CURRICULUM VITAE

Meredith Hay, Ph.D., Vice President
University of Iowa
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Iowa City, IA, 52245
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EDUCATION

Ph.D.	Cardiovascular Pharmacology	University of Texas HSC, San Antonio, TX
M.S.	Neurobiology	University of Texas at San Antonio
B.A.	Psychology	University of Colorado, Denver, CO

APPOINTMENTS

Vice President	Vice President for Research University of Iowa	2005-present
Professor	Department of Molecular Physiology & Biophysics, Carver College of Medicine Department of Psychology, College of Liberal Arts and Sciences University of Iowa	2005-present
Assistant to the Vice President For Academic Affairs	University of Missouri-System Columbia, Missouri	2002-2005
Director and Chair	National Center for Gender Physiology School of Medicine University of Missouri-Columbia	2002-2005
External Relations Director	Bond Life Sciences Center University of Missouri-Columbia	2003-2005
Science Director	UMC-Nuclear Research Reactor University of Missouri-Columbia	2000-2002
Professor Associate Professor Assistant Professor	Department of Medical Pharmacology & Physiology, School of Medicine Department of Biomedical Sciences, College of Veterinary Medicine University of Missouri-Columbia	1996-2005
Dalton Investigator	Dalton Cardiovascular Center University of Missouri, Columbia	1996-2005
Assistant Professor	Department of Physiology University of Texas Health Science Center San Antonio, Texas	1993-1996
Postdoctoral Fellow	Dept. of Molecular Physiology & Biophysics, Baylor College of Medicine, Houston, Texas	1991-1993
Postdoctoral Fellow	Cardiovascular Center, Carver College of Medicine University of Iowa, Iowa City, Iowa	1990-1991

ADMINISTRATIVE APPOINTMENTS

2005-Present, Vice President for Research, University of Iowa

The Vice President for Research at the University of Iowa reports directly to the President and provides central leadership for all of the university's research, creative activity and scholarly endeavors, including the academic medical center. The University of Iowa has an enrollment of over 29,600 students in 11 colleges, departments, and programs, many of which are ranked among the nation's best, according to *U.S. News & World Report* and other sources. In addition, the University of Iowa Hospitals and Clinics (UIHC) have been named among "America's Best Hospitals" for the 17th year in a row by *U.S. News & World Report.*

As a member of the President's cabinet, I work daily with the president, the provost, and other university vice presidents, college deans, faculty, students, and staff on campus-wide issues. The University of Iowa is a $2.3 billion organization and owns and operates the University of Iowa Hospitals and Clinics. I have significant experience in leading and managing a successful complex organization including human resource management and financial and space allocation. I am directly involved in:

- campus-wide strategic planning and research development;
- the campus-wide annual budget process and resource allocation;
- facility planning and fundraising;
- faculty recruitment , promotion and retention;
- diversity and student engagement;
- government relations, community engagement, and economic development.

2002-2005, Assistant to the Vice President for Academic Affairs, University of Missouri-System

The University of Missouri has more than 62,000 students on four campuses and is the Land Grant University for the State of Missouri. My position with University of Missouri-System was the first-of-its-kind for the University and the first time the University System administration had taken an active role in the research strategic planning on its four campuses.
In this position I was responsible for building state-wide coalitions to compete for multi-institutional, multidisciplinary federal funding programs. I have significant leadership experience in bringing faculty from disparate campuses and backgrounds, as well as researchers from the corporate sector, together for a common cause. My responsibilities and successes included:

- creating two new interdisciplinary, multi-campus centers: The Center for Trustworthy Systems and the Midwest Alliance for Agricultural Biosecurity;
- integrating the research strategic plans of the four University of Missouri campuses;
- working with college deans and faculty to develop strategic interdisciplinary/multi-campus responses to major research opportunities and federal initiatives;
- identifying and developing strategic partnerships with private industry; and
- communicating University of Missouri science and technology activities to federal agencies in Washington D.C.

