

CURRICULUM VITAE

NAME: Irving H. Zucker

CAMPUS ADDRESS:

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Dept Homepage: <https://www.unmc.edu/physiology/faculty/zucker.html>



PLACE OF BIRTH: New York, New York, U.S.A.

EDUCATION:

Degree	Year	Institution	Major
B.S.	1965	The City College of New York New York City, New York	Biology
M.S.	1967	University of Missouri at Kansas City Kansas City, Missouri	Biology
Ph.D.	1972	New York Medical College New York City, New York	Physiology

PRE AND POSTDOCTORAL TRAINING:

1968 - 1972 NSF Predoctoral Trainee, Department of Physiology, New York Medical College
1972 - 1973 NIH Postdoctoral Fellow, Department of Physiology and Biophysics, University of Nebraska Medical Center

AREA OF SPECIALIZATION:

heart failure, hypertension, renal function, neural control of the circulation, oxidative stress.

ACADEMIC APPOINTMENTS:

2022 Professor, Department of Anesthesiology-Courtesy Appointment
2012- Member, REDOX Biology Center, UNL
2008- Member, Center for Drug Delivery and Nanomedicine
2004- Professor, Internal Medicine, Division of Cardiology-Courtesy Appointment
1998- Theodore F. Hubbard, M.D. Endowed Chair of Cardiovascular Research
1989-2019 Chairman, Department of Cellular and Integrative Physiology, University of Nebraska College of Medicine, Omaha, Nebraska
1983- Professor, Department of Physiology and Biophysics, University of Nebraska Medical Center, Omaha, Nebraska
1980-1983 Associate Professor with tenure, Department of Physiology and Biophysics, University of Nebraska Medical Center, Omaha, Nebraska
1976-1983 Associate Professor, Department of Physiology and Biophysics, University of Nebraska Medical Center, Omaha, Nebraska
1973-1976 Assistant Professor, Department of Physiology and Biophysics, University of Nebraska Medical Center, Omaha, Nebraska

OTHER PROFESSIONAL EXPERIENCE:

1965-1967 Graduate Teaching Assistant, Department of Biology, University of Missouri at Kansas City

HONORS:

Established Investigator of the American Heart Association, July 1977-July 1982 NIH Research Career Development Award (not accepted) - July 1977

Great Plains Regional Review Group, American Heart Association, 1978-July 1982

Chairman, Research Committee, American Heart Association, Nebraska Affiliate, 1979-1981

Member, Board of Directors, American Heart Association, Nebraska Affiliate, 1979-1981

Research Committee, Nebraska Heart Association, 1979-1983

MASUA Honor Lecturer, 1980-1981 Sigma Xi, 1982- 2000

University of Nebraska Foundation Merit Award - Bookmeyer Fund, 1983 Research Committee, Nebraska Heart Association, 1984

Animal Care and Experimentation Committee of the American Physiology Society, July 1985-July, 1988

Alternate to Delegate Assembly, Council on Circulation, American Heart Association, 1986

American Heart Association Delegate: Research and Medical Programs Reference Commission, 1987

Visiting Scientist, Hebei Medical College, Shijiazhuang, People's Republic of China, July 6-11, 1987.

Organizer and Participant, Joseph P. Gilmore Symposium. September 29, 1988.

Visiting Scientist of the National Science Council of Taiwan, R.O.C. May 5-12, 1991.

Scientific Advisory Board, International Society of Heart Failure, Inc. 1992-2005

Scientific Advisory Board, International Society of Cardiology. 2006

MERIT Award, National Heart, Lung and Blood Institutes, 1992-2002

Outstanding Research and Creative Achievement Award- University of Nebraska, 1993

Member, International Scientific Advisory Board of the International Academy of Cardiology, Inc June 1, 1997-

Councilor, Society for Experimental Biology and Medicine, July 1, 1998-June 30, 2002

President, Nebraska Physiological Society 1998-2000

Publications Committee, Heart Failure Society of America, 1998-2000n's Award for Outstanding Contributions to the College of Medicine, 1999

Marcus Award Selection Committee, Council on Basic Cardiovascular Sciences, American Heart Association, 2000-2002

Member at Large of the Executive Committee of the Council on Basic Cardiovascular Sciences. American Heart Association, July 1, 2000-June 30, 2002.

Councilor, American Chairs of Departments of Physiology, 2001

Fellow of the American Heart Association (FAHA), 2001-

Fellow of the American Physiological Society (FAPS), 2015-

President, Association of Chairs of Departments of Physiology (ACDP), 2003

Member, Communication Committee, Council on Basic Cardiovascular Science, American Heart Association July 1, 2002-June 30, 2006

Member, Public Affairs Committee, APS, 2000-2004 Chairman, Public Affairs Committee, APS, 2004

Member, National Research Committee, American Heart Association, July 1, 2003-June 30, 2007

Member, Research Committee, American Heart Association, Heartland Affiliate, Nov 1, 2003-2007
Councilor, American Physiological Society, April 2004-April 2007
Chairman, Early Career Opportunities Subcommittee, American Heart Association, 2006-2007.
Wiggers Award, Cardiovascular Section, American Physiological Society, 2008.
Scientist Laureate, University of Nebraska Medical Center, 2008.
President, American Physiological Society. April 2008-April, 2009.
Carl Ludwig Award, Section on Neural Control and Autonomic Regulation of the American Physiological Society. April 23, 2012.
Member, Nominating Committee for the International Union of Physiological Sciences 2012
Mayerson-DiLuzio Award, Tulane University, 2013
Outstanding Mentor of Graduate Students Award, UNMC, 2013
Interim Editor-In-Chief, American Journal of Physiology: Heart and Circulatory Physiology. 12/1/13- 3/31/14
Editor-In-Chief, American Journal of Physiology: Heart and Circulatory Physiology 4/1/14-12/31/20
Lifetime Achievement Award from the International Academy of Cardiovascular Sciences. September 12, 2015.
Gabor Kaley Memorial Lecture, New York Medical College, Valhalla, New York. April 14, 2016
Clarenburg Lecture, Kansas State University, October 3, 2016
Innovator of the year award, UneMed, UNMC, October 5, 2016 Patent approved, May 2018
Member, Publications Committee, American Physiological Society. May 1, 2021-present.
UeMed Research Innovation Award. February 10, 2022.
Fellow of the International Union of Physiology (IUPS). May 2022-
J.O. Davis Lecture, University of Missouri Cardiovascular Day, March 7, 2023

REVIEWS AND STUDY SECTIONS:

Journals

American Journal of Physiology
American Journal of Cardiology
Physiological Genomics
The American Journal of Hypertension
Annals of Internal Medicine
Basic Research in Cardiology
Brain Research
Cardiology Circulation
Circulation Research
Cardiovascular Research
Clinical Science
Comparative Biochemistry and Physiology
Canadian Journal of Physiology and Pharmacology
Drugs under Experimental and Clinical Research
The Journal of Clinical Investigation
Hypertension
Life Sciences
Metabolism: Clinical and Experimental
The Journal of Cardiovascular Pharmacology
Journal of Pharmacology and Experimental Therapeutics PNAS
Peptides

The Journal of Cardiac Failure Little, Brown & Company
 Journal of Experimental Physiology
 The Journal of Physiology (London)
 The Journal of Neurophysiology
 Nature: Clinical Practice-Cardiovascular Medicine
 Pharmacological Reports
 Abstracts for American Heart Association published in Circulation, 1982-1990, 1994-95, 1998,
 2004-05, 2008-2019; in Hypertension, 2012-23
 The Journal of Human Hypertension
 Frontiers in Physiology
 PLoS One
 The Journal of Neuroimmunology
 Journal of the American Heart Association Neuroscience letters
 Science-Translational Medicine
 iScience
 Nature Communications
 Journal of Cellular and Molecular Medicine

Organizations

National Science Foundation
 National Aeronautics and Space Administration
 National Institutes of Health (Ad Hoc Study Section; Experimental Cardiovascular Sciences and
 Cardiovascular and Renal, January, 1985)
 National Institutes of Health site visit team for program project, Stanford University, October
 1984
 National Institutes of Health site visit team for program project, Tufts University, October, 1984
 Chairman, Special Review Group, NIH, November 9, 1987
 Special Review Group, NIH, December 9, 1987 Special Review Group, NIH, July 21, 1992
 National Institutes of Health site visit team for program project, University of Michigan, October
 5, 1988
 National Institutes of Health site visit team for program project, Case Western Reserve
 University, February, 1990
 National Institutes of Health site visit team for program project, University of Texas
 Southwestern Medical School, February 16-18, 1992
 National Institutes of Health site visit team for program project, University of Iowa, School of
 Medicine, May 21-22, 1992.
 National Institutes of Health site visit team for program project, University of Oklahoma School
 of Medicine, May 09-11, 1994
 Great Plains Regional Review Group, American Heart Association, 1978-1982
 American Heart Association-Cardiovascular Regulation Research Study Committee, 1990-1992
 National Institutes of Health, Cardiovascular and Renal Study Section- Ad Hoc, February, 1990
 National Institutes of Health, Experimental Cardiovascular Sciences Study Section-Ad Hoc,
 June 8- 10, 1994
 National Institutes of Health, Respiratory Functions Special Study Section, July, 1994
 National Institutes of Health, Respiratory Functions Special Study Section, Chairman,
 November 28, 1994
 National Institutes of Health, Special Emphasis Panel-PPG review, March 24-25, 1997 National
 Institutes of Health, PPG review, January 20-21, 1998
 National Institutes of Health, Special Emphasis Panel- Heart Failure Research, New
 Approaches to Pathogenesis, June 14-16, 1998

National Institutes of Health, Special Study Section, November 22, 1999
National Institutes of Health, CICS Study Section Ad Hoc, February 17-18, 2011
Melvin Marcus Young Investigator Award for Integrative Physiology of the American Heart Association, 1991, 1999-2002
Scientific Panel, Texas Higher Education Coordinating Board- September, 1991 International Science Foundation
Program Committee, American Heart Association, Circulation Council, July 7-8, 1995, July 11-12, 1996, July 8-9, 1998.
Chairman, Academic Review Committee, Department of Physiology, University of Arizona College of Medicine, Tucson, AZ, March 27-28, 2000
Member, Pathophysiology 1. Study Section. American Heart Association 2000-2002.
Member, Cardiovascular and Renal Study Section (CVB), NHLBI, 10/02-10/03
Member, Clinical and Integrative Sciences Study Section (CV IRG), NHLBI, 2/04-6/06
Member, Heart Failure SCCORE study section, NHLBI, 2/04
Philip Morris Foundation, 11/05; 5/07
Health Effects Institute Study Section, Boston, MA. 2/10/06
The Thrasher Foundation, 08/07, 12/07
Louisiana State University Excellence Grants, 2008 NIH, Challenge Grants Panel, July 20-21, 2009
NIH, PPG Special Emphasis Panel, September 28, 2012
Korean World University, 2012
NIH, Special Emphasis Panel, April 4, 2013
NIH, PPG Special Emphasis Panel, April 30, 2013
NIH, PPG Special Emphasis Panel, November 5, 2013
Peer Net State of Pennsylvania, October, 2013
Member, Special Emphasis Panel, NHLBI Nov 5, 2013
NIH Special Emphasis Panel, Chair. March 2015
NIH Loan Repayment Program. 2015, 2017, 2019, 2020, 2021
Chair, Special Emphasis Panel, NHLBI, Mar 25, 2015
Department of Life Sciences, Ministry of Science and Technology, Taiwan, 2016, 2018, 2020,2022
USAMRMC grant reviewer, DOD. 2017
NIH, PPG Special Emphasis Panel, October 19, 2017
NIH, PPG Special Emphasis Panel, September 24, 2018
NIH, PPG Special Emphasis Panel, May 8, 2019
NIH, DP5 Special Emphasis Panel, April, 2019
UNMC Pre-doctoral fellowship review committee, May 7, 2019
NIH, MIM Study Section, October 29-30, 2020
NIH, TDPS Study Section, February 2021
Qatar National Research Program-2021
British Heart Foundation-2021
National Research Council of Taiwan 2017-2021
NIH CSR Special Emphasis Panel, IMST-U70, June 16, 2022

EDITORIAL BOARDS:

American Journal of Physiology: Regulatory, Integrative and Comparative Physiology, 1986-2020
American Journal of Physiology: Heart and Circulatory Physiology, 1998-2011, 2021-
Associate Editor, American Journal of Physiology: Heart and Circulatory Physiology, 2011-2013
Editor in Chief, American Journal of Physiology: Heart and Circulatory Physiology. 2013-2020
Basic Research in Cardiology- 1993-2006

Circulation Research - 1992-2011
 Drugs under Experimental and Clinical Research - 1984-present
 Heart Failure Reviews-2000-present
 Hypertension-2003-2018
 The Journal of Biomedical Science - 1992-2008
 The Journal of Heart Failure-1994-96, 2000
 Journal of Cardiac Failure-2000-2006
 Current Cardiology Reviews-2004-present
 Current Hypertension Reviews-2004-present
 Therapeutic Advances in Cardiovascular Disease- 2007-present
 Reviewing Editor, Journal of Physiology-April 2011-2013
 Interim EIC, American Journal of Physiology: Heart and Circulatory Physiology. 12/1/13-3/31/14
 Co-Section Head Cardiovascular Section, Faculty of 1000; 2014-present
 Journal of Molecular and Translational Research. 2015-present
 Guest Editor, Canadian Journal of Physiology and Pharmacology-2016
 Guest Editor, Free Radicals and Medicine. Special Issue: Extracellular Vesicles and Exosomes
 in Redox Biology: Therapeutic Targets for Inflammation and Aging. 2021
 Frontiers in Physiology, Associate Editor-Integrative Physiology. 2021

GRANT SUPPORT

Previous

1. American Heart Association. Role of Atrial Receptors in Congestive Heart Failure. Principal Investigator. \$16,500 per year 07/75 - 06/78
2. Nebraska Heart Association. Neural Mechanisms in Congestive Heart Failure. Principal Investigator. \$8,988 per year 07/01/74 - 06/30/75
3. Nebraska Heart Association. Osmoreception by the Heart. Principal Investigator. \$4,500 per year 07/01/75 - 06/30/76
4. University of Nebraska Seed Grant. Study of Atrial Stretch Receptor Reflexes in the Primate. Principal Investigator. \$5,000 per year 07/01/74 - 06/30/75
5. National Institutes of Health. Neural Control of Blood Volume. Co-Investigator. \$539,000, 09/01/75 - 08/31/80
6. University of Nebraska Medical Center. A Conscious Dog Model for the Study of Cardiovascular Reflexes. Principal Investigator. \$5,000 per year 07/01/77 - 06/30/78
7. National Institutes of Health. Reflex Control of the Circulation in Heart Failure. Principal Investigator. \$220,756 08/01/78 - 12/31/81
8. University of Nebraska Medical Center. Acute Resetting of the Arterial Baroreflex. \$6,962 07/01/79 - 06/30/80
9. The Nebraska Foundation. Purchase of an Autoanalyzer II. \$20,000 01/79 - 01/80
10. Nebraska Heart Association. The Role of Ventricular Receptors in Dynamic Exercise.

