6): 48-57. doi: 10.4037/ccn2017901.
35. *Anderson, M., Elmer, J., Shutter, L., Puccio, A., & **Alexander, S.** (2018). Integrating quantitative pupillometry into regular care in a Neuro-Trauma Intensive Care Unit. *Journal of Neuroscience Nursing*, 50(1); 30-36. doi: 10.1097/JNN.0000000000000333. PMID: 29303836.
36. *Wright Heinsberg, L., Turi, E., Ren, D., Crago, E., **Alexander, S.**, Grimes Stanfill, A., & Conley, Y. (2018). Association of APOE genotype with activities of daily living following aneurysmal subarachnoid hemorrhage. *Biological Research for Nursing*, 20(2); 177-82. doi: 10.1177/1099800417746504. PMID: 29258400. PMCID: PMC5942520.
37. Bulters D., Gaastra B., Zolnourian A., **Alexander S.**, Ren D., Blackburn S., Borsody M., Doré S., Galea

- J., Iihara K., Nyquist P. & Galea I. (2018). Haemoglobin scavenging in intracranial bleeding: biology and clinical implications. *Nature Reviews Neurology*, published online 06-20-2018. doi: 10.1038/s41582-018-0020-0. PMID: 29925923.
38. *Paik G.P., Henker H., Appel N., Meng L., Bircher N., Sereika S., **Alexander S.A.**, & Henker R. (2018). Accuracy of temporal artery thermometry as an indicator of core body temperature in patients receiving general anesthesia. *Journal of PeriAnesthesia Nursing*. 34(2): 330-337. doi: 10.1016/j.jopan.2018.05.001. PMID: 30033001
39. Osier N., McGreevy E., Pham L., Puccio A., Ren D., Conley Y.P., **Alexander S.**, & Dixon C.E. (2018). Melatonin as a therapy for traumatic brain injury: A review of published evidence. *International Journal of Molecular Science*. 19; 1539. doi:10.3390/ijms19051539. PMID:29786658. PMCID: PMC5983792.
40. *Gaastra, B., Ren, D., **Alexander, S.**, Bennett, E.R., Bielawski, D.M., Blackburn, S. L., Borsody, M.K. Dore, S., Galea, J., Garland, P., He, T., Iihara, K., Kawamura, Y., Leclerc, J.L., Meschia, J.F., Pizzi, M.A., Tamargo, R. J., Yang, W., Nyquist, P.A., Bulters, D.O., and Galea, I., (2019). Haptoglobin genotype and aneurysmal subarachnoid hemorrhage: Individual patient data analysis. *Neurology*, 92(18): e2150-e2164. Doi:10.1212/WNL.00000000000007397. PMCID: PMC6512887.
42. **Alexander, S. A.** (2019). Genetics of Neurodegenerative Diseases for the Advanced Practice Provider. *Journal of the American Association of Nurse Practitioners*, 31(5); 282-284. doi:10.1097/JXX.0000000000000237.
43. Hocker, S., Shah, S., Vespa, P., Provencio, J.J., Calvillo, E., Olson, D., Rau, C.V., Hemphill, C., Helbok, R., Human, T., Kamel, H., Madden, L., Nyquist, P., Benth. O., O'Phelan, K., Lewin, J., **Alexander, S.**, Zai, W., Chou, S., Rincon, F., McNett, M., Ko, N., Zink, E., Rhoney, D., Diringer, M., Stevens, R., Robertson, C., Silva, G. S., Shutter, L., Ling, G., Rehman, M., Mahmoud, S.H., Yeager, S., Livesay, S., & Suarez, J. (2019). The future of neurocritical care research: Proceedings and recommendations from the fifth neurocritical care research network conference. *Neurocritical Care*, 32: 311-16. doi: 10.1007/s12028-019-00767-8.
44. *Mellett, K., Ren, D., **Alexander, S.**, Osier, N., Beers, S. R., Okonkwo, D. O., Puccio, A.M., & Conley, Y.P. (2020). Relationship between variation in the TP53 gene and patient outcomes following severe traumatic brain injury. *Biologic Research for Nursing*, 22(3): 334-40. epub ahead of print. doi: 10.1177/109980042091233 . PMID: 32207313. PMCID: PMC7492776.
45. Gao, W., Baumgartel, K.L., & **Alexander, S.** (2020). The gut microbiome as a component of the gut-brain axis in cognitive health. *Biologic Research for Nursing*, 22(4): 485-94. doi: 10.1177/1099800420941923 . PMID: 35176247.
46. **Alexander, S.** (2020). Targeted temperature management. *The Chinese Journal of Emergency and Critical Care Nursing*.
47. **Alexander, S.** (2021). Intensive care unit nursing priorities in the US. *Critical Care Nursing Clinics of North America*. 33(1): 1-108. doi: 10.1016/j.cnc.2020.10.001. PMID: 33516194.
48. Verhoef, P.A., Kannan, S, Sturgill, J.L., Tucker, W.W., Morris, P.E., Miller, A.C., Sexton, T.R., Koyner, J.L., Hejal, R, Brakenridge, S.C., Moldawer, L.L., Hotchkiss, R.S., Blood, T.M., Mazer, M.B., Bolesta, S., **Alexander, S.A.**, Armaignac, D.L., Shein, S.L., Jones, C., Hoemann, C.D., Doctor, A., Friess, S.H., Parker, R.L., Rotta, A.T., and Remy, K.E. for the Basic and Translational Science Committee of the Research Section for the Society of Critical Care Medicine. (2021). SARS-CoV-2 infection and organ

dysfunction in the ICU: Opportunities for translational research. *Critical Care Explorations*, 3(3): e3074. doi: 10.1097/CCE.0000000000000374.ecollection 2021 MAR. PMID: 33786450. PMCID: PMC7994036.

49. *Liu, D., Arockiaraj, A.I., Shaffer, J. R., Poloyac, S. M., Sherwood, P.R., **Alexander, S.A.**, Crago, E. A., Weeks, D. E., & Conley, Y.P. (2021). ANGPT1 methylation and delayed cerebral ischemia in aneurysmal subarachnoid hemorrhage patients. *Epigenetics Communications* 1:3. doi: 10.1186/s43682-021-00001-7. PMID: 35359917. PMCID: PMC8967216.
50. Claassen, J., Akbari, Y., **Alexander, S.**, Bader, M.K., Bell, K., Bleck, T.P., Boly, M., Brown, J., Chou, S., Diring, M.N., Edlow, B., Foreman, B., Giacino, J.T., Gosseries, O., Green, T., Greer, D.M., Hanley, D., Hartings, J., Helbok, R., Hemphill, J.C., Hinson, H., Hirsch, K., Human, T., James, M., Ko, N., Kondziella, D., Livesay, S., Madden, L., Mainali, S., Mayer, S., McCredie, V., McNett, M.M., Meyfroidt, G., Monti, M.M., Muehlschlegel, S., Murthy, S., Nyquist, P., Olson, D.M., Provencio, J.J., Rosenthal, E., Sampaio, G., Sarasso, S., Schiff, N.D., Sharshar, T., Shutter, L., Stevens, R., Vespa, P., Videtta, W., Wagner, A., Ziai, W., Whyte, J., Zink, E., & Suarez, J.I. (2021). Proceedings of the first Curing Coma Campaign NIH symposium: challenging the future of research for coma and disorders of consciousness. *Neurocritical Care*, 35: S4-S23. doi: 10.1009/s12028-021-01260-x . PMID: 34236619. PMCID: PMC8264966.
51. *Heinsberg, L.W., Weeks, D.E., **Alexander, S.A.**, Min, P.R., Poloyac, S.M., Deslouches, S., Crago, E.A., & Conley, Y.P. (2021). Iron homeostasis pathway DNA methylation trajectories reveal a role for STEAP3 metalloredutase in patient outcomes after aneurysmal subarachnoid hemorrhage. *Epigenetics Communications*, 1:4. doi: 10.1186/s43682-021-00003-5. PMID: 35083470. PMCID: PMC8788201.
52. Gaastra, B., **Alexander, S.**, Bakker, M.K., Bhagat, H., Bijlenga, P., Blackburn, S., Collins, M.K., Dore, S., Griessenauer, C., Hendrix, P., Hong, E.P., Hostettler, I.C., Houlden, H., Ihara, K., Jeon, J.P., Kim, B.P., Kumar, M., Morel, S., Nyquist, P., Ren, D., Ruigrok, Y.M., Werring, D., Galea, I., Bulters, D., & Tapper, W. (2021). Genome-wide association study of clinical outcome after aneurysmal subarachnoid hemorrhage: Protocol. *Translational Stroke Research*, doi: 10.1007/s12975-021-00978-2 . PMID: 34988871.
53. Hinkle, J.L., **Alexander, S.A.**, Avanecean, D., Batten, J., Bautista, C., Hundt, B., & Rhudy, L. (2022). Research priority setting: The current landscape of neuroscience nursing research. *JNN*, 54(2): 55-60. PMID: 35149626. doi:10.1097/JNN.0000000000000638.
54. *Bautista, C., Hinkle, J.L., **Alexander, S.A.**, Hundt, B., & Rhudy, L. (2022). A Delphi study to establish research priorities for neuroscience nursing. *JNN*, 54(2): 74-79. PMID: 35149624. doi:10.1097/JNN.0000000000000637.
55. ***Alexander, S.A.**, Conley, Y.P., Girard, T.G., McVerry, B.J., & Ren, D. (2022). Temporal inflammatory gene methylation and delirium in the critically ill. *American Journal of Critical Care*, 31(5): 367-374. PMID: 36045041. doi: 10.4037/ajcc2022225.
56. *Eaton, T.L., Scheunemann, L.P., Butcher, B.W., Donovan, H.S., **Alexander, S.**, & Iwashyna, T.J. (2022). The prevalence of spiritual and social support needs and their association with post-intensive care syndrome (PICS) symptoms among critical illness survivors seen in a post-intensive care unit (ICU) follow-up clinic. *Critical Care Explorations*, 4(4): e0676. PMID: 35425905. PMCID: PMC9000047. doi:10.1097/CCE2000000000000676
57. *Eaton, T.L., Sevin, C., Hope, A., **Alexander, S.**, & Iwashyna, J. (2022). Evolution in care delivery within critical illness recovery programs during the COVID-19 pandemic: A qualitative study. *Annals of*

the American Thoracic Society. PMID: 35731631 doi: 10.1513/AnnalsATS.202203-2550C

