# Chad R. Frasier, Ph.D.

(423) 439-2010 (810) 841-2187 Department of Biomedical Sciences East Tennessee State University Quillen College of Medicine Stanton-Gerber Hall, VA Building 178 PO Box 70582 Johnson City, TN 37614 frasierc@etsu.edu chad.frasier@gmail.com

#### **POSITIONS**

2018- Assistant Professor

pres Department of Biomedical Sciences East Tennessee State University Quillen College of Medicine

Johnson City, TN 37614

#### **EDUCATION AND TRAINING**

2012- Post-Doctoral Fellowships2017 Department of Pharmacology

University of Michigan Medical School

University of Michigan Ann Arbor, MI 48109

**Mentors**: Lori L. Isom, Ph.D. (2013-2017) Jeffrey R. Martens, Ph.D. (2012-2013)

2008- Brody School of Medicine, East Carolina

University, Greenville, NC

2012 **Ph.D. in Physiology** 

**Dissertation Title:** "The role of cardiac

mitochondria in myocardial ischemia/reperfusion

injury."

**Ph.D. Advisor:** David A. Brown, Ph.D.

2017- Research Investigator

2018 Department of Pharmacology

University of Michigan Medical School

University of Michigan Ann Arbor, MI 48109

#### 2012 Post-Doctoral Fellow

Department of Physiology Brody School of Medicine East Carolina University Greenville, NC 27834

**Mentor**: David A. Brown, Ph.D.

2004- **Central Michigan University**, Mt. Pleasant, MI

2007 **Bachelor of Science** 

Majors: Neuroscience, Psychology

**Research:** The role of D1-like and D2-like dopamine receptors in the striatum in a rat model

of Parkinson's Disease.

Activities: Resident Assistant, Student

Government Association, Diversity Committee,

Residence Hall Council, Leadership Institute

**Advisor:** Dr. Justin Oh-Lee, Ph.D.

#### **Personal Statement**

I have the expertise, leadership skills, and motivation to carry out the proposed research project. My training to date has been diverse, which allows me to approach research questions with a unique set of skills and mindset. This exploratory grant is the perfect funding mechanism for a new collaborative project with a diverse research team. This proposal seeks to determine not just the link between cardiac biomarkers (specifically HRV and QTVI) and mental health, but to identify measures of educator health and be used to evaluate interventions. This project will likely scale-up and can potentially spread into other disciplines. My current position at a highly collaborative university can be leveraged into outcomes for our regional population. Some of my previous work was focused on "Exercise as Medicine", and I look forward to expanding this project into "Education as Medicine".

While at Central Michigan University, my original area of study was to become a teacher in K-12 schools with a focus in biology and mathematics. However, I decided to pursue a career in research after being exposed in my undergraduate program. This project is an opportunity to contribute back to the K-12 education field that I was so intrigued by many years ago. The diversity of my research training has given me a unique ability to apply my skill set to research questions that

are of interest to me. My first research project investigated the differential role of dopamine-like receptors on the memory deficits in the early stages of Parkinson's disease. During this project I was involved in stereotaxic surgeries, brain sectioning and staining, and operant conditioning behavioral experiments. While working on my dissertation, I focused on the role that mitochondria play in cardiac physiology and pathophysiology. This research was supported in part by a competitive American Heart Association pre-doctoral fellowship. In addition to my primary research project, I was also fortunate to work on a project in collaboration with a pharmaceutical company on a drug candidate for myocardial infarction that went on to clinical trials. While searching for potential post-doctoral positions it was important for me to find a lab with a successful PI in both the cardiovascular and neuroscience fields, with the hope that I would receive training that would allow me to combine my diverse interests. In Dr. Isom's lab my work focused on the role of the cardiovascular system in Sudden Unexpected Death in Epilepsy (SUDEP). Using multiple genetic mouse models and cardiomyocytes derived from induced pluripotent stem cells I found that cardiac arrhythmias are present in both human and animal models, with differences in Heart Rate Variability (HRV) potentially driving some of our responses. While in Dr. Isom's lab I published 2 first author manuscripts demonstrating the role of the cardiovascular system in SUDEP. In addition, I was also the recipient of 3 different competitive post-doctoral fellowship awards. In October of 2018 I officially began my first tenure-track position in the Department of Biomedical Sciences at the Quillen College of Medicine at East Tennessee State University, where my work has been supported by NIH funding in addition to strong institutional support and resources. Recently, a portion of my laboratory has turned its focus on mechanisms that underly epileptogenesis following traumatic brain injury (or posttraumatic epilepsy). This new area of research for me has recently received Department of Defense (DoD) funding. In addition, I handle lectures within the Medical School's curriculum in Cardiovascular Pharmacology. Overall, I have the skillset, determination, and all the required tools to complete this proposal. My funding history demonstrates my ability to successfully turn small pilot projects, such as this exploratory/developmental research grant, into larger applications.