\$9,775 07/01/80 - 12/01/81

11. American Heart Association. Ventricular Receptors and Heart Failure. \$91,520 07/01/81 - 12/30/84

12. University of Nebraska Medical Center. The Role of Prostaglandins in the Sympathetic Response to Epicardial Bradykinin in the Monkey. \$5,000 07/01/81 - 06/30/82

13. Nebraska Heart Association. Function of Carotid Sinus Baroreceptors in Heart Failure. \$12,000 07/01/81 - 06/30/82

14. National Institutes of Health. Reflex Control of the Circulation in Heart Failure. \$230,875 12/01/82 - 11/30/86

15. State of Nebraska Department of Health. Cardiovascular Effects of Nicotine in Coronary Ischemia. \$21,000 07/01/82 - 06/30/83; \$35,000, 07/01/83 - 06/30/84

16. University of Nebraska Medical Center. The Effects of Myocardial Contractility on the Reflex Effects of Left Ventricular Mechanoreceptor Stimulation in Conscious Dogs. \$8,860 07/01/83 - 06/30/84

17. Nebraska Heart Association. Inotropic State and Left Ventricular Receptor Reflexes. \$11,983 07/01/84 - 06/30/85

18. National Institutes of Health. Ventricular Receptor Control of the Circulation. \$349,655 12/01/84 - 06/30/88

19. Nebraska Heart Association. Beta Receptor Stimulation of Carotid Sinus Baroreceptor Discharge. \$16,000 07/01/86 - 06/30/87

20. National Institutes of Health. Cardiac and Arterial Baroreflexes in Heart Failure. \$647,562 07/01/87 - 06/30/92

21. Nebraska Heart Association. Cardiac Prostaglandins and Renal Sympathetic Nerve Activity. \$16,000 07/01/87 - 06/30/88

22. Nebraska Heart Association. Central Baroreflex Resetting in the Conscious Dog. \$16,000 07/01/88 - 06/30/89

23. Nebraska Heart Association. The Role of Endogenous Opioids on the Baroreflex in Heart Failure. \$19,992 07/01/90-06/30/91

24. University of Nebraska Medical Center. The role of aldosterone on arterial baroreflexes. \$7,500 07/01/90 - 06/30/92

25. National Institutes of Health. Cardiopulmonary Reflexes in Heart Failure. \$787,205. 07/01/92- 06/30/97.

26. MERIT AWARD-National Heart, Lung and Blood Institute. 7-1, 1992- 6-30, 2002

27. Nebraska Heart Association. Coronary vascular effects of estrogen in conscious dogs. \$40,000 07/01/94-06/30/96.
28. Parke-Davis Co. Evaluation of an orally effective endothelin antagonist in heart failure. \$60,000, 2/1/95-1/31/96
29. UNMC Interactive Seed Grant. Project I. The Role of Nitric Oxide and Angiotensin II on the Neural Control of the Circulation in Heart Failure. \$10,913. 7/1/96-6/30/97.
30. University of Nebraska College of Medicine Indirect Cost Proposal for a Cardiovascular Research Center. \$100,000. May 28, 1997-June 30, 2000
31. American Heart Association, Nebraska Affiliate. Endothelin and Sympathetic Nerve Activity in Heart Failure. \$40,000. July 1, 1997-June 30, 1999.
32. Merck and Company. Evaluation of an ET-A and a combined ET-A,B antagonist on hemodynamic and sympathetic function in a rabbit model of chronic heart failure. \$67,000. 1997-98.
33. NIH, NHLBI. Cardiovascular Research Training Program. \$383,715. July 1, 1998-June 30, 2003
34. NIH, NHLBI. RO-1, HL62365-01. Exercise and Sympathetic Nerve Activity in Heart Failure. \$614,264. April 1, 1999-July 5, 1999 (rolled into PPG)
35. NIH, NHLBI Principal Investigator, Program Project (P01 HL62222-01). "Neuro-Circulatory Function in Chronic Heart Failure". (Score 168) \$3,869,451 07/05/99-06/30/04
36. NIH, NHLBI. Project Leader, Project I: "Control of Sympathetic Outflow in Heart Failure: Ang II and NO". \$954,440 07/05/99-06/30/04
37. NIH, NHLBI Principal Investigator, "Core A: Administrative Core" \$385,232 07/05/99-06/30/04
38. Protostar, Inc. "Development of a baropacing unit for heart failure" 2000- \$35,000
39. Proctor and Gamble Pharmaceuticals. "Matrix metalloprotease inhibitors in a rabbit model of chronic heart failure." 2001- \$211,000.
40. BioNebraska (Restoragen). "Hemodynamic effects of GLP-1 infusion in rabbits with chronic heart failure. 2001-2002, \$38,136
41. NIH, NHLBI Principal Investigator, "Sympathetic Control in Heart Failure: A Role for Statins". 2002-2007, \$1,000,000
42. CVRx, "The baroreflex in heart failure", 2000-2003, \$97,179
43. University of Nebraska Medical Center. Purchase of an Acuson Echocardiograph. \$100,000, 2002.

44. NIH, NHLBI. Program Project Grant. "Neuro- Circulatory Function in Chronic Heart Failure" 7/1/04-6/30/09 Total Direct Costs \$7,289,513
45. NIH, NHLBI. Project Leader Project 1: "Sympathetic Outflow in Heart Failure: Ang II, NO and ROS." 7/1/04-6/30/09, Total Direct Costs \$ 1,139,824
46. NIH, NHLBI. Principal Investigator, "Core A Administrative Core". 7/1/04-6/30/09, Total Direct Costs \$500,000
47. CVRx, Inc. Augmentation of Baroreflex Function. 3/1/05-2/28/07, Total Direct Costs: \$54,000
48. Cardiovascular Therapeutics, Inc. Ranolazine and Diastolic Function in Heart Failure. 1/1/08- 12/31/08. \$23,000.
49. NIH, NHLBI. Principal Investigator, "Core A Administrative Core". 7/1/09-6/30/14, Total Direct Costs \$598,505
50. NIH, NHLBI RO-1, Principal Investigator, "Sympathetic Control in Heart Failure: A Role for Statins". 2009-2011, ARRA funds, \$500,000 Total Direct Costs.
51. NIH, NHLBI P-30, Principal Investigator, "Support for the recruitment of a tenure track faculty member", 2009-2011, ARRA funds, \$952,484 Total Direct Costs.
52. NIH, NHLBI. PO-1. Principal Investigator "Neuro-Circulatory Function in Chronic Heart Failure" 7/1/09-8/31/14 Total Direct Costs \$6,166,355
53. NIH, NHLBI. Project Leader Project 1: "Regulation of Central AT1R Expression in Heart Failure and Modulation by Exercise Training." 7/1/09-8/31/14, Total Direct Costs \$ 1,354,380
54. NIH, NHLBI, RO-1, Co-Investigator "Oxidative Stress Causes Chronic Orthostatic Intolerance", 12/1/2009-11/30/2014, \$152,442 PI of Subcontract. (PI. Julian Stewart, New York Medical College).
55. American Heart Association. Sponsor of Pre Doctoral Fellowship. 1/1/2013-12/31/2015. (PI. Alicia Schiller).
56. NIH, NHLBI 1R01HL112736-01A1 (Zucker) New York Medical College. Mechanisms in Vasovagal Syncope. 02/01/13-1/31/17 (PI of subcontract).
57. NIH, NHLBI, F32 Central GRK5 modulation of Angiotensin II receptor expression in heart failure. 7/1/2012-6/30-15. Mentor (PI. Karla K. V. Haack).
58. Sorrento Therapeutics. Evaluation of Thoracic Intrathecal RTX for Treatment of Chronic Heart Failure. July 1, 2014-June 30, 2015. \$49,626
59. NIH F31 to Bryan Becker. Brain-Derived Neurotrophic Factor and Sympatho-excitation in Chronic Heart Failure. Mentor. May 1, 2015

60. American Heart Association. Sponsor of Pre-Doctoral Fellowship. 7/1/2013-6/30/2015. (PI. Peter Pellegrino).
61. 1 R01 HL093028-01A1 Gao (PI) AT2 Receptors in the RVLM: Regulation of Sympathetic Nerve Activity in Heart Failure 04/15/09-03/31/15 DHHS/NIH/NHLBI Role: Co-I
62. Nebraska Research Initiative. PI. "The effects of renal denervation on sympathetic vasomotion in anesthetized swine". August 1, 2016-July 31, 2017. \$250,000.
63. NIH, F30HL118974 Central Rho-Kinase Inhibition and Ang II-induced Sympatho-excitation. Sept 1, 2014-August 31, 2018 (PI. Peter R. Pellegrino). Role: Mentor
64. NIH, R01 HL116608, Principal Investigator "Molecular and Cellular Determinants of the Exercise Pressor Reflex in CHF". 8/1/13-7/31/17, Total Direct Costs \$ 1,200,148
65. Sorrento Therapeutics, Inc. PI. "RTX for the treatment of hypertension". \$180,000. August 1, 2016-July 31, 2018.
66. NIH, 1OT2OD023848-01. "Comprehensive Structural and Functional Mapping of the Mammalian Cardiac Nervous System". 9/24/2016-7/31/2019. PI: Kalyanam Shivkumar, \$2,631,291 total costs UCLA. Subcontract UNMC \$450,000 direct costs.
67. NIH R01 HL126796. Co-PI. "Cardiac Sympathetic Afferent Denervation and Remodeling in Heart Failure". \$2,479,000. December 1, 2015-November 30, 2019.
68. Medtronic, Inc. (Schiller, PI.). The effect of surgical and catheter-based renal denervation on renal sympathetic vasomotion in swine. \$171,159.00 04/23/2020 - 04/22/2021 Role: Col 0.24 Calendar months.
69. Sorrento Therapeutics, Inc. PI. "The use of RTX in Pacing-Induced Heart Failure". \$200,000. September 2017-September 2021.
70. UNMC COVID-19 Rapid Response Grant. 7/1/20-12/31/21. Zucker PI. "CNS ACE2 overexpression and cardiovascular events following corona viral infection in mice." \$86,599
71. 8P20GM103480-05 (Bronich, PI) 09/26/2008 - 06/30/2022 1.20 calendar DHHS/NIH/NIGMS \$1,418,080 Role: Other
72. NIH Program Project Grant P01-HL62222-20. PI. July 1, 2015-July 31, 2022. "Neural Control of the Circulation in Heart Failure". \$5,870,370 NCE

Current

73. NIH R01 HL126796-05. Multi-PI (Zucker and Wang). "Cardiac afferents and renal function in heart failure". \$1,494,176 Direct Costs. December 1, 2019-November 30, 2024.
74. NIH R01 HL152160-02 (Wang, PI) "Novel Neural Mechanisms underlying Lung-Heart Pathological Crosstalk". 04/01/2020 - 03/31/2024. \$353,473.00/yr direct costs. Role: Col. 1.20 calendar

75. NIH R01 HL1 R01 HL153176-01, Multi-PI. (Zucker and Tian) 4/1/21-3/31/25. "Nrf2 regulation of oxidative stress in heart failure and extra vesicular communication". April 1, 2021-March 31, 2025. Total Direct Costs: \$2,091,215

76. NIH R01 HL160820-01 (Gao PI) 12/01/2021-11/31/2025 NIH/NHLBI "Skeletal Muscle Nrf2: Exercise-Induced Cardiovascular Protection" Role: Co-Investigator (4.8 calendar months). Total Direct Costs: \$1,351,096

77. NIH R01HL172029-01A1 (Hanjun Wang and Irving Zucker Co-PI's). 7/1/2024-6/30/2028. "Stellate Ganglia Nrf2 Signaling and Enhanced Cardiac Sympathetic Tone in Chronic Heart Failure." 4.2 person months. Total Direct Costs: \$1,932,280. Pending. 2%tile.

