

CURRICULUM VITAE

David L. Mattson, Ph.D.
Professor and Chair of Physiology

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- 2. Education:**
1984 B.S. Biology, University of Minnesota Duluth, Duluth, MN

1990 Ph.D. Physiology, Medical College of Wisconsin, Milwaukee, WI

- 3. Postgraduate Training:**
1990-1992 Postdoctoral Fellow, Department of Physiology, Medical College of Wisconsin, Milwaukee, WI

- 4. Faculty Appointments:**
1992-1997 Assistant Professor, Department of Physiology, Medical College of Wisconsin; Milwaukee, WI

1997-2002 Associate Professor, Department of Physiology, Medical College of Wisconsin; Milwaukee, WI

2002-2019 Professor with Tenure, Department of Physiology, Medical College of Wisconsin; Milwaukee, WI

2014-2015 Interim Senior Associate Dean of Research, Medical College of Wisconsin; Milwaukee, WI

2019- Professor and Chair, Department of Physiology, Medical College of Georgia at Augusta University; Augusta, GA

5. Awards, Honors:

1984	Summa Cum Laude, University of Minnesota Duluth
1990	Outstanding Dissertation Award, MCW
1991	Merck Sharpe & Dohme Travel Fellowship
1998	Fellow, American Heart Association Council for High Blood Pressure Research
2000	Established Investigator Award, American Heart Association
2006	Distinguished Lecturer in Integrative Physiology, University of Saskatchewan, Saskatoon, SK, Canada.
2008,10-16	Outstanding Medical Student Educator, MCW
2013,18	MCW Faculty Service Award
2015	MCW Distinguished Service Award
2016	MCW Society of Teaching Scholars
2018	Starling Award-American Physiological Society
2019-	Georgia Research Alliance Eminent Scholar in Hypertension
2020-	Fellow, American Physiological Society

6. Membership in Professional Societies:

1997-	American Physiological Society
1995-	American Heart Association Council for High Blood Pressure Research

7. Editorial Boards:

1999-2008	<i>American Journal of Physiology (Heart Circulatory Physiology)</i>
2001-20	<i>American Journal of Physiology (Renal Physiology)</i>
2001-20	<i>American Journal of Physiology (Regulatory Physiology)</i>
2002-20	<i>Hypertension</i>
2003-20	<i>Physiological Genomics</i>

8. Regional/Local/Appointed Leadership and Committee Positions:

1997-2001	American Heart Association Great America Consortium Study Group 3A, Chicago, IL.
2008-2009, 2012	MCW Clinical and Translational Science Institute (CTSI) Grant Review Committee, Milwaukee, WI
2016-2019	Member, American Heart Association-Metro Milwaukee Board of Directors

9. National Elected/Appointed Leadership and Committee Positions:

1999	NIH Cardiovascular Sciences Review Group, ZRG1-CVB, Washington, DC.
2000	Abstract Grading Committee, International Society of Hypertension Meeting, Chicago, IL.
2000	External Reviewer, Henry Ford Hospital Intramural Grants, Detroit, MI
2001	External Reviewer, The Wellcome Trust (Physiology and Pharmacology), External Grant Reviewer, London, UK.
2001	NIH Hematology-1 Study Section, Special Emphasis Panel (ZRG1-HEM-1), Washington, DC.
1999-03	American Heart Association National CV Regulation II Review Committee, Dallas, TX.
2003	AHA Council for High Blood Pressure Research Meeting, Abstract Grading Committee, Washington, D.C.
2003	NIH/HLBI Spring Hypertension PPG Review Committee, Columbia, MD
2003	NIH/ICP-1 Review Group, Washington, DC
2004	AHA Council for High Blood Pressure Research Meeting, Abstract Grading Committee, Chicago, IL.
2005	The Wellcome Trust (Physiology and Pharmacology), External Grant Reviewer, London, UK.
2005	AHA Council for High Blood Pressure Research Meeting, Abstract Grading Committee, Washington, DC
2005-6	Faculty Member, Faculty of 1000, Renal, Fluid & Electrolyte Physiology
2005	NIH/HLBI CSR Special Emphasis Panel Member (ZRG1 CVS-B-02), Washington, DC
2005	NIH/NCRR Clinical Research Review Committee (RIRG-G (01)) Palo Alto, CA
2007	AHA Council for High Blood Pressure Research Meeting, Abstract Grading Committee, San Antonio, TX.
2007	NIH/NIAMS Small Research Grants Review Committee Member (ZAR1 EHB-H 01), Washington, DC.
2007	Chairman, NIH/NHLBI Special Emphasis Panel, Hypertension and Microcirculation Study Section (ZRG1 CVS-B02S), Washington, DC.
2005-8	Councilor, American Physiological Society, Water & Electrolyte Section
2008-12	NIH Hypertension and Microcirculation Study Section Member (CVS Integrated Review Group), Washington, DC.
2008	American Heart Association National Vascular Biology & Blood Pressure I Review Committee, Dallas, TX.
2008	NIH/HLBI Fall Hypertension PPG Review Committee, Columbia, MD
2009	NIH/NHLBI SEP, (ZRG1 HM-P(02), San Francisco, CA.

2009 External Grant Reviewer, Hertha Fimberg Program, Austrian Science Fund (FWF); Vienna, Austria.

2010 NIH/NHLBI Special Emphasis Panel-HLBP Workgroup 031, Bethesda, MD.

2009-12 Committee on Committees Representative, American Physiological Society, Water & Electrolyte Section

2011 NIH/NHLBI Special Emphasis Panel, (ZRG1 HM-B(02)S, Chicago, IL.

2011 NIH/NHLBI Special Emphasis Panel, (ZRG1 VH-B(04)M, Bethesda, MD.

2012 NIH/NHLBI Special Emphasis Panel, (ZRG1 HM-C(02)S, San Francisco, CA.

2012 American Heart Association National Cardiorenal 1 and 2 Review Committees; Dallas, TX.

2012 Nominating Committee-Water & Electrolyte Section Representative, American Physiological Society; Bethesda, MD.

2013 NIH/HLBI PPG Workgroup (2013/10 HLBP 1); Bethesda, MD.

2013 NIH/NHLBI Special Emphasis Panel, (ZRG1 VH-B(02)M, Bethesda, MD.

2013 Co-Chair, American Heart Association National Cardiorenal 1 Review Committee; Dallas, TX.

2014 Education Committee, American Physiological Society; Bethesda, MD.

2014-17 Joint Programming Committee Representative, American Physiological Society, Water & Electrolyte Section; Bethesda, MD.

2014-15 Chair, American Heart Association National Cardiorenal 1 Review Committee; Dallas, TX.

2014 NIH/HLBI PPG Workgroup (2014/05 HLBP-1); Bethesda, MD.

2014 Co-Chair NIH/NHLBI Special Emphasis Panel, (ZRG1 VH-N(02)M), Bethesda, MD.

2014 NIH/NHLBI Working Group Panelist, "Salt in Human Health and Sickness: Building on the Current Scientific Evidence"; Bethesda, MD.

2014 NIH/NHLBI Special Emphasis Panel, (ZRG1 VH-D 02 M), Bethesda, MD.

2015 NIH/NHLBI Special Emphasis Panel, (ZRG1 VH-D 02 M), Bethesda, MD.

2016 NIH/HLBI HLBP 1 Workgroup 003-PPG Workgroup; Bethesda, MD.

2016 American Heart Association Research Leader's Academy; San Antonio, TX; July, 2016.

2016 Co-Organizer, American Physiological Society Meeting, "Inflammation, Immunity and Cardiovascular Disease"; Westminster, CO

2016 Chair, NIH/NHLBI Special Emphasis Panel, (ZRG1 VH-N 02 M), Bethesda, MD.

2016 NIH/HLBI HLBP 1 Workgroup 2017/01; Bethesda, MD.

2017 NIH/HLBI HLBP 1 Workgroup 2017/05; Bethesda, MD.
2017-18 American Heart Association, “Animal Models of Hypertension” Writing Group Member
2017 Overseas External Assessor; National Health and Medical Research Council of Australia, Canberra City ACT, Australia
2017 NIH/NIDDK Review Committee 2017/10 DDK-D1; Bethesda, MD
2017 NIH/NHLBI Special Emphasis Panel, (ZRG1 VH-B 03 M), Bethesda, MD.
2017 American Heart Association Collaborative Science Award Review Group; Dallas, TX.
2017 American Heart Association Established Investigator Award Review Group; Dallas, TX.
2018 Program Project Grant (P01HL134604) External Advisory Committee, Augusta, GA
2018-21 Councilor, American Physiological Society, Bethesda, MD.
2018 NIH/HLBI HLBP 1 Workgroup 005; Bethesda, MD.
2018 American Heart Association Established Investigator Award Review Group; Dallas, TX.
2019 NIH/HLBI HLBP 1 Workgroup; Bethesda, MD.
2019-20 American Heart Association Established Investigator Award Review Group; Dallas, TX.
2020 NIH/HLBI HLBP 1 Workgroup; Bethesda, MD.

