

## CURRICULUM VITAE

**Adam John Case**

**Professional Address:** Department of Psychiatry and Behavioral Sciences  
Department of Medical Physiology  
School of Medicine  
Texas A&M University Health Science Center  
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**I. Research Interests**

Redox signalling is vital for proper immune system function, yet this area of research is understudied. My graduate career focused on the role of mitochondrial superoxide in T-lymphocyte development. I transitioned this expertise into my postdoctoral training where I examined the role of redox signalling in T-lymphocytes during the pathogenesis of cardiovascular disease. As an independent investigator, I have extended this work to identify the contribution of the immune system and redox signalling to different pathological states of psychological trauma and stress. With this, I am investigating the redox, metabolic, and epigenetic mechanisms that may affect immune cell function and potentiate psychological trauma-mediated inflammatory diseases including cardiovascular disease.

**II. Education**

- 1996 – 2000      **High School Degree**, Ankeny High School, Ankeny, IA
- 2000 – 2004      **B.S. with Honors and High Distinction, Biochemistry**, The University of Iowa, Iowa City, IA; Minors in Biology and Chemistry; Dr. Adrian Elcock, PhD mentor  
Thesis: *Prediction of disease and resistance causing mutations via predictive computer algorithms.*
- 2004 – 2011      **Ph.D., Free Radical and Radiation Biology**, The University of Iowa Carver College of Medicine, Iowa City, IA; Dr. Frederick Domann, PhD mentor  
Thesis: *The role of mitochondrial superoxide in the development of the mammalian hematopoietic system.*
- 2011 – 2012      **Postdoctoral Trainee**, The University of Iowa Carver College of Medicine, Iowa City, IA; Dr. Frederick Domann, PhD/Dr. James Mezhir, MD co-mentors  
Project: *Extracellular superoxide dismutase as a target for pancreatic cancer therapy.*
- 2012 – 2015      **Postdoctoral Fellow**, University of Nebraska Medical Center, Omaha, NE; Dr. Matthew Zimmerman, PhD mentor  
Project: *Redox signaling in T-lymphocytes during hypertension.*

### III. Academic Appointments

2015 – 2016	<b>Instructor (non-tenure track)</b> , Department of Cellular and Integrative Physiology, College of Medicine, University of Nebraska Medical Center, Omaha, NE
2016 – 2021	<b>Assistant Professor (tenure track)</b> , Department of Cellular and Integrative Physiology, College of Medicine, University of Nebraska Medical Center, Omaha, NE
2021 – 2023	<b>Associate Professor (tenure track)</b> , Department of Psychiatry and Behavioral Sciences, Department of Medical Physiology, College of Medicine, Texas A&M University, College Station, TX
2023 – Present	<b>Associate Professor (with tenure)</b> , Department of Psychiatry and Behavioral Sciences, Department of Medical Physiology, School of Medicine, Texas A&M University, College Station, TX

### IV. Other Academic Appointments

2016 – 2021	<b>Director, Physiological Environment Research Facility</b> , University of Nebraska Medical Center, Omaha, NE
2016 – 2022	<b>Graduate Faculty</b> , Integrative Physiology and Molecular Medicine (IPMM); Neuroscience; Immunology, Pathology, and Infectious Disease (IPID); Biomedical Informatics (BMI) Graduate Programs, University of Nebraska Medical Center, Omaha, NE
2018 – 2021	<b>Associate Member</b> , Molecular & Biochemical Etiology Program, Fred and Pamela Buffet Cancer Center, University of Nebraska Medical Center, Omaha, NE
2021 – Present	<b>Graduate Faculty</b> , Medical Sciences (MSCI); Genetics (GENE), Institute for Neuroscience (TAMIN), Texas A&M University
2022 – Present	<b>Affiliate Faculty</b> , Huffines' Institute for Sports Medicine and Human Performance, Texas A&M University

### V. Academic and Research Experience

2000 – 2001	<b>Internship</b> , Department of Biochemistry, Pioneer Hybrid International, Johnston, IA; Dr. George Singletary mentor
2000 – 2002	<b>Tutor</b> , The University of Iowa, Iowa City, IA; Subjects taught Calculus, Biology, Chemistry, and Organic Chemistry
2002 – 2004	<b>Undergraduate Research Assistant</b> , Department of Biochemistry, The University of Iowa, Iowa City, IA; Dr. Adrian Elcock mentor

### VI. Grant Support

#### Current External

- NIH R01HL158521, Case (PI)** 07/20/2021 – 05/31/2026  
Source: National Institutes of Health – National Heart, Lung, and Blood Institute  
Title: Neuroimmune dynamics involved in the pathogenesis of hypertension after psychological trauma  
Goal: Determine the role of autonomic-immune interactions after psychological trauma leading to the development of hypertension  
Role: Principal Investigator  
Amount: \$2,713,485

- NIH R01MH132806, Vladimirov (PI)** 04/01/2023 – 03/31/2028  
Source: National Institutes of Health – National Institute of Mental Health  
Title: Translational Approach to Studying miRNA functions in sACC and amygdala in patients with BPD  
Goal: Identify and mechanistically investigate new potential miRNA regulators of bipolar disorder  
Role: Co-Investigator  
Amount: \$2,434,223
- NIH R01DK129311, Patel (PI)** 09/01/2021 – 08/31/2025  
Source: National Institutes of Health – Institute of Diabetes, Digestive, and Kidney Diseases  
Title: Novel target mechanism (renal nerves) for the beneficial actions of SGLT2 inhibition in congestive heart failure  
Goal: To determine the cardiorenal contributions of SGLT2 in heart failure  
Role: Paid Consultant  
Amount: \$5,000/year
- DOD PR210574, Marvar (PI)** 07/01/2022 – 06/30/2027  
Source: CDMRP Peer Reviewed Medical Research Program (PRMRP) Investigator-Initiated Research Award  
Title: Elucidating mechanisms of hypertension risk in PTSD  
Goal: The proposed project is part of the FY21 PRMRP topic area of interest and addresses contributing mechanism(s), causal pathways and interventions of hypertension (HTN) associated with PTSD.  
Role: Unpaid Consultant  
Amount: \$2,000,000 Direct

#### Internal

- R3 (Renew, Reinvest, Resubmit Program), Yentes (PI)** 04/15/2022 – 04/14/2024  
Source: Texas A&M - College of Education and Human Development  
Title: No Title  
Goal: Gather preliminary data needed for submission of major grant (R01)  
Role: Collaborator  
Amount: \$27,356 (\$10,000 to Case)

#### Trainee

- NIH T32GM135115, Threadgill (PI)** 09/01/2023 – 08/31/2024  
Source: National Institutes of Health – National Institute of General Medical Sciences  
Title: Diverse Predoctoral Training in Genetics  
Goal: To train the next generation of genetics PhD students at Texas A&M University  
Role: Mentor of predoctoral awardee, Emily Reed  
Amount: \$40,000
- NIH Predoctoral Fellowship F30HL154535, Elkhatib (PI)** 09/01/2020 – 08/31/2024  
Source: National Institutes of Health – National Heart, Lung, and Blood Institute  
Title: Neuroimmune contributions to hypertension sensitization in a preclinical model of PTSD  
Goal: Determine the role of sympathetic modulation of splenic inflammation after psychological trauma  
Role: Mentor of predoctoral awardee, Safwan Elkhatib

Amount: \$185,846**Past***External*

- **NIH L40HL148832, Case (PI)** 10/01/2019 – 09/30/2023  
Source: National Institutes of Health – NHLBI Loan Repayment Program  
Title: Calprotectin Control of T-lymphocyte Inflammation and Hypertension after Juvenile Psychological Trauma  
Goal: Determine how early-life stress impacts T-lymphocyte inflammation to drive cardiovascular disease later in life  
Role: Principal Investigator  
Amount: \$40,031 (to pay personal student loans)
- **Applied Behavior Research Seed Grant, Case (PI)** 01/01/2022 – 12/31/2022  
Source: American Society for the Prevention of Cruelty to Animals (ASPCA)  
Title: Precision Care of Canine Behavior Utilizing Non-Invasive Biological Markers for Psychological Trauma  
Goal: Identify inflammatory markers of psychological trauma in shelter dogs to help diagnose and treat behavioral issues  
Role: Co-Principal Investigator  
Amount: \$15,000 Total
- **DOD W81XWH-20-PCRP-IDA, Cook (PI)** 12/01/2021 – 11/30/2024  
Source: Department of Defense, Prostate Cancer Idea Development Award  
Title: Therapeutic targeting of Nox2 to target Bone Metastatic Prostate Cancer Progression and Immune Evasion  
Goal: To determine the function of Nox2 in prostate cancer as it pertains to bone metastasis, and target this protein for therapeutic benefit  
Role: Co-Investigator  
Amount: \$1,800,000 Direct (20% FTE to Case)
- **134073RSG-19-127-01-CSM, Cook (PI)** 01/01/2020 – 12/31/2022  
Source: American Cancer Society  
Title: Reprogramming the Immune-bone Microenvironment for Improving Outcomes of Bone Metastatic Cancer  
Goal: Determine the role of neutrophils in modulating the bone microenvironment of prostate cancer metastasis  
Role: Co-Investigator (Relinquished early due to relocation to Texas A&M)  
Amount: \$600,000 Direct (8% FTE to Case)
- **NIH R01HL129823, Lindsey (PI)** 05/01/2019 – 04/30/2021  
Source: National Institutes of Health – National Heart, Lung, and Blood Institute  
Title: Systems Biology of Fibroblast Activation Following Myocardial Infarction  
Goal: To develop in silico computational models of fibroblast activation following myocardial infarction  
Role: Co-Investigator

Amount: \$962,080 Direct (25% FTE to Case)

- **NIH R00HL123471, Case (PI)** 09/01/2017 – 08/31/2020  
Source: National Institutes of Health – National Heart, Lung, and Blood Institute  
Title: Redox Regulation of T-lymphocytes in Sympathoexcitation-associated Hypertension  
Goal: Determine the effect of redox signaling on T-lymphocyte-mediated inflammation in neurogenic hypertension  
Role: Principal Investigator  
Amount: \$800,997 Total (\$550,344 Direct, \$250,653 Indirect)
- **NIH K99HL123471, Case (PI)** 07/01/2015 – 08/31/2017  
Source: National Institutes of Health – National Heart, Lung, and Blood Institute  
Title: Redox Regulation of T-lymphocytes in Sympathoexcitation-associated Hypertension  
Goal: Determine the effect of redox signaling on T-lymphocyte-mediated inflammation in neurogenic hypertension  
Role: Principal Investigator  
Amount: \$216,000 Total (\$200,000 Direct, \$16,000 Indirect)
- **NIH Postdoctoral Fellowship F32HL122021, Case (PI)** 07/01/2014 – 06/30/2015  
Source: National Institutes of Health – National Heart, Lung, and Blood Institute  
Title: Regulation of Mitochondrial Redox Systems in T-lymphocytes During Hypertension  
Goal: Determine the role of mitochondrial redox signaling in T-lymphocytes in neurogenic hypertension  
Role: Principal Investigator  
Amount: \$53,282
- **AHA Postdoctoral Fellowship 13POST17060015, Case (PI)** 07/01/2013 – 06/30/2014  
Source: American Heart Association  
Title: Regulation of Mitochondrial Redox Systems in T-lymphocytes During Hypertension  
Goal: Determine the role of mitochondrial redox signaling in T-lymphocytes in neurogenic hypertension  
Role: Principal Investigator (Relinquished early due to F32 acquisition)  
Amount: \$46,796
- **NIH Postdoctoral Fellowship T32CA078586, Spitz (PI)** 07/01/2011 – 06/30/2012  
Source: National Institutes of Health – National Cancer Institute  
Title: Training Program in Free Radical and Radiation Biology  
Goal: Develop new generation of basic science researchers in the field of redox biology  
Role: Postdoctoral Trainee  
Amount: \$45,123
- **DOD Predoctoral Fellowship PC073831, Case (PI)** 07/01/2008 – 06/30/2011  
Source: Department of Defense  
Title: Epigenetic Control of Prolyl and Asparaginyl Hydroxylases in Prostate Cancer  
Goal: Determine the role of hypoxia control proteins in prostate cancer progression  
Role: Principal Investigator  
Amount: \$96,984
- **NIH Predoctoral Fellowship T32GM073610, Gardinier (PI)** 07/01/2007 – 06/30/2008

Source: National Institutes of Health – National Institute of General Medical Sciences

Title: Training Program in Molecular and Cellular Biology

Goal: Develop new generation of basic science researchers in the field of molecular biology

Role: Predoctoral Trainee

Amount: \$32,328

#### Internal

- **Texas A&M Health Science Center Seedling Grant, Case (PI)** 06/01/2022 – 05/31/2023

Source: Texas A&M College of Medicine

Title: Antigen screening in post-traumatic stress disorder (PTSD)