2001-2005, Founder, Director and Chair, National Center for Gender Physiology, University of Missouri-Columbia

This NASA and NIH funded Center was the first-of-its-kind in the country with a mission to serve as a catalyst for the development of multidisciplinary, integrated collaborations in basic and clinical research in the arena of gender-based biology and medicine. As Chair and Center Director, I had responsibilities of a department chair including faculty recruitment, promotion and support, and fiscal management of a $4.3 M budget. I also had federal compliance responsibility and research policy authority for our campus-wide research core facilities including a human performance core, the swine hormone core, the hormone assay core, and our rodent core. Member participation in this Center spanned nearly every college and school on the University of Missouri-Columbia campus as well as members from across the country and overseas.

2003-2005, External Relations Director, Bond Life Sciences Center, University of Missouri-Columbia

This position was responsible for working with deans and faulty to create cross-college collaborations and build external relations including government and private sector relations for the new Bond Life Sciences Center. The Bond Life Sciences Center, which opened its doors July 2004, is a $58 M facility encompassing 231,000 gross square feet of space for researchers from the colleges of Agriculture, Food and Natural Resources; Arts & Science; Veterinary Medicine; Engineering; and Human Environmental Sciences; and the schools of Medicine and Health Professions.

2000-2002, Science Director, University of Missouri Nuclear Research Reactor

The MU research reactor is the largest university research reactor in the country. Duties of the Science Director included strategic planning and faculty recruitment in the Biomedical Sciences Program, the Trace Analysis Program, and the Material Sciences Program. This position was also responsible for program mission alignment with the rest of the campus, budget management, and community engagement.

ADMINISTRATIVE SELECTED ACCOMPLISHMENTS

ACADEMIC EXCELLENCE & INTERDISCIPLINARY ADVANCEMENT

Ensconced in The University of Iowa's learning environment are experiences leading to the ability to think critically, hypothesize, understand one's own cultural roots and the cultural roots of others, and communicate effectively. This learning is invaluable for students as they become the next generation of leaders contributing to the realization of our regional, state, national, and global long-term goals.

My commitment to working with faculty, staff, and students to advance excellence in education and build cross-campus interdisciplinary research programs is evidenced by my support for both the undergraduate and graduate education and my accomplishments for building bridges between disciplines to advance the University. Examples include:

University of Iowa

- Created and led the funding strategy and program planning for the new $120M *Iowa Institute for Biomedical Discovery*. This new interdisciplinary research facility, which is founded on public-private partnerships, includes scientists and researchers from across campus and colleges.
- Launched a new cross-campus interdisciplinary research program in nanotechnology/nanohealth and supported the formation of the new *Iowa Nanotechnology Institute.*
- Led central administrative efforts for infrastructure and faculty support for the University of Iowa's successful application for an NIH *Clinical and Translational Science Award*. This important new initiative within NIH is designed to transform clinical and translational research.
- Advanced the undergraduate education experience at the University of Iowa by creating and sponsoring four *Excellence in Undergraduate Research Awards.* These awards recognize outstanding accomplishments in scholarly investigation, artistic creation, or performance by an undergraduate student in each of the following areas: Arts and Humanities, Mathematics and Engineering, Natural Sciences, and Social Sciences.
- Working with the Graduate Student Representatives, implemented the first *Graduate Student Mentor Recognition Awards* for their work in mentoring other students in research and creative activity.
- Secured $37M in state funding for a new public health laboratory for which my office has responsibility for construction planning, design, oversight and budget.
- Reallocated internal support for Arts and Humanities Research to more than $750,000 per year.
- Created and funded a cross-disciplinary humanities conference in Iowa to bring together internationally renowned writers, scientists, poets, and policy makers to lead discussions on the global issues of water and its uses and abuses.