10. Research Grants, Contracts, Awards, Projects:

Peer Review-Completed

1993-1996 Principal Investigator, Grant-In-Aid, "Chronic Role of Renal Medullary Kinins in Blood Pressure Regulation", American Heart Association-Wisconsin, Milwaukee, WI.
1993-1998 Co-Investigator, PPG, "Blood Pressure-Determinants and Controllers", Project 1 (30% Effort), NIH, Bethesda, MD.
1994-1997 Co-Investigator, RO1, "Renal V1 Vasopressin and Hypertension", (30% Effort) NIH, Bethesda, MD.
1998-2003 Project Leader, PPG, "Blood Pressure-Determinants and Controllers", Project 2 (25% Effort), National Institutes of Health, Bethesda, MD.
1997-2002 Principal Investigator, RO1, “ Renal Medullary Nitric Oxide and Blood Pressure” (25% Effort), NIH, Bethesda, MD.
2000-2004 Co-Investigator, Program for Genomic Applications (PGA), “Physiogenomics of Stressors in Derived Consomic Rats”, (10% Effort), NIH, Bethesda, MD.

- 2000-2003 Principal Investigator, “Control of Sodium Excretion and Arterial Blood Pressure by Cationic Amino Acid Transporters in the Renal Medulla”, (25% Effort), Established Investigator Award, American Heart Association, National Center, Dallas, TX.
- 2002-2007 Principal Investigator, R01, “Arterial Blood Pressure in eNOS Knockout Mice”, NIH/NIDDK, Bethesda, MD.
- 2003-2008 Project Leader, PPG, “Blood Pressure-Determinant and Controllers”, Project 2, Project 2, NIH/HLBI, Bethesda, MD.
- 2004-2009 Co-Investigator, PGA, “Physiogenomics of Stressors in Derived Consomic Rats”, NIH, Bethesda, MD.
- 2009-2011 Co-Investigator, RC2 Grant, “Mechanistic Characterization of Genes for Hypertension and Renal Disease”, NIH, Bethesda, MD.
- 2007-2012 Principal Investigator, R01, “Arginine Uptake Mechanisms Regulate Nitric Oxide in the Renal Vasculature”, NIH/NIDDK, Bethesda, MD.
- 2008-2013 Project Leader, PPG, “Blood Pressure Determinants and Controllers”, Project 2, NIH/NHLBI, Bethesda, MD.
- 2008-2013 Core Director, PPG, “Blood Pressure Determinants and Controllers”, Core B (Biochemical Core), NIH/NHLBI, Bethesda, MD.
- 2013-2018 Project Leader, PPG, “Renal Mechanisms in Blood Pressure Control”, Project 2, NIH/NHLBI, Bethesda, MD.
- 2013-2018 Core Director, PPG, “Renal Mechanisms in Blood Pressure Control”, Core B (Biochemical/Microscopy Core), NIH/NHLBI, Bethesda, MD.
- 2018-2019 Program Director/Project Director, PPG, “Renal Mechanisms in Blood Pressure Control”, NIH/NHLBI, Bethesda, MD.
- 2012-2019 Principal Investigator, R01, “Role of CD247 in Salt-Sensitive Hypertension and Renal Disease”, NIH/NIDDK, Bethesda, MD.
- 2015-2019 Principal Investigator, American Heart Association Strategically Focused Hypertension Research Center; Basic Science Project: “Epigenetic Modification of Immune Mechanisms in Salt-Sensitive Hypertension and Renal Damage”, AHA-National; Dallas, TX
- 2013-2018 Co-Investigator (Salary Support), U01 (Medhora), “Development of Lisinopril for post-exposure mitigation effects from RAD”; NIH/NIAID, Bethesda, MD.
- 2013-2019 Co-Investigator (Salary Support), R24 (Dwinell), “Gene Targeted Rat Resource for the Study of Complex Disease”, NIH/NHLBI, Bethesda, MD.
- 2016-2019 Co-Investigator (Salary Support), R03 (Hillard), “Circulating Endocannabinoids in Rats: Assay Development and Validation”, NIH/NIDA, Bethesda, MD

Peer Review-Current

- 2018-2021 Project Director, PPG, “Renal Mechanisms in Blood Pressure Control”, NIH/NHLBI, Bethesda, MD.
- 2018-2022 Principal Investigator (Multi-PI R01-Cowley/Mattson), “Mechanisms of Renal Immune Cell Infiltration in Salt-Sensitive Hypertension”, NIH/NHLBI, Bethesda, MD

Industrial Contracts/Awards

- 2004-2005 Principal Investigator, “Comparison of Renoprotective Effects of Norvasc and Verelan PM in Dahl Salt- Sensitive Rats”, Schwarz Pharma, Milwaukee, WI.

11. Invited Lectures/Workshops/Presentations/Site Visits:

Local and Regional

- "Influence of Angiotensin II on the Regulation of Intrarenal Blood Flow Distribution and Pressure Natriuresis in the Rat", Dissertation Defense, Medical College of Wisconsin, November, 1989.
- "Renal Medullary Infusion of a Nitric Oxide Synthase Inhibitor Produces Hypertension", Oral Presentation, CVRC/Physiology Joint Hypertension Research Conference, Milwaukee, WI; August, 1992.
- "The Renal Medulla and Blood Pressure Control", Departmental Seminar, Department of Physiology, Medical College of Wisconsin; February, 1993.
- "Renal Medullary Nitric Oxide", Departmental Seminar, Department of Physiology, Medical College of Wisconsin; March, 1995.
- "Nitric Oxide Synthase, Cellular L-Arginine Uptake, and Arterial Blood Pressure Control", Departmental Seminar, Medical College of Wisconsin, Milwaukee, WI; January, 2000.
- "Research Assistant Professorships: A Stepping Stone in Science", Speaker, Graduate Student Forum, Medical College of Wisconsin, Milwaukee, WI; February, 2000.
- Facilitator: “Biomolecular Advancement in Cardiovascular Research”, MSRTP Summer Program Graduation Luncheon, Office of Multicultural Student Affairs, MCW; August, 2001
- “Importance of Cellular L-Arginine Uptake for Nitric Oxide Production in the Kidney”, Seminar, Dept. of Physiology, Medical College of Wisconsin, Milwaukee, WI; February, 2002.
- “Physiological Approaches to Hypertension”, Speaker, Animal Resource Center, MCW, Milwaukee, WI; April, 2002.
- “Renal High-Throughput Physiology”, Speaker, Workshop in Physiological Genomics of Consomic Rats, Physgen, Milwaukee, WI; August, 2002.
- “Physiological Sources, Regulation, and Importance of Nitric Oxide in the Kidney”, Seminar, Dept. of Physiology, Medical College of Wisconsin, Milwaukee, WI; November, 2003.
- “Methods to Measure Arterial Blood Pressure in Mice”, Speaker, 1st Wisconsin-Based

Telemetry Users Group Meeting-Sponsored by Data Sciences International. Medical College of Wisconsin, Milwaukee, WI; June, 2004.