Grant and Industrial Consultation and Departmental Reviews

1. National Institutes of Health. "Chronic Elevation of NE: Cardiac and Vascular Regulation". Dr. Thomas H. Hintze, Principal Investigator. \$308,144 07/01/87 to 06/30/90.
2. National Institutes of Health. "Endotracheal Suctioning: Open versus Closed Systems". Dr. Mara Baun, Principal Investigator. \$360,904 03/17/88 - 03/16/90.
3. Dr. Alan Scher, Professor. Department of Physiology and Biophysics, University of Washington School of Medicine. June 1985.
4. Dr. Kenneth L. Goetz, Professor and Chief of Department of Experimental Medicine, St. Lukes Hospital, Kansas City, Missouri. 1983.
5. Dr. Michael Bristow, University of Colorado School of Medicine. Heart Failure SCOR - 1993.
6. Dr. John Hall, Professor and Chairman, Department of Physiology, University of Mississippi College of Medicine, Jackson, MS. Program Project. August 1997, December 2002.
7. Dr. Contantino Iadacola, Professor Department of Neurology, Cornell University College of Medicine, New York, NY. Program Project Review. May 23, 2006.
8. CVRx, Inc. 2000-
9. Proctor and Gamble Restoragen, Inc. 2001-2002
10. Merck and Co. 1998-2000
11. Parke-Davis, Inc. 1997-1998
12. Dr. Steven F. Vatner, Professor and Chair, Department of Cell Biology and Molecular Medicine, University of Medicine and Dentistry of New Jersey. Training Grant Review, June 6, 2006; Dec 18, 2007.
13. University of Oklahoma Health Science Center, Graduate Program Review, Department of Physiology and Biophysics, April 18-19, 2007.
14. University of South Florida, Departmental Review. Department of Molecular Physiology and Pharmacology. May 19-20, 2010.
15. Vascular Dynamics, Inc. August 2011.
16. Samson Neuroscience, 2011
17. Medtronic, March 2012
18. Merck and Co., May 2012
19. Sorrento Therapeutics, Inc. August 2015, Inc. 2000-2002
20. Cardionomics, Inc. March 2023

INVITED LECTURES AND TALKS:

1. May 1973. "Central Regulation of Sodium Excretion" Loyola University, Department of Physiology.

2. November 1974. New York Medical College, Department of Physiology. "Characterization of Atrial Stretch Receptors".
3. November 1975. Creighton University, Department of Physiology and Pharmacology. "Some Aspects of Atrial Stretch Receptor Function."
4. October 1977. University of Miami, Department of Medicine. "The Role of Atrial Mechanoreceptors in Fluid Homeostasis."
5. October 1978. Brown University, Department of Physiology and Biophysics. "Alterations in Atrial Receptor Activity in Chronic Heart Failure."
6. February 1980. "Atrial Receptors in Heart Failure." American Heart Association Council on Circulation. Keystone, Colorado.
7. April 1980. Symposium on Neurogenic Control of the Circulation, Anaheim, California. "Modulation of Renal Function by Atrial Receptors in Heart Failure."
8. December 1980. University of Oklahoma College of Medicine.
 - a. (College-wide) "Modulation of Renal Function by Atrial Receptors in Heart Failure."
 - b. (Department of Physiology) "Reflexes from the Left Ventricle."
9. December 1980. Oklahoma State College of Veterinary Medicine. Department of Physiological Sciences. "Modulation of Renal Function by Atrial Receptors in Heart Failure."
10. May 1981. Iowa State College of Veterinary Medicine, Department of Physiology and Pharmacology. "Modulation of Renal Function by Atrial Receptors in Heart Failure."
11. May 1981. University of Kansas College of Medicine, Department of Physiology. "Modulation of Renal Function by Atrial Receptors in Heart Failure."
12. May 1981. University of Iowa. Department of Medicine. "Reflexes from the Left Ventricle."
13. June 1982. Harvard University, New England Regional Primate Center, Department of Medicine. "The Bezold-Jarisch Reflex in Conscious Dogs."
14. June 1982. New York Medical College, Department of Physiology. "The Bezold-Jarisch Reflex Revisited."
15. March 1984. University of Texas Health Science Center, San Antonio, Department of Physiology. "Reflex Control of the Circulation in Pathological States."
16. June 18, 1984. New York Medical College, Department of Physiology. "Reflex Control of the Circulation in Heart Failure."
17. March 6, 1985. Michigan State University, Department of Physiology. "Ventricular Receptors and Cardiovascular Control."
18. June 12, 1985. University of Washington, Department of Physiology. "Interaction Between Ventricular Receptors and Baroreflexes in Conscious Dogs."

19. January 13, 1986. Northeastern Ohio Universities College of Medicine. "Ventricular Receptor Control of the Circulation."
20. February 28, 1986. Council on Circulation Symposium, Keystone, Colorado. "Cardiac and Arterial Baroreceptor function in Heart Failure."
21. October 20, 1986. Eastern Virginia Medical School. "Modulation of the Arterial Baroreflex by Cardiac Receptors in Conscious Dogs."
22. October 22, 1986. East Carolina University College of Medicine. "Modulation of the Arterial Baroreflex by Cardiac Receptors in Conscious Dogs."
23. July 7, 1987. Hebei Medical College, People's Republic of China. "Atrial Receptors in Heart Failure."
24. July 8, 1987. Hebei Medical College, People's Republic of China. "Left Ventricular Reflexes and Regional Blood Flow in Conscious Dogs."
25. July 9, 1987. Hebei Medical College, People's Republic of China. "Interaction of the Cardiac and Arterial Baroreflexes on Heart Rate and Peripheral Resistance in Conscious Dogs."
26. July 10, 1987. Hebei Medical College, People's Republic of China. "The Role of Prostaglandins in Baroreflex Control." "Resetting of the Carotid Baroreflex in the Conscious Dog."
27. July 10, 1987. Hebei Medical College, People's Republic of China. "Baroreceptors in heart failure."
28. July 16, 1987. Second Military Medical College, Shanghai, People's Republic of China. "Atrial Receptors in heart failure."
29. July 20, 1987. Department of Physiology. Pramongkutkiao College of Medicine, Bangkok, Thailand. "Baroreceptor and atrial receptor reflexes in heart failure."
30. July 20, 1987. Department of Anatomy. Mahidol University, Bangkok, Thailand. "The role of prostaglandins in baroreflex control."
31. October 19, 1987. Tulane University Medical School, New Orleans, Louisiana. "Interaction between ventricular and baroreflexes in conscious dogs."
32. June 3, 1988. University of Tübingen, West Germany. "Neural Mechanisms of Salt and Water Homeo-stasis in the Primate."
33. June 3, 1988. University of Tübingen, West Germany. "Cardiac and Baroreflexes in Heart Failure."
34. June 21, 1988. Bristol-Myers Company. "Reflex Control of the Circulation in Heart Failure."
35. March 6, 1985. Michigan State University, Department of Physiology. "Ventricular Receptors and Cardiovascular Control."

36. June 12, 1985. University of Washington, Department of Physiology. "Interaction Between Ventricular Receptors and Baroreflexes in Conscious Dogs."
37. January 13, 1986. Northeastern Ohio Universities College of Medicine. Department of Physiology. "Ventricular Receptor Control of the Circulation."
38. February 28, 1986. Council on Circulation Symposium, Keystone, Colorado. "Cardiac and Arterial Baroreceptor function in Heart Failure."
39. October 20, 1986. Eastern Virginia Medical School. "Modulation of the Arterial Baroreflex by Cardiac Receptors in Conscious Dogs."
40. October 22, 1986. East Carolina University College of Medicine. "Modulation of the Arterial Baroreflex by Cardiac Receptors in Conscious Dogs."
41. July 7, 1987. Hebei Medical College, People's Republic of China. "Atrial Receptors in Heart Failure."
42. July 8, 1987. Hebei Medical College, People's Republic of China. "Left Ventricular Reflexes and Regional Blood Flow in Conscious Dogs."
43. July 9, 1987. Hebei Medical College, People's Republic of China. "Interaction of the Cardiac and Arterial Baroreflexes on Heart Rate and Peripheral Resistance in Conscious Dogs."
44. July 10, 1987. Hebei Medical College, People's Republic of China. "The Role of Prostaglandins in Baroreflex Control." "Resetting of the Carotid Baroreflex in the Conscious Dog."
45. July 10, 1987. Hebei Medical College, People's Republic of China. "Baroreceptors in heart failure."
46. July 16, 1987. Second Military Medical College, Shanghai, People's Republic of China. "Atrial Receptors in heart failure."
47. July 20, 1987. Department of Physiology. Pramongkutkiao College of Medicine, Bangkok, Thailand. "Baroreceptor and atrial receptor reflexes in heart failure."
48. July 20, 1987. Department of Anatomy. Mahidol University, Bangkok, Thailand. "The role of prostaglandins in baroreflex control."
49. October 19, 1987. Tulane University Medical School, New Orleans, Louisiana. "Interaction between ventricular and baroreflexes in conscious dogs."
50. June 3, 1988. Tubingen, West Germany. "Neural Mechanisms of Salt and Water Homeo-stasis in the Primate."
51. June 3, 1988. Tubingen, West Germany. "Cardiac and Baroreflexes in Heart Failure."
52. June 21, 1988. Bristol-Myers Company. "Reflex Control of the Circulation in Heart Failure."

53. June 17, 1988. Department of Physiology, New York Medical College. "Prostaglandins and Baroreflexes."
54. April 3, 1989. Department of Physiology, The University of Louisville. "Prostaglandin Modulation of Arterial Baroreflexes."
55. April 10, 1989. Department of Medicine, Division of Cardiology. University of Toronto. "Ventricular Receptor Control of the Circulation."
56. April 10, 1989. Department of Medicine, Division of Cardiology. University of Toronto. "Reflex Control of the Circulation in Heart Failure."
57. May 23, 1989. Jerusalem, Israel. "Significance of Cardiac and Baroreflexes in Heart Failure."
58. November 13, 1989. Postgraduate Seminar. American Heart Association Scientific Sessions, New Orleans, La. "Prostaglandins and ventricular modulation of baroreceptor reflexes."
59. April, 19, 1990. Nebraska Heart Association. Research Colloquium "Prostaglandin control of cardiovascular reflexes."
60. September 27, 1990. Food and Drug Administration. Bethesda, Maryland. "Baroreflex control of the circulation in heart failure"
61. October 12, 1990. Symposium on Current Topics in Heart Failure. Freudenstadt, Germany. "Modulation of baroreflex and baroreceptor function in experimental heart failure."
62. November 3, 1990. Symposium on Neural Control of the Circulation. "Baroreflexes in heart failure." Joint meeting of American and Chinese Physiological Societies.
63. November 5, 1990. "Baroreflex control of the circulation in heart failure". Department of Medical Research. Taichung Veterans General Hospital. Taichung, Taiwan. ROC.
64. January 11, 1991. Seminar, Dept. of Cardiology. University of California-Davis, Davis, California. "Baroreflex Control of the Circulation in Heart Failure".
65. January 14, 1991. Seminar, Syntex Research. Palo Alto, California. "Prostaglandin modulation of the arterial baroreflex".
66. February 25, 1991. Seminar, Department of Anesthesiology, Medical College of Wisconsin. Milwaukee, Wisconsin. "Baroreflex control in experimental heart failure"
67. February 26, 1991. Seminar, Department of Anesthesiology. Medical College of Wisconsin and VA Medical Center, Milwaukee, Wisconsin. "The role of prostaglandins in modulation of baroreflex function".
68. March 21-22, 1991. Visiting Scientist and Seminar, Department of Medical Physiology, Texas A&M University, College Station, Texas. "Baroreflex control of the circulation in chronic heart failure."

69. April 05, 1991. Seminar, Department of Basic Medical Sciences. Creighton University School of Medicine, Omaha, Nebraska. "Baroreflex control of the circulation in heart failure."
70. April 15, 1991. Seminar, Department of Physiology and Physiology, University of South Dakota School of Medicine, Vermillion, South Dakota. "Baroreflex control of the circulation in experimental heart failure."
71. April 23, 1991. Symposium, FASEB - Factors Affecting the Regulation of the Arterial Baroreflex. "Modulation of arterial baroreflexes in experimental heart failure."
72. April 25, 1991. Symposium, FASEB-The Heart and Control of Renal Excretion: Neural and Endocrine Mechanisms. "Cardiac volume receptors": electrophysiology in normal and pathological states."
73. May 7, 1991. Seminar, Department of Medical Research, Taichung Veterans General Hospital. Taichung, Taiwan. "Modulation of arterial baroreflex control of the circulation by prostaglandins."
74. May 8, 1991. Seminar, Department of Physiology and Biophysics, National Cheng Kung University Medical College, Tainan, Taiwan. "Atrial receptor control of renal function."
75. May 11, 1991. Seminar, Department of Physiology and Biophysics, National Defense Medical Center, Taipei, Taiwan. "Arterial baroreflex control of the circulation in heart failure."
76. June 10, 1991. Seminar, Department of Physiology, New York Medical College, Valhalla, New York. "Baroreflex control of the circulation in heart failure."
77. August 19, 1991. Seminar, Division of Cardiology, Tucson VA Hospital, Tucson, Arizona. "Abnormal baroreflex control of the circulation in experimental heart failure."
78. November 16, 1992. Symposium, Hormones and Early Heart Failure. "Role of cardiovascular reflexes". American Heart Association Scientific Sessions, New Orleans, Louisiana.
79. January 19, 1993. Seminar, Department of Physiology, University of South Florida. "Reflex control of the circulation in chronic heart failure."
80. April 16, 1993. Seminar, Omaha VA Medical Center. "Reflex control of the circulation in experimental heart failure."
81. April 30, 1993. Seminar, Pennsylvania State University, Hershey Medical Center. Department of Internal Medicine, Division of Cardiology. "Reflex control of the circulation in experimental heart failure."
82. May 18, 1993. "Cardiopulmonary reflexes in experimental congestive heart failure". Second International Symposium on Heart Failure-Mechanisms and Management. Geneva, Switzerland.
83. May 21, 1993. Seminar, Eberhard-Karls Universität Tübingen. Physiologisches Institut II. Tübingen, Germany. "Cardiac and baroreflex control of the circulation in heart failure."