Goal: Determine if the inflammatory response of psychological trauma is driven by antigen or non-antigen-mediated signaling

Role: Lead Co-PI

Amount: \$75,000
- **Pilot Project Grant, Case (PI)** 02/01/2021 – 01/31/2022

Source: Cognitive Neuroscience of Development and Aging Center (P20GM130447)

Title: Deciphering autonomic regulation of psychological trauma-induced inflammation

Goal: Determine the sympathetic and parasympathetic contributions to inflammation after psychological trauma

Role: Principal Investigator

Amount: \$50,000
- **Pilot Project Grant, Dickinson (PI)** 01/01/2020 – 12/31/2021

Source: Fred and Pamela Buffet Cancer Center

Title: A mouse model of cancer-related fatigue

Goal: To develop a new murine model of radiation-induced fatigue to determine mechanistic drivers of the disease

Role: Co-Investigator

Amount: \$50,000
- **Innovation and Momentum Grant, Case (PI)** 11/06/2019 – 11/09/2019

Source: University of Nebraska Medical Center

Title: Improving Scientific Communication at UNMC

Goal: Obtain additional professional training in scientific communication education

Role: Principal Investigator

Amount: \$1,500
- **Core User Program Grant A-000000340, Case (PI)** 07/01/2018 – 12/31/2018

Source: Nebraska Research Initiative

Title: Psychological Stress-induced Immune Dysfunction

Goal: Determine immune system-wide gene expression profiling utilizing single cell RNA sequencing in a preclinical model of PTSD

Role: Principal Investigator

Amount: \$7,086
- **Core Facility Voucher Program, Case (PI)** 01/01/2018 – 06/30/2018

Source: Center for Neurosensory Systems

Title: Psychological Stress-induced T-lymphocyte dysfunction

Goal: Determine T-lymphocyte-specific gene signatures after psychological trauma

Role: Principal Investigator

Amount: \$4,152

- **Medical Research Fund, Case (PI)** 07/01/2017 – 06/30/2018  
Source: Mary G. and George W. White Fund for Medical Research  
Title: Immunological Memory as a Driver for Post-Traumatic Stress Disorder (PTSD)  
Goal: Determine the role of memory T-lymphocytes in potentiating PTSD-like behavior  
Role: Principal Investigator  
Amount: \$50,000
- **Equipment Award, Case (PI)** 09/27/2016  
Source: Nebraska Research Initiative  
Title: Establishment of an Autonomous-Environment Research Chamber and Imager for Higher Quality Culture of Tissues and Cells Under Appropriate Physiological Conditions  
Goal: Establish the physiological environment research facility at UNMC  
Role: Principal Investigator/Director  
Amount: \$115,782

#### Trainee

- **Student Predoctoral Fellowship, Moshfegh (PI)** 07/01/2020 – 06/30/2022  
Source: University of Nebraska Medical Center  
Title: Calprotectin as a novel regulator of psychological trauma-induced inflammation  
Goal: Determine the role of calprotectin in regulating peripheral inflammation during PTSD  
Role: Mentor  
Amount: \$62,032
- **NIH, Predoctoral Fellowship T32NS105594 Gendelman (PI)** 07/01/2020 – 07/01/2020  
Source: National Institutes of Health  
Title: Neuroimmunology of disease training program  
Goal: To train new graduate students in the field of neurological and immunological research  
Role: Mentor for Cassandra Moshfegh (Declined due to acquisition of UNMC fellowship)  
Amount: \$62,032
- **AHA Predoctoral Fellowship 20PRE35080059, Elkhatib (PI)** 01/01/2020 – 06/30/2020  
Source: American Heart Association  
Title: Neuroimmune contributions to hypertension sensitization in a preclinical model of PTSD  
Goal: Determine the role of sympathetic modulation of splenic inflammation after psychological trauma  
Role: Mentor for Safwan Elkhatib (Relinquished early due to F30 acquisition)  
Amount: \$62,032
- **NIH, Predoctoral Fellowship T32NS105594 Gendelman (PI)** 07/01/2019 – 12/31/2020  
Source: National Institutes of Health  
Title: Neuroimmunology of disease training program  
Goal: To train new graduate students in the field of neurological and immunological research  
Role: Mentor for Safwan Elkhatib (Relinquished early due to AHA fellowship acquisition)  
Amount: \$62,032

**Pending****External**

- **NIH R01, Wainford and Case (MPI)** 07/01/2024 – 06/30/2029  
Source: National Institutes of Health – National Heart, Lung, and Blood Institute  
Title: The spleen-gut-brain axis and hypertension driven cognitive impairment  
Goal: Determine the interoceptive contributions of the spleen, gut, and brain to age-related hypertension-induced cognitive impairment  
Role: PI  
Amount: \$3,857,799
- **NIH R01, Greaney (PI)** 07/01/2024 – 06/30/2029  
Source: National Institutes of Health – National Heart, Lung, and Blood Institute  
Title: The redox-immunological axis as a mechanism of vascular dysfunction in depression  
Goal: Determine the contribution of depression-induced interleukin-6 in driving redox-mediated vascular endothelial dysfunction  
Role: Co-investigator (15%) + Subcontract funds  
Amount: \$3,799,576 Total (\$1,030,344 to Case)
- **NIH R01, Yentes (PI)** 07/01/2024 – 06/30/2029  
Source: National Institutes of Health – National Institute on Aging  
Title: Multi-system predictors of cognitive performance  
Goal: Determine how various components of intrinsic capacity contribute to cognitive performance with aging  
Role: Co-investigator (10%) + Research funds  
Amount: \$3,111,559 Total (\$392,264 to Case)
- **NIH R01, Threadgill (PI)** 08/01/2024 – 07/31/2029  
Source: National Institutes of Health – Office of Strategic Coordination  
Title: Adaptive Health: Mechanisms of epigenetic programming, reversal, and transmission of individual maladaptation to the environment  
Goal: Determine the contribution of epigenetic programming with various environmental stressors  
Role: Co-investigator (10%)  
Amount: \$3,502,443 Total
- **NIH R01, Vladimirov (PI)** 04/01/2024 – 03/31/2029  
Source: National Institutes of Health – National Institute of Mental Health  
Title: Understanding miRNA role in the neuropathology of Problem Alcohol Use  
Goal: Identify and mechanistically investigate new potential miRNA regulators of alcohol use disorder  
Role: Co-Investigator (10%) + Subcontract funds  
Amount: \$698,282 (to Case)
- **NIH R01AI181802, Case (PI)** 04/01/2024 – 03/31/2029  
Source: National Institutes of Health – National Institute of Allergy and Infectious Diseases  
Title: Hemoglobin as a novel regulator of T-lymphocytes  
Goal: Determine the genetic regulation immune impact of hemoglobin alpha a1 in T-lymphocytes  
Role: Principal Investigator  
Amount: \$3,481,637 Total

- NIH R01, Newell-Fugate (PI)** 04/01/2024 – 03/31/2029

Source: National Institutes of Health – National Heart, Lung, and Blood Institute

Title: Role of white adipose tissue androgen interconversion in control of peripheral insulin sensitivity in transgender males

Goal: Determine the role of trans-sex hormone supplementation on glucose regulation and diabetes formation

Role: Co-investigator (10%)

Amount: \$3,819,235 Total
- NIH R01, Verhulst (PI)** 04/01/2024 – 03/31/2029

Source: National Institutes of Health – National Heart, Lung, and Blood Institute

Title: A genome-wide gene-lifestyle and gene-drug interaction study of intermediate CVD risk factors: Obesity, Cholesterol, Blood Pressure and Type 2 Diabetes

Goal: Determine genetic linkages that affect lifestyle and drug interactions in the attenuation of cardiovascular disease risk

Role: Co-investigator (10%)

Amount: \$1,894,895 Total

*Internal*

- Texas A&M Health Science Center Seedling Grant, Case (PI)** 06/01/2024 – 05/31/2025

Source: Texas A&M College of Medicine

Title: Hemoglobin as a novel regulator of T-lymphocytes

Goal: Determine the functional role of intracellular hemoglobin in T-lymphocytes

Role: PI

Amount: \$75,000

*Trainee*

- NIH Predoctoral Fellowship F31, Reed (PI)** 07/01/2024 – 06/30/2026

Source: National Institutes of Health – National Institute of Allergy and Infectious Diseases

Title: Elucidating the function and regulation of hemoglobin in T-lymphocytes after psychological trauma

Goal: Determine the role of intracellular hemoglobin in T-lymphocytes after psychological trauma

Role: Mentor

Amount: \$79,083 Total
  - NIH Predoctoral Fellowship F31, Lauten (PI)** 07/01/2024 – 06/30/2026

Source: National Institutes of Health – National Heart, Lung, and Blood Institute

Title: Deciphering the autonomic regulation of inflammation and hypertension sensitization after psychological trauma

Goal: Determine the autonomic signaling regulating inflammation after psychological trauma that leads to enhanced hypertension sensitization

Role: Mentor

Amount: \$79,083 Total
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**VII. Study Sections***International*

- 2020 German Research Foundation Research Grant Program (April 1). Role *Ad Hoc* Member
- 2022 Natural Sciences and Engineering Research Council of Canada (NSERC). Genes, Cells, and Molecules Study Section (EG 1501; January 14). Role *Ad Hoc* Member

*National*

- 2017 National Institutes of Health, National Heart, Lung, and Blood Institute Mentored Transition to Independence Review Committee (2017/10 MTI(OA)1; June 8-9). Role *Ad Hoc* Member
- 2019 National Science Foundation, Graduate Research Fellowship Program Physiology, Organismal, and Developmental Biology Panel (January 28-31). Role *Ad Hoc* Member
- 2019, 2020 National Aeronautics and Space Administration, Translational Research Institute for Space Health Postdoctoral Fellowship (TRISH\_PD\_2019, June 13-14; TRISH\_PD\_2020, May 12). Role *Ad Hoc* Member
- 2020 American Heart Association, Career Development Awards – Basic Cardiac Sciences 2 (February 12). Role *Ad Hoc* Member
- 2021 National Aeronautics and Space Administration, Human Exploration Research Opportunities (20-21\_HEROEF\_2; October 8). Role *Ad Hoc* Member
- 2021 Department of Defense, Investigator Initiated Research Award/Technology and Therapeutic Development Award/Expansion Award, Hypertension Peer Review Panel (October 26-27). Role *Ad Hoc* Member
- 2021 - 2023 National Institutes of Health, Director's New Innovator Award Program (DP2). (December 18, 2021; December 9, 2022; December 10, 2023) Role *Stage 1 Ad Hoc* Member.
- 2022 - 2024 American Heart Association, Established Investigator Awards (May 19, 2022; March 16, 2023; March 14, 2024). Role *Ad Hoc* Member
- 2023 - 2024 US Department of Veterans Affairs, Chronic Medical Conditions and Aging [RRD6] Merit Awards (February 21, 2023; August 8, 2023; February 21, 2024). Role *Ad Hoc* Member

*Regional/Local*

- 2017 Kentucky Science and Engineering Foundation Research and Development Excellence Program (April 8). Role *Ad Hoc* Member
- 2017 University of Nebraska Medical Center Graduate Fellowships, Cell Biology II Study Section (May 3). Role *Ad Hoc* Member
- 2017 The North Carolina Biotechnology Center Institutional Development Grant Program (October 20). Role *Ad Hoc* Member
- 2018 University of Nebraska Medical Center Graduate Fellowships, Biochem/MolBio/Genetics Study Section (May 2). Role *Ad Hoc* Member
- 2018 University of Nebraska Medical Center Graduate Fellowships, System Biology Study Section (May 11). Role *Ad Hoc* Member
- 2019 University of Nebraska Medical Center, SPOR Career Enhancement Program Review Panel (March 13). Role *Ad Hoc* Member
- 2019 West Virginia IDeA Network of Biomedical Research Excellence Chronic Disease Research Program (May 5). Role *Ad Hoc* Member

2019	University of Nebraska Medical Center, NE-INBRE Developmental Research Project Program (November 19). Role <i>Ad Hoc</i> Member
2020	University of Nebraska Medical Center Graduate Fellowships, Biochem & MolBio Study Section (May 11). Role <i>Ad Hoc</i> Member
2020	Louisiana State University Health Shreveport, COVID-19 Response Program (June 28). Role <i>Ad Hoc</i> Member

### VIII. Patents/Inventions

2018	New Invention Notification, UNeMed, University of Nebraska Medical Center. "Administration of Chronic Medications via Dentifrice."
2018	New Invention Notification, UNeMed, University of Nebraska Medical Center. "Visualization-friendly Gels by Way of Contrast Agents."
2018	New Invention Notification, UNeMed, University of Nebraska Medical Center. "A Novel Circulating Biomarker to Assess the Impact of Psychological Trauma."
2019	New Invention Notification, UNeMed, University of Nebraska Medical Center. "Non-invasive diagnostics of post-traumatic stress disorder (PTSD) in urine."
2023	New Invention Disclosure, Texas A&M Innovation, Texas A&M University. "Antioxidant supplementation for the prevention of psychological trauma-induced pathology."