- “L-Arginine, Nitric Oxide, and Arterial Blood Pressure”, Seminar, Dept. of Physiology, Medical College of Wisconsin, Milwaukee, WI; March, 2005.
- “Importance of Cellular L-Arginine Uptake in the Regulation of Kidney Function and Arterial Blood Pressure”, Seminar, Division of Nephrology, Froedtert Hospital, Milwaukee, WI; October, 2005.
- “Arginine Uptake and Endothelial Function”, Grand Rounds, Division of Cardiology, Froedtert Hospital, Milwaukee, WI; January, 2006.
- “Renal Infiltration of Immune Cells Mediates Sodium-Sensitive Hypertension”, Seminar, Division of Nephrology, Froedtert Hospital, Milwaukee, WI; May 2007.
- “Infiltration of Immune Cells into the Kidney Mediates Sodium-Sensitive Hypertension in Rats”, Seminar, The Blood Research Institute, Milwaukee, WI; October, 2007.
- “Protein-Sensitive Hypertension and Renal Disease in Dahl SS Rats”, Seminar, Dept. of Physiology, Medical College of Wisconsin, Milwaukee, WI; January, 2008.
- “Renal Infiltration of Immune Cells Mediates Sodium-Sensitive Hypertension”, Work-in-Progress Seminar, Cardiovascular Research and Kidney Disease Center, MCW, Milwaukee, WI; May, 2008.
- “The Role of the Kidney in Health and Disease”, Faculty, Apprenticeship in Medicine (AIM) Program for High School Students of Diverse Backgrounds, MCW, Milwaukee, WI, July 2008-2013.
- “Long-Term Consequences of Acute Kidney Injury”, Invited Speaker, The Solid Organ Transplant Center, Froedtert Hospital, Medical College of Wisconsin, March 2010.
- “Environmental Factors and Immune Mechanisms in Salt-Sensitive Hypertension and Renal Disease”, Dept. of Physiology, Medical College of Wisconsin, Milwaukee, WI; January, 2011.
- “Infiltrating Immune Cells in the Kidney Amplify Sodium-Sensitive Hypertension and Renal Injury”, Invited Speaker, Division of Nephrology, MCW/Froedtert Hospital, Milwaukee, WI; September, 2011.
- “T Cells, Hypertension, and Kidney Injury”, Seminar, Dept. of Physiology, Medical College of Wisconsin, Milwaukee, WI; December, 2012.
- Invited Speaker, “T Cells, Hypertension, and Renal Injury”, Children’s Research Institute, Children’s Hospital of Wisconsin, Milwaukee, WI; January, 2013.
- Speaker, “Methods in Grant Preparation”; Clinical & Translational Science Institute, Medical College of Wisconsin, Milwaukee, WI; 2013-2018.
- Speaker, “DOCERI: A Tool for Interactive Teaching in the Discovery Classroom”, Media & Production Services/Discovery Curriculum Technology Open House, Medical College of Wisconsin, Milwaukee, WI; June and July, 2013.
- Panelist, “Mid-Career Workshop”, Faculty Career Development Committee, Medical College of Wisconsin, Milwaukee, WI; March 2014.
- Panelist, “Exploring Effective Teaching Techniques in the Discovery Curriculum”, Women’s Faculty Council, MCW; June, 2014.
- Speaker, “Immune Mechanisms Amplify Sodium-Sensitive Hypertension and Renal Injury”,

Division of Nephrology, Dept. of Medicine, Medical College of Wisconsin, Milwaukee, WI; September 2014.

- Panelist, “Is Professionalism Caught or Taught?” Society of Teaching Scholars, MCW; October, 2014.
- Speaker, “Engaging the Learner in a Large Classroom”, in Innovations in Medical Education Conference, MCW; April, 2015.
- “Hypertension: An Immune Disease? Work-in-Progress Seminar, Immunology Interest Group, MCW, Milwaukee, WI; January, 2016.
- “Is Hypertension an Immune Disease?” Seminar, Department of Physiology, MCW, Milwaukee, WI; February, 2016.
- Speaker, “An Approach for Interactive Teaching”, MCW Society of Teaching Scholars. Milwaukee, WI; September, 2016.
- Panelist, “Hiring & Managing People”, Advance from Postdoc to Faculty Program, MCW Office of Postdoctoral Education. March, 2017.
- Speaker, “Epigenomics of Hypertension”, Board of Directors, American Heart Association Milwaukee Affiliate, Milwaukee, WI; April, 2017.
- Panelist, Knowledge Now: Flipping the Classroom Panel Discussion, MCW Office of Educational Improvement, September, 2017.
- Speaker, “Sodium-Independent Dietary Components Modify Sodium-Dependent Hypertension and Kidney Disease”, Division of Nephrology, Dept. of Medicine, Medical College of Wisconsin, Milwaukee, WI; February, 2018.
- Speaker, “Immunity and Hypertension”, Medical College of Wisconsin, Department of Physiology; Milwaukee, WI; June, 2018.
- Speaker, “Renal Mechanisms in Blood Pressure Control”, MCW Cardiovascular Center Annual Research Retreat; Milwaukee, WI; October, 2018.
- Speaker, “Environment and Hypertension”, American Heart Association Milwaukee Board of Directors, Milwaukee, WI; April, 2019.
- Speaker, “Immunity, Hypertension, and Renal End-Organ Damage”, Vascular Biology Center, Medical College of Georgia, Augusta University; October, 2019.
- Speaker, “Immunity, Environment, and Salt: Modifiers of Hypertension and Kidney Damage”, Department of Cell Biology and Anatomy, Medical College of Georgia, Augusta University; November, 2019.
- Speaker, “Salt-Sensitive Hypertension and Kidney Damage, Georgia Research Alliance Annual Meeting, Atlanta, GA; January, 2020.
- Speaker, “Environmental Influences on Salt-Sensitive Hypertension and End-Organ Damage”, Mechanisms of Disease Seminar, Augusta University/University of Georgia Medical Partnership; February, 2020.
- Speaker, “Environmental Influences on Salt-Sensitive Hypertension and End-Organ Damage”, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta University; February, 2020.
- Speaker, “Immune Mechanisms in Salt-Sensitive Hypertension and End-Organ Damage”, Department of Physiology, Medical College of Georgia, Augusta University; April, 2020.

National and International

- "Effects of Captopril and Angiotensin II on Papillary Blood Flow in Rats", Oral Presentation, FASEB, Las Vegas, NV, 1988.
- "Angiotensin II and Kinins Regulate Renal Blood Flow and Pressure Natriuresis in the Rat", Seminar, Hypertension Division, Henry Ford Hospital; Detroit, MI; July, 1989.
- "Kinin Actions on Papillary Blood Flow and Renal Excretory Function", Oral Presentation, Council for High Blood Pressure Research, Cleveland, OH; September, 1992.
- "Implanted Optical Fibers for Laser-Doppler Flowmetry", Oral Presentation, Experimental Biology Manufacturers Symposium (PERIMED KB), New Orleans, LA, April, 1993.
- "Role of Nitric Oxide in Control of Renal Medullary Circulation", Invited Speaker, Experimental Biology, Atlanta, GA; April, 1995.
- "Implanted Optical Fibers for Measurement of Cortical and Medullary Blood Flow by Laser Doppler Flowmetry: At Last a Valid Method?" Invited Speaker, FASEB Summer Research Conference- Renal Hemodynamics: Vascular Biology of the Renal Circulation. Saxton's River, VT; June, 1995.
- "Influence of Renal Medullary Blood Flow on Sodium Balance and Blood Pressure", Invited Speaker, European Renal Association XXXIInd Congress; Athens, Greece; June, 1995.
- "Renal Medullary Nitric Oxide Synthase Activity in Rats on Low and High Salt Diets", Oral Presentation, Experimental Biology, Washington, D.C.; April, 1996.
- "Renal Medullary Nitric Oxide and Blood Pressure", Seminar, Abbott Laboratories, Abbott Park, IL; July, 1996.
- "Role of Renal Medullary nNOS and iNOS in the Control of Renal Function and Arterial Pressure", Invited Speaker, IBC Conference- Molecular Targets for the Treatment of Chronic Renal Failure. Boston, MA; March, 1997.
- "Role of Different Nitric Oxide Synthase Isoforms in the Control of Renal Medullary Function", Invited Speaker, FASEB Summer Research Conference- Renal Hemodynamics: Vascular Biology of the Renal Circulation. Saxton's River, VT; June, 1998.
- "Nitric Oxide Synthase in the Renal Medulla Regulates Sodium Excretion and Blood Pressure", Oral Presentation, APS Conference- Endothelial Regulation of Vascular Tone: Molecular to Integrative Physiology. Augusta, GA; September, 1998.
- Symposium Chair, Renal Circulation, APS Conference: Endothelial Regulation of Vascular Tone: Molecular to Integrative Physiology. Augusta, GA; September, 1998.
- "Role of Kidneys in Blood Pressure Regulation: Studies in Conscious Mice", Invited Speaker, Jackson Laboratory. Bar Harbor, ME; January, 1999.
- "Control of Sodium Excretion and Arterial Blood Pressure by Nitric Oxide Synthase in the Renal Medulla", Invited Speaker, Division of Nephrology, Department of Medicine, Vanderbilt University, Nashville, TN; June, 1999.
- "Control of Arterial Blood Pressure by Nitric Oxide Synthase in the Renal Medulla", Invited Speaker, *Acta Physiologica Scandinavica* Symposium: Vasodilators in the Development of Hypertension, Uppsala, Sweden; June, 1999.
- "Control of Arterial Blood Pressure by L-Arginine Uptake and Nitric Oxide Synthase in the Renal Medulla", Invited Speaker, Vascular Biology Center, Medical College of Georgia, Augusta, GA;