84. May 28, 1993. Seminar. Universität Heidelberg. Heidelberg, Germany. Department of Physiology. "Reflex control of the circulation in heart failure."
85. July 01, 1993. Seminar. Division of Cardiology, University of Colorado College of Medicine. "Reflex Control of the Circulation in Heart Failure."
86. August 06, 1993. "Reflex Changes in Heart Failure: Evidence from Animals." Symposium at the International Union of Physiological Sciences, Glasgow, Scotland.
87. April 09, 1994. "Reflex control of the circulation in heart failure." Coleridge Symposium, Sacramento, California.
88. Sept. 27, 1994. Seminar "Baroreceptor and cardiac receptor abnormalities in heart failure." Dept. of Pulmonary and Critical Care Medicine, University of Illinois at Chicago.
89. October 10, 1994. Seminar "Arterial and Cardiopulmonary Reflex Control of the Circulation in Heart Failure". Dept. of Anatomy and Physiology, Kansas State University School of Veterinary Medicine.
90. February 07, 1995. Seminar "Reflex Control of Sympathetic Nerve Activity in Heart Failure: New Concepts". Division of Cardiology. Albert Einstein College of Medicine of Yeshiva University.
91. February 07, 1995. Cardiology Grand Rounds. "Reflex Control of Sympathetic Nerve Activity in Heart Failure: New Concepts". Division of Cardiovascular Physiology, Columbia University College of Physicians and Surgeons.
92. April 12, 1995. FASEB Symposium. "Neural control of the circulation in heart failure and coronary ischemia". Atlanta, Georgia.
93. May 22, 1995. Scientific Conference on the Pathophysiology of Tachycardia-induced heart failure. "Alterations in baroreceptor systems in pacing-induced heart failure". Perdido Beach, Alabama.
94. August 29, 1995. The 3rd International Head-Out Water Immersion Symposium. "Enhanced responsiveness of cardiac vagal chemosensitive endings in heart failure". Copenhagen, Denmark.
95. March 28, 1996. Neurohumoral Control of the Circulation in Heart Failure, Medtronic Symposium. "The role of arterial baroreflex stimulation in heart failure". Orlando, Florida.
96. April 30, 1996. "Novel mechanisms for the control of sympathetic nerve activity in chronic heart failure". Mount Sinai Medical Center, New York, N.Y.
97. May 1, 1996. "Novel mechanisms for the control of sympathetic nerve activity in chronic heart failure". Department of Physiology, New York Medical College, Valhalla, New York.
98. May 27, 1996. "Neurohumoral mechanism of autonomic control in experimental heart failure." Symposium Presentation. 4th World Congress on Heart Failure. Jerusalem, Israel.

99. October 2, 1996. "Novel mechanisms for the control of sympathetic nerve activity in chronic heart failure". Division of Cardiology, Case-Western Reserve University, Cleveland, Ohio.
100. March 26, 1997. "Multiple mechanisms for the control of sympathetic nerve activity in heart failure: Roles for angiotensin II, nitric oxide and endothelin." Merck Research Laboratories, West Point, Pa.
101. April 28, 1997. "Multiple mechanisms for the control of sympathetic nerve activity in heart failure: Roles for angiotensin II, nitric oxide and endothelin" Division of Cardiology. Pennsylvania State University. Hershey, PA.
102. May 20, 1997. "Multiple mechanisms for the control of sympathetic nerve activity in heart failure: Roles for angiotensin II, nitric oxide and endothelin". Merck-Darmstadt, Germany
103. May 25, 1997. "Central nervous system regulation of autonomic control in experimental heart failure." Symposium on The Brain in Heart Failure: Heart Failure '97, Cologne, Germany
104. May 26, 1997. "Quantification of the sympathetic activation in heart failure". Symposium on Baroreceptor Dysfunction, Reflex Sympathetic and Vagal Control: Heart Failure '97, Cologne, Germany
105. June 14, 1997. "Novel mechanisms of sympathetic activation in heart failure". Symposium on New Frontiers in Cardiovascular Medicine. Taichung, Taiwan
106. June 18, 1997. "Multiple mechanisms for the control of sympathetic nerve activity in heart failure: Roles for angiotensin II, nitric oxide and endothelin" Division of Cardiology. Kyushu University. Fukuoka, Japan.
107. June 19, 1997. "Novel mechanisms of sympathetic activation in heart failure" Kagawa University, Department of Physiology. Takamatsu, Japan
108. June 24, 1997. "Novel mechanisms of sympathetic activation in heart failure" Heibei Medical College. Department of Physiology. Shijiazhuang, China.
109. June 26, 1997. "Novel mechanisms of sympathetic activation in heart failure" Chengde University. Chengde, China
110. July 25, 1997. "Multiple Mechanisms for the Regulation of Sympathetic Outflow in Chronic Experimental Heart Failure". Symposium on Ventricular Rate Related Failure at the International Society for Heart Research, North American Section. Vancouver, British Columbia, Canada.
111. March 16, 1998. "Sympathetic Outflow in Heart Failure: Reflexes, AII, NO and Exercise". Department of Physiology, New York Medical College, Valhalla, NY.
112. September 14, 1998. "Mechanisms of Increased Sympathetic Drive" In "Reflex Control Mechanisms" symposium at the Second Annual Scientific Meeting of the Heart Failure Society of America, Boca Raton, Fl.

113. June 4, 1999. "Chemoreflex Regulation of Sympathetic Nerve Activity in Heart Failure." Imperial College, Division of Cardiology, Royal Brompton Hospital, London, UK.
114. June 6, 1999. "The Brain in Heart Failure". Heart Failure '99. Gothenberg, Sweden
115. June 23, 1999. "The Regulation of Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin II and Nitric Oxide." Department of Physiology and Biophysics, Georgetown University Medical Center, Washington, D.C.
116. Sept. 23, 1999. "How to measure sympathetic nerve activity". Heart Failure Society of America Meeting, San Francisco, Ca.
117. Sept. 24, 1999. "The Role of Nitric Oxide in Regulating Sympathetic Activity" Heart Failure Society of America Scientific Meeting, San Francisco, Ca.
118. October 5, 1999. "The Regulation of Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin II and Nitric Oxide." Hong Kong Pharmacology Society. Hong Kong, China
119. October 8, 1999. "The Role of Exercise Training on Sympathetic Nerve Activity in Heart Failure" The Japanese Heart Failure Society. Fukuoka, Japan
120. October 12, 1999. "The Regulation of Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin II and Nitric Oxide." Keio University. Tokyo, Japan
121. January 27, 2000. "Modulation of Neurohumoral Outflow in Heart Failure" University of Missouri at Kansas City-St. Luke's Hospital Grand Rounds, Kansas City, MO
122. April 26, 2000. "The Regulation of Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin II and Nitric Oxide." Cardiology Grand Rounds. Henry Ford Hospital. Detroit, MI
123. July 11, 2000. "Endothelin-1 Modulation of Sympathetic Nerve Activity in Heart Failure". 7th World Congress on Heart Failure-Mechanisms and Management. Vancouver, B.C., Canada
124. July 20, 2000. "Alterations in the Cardiac Sympathetic Afferent Reflex in dogs with Heart Failure: The Role of Angiotensin II." International Society for Autonomic Neuroscience. 2nd International Congress. London, UK.
125. August 24, 2000. "Autonomic Reflex Control of Sympathetic Nerve Activity in Heart Failure, Involvement of Angiotensin II and Nitric Oxide." APS Symposium on Baroreflexes. Iowa City, IA
126. April 21, 2001. "Reflex Control of the Sympathetic Nervous System in Heart Failure". The Iowa Physiological Society, Des Moines, IA.
127. June 12, 2001. "Sympathetic Regulation in dogs with Pacing-Induced Heart Failure." FDA, Bethesda, Maryland.
128. August 16, 2001. "Mechanisms of sympathetic regulation in heart failure" Baker Institute. Melbourne, Australia

129. August 22, 2001. "Sympathetic Nerve Activity in Heart Failure. The Role of Exercise Training." Central Mechanisms of Cardiovascular Control- Cellular, Molecular and Integrative Aspects. Sydney, Australia.
130. August 25, 2001. "Renal Sympathetic Nerve Activity in Heart Failure" Queenstown, New Zealand.
131. November 1, 2001. "Regulation of Sympathetic Nerve Activity in Heart Failure" George Washington University. Washington, D.C.
132. November 27, 2001. "Assessment of Arterial Baroreflex Function: Methodologies and Implications." Safety Pharmacology Society. Chicago, IL.
133. May 1, 2002. "The control of sympathetic nerve activity in heart failure: Angiotensin II and nitric oxide." New York Medical College, Valhalla, NY.
134. June 19, 2002. "The regulation of sympathetic nerve activity in heart failure: Roles for Angiotensin II and NO" The Paul Erlich Lecture. The Charite. Berlin, Germany.
135. June 24, 2002. "The regulation of sympathetic nerve activity in heart failure: Roles for Angiotensin II and NO" The University of Leipzig Cardiac Center. Leipzig, Germany.
136. June 30, 2002. "The regulation of sympathetic nerve activity in heart failure: Roles for Angiotensin II and NO" Invited speaker. 4th International Congress of Pathophysiology. Budapest, Hungary.
137. October 9, 2002. "Novel aspects of sympathetic regulation in heart failure" Vascular Biology Research Center. Medical College of Georgia. Augusta, Georgia.
138. December 13, 2002. "The regulation of sympathetic nerve activity in heart failure: Roles for Angiotensin II and NO" Cardiovascular Research Center, University of Iowa. Iowa City, IA.
139. January 13, 2003. "The Cardiac sympathetic afferent reflex: A contributing factor to sympatho- excitation in heart failure." International Conference on Chest Diseases and Allied Sciences, New Dehli, India.
140. January 14, 2003. Plenary Lecture. "The influence of sympathetic outflow in heart failure by nitric oxide and angiotensin II." International Conference on Chest Diseases and Allied Sciences, New Dehli, India.
141. May 16, 2003. "The Regulation of Sympathetic Outflow in Chronic Heart Failure". Symposium on the Sympathetic System in Hypertension and Heart Failure. American Society of Hypertension. New York, NY.
142. June 13, 2003. "The Origin of Sympathetic Nerve Activity in Heart Failure". 6th Heart Failure Summit. American College of Cardiology. Toronto, Canada.
143. June 28, 2003. "The Origin of Sympathetic Outflow in Heart Failure: the Role of Angiotensin II and Nitric Oxide." Bristol Symposium 2003. Neurohumoral Control of Cardiovascular Function-From Genes to Physiology. Bristol, UK.

144. July 1, 2003. "The Origin of Sympathetic Nerve Activity in Heart Failure". Department of Physiology. University of Birmingham. Birmingham, UK.
145. September 5, 2003. "Mechanisms mediating the normalization of enhanced autonomic function during exercise training in heart failure". Trends in Exercise Physiology and Cardiac Rehabilitation. Rome, Italy.
146. December 4, 2003. "Exercise training and sympathetic regulation in experimental heart failure". Inaugural Research Symposium. Windsor University School of Medicine. St. Kitts, West Indies.
147. April 20, 2004. "Defining integrative physiology" Public Affairs Workshop Sustaining Integrative and Organ Systems Sciences: Problems, Opportunities, Solutions. EB04 Washington, DC.
148. May 7, 2004. "The Origins of Sympatho-Excitation in Chronic Heart Failure". Department of Integrative Physiology. North Texas Health Sciences Center. Fort Worth, Texas.
149. August 20, 2004. "Chronic Volume Overload and Renal Sympathetic Activation in Heart Failure" NIH Workshop on the Cardio-Renal Syndrome in Heart Failure. Tysons Corner, VA.
150. September 27, 2004. "Exercise training and sympathetic regulation in heart failure" University of Northern Iowa
151. December 9, 2004. "Central Humoral Regulation of Sympathetic Outflow in Heart Failure". Jaipur, India.
152. February 7, 2005. "The regulation of sympathetic nerve activity in heart failure: roles of Angiotensin, reactive oxidant stress and exercise". Hypertension Center, University of Florida School of Medicine, Gainesville, FL.
153. February 8, 2005. "The Role of Statins in Sympathetic Regulation in Heart Failure". Division of Cardiology. University of Florida School of Medicine, Gainesville, FL.
154. September 21, 2005. "Central Neural Control Mechanisms in Heart Failure". Council for High Blood Pressure Research. Washington, D.C.
155. December 5, 2005. "The regulation of sympathetic nerve activity in heart failure: The roles of angiotensin II, reactive oxidant stress and exercise training". Department of Physiology. Case- Western Reserve University, Cleveland, OH.
156. January 13, 2006. "How to write a Discussion and Introduction". APS Workshop on Scientific Writing. Orlando, FL.
157. January 27, 2006. "Radical Stress, Autonomic Nerve Activity and Heart Failure". Department of Physiology and Biomedical Engineering, Mayo Clinic Medical School, Rochester, MN.

