

## CURRICULUM VITAE

**Name:** Joey Victor Barnett, Ph.D.  
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**Office Address:** Department of Pharmacology  
Vanderbilt University School of Medicine  
Rm. 476, RRB, 2220 Pierce Avenue  
Nashville, TN 37232-6600  
**Date of Birth:** June 18, 1958; Evansville, Indiana

### Education and Professional Experience:

2014- Assistant Dean of Physician-Researcher Training, Director of the Office of Medical Student Research, Vanderbilt University School of Medicine, Nashville, TN

2013-2016;  
2018-2019 Acting Chair, Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, TN

2008- Professor of Pharmacology, Medicine, Pediatrics, and Pathology, Microbiology & Immunology, Vanderbilt University School of Medicine, Nashville, TN

2005-2013; 2016-  
2005- Vice Chair, Department of Pharmacology  
Adjunct Associate Professor of Biomedical Sciences, Meharry Medical College, Nashville, TN

2002-2008 Associate Professor of Pharmacology, Medicine, and Microbiology & Immunology (tenure in Pharmacology)  
Vanderbilt University School of Medicine, Nashville, TN

1999-2002 Associate Professor of Medicine, Pharmacology, and Microbiology and Immunology (tenure in Medicine)  
Vanderbilt University School of Medicine, Nashville, TN

1992-1999 Assistant Professor of Medicine and Pharmacology  
Vanderbilt University School of Medicine, Nashville, TN

1989-1992 Instructor in Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, MA

1986-1989 Research Fellow in Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, MA  
Advisor: Dr. Jonas B. Galper

1981-1986 Department of Pharmacology, Vanderbilt University, Nashville, TN  
Ph.D., Pharmacology, 1986  
Advisor: Dr. Ronald T. Kuczenski

1981 Undergraduate Research Fellow, Argonne National Laboratories and the University of Chicago, Argonne, IL  
Advisor: Dr. Charles F. Ehret

1976-1980 University of Southern Indiana, Evansville, IN  
B.S., Biology, 1980

### **Awards and Honors:**

**Elected Fellow**, Academy of Pharmacology Educators, ASPET 2020

**Chair**, Amer. Heart Assoc., "H32" working group to explore predoctoral training, 2019.

**Member**, Amer. Heart Assoc. Partners to Promote Diversity in Science: Supporting Undergraduate Research Experiences (SURE) Oversight Advisory Committee 2018-

**Chair**, NICHD T32 Study Section, 2019, 2020

**Member**, Advisory Committee Member, Burroughs Wellcome Fund Postdoctoral Enrichment Grant Program, 2019-

**Member**, NICHD T32 Study Section, 2018

Louis B. Russell, Jr. Memorial Award, American Heart Association, 2017

**Master Science Teacher**, Vanderbilt University School of Medicine, 2016

**Member**, Amer. Heart. Assoc. Funding Subcommittee (National subcommittee of the Amer. Heart Assoc. Research Committee), 2016-2018

**Honoree Faculty Inductee**, Alpha Omega Alpha Honor Medical Society, 2016

**Elected Fellow**, American Association for the Advancement of Science, 2015

Gerald S. Gotterer Award for Innovation in Education Programming, 2015

Reviewer, Howard Hughes Medical Institute Medical Fellows Program, 2015-2017

Member, Executive Committee, Division of Pharmacology Education, ASPET 2014-

Ambassador in the United States, Organization for Ph.D. Education in Biomedicine and Health Sciences in the European System (ORPHEUS), 2014-

**Past President**, Amer. Heart Assoc. Greater Southeast Affiliate (2013-2014)

Delegate, ASPET-IUPHAR, Capetown, South Africa (2014)

Member, National Diversity Leadership Comm., Amer. Heart Assoc. (2013-2017)

Member, Greater Southeast Affiliate Multicultural Initiatives Committee, Amer. Heart Assoc., (2013-2018)