University of Missouri

- Led campus and system administration in the establishment of performance goals and measures to implement research elements for the University of Missouri-System 2010 strategic plan.
- Created and Founded the *Midwest Alliance on Agroterrorism* bringing together the four University of Missouri campuses, Kansas State University, Washington University in St. Louis, the private sector, and national laboratories to team together to compete to become one of two $18M Department of Homeland Security Centers of Excellence.
- Developed new partnerships between the University of Missouri-led Midwest Alliance and private sector parties such as Monsanto, Cerner Corp., Bayer World Animal Health, Kansas City Business Executives for National Security, and the Midwest Research Institute to compete for new federal funding opportunities.
- Created the first ever *National Center for Gender Physiology* dedicated to understanding sex differences in cardiovascular health and disease. Served as Principal Investigator of a NASA program project type grant on sex differences in space-flight related physiology.
- Formed partnership with the State of Missouri Office of Women's Health and founded and chaired the annual Missouri Women's Health Workshop.
- Provided administrative, security and budgetary oversight for the MU Research Reactor's three major research programs including Biomedical Sciences Program, the Trace Analysis Program, and the Material Sciences Program.
- Worked to identify and hire new faculty in the departments of physics, chemistry, engineering, and veterinary medicine.

DIVERSITY AND INTERNATIONALIZATION

In a world where rapid evolution in technology is the norm, where information and ideas can be exchanged in seconds, where the nature of how, where, and when we work is in constant flux - affecting the very core of our society – our citizens and workers will need interpersonal and social capacities to succeed. The public research university fulfills this need by preparing students for global citizenship and providing the tools and opportunities for individuals to be successful in a culturally and ethnically diverse environment. My commitment to advancing campus diversity, cultural competence, and internationalization are evidenced by the following:

- Created and supported a new program known as the *Iowa Promise Momentum Plus* Awards. These awards provide opportunities for researchers, scholars, and artists to incorporate diversity outreach programming into their externally funded projects.
- Serve as Principal Investigator on the state-wide Iowa Regents Universities NSF AGEP program.
- Reallocated funds to support the new University of Iowa Center for Ethnic Studies and the Arts which supports research and public programs on the role of the arts in American ethnic and minority populations.
- Advanced the University of Iowa's internationalization efforts as a member of Governor Tom Vilsack's 2006 trade delegation to India. This visit was a part of continuing efforts to bring the leaders of Indian government, industry, and universities into closer collaborations with the University and the State of Iowa.
- Organized and hosted a University of Iowa visit and facilities tour for His Eminence Sibal, the Indian government Minister of Science and Technology.
- Traveled to Beijing with University of Iowa International Writing Program Director to facilitate opportunities for Chinese scholars to participate in the University of Iowa's writing programs and to further relationships between the University of Iowa and Chinese academics and writers.

FUNDRAISING AND ECONOMIC DEVELOPMENT

In January 2006, The University of Iowa concluded its very successful *Good, Better, Best* $1.1B dollar capital campaign and is in the process of planning for the future campaign. My experience and success in marshalling external support and fundraising are evidenced by:

- Working with alumni and the University of Iowa Foundation leadership to secure a significant multi-million dollar private gift for the University of Iowa's $120M Life Sciences Initiative.
- Working with the State of Iowa Economic Development Committee and the Board of Regents to secure over $18 million for infrastructure and project support for advancement of key biomedical research programs.
- Leveraging a $1.2M state investment in regional economic development into a $16 million private partnerships with a local development firm to design and build a new biotechnology incubator at the University of Iowa.
- Developing an innovative approach to create venture capital funds for University spin-off companies via the development of a *Venture Philanthropy Fund* for support of entrepreneurial activity.
- Created and founded the *IOWA Centers for Enterprise*. This effort brought together with coordinated purpose the University of Iowa Research Foundation, the Technology Innovation Center and Oakdale Research Park, Office of Corporate Relations, the John Pappajohn Entrepreneurial Center, the Center Small Business Development and college liaisons.

COMMUNITY AND GOVERNMENT RELATIONS

While at the University of Iowa, I have been an enthusiastic and vocal spokesperson for the University and have worked closely with state and federal delegations, the private sector, and local community groups across the state to broaden both private and public support for the University. This is evidenced by the following examples:

- Work extensively with U.S. Senatorial and House delegation and staff from the State of Iowa to align the expertise of the University of Iowa research enterprise with federal agency needs and opportunities.
- Structured a collaboration between The University of Iowa College of Engineering and Rockwell Collins, Inc. to work with the National Aeronautics and Space Administration (NASA) to establish the *Iowa Institute for Flight Systems Research.*
- Led and organized Regent University faculty team presentations on biofuels to the State of Iowa General Assembly.
- Presented findings from NASA supported sex-based physiology workshop held at the University of Missouri to the Office of Science and Technology Policy, Executive Office of the President of the United States.
- Awarded 2006 Corridor Business Journal Woman of Influence Award;
- Board of Directors for United Way of Johnson County;
- Member of United Way Johnson County Campaign Cabinet;
- Board Member Cedar Rapids Chamber of Commerce Priority One.

