

## CURRICULUM VITAE

**Nancy J. Rusch, Ph.D.**  
**Professor and Chair**  
**Department of Pharmacology and Toxicology**  
**College of Medicine**  
**University of Arkansas for Medical Sciences**

### **Office:**

Department of Pharmacology & Toxicology  
University of Arkansas for Medical Sciences  
4301 W. Markham Street, #611  
Little Rock, AR 72205  
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### **Home:**

392 Baylor House Road  
Bigelow, AR 72016  
(501) 889-4013

### **Education:**

1975 B.S. University of Wisconsin -Madison  
1977 M.A. University of Washington - Seattle  
1983 Ph.D. Mayo Clinic (Univ. of Minnesota)

### **Military Service:**

1979- 1981 First Lieutenant, US Army Reserve, 5501 US Army Hospital, St. Paul, Minnesota  
1981- 1983 Captain, US Army Reserve, 5501 US Army Hospital, St. Paul, Minnesota

### **Fellowships:**

1983- 1986 Postdoctoral Fellow, Department of Pharmacology, University of Iowa  
1986- 1987 Postdoctoral Fellow, Department of Physiology and Biophysics, University of Cincinnati

### **Faculty Appointments:**

1987- 1992 Assistant Professor, Dept. of Physiology, Medical College of Wisconsin  
1992- 1998 Associate Professor, Dept. of Physiology, Medical College of Wisconsin  
1999- 2004 Professor, Dept. of Pharmacology & Toxicology, Medical College of Wisconsin  
2005- Professor & Chair, Dept. of Pharmacology & Toxicology, University of Arkansas for Medical Sciences  
2010- 2016 Co-Director, CardioVascular Center, University of Arkansas for Medical Sciences  
2021 - Interim Executive Associate Dean for Research, College of Medicine, University of Arkansas for Medical Sciences

### **Awards, Honors:**

1979- 1983 Mayo Clinic Predoctoral Fellowship  
1983 Young Investigator Award in Environmental Physiology  
1984- 1986 NIH Postdoctoral Fellowship  
1993 Max Baer Heart Award (Wisconsin Fraternal Order of Eagles)  
1997 Max Baer Heart Award (Wisconsin Fraternal Order of Eagles)  
1998 National Research Award, Fraternal Order of Eagles  
2007 Fifteenth Annual Thomas G. Muldoon Memorial Lecture, Department of Physiology, Medical College of Georgia  
2008 Distinguished Scientist Speaker, Department of Physiology, Distinguished Scientist

- Series, University of South Alabama
- 2010 Circulation Research Top Reviewer Award
- 2011 Chancellors Teaching Award, University of Arkansas for Medical Sciences
- 2012, 2013 Red Sash Teaching Award, by Senior Medical School Class, UAMS (faculty member making a major impact on medical education)
- 2012 Runner-Up for Golden Apple Award, Sophomore Medical School Class, UAMS (best teacher of the sophomore year)
- 2014 Graduate School Best Faculty Award, UAMS
- 2015 Red Sash Teaching Award, by Senior Medical School Class, UAMS
- 2018 The Association of American Medical Colleges (AAMC) 2018 Innovations in Research and Research Education Award for entry: Health Sciences Entrepreneurship Workshop (co-awardee: Dr. Nancy Gray, president of Arkansas BioVentures)
- 2020 Educational Innovation Award, College of Medicine, UAMS (In recognition of leadership in developing the Health Science Innovation and Entrepreneurship training program)

### **Professional Societies:**

#### **American Physiological Society (member)**

Member, Awards Committee 1999-2001

#### **American Heart Association (Gold Heart Member)**

Member, AHA Southwest Affiliate Research Advisory Committee (2011- )

Co-Chair, AHA Southwest Affiliate Research Advisory Committee (2013- 2014)

Chair, AHA Southwest Affiliate Research Advisory Committee (2014- 2016)

Member, AHA Southwest Affiliate Board of Directors (2014-2016)

Member, National Research Funding Subcommittee (2016-2018)

#### **American Society of Pharmacology and Experimental Therapeutics (member)**

Member, National Programming Committee (2004- 2006)

Member, Cardiovascular Pharmacology Division Executive Committee (2002- 2014)

Secretary-Treasurer, Cardiovascular Pharmacology Division (2002- 2004)

President-Elect, Cardiovascular Pharmacology Division (2004- 2006)

President, Cardiovascular Pharmacology Division (2006- 2008)

Chair, Awards Committee, Cardiovascular Pharmacology Division (2010-2013)

Founder, Paul M. Vanhoutte Distinguished Lectureship (2010- )

Member, Cardiovascular Pharmacology Division Executive Committee (2018- )

Chair, Awards Committee, Cardiovascular Pharmacology Division (2018- )

### **Current Grants and Contracts:**

- 2019-2024 N.J. Rusch, Principal Investigator  
1 TL1 TR003109-01  
National Center for Advancing Translational Science  
National Institutes of Health  
This grant attached to CTSA 1 U54 TR002732-01 supports a postdoctoral training program in health science innovation and entrepreneurship administered by the UAMS Translational Research Institute.
- 2019-2024 N.J. Rusch, Director of Translational Workforce Development  
(PI: Laura James, M.D.)