#### **PUBLICATIONS**

For up to date list of my published work see OrcID: <a href="https://orcid.org/my-orcid?orcid=0000-0002-7496-2830">https://orcid.org/my-orcid?orcid=0000-0002-7496-2830</a>

- # represents corresponding author
- \* represents graduate student; \*\* represents undergraduate student; \$ represents medical student
- Patrick C. Bradshaw, Jessa L Aldridge\*, Leah Jamerson\*, Canah McNeal\*, A. Catherine Pearson\*, and **Chad R. Frasier**\*. *The role of cardiolipin in brain bioenergetics, neuroinflammation, and neurodegeneration.* Molecular Neurobiology. (In press). Part of Special Issue: *Molecular Neurobiology of Mitochondria: Focus on Mitochondrial Therapeutics.*
- Jessa L. Aldridge\*, Emily Davis Alexander, Allison A. Franklin\$, Elizabeth Harrington, Farah Al-Ghzawi, and **Chad R. Frasier**\*. Sex differences in cardiac mitochondrial respiration and reactive oxygen species production may predispose Scn1a<sup>-/+</sup> mice to cardiac arrhythmias and SUDEP. Journal of Molecular and Cellular Cardiology Plus. (In press)
- Jessa L. Aldridge\*, Emily Davis Alexander, Allison A. Franklin\$, and **Chad R. Frasier**\*. Decreased ability to manage increases in reactive oxygen species may underly susceptibility to arrhythmias in mice lacking Scn1b. American Journal of Physiology-Heart and Circulatory Physiology. (In press) (PMID 39120465)

  Received an Editorial Focus: Janet R. Manning and Ian Scott. Reactive oxygen species in cardiace electrophysiology: loss of Scn1b increases susceptibility to oxidative stress and drives a pro-arrhythmic phenotype. American Journal of Physiology-Heart and Circulatory Physiology. (In press) (PMID 39212769)
- Jessa L. Aldridge\*, Emily Davis Alexander, Allison A. Franklin\$, and **Chad R. Frasier**\*. *Altered cardiac energetics in mice lacking Scn1b.* Cardiovascular Research. Jul 31;120(9) (PMID 38641853)
- Emily Davis Alexander, Jessa L Aldridge\*, T. Samuel Burleson\*\*, and **Chad R. Frasier**\*. *Teriflunomide treatment exacerbates cardiac ischemia reperfusion injury in isolated rat hearts.* Cardiovascular Drugs and Therapy. April (2022). (PMID 35488973). PMCID: PMC9055010.
- Mary Wingard\*, **Chad R. Frasier**, Mahipal Singh, Krishna Singh. *Heart Failure and Diabetes: Role of ATM.* Current Opinion in Pharmacology. Oct;54:27-35. (PMID 32745970). PMCID: PMC7769978.

- 2018 Chad R. Frasier, Helen Zhang, James Offord, Louis T. Dang, David S. Auerbach, Huilin Shi, Chunling Chen, Alica M. Goldman, L. Lee Eckhardt, Vassilios J. Bezzerides, Jack M. Parent, and Lori L. Isom. *Channelopathy as a SUDEP Biomarker in Dravet Syndrome Patient-Derived Cardiac Myocytes.* Stem Cell Reports. 2018 Sep 11;11(3):626-634. (PMID 30146492). PMCID: PMC6135724.
- Nathan A. Holland, **Chad R. Frasier**, Ruben C. Sloan III, Robert B. Devlin, David A. Brown and Christopher J. Wingard. *Ultrafine Particulate Matter Increases Cardiac Ischemia/Reperfusion Injury via Mitochondrial Permeability Transition Pore*. Cardiovascular Toxicology. 17(4):441-450. (PMID 28194639). PMCID: PMC5617757.
- Luis F. Lopez-Santiago, Yukun Yuan, Jacy L. Wagnon, Jacob Hull\*, **Chad R. Frasier**, Miriam H. Meisler, and Lori L. Isom. *Neuronal Hyperexcitability in an SCN8A Mouse Model of Early Infantile Epileptic Encephalopathy with SUDEP*. Proceedings of the National Academy of Sciences. 114(9): 2383-2388. (PMID 28193882). PMCID: PMC5338511.
- Yangyang Bao\*, B. Cicero Willis, **Chad R. Frasier,** Xianming Lin, Roberto Mondragon Ramos, Héctor H. Valdivia, Mario Delmar, José Jalife, Lori L. Isom. *Scn2b Deletion in Mice Results in Ventricular and Atrial Arrhythmias*. Circulation Arrhythmia and Electrophysiology. 9(12). (<a href="PMID">PMID</a>
  27932425). PMCID: PMC5161227.
- 2016 **Chad R. Frasier,** Jacy L. Wagnon, Yangyang Bao\*, Luis F. Lopez-Santiago, Miriam H. Meisler, and Lori L. Isom. *Cardiac arrhythmia in a mouse model of Epileptic Encephalopathy with SUDEP.* Proceedings of the National Academy of Sciences. Nov 8;113(45):12838-12843. (PMID 27791149). PMCID: PMC5111690.
- Sarah M. Schumacher-Bass, Eileen D. Vesely, Lian Zhang, Katherine E. Ryland\*, Dyke P. McEwen, Priscilla J. Chan, **Chad R. Frasier**, Robin M. Shaw, and Jeffrey R. Martens. *A role for Myosin V motor proteins in the selective delivery of Kv channel isoforms to the membrane surface of cardiac myocytes*. Circulation Research; 114(6):982-92. (PMID 24508725)
- David A. Brown, Sharon Hale, Christopher Baines, Carlos del Rio, Robert Hamlin, Yukie Yueyama, Anusak Kijtawornrat, Steve Yeh, **Chad R. Frasier**, Luke Stewart\*\*, Saame Raza Shaikh, Kelsey Fisher-Wellman, Peter Darrell Neufer, and Robert Kloner. *Reduction of early reperfusion injury with the mitochondria-targeting peptide Bendavia: A multicenter study.* Journal of Cardiovascular Pharmacology and Therapeutics; 19 (1):121-32 . (PMID 24288396)
- 2013 **Chad R. Frasier**, David A. Brown, Ruben C. Sloan, Brian Hayes\*\*, Luke M. Stewart\*\*, Robert M. Lust, and Matthew D. Rosenbaum. *Estrous cycle stage does not influence myocardial ischemia reperfusion injury in the rat (Rattus norvegicus): Insight from in vivo and ex vivo experimental models.* Comparative Medicine 63 (5): 416-421. (PMID 24210018)
- 2013 **Chad R. Frasier**, Fatiha Moukdar, Hetal D. Patel, Ruben C. Sloan, Luke M. Stewart\*\*, Rick J. Alleman, Justin D. LaFavor, and David A. Brown. *Redox-dependent increases in glutathione reductase and exercise preconditioning:* role of NADPH oxidase and mitochondria. Cardiovascular Research; 98(1):47-55. (PMID 23341578)
- Leslie C. Thompson, **Chad R. Frasier**, Ruben C. Sloan, Erin E. Mann, Ben Harrison, David A. Brown, Jared M. Brown, and Christopher J. Wingard. *Pulmonary Exposure to Multi-Walled Carbon Nanotubes Alters Cardiovascular Function that Promotes Ischemia/Reperfusion Injury in a Langendorff Heart Model.* Nanotoxicology 8 (1):38-49. (PMID 23102262)
- Robert A. Kloner, Sharon Hale, Wangde Dai, Robert C. Gorman, Takashi Shuto, Kevin J Koomalsingh, Joseph H. Gorman III, Ruben C. Sloan, **Chad R. Frasier**, Corinne A. Watson<sup>\$</sup>, Phillip A. Bostian<sup>\$</sup>, Alan P. Kypson, and David A. Brown. *Reduction of Ischemia/Reperfusion injury with Bendavia, a mitochondrial-targeting cytoprotective peptide.* Journal of the American Heart Association; 1 (3): e001644. (PMID 23130143)