AREA OF SCHOLARLY INTEREST

My research team, actively supported by the NIH, is focused on the central nervous system control of cardiovascular regulation. The primary emphasis is on understanding the biophysical and cellular mechanisms underlying neurotransmitter

modulation brainstem neurons and sympathetic outflow and, ultimately, how those actions affect arterial blood pressure and hypertension. Current studies are specifically focused on understanding how central actions of sex steroids may modulate brainstem neuronal activity and modulate cell signaling mechanisms regulating sympathetic activity and blood pressure.

PROFESSIONAL ORGANIZATIONS

Society for Neuroscience	1985-Present
American Physiological Society	1987-Present
Federation of American Societies for Experimental Biology	1987-Present
Council for High Blood Pressure Research	1995-Present
American Association for the Advancement of Science	Present

HONORS AND AWARDS

Honorary member of Iowa Phi Beta Kappa	2006
Member, NIH NHLBI T32 Study Section	2006
Johnson County United Way Board of Directors	2006
Corridor Business Journal Women of Influence	2006
US Bank Iowa City Community Advisory Board	2006
Senior Editor, Journal of CardioMetabolic Syndrome	2006
Cedar Rapids Priority One Board Member	2005
Iowa City Area Development Board Member	2005
Iowa City Area Development Executive Committee	2005
United Way of Johnson County Campaign Cabinet	2005
Honorary Chair of Leukemia & Lymphoma Society "Light the Night" Walk	2005
Member, NASA- Human and Animal Research Policy Committee	2004
Member, NIH-Hypertension & Microcirculation Study Section	2003
Member, NIH-Experimental Cardiovascular Sciences Study Section	2003
Chair, Study-Section, CV-Reg.2, AHA National Center	2003
Chair, Study-Section, CV-Reg.2, AHA National Center	2002
FASEB Science Policy Committee	2002
Board Member – American Heart Association: Missouri Affiliate	2002
Fellow, AHA Council for High Blood Pressure	2001
Chair, Study-Section, CV-Reg.2, AHA National Center	2001
Awarded Tenure, University of Missouri-Columbia	1999
Editorial Board for American Journal of Physiology-Heart and Circulation	1999
Member, Graduate Faculty, University of Missouri-Columbia	1996
NIH Research Career Development Award	1996
Scholarship Award to attend Cold Spring Harbor Laboratory Course on "Molecular Cloning of Neural Genes".	1995
Member, Doctoral Faculty, University of Texas Health Sci. Center, San Antonio	1993
NIH National Research Service Award	1991
NIH Postdoctoral Fellow, Univ. of Iowa College of Medicine	1990
American Physiological Society/Proctor & Gamble Professional Opportunity Award	1990
Armand Guarino Award for Academic Excellence in Doctoral Studies	1990
NIH Minority Biomedical Research Fellowship Award	1986

COMMITTEE RESPONSIBILITIES/SERVICE

A. National Organizations

AAU-NASA Working Group	2007-present
AAU- Animal Research policy group	2007-present
Finance Committee, American Physiological Society	2006-present
FASEB Science Policy Committee	2002-2005
Education Committee, American Physiological Society	2001-2005
Editorial Board, Am. Journal of Physiology, Heart and Circ.	1999-2005
Membership Committee, American Physiological Society	1997-2001

Grant Review Boards

Member, NIH NHLBI T32 Study Section	2006-present
NIH Study Section, HM, charter member	2004-2005

NIH Study Section, ECS, charter member	2003
NIH Study Section, ECS, Ad-Hoc member	1998-2002
Chair, AHA Study Section, Cardiovascular Regulation II	2001-2003
American Heart Association, National (Dallas)	1996-2001