CTSA 1 U54 TR002732-01  
National Center for Advancing Translational Science  
National Institutes of Health  
*Expanding Translational Research in Arkansas*

2019-2024 N.J. Rusch, Program Faculty; Internal Advisory Committee  
(PI: Philip Mayeux, Ph.D.)  
T32 GM10699-06  
National Institutes of Health  
*Systems Pharmacology and Toxicology (SPaT) Training Program*

**Past Grants and Contracts:**

- 1987- 1988 N.J. Rusch, Principal Investigator  
New Faculty Grant  
Medical College of Wisconsin  
*Calcium Currents in WKY and SHR Mesenteric Arteries*
- 1988- 1993 N.J. Rusch, Principal Investigator  
First Award, R29 HL 40474  
National Institutes of Health, NHLBI  
*Vascular Muscle Calcium Currents in Hypertension*
- 1989- 1991 N.J. Rusch, Principal Investigator  
Grant in Aid  
American Heart Association - Wisconsin Affiliate  
*Coronary Arterial Cells: Membrane Currents and Endothelium*
- 1992- 1993 N.J. Rusch, Principal Investigator  
Pharmaceutical contract, #39063  
The Upjohn Company  
*Ramipril: Reversal of Arterial Muscle Hypertrophy and K<sup>+</sup> Channel Alterations in Hypertension*
- 1993- 1994 N.J. Rusch, Principal Investigator  
Max Baer Heart Award  
Fraternal Order of Eagles  
*Reversal of Vasospasm During Coronary Bypass Surgery*
- 1993- 1995 N.J. Rusch, Sponsor  
(Faculty PI: Viktor Berczi, M.D., University of Budapest, Hungary)  
Fogarty International Award, RO3 TW 00350  
National Institutes of Health  
*Regulation of Venous Muscle K<sup>+</sup> Channels by Pressure*
- 1993- 1998 N.J. Rusch, Project Leader  
(Director: Allen W. Cowley, Ph.D.)  
Program Project Grant, PPG HL 29587  
National Institutes of Health, NHLBI  
*Blood Pressure: Determinants and Controllers*
- 1995- 1996 N.J. Rusch, Sponsor  
(Visiting Professor: William F. Jackson, Ph.D., W. Michigan University)

- Fogarty Senior Fellowship, F33 HL 09290  
National Institutes of Health  
*K<sup>+</sup> Channels and Arteriolar Hyperpolarization*
- 1995- 1996 N.J. Rusch, Sponsor  
(Student PI: Kathryn M. Gauthier-Rein)  
Predoctoral Fellowship  
American Heart Association - Wisconsin Affiliate  
*Mechanisms of Hypoxic Vasodilation in Bovine Coronary Arteries*
- 1996- 1997 N.J. Rusch, Sponsor  
(Student PI: Kathryn M. Gauthier-Rein)  
Predoctoral Fellowship  
American Heart Association - Wisconsin Affiliate  
*Altered Endothelium-Smooth Muscle Cell Interactions in Hypertension*
- 1997- 1998 N.J. Rusch, Sponsor  
(Fellow PI: Marcie G. Berger, M.D.)  
Postdoctoral Fellowship, P32 HL 09798  
National Institutes of Health, NHLBI  
*Intracellular Acidosis: Effect on Vascular K<sup>+</sup> Channels*
- 1997- 1998 N.J. Rusch, Principal Investigator  
Max Baer Heart Award  
Fraternal Order of Eagles  
*Potassium Channels in Human Coronary Arteries*
- 1997- 1998 N.J. Rusch, Sponsor  
(Fellow PI: Yanping Liu, M.D., Ph.D.)  
Postdoctoral Fellowship  
American Heart Association - Wisconsin Affiliate  
*Enhanced K<sup>+</sup> Channel Expression in Cerebrovascular Membranes of Genetically Hypertensive Rats*
- 1998- 1999 N.J. Rusch, Principal Investigator  
Grant-In-Aid  
Digestive Disease Center, Milwaukee Community  
*Molecular Mechanisms and Functional Relevance of Altered Calcium Channel Current in the Inflamed Ileum*
- 1998- 1999 N.J. Rusch, Principal Investigator  
National Anniversary Award  
Fraternal Order of Eagles  
*Abnormal Cell Growth after Balloon Angioplasty: New Sites for Drug Therapy*
- 2000- 2001 N.J. Rusch, Sponsor  
(Fellow PI: Xiaorong Liu, M.D., Ph.D.)  
Postdoctoral Fellowship  
American Heart Association - Northland Affiliate  
*Remodeling of Ca<sup>2+</sup> Channels in the Coronary Circulation during Hypertension*
- 1998- 2001 N.J. Rusch, Principal Investigator  
RO1 HL 59238-01  
National Institutes of Health, NHLBI