58. Mainaili, S., Aiyagari, V., **Alexander, S.**, Bodien, Y., Boerwinkle, V., Boly, M., Brown, E., Brown, J., Claasen, J., Edlow, B.L., Fink, E., Fins, J.J., Foreman, B., Frontera, J., Geocadin, R.G., Giacino, J., Gilmore, E.J., Gosseries, O., Hammond, F., Helbok, R., Hemphill, J.C., Hirsch, K., Kim, K., Laureys, S., Lewis, A., Ling, G., Livesay, S.L., McCredie, V., McNett, M., Menon, D., Molteni, E., Olson, D., O'Phelan, K., Park, S., Polizzotto, L., Provencio, J.J., Puybasset, L., Rao, C.P.V., Robertson, C., Rohaut, B., Rubin, M., Sharshar, T., Shutter, L., Silva, G.S., Smith, W., Stevens, R.D., Thibaut, A., Vespa, P., Wagner, A.K., Ziai, W.C., Zink, E., Suarez, J.I., & the Curing Coma Campaign collaborators. (2022). Proceedings of the Second Curing Coma Campaign NIH Symposium: Challenging the Future of Research for Coma and Disorders of Consciousness. *Neurocritical Care*. 37; 326-350. PMID: 35534661. doi: 10.1007/s12028-022-01505-3
59. *Gaastra, B., Ren, D., **Alexander, S.**, Blackburn, S., Dore, S., Nyquist, P., Butters, D., & Galea, I. (In press). Evidence-based interconversion of the Glasgow outcome and modified Rankin scales: Pitfalls and best practices. *Journal of Stroke and Cerebrovascular Disease*.
60. *Eaton TL, Lewis A, Donovan HS, Davis BC, Butcher BW, **Alexander S**, Iwashyna TJ, Scheunemann LP, Seaman J. (In press). Examining the Needs of Survivors of Critical Illness Through a Palliative Care Lens: A Qualitative Study of Patient Experiences. *Intensive and Critical Care Nursing*
61. *Perpetua, Z., Hayden, P., **Alexander, S.** (In press). Increasing Self-efficacy and Knowledge of Cardiac Arrhythmias for Medical Surgical Nurses. *MEDSURG Nursing*

Pending

62. *Gaastra, B. **Alexander, S.**, Bakker, M.K., Bhagat, H., Bijlenga, P., Blackburn, S., Collins, M.K., Doré, S., Griessenauer, C., Hendrix, P., Hong, E.P., Hostettler, I.C., Houlden, H., Iihara, K., Jeon, J.P., Kim, B.J., Li, J., Morel, S., Nyquist, P., Ren, D., Ruigrok, Y.M., Werring, D., Tapper, W., Galea, I., & Bulters, D. (In review). A genome wide association study of outcome after aneurysmal subarachnoid haemorrhage: discovery analysis.
63. *Eaton, TL., Lincoln, TE., Lewis, A., Davis, BC., Sevin, CM., Valley, TS., Donovan, HS., Seaman, J., Iwashyna, TJ., **Alexander, SA.**, Scheuneman, LP. (In review). Palliative Care in Survivors of Critical Illness: A Qualitative Inquiry of International Post-Intensive Care Unit (ICU) Program Clinicians.

Text and Chapters

1. **Alexander, S.** (2013). **Evidence-Based Nursing Care for Stroke and Neurovascular Conditions.** Wiley-Blackwell, Ames, IA.
2. **Alexander, S.** (2016) .**Chapter 12. Neurologic System.** In **Genomic Essentials for Graduate Level Nurses**, Editors: Diane Seibert, Quannetta Edwards, Ann Maradiegue, and Susan Tinley. Destech Publications, Lancaster, PA. ISBN: 978-1-60595-094-5
3. **Alexander, S.** & Groves, M. (2019). **Chapter 3. Molecular Biology and Genetics In Advanced Physiology and Pathophysiology: Essentials for Clinical Practice**, Editor: Nancy Tkaacs.
4. Lozano, M. & **Alexander, S.** (2021). **Chapter 2. Cellular Physiology of the Nervous System in Section 1. Neuroscience Foundations and Concepts**, American Association of Neuroscience Nurses Core Curriculum. Editors: DaiWai Olson & Molly McNett.

5. **Alexander, S. & Groves, M. (2022). Chapter 3. Molecular Biology and Genetics In Advanced Physiology and Pathophysiology: Essentials for Clinical Practice, 2nd Edition, Editor: Nancy Tkacs.**

Other Invited Publications

1. **Alexander, S.A.,** Gallek, M., Presciutti, M., Zrelak, P. (2008). Care of the patient with subarachnoid hemorrhage: A guide for clinical nurses. American Association of Neuroscience Nurses Clinical Practice Guideline Series (<http://www.aann.org/pubs/guidelines.html>).
2. Conley, Y.P. & **Alexander, S.** (2011). Genomic, Transcriptomic, and Epigenomic Approaches to Recovery following Acquired Brain Injury. *Physical Medicine & Rehabilitation*; S52-58. doi: 10.1016/j.pmrj.2011.04.004. PMID: 21703581.
3. **Alexander, S.A.** & Provencio, JJ. (2014) Editorial Response: Haptoglobin Genotype. *Journal of Neurosurgery*, 120(2); 384-5. PMID: 24645183.
4. Puccio, A.M. & **Alexander, S.A.** (2015) Genomics, Transcriptomics and Epigenomics in TBI Research. *Annual Reviews in Nursing Research*, 33(1): 75-109. doi: 10.1891/0739-6686.33.75. PMID: 25946384.
5. **Alexander, S.A.** (2017). Announcing the Primer in Genetics and Genomics Series. *Biological Research for Nursing*, 19(1); 5-6. Doi: 10.1177/1099800416677094.
6. Maserati, M. & **Alexander, S.** (2018). Genetics and genomics of acute neurologic disorders. *AACN Advanced Critical Care*. 29(1); 57-75.
7. **Alexander, S.A.** (2018). Primer in Genetics and Genomics Series: Final Remarks. *Biological Research for Nursing*, 20(3); 253-254.
8. **Alexander, S.A.** (2018). Five ways to find research opportunities outside academia. *Critical Connections*, July, 2018

Published Abstracts

1. **Alexander, S.,** Kerr, M.E., Bullian, L., Marion, D. (2001). Effect of alcohol intoxication on cerebral blood flow and outcomes following a severe traumatic brain injury. *Critical Care Medicine*, 28(12) A206 (Suppl.).
2. Kerr, M.E., Nemoto, E. Yonas, H., Kassam, A., Crago, E., **Alexander, S.** (2001). Vasospasm detection following SAH using cerebral oximetry. *Critical Care Medicine*, 28 (12) A208 (Suppl).
3. Lorenzi, L., Kerr, M.E., Yonas, H., Kassam, A, **Alexander, S.,** Crago, E. (2001). Influence of delaying treatment after symptoms develop from subarachnoid hemorrhage (SAH) on outcome: A preliminary analysis. *Critical Care Medicine*, 28 (12) A 209 (Suppl).
4. Kerr, M.E., **Alexander, S.,** Kim, Y., Kamboh, I., Marion, D. (2001). Effect of Apolipoprotein E genotype on cerebral blood flow in traumatic brain injured patients. *Critical Care Medicine*, 29 (12) A6 (Suppl).
5. **Alexander, S.,** Kim, Y., Kerr, M.E., Yonas, H. (2002). A Comparison of psychometric qualities of the

SF-36 Physical Function Subscale and the Barthel Index in the subarachnoid hemorrhage population. *Critical Care Medicine*, 29 (12) A133 (Suppl).