June, 2000.

- “Nitric Oxide in the Renal Medulla: Importance in Fluid and Electrolyte Homeostasis and Blood Pressure Regulation”, Featured Speaker, Experimental Biology, Orlando, FL; April, 2001.
- “Study of Physiological Function in Genetically Altered Mice: Approaches for Evaluating Fluid and Electrolyte Balance”, Invited Speaker, Experimental Biology, Orlando, FL; April, 2001.
- “Production and Physiological Effects of Nitric Oxide in the Renal Medulla are Dependent on Cellular L-Arginine Uptake”, Invited Speaker, FASEB Summer Research Conference-Renal Circulatory Hemodynamics. Saxton's River, VT; June, 2001.
- Workshop Co-Chair and Co-Organizer: Integrative Approaches for the Study of Physiological Function in Genetically Altered Mice, Experimental Biology, Orlando, FL; April, 2001.
- “Physiological and Genomic Approaches to Study Hypertension”, Visiting Speaker, Tougaloo College, Jackson, MS; March, 2002.
- “Chromosomal Substitution Reveals Genes of Hypertension and Renal Disease on Chromosomes 13 and/or 16 of the Dahl SS rat”. Oral Presentation, Experimental Biology, New Orleans, LA; April, 2002.
- "Physiological Importance of Cellular L-Arginine Uptake in the Renal Medulla", Invited Speaker, Department of Physiology, School of Medicine, West Virginia University, Morgantown, WV; November, 2002.
- "Parental and Developmental Influence of Purified or Grain-Based Diets on Hypertension and Renal Disease in Dahl Salt-Sensitive (SS/Mcw) Rats", Oral Presentation, Experimental Biology, San Diego, CA; April, 2003.
- Session Chairman: Insights on Renal Function and Blood Pressure Control from Genetically Manipulated Animals, Experimental Biology, San Diego, CA; April, 2003.
- "Substitution of Chromosome 1 Ameliorates L-NAME-Hypertension and Proteinuria in the Fawn Hooded Hypertensive Rat", Oral Presentation, XVth Scientific Meeting of the Inter American Society of Hypertension, San Antonio, TX; April, 2003.
- Poster Session Chair: Kidney and Hypertension III, XVth Scientific Meeting of the Inter-American Society of Hypertension, San Antonio, TX; April, 2003.
- “Chromosomal Substitution Reveals Genes of Hypertension and/or Renal Disease on Chromosomes 6, 18 and 20 of the Dahl SS (SS/Mcw) Rat”. Oral Presentation, Council for High Blood Pressure Research, Washington DC; September, 2003.
- Session Co-Chair: Session 14.0 Free Communications, Understanding Renal and Cardiovascular Function through Physiological Genomics. Augusta, GA; October, 2003.
- “Influence of Sodium Intake on Arterial Blood Pressure in eNOS Null Mutant, nNOS Null Mutant and Wild-Type Mice”. Oral Presentation, APS Conference: Understanding Renal and Cardiovascular Function through Physiological Genomics. Augusta, GA; October, 2003.
- “Substitution of Chromosome Y Attenuates Hypertension and Renal Disease in the Dahl Salt-Sensitive (SS/Mcw) Rat”. Oral Presentation, Experimental Biology, Washington, D.C.; April, 2004.
- Session Co-Chair: Session VA, Role of Autocoid Factors in the Regulation of Renal Function and Arterial Pressure. FASEB Summer Research Conference- Renal Microcirculatory and Tubular Dynamics: Molecules to Man; Callaway Gardens, Pine Mountain, GA; June 2004.

- “Immune Suppression Attenuates Hypertension and Renal Disease in the Dahl Salt-Sensitive Rat”. Oral Presentation, Council for High Blood Pressure Research, Washington DC; September, 2005.
- Site Visit Team: National Institutes of Health/National Center for Research Resources. Stanford University-General Clinical Research Center, Palo Alto, CA; November, 2005.
- “Influence of L-Arginine Uptake on Endothelial and Epithelial Function: Mechanisms Regulating Arterial Blood Pressure”. Distinguished Lecturer in Integrative Physiology, University of Saskatchewan, Saskatoon, SK, Canada; March, 2006.
- Co-Chairman, Session X: Renal Mechanisms of Hypertension. Council for High Blood Pressure Research Annual Meeting, San Antonio, TX; October, 2006.
- “Importance of Cellular L-Arginine Uptake in the Regulation of Endothelial and Epithelial Nitric Oxide Production, Renal Function, and Arterial Blood Pressure”, Invited Speaker, Department of Cellular and Integrative Physiology, School of Medicine, Indiana University, Indianapolis, IN; November, 2006.
- “L-Arginine Transport Regulates Renal Epithelial and Endothelial Cell Function”, Invited Speaker, Department of Pharmacology and Toxicology, Virginia Commonwealth University, Richmond, VA; February, 2007.
- “Rat Consomic Panels and ENU Mutagenesis”, Faculty/Speaker, NIH Program for Genomic Applications Traveling Tutorial, University of Maryland Medical School, Baltimore, MD; April, 2007.
- Co-Chairman, Session 12: “Hot Topic”, FASEB Summer Research Conference, Renal Hemodynamics: Biomolecular Control Mechanisms Integrating Vascular and Tubular Function. Saxtons River, VT; July, 2007.
- “Chromosome Mapping of Dahl Salt-Sensitive Hypertension and Renal Disease in Male and Female Rats”, Oral Presentation, Council for High Blood Pressure Research, Tucson, AZ; September, 2007.
- Session Co-Chairman, “APS Water and Electrolyte Homeostasis Section Trainee Awards Symposium”, Experimental Biology. San Diego, CA; April, 2008.
- “Rat Consomic Panels and ENU Mutagenesis”, Faculty/Speaker, NIH Program for Genomic Applications Traveling Tutorial, Case Western Reserve University, Cleveland, OH; April, 2008.
- “Rat Consomic Panels and ENU Mutagenesis”, Faculty, American Thoracic Society Postgraduate Course: Genomic Tools and Resources for Phenotype Analysis. Toronto, Ontario, Canada; May 2008.
- “Sodium-Sensitive Hypertension Following Recovery from Renal Ischemia-Reperfusion (I/R) Injury is Mediated by Altered Renal Hemodynamics”, Oral Presentation, Council for High Blood Pressure Research, Atlanta, GA; September, 2008.
- “Infiltration of Immune Cells Mediates Sodium-Sensitive Hypertension and Renal Injury in Dahl Rats”, Invited Speaker, Vascular Biology Center, Medical College of Georgia, Augusta, GA; March 2009.
- “Cellular L-Arginine Uptake Mechanisms Control Nitric Oxide (NO) Production and NO-Dependent Function in the Kidney”, Invited Speaker, FASEB Summer Research Conference:

Renal Hemodynamics. Saxtons River, VT; June, 2010.