*Role of Cerebrovascular K<sup>+</sup> Channels in Hypertension*

- 2000- 2001 N.J. Rusch, Sponsor  
(Student PI: Lynda M. Ludwig)  
Predoctoral Fellowship  
American Heart Association - Northland Affiliate  
*Upregulation of Ca<sup>2+</sup> Channels in Renal Vascular Muscle Membranes of Genetically Hypertensive Rats*
- 2000– 2001 N.J. Rusch, Sponsor  
(Scholar: Sulayma Albarwani, Ph.D., Sultan's University of Oman)  
Fulbright Grant  
Council for International Exchange Scholar (CIES), USA State Department  
*Identifying Ion Channels in Cerebral Arteries Exposed to High Blood Pressure*
- 2001- 2003 N.J. Rusch, Principal Investigator  
Pfizer Award  
Competition on Ca<sup>2+</sup> channels or transport (Lynda M. Ludwig, presenter)  
International Society of Hypertension  
*Award to Support Ca<sup>2+</sup> Channel Research*
- 2003- 2004 N.J. Rusch, Principal Investigator  
New Idea Grant  
Medical College of Wisconsin  
*Role of Vascular L-type Ca<sup>2+</sup> Channels in Neonatal Pulmonary Hypertension*
- 1998- 2005 N.J. Rusch, Principal Investigator  
RO1 HL 59238  
National Institutes of Health, NHLBI  
*Role of Cerebrovascular K<sup>+</sup> Channels in Hypertension*
- 2007– 2009 N.J. Rusch, Sponsor  
(Student PI: Biny Joseph, M.S.)  
Predoc 0715570Z  
American Heart Association – Southwest Affiliate  
*Regulation of Voltage-gated K<sup>+</sup> Channels in Cerebral Arteries during Hypertension*
- 2005- 2009 N.J. Rusch, Principal Investigator  
R01 HL 050818  
National Institutes of Health, NHLBI  
*Calcium Channels in Neonatal Pulmonary Hypertension*
- 2009- 2010 N.J. Rusch, Sponsor  
(Student PI: Christopher Ezika, B.S.)  
R01 HL64806-08A1S2  
National Institutes of Health, NHLBI  
*Vascular Calcium Channel Expression in Hypertension: Research Supplement to Promote Diversity in Health-Related Research*
- 2009- 2011 N.J. Rusch, Sponsor  
(Student PI: Sujay Kharade, M.S.)  
Predoc 09PRE2250224  
American Heart Association – South Central Affiliate

- Vascular Calcium Channel  $\beta$ 3 Subunit in Hypertension*
- 2009–2011 N.J. Rusch, Co-Investigator  
(Principal Investigator: Fusun Kilic, Ph.D.)  
R01 HL 091196-01A2  
National Institutes of Health, NHLBI  
*Abnormalities of Platelet Serotonin Transporters (SERT) in Systemic Hypertension*
- 2009-2012 N.J. Rusch, Sponsor  
1F32HL095284  
National Institutes of Health, NHLBI  
(Fellow PI: Keshari Thakali, Ph.D.)  
*Vascular Calcium Channel Expression in Hypertension*
- 2009– 2012 N.J. Rusch, Lead Investigator  
(International PI: Khaled Machaca, Ph.D.)  
NPRP 08-392-3-087  
Qatar National Research Foundation  
*Vascular Smooth Muscle Calcium Signaling in Hypertension*
- 2009– 2014 N.J. Rusch, Principal Investigator  
R01 HL64806-11  
National Institutes of Health, NHLBI  
*Vascular Calcium Channel Expression in Hypertension*
- 2009- 2014 N.J. Rusch, Principal Investigator  
R01 HL 0932526-01A1  
National Institutes of Health, NHLBI  
*Long-term Antihypertensive Therapy by Delivery of the BK Channel Gene to VSMCs*
- 2010- 2011 N.J. Rusch, Co-Investigator  
(Principal Investigator: Kumuda Das, Ph.D.; relocated)  
R01 HL03861-01A1  
National Institutes of Health, NHLBI  
*Endothelial dysfunction in aged Trx-deficient mice*
- 2011- 2015 N.J. Rusch, Co-Investigator  
(Principal Investigator: Sung Rhee, Ph.D.)  
R01 HL 097107  
National Institutes of Health, NHLBI  
*PSD95 Scaffolding of Vascular  $K^+$  Channels in Hypertension*
- 2013- 2015 N.J. Rusch, Sponsor  
(Student PI: Asif Pathan)  
#13GRNT14590001  
American Heart Association – Southwest Affiliate  
*Role of Vascular TRPC3 Channels in Hypertension*
- 2013- 2015 N.J. Rusch, Principal Investigator  
#13GRNT14590001  
American Heart Association – Southwest Affiliate  
*Vascular TRPC3 Channels as Antihypertensive Targets*
- 2013- 2015 N.J. Rusch, Sponsor