6. Beatty, M.G., Kerr, M.E., **Alexander, S.**, Beers, S., Marion, D. (2002). Effects of the APOE Allele on memory following traumatic brain injury (TBI). *Critical Care Medicine*, 29 (12) A33 (Suppl).
7. Puccio, A.M., Kim, Y., Kerr, M.E., Beers, S.R., Wagner, A., **Alexander, S. A.**, and Marion, D.W. (2002). Psychometric analysis of the functional independence measure in severe traumatic brain injury: A comparison to the Glasgow outcome scale. *Critical Care Medicine*, 30 (12), A283 (Suppl).
8. Kim, Y., Kerr, M.E., **Alexander, S.**, and Yonas, H. (2002). Use of structural equation modeling (SEM) in quality of life measurement in the subarachnoid hemorrhage population. *Quality of Life Research*, 11(7), 671 (Suppl).
9. Kim, Y., Kerr, M.E., Puccio, A.M., Beers, S.R., **Alexander, S.**, and Crago, E. A. (2003). Repeatability and responsiveness of the FIM, DRS, and NRS in patients with severe traumatic brain injury. *Critical Care Medicine*, 30 (12), A565 (Suppl).
10. Puccio, A.M., Kim, Y., Kerr, M.E., Beers, S.R., Wagner, A., **Alexander, S.**, and Marion, D.W. (2003). Reliability and validity of the Functional Independence Measure in severe traumatic brain injury, *Eastern Nursing Research Society*, p. 116 [The Best Student Presentation Award].
11. **Alexander, S.**, Kerr, M.E., Yonas, H., (2004). Cerebrospinal fluid (CSF) calcium as a biomarker of vasospasm after subarachnoid hemorrhage (SAH). *Critical Care Medicine*, 31 (12) A11 (Suppl).
12. **Alexander, S.**, Kerr, M.E., Conley, Y., Yonas, H. (2005). Cerebrospinal fluid calcium levels and cerebral vasospasm after subarachnoid hemorrhage. *Biological Research for Nursing*, 6 (4) p. 301.
13. **Alexander, S.**, Kerr, M.E., Conley, Y., Kong, Y., Yonas, H. (2004). Apolipoprotein E Genotype and outcomes in the subarachnoid hemorrhage population. *Nursing and Health Sciences*, 7 (2), pp 143-44.
14. **Alexander, S.**, Walter, K., Conley, Y. (2006). APOE genotype and Glasgow Coma Score after severe traumatic brain injury. *Critical Care Medicine*, 33:A293 (Suppl.).
15. **Alexander, S.**, Gallek, M., Poloyac, S., Horowitz, M., Kassam, A., Conley, Y. (2007). eNOS Tagging SNPs and CV after SAH. *Critical Care Medicine*, 34 (Suppl.).
16. Gallek, M.J., Sherwood, P., Crago, E., **Alexander, S.**, Hoffman, L.A., Poloyac, S.M., Horowitz, M. (2007). Endothelin-1 cerebrospinal fluid levels are associated with the development of cerebral vasospasm in aneurysmal subarachnoid hemorrhage patients. *Critical Care Medicine*, 34:A80 (Suppl).
17. **Alexander, S.**, Poloyac, S., Balzer, J., Hoffman, L., Gallek, M., Kassam, A., Ren, D., Conley, Y. (2008) NO Pathway Biomarkers and CV after SAH. *Critical Care Medicine*. 36:A11(Suppl).
18. Chuang, P.Y., Conley, Y., **Alexander, S.**, Ren, D., Hravnak, M. (2008) Neuroglobin Genetic Polymorphisms and Their Relationship to Functional Outcome Following Traumatic Brain Injury. *Critical Care Medicine* 36: A10 (Suppl).
19. Kantor, E., Conley, Y.P., Ren, D., Bayir, H., Provencio, J. J., Crago, E., Horowitz, M., **Alexander, S.** (2009) Haptoglobin Genotype and Functional Outcome after Aneurysmal Subarachnoid Hemorrhage. *Critical Care Medicine* 37: A368 (Suppl).

20. Watkins, L., **Alexander, S.**, Ren, D., Crago, E., Conley, Y., Kagan, V., Bayir, H. (2009) Haptoglobins Containing α -2 Subunit Favor Angiographic Vasospasm in Aneurysmal Subarachnoid Hemorrhage. *Critical Care Medicine* 37: A19 (Suppl).
21. **Alexander, S.**, Poloyac, S., Ren, D., Crago, E., Horowitz, M., Conley, Y.P. (2009) DDAH2 Genotype Predicts Outcome after Subarachnoid Hemorrhage. *Critical Care Medicine* 37: A156 (Suppl).
22. NeSmith, E.G., Catravas, J.D., Marsland, A.L., **Alexander, S.A.**, Hawkins, M.L., Medeiros, R.S. (2009). The influence of accelerated biologic aging, chronic stress, and inflammatory response on outcomes following trauma. *Brain, Behavior, and Immunity*, 23(2), S51.
23. **Alexander, S.**, Tate, J., Ren, D., Gunn, S., Ely, E. W. (2010) Interleukin 6 and Delirium in ICU patients *Critical Care Medicine* 38 (12): A326 (Suppl).
23. Watkins, L., **Alexander, S.**, Kapralov, A., Ren, D., Crago, E., Conley, Y., Kagan, V., Bayir, H. (2010) Possible Role for Haptoglobin and Hemoglobin Aggregates in Pathomechanism of Aneurysmal Subarachnoid Hemorrhage. *Critical Care Medicine* 38 (12): A154 (Suppl).
24. **Alexander, S.**, Tate, J. Ren, D., Gunn, S., Conley, Y. (2011) APOE Genotype, Inflammation and Delirium in ICU Patients. *Critical Care Medicine*.39 (12):A7 (Suppl).
25. **Alexander, S.**, Conley, Y. (2013) Inflammatory Gene Methylation in ICU Patients with and without Delirium. *Critical Care Medicine*. 41 (12): A104 (Suppl). DOI: 10.1097/01.ccm.0000439574.72890.33
26. **Alexander, S.** (2014) Gene-Protein Interaction: A Methodology for Integration of Biomarkers into Nursing Research. *Nursing Research*, 63(2): E66.
27. **Alexander, S.**, Ren, D., McVerry, B.M., Gunn, S.M. (2014) Preadmission Smoking and Inflammation and Delirium in ICU Patients. *Critical Care Medicine*.42 (12): A1501 (Suppl). DOI: 10.1097/01.ccm.0000458083.70730.b4
28. Smithburger PL, **Alexander SA**, Gries CJ, Korenoski AS, Kane-Gill SL. (2015) Provider and family perceptions of family involvement in delirium prevention in an ICU. *Critical Care Medicine* 43(12)
29. **Alexander, S.** (2015) Medical History, Delirium and Recovery from the ICU. *Critical Care Medicine* 43(12)
30. **Alexander, S. A.**, Conley, Y., Girard, T.D., McVerry, B., & Ren, D. (2019) Inflammatory gene methylation profiles in critically ill patients with and without delirium. *Critical Care Medicine*, 48(1):361 (Suppl)
31. Eaton, T., Lewis, A., **Alexander, S.**, Seaman, J., & Scheunemann, L. (2022). Exploring the intersection between palliative care and critical illness survivorship, *Critical Care Medicine*, 50(1):419.
32. Eaton, T., Lewis, A., Donovan, H., Scheunemann, L., & **Alexander, S.** (2022). Exploring the landscape of symptom burden in critical illness survivors. *Critical Care Medicine*, 50(1):221.

RESEARCH

Research Awards as PI

- Role: Principal Investigator Dates: 2003, Nov – 2004, Oct.
 Type: Professional Organization
 Funding Agency: American Nurses Foundation John Merck Scholar
 Title: Biomarkers to Predict Cerebral Vasospasm after Subarachnoid Hemorrhage.
 Award: \$5,000
- Role: Principal Investigator Dates: 2004, July – 2005, June
 Type: Professional Organization
 Funding Agency: Neuroscience Nursing Foundation
 Title: The Impact of Isoform Specific ApoE-Calcium Interaction on Cerebral Vasospasm after Subarachnoid Hemorrhage.
 Award: \$2,200
- Role: Principal Investigator Dates: 2004, Sept – 2005, Aug
 Type: Professional Organization
 Funding Agency: Sigma Theta Tau International Research Award, Eta Chapter
 Title: APOE Genotype and Cerebral Vasospasm and Outcomes after Subarachnoid Hemorrhage.
 Award: \$1,500
- Role: Principal Investigator Dates: 2004, Sept - 2005, August
 Type: School of Nursing Endowed Research Award
 Funding Agency: The Leslie A. Hoffman Endowed Acute Care Nursing Research Fund
 Title: The Effect of Apolipoprotein E and Calcium on Cerebral Vasospasm after SAH.
 Award: \$ 750
- Role: Principal Investigator Dates: 2005, July - 2009, January
 Type: University of Pittsburgh
 Funding Agency: Central Research Development Fund
 Title: CSF Ca⁺⁺ APOE protein and genotype and CV after TBI.
 Award: \$ 16,000
- Role: Principal Investigator 0% Dates: 2008, February- 2011, February
 Type: Norma J. Shoemaker Grant for Critical Care Nursing Research
 Funding Agency: Society for Critical Care Medicine
 Title: Apolipoprotein E, Inflammatory Markers and Delirium in ICU Patients.
 Award: \$16,000
- Role: Principal Investigator 0% Dates: 2008, September –2010, August
 Type: School of Nursing Endowed Research Award
 Funding Agency: Ruth Perkins Kuehn Research Award 2008
 Title: ADMA and Cerebral Vasospasm after Subarachnoid Hemorrhage.
 Award: \$12,828
- Role: Principal Investigator 27% Dates: 2008, September- 2011, July
 Type: R03 NR01152-01
 Funding Agency: NIH, NINR
 Title: Long Term Outcomes in ICU Patients: Delirium & Apolipoprotein E.
 Award: \$99,831
- Role: PI 0% Dates: 2015, July- 2016, June

Type: Pilot study
 Funding Agency: University of Pittsburgh School of Nursing Genomics Hub
 Title: Epigenetic Changes Promoting Delirium after Intensive Care Unit Admission.
 Award: \$5,000

Role: Principal Investigator 2.5% Dates: 2017, January – 2018, December
 Type: Weill Research Grant
 Funding Agency: SCCM
 Title: Temporal Inflammatory Gene Methylation Profiles and ICU Delirium.
 Award: \$50,000

Role: Principal Investigator 20% Dates: 2019, September- 2023, June
 Type: R21AG059167
 Funding Agency: NIH, NIA
 Title: Epigenetic Changes and Delirium after Intensive Care Unit Admission.
 Award: \$430,375

Role: Principal Investigator 20% Dates, 2019, September – 2021, December
 Funding Agency: Shadyside Foundation
 Title: Noise Reduction Improving Sleep
 Award: \$80,000

Research Awards as Co-I / Mentor

Role: Co-Investigator 10% (PI Yvette Conley, PhD) Dates: 2005, July - 2009, June
 Type: R01 NR008424
 Funding Agency: NIH, NINR
 Title: Mitochondrial Genetics of Recovery after Brain Injury.
 Award: \$ 800,000