- Ruben C. Sloan, Fatiha Moukdar, **Chad R. Frasier**, Phillip A. Bostian<sup>\$</sup>, and David A. Brown. *Mitochondrial permeability transition in the diabetic heart: contributions of thiol redox state and mitochondrial calcium to augmented reperfusion injury.* Journal of Molecular and Cellular Cardiology; 52(5):1009-18. (PMID 22406429)
- 2011 **Chad R. Frasier**, Ruben C. Sloan, Phillip A. Bostian<sup>\$</sup>, Michael Gonzon\*\*, Jennifer Kurowicki\*\*, Steven LoPresto\*\*, Ethan Anderson, and David A. Brown. *Short-term exercise preserves myocardial glutathione and decreases arrhythmias following thiol oxidation and ischemia in isolated rat hearts.* Journal of Applied Physiology; 111(6): 1751-1759. (PMID 21940849)
- 2011 **Chad R. Frasier,** Russell L. Moore, and David A. Brown. *Exercise-induced cardiac preconditioning: How exercise can mend your achy breaky heart.* Journal of Applied Physiology; 111(3): 905-915. (PMID 21393468)
- Ruben C. Sloan, Matthew Rosenbaum, Dorcas O'Rourke, Karen Oppelt, **Chad R. Frasier**, Corinne A. Waston<sup>\$</sup>, Amanda G. Allan, and David A. Brown. *Ketamine/xylazine anesthesia influences cardiac ischemia-reperfusion injury in guinea pigs in a dose-dependent manner*. Journal of the American Association for Laboratory Animal Science; 50(3): 349-354 (PMID 21640030).
- David A. Brown, Miguel A. Aon, **Chad R. Frasier**, Ruben C. Sloan, Andrew H. Maloney<sup>\$</sup>, Ethan J. Anderson, and Brian O'Rourke. *Cardiac arrhythmias induced by glutathione oxidation can be inhibited by preventing mitochondrial depolarization*. Journal of Molecular and Cellular Cardiology; 48(4):673-679 (PMID 19962380).