**President**, Amer. Heart Assoc. Greater Southeast Affiliate (2012-2013)

Member, FASEB Subcommittee on Training and Career Opportunities for Scientists, 2012-

**Chair**, Special Emphasis Panel ZGM1 MORE-2, NIGMS IRACDA Program Review, 2012.

**Co-Director**, Howard Hughes Medical Institute, Training Program in Molecular Medicine, 2009-2015

**Chair**, Public Affairs Committee, American Association of Anatomists (2010-2014)

Member, FASEB Public Policy Committee, (2010-2014)

**President-elect**, Amer. Heart Assoc. Greater Southeast Affiliate (2012)

**Co-Chair**, Graduate Education Comm., Amer Soc for Pharm & Exper Therapeutics, 2011-2013.

Delegate, ASPET-IUPHAR, Copenhagen, Denmark (2010)

Member, Biomedical Research & Research Training Review Subcommittee A, NIH (2009-2014)

Member, Web design committee, ASPET, 2009

Invited Member, ASPET Strategic Planning Retreat, 2008

Amer. Heart Assoc. South East Affiliate Science Integration Award, 2008

Member, Public Affairs Committee, American Association of Anatomists, 2008-2011

**Elected** to Vanderbilt Academy for Excellence in Teaching, 2008

Invited Reviewer, Pfizer Australia Research Fellowships, 2007

Elaine Sanders-Bush Award for Mentoring Graduate and Medical Students, 2007

Representative, AAMC GREAT Group, 2007-2019.

Member, Tennessee State University MARC Advisory Board, 2006-

Member, Tennessee State University MARC Advisory Board, 2016-

**Chair**, Graduate Education Comm., Amer Soc for Pharm and Exper Therapeutics, 2007-2010  
**Vice Chair**, American Heart Association Greater Southeast Affiliate Research Comm. (2007)  
**Chair**, American Heart Association Southeast Affiliate Research Comm. (2006)  
Member, Committee on Graduate Education, ASPET, 2005  
**Organizer**, National Meeting for Directors of Graduate Study in Pharmacology, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2020  
Member, Special Study Section (PPG Review), NHLBI. 2005  
Member, Special Emphasis Panel, NHLBI. 2005  
**Co-Organizer**, Updates in Genetics and Development, Harvard Med Sch, Boston, MA (2004)  
Member, Special Study Section (PPG Review), NHLBI. 2004  
**Co-Organizer**, Coronary Vasculogenesis Meeting, Estes Park, CO 2004  
**Charter Member**, Development 1 (DEV-1) NIH Study Section, 2003-2006  
Member, Cardiovascular Development Study Section, National American Heart Assoc., 2003  
Member, American Heart Association Peer Review Steering Committee, 2001-2002  
**Chair**, Cardiovascular Development Study Section, Nat American Heart Assoc., 1999-2000  
Member, Review Panel for Centers of Biomedical Research Excellence, National Center for Research Resources NIH 2000  
Department of Pharmacology Teaching Award, 1996, 2000, 2006, 2008.  
Member, NHLBI Working Group, Res. Opportunity Meeting for Cardiovascular Dev., 2000  
Ad Hoc Reviewer, Animal Growth, Development, and Nutrient Utilization Program, USDA National Research Initiative Program, 2000  
Member, NHLBI Working Group, The Role of Cholesterol and Lipids in Embryonic Development and Congenital Disease, 1998  
**Executive Committee**, Weinstein Cardiovascular Development Meeting, 1998-2000  
**Co-Organizer**, Weinstein Cardiovascular Development Meeting, 1998  
**Co-Chair**, Cardiovascular Development Study Section, National Amer Heart Assoc., 1997-1998  
Sigma Xi, 1997  
Member, Lung and Development Study Section, National American Heart Association, 1996  
Member, Developmental Mechanisms Study Section, National Science Foundation, 1996-1999  
Individual National Research Service Award, 1988-1990  
Fellow, American Heart Association, Massachusetts Affiliate 1986-1988  
Student Travel Award, Amer. Society for Pharmacology and Experimental Therapeutics, 1985  
Undergraduate Fellow, United States Dept. of Energy, Argonne National Laboratory, 1981  
Sigma Zeta, 1980