### IX. Consulting Positions

#### *Editorial*

2014 – 2016	Guest editor, special issue "Redox Signaling and Neural Control of Cardiovascular Function" in <i>Oxidative Medicine and Cellular Longevity</i>
2016 – Present	Editorial Board, <i>AJP Heart and Circulatory Physiology</i>
2018 – 2019	Guest editor, special issue "Redox Biology in Physiology and Disease" in <i>Redox Biology</i>
2019 – Present	Editorial Board, <i>Frontiers in Physiology</i>
2019 – Present	Editorial Board, <i>Reactive Oxygen Species (ROS)</i>
2022 – 2023	Guest editor, special issue "Autonomic-Immune System" in <i>Autonomic Neuroscience</i>

#### *Peer Review*

- Number of journals to date: **47**

- Number of reviews to date: **254**

Journal	2012 – 2016 (Pre-Faculty)	2017 – 2021 (UNMC)	2021 – Present (TAMU)
Free Radical Biology and Medicine	2	6	
PLoS ONE	2	1	
Hypertension	1	7	
Cellular and Molecular Neurobiology	1	1	
AJP Regulatory, Integrative, and Comparative Physiology	6	7	

AJP Heart and Circulatory Physiology	10	38	7
Circulation Research	1	2	
Experimental Physiology	1		
Journal of Cardiac Failure	3	1	
Oxidative Medicine and Cellular Longevity	8	4	
AJP Cell Physiology	1	2	
Journal of Neurophysiology	1		
Journal of Nutrition and Food Sciences	1		
Canadian Journal of Physiology and Pharmacology	1		
Alcohol	1	4	
Physiological Genomics	8	1	1
Physiological Reports	1	2	
Brain Research	2		
Redox Biology		33	17
AJP Endocrinology and Metabolism		1	
Advances in Physiology Education		2	
Clinical and Experimental Medicine		1	
Biomedicine and Pharmacotherapy		1	
Antioxidants and Redox Signaling		5	
British Journal of Pharmacology		2	
Biology of Sex Differences		3	
Neurotoxicity Research		1	
Frontiers in Physiology		6	9
Molecular and Cellular Endocrinology		1	
Alternatives to Animal Experimentation		1	
Reactive Oxygen Species		2	1
Mitochondrion		2	1
Cognitive and Behavioral Neurology		2	
Nature Scientific Reports		1	2
Clinical Psychopharmacology and Neuroscience		2	

Journal of Applied Physiology		1	2
Frontiers in Behavioral Neuroscience			2
American Journal of Hypertension			3
Translational Psychiatry			2
Frontiers in Cell and Developmental Biology			1
Frontiers in Psychiatry			2
Nucleic Acids Research			2
AJP Renal Physiology			2
Experimental and Clinical Endocrinology and Diabetes			1
Brain, Behavior, and Immunity			2
Clinical Autonomic Research			2
Neurotherapeutics			1
<b>Totals</b>	<b>51</b>	<b>143</b>	<b>60</b>

## X. Honors and Awards

<i>Self</i>	
1998	Eagle Scout with Bronze Palm, Boy Scouts of America
2000	Air Force National Science and Math Award
2000	The University of Iowa Undergraduate Tuition Scholarship
2003	Dignitas National Dean's List
2003	Golden Key National Honor Society
2003	Phi Sigma Pi National Honor Fraternity
2003	National Residence Hall Honorary
2003	Phi Beta Kappa National Honor Fraternity
2003	The University of Iowa Homecoming King (1 awarded per year for entire University)
2004	Graduate with High Distinction and Honors
2004	Presentation Award, The University of Iowa Undergraduate Research Conference
2008	The University of Iowa Carver College of Medicine Award for Outstanding Individual Community Service (1 awarded per year for entire College)
2008	Graduate Incentive Fellowship for External Funding Recipients
2008	First place (of >50 participants), The University of Iowa Molecular and Cellular Biology Annual Meeting
2008	Young Investigator Award (1 of 10 from >400 participants), Society for Free Radical Biology and Medicine
2010	Clinical and Translational Medicine Award (1 awarded from >200 participants), The University of Iowa Carver College of Medicine Research Week
2010	Travel Award (1 of 10 from >400 abstracts), Society for Free Radical Biology and Medicine

- 2011 Second place (of >500 participants), 13th Annual James F. Jakobsen Graduate Conference
- 2012 Young Investigator Award (1 of 10 from >400 participants), Society for Free Radical Biology and Medicine
- 2013 Research Recognition Award (1 award based on abstract and oral competition), American Physiological Society: Cell and Molecular Physiology Section
- 2013 Travel Award (1 of 5 from >50 participants), FASEB Summer Research Conference on Neural Mechanisms in Cardiovascular Regulation
- 2013 Larry Oberley Young Investigator Award (1 award from >400 participants), Society for Free Radical Biology and Medicine
- 2013 Travel Award (Based on abstract submission to conference), University of Nebraska Redox Biology Center
- 2014 Research Presentation Award (1 of 10 from >200 participants), American Heart Association Council for Hypertension Research
- 2014 Travel Award (Based on abstract submission to conference), University of Nebraska Redox Biology Center
- 2014 Postdoctoral to Pathway Independence Award (1 awarded to most outstanding postdoctoral fellow based on overall academic achievement), University of Nebraska Medical Center
- 2015 Travel Award (1 of 10 from >400 abstracts), Society for Redox Biology and Medicine
- 2016 Michael J. Brody Young Investigator Award (1 award based on overall academic achievement), American Physiology Society: Neural Control and Autonomic Regulation Section
- 2016 Travel Award (1 of 5 from >50 participants), FASEB Summer Research Conference on Neural Mechanisms in Cardiovascular Regulation
- 2017 Star Reviewer (1 of 3 of >175 editorial board members), American Journal of Physiology - Heart and Circulatory Physiology
- 2018 Research Recognition Award (Early Career Investigator; 1 award based on overall academic achievement), American Physiology Society: Neural Control and Autonomic Regulation Section
- 2019 Alan Alda Center for Communicating Science Graduate
- 2019 Academic Variable Compensation Recipient for Teaching Excellence, College of Medicine, University of Nebraska Medical Center
- 2019 Star Reviewer (1 of 3 of >175 editorial board members), American Journal of Physiology - Heart and Circulatory Physiology
- 2020 Distinguished Graduate Student Mentor Award (1 awarded per year), University of Nebraska Medical Center
- 2022 GENEious Mentor Award (Awarded to only 14 faculty who successfully completed 12 months of NIH-directed mentorship and DEI training at Texas A&M University), Texas A&M University
- 2023 Fellow of the American Heart Association (FAHA), Council on Hypertension

*Press/Publicity*

- 2010 Featured article in New Scientist magazine (Case *et al.* 2011. *Free Radic Biol Med.* 50(3)448-58)
- 2013 Featured article and interview for American Journal of Physiology Heart and Circulatory Physiology podcast (Case *et al.* 2013. *Am J Physiol Heart Circ Physiol.* 305(1)H19-28)

2014	UNMC Today Feature on most outstanding postdoctoral fellow award. "Adam Case, Ph.D., wins UNMC Pathway to Independence Award."
2015	UNMC Today Feature on acquisition of K99/R00 grant. "Dr. Case lands Pathway to Independence grant."
2017	UNMC Today Feature on the development of the Physiological Environment Research Facility (PERF). "New facility boosts accuracy of cellular experiments."
2018	Select Science Feature Editorial Article on Case Laboratory Research. "The Immune System Reacts to Neurological Stress Catching Killer T cells Live in Action." - Winner Best in Digital Marketing Award at 2018 Society for Neuroscience
2018	Invited expert, American Journal of Physiology Heart and Circulatory Physiology Podcast. Invited as expert in field to discuss recent paper entitled "Sex Differences in Depression-Like Behavior and Neuroinflammation in Rats Post MI Role of Estrogens."
2019	Featured article in MedPage Today (Maloley <i>et al.</i> 2019. <i>Semin Arthritis Rheum.</i> S0049-0172(18)30612-7)
2019	UNMC Today Feature on improving scientific communication at UNMC. "Aiming to improve scientific communication."
2020	Invited expert, American Journal of Physiology Heart and Circulatory Physiology Podcast. Invited as expert in field to discuss recent paper entitled "Abnormal sympathetic neural recruitment patterns and hemodynamic responses to cold pressor test in women with post-traumatic stress disorder."
2021	Featured Faculty Member for October, Genetics program, Texas A&M University.
2022	Featured Faculty Interview for Blue Genes and Boots podcast, Genetics and Genomics graduate program, Texas A&M University.
2022	Invited expert, "I don't know about that" podcast with comedian Jim Jefferies. Discussion on the heart and cardiovascular disease.
2022	Invited expert, Interview on PNAS paper "A genetically encoded system for oxygen generation in living cells" in Chemical and Engineering News (C&EN)
2022	Invited expert, Huffines Institute for Sports Medicine and Human Performance Podcase. Discussion on antioxidants and health.
2023	Invited expert, The Battalion Newspaper – Texas A&M University. Interview on depression in college students.
2023	Interviewee, American Psychiatric Association – Short documentary film on Texas A&M Department of Psychiatry and Behavioral Sciences

#### *Awards and Honors to Trainees*

	1) Cassandra Moshfegh (PhD student, University of Nebraska Medical Center)
2018	Selected oral presentation from abstract: " <i>Redox-Driven Lymphocyte Inflammation Sensitizes Mice to Psychological Stress-Mediated Hypertension</i> ," Society for Redox Biology and Medicine Regional Meeting, Omaha, NE.
2018	Travel award and selected oral presentation from abstract: " <i>Psychological Stress-Mediated Hypertension is Regulated via Redox-Signaling in T-lymphocytes</i> ," Society for Redox Biology and Medicine Annual National/International Meeting, Chicago, IL
2018	First place poster presentation: " <i>Psychological Stress-Mediated Hypertension is Regulated via Redox-Signaling in T-lymphocytes</i> ," Nebraska Physiological Society Annual Meeting, Omaha, NE

- 2019 Selected oral presentation from abstract: "*Redox-Regulated Calprotectin as a Possible Novel Regulator of Pro-Inflammatory T-lymphocytes after Psychological Trauma*," Society for Redox Biology and Medicine Annual National/International Meeting, Las Vegas, NV
- 2020 Selected as UNMC Representative from abstract and oral competition: "*Psychological Trauma-Induced Calprotectin Potentiates Pro-Inflammatory and Memory T-lymphocyte Formation*." International Student Research Forum, Vancouver, British Columbia
- 2020 Fuji Films Visual Sonics Outstanding Graduate Poster Award: "*Redox-Regulated Calprotectin Potentiates Psychological Trauma Induced Pro-Inflammatory T-Lymphocyte Differentiation*." Midlands Physiological Society annual conference, Omaha, NE
- 2020 Invited oral presentation and Young Investigator Award: "*Redox-Regulated Calprotectin Potentiates Psychological Trauma Induced Pro-Inflammatory T-Lymphocyte Differentiation*." Society for Redox Biology and Medicine Annual National/International Meeting
- 2021 Young Investigator Award: "*Calprotectin is Protective during Psychological Trauma*." Society for Redox Biology and Medicine Annual National/International Meeting
- 2022 Alice Cummings Award for most outstanding student in physiology (Awarded to 1 student per year at University), University of Nebraska Medical Center, Omaha, NE.
- 2) Safwan Elkhatib (MD/PhD student, University of Nebraska Medical Center)
- 2019 Selected oral presentation from abstract and 4<sup>th</sup> place overall: "*Inflammatory T-lymphocytes express a pro-sympathetic neurotransmission signature during psychological trauma*." Midwest Student Biomedical Research Forum, Omaha, NE
- 2019 Selected as UNMC Representative from abstract and oral competition: "*Inflammatory T-lymphocytes express a pro-sympathetic neurotransmission signature during psychological trauma*." International Student Research Forum, Odense, Denmark
- 2019 1<sup>st</sup> Place – Outstanding Poster Award: "*Neuroimmune Contributions to Hypertension Sensitization in a Preclinical Model of PTSD*." UNMC Pharmacology and Experimental Neuroscience Retreat, Omaha, NE
- 2020 Travel Fellowship Award selected from abstract and CV: "*Neuroimmune Contributions to T-lymphocyte-Driven Inflammation in a Preclinical Model of Post-traumatic Stress Disorder (PTSD)*." Society of Biological Psychiatry Annual Meeting, New York, NY
- 2020 Selected oral presentation from abstract: "*Neuroimmune Contributions to T-lymphocyte-Driven Inflammation in a Preclinical Model of Post-traumatic Stress Disorder (PTSD)*." Experimental Biology Annual National/International Meeting
- 2020 Lasker Essay Contest Winner: "*Salk, Sabin, and the Crown of Health*." Albert and Mary Lasker Foundation
- 2020 Poster Presentation Award, 2<sup>nd</sup> place: "*Sympathetic splenic denervation ameliorates social defeat stress-induced inflammatory and redox profiles in T-lymphocytes*." UNMC Campus Research Retreat, Omaha, NE
- 2021 Selected oral presentation from abstract: "*Sympathetic nerves control splenic T-lymphocyte inflammation and mitochondrial redox environment during repeated social defeat stress*." Society of Biological Psychiatry Annual Meeting