<u>In review/preparation</u> (confidential copy of draft for work in which I am first or senior author can be provided upon request)

Jessa L. Aldridge\*, Emily Davis Alexander, Allison A. Franklin, Elizabeth Harrington, Farah Al-Ghzawi, and **Chad R. Frasier**\*. Altered cardiac mitochondrial Ca2+ buffering in two Dravet syndrome mouse models. AJP – Heart and Circulatory Physiology. (<u>In revision</u>)

Jessa L. Aldridge\*, Emily Davis Alexander, William Thompson\*\*, Hazlee Kleine\*\*, and **Chad R. Frasier**\*. *Hypersensitive and circadian effects of acebutolol administration in Scn1b*-/- mice. Epilepsy Research. (<u>In revision</u>)

Amanda S. Frasier, Trystan Innes<sup>\$</sup>, Noah Daniels<sup>\$</sup>, S. Grayson Blount<sup>\$</sup>, and **Chad R. Frasier<sup>#</sup>.** *Pilot Data from a New Teacher Health Protocol: The Link Between Heart Rate Variability and Occupational Stress in K-12 Educators.* J Applied Physiology. Journal of Applied Physiology. (Planned submission December, 2024).

Leah Jamerson\*, Henry Gong\*, Jessa L. Aldridge\*, Emily Davis Alexander, **Chad R. Frasier**, and Patrick C. Bradshaw. *Decreased NADPH synthesis induces a DAF-16 and HSF-1-dependent antioxidant response in C. elegans.* (In preparation)

Ian J. Stewart, **Chad R. Frasier**, Mark Haigney, Megan E. Amuan, and Mary Jo Pugh. *The risk of sudden cardiac death in patients with post traumatic epilepsy.* (In preparation)

## **BOOK CHAPTERS**

- 2024 **Chad R. Frasier.** Cardiac Electrophysiology and Pharmacology. <u>Comprehensive Toxicology.</u> (Submitted)
- 2009 (Acknowledgements) **Chad R. Frasier** in: The Cardiovascular System: Cardiac Function 2009 by Russell L. Moore and David A. Brown. <u>American College of Sports Medicine's Advanced Exercise Physiology</u>. Lippincott Williams & Wilkins, 2nd Edition.

### **FUNDING**

#### **Active**

2023- EP220018 Department of Defense

2026 Role: PI

Project Title: "Mitochondrial Pathways in Epileptogenesis Following Traumatic Brain Injury"

Total Direct: \$500,000

Total Project: \$750,000

#### **Completed**

2020- **NINDS** R21 1R21NS116647-01A1

2024 Role: PI

Project Title: "The role of cardiac mitochondrial energetics in cardiac arrhythmias and SUDEP"

Total Direct: \$275,000

**Supplement:** 3R21NS116647-01A1S1

Total Direct: \$44,235

Project total directs: \$319,235 Total project costs: \$453,071

2022- East Tennessee State University Research Development Committee

2024 Major Grant Role: Co-PI

Project Title: "Piloting an approach to assessing teacher workplace well-being through measures of

perception and noninvasive biomarkers."

2022- East Tennessee State University Research Development Committee

2023 Major Grant

Role: PI

**Project Title:** "Importance of mitochondrial signaling cascades and function in the progression of seizures in temporal lobe epilepsy."

2019- East Tennessee State University Research Development Committee

2021 Major Grant

Project Title: "Determining the effect of Dravet Syndrome on cardiac potassium channels."

#### 2015 **Postdoctoral Translational Scholars Program**

NIH Clinical and Translational Science Award (NCATS)

Funded through Michigan Institute for Clinical & Health Research (MICHR)

Total Direct: \$100,000

## 2017 American Epilepsy Society

Postdoctoral Fellowship

Project Title: "Novel mechanisms of SUDEP in SCN8A-EIEE13 patients"

July 2017-June 2018 Direct: \$45,000

2013 Postdoctoral Cardiovascular Research Training Grant (NIH T32HL007853)

University of Michigan. Ann Arbor, MI

2011 American Heart Association Pre-Doctoral Fellowship (Mid-Atlantic Affiliate)

Project Title: "The role of cardiac mitochondria in exercise-induced cardioprotection."

2007 Undergraduate Student Research & Creative Endeavors Grant

**Project Title:** "The Role of Dopamine D1 and D2 Receptors within the Striatum Using an Operant Discrimination Task in Rats."

#### **PRESS RELEASES**

2020	"Department of Biomedical Sciences awarded more than \$7 million since January" <a href="https://www.etsu.edu/etsu-news/2020/09-september/biomedical-sciences-extramural-funding.php">https://www.etsu.edu/etsu-news/2020/09-september/biomedical-sciences-extramural-funding.php</a>
2019	"Quillen's Biomed 'goes red' for heart health" <a href="https://www.etsu.edu/news/2019/02-feb/nr">https://www.etsu.edu/news/2019/02-feb/nr</a> heart health month.aspx
2018	"Heart Abnormalities May Trigger Sudden Unexplained Death in Epilepsy" <a href="https://labblog.uofmhealth.org/lab-report/study-heart-abnormalities-may-trigger-sudden-unexplained-death-epilepsy">https://labblog.uofmhealth.org/lab-report/study-heart-abnormalities-may-trigger-sudden-unexplained-death-epilepsy</a>
2017	"MICHR Reps Push for Funding Support in Capitol Hill Advocacy Day" <a href="https://www.michr.umich.edu/news/2017/4/28/michr-reps-push-for-funding-support-in-capital-hill-advocacy-day">https://www.michr.umich.edu/news/2017/4/28/michr-reps-push-for-funding-support-in-capital-hill-advocacy-day</a>
2017	"Fighting Sudden Death in Epilepsy Through Science" <a href="http://labblog.uofmhealth.org/lab-report/fighting-sudden-death-epilepsy-through-science">http://labblog.uofmhealth.org/lab-report/fighting-sudden-death-epilepsy-through-science</a>
2015	"Growing Heart Cells For Epilepsy Patients?" <a href="http://www.medscape.com/viewarticle/838864">http://www.medscape.com/viewarticle/838864</a>
	"Unraveling the genetic basis of sudden unexpected death in epilepsy" <a href="https://www.aesnet.org/about">https://www.aesnet.org/about</a> aes/press releases/UnravelingGeneticBasisSUDEP