**Professional Affiliations:**

American Association for the Advancement of Science  
Council on Basic Cardiovascular Sciences, American Heart Association  
Society for Developmental Biology  
American Association of Anatomists  
American Society for Pharmacology and Experimental Therapeutics  
New York Academy of Sciences  
Indiana Academy of Science  
American Heart Association, Expert Speaker and Media Consultant

**License Agreements:**

VU 9702; Bionostics, Inc., chick Type II TGF $\beta$  receptor fusion proteins

Pending; Bionostics, Inc., chick Type III TGF $\beta$  receptor fusion proteins, chick Type I receptor isoforms ALK2 and ALK5 fusion proteins

**Editorial Responsibilities:**

Ad Hoc Reviewer, Editor, Explore Pharmacology: Graduate Studies in Pharmacology, ASPET 2012

Member, Editorial Board, Developmental Dynamics, 2005-2013

Reviewer, American Heart Assoc. Scientific Sessions, 2000-2009

Ad Hoc Reviewer, PLUS One 2011-

Ad Hoc Reviewer, Carcinogenesis

Ad Hoc Reviewer, BBA

Ad Hoc Reviewer, Journal of Clinical Investigation

Ad Hoc Reviewer, Nature Cell Biology

Ad Hoc Reviewer, Anatomical Record, 2002-

Ad Hoc Reviewer, Development, 2001-

Ad Hoc Reviewer, Proceedings of the National Academy of Sciences USA, 2000

Ad Hoc Reviewer, Genes and Development, 2000

Ad Hoc Reviewer, Cell and Tissue Research, 2000

Ad Hoc Reviewer, Cytokine, 2000

Ad Hoc Reviewer, Developmental Biology, 2000-

Ad Hoc Reviewer, Acta Anatomica, 1995-

Ad Hoc Reviewer, Developmental Dynamics, 1995-2005

Ad Hoc Reviewer, Cardiovascular Research, 1998-

Ad Hoc Reviewer, Circulation Research, 1999-

**Invited Program Reviews:**

The Cellular and Molecular Pharmacology and Physiology Graduate Program, University of Nevada, 2008

The Department of Pharmacology and Toxicology Graduate Program, University of Utah, 2012

The Department of Pharmacology, University of Pennsylvania, 2014

The Department of Pharmacology, Saint Louis University, 2014

The Department of Pharmacology, Case Western Reserve, 2016

The Department of Pharmacology, University of Iowa, 2018

Program in Molecular, Cellular & Biochemical Pharmacology, University of Cincinnati, 2018

Molecular Medicine Program, University of North Carolina Chapel Hill, 2020

Integrated and Biomedical Physiology Training Program, Pennsylvania State University, 2020

**Funding:**

**Active:**

1R25HL145330 (Barnett)

12/1/2018 - 11/30/2023

NIH NHLBI

Promoting Academic Excellence through Community Engagement and Research Scholars Program (PAECER Scholars Program)

Summer training program for underrepresented students developed in collaboration with the American Heart Association and Vanderbilt University. Drs. Barnett, Sealy, and Sanchez direct the program.

\*2019 Program highlighted in "Community-based cardiovascular interventions gain steam" Circulation. 2019; 140:262–263. DOI: 10.1161/CIRCULATIONAHA.119.042118

AHA 18SFRN33900069 (Beckman) 04/01/2018-03/31/2022 0.9 calendar months  
AHA Total Award \$3,709,200

Microvascular Disease Determines Limb Outcomes in PAD

This is a Strategically-Focused Research Network Center grant has a basic, translational, and population project joined by a postdoctoral training program that is focused on interdisciplinary training. Efforts address the role of the microcirculation in the pathology of peripheral artery disease. Dr. Barnett's role is as the director of the training program and collaborator at 7.5% effort.

