

# Caroline A. Rickards, PhD, FAPS

## Professor

Department of Physiology & Anatomy  
College of Biomedical & Translational Sciences  
University of North Texas Health Science Center  
3500 Camp Bowie Boulevard  
Fort Worth, TX 76107

**Email:** [caroline.rickards@unthsc.edu](mailto:caroline.rickards@unthsc.edu)

**Phone:** +1 817 735 2735 (Work)  
+1 210 705 3922 (Mobile)

**Website:** [Cerebral & Cardiovascular Physiology Laboratory](#)

---

## Education

- 2001 – 2005**      **Doctor of Philosophy (PhD)**, Aerospace Physiology Laboratory, School of Medical Sciences, Science Engineering and Technology Portfolio, RMIT University, Melbourne, Australia
- 2000**            **Bachelor of Applied Science (Honours)**, Aerospace Physiology Laboratory, School of Medical Sciences, Science Engineering and Technology Portfolio RMIT University, Melbourne, Australia  
First Class Honours (Physiology)
- 1997 – 1999**    **Bachelor of Science**, University of Melbourne, Melbourne, Australia  
First Class Honours (Majors in Physiology and Pathology)
- 

## Employment History

### *Academic Appointments*

- 2024 – Present**    Professor with Tenure, Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, Texas, USA
- 2018 – 2024**      Associate Professor with Tenure, Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, Texas, USA
- 2020 – 2023**      Director, Medical Sciences Research Track, School of Biomedical Sciences, University of North Texas Health Science Center, Fort Worth, Texas, USA
- 2012 – 2018**      Assistant Professor (tenure-track), Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, Texas, USA
- 2008 – 2012**      Research Assistant Professor, Department of Health and Kinesiology, The University of Texas at San Antonio, San Antonio, Texas, USA

- 2005 – 2008** Postdoctoral Research Associate, National Research Council, US Army Institute of Surgical Research, Fort Sam Houston, Texas, USA
- June – July 2005** Mentor, Spaceflight and Life Sciences Training Program (SLSTP), NASA-Kennedy Space Center, Florida, USA

### ***Non-Academic Appointments***

- 2002 – 2005** Manager, On-line School of Medical Sciences Graduate Student Information Resources (BlackBoard), RMIT University, Melbourne, Australia

---

## **Honors & Awards**

- 2024** Outstanding Specialized Masters Faculty Member, Student Association of Biomedical Sciences, University of North Texas Health Science Center
- 2024** Promoted to Professor, University of North Texas Health Science Center
- 2023** Elected as Chair of the Cerebrovascular Research Network (CARNet)
- 2022** Fellow of the American Physiological Society (FAPS)
- 2022** Nominated for the Graduate Student Association Outstanding Graduate Faculty Member Award, University of North Texas Health Science Center
- 2021** Nominated for the Graduate Student Association Outstanding Graduate Faculty Member Award, University of North Texas Health Science Center
- 2019** Faculty Achievement Award, Graduate School of Biomedical Sciences, University of North Texas Health Science Center (Nominee for UNTHSC Faculty Achievement Award)
- 2018** Best oral presentation, Cerebral Autoregulation Research Network (CARNet) 8<sup>th</sup> Annual Meeting, Oxford, UK
- 2018** Granted tenure and promotion to Associate Professor, University of North Texas Health Science Center
- 2018** Nominated for the Graduate Student Association Outstanding Graduate Faculty Member Award, University of North Texas Health Science Center
- 2013** Nominated for the Graduate Student Association Outstanding Graduate Faculty Member Award, University of North Texas Health Science Center
- 2010** Associate Fellow of the Aerospace Medical Association (AsMA)
- 2010** American Physiological Society (APS) Research Career Enhancement Award (\$US4,000)
- 2007** American Physiological Society (APS) Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award (\$US500 and registration at the 2007 Experimental Biology Meeting)
- 2005-2008** National Research Council (NRC) Postdoctoral Research Associateship, United States Army Institute of Surgical Research (USAISR), Fort Sam Houston, Texas, USA (~ \$US135,000)
- 2005** Australian Military Medicine Association (AMMA) Patron's Prize for best health-related article published in a peer-reviewed journal by an AMMA member ("G-induced visual and cognitive disturbances in a survey of 65 operational fighter pilots" published in *Aviation, Space and Environmental Medicine*) (\$AU250)
- 2003-2004** Zonta International Amelia Earhart Fellowship (\$US6,000)
- 2002** Aerospace Medicine Student & Resident Organisation (AMSRO) and Aerospace Medical Association (AsMA) Travel Scholarship (\$US1,000)

- 2001** Aerospace Medical Association (AsMA), Space Medicine Branch Young Investigator Award Finalist
- 2001-2004** Australian Postgraduate Award (APA) (~ \$AU85,000, including stipend and university tuition)
- 

## Funding History

### Current Research Support

**Rickards (PI), Yurvati (Co-I)** **10/24 – 09/25**  
Bridge Funding Program, Research Enhancement Assistance Program (REAP), University of North Texas Health Science Center  
*“Pulsatile Perfusion Therapy: Advancing Oscillatory Blood Flow as a Therapeutic Approach to Treat Cerebral Ischemia and Hypoxia”*  
\$US 66,348 (total costs)

Davis (PI), **Rickards (Mentor)** **05/23 – 4/25**  
American Heart Association (AHA) Predoctoral Fellowship (23PRE1018469)  
*“Pulsatile Perfusion Therapy: A Novel Approach to Improve Tissue Oxygenation and Entrain Sympathetic Activity”*  
(Percentile Rank: 24.69%)  
\$US 65,106 (total costs)

### Pending Research Support

Rickards (PI), Farmer (Co-I), Yurvati (Co-I) **9/24**  
*“Implementation of Pulsatile Perfusion Therapy to treat cerebral hypoperfusion from blood loss”*  
Department of Defense, FY24 Combat Readiness-Medical Research Program - Translational Research Award (Pre-Proposal submitted)

Dinh (PI), **Rickards (Mentor)** **9/24**  
American Heart Association (AHA) Predoctoral Fellowship (25PRE1368764)  
*“Pulsatile Perfusion Therapy: A Novel Treatment to Improve Survival from Hemorrhage”*  
\$US \$69,548 (total costs)

**Rickards (PI)** **8/24**  
Seed Grant, Department of Physiology & Anatomy, University of North Texas Health Science Center  
*“Pulsatile Perfusion Therapy: Sympathetic Activity & Oxygen Diffusion Dynamics”*  
\$US 11,500 (total costs)

### Completed Research Support

Tune (PI), Dick (Co-I), Farmer (Co-I), Menegaz (Co-I), Mundluru (Co-I), **Rickards (Co-I)**, Reeves (Co-I), Romero (Co-I), Smith (Co-I), Thambidorai (Co-I) **9/22 – 8/24**  
Team Science Seed Grant, University of North Texas Health Science Center  
*“Heart Failure with Preserved Ejection Fraction: Mechanisms and Therapy”*  
\$US 200,000 (total costs)

**Rickards (PI)** **10/23 – 07/24**  
Seed Grant, Department of Physiology & Anatomy, University of North Texas Health Science Center  
*“Pulsatile Perfusion Therapy: A Strategy for Clearance of Cerebrospinal Fluid”*  
\$US 11,200 (total costs)

**Rickards (PI), Yurvati (Co-I)** **07/19 – 06/24 (NCE)**  
American Heart Association (AHA) Association Transformational Project Award (19TPA34910073)  
*“Phase II: A novel approach for improving cerebral tissue blood flow and oxygenation via pulsatile perfusion therapy”*  
(Priority Score: 1.48; Percentile Rank: 7.56%)  
\$US 300,000 (total costs)

**Rickards (PI)** **04/23 – 05/24 (NCE)**  
Sola Gratia LLC. [Contract]  
*“Safety of High frequency, Low Amplitude Vibration on the Neck: A Pilot Study”*  
\$US 10,000 (total costs)

**Rickards (PI)** **09/22 – 02/24**  
Special Operations Command, Department of Defense (W911QY22P0135) [Contract]  
*“Investigation of a novel NIRS sensor for assessment of blood volume loss”*  
\$US 23,505 (total costs)

King K (PI), Pahlevan N (PI), **Rickards (site PI, sub-award)** **04/21 – 08/23 (NCE)**  
NIH National Institute for Aging (NIA) (R56AG068630)  
*“Hemodynamic Mechanisms Linking Aortic Arch Stiffness with Brain Insult in Older Adults”*  
\$US 251,554 (total costs)

**Rickards (PI), Farmer** **11/22 – 07/23**  
Seed Grant, Department of Physiology & Anatomy, University of North Texas Health Science Center  
*“Pulsatile Perfusion Therapy: A Novel Approach for Protection of Ischemic Tissues Part III”*  
\$US 15,000 (total costs)

**Rickards (PI), Tune, Cunningham** **11/21 – 10/22**  
Seed Grant, Department of Physiology & Anatomy, University of North Texas Health Science Center  
*“Pulsatile Perfusion Therapy: A Novel Approach for Protection of Ischemic Tissues Part II”*  
\$US 15,000 (total costs)

Anderson (PI), **Rickards (Mentor)** **05/20 – 4/22**  
American Heart Association (AHA) Predoctoral Fellowship (20PRE35210249)  
*“Hemodynamic Oscillations and Protection of Cerebral Tissue Oxygenation”*  
(Priority Score: 1.34; Percentile Rank: 12.35%)  
\$US 62,032 (total costs)

**Rickards (PI), Yurvati (Co-I)** **07/17 – 09/21 (NCE)**  
American Heart Association (AHA) Association Wide Grant-in-Aid (17GRNT33671110)  
*“A novel approach for improving cerebral tissue blood flow and oxygenation via pulsatile perfusion therapy”*  
(Priority Score: 1.1; Percentile Rank: 0.13%)  
\$US 154,000 (total costs)

Rosenberg (PI), O'Bryant (Co-Mentor), **Rickards (Co-Mentor)** **06/19 – 08/21**  
Ruth L. Kirschstein Postdoctoral Individual National Research Service Award (NRSA), National Institutes of Health (1 F32 HL144082-01A1)  
*"Development of a clinically-relevant test for assessment of cerebral vascular function"*  
\$US 186,582 (total costs)

**Rickards (PI)**, Tune, Cunningham **02/21 – 07/21**  
Seed Grant, Department of Physiology & Anatomy, University of North Texas Health Science Center  
*"Pulsatile Perfusion Therapy: A Novel Approach for Protection of Ischemic Tissues"*  
\$US 15,000 (total costs)

**Rickards (Co-PI)**, Mallet (Co-PI), Yurvati (Co-I) **03/17 – 12/19 (NCE)**  
William and Ella Owens Medical Research Foundation  
*"Pyruvate-enriched resuscitation to reduce inflammation and free radical production during simulated hemorrhage"*  
\$US 59,935 (direct costs)

**Rickards (PI)**, Rosenberg (Co-I), Romero (Co-I), Yurvati (Co-I) **06/18 – 04/19**  
Applied Research Program Seed Grant, University of North Texas Health Science Center  
*"Vascular Function Following Blood Flow Restriction Exercise Training"*  
\$US 28,806 (total costs)

**Rickards (PI)** **07/16 – 08/18**  
Junior Faculty Seed Grant, Institute for Cardiovascular and Metabolic Diseases, University of North Texas Health Science Center  
*"Pulsatile Perfusion Therapy: A novel approach for improving cerebral tissue blood flow and oxygenation"*  
\$US 10,000 (total costs)

Sprick (PI), **Rickards (Mentor)** **06/17 – 04/18**  
Ruth L. Kirschstein Predoctoral Individual National Research Service Award (NRSA), National Institutes of Health (1 F31 HL134242-01A1)  
*"Potential therapeutic benefits of remote ischemic preconditioning vs. occlusive exercise: an acute study"*  
\$US 30,248 (direct costs; received 2 years of funding, but early termination with completion of PhD)

**Rickards (PI)**, Sprick (Co-I) **03/15 – 04/18**  
Faculty Research Pilot Grant, Intramural Grant Program, University of North Texas Health Science Center  
*"Potential therapeutic benefits of remote ischemic preconditioning vs. occlusive exercise: an acute study"*  
\$US 20,000 (total costs)

**Rickards (PI)**, Petree (Co-I) **06/16 – 05/17**  
Seed Grant, Institute for Cardiovascular and Metabolic Diseases Summer Research Rotation, University of North Texas Health Science Center  
*"Protection of cerebral blood flow and oxygenation during simulated hemorrhage with low-frequency oscillations in arterial pressure and cerebral blood flow"*  
\$US 1,000 (total costs)

Vishwanatha (PI), Cunningham (PI), Schreihofner (PI) **06/16 – 05/17**  
National Institutes of Health (NIH), Promoting Diversity in Research Training for Health Professional Students (PDRT)  
Role: Mentor  
\$US 3,000 (total costs to Rickards Laboratory)

Sprick (PI), **Rickards (Mentor)** **04/16 – 03/17**  
Predoctoral Student Research Development Award (SRDA), Texas Chapter of the American College of Sports Medicine (TACSM)  
*“Potential therapeutic benefits of remote ischemic preconditioning vs. occlusive exercise: an acute study”*  
\$US 1,500 (total costs)

**Rickards (PI)** **11/14 – 06/16**  
Pendar Medical LLC [Contract]  
*“Evaluation of microvascular oxygenation with Resonance Raman Spectroscopy”*  
\$US 51,302 (total costs)

Cooke (PI), Fogt (Co-PI), **Rickards (Co-PI)** **09/13 – 08/14**  
University of Texas at San Antonio (UTSA) Collaborative Research Seed Grant Program (CRSGP)  
*“Acute Effects of Vaporized Nicotine on Metabolic, Cardiovascular, and Cerebrovascular Responses in Humans”*  
\$US 30,000 (total costs); \$US 10,000 (to UNTHSC)

**Rickards (PI)** **09/13 – 08/14**  
Reflectance Medical Inc. [Contract]  
*“Assessment of muscle oxygenation at multiple anatomical sites during central hypovolemia”*  
\$US 7,250 (total costs)

**Rickards (PI)** **06/11 – 06/15**  
Department of Defense, US Army Medical Research and Materiel Command (W81XWH-11-2-0137)  
*“Cerebral blood flow regulation during simulated hemorrhage”*  
\$US 367,402 (total costs)

Cooke (PI), **Rickards (Co-I)** **04/08 – 06/11**  
Department of Defense, US Army Medical Research and Materiel Command (W81XWH-08-1-0274)  
*“Autonomic rhythms during simulated hemorrhage and real-world trauma”*  
\$US 308,131 (total costs)

**Rickards (PI)** **01/02 – 12/02**  
Australian Military Medicine Association (AMMA) Research Grant  
*“G-induced visual and cognitive disturbances in Royal Australian Air Force (RAAF) high-performance aircraft pilots”*  
\$AU 1000 (total costs)

---

## Publications

### **Published Manuscripts (\* mentored trainees in my laboratory)**

1. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, Dinh VQ\*, **Rickards CA**. Induced Blood Flow Oscillations at 0.1 Hz Protects Oxygenation of Severely Ischemic Tissue in Humans. *J Appl Physiol* 2024; (In Press).
2. Rosenberg AJ\*, Anderson GK\*, McKeefer HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. White Mountain Expedition 2019: The Impact of Sustained Hypoxia on Cerebral Blood Flow Responses and Tolerance to Simulated Hemorrhage. *Eur J Appl Physiol* 2024; 124(8): 2365-2378. <https://doi.org/10.1007/s00421-024-05450-1> PMID: PMC11321930

3. Anderson GA\*, Davis KA\*, Bhuiyan NA\*, Rusy R\*, Rosenberg AJ\*, **Rickards CA**. Effect of Oscillatory Hemodynamics on the Cardiovascular Response to Simulated Hemorrhage with Isocapnia. *J Appl Physiol* 2023; 135(6):1312-1322. <https://doi.org/10.1152/jappphysiol.00241.2023> PMID: PMC10911761
4. Panerai RB, Brassard P, Burma JS, Castro P, Claassen JAHR, van Lieshout JJ, Liu J, Lucas SJE, Minhas JS, Mitsis GD, Nogueira RC, Ogoh S, Payne SJ, **Rickards CA**, Robertson AD, Rodrigues GD, Smirl JD, Simpson DM. Transfer function analysis of dynamic cerebral autoregulation: A CARNet white paper 2022 update. *J Cereb Blood Flow Metab* 2023; 43(1):3-25. <https://doi.org/10.1177/0271678X221119760>
5. Anderson GK\*, **Rickards CA**. The Potential Therapeutic Benefits of Low Frequency Hemodynamic Oscillations. *J Physiol* 2022; 600(17):3905-3919. <https://doi.org/10.1113/JP282605> [Review] PMID: PMC9444954
6. Skow RJ, Brothers RM, Claassen JAHR, Day TA, **Rickards CA**, Smirl JD, Brassard P. On the use and misuse of cerebral hemodynamics terminology using Transcranial Doppler ultrasound: a call for standardization. *Am J Physiology-Heart & Circ Physiol* 2022; 323(2):H350-H357. <https://journals.physiology.org/doi/abs/10.1152/ajpheart.00107.2022>
7. Baker J, Safarzadeh MA, Incognito AV, Jendzjowsky NG, Foster GE, Bird JD, Raj SR, Day TA, **Rickards CA**, Zubieta-DeUrioste N, Alim U, Wilson RJA. Functional optical coherence tomography at altitude: retinal microvascular perfusion and retinal thickness at 3,800 meters. *J Appl Physiol* 2022; 133(3):534-545. <https://doi.org/10.1152/jappphysiol.00132.2022> PMID: PMC9744644.
8. Rosenberg AJ\*, Kay VL\*, Anderson GK\*, Barnes HJ\*, Luu, M-L\*, Sprick JD\*, Alvarado HB\*, **Rickards CA**. The Reciprocal Relationship Between Cardiac Baroreceptor Sensitivity and Cerebral Autoregulation During Simulated Hemorrhage in Humans. *Auton Neurosci* 2022; 241:103007. <https://doi.org/10.1016/j.autneu.2022.103007>
9. Fan J-L, Tzeng Y-C, **Rickards CA**, Nogueira R, Nasr N, Brassard P. Integrative physiological assessment of cerebral hemodynamics and metabolism in acute ischemic stroke. *J Cereb Blood Flow Metab* 2022; 42(3):454-470. <https://doi.org/10.1177/0271678X211033732> [Review]
10. Fan J-L, Tzeng Y-C, **Rickards CA**, Nogueira R, Nasr N, Brassard P. Integrative cerebral blood flow regulation in ischemic stroke. *J Cereb Blood Flow Metab* 2022; 42(3):387-403. <https://doi.org/10.1177/0271678X211032029> [Review]
11. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. Peaks and Valleys: Oscillatory cerebral blood flow at high altitude protects cerebral tissue oxygenation. *Physiol Meas* 2021 Jun 29;42(6). <https://doi.org/10.1088/1361-6579/ac0593>
12. Rosenberg AJ\*, Kay VL\*, Anderson GK\*, Luu M-L\*, Barnes HJ\*, Sprick JD\*, **Rickards CA**. The impact of acute central hypovolemia on cerebral hemodynamics: Does sex matter? *J Appl Physiol* 2021; 130(6):1786-1797.
13. Bird JD, Leacy JK, Foster GE, **Rickards CA**, Wilson RJA, Jendzjowsky NG, Pentz BA, Byman BRM, Thrall SF, Skalk AL, Burns D, O'Halloran KD, Steinback CD, Ondrus P, Hewitt SA, Day TA. Time Course and Magnitude of Ventilatory and Renal Acid-Base Acclimatization Following Rapid Ascent to and Residence at 3800m for Nine Days. *J Appl Physiol* 2021; 130(6): 1705-1715. PMID: PMC11025293