# PROFESSIONAL EXPERIENCE AND SERVICE (selected)

2022- Pres	Grant Reviewer. American Heart Association.
2022- Pres	Review editor and Board: Frontiers in Pharmacology (Cardiovascular and Smooth Muscle Pharmacology)
2020- Pres	Grant Reviewer. German Research Foundation (DFG).

### AMANDA SLATEN FRASIER, Ph.D., NBCT

## frasiera@etsu.edu amanda.slaten.frasier@gmail.com 810-650-3014

## **EDUCATION**

Michigan State University, East Lansing, MI

December 2017

Ph.D. in Educational Policy, Dept of Educational Administration

Defended August 2017

Dissertation: "Teacher Perceptions of the Relationship between Evaluation Policy and Teacher Practice in a North Carolina School System."

East Carolina University, Greenville, NC

August 2011

M.A. in Library Science

Central Michigan University, Mt. Pleasant, MI

May 2007

B.S. in Secondary Education; Majors: English and History

St. Clair County Community College, Port Huron, MI

August 2004

Associate of Arts in General Education; Associate of Arts in Secondary Education Transfer

## CERTIFICATION AND LICENSURE

Tennessee Professional License #000716972

expires 08/31/2025

Certifications: MIDDLE GRADES SOCIAL SCIENCE 6-8, HISTORY 6-12, GOVERNMENT 6-12, ENGLISH 6-12, LIBRARY K-12

North Carolina Professional License # 1107495

expires 06/30/2024

Certifications: LANGUAGE ARTS 6-9, ENGLISH 9-12, SOCIAL STUDIES 6-9, HISTORY 9-12, MEDIA COORDINATOR K-12

National Board for Professional Teaching Standards #02744097

expires 11/22/2027

Certifications: Adolescence and Young Adulthood: English/Language Arts

## HIGHER EDUCATION POSITIONS

**Tenure-Track Assistant Professor** (2022-present), Department of Curriculum and Instruction; Clemmer College; East Tennessee State University; Johnson City, TN

**Tenure-Track Instructor** (2020-2022), University School; Clemmer College; East Tennessee State University; Johnson City, TN

**Full -time Adjunct Professor** (2020); **Part-Time Adjunct Professor** 2019; 2021-2022; School of Education, Human Performance, and Health; University of South Carolina Upstate; Spartanburg, SC

**Fixed-Term Assistant Professor** (2018-2020), **Fixed-Term Instructor** (2017), Department of Teacher Education;

College of Education; Michigan State University; East Lansing, MI

## **ADMINISTRATIVE EXPERIENCE**

August 2018-December 2019 **Co-Subject Area Leader and CAEP Coordinator for Elementary Social Studies** Teacher Preparation Program, Department of Teacher Education, Michigan State University
August 2017-May 2018 **Chicago Intern Program Supervisor and Support** Teacher Preparation Program,
Department of Teacher Education, Michigan State University

### PERSONAL STATEMENT

My research interests lie at the intersection of educational policy and teaching practice. As such, I have extensive experience utilizing survey, interview, observational, and secondary data to conduct human research studies in three states including: North Carolina, Tennessee, and Michigan. I hold a Ph.D. in Educational Policy from the Department of Educational Administration at Michigan State University (MSU) where I was an Erickson Research Fellow for five years. Aside from my graduate preparation, I continue to receive advanced methodological training through the InterUniversity Consortium for Political and Social Research at the Institute of Social Research at the University of Michigan in areas that strengthen my survey research, such as Maximum Likelihood Estimation and Measurement, Scaling, and Dimensional Analysis (for Categorical Data). My research has been presented at referred conferences nationally and abroad and I have worked on several grant funded studies including a two-year cooperative project with Educational Testing Services (ETS) designing performance-based teacher certification assessments. My dissertation, a study of teacher perceptions, utilized similar survey and mixed methodology to the proposed project and has yielded multiple peer-reviewed publications (listed below). Aside from investigating teachers, I have engaged in independent work on other populations, such as school board members and high school students. My work has utilized qualitative, quantitative, and historical methods. In addition to peer-reviewed work, I have a history of being an active public scholar whose expertise has been featured in popular publications such as The Washington Post and Education Week as well as on podcasts such as BAM Radio network's Teachers Aide. These practical experiences show my deep and multi-leveled relationship with the teaching profession, which is important in policy research that relies heavily on a contextual understanding of the problem. Overall, my teaching and research background makes me well suited for this award.

## PEER-REVIEWED BOOK CHAPTERS

**Frasier, A. S.** (In Press). Addressing the "Big Chill" of Prohibited Concepts Legislation in Teacher Education: A

View from Tennessee. In Teacher Educators as Scholar Citizens: Activism and Resistance in Uncertain Times.