158. March 8, 2006. "Sympathetic Nerve Activity in Heart Failure: The Angiotensin-Radical Stress Connection" Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS.
159. June 2, 2006. "Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin, Radical Stress and Exercise Training." Hypertension Grand Rounds. University of Texas Southwestern Medical School. Dallas, TX.
160. June 22, 2006. "Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin, Radical Stress and Exercise Training." Department of Physiology and Pharmacology. Universidade Federal Fluminense. Neteroi, Rio de Janeiro, Brazil.
161. June 26, 2006. "Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin, Radical Stress and Exercise Training." Department of Cardiac Rehabilitation. The University of Sao Paulo, InCor. Sao, Paulo, Brazil.
162. June 29, 2006. "Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin, Radical Stress and Exercise Training." Department of Physiology, University of Sao Paulo, Ribiero Preto, Brazil.
163. August 23, 2006. "Sympathetic Nerve Activity in Heart Failure: The Roles of Angiotensin, Radical Stress and Exercise Training." Department of Physiology, University of Missouri School of Medicine, Columbia, MO.
145. September 10, 2006. "Carotid Sinus Stimulation in Heart Failure". CVRx, Inc. meeting at the HFSA. Seattle, WA.
146. October 14, 2006. "Central mediators of Sympatho-excitation in heart failure: The Angiotensin- ROS-nitric oxide connection". ISH2006 Investigator Initiated Symposium. Fukuoka, Japan.
147. October 16, 2006. "Statins and sympathetic nerve activity in heart failure: implications for new therapeutic targets." In Angiotensin Receptor Blockers and Statins Targeted to Autonomic Regulation. Fukuoka, Japan.
148. October 18, 2006. "Sympathetic Activity in Heart Failure". Honorary Speaker. Physiological Society of Thailand, Chulalongkorn University. Bangkok, Thailand.
149. April 5, 2007. "Sympathetic Nerve Activity in Heart Failure: A Radical Problem". Department of Physiology, Wayne State University. Detroit, MI.
150. May 2, 2007. "Exercise Training, radical stress and sympathetic nerve activity in heart failure" In the Cross Sectional Symposium, "Heart Failure and Exercise: Autonomic and Cardiovascular Responses". EB07, Washington, D.C.
151. May 7, 2007. "Heart Failure and the Autonomic Nervous System". Inter-American Society of Hypertension and the Consortium for Southeastern Hypertension Control. Miami Beach, FL.
152. June 7, 2007. "Statins and Heart Failure". Emergency Medicine Resident Research Day. University of Nebraska Medical Center. Omaha, NE.

153. July 19, 2007. "Sympathetic tone in heart failure: Modulation by Angiotensin II and Radical Stress. FASEB Summer Conference. Neural Mechanism in Cardiovascular Regulation. Sydney, Australia.
154. July 24, 2007. "Central Angiotensin Receptor Modulation of Sympathetic Function in Heart Failure". Howard Florey Labs, University of Melbourne, Melbourne, Australia.
155. July 25, 2007. "Statins and Heart Failure". Baker Cardiovascular Research Foundation. The Alfred Hospital. Melbourne, Australia.
156. October 1, 2007. "Sympatho-Excitation in Heart Failure: Angiotensin, ROS and Exercise", Department of Medicine, University of California-Irvine. Irvine, CA.
157. October 24, 2007. "Sympathetic Tone in Heart Failure: Modulations by Angiotensin II and Radical Stress". Cardiovascular Therapeutics. Palo Alto, CA.
158. February 8, 2008. "The Regulation of Sympathetic Outflow in Heart Failure: Angiotensin II, ROS and Exercise Training". Department of Physiology. University of South Dakota School of Medicine. Vermillion, SD.
159. February, 15, 2008. "The Regulation of Sympathetic Outflow in Heart Failure: Angiotensin II, ROS and Exercise Training". Department of Physiology, Louisiana State University School of Veterinary Medicine. Baton Rouge, LA.
160. March 20, 2008. "Sympatho-Excitation in Heart Failure: Angiotensin II, ROS and Exercise Training". Center for Drug Development and Nanotechnology. UNMC, Omaha, NE.
161. March 26, 2008. "A Central Role for Angiotensin in the Sympatho-Excitation of Chronic Heart Failure". The 20th Annual Graduate Student Research Forum. New York Medical College, Valhalla, NY.
162. April 6, 2008. "Chronic baroreflex stimulation: a new therapy for heart failure?" In: Novel Therapeutic Targeting of the Autonomic Nervous System in Heart Failure and Hypertension. Experimental Biology 09, San Diego, CA
163. April 7, 2008. Wiggers Award Lecture. "Sympathetic Regulation in Heart Failure: A Pivotal Role for Brain Angiotensin II." Experimental Biology 09, San Diego, CA.
164. July 14, 2008. "The regulation of central angiotensin receptor expression in chronic heart failure." The Committee on Molecular Medicine, Department of Internal Medicine. The University of Chicago School of Medicine, Chicago, IL.
165. August 26, 2008. "Angiotensin II, NO and ROS: Autonomic and Cerebrovascular Effects in Heart Failure and Diabetes." Plenary Lecture. European Society for Microcirculation. Budapest, Hungary.
166. October 21, 2008. "Angiotensin II, NADPH Oxidase and MAPKs in central cardiovascular regulation". The Beijing Joint Conference of Physiological Sciences. Beijing, China.

167. October 23, 2008. "Control of Central Angiotensin Receptor Expression in Chronic Heart Failure". Schezuan Medical University. Chengdu, China.
168. October 27, 2008. "Funding for Biomedical Research in the United States". Sun Yat Sen University. Guangzhou, China.
169. October 29, 2008. "Control of Central Angiotensin Receptor Expression in Chronic Heart Failure". Department of Physiology. Nanjing Medical University, Nanjing, China.
170. October 31, 2008. "Control of Central Angiotensin Receptor Expression in Chronic Heart Failure". Shuzhou University, Shuzhou, China.
171. November 3, 2008. "Neural control of cardiovascular activity in heart failure." Department of Physiology. The Second Military Medical School. Shanghai, China.
172. February 21, 2009. "The Regulation of Central AT1 Receptor Expression and Sympathetic Tone in Heart Failure." Spanish Physiological Society, Valencia, Spain.
173. April 20, 2009. "Central Angiotensin Type 2 Receptor: A Novel Mechanism for the Regulation of Sympathetic Nerve Activity in Heart Failure". Experimental Biology 09, New Orleans, LA.
174. May 7, 2009. "The Regulation of Central Angiotensin Receptor Expression in Heart Failure and its Role in Sympatho-excitation." Department of Physiology. Louisiana State University Health Sciences Center, New Orleans, LA.
175. August 21, 2009. "Exercise Training Reduces Sympathetic Activation in Heart Failure: Central Mechanisms". Department of Physiology, De Moines University. De Moines, IA.
176. September 15, 2009. "Angiotensin II, free radical stress and sympatho-excitation in heart failure." The Second Annual Joint Research Symposium China-US Research Center for Life Sciences. University of Nebraska Medical Center, Omaha, NE.
177. October 7, 2009. "The Regulation of Central Angiotensin Receptor Expression in Heart Failure and its Role in Sympatho-excitation." Lillehei Heart Institute. University of Minnesota. Minneapolis, MN.
178. December 18, 2009. "The Regulation of Central Angiotensin Receptor Expression in Heart Failure and its Role in Sympatho-excitation." Department of Physiology. University of North Texas Health Science Center, Fort Worth, TX.
179. January 05, 2010. "Angiotensin II, the brain and heart failure". Indian Science Congress, Travandrum, India
180. January 07, 2010. "The regulation of central Angiotensin II Receptor Expression in Heart Failure". MGM University of the Health Sciences. Navi Mumbai, India.
181. January 11, 2010. "The regulation of central Angiotensin II Receptor Expression in Heart Failure". University of New Delhi. New Delhi, India.

182. April 26, 2010. "Angiotensin receptor expression in the RVLM in heart failure". In Neural Mechanisms of Sympathetic Activation in Cardiovascular Diseases. Experimental Biology 2010, Anaheim, CA.
183. September 28, 2010. 1. "The Regulation of Sympathetic Nerve Activity in Heart Failure: Role of Angiotensin Receptor Expression and Reactive Oxidant Species." 2. "The role of exercise training on sympathetic nerve activity in heart failure". 3. "ACE2 and Angiotensin 1-7: Their roles in sympatho-vagal balance in heart failure". Third International Conference on Advanced Cardiac Studies. Hofuf, Saudi Arabia.
184. October 9, 2010. "The regulation of central angiotensin receptor expression in heart failure." The DSI speaker at the Iowa Physiological Society, DeMoines, IA.
185. October 20, 2010. "The regulation of sympathetic nerve activity in heart failure". Department of Surgery. University of Nebraska Medical Center, Omaha, NE
186. November 15, 2010. "Neurohormonal Regulation of the Cardiovascular System". Cardiovascular Seminar. American Heart Association Scientific Sessions. Chicago, IL
187. March 25, 2011. "The regulation of central angiotensin receptor expression in heart failure." Department of Physiology. Dalhousie University. Halifax, Nova Scotia. Canada
188. April 10, 2011. "Sympathetic regulation by ACE2 and Ang 1-7 in experimental heart failure." Symposium on Therapeutic Potential of the ACE2/Ang -(1-7)/MasR Axis in Disease. Experimental Biology, Washington, D.C.
189. September 12, 2011. "The origin of sympatho-excitation in heart failure: A critical role for Angiotensin II" 7th FAOPS Congress, Taipei, Taiwan.
190. November 4, 2011. "Central Angiotensin II, Sympatho-Excitation and Heart Failure". Department of Physiology. University of Arizona, Tucson, AZ.
191. January 6, 2012. "Central Angiotensin II, Sympatho-Excitation and Heart Failure". Veterans Administration Hospital, Omaha, NE.
192. April 23, 2012. "Sympathetic Nerve Activity in Heart Failure: A Critical Role for Central Angiotensin II Receptors". The Carl Ludwig Award Lecture. Experimental Biology 2012. San Diego, CA.
193. May 15, 2012. "Central Oxidative Stress in Chronic Heart Failure: Modulation by Exercise Training". Redox Biology Center, Department of Biochemistry, University of Nebraska Lincoln.
194. May 17, 2012. A celebration of the career of Gabor Kaley. "A man and a graduate student." New York Medical College, Valhalla, NY.
195. September 28, 2012. "Exercise Training in Heart Failure: Molecular and Neural Mechanisms". Neuropathophysiology of Hypertension. Satellite of the International Society of Hypertension. Palm Cove, Queensland, Australia.

196. September 7, 2012. "Unilateral renal denervation enhances arterial baroreflex function in conscious rabbits with heart failure" Psychogenic Cardiovascular Disease Conference. Prato, Italy.
197. March 4, 2013. "The role of statins and rhokinase in regulating sympathetic nerve activity in heart failure." Department of Physiology, Tulane University, New Orleans, LA.
198. March 4, 2013. Mayerson-DiLuzio Lectureship. "Central Angiotensin and its role in sympatho- excitation in heart failure." Tulane University, New Orleans, LA.
199. May 2, 2013. "Exercise training in heart failure: Inhibition of central RAS and oxidative stress." Vasoactive Peptides 2013, Belo Horizonte, Brazil.
200. May 5, 2013. "Central ACE2 and Sympathetic Nerve Activity in Heart Failure." Vasoactive Peptides 2013, Belo Horizonte, Brazil.
201. July 17, 2013. "Modulation of potassium currents and sympathoexcitation in chronic heart failure." FASEB Summer Conference. Neural Mechanisms in Cardiovascular Regulation. Gleneden Beach, OR.
202. August 2, 2013. "Mechanisms of sympatho-inhibition following renal and cardiac denervation in heart failure." International Society of Neuroscience. Giessen, Germany
203. August 15, 2013. "Sympatho-excitation in heart failure: molecular and integrative mechanisms". University of Houston, Houston, TX
204. August 16, 2013. "A successful career in biomedical science in troubling times". University of Houston, Houston, TX.
205. January 24, 2014. "Mechanisms of sympatho-inhibition following renal and cardiac denervation in heart failure" Division of Cardiology University of California at Los Angeles. Los Angeles, CA.
206. April 28, 2014. "The brain in heart failure: mechanisms for sympatho-excitation." The Gabor Kaley Lecture, Experimental Biology 2014, San Diego, CA
207. April 30, 2014. "What is included in a review". The other side of the submit button: The Ins and Outs of the Manuscript Review Process. Experimental Biology 2014, San Diego, CA.
208. May 5, 2014. "The regulation of sympathetic nerve activity in heart failure: Role of Angiotensin and Oxidative Stress". Kansas University Medical Center. Kansas City, MO.
209. August 4, 2014. "Modulation of Angiotensin Signaling Following Exercise Training in Heart Failure." First Pan American Congress of Physiological Sciences. Iguassu Falls, Brazil.
210. August 9, 2014. "The regulation of central AT1receptor expression in chronic heart failure." Bristol-Sao Paulo Research Summit. Autonomic and neuroendocrine dysfunction in chronic disease. Ribeirao Preto, Brazil.