- 2021 Michael Irwin Equity, Diversity and Inclusion (EDI) Award,  
Psychoneuroimmunology Research Society Annual meeting
- 2021 Young Investigator Award: "*T-Lymphocyte Tyrosine Hydroxylase Regulates IL-17A Downstream of Mitochondrial Superoxide.*" Society for Redox Biology and  
Medicine Annual National/International Meeting
- 2022 Thomas Jefferson Ingenuity Award for most creative/outstanding dissertation  
(Awarded to 1 student per year at University), University of Nebraska Medical  
Center, Omaha, NE
- 3) Tatlock Lauten (Medical Sciences PhD Student, Texas A&M)
- 2022 First place, First year Medical Sciences PhD Student Flash Talks, Texas A&M  
University, Bryan, TX
- 2022 First place, Medical Sciences PhD Retreat Poster Session, Texas A&M University,  
Bryan, TX
- 2023 Research Recognition Award, American Physiology Society: Neural Control and  
Autonomic Regulation Section, APS Summit, Long Beach, CA
- 2023 Second Place, School of Medicine Graduate Student Organization Biomedical  
Research Symposium, Texas A&M University, Bryan, TX
- 2024 Data NCAR-nation invited presentation, American Physiology Society: Neural  
Control and Autonomic Regulation Section, APS Summit, Long Beach, CA
- 4) Emily Reed (Genetics PhD Student, Texas A&M)
- 2022 Travel award and selected oral presentation from abstract: "*Mitochondrial  
regulation of inflammation after psychological trauma,*" Society for Redox Biology  
and Medicine Annual National/International Meeting, Orlando, FL
- 2023 First Place, School of Medicine Graduate Student Organization Biomedical  
Research Symposium, Texas A&M University Health Science Center, Bryan, TX
- 2023 National finalist, Philanthropic Educational Organization (P.E.O.) Scholars Award,  
Nominated by the Regional P.E.O. Chapter, TX
- 2023 Third Place, Genetics and Genomics Program Research Symposium, Texas A&M  
University, College Station, TX
- 2024 Selected oral presentation from abstract: "Hemoglobin regulates T-lymphocyte  
function after psychological trauma", Society for Redox Biology and Medicine  
Regional Meeting, Shreveport, LA
- 5) Tamara Natour (Medical Sciences PhD Student, Texas A&M)
- 2023 Second place, First year Medical Sciences PhD Student Flash Talks, Texas A&M  
University, Bryan, TX

## XI. Memberships and Service in Professional Societies (Leadership Positions Bolded)

2006 – Present Member, Society for Redox Biology and Medicine (SfRBM)

- Committee Member, Student/Trainee Council (2013-2015)
- **Chair**, Student/Trainee Council (2015-2017)
- Committee Member, Professional Development Committee (2016-Present)
- Committee Member, Programming Committee (2017-Present)
- Travel and Young Investigator Award Committee (2018-Present)
- **Organizing Committee Member**, Regional Meeting and Oberley Symposium, Omaha, NE. (2018)

- **Session Chair and Organizer**, Annual Meeting. “*Inflammation and Immunity*.” (2018, 2021)
- **Council Member**, Society Council (2020 – Present)
- **Co-Chair**, Free Radical School Committee (2020 – Present)
- Selected member, Strategic Planning and Rebranding Task Force (2024)

2012 – Present Member, American Physiological Society (APS)

- Volunteer, Physiology Understanding (PhUn) Week, Omaha, NE. (2012-2017)
- Award Reviewer, Neural Control and Autonomic Regulation Section Awards (2016, 2020-Present)
- **Session Chair and Organizer**, Inaugural APS-SfRBM Joint Session, Experimental Biology Meeting, San Diego, CA. “*Redox Biology a Unifying Theme in the Etiology of Human Diseases*.” (2018)
- **Session Chair and Organizer**, Neural Control and Autonomic Regulation Section, Experimental Biology Meeting, San Diego, CA. “*Neuro-Immune Interactions in Inflammatory Homeostasis*.” (2018)
- Inaugural Figure Reviewer, The Figure Reviewer Project, American Journal of Physiology Heart and Circulatory Physiology. (2019)
- **Session Chair and Organizer**, APS-SfRBM Joint Session, Experimental Biology Meeting, San Diego, CA. “*Small Molecule Redox Targets Regulation of Physiological Responses*.” (2020; Canceled due to COVID-19)
- Committee Member, CV Section Nominating Committee (2020-2023)

2012 – Present Member, American Heart Association (AHA)

- Committee Member, AHA Excellence Award for Hypertension Research Selection Committee (2013-2018)
- Poster Judge, Council on Hypertension Annual Meeting (2017-2019)
- Committee Member, Hypertension Scientific and Clinical Education Lifelong Learning Committee (2019-2023)

2013 – 2021 Member, Nebraska Physiological Society (NPS)/Midlands Society of Physiological Sciences (MSPS)

- **Council Member** (2014-2017)
- Poster Judge, Annual Meeting (2015-2018)

2014 – 2017 Postdoctoral member, American Association for the Advancement of Science

2019 – Present Member, Society of Biological Psychiatry (SOBP)

- Committee Member, Travel Awards Committee (2021-2024)

2020 – Present Member, Psychoneuroimmunology Research Society (PNIRS)

**XII. Institutional Service and Committee Assignments (Leadership Positions Bolded)**

*Departmental*

2016 – 2018 Recruiter, University of Nebraska Medical Center Integrative Physiology and Molecular Medicine (IPMM) Doctoral Program, APS Undergraduate Poster Session at Experimental Biology

2018 – 2021	<b>Chair</b> , Recruitment Committee, Department of Cellular and Integrative Physiology, University of Nebraska Medical Center, Omaha, NE
2019 – 2021	Member, Executive Committee, Department of Cellular and Integrative Physiology, University of Nebraska Medical Center, Omaha, NE
2020	<b>Chair</b> , Expenditure Account Guidelines Task Force, Department of Cellular and Integrative Physiology, University of Nebraska Medical Center, Omaha, NE
2020 – 2021	Member, A. Ross McIntyre Award Committee, Department of Cellular and Integrative Physiology, University of Nebraska Medical Center, Omaha, NE
2022 – Present	<b>Chair</b> , Recruitment Committee, Department of Psychiatry and Behavioral Sciences, Texas A&M University, Bryan, TX
2022 - 2023	Member, Medical Physiology Chair Search Committee, Department of Medical Physiology, Texas A&M University, Bryan, TX
2023 – Present	Member, Chairs Advisory Committee, Department of Psychiatry and Behavioral Sciences, Texas A&M University, Bryan, TX

*College*

2017 – 2021	Member, Medical Student Evaluation Committee, College of Medicine, University of Nebraska Medical Center, Omaha, NE
2019 – 2021	Basic Science Assistant Professor Member, Faculty Council of the College of Medicine, University of Nebraska Medical Center, Omaha, NE
2019 – 2021	Member, Self-Study Task Force Subcommittee for the Liaison Committee on Medical Education, College of Medicine, University of Nebraska Medical Center, Omaha, NE
2020 – 2021	Member, Postdoctoral Committee, Center for Patient, Family, and Community Engagement in Chronic Care Management (CENTRIC), College of Nursing, University of Nebraska Medical Center, Omaha, NE
2020	Member, Supplemental Compensation Policy Taskforce, College of Medicine, University of Nebraska Medical Center, Omaha, NE
2021	Member, Living Anatomy Evaluation Taskforce, College of Medicine, University of Nebraska Medical Center, Omaha, NE
2021 – Present	Member, Cell Analysis Facility Advisory Committee, School of Medicine, Texas A&M University, Bryan, TX
2021 – Present	Medical School and MD/PhD Program Admissions Interviewer, School of Medicine, Texas A&M University, Bryan, TX
2021 – Present	Medical Physiology Department Representative, Research Advisory Committee, School of Medicine, Texas A&M University, Bryan, TX
2022 – 2023	At Large Member, Graduate Program Executive Committee, Medical Sciences Program, School of Medicine, Texas A&M University, Bryan, TX
2022 – Present	Member, Graduate Admissions Committee, Medical Sciences Program, School of Medicine, Texas A&M University, Bryan, TX
2022 – Present	Member, Medical Scholars Research Advisory Committee, School of Medicine, Texas A&M University, Bryan, TX
2023 – Present	<b>Chair</b> , Research Advisory Committee, School of Medicine, Texas A&M University, Bryan, TX
2023 – Present	Member, Senior Associate Dean for Research Search Committee, School of Medicine, Texas A&M University, Bryan, TX
2024	Member, Associate Dean of Graduate Studies Search Committee, College of Medicine, Texas A&M University, Bryan, TX

2024 – Present Psychiatry and Behavioral Sciences Department Representative, Graduate Program Executive Committee, Medical Sciences Program, School of Medicine, Texas A&M University, Bryan, TX

### *University*

2016 – 2020 Facilitator, Interprofessional Education (IPE) Days (Years 1 and 2), University of Nebraska Medical Center, Omaha, NE

2019 – 2021 Member, Next Generation Sequencing Core Oversight Committee, University of Nebraska Medical Center, Omaha, NE

2019 – 2020 Member, Rodent Behavior Assessment Facility Director Search Committee, University of Nebraska Medical Center, Omaha, NE

2019 – 2021 Ambassador, University of Nebraska Medical Center NIH Loan Repayment Program Ambassador Program

2020 – 2021 **Chair**, Three-Minute Thesis Committee, University of Nebraska Medical Center, Omaha, NE

2020 – 2021 Member, Rodent Behavior Assessment Facility Oversight Committee, University of Nebraska Medical Center, Omaha, NE

2020 Coach, Focused Accelerated Success in Teaching, University of Nebraska Medical Center, Omaha, NE

2022 Judge, 28<sup>th</sup> Annual Student Research Week, Texas A&M University, College Station, TX

2022 – 2023 Member, Graduate Admissions Committee, Interdisciplinary Graduate Program in Genetics and Genomics, Texas A&M University, College Station, TX

2023 – 2024 Member, Graduate Admissions Committee, Interdisciplinary Graduate Program in Neuroscience, Texas A&M University, College Station, TX

### *Outside Home University*

2020 Promotion and Tenure Review, Department of Physiology and Pharmacology, Des Moines University, Des Moines, IA

## **XIII. Invited Oral Presentations**

### *International Meeting: Invited Research Presentation, Abstract-Based*

2009 Society for Free Radical Biology and Medicine Annual Meeting, San Francisco, CA. “Heightened susceptibility to influenza mortality in immunodeficient mice caused by a T-cell specific defect in SOD2.”

2010 Society for Free Radical Biology and Medicine Annual Meeting, Orlando, FL. “A novel role for mitochondrial superoxide in the development of erythropoietic protoporphyria.”

2014 Society for Free Radical Biology and Medicine Annual Meeting, Seattle, WA. “Redox-regulated suppression of resting splenic T-lymphocyte activation in a model of sympathoexcitation.”

2015 International Academy of Cardiovascular Sciences North America Section, Washington, DC. “Increased mitochondrial superoxide in the brain, but not periphery, sensitizes mice to angiotensin II-mediated hypertension.”

- 2015 Society for Free Radical Biology and Medicine Annual Meeting, San Francisco, CA. "Inverse regulatory effects of mitochondrial superoxide in resting and activated T-lymphocytes."
- 2016 Experimental Biology Annual Meeting, San Diego, CA. "Norepinephrine-mediated suppression of T-lymphocyte activation is regulated by mitochondrial redox mechanisms."
- 2018 Experimental Biology Annual Meeting, San Diego, CA. "Redox-Driven Lymphocyte Inflammation Sensitizes Mice to Psychological Stress-Mediated Hypertension."

*International Meeting: Formally Invited Speaker for Professional Development*

- 2015 Society for Free Radical Biology and Medicine Annual Meeting, San Francisco, CA. "The Do's and Don'ts of the Interview Chalk Talk."
- 2017 Society for Free Radical Biology and Medicine Annual Meeting, Baltimore, MD. "Visual arts to enhance your manuscript figures and online presence."
- 2018 Society for Free Radical Biology and Medicine Annual Meeting, Chicago, IL. "Not enough hours in the day – How to say no."
- 2019 Experimental Biology Annual Meeting, Orlando, FL. "The elusive informal skills: Things I wish I had known earlier."
- 2020 Society for Redox and Medicine Annual Meeting, Virtual due to COVID-19. "The art of the interview chalk talk."
- 2020 Society for Redox Biology and Medicine Annual Meeting, Virtual due to COVID-19. "Post-training career opportunities."
- 2021 Society for Redox Biology and Medicine Annual Meeting, Virtual due to COVID-19. "Managing your research enterprise."
- 2022 Society for Redox Biology and Medicine Annual Meeting, Orlando, FL. "Becoming a Confident and Resilient Scientist."