14. Hansen A, Lawley J, **Rickards CA**, Howden E, Sarma S, Cornwell III W, Amin S, Mugele H, Marume K, Possnig C, Whitworth L, Williams M, Levine BD. Reducing Intracranial Pressure by Reducing Central Venous Pressure: Assessment of potential countermeasures to spaceflight associated neuro-ocular syndrome. *J Appl Physiol* 2021; 130:283-289.
15. Rosenberg AJ\*, Kay VL\*, Anderson GK\*, Sprick JD\*, **Rickards CA**. A Comparison of Protocols for Simulating Hemorrhage in Humans: Step vs. Ramp Lower Body Negative Pressure. *J Appl Physiol* 2021; 130:380-389.
16. Anderson GK\*, Sprick JD\*, Park FS\*, Rosenberg AJ\*, **Rickards CA**. Responses of cerebral blood flow and tissue oxygenation to low frequency oscillations during simulated hemorrhagic stress in humans. *Exp Physiol* 2019; 104:1190-1201 (PMID 31090115). <https://doi.org/10.1113/EP087358>
17. **Rickards CA**. Vive la résistance! The Role of Inspiratory Resistance Breathing on Cerebral Blood Flow. *Resp Physiol & Neurobiol* 2019; 265: 76-82. (PMID 30340016) [Review]
18. Park FS\*, Kay VL\*, Sprick JD\*, Rosenberg AJ\*, Anderson GK\*, Mallet RT, **Rickards CA**. Oxidative stress response during stimulated hemorrhage via application of lower body negative pressure. *Exp Biol Med* 2019; 244: 272-278 (PMID 30727766).
19. Sprick JD\*, Przyklenk K, Mallet RT, **Rickards CA**. Ischemic and hypoxic conditioning: Potential for protection of vital organs. *Exp Physiol* 2019; 104(3): 278-294. (PMID 30597638). [A “top cited article” for *Exp Physiol* 2019-2020] [Review]
20. Crandall CG, **Rickards CA**, Johnson BD. Impact of Environmental Stressors on Tolerance to Hemorrhage in Humans. *Am J Physiol Regul Integr Comp Physiol* 2019; 316: R88-R100. (PMID 30517019) [Review]
21. Xiang L, Hinojosa-Laborde C, Ryan KL, **Rickards CA**, Convertino VA. Time course of compensatory physiological responses to central hypovolemia in high and low tolerant human subjects. *Am J Physiol Regul Integr Comp Physiol* 2018; 315:R408-R416. (PMID 29668322)
22. Sprick JD\*, **Rickards CA**. Cyclical Blood Flow Restriction Resistance Exercise: A Potential Parallel to Remote Ischemic Preconditioning? *Am J Physiol Regul Integr Comp Physiol* 2017; 313:R507-R517 (PMID 28835448; DOI: 10.1152/ajpregu.00112.2017)
23. Sprick JD\*, **Rickards CA**. Combining Remote Ischemic Preconditioning and Aerobic Exercise: A Novel Adaptation of Blood Flow Restriction Exercise. *Am J Physiol Regul Integr Comp Physiol* 2017; 313:R497-R506 (PMID 28835447; doi: 10.1152/ajpregu.00111.2017)
24. Kay VL\*, Sprick JD\*, **Rickards CA**. Cerebral Oxygenation and Regional Cerebral Perfusion Responses with Resistance Breathing during Central Hypovolemia. *Am J Physiol Regul Integr Comp Physiol* 2017; 313:R132-R139 (PMID 28539354; DOI: 10.1152/ajpregu.00385.201)
25. Tymko MM, **Rickards CA**, Skow RJ, Ingram-Cotton NC, Howatt MK, Day TA. The effects of superimposed tilt and lower-body negative pressure on anterior and posterior cerebral circulations. *Physiol Reports* 2016; 4(17): e12957 (PMID 27634108; DOI: 10.14814/phy2.12957)
26. Sprick JD\*, Soller BR, **Rickards CA**. Efficacy of Novel Anatomical Sites for Assessment of Muscle Oxygenation During Central Hypovolemia. *Exp Biol Med* 2016; 241(17): 2007-2013 (PMC5068462).



27. Fogt DL, Levi MA, **Rickards CA**, Stelly SP, Cooke WH. Effects of Acute Vaporized Nicotine in Non-Tobacco Users at Rest and during Exercise. *Int J Exerc Sci* 2016; 9(5): 607-615. (PMC5154719)
28. Kay VL\*, **Rickards CA**. The role of cerebral oxygenation and regional cerebral blood flow on tolerance to central hypovolemia. *Am J Physiol Regul Integr Comp Physiol* 2016; 310(4): R375-83 (PMID 26676249).
29. Kay VL\*, **Rickards CA**. Reproducibility of a Continuous Ramp Lower Body Negative Pressure (LBNP) Protocol for Simulating Hemorrhage. *Physiol Reports* 2015; 3(11): e12640 (PMID 26676249; PMC4673656).
30. **Rickards CA**, Johnson BD, Convertino VA, Joyner MJ, Barnes JN. Cerebral blood flow regulation during blood loss compared to lower body negative pressure in humans. *J Appl Physiol* 2015; 119(6): 677-85.
31. Cooke WH, Pokhrel A, Dowling C, Fogt DL, **Rickards CA**. Acute inhalation of vaporized nicotine increases arterial pressure in young non-smokers. *Clin Auton Res* 2015; 25(4): 267-70.
32. **Rickards CA**. Cerebral blood flow regulation during hemorrhage. *Compr Physiol* 2015; 5: 1585-1621. [Review]
33. **Rickards CA**, Sprick JD\*, Colby HB, Kay VL\*, Tzeng YC. Coupling between arterial pressure, cerebral blood velocity, and cerebral tissue oxygenation with spontaneous and forced oscillations. *Physiol Meas* 2015; 36: 785-801.
34. Zaar M, Fedyk CG, Pidcoke HF, Scherer MR, Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Convertino VA, Cap AP. Platelet activation after presyncope by lower body negative pressure in humans. *PLoS One* 2014; 9(12): e116174 (doi: 10.1371/journal.pone.0116174)
35. Hinojosa-Laborde C, Ryan KL, **Rickards CA**, Convertino VA. Resting sympathetic baroreflex sensitivity in subjects with low and high tolerance to central hypovolemia induced by lower body negative pressure. *Front Physiol* 2014; 5:241 (doi: 10.3389/fphys.2014.00241)
36. **Rickards CA**, Tzeng YC. Arterial pressure and cerebral blood flow variability: friend or foe? A review. *Front Physiol* 2014; 5:120. [Review]
37. Abeelen ASS, Simpson D, Zhang R, Tarumi T, **Rickards CA**, Payne S, Mitsis G, Marmarelis V, Tzeng YC, Gommer E, Müller M, Dorado AC, Yelicich B, Puppo C, Liu X, Czosnyka M, Wang N, Novak V, Panerai R, Claassen JAHR. Between-center variability in transfer function analysis: a widely used method for linear quantification of the dynamic pressure-flow relation: the CARnet study. *Med Eng Phys* 2014; 36(5):620-7.
38. **Rickards CA**, Vyas N, Ryan KL, Ward KW, Andre D, Hurst GM, Barrera CR, Convertino VA. Are you bleeding? Validation of a machine-learning algorithm for remote determination of blood volume status. *J Appl Physiol* 2014; 116(5):486-94.
39. Ji S-Y, Ward KR, Ryan KL, **Rickards CA**, Convertino VA, Najarian K. Heart rate variability analysis during central hypovolemia using wavelet transformation. *J Clin Monit & Comput* 2013; 27(3):289-302.
40. Tzeng YC, Ainslie PN, Cooke WH, Peebles K, MacRae BA, Smirl JD, Willie CK, Horsman H, **Rickards CA**. Assessment of cerebral autoregulation: the quandary of quantification. *Am J Physiol-Heart Circ Physiol* 2012; 303(6):H658-H671.

41. Soller BR, Zou F, Ryan KL, **Rickards CA**, Ward K, Convertino VA. Lightweight noninvasive trauma monitor for early indication of central hypovolemia and tissue acidosis: a review. *J Trauma Acute Care Surg* 2012; 73:S106-S111.
42. Morales G, Romero SA, **Rickards CA**, Ryan KL, Convertino VA, Cooke WH. Effects of dehydration on cerebrovascular control during standing after heavy resistance exercise. *J Appl Physiol* 2012; 112:1875-1883.
43. Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Cooke WH, Convertino VA. Sympathetic responses to central hypovolemia: New insights from microneurographic recordings. *Front Physiol* 2012; 3:110.
44. Chung KK, Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Pamplin JC, Patel SS, Herold TS, Convertino VA. Progressive reduction in central blood volume is not detected by sublingual capnography. *Shock* 2012; 37(6):586-591.
45. Soller BR, Sliwa J, Yang Y, Zou F, Ryan KL, **Rickards CA**, Convertino VA. Simultaneous spectroscopic determination of forearm muscle pH and oxygen saturation during simulated hemorrhage. *J Near Infrared Spectrosc* 2012; 20:141-150.
46. Convertino VA, **Rickards CA**, Ryan KL. Autonomic mechanisms associated with heart rate and vasoconstrictor reserves. *Clin Auton Res* 2012; 22:123-130.
47. Hinojosa-Laborde C, **Rickards CA**, Ryan KL, Convertino VA. Heart rate variability during simulated hemorrhage with lower body negative pressure in high and low tolerant subjects. *Frontiers in Clinical and Translational Physiology* 2011; 2:85.
48. Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Cooke WH, Convertino VA. Arterial pressure oscillations are not associated with muscle sympathetic nerve activity in individuals exposed to central hypovolemia. *J Physiol* 2011; 589:5311-5322.
49. **Rickards CA**, Ryan KL, Cooke WH, Convertino VA. Tolerance to central hypovolemia: the influence of oscillations in arterial pressure and cerebral blood velocity. *J Appl Physiol* 2011; 111: 1048-1058. <https://doi.org/10.1152/jappphysiol.00231.2011>
50. Xu D, Ryan KL, **Rickards CA**, Zhang G, Convertino VA, Mukkamala R. Improved Pulse Transit Time Estimation by System Identification Analysis of Proximal and Distal Arterial Waveforms. *Am J Physiol Heart Circ Physiol* 2011; 301(4): H1389-H1395.
51. Convertino VA, Moulton SL, Grudic GZ, **Rickards CA**, Hinojosa-Laborde C, Gerhardt RT, Blackburne LH, Ryan KL. Use of advanced machine-learning techniques for non-invasive monitoring of hemorrhage. *J Trauma* 2011; 71(1): S25-S32. [Review]
52. Convertino VA, Ryan KL, **Rickards CA**, Glorsky SL, Idris AH, Yannopoulos D, Metzger A, Lurie KG. Optimizing the respiratory pump: harnessing inspiratory resistance to treat systemic hypotension. *Respir Care* 2011; 56(6):846-857. [Review]
53. Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Gerhardt RT, Cain J, Convertino VA. Advanced technology development for remote triage applications in bleeding combat casualties. *US Army Med Dep J* 2011; April-June: 61-72.
54. Romero SA, Morales G, **Rickards CA**, Ryan KL, Convertino VA, Fogt DL, Cooke WH. Control of cerebral blood velocity with furosemide-induced hypovolemia and upright tilt. *J Appl Physiol* 2011; 110: 492-498.

55. McGrath SP, Ryan KL, Wendleken SM, **Rickards CA**, Convertino VA. Pulse oximeter plethysmographic waveform changes in awake, spontaneously breathing, hypovolemic volunteers. *Anesth Analg* 2011; 112(2):368-74.
56. Reisner AT, Xu D, Ryan KL, Convertino VA, **Rickards CA**, Mukkamala R. Comparison of cardiac output by blood pressure waveform analysis methods during experimental human hypovolemia and resuscitation. *Br J Anaesth* 2011; 106(1):23-30.
57. **Rickards CA**, Ryan KL, Ludwig DA, Convertino VA. Is heart period variability associated with the administration of life saving interventions in individual, pre-hospital trauma patients with normal standard vital signs? *Crit Care Med* 2010; 38(8):1666-73.
58. Ward KR, Tiba, MH, Ryan KL, Torres I, **Rickards CA**, Witten T, Soller BR, Ludwig DA, Convertino VA. Oxygen transport characterization of a human model of progressive hemorrhage. *Resuscitation* 2010; 81(8):987-93.
59. Ryan KL, **Rickards CA**, Ludwig DA, Convertino VA. Tracking central hypovolemia with ECG in humans: Cautions for the use of heart period variability in patient monitoring. *Shock* 2010; 33(6): 583-9.
60. **Rickards CA**, Ryan KL, Convertino VA. Characterization of common measures of heart period variability in healthy human subjects: implications for patient monitoring. *J Clin Monit and Comput* 2010; 24(1): 61-70.
61. Sethuraman G, Ryan KL, **Rickards CA**, Convertino VA. Ectopic beats in healthy humans and trauma patients: implications for use of heart period variability indices in medical monitoring. *Aviat Space Environ Med* 2010; 81:125-129.
62. Convertino VA, **Rickards CA**, Ryan KL. Responses of sympathetic nerve activity to presyncope: new insights about mechanisms of fainting. *J Gravit Physiol* 2010; 17(1):P27-P30. [Review]
63. Convertino VA, **Rickards CA**, Lurie KG, Ryan KL. Hyperventilation induced by severe reductions in central blood volume: the respiratory pump as a protective mechanism against hypotension. *Aviat Space Environ Med* 2009; 80:1012-1017.
64. Cooke WH, **Rickards CA**, Ryan KL, Convertino VA. Muscle sympathetic nerve activity during intense lower body negative pressure to presyncope in humans. *J Physiol* 2009; 587:4987-4999.
65. Lee J, Kim J, Mahon S, Tromberg BJ, Ryan KL, Convertino VA, **Rickards CA**, Osann K, Brenner M. Tissue hemoglobin monitoring of progressive central hypovolemia in humans using broadband diffuse optical spectroscopy. *J Biomed Opt* 2008; 13(6):064027.
66. **Rickards CA**, Ryan KL, Cooke WH, Romero SA, Convertino VA. Combat stress or hemorrhage? Evidence for a decision-assist algorithm for remote triage. *Aviat Space Environ Med* 2008; 79:670-676.
67. Cooke WH, **Rickards CA**, Ryan KL, Convertino VA. Autonomic compensation to simulated hemorrhage monitored with heart period variability. *Crit Care Med* 2008; 36(6):1892-1899.
68. Ryan KL, Cooke WH, **Rickards CA**, Lurie KG, Convertino VA. Breathing through an inspiratory threshold device improves stroke volume during central hypovolemia in humans. *J Appl Physiol* 2008; 104:1402-1409.

69. **Rickards CA**, Cohen KD, Bergeron LB, Burton L, Khatri P, Lee CT, Doerr DF, Ryan KL, Cooke WH, Lurie KG, Convertino VA. Inspiratory resistance, cerebral blood flow velocity, and symptoms of acute hypotension. *Aviat Space Environ Med* 2008; 79:557-564.
70. Convertino VA, Ryan KL, **Rickards CA**, Salinas J, McManus JG, Cooke WH, Holcomb JB. Physiological and medical monitoring for en route care of combat casualties. *J Trauma* 2008; 64: S342-53. [Review]
71. Ryan KL, Batchinsky AI, McManus JG, **Rickards CA**, Convertino VA. Changes in pulse character and mental status reflect late responses to reductions in central blood volume. *Prehosp Emerg Care* 2008; 12(2): 192-8.
72. McManus JG, Ryan KL, Morton MJ, **Rickards CA**, Cooke WH, Convertino VA. Limitations of end-tidal CO<sub>2</sub> as an early indicator of central hypovolemia in humans. *Prehosp Emerg Care* 2008; 12(2): 199-205.
73. Soller BR, Ryan KL, **Rickards CA**, Cooke WH, Soyemi OO, Yang Y, Crookes BA, Heard SO, Convertino VA. Oxygen saturation determined from deep muscle, not thenar tissue, is an early indicator of central hypovolemia in humans. *Crit Care Med* 2008; 36(1):176-182.
74. Soller BR, Soyemi OO, Yang Y, Ryan KL, **Rickards CA**, Walz JM, Heard SO, Convertino VA. Noninvasively measured muscle PO<sub>2</sub> is an early indicator of central hypovolemia in humans. *J Appl Physiol* 2008; 104:475-481.
75. **Rickards CA**, Ryan KL, Cooke WH, Lurie KG, Convertino VA. Inspiratory resistance delays the reporting of symptoms with central hypovolemia: association with cerebral blood flow. *Am J Physiol Regul Integr Comp Physiol* 2007; 293:R243-R250.
76. **Rickards CA**, Cohen KD, Bergeron LB, Burton L, Khatri P, Lee CT, Doerr DF, Ryan KL, Cooke WH, Convertino VA. Cerebral blood flow responses and the association with symptoms during orthostatic hypotension. *Aviat Space Environ Med* 2007; 78:653-658.
77. Convertino VA, Ryan KL, **Rickards CA**, Cooke WH, Idris AH, Metzger A, Holcomb JB, Adams BD, Lurie KG. Inspiratory resistance maintains arterial pressure during central hypovolemia: Implications for treatment of patients with severe hemorrhage. *Crit Care Med* 2007; 35(4):1145-1152.
78. Cooke WH, Salinas J, McManus JG, Ryan KL, **Rickards CA**, Holcomb JB, Convertino VA. Heart period variability in trauma patients may predict mortality and allow remote triage. *Aviat Space Environ Med* 2006; 77:1107-1112.
79. Berry NM, **Rickards CA**, Newman DG. Squat-stand test responses following ten consecutive episodes of head-up tilt. *Aviat Space Environ Med* 2006; 77:1125-1130.
80. Berry NM, **Rickards CA**, Newman DG. Acute cardiovascular adaptation to ten consecutive episodes of head-up tilt. *Aviat Space Environ Med* 2006; 77(5):494-499.
81. **Rickards CA**, Newman DG. G-induced visual and cognitive disturbances in a survey of 65 operational fighter pilots. *Aviat Space Environ Med* 2005; 76(5):496-500.
82. Arkinstall MJ, Bruce CR, Clark SA, **Rickards CA**, Burke LM, Hawley JA. Regulation of fuel metabolism by pre-exercise muscle glycogen content and exercise intensity. *J Appl Physiol* 2004; 97:2275-83.

83. **Rickards CA**, Newman DG. A comparative assessment of two techniques for investigating initial cardiovascular reflexes under acute orthostatic stress. *Eur J App Physiol* 2003; 90:449-457.
84. Berry NM, **Rickards CA**, Newman DG. The effect of caffeine on orthostatic tolerance. *Aviat Space Environ Med* 2003; 74(7): 725-30.
85. **Rickards CA**, Newman DG. The effect of low-level normobaric hypoxia on orthostatic responses. *Aviat Space Environ Med* 2002; 73:460-465.