- “Immune Cells in the Kidney Mediate Sodium-Sensitive Hypertension and Renal Injury”, Invited Speaker, Department of Physiology, University of Oklahoma Medical School, Oklahoma City, OK; July 2010.
- “Immune Cells Mediate Sodium-Sensitive Hypertension and Renal Injury in Rats”, Invited Speaker, APS Conference: Inflammation, Immunity, and Cardiovascular Disease; Westminster, CO; August, 2010.
- Co-Chairman, Session 1: Inflammation, Immunity and Hypertension. Council for High Blood Pressure Research, Washington, DC; October, 2010.
- “T Cells, Hypertension, and Kidney Injury”, Invited Speaker, American Heart Association Scientific Sessions; Chicago, IL; November, 2010.
- “Renal Infiltration of Immune Cells Mediates Sodium-Sensitive Hypertension and Renal Injury”, Invited Speaker, Department of Physiology, Louisiana State University Health Sciences Center; New Orleans, LA; January, 2011.
- “Cellular L-Arginine Uptake Mechanisms in the Control of Nitric Oxide Production, Renal Function, and Arterial Blood Pressure”, Invited Speaker, Department of Physiology, Tulane University Medical School; New Orleans, LA; January, 2011.
- Chair and Organizer, Featured Topic: Hemodynamic and Inflammatory Alterations in Hypertension and Renal Disease. Experimental Biology; Washington DC; April 2011.
- “Renal Infiltration of Immune Cells Mediates Salt-Sensitive Hypertension and Renal Disease”, Invited Speaker, Experimental Biology; Washington, DC; April, 2011.
- “Importance of Immune Cells in Hypertension and Renal Injury”, Invited Speaker, Department of Physiology, University of Mississippi Medical Center; Jackson, MS; May, 2011.
- “Novel Mechanisms of Renal Injury in Hypertension”, Invited Presentation, American Society of Hypertension Meeting; New York, NY; May, 2011.
- Chair and Organizer, Symposium: Immune Mechanisms, Council for High Blood Pressure Research, Orlando, FL; September, 2011.
- “T-Lymphocyte Infiltration in the Kidney Exaggerates Salt-Sensitive Hypertension and Renal Disease”, Invited Speaker, Council for High Blood Pressure Research, Orlando, FL; September, 2011.
- Co-Chair, Oral Session VIIA: Inflammation and Immunity, Council for High Blood Pressure Research, Orlando, FL; September, 2011.
- “Genetic Mutation of Recombination Activating Gene 1 (RAG1) in Dahl Salt-Sensitive (SS) Rats Attenuates Hypertension and Renal Damage”. Oral Presentation, Council for High Blood Pressure Research, Orlando, FL; September, 2011.
- “Role of Cellular L-Arginine Uptake in Nitric Oxide Production and Renal Blood Flow”, Invited Speaker, American Society of Nephrology: Philadelphia, PA; November, 2011.
- Discussion Leader, Oral Session: Overlapping, Interacting, Crossreacting: The Immune and Renin Angiotensin Systems. Gordon Research Conference: Emerging and Evolving Paradigms in the Renin Angiotensin System; Ventura, CA; February, 2012.
- “Infiltrating Immune Cells in the Kidney Amplify Sodium-Sensitive Hypertension and Renal Injury”, Invited Speaker, Aab Cardiovascular Research Institute, University of Rochester;

Rochester, NY; April 2012.

- “Genetic Deletion of CD247 in Dahl Salt-Sensitive (SS) Rats Attenuates Hypertension and Renal Damage”. Oral Presentation, Council for High Blood Pressure Research, Washington, DC; September, 2012.
- Invited Speaker, “Infiltrating Immune Cells in the Kidney Amplify Sodium-Sensitive Hypertension and Renal Injury”, 2012 UPS Conference: 2012-Oxidative Stress and the Immune System: Players in Health and Cardiovascular Disease, Ribeiro Preto, Brazil; November, 2012.
- Invited Speaker, “Infiltrating Immune Cells in the Kidney Amplify Sodium-Sensitive Hypertension and Renal Injury”, UNICAMP, National Center for Biology, Campinas, Brazil; November 2012.
- Invited Speaker, “Infiltrating Immune Cells in the Kidney Amplify Sodium-Sensitive Hypertension and Renal Injury”, Heart Institute, University of Sao Paulo School of Medicine, Sao Paulo, Brazil; November, 2012.
- Invited Speaker, “The Role of T Lymphocytes in Salt-Sensitive Hypertension and Renal Damage”, Department of Cell Biology and Physiology, University of North Carolina, Chapel Hill, NC; February, 2013.
- Chair and Organizer, Symposium: “Physiological Genomic Approaches in Hypertension Research”, Experimental Biology, Boston, MA; April, 2013.
- Invited Speaker, “The Role of T Lymphocytes in Salt-Sensitive Hypertension and Renal Damage”, FASEB Summer Research Conference: Renal Hemodynamics, Integrating with the Nephron and Beyond. Saxtons River, VT; June, 2013.
- Invited Speaker, “L-Arginine, Nitric Oxide, and Salt-Sensitive Hypertension”, American Society of Nephrology: Atlanta, GA; November, 2013.
- Invited Speaker, “Infiltrating Immune Cells in the Kidney Amplify Sodium-Sensitive Hypertension and Renal Injury”. Amgen Cardio-Renal Seminar, Division of Nephrology, Department of Medicine, McMaster University, Hamilton, Ontario, Canada; February, 2014.
- Invited Speaker, “Inflammation and the Kidney”, American Society of Hypertension Meeting; New York, NY; May, 2014.
- Invited Speaker, “Immune Cells in the Kidney Amplify Sodium-Sensitive Hypertension and Renal Disease”, NIH/NHLBI Working Group, “Salt in Human Health and Sickness: Building on the Current Scientific Evidence”; Bethesda, MD; May, 2014.
- Chair, Section II: Hypertension, Renal Physiology Satellite Symposium to 1st PanAmerican Physiological Sciences Meeting; Heart Institute, University of Sao Paulo School of Medicine, Sao Paulo, Brazil; August, 2014.
- Invited Speaker, “T Cells, Hypertension, and Kidney Injury”, Renal Physiology Satellite Symposium to 1st PanAmerican Congress of Physiological Sciences Meeting; Heart Institute, University of Sao Paulo School of Medicine, Sao Paulo, Brazil; August, 2014.
- Invited Speaker, “Cellular L-Arginine Uptake Mechanisms in the Control of Nitric Oxide Production, Renal Function, and Arterial Blood Pressure”, Symposium #1: Regulation of Renal Function under Physiological and Pathophysiological Conditions; 1st PanAmerican Congress of Physiological Sciences: Physiology without Borders; Iguassu Falls, Brazil; August, 2014.