Robinson, M. K., **Frasier, A. S.** (In Press). Building a Community of Scholars: Fostering Student Learning and University Collaborations through Student-led Research. In *The How and Why of Laboratory* 

Schools: Innovations and Success Stories in Teacher Preparation and Student Learning

#### PEER-REVIEWED ARTICLES

**Frasier**, **A. S.** (In Press) The Chilling Effects of Tennessee's Prohibited Concepts Law: What is the Potential Role

of School Board Members and Superintendents? AERA Open.

**Frasier, A. S**. (2024). The Harm of Assessment-Backward Practices. *Phi Delta Kappa*, 105(8), 66-67. https://doi.org/10.1177/00317217241251893

DeGennaro, K., **Frasier**, **A. S.** (2024). The Frayer Model as Analysis of Instruction and Student Knowledge in Undergraduate Astronomy. *Journal of Student Research*, *12*(4).

https://doi.org/10.47611/jsrhs.v12i4.5198

**Frasier. A. S.** (2023). New-to-the-school teachers' responses to evaluation policy. *Tennessee Educational Leadership Journal*, 49(1), 12-20.

**Frasier, A. S.**, Campbell, H., Reis, L. & Ziglar, H. Obligations, Obstacles, and Opportunities: Conducting Research as a Laboratory School Teacher. (2023). *International Association of Laboratory Schools Journal 13*(1).

- **Frasier, A. S.** (2023). Do high school teachers alter classroom practice due to evaluation? Evidence from North Carolina's career status and teacher evaluation policies. *Journal of Education Human Resources*, 41(2), 293-323. https://doi.org/10.3138/jehr-2022-0007
- **Frasier, A. S.** (2022). It's time to (re)evaluate evaluation. *Phi Delta Kappa, 104*(4), 66-67. http://doi.org/10.1177/00317217221142991
- **Frasier, A. S.** (2022). What makes classroom observation feedback useful?: The perceptions of secondary Math and English teachers. *Voices of Reform: Educational Research to Inform and Reform* (5)1, 40-58. https://doi.org/10.32623/5.00004
- **Frasier, A. S.** (2022). District administration and the local workforce in an era of centralization. *Southeast Journal of Educational Administration 21*(1), 23-42.
- **Frasier, A. S.** (2021). Principal-led state evaluation policy: Teacher perceptions at four high schools. *The Qualitative Report* 26(9), 2769-2796. https://doi.org/10.46743/2160-3715/2021.4696
- **Frasier, A. S.** (2021). Pushing back: How one school board publicly deliberated state-level teacher personnel policies. *SN Social Sciences 1*(1), 1-19. https://doi.org/10.1007/s43545-020-00022-4
- Jacobsen, R., Halvorsen, A., **Frasier, A. S.,** Schmitt, A., Crocco, M., & Segall, A. (2017). Thinking deeply, thinking emotionally: How high school students make sense of evidence. *Theory and Research in Social Education* 46(2), 232-276. http://dx.doi.org/10.1080/00933104.2018.1425170
- Halvorsen, A., Harris, L. M., Aponte-Martinez, G. J., & **Frasier, A. S.** (2016). Does students' heritage matter in their performance on and perceptions of historical reasoning tasks? *Journal of Curriculum Studies*, 48(4), 457478. http://dx.doi.org/10.1080/00220272.2015.1092585
- **Frasier, A. M**. (2015). Schooling in the Kovno Ghetto: Cultural reproduction as a form of defiance. *Paedagogica Historica*, 51(1-2), 197-205. http://dx.doi.org/10.1080/00309230.2014.998686

## **MANUSCRIPTS IN PREPARATION**

- **Frasier, A. S.** (In Review) Surveying Superintendents and School Board Members on Policy: A Descriptive Comparison of Accessibility, Responsiveness, and Perceptions. In Review at *Leadership and Policy in Schools*.
- **Frasier, A. S.**, Innes, T., Daniels, N. Frasier, C. R. (In Review) Lessons from a Pilot Protocol on Perceptions of and Non-invasive Biomarkers of Stress and Health. In Review at *International Journal of Education Management*
- **Frasier, A. S.** A Retrospective on the Costs of Implementing High Stakes Value Added Model Teacher Evaluations.
- Monroe, N. A., Mooneyham, J., **Frasier, A. S.** Program Guidance in ESL Manuals: Perspectives of State-level Actors.
- Lewis, P. R., **Frasier**, **A. S.** Exploring Diversity in Inclusive Higher Education Programs for Students with Intellectual Disabilities in Tennessee
- **Frasier, A. S.** Bridging the Gap: Exploring the Self-Efficacy of Teachers Who Obtained ESL Licensure Under Tennessee's Abbreviated Licensure Requirements

## PUBLIC SCHOLARSHIP, NON-REFERRED PUBLICATIONS, AND OTHER PRESS

- **Frasier, A. S.** (2024). The importance of assessing the assessments in education. *University of Toronto Press Blog.* (Invited).
- Johnny Lupinnacci (Host). (2024). The Harm of Assessment Backwards Practices with Amanda Frasier. BustED
  - Pencils. (Invited).
- Frasier, A. S. (2023). Review of Teaching to Prepare Advocates. *Teachers College Record*. (Invited).
- **Frasier**, A. S. (2023). Teachers are not meant to be martyrs. *Education Week*.
- Harper, J. (Host). (January 2022). Teachers and policymakers and how to bridge the gap with Amanda Frasier,

Rick Hess, and Steven Weber. Teachers Aide. Bam Radio Network. (Invited).