211. September 19, 2014. "Cardiac Sympathetic Afferent Denervation and Remodeling in Heart Failure". XXVI Congress of the Polish Physiological Society. Szczecin, Poland.
212. October 9, 2014. "Cardiac Sympathetic Afferents in Heart Failure: It's not just about the pain." Second François Abboud Cardiovascular Research Symposium. Iowa City, IA.
213. November 14, 2014. "The Role of Oxidant Stress on Sympatho-Excitation in Chronic Heart Failure". Redox Biology Symposium. University of Nebraska-Lincoln.
214. February 25, 2015. "Modulation of Cardiac Afferent Signaling: A new Strategy for Heart Failure Therapy?" Stimulating Activity to Relieve Conditions (SPARC) Workshop. NIH. Bethesda, MD.
215. March 12, 2015. "Reflex Control in Heart Failure" The Second UCLA Autonomic Nervous System Control of the Heart in Health and Disease Symposium: 2015. Los Angeles, CA.
216. March 30, 2015. "Cardiac Sympathetic Afferent Denervation in Heart Failure: Impact on SNA and Cardiac Remodeling". Experimental Biology Symposium. Boston, MA.
217. April 30, 2015. "Cardiac Sympathetic Afferents in Heart Failure: It's not just about the pain." Michigan Physiological Society. Boyne Falls, MI.
218. August 4, 2015. "Sympatho-excitation in Heart Failure: The role of Central Angiotensin II and reactive oxidant stress". Department of Physiology. Pontificia Universidad Catolica De Chile. Santiago, Chile.
219. August 4, 2015. "Publishing 101; A primer for young investigators". Pontificia Universidad Catolica De Chile. Santiago, Chile.
220. August 7, 2015. "Cardiac Sympathetic Afferent Denervation attenuates cardiac remodeling and improves cardiovascular dysfunction in rats with heart failure". Instituto Modelo de Cardiologia. Cordoba, Argentina.
221. August 19, 2015. "Cardiac Sympathetic Afferent Denervation attenuates cardiac remodeling and improves cardiovascular dysfunction in rats with heart failure." Department of Surgery. University of Nebraska Medical Center. Omaha, NE.
222. September 1, 2015. "The Role of Cardiac Sympathetic Afferents in Heart Failure: A Double Edged Sword." Department of Pharmaceutical Sciences. North Dakota State University. Fargo, ND.
223. December 4, 2015. "Chair burnout: identification, coping, and prevention". Association of Chairs of Departments of Physiology annual meeting. St. Thomas, US Virgin Islands.
224. April 14, 2016. "Cardiac Sensory Endings in Heart Failure: It's Not Just About the Pain" Gabor Kaley Memorial Lecture, New York Medical College, Valhalla, New York.
225. April 22, 2016. "Cardiac sensory nerves in heart failure, what they are, what they do." Omaha Veterans Administration Research Service, Omaha, NE

226. June 3, 2016. "Hypertensive therapy targeting cardiac sensory neurons" American Heart Association MERIT Award Finalist. Washington, DC.
227. June 15, 2016. "Targeting Dorsal Root Ganglia in Cardiovascular Disease". Department of Neurology. UNMC. Omaha, NE.
228. September 8, 2016. "Nrf2 regulates central sympathetic outflow". Cardiovascular Science at the Cutting Edge. Am. J. Physiology Editors Conference, Omaha, NE.
229. September 17, 2016. "The origin of sympathetic nerve activity in heart failure". Heart Failure Society of America. Orlando, FL
230. October 3, 2016. Clarenberg Lecture. "Targeting Dorsal Root Ganglia in Cardiovascular Disease". Kansas State University. Manhattan, KS.
231. October 15, 2016. Shanghai Neural Regulation of the Circulation Symposium. Second Military Medical School. "Sympathetic Regulation in Heart Failure: Peripheral and Central Mechanisms". Shanghai, China.
232. October 21, 2016. Publishing 101. "A primer for submitting and reviewing to scientific journals." South China University of Biotechnology. Guangzhou, China.
233. November 4, 2016. "The Ups and Downs of Chairing a Basic Science Department. Post-Doctoral Seminar series, UNMC.
234. January 13, 2017. "Cardiac spinal sensory endings mediate remodeling in the post MI state" Utah Cardiac Recovery Symposium. Salt Lake City, UT
235. March 28, 2017. "Neural control of cardiovascular function in heart failure". Department of Comparative Medicine, UNMC.
236. April 12, 2017. "Oxidant Stress in Heart Failure: Brain and Muscle". Cardiology Grand Rounds. UNMC.
237. April 24, 2017. "The role of TRPV1 Cardiac Sensory Afferents on Sympathetic Outflow and Remodeling in Heart Failure". Experimental Biology 2017. Chicago, IL.
238. July 29, 2017. "Central Mechanisms Mediating Exercise Training-Induced Sympatho-inhibition in Heart Failure". Cardiovascular Symposium on Exercise. In Cor, Sao Paulo, Brazil.
239. August 30, 2017. "Cardiac Receptors: Inhibitory, Excitatory and Everything in Between". Plenary Lecture, International Society of Autonomic Neuroscience 2017, Nagoya, Japan.
240. September 4, 2017. "The Role of Cardiac Sensory Neurons on Cardiac Remodeling and Sympathetic Regulation in Heart Failure and Hypertension". Astra-Zeneca Symposium. University of Osaka, Osaka, Japan.
241. September 27, 2017. "Oxidative Stress and Autonomic Function in Heart Failure". Department of Surgery. University of Nebraska Medical Center.

242. December 1, 2017. "A tribute to Martin Frank". Association of Chairs of Departments of Physiology. Montego Bay, Jamaica.
243. January 18, 2018. "Therapeutic Targeting of Cardiac Spinal Afferents in Cardiovascular Disease", Division of Cardiology. University of Texas Southwestern Medical School. Dallas, TX.
244. February 21, 2018. "Cardiac sensory nerves, sympathetic tone and remodeling in heart failure", Division of Cardiology. Johns Hopkins University School of Medicine. Baltimore, MD.
245. April 24, 2018. "Resolving and Dealing with Conflict" Trainee Symposium, Experimental Biology 18, San Diego, CA.
246. October 2, 2018. "Can the heart regulate oxidant stress in the brain". AJP-Heart and Circulatory Physiology Editors Symposium, Omaha, NE
247. October 12, 2018. "Mechanisms of Central Oxidant Stress and the Regulation of Sympathetic Nerve Activity". Michigan Tech University, Houghton, MI
248. April 19, 2019. "Mechanisms of Central Oxidant Stress and the Regulation of Sympathetic Nerve Activity: Implications for Cardiovascular Disease". Department of Pharmacology and Experimental Neuroscience. UNMC. Omaha, NE
250. May 29, 2019. "How to Publish your Research Workshop" PanAM 2019 Physiology. Havana Cuba.
251. August 7, 2019. "How to Publish your Research" Argentinian Society of Cardiology. Cordoba, AR.
252. May 5, 2020. "Central Oxidative Stress in Sympatho-Excitation in Heart Failure". International Society for Heart Research Webinar.
253. September 2, 2020. Spinal Cardiac and Pulmonary Afferent/Efferent Reflexes. NIH workshop on Autonomic Neural Mechanisms of Cardiopulmonary Regulation. Zoom Conference.
254. April 12, 2021. Mechanisms of Central Oxidant Stress and the Regulation of Sympathetic Nerve Activity: Implications for Cardiovascular Disease. Department of Physiology and Biophysics. Case-Western Reserve University. Cleveland, Ohio. Zoom talk.
255. April 19, 2021. Introductory remarks to the Gabor Kaley memorial lecture. New York Medical College. Valhalla, NY. Zoom talk.
256. October 15, 2021. XIII International Symposium on Vasoactive Peptides. "The role of ACE2 and Nrf2 in sympatho-excitation: Responses to central Ang II". Zoom talk.
257. January 24, 2022. "Oxidant Stress and the Regulation of Sympathetic Nerve Activity: Implications for Cardiovascular Disease, Exercise and Ageing". Department of Toxicology and Cancer Biology. University of Kentucky. Lexington, KY. Zoom talk.
258. April 13, 2022. Introduction to the Gabor Kaley Annual Lectureship at New York Medical College. Zoom

259. December 9, 2022. Oxidant Stress and the Regulation of Sympathetic Nerve Activity: Implications for Cardiovascular Disease, Exercise and Ageing. Department of Cellular and Integrative Physiology University of Nebraska Medical Center, Omaha, NE.

260. March 7, 2023. J.O. Davis Lecture. Oxidant Stress and the Regulation of Sympathetic Nerve Activity: Implications for Cardiovascular Disease, Exercise and Ageing. University of Missouri, Columbia.

261. June 30, 2023. The Evolution of a Physiologist: From Volume Regulation to Oxidative Stress in Cardiovascular Disease. Scuola Universitaria Superiore Pisa San't Anna University. Pisa, Italy.

262. September 13, 2023. "Oxidant Stress and the Regulation of Sympathetic Nerve Activity: Implications for Cardiovascular Disease, Exercise." Department of Physiology and Biophysics. University of Mississippi Medical Center, Jackson, MS.

263. April 7, 2024. "Novel Mechanisms of Peripheral Organ-Brain Communication and Neurological Dysfunction." Symposium Physiology Summit. Long Beach, CA.

PARTICIPATION IN NATIONAL AND INTERNATIONAL MEETINGS:

Experimental Biology (formally FASEB) - 1969-1975, 1977-1984, 1982 (chaired session), 1983; (chaired session), 1984-1998, 1999 (chaired session), 2000-2008 (chaired session), 2009, 2010, 2011(chaired session), 2012-2014, 2015 (chaired session), 2016, 2017, 2018 (chaired session), 2019, 2022, Physiology Summit. 2023, 2024 (co-chaired session).

American Society of Nephrology. 1971, 1972, 1974. International Physiology Congress, Washington, D.C. 1968. International Physiology Congress, Munich, Germany 1971.

International Physiology Congress, Glasgow, Scotland, 1993.

American Heart Association, Dallas, Texas 1974, 1978, 1981, 1982, 1986 (chaired session); 1990

(Chaired session), 1994 (chaired session), 1998 (Chaired session), 2005.

American Heart Association, Miami, Florida 1976, 1977, 1980 (chaired session) 1984.

American Heart Association, Anaheim, California, 1983, 1987, 1991 (chaired session), 2001.

American Heart Association, Washington, DC, 1985, 1988.

American Heart Association, New Orleans, Louisiana. 1989, 1992 (chaired session); 1996 (chaired session), 2000; 2004 (Chaired session), 2008 (Chaired session).

American Heart Association, Atlanta, Georgia. 1993 (chaired session).

American Heart Association, Orlando, FL 1997 (chaired session), 2003 (chaired session), 2007 (chaired session), 2009, 2011.

American Heart Meeting, Chicago, IL 2002 (chaired sessions), 2006 (chaired session), 2010 (chaired sessions), 2014

Fall Meeting of the American Physiological Society, San Francisco, California. 1975. Fall

Meeting of the American Physiological Society, Philadelphia, Pennsylvania. 1976. Fall Meeting of the American Physiological Society, Hollywood, Florida. 1977.

Fall Meeting of the American Physiological Society, New Orleans, Louisiana. 1979. Fall Meeting of the American Physiological Society, San Diego, California. 1982.

Fall Meeting of the American Physiological Society, Honolulu, Hawaii. 1983. Fall Meeting of the American Physiological Society, Orlando, Florida. 1990.

Circulation Council of American Heart Association, Keystone, Colorado. 1980, 1986. Circulation Council of American Heart Association, Aspen, Colorado. 1981.
 American College of Cardiology, Orlando, FL. 2005
 American Heart Association Research Committee, Established Investigator Meeting, Williamsburg, Virginia. 1979.
 FASEB Summer Research Conference. Neural Control of the Circulation, Saxtons River, Vermont. June 1984.
 American Heart Association Delegate Assembly. Dallas, Texas. June 19-21, 1987.
 Cardiac Dilatation Symposium, Tübingen, West Germany. (Chaired session.) June 2-4, 1988.
 First International Symposium on Heart Failure - Mechanisms and Management. Jerusalem, Israel. (Chaired session). May 21-25, 1989.
 Association of Chairmen of Depts. of Physiology, San Juan, Puerto Rico. November 30 - December 3, 1989.
 Association of Chairmen of Depts. of Physiology, Scottsdale, Arizona. December 5-8, 1991.
 Association of Chairmen of Depts. of Physiology, Stuart, Florida. Jan 14-17, 1993.
 Association of Chairmen of Depts. of Physiology, Palm Springs, California. December 2-5, 1993.
 Association of Chairmen of Depts. of Physiology, Cabo San Lucas, Mexico. December 1-4, 1994; December 5-9, 2001
 Association of Chairmen of Depts. of Physiology, Cancun, Mexico. December 7-10, 1995, Nov 29- Dec 30, 2019
 Association of Chairmen of Depts. of Physiology, Captiva Island, Florida. December 5-8, 1996
 Association of Chairmen of Depts. of Physiology, San Antonio, Texas. December 4-6, 1998
 Association of Chairmen of Depts. of Physiology, Tucson, AZ Nov. 30-Dec. 2, 2000; Dec. 3-6, 2009
 Association of Chairmen of Depts. of Physiology, Santa Fe, NM. December 5-7, 2002
 Association of Chairmen of Depts. of Physiology, St. Kitts, BWI. December 4-7, 2003
 Association of Chairmen of Depts. of Physiology, Maui, HI. December 2-5, 2004
 Association of Chairmen of Dept. of Physiology, Salt Lake City, UT. October 5-6, 2005
 Association of Chairmen of Dept. of Physiology, Liberia, Costa Rica. November 29-Dec 2, 2006
 Association of Chairmen of Dept. of Physiology, Puerto Vallarta, Mexico. November 29-Dec 2, 2007; Dec 5-8, 2013
 Association of Chairmen of Dept. of Physiology, Curacao, Netherland Antillies. Dec 4-8, 2008
 Association of Chairmen of Dept. of Physiology, St. Thomas, US VI, Dec 4-6, 2015
 Association of Chairmen of Dept. of Physiology, Montego Bay, Jamaica, Nov 30-Dec 3, 2017
 Sarnoff Society of Cardiovascular Fellows, Bethesda, Maryland. May 4-6, 1990; May 1-3, 1992-99. Sarnoff Society of Cardiovascular Fellows, Washington, D.C. 1996-2001, 2003, 2005
 Current Topics in Heart Failure: Experimental and Clinical Aspects, Freudenstadt, Germany. October 11-14, 1990.
 AAMC Executive Development Seminar, Marathon, Florida. November 30-December 5, 1990.
 Midwest Hypertension Society, Scientific Meeting, Omaha, Nebraska. 1991-93
 Second International Symposium on Heart Failure - Mechanisms and Management. Geneva, Switzerland. (Chaired Session), May 16-20, 1993
 Society for Neuroscience, Miami Beach, Florida, Nov. 12-16, 1994; October 24-28, 1999.
 Experimental Biology '95 Symposium Organizer, "Neural Control of the Circulation in Heart Failure and Coronary Ischemia", Atlanta, Georgia. April 12, 1995
 International Society for Heart Research (ISHR), Perdido Beach, Alabama. May 20-25, 1995.
 International Society for Heart Research (ISHR), Vancouver, British Columbia, Canada. July 23-28, 1997 (Symposium Chairman).
 The 3rd International Head-Out Water Immersion Symposium, Copenhagen, Denmark. August 27-30, 1995.