- (Student PI: Neil Detweiler)  
 Predoc #12PRE17240055  
 American Heart Association – Southwest Affiliate  
*High Conductance K<sup>+</sup> Channels in Pulmonary Hypertension*
- 2014- 2015 N.J. Rusch, Principal Investigator  
 College of Medicine Pilot Grant  
 University of Arkansas for Medical Sciences  
*Doxorubicin and Suppression of Lymphatic Function*
- 2009- 2016 N.J. Rusch, Leadership Council  
 (PI: Laura James, MD)  
 UL1 RR025209 CTSA  
 National Institutes of Health, NCATS  
*Arkansas Center for Clinical and Translational Research*
- 2015- 2017 N.J. Rusch, Principal Investigator  
 R21 CA187325-01A1  
 National Institutes of Health, NCI  
*Doxorubicin Suppression of Lymphatic Function and Therapeutic Reversal*
- 2016 N.J. Rusch, Sponsor  
 (Student PI: Stolarz)  
 PhRMA Predoctoral Fellowship  
 Pharmaceutical Research and Manufacturers of America  
*Mechanism of Doxorubicin Inhibition of Lymphatic Function and Potential Therapeutics*
- 2016- 2017 N.J. Rusch, Co-Principal Investigator  
 (Co-PI: Lee Ann MacMillan-Crow, Ph.D.)  
 UAMS Pilot Grant  
*Role of Mitochondrial BK channel in Renal Transplantation*
- 2016- 2018 N.J. Rusch, Co-Sponsor  
 (Student PI: Shrum)  
 Predoc 6PRE30830010  
 American Heart Association  
*Role of MitoBK Channels in Rat Renal Cold Preservation*
- 2017- 2018 N.J. Rusch, Leadership Council; Director of Translational Workforce Development  
 (PI: Laura James, M.D.)  
 UL1 RR025209 CTSA  
 National Institutes of Health, NCATS  
*Expanding Translational Research in Arkansas*
- 2013- 2018 N.J. Rusch, Program Faculty; Internal Advisory Committee  
 (PI: Philip Mayeux, Ph.D.)  
 T32 GM10699-01  
 National Institutes of Health, NIGMS  
*Systems Pharmacology and Toxicology (SPaT) Training Program*
- 2017- 2019 N.J. Rusch, Principal Investigator  
 Sturgis Charitable Trust 00052492



University of Arkansas for Medical Sciences  
*Targeting of TRPC3 Channels to Normalize Vascular Tone*

**Service in Peer Review:**

**American Heart Association**

Member, Wisconsin Affiliate Review Group (1993-1997)  
Co-Chair, Cellular Physiology & Pharmacology, Greater America Consortium (1998-2000)  
Member, National Cardiovascular Regulation I Study Section (1999)  
Co-Chair, National Cardiovascular Regulation I Study Section (2000)  
Member, AHA Peer Review Steering Committee (member, 2001-2002)  
Reviewer, AHA National Abstract Review (2006-2008)

**National Institutes of Health, Center for Scientific Review**

Ad hoc member, Clinical Sciences II Study Section (1988, 1993)  
Ad hoc member, Experimental Cardiovascular Study Section (1993-1994)  
Member, Clinical Sciences II Study Section (1995)  
Member, NHLBI PPG Site Visit Teams (1989, 1990, 1991, 1994)  
Adhoc Member, Pharmacology Study Section (1999- 2000)  
Member, Pharmacology Study Section (2000- 2003)  
Chair, Pharmacology Study Section (2002- 2003)  
Member, Program Project Parent Committee, Blood and Vascular Review Group (2000-2004)  
Adhoc Member, NHLBI PPG Review, Special Review Committees (2005, 2007, 2007, 2008, 2009, 2010)  
Member, Special Emphasis Panel, RIBT, NHLBI (2006)  
Adhoc Member, NHLBI K99 Review (2008)  
Adhoc Member, Vascular Cell Molecular Biology (VCMB) Study Section (2009)  
Adhoc Reviewer, ARRA Challenge Grants (2009)  
Member, Vascular Cell Molecular Biology (VCMB) Study Section (2009- 2013)  
Member, Special Emphasis Panel, HM, NHLBI (2010)  
Chair, Vascular Cell Molecular Biology (VCMB) Study Section (2011- 2013)  
Adhoc Chair, Vascular Biology and Hematology AREA (ZRG1) Study Section (2013, 2014, 2014)  
Adhoc Member, NHLBI Program Project Review Committee, HLBP1 (2014)  
Adhoc Chair, Vascular Biology and Hematology AREA (ZRG1) Study Section (2015)  
Member, Special Emphasis Panel, Hypertension and Microcirculation Study Section, NHLBI (2015)  
Adhoc Member, Vascular Cell Molecular Biology (VCMB) Study Section (2017, 2018)  
Adhoc Member, Anonymization Study (2018-2019)  
Adhoc Member, Fellowships: Physiol/Pathobiol Vascular and Hematological Systems F10C, (2019, 2021)  
Adhoc Member, NHLBI Program Project Review Committee, HLBP1 (2020)

**Association for Clinical and Translational Science**

Reviewer, Trainee Abstract Competition (2020, 2021)

**International Peer Review**

Reviewer, Canadian National Research Foundation (1999, 2004, 2009)  
Reviewer, Canadian Alberta Heritage Foundation (1999, 2003)



Reviewer, Canada Research Chairs Evaluator (2014, 2018)

**Steering Committees, Advisory/Review Boards, Board of Directors:**

Member, American Heart Association, Northland Affiliate Research Committee (1998- 2002)

Member, American Heart Association, National Peer Review Steering Committee (2002)

External Reviewer, Lankenau Institute, Philadelphia (2002)

Chair-Elect, American Heart Association, Northland Affiliate Research Committee (2002)

Member, American Heart Association, Northland Affiliate Board of Directors (2002)

Member, External Review Committee, Department of Pharmacology, University of Iowa, Iowa City, IA (2011)

Member, American Heart Association, Southwest Affiliate Research Committee (2012- 2016)

Chair-Elect, American Heart Association, Southwest Affiliate Research Committee (2013- 2014)

Chair, American Heart Association, Southwest Affiliate Research Committee (2014- 2016)

Member, American Heart Association, Southwest Affiliate Board of Directors (2014- 2016)