Manuscript Reviews for Journals

Journal of CardioMetabolic Syndrome - Senior Editor	2006-present
American Journal of Physiology, Heart and Circulation	1991-present
American Journal of Physiology, Regulatory, Integrative	1991-present
Hypertension	1992-present
Journal of Neurophysiology	1996-present
Journal of Physiology, London	1997-present
Brain Research	1996-present
Journal of Autonomic Nervous System	1997-present
Journal of Applied Physiology	1996-present

B. State-Regional Boards/Committees

Bioscience Alliance of Iowa Board Member	2005-present
Priority One Board Member	2005-present
Iowa City Area Development Board Member	2005-present
Iowa City Area Development Executive Committee	2005-present
Johnson County United Way Board Member	2005-present

C. University

Board President, University of Iowa Research Park	2005-present
Board President, University of Iowa Research Foundation	2005-present
University of Iowa Foundation Director Search Committee	2006
Carver College of Medicine, Assoc. Dean Search Committee	2005-2006
University of Iowa Life Sciences Steering Committee	2005-present
University Missouri Research Reactor Advisory Committee	2003-2005
University of Missouri Conflict of Interest Working Group (UM-System)	2003-2005
Chair, UM System Homeland Security Task Force (UM-System)	2003-2005
Life Sciences Center Director Search Committee	2001-2003
Bioengineering Faculty Search Committee	2001-2002
UM System Patent Applications Committee (UM-System)	2001-2005
Chair, Missouri Women's Health Symposium Planning Comm.	2001-2005
Chair, MURR RAP Committee	2001-2002
Internal Advisory Committee- Comprehensive Cancer Center	2001-2002
UMC Search Committee for CCC director	2000-2002
CCC Planning Group; Key Group Leader	2000-2002
Internal Advisory Committee for RSI P20 program	2000-2002
Dept. of Physics Faculty Search Committee	2000-2002
Faculty Diversity Advisory Council, UMC	1999-2001
Curriculum Review Committee, Medical School, UTHSCSA	1995-1996
Library Committee, UTHSCSA	1995-1996
Medical School Accreditation , LCME Committee, UTHSCSA	1995
Chair- LCME Subcommittee, Medical Students Tuition, Fees and Financial Aid, UTHSCSA	1995
Minority High School Student Research Apprenticeship Program, UTHSCSA	1993-1996

D. College

Dean's Council of Chairs, School of Medicine, UMC	2003-2005
Research Advisory Council, School of Medicine, UMC	2003-2005
Committee on Research, CVM, University of Missouri	1996-2000
Committee on Disabilities (ad hoc), CVM, University of Missouri	1997
Faculty Honor Code Committee	1996-2001

E. Departmental

Promotion and Tenure Committee	1996-2005

Chair, Faculty Pharmacology/Biochemistry Search Committee, UMC	1997-1998
Co-Director, Dalton Membrane Physiology Journal Club, UMC	1997- 2000
Coordinator, Neurohumoral Control of the Circulation Research Conference	1997- 2000
Chair, Organizing Committee, Ozark Rivers Neurohumoral Control of the Circulation Meeting, UMC	1998
Chair, Department of Physiology Test Committee, UTHSCSA	1994-1996
Committee on Graduate Studies, UTHSCSA	1994-1996
Department of Physiology Test Committee, UTHSCSA	1993-1996
Coordinator, Cardiovascular Research Conference, UTHSCSA	1993-1996

TEACHING ACTIVITIES

A. Professional Courses

Course Director, Pharmacology 507, Department of Biomedical Sciences College of Veterinary Medicine, University of Missouri	1996-2004
Course Director, Pharmacology 508, Department of Biomedical Sciences College of Veterinary Medicine, University of Missouri	1996-2000
Lecturer, Pharmacokinetics, Pharmacodynamics, Autonomic Pharmacology College of Veterinary Medicine, University of Missouri	1996-2004
Lecturer, Adverse Drug Reactions, Ethics College of Veterinary Medicine, University of Missouri	1996-2000
Advanced Topics in Veterinary Clinical Sciences College of Veterinary Medicine, University of Missouri	1999-2000
Course Director, Laboratory Exercises in Physiology School of Medicine, UTHSCSA	1993-1996
Course Director, Experiments in Physiology, Graduate School of Biomedical Sciences, UTHSCSA	1993-1996