\*2020 Program highlighted. Barnett, JV, Beckman, JA, Bonaca, MP, Carnethon, MR, Cassis, LA, Creager, MA, Daugherty, A, Feinberg, MW, Freiberg, MS, Goodney, PP, Greenland, P, Leeuwenburgh, C, LeMaire, SA, McDermott, MM, Shen, YH, Wasserman, DH, Webb, NR, Wells, QS. The American Heart Association's Vascular Diseases Strategically Focused Research Network. Arteriosclerosis, Thrombosis, and Vascular Biology 40:00-00. DOI: 10.1161/ATVBAHA.120.313967, 2020

1R01 HL133127-01A1 (Murray) 04/01/2017-03/31/2022 0.24 calendar months  
NHLBI \$18,596

Novel Pathophysiological Targets in Atrial Fibrillation Susceptibility

The proposed studies have substantial significance for the general population, given that the hypotheses we are testing may not only provide mechanistic links between common diseases such as hypertension and obesity with atrial fibrillation, but they may also provide novel therapeutic targets for the prevention and/or treatment of this common and difficult to treat arrhythmia.

2T32 GM007628-36 (Barnett)\* 07/01/2014-06/30/2023 0.60 calendar months  
NIH/NIGMS \$1,084,754 (No salary support)

Training in Pharmacological Sciences

This is a training grant in pharmacological sciences.

\*2016 Awarded supplement to develop a course in "Enhancement of Rigor and Reproducibility" for all Vanderbilt NIGMS trainees at Vanderbilt. Program developed highlighted in a Nature article entitled "Seek out stronger science". Nature 537: 703-704, 2016.

\*2020 Awarded supplement to develop a program of study to build capacity and competence in program evaluation in a cadre of key stakeholders in graduate education.

**Pending:**

R25 GM134979-01 (**Barnett**) (Scored 16) 12/1/2020-11/30/2025 0.6 calendar months  
Vanderbilt Experimental Research Training Inclusion Community Engagement Skills (VERTICES)  
NIH \$428,976/yr

Postbaccalaureate students are funded to complete a mentored, 12 month research experience in a laboratory addressing a basic science question that is supplemented with training in critical thinking, leadership, and communication skills. Students also benefit from near peer mentoring, exposure to a range of career opportunities, and unique programming to support professional development that includes opportunities to relate the trainees' scientific interests to the broader community.

**Past:**

1R13 GM108284-01 (Barnett) NCE 05/15/2014-05/15/18 0.3 calendar months  
NIH \$46,158 (No salary support)

National Pharmacology Directors of Graduate Programs Meeting

This grant provides support of educational programming sessions for the national meeting of Ph.D. program directors in pharmacology and physiology. This includes an every other year stand-alone meeting as well as a single session at Experimental Biology.

1R01 HL115103-01 (Merryman) 07/01/2012-06/30/2017 1.20 calendar months  
NIH \$268,432

Serotonergic Receptor Targeted Therapy for Degenerative Aortic Valve Disease

The goal of this project is to develop serotonergic receptor targeted therapy that prevents aortic valve cells from becoming myofibroblasts, which are the hallmark of degenerative aortic valve disease.

13GRNT16690001 (Barnett) 07/01/2013-06/30/2015 1.2 calendar months  
AHA \$82,000 (No salary support)

Mechanisms of Transforming Growth Factor Beta Type III Receptor-Dependent Epicardial Cell Invasion

Completion of these studies will reveal the role of TGFB in regulating cell invasion and identify the components of the TGFbeta R3 complex required for invasion. The attainment of these goals is essential to effectively develop and use drugs that target this pathway.