Role: Co-Investigator 5% (Co-PIs S. Poloyac, P. Sherwood) Dates: 2009, August-2014, July
 Type: R01 NR004339
 Funding Agency: NIH, NINR
 Title: Determining genetic and biomarker predictors of DCI and long term outcomes after aSAH.
 Award: \$3,365,222

Role: Co- Mentor 0% (PI-Nesmith) Dates: 2010, August- 2013, June
 Type: K01 NR011471
 Funding Agency: NIH, NINR
 Title: Accelerated Biological Aging and Risk for Sepsis and Organ Failure Following Trauma.
 Award: \$93.363

Role: Sponsor (PI- Osier) Dates: 2014, September – 2016, August
 Type: F31 NR014957
 Funding Agency: NIH, NINR
 Title: Mechanism of Melatonin-Induced Neuroprotection in Traumatic Brain Injury.
 Award: \$85,796

Role: Co-Investigator 5% (PI- Conley) Dates: 2012, September- 2017, June
 Type: R01 NR 013610
 Funding Agency: NIH, NINR

Title: Epigenomics of Patient Outcomes after Aneurysmal SAH.
Award: \$2,749,754

Role: Faculty Dates: 2006, July- 2026, June
Type: T32 NR009759
Funding Agency: NIH, NINR
Title: Targeted Research and Academic Training of Nurses in Genomics.
Award: \$223,876

Role: Co-Investigator 10% contributed effort (PI- Arbor) Dates: 2022, April-2023, March
Type: Pilot Project Grant
Funding Agency: Quebec Pain Research Network
Title: Pupillometry to Predict Procedural Pain in Critically Ill Sedated Patients with Traumatic Brain Injury.
Award: \$25,000

Other Scholarly Activities

Research Grant Reviews

2006-2015 Society of Critical Care Medicine Vision grant reviewer

2007-2013

2021-present Department of Defense Congressionally Directed Medical Research Program Post-Traumatic Stress Disorder and Traumatic Brain Injury Research Program – Traumatic Brain Injury Award grant reviewer

2008- 2013

2021 United States Army Medical Material Development Activity grant reviewer

2005-2011,
2013, 2014,
2017

Sigma Theta Tau International, Eta chapter grant reviewer

2010- 2013 American Association of Critical Care Nurses, grant reviewer

2010- 2013 Italian Ministry of Health grant reviewer

2012- 2014,

2018-present Neuroscience Nursing Foundation grant reviewer

2013-present Department of Veterans Affairs (Neurobiology C) grant reviewer

2015-2020 Permanent Member

2015-2016 Society of Critical Care Medicine THRIVE Grant reviewer

2016-2021 The Defense and Veterans Brain Injury Center (DVBIC) intramural research grant science reviewer

2017 University of Pittsburgh Central Research Development Fund Grant reviewer

- 2017 National Institutes of Health/National Institute on Aging, Special Emphasis Panel. ZAG1 ZIJ-3(01). Relationship between Delirium and Alzheimer's disease
- 2017-present Society of Critical Care Medicine Research Grant reviewer- Weil and Discovery grants
- 2017 International Society for Nurses in Genetics Grant reviewer.
- 2019 United States Army Medical Material Research and Command, 2019 Broad Agency Announcement, Combat Casualty Care Research Program (CCCRP) grant reviewer.
- 2019-present National Institutes of Health/National Institute on Aging. GEMSSTAR Grants for Early Medical/Surgical Specialists' Transition to Aging Research.
- 2019 National Institutes of Health/National Cancer Institute, Special Emphasis Panel/Scientific Review Group 01 ZCA1 SRB-P (J1) S. Ad hoc reviewer with expertise in gut dysbiosis.
- 2020-2022 National Institutes of Health/National Institute on Aging. Special Emphasis Panel/Scientific Review Group, ZAG1 ZIJ-D (M1), Clarifying the Relationship between Delirium and Alzheimer's Disease and Related Dementias.
- 2022 National Institutes of Health Chronic Dysfunction and Neurodegeneration Scientific Review . Ad hoc reviewer with expertise in delirium.

Editorial Board/Regular Manuscript Reviewer

- 2005-present Journal of Neuroscience Nursing, regular reviewer
2020-present Editorial Board Member
- 2007-present Biological Research for Nursing, regular reviewer
2016-2018 Guest Editor, 'Primer in Genetics and Genomics Series'
2018-present Editorial Board Member
- 2007- 2012 Nursing Research, regular reviewer
- 2008- present Journal of Neurotrauma, ad hoc reviewer
- 2010-2014 Open Critical Care Medicine Journal, regular reviewer, Editorial Advisory Board member
- 2012-present PLOS One, regular reviewer
2014-2021 Editorial Board Member
- 2014-present Pediatric Critical Care Medicine, ad hoc reviewer
- 2014-2021 Journal of the Neurological Sciences, ad hoc reviewer
- 2014-present Stroke, ad hoc reviewer
- 2014-present Heart & Lung: The Journal of Acute & Critical Care, ad hoc reviewer
- 2015 Biomarkers, ad hoc reviewer

2015	BMC Neurology, ad hoc reviewer
2017-present	Journal of Nursing Measurement, reviewer
2018-2020	Nursing: Research and Reviews, ad hoc reviewer
2018	Neurology Reviews, ad hoc reviewer
2018-present	Neurocritical Care, ad hoc reviewer
2021-present	Critical Care Explorations, Editorial Board Member
2021-present	Chinese Journal of Emergency and Critical Care Nursing, Editorial Board Member
2022-present	Critical Care Medicine, Editorial Board Member

PRESENTATIONS

International Paper

1. (2000, August). Continuous assessment of cerebrovascular regulation after subarachnoid hemorrhage (SAH), by near- infrared spectroscopy (NIRS). International Society on Oxygen Transport to Tissue. Nijmegen, Netherlands.
2. (2004, February). Cerebrospinal fluid (CSF) calcium as a biomarker of vasospasm after subarachnoid hemorrhage (SAH). Society of Critical Care Medicine 33rd International Educational and Scientific Symposium. Orlando, FL.
3. (2004, October). Apolipoprotein E genotype and outcomes in the subarachnoid hemorrhage population. International Society of Nurses in Genetics, Annual International Conference. Toronto, Canada.
4. (2007, February). Nursing year in review. Society of Critical Care Medicine 36th Critical Care Congress. Orlando, FL.
5. (2008, October). Influence of the Endothelial Nitric Oxide Synthase Gene and Recovery from SAH. 21st Annual ISONG Conference.
6. (2009, February). NO Pathway Biomarkers of CV after SAH. Society of Critical Care Medicine 38th Annual Critical Care Congress. Nashville, TN.
7. (2010, October). DDAH2 Genotype Predicts Outcome after Subarachnoid Hemorrhage. International Society of Nurses in Genetics 23rd Annual Conference. Dallas, TX.
8. (2012, February). APOE Genotype, Inflammation and Delirium in ICU Patients. Society of Critical Care Medicine 40th Annual Critical Care Congress. Houston, TX.
9. (2012, October) Genetics Influences on Risk of Stroke and Stroke Recovery. International Society of Nurses in Genetics, 25th Annual Conference. Philadelphia, PA.

10. (2014, November) Inflammatory Gene Methylation Profile as a marker of ICU Delirium. International Society of Nurses in Genetics 27th Annual Congress. Philadelphia, PA, USA.
11. (2017, November) ICU Delirium and Changes in IL6ST Methylation. International Society of Nurses in Genetics 30th Annual Congress, Reston, VA, USA.

Poster

1. (2000, August). Vasospasm detection following SAH using cerebral oximetry. International Society on Oxygen Transport to Tissue. Nijmegen, Netherlands.
2. (2002, January). Effect of Apolipoprotein E genotype on cerebral blood flow in traumatic brain injured patients. Society of Critical Care Medicine 31st International Educational and Scientific Symposium. San Diego, CA, USA.
3. (2005, October). APOE ϵ 2 allele, clotting, and hemorrhage in traumatic brain injury. International Society of Nurses in Genetics Annual International Conference. Salt Lake City, UT, USA.
4. (2008, February). eNOS Tagging SNPs and CV after SAH. Society of Critical Care Medicine 37th International Educational and Scientific Symposium. Honolulu, HI, USA.
5. (2010, February). DDAH2 Genotype Predicts Outcome after Subarachnoid Hemorrhage. Society of Critical Care Medicine 39th Critical Care Congress. Miami, FL, USA.
6. (2011, January) Interleukin 6 and Delirium in ICU Patients. Society of Critical Care Medicine 40th Critical Care Congress. San Diego, CA, USA.
7. (2011, October) APOE Genotype and Delirium in an ICU Population. International Society of Nurses in Genetics 24th Annual International Conference. Montreal, Canada.
8. (2014) Inflammatory Gene Methylation in ICU Patients with and without Delirium. Society of Critical Care Medicine, 42nd Annual Critical Care Congress. San Francisco, CA, USA.
9. (2016) Medical History, Delirium and Recovery from the ICU. Society of Critical Care Medicine, 44th Annual Critical Care Congress, Orlando, FL, USA.
10. (2020) Inflammatory gene methylation profiles in critically ill patients with and without delirium. Society of Critical Care Medicine, 49th Annual Critical Care Congress, Orlando, FL, USA.

National

Paper

1. (1999, March). Charting the course for standardizing neurologic assessment in the ICU. 31st Meeting & Exposition of the American Association of Neuroscience Nurses. Philadelphia, PA.
2. (2002, September). An analysis of the SF-36 function subscale and the Barthel index for use in the subarachnoid hemorrhage population. State of the Science in Nursing Research. Washington, D.C.
4. (2004, October). Cerebrospinal fluid calcium levels and cerebral vasospasm after subarachnoid hemorrhage. National Congress on the State of the Science in Nursing Research. Washington, D.C.