*National Meeting: Invited Research Presentation, Abstract-Based*

- 2013 FASEB Scientific Research Conference: Neural Mechanisms in Cardiovascular Regulation, Glendon Beach, OR. "Nitration of the tyrosine in angiotensin II attenuates its biological activity."
- 2015 American Heart Association Council on Hypertension Scientific Sessions, Washington, DC. "Increased mitochondrial superoxide in the brain, but not periphery, sensitizes mice to angiotensin II-mediated hypertension."
- 2016 FASEB Scientific Research Conference: Neural Mechanisms in Cardiovascular Regulation, Saxtons River, VT. "Norepinephrine-mediated modulation of T-lymphocyte activation is regulated by mitochondrial redox mechanisms."
- 2018 American Heart Association Council on Hypertension Scientific Sessions, Chicago, IL. "Redox-Driven T-Lymphocyte Inflammation Sensitizes Mice to Psychological Stress-Mediated Hypertension."

*Local/Regional Meeting: Formally Invited Speaker for Research*

- 2014 University of Nebraska Redox Biology Center Annual Retreat, Ashland, NE. "Norepinephrine suppresses T-lymphocyte growth and cytokine production via superoxide during hypertension."
- 2017 Nebraska Physiological Society Annual Meeting, Omaha, NE. "The use of animals is necessary for the future of biomedical research and development of new therapeutics/cures." Opposition Team Captain – *Debate Winner*

- 2018 Society for Redox Biology and Medicine Regional Meeting and Oberley Symposium, Omaha, NE. "Redox-Driven Lymphocyte Inflammation Sensitizes Mice to Psychological Stress-Mediated Hypertension."
- 2022 Society for Redox Biology and Medicine Regional Meeting and Oberley Symposium, Iowa City, IA. "Mitochondrial superoxide in T-lymphocytes: Implications for post-traumatic stress disorder"
- Institutional: Formally Invited Speaker for Research (Bold = Outside home institution)*
- 2009 The University of Iowa, Department of Radiation Oncology, Iowa City, IA. "Heightened susceptibility to influenza mortality in immunodeficient mice caused by a T-cell specific defect in SOD2."
- 2010 The University of Iowa, Department of Radiation Oncology, Iowa City, IA. "A novel role for mitochondrial superoxide in the development of erythropoietic protoporphyria."
- 2011 The University of Iowa, Department of Radiation Oncology, Iowa City, IA. "The role of mitochondrial superoxide in mammalian hematopoietic system development."
- 2012 University of Nebraska Medical Center, Department of Cellular and Integrative Physiology, Omaha, NE. "The role of mitochondrial superoxide in mammalian hematopoietic system development."
- 2013 University of Nebraska Medical Center, Department of Surgery, Omaha, NE. "Redox regulation of T-lymphocytes in sympathoexcitation-associated hypertension."
- 2014 **University of Chicago**, Institute for Integrative Physiology, Chicago, IL. "Redox regulation of T-lymphocytes in sympathoexcitation-associated hypertension."
- 2015 University of Nebraska Medical Center, Department of Cellular and Integrative Physiology, Omaha, NE. "Redox regulation of T-lymphocytes in sympathoexcitation-associated hypertension."
- 2015 University of Nebraska Medical Center, Immunology Interest Group, Omaha, NE. "Redox regulation of T-lymphocytes in Hypertension."
- 2015 **University of Nebraska Omaha**, School of Health, Physical Education and Recreation, Omaha, NE. "Revisiting 'oxidative stress' in health and disease."
- 2015 **Kansas State University**, Department of Anatomy and Physiology, Manhattan, KS. "Redox regulation of T-lymphocytes in sympathoexcitation-associated hypertension."
- 2015 **University of Pittsburgh**, Vascular Medicine Institute, Pittsburgh, PA. "Redox regulation of T-lymphocytes in sympathoexcitation-associated hypertension."
- 2015 **Augusta University**, Department of Physiology, Augusta, GA. "Redox regulation of T-lymphocytes in sympathoexcitation-associated hypertension."
- 2016 University of Nebraska Medical Center, Office of Comparative Medicine Tech Talk, Omaha, NE. "Psychological stress and oxidative stress: Consequences for the immune system."
- 2016 **Des Moines University**, Department of Physiology and Pharmacology, Des Moines, IA. "Revisiting 'oxidative stress' in health and disease."
- 2017 **Veteran's Affairs (VA)** Seminar Series, Omaha VA Medical Center, Omaha, NE. "Sympathetic control of T-lymphocytes via redox and metabolic pathways."

- 2018 University of Nebraska Medical Center, Pulmonary, Critical Care, Sleep & Allergy Research Conference, Omaha, NE. "Redox and Transcriptional Control of Immune Cells during Psychological Stress."
- 2018 University of Nebraska Medical Center, Immunology Interest Group, Omaha, NE. "Redox and Transcriptional Control of Immune Cells during Psychological Stress."
- 2018 University of Nebraska Medical Center, Genomics Core Facility, Omaha, NE. "Immune cell transcriptome profiling during psychological trauma."
- 2018 **University of Nebraska Omaha**, Department of Biology, Omaha, NE. "Revisiting 'oxidative stress' in health and disease."
- 2019 **University of Texas at Arlington**, Department of Kinesiology, Arlington, TX. "Identification of a Novel Redox-Regulated T-lymphocyte Inflammatory Protein in Psychological Stress-Induced Hypertension."
- 2019 **Texas A&M University**, Department of Medical Physiology, Bryan, TX. "T-lymphocyte Inflammatory Mechanisms of Psychological Trauma."
- 2020 **Veteran's Affairs (VA) Seminar Series**, Omaha VA Medical Center, Omaha, NE. "T-lymphocyte Inflammatory Mechanisms of Psychological Trauma."
- 2020 **Texas A&M Health Science Center**, Department of Psychiatry and Behavioral Sciences, Bryan, TX. "A redox biology perspective of behavior and inflammation."
- 2020 **University of Arizona Health Sciences**, Department of Physiology, Tucson, AZ. "T-lymphocyte Inflammatory Mechanisms of Psychological Trauma."
- 2021 **Vanderbilt University**, Department of Clinical Pharmacology Grand Rounds, Nashville, TN. "Mechanisms of Psychological Trauma-induced T-lymphocyte Inflammation."
- 2022 **University of Alabama at Birmingham**, Hypertension Research Center and Vascular Biology and Hypertension Program, Birmingham, AL. "PTSD, Inflammation, and Cardiovascular Disease: Redefining Resilience."
- 2022 Texas A&M University, Department of Microbial Pathogenesis and Immunology, Bryan, TX. "PTSD, Inflammation, and Cardiovascular Disease: Redefining Resilience."
- 2022 **Penn State University**, College of Medicine, Department of Neural and Behavioral Sciences, Hershey, PA. "PTSD, Inflammation, and Cardiovascular Disease: Redefining Resilience."
- 2022 **University of Colorado Boulder**, Department of Integrative Physiology and the Center for Neuroscience, Boulder, CO. "PTSD, Inflammation, and Cardiovascular Disease: Redefining Resilience."
- 2022 Texas A&M University, Interdisciplinary Program in Genetics, College Station, TX. "PTSD, Inflammation, and Cardiovascular Disease: Redefining Resilience."
- 2022 **The University of Iowa**, Department of Radiation Oncology, Free Radical and Radiation Biology Program, Iowa City, IA. "Redox and metabolic regulators of post-traumatic stress disorder-mediated inflammation"
- 2023 Texas A&M University, School of Medicine, Medical Scholar Research Pathway Program, Bryan, TX. "PTSD and your body: It's not all just in your mind"

*Institutional: Formally Invited Speaker for Professional Development (**Bold = Outside home institution**)*

- 2016 University of Nebraska Medical Center, Office of Postdoctoral Education, Omaha, NE. "Keys to submitting a successful K award application."

2017	University of Nebraska Medical Center, Research and Innovation Week, Omaha, NE. "The honest truth about navigating academia as a graduate student or postdoc."
2017	University of Nebraska Medical Center, Office of Postdoctoral Education, Omaha, NE. "The academic faculty job search."
2018, 2019	University of Nebraska Medical Center, Office of Postdoctoral Education, Omaha, NE. "The Interview Chalk Talk: Do's and Don'ts."
2018	University of Nebraska Medical Center, Office of Postdoctoral Education, Omaha, NE. "Keys to submitting a successful K award application."
2020	University of Nebraska Medical Center, Graduate Studies Professional Development Lunch and Learn, Omaha, NE. "Communicating science to a lay audience."
2020	University of Nebraska Medical Center, College of Pharmacy, Omaha, NE. "Keys to submitting a successful K99 award application."
2020	<b>Texas A&amp;M Health Science Center</b> , Office of Postdoctoral Affairs, Bryan, TX. "How to equip yourself for the next step in your career."
2020	University of Nebraska Medical Center, Department of Academic Affairs, Omaha, NE. "What comes after my postdoc? Tips for successful transition into the workforce."
2020	University of Nebraska Medical Center, Department of Academic Affairs, Omaha, NE. "Job interview communication: From one-on-one meetings to the chalk talk."
2020	Keynote Speaker, University of Nebraska Medical Center Matriculation Ceremony, Omaha, NE. "Ten things I wish someone had told me about graduate school."
2020	University of Nebraska Medical Center, College of Nursing, Omaha, NE. "Communicating science to a general audience and patients."
2021	Texas A&M Health Science Center, Office of Postdoctoral Affairs, Bryan, TX. "Keys to success with NIH F32 grants."
2021	Texas A&M Health Science Center, Office of Postdoctoral Affairs, Bryan, TX. "Keys to success with NIH K99/R00 grants."
2022	Texas A&M Health Science Center, Office of Postdoctoral Affairs, Bryan, TX. "Communicating your science."

#### **XIV. Community Service/Outreach**

2000 – 2006	Volunteer, University of Iowa Hospitals and Clinics Children's Oncology Ward, Iowa City, IA
2000 – 2001	Dancer/Volunteer, University of Iowa Dance Marathon, Iowa City, IA
2002 – 2004	Family Relations Committee, University of Iowa Dance Marathon, Iowa City, IA
2002 – 2004	Volunteer, Mercy Hospital Emergency Room, Iowa City, IA
2002 – 2004	Alpha Phi Omega Community Service Fraternity
2002 – 2004	Tour guide, University of Iowa, Iowa City, IA
2003	Teacher, Boy Scouts of America Merit Badge University, Iowa City, IA
2003 – 2008	Councilor, Heart Connection Children's Cancer Camp, Boone, IA
2004 – 2006	Ambassador, University of Iowa Medical Student Ambassador Program, Iowa City, IA
2005 – 2006	Recruitment Committee, University of Iowa Dance Marathon, Iowa City, IA
2006 – 2008	Soccer coach, Iowa City Kickers Little League Soccer, Iowa City, IA
2006 – 2012	Examiner/Volunteer, Iowa City Free Medical Clinic, Iowa City, IA
2006	Participant/Volunteer, Healing Tour with Dr. Patch Adams, Moscow/St. Petersburg, Russia

- 2007 – 2008 Volunteer, Susan G. Komen Race for the Cure, Des Moines, IA
- 2008 Organizer, Patch Adams public lecture, University of Iowa Carver College of Medicine, Iowa City, IA
- 2009 – 2010 Judge, Eastern Iowa Science Fair, Cedar Rapids, IA
- 2009 – 2011 Councilor, Camp Hertko Hollow Children’s Diabetes Camp, Boone, IA
- 2010 – 2011 Board member, Iowa City Free Medical Clinic Board of Directors, Iowa City, IA
- 2011 – 2012 President, Iowa City Free Medical Clinic Board of Directors, Iowa City, IA
- 2013 – 2016 Participant, American Heart Association Heart Walk, Omaha, NE
- 2013 – 2020 Judge, Annual Student Research and Creative Activity Fair, University of Nebraska Omaha, Omaha, NE
- 2014 Volunteer, Nebraska Science Festival, Omaha, NE
- 2015 – 2023 Volunteer and Donor, Corgi Connection of Kansas Annual Fundraiser, Topeka, KS
- 2015 – 2019 Judge, Nebraska Junior Academy of Sciences State Science Fair, Lincoln, NE
- 2016 Abstract Reviewer and Poster Judge, American Physician Scientists Association Midwest Regional Meeting, University of Nebraska Medical Center, Omaha, NE
- 2017 Judge, Metropolitan Science and Engineering Fair (MSEF), Omaha, NE
- 2017 – 2018 Judge and Abstract Reviewer, Midwest Student Biomedical Research Forum, University of Nebraska Medical Center and Creighton University, Omaha, NE
- 2017 – 2021 Public Member, Board of Respiratory Care, State Board of Health, Nebraska Department of Health and Human Services
- 2020 – 2021 Vice Chair, Board of Respiratory Care, State Board of Health, Nebraska Department of Health and Human Services
- 2021 – Present Volunteer Scientist, Skype a Scientist, non-profit organization
- 2022 Judge, Texas Junior Academy of Sciences State Science Fair, College Station, TX
- 2022 – 2024 President, Home Owners Association, North Country Estates, Bryan, TX