Member, American Heart Association, National Research Advisory Board (2016- 2018)

Member, CTSA Measures of Impact Working Group, Subgroup Leader (2019-2020)

Member, External Advisory Committee, Knight Cardiovascular Institute, Oregon Health Sciences University (2021- )

**Editorial Boards:**

Member, Editorial Board, American Journal of Physiology, Heart & Circulatory Physiology (1998- 2001; 2009- )

Member, Editorial Board, Vascular Pharmacology (1998-2008)

Member, Editorial Board, Basic & Clinical Pharmacology and Toxicology (2003-2012)

Member, Editorial Board, Journal of Cardiovascular Pharmacology (2002- )

Member, Editorial Board, Circulation Research (2007- ); Top reviewer award (2010)

Member, Editorial Board, Pharmacological Reviews (2019- )

**Adhoc Reviewer:**

American Journal of Hypertension

American Journal of Physiology

General Pharmacology

Hypertension

Journal of Applied Physiology

Journal of Cardiovascular Pharmacology

Journal of Pharmacology & Experimental Therapeutics

Journal of Physiology

Journal of Vascular Research

Proceedings of the National Academy of Sciences

**Book, Publication or Section Editor:**

Vascular Biology Section Editor, *Proceedings of the Council on High Blood Pressure*, Hypertension (1997)

Featured Topic Publication Editor, *Potassium Channels and Vascular Dysfunction*, Vascular Pharmacology (1999)

Book Editor, *Potassium Channels in Cardiovascular Biology* (45 international contributors, 900-page textbook), Kluwer- Plenum Press, Stephen L. Archer & Nancy J. Rusch (eds.). (2001)

**Speaker at Invited Lectures, Symposia and Workshops:**

Workshop Speaker, American Physiological Society (Fall Meeting), Workshop on Patch-Clamp Techniques, San Diego, CA (1987)

Conference Speaker, FASEB Summer Research Conference on Smooth Muscle, Vermont (1988)

Conference Speaker, Research Strategic Planning Committee, American Heart Association - Wisconsin Affiliate, Madison, WI (1989)

Convention Speaker, Midwest Science Teacher Convention, Milwaukee, WI (1989)

Symposium Speaker, Graduate Hospital Research Symposium, Cellular and Molecular Mechanisms in Hypertension: Implications for Pathogenesis and Treatments, Philadelphia, PA (1989)

Seminar Speaker, Department of Physiology, University of Illinois, Chicago, IL (1990)

Symposium Speaker, 3rd International Symposium on Calcium and Gene Hypertension, Portland, OR (1991)

Seminar Speaker, Departments of Physiology & Pharmacology, University of Nevada, Reno, NV (1994)

Symposium Speaker and Co-Chair, FASEB Meeting (EB1996), Potassium Channel Symposium, American Physiological Society, Washington DC (1996)

Conference Speaker, Women's Faculty Council, Medical College of Wisconsin (1997)

Symposium Speaker and Chair, FASEB meeting (EB1998), Potassium Channels in Hypertension and Conditions of Increased Vascular Tone, American Physiological Society, San Francisco (1998)

Seminar Speaker, Departments of Physiology & Pharmacology, University of Minnesota, Duluth, MN (1998)

Seminar Speaker, Department of Physiology, University of Nebraska, Omaha, NE (1998)

Seminar Speaker, Vascular Biology Institute, Medical College of Georgia, Augusta, GA (1998)

Seminar Speaker, Department of Biology, Western Michigan University, Kalamazoo, MI (1998)

Symposium Speaker, Council on High Blood Pressure Research, Orlando, FL (1998)

Symposium Speaker, American Heart Association Scientific Sessions, Chair of Cardiopulmonary knockout mice: Strategies for tissue-specific targeting and conditional expression (1998)

Seminar Speaker, Department of Nephrology, University of Cincinnati, OH (2000)

Symposium Chair and Speaker, American Heart Association Scientific Sessions, Regulation of Ca<sup>2+</sup> channels and Ca<sup>2+</sup> release in hypertension, CHF and diabetes (2000)

Symposium Chair and Speaker, FASEB Special Topics, Ion channel remodeling in cardiovascular disease: pathogenesis and therapeutic implications (2001)

Seminar Speaker, Department of Pharmacology, Cornell University (2001)

EDHF 2002, Potassium channels in vascular endothelial and smooth muscle cells, Paris, France (2002)

Seminar Speaker, Department of Pharmacology, University of Vermont (2002)

Symposium Speaker, American Heart Association Scientific Sessions, Regulation of membrane potential in pulmonary vascular smooth muscle cells (2002)

Seminar Speaker, Medical College of Wisconsin, Faculty Orientation, Promotion, Rank and Tenure (2003)

Seminar Speaker, Medical College of Wisconsin, Women's Faculty Council, Rank and Tenure Process (2003)

Seminar Speaker, Department of Physiology and Biophysics, Rosalind Franklin Medical School (2004)

Session Chair, FASEB International Union of Physiological Sciences, Session Chair: Ion Channels in Cardiovascular Disease (2005)

Memorial Lecturer, Fifteenth Annual Thomas G. Muldoon Memorial Lecture, Department of Physiology, Medical College of Georgia, Augusta GA (2008)