5. (2006, April). Apolipoprotein E and outcome after subarachnoid hemorrhage. American Association of Neuroscience Nurses 38th Annual Meeting. San Diego, CA.
6. (2007, May). Basic genetics for nurses. National Teaching Institute & Critical Care Exposition. Atlanta, GA.

Poster

1. (2015, June). Smithburger, P. L., **Alexander, S.A.**, Kane-Gill, S., Korenoski, A., Gries, C.J. Healthcare provider perception of delirium prevention and family involvement in a medical intensive care unit. The 5th Annual American Delirium Society Meeting, Baltimore MD

Regional

Paper

1. (2001, April). Vasospasm detection following SAH using cerebral oximetry. 13th Annual Scientific Session of the Eastern Nursing Research Society. Atlantic City, N.J.
2. (2001, April). Effect of alcohol intoxication on cerebral blood flow and outcomes following a severe traumatic brain injury. 13th Annual Scientific Session of the Eastern Nursing Research Society. Atlantic City, N.J.
3. (2002, April). A comparison of psychometric qualities of the SF-36 physical function subscale and the Barthel index in the subarachnoid hemorrhage population. 14th Annual Scientific of the Session of the Eastern Nursing Research Society. State College, PA.
4. (2005, April). Apolipoprotein E genotype and outcomes in the subarachnoid hemorrhage population. 17th Annual Scientific Session of the Eastern Nursing Research Society. New York City, NY.
5. (2006, April). APOE genotype and cognitive outcomes after severe TBI. Eastern Nursing Research Society 18th Annual Scientific Sessions. Cherry Hill, NJ.
6. (2008, March). Endothelial Nitric Oxide Synthase Tagging Single Nucleotide Polymorphisms and Outcome after Aneurysmal Subarachnoid Hemorrhage. Eastern Nursing Research Society 20th Annual Scientific Sessions. Philadelphia, PA.
7. (2009, March). Bringing Genetics into Your Program of Nursing Research. Eastern Nursing Research Society 21st Annual Scientific Sessions. Boston, MA.
8. (2014, April). Gene-Protein Interaction: A Methodology for Integration of Biomarkers into Nursing Research. Eastern Nursing Research Society 26th Annual Scientific Sessions. Philadelphia, PA
9. (2015, April). Consent and Human Subject Issues for Genetic and Genomic Research. Eastern Nursing Research Society 27th Annual Scientific Sessions, Washington, D.C.
10. (2016, April). Special Populations: Conducting Genetic, Genomic and Physiologic Research in Cognitively Impaired, Critically Ill Adults. Eastern Nursing Research Society 28th Annual Scientific Sessions, Pittsburgh, PA.

Local

Paper

1. (1990, September). Care of the patient with an arterio-venous malformation. Nursing Grand Rounds. Montefiore University Hospital. Pittsburgh, PA.
2. (1994, May). Myasthenia Gravis. Nursing Grand Rounds. Montefiore University Hospital. Pittsburgh, PA.
3. (2000, October). Influence of delaying treatment after symptoms develop from subarachnoid hemorrhage (SAH) on outcome: a preliminary analysis. Greater Pittsburgh 12th Annual Nursing Research Conference. Pittsburgh, PA.
4. (2005, April). The effect of APOE genotype on outcome in severe traumatic brain injured adults. Brain Trauma Research Center Monthly Lecture Series. Pittsburgh, PA.
5. (2007, April). Apolipoprotein E and severe traumatic brain injury: Book 2. Safar Center for Resuscitative Research Monthly lecture series. Pittsburgh, PA.

Poster

1. (2002, February). Effects of the APOE 4 allele on memory following traumatic brain injury (TBI). Sigma Theta Tau, Eta Chapter Poster Presentation Night. Pittsburgh, PA.

Invited Lectures

1. (2008, October). Traumatic Brain Injury: Saving Lives, Saving Brain. Pennsylvania State Nurses Association Annual Summit. State College, PA
2. (2009, March). Bringing Genetics into Your Program of Research. Eastern Nursing Research Biobehavioral Research Interest Group Sponsored Symposium. Boston, MA.
3. (2010, September). NO Means NO: Nitric Oxide as an Inhibitor of Cerebral Vasospasm after Subarachnoid Hemorrhage. Neurocritical Care Society, San Francisco, CA.
4. (2011, January). Apolipoprotein E, Inflammatory Markers and Delirium in ICU Patients. Nursing Section Business Meeting, Society of Critical Care Medicine. San Diego, CA.
5. (2011, June) Moderator. The Spectrum of Simulation- A Quest to Improving Healthcare Education. 9th Annual Safar Symposium. Pittsburgh, PA.
6. (2012, March). Blame It on Your Mother: Genetic Influences on Stroke and Recovery. UPMC Stroke Institute 12th Annual Acute Stroke Management Conference. Canonsburg, PA.
7. (2012, July). Pharmacogenetics/Pharmacogenomics: Science. National Nurse Practitioner Symposium, Copper Mountain, CO.
8. (2012, October). What can you do with a PhD? Academic Nursing Research. Nursing Section Breakfast, Neurocritical Care Society. Denver, CO.
9. (2012, October) Moderator. Found in Translation: What your patients need to know right now about translational research. Neurocritical Care Society. Denver, CO.

10. (2013, January). Neurocritical Care Research: One Investigators' Journey Down the Road Less Traveled. Center for Bio-Behavioral Clinical Research, School of Nursing, Virginia Commonwealth University. Richmond, VA
11. (2013, January). Neuroscience Nurses in Academia and Research. Arbeitstagung für neurologische Intensiv- & Notfallmedizin (Workshop for Neurological Intensive Care & Emergency Medicine). Mannheim, Germany.
12. (2013, January). Nursing in the United States of America: Past, Present and Future. Duale Hochschule Baden-Württemberg Stuttgart (Dual Academy of Baden-Wurttemberg, Stuttgart), Stuttgart, Germany.
13. (2013, February). Delirium: Risks, Recognition, Remedies and Recovery. Pulmonary, Allergy, and Critical Care Medicine Grand Rounds, Pittsburgh, PA.
14. (2013, May). Pharmacogenomics: Basic Science. National Conference for Nurse Practitioners. Nashville, TN.
15. (2013, May). Pharmacogenetics/Pharmacogenomics: Science. National Teaching Institute & Critical Care Exposition, Boston, MA.
16. (2013, September). Nursing Research in Neurocritical Care. Research Career Development Symposium in Neurocritical Care, 11th Annual Neurocritical Care Society Meeting, Philadelphia, PA.
17. (2013, October). Electronic Medical Records Improve Care in the NeuroICU Debate (Pro). 11th Annual Neurocritical Care Society Meeting, Philadelphia, PA.
18. (2013, October). Incorporating Genetics/Genomics into the MSN Curriculum to Meet the Essentials. ISONG Silver Anniversary Conference, Bethesda, MD.
19. (2014, November) Incoming Presidential Address, ISONG Annual Congress, Phoenix, Az.
20. (2014, November) Case Studies to Enhance Education: Unfolding Case Studies: Huntington Disease as an Exemplar for Multidisciplinary Pathophysiology Education. ISONG Annual Congress, Phoenix, Az.
21. (2015, July). The Science behind Pharmacogenetics/Pharmacogenomics: Basic Science. National Nurse Practitioner Symposium, Keystone, CO.
22. (2015, July). Delirium in the Intensive Care Unit. National Nurse Practitioner Symposium, Keystone, CO.
23. (2015, November). Presidential Welcome Message. ISONG Annual Congress, Pittsburgh, PA.
24. (2016, March/April). My Career as a Nurse Scientist: A Journey Down the Road Less Traveled. Honors Day Program, University of Pittsburgh, Pittsburgh, PA.
25. (2017, April). Clinical practice guidelines: Be part of the process. American Association of Neuroscience Nurses 49th Annual Meeting, Boston, MA.
26. (2017, November). Gut Microbiome Changes and ICU Delirium. Center for Microbiome & Medicine Data Blitz, Pittsburgh, PA.

27. (2018, February). How to be a good mentor; How to be a good Mentee. Roundtable discussion. Society of Critical Care Medicine 47th Critical Care Congress. San Antonio, Tx.
28. (2018, February). Temporal Inflammatory Gene Methylation Profiles and ICU Delirium. Distinguished Investigator Lecture and SCCM-Weil Research Grant Recipients Lectures, Society of Critical Care Medicine 47th Critical Care Congress. San Antonio, Tx.
29. (2018, March). SON Honors College Opportunities. Honors Day Program, Pittsburgh, PA.
30. (2019, February). Brain Bleed Essentials: Keeping the Brain Cool after Bleeds. Society of Critical Care Medicine 48th Critical Care Congress. San Diego, CA.
31. (2019, February). Meet the Nursing Professor: What Does an Academic Path Look Like? Roundtable discussion. Society of Critical Care Medicine 48th Critical Care Congress. San Diego, CA.
32. (2019, February). Candidate and Career Goals. Society of Critical Care Medicine Research Methodology and Career Trajectory Foundation Course (48th Critical Care Congress, Pre-Congress workshop). San Diego, CA.
33. (2019, August). Neurocritical Care Nursing Research: My Journey Down the Road Less Traveled. International Neuroscience Nursing Research Symposium. Austin, TX.
34. (2019, November). Big Data in Healthcare Research. 13th Annual Second International Nursing Forum. Hangzhou, China.
35. (2019, November). ICU Delirium Research: Where It's been and Where It's Going. 13th Annual Second International Nursing Forum. Hangzhou, China.
36. (2020, February). You Have to Keep the Patient at the Right Temperature. Society of Critical Care Medicine 49th Critical Care Congress, Orlando, FL.
37. (2020, June). Immune Response and Convalescent Plasma Therapy. COVID19 from a Physiologic Perspective for Nurses. (Online, Enduring).
38. (2020, July). Nursing Research: Improving Outcomes with Genetic Data. West China-Yale Nursing Development Forum. (Virtual).
39. (2020, August). Exploring Individual Variability in ICU Delirium. International Neuroscience Nursing Research Symposium. (Virtual).
40. (2020, August). Biomarkers of Delirium. Chinese Emergency Nursing Annual Conference. (Virtual).
41. (2020, September) Moderator. Biomarkers. Curing Coma Virtual Symposium. Neurocritical Care Society/National Institute of Neurologic Disease and Stroke. (Virtual).
42. (2020, September). Genomic and Proteomic Biomarkers of Recovery in Acute Brain Injury and Disorders of Consciousness. Neurocritical Care Society 18th Annual Meeting, Neurocritical

Care: From Research to Recovery. (Virtual).