Neuro-humoral Control in Heart Failure, Medtronic, Orlando, Florida. March 27-28, 1996.
Fourth International Symposium on Heart Failure: Mechanisms and Management, Jerusalem, Israel. May 25-29, 1996.
Cardiovascular Seminar Organizer, American Heart Association Scientific Sessions, New Orleans, Louisiana. November 9, 1996.
Heart Failure '97: European Working Group on Heart Failure. Invited Speaker. Cologne, Germany, May 25-May 28, 1997.
Frontiers in Cardiovascular Medicine, June 14, 1997. Taichung, Taiwan.
International Society for Heart Research World Congress. Rhodes, Greece, May 24-29, 1998.
Scientific Meeting of the Heart Failure Society of America. Boca Raton, FL September 13-16, 1998; September 9-14, 2000; September 20-25, 2002; September 16-20, 2005.
Scientific Meeting of the Heart Failure Society of America. San Francisco, Ca. Sept. 21-25, 1999
Scientific Meeting of the Heart Failure Society of America. Seattle, WA. Sept. 10-12, 2006.
Scientific Meeting of the Heart Failure Society of America. Orlando, FL. Sept. 17, 2016.
International Symposium on Angiotensin II Receptor Antagonists. Monte Carlo, Monaco January 27-30, 1999, January 24-27, 2001.
Heart Failure '99. Gothenberg, Sweden. June 5-8, 1999.
Scientific Conference on Molecular, Cellular, and Integrated Physiological Approaches to the Failing Heart. Snowbird Conference Center, Utah August 18-22, 1999.
Seventh International Symposium on Heart Failure: Mechanisms and Management, Vancouver, BC. Canada, July 9-12, 2000.
International Society for Autonomic Neuroscience, Millennium Congress, London, UK, July 17-21, 2000.
International Society for Autonomic Neuroscience, Marseilles, France, July 11-16, 2005.
APS Conference on Baroreceptors and Cardiopulmonary Receptors, Iowa City, IA August 24-27, 2000.
Iowa Physiological Society, Des Moines, IA April 20-21, 2001.
American Heart Association Lobby Day, Washington, DC April 23-25, 2001.
Central Mechanisms of Cardiovascular Control: Cellular, Molecular and Integrative Aspects. August 20-22, 2001, Sydney, Australia.
Renal Mechanisms in Health and Disease. August 23-25, 2001. Queenstown, New Zealand.
International Physiology Congress, August 26-31, 2001. Christ Church, New Zealand.
International Physiology Congress, March 30-April 5, 2005, San Diego, CA
Safety Pharmacology Society, September 24, 2001, Chicago, IL
4th International Congress of Pathophysiology. June 29-July 5, 2002. Budapest, Hungary.
FASEB Summer Conference on Neural Mechanisms in Cardiovascular Regulation. July 20-July 25, 2002. Snowmass, Colorado.
What is Training in the Pharmacological Sciences. NIGMS. Bethesda, Maryland, August 8-9, 2002. The Evolving Role of the Basic Science Department Chair. AAMC. October 11-13, 2002. Philadelphia, PA
International Congress on Chest and Allied Diseases, January 12-14, 2003, New Delhi, India
American Society of Hypertension, May 14-17, 2002, New York City, NY; May, 2006, 2011, 2012, 2014, 2015 New York City
Trends in Exercise Physiology and Cardiac Rehabilitation. Rome, Italy, Sept. 5-6, 2003.
AHA Council for High Blood Pressure Research, Oct 8-12, 2004, Chicago, IL; Sept. 23-26, 2009, 2018
AHA Council for High Blood Pressure Research, Sept. 21-23, 2005, Oct. 13-16, 2010, September 19-22, Sept. 17-19, 2015 Washington, D.C.
AHA Council for High Blood Pressure Research, Sept, 2007, Tucson, AZ.

AHA Council for High Blood Pressure Research, Sept. 18-20, 2008, Atlanta, GA. Long Term Control of Blood Pressure, December 7-12, 2004, Jaipur, India AAMC Basic Science Chairs Meeting, October 7-9, 2005, Salt Lake City, UT.

American Physiological Society Strategic Planning Meeting, October 29-Nov 1, 2005, Houston, TX.; Landsdowne, VA. Feb 22-24, 2006

American Physiological Society Workshop on Scientific Writing, January 12-15, 2006, Orlando, FL. International Hypertension Society, October 13-17, 2006. Fukuoka, Japan.

Inter American Society of Hypertension, May 7-10, 2007. Miami, FL.

FASEB Summer Conference on Neural Mechanisms in Cardiovascular Regulation. July 18-23, 2007. Sydney, Australia

Gordon Conference on Angiotensin. February 24-28, 2008, February 22-26, 2010, Ventura, CA. Baroreflex Summit, CVRx, Inc. April 9-10, 2008, San Diego, CA.

European Society of Microcirculation, August 18-23, 2008. Budapest, Hungary HHMI and AAAS Vision and Change in Biology Undergraduate Education: A view for the 21st Century: The Role of Disciplinary Societies. Nov 19-21, 2008, Chevy Chase, MD.

Spanish Society of Physiological Sciences. Feb 17-21, 2009, Valencia, Spain Indian Science Congress, Jan 3-7, 2010, Trivandrum, India

Psychogenic Cardiovascular Disease Conference, Sept. 1-4, 2010; Sept. 5-8, 2012 Prato, Italy.

Third International Conference on Advanced Cardiac Studies. Sept. 27-Oct.1, 2010. Hofuf, Saudi Arabia.

7th FAOPS Congress, Sept. 1-14, 2011. Taipei, Taiwan.

APS Conference on Autonomic Regulation of Cardiovascular Function in Health and Disease. July 7-10, 2012, Omaha, NE, Co-Organizer.

Neuropathophysiology of Hypertension. Satellite Conference of ISH. Sept. 25-29, Palm Cove, Queensland, Australia.

IX International Symposium on Vasoactive Peptides. May 2-5, 2013. Belo Horizonte, Brazil

FASEB Summer Conference on Neural Control of the Circulation. July 15-18, 2013 Portland, OR

International Union of Physiological Sciences. July 21-26, 2013, Birmingham, England.

International Union of Physiological Sciences. August 1-6, 2017. Rio De Janeiro, Brazil.

International Society for Autonomic Neuroscience. July 26-Aug 1, 2013. Giessen Germany.

International Society for Autonomic Neuroscience. July 26-Aug 1, 2015. Stresa, Italy.

International Society for Autonomic Neuroscience. August 31-September 3, 2017. Nagoya, Japan (Plenary Lecture).

International Society for Autonomic Neuroscience. July 25-27, 2019. Los Angeles, CA (Symposium Chair).

APS Scientific Writing Workshop. July 29-Aug. 1, 2014. Sao Paulo, Brazil Polish Physiological Society. September 18-20, 2014. Szczecin, Poland

Second François M. Abboud Cardiovascular Research Symposium, Oct 9-10, Iowa City, IA

Redox Biology Symposium, University of Nebraska Lincoln, November 14, 2014. Lincoln, NE

NIH SPARC Workshop. February 25-26, 2015, Bethesda, MD

Second UCLA Autonomic Nervous System Control of the Heart in Health and Disease Symposium. March 12-13, 2015. Los Angeles, CA

Michigan Physiological Society. April 30-May 1, 2015. Boyne Falls, MI

Co-Organizer, Annual Meeting of the International Academy of Cardiovascular Sciences: North American Section. September 10-12, 2015.

International Society of Autonomic Neuroscience, Stresa, Italy September 25-30, 2015.

Joint Meeting of the American and British Physiological Societies, Dublin, IR. July 29-August 1, 2016.

Organizer. American Journal of Physiology: Heart and Circulatory Physiology First Editors Scientific Conference. Omaha, NE. September 8, 2016.

Organizer. American Journal of Physiology: Heart and Circulatory Physiology Second Editors Scientific Conference. Omaha, NE. October 1, 2018.

Utah Cardiac Recovery Symposium, January 12-14, 2017,2022 (virtual). Salt Lake City, UT
Symposium on Exercise, In Cor, Sao Paulo, Brazil. July 29, 2017.

International Society of Autonomic Neuroscience, Nagoya, Japan, August 30-Sept. 5, 2017

AHA, Council on Basic Cardiovascular Sciences, San Antonio, TX. July 29-August 1, 2018

AHA, Council on Hypertension. San Francisco, CA. September 13-17, 2017.

AHA, Council on Hypertension. Chicago, IL. September 6-9, 2018. European Society of Cardiology, Munich, Germany. August 25-29, 2018

NIH Workshop on Autonomic Neural Mechanisms of Cardiopulmonary Regulation-Zoom Conference September 2-3, 2020.

Paris Antioxidant Conference. Virtual. October 14-15, 2021

International Conference on Vasoactive Peptides. Virtual. October 15-17, 2021

European Society of Cardiology, Barcelona, Spain, August 26-30, 2022

European Hypertension Society, Milan, Italy, June 23-26, 2023

European Society of Cardiology Heart Failure, Lisbon Portugal, May 11-15, 2024

UNIVERSITY, COLLEGE OF MEDICINE AND DEPARTMENTAL COMMITTEES:

Seminar Chairman, Physiology and Biophysics, 1973-1974; 1982-1983

Ad Hoc Committee for the formation of a governance document for Graduate Council at the University of Nebraska Medical Center, 1976

Animal Care Committee, 1976-1988

University of Nebraska Medical Center Scholastic Evaluation Committee, 1976-1982

Departmental Research Committee, 1977-1979

University of Nebraska Medical Center Executive Faculty Committee, 1977-1978 University of Nebraska Standing Committee on Continuing Medical Education, 1978 University of Nebraska Medical Center Accreditation Committee, 1978 Departmental Graduate Committee, 1978, 1979-1980 (Chairman), 1981, 1985-1989

University of Nebraska Medical Center Research Advisory Committee, 1980 (Chairman), 1982, 1986, 1987

Faculty Advisor, Graduate Student Association, 1980-1990

University of Nebraska Grant Review Group for Board of Health (Chairman), 1984 University of Nebraska Research and Development Committee, 1984-1989

Animal Research Committee, Chairman, University of Nebraska Medical Center, 1984- 1989

Search Committee for Chairman of Biochemistry, 1985-1986

Pharmacology Department Review Committee, 1987

Student Appeals Committee, June 1990

Pharmacology Chairman Search Committee, 1987-1988 M.D.-Ph.D. Program Committee, 1988

Ad Hoc Committee for Curriculum (Research Thesis), 1989

University of Nebraska College of Medicine Promotions and Continuous Appointments Committee, 1989-1995

Internal Medicine Chairman Search Committee, 1990 Burlington Northern Teacher-Scholar

Award Committee, 1991 Chairman, Cardiovascular Coordinating Committee, 1991-1997

Chairman, Promotions and Continuous Appointments Committee, 1991-1995 Search Committee for Chairman of Biochemistry 1993

Outstanding Research and Creative Activity Award Committee 1993-1995, 2018 Cardiovascular Strategic Planning Committee 1994-

Coleridge Symposium, University of California at Davis. April 8-9, 1994. Human Resource Strategic Repositioning Process, 1995-1997 Cardiology Evaluation Committee, 1995.