## **XV. Publications**

*Note: The Case Lab is passionate about equal access to science and publishing. Therefore, given the exclusionary cost of publication, we purposefully do not submit corresponding manuscripts from our lab to Nature, Science, and Cell journals. Instead, we primarily submit our work to open access and research society journals. We do not believe this affects the quality and impact of our science.*

### **Quantitative Metrics**

h-index = **22**

i10-index = **31**

NIH iCite RCR = **59.62**

Complete PubMed Bibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/adam.case.1/bibliography/public/>

Google Scholar:

<https://scholar.google.com/citations?user=r2HliigAAAAJ&hl=en>

ResearchGate:

[https://www.researchgate.net/profile/Adam\\_Case](https://www.researchgate.net/profile/Adam_Case)

Scopus:

<https://www.scopus.com/authid/detail.uri?authorId=36859368400>

ORCID:

<https://orcid.org/0000-0003-3404-1428>

### **Peer-Reviewed Primary Research Articles (\*Corresponding Author; †Case Lab trainee)**

- 1) Ferguson, KJ., Iverson, W., and Pizzimenti, M. Excerpt by **Case, AJ**. Constructing stories of past lives: Cadaver as first patient: "Clinical summary of dissection." (2008) *Permanente Journal*. 12(2): 89-92. PMID: PMC3042299.
- 2) Nam, C., **Case, AJ**, Hostager, B., and O'Dorisio, S. The role of vasoactive intestinal peptide in megakaryocyte proliferation. (2009) *J Mol Neurosci*. 37(2):160-7. PMID: 18663606.
- 3) Place, TL., Fitzgerald, MP., Venkataraman, S., Vorrink, SU., **Case, AJ**., Teoh, MLT., and Domann, FE. Aberrant promoter CpG methylation is a mechanism for impaired PHD3 expression in a diverse set of malignant cells. (2011) *PLoS One*. 6(1):e14617. PMID: PMC3030558.
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- 2) Place, TL., Domann, FE., and **Case, AJ.\*** Limitations of oxygen delivery to cells in culture: An underappreciated problem in basic and translational research. (2017) *Free Radic Biol Med*. 113:311-322. PMID: PMC5699948. (**Cited >300 times**).
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### Editorials (\*Corresponding Author)

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- 2) Zimmerman, MC. and **Case, AJ**.\* Redox Biology in Physiology and Disease. (2019) *Redox Biol*. 27:101267. PMID: PMC6859570.

### Book Chapters

- 1) **Case, AJ**. and Domann, FE. Hypoxia-induced gene regulation: HIF1 $\alpha$ . *Redox Signaling and Regulation in Biology and Medicine*. (2008) Wiley-CH Verlag GmbH & Co. pp 207-229.

### Articles in Prep/Submitted for Publication in Scholarly Journals (\*Corresponding Author; <sup>†</sup>Case Lab trainee)

### Abstracts (\*Corresponding Author, <sup>†</sup>Case Lab trainee or employee)

- 1) **Case, AJ**. and Domann, FE. The use of lactoperoxidase as a potential target for breast cancer therapy.
  - 2007: University of Iowa Carver College of Medicine Research Week. (Poster)
- 2) Venkataramen, S., Fitzgerald, M., Jettawatana, S., **Case, AJ**., Oberley, LW., and Domann, FE. Epigenetics, a key factor in hormone-independent prostate and breast cancers: New concepts for developing tailored therapies.
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- 3) **Case, AJ**., Johns, AG., Takahashi, T., Waldschmidt, T.J., and Domann, FE. Aberrant thymic development in a T-lymphocyte specific SOD2 knock-out mouse.
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- 4) **Case, AJ**., McGill, J.L., Sangster, SC., Madsen, J.M., Tygrett, L.T., Johns, AG., Takahashi, T., Shirasawa, T., Spitz, DR., Meyerholz, DK., Waldschmidt, T.J., Legge, K.L., Domann, FE. Heightened susceptibility to influenza mortality in immunodeficient mice caused by a T-cell specific defect in SOD2.
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- 5) **Case, AJ**., Wagner, BA., Buettner, GR., and Domann, FE. Deficiency of MnSOD in hematopoietic stem cells causes a sideroblastic anemia-like phenotype.

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  - 10) **Case, AJ.** and Domann, FE. A novel role for mitochondrial superoxide in the development of erythropoietic protoporphyria.
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  - 11) **Case, AJ.**, Madsen, JM., and Domann, FE. A novel role for mitochondrial superoxide in the development of erythropoietic protoporphyria.
    - 2011: Keystone Symposia on Molecular and Cellular Biology, Big Sky, MT. (Poster)
  - 12) **Case, AJ.**, and Domann, FE. Perturbation of mitochondrial superoxide flux inhibits ferrochelatase in hematopoietic stem cells to cause an erythropoietic protoporphyria-like phenotype.
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  - 16) **Case, AJ.**, O'Leary, BR., Hrabe, JE., Mezhir, JJ., and Domann, FE. The Creation of an Enzymatic inactive mutant to study the non-catalytic effects of extracellular superoxide dismutase.
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  - 17) O'Leary, BR. **Case, AJ.**, Hrabe, JE., Olivier, AK., Henry, MD., Domann, FE., and Mezhir, JJ. An evaluation of the role of extracellular superoxide dismutase in pancreatic cancer liver metastasis.
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- 18) **Case, AJ.** Madsen, JM., Motto, DG., Meyerholz, DK., and Domann, FE. Disruption of mitochondrial superoxide flux causes abnormal heme synthesis and hemoglobin gene regulation in erythroid precursor cells.
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  - 2013: University of Nebraska Redox Biology Center Annual Retreat, Ashland, NE. (Poster)
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- 21) **Case, AJ.,** Liu, M., Ding, SJ., and Zimmerman, MC. Nitration of the tyrosine in angiotensin II attenuates its biological activity.
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  - 2013: Nebraska Physiological Society Annual Meeting, Ashland, NE. (Poster)
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- 30) Basu, U., **Case, AJ.**, Liu, J., Li, YL., and Zimmerman, MC. Overexpression of redox-sensitive calcium/calmodulin-dependent protein kinase II (CamkII) in central neurons augments angiotensin II (AngII)-induced hypertension.
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- 34) **Case, AJ** and Zimmerman, MC. Inverse regulatory effects of mitochondrial superoxide in resting and activated T-lymphocytes.
- 2015: *Free Radic Biol Med.* 87(Supplement 1):S39. (Oral)
- 35) **Case, AJ** and Zimmerman, MC. Norepinephrine-mediated suppression of T-lymphocyte activation is regulated by mitochondrial redox mechanisms.
- 2016: *FASEB J.* 30:757.1. (Oral)
- 36) **Case, AJ.**, Roessner, CT., Tian, J., and Zimmerman, MC. Norepinephrine-mediated modulation of T-lymphocyte activation is regulated by mitochondrial redox mechanisms.
- 2016: University of Nebraska Redox Biology Center Annual Retreat, Ashland, NE. (Poster)
  - 2016: FASEB Scientific Research Conference: Neural Mechanisms in Cardiovascular Regulation, Saxtons River, VT. (Oral)
- 37) Price, ME., **Case, AJ.**, Zimmerman, MC., and Sisson, JH. Oxidation of airway cilia-localized protein phosphatase 1 drives alcohol-induced ciliary dysfunction.
- 2016: Nebraska Physiological Society Annual Meeting, Omaha, NE. (Poster)
  - 2016: American Physician Scientists Association Midwest Regional Meeting, Omaha, NE. (Poster)
  - 2016: Alcohol and Immunology Research Interest Group Meeting, Loyola University, Chicago, IL. (Poster)
  - 2017: *Alcohol.* 59:74. (Poster)
- 38) **Case, AJ.\***, Collins, CW.<sup>†</sup>, Roessner, CT., Tian, J., and Zimmerman, MC. Disruption of mitochondrial redox and metabolic states in norepinephrine-exposed T-lymphocytes
- 2017: *FASEB J.* 31:697.8. (Poster)
- 39) Kohl, AJ.<sup>†</sup>, Collins, CW.<sup>†</sup>, Elkhatib, S.<sup>†</sup>, and **Case, AJ\***. Evaluation of inflammatory parameters in mouse stress models.
- 2017: Nebraska Physiological Society Annual Meeting, Omaha, NE. (Poster)

- 40) Djalilova, DM.<sup>†</sup>, Schulz, P., Berger, AM., **Case, AJ.**, Dupzyk, KA., and Ross, A. Yoga and inflammation: A systematic review.
- 2017: Midwest Nursing Research Society Annual Research Conference, Minneapolis, MN. (Poster)
- 41) Price, ME., Pavlik, JA., **Case, AJ.**, Zimmerman, MC., and Sisson, JH. Alcohol drives redox imbalance and mitochondrial dysfunction in ciliated airway epithelial cells.
- 2017: Nebraska Physiological Society Annual Meeting, Omaha, NE. (Poster)
- 42) **Case, AJ.\***, Collins, CW.<sup>†</sup>, Kohl, AJ.<sup>†</sup>, Moshfegh, CM.<sup>†</sup>, and Elkhatib, S.<sup>†</sup> Redox-Driven Lymphocyte Inflammation Sensitizes Mice to Psychological Stress-Mediated Hypertension.
- 2018: *FASEB J.* 32:737.1. (Oral)
- 43) Moore, TA., **Case, AJ.**, Matthews, TL, and Zimmerman, MC. IL-17A and Chronic Stress in Pregnant Women at 24-48 Weeks Gestation.
- 2018: Council for the Advancement of Nursing Science Annual Meeting, Washington, DC. (Poster)
- 44) Moshfegh, CM.<sup>†</sup>, Collins, CW.<sup>†</sup>, Kohl, AJ.<sup>†</sup>, Elkhatib, S.<sup>†</sup>, and **Case, AJ.\*** Redox-Driven Lymphocyte Inflammation Sensitizes Mice to Psychological Stress-Mediated Hypertension.
- 2018: SfRBM Regional Meeting and Oberley Symposium, Omaha, NE. (Oral)
  - 2018: *Hypertension.* 72(Supplement 1):023. (Oral)
- 45) Ahmad, IM., Abdalla, MY., Moore, TA., Bartenhagen, L., **Case, AJ.**, and Zimmerman, MC. Elevated Pro-Inflammatory Cytokines in Healthcare Workers Occupationally Exposed to Ionizing Radiation.
- 2018: *Free Radic Biol Med.* 128(Supplement 1):S100. (Poster)
- 46) Moshfegh, CM.<sup>†</sup>, Elkhatib, S.<sup>†</sup>, Collins, CW.<sup>†</sup>, Kohl, AJ.<sup>†</sup>, and **Case, AJ.\*** Psychological Stress-Mediated Hypertension is Regulated via Redox-Signaling in T-lymphocytes.
- 2018: *Free Radic Biol Med.* 128(Supplement 1):S33. (Oral)
  - 2018: Nebraska Physiological Society Annual Meeting, Omaha, NE. (Poster)
- 47) **Case, AJ.\***, Moshfegh, CM.<sup>†</sup>, and Elkhatib, S.<sup>†</sup> Identification of a Novel T-lymphocyte Inflammatory Protein in Psychological Stress-Induced Hypertension.
- 2019: *FASEB J.* 33:836.2. (Poster)
  - 2019: *Biol Psych.* 85:10. S304. (Poster)
- 48) Elkhatib, S.<sup>†</sup>, Moshfegh, CM.<sup>†</sup>, Collins, CW.<sup>†</sup>, and **Case, AJ.\*** Inflammatory T-lymphocytes Express a Pro-Sympathetic Neurotransmission Signature during Psychological Trauma.
- 2019: Midwest Student Biomedical Research Forum, Omaha, NE. (Oral)
  - 2019: International Student Research Forum, Odense, Denmark. (Oral)
- 49) Elkhatib, SK.<sup>†</sup>, Moshfegh, CM.<sup>†</sup>, Watson, GF.<sup>†</sup>, and **Case, AJ.\*** Neuroimmune Contributions to Hypertension Sensitization in a Preclinical Model of PTSD.
- 2019: UNMC Pharmacology and Experimental Neuroscience Retreat, Omaha, NE. (Poster)
  - 2019: UNMC MD/PhD Scholars Program Annual Retreat, Omaha, NE. (Poster)
- 50) Moshfegh, CM.<sup>†</sup>, Elkhatib, SK.<sup>†</sup>, Watson, GF.<sup>†</sup>, and **Case, AJ.\*** Redox-Regulated Calprotectin as a Possible Novel Regulator of Pro-Inflammatory T-lymphocytes after Psychological Trauma.
- 2019: *Free Radic Biol Med.* 145(Supplement 1):S147. (Oral)
- 51) Sass, D.<sup>†</sup>, Fitzgerald, W., Margolis, L., Schulz, P., Berger, A., Kupzyk, K., **Case, AJ.**, Dickinson, K., and Saligan, L. Characterization of Extracellular Vesicles in Patients with Cancer-Related Fatigue.
- 2019: National Institute on Nursing Research Council Meeting, Baltimore, MD. (Poster)