Featured Speaker, Hypertension Research Day, University of Tennessee at Memphis (2008)  
Co-organizer and Speaker, Keystone Symposium, Dissecting the Vasculature, Vancouver Canada (2008)  
Featured Speaker, Arkansas Short Course in Toxicology, Little Rock, AR (2009)  
Seminar Speaker, Department of Pharmacology & Toxicology, UAMS, Little Rock, AR (2009)  
Seminar Speaker, Department of Pharmacology, Virginia Commonwealth University, Richmond, VA (2010)  
Symposium Speaker, FASEB Smooth Muscle Conference, Lucca, Italy (2009)  
Seminar Speaker, Department of Physiology, University of Mississippi, Jackson, MS (2010)  
Distinguished Scientist Speaker, Department of Physiology, Distinguished Scientist Series, University of South Alabama, Mobile, AL (2011)  
Invited Speaker and Chair, 10<sup>th</sup> International Symposium on Resistance Arteries (ISRA), Rebild, Denmark (2011)  
Seminar Speaker, Hypertension Center, University of Florida, Gainesville, FL (2011)  
Symposium Speaker, Chinese Heart Conference (CHC2011), Beijing, China (2011)  
Seminar Speaker, Department of Medicine, University of Illinois at Chicago, Chicago, IL (2012)  
Invited Speaker, Tufts Molecular Cardiology Institute Retreat, Woods Hole, ME (2012)  
Seminar Speaker, Department of Medicine, University of Louisville, Louisville, KY (2013)  
Seminar Speaker, Department of Pharmacology, Temple University Philadelphia, PA (2013)  
Speaker, Cardiology Grand Rounds, University of Arkansas for Medical Sciences, AR (2014)  
Seminar Speaker, Department of Pharmaceutical Sciences, University of North Dakota, Grand Forks, ND (2016)  
Seminar Speaker, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences (2017)  
Invited Symposium Speaker, 9<sup>th</sup> Annual Symposium on Physiological Models and Disease, National University of Singapore (2017)

## **INSTITUTIONAL SERVICE**

### **Committees, Representation:**

#### **Medical College of Wisconsin (1987-2004)**

Member, Animal Care and Use Committee (1989- 1993)

Secretary, Animal Care and Use Committee (1992- 1995)

Chair, Awards Committee (1990- 1993)

Member, Women's Faculty Council (1991-1993)

Member, Chair Search Committee, Department of Cell Biology and Anatomy (1996)

Representative, Department of Physiology to the Faculty Council (1997)

Member, Faculty Welfare Committee (1998- 2000)

Member, Rank and Tenure Committee (2000- 2002)

Chair, Rank and Tenure Committee (2002-2005)

#### **University of Arkansas for Medical Sciences (2005- )**

Member, Search Committee for Director of Pediatric Cardiovascular Surgery (2005)

Member, Search Committee for Director of Bioventures and Biotechnology (2005)

Chair, Search Committee for Chair of Microbiology & Immunology (2006)

Chair, UAMS Basic Science Chair Council (2007- 2008)

Chair, UAMS Council of Department Chairs (2007- 2008)

Member, Search Committee for Chair of Urology (2007)

Member, Search Committee for Chair of Surgery (2008)

Member, Search Committee for Director of the Institute on Aging (2008)

Member, Search Committee for the Chancellor of UAMS (2008)  
Chair, UAMS Basic Science Chair Council (2012- 2013)  
Chair, UAMS Council of Department Chairs (2012- 2013)  
Member, CTSA Grant Writing Team (2014- 2015)  
Member, Search Committee for Chair of Pediatrics (2017)  
Member, Search Committee for the Chancellor of UAMS (2018)  
Member, Search Committee for Chair of Microbiology and Immunology (2019)  
Chair, UAMS Basic Science Chair Council (2018- 2019)  
Member, Dean's Executive Committee, College of Medicine (2019-)  
Member, Search Committee for the Dean of the College of Pharmacy (2019)  
Member, Search Committee for the Chair of Internal Medicine (2020)  
Member, Search Committee for the Associate Provost of Faculty (2020)  
Member, Search Committee for the Dean of the College of Medicine (2020-2021)  
Member, Search Committee for Chair of Psychiatry (2021)

## **EDUCATION**

### **Graduate and Medical School Education:**

#### **Medical College of Wisconsin Graduate and Medical Education (1987-2004)**

Lecturer, Cell Physiology Graduate Course, Department of Physiology – 3 hours (1989)  
Lecturer, Cardiovascular Practicum, Medical School Physiology – 3 hours (1990)  
Lecturer, Molecular Pharmacology Graduate Course – 2 hours (1990)  
Lecturer, Molecular Biology Graduate Course– 2 hours (1991)  
Lecturer, Neuroscience Graduate Course – 2 hours (1993)  
Lecturer, Selective Seminars Series, POMP Medical School Curriculum – 2 hours (1994)  
Lecturer, Cell & Membrane Physiology, Medical Physiology, MCW Medical School – 4 hours/yr (1994-1999)  
Lecturer, Neuropharmacology Graduate Course – 2 hours (1998- 1999)  
Co-Director, Pharmacology Journal Club, - 12 to 15 hours/yr (2000, 2002)  
Lecturer, Medical Pharmacology, antiarrhythmic drugs and calcium channel blockers – 3 hours/yr (2000- 2005)