New Graduate Program Planning Committee 1996-1997 Cardiology Chief Search Committee 1997-1998
 Lied Transplant Center Space Committee, 1997-1998
 Search Committee for Chairman of the Department of Internal Medicine, 1999-2000 Centers of Excellence Building Steering Committee, 1999-2000
 Chairman, Animal Facilities Subcommittee, 1999-2000
 Curriculum Committee, College of Medicine, 10/2000-09/2003; 10/2007- Research Resources Board, 2004-2009
 Search Committee for Chairman of the Department of Internal Medicine, 2004 Comparative Medicine Advisory Committee, 2004-2007
 Durham Research Center Management Committee Chair, 2005-2008 Sponsored Programs Evaluation Committee, 2008
 Ad hoc Deans Budget Task Force, 2009
 College of Medicine Deans Search Committee, 2010 Search Committee, Vice Chancellor for Research, 2011 Search Committee, Chief of Cardiology, 2016
 Tenure and salary guideline revision task force, 2016 Search Committee, Director of Comparative Medicine, 2016
 Chair, Search Committee for Vice Chair of Research Department of Anesthesiology 2018-19
 Chair, Internal Evaluation Committee, Department of Genetics, Cell Biology and Anatomy 2019
 Physiology Summit organizing committee, 2023

TEACHING:

Renal and Acid-Base Physiology questions for the University of Louisville Health Sciences Center Computer Program. Copyright, 1976
 Taught renal and cardiovascular (reflex control) physiology to medical students at the University of Nebraska Medical Center, 1972, 1974, 1977-1992
 Taught renal physiology to medical students at Creighton University, 1977, 1978, 1981
 Taught renal physiology to physician's assistant students, pharmacy and physical therapy students, 1979, 1980, 1982-1989, 1993
 Organized and taught graduate courses in comparative (1975), renal (1976-1983, 1987, 1990, 1992, 1996) and cardiovascular physiology (1977, 1980-1982, 1985, 1997, 2000) at the University of Nebraska Medical Center
 Renal Pathophysiology for nurses, 1984
 Nursing Physiology - Renal lectures, 1989-1991, 1993, 1995, 1996, 1998-2000 Renal Subcommittee Chairman (Core 4) 1992
 Nurse Anesthetist Review Seminar - Renal Physiology, 1976 Critical Care Nurses Review - Renal Physiology, 1978 Midwest Student Research Forum - Research Seminar, 1979
 Course Coordinator - Physiology for physician's assistants, pharmacy students and physical therapists, 1980-1981; 1982-1985, Continuing Education for nurses, renal patho-physiology, Methodist Hospital, 1984
 Continuing Education for nurses, cardiovascular pathophysiology, Methodist Hospital, 1984
 Anatomy and Physiology - University of Nebraska at Omaha, 1986
 Endocrine and Cellular Regulation Biochemistry, 1987
 Judge - Midwest Student Research Forum, 1988-1989, 1996, 1998, 1999-2002
 Advanced Cardiopulmonary Physiology, Co-Director, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2018, 2019, 2020
 Scientific Writing, 2008-22
 APS Workshop in Scientific Writing and Reviewing, 2008, 2010-12 Gastrointestinal physiology allied health students 2011-2015 Gastrointestinal physiology for medical students 2011-2017

Co-Director, Cardiovascular Block Medical Curriculum 2018-22
 Cardiovascular lectures, Allied Health (606). 2018-2023
 Advanced Topics in Physiology (MEP 901, Physiology Master's Program)-2023-24
 APS Summer Undergraduate Fellowship Program-2022

Graduate Student Supervisory Committees:

J. Strand, L. Stacy, L. Huffman, A. Ryberg, G. Bush, M. Hajdu, P. Lacy, K. Rovang, R. Mohama, P. Keelan, M. Holmberg, M. Davis, R. Click, S. Echtenkamp, T. Clanton, C. Cherdchu, P. Nwangnu, M. Al-Turk, T. Yong, W. Mayhan, N. Wahab, M. Hicken, J. Dietz, K. Zhang, S. Didion, R. Ma, R. Bernstein, Carolyn Barrett (Un. of Otago), K. Estep, Yi-Ming Zhang, C. Chaperon, Cristabel Stokes (Un. of Bristol), K. Devalaraja-Narashimha, C. Troncoso, Xiang Yi, D. Irsik, E. Rosenbaugh, A. Brynskikh, A. Mukherjee, P. Chakraborty, Yuan Ying, K. Salvia, S. Choudhury, Bang Wang, U. Chalise, S. Kar, Z (Claire) Xia, T. Hajka (2019-2021), O. Kitzerow, K. Kamra, F Garwarigi

Graduate Students Supervised:

John R. Dietz (1976-1979) Present Position: Professor Emeritus, Department of Physiology, University of South Florida, Tampa, Florida

Mark J. Holmberg (1980-1983) Present Position: Cardiologist, Dept. of Internal Medicine Creighton University, Omaha, NE.

Michael A. Hajdu (1984-1988)
 Present Position: Clinical Cardiologist, Unknown

Wen Tan (1984-1989)
 Present Position: Dean, South China University of Biotechnology. Guangzhou, China

Joseph McClain (1989-1990)
 Present Position: Cardiac Surgeon, unknown

Kay Rhyschon (1992-1993) Present Position: Unknown

Jun-Li Liu (1995-1999)
 Present Position: New York Hospital, Cornell University. Clinical Perfusionist.

Yu Wang (2000-2004)
 Present Position: Family Practice. Unknown.

Ram Chettiar (2006-2008) Present Position: DO, Children's Mercy Hospital. Kansas City, MO

Viswanathan Rajagopalan (2004-2008)
 Present Position: Associate Professor, New York Institute of Technology, Jonesboro, AK

Sarah Clayton (2006-2011)
 Present Position: Associate Professor, Des Moines University, Des Moines, IA

Liang Xiao (2008-2012)

Present Position: Assistant Professor, Guangzhou University, China

Alicia Schiller (2010-2015)

Present Position: Assistant Professor, Department of Anesthesiology, University of Nebraska Medical Center

Bryan Becker (2011-2016)

Present Position: Assistant Professor. Department of Medicine. University of Alabama Birmingham

Peter Pelligrino, MD/Ph.D student (2012-2016) Present Position: Fellow in Anesthesiology, UNMC

Derek Passer MD/Ph.D. student (2013-2017). Anesthesiology, Private Practice. US Anesthesia Partners of Colorado

Anyun Ma (2016-2020), Present position. Resident Family Practice, UNMC

Ahmed Wafi (2016-2020), Present position. Professor. Department of Physiology. Jazan University, Saudi Arabia

Sarah Pribil (2023-) Co Supervisor with Dr. Lie Gao.

Post-Doctoral Fellows:

Andrew J. Gorman, Ph.D. 1980-1982

Last Known Position, Research Scientist, Hoechst-Celanese Corp. Summerville, New Jersey

Mark J. Niebauer, M.D., Ph.D. 1983-1984.

Last Known Position, Associate Professor, Division of Cardiology. University of Nebraska Medical Center, Omaha, NE

Maret J. Panzenbeck, Ph.D. 1985-1988.

Last Known Position, Research Scientist, Beringer-Ingelheim, Connecticut

Wen Tan, M.D., Ph.D. 1984.

Present Position: Dean, Guandong University. Guangzhou, China

Wei Wang, M.D., Ph.D. 1988-1990.

Present Position: Associate Professor, Department of Cellular and Integrative Physiology, University Nebraska College of Medicine, Omaha, Nebraska, Retired.

Jwo-Sheng Chen, Ph.D. 1988-1990.

Present Position: Dept. of Physiology China Medical College, Taichung, Taiwan Retired

Marian Brändle, Ph.D. 1990-1992.

Finalist, Melvin Marcus Young Investigator Award. Last Position: Merck and Co. Darmstadt, Germany, now retired.

Jun-Li Liu, Ph.D. 1994.

Present Position: Clinical Perfusionist, Cornell University, New York Hospital, NY, NY

Hiroshi Murakami, M.D., Ph.D. 1994-1996.

Last Known Position: Surgeon, Kagawa Medical School, Kagawa, Japan.

Kiyoshi Tsunooka, M.D., Ph.D. 1998-2000 Present Position: Unknown

Rainer Pliquett, M.D. 1999-2001

Present Position, Nephrologist. Martin Luther University, Halle, Germany

Guo-Qing Zhu, M.D., Ph.D. 1999-2002

Present Position, Professor and Chair, Dept. of Physiology, Nanjing Medical University, China

Dongmei Liu, M.D., Ph.D. 2006-2009

Present Position, Faculty, Alhambra University, Los Angeles, CA

Lie Gao, M.D., Ph.D. 2002-2006. Assistant Professor Department of Anesthesiology, UNMC

Hanjun Wang, M.D. 2010-2013. Associate Professor, Department of Anesthesiology, UNMC

Tarek Mousa, M.D. 2003-2006

Present Position, Cardiologist, NYU Langone Medical Center, New York, NY.

Amit Mitra, Ph.D. 2008-2012, Present Position, Professor, Our Lady of the Lake University, Baton Rouge, LA.

Karla K. Haack, Ph.D. 2010-2014, Medical Writer, Merck and Co. Atlanta, GA.

Min Li, Ph.D. 2014-2015 (unknown)

Changhai Tian, Ph.D. 2015- 2019 Assistant Professor Department Toxicology and Cancer Biology, University of Kentucky, Lexington, KY.

Sharon Morais Del Bem, Ph.D. 2016-2019. Researcher, UNMC

Julia Shanks, Ph.D. 2016-2019 (AHA Fellow), Research Scientist. University of Auckland.

Ryan Adam, Ph.D. 2017-2019-co-mentor, Present Position: Medical College of Wisconsin

Neha Dhyani, Ph.D. 2022-

Medical Student Fellows:

Brian Miller (1980) (became Sarnoff Cardiovascular Research Fellow)

Michael Lang (1983)

Sue Kess (1983)

Diana Antoniskis (1982)

Michael Wadzinski (1985) (Sarnoff Cardiovascular Research Fellow)

James F. Luebbert (1984) Shelly Barker (1986)

Stephanie Kramer (1982) Marc Weitzel (1989)

Tom Clinch (1992) Saswatha Roy (1994)

Patrick McConnell (1994-96, First Prize Midwest Student Research Forum, 2/96, Sarnoff Fellow, 1996-97)

Scott Swanson (1998), Sarnoff Fellow, 1999-2000

Jason Chu, 1999

Brad Hiser- 2001, 2002, 2003

Mathue Baker, 2001

(Sarnoff Fellow, 2002)

Ron Rawlings-2002

Patricia Sund, 2003

Ben Bixenmann-2006

Nick Anderson-2006-07

Gregory Nissan-2008

Brandon Bennett-2012

Amanda Harlow-2012

Rocky Estereich-2014

William Breuning -2022

Nicholas St. Ong-2023, 2024

Other Student Fellows:

Matthew Rings1983

Lynn Polonski 1985

Tom Bartholet 1989-1990

Matt West 1993

Brenda Hilkemann 1993

Eric Givner 1995

Beth Higa, 1995-1996

George Dittrick1997

Jay Kulakofsy 1997,1998,2000

Erin Brewer 1999

Chad Hindman2000

Anna Lillidahl 2003

Ram Chettiar 2003-04

Nick Anderson2004-05

Marcus Finch 2005

Sumit Kar (APS Fellow and AHA Fellow)

Rachael Farrar 2008

Dan Belatti 2009-10

Carolin Pügge 2010-2011

Jai Mediratta 2010-12

Andi Zheng 2015-2018 (APS Summer Fellow)

Dylan Dingbaum 2015

Dyana Montano 2019-2020

Mandie Lisco 2019-2020

Lucas Wang 2021-2022 (APS Summer Fellow-2022)

Thomas Wang 2023

Nicholas St Ong 2023-2024

Steve Stultz, 1996. American Physiological Society Summer Teaching Fellow

PROFESSIONAL ASSOCIATIONS:

1967-1971 New York Academy of Science
 1973-1975 Associate Member, American Physiological Society
 1973- Member, American Heart Association
 1975- Full Member, American Physiological Society
 1978- Fellow, Circulation Group, American Physiological Society
 1979- Member, Council on Circulation, American Heart Association
 1979- Member, Council on Basic Science, American Heart Association
 1979- Member, Society for Experimental Biology and Medicine
 1979- Member, Neural Control of the Circulation section
 1980- Fellow, Council on Circulation, American Heart Association
 1982-1985 Sigma Xi
 1982- Member, American Physiological Society, Section on Water and Electrolyte Homeostasis
 1985-88 Animal Care and Experimentation committee of the American Physiological Society
 1990 National Institutes of Health Experimental Cardiovascular Sciences Study Section - Ad Hoc
 1989-1996 Sarnoff Society of Cardiovascular Fellows
 1992-1994 Scientific Advisory Board, International Society for Heart Failure, Inc.
 1993- Fellow, Council for High Blood Pressure Research, American Heart Association
 1994 National Institutes of Health Experimental Cardiovascular Sciences Study Section - Ad Hoc
 1994 National Institutes of Health Lung Biology and Pathology Study Section - Ad Hoc
 1994-2000 Society for Neuroscience
 1995-1992 Member, Fellowship Committee of CV Section of American Physiological Society
 1996-2010 Member, Heart Failure Society of America
 1998-02 Councilor, Society for Experimental Biology and Medicine Chairman, Nominating Committee
 1998-03 Member, Publications Committee, Heart Failure Society of America
 2000 Member, Clinical Physiology Committee, International Union of Physiological Sciences.
 2000 Member, Executive Committee, Council on Basic Cardiovascular Sciences,
 2000 AHA. Member, Melvin Marcus Young Investigator Committee, AHA
 2001-02 Public Affairs Committee, American Physiological Society
 2001- Councilor, Association of Department Chairs of Physiology
 2002-03 President, Association of Department Chairs of Physiology
 2002-03 Member, Cardiovascular and Renal (CVB) study section, NHLBI.
 2004-07 Member, Clinical and Integrated Cardiovascular Sciences Study Section, NHLBI.
 2000 Member Public Affairs Committee, APS
 2004 Chairman, Public Affairs Committee, APS
 2003-07 Member National Research Committee, AHA
 2004-07 Councilor, American Physiological Society
 2006-07 Chair, American Heart Association Strategic Planning; Early Career Working Group
 2007-08 President-Elect, American Physiological Society
 2008-09 President, American Physiological Society
 2009-10 Past-President, American Physiological Society
 2010-11 Nominating Committee, High Blood Pressure Research Council, AHA
 2012 Nominating Committee, International Union of Physiological Sciences
 2014-16 Ray G. Daggs Committee, American Physiological Society

2016-18 Education Committee, American Heart Association Hypertension Council
2017-2019 Chair, Ray G. Daggs Committee, American Physiological Society
2021-2023 APS Publications Committee

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14. Echtenkamp, S., I.H. Zucker and J.P. Gilmore. Mechanoreceptor modulation of efferent renal nerve activity in the nonhuman primate. *Fed. Proc.* 37(3):273, 1978.
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