Mathews, J. (2021). US teachers pummeled by a hailstorm of conflicting instructions. *Washington Post*. (Featured

Media Requested Commentary).

Frasier, A. S. (2021). I'm back in the classroom with a PhD & some advice for policymakers. *Education Week*.

## **GRANTS FUNDED**

- Building Community with the Laboratory School by Exploring the Integration of Social Studies and Math in Early Elementary through Lesson Study. Engagement Scholarship Consortium. \$5,000. Role: PI
- Exploring the Integration of Social Studies and Math in Early Elementary through Lesson Study. International Association of Laboratory Schools. \$1,500.00. Role: PI
- The beliefs and practices of new teachers encountering converging assessment-derived policy values. Oak Ridge Associated Universities. Junior Faculty Enhancement Award. \$10,400 Role: PI
- The Beliefs and Practices of Teaching Candidates Encountering Converging Assessment-Derived Policy. East Tennessee State University. Summer Research Assignment, Clemmer College. \$3,450. Role: PI
- 2022 Piloting an approach to assessing teacher workplace well-being through measures of perception and noninvasive biomarkers. East Tennessee State University. Research Development Committee Major Grant. \$12,000. Role: PI
- 2022 Developing an Argument for Validating Perceptions of Teacher Workplace Well-being Using Minimally Invasive Biomarkers East Tennessee State University. Summer Research Assignment, Clemmer College. \$5,000. Role: PI
- What makes classroom observation feedback effective?: A mixed method case study. East Tennessee State University. Research Development Committee Small Grant. \$2,000. Role: PI
- 2021 Presidential Grant in Aid. Office of the President. East Tennessee State University
- 2021 Principal-Led State Evaluation Policy: Lessons from Teacher Perceptions at Four High Schools. East Tennessee State University. Richard A. Wilson Faculty Fellowship Grant. \$750. Role: PI
- 2017 Examining Teacher Perceptions of the Relationship Between Evaluation Policy and Teacher Practice in a North Carolina School System. Michigan State University Graduate School Dissertation Completion Fellowship Grant. \$7,000. Role: PI
- 2016 Examining Teacher Perceptions of the Relationship Between Evaluation Policy and Teacher Practice in a North Carolina School System. Michigan State University Graduate School Research Enhancement Fellowship. \$1,000 Role: PI
- 2017 Association for Education Finance and Policy Graduate Student Travel Grant. \$750.
- 2013 History of Education Society Graduate Student International Travel Grant. \$500.
- 2013 The shifting definition of American teacher quality in a practitioner publication. Michigan State University Summer Research Development Fellowship Grant (with Dr. Dorothea Anagnostopoulos). \$6.000. Role: PI

## PENDING GRANT ACTIVITY

(In Review- 2024) **Frasier, A. S.** The beliefs and practices of new teachers encountering converging assessment-

derived policy values. Spencer Foundation, \$70,000.00. Role: Principal Investigator

## **AWARDS AND HONORS**

2024 ETSU Standing Early Career Scholar Award Nominee, Office of Research and Sponsored Programs

- 2023 Oak Ridge Associated Universities Powe Junior Faculty Award
- 2022 Outstanding Junior Faculty Paper Award, Southern Regional Council on Educational Administration
- 2017 College of Education, Educational Administration Enhancement Fellowship, Michigan State University
- 2017 Roe L. Johns Award, Association for Education Finance and Policy
- 2015 Council of Graduate Students, Conference Award, Michigan State University
- 2014 Council of Graduate Students, Professional Development Award, Michigan State University
- 2014 History of Education Doctoral Summer School, European Educational Research Association
- 2013 Jurgen Herbst Award, History of Education Society
- 2012 Erickson Research Fellowship, Michigan State University (5-year support award)
- 2011 Emily Boyce Library Science Scholarship, East Carolina University
- 2010 Pitt County Schools Teacher Executive Institute Inductee
- 2007 College of Humanities and Social and Behavioral Sciences Undergraduate Student Paper Prize Winner for "The Challenge of Change: Social Justice Education in the Classroom"
- 2006 College of Humanities and Social and Behavioral Sciences Undergraduate Student Paper Honorable Mention for "Conversion and Conquest: Europeans and New World Religion prior to 1600"
- 2006 Duane Bouliew History Prize and Mae Teeter History Research Prize, Central Michigan University
- 2005 Miley Teacher Education Scholarship, Central Michigan University