### **Letters to the Editor/Invited Opinion**

1. **Rickards CA**. The data must dictate our research practices. Invited comment on Crosstalk debate, “The middle cerebral artery diameter does/does not change during alterations in arterial blood gases and blood pressure”. *J Physiol* 2016; 594(15).
2. Tzeng YC, MacRae BA, **Rickards CA**. A recipe for reducing blood pressure variability: adding blood flow to the mix. *Hypertension* 2012; 60(2):E12.
3. Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Cooke WH, Convertino VA. Response to the letter to the editor by Pagani et al. *J Physiol* 2012; 590: 649-650.
4. **Rickards CA**, Ryan KL, Ludwig DA, Convertino VA. RE: Trauma patients with normal vital signs: is shock index a reflection of injury severity? *Crit Care Med* 2010; 38(11): 2269-70.
5. **Rickards CA**. RE: Heart period variability in trauma and hemorrhage. *J Trauma* 2010; 69(2): 479-80.
6. Soller BR, Yang Y, Soyemi OO, Heard SO, Ryan KL, **Rickards CA**, Convertino VA, Cooke WH, Crookes BA. Oxygen saturation determined from deep muscle, not thenar tissue, is an early indicator of central hypovolemia in humans. *Crit Care Med* 2009; 37(1): 385.

### **Book Chapters**

1. Convertino VA and **Rickards CA**. Human Models of Space Physiology. In: Conn PM, ed. Source Book of Models for Biomedical Research. Totowa: Humana Press; 2008:457-464.

### **Technical Reports**

1. Convertino VA, Moulton SL, Grudic GZ, **Rickards CA**, Hinojosa-Laborde C, Ryan KL. Use of advanced machine-learning techniques for non-invasive monitoring of hemorrhage. In: Use of Advanced Technologies and New Procedures in Medical Field Operations. NATO Publication RTO-MP-HFM-182, 2010, pp. 23-1-23-10.

### **Other Publications**

1. **Rickards CA**. The Last Word: Magnifying ‘The Tyranny of Distance’. *The Physiologist Magazine*, July 2021
2. **Rickards CA**. Far From Home – Challenges facing international graduate students, postdocs, & professionals living and working in the US. *The Physiologist* 2013; 56(2):50-2.

**Abstracts and Proceedings (\* mentored trainees in my laboratory)**

1. Dinh VQ\*, Farmer GE, Davis KA\*, **Rickards CA**. Pulsatile Perfusion Therapy at 0.1 Hz via Inflatable Hind Limb Cuffs Protects Cerebral Blood Flow and Improves Survival Following Severe Hemorrhage in Rats. Cerebrovascular Research Network (CARNet) Annual Meeting, Quebec City, Canada, October 2024.
2. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. Assessment of Dynamic Cerebral Autoregulation Using Intermittent Thigh Cuff Compressions at 0.1 Hz. Cerebrovascular Research Network (CARNet) Annual Meeting, Quebec City, Canada, October 2024.
3. Hudson L\*, Davis KA\*, Dinh VQ\*, Moody A\*, Rickards CA. Interactions Between Carotid Arterial Stiffness, Amplitude of Cerebral Blood Flow Oscillations, and Cerebral Tissue Oxygenation During Simulated Hemorrhage in Humans [Oral Presentation]. Robert J. Hardin Translational Cardiovascular Research Symposium, University of North Texas Health Science Center, July 2024.
4. Dinh VQ\*, Farmer GE, **Rickards CA**. Pulsatile perfusion therapy at 0.1 Hz improves survival following severe hemorrhage in rats. Robert J. Hardin Translational Cardiovascular Research Symposium, University of North Texas Health Science Center, July 2024.
5. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. The Effect of 0.1 Hz Blood Flow Oscillations on Microvascular Blood Flow Responses Following Severe Ischemia. Robert J. Hardin Translational Cardiovascular Research Symposium, University of North Texas Health Science Center, July 2024.
6. Lal K\*, Davis KA\*, Anderson GK\*, Bhuiyan NA\*, **Rickards CA**. Evaluating the Role of Arterial Stiffness on Amplitude of Cerebral Blood Flow Oscillations. American Geriatrics Society (AGS) Virtual Annual Meeting, May 2024.
7. Hudson L\*, Davis KA\*, Anderson GA\*, Rosenberg AJ\*, McKeefer HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day T, **Rickards CA**. Interactions Between Carotid Arterial Stiffness, Amplitude of Cerebral Blood Flow Oscillations, and Cerebral Tissue Oxygenation During Simulated Hemorrhage in Humans. American Physiological Society (APS) Summit, Long Beach CA, April 2024.
8. Dinh VQ\*, Farmer GE, **Rickards CA**. Pulsatile perfusion therapy at 0.1 Hz improves survival following severe hemorrhage in rats. American Physiological Society (APS) Summit, Long Beach CA, April 2024.
9. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. The Effect of 0.1 Hz Blood Flow Oscillations on Microvascular Blood Flow Responses Following Severe Ischemia. American Physiological Society (APS) Summit, Long Beach CA, April 2024.
10. Lal K\*, Davis KA\*, Anderson GK\*, Bhuiyan NA\*, **Rickards CA**. Evaluating the Role of Arterial Stiffness on Amplitude of Cerebral Blood Flow Oscillations. UNTHSC Research Appreciation Day (RAD), March 2024.
11. Muthyala R\*, Davis KA\*, Hudson L\*, Dinh VQ\*, Roumengous T, Wallner J, Boutwell C, **Rickards CA**. Evaluating the efficacy of wireless near infrared spectroscopy sensors for detecting central hypovolemia during simulated hemorrhage in humans. UNTHSC Research Appreciation Day (RAD), March 2024.
12. Dinh VQ\*, Farmer GE, **Rickards CA**. Pulsatile perfusion therapy at 0.1 Hz improves survival following severe hemorrhage in rats. UNTHSC Research Appreciation Day (RAD), March 2024.
13. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. The Effect of 0.1 Hz Blood Flow Oscillations on Microvascular Blood Flow Responses Following Severe Ischemia. UNTHSC Research Appreciation Day (RAD), March 2024.

14. Hudson L\*, Davis KA\*, Anderson GA\*, Rosenberg AJ\*, McKeefer HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day T, **Rickards CA**. Interactions Between Carotid Arterial Stiffness, Amplitude of Cerebral Blood Flow Oscillations, and Cerebral Tissue Oxygenation During Simulated Hemorrhage in Humans. UNTHSC Research Appreciation Day (RAD), March 2024.
15. Dinh VQ\*, Farmer GE, **Rickards CA**. Pulsatile perfusion therapy at 0.1 Hz improves survival following severe hemorrhage in female rats. Women's Cardiovascular & Brain Health (WCBH) Symposium, University of North Texas Health Science Center, February 2024.
16. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. Reactive Hyperemia in Young and Healthy Men and Women Following Ischemia with 0.1 Hz Oscillatory Blood Flow. Women's Cardiovascular & Brain Health (WCBH) Symposium, University of North Texas Health Science Center, February 2024.
17. Davis KA\*, Anderson GK\*, Bhuiyan NA\*, McIntyre BJ\*, Sprick JD\*, Park FS\*, Rosenberg AJ\*, **Rickards CA**. Amplitude of Induced Blood Flow Oscillations at 0.1 Hz is Related to Greater Oxygen Extraction during Peripheral Ischemia but not Cerebral Ischemia. Cerebrovascular Research Network (CARNet) Annual Meeting, Taipei, Taiwan, October 2023.
18. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. Induced Blood Flow Oscillations at 0.1 Hz Protects Oxygenation of Severely Ischemic Tissue. American Physiological Society (APS) Summit, Long Beach CA, April 2023. (Physiology 2023, 38:S1 <https://doi.org/10.1152/physiol.2023.38.S1.5725771>)
19. McIntyre BJ\*, Davis KA\*, Bhuiyan NA\*, **Rickards CA**. Hemodynamic Responses to 0.1 Hz Oscillatory Thigh Cuff Inflations. American Physiological Society (APS) Summit, Long Beach CA, April 2023. (Physiology 2023, 38:S1 <https://doi.org/10.1152/physiol.2023.38.S1.5731693>)
20. Bhuiyan NA\*, Davis KA\*, Vintimilla RM, Borzage M, Pahlevan NM, King KS, Johnson LA, O'Bryant SE, **Rickards CA**. Carotid arterial stiffness and cerebral blood flow variability in individuals with mild cognitive impairment. American Physiological Society (APS) Summit, Long Beach CA, April 2023. (Physiology 2023, 38:S1 <https://doi.org/10.1152/physiol.2023.38.S1.5733026>)
21. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. Induced Blood Flow Oscillations at 0.1 Hz Protects Oxygenation of Severely Ischemic Tissue. UNTHSC Research Appreciation Day (RAD), March 2023.
22. McIntyre BJ\*, Davis KA\*, Bhuiyan NA\*, **Rickards CA**. Hemodynamic Responses to 0.1 Hz Oscillatory Thigh Cuff Inflations. UNTHSC Research Appreciation Day (RAD), March 2023.
23. Bhuiyan NA\*, Davis KA\*, Vintimilla RM, Borzage M, Pahlevan NM, King KS, Johnson LA, O'Bryant SE, **Rickards CA**. Carotid arterial stiffness and cerebral blood flow variability in individuals with mild cognitive impairment. UNTHSC Research Appreciation Day (RAD), March 2023.
24. Stanteen C\*, Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. Peripheral Vascular Function is Not Correlated to Subjective Sleep Quality in Young Healthy Humans. UNTHSC Research Appreciation Day (RAD), March 2023.
25. Davis KA\*, Bhuiyan NA\*, McIntyre BJ\*, **Rickards CA**. Induced Blood Flow Oscillations at 0.1 Hz Protects Oxygenation of Severely Ischemic Tissue in Men but Not Women. Women's Cardiovascular & Brain Health (WCBH) Symposium, University of North Texas Health Science Center, February 2023.
26. McIntyre BJ\*, Davis KA\*, Bhuiyan NA\*, **Rickards CA**. Does sex affect the relationship between carotid artery stiffness and the magnitude of induced 0.1 Hz oscillatory cerebral blood flow? Women's

Cardiovascular & Brain Health (WCBH) Symposium, University of North Texas Health Science Center, February 2023.

27. Bhuiyan NA\*, Davis KA\*, McIntyre BJ\*, **Rickards CA**. Relationship Between Brachial Artery Stiffness and 0.1 Hz Blood Flow Oscillations in Young and Healthy Males and Females. Women's Cardiovascular & Brain Health (WCBH) Symposium, University of North Texas Health Science Center, February 2023.
28. Davis KA\*, Sprick JD\*, Kay VL\*, **Rickards CA**. Resistance Breathing and Sympathetic Nerve Activity During Simulated Hemorrhage in Humans. Experimental Biology (EB) Meeting, Philadelphia, PA, April 2022. (FASEB J 2022 36(S1)): <https://doi.org/10.1096/fasebj.2022.36.S1.R4599>
29. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. Effects of Sustained Hypobaric Hypoxia on Amplitude of Forced Hemodynamic Oscillations During Central Hypovolemia. Experimental Biology (EB) Meeting, Philadelphia, PA, April 2022. (FASEB J 2022 36(S1)): <https://doi.org/10.1096/fasebj.2022.36.S1.R5720>
30. Davis KA\*, Sprick JD\*, Kay VL\*, **Rickards CA**. Resistance Breathing and Sympathetic Nerve Activity During Simulated Hemorrhage in Humans. UNTHSC Research Appreciation Day (RAD), March 2022.
31. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. Effects of Sustained Hypobaric Hypoxia on Amplitude of Forced Hemodynamic Oscillations During Central Hypovolemia. UNTHSC Research Appreciation Day (RAD), March 2022.
32. Bhuiyan N\*, Farmer GE, Anderson GK\*, Davis KA\*, Cunningham JT, **Rickards CA**. Characterization of arterial pressure and carotid blood flow responses to pulsatile perfusion therapy in a rat model of hemorrhage. UNTHSC Research Appreciation Day (RAD), March 2022.
33. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. Sex Differences in the Hemodynamic Responses to Induced Arterial Pressure Oscillations During Central Hypovolemia. Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center, April 2021.
34. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. White Mountain Expedition 2019: Peaks and Valleys - Oscillatory cerebral blood flow at high altitude. Cerebral Autoregulation Research Network (CARNet) 10<sup>th</sup> Annual Meeting, April 2021 [Oral, Virtual].
35. Hua VW\*, Barnes HJ\*, Rosenberg AJ\*, Anderson GK\*, Luu M-Y\*, **Rickards CA**. Impact of Sleep Quality on Cardiovascular Responses to Simulated Hemorrhage in Humans. Experimental Biology (EB) Meeting [Virtual], April 2021. (FASEB J 2021 35(S1)): <https://doi.org/10.1096/fasebj.2021.35.S1.00287>
36. Davis KA\*, Sprick JD\*, Kay VL\*, **Rickards CA**. Sympathetic Response to Resistance Breathing During Simulated Hemorrhage in Humans. Experimental Biology (EB) Meeting [Virtual], April 2021. (FASEB J 2021 35(S1)): <https://doi.org/10.1096/fasebj.2021.35.S1.05215>
37. Rosenberg AJ\*, Kay VL\*, Anderson GK\*, Barnes HJ\*, Sprick JD\*, **Rickards CA**. The Reciprocal Relationship Between Cardiac Baroreceptor Sensitivity and Cerebral Autoregulation During Simulated Hemorrhage in Humans. Experimental Biology (EB) Meeting [Virtual], April 2021. (FASEB J 2021 35(S1)): <https://doi.org/10.1096/fasebj.2021.35.S1.03837>



38. Anderson GK\*, Rosenberg AJ\*, Kay VL\*, Barnes HJ\*, Sprick JD\*, Payne S, **Rickards CA**. Time-Frequency Analysis of Hemodynamics Oscillations during Presyncopal Lower Body Negative Pressure (LBNP). Experimental Biology (EB) Meeting [Virtual], April 2021. (FASEB J 2021 35(S1): <https://doi.org/10.1096/fasebj.2021.35.S1.04565>)
39. Leacy J, Burns D, Jendjowsky N, Braun C, Herrington B, Wilson R, Vermeulen T, Rosenberg AJ\*, Anderson GK\*, **Rickards CA**, Lucking E, Foster G, O'Halloran K, Day T. The Effects of Acute High Altitude Exposure and Arterial Blood Gas Manipulation on Neurovascular Coupling in Healthy Humans. Experimental Biology (EB) Meeting [Virtual], April 2021. (FASEB J 2021 35(S1): <https://doi.org/10.1096/fasebj.2021.35.S1.03530>)
40. Solloum T, Cates V, Marullo A, Javan M, Tymko M, **Rickards CA**, Day T. Cerebral Blood Flow Pulsatility Index is Unchanged during Superimposed Lower-Body Negative Pressure in Head-Up Tilt in Anterior and Posterior Cerebral Circulations. Experimental Biology (EB) Meeting [Virtual], April 2021. (FASEB J 2021 35(S1): <https://doi.org/10.1096/fasebj.2021.35.S1.04421>)
41. Hua VW\*, Barnes HJ\*, Rosenberg AJ\*, Anderson GK\*, Luu M-Y\*, **Rickards CA**. Impact of Sleep Quality on Cardiovascular Responses to Simulated Hemorrhage in Humans. UNTHSC Research Appreciation Day (RAD), March 2021 [Poster, Virtual].
42. Rusy R\*, Anderson GK\*, Kay VL\*, **Rickards CA**. Investigating the Use of Resistance Breathing for the Detection of Acute Hypovolemia. UNTHSC Research Appreciation Day (RAD), March 2021 [Oral, Virtual].
43. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. Peaks and Valleys - Oscillatory cerebral blood flow at high altitude. UNTHSC Research Appreciation Day (RAD), March 2021 [Oral, Virtual].
44. Barnes HJ\*, Rosenberg AJ\*, Luu M-Y, Anderson GK\*, **Rickards CA**. Sex differences in the oxidative stress and inflammation response during and after simulated hemorrhage in humans. UNTHSC Research Appreciation Day (RAD), March 2021 [Poster, Virtual].
45. Davis KA\*, Sprick JD\*, Kay VL\*, **Rickards CA**. Sympathetic Response to Resistance Breathing During Simulated Hemorrhage in Humans. UNTHSC Research Appreciation Day (RAD), March 2021 [Poster, Virtual].
46. Rosenberg AJ\*, Anderson GK\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. White Mountain Expedition 2019: The Impact of Sustained Hypoxia on Cerebral Blood Flow Responses and Tolerance to Simulated Hemorrhage. UNTHSC Research Appreciation Day (RAD), March 2021 [Oral, Virtual].
47. Barnes HJ\*, Rosenberg AJ\*, Luu M-Y, Anderson GK\*, **Rickards CA**. Sex differences in the oxidative stress and inflammation response during and after simulated hemorrhage in humans. John Peter Smith (JPS) Health Network Research Symposium, June 2020 [Oral Presentation].
48. Anderson GK\*, Steele A, Vanden Berg ER, Berthelsen L, Rosenberg AJ\*, Barnes HJ\*, Bird J, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, Steinback CD, **Rickards CA**. White Mountain Expedition 2019: Association between cerebral tissue oxygenation and low frequency oscillations in arterial pressure. Okanagan Cardiovascular & Respiratory Symposium, Silver Star Ski Resort, British Columbia, CANADA, March 2020. [Meeting cancelled due to COVID-19].

49. Barnes HJ\*, Rosenberg AJ\*, Luu M-Y, Anderson GK\*, **Rickards CA**. Sex differences in the oxidative stress and inflammation response during and after simulated hemorrhage in humans. Experimental Biology (EB) Meeting, San Diego, CA, April 2020. [Meeting cancelled due to COVID-19] (FASEB J 2020 34(S1): <https://doi.org/10.1096/fasebj.2020.34.s1.09635>)
50. Holme NL\*, Rosenberg AJ\*, Anderson GK\*, Barnes HJ\*, **Rickards CA**. Cerebral blood flow and cerebral tissue oxygen responses to inspiratory resistance breathing during hypoxia. Experimental Biology (EB) Meeting, San Diego, CA, April 2020. [Meeting cancelled due to COVID-19] (FASEB J 2020 34(S1): <https://doi.org/10.1096/fasebj.2020.34.s1.09673>)
51. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. White Mountain Expedition 2019: Peaks and Valleys - Oscillatory cerebral blood flow at high altitude. Experimental Biology (EB) Meeting, San Diego, CA, April 2020. [Meeting cancelled due to COVID-19] (FASEB J 2020 34(S1): <https://doi.org/10.1096/fasebj.2020.34.s1.05888>)
52. Rosenberg AJ\*, Anderson GK\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. White Mountain Expedition 2019: The Impact of Sustained Hypoxia on Cerebral Blood Flow Responses and Tolerance to Simulated Hemorrhage. Experimental Biology (EB) Meeting, San Diego, CA, April 2020. [Meeting cancelled due to COVID-19] (FASEB J 2020 34(S1): <https://doi.org/10.1096/fasebj.2020.34.s1.05889>)
53. Leacy JK, Burns D, Jendzjowsky N, Braun C, Herrington B, Wilson RJA, Vermeulen T, Foster G, Rosenberg AJ, Anderson GK, **Rickards CA**, Lucking E, O'Halloran KD, Day TA. The Impact of Acute High Altitude Exposure (3800m) And Isocapnic Hypoxia/Hyperoxia on Neurovascular Coupling in Healthy Volunteers. Experimental Biology (EB) Meeting, San Diego, CA, April 2020. [Meeting cancelled due to COVID-19] (FASEB J 2020 34(S1): <https://doi.org/10.1096/fasebj.2020.34.s1.05124>)
54. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. White Mountain Expedition 2019: Peaks and Valleys - Oscillatory cerebral blood flow at high altitude. UNTHSC Research Appreciation Day (RAD), March 2020. [Meeting cancelled due to COVID-19]
55. Rosenberg AJ\*, Anderson GK\*, Barnes HJ\*, Bird J, Pentz B, Byman BRM, Jendzjowsky N, Wilson RJ, Day TD, **Rickards CA**. White Mountain Expedition 2019: The Impact of Sustained Hypoxia on Cerebral Blood Flow Responses and Tolerance to Simulated Hemorrhage. UNTHSC Research Appreciation Day (RAD), March 2020. [Meeting cancelled due to COVID-19]
56. Barnes HJ\*, Rosenberg AJ\*, Luu M-Y, Anderson GK\*, **Rickards CA**. Sex differences in the oxidative stress and inflammation response during and after simulated hemorrhage in humans. UNTHSC Research Appreciation Day (RAD), March 2020. [Meeting cancelled due to COVID-19]
57. Hua VW\*, Anderson GA\*, Barnes HJ\*, **Rickards CA**, Rosenberg AJ\*. Visit-to-Visit Reproducibility of Cerebral Vascular Reactivity to CO<sub>2</sub> in Healthy Young Humans. UNTHSC Research Appreciation Day (RAD), March 2020. [Meeting cancelled due to COVID-19]
58. Anderson GK\*, Rosenberg AJ\*, Barnes HJ\*, Kay VL\*, Sprick JD\*, **Rickards CA**. Low frequency hemodynamic oscillations during simulated hemorrhage: the influence of sex. Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center, January 2020.