- Invited Speaker, “Immune Cells and Salt-Sensitive Hypertension”, Department of Pharmacology and Toxicology, University of Mississippi Medical Center; Jackson, MS; September, 2014.
- Invited Speaker, “Immune Cells and Salt-Sensitive Hypertension”, American Society of Nephrology; Philadelphia, PA; November, 2014.
- Invited Speaker, “Immunity, Salt-Sensitive Hypertension, and Renal Damage”, Department of Biomedical Sciences, University of Minnesota Medical School Duluth; Duluth, MN; January, 2015.
- Invited Speaker, “Immunity, Salt-Sensitive Hypertension, and End-Organ Damage”, Department of Pharmacology and Toxicology, LSU Health Sciences Center; New Orleans, LA; May, 2015.
- Co-Chair, Oral Session IX: Inflammation, Immunity, and Cytokines 1, Hypertension 2015 Scientific Sessions; American Heart Association High Blood Pressure Council, Washington, DC; September, 2015.
- Invited Speaker, “Immune Cells in the Kidney Amplify Salt-Sensitive Hypertension”, American Heart Association Scientific Sessions, Orlando, FL; November, 2015.
- Invited Speaker, “Is Hypertension an Immune Disease?” Department of Physiology, Texas A&M Medical Center; College Station, TX; February, 2016.
- “Epigenetic Modifications of Immune Mechanisms in Salt-Sensitive Hypertension” American Heart Association Strategically-Focused Research Network Scientific Meeting, Phoenix, AZ; March, 2016.
- Invited Speaker, “Insights into the Genetics of Hypertension from the Dahl SS Rat”, FASEB Science Research Conference: Renal Hemodynamics and Cardiovascular Function in Health and Disease. Big Sky, MT; June, 2016.
- Chair and Organizer, Symposium VIII: “Inflammation, Hypertension and End-Organ Damage”, 2016 APS Conference-Inflammation, Immunity, and Cardiovascular Disease, Denver, CO; August 2016.
- Invited Speaker, “Renal Immune Cells and Hypertension”, 2016 APS Conference-Inflammation, Immunity, and Cardiovascular Disease, Denver, CO; August 2016.
- Symposium Organizer, “Twenty Years of Physiological Genomics”, American Physiological Society History of Physiology Section, Experimental Biology 2017; Chicago, IL; April, 2017.
- Invited Speaker, “Inflammation in the Kidney in Hypertension”, American Heart Association Scientific Sessions, Anaheim, CA; November, 2017.
- Invited Speaker, “Diet, Inflammation, and Hypertension”, American Physiological Society Water and Electrolyte Homeostasis Section, Ernest H Starling Lectureship, Experimental Biology 2018; San Diego, CA; April, 2018.
- Invited Speaker, “T Cells, Salt-Sensitive Hypertension, and End-Organ Injury”, Medical College of Georgia at Augusta University, Mini-Symposium: Immune System and Inflammation as Modulators of Physiological Function in Health and Disease; Augusta, GA; May, 2018.
- Session Chair, “Inflammation Immunity and Cytokines II”, 2018 AHA Joint Hypertension

2018 Scientific Sessions, Chicago, IL; September, 2018.

- Invited Speaker, “Immune Mechanisms in Salt-Sensitive Hypertension and Kidney Damage”, Abboud Cardiovascular Center, University of Iowa, Iowa City, IA; September, 2018.
- Invited Speaker, “Effects of Dietary Protein Source on Hypertension, Renal Injury, and Renal Inflammation”, American Heart Association Scientific Sessions, Chicago, IL; November, 2018.
- Invited Speaker, “Immunity, Hypertension, and Renal End-Organ Damage”, Medical College of Georgia at Augusta University; Augusta, GA; November, 2018.
- Invited Speaker, “Immunity, Salt-Sensitive Hypertension, and Renal End-Organ Damage”, University of Arkansas for Medical Sciences; Little Rock, AR; December, 2018.
- Invited Speaker, “Immune Mechanisms of Renal Injury in Salt-Sensitive Hypertension”, APS Conference: Control of Renal Function in Health and Disease; Charlottesville, VA; June, 2019.
- Panelist, "How to Choose a Mentor/Mentee at the Graduate Student, Postdoctoral and Early Career Level", Trainee Advocacy Committee of the AHA Council on Hypertension; New Orleans, LA; September, 2019.
- Speaker, “Epigenetic Modifications of Immune Mechanisms in Salt-Sensitive Hypertension and Renal Damage”, Basic Science Presentation for the Medical College of Wisconsin Strategically Focused Hypertension Research Center at the American Heart Association SFRN Annual Meeting; Baltimore, MD; September, 2019.
- Speaker, “Physiology at MCG-AU”, Annual Meeting of the Association of Chairs of Departments of Physiology; Antigua, Guatemala; December, 2019.
- Invited Speaker, “Environmental Influences on Salt-Sensitive Hypertension and End-Organ Damage”, Vascular Biology/Hypertension Lecture Series, Division of Clinical Pharmacology, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN; March, 2020.
- Panelist, Career Development Roundtable (Work-Life Continuum), Basic Science Forum, American Society of Nephrology Annual Meeting; October, 2020.

12. Institutional Service and Committees:

1998-19	Member, MCW Physiology Graduate Admissions Committee
1998-01	Coordinator, MCW Physiology Seminar Program
1999-00	Faculty Advisor to MCW Graduate Student Association
1999-00	Member, MCW Animal Resource Center Faculty Advisory Committee
2001-03	Member, MCW Curriculum and Program Committee of Graduate Studies Council
2001-04	Member, MCW Institutional Animal Care and Use Committee
2002-05	MCW Faculty Council—Physiology Department Representative
2002-04	Secretary, MCW Institutional Animal Care and Use Committee
2004-2016	Chair, Steering Committee, MCW Multicultural Summer Research Training Program
2006-07	MCW Institutional Animal Care and Use Committee Alternate Member
2007-8	Member, MCW Graduate Faculty Credentials Committee
2007-8	Director, MCW Animal Research Education and Compliance
2007-8	Member, MCW Biomedical Resource Center Advisory Committee

2007-8 Member, MCW Graduate School *ad hoc* Teaching Certificate Committee
 2008-18 Director, Biochemical Core Laboratory, MCW Department of Physiology
 2009 Member, MCW Research Day Graduate Student Award Committee
 2009-10 Member, Integration Council, MCW Academic Affairs
 2008 Member, MCW Clinical Translational Science Institute Grant Proposal Review Group
 2010-12 Member, MCW Core Laboratory Committee
 2009 Member, MCW Research Day Graduate Student Award Committee
 2010-16 Vice President, President, Past-President: MCW Faculty Council
 2010-15 Member, MCW Women's Health Research Program Committee
 2011-15 Member, MCW Executive Committee of the Faculty
 2010 Member, Medical Student Honors in Research Committee
 2011-13 Member, M1/M2 Workgroup, New Curriculum Steering Committee
 2012 Member, *Ad hoc* Research Misconduct Committee, MCW Graduate School
 2012-13 Member, Fundamentals of Pathologic Processes Expert Panel, MCW Discovery Curriculum
 2011-14 Lead, MCW Discovery Curriculum Faculty Development Workgroup
 2012 Member, MCW Community Medical Education Program Core Team
 2012-13 Member, Search Committee, MCW Vice President of Institutional Advancement
 2012-15 Member, MCW Institutional Finance Advisory Committee
 2012-13 Member, *Ad hoc* Dissertation Investigation Committee, MCW
 2012-14 Member, Search Committee, Community Medical Education Program Campus Dean
 2013 Member, MCW Research Strategy Cardiovascular Work Group
 2013 Member, Task Force on the Library of the Future
 2013-16 Member, MCW Graduate School Faculty Credentials Committee
 2013-14 Chair, MCW Higher Learning Commission Accreditation Quality Initiative Committee
 2014-15 Chair/Co-Chair, MCW Research Council
 2014-15 Member, MCW Institutional Compensation Committee
 2015 Chair, MCW Presidents Faculty Scholar Awards Review Committee
 2014-15 Co-Chair, Advancing Healthier Wisconsin Responsive Grant Award Review Committee
 2014-15 Chair, Technology Evaluation Committee, MCW Office of Technology Development
 2014-15 MCW Institutional Official (IO)
 2015 Chair, MCW Bridge Funding Committee
 2015-18 Member, MCW Rank & Tenure (Medical School Rank) Committee
 2015-16 Graduate, MCW/UWM Leadership Academy
 2016-18 Member, Technology Innovation Council, Office of Technology Development, MCW
 2016 Member, Distinguished Service Award Committee, MCW
 2016-19 Member, MCW Interdisciplinary Graduate Program Subcommittee on Curriculum Change
 2017-19 Member, MCW Faculty Council Nominating Committee
 2017-19 Member, MCW Office of Research *Ad Hoc* Space Committee
 2017-19 Member, BRC Advisory Committee
 2017-19 Member, Kern Institute

2017-19 Member, MCW University Rank & Tenure Committee
2017-19 Chair, MCW Graduate School Rank Committee
2018 Co-Chair, MCW CVC Pre-PPG Review Committee
2018 Member, Ad hoc Research Misconduct Committee, MCW Office of
Research/Corporate Compliance
2018 Member, Proposal Review Committee, Advancing a Healthier Wisconsin Endowment
Research and Education Program
2020 Member, Research Workgroup, Augusta University Campus Reopening Plan
2020-23 Secretary and Parliamentarian, Board of Directors, Augusta University Research
Institute
2020 Co-Chair, COVID-19 Health and Safety Research Advisory Committee
2020 Member, Augusta University Graduate School Dean Search Committee
2020 Member, Augusta Research Master Plan Committee
2020 Member, MCG Curriculum Oversight Committee