## PEER-REVIEWED RESEARCH PRESENTATIONS

- **Frasier, A. S.** & Krupa, M. (2024). Examining field supervisor and pre-Service teacher perspectives on observational feedback. American Educational Studies Association, Greenville, SC.
- **Frasier, A. S.** (2024). Examining the policy perspectives of Tennessee's district-level stakeholders. American Educational Studies Association, Greenville, SC.
- **Frasier, A. S.** (2024). Superintendent and School Board Member Policy Perspectives in Tennessee: A Descriptive Analysis, American Educational Research Association, Philadelphia, PA.
- **Frasier, A. S.** (2024). The beliefs and practices of teaching candidates encountering converging assessment-derived policy, Association for Education Finance and Policy, Baltimore, MD.
- **Frasier, A. S.** (2023). Projects in Progress: The beliefs and practices of new teachers encountering assessment policy values National Council of Social Studies, Nashville, TN.
- **Frasier, A. S.** (2023). Superintendent and School Board Member perspectives on Tennessee's Divisive Concepts Law: Implications for Teacher Preparation Programs, National Council of Social Studies, Nashville, TN.
- **Frasier, A. S**. & Frasier, C. R. (2023). Data from a New Teacher Health Protocol. Eastern Educational Research Association. Myrtle Beach, SC.
- **Frasier, A. S,** Campbell, H., Reis, L., & Ziglar, H. (2023). Obligations, obstacles, and opportunities: Conducting research as laboratory school teacher. Eastern Educational Research Association. Myrtle Beach, SC.
- **Frasier, A. S.** (2022). What Makes Classroom Observation Feedback Useful? Mid-South Educational Research Association. Little Rock, AR.
- Frasier, A. S. (2022). Teachers and Health. Mid-South Educational Research Association. Little Rock, AR.
- **Frasier, A.S**. (2022). District Administration and Local Workforce in an Era of Centralization Southern Council on Educational Administration. Tuscaloosa, AL.
- **Frasier, A. S.** (2022). Teacher Sense-making and Evaluation Policy: Three Cases of New-to-the-School Teachers. Southern Regional Council on Educational Administration. Tuscaloosa, AL.
- **Frasier, A. S.** and others. (2022). Featured Panelist for Equitable Learning Opportunities, Opportunity Gap Inquiry Initiative. Association of Teacher Educators. Nashville, TN.
- **Frasier, A. S.** (2022). Voices from the Field: What Makes Classroom Observation Feedback Effective? Association of Teacher Educators. Nashville, TN.

- **Frasier**, **A. S.** (2022). Developing an Argument for Validating Perceptions of Teacher Workplace Well-being Using Minimally Invasive Biomarkers. Association of Teacher Educators. Nashville, TN.
- **Frasier, A. S.** (2018) Examining how school conditions are related to perceptions of teacher evaluation. American Educational Research Association. New York, NY.
- **Frasier, A. S.** (2017). Examining the relationship between teacher evaluation and perceptions of impact on teacher practice. Association for Education Finance and Policy. Washington, DC.
- Crocco, M., Segall, A., Jacobsen, R., Halvorsen, A., Schmitt, A., & **Frasier**, **A.** (2016). Facilitating evidence-based discussions in secondary social studies classrooms. National Council of Social Studies College and University Faculty Assembly. Washington, DC.
- **Frasier, A. S**. (2016). Examining relationships between school evaluation conditions and evaluation scores. University Council for Educational Administration. University Council for Educational Administration. Detroit, MI.
- Crocco, M., Halvorsen, A., **Frasier, A. S.,** Riek, N. & Koneitzko, L. (2016). Successes and challenges in supporting adolescents' argumentation skills in public policy discussions. University Council for Educational Administration. Detroit, MI.
- **Frasier, A. S.** (2016) Shift happens: A case of a school board response to state level workforce policy. Association for Education Finance and Policy. Denver, CO.
- **Frasier, A. S.** (2015). Pushing back: A case study of one school system's response to state level teacher policy. University Council for Educational Administration. San Diego, CA.
- Bell, C., Drake, C., Wilson, M., **Frasier, A.,** Qi, Y., McCaffrey, D, Lockwood, J.R. & Kim, J. (2015). Subject specific and general observation protocols as tools for the evaluation and improvement of teaching. American Educational Research Association, Chicago, IL.
- **Frasier, A. S.** (2014). War and teacher quality: How WWII impacted the definition of teacher quality as reflected in an American practitioner publication. International Standing Conference on the History of Education, London, England.
- **Frasier, A. S.** (2014). The shifting definition of teacher quality in American schools. Histories of Education Summer School Conference for Postgraduate Students, Umea, Sweden.
- **Frasier, A. S.,** Bennett, S., Cisterna, D. & Gotwals, A. (2014). Policy churn and the micro-level implementation of a professional development program. American Educational Research Association, Philadelphia, PA.
- **Frasier, A. S.** (2013). Schooling in the Kovno Ghetto: Cultural reproduction as a form of defiance. International Standing Conference on the History of Education, Riga, Latvia.

### PROFESSIONAL DEVELOPMENT FACILITATED

- **Frasier, A. S.** (2023). Getting to the Big Idea: Teaching Inquiry and Criticality in the Elementary Social Studies Classroom. Niswonger Foundation Learning Together Conference, Gray, TN
- **Frasier, A. S.** (2022). Facilitating Discussion in the Secondary Social Studies Classroom. Niswonger Foundation Learning Together Conference; Elizabethton, TN