59. Barnes HJ\*, Rosenberg AJ\*, Luu M-Y, Anderson GK\*, **Rickards CA**. Sex differences in the oxidative stress response during and after simulated hemorrhage in humans. Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center, January 2020 [Oral Presentation].
60. Rosenberg AJ\*, Anderson GK\*, Barnes HJ\*, Kay VL\*, Sprick JD\*, **Rickards CA**. Sex does not impact cerebral hemodynamics in response to simulated blood loss in humans. Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center, January 2020.
61. Rosenberg AJ\*, Kay VL\*, Anderson GK\*, Sprick JD\*, **Rickards CA**. A Comparison of Protocols for Simulating Hemorrhage in Humans: Step vs. Ramp Lower Body Negative Pressure. Experimental Biology (EB) Meeting, Orlando, FL, April 2019. (FASEB J 2019 33(1): 838.22)
62. Anderson GK\*, Rosenberg AJ\*, Kay VL\*, Sprick JD\*, **Rickards CA**. Are Spontaneous Low Frequency Oscillations in Arterial Pressure and Cerebral Blood Flow Associated with the Protection of Cerebral Tissue Oxygenation during Simulated Hemorrhage? Experimental Biology (EB) Meeting, Orlando, FL, April 2019. (FASEB J 2019 33(1): 838.23)
63. Rosenberg AJ\*, Kay VL\*, Anderson GK\*, Sprick JD\*, **Rickards CA**. A Comparison of Protocols for Simulating Hemorrhage in Humans: Step vs. Ramp Lower Body Negative Pressure. UNTHSC Research Appreciation Day (RAD), April 2019.
64. Anderson GK\*, Rosenberg AJ\*, Kay VL\*, Sprick JD\*, **Rickards CA**. Are Spontaneous Low Frequency Oscillations in Arterial Pressure and Cerebral Blood Flow Associated with the Protection of Cerebral Tissue Oxygenation during Simulated Hemorrhage? UNTHSC Research Appreciation Day (RAD), April 2019.
65. Park FS\*, Luu M-L\*, Kay VL\*, Sprick JD\*, Rosenberg AJ\*, Anderson GK\*, Mallet RT, **Rickards CA**. Examining the Sex Effect on Oxidative Stress during Simulated Hemorrhage Induced by Lower Body Negative Pressure. UNTHSC Research Appreciation Day (RAD), April 2019.
66. Barnes H\*, Anderson GK\*, Rosenberg AJ\*, Park FS\*, Sprick JD\*, **Rickards CA**. Peak Analysis of Cerebral Blood Velocity Responses to Forced Low Frequency Oscillations during Simulated Hemorrhagic Stress in Humans. UNTHSC Research Appreciation Day (RAD), April 2019.
67. Anderson GK\*, Park FS\*, Sprick JD\*, **Rickards CA**. Responses of cerebral blood flow and tissue oxygenation to low frequency oscillations during simulated hemorrhagic stress in humans. Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center, February 2019.
68. Luu M-L\*, Park FS\*, Kay VL\*, Sprick JD\*, Rosenberg AJ\*, Anderson GK\*, Mallet RT, **Rickards CA**. Examining the Sex Effect on Oxidative Stress during Simulated Hemorrhage Induced by Lower Body Negative Pressure. Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center, February 2019.
69. Rosenberg AJ\*, Kay VL\*, Anderson GK\*, Sprick JD\*, **Rickards CA**. Sex differences and cerebral blood flow regulation with acute central hypovolemia. Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center, February 2019.
70. **Rickards CA**, Sprick JD\*, Park FS\*, Rosenberg AJ\*, Anderson GK\*. Cerebral blood velocity and oxygenation responses to hypovolemic oscillatory lower body negative pressure. Cerebral Autoregulation

- Research Network (CARNet) 8<sup>th</sup> Annual Meeting, The University of Oxford, Oxford, UK, June 2018. [Best Oral Presentation]
71. Rosenberg AJ\*, Kay VL\*, **Rickards CA**. The impact of acute central hypovolemia on cerebral hemodynamics: Does sex matter? North American Artery, Chicago, IL, June 2018.
  72. Sprick JD\*, Romero SA, **Rickards CA**. Cytokine responses to cyclical blood flow restriction exercise. Experimental Biology (EB) Meeting, San Diego, CA, April 2018. (FASEB J 2018 32(1): LB244)
  73. Anderson GK\*, Park FS\*, Sprick JD\*, **Rickards CA**. Responses of cerebral blood flow and tissue oxygenation to low frequency oscillations during simulated hemorrhagic stress in humans. Experimental Biology (EB) Meeting, San Diego, CA, April 2018. (FASEB J 2018 32(1): 910.6)
  74. Park FS\*, Kay VL\*, Anderson GK\*, Sprick JD\*, **Rickards CA**. Oxidative Stress During Simulated Hemorrhage Elicited by Lower Body Negative Pressure. Experimental Biology (EB) Meeting, San Diego, CA, April 2018. (FASEB J 2018 32(1): 910.5)
  75. Rosenberg AJ\*, Kay VL\*, **Rickards CA**. The impact of acute central hypovolemia on cerebral hemodynamics: Does sex matter? (Oral Presentation). Okanagan Cardiovascular & Respiratory Symposium, Silver Star Ski Resort, British Columbia, CANADA, March 2018.
  76. Sprick JD\*, Colby HB\*, **Rickards CA**. Combined Effects of Remote Ischemic Preconditioning and Aerobic Exercise on Sympathetic and Cerebrovascular Responses: A Novel Adaptation of Blood Flow Restriction Exercise. Experimental Biology (EB) Meeting, Chicago, IL, April 2017. (FASEB J 2017 31:1086.1)
  77. Sprick JD\*, Colby HB\*, **Rickards CA**. Combined Effects of Remote Ischemic Preconditioning and Aerobic Exercise on Sympathetic Responses: A Novel Adaptation of Blood Flow Restriction Exercise (Oral Presentation). UNTHSC Research Appreciation Day (RAD), April 2017.
  78. Coon J\*, Sprick JD\*, Romero SA, **Rickards CA**. Assessment of Arterial Occlusive Pressures for Blood Flow Restriction Exercise. UNTHSC Research Appreciation Day (RAD), April 2017.
  79. Petree TR\*, Sprick JD\*, Colby HB, Kay VL\*, **Rickards CA**. Impact of Low-Frequency Oscillations in Arterial Pressure and Cerebral Blood Flow on Cerebral Oxygenation During Simulated Hemorrhage. UNTHSC Research Appreciation Day (RAD), April 2017.
  80. Sprick JD\*, Colby HB\*, **Rickards CA**. Sympathetic and Cerebrovascular Responses to Blood Flow Restriction Resistance Exercise: A Potential Parallel to Remote Ischemic Preconditioning? International Stroke Conference (ISC), Houston, TX, February 2017. (Stroke 2017;48:AWP157)
  81. Sprick JD\*, Colby HB\*, **Rickards CA**. Hemodynamic and cerebrovascular responses to an acute bout of blood flow restriction exercise. Experimental Biology (EB) Meeting, San Diego, CA, April 2016. (FASEB J 2016 30:1239.3)
  82. Sprick JD\*, Colby HB\*, **Rickards CA**. Hemodynamic and Cerebrovascular Responses to an Acute Bout of Blood Flow Restriction Exercise. UNTHSC Research Appreciation Day (RAD), April 2016.
  83. Schaefer TS\*, Sprick JD\*, Colby HB\*, **Rickards CA**. Energy Expenditure and Substrate Utilization with Intermittent Blood Flow Restriction Aerobic Exercise. UNTHSC Research Appreciation Day (RAD), April 2016.

84. Sprick JD\*, Colby HB\*, **Rickards CA**. Hemodynamic and cerebrovascular responses to an acute bout of aerobic blood flow restriction exercise. Okanagan Cardiovascular & Respiratory Symposium, Silver Star Ski Resort, British Columbia, CANADA, March 2016
85. Sprick JD\*, Colby HB\*, **Rickards CA**. Hemodynamic and cerebrovascular responses to an acute bout of blood flow restriction resistance exercise. Texas Chapter of the American College of Sports Medicine (TACSM), College Station, TX, March 2016 (Int J Exerc Sci 2016; 2(8): Article 4)
86. Mejia J, Garcia J, Cooke WH, **Rickards CA**, Fogt DL. Effects of Acute Vaporized Nicotine in Non-tobacco Users at Rest and During Exercise. Texas Chapter of the American College of Sports Medicine (TACSM), College Station, TX, March 2016 (Int J Exerc Sci 2013; 2(8): Article 102).
87. Kay VL\*, **Rickards CA**. The Role of Regional Cerebral Blood Flow on Tolerance to Central Hypovolemia. UNTHSC Research Appreciation Day (RAD), April 2015.
88. Sprick JD\*, Soller B, **Rickards CA**. Efficacy of Novel Anatomical Sites for Assessment of Muscle Oxygenation During Central Hypovolemia. UNTHSC Research Appreciation Day (RAD), April 2015.
89. Colby HB\*, Sprick JD\*, Pham G\*, Cooke WH, Fogt DL, **Rickards CA**. Cerebral Blood Flow Regulation Following Inhalation of Nicotine via Electronic Cigarettes. UNTHSC Research Appreciation Day (RAD), April 2015.
90. Pham G\*, Kay VL\*, **Rickards CA**. Reproducibility of Near Infrared Spectroscopy (NIRS)-Derived Peripheral Muscle Oxygenation Measurements at Rest and During Central Hypovolemia. UNTHSC Research Appreciation Day (RAD), April 2015.
91. Sprick JD\*, Soller BR, **Rickards CA**. Efficacy of Novel Anatomical Sites for Assessment of Muscle Oxygenation During Central Hypovolemia. Experimental Biology (EB) Meeting, Boston, MA, March 2015. (FASEB J 2015 29:823.6)
92. Colby HB\*, Sprick JD\*, Pham G\*, Cooke WH, Fogt DL, **Rickards CA**. Cerebral blood flow regulation following inhalation of nicotine via electronic cigarettes. Experimental Biology (EB) Meeting, Boston, MA, March 2015. (FASEB J 2015 29:833.1)
93. Pham G\*, Kay VL\*, **Rickards CA**. Reproducibility of Near Infrared Spectroscopy (NIRS)-Derived Peripheral Muscle Oxygenation Measurements at Rest and During Central Hypovolemia. Experimental Biology (EB) Meeting, Boston, MA, March 2015. (FASEB J 2015 29:823.7)
94. **Rickards CA**, Kay VL\*. Reproducibility of a Continuous Ramp Lower Body Negative Pressure (LBNP) Protocol for Simulating Hemorrhage. Experimental Biology (EB) Meeting, Boston, MA, March 2015. (FASEB J 2015 29:800.7)
95. **Rickards CA**, Tzeng YC. Blood pressure and cerebral blood flow oscillations: Friend or Foe? 8<sup>th</sup> Conference of the European Study Group on Cardiovascular Oscillations (ESGCO), Trento, Italy, May 2014.
96. Kay VL\*, **Rickards CA**. The role of cerebral oxygenation on tolerance to central hypovolemia. Experimental Biology (EB) Meeting, San Diego, CA, April 2014. (FASEB J 2014; 28:1183.12).
97. Kay VL\*, **Rickards CA**. The Role of Cerebral Oxygenation on Tolerance to Central Hypovolemia. UNTHSC Research Appreciation Day (RAD), April 2014

98. Barnes JN, Johnson BD, Convertino VA, Joyner MJ, **Rickards CA**. Cerebral blood flow regulation during blood loss compared to lower body negative pressure in humans. Experimental Biology (EB) Meeting, San Diego, CA, April 2014. (FASEB J 2014; 28:1068.9).
99. Dowling C, Pokhrel A, **Rickards CA**, Fogt DL, Cooke WH. Vaporized Nicotine Inhalation Increases Arterial Pressure in both Supine and 70° Head-up Positions. Texas Chapter of the American College of Sports Medicine, Fort Worth, TX, February 2014. (Int J Exerc Sci 2014; 2(6): Article 51).
100. Levi M, Cotton M, Hines N, Koehler L, Nasirian A, Stelly S, Torres J, **Rickards CA**, Cooke WH, Fogt DL. Effects of Vaporized Nicotine on Resting Metabolic Rate and Physical Work Capacity. Texas Chapter of the American College of Sports Medicine, Fort Worth, TX, February 2014. (Int J Exerc Sci 2014; 2(6): Article 45).
101. **Rickards CA**, Kay VL\*, George M, Ryan KL, Hinojosa-Laborde C, Convertino VA. Association of cerebral blood flow variability and cerebral tissue oxygenation with tolerance to central hypovolemia. 18<sup>th</sup> Meeting of the European Society of Neurosonology and Cerebral Hemodynamics, and the 3<sup>rd</sup> Meeting of the Cerebral Autoregulation Research Network (CARNet), Porto, Portugal, May 2013. (Cerebrovasc Dis 2013; 35(Suppl 2):17).
102. Kay VL\*, George M, Soller BR, Ryan KL, Hinojosa-Laborde C, Convertino VA, **Rickards CA**. The role of differential oxygen distribution between the brain and peripheral tissues on tolerance to induced central hypovolemia. Experimental Biology (EB) Meeting, Boston, MA, April 2013. (FASEB J 2013; 27:LB667).
103. Morales G\*, Romero SA\*, Ryan KL, Cooke WH, **Rickards CA**. Effects of inspiratory resistance on cerebral blood velocity during orthostasis with dehydration. Experimental Biology (EB) Meeting, Boston, MA, April 2013. (FASEB J 2013; 27:1203.14).
104. Morales G\*, Romero SA\*, **Rickards CA**, Raven PB, Cooke WH. Cerebrovascular Hemodynamics During Concentric and Eccentric Phases of Heavy Resistance Exercise. Texas Chapter of the American College of Sports Medicine, Austin, TX, February 2013. (Int J Exerc Sci 2013; 2(5): Article 14).
105. Zhang G, Ryan KL, **Rickards CA**, Convertino VA, Mukkamala R. Early detection of hemorrhage via central pulse pressure derived from a non-invasive peripheral arterial blood pressure waveform. (Conf Proc IEEE Eng Med Biol Soc 2012; August:3116-9).
106. Barrera CR, **Rickards CA**, Cooke WH. The influence of controlled breathing on cerebrovascular control. Experimental Biology (EB) Meeting, San Diego, USA, April 2012. (FASEB J 2012; 26:LB820).
107. **Rickards CA**, Hinojosa-Laborde C, Ryan KL, Convertino VA. The influence of breathing on hemodynamic oscillations at presyncope. Experimental Biology (EB) Meeting, San Diego, USA, April 2012. (FASEB J 2012; 26:1091.31).
108. Hinojosa-Laborde C, Ryan KL, **Rickards CA**, Convertino VA. Resting sympathetic baroreflex sensitivity in subjects with low and high tolerance to simulated hemorrhage with lower body negative pressure. Experimental Biology (EB) Meeting, San Diego, USA, April 2012. (FASEB J 2012; 26:1080.4).
109. Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Convertino VA. Time course of compensatory physiological response to central hypovolemia varies with tolerance. Experimental Biology (EB) Meeting, San Diego, USA, April 2012. (FASEB J 2012; 26:1080.5).

110. Chung KK, Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Pamplin JC, Patel SS, Herold TS, Convertino VA. Progressive reduction in central blood volume is not detected by sublingual capnography. Society of Critical Care Medicine, Houston, TX, USA, February 2012. (Crit Care Med 2011; 39:A121)
111. **Rickards CA**, Cooke WH, Hinojosa-Laborde C, Lurie KG, Morales G, Romero SA, Ryan KL, Convertino VA. The influence of oscillations in arterial pressure and cerebral blood velocity on tolerance to hypovolaemia. Cerebral Haemodynamics: Measurement and Management Meeting, London, UK, July 2011.
112. Barrera C\*, Romero SA\*, **Rickards CA**, Cooke WH. Influence of controlled breathing on cerebrovascular control during upright tilt. American College of Sports Medicine Annual Meeting, Denver, Colorado, May/June 2011. (Med Sci Sports Exerc 2011; 43:646).
113. **Rickards CA**, Ryan KL, Hinojosa-Laborde C, Convertino VA, Lurie KG. Cerebral blood velocity dynamics during inspiratory resistance breathing. Experimental Biology (EB) Meeting, Washington DC, USA, April 2011. (FASEB J 2011; 25:1024.2).
114. Hinojosa-Laborde C, **Rickards CA**, Ryan KL, Convertino VA. Heart period variability responses during simulated hemorrhage in high and low tolerant subjects. Experimental Biology (EB) Meeting, Washington DC, USA, April 2011. (FASEB J 2011; 25:647.6)
115. Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Cooke WH, Convertino VA. Muscle Sympathetic Nerve Activity (MSNA) at Presyncope: Influence of Tolerance to Central Hypovolemia. Experimental Biology (EB) Meeting, Washington DC, USA, April 2011. (FASEB J 2011; 25:647.5)
116. **Rickards CA**, Ryan KL, Hinojosa-Laborde C, Cooke WH, Convertino VA. What is the stimulus for oscillations in arterial pressure and cerebral blood velocity? 21<sup>st</sup> International Symposium on the Autonomic Nervous System, Marco Island, FL, November 2010. (Clin Auton Res 2010; 20(5):310).
117. Ryan KL, **Rickards CA**, Hinojosa-Laborde C, Convertino VA. Association of arterial pressure oscillations with direct measurement of sympathetic outflow in subjects with differing tolerances to central hypovolemia. 21<sup>st</sup> International Symposium on the Autonomic Nervous System, Marco Island, FL, November 2010. (Clin Auton Res 2010; 20(5):290).
118. Ji SY, Ward K, Bsoul AAR, Ryan K, **Rickards C**, Convertino V, Najarian K. Developing a Hypovolemia Monitoring System by Integrating Physiological Measures and P-QRS-T Waves. American Heart Association Resuscitation Science Symposium, Chicago, IL, November 2010. (Circulation 2010; 122:A272)
119. Moulton SL, Mulligan J, Grudic GZ, Ryan KL, **Rickards CA**, Convertino VA. Non-invasive prediction of acute blood loss volume and CV collapse. American Association for the Surgery of Trauma, Boston, MA, September 2010.
120. Xu D, Ryan KL, **Rickards CA**, Zhang G, Convertino VA, Mukkamala R. Robust pulse wave velocity estimation by application of system identification to proximal and distal arterial waveforms. 32<sup>nd</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS), Buenos Aires, Argentina, September 2010. (Conf Proc IEEE Eng Med Biol Soc 2010; 1:3559-62)
121. Convertino VA, Hurst GM, Ryan KL, Vyas N, Ward K, **Rickards CA**. Bleeding or active? Validation of a machine-learning algorithm for remote determination of blood volume status. American College of Sports Medicine Annual Meeting, Baltimore, MD, June 2010. (Med Sci Sport Exerc 2010; 42(5):285).