13. Teaching Activities

Medical Student/Fellow Education

1996-10	Laboratory and Small Group Instructor, Medical Physiology (M-1), Medical College of Wisconsin, Milwaukee, WI
1996-2017	Lecturer, Medical Physiology (M-1), Medical College of Wisconsin
2000-13	Instructor, Pediatric Medical Problem Solving, M-4 Elective, MCW
2011	Instructor, Pilot Integrated Curriculum (PIC); Cardiovascular, Respiratory, and Renal Module (CVRR), MCW
2011	Instructor, MCW Longitudinal Patient Panel (LEAP)
2013-19	Instructor, Clinical & Translational Science Institute; Methods in Grant Preparation
2013	Instructor, Foundations of Clinical Medicine (M-1), MCW
2014	Instructor, M2 Symptoms Unit, “Electrolyte Abnormalities”, MCW
2015-19	Instructor, M2 Symptoms Unit, “Weakness”, MCW
2019-20	Instructor, M1 Simulation Laboratory, MCG-AU
2020	Instructor, M1 Simulation Laboratory, MCG-AU

Graduate Student Education

1995	Instructor, Advanced Renal Physiology, Department of Physiology, MCW
1998-00	Course Director, MCW Graduate Student Seminar, Department of Physiology, MCW
1998	Course Director and Lecturer, Advanced Renal Physiology, Department of Physiology
2001-07	Instructor, Advanced Physiology (Renal Physiology), Department of Physiology, MCW
2007-19	Instructor, Physiological Genomics, Department of Physiology, MCW
2008-13	Course Director and Lecturer, Advanced Renal Physiology, Department of Physiology (received an “Outstanding” course rating by the Graduate School Curriculum Evaluation Committee in 2009, 2010, 2011 and 2012), MCW
2015-18	Lecturer, Advanced Renal Physiology, Department of Physiology, MCW

14. Students, Residents, Fellows, Faculty Mentored

1995	Amadou Camera, Ph.D., Dissertation Committee Member
1997	Jian Jiang, Ph.D., Dissertation Committee Member
1998	Kathy Gauthier Rein, Ph.D., Dissertation Committee Member
1998	Frank Park, Ph.D., Dissertation Committee Member
1999-2001	Feng Wu, M.D., Ph.D.; Postdoctoral Fellow
2001	Marcelo Nobrega, M.D., Ph.D.; Dissertation Committee Member
2001	Frank Sylvester, Ph.D.; Dissertation Committee Member
2001-2003	Masao Kakoki, M.D., Ph.D.; Postdoctoral Fellow
2002-2004	Tewabech Zewde, Ph.D.; Postdoctoral Fellow
2001	Michelle Vanderhaven, M.D., M.S.; Thesis Advisor
2002	Gary Cohen, M.D., M.S.; Thesis Advisor

2002 Brian Cholewa, Ph.D.; Dissertation Advisor
 2002 Melissa Morse, Ph.D.; Dissertation Committee Member
 2002 Annette Dahly, Ph.D.; Dissertation Committee Member
 2003 Matthias Riess, M.D., Ph.D.; Dissertation Committee Member
 2003 Shane Phillips, Ph.D.; Dissertation Committee Member
 2004 Norman Taylor, Ph.D., Dissertation Committee Member
 2004 Nancy Schlick, Ph.D., Dissertation Committee Member
 2004 Lisa M. Duke, Ph.D., Thesis Examiner, Monash University, Melbourne, Australia
 2004 Fan Yi, Ph.D., Dissertation Committee Member
 2005 Niwanthi Rajapakse, Ph.D. Postdoctoral Fellow
 2005 Artur Filho, Ph.D., Dissertation Committee Member
 2005 Michael Perrine, M.S.; Thesis Advisor
 2006 Jeff Eckert, Ph.D. Dissertation Committee Member
 2006 Enis Novalija, M.D., Ph.D., Dissertation Committee Member
 2006 Michelle Lutz, Ph.D., Dissertation Committee Member
 2006 Scott McKewen, Ph.D., Dissertation Committee Member
 2006 Satarupa Das, Ph.D., Dissertation Advisor
 2006 Carmen De Miguel, Ph.D., Dissertation Advisor
 2007 Michael Harrison, Ph.D., Dissertation Committee Member
 2007 Aaron Polichnowski, Ph.D., Dissertation Committee Member
 2007 Kim Pechman, Ph.D., Dissertation Advisor
 2007 Matt Brown, M.D., M.S., Dissertation Committee Member
 2008 Talha Akbulut, Ph.D., Dissertation Committee Member
 2009 Caitlin O'Meara, PhD., Dissertation Committee Member
 2009 Pallabi Sarkar, Ph.D., Dissertation Committee Member
 2010 Carla Meister, M.D., M.S., Thesis Advisor
 2010 Mohammad Saleh, M.D., MCW Nephrology Fellow
 2011 Domagoj Mladinov, M.D., Ph.D., Dissertation Committee Member
 2012 Feng Di (Raina), Ph.D., Dissertation Committee Member
 2009 Koryn Carver, Dissertation Committee Member
 2010 Matt Thompson, Dissertation Committee Member
 2011 Brittany Wade, Dissertation Advisor
 2011 Nathan Rudemiller, Dissertation Advisor
 2012 Ammar Haque, M.D., MCW Nephrology Fellow
 2012 Jeff Peng, Medical Student Pathways Advisor, MCW
 2013 Louise Hillen, Medical Student Mentor, MCW
 2013 Ammar Jihad Alsheikh, Medical Student Mentor, College of Medicine, Alfaisal University; Riyadh, Saudi Arabia
 2013 Shireen Hashmat, M.D., Nephrology Fellow, Children's Hospital of Wisconsin
 2014 Michael Bergquist, Medical Student Pathways Advisor, MCW
 2014 Shraddha Nyak, Dissertation Committee Member
 2015 Erik Exner, Dissertation Committee Member
 2016 Justine Abais-Battad, Ph.D.; Postdoctoral Fellow

2016 Michael Yeboah MD, Mentoring Committee Member
 2016 John Bukowy, Dissertation Committee Member
 2016 Daniel Fehrenbach, Dissertation Advisor
 2016 John Henry Dasinger, Ph.D.; Postdoctoral Fellow
 2017 Ammar Alsheikh, Dissertation Advisor
 2017 Daniel Kadden, Medical Student Pathways Advisor, MCW
 2017 Tammy Kindel, MD PhD, Mentoring Committee Member
 2019 Elinor Mannon, Dissertation Committee Member, MCG-AU
 2019 Shinjini Chowdhary, Dissertation Committee Member, MCG-AU
 2020 Emily Bruns, Dissertation Advisor, MCG-AU
 2020 Sam Walton, Dissertation Advisor, MCG-AU
 2020 Taylor Kress, Dissertation Committee Member, MCG-AU
 2020 Lance Benson, Dissertation Committee Member, University of Arkansas

Undergraduate/High School Students

1997 Kristyn Krauski, Summer Program for Undergraduate Research (SPUR) Mentor
 1998 Candace Lovell, Minority Summer Research Training Program (MSRTP) Mentor
 1998 Matthew Buencamino, SPUR Student Mentor
 1999 Candace Lovell, MSRTP Student Mentor
 1999 Jessica Stefanski, SPUR Student Mentor
 2000 Zakiya Farris, MSRTP Student Mentor
 2000 Rebecca Stockhausen, SPUR Student Mentor
 2001 Tiara Lockett, MSRTP Student Mentor
 2001 Rebecca Stockhausen, SPUR Student Mentor
 2001 Caliste Ive, M-1 Student Summer Fellowship Mentor
 2002 Rebecca Stockhausen, SPUR Student Mentor
 2002 Sher Xiong, MSRTP Student Mentor
 2003 Shana Danube, SPUR Student Mentor
 2003 Amber Ellis, MSRTP Student Mentor
 2004 Shana Danube, SPUR Student Mentor
 2004 Ameerah Muhammed, MSRTP Student Mentor
 2005 Aaron Radish, SPUR Student Mentor
 2006 Kayla Flores, SPUR Student Mentor
 2005-6 Marie Baylon, High School Student Mentor
 2006-7 Carla Meister, M-1 Medical Student Fellowship Mentor
 2007 Danielle Abraham, SPUR Student Mentor
 2008 Jennifer Yeek, SPUR Student Mentor
 2008-10 Molly Thorson, High School Student Mentor
 2009 Anne Pierre, Diversity Summer Health-Related Research Education Program (DSHREP) Student Mentor
 2010 Brett Glomski, SPUR Student Mentor
 2011 Brionca Walker, DSHREP Student Mentor