B. Graduate Courses

Lecturer, Multidisciplinary Approaches to Biomedical Sciences College of Veterinary Medicine, University of Missouri	1998-2002
Course Director, Selected Topics in Neurophysiology Graduate School of Biomedical Sciences, UTHSCSA	1995-1996
Selected Topics in Cardiovascular Physiology, Topic: Ion Channels in Cardiovascular Regulation, Graduate School of Biomedical,UTHSCSA	1995-1996
Cardiovascular Physiology, Neural Control of the Circulation Department of Physiology, UTHSCSA	1993-1996

C. Undergraduate Courses

Lecturer, Cardiovascular Pharmacology, Dept. of Pharmacy, University of Houston	1991
Lecturer, General Physiology, Our Lady of the Lake University San Antonio, Texas	1987

D. Student Research:

Advisor

Caroline Hoang, Ph.D. (now postdoctoral fellow at Einstein)
Hope Gole, B.S., (current Ph.D. candidate at UMC)

Postdoctoral Fellows

Zhicheng Li, MD.
Jaya Pamidimukkala, Ph.D.
Baojian Xue, Ph.D.
Yuanzi Zhao, M.D.

Reader/Committee Member

Stephanie Pierce, 2006, Dept. of Biophysics and Physiology, UI

Lara Gawenis, 1996, Dept. Vet. Biomedical Sciences, UMC
Eric Eberling, 1997, Dept. Vet. Biomedical Sciences, UMC
Simen Klebanov, 1995, Dept. Physiology, UTHSCSA
Yurong Cai, 1993, Dept. Physiology, UTHSCSA

Undergraduates
Heather McClain: Heather was an UTSA undergraduate in 1993-1994; is now a practicing physician.
April McClain: April McClain is a MU Chemistry major who joined our lab. in the Summer of 1997 as a Hughes Undergraduate Fellow.
April Pannell: April Pannell was a MU Psychology major who joined our lab.
as an undergraduate student in 1996 and was actively involved in the Fura-2 experiments using area postrema neurons.
Kyle Kenester: Kyle joined our lab. for the summer of 1997 and worked as an undergraduate researcher for the summer.
Adam Fedyk: Adam is a MU Biology major who joined our lab. in the Fall of 1998 as a Hughes Undergraduate Fellow and is now in Medical School.
Monica Fuller: Monica is a MU Biology major who joined the lab in 1998.
Hope Gole: Hope is a MU-Ag. major who joined the lab in 2000. Hope is now a Ph.D.student at MU.
Lela Hall: Lela was a MU-Biology major who joined the lab in 2000.
Jennifer Baker: Jennifer was a MU-Biology major who joined the lab in 2000.
Andrea Murphy: Andrea is a MU-Biology major who worked in the lab in 2000.

High School Students (UTHSCSA)
Roberto Martinez:Roberto was a high school senior who worked in my lab for 6 months. He originally was enrolled in Fox Technical High School Biomedical Science Program and following graduation continued work in my laboratory in the summer of 1994.
Rosa Lopez: Rosa was a high school senior who worked in my lab for 6
months in 1994. She was a student in the Fox Technical High School Biomedical Science Program and her project involved identification of nitric oxide containing neurons in cultured area postrema neurons.
Jennifer Contillo: Jennifer was a high school senior who worked in my lab during the school year of 1994-1995. She was in the High School Biomedical Science Program and her project involved immunocytochemical identification of neurotransmitters in area postrema neurons.
Celeste Garza: Celeste was a high school senior who is working in my lab during the 1995-1996 .

High School Teachers (UTHSCSA)
Misty D. Belmontez: Ms. Belmontez is a science teacher who spent the Summer of 1995 in my laboratory in the American Physiological Society Sponsored Science Teacher Summer Research Program. She was involved in the immunocytochemical experiments examining neurotransmitters and receptors present in area postrema neurons.