122. **Rickards CA**, Ryan KL, Convertino VA. Association between oscillations in cerebral blood velocity and sympathetic activity. 20<sup>th</sup> International Symposium on the Autonomic Nervous System, St. Thomas, US Virgin Islands, November 2009. (Clin Auton Res 2009;19(6):287).
123. Al Raof Bsoul A, Ji S-Y, Ward K, Ryan K, **Rickards C**, Convertino V, Najarian K. Prediction of Severity of Blood Volume Loss Using Features Based on P, T and QRS Waves. American Heart Association Resuscitation Science Symposium, Orlando, FL, November 2009. (Circulation 2009;120(18): S1466[P115]).
124. Ji S-Y, Ward K, Ryan K, **Rickards C**, Convertino V, Vyas N, Stivorc J, Najarian K. Prediction of Hypovolemia Severity Using ECG Signal with Wavelet Transformation Analysis from a Mobile Armband. American Heart Association Resuscitation Science Symposium, Orlando, FL, November 2009. (Circulation 2009; 120(18):S1441[2]).
125. Ji S-Y, Al Raof Bsoul A, Ward K, Ryan K, **Rickards C**, Convertino V, Najarian K. Incorporating Physiological Signals to Blood Loss Prediction Based on Discrete Wavelet Transformation. American Heart Association Resuscitation Science Symposium, Orlando, FL, November 2009. (Circulation 2009;120(18): S1483[P195]).
126. Ward K, Vyas N, Ji S-Y, **Rickards C**, Ryan K, Convertino V, Stivorc J, Jackson R, Najarian K. Use of Low Level Physiologic Signals and Machine Learning to Derive Important Hemodynamic Variables During Acute Volume Loss. American Heart Association Resuscitation Science Symposium, Orlando, FL, November 2009. (Circulation 2009;120(18): S1482[P191]).
127. **Rickards CA**, Ryan KL, Convertino VA. Limitations of heart period variability for monitoring individual trauma patients in the pre-hospital setting. Shock Society Annual Meeting, San Antonio, TX, June 2009. (Shock 2009; 31(Suppl. 1):P75).
128. Ryan KL, **Rickards CA**, Ludwig DA, Convertino VA. Tracking central hypovolemia with heart period variability (HPV) in humans: implications for patient monitoring. Shock Society Annual Meeting, San Antonio, TX, June 2009. (Shock 2009; 31(Suppl. 1):P74).
129. Sethuraman G, Ryan KL, **Rickards CA**, Convertino VA. Ectopic beats in healthy humans and trauma patients: implications for use of heart period variability indices in medical monitoring. Shock Society Annual Meeting, San Antonio, TX, June 2009. (Shock 2009; 31(Suppl. 1):P76).
130. McGrath SP, Ryan KL, Wendleken SM, **Rickards CA**, Convertino VA. Photoplethysmogram features track reductions in central blood volume in a human model of pre-shock hemorrhage. Shock Annual Meeting, San Antonio, TX, June 2009. (Shock 2009; 31(Suppl. 1):P72).
131. **Rickards CA**, Ryan KL, Convertino VA. Tolerance to central hypovolemia: the influence of cerebral blood flow velocity oscillations. Experimental Biology (EB) Meeting, New Orleans, LA, April 2009. (FASEB J 2009; 23:613.7).
132. Ryan KL, **Rickards CA**, Convertino VA. Association of arterial pressure oscillations with muscle sympathetic nerve activity (MSNA) during central hypovolemia. Experimental Biology (EB) Meeting, New Orleans, LA, April 2009. (FASEB J 2009; 23:1019.5).



133. Convertino VA, **Rickards CA**, Ryan KL. Evidence for a heart rate mechanism associated with tolerance to progressive central hypovolemia. Experimental Biology (EB) Meeting, New Orleans, LA, April 2009. (FASEB J 2009; 23:1019.6).
134. Ji SY, Chen W, Ward K, **Rickards C**, Ryan K, Convertino VA, Najarian K. Wavelet Based Analysis of Physiological Signals for Prediction of Severity of Hemorrhagic Shock. ICME International Conference on Complex Medical Engineering (CME), Tempe, AZ, April 2009. (Conf Proc IEEE Compl Med Eng 2009; 1:1-6)
135. Tiba MH, Ryan KL, Torres I, **Rickards CA**, Witten T, Soller B, Convertino VA, Ward KR. Oxygen carrying characterization of a human model of hemorrhage. American Heart Association Scientific Sessions, New Orleans LA, USA, November 2008. (Circulation 2008; 118: S1447[10]).
136. Ji S-Y, Ward KR, Ryan KL, **Rickards CA**, Convertino VA, Najarian K. Heart rate variability analysis using wavelet transformation to predict hemorrhage severity. American Heart Association Scientific Sessions, New Orleans LA, USA, November 2008. (Circulation 2008; 118: S1465[P93]).
137. **Rickards CA**, Ryan KL, Cooke WH, Convertino VA. Do non-linear measures of heart rate variability (HRV) track muscle sympathetic nerve activity (MSNA) during central hypovolemia in humans? 7<sup>th</sup> International Conference on Complexity in Acute Illness, Cologne, GERMANY, June/July 2008. (J Crit Care 2008; 23:267).
138. Ryan KL, **Rickards CA**, Cooke WH, Convertino VA. Tracking central hypovolemia with linear and non-linear indices of heart rate variability (HRV) in humans. 6<sup>th</sup> Congress of the International Federation of Shock Societies and the 31<sup>st</sup> Annual Conference on Shock (US Shock Society), Cologne, GERMANY, July 2008. (Shock 2008; 29(Suppl. 1):24).
139. **Rickards CA**, Cohen KD, Bergeron LB, Burton L, Khatri P, Lee CT, Doerr DF, Ryan KL, Cooke WH, Lurie KG, Convertino VA. Inspiratory resistance increases oscillations in cerebral blood flow velocity, reducing orthostatic symptoms during acute hypotension. Aerospace Medical Association 79<sup>th</sup> Annual Scientific Meeting, Boston MA, USA, May 2008. (Aviat Space Environ Med 2008; 79(3):326[510]).
140. Convertino VA, **Rickards CA**, Lurie KG, Ryan KL. Hyperventilation induced by severe reductions in central blood volume: the respiratory pump as a protective mechanism against hypotension. Aerospace Medical Association 79<sup>th</sup> Annual Scientific Meeting, Boston MA, USA, May 2008. (Aviat Space Environ Med 2008; 79(3):327[511]).
141. Freeman CN, Romero SA, **Rickards CA**, Ryan KL, Convertino VA, Cooke WH. Inspiratory resistance increases cerebral blood velocity oscillations during standing after exercise. American College of Sports Medicine (ACSM) Annual Meeting, Indianapolis IN, USA, May 2008. (Med Sci Sports Exerc 2008; 40(5):S286).
142. **Rickards CA**, Ryan KL, Muniz GW, Morales G, Convertino VA. How many heart beats are enough? A systematic assessment of data length reduction on measures of heart rate variability and complexity. Experimental Biology (EB) Meeting, San Diego CA, USA, April 2008. (FASEB J 2008; 23:1229.1).
143. Ryan KL, **Rickards CA**, Muniz GW, Morales G, Convertino VA. Interindividual variability in heart rate variability (HRV) and complexity (HRC) measurements. Experimental Biology (EB) Meeting, San Diego CA, USA, April 2008. (FASEB J 2008; 22:1229.3).

144. Convertino VA, **Rickards CA**, Ryan KL, Cooke WH. Autonomic compensation to central hypovolemia monitored with heart period variability. Experimental Biology (EB) Meeting, San Diego CA, USA, April 2008. (FASEB J 2008; 22:1229.2).
145. **Rickards CA**, Ryan KL, Convertino VA, Cooke WH. Running or bleeding? What should we measure to assist remote triage decisions in a military environment? American College of Sports Medicine (ACSM) Annual Meeting, New Orleans LA, USA, May/June 2007. (Med Sci Sports Exerc 2007; 39(5):S204).
146. **Rickards CA**, Ryan KL, Cooke WH, Lurie KG, Convertino VA. Cerebral blood flow oscillations elicited by inspiratory resistance delays the reporting of orthostatic symptoms with central hypovolemia. Experimental Biology (EB) Meeting, Washington DC, USA, April/May 2007. (FASEB J 2007; 21:960.20).
147. Ryan KL, Cooke WH, **Rickards CA**, Lurie KG, Convertino VA. Inspiratory resistance increases hemodynamic oscillations and tolerance to induced central hypovolemia. Experimental Biology (EB) Meeting, Washington DC, USA, April/May 2007. (FASEB J 2007; 21:750.2).
148. Convertino VA, Ryan KL, **Rickards CA**, Cooke WH, Idris AH, Metzger A, Holcomb JB, Adams BD, Lurie KG. Inspiratory resistance maintains arterial pressure during central hypovolemia: Implications for treatment of patients with severe hemorrhage. American Heart Association Scientific Sessions, Chicago, IL, USA, November, 2006. (Circulation 2006; 114: II-1200[61])
149. **Rickards CA**, Cohen KD, Doerr DF, Lurie KG, Convertino VA. Cerebral blood flow regulation during orthostatic hypotension. Aerospace Medicine Association 77<sup>th</sup> Annual Scientific Meeting, Orlando FL, USA, May 2006. (Aviat Space Environ Med 2006; 77(3):318[411]).
150. Doerr DF, Cohen KD, **Rickards CA**, Convertino VA, Lurie KG. Breathing Mechanics of the Impedance Threshold Device. Aerospace Medicine Association 77<sup>th</sup> Annual Scientific Meeting, Orlando FL, USA, May 2006. (Aviat Space Environ Med 2006; 77(3):231[69]).
151. Cohen KD, **Rickards CA**, Doerr DF, Lurie KG, Convertino VA. The effect of an inspiratory threshold device on cardiovascular compensation in orthostatically compromised subjects. Aerospace Medicine Association 77<sup>th</sup> Annual Scientific Meeting, Orlando FL, USA, May 2006. (Aviat Space Environ Med 2006; 77(3):317[410]).
152. Convertino VA, **Rickards CA**, Ryan KL, Cooke WH, Lurie KG. Effects of inspiratory impedance on hemodynamic responses and tolerance to progressive reduction in central blood volume: implications for treatment of hemorrhage. Experimental Biology Meeting, San Francisco CA, USA, April 2006. (FASEB J 2006; 20:A1383).
153. Khatri P, Cohen KD, **Rickards CA**, Convertino VA. Effect of an Inspiratory Impedance Threshold Device on Cerebral Blood Flow During Orthostatic Stress. American Society for Gravitational and Space Biology (ASGSB), Reno, NV, USA, November 2005. (Gravit Space Biol Bull 2005; 19:4).
154. Burton BL, Cohen KD, **Rickards CA**, Convertino, VA. Self-Reporting of Symptoms During Orthostatic Stress: Relationship to Mean Cerebral Blood Flow Velocity. American Society for Gravitational and Space Biology (ASGSB), Reno, NV, USA, November 2005. (Gravit Space Biol Bull 2005; 19:14).
155. Lee CT, Cohen KD, **Rickards CA**, Convertino VA. Cerebral Autoregulation and Orthostatic Stress. American Society for Gravitational and Space Biology (ASGSB), Reno, NV, USA, November 2005. (Gravit Space Biol Bull 2005; 19:14)

156. Bergeron LL, Cohen KD, **Rickards CA**, Convertino VA. “The Effect of Height on Cardiovascular Responses to Orthostasis. American Society for Gravitational and Space Biology (ASGSB), Reno, NV, USA, November 2005. (*Gravit Space Biol Bull* 2005; 19:4).
157. **Rickards CA**, Newman DG. G-induced visual and cognitive disturbances in Royal Australian Air Force (RAAF) high-performance aircraft pilots. Aviation Medical Society of Victoria (AMSVIC) Annual Conference, Melbourne, AUSTRALIA, March 2005.
158. **Rickards CA**. The design and construction of a lower body negative pressure (LBNP) chamber for the assessment of cardiovascular reflexes in humans. The Health and Exercise Science Technologists Association (HESTA) Annual Conference, Melbourne, AUSTRALIA, November 2004.
159. **Rickards CA**, Newman DG. G-induced visual and cognitive disturbances in Royal Australian Air Force (RAAF) high-performance aircraft pilots. Australian Military Medicine Association 13<sup>th</sup> Annual Conference, Canberra, AUSTRALIA, October 2004.
160. **Rickards CA**, Berry NM, Newman DG The effect of repeated lower body negative pressure on integrated cardiac baroreflex sensitivity. Aerospace Medical Association 75<sup>th</sup> Annual Scientific Meeting, Anchorage, AK, USA, May 2004. (*Aviat Space Environ Med* 2004; 75(4):B70[322]).
161. Berry NM, **Rickards CA**, Newman DG. Acute cardiovascular adaptation to repetitive head-up tilting. Aerospace Medical Association 75<sup>th</sup> Annual Scientific Meeting, Anchorage, AK, USA, May 2004. (*Aviat Space Environ Med* 2004; 75(4):B114[528]).
162. Arkinstall MJ, Saunders PJ, Bruce CR, **Rickards CA**, Clark SA, Lessard SJ, Burke LM, Hawley JA. Interaction between muscle glycogen content and exercise intensity on pyruvate dehydrogenase activation in skeletal muscle. American College of Sports Medicine (ACSM) Annual Meeting, San Francisco, CA, USA, June 2003. (*Med Sci Sports Exerc* 2003; 35(5):S147).
163. **Rickards CA**, Newman DG. A comparative assessment of two techniques for investigating cardiovascular reflexes under orthostatic stress. International Congress of Aviation and Space Medicine (ICASM), Sydney, AUSTRALIA, September 2002.
164. Berry, NM, **Rickards CA**, Newman DG. The effect of caffeine on orthostatic tolerance. Aerospace Medical Association 73<sup>rd</sup> Annual Scientific Meeting, Montreal, CANADA, May 2002. (*Aviat Space Environ Med* 2002; 73(3):305[414]).
165. **Rickards CA**, Newman DG. The effect of low-level normobaric hypoxia on orthostatic tolerance. Aerospace Medical Association 72<sup>nd</sup> Annual Scientific Meeting, Reno, NV, USA, May 2001. (*Aviat Space Environ Med* 2001; 72(3):269[186]).
166. Newman DG, **Rickards CA**. Comparison of two orthostatic challenges - the +75 degree head-up tilt and the squat-stand test. Aerospace Medical Association 72<sup>nd</sup> Annual Scientific Meeting, Reno, NV, USA, May 2001. (*Aviat Space Environ Med* 2001; 72(3):269[185]).
167. **Rickards CA**, Newman DG. Comparison of two orthostatic challenges - the +75 degree head-up tilt and the squat-stand test. Australian Physiological and Pharmacological Society (APPS) Meeting, Melbourne, AUSTRALIA, November 2000.

## Invited Seminars/Lectures/Presentations

|                      |   |
|----------------------|---|
| <b>2024 August</b>   | University of Utah School of Medicine, Division of Geriatrics Translational Research Grand Rounds, Salt Lake City, UT [virtual]<br><i>“Pulsatile Perfusion Therapy: A Potential Treatment for Cerebral Hypoperfusion”</i>       |
| <b>2024 July</b>     | Summer Undergraduate Research Program in Integrative Physiology (SURPRINT), University of Texas at Arlington<br><i>“My Scientific Journey: From the Land Down Under to the Lonestar State”</i>                                  |
| <b>2024 April</b>    | University of Southern California Health Sciences Campus, Mark & Mary Stevens Neuroimaging and Informatics Institute, Los Angeles, CA<br><i>“Pulsatile Perfusion Therapy: A Potential Treatment for Cerebral Hypoperfusion”</i> |
| <b>2023 August</b>   | Autonomic Nervous System Learning Module, Center for Physiology Education, American Physiological Society [virtual]<br><i>“Military Applications: Autonomic control during hemorrhage”</i>                                      |
| <b>2023 July</b>     | Summer Undergraduate Research Program in Integrative Physiology (SURPRINT), University of Texas at Arlington<br><i>“My Scientific Journey: From the Land Down Under to the Lonestar State”</i>                                  |
| <b>2023 March</b>    | Colorado State University, Department of Health and Exercise Science, Fort Collins, CO<br><i>“Cerebral Hypoperfusion: Reflex Compensation and Therapeutic Opportunities”</i>  |
| <b>2022 December</b> | University of Nebraska Medical Center, Department of Cellular and Integrative Physiology, Omaha, NE<br><i>“Cerebral Hypoperfusion: Reflex Compensation and Therapeutic Opportunities”</i>                                       |
| <b>2022 December</b> | University of Nebraska Medical Center, Department of Cellular and Integrative Physiology, Omaha, NE<br><i>“Formalizing DEI Education for Graduate Students - A Work in Progress”</i>  |
| <b>2022 October</b>  | Cerebrovascular Research Network (CARNet) Annual Meeting, Leicester, UK<br><i>“Cerebral Hypoperfusion: Reflex Compensation and Therapeutic Opportunities”</i>   |
| <b>2022 July</b>     | Summer Undergraduate Research Program in Integrative Physiology (SURPRINT), University of Texas at Arlington<br><i>“My Scientific Journey: From the Land Down Under to the Lonestar State”</i>                                  |
| <b>2022 July</b>     | Neurovascular Coupling Collaborative Cluster, Carnegie Mellon University & University of Pittsburgh, Pittsburgh, PA [virtual]<br><i>“Cerebral Hypoperfusion: Reflex Compensation and Therapeutic Opportunities”</i>             |
| <b>2022 June</b>     | Exploring DEI in Science Webinar, American Physiological Society<br><i>“Formalizing DEI Education for Graduate Students - A Work in Progress”</i>   |
| <b>2021 November</b> | University College Cork, Department of Physiology, Cork, Ireland [virtual]<br><i>“Cerebral blood flow regulation during hemorrhage”</i>   |
| <b>2021 April</b>    | University of Oklahoma, Department of Health and Exercise Science, Norman, OK [virtual]<br><i>“Blood Pressure and Cerebral Blood Flow Variability: Friend or Foe?”</i>  |
| <b>2020 November</b> | Mount Royal University, Department of Biology, Calgary, Canada [online]<br><i>“Take a Deep Breath – The Role of Breathing on Brain Blood Flow Regulation”</i>   |
| <b>2020 July</b>     | Cerebral Blood Flow Virtual Seminar Series [online]<br><i>“Cerebral blood flow regulation during hemorrhage”</i>  |
| <b>2020 June</b>     | Mount Royal University, Department of Biology, Dr. Trevor Day’s Laboratory, Calgary, Canada [online]<br><i>“My life as a research scientist – how did I get here?”</i>  |
| <b>2019 August</b>   | White Mountain 2019 Research Expedition, White Mountain Research Station, CA<br><i>“Blood Pressure and Cerebral Blood Flow Variability: Friend or Foe?”</i>   |