2011 Stequita Hankton, DSHREP Student Mentor
 2013 Bellony Nzemenoh, DSHREP Mentor
 2014 Jasmine Blunt, DSHREP Mentor
 2015 Alyssa Nycz, SPUR Student Mentor
 2016 Maggie Williams, SPUR Student Mentor
 2016-17 Kennedy Key, DSHREP Mentor
 2018 Jessica DuVal, SPUR Mentor

15. Community Service Activities:

1993-7 Physiology Instructor, LaFarge Lifelong Learning Institute, Milwaukee, WI
 1992 United Way Fund-Raising Campaign Volunteer Representative, Department of Physiology, MCW
 1998-9 Parent Teacher, Pleasant Hill School, Waukesha, WI 1998-1999
 2000-1 Basketball Coach, Saturday Slammers, Mequon-Thiensville Rec. Dept., Mequon, WI
 2001 Cashier, Shamrock 2001, St. Cecilia & St. James Parent Association Annual Fundraiser
 2001-2 Basketball Coach, Saturday Slammers, Mequon-Thiensville Rec. Dept., Mequon, WI
 2002-04 Basketball Coach, St. James Grade School, Mequon, WI
 2003 Coach, Mequon/Thiensville Youth Baseball Association, Mequon, WI
 2003-6 Cashier, Shamrock 2002, St. Cecilia & St. James Parent Association Annual Fundraiser
 2005-6 High School Student Mentor, Divine Savior Holy Angels High School, Milwaukee, WI
 2006,08 Undergraduate Student Internship Mentor, Alverno College, Milwaukee, WI
 2008-10 High School Student Mentor, Divine Savior Holy Angels High School, Milwaukee, WI
 2009-13 Faculty, Apprenticeship in Medicine (AIM) Program for High School Students of Diverse Backgrounds, MCW, Milwaukee, WI.
 2014 Volunteer, FMSC (Feed My Starving Children) MobilePack Event; Mequon, WI
 2016-19 Member, American Heart Association-Metro Milwaukee, Board of Directors

16. Bibliography

Publications/Original Papers

1. Roman, R.J., M.L. Kaldunski, D.L. Mattson, M. Mistry, and A. Nasjletti. Influence of renal prostanoids on renal function of DOCA-salt hypertensive rats. *Hypertension* 12:287, 1988.
2. Mattson, D.L., H. Raff and R.J. Roman. Influence of angiotensin II on pressure natriuresis and renal hemodynamics in volume-expanded rats. *Am J Physiol* 260:R1200-1209, 1991.
3. Mattson, D.L. and R.J. Roman. Role of kinins and angiotensin II in the renal hemodynamic response to captopril. *Am J Physiol* 260:F670-679, 1991.
4. Lu S.-H., R.J. Roman, D.L. Mattson and A.W. Cowley, Jr. Renal medullary interstitial infusion of diltiazem alters sodium and water excretion in rats. *Am J Physiol* 263:R1064-R1070, 1992.
5. Mattson, D.L., R.J. Roman, and A.W. Cowley, Jr. Role of nitric oxide in renal papillary blood flow and sodium excretion in the rat. *Hypertension* 19:766-769, 1992.
6. Komarov, A., D. Mattson, M.M. Jones, P.K. Singh and C.-S. Lai. In vivo spin trapping of nitric oxide in mice. *Biochem. Biophys. Res. Comm.* 195:1191-1198, 1993.
7. Mattson, D.L., S.-H. Lu, R.J. Roman, and A.W. Cowley, Jr. Relationship between renal perfusion pressure and blood flow in different regions of the kidney. *Am J Physiol* 264:R578-R583, 1993.
8. Lu, S.-H., D.L. Mattson, R.J. Roman, and A.W. Cowley, Jr. Assessment of changes in intrarenal blood flow in conscious rats using laser-Doppler flowmetry. *Am J Physiol* 264:F956, 1993.
9. Mattson, D.L. and A.W. Cowley, Jr. Kinin actions on renal papillary blood flow and sodium excretion. *Hypertension* 21:961-965, 1993.
10. Cowley, A.W., Jr., R.J. Roman, F.J. Fenoy, and D.L. Mattson. Role of renal medullary circulation as a determinant of arterial pressure. *J Hypertension* 10:S187-S193, 1993.
11. Mattson, D.L., S.-H. Lu, K. Nakanishi, P.E. Papanek, and A.W. Cowley, Jr. Effect of chronic renal medullary nitric oxide inhibition on blood pressure. *Am J Physiol* 266:H1918-H1926, 1994.
12. Cowley, A.W. Jr., E. Szepanska-Sadowska, K. Stepniakowski and D. Mattson. Chronic intravenous administration of V1 arginine vasopressin agonist results in sustained hypertension. *Am J Physiol* 267:H751-H756, 1994.
13. Lu, S.-H., D.L. Mattson and A.W. Cowley, Jr. Renal medullary captopril delivery lowers blood pressure in spontaneously hypertensive rats. *Hypertension* 23:337-345, 1994.
14. Zou, A.-P., E. Muirhead, A.W. Cowley, Jr., D.L. Mattson, J.R. Falck, J. Jiang, and R.J. Roman. Role of changes in renal hemodynamics and P450 metabolites of arachidonic acid in the reversal of 1K,1C-hypertension. *J Hypertension* 13:557-566, 1995.
15. Cowley, A.W., Jr., D.L. Mattson, S.-H. Lu, and R.J. Roman. The renal medulla and hypertension. *Hypertension* 25:663-673, 1995.
16. Nakanishi, K., D.L. Mattson, V. Gross, R.J. Roman, and A.W. Cowley, Jr. Control of renal medullary blood flow by vasopressin V1 and V2 receptors. *Am J Physiol* 269:R193-R200, 1995.

17. Nakanishi, K., D.L. Mattson and A.W. Cowley, Jr. Role of renal medullary blood flow in the development of L-NAME hypertension in rats. *Am J Physiol* 268:R317-R323, 1995.
18. Ledderhos, C., D.L. Mattson, M.M. Skelton and A.W. Cowley, Jr. In vivo diuretic actions of renal vasopressin V1 receptor stimulation in rats. *Am J Physiol* 268:R796-R807, 1995.
19. Stec, D.E., D.L. Mattson, and R.J. Roman. Inhibition of renal outer medullary 20-HETE production produces hypertension in Lewis rats. *Hypertension* 29:315-319, 1996.
20. Mattson, D.L., and T.G. Bellehumeur. Comparison of three chemiluminescent horseradish peroxidase substrates for immunoblotting. *Anal Biochem* 240:306-308, 1996.
21. Mattson, D.L., and T.G. Bellehumeur. Neural nitric oxide synthase in the renal medulla and blood pressure regulation. *Hypertension* 28:297-303, 1996.
22. Mattson, D.L., and D.J. Higgins. Influence of dietary sodium intake on renal medullary nitric oxide synthase. *Hypertension* 27:688-693, 1996.
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26. Park, F., D.L. Mattson, M.M. Skelton, and A.W. Cowley, Jr. Localization of the vasopressin V1A and V2 receptors within the renal cortical and medullary circulation. *Am J Physiol* 273:R243-R251, 1997.
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33. Mattson, D.L., and J.L. Osborn. Renal Physiology in *Physiological Secrets* (ed. by H. Raff, 1st Ed.) Hanley & Belfus, Philadelphia, 1998.
34. Mattson, D.L. Use of antisense techniques in the rat renal medulla. *Methods in Enzymology* 314:389-400, 1999.
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