GRANT HISTORY

Current:

NIH RO1 HL62261, "Circumventricular Organs: Gender and Hypertension"
PI: M. Hay; 15% effort, Direct support for project period: $1,250,000;Dates 01/01/05-02/31/08.
NIH RO1 HL59676-06, "Regulation of Baroreceptor Afferent Transmission"
P.I. M. Hay; 15% effort , Direct support for project period: $ 650,000,Dates 01/01/05-02/31/08.
NSF AGEP
P.I. M. Hay, $3,000,000, 08/01/03-07/31/08.

Pending:

NIH PPG "Sex differences in RAAS-associated mechanisms of end organ damage.
P.I. Katheryn Sandberg, Georgetown University; **Co-I. M. Hay** on Project 3 with J. Verbalis.
NIH PPG "Integrative neurobiology of cardiovascular regulation"
P.I. Frank Abboud, University of Iowa, **Co-I. M.Hay** on Project 1 with A.K. Johnson.

Past:

NASA- National Center for Gender Physiology and Environmental Adaptation
P.I. M. Hay, $ 1,350,000, Dates 07/2003-06/2007.

NASA-National Center for Gender Physiology
P.I. M. Hay, 30% effort**,** Support for project period $ 3,000,000, Dates 7/02-6/06.
NIH RO1(5) "Metabotropic Glutamate Receptors and Baroreflex Function"
CoI: M. Hay, 10% effort, P.I., Eileen Hasser, Dates 12/01/01-11/31/06.
NIH Training Grant HL07094, PI V. Huxley "Molecular and Biophysical Aspects of Cardiovascular Function and Adaptation" Dates 6/00-6/05, Advisor, 0%.
American Heart Association-MO Affl. (sponsor for Dr. Baojin Xue)$ 84,000, 7/1/03-6/30/05.
NSF BES-0089018 "Cellular Electrophysiology on a Chip"
Co-I: M. Hay,5% effort , P.I., Kevin Gillis., 6/00-5/04.
NIH RO1 HL59676, "Regulation of Baroreceptor Afferent Transmission"
P.I. M. Hay; 20% effort , Support for project period: $ 629,614; Dates 12/01/97-11/30/02.
DOE "University Reactor Sharing Grant", **P.I. M., Hay**, $63,000/year; Dates 10/01-9/02.
NIH K02 (RCDA) , "Metabotropic Receptors and Baroreceptor Neurons"
PI: **M. Hay**; Salary support for project period: $250,000; Dates 12/01/96-11/30/01
CVM Research Board ; "Global Gene Expression Profile in Rat Brain and Heart Following Estrogen
AHA-MO Affl. "Angiotensin II and AVP Modulation of NTS"
(sponsor for Dr. Jaya Pamidimukkala)$ 55,000, 7/1/99-6/30/01
NIH R29 HL50304-, "Metabotropic Receptor Modulation of Baroreceptor Neurons";
PI: **M. Hay;** Support for project period: $505,377, Dates 08/01/94 - 07/31/99.
American Heart Association, National Grant-in-Aid,"Circumventricular Organs: Gender and Hypertension"
PI: **M. Hay**; Support for project period: $ 120,000; Dates 01/01/99-2/31/02
American Heart Association, National Grant-in-Aid, "Angiotensin II Modulation of Area Postrema Neurons"
PI: **M. Hay**; Support for project period: $ 120,000; Dates 07/01/95-06/31-98.
American Heart Association-MO Affl. "Angiotensin II and Glutamate Modulation of Area Postrema Neurons" (sponsor for Dr. Zhicheng Li)$ 55,000, 7/1/98-6/30/00
American Lung Association of Texas, "Cellular Mechanisms of Pulmonary Vagal Afferent Activation", P.I. **M. Hay**, Renewal, Support for project period: $25,000 Dates 07/01/95-06/30/96.
American Heart Association, Texas Affil. Grant- In-Aid, "Presynaptic Regulation of Baroreceptor Neurons" PI: **M. Hay**, Support for project period: $83,597; Dates 07/01/93 - 06/30/95
American Lung Association of Texas, "Cellular Mechanisms of Pulmonary Vagal Afferent Activation", P.I. **M. Hay**, Support for project period: $25,000 Dates 07/01/94-06/30/95.
NIH- National Research Service Award (NRSA), "Acute Hypertension: Baroreflex and Brainstem Interactions"
PI: M. Hay; Salary support for project period: $71,000; Dates 09/01/90-08/31/93.