- 52) Elkhatib SK.†, Moshfegh CM.†, Watson GF.†, **Case AJ.\*** Neuroimmune Contributions to T-lymphocyte-Driven Inflammation in a Preclinical Model of Post-traumatic Stress Disorder (PTSD).
- 2020: *FASEB J.* 34(S1):1-1. (Oral)
  - 2020: *Biol Psych.* 87:9. S315. (Poster)
- 53) Moshfegh CM.†, Elkhatib SK.†, Watson GF.†, **Case AJ.\*** Psychological Trauma-Induced Calprotectin Potentiates Pro-Inflammatory T-lymphocyte Differentiation and Memory Formation.
- 2020: *Biol Psych.* 87:9. S327. (Poster)
  - 2020: International Student Research Forum, Vancouver, British Columbia. (Oral)
- 54) Lally, RM., Schmidt, R., Wengel, SP., Sebastian, JG., Kupzyk, KA., Cordts, KM., **Case, AJ.** Promoting Psychological Wellness Among the Healthcare Workforce During COVID-19.
- 2020: Academy of Nursing Policy Conference. (Poster)
- 55) Elkhatib SK.†, Moshfegh CM.†, Watson GF.†, Katsurada, K., Patel, KP., and **Case AJ.\*** Sympathetic splenic denervation ameliorates social defeat stress-induced inflammatory and redox profiles in T-lymphocytes
- 2020: 35th Annual MD/PhD National Student Conference, Aurora, CO (Poster)
  - 2020: Midlands Physiological Society annual conference, Omaha, NE (Poster)
- 56) Moshfegh CM.†, Elkhatib SK.†, Watson GF.†, and **Case AJ.\*** Redox-Regulated Calprotectin Potentiates Psychological Trauma Induced Pro-Inflammatory T-Lymphocyte Differentiation
- 2020: *Free Radic Biol Med.* 159(Supplement 1):S45-46. (Oral)
  - 2020: Midlands Physiological Society annual conference, Omaha, NE (Poster)
- 57) Elkhatib SK.†, Moshfegh CM.†, Watson GF.†, Katsurada K, Patel KP, and **Case AJ.\*** Sympathetic nerves control splenic T-lymphocyte inflammation and mitochondrial redox environment during repeated social defeat stress
- 2021: *Biol Psych.* 89:9. S89. (Oral)
  - 2021: Midwest Student Biomedical Research Forum, Omaha, NE (Poster)
- 58) Moshfegh CM.†, Elkhatib SK.†, Watson GF.†, and **Case AJ.\*** Repeated social defeat stress leads to pro-inflammatory T-lymphocytes via dendritic cell priming
- 2021: *Biol Psych.* 89:9. S387. (Poster)
- 59) Elkhatib SK.†, Moshfegh CM.†, Watson GF.†, and **Case AJ.\*** T-lymphocyte tyrosine hydroxylase controls TH17 polarization during repeated social defeat stress
- 2021: *Brain Behav Immun.* 98:S. 14-15. (Poster)
- 60) Elkhatib SK.†, Moshfegh CM.†, Watson GF.†, and **Case AJ.\*** T-Lymphocyte Tyrosine Hydroxylase Regulates IL-17A Downstream of Mitochondrial Superoxide
- 2022: *Free Radic Biol Med.* 180(Supplement 1):S81. (Poster)
- 61) Moshfegh CM.†, Elkhatib SK.†, Watson GF.†, and **Case AJ.\*** Calprotectin is Protective during Psychological Trauma
- 2022: *Free Radic Biol Med.* 180(Supplement 1):S85. (Poster)
- 62) Reed EC. †, Lauten TH. †, Clopp AJ. †, Moshfegh CM. †, Elkhatib SK. †, and **Case AJ.\*** Mitochondrial regulation of inflammation after psychological trauma
- 2022: *Free Radic Biol Med.* 192(Supplement 1):33-34. (Oral)
- 63) Lauten TH. †, Reed EC. †, Moshfegh CM. †, Elkhatib SK. †, Clopp AJ. †, and **Case AJ.\*** Neuropeptide Y potentiates T-Lymphocyte Inflammation after Psychological Trauma
- 2023: *Physiology.* 38(S1), 5728219 (Poster)
- 64) Yadav SK., Ahmad R., Moshfegh CM. †, Sankarasubramanian J., Elkhatib SK. †, Talmon GA., Guda C., **Case AJ.**, and Singh AB. Repeated Social Defeat Stress induces an Inflammatory

Gut Milieu by Compromising the Mucosal Barrier Integrity and Altering Gut Microbiota Homeostasis.

- 2023: *Gastroenterology*. 164:6. S411.(Poster)
- 65) Reed EC.†, Lauten TH.†, Natour T.†, and **Case AJ**.\* Hemoglobin buffers T-lymphocyte mitochondrial redox and inflammation after psychological trauma.
- 2023: Psychoneuroimmunology Research Society (PNIRS) Annual Conference (Poster)
- 66) Lauten TH.†, Reed EC.†, Natour T.†, and **Case AJ**.\* Sympathetic neurotransmission does not directly cause T-lymphocyte inflammation during psychological trauma.
- 2023: Psychoneuroimmunology Research Society (PNIRS) Annual Conference (Poster)
- 67) Silva VA.†, Reed EC.†, Lauten TH.†, Natour T.†, and **Case AJ**.\* Elucidating the Regulation of Hemoglobin in T-lymphocytes After Psychological Trauma.
- 2023: Texas A&M University LAUNCH Summer Undergraduate Research Day (Poster)
- 68) Lauten TH.†, Reed EC.†, Natour T.†, and **Case AJ**.\* Autonomic Regulation of T-Lymphocyte Inflammation after Psychological Trauma.
- 2024: American Physiology Summit (Poster)
- 69) Natour T.†, Lauten TH.†, Reed EC.†, and **Case AJ**.\* Elucidation of the Molecular Signal Linking Psychological Trauma to T-lymphocyte Inflammation.
- 2024: American Physiology Summit (Poster)
- 70) Velusamy P., Greaney J., **Case AJ**., Fadel PJ., Trott DW. IL-6 contributes to impaired nitric oxide and increased mitochondrial ROS production in Human Aortic Endothelial Cells.
- 2024: American Physiology Summit (Poster)
- 71) Reed EC.†, Silva VA.†, Lauten TH.†, Natour T.†, and **Case AJ**.\* Hemoglobin regulates T-lymphocyte function after psychological trauma.
- 2024: SfrBM Regional Meeting, Shreveport, LA. (Oral)

**XVI. Teaching Activities****Lectures in Team-Taught Courses****The University of Iowa**

2007 – 2008

**Radiation Safety and Radiobiology (RSP 3130)**

- No Student Evaluations Available
- 4 lectures/semester (4 annually) @ 1 hour each
  - *What exactly is radiation?*
  - *High and low LET radiation*
  - *Pathological effects of radiation*
  - *Treatment of radiation toxicity*

2022

**Redox Biology and Medicine (FRRB 7000)**

- No Student Evaluations Available
- 1 lectures/semester (1 annually) @ 1 hour each
  - *The evolution of superoxide dismutase*

**The University of Nebraska Omaha**

2013 – 2017

**Physiology and Anatomy I and II (BMCH 2400-2500)**

- 4.60/5 Cumulative Average for Student Evaluations
- 3 lectures/semester (6 annually) @ 2 hours each
  - *Lymphatics*
  - *Innate Immunity*
  - *Adaptive Immunity*

2016

**Health Aspects of Stress Management (HED 2850)**

- No Student Evaluations Available
- 1 lecture/semester (1 annually) @ 2 hours each
  - *Psychological stress Consequences for the immune system*

**The University of Nebraska Lincoln**

2016

**Redox Biology Center Summer Course**

- 4.0/5 for Student Evaluations
- 1 lecture/semester (1 annually) @ 1 hour each
  - *Mitochondrial redox signaling*

**University of Nebraska Medical Center****College of Medicine**

2014 – 2020

**Redox Biology in Human Disease (CIP/IPMM 922)**

- 4.86/5 Cumulative Average for Student Evaluations
- 3 lectures/semester (3 annually) @ 2 hours each
  - *Sources of reactive oxygen species*
  - *Redox signaling*
  - *Redox biology and the immune system*

2023

**Redox Biology in Human Disease (CIP/IPMM 922)**

- No Student Evaluations Available
- 1 lectures/semester (1 annually) @ 2 hours each

- *Redox biology and the immune system*

2018 – 2020

**Scientific Writing (CIP/IPMM 814)**

- No Student Evaluations Available
- 2 lectures/semester (4 annually) @ 2 hours each
  - *Methods and figure legends*
  - *References*

2019 – 2021

**Neuroimmunology (PAMM 930)**

- 4.59/5 Cumulative Average for Student Evaluations
- 2 lectures/semester (2 annually) @ 1.5 hours each
  - *Lymphocytes and the nervous system*
  - *Psychological disorders and the immune system*

**College of Allied Health Professions**

2015 – 2018

**Radiation Technology Physiology (RSTE/MITS 352R)**

- 4.61/5 Cumulative Average for Student Evaluations
- 14 lectures/semester (14 annually) @ 1 hour each
  - *Introduction to cell physiology*
  - *Chemical composition of the body*
  - *Cellular composition of the body*
  - *Osmosis, diffusion, and transport*
  - *Membrane potentials and excitable cells*
  - *Nervous system*
  - *Muscles*
  - *Overview of metabolism*
  - *Blood 1*
  - *Blood 2*
  - *Blood vessels*
  - *Lymphatics*
  - *Innate immunity*
  - *Adaptive immunity*

2018 – 2020

**Radiation Technology Anatomy and Physiology I and II (CAHP 462-463)  
Online course**

- No Student Evaluations Available
  - *Administration and grading of 3 group projects/semester (6 annually)*

Texas A&M University**College of Medicine**

2021 – 2022

**Contemporary Topics in Advanced Cell Biology I (MSCI 601)**

- No Student Evaluations Available
- 2 lectures/Fall semester @ 2 hours each
  - *DNA, chromosomes, and genes (journal club discussion)*
  - *Gene expression and epigenetics (journal club discussion)*

2021 – Present

**Pathogenesis of Disease (MSCI 630)**

- No Student Evaluations Available
- 2 lectures/ Fall semester @ 2 hours each

- *Atherosclerosis and myocardial infarction*
- *Cardiovascular disease journal club discussion*

2022

**Medical Student Grand Rounds (MEID 618)**

- 5.43/6 Cumulative Average for Student Evaluations
- 7 meetings/Spring semester @ 1-2 hours each
  - *Lead small group of medical students in choosing a basic science topic with potential for human translation, as well as help develop, review, facilitate, and evaluate group presentations*

2022 – Present

**Interprofessional Social and Ethical Dilemmas in Healthcare (MEID 823)**

- No Student Evaluations Available
- 6 meetings/Spring semester @ 1 hours each
  - *Lead small group of professional health students in traversing various social and ethical dilemmas and cases*

2022 – Present

**General Pharmacology (NEXT 605)**

- No Student Evaluations Available
- 2 lectures/Spring semester @ 2 hours each
  - *Cardiovascular diseases*
  - *Cardiovascular pharmacology*

2022 – Present

**Introduction to Medical Physiology (MPHY 689)**

- No Student Evaluations Available
- 1 lecture/Fall semester @ 2 hours each
  - *Synapse and receptors and autonomic nerve system*

2022 – Present

**Mammalian Immunobiology (MSCI 635)**

- No Student Evaluations Available
- 2 lecture/Fall semester @ 1.5 hours each
  - *Lymphocyte signaling*
  - *Immunological methods*

2023 – Present

**Cardiovascular and Lymphatic Biology (MPHY 631)**

- No Student Evaluations Available
- 3 lectures/Spring semester @ 2 hours each
  - *Autonomic nervous system and cardiovascular receptors*
  - *Membrane potential and cardiovascular ion channels*
  - *Smooth muscle contraction*

2023 – Present

**Contemporary Topics in Advanced Cell Biology II (MSCI 602)**

- No Student Evaluations Available
- 1 lectures/Spring semester @ 2 hours each
  - *Research methods in psychiatry*