- 2019 April** Michigan Technological University, Kinesiology & Integrative Physiology Department, Houghton, MI  
*“Take a Deep Breath – The Role of Breathing on Brain Blood Flow Regulation”*
- 2019 March** University of Oslo, Division of Physiology, Institute of Basic Medical Sciences, Oslo, Norway  
*“Blood Pressure and Cerebral Blood Flow Variability: Friend or Foe?”*
- 2018 December** Integrated Control of Cerebral Blood Flow Meeting, The Royal Society, Chicheley Hall, Newport Pagnell, Buckinghamshire, UK.  
*“Experimental Approaches for Assessment of Cerebral Autoregulation in Humans”*
- 2018 March** University of Texas Arlington, College of Nursing & Health Innovation  
*“Blood Pressure and Cerebral Blood Flow Variability: Friend or Foe?”*
- 2017 September** Oxford Conference on Modelling and Control of Breathing, Oxford, England, UK.  
*“Cerebral Blood Flow Responses to Inspiratory Resistance Breathing During Hemorrhage”*  
Session: Control of Cerebral Blood Flow (Chair: Marc Poulin)
- 2017 May** US Army Institute of Surgical Research, Fort Sam Houston, TX  
*“Blood Pressure and Cerebral Blood Flow Variability: Friend or Foe?”*
- 2017 April** Pre-Experimental Biology Meeting, University of Illinois at Chicago, Integrative Physiology Laboratory, Chicago, IL  
*“Take a Deep Breath – The Role of Breathing on Brain Blood Flow Regulation”*
- 2016 July** European College of Sports Science Meeting, Vienna, AUSTRIA  
*“Dehydration & Exercise: Cerebrovascular Control and Orthostatic Tolerance”*  
Session: Physical Activity and Brain Vascular Function (Chair: Johannes van Lieshout)
- 2016 July** 6<sup>th</sup> Annual Meeting of the Cerebral Autoregulation Research Network (in conjunction with the 16<sup>th</sup> International Symposium on Intracranial Pressure & Neuromonitoring), Massachusetts Institute of Technology (MIT), Cambridge, MA  
*“Cerebral Blood Flow Responses to Inspiratory Resistance Breathing During Hemorrhage”*  
Session: Cerebrovascular Autoregulation (Chairs: Shieak Tzeng & Jurgen Claassen)
- 2015 March** Experimental Biology Meeting, Boston, MA  
*“Cerebral blood flow responses during hemorrhage”*  
Session: Cardiovascular Responses to Trauma (Chair: Robert Hester)
- 2014 March** Okanagan Cardiovascular & Respiratory Symposium, Silver Star Ski Resort, Vernon, British Columbia, CANADA  
*“The role of oscillations in muscle sympathetic nerve activity on arterial pressure and cerebral blood flow, and tolerance to central hypovolemia”*  
Session: Cerebrovascular Physiology
- 2013 May** 18<sup>th</sup> Meeting of the European Society of Neurosonology and Cerebral Hemodynamics, and the 3<sup>rd</sup> Meeting of the Cerebral Autoregulation Research Network (CARNet), Porto, PORTUGAL  
*“Association of cerebral blood flow variability and cerebral tissue oxygenation with tolerance to central hypovolemia”*  
Session: New insights into the physiology and pathology of autoregulation
- 2013 April** Experimental Biology Meeting, Boston, MA  
*“Cerebral blood flow regulation during central hypovolemia”*  
Session: Brain Strain: Challenges to Cerebral Blood Flow Regulation in Humans
- 2012 June** US Army Institute of Surgical Research, Fort Sam Houston, TX  
*“Cerebral blood flow regulation during central hypovolemia”*
- 2012 February** Department of Biology, Trinity University, San Antonio, TX  
*“Cerebral blood flow regulation during central hypovolemia”*
- 2012 February** Department of Kinesiology and Applied Physiology, University of Delaware, Newark, DE

- 2012 January** “Cerebral blood flow regulation during central hypovolemia”  
Department of Kinesiology, Health Promotion, and Recreation, University of North Texas, Denton, TX
- 2012 January** “Cerebral blood flow regulation during central hypovolemia”  
Department of Integrative Physiology, University of North Texas Health Science Center, Fort Worth, TX
- 2011 July** “Cerebral blood flow regulation during central hypovolemia”  
Cerebral Haemodynamics: Measurement and Management Meeting, London, UK  
“The influence of oscillations in arterial pressure and cerebral blood velocity on tolerance to hypovolaemia”
- 2009 August** 20<sup>th</sup> International Symposium on the Autonomic Nervous System, St. Thomas, US Virgin Islands
- 2009 August** “Association between oscillations in cerebral blood velocity and sympathetic activity”  
Advanced Technology Applications for Combat Casualty Care (ATACCC) Conference, St. Pete Beach, FL.  
“Tolerance to central hypovolemia: The influence of oscillations in arterial pressure and cerebral blood velocity”
- 2009 June** The University of Texas at San Antonio, Department of Health and Kinesiology.  
“The road to a career in physiology research”
- 2008 August** Advanced Technology Applications for Combat Casualty Care (ATACCC) Conference, St. Pete Beach, FL.  
“Fighting or Hemorrhage: Evidence for a decision-assist algorithm for remote battlefield triage”
- 2008 March** The University of Texas at San Antonio, Department of Health and Kinesiology.  
“The Adventures of the Little Aussie in Texas. Experiences as a Graduate Student and Postdoctoral Fellow.”
- 2004 June** Victorian Medical Women’s Society (VMWS), Melbourne, Australia.  
“Aerospace Physiology: From Microgravity to Hypergravity.”

---

## Professional Development

### Facilitator/Organizer

- 2020 December** Organizer & Facilitator, “Picture a Scientist” screening and panel discussion. Women Faculty Network, University of North Texas Health Science Center
- 2020 November** Panelist, “GSBS Research Café: Specific Aims Workshop”, Graduate School of Biomedical Sciences, University of North Texas Health Science Center
- 2020 September** Organizer & Panelist, Early Career Development Council (ECDC) Fall General Meeting, “P&T Best Practices for Early Career Faculty”, University of North Texas Health Science Center
- 2020 September** Organizer & Facilitator, Faculty Support Session – Coping During COVID-19. Women Faculty Network, University of North Texas Health Science Center
- 2020 February** Organizer & Facilitator, Launch Meeting of the UNTHSC Women Faculty Network, University of North Texas Health Science Center
- 2019** Facilitator, Faculty Needs Assessment Survey – Professional Development, Department of Physiology & Anatomy, University of North Texas Health Science Center
- 2019** Organizing Committee, Early Career Development Council (ECDC) Spring General Meeting, “Strategies for Mentoring, Project Management, and People Management”, University of North Texas Health Science Center

- 2019** Organizing Committee & Facilitator, Faculty Assembly round-table discussion, “Why are you here at UNTHSC”, University of North Texas Health Science Center
- 2019** Organizing Committee, Professional Development session on “Promotion & Tenure Process”, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center
- 2019** Organizing Committee, Early Career Development Council (ECDC) Summer General Meeting, “Promotion & Tenure Process”, University of North Texas Health Science Center
- 2019** Organizing Committee, Early Career Development Council (ECDC) Spring General Meeting, “Writing Resources”, University of North Texas Health Science Center
- 2019 - Present** Facilitator, Writing Accountability Group (WAG), Cerebral & Cardiovascular Physiology Laboratory, Department of Physiology & Anatomy, University of North Texas Health Science Center
- 2019** Facilitator, Junior Faculty Writing Accountability Group (WAG), Early Career Development Council (ECDC), University of North Texas Health Science Center

**Participant**

- 2023 March** Women in Leadership Discussion, Women Faculty Network, University of North Texas Health Science Center
- 2022 September** How to ‘Successfully’ Juggle Work and Life in Academia, Women Faculty Network, University of North Texas Health Science Center
- 2021 May** Welcoming Diversity Workshop, National Coalition Building Institute (NCBI)
- 2020 June** The Physiological Society, Scientific Theme Seminars, Education & Teaching: “What and How Do Students Learn Without Classroom Attendance: Lessons from Lockdown”
- 2020 May** The American Physiological Society (APS) Career Development Symposium (APS Live): “Your New Job - Finding one, Negotiating & Navigating Issues”
- 2020 May** The American Physiological Society (APS) Mentoring Symposium (APS Live): “Mentoring Symposium: Imposters, Promoters, Leaders - The Scientific Struggles”
- 2020 May** “Resuming Laboratory Testing with Human Participants Workshop”, The Physiological Society
- 2020 May** NIH Office of Intramural Training and Education (OITE) webinar “From Bystander to Upstander: take action to combat harassment and aggression”
- 2020 April** NIH Office of Intramural Training and Education (OITE) webinar “Supporting Yourself and Your Trainees During the Coronavirus Pandemic”
- 2020 April-June** Leadership Development Program, Department of Physiology & Anatomy, University of North Texas Health Science Center
- 2018** Workshop on Coaching Philosophy and Coaching Models for Grantsmanship (Facilitator: Dr. Richard McGee, Feinberg School of Medicine, Northwestern University), University of North Texas Health Science Center
- 2018** TCOM Pass 1 Curricular Workshop, University of North Texas Health Science Center
- 2016 – 2017** New Faculty Teaching Excellence Seminar Series on the Building Blocks of Teaching Excellence (12 part series), University of North Texas Health Science Center
- 2016 Feb-May** National Research Mentoring Network (NRMN) Workshop Series, University of North Texas Health Science Center
- 2015 May-Sept** Grant Writing Group, Division of Research & Innovation, University of North Texas Health Science Center
- 2013 December** “Team Based Learning (TBL) Work Shop”, UNTHSC Center for Learning and Development
- 2013 April** UNTHSC workshop “Teaching Today’s Learners: Models and Techniques” presented by Dr. Mark Taylor
- 2013 March** “Engaging Students” workshop/panel, UNTHSC Center for Learning and Development

|                       |  |
|-----------------------|--|
| <b>2013 February</b>  | “Getting Started with Camptasia” workshop, UNTHSC Center for Learning and Development  |
| <b>2013 February</b>  | “First Steps in Course Planning” workshop, UNTHSC Center for Learning and Development  |
| <b>2012 September</b> | Distance Learning Presentation and Discussion, UNTHSC GSBS Basic Science Chairs and Graduate Council Retreat                         |
| <b>2010 July</b>      | Cardiovascular Ultrasound in Sport and Exercise Sciences Summer School, University of British Columbia Okanagan, Kelowna, BC, Canada |

## Teaching

### Courses

#### University of North Texas Health Science Center (UNTHSC), Fort Worth, TX, USA

##### Course Director

| <b>Dates</b>   | <b>Semester</b> | <b>Course ID</b> | <b>Course Title</b>  | <b>SCH</b> |
|----------------|-----------------|------------------|--|------------|
| 2022 – Present | Fall            | PHAN 6185        | Advanced Scientific Communication Skills in Physiology                   | 1          |
| 2022 – Present | Spring          | BMSC 5109        | Values-Based Considerations in Biomedical Sciences: Fundamental Concepts | 1          |
| 2022 – Present | Spring          | BMSC 5504-DL     | Physiology (Online Course)   | 5          |
| 2020 – Present | Spring          | BMSC 5504        | Integrative Biomedical Sciences I: Physiology                            | 5          |
| 2021           | Spring          | PHAN 6503        | Cardiopulmonary Physiology (Online Course)                               | 2          |
| 2013 – Present | Fall, Spring    | PHAN 5140        | Journal Club in Physiology   | 1          |

##### Teaching Faculty

| <b>Dates</b>   | <b>Semester</b> | <b>Course ID</b> | <b>Course Title</b>  |
|----------------|-----------------|------------------|--|
| 2022 – Present | Spring          | BMSC 5504-DL     | Physiology (Online Course) (Cardiovascular; Respiratory)   |
| 2020 – Present | Fall            | MEDE 7615        | Cardiopulmonary System 1 (TCOM; 2 DSA, 2 MLM)  |
| 2019 – Present | Fall            | PHAN 5300        | Cardiovascular Physiology – Advanced Course  |
| 2019 – 2020    | Spring          | PHAN 6400        | Physiology in Health and Disease – Advanced Course   |
| 2017 – 2019    |                 |                  | Human Cardiovascular Physiology, Texas Academy of Biomedical Sciences (TABS) High School Program |
| 2016 – Present | Spring          | BMSC 5504        | Integrative Biomedical Sciences I: Physiology (Cardiovascular)                                   |
| 2016 – Present | Fall, Spring    | BMSC 5205        | Topics in Biomedical Sciences  |
| 2014 – 2015    | Spring          | BMSC 6303        | Integrative Biomedical Sciences II: Physiology (Cardiovascular/Respiratory)                      |
| 2014           | Fall            | BMSC 5170        | Techniques in Biomedical Sciences: Microneurography Theory and Practice                          |
| 2013 – Present | Fall, Spring    | PHAN 5390        | Special Problems (Independent Study)   |
| 2013 – Present | Fall, Spring    | BMSC 6998        | Individual Research (Laboratory)   |
| 2012 – Present | Fall, Spring    | BMSC 5150        | Laboratory Rotations   |



|                |              |           |   |
|----------------|--------------|-----------|---|
| 2013 – Present | Fall, Spring |           | Laboratory Journal Club                   |
| 2012 – 2015    | Fall         | BMSC 5135 | Introduction to Faculty Research Programs |

### **Michigan State University, East Lansing, MI**

|      |         |  |
|------|---------|--|
| 2015 | PSL 439 | Guest Lecturer, Special Topics in Integrative Physiology |
|------|---------|--|

### **RMIT University, Melbourne, Australia**

|             |  |  |
|-------------|--|--|
| 2003 – 2005 |  | Tutor, Information Technology Induction Sessions,                                      |
| 2002        |  | Laboratory Demonstrator, Human Physiology 1 - Body Systems, School of Medical Sciences |

### **Advisor – Postdoctoral Fellows**

- **Alexander Rosenberg (Postdoctoral Fellow):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor 2018-2021  
*Current Position:* Assistant Professor (tenure-track), Department of Physiology, Northwestern University, Chicago, IL  
*Honors & Awards:*
  - 2021 American Physiological Society (APS), Environmental & Exercise Physiology (EEP) Section, Gatorade Sport Science Institute Postdoctoral Research Award
  - 2021 Postdoctoral Oral Presentation Award, Graduate School of Biomedical Sciences, UNTHSC Research Appreciation Day
  - 2020 Young Investigator Award, Society for Experimental Biology and Medicine (SEBM)
  - 2020 American Physiological Society (APS) Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award
  - 2019-2022 NIH-F32 Ruth L. Kirschstein Postdoctoral Individual National Research Service Award (NRSA)
  - 2019 Postdoctoral Travel Award, Graduate School of Biomedical Sciences, University of North Texas Health Science Center, Fort Worth, TX
  - 2019 Postdoctoral Oral Presentation Award, Graduate School of Biomedical Sciences, UNTHSC Research Appreciation Day
  - 2018 Travel Award, FASEB Postdoctoral Preparation Institute, Minneapolis, MN
  - 2018 Postdoctoral Oral Presentation Award, Graduate School of Biomedical Sciences, UNTHSC Research Appreciation Day
  - 2018 Postdoctoral Travel Award, Graduate School of Biomedical Sciences, University of North Texas Health Science Center, Fort Worth, TX

### **Advisor/Major Professor – MS and PhD Students**

- **Viet Dinh (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2023-Present  
*Honors & Awards:*
  - 2024 Student Outstanding Service Award, School of Biomedical Sciences Values Committee, University of North Texas Health Science Center
- **Lindsey Hudson (MS-Research Track):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2023-2024  
*Honors & Awards:*
  - 2024 Robert J. Hardin Heart Research Fund Scholarship, School of Biomedical Sciences, University of North Texas Health Science Center

- 2024 Medical Sciences Research Track Student of the Year Award, School of Biomedical Sciences, University of North Texas Health Science Center
- 2024 1<sup>st</sup> Place Integrative Physiology Poster Competition, Research Appreciation Day (RAD), University of North Texas Health Science Center
- **Austin Davis (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2020-Present  
*Honors & Awards:*
  - 2023 2<sup>nd</sup> Place Oral Presentation, Research Appreciation Day (RAD), University of North Texas Health Science Center
  - 2023 Top Oral Presentation Award, Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center
  - 2023 3<sup>rd</sup> Place Poster Presentation, Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center
  - 2023 Dr. Charles (Tip) Tipton Predoctoral Research Award, Environmental & Exercise Physiology (EEP) Section, American Physiological Society (APS)
  - 2023-2025 American Heart Association Predoctoral Fellowship
  - 2022-2023 NIH-T32 Predoctoral Fellowship, Neurobiology of Aging Training Program from the National Institute on Aging, Institute for Healthy Aging, UNTHSC
  - 2021 Passed Research Proposal Defense (November)
- **Benjamin McIntyre (MS-Research Track):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2022-2023  
*Current Position:* Medical Student (fall 2023), Michigan State University College of Osteopathic Medicine  
*Honors & Awards:*
  - 2023 Medical Sciences Research Track Student of the Year Award, School of Biomedical Sciences, University of North Texas Health Science Center
  - Robert J. Hardin Heart and Cancer Research Fund Scholarship, School of Biomedical Sciences (SBS), University of North Texas Health Science Center
- **Fernando Gracia (MS-Research Track):** Department of Pharmacology & Neuroscience, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2022 (Spring)  
*Current Position:* Research Assistant, Institute for Translational Research, University of North Texas Health Science Center
- **Nasrul Bhuiyan (MS-Research Track):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2021-2022  
*Current Position:* Medical Student (fall 2023), Alabama College of Osteopathic Medicine  
*Honors & Awards:*
  - Robert J. Hardin Heart and Cancer Research Fund Scholarship, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center
- **Ryan Rusy (MS-Research Track):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2020-2021  
*Current Position:* MD/MBA student, Texas Tech Health Science Center, Lubbock, TX  
*Honors & Awards:*
  - 2020 1<sup>st</sup> place, Physiology 3-Minute Thesis (3MT) Competition
- **Haley Barnes (MS-Integrative Physiology Track):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2019-2020

*Current Position:* Pharmacy student, System College of Pharmacy, University of North Texas Health Science Center, Fort Worth, TX

*Honors & Awards:*

- 2021 2<sup>nd</sup> Place Poster Presentation, System College of Pharmacy, Research Appreciation Day, University of North Texas Health Science Center
- 2020 3<sup>rd</sup> place in the Original Research Podium Presentation competition at the John Peter Smith (JPS) Health Network Research Symposium
- 2020 Passed Final Presentation Defense with Distinction (April)
- 2019 June Valubility of the Month, University of North Texas Health Science Center

- **Garen Anderson (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2018-2022