43. (2021, February). When Zombies Attack: Toxidromes in Neurocritical Care. Toxidromes Causing Seizures. Society of Critical Care Medicine 50th Critical Care Congress. (Virtual).
44. (2021, April). Genomic and Proteomic Biomarkers of Recovery in Acute Brain Injury and Disorders of Consciousness. World Coma Day 2021. (Virtual).
45. (2022, April). Moderator. Recent Research which will Impact Care 1. Society of Critical Care Medicine 51st Critical Care Congress. (Virtual).
46. (2022, April). Moderator. Recent Research Which Will Impact Care 2. Society of Critical Care Medicine 51st Critical Care Congress. (Virtual).
47. (2022, April). Moderator. Recent Research Which Will Impact Care 3. Society of Critical Care Medicine 51st Critical Care Congress. (Virtual).
48. (2022, April). Moderator. Late Breaking Research. Society of Critical Care Medicine 51st Critical Care Congress. (Virtual).
49. (2022, April). Moderator. Thought Leaders: Genetics and Genomics in Critical Care. Society of Critical Care Medicine 51st Critical Care Congress. (Virtual).
50. (2022, April). Research: Hope for the Future: Genomic and Proteomic Biomarkers of Recovery in Disorders of Consciousness. World Coma Day 2022. (Virtual).
51. (2022, May). Potential Biomarkers of Recovery in Acute Brain Injury and Disorders of Consciousness. West China-Pittsburgh Nursing Development Online Conference: Genomics and Precision Healthcare. (Virtual).
52. (2023, January). Moderator. Late Breaking Research. Society of Critical Care Medicine 52nd Critical Care Congress.
53. (2023, January). Journal Peer Review Academy; Tips from the Experts. Society of Critical Care Medicine 52nd Critical Care Congress.

Podcasts

1. (2019, June). Targeted Temperature Management. <https://www.sccm.org/Communications/iCritical-Care/All-Audio-iCritical-Care/SCCM-Pod-387-Targeted-Temperature-Management>.

TEACHING

University of Pittsburgh Medical Center

Guest Lecturer

- 1994 Transcranial Dopplers-Unit Based In-service. Neurovascular Intensive Care Unit. University of Pittsburgh Medical Center, Pittsburgh, PA.
- 1997-1999 Emergency Response Training. Western Psychiatric Institute and Clinic, Pittsburgh, PA.
- 1997-2001 Cardiopulmonary Resuscitation. University of Pittsburgh Medical Center, Pittsburgh, PA.
- 2005 Research Design. Physical Medicine and Rehabilitation. University of Pittsburgh Medical Center, Pittsburgh, PA.
- 2005 Research Methods. Physical Medicine and Rehabilitation. University of Pittsburgh Medical Center, Pittsburgh, PA.
- 2007 Research Design and Methods. Physical Medicine and Rehabilitation, University of Pittsburgh Medical Center, Pittsburgh, PA
- 2017- 2020 Research in Special Populations: Cognitively Impaired Adults, Clinical and Translational Science, University of Pittsburgh, Pittsburgh, PA.

Children's Hospital of Pittsburgh

- 2006-2008 Brain Anatomy (for Pediatric Trauma Nurse Fellows)
- 2006-2008 Brain Disorders (for Pediatric Trauma Nurse Fellows)
- 2009 Critical Care Awareness Month Lecture Series.
Seizures and Antiepileptic Medications

University of Pittsburgh School of Education

- June 2006 Cardiovascular Risk (for Exercise Physiology Students)

University of Pittsburgh School of Nursing

Primary Teacher

- 2005-present NUR 2004 Pathophysiology across the Lifespan. (Fall and Summer terms for 2005-2006; Fall, Spring and Summer terms for 2006-present)
Core graduate course presented to approximately 150-200 students yearly enrolled in nurse practitioner, nurse anesthesia, clinical nurse specialist, nursing administration nursing education, informatics and research master's programs. This course is also offered to students from the School of Public Health (EPIDEM 2004), Health and Rehabilitative Sciences (HRS 2004), and Psychology (PSYCH 2004).
- 2009-present NUR 2204/2004 Pathophysiology across the Lifespan. (Fall)
Core graduate course presented to approximately 5-10 students in the ONLINE Clinical Nurse Leader program.
- 2012-present NUR 2004D Pathophysiology across the Lifespan. (Fall/Spring/Summer)
Core graduate course presented to 10-20 students yearly enrolled in select nurse

practitioner programs. This course is offered via distance education and offered synchronously with NUR 2004.

2015-2016	NUR 3050 Grant Writing. (Summer) Doctorate level course presented to 5 students in select Online Doctor of Nursing Practice Programs.
2015-2018	NUR 2008 Ethics for Advanced Practice Nurses (Fall/Spring/Summer) Core graduate course presented to 25 students enrolled in various graduate programs in the School of Nursing. This course is offered online.
2018-2019	NUR 1085 Ethics in Nursing and Healthcare (Fall/Spring/Summer) Core undergraduate course presented to about 25 students enrolled in the second degree undergraduate program in the School of Nursing.
2021-present	NUR 0053 Introduction to Inclusion, Equity and Diversity in Healthcare (Spring) Core undergraduate course presented to 8-15 students in traditional BSN program in the school of nursing.

Guest Lecturer School of Nursing

2001-2003	NUR 3030 Research Development. Annual lecture on 'Hiring Project Directors'.
February, 2004	NUR 1680 Introduction to Genetics and Molecular Therapies. 'DNA/RNA Replication'.
October, 2004	NUR 2004 Advanced Pathophysiology. 'Alterations in Neurologic Function'.
2007- 2016	NUR 3049 Doctoral Research Seminar. 'Genetic and Physiologic Neurologic Research'
2007- 2013	NUR 3040 Research Emphasis. 'Using Genetics to Understand Outcomes in Critically Ill Neuro Patients: Strategies for Success'
August, 2008	2008 Pharmacology Update. 'Genetic-driven Prescribing.'
September, 2008	NUR 1680 Introduction to Genetics and Molecular Therapies. 'Individualized Medical Management in the Genomic Era: Genetic Driven Therapies'
2009- 2013	NUR 3030 Research Development. 'Department of Defense Grants: Topics & Review Process'
2009- 2011	NUR 0067 Nursing research: Introduction to critical appraisal and evidence based practice. 'Genetic and Physiologic Neurologic Research'
June, 2009	2009 Pharmacology Update. Little People, Big Headaches: Medical Management of Migraines in Pediatric Populations.
June, 2009	2009 Pharmacology Update. Seizures and Epilepsy in Pediatric Populations: Concepts to Guide Medical Management.
March, 2010-2011	University of Pittsburgh Medical Center Health Plan Continuing Education Series. Lifetime Management of Sickle Cell Disease.

July, 2010-2017	NUR 3110 Research Instrumentation. 'Physiologic Research Methods.'
2017- 2019	NUR 0005 Honors Freshman Seminar. 'Brain Research'
2018-present	NUR 1085 Ethics in Nursing and Healthcare. 'Organ Donation and Transplantation.'
2020-present	NUR 3292 Responsibilities and Activities of Scientists. 'Mapping the Research Trajectory.'

Clinical Supervision School of Nursing

2006 (Spring)	Instructor: NUR 1033 Transitions into Nursing
2008 (Summer)	Instructor: NUR 1033 Transitions into Nursing
2009 (Fall)	NUR 0080 Foundations of Nursing Practice 1
2010 (Spring)	NUR 0081 Foundations of Nursing Practice 2
2018 (Spring)	Instructor: NUR 1033 Transitions into Nursing

Undergraduate Research Mentorship

2005 -2008	Mollie Orr
2007 - 2009	Katie Flaherty
2007 -2010	Jenny Melchior
2007 - 2010	Ellen Kantor
2009 - 2010	Kelly Moon
2009	Tiffany Fletcher
2009 - 2011	Lyndsey Pretsch
2010	Emily Christopher
2010	Brooke Stewart
2010 -2012	Kristin Kamp
2010- 2012	Ariella Laiken
2011	Maryam Adebayo
2011	Sara Hervitz
2011-2013	Yelizaveta Tsyss
2011-2014	Apoorva Gopalakrishna
2012-2013	Meaghan Maydick
2012-2015	Lisa Nagy
2014-2016	Maeve O'Donnell
2016-2018	Grace Paik
2017-present	Meryn Holtslander
2017-2019	Janette Kim
2017-2018	Hannah Beck
2018-2020	Akshay Roy
2019-present	Jaime Woo
2021-present	Cameron Snyder