2023 – Present

**Foundations of Psychiatric Research (MSCI 689/625)**

- No Student Evaluations Available
- 4 lectures/Spring semester @ 2 hours each

- *Research Domain Criteria Initiative (RDoC)*
- *Trauma and stress related disorders*
- *Physiological measurements of stress and neuromodulation*
- *Limitations and current gaps in psychiatry research*

- 2023 – Present     **Foundations of Medicine II (MEID 606)**
- 4.7/5 Cumulative Average for Student Evaluations
  - 4 lectures/Fall semester @ 1 hour each
    - *Adrenergics I*
    - *Adrenergics II*
    - *Adrenergics III*
    - *Adrenergics IV*

- 2024 – Present     **Cardiovascular Block – Regular Track (MEID 616)**
- No Student Evaluations Available
  - 1 lectures/Spring semester @ 1.5 hour each
    - *Pharmacology: Therapy of arrhythmias*

### Lectures in Individually-Taught Courses

University of Nebraska Medical Center

#### **College of Medicine**

- 2018 – 2021     **Physiology Seminar Series and Journal Club (IPMM 970/CIP 970)**
- No Student Evaluations Available
  - 15 lectures/semester (30 annually) @ 1 hour each
    - *Selected manuscript discussions*
    - *Student presentation evaluation*

- 2018 – 2020     **Scientific Communication (IPMM 815)**
- 4.88/5.0 Cumulative Average for Student Evaluations
  - 15 lectures/semester (15 annually) @ 2 hours each
    - *Listening and connection*
    - *Emotion and connection*
    - *Finding your story*
    - *Building your story*
    - *Practicing your story*
    - *The scientific presentation for scientists*
    - *The scientific poster*
    - *Networking and elevator pitches*
    - *The chalk talk*
    - *7 full classes devoted to student presentation evaluations*

### Course Development and Directorship

The University of Iowa

- 2007 – 2008     Radiation Safety and Radiobiology (RSP 3130)  
**Course Co-Director**

University of Nebraska Medical Center

#### **College of Medicine**

- 2018 – 2021     Physiology Seminar Series and Journal Club (CIP 970)

2018 – 2020 **Course Director**  
 Scientific Communication (IPMM 815)  
**Course Developer (recorded 76 hours of time spent in development)**  
**Course Director**

### **College of Allied Health Professions**

2018 – 2020 Radiation Technology Anatomy and Physiology I and II (CAHP 462-463), online course  
**Course Co-Developer (recorded 68 hours of time spent in development)**  
**Course Co-Director**

### Texas A&M University

#### **College of Medicine**

2023 – Present Foundations of Psychiatric Research (MSCI 625)  
**Course Developer and Director**

2023 Contemporary Topics in Advanced Cell Biology II (MSCI 602)  
 Psychiatry week material **Course Developer**

### **Mentoring**

#### *High School Students*

2023 Jacob Kim, Prosper Independent School District, Career development independent study program, **Primary mentor**

#### *Undergraduate Students*

2008 Anna Johns, University of Iowa summer undergraduate research, Secondary undergraduate mentor  
 2009 Stephen Sangster, University of Iowa/Lincoln University summer undergraduate research, Secondary undergraduate mentor, (Currently Instructor at University of Belize)  
 2015 Colton Roessner, University of Nebraska Medical Center summer undergraduate research, **Primary undergraduate mentor**, (Currently Anesthesiology Resident, Ohio State University)  
 2017 Sarah Schlichte, Buena Vista University J-term undergraduate research, **Primary undergraduate mentor**, (Currently Assistant Professor, Buena Vista University)  
 2017 – 2018 Allison Kohl, University of Nebraska Medical Center summer undergraduate research, **Primary undergraduate mentor** (Currently Graduate Student, Applied Behavior Analysis program, University of Nebraska Medical Center)  
 2019 Logan Duryee, University of Nebraska Omaha Undergraduate Research Internship, **Primary mentor**  
 2019 Miranda Jangula, University of Nebraska Omaha Undergraduate Research Internship, **Primary mentor**, (Currently Medical Student, University of Nebraska Medical Center)  
 2021 – 2022 Joanna Zagrean, Texas A&M University BICH/GENE 491 Research, **Primary mentor**  
 2022 Blake Surber, Texas A&M University BICH/GENE 491 Research, **Primary mentor**  
 2022 Riley Stanley, Texas A&M University BICH/GENE 491 Research, **Primary mentor**  
 2022 Spencer Keith, Texas A&M University BICH/GENE 491 Research, **Primary mentor**

2022	Adam Tomsio, Texas A&M University BICH/GENE 491 Research, <b>Primary mentor</b>
2022 – 2023	Abigail Schlieker, Texas A&M University BICH/GENE 491 Research, <b>Primary mentor</b>
2022 – Present	Caroline JoJo, Texas A&M University BICH/GENE 491 Research, <b>Primary mentor</b>
2023	Valeria Silva, Summer Undergraduate Research in Genetics and Genomics (SURGe), Texas A&M University, <b>Primary mentor</b>
2023 – Present	Praneeth Akkineni, Texas A&M University BMEN 491 Research, <b>Primary mentor</b>
2024 – Present	Brooke Griffin, Texas A&M University MSCI 691 Research, <b>Primary mentor</b>
2024 – Present	Kelsie Grassman, Texas A&M University NRSC 491 Research, <b>Primary mentor</b>

*Masters Students*

2022 – 2023	Dimple Wadhwa, Texas A&M Medical Sciences MS student, Directed studies student in Case laboratory
2023 – Present	Jordan Woods, Texas A&M Psychological and Brain Sciences MS student, informal mentor

*PhD Students*

2012 – 2015	Urmi Basu, University of Nebraska Medical Center PhD graduate student research, Secondary graduate mentor (Currently medical writer, Axon Communications)
2017	Cleofus Sarmiento, University of Nebraska Medical Center PhD student rotation, Rotation mentor
2017	Tyler Jones, University of Nebraska Medical Center PhD student rotation, Rotation mentor
2017 – 2018	Sabrina Schatzman, Johns Hopkins University PhD Student, SfRBM Mentorship program, <b>Primary mentor</b> (Currently postdoctoral fellow at Centers for Disease Control and Prevention)
2017 – 2020	Dilorom Djalilova, University of Nebraska Center, College of Nursing PhD student, Research mentor (Currently postdoctoral fellow at National Institutes of Health)
2017 – 2022	Safwan Elkhatib, University of Nebraska Medical Center MD/PhD student, <b>Primary graduate mentor</b> (Currently in medical school rotations at University of Nebraska Medical Center)
2017 – 2022	Cassandra Moshfegh, University of Nebraska Medical Center IPMM PhD graduate student, <b>Primary graduate mentor</b> (Currently Quality Control Scientist at Matica Biotechnology)
2020	Aaron Schwab, University of Nebraska Medical Center MD/PhD student rotation, Rotation mentor
2020	Roneldine Mesidor, University of Nebraska Medical Center PhD student rotation, Rotation mentor
2021	Vladimir Baraev, German Cancer Research Center PhD Student, SfRBM Mentorship program, <b>Primary mentor</b>
2021	Hannah Smith, Texas A&M University, Medical Sciences PhD student rotation, Rotation mentor
2021	Heather Barreda, Texas A&M University, Medical Sciences PhD student rotation, Rotation mentor
2021	Anthony Matarazzo, Texas A&M University, Genetics PhD student rotation, Rotation mentor
2022	Destani Derrico, Texas A&M University, Genetics PhD student rotation, Rotation mentor

2022	Abigail Schoeller, Texas A&M University, Medical Sciences PhD student rotation, Rotation mentor
2022 – Present	Emily Reed, Texas A&M Genetics PhD Student, <b>Primary graduate mentor</b>
2022 – Present	Tatlock Lauten, Texas A&M Medical Sciences PhD Student, <b>Primary graduate mentor</b>
2022 – Present	Drew Gonzalez, Texas A&M Kinesiology PhD Student, Directed studies student in Case laboratory
2023 – Present	Tamara Natour, Texas A&M University, Medical Sciences PhD student, <b>Primary graduate mentor</b>
2023	Victoria Bunting, Texas A&M University, Genetics PhD student rotation, Rotation mentor

*Medical Students*

2013 – 2014	Daniel Agraz, University of Nebraska Medical Center summer medical student research, Secondary medical student mentor, (Currently Ophthalmology Surgery Fellow, Price Vision Group, Indianapolis, IN)
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*Medical Residents*

2010 – 2011	Jennifer Hrabe, MD, University of Iowa surgical research resident, Secondary resident mentor, (Currently Colorectal Surgeon, University of Iowa)
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*Postdoctoral Fellows*

2017 – 2018	Kahkashan Rashid, PhD, University of Nebraska Medical Center, <b>Primary mentor</b> (Currently research scientist with Irfan Raman, University of Rochester)
2018 – 2019	Eman Gohar, PhD, University of Alabama at Birmingham, AHA Council on Hypertension Advisory and Mentoring Program, K99/R00 mentor (received K99/R00)
2021 – 2022	Bethany Hanson, PhD, University of Kansas Medical Center, F and K99/R00 mentor (received F32; K99/R00 pending)

*Junior Faculty*

2017 – 2021	Tiffany Moore, PhD, Assistant Professor, University of Nebraska Medical Center, College of Nursing, Peer mentor
2018 – 2021	Kristin Dickinson, PhD, Assistant Professor, University of Nebraska Medical Center, College of Nursing, Peer mentor
2018 – 2021	Leah Cook, PhD, Assistant Professor, University of Nebraska Medical Center, College of Medicine, Peer mentor
2019 – 2021	Windy Alonso, PhD, Assistant Professor, University of Nebraska Medical Center, College of Nursing, Peer mentor
2021 – 2022	Gaston Ofman, MD, Assistant Professor, University of Oklahoma Health Sciences Center, SfRBM Mentorship program, <b>Primary mentor</b>
2022 – Present	Annie Newell-Fugate, PhD., DVM., Assistant Professor, Department of Veterinary Physiology and Pharmacology, Texas A&M University, Peer mentor

**Service on Graduate Student Advisory/Supervisory Committee:**

- **PhD Thesis Committee Chair**
  - Cassandra Moshfegh, University of Nebraska Medical Center Integrative Physiology and Molecular Medicine PhD student (2018 – 2022)

- Safwan Elkhatib, University of Nebraska Medical Center Integrative Physiology and Molecular Medicine MD/PhD student (2018 – 2022)
- Emily Reed, Texas A&M Genetics PhD student (2022 – Present)
- Tatlock Lauten, Texas A&M Medical Sciences PhD student (2022 – Present)
- Tamara Natour, Texas A&M Medical Sciences PhD student (2023 – Present)
  
- **Comprehensive Examination Committee Chair**
  - Upendra Chalise, University of Nebraska Medical Center Integrative Physiology and Molecular Medicine PhD student (2021)
- **Master's Committee Chair**
  - Dimple Wadhwa, Texas A&M Medical Sciences MS student (2021 – 2023)
- **PhD Thesis Committee Member**
  - Michael Price, University of Nebraska Medical Center Integrative Physiology and Molecular Medicine MD/PhD student (2016 – 2018)
  - Dilorom Djalilova, University of Nebraska Medical Center Nursing PhD student (2017 – 2020)
  - Danielle Frodyma, University of Nebraska Medical Center Cancer Research PhD student (2018 – 2020)
  - Upendra Chalise, University of Nebraska Medical Center Integrative Physiology and Molecular Medicine PhD student (2019 – 2021)
  - Sydney Greer, University of Nebraska Medical Center Molecular Genetics and Cell Biology PhD student (2018 – 2023)
  - Francesca Agobe, Texas A&M Medical Sciences PhD student (2021 – 2022; changed labs/projects)
  - Justin McDermott, Texas A&M Medical Sciences PhD student (2021 – 2023)
  - Allie Denham, Texas A&M Genetics PhD student (2021 – Present)
  - Hannah Smith, Texas A&M Medical Sciences PhD student (2022 – Present)
  - Anthony Matarazzo, Texas A&M Genetics PhD student (2022 – Present)
  - Samantha Plas, Texas A&M TAMIN PhD student (2022 – 2023)
  - Rosaline Kumar, Texas A&M Medical Sciences PhD student (2022 – Present)
- **Master's Committee Member**
  - Roksana Zak, University of Nebraska Omaha Exercise Physiology MS student (2016 – 2017)
  - Ronald Headid, University of Nebraska Omaha Exercise Physiology MS student (2019 – 2020)
  - Joshua McDowell, University of Nebraska Medical Center Biochemistry and Molecular Biology MS student (2020 – 2023)
  - Alejandro Tovar, Texas A&M Medical Sciences MS student (2021 – 2023)
  - Ismael Zaitouni, Texas A&M Medical Sciences MS student (2022 – Present)
  - Michael Butts, Texas A&M Medical Sciences MS student (2022 – Present)