#### **University of Arkansas for Medical Sciences Graduate and Medical Education (2005- )**

Lecturer, Graduate Pharmacology, antiarrhythmic drugs – 2 hours/yr (2012- )  
Lecturer, Medical Pharmacology, antihypertensive drugs and calcium channel blockers – 3 hours/yr (2006- 2013)  
Director & Course Moderator, Scientific Communications and Ethics, grant writing - 25 hours (2007)  
Lecturer, Graduate Experimental Pharmacology & Toxicology, 4 hours/yr (2009-2013)  
Lecturer, Graduate Pharmacology, antiarrhythmic drugs – 2 hours/yr (2012- )  
Lecturer, Graduate Molecular Endocrinology – 2 hours (2013)  
Lecturer, Cardiovascular Medical School Block, electrical activity of the heart, antiarrhythmic drugs, antihypertensive drugs- 5 hours/yr (2014-2018)  
Lecturer, Graduate Pharmacology, antihypertensive drugs- 2 hours/yr (2015- )  
Co-Director, Cardiovascular Module, Sophomore Medical Students – 5 weeks (2015)  
Group Director, Scientific Communications and Ethics, Grant Writing Small Groups (2019-2021)

### **Undergraduate & Medical Student Research Training:**

#### **Medical College of Wisconsin (1987-2004)**

Roberto De Lucena, B.S., visiting medical student from University of Sao Paulo, Brazil (1990- 1991)

Andrea Scymczak, Wauwatosa High School undergraduate student, Wauwatosa, Wisconsin (1991)  
 Alexandra Sanchez, Apprentice in Research Scholar, undergraduate student, Brown University, Providence, RI (1992, 1993)  
 James Boyd, Apprenticeship in Research Scholar, Minority Students Affairs, University of Wisconsin – Milwaukee (1993)  
 Clark Kulig, Summer Program for Undergraduate Research (SPUR) Scholar, University of Wisconsin – River Falls, River Falls, WI (1993)  
 Otobia Dimson, Apprenticeship in Research Scholar, Minority Student Affairs, Medical College of Wisconsin, Milwaukee, WI (1995)  
 Negin Almassi, Brookfield High School Honors Program for Scientific Mentorship, Brookfield, WI (1997)  
 Jason Revolinski, Summer Program for Undergraduate Research (SPUR) Scholar, University of Wisconsin, WI (1998)

**University of Arkansas for Medical Sciences (2005- )**

Elizabeth Pryor, ASPET Summer Undergraduate Research Fellow (SURF) Scholar, University of Arkansas at Fayetteville, AR (2006)  
 Corey Post, ASPET Summer Undergraduate Research Fellow (SURF) Scholar, University of Illinois at Champagne, IL (2011)  
 Kionna Henderson, Minority Scholarship Program, University of Arkansas at Pine Bluff, Pine Bluff, AR (2014)

**Training of Graduate Students, Postdoctoral Fellows and Visiting Faculty (see table):**

<b>GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS</b>				
<b>Name</b>	<b>Position</b>	<b>Degree</b>	<b>Years</b>	<b>Current position</b>
ENGLAND, Sarah	PhD student	PhD	1989-1993	Professor, Dept of OB/GYN, Washington University
BULJUBASIC, Neda	Postdoc fellow	-----	1989-1991	Associate Professor of Cardiology, UCLA
AL-KAYED, Nabil	PhD student	PhD	1992-1994	Professor of Anesthesiology, Oregon Health Sciences University
NEARING, Michael	Postdoc fellow	-----	1992-1993	Cardiologist, Des Moines Med Center
LI, Pinlan	Postdoc fellow	-----	1993-1994	Professor of Pharmacology, Virginia Commonwealth University
VANDIER, Christophe	Visiting PhD student	PhD	1995	Professor, Lab de Physiologie des Cellules Vasculaires, Tours, France
GAUTHIER, Kathryn	PhD student <i>deceased 2015</i>	PhD	1993-1998	Associate Professor of Pharmacology, Medical College of Wisconsin
LIU, Yanping	Postdoc fellow	-----	1995-1998	Program Officer, NIH
BERGER, Marcie	Postdoc fellow	-----	1996-1998	Associate Professor of Cardiology, Medical College of Wisconsin
LUDWIG,	PhD student	PhD	1998-2000	Scientist, WL Gore & Associates,