*Current Position:* Medical Writer, Medpace, Cincinnati, Ohio

*Honors & Awards:*

- 2022 Passed Dissertation Defense with Distinction
- 2020-2022 American Heart Association Predoctoral Fellowship
- 2021 1<sup>st</sup> Place Poster Presentation, Women's Cardiovascular & Brain Health Symposium, University of North Texas Health Science Center
- 2020 Young Investigator Award, Society for Experimental Biology and Medicine (SEBM)
- 2020 American Physiological Society (APS) Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award
- 2019-2020 NIH-T32 Predoctoral Fellowship, Neurobiology of Aging Training Program from the National Institute on Aging, Institute for Healthy Aging, UNTHSC
- 2019 2<sup>nd</sup> Place Poster Presentation, Department of Physiology & Anatomy, Research Appreciation Day, University of North Texas Health Science Center
- 2019 Passed Research Proposal Defense (May)

- **Garen Anderson (MS-Integrative Physiology Track):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2017-2018

*Current Position:* Medical Writer, Medpace, Cincinnati, Ohio

*Honors & Awards:*

- 2018 Passed Final Presentation Defense with Distinction (April)

- **Flora Park (MS-Integrative Physiology Track):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2017-2018

*Current Position:* Family Medicine Resident (DO), Marshall University, Huntington, WV

*Honors & Awards:*

- 2018 Passed Final Presentation Defense with Distinction (April)
- 2018 Oral Presentation (the only Master's level student), Research Appreciation Day
- 2018 Young Investigator Award, Society for Experimental Biology and Medicine (SEBM)

- **Justin Sprick (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2013-2018

*Current Position:* Assistant Professor (tenure-track), Department of Kinesiology, Health Promotion, and Recreation, University of North Texas, Denton, TX

*Honors & Awards:*

- 2018 Passed Dissertation Defense with Distinction (April)
- 2018-2021 Trainee Advisory Committee Representative, Exercise & Environmental Physiology Section, American Physiological Society
- 2017-2018 NIH-F31 Ruth L. Kirschstein Predoctoral Individual National Research Service Award (NRSA)

- 2017 Graduate Student Association Professional Development Travel Award, University of North Texas Health Science Center
- 2017 Preventable Aging Award, University of North Texas Health Science Center Annual Neurobiology of Aging Trainee Symposium
- 2017 Outstanding Graduate Student of the Year for Integrative Physiology, University of North Texas Health Science Center
- 2017 Graduate Student Association Scholarship, University of North Texas Health Science Center
- 2017 1<sup>st</sup> Place Oral Presentation, Research Appreciation Day, University of North Texas Health Science Center
- 2017 Young Investigator Award, Society for Experimental Biology and Medicine (SEBM)
- 2016 Graduate Student Travel Award, Graduate School of Biomedical Sciences, University of North Texas Health Science Center
- 2016 Student Leadership/Professional Development Fund Award, Graduate School of Biomedical Sciences, University of North Texas Health Science Center
- 2016 Preventable Aging Award, University of North Texas Health Science Center Annual Neurobiology of Aging Trainee Symposium
- 2016 Graduate Student Association Scholarship, University of North Texas Health Science Center
- 2016 Outstanding Graduate Student Association Member, University of North Texas Health Science Center
- 2016 1<sup>st</sup> place, Institute for Cardiovascular & Metabolic Disease Research Award, Research Appreciation Day, University of North Texas Health Science Center
- 2016 Finalist, Predoctoral Student Research Poster Award, Texas Chapter of the American College of Sports Medicine (TACSM)
- 2016 Predoctoral Student Research Development Award (SRDA), Texas Chapter of the American College of Sports Medicine (TACSM)
- 2015 Passed Research Proposal Defense with Distinction (November)
- 2015-2017 Predoctoral Fellowship, Neurobiology of Aging Training Program (T32) from the National Institute on Aging (NIA), Institute for Aging and Alzheimer's Disease Research (IAADR) and the Department of Pharmacology & Neuroscience, University of North Texas Health Science Center
- 2015 Cardiovascular Research Institute Award, 3<sup>rd</sup> place, Research Appreciation Day, University of North Texas Health Science Center
- 2015 American Physiological Society (APS) Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award
- 2014/2015 Graduate Student Travel Award, Graduate School of Biomedical Sciences, University of North Texas Health Science Center
- **Victoria Kay (PhD/PA):** Department of Integrative Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Advisor/Major Professor 2012-2015  
*Current Position:* Physician Assistant (Gastroenterology), Baylor Scott & White Digestive Diseases, Fort Worth, TX  
*Honors & Awards:*
  - 2015 Passed Dissertation Defense with Distinction (July)
  - 2015 Best Physician Assistant Poster Presentation, School of Health Professions, Research Appreciation Day, University of North Texas Health Science Center
  - 2014 American Physiological Society (APS) Fleur L. Strand Professional Opportunity Award (top ranked applicant for the Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award)

- 2014 Cardiovascular Research Institute Award, 3<sup>rd</sup> place, Research Appreciation Day, University of North Texas Health Science Center
- 2013 Graduate Student Association, 3<sup>rd</sup> place, Research Appreciation Day, University of North Texas Health Science Center
- 2013 Rachel Dauphin Memorial Scholarship, Graduate School of Biomedical Sciences, University of North Texas Health Science Center

### **Graduate Student Advisory Committees**

- **Heidi Cope (MS):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2024
- **Ying Qin (PhD):** Pharmaceutical Sciences & Pharmacotherapy, University of North Texas Health Science Center, Fort Worth, TX; University member 2024-Present
- **Bupe Kapema (PhD):** Department of Microbiology, Immunology, and Genetics, University of North Texas Health Science Center, Fort Worth, TX; University member 2023-Present
- **Tamara Fischer (PhD):** Department of Microbiology, Immunology, and Genetics, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2023-Present
- **Christopher “Briggs” Lambring (PhD):** Department of Microbiology, Immunology, and Genetics, University of North Texas Health Science Center, Fort Worth, TX; University member 2020-2024
- **Oluwaseun Omoba (MS-Research Track):** Department of Pharmacology & Neuroscience, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2021-2022
- **Calvin Brooks (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2021-2022
- **Nathalie Holme (PhD):** Institute of Basic Medical Sciences, University of Oslo, Norway; Co-supervisor 2020-2022
- **Jordan Gardner (PhD):** Department of Physiology & Anatomy, Institute, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2020-2021
- **Talisa Silzer (PhD):** Department of Microbiology, Immunology, and Genetics, University of North Texas Health Science Center, Fort Worth, TX; University member 2018-2020
- **Pinkal Patel (PhD):** North Texas Eye Research Institute, University of North Texas Health Science Center, Fort Worth, TX; University member 2017-2020
- **Maria Skytioti (PhD):** Division of Physiology, Institute of Basic Medical Sciences, Faculty of Medicine, University of Oslo, Norway; Committee member & First Opponent for PhD Defense, March 2019
- **Troy Stuckless (MS):** Department of Health and Exercise Science, University of British Columbia – Okanagan, Canada; Committee member, June 2018
- **Oluwatobiloba (Deborah) Osikoya (PhD):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2016-2020
- **Grace Pham (PhD/DO):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2015-2020
- **Chaitanya Joshi (PhD):** Department of Cell Biology, Immunology & Microbiology, University of North Texas Health Science Center, Fort Worth, TX; University member 2014-2018
- **Jessica Juarez (PhD):** Structural Anatomy and Rehabilitation Sciences, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2015-2018
- **Samita Kumar (MS-Clinical Research Management):** University of North Texas Health Science Center, Fort Worth, TX; Committee member 2017
- **Pawanpreet (Bobby) Randhawa (MS-Clinical Research Management):** University of North Texas Health Science Center, Fort Worth, TX; Committee member 2016-2017
- **Bhuvanawari Koneru (PhD):** Biochemistry & Cancer Biology, University of North Texas Health Science Center, Fort Worth, TX; University member 2016
- **Noah Jouett (PhD/DO):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2013-2016

- **Brent Shell (PhD):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2012-2016
- **Gilbert Morales (PhD):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2013-2016
- **Ahn Nguyen (PhD/DO):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX; Committee member 2012-2016
- **Brittany Vo-Le (MS-Clinical Research Management):** University of North Texas Health Science Center, Fort Worth, TX; Committee member 2015
- **Trevor Witter (MS):** Department of Surgery and Anaesthesia, University of Otago: Wellington, Wellington South, New Zealand; Thesis reviewer 2015
- **Michelle Graham (MS):** Department of Molecular and Medical Genetics, University of North Texas Health Science Center, Fort Worth, TX; University member 2014-2015
- **Chelsea Barrera (MS):** Department of Health and Kinesiology, The University of Texas at San Antonio, TX, USA; Committee member 2010-2011
- **Peter Sin (PhD):** Department of Surgery and Anaesthesia, University of Otago: Wellington, Wellington South, New Zealand; Thesis reviewer 2011

### Graduate Student Qualifying Exam Committees

- **Savanna Smith (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX, June 2023
- **Michael Wade (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX, July 2022
- **Rusty Hartman (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX, July 2020
- **Yu Tao (PhD):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX, July 2020
- **Oluwatobiloba (Deborah) Osikoya (PhD):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX, June 2017
- **Gilbert Morales (PhD):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX, June 2014
- **Brent Shell (PhD):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX, June 2013
- **Ahn Nguyen (PhD/DO):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX, June 2013
- **Sarika Chaudhari (PhD):** Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center, Fort Worth, TX, June 2013

### Graduate Student Rotations

- **Jeri Keitzer,** Graduate Student, School of Biomedical Sciences (SBS), University of North Texas Health Science Center, Fort Worth, TX, October-December 2023
- **Viet Dinh,** Graduate Student, School of Biomedical Sciences (SBS), University of North Texas Health Science Center, Fort Worth, TX, August-October 2023
- **Caroline Counts,** Graduate Student, School of Biomedical Sciences (SBS), University of North Texas Health Science Center, Fort Worth, TX, August-October 2023
- **Kevin Lal,** Research Fellow, Texas College of Osteopathic Medicine (TCOM), University of North Texas Health Science Center, Fort Worth, TX, Summer 2023
  - Medical Student Training in Aging Research (MSTAR) Program
- **Ysabella Ruiz,** Graduate Student, School of Biomedical Sciences (SBS), University of North Texas Health Science Center, Fort Worth, TX, October-December 2022

- **Nathan Jones**, Graduate Student, School of Biomedical Sciences (SBS), University of North Texas Health Science Center, Fort Worth, TX, August-October 2022
- **Vincent Hua**, Research Fellow, Texas College of Osteopathic Medicine (TCOM), University of North Texas Health Science Center, Fort Worth, TX, Summer 2020
  - Medical Student Training in Aging Research (MSTAR) Program
- **Austin Davis**, Graduate Student, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center, Fort Worth, TX, October-December 2020
- **Garen Anderson**, Graduate Student, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center, Fort Worth, TX, August-October 2018
- **Daniel De La Cruz**, Graduate Student, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center, Fort Worth, TX, August-October 2015
- **Jackson Lopez**, Graduate Student, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center, Fort Worth, TX, February-March 2015
- **Justin Sprick**, Graduate Student, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center, Fort Worth, TX, October-December 2013
- **Marlyn Panchoo**, Graduate Student, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center, Fort Worth, TX, August-October 2013
- **Gilbert Morales**, Graduate Student, Graduate School of Biomedical Sciences (GSBS), University of North Texas Health Science Center, Fort Worth, TX, October-November 2012

### **Graduate Student Supervision - Other**

- **Nathalie Holme**: Fulbright Fellow and Graduate student (PhD) from the University of Oslo (Norway), Department of Physiology and Anatomy, University of North Texas Health Science Center, Fort Worth, TX, USA, 2019
- **Gilbert Morales**: Graduate student (Masters), Department of Health and Kinesiology, The University of Texas at San Antonio, San Antonio, TX, USA, 2008-2010
- **Steven A. Romero**: Graduate student (Masters), The University of Texas at San Antonio, San Antonio, TX, USA, 2007-2009

### **Medical Students**

- **Kevin Lal**: Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; 2023-2024  
*Honors & Awards:*
  - 2024 Best in Second Year Class, Medical Student Government Association, Texas College of Osteopathic Medicine, Research Appreciation Day, University of North Texas Health Science Center*Current Position:* Medical Student, Texas College of Osteopathic Medicine, University of North Texas Health Science Center, Fort Worth, TX
- **Ritika Muthyala**: Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; 2023-2024  
*Honors & Awards:*
  - 2024 2<sup>nd</sup> Place Student Research Award, Texas College of Osteopathic Medicine, Research Appreciation Day, University of North Texas Health Science Center*Current Position:* Medical Student, Texas College of Osteopathic Medicine, University of North Texas Health Science Center, Fort Worth, TX
- **Michael Mogg**: Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; 2022-2023  
*Current Position:* Medical Student, Texas College of Osteopathic Medicine, University of North Texas Health Science Center, Fort Worth, TX

- **Chandler Stanteen:** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; 2021-2023  
*Current Position:* Medical Student, Texas College of Osteopathic Medicine, University of North Texas Health Science Center, Fort Worth, TX
- **Vincent Hua:** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; 2019-2021  
*Current Position:* Emergency Medicine Resident, University of Texas Health San Antonio, TX
- **Jace Coon,** Research Fellow, Texas College of Osteopathic Medicine (TCOM), University of North Texas Health Science Center, Fort Worth, TX, 2016/2017
  - Promoting Diversity in Research Training for Health Professional Students (PDRT) Program, NIH NHLBI
- **Tyler Petree,** Summer Research Intern, Texas College of Osteopathic Medicine (TCOM), University of North Texas Health Science Center, Fort Worth, TX, June/July 2016
  - 2016 TCOM Summer Research Fellow Award
- **Travis Schaefer,** Summer Research Intern, Texas College of Osteopathic Medicine (TCOM), University of North Texas Health Science Center, Fort Worth, TX, June/July 2015
  - 2015 TCOM Summer Research Fellow Award
- **Hannah Colby,** Summer Research Intern, Texas College of Osteopathic Medicine (TCOM), University of North Texas Health Science Center, Fort Worth, TX, June/July 2014
  - 2014 TCOM Summer Research Fellow Award
- **Grace Pham,** Summer Research Intern, Texas College of Osteopathic Medicine (TCOM), University of North Texas Health Science Center, Fort Worth, TX, June/July 2014
  - 2015 American Physiological Society (APS) Excellence in Professional Student Research Travel Award (\$1800)
  - 2014 TCOM Summer Research Fellow Award
- **Eric Chang,** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; 2018

### **Undergraduate Student Supervision**

- **Ayrion Moody:** Intern, Summer Research Internship Program (SRIP), University of North Texas Health Science Center, 2024
- **Chelsea Barrera:** Summer Intern, US Army Institute of Surgical Research, 2010  
*Current Position:* Phlebotomist, Biolife Plasma Services, Austin, TX
- **Travis Kiker:** Fall Intern, US Army Institute of Surgical Research, 2009  
*Current Position:* Registered Nurse, Methodist Hospital, San Antonio, TX
- **Gennifer Hurst:** Summer Intern, US Army Institute of Surgical Research, 2009  
*Current Position:* Infectious Diseases Fellow, Baylor Scott & White, Temple, TX
- **Kevin Seery:** Summer Intern, US Army Institute of Surgical Research, 2008  
*Current Position:* Paramedic, St. Joseph Hospital System, Bryan, Texas
- **Gilbert Moralez:** Fall Intern, US Army Institute of Surgical Research, 2007  
*Current Position:* Assistant Professor, School of Health Professions, UT Southwestern Medical Center, Dallas, TX
- **Steven A. Romero:** Summer Intern, US Army Institute of Surgical Research, 2007  
*Current Position:* Associate Professor, Department of Physiology & Anatomy, University of North Texas Health Science Center
- **Christopher T. Lee:** Intern, NASA Spaceflight and Life Sciences Training Program (SLSTP), 2005  
*Current Position:* Epidemic Intelligence Service Officer, Center for Disease Control (CDC), New York
- **Prateek J. Khatri:** Intern, NASA Spaceflight and Life Sciences Training Program (SLSTP), 2005  
*Current Position:* Physician (Internal Medicine), North York General Hospital, Toronto, Canada
- **Lubrina Burton:** Intern, NASA Spaceflight and Life Sciences Training Program (SLSTP), 2005



- **Lindsey L. Bergeron:** Intern, NASA Spaceflight and Life Sciences Training Program (SLSTP), 2005  
*Current Position:* Major, US Air Force
- **Sheena A. Dohar:** Summer Intern, US Army Institute of Surgical Research, 2006  
*Current Position:* Resident (Behavioral Medicine & Psychiatry), West Virginia University Health Sciences Center, Morgantown, WV

### **Laboratory Volunteers**

- **Haley Barnes (MS Med Sci):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; 2018-2019  
*Honors & Awards:*
  - 2019 3<sup>rd</sup> Place Poster Presentation, Department of Physiology & Anatomy, Research Appreciation Day, University of North Texas Health Science Center*Current Position:* Pharmacy Student, System College of Pharmacy, University of North Texas Health Science Center, Fort Worth, TX
- **My-Loan Luu (MS Med Sci):** Department of Physiology & Anatomy, University of North Texas Health Science Center, Fort Worth, TX; 2018-2019  
*Current Position:* Medical Student, Arizona College of Osteopathic Medicine, Midwestern University, Glendale, AZ

---

## **Service**

### **Service to the Department**

|                       |   |
|-----------------------|---|
| <b>2024 – Present</b> | Faculty Advisor, Physiology & Anatomy Student Interest Group (PHANatics), Department of Physiology & Anatomy, University of North Texas Health Science Center                       |
| <b>2023</b>           | Organizer, Department of Physiology & Anatomy 3-Minute Thesis (3MT) Competition   |
| <b>2022 – 2023</b>    | Chair, Faculty Search Committee, Department of Physiology & Anatomy, University of North Texas Health Science Center  |
| <b>2021 – Present</b> | Promotion & Tenure Committee  |
| <b>2020 – Present</b> | Department of Physiology & Anatomy Steering Committee   |
| <b>2019 – 2024</b>    | Committee member, Organizing Committee, Women’s Cardiovascular & Brain Health (WCBH) Symposium, Department of Physiology & Anatomy, University of North Texas Health Science Center |
| <b>2019</b>           | Committee member, Department Chair Search Committee, Department of Physiology & Anatomy, University of North Texas Health Science Center  |
| <b>2018 – 2019</b>    | Committee member, development of Physiology in Health & Disease (BMSC 6391), an advanced physiology course for the Department of Physiology & Anatomy                               |
| <b>2017 – 2020</b>    | Master’s of Medical Science Integrative Physiology Admissions and Oversight Committee   |
| <b>2016 – 2017</b>    | Chair, Faculty Search Committee (Human Physiology Candidates), Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center                   |
| <b>2015</b>           | Core Curriculum Competency Committee, Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center  |
| <b>2013 – 2018</b>    | Seminar Co-ordinator, Institute for Cardiovascular & Metabolic Diseases, University of North Texas Health Science Center  |
| <b>2012 – Present</b> | Bylaws Committee, Department of Physiology & Anatomy, University of North Texas Health Science Center   |
| <b>2012 – Present</b> | Curriculum Committee, Department of Physiology & Anatomy, University of North Texas Health Science Center   |