INTERNATIONAL CONFERENCES: ORGANIZED AND PARTICIPATED (last 5 years)

Invited Presenter: "Sex Differences in Aldo/Salt Hypertension"
Neuropeptides 2007, Santorini, Greece 2007
Invited Speaker: "Sex Differences in Hypertension", International Symposium of 2006
Neuroendocrinology: Neuroendocrine Control Of Body Fluid Homeostasis:
Past, Present and Future, Sao Paulo, Brazil
Invited Participant: State of Iowa Trade Mission to India with Governor Vilsack 2006
Invited Participant: First World Congress on Gender Specific Medicine - Berlin, Germany 2006
Conference Chair (elected), M. Hay FASEB Summer Conference 2004,
"Neurohumoral Control of the Circulation", Snowmass, CO, 2004
Conference Vice-Chair (elected), M. Hay FASEB Summer Conference, 2002
"Neurohumoral Control of the Circulation", Snowmass, CO, Chair: M. Chapleau. 2002

INVITED PRESENTATIONS (last 5 years)

Research Innovation Summit, Mayo Clinic, Rochester, Minn. 2007
International Symposium of Neuroendocrinology: Neuroendocrine Control Of
Body Fluid Homeostasis:Past, Present and Future, Sao Paulo, Brazil
"Sex Differences in Hypertension" 2006
Workshop on Sex/Gender Differences in Obesity and Cardiovascular Disease 2005
Society for Women's Health Research, Washington, D.C.
"Non-Zero-Sum Game Research Strategies in Times of Flat Federal Budgets" 2004
Research Policy Retreat: The Research Mission of Public Universities
Merrill Center for Advanced Studies, University of Kansas
NASA Sex/Gender Inclusion Workshop, Washington D.C. 2004
Thought Leaders Workshop on Sex Based Biology Society for Women's Health Research,

Washington, D.C. 2003
"Sex, Space and Environmental Adaptation",
Presentation to the Office of Science and Technology Policy
White House Conference Center, Washington, D.C. 2003
"Sex, Aging and Angiotensin II" Workshop., Georgetown University 2003
"Sex and Hypertension", St. Louis University 2003
AAU Homeland Security & Universities Workshop, Washington, D.C. 2003
"Regulation of Baroreceptor Neurotransmission", University of Florida 2002
Conference Chair: "Second Annual Missouri Symposium on Women's Health Research"
University of Missouri, Columbia. 2002
"Measurements of Baroreceptor Synaptic Transmission" *FASEB Summer Conference*,
"Neurohumoral Control of the Circulation", Snowmass, CO 2002
Conference Chair: "Sex, Space and Environmental Adaptation: A National
Workshop to Define Research Priorities Regarding Sex-Differences
in Human Responses to Challenging Environments", University of Missouri 2002
Circumventricular Organs; Sex and Hypertension. Department of Physiology,
Georgetown University , Washington, D.C., 2002

PUBLICATIONS

A. Book Chapters/Reviews

Books Edited *Principles of Sex-Based Physiology*, In: Advances in Molecular and Cell Biology, Vol. 34, Elsevier Publishing Company; editors, V. M. Miller, **M. Hay,** 2004**.**

Book Chapters/Proceedings

Bowles, D. K. and **M. Hay.** Cardiovascular Membrane Excitability and the Influence of Sex and Sex Steroids, *Principles of Sex-Based Physiology*, In: Advances in Molecular and Cell Biology, Vol. 34, Elsevier Publishing Company; editors, V. M. Miller, M. Hay**,** 2004**.**

Hay, M.. Subcellular Mechanisms of Area Postrema Activation. *Clin Exp Pharmacol Physiol,28: 551-557,* 2001.

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