Masters Research Practicum Preceptor

2000 (Summer)	Kevin Gasior, MSN student
2000 (Fall)	Dwight Herman, MSN student

2001(Spring)	William Shaulis, MSN student Chris Yost, MSN student
2002 (Spring)	Marina Ogden, MSN student
2004 (Spring)	Brian Pelkey, MSN student
2006 (Spring)	Dawn Mudar, MSN student Shai Goel, MSN student
2006 (Summer)	Erin Carville, MSN student
2009 (Spring)	Sarah Klein, MSN student
2010 (Spring)	Christina Blewitt, MSN student Paul J. McMullen, MSN student
2010 (Summer)	LaShonda Gray, MSN student Jordan Thompson, MSN student
2011 (Spring)	Marissa Berg, MSN student Nicole Cournoyer, MSN student
2011 (Summer)	Archana Shah, MSN student Christina Sivak, MSN student Tawni Fuller, MSN student
2012 (Spring)	David Gaggini, MSN student Shannon Barr, MSN student
2012 (Summer)	James Durall, MSN student
2013 (Spring)	Sean Griffith, MSN student
2014 (Summer)	E. Jamaal Hawkins, MSN student
2015 (Summer)	Allyson Heard, MSN student
2017 (Spring)	Jessica J. Davis, MSN student

DNP Research Practicum Preceptor

2018 (Spring)	Greg Romano, DNP student
2018 (Spring)	Kyle Sheerin, DNP student
2018 (Spring)	Shawn West, DNP student

Doctoral Practicum Preceptor

2005 (Spring)	Coordinating Clinical Trials Practicum Taura Barr, RN, PhD student
2006 (Spring)	Manuscript Development Practicum Matt Gallek, RN, PhD student
2006 (Summer)	Neuroanatomy Peiying Chuang, PhD student
2008 (Spring)	Coordinating Clinical Trials Practicum Claire Shaler, PhD student
2013 (Spring)	Genetic Research Proposal Development Nicole Osier, RN, PhD student
2013 (Summer)	Genetic Research Proposal Development II Nicole Osier, RN, PhD student
2013 (Fall)	Research in Critical Care Tammy Eaton, RN, PhD student
2014 (Fall)	Animal laboratory methodologies in TBI research Nicole Osier, RN, PhD student
2017 (Spring)	Maighdlin Anderson, RN, DNP student Pupillometer Use in the Neuro-Trauma ICU Megan Maserati, RN, PhD student

2018 (Fall) Biomarkers of Traumatic Brain Injury
 Megan Maserati, RN, PhD student
 Biomarkers of Traumatic Brain Injury; Specific Aims

Theses, Capstones and Dissertations

Bachelor of Philosophy Thesis Chair

Ellen Kantor, SN. “An Analysis of Haptoglobin Genotypes and Recovery from Aneurysmal Subarachnoid Hemorrhage”. Final presentation, August 2011

BSN-Honors Thesis Committee

Kaleigh Mellett, SN. “Relationship Between Variation in the TP53 Gene and Patient Outcomes Following Severe Traumatic Brain Injury.” Final presentation, March 2019.

Emilie Loudenslager, SN. “The role of a PGC1- α variation in patient outcomes after severe traumatic brain injury.” Final presentation, April 2020.

BSN-Honors Thesis Committee Chair

Grace Paik, SN. “Is Temporal Artery Thermometry a Useful Indicator of Core Bod Temperature in Patients Receiving General Anesthesia?” Final presentation. April 2018.

Janette Kim, SN. “Does a Functional SNP Variant in Interleukin-6 Lead to Increased Physiology of Delirium in ICU Patients.” Final presentation, March 2019.

MS Thesis Committee Member

Tian He, BE. Haptoglobin after Subarachnoid Haemorrhage: Individual Patient Level Data (IPLD) Analysis. Final presentation, April 2018.

DNP Doctoral Capstone Committee member

Kim (Weinholdt) Shatz RN, BSN, CCRN. “ICU Delirium.” Final presentation, April 2015.

Madeline Georgino, RN, BSN, PCCN, CCRN. “Emergency Preparedness and Disaster Response: Trauma Nurse Education at a Level 1 Trauma Center Utilizing the Emergency Preparedness Information Questionnaire (EPIQ).” Final presentation December 2014

DNP Doctoral Capstone Committee chair

Maighdlin Anderson, RN, BSN, MSN, ACNP-BC. “Improved Care of Adult Patients with Severe Traumatic Brain Injury by the Use of an Automated Pupillometer During Regular Neurological Assessments.” Final presentation March 2017.

PhD Doctoral Dissertation Committee member

Ava Puccio, RN, MSN, PhD “Effect of FiO₂ Elevation on Local Brain Tissue Oxygenation & Cerebrospinal Fluid Oxidative Stress Markers in Severe Traumatic Brain Injury.” Defense, March, 2008

Matthew Gallek, RN, BSN, PhD “Endothelin-1 Polymorphisms and Endothelin-1 Cerebrospinal Fluid Protein Expression and their Relationships to Cerebral Vasospasm and Long Term Outcomes in Individuals Following Aneurysmal Subarachnoid Hemorrhage.” Defense: May, 2008

Peiyong Chuang, MSN, PhD “Neuroglobin Genetic Polymorphisms and Their Relationship to Functional Outcome Following Traumatic Brain Injury.” Defense: May, 2008.

Nicole Zangrilli- Hoh, RN, BSN, PhD “BCL2 Genotypes and Outcomes after Traumatic Brain Injury.” Defense: September, 2008

Taura L. Barr, RN, BSN, PhD “Gene Expression Profiling & Biomarker Discovery in Ischemic Stroke.” Defense: April, 2009.

Heba Khalil, RN “Gene-Gene Interactions and Opioid Response in Post-operative Pain Management.” Defense: November, 2015.

Katie Edwards, RN (Clemson University School of Nursing/National Institute of Health, National Institute of Nursing Research Graduate Partners Program) “Peripheral Biomarkers of Inflammation Following Blast Exposure in a Clinical Population.” Defense- March, 2018.

Letitia Graves, RN, BSN. ‘Genetics and Symptomology after Spinal Cord Injury.’ Defense- June, 2019.

Lacey Wright Heinsberg, RN, BSN. “Epigenetic Variation of the Iron Homeostasis Pathway in Patient Outcome Following Aneurysmal Subarachnoid Hemorrhage.” Defense- June, 2020.

Frances M. Peterson-Burch, RN, BSN, BA. “Omics of Macular Degeneration.”

PhD Doctoral Dissertation Committee Chair

Nicole Osier, RN, BSN PhD Student “Mechanism of Melatonin-induced Neuroprotection in Severe Traumatic Brain Injury.” Defense: July, 2016.

Megan Maserati, RN, BSN, PhD Student. ”Biomarkers of Mild and Moderate Traumatic Brain Injury”

Tammy Eaton, RN, BSN, MSN, PhD Student. ”Palliative Care Intervention in the Context of an ICU Survivors Clinic.” Defense: May, 2020

Children’s Hospital of Pittsburgh/Safar Center for Resuscitative Research, Research Committee member
Laura Watkins, MD Critical Care Medicine Fellow

Jonas Nurse Leader Scholar Program Mentor

Tammy Eaton, RN, BSN, MSN, PhD student, University of Pittsburgh
Katie Edwards, RN, PhD student, Clemson University

Independent study

2005 (Fall)	Basic Neuroanatomy. Taura Barr, PhD student
2006 (Spring)	Manuscript development. Taura Barr, PhD student

2006 (Summer)	Neurologic and epidemiologic research methods. Peiyong Chuang, PhD student
2006 (Summer)	Advanced Pathophysiology. Kirsten Samuelson, pre-BSN student
2006 (Fall)	Neuro-physiologic methods, analysis and manuscript development. Erin Carwille, MSN student
2006 (Fall)	Neuroscience and neuroscience nursing manuscript development. Peiyong Chuang, PhD student
2007 (Summer)	Graduate level teaching. Matthew Gallek, BSN, PhD student
2007 (Fall)	Genetics in Neuroscience Nursing Peiyong Chuang, PhD student
2008(Fall)	Genetic Based Research Strategies in Neuroscience Karen Kovach, PhD student
2009 (Summer)	Theory and Framework Driving Physiologic Research Karen Kovach, PhD student
2009 (Summer)	Advanced Pathophysiology. Michelle Henritzky, pre-BSN student
2009 (Fall)	Advanced Pathophysiology. Deborah Woomer, MSN student
2010 (Fall)	Evidenced based rehabilitation for stroke patients Christian Page, MSN student
2011 (Fall)	Neurologic Research in Acute Brain Injured Populations Nicole Osier, PhD student
2011 (Fall)	Concepts in Advanced Pathophysiology Susan Albrecht, PhD, RN Teresa Lucchetti, MSN student Rebecca Robinson, MSN student
2011 (Fall)	Professional Writing for Publication Kristin Kamp, BSN student
2012 (Spring)	Professional Writing for Publication Kristin Kamp, BSN student Ariella Laiken, BSN student
2012 (Fall)	Select Topics in Advanced Pathophysiology Oliver Douglas Smith, MSN student Allyson Kornarhens, MSN student Amy Wojdyla, MSN student
2013 (Fall)	Exploring Human Brain Injury Nicole Osier, BSN, PhD student Select Topics in Advanced Pathophysiology Justin Bala Hampton, PhD/DNP student Julie Eiler, MSN student Heather Madera, MSN student Emily Matone, MSN student International Healthcare Utilization Research Lisa Nagy, BSN student
2014 (Spring)	Manuscript Preparation (translational research dissemination) Nicole Osier, BSN, PhD student International Healthcare Utilization Research II Lisa Nagy, BSN student Select Topics in Advanced Pathophysiology