## Service to the University

|                       |  |
|-----------------------|--|
| <b>2023 – 2024</b>    | Ad-hoc member, Research Integrity Committee, University of North Texas Health Science Center   |
| <b>2023</b>           | Organizer, University of North Texas Health Science Center 3-Minute Thesis (3MT) Competition   |
| <b>2022 – Present</b> | Member, Dr. Martin Farias III Memorial Lectureship Committee   |
| <b>2022 – 2024</b>    | Chair, Diversity, Equity, and Inclusion (DEI) Committee (Values Committee as of spring 2023), School of Biomedical Sciences (SBS), University of North Texas Health Science Center |
| <b>2022</b>           | Committee member, Biochemistry & Cancer Biology Discipline Review, School of Biomedical Sciences (SBS), University of North Texas Health Science Center                            |
| <b>2021 – 2023</b>    | Teaching Assistant Working Group, School of Biomedical Sciences (SBS), University of North Texas Health Science Center   |
| <b>2020 – 2023</b>    | Education Council, School of Biomedical Sciences (SBS), University of North Texas Health Science Center  |
| <b>2020 – Present</b> | Committee on Student Conduct, University of North Texas Health Science Center  |
| <b>2020 – 2022</b>    | Diversity, Equity, and Inclusion (DEI) Committee, School of Biomedical Sciences (SBS), University of North Texas Health Science Center   |
| <b>2020 – 2020</b>    | Steering Committee, Intramural Predoctoral Fellowship Program, Office of the Vice President for Research & Innovation, University of North Texas Health Science Center             |
| <b>2019 – 2023</b>    | Founding Member & Chair (2019-2022), Women Faculty Network (WFN), University of North Texas Health Science Center  |
| <b>2019 – Present</b> | Steering Committee, Neurobiology of Aging and Alzheimer’s Disease T32 Training Grant, Institute for Healthy Aging, University of North Texas Health Science Center                 |
| <b>2019</b>           | Promotion & Tenure Committee (ad-hoc), School of Biomedical Sciences, University of North Texas Health Science Center  |
| <b>2019 – 2022</b>    | Faculty Senate Communications Committee, University of North Texas Health Science Center   |
| <b>2018 – 2022</b>    | Senator (Elected & Re-elected for 2 <sup>nd</sup> term), Faculty Senate, University of North Texas Health Science Center   |
| <b>2017 – Present</b> | Vice Chair, Institutional Review Board, University of North Texas Health Science Center  |
| <b>2018 – 2021</b>    | Founding Member, Early Career Development Council (ECDC), University of North Texas Health Science Center  |
| <b>2016 – 2018</b>    | Member, Faculty Mentoring Working Group, Health Institutes, University of North Texas Health Science Center  |
| <b>2016</b>           | Hosted a laboratory tour for UNT System Regent Laura Wright  |
| <b>2016</b>           | Reviewer, Intramural Seed Grant Program, University of North Texas Health Science Center   |
| <b>2015 – 2017</b>    | Scientist Member, Institutional Review Board, University of North Texas Health Science Center  |
| <b>2015 – 2016</b>    | Hosted laboratory demonstration for “Mentors for Life” summer school program (high school)   |
| <b>2014 – 2015</b>    | Hosted laboratory demonstration for “Camp Cardiac” summer school students (high school)  |
| <b>2014, 2018</b>     | Lecture and laboratory demonstration for undergraduate students from Tecnológico de Monterrey, Nuevo Leon, Mexico  |
| <b>2013 – 2018</b>    | Hosted laboratory demonstrations for students from the Texas Academy of Biological Sciences (TABS), and other local high schools   |
| <b>2013 – 2020</b>    | Interviewer for Medical School Mock Interviews for Masters of Medical Science students   |
| <b>2012 – 2015</b>    | Interviewer for Texas College of Osteopathic Medicine (TCOM) applicants, University of North Texas Health Science Center   |

**2012 – 2016** Distance Education Advisory Committee, Graduate School of Biomedical Sciences

**Service to the Profession**

**2023 – Present** Chair (Elected), Cerebrovascular Research Network (CARNet)  
**2022 – Present** Programming Working Group, Exercise & Environmental Physiology Section Representative, American Physiological Society  
**2020 – 2021** Co-Organizer, Cerebral Blood Flow Virtual Seminar Series [online]; 23 symposia scheduled between July 2020-December 2021  
**2020** Established and maintained a “Human Research COVID-19” Online Discussion Board (Slack)  
**2020** Advisory Group of Early Career Scientists, American Physiological Society  
**2019 – 2022** Committee on Committees, Exercise & Environmental Physiology Section Representative, American Physiological Society  
**2018 – 2021** Environmental Physiology Councillor (Elected), Exercise & Environmental Physiology Section, American Physiological Society  
**2017 – 2019** Awards Task Force, American Physiological Society  
**2017** Social Media/Website/Communications Task Force, American Physiological Society  
**2017 – 2018** Life Science Teaching Resource Community (LifeSciTRC) Review Board, American Physiological Society  
**2016 – 2022** Secretary (Elected), Cerebral Autoregulation Research Network (CARNet)  
**2014 – 2016** Steering Committee, Cerebral Autoregulation Research Network (CARNet)  
**2015 – 2018** Federation of American Societies for Experimental Biology (FASEB), Excellence in Science Award Committee  
**2015 – 2017** Chair, American Physiological Society, Women in Physiology Committee  
**2015 – 2016** American Physiological Society Physiology Understanding (PhUn) Week team member, Dallas Park Elementary, Fort Worth, TX  
**2014** American Physiology Society Physiology Understanding (PhUn) Week team member, Ellis PK-4, Fort Worth, TX  
**2011 – 2013** American Physiological Society, Women in Physiology Committee

- Coordinated team for launching and maintaining the APS Women in Physiology Committee Facebook page
- Coordinator, Mentoring Forum Column, *The Physiologist*

**2010 – 2013** American Physiological Society, Cardiovascular Section Trainee Committee

**Journal Editorial Boards**

**2024** Guest Editor, Journal of Applied Physiology; special call for papers “Cerebrovascular Control in Health and Disease: From Modeling to Translational Research”  
**2018 – 2024** Reviewing Editor, Journal of Physiology (handled 155 manuscripts)  
**2017 – Present** Editorial Board, American Journal of Physiology-Regulatory, Integrative and Comparative Physiology  
**2011 – 2022** Review Editor, Frontiers in Exercise Physiology

**Journal Reviewer (Ad Hoc; 140 manuscripts)**

Advances in Physiology Education (1 paper)  
American Journal of Physiology

- Heart and Circulatory Physiology (15 papers)
- Regulatory, Integrative and Comparative Physiology (16 papers)

Autonomic Neuroscience (4 papers)  
Aviation, Space and Environmental Medicine (3 papers)

BMC Anesthesiology (1 paper)  
Clinical Physiology & Functional Imaging (1 paper)  
Comprehensive Physiology (1 paper)  
Critical Care (1 paper)  
Critical Care Medicine (7 papers)  
European Heart Journal (1 paper)  
European Journal of Applied Physiology (2 papers)  
European Journal of Sports Science (1 paper)  
Experimental Neurology (1 paper)  
Experimental Physiology (9 papers)  
Frontiers in Physiology (8 papers)  
Hypertension (2 papers)  
Journal of Alzheimer's Disease (1 paper)  
Journal of Applied Physiology (28 papers)  
Journal of Cardiovascular Pharmacology & Therapeutics (1 paper)  
Journal of Cerebral Blood Flow & Metabolism (3 papers)  
Journal of Gravitational Physiology (1 paper)  
Journal of Healthcare Engineering (1 paper)  
Journal of Neurophysiology (1 paper)  
Journal of Neurotrauma (1 paper)  
Medical Engineering and Physics (2 papers)  
Medicine and Science in Sports and Exercise (10 papers)  
Neurology (1 paper)  
Neurotherapeutics (1 paper)  
Physiological Measurement (2 papers)  
Physiological Reports (2 papers)  
Physiology & Behavior (1 paper)  
Physiology Journal (1 paper)  
PLoS One (1 paper)  
The Journal of Physiology (6 papers)  
The Lancet (2 papers)

### **Grant Reviewer**

|                    |   |
|--------------------|---|
| <b>2024 Fall</b>   | American Heart Association (AHA), Chair, Fellowship Vascular Biology Blood Pressure Peer Review [declined request as graduate student (Viet Dinh) applying in same round] |
| <b>2023 Fall</b>   | American Heart Association (AHA), Fellowship Vascular Biology and Blood Pressure Peer Review Committee  |
| <b>2023 Spring</b> | American Heart Association (AHA), Second Century Early Faculty Independence Award Peer Review Study Group   |
| <b>2022 Fall</b>   | American Heart Association (AHA), Fellowship Vascular Biology Blood Pressure Peer Review [declined request as graduate student (Austin Davis) applying in same round]     |
| <b>2021 Spring</b> | NASA Translational Research Institute for Space Health (TRISH) Review Committee for Postdoctoral Fellowships  |
| <b>2020 Spring</b> | American Heart Association (AHA) Career Development Award – Clinical Sciences Peer Review Study Group   |
| <b>2019</b>        | NIH Early Career Reviewer, Hypertension & Microcirculation (HM) Study Section   |

|                    |   |
|--------------------|---|
| <b>2018 – 2019</b> | Natural Sciences and Engineering Research Council of Canada (NSERC)   |
| <b>2017</b>        | Undergraduate Research Excellence Fellowships, American Physiological Society   |
| <b>2017</b>        | Undergraduate Summer Research Fellowships, American Physiological Society   |
| <b>2017</b>        | Research Career Enhancement Awards, American Physiological Society  |
| <b>2016</b>        | United Kingdom Medical Research Council (UK MRC)  |
| <b>2015</b>        | Natural Sciences and Engineering Research Council of Canada (NSERC)   |
| <b>2015 Fall</b>   | American Heart Association (AHA) Vascular Biology Blood Pressure Clinical Peer Review Study Group   |
| <b>2015 Spring</b> | American Heart Association (AHA) CardioRenal Clinical Peer Review Study Group   |
| <b>2013 Spring</b> | American Heart Association (AHA) CardioRenal 3 Peer Review Study Group  |
| <b>Ad-hoc</b>      | The National Heart Foundation of New Zealand<br>Canada Foundation for Innovation (CFI), Government of Canada<br>Wellington Medical Research Foundation, New Zealand |

**Other**

|                       |  |
|-----------------------|--|
| <b>2024</b>           | Organizing Committee, Cerebrovascular Research Network (CARNet) Meeting, Québec City, Québec, Canada   |
| <b>2024</b>           | Co-Chair, Environmental and Exercise Physiology (EEP) “Sprints”, American Physiology Summit, Long Beach, CA  |
| <b>2023</b>           | Chair, Physiology Session #1, Cerebrovascular Research Network (CARNet) Annual Meeting, Taipei, Taiwan   |
| <b>2023</b>           | Co-Chair, Environmental and Exercise Physiology (EEP) “Sprints”, American Physiology Summit, Long Beach, CA  |
| <b>2022</b>           | Chair, Physiology Session #2, Cerebrovascular Research Network (CARNet) Annual Meeting, Leicester, UK  |
| <b>2022</b>           | Organizing Committee, Cerebrovascular Research Network (CARNet) Meeting, Leicester, UK   |
| <b>2020</b>           | Co-Chair, APS Exercise and Environmental Physiology (EEP) Section Featured Topic “ <i>Exercise and Brain: Can Exercise Improve Cerebrovascular and Cognitive Function?</i> ”, APS LIVE (Virtual Experimental Biology 2020) [259 attendees] |
| <b>2018</b>           | Chair, Integrative Physiology Symposium “ <i>Ischemic and hypoxic conditioning: Potential for protection of vital organs</i> ”, Experimental Biology, San Diego  |
| <b>2017 – Present</b> | Mentor for “Mentoring on the Go” at Experimental Biology/American Physiology Summit, Exercise & Environmental Physiology (EEP) Section, American Physiological Society   |
| <b>2017</b>           | Reviewer, Research Career Enhancement Awards (RCEA), American Physiological Society  |
| <b>2017</b>           | Judge, David S. Bruce Excellence in Undergraduate Research Awards, Experimental Biology 2017, Chicago, IL  |
| <b>2017</b>           | Reviewer, Undergraduate Research Excellence Fellowships (UGREF), American Physiological Society  |
| <b>2017</b>           | Reviewer, Undergraduate Summer Research Fellowships (UGSRF), American Physiological Society  |
| <b>2017</b>           | Organizing Committee, Cerebral Autoregulation Research Network (CARNet) Meeting, Berlin, GERMANY, 2017   |
| <b>2016</b>           | Chair, Oral Presentation Session: “ <i>Cognitive Function</i> ”, European College of Sports Science Meeting, Vienna, AUSTRIA   |
| <b>2016</b>           | Chair, Oral Presentation Session: “ <i>Cardiovascular Physiology</i> ”, European College of Sports Science Meeting, Vienna, AUSTRIA  |
| <b>2016</b>           | Chair, “ <i>Cerebrovascular Autoregulation in Disease</i> ”, 6 <sup>th</sup> Annual Meeting of the Cerebral Autoregulation Research Network (in conjunction with the 16 <sup>th</sup> International Symposium                              |

- on Intracranial Pressure & Neuromonitoring), Massachusetts Institute of Technology (MIT), Cambridge, MA
- 2015** Chair, APS Neural Control & Autonomic Regulation (NCAR) Section Featured Topic *“Baroreflex and Chemoreflex Controls of the Human Cerebral Circulation”*, Experimental Biology, Boston
- 2014 – 2015** Organizing Committee, Cerebral Autoregulation Research Network (CARNet) Meeting, Southampton, UK, 2015
- 2014** Chair, *“Cerebral Autoregulation in Pathological Conditions”*, Cerebral Autoregulation Research Network (CARNet) Meeting (in conjunction with Experimental Biology, 2014), San Diego, CA
- 2014** Chair, Scientific Session # 1: *Cerebrovascular Physiology*, Okanagan Cardiovascular & Respiratory Symposium, Silver Star Ski Resort, Vernon, British Columbia, Canada
- 2013 – 2014** Organizing Committee, Cerebral Autoregulation Research Network (CARNet) Meeting, San Diego, 2014 (in conjunction with Experimental Biology, 2014)
- 2013** Chair, Session II: *New insights into the physiology and pathology of autoregulation*, Cerebral Autoregulation Research Network (CARNet) Meeting, Portugal
- 2013** Chair, APS Exercise and Environmental Physiology (EEP) Section Featured Topic *“Brain Strain: Challenges to Cerebral Blood Flow Regulation in Humans”*, Experimental Biology, Boston

### **Service to the Community**

#### **Zonta International**

- 2019 June** Guest Speaker, Zonta North American Interdistrict Meeting, Dallas, Texas.
- 2018 February** Guest Speaker, Amelia Earhart Luncheon, Zonta Club of Dallas, Texas.
- 2011 March** Guest Speaker, Zonta Club of Columbus, Ohio.  
*“The Adventures of a Little Aussie in Texas”*
- 2011 January** Guest Speaker, Zonta Clubs of Johnson County, Kansas. Amelia Earhart Luncheon.  
*“The Adventures of a Little Aussie in Texas”*
- 2010 June** Guest Speaker, Zonta International Convention 2010, San Antonio, Texas.  
*“The Adventures of a Little Aussie in Texas”*
- 2010 January** Guest Speaker, Zonta Club of San Antonio, Texas.  
*“The Adventures of a Little Aussie in Texas”*
- 2009 September** Guest Speaker, Zonta District 23 Conference, Ballarat, Australia.  
*“Postcard from Texas. An overview of my career from PhD to Postdoctoral Fellow”*  
(Video Presentation)
- 2009 July** Guest Speaker, Zonta Club of Melbourne on the Yarra, Victoria, Australia.  
*“Postcard from Texas. An overview of my career from PhD to Postdoctoral Fellow”*  
(Video Presentation)
- 2008 March** Guest Speaker, Zonta Club of Kyneton, Victoria, Australia. International Women’s Day Celebration. *“Postcard from Texas. An overview of my career from PhD to Postdoctoral Fellow”* (Video Presentation)
- 2003 – 2004** Guest speaker for Zonta International at club, area and district levels around Australia.  
*“Zonta International Amelia Earhart Fellow 2003/2004”*

#### **Other**

- 2023** “Stop the Bleed” training course, American College of Surgeons Committee on Trauma
- 2015** Attendee, American Heart Association “Go-Red for Women” Luncheon, Tarrant County, Texas
- 2014** Guest Speaker, Awards Day, Sacred Heart College, Kyneton, Victoria, Australia

|                       |  |
|-----------------------|--|
| <b>2012</b>           | Guest Speaker, Moonee Ponds Central School (Year 7&8 Students), Victoria, Australia. <i>“The Adventures of a Little Aussie in Texas”</i> |
| <b>2011 – 2012</b>    | Regular volunteer at Haven for Hope (via St. Mark’s Episcopal Church “Kitchen Corp”), San Antonio, Texas                                 |
| <b>2011</b>           | Guest Speaker, Good Samaritan Center, San Antonio, Texas. <i>“The Adventures of a Little Aussie in Texas”</i>                            |
| <b>2010 – 2011</b>    | Volunteer at Food Bank, San Antonio, Texas   |
| <b>2010</b>           | “Christmas to the Streets” at Haven for Hope/Prospect’s Courtyard, St. Mark’s Episcopal Church, San Antonio, Texas                       |
| <b>1999 – Present</b> | Regular whole blood donor, Australian Red Cross Blood Service, South Texas Blood and Tissue Center, and Carter Blood Care (Texas)        |
| <b>1995 – 2000</b>    | Volunteer member of the State Emergency Service (SES), Gisborne Unit, Victoria, Australia  |

---

## Professional Membership

|                       |   |
|-----------------------|---|
| <b>2013 – Present</b> | American Heart Association  |
| <b>2011 – Present</b> | Cerebrovascular Research Network (CARNet) (previously the Cerebral Autoregulation Research Network) |
| <b>2009 – Present</b> | American Autonomic Society  |
| <b>2006 – Present</b> | American Physiological Society (APS)  |

---

## Media Coverage

### Predatory Journals

- **December 2023** BioScience (International)  
<https://academic.oup.com/bioscience/advance-article/doi/10.1093/biosci/biad104/7465222>

### High Altitude Physiology

- **April 2020** UNTHSC Solutions Magazine (Local)  
[2020\\_April\\_Solutions\\_final](#)

### e-Cigarettes

- **December 2013** USA Today (National)  
<http://www.usatoday.com/story/news/usanow/2013/12/20/e-cigarette-bans-considered-across-the-country/4143993/>
- **November 2013** NBC News, Dallas/Fort Worth (Regional)  
<http://www.nbcdfw.com/investigations/Rise-of-e-Cigarette-Use-in-Kids-Sparks-Concern-232893231.html>
- **September 2013** KERA News (Regional NPR affiliate)  
<https://www.keranews.org/post/e-cigarettes-hot-commodity-texas>

### Inspiratory resistance breathing

- **January 2013** KRLD NewsRadio (CBS DFW), Dallas/Fort Worth (Regional)  
<https://soundcloud.com/unthsc/dr-caroline-rickards-talks>

- **December 2013** UNTHSC Daily News (Local)  
<https://www.unthsc.edu/newsroom/story/device-being-tested-at-unthsc-could-save-lives-of-trauma-victims/>
- 

## Other Achievements

- Stop the Bleed Training, May 2023
- Basic Life Support (BLS) Provider, American Heart Association, September 2023
- Radiation Safety Training, August 2021
- DEXA Operator Training, November 2018
- Certified in venipuncture, UNTHSC, 2014
- Advanced Cardiac Life Support (ACLS) training, American Heart Association, 2013-2017
- Captain, Women's Australian Rules Football Team, The University of Melbourne, Melbourne, Australia, 1997
- Ridley College Alumna, The University of Melbourne, Melbourne, Australia, 1997