Lynda				Flagstaff, AR
LIU, Xiaorong	Postdoc fellow	-----	1998-2001	Senior Scientist, Wyeth Pharmaceuticals, Madison, NJ
NEMETZ, Leah	MS student	MS	2000-2002	FBI Special Agent, Health Care Fraud
BONNET, Sebastien	Visiting PhD student	PhD	2001-2002	Associate Professor, Dept of Pharmacology, University of Montreal
TOBIN, Ann	PhD student	PhD	2002-2005	At-home mother
JOSEPH, Biny	PhD student	PhD	2006-2010	Grant Program Manager, Neuro-Oncology Research, MD Anderson Cancer Center, Houston, TX
SONKUSARE, Swapnil	PhD student	PhD	2006-2009	Assistant Professor of Physiology (tenure path), University of Virginia
KUMAR-HIRENNALUR, Dinesh	PhD student	PhD	2006-2009	Senior Principal Scientist, Pfizer Company, Boston, MA
KHARADE, Sujay	PhD student	PhD	2007-2011	Instructor, Dept of Anesthesiology, Vanderbilt University
THAKALI, Keshari	Postdoc fellow	-----	2007-2011	Assistant Professor of Pediatrics (tenure path), Univ Arkansas Med Sci
PATHAN, Asif	PhD student	PhD	2009-2014	Research Scientist, Clinical Pharmacology and Pharmacokinetics, AROG Pharmaceuticals, Dallas, TX
DEWEILER, Neil	PhD student	PhD	2010-2015	Assistant Professor (tenure path), Dept of Biology and Chemistry, Goshen College, Goshen, IN
SRIVASTAVA, Anup	PhD student	PhD	2009-2015	Postdoc Fellow, Federal Drug Administration, Silver Spring, MD
STOLARZ, Amanda	PhD student/ Postdoc fellow	PhD	2013-2018	Assistant Professor (tenure path), Dept of Pharmaceutical Sciences, Univ Arkansas for Med Sci
LIEBLONG, Benjamin	PhD student	PhD	2014-2017	Clinical Coordinator, Dept of Internal Medicine, Univ Arkansas Med Sci
SHRUM, Stephen	PhD student	PhD	2015-2020	Post-graduation Sabbatical
GARNER, Brittney	PhD student	PhD	2015-2020	Regulatory Specialist, NuShores, LLC, Little Rock, AR
<b>GUEST FACULTY</b>				
<b>Name</b>	<b>Position</b>	<b>Years</b>	<b>Current Position</b>	
BERCZI, Viktor	Visiting Professor	1992-1993	Professor and Director, Dept of Radiation and Oncotherapy, Semmelweis University, Budapest,	

			Hungary
JACKSON, William	Visiting Prof., Sr. NIH Fellow	1995- 1996	Professor, Dept. of Pharmacology & Toxicology, Michigan State University, East Lansing, MI
ALBARWANI, Sulayma	Fulbright Scholar	2000-2001	Professor, Biomedical Sciences, Sultan's University of Oman, Muscat, Oman
HILL, Brent Hill	NIH INBRE Partner	2006-2010	Professor and Chair, Department of Biology and Chemistry, University of Central Arkansas, Conway, AR

### **Dissertation Committees:**

#### **Medical College of Wisconsin (1987-2004)**

Monica M. Stiemke, Ph.D. in Physiology (1990)  
Kim T. Fredricks, Ph.D. in Physiology (1992)  
Russell Wilke, Ph.D. in Pharmacology (1993)  
Sarah K. England, Ph.D. in Physiology (1993)  
Hailing Zhang, M.S. in Pharmacology (1994)  
Yanping Liu, Ph.D. in Physiology (1995)  
Jian Jiang, Ph.D. in Physiology (1996)  
Xuan-Sheng Shi, M.S. in Physiology (1996)  
Kathryn Gauthier-Rein, Ph.D. in Physiology (1998)  
David Weber, Ph.D. in Physiology (1998)  
Ronald Gerrits, Ph.D. in Physiology (1999)  
Ryan Fryer, Ph.D. in Pharmacology (2001)  
Michelle Vanderheyden M.D., M.S. in Physiology (2001)  
Leah Nemetz, M.S. in Pharmacology (2002)  
Ann Tobin, Ph.D. in Pharmacology (2004)

#### **University of Arkansas for Medical Sciences (2005- )**

January Schultz, Ph.D. in Pharmacology & Toxicology (2007)  
Rohit Puri, Ph.D. in Pharmacology & Toxicology (2008)  
Swapnil Sonkusare, Ph.D. in Pharmacology & Toxicology (2009)  
Biny Joseph, Ph.D. in Pharmacology & Toxicology (2010)  
Dinesh Kumar Hirehallur, Ph.D. in Pharmacology & Toxicology (2010)  
Tanecia Mitchell, Ph.D. in Interdisciplinary Biological Sciences (2010)  
Melda Onal, Ph.D. in Interdisciplinary Biological Sciences (2011)  
Sujay Kharade, Ph.D. in Pharmacology & Toxicology (2012)  
Misty Thompson, Ph.D. in Pharmacology & Toxicology (2012)  
Hunter Holthoff, M.D., Ph.D. in Interdisciplinary Biological Sciences (2012)  
Asif Pathan, Ph.D. in Pharmacology & Toxicology (2013)  
Neil Detweiler, Ph.D. in Pharmacology & Toxicology (2014)  
Anup Srivastava, Ph.D. in Pharmacology & Toxicology (2015)  
Benjamin Lieblong, Ph.D. in Pharmacology & Toxicology (2016)  
Amanda Stolarz, Pharm.D., Ph.D. in Pharmacology & Toxicology (2016)  
Ryan McCleod, Ph.D. in Interdisciplinary Biological Sciences (2019)  
Samantha McClenahan, Ph.D. in Pharmacology & Toxicology (2019)  
Michael Cozart, Ph.D. in Pharmacology & Toxicology (2019)  
Stephen Shrum, Ph.D. in Interdisciplinary Biological Sciences (2020)  
Brittney Garner, Ph.D. in Pharmacology & Toxicology (2020)



## MANUSCRIPTS

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## INVITED CHAPTERS AND REVIEWS

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## **ABSTRACTS (approximately 200; not listed)**