2014 (Summer)	Joseph Kim, MSN student PhD Dissertation (Thesis Research) Nicole Osier, BSN, PhD student Capstone Project (Directed Studies)
2014 (Fall)	Samuel Hoffman, BSN, MSN, DNP student F31 Proposal Development Tammy Eaton, RN, PhD student PhD Dissertation (Thesis Research)
2015 (Spring)	Nicole Osier, BSN, PhD student F31 Proposal Development Tammy Eaton, RN, PhD student PhD Dissertation (Thesis Research)
2015 (Summer)	Nicole Osier, BSN, PhD candidate Grant Proposal Development Megan Maserati, RN, DNP, PhD student PhD Dissertation (Thesis Research)
2015 (Fall)	Nicole Osier, BSN, PhD candidate Select Topics in Advanced Pathophysiology Roseanne DeCastro, MSN student
2017 (Spring)	Select Topics in Advanced Pathophysiology Janelle Pickering, DNP student
2017 (Spring)	Joshua Bentzen, MSN student Select Topics in Advanced Pathophysiology Martina Cade, DNP student
2018 (Fall)	Ajaypal Singh, DNP student Select Topics in Advanced Pathophysiology Jody Bodenschatz, BSN, DNP student Jeffrey Jurosky, BSN, DNP student Research Fundamentals Janette Kim, SN Select Topics in Nursing and Healthcare Ethics Bruce Egbudin, SN James Kunst, SN Raquel Ferris, SN
2019 (Spring)	IL6 Genotypes in Delirium: Research Janette Kim, SN Select Topics in Advanced Pathophysiology Thomas Hageman, BSN, DNP Student
2020 (Spring)	Select Topics in Advanced Pathophysiology Diane Adams, BSN, DNP Student
2020 (Fall)	Select Topics in Advanced Pathophysiology Salina Torgerson, BSN, DNP Student
2021 (Summer)	Dissertation Research: Mitochondrial energetics and TBI Megan Maserati, BSN, MSN, NP, PhD student
2022 (Fall)	Select Topics in Advanced Pathophysiology Kaitlyn Pella, BSN, Nurse Midwife Student

SERVICE

University of Pittsburgh Medical Center

1/92-7/96 Member, Unit based Quality Improvement Committee
 6/93-7/96 Member, Unit based Patient Education Committee
 8/93-7/96 Member, Primary Nursing Task Force
 6/97-9/99 Member, Medical Emergency Committee, WPIC
 11/98-9/99 Member, Nursing Documentation Committee
 11/98-9/99 Member, Nursing Roles Committee
 07/18-12/21 Passavant Hospital, Evidence Based Quality Research Council Member/Mentor.

University of Pittsburgh

2009-present University of Pittsburgh Postdoctoral Association Data & Dine Symposium
 Table host/Abstract judge

2014 Women in Medicine & Science Forum, '*Self Promotion: Building Your Brand for Success*' Group
 Facilitator

2012-2018 Member, University of Pittsburgh Faculty Senate Library Committee
 2013-2014 Chair

2018-present Member, University of Pittsburgh Bylaws and Procedures Committee

2019-present Facilitator, University of Pittsburgh Interprofessional Forum

2020-present Member, University of Pittsburgh Faculty Senate Nominations Committee

University of Pittsburgh School of Nursing

4/03 – 9/04 Student representative, Search Committee, Assistant Dean for Scientific & International Affairs

2005-present Member, MSN Council

2005-2009
 2018-present Member, Evaluation and Steering Committee

2005-2007 Member, Cameos of Caring Scholarship Review Committee

2005 Member, Scholarship Review Committee

2006 Member, Clinical Instruction Review Committee

2006, 2009,
 2011, 2012,
 2014 Grant Reviewer, Ruth Perkins Kuehn Research Review Committee

2006-2007 Chair, Evidenced Based Practice Implementation Evaluation Taskforce

2007-present Member, PhD Council

2009-2011 Member, PhD Program Outcome Evaluation subcommittee

2007, 2010,

- 2011, 2013 Grant reviewer, Leslie A. Hoffman Endowed Acute Care Nursing Research Fund Committee
- 2005-present Member, BSN Council
- 2008-2010 Member, PhD Curriculum Committee
2009 Chair
- 2008-2009 Chair, MSN Quality Improvement Committee
- 2012-present Member, DNP Council
- 2012 Member, PhD Council Career Development Task Force
- 2012 Member, PhD Council Research Course Task Force
- 2012 Member, Cameos of Caring Advanced Practice Award Selection committee member
- 2013- 2015 Member, PhD Program Progression and Graduation Committee
2014-2015 Chair
- 2014-2015 Refreshing the Curriculum Taskforce 10
Advocacy
Education
- 2015-2018 Member, Nursing University Honors College Committee
- 2017-2021 Member, Planning and Budget Committee
2018-2020 Chair
- 2018 Member, MSN Council Advancement, Progression and Graduation Taskforce.
- 2018- present Member, SON Honors College Committee
- 2022 Member, SON Grant Review Committee
- 2022 Member, PhD ETD Dissertation Guideline Revision Taskforce

Consultation

- 2005 Review of credentials for promotion to Associate Professor without tenure.
Wayne State University, Detroit, MI
- 2005 Genetics (1) and Neuroscience (4) chapter reviews. LeMone Publishing.
- 2006-2010 Research program design Brain Trauma Research Center visiting physicians/fellows.
- 2012-2015 Surviving Critical Care Clinic development committee, University of Pittsburgh Medical Center.
- 2012-2016 Delirium assessment and management in the Intensive Care Units committee, University of Pittsburgh Medical Center.

- 2013 Biological Research in Intensive Care/Acute Care Settings. Center for Bio-Behavioral Clinical Research, Virginia Commonwealth University.
- 2013 Professional Nursing Development. Duale Hochschule Baden-Württemberg Stuttgart (Dual Academy of Baden-Wurttemberg, Stuttgart), Stuttgart, Germany.
- 2014 Review of credentials for promotion to Associate Professor without tenure. Rush University, Chicago, Ill.
- 2015 Family involvement in prevention of ICU Delirium. University of Pittsburgh Medical Center.
- 2015 Review of credentials for promotion to Associate Professor Duke University, Durham, NC.
- 2015 Faculty Mentor for Visiting Scholar, P. Amay-Ray, Professor, School of Nursing, Universidad Nacional de Colombia, Bogota, Columbia; Incorporating Genetics and Genomics into Nursing Research and Education.
- 2015 Review of Hartford Award for Research and Practice (HARP) Research Proposal, Oregon Health and Science University, Hartford Center of Gerontological Nursing Excellence at OHSU, Portland, OR.
- 2015 Review of credentials for promotion to Associate Professor University of California Los Angeles School of Nursing, Los Angeles, CA.
- 2016 Peer Review Committee (PRC): Review of credentials for promotion to Associate Professor without Tenure (Tenure Stream) University of Pittsburgh Johnstown, School of Nursing, Johnstown, PA.
- 2016 Review of credentials for promotion to Associate Professor with Tenure in the School of Nursing and Health Studies at Northern Illinois University, Dekalb, IL.
- 2017 Review of credentials for promotion to Associate Professor in the Tenure Stream University of Texas Health Science Center at Houston, School of Nursing, Houston, TX.
- 2017 Delirium in Nursing Home Residents, grant review. Asuzu Pacific Univeristy School of Nursing, Azusa, CA.
- 2018 Faculty Mentor for Visiting Scholar Yanwei Long, MSN, Xiangya Hospital, Changsha, P.R. China; Neuroscience Nursing Resarch and Education.
- 2019 Review of credentials for promotion to Associate Professor without Tenure in the Tenure Stream University of Tennessee Health Science Center, College of Nursing, Memphis, TN.
- 2019 Peer Review Committee (PRC): Review of teaching, scholarship and credentials for promotion to Associate Professor with Tenure. University of Pittsburgh Johnstown, School of Nursing, Johnstown, PA.
- 2019 Faculty Mentor for Visiting Scholar Zhumin Wang, Xinhua Hospital Affiliated to Shanghai Jiao Tong University School of Medicine, Department of Neurosurgery. Shanghai China.
- 2019-2021 Faculty Mentor for Visiting Scholar Gao Wen, PhD(c), Zheijiang University, Hangzhou, China.

- 2020 Review of credentials for promotion to Associate Professor with tenure at Duke University, Durham, NC.
- 2021 Consultation with External (University of Iowa) Post-doctoral trainee. Topic: Pediatric PICS, Nursing Research, Physiologic/Omics research.
- 2021 Consultation with University of Pittsburgh Critical Care Medicine Post-doctoral trainee. Topic: Critical Care Nursing Physiologic Research.
- 2021 Review of credentials for promotion to Associate Professor with Tenure at University of Kansas School of Nursing
- 2021 Review of credentials for promotion to Associate Professor at W.F. Connell School of Nursing, Boston College
- 2021 Interview Faculty Candidate for SON Health Promotion and Development Department.
- 2021 Interview Faculty Candidate for SON Health Promotion and Development Department.
- 2021 Interview Faculty Candidate for SON Health Promotion and Development Department.
- 2021 Interview Faculty Candidate for SON Health Promotion and Development Department.
- 2021 Consultation on Professional Development in Critical Care Research with X. J. (Faculty and John Hopkins University).
- 2022 Review of credentials for Tenure (Associate Professor) at University of Maryland School of Nursing.
- 2021-2022 Data analysis and presentation development for Magnet Site Review at UPMC Passavant Hospital.
- 2022 Interview/Discussion on Critical Care Nursing Research with J.J. (PhD student University of Utah).
- 2022 Consultation on Critical Care Nursing Research with K.P. (Post-doctoral trainee at University of Pittsburgh School of Medicine, Critical Care Medicine)
- 2022-present Consultation on Pupillometry, Delirium, and Traumatic Brain Injury Research (C. A. Faculty at University of Montreal, Canada).

Community

- 2005 Volunteer, Young Women in Science Day