Howard Hughes (Muglia) 04/01/2010-03/31/2014 0.24 calendar months  
Howard Hughes Project \$211,152

Certificate Program in Molecular Medicine

The educational intent is to integrate doctoral thesis research with relevant clinical experiences

W81XWH-12-1-0489 (Perrien) 09/30/2012-03/29/14 0.60 calendar months

Department of Defense

PR110718 TGFbeta receptor 3/Betaglycan as a target for hypogonadal bone loss

Uses mouse model of osteoporosis to investigate the role of the Type III receptor in bone loss.

5R25 GM086771 (McGuinness) 04/01/2009-03/31/2013 0.12 calendar months  
NIH/NIGMS \$97,153

A short course: An organ systems approach to target the metabolic syndrome

Support for one of 4 NIH-sponsored, hands on, whole animal biology summer short courses.

5T32 GM007628 (Barnett) 07/01/2008-06/30/2013 0.60 calendar months  
NIH/NIGMS \$421,000 (No salary support)

Training in Pharmacological Sciences

This is a training grant in pharmacological sciences.

5RL1 HL092551 (Baldwin & Barnett) 09/30/2007-07/31/2012 1.80 calendar months  
NIH/NHLBI \$382,756 (\$25,000 for project)

Systems-based consortium for organ design and engineering

Experiments use several approaches to develop and in vitro matrix and cell system to support generation of heart valve tissue.

5R01 HL085708 (Barnett) 02/01/2008-01/31/2012 6.57 calendar months  
NIH/NHLBI (NCE until 01/31/13)  
Type III transforming growth factor beta receptor in coronary vessel development  
Experiments will determine the tissues that require the Type III receptor for normal coronary vessel development.

0855039E (Barnett) 07/01/2008-06/30/2010 0.58 calendar months  
AHA \$75,000  
Role of the Type III TGF-beta receptor in Outflow tract development  
Experiments explore the role of the Type III TGFβ receptor in heart valve and outflow tract development in the mouse. The receptor will be conditionally deleted from the secondary heart field, neural crest, and endothelium to define the cell populations that require the receptor.

5T32 HL076133-05 Barnett (PI) 05/01/2004-04/30/2010  
NIH/NHLBI \$236,728  
“Training in Cardiovascular Pharmacology”  
Postdoctoral training program in cardiovascular pharmacology.  
Role: Principal Investigator Director of Program

1R13 GM087797 (Barnett) 03/01/2009-02/28/2010  
NIH/NIGMS \$6,000  
National Pharmacology Directors of Graduate Programs Meeting  
American Heart Association 0655129B “Role of the Type III TGF-beta receptor in coronary vessel development” (Joey V. Barnett, Principal Investigator)  
07/01/2006-06/30/2008 \$140,000 (total direct)

NIH/NIGMS 1R13 GM080977 “National Pharmacology Directors of Graduate Program Meeting” (Joey V. Barnett, Principal Investigator)  
03/01/2007-02/28/2008 \$8,000 (total direct)

NIH/NHLBI 1 PO1 HL67105; "Molecular Regulation of Coronary Development" (David Bader, Principal Investigator)  
NIH/NHLBI 1 PO1 HL67105; "TGFβ and Coronary Vessel Development" (Joey V. Barnett, Principal Investigator)  
06/01/01-05/31/06 \$1,046,979 (total direct)

NIH/NHLBI 1 PO1 HL67105; "Molecular Regulation of Coronary Development" (David Bader, Principal Investigator) Core Facilities "Morphology Core Laboratory" (Joey V. Barnett, Core Director)  
06/01/01-05/31/06 \$921,008 (total direct)

NIH/NCI 5P50 CA098131 “SPOR in Breast Cancer” Arteaga (PI)  
Pilot Project “Role of the Type III TGFβ Receptor in Breast Development and Cancer” (Joey V. Barnett, PI)  
01/01/05-12/31/06 \$50,000 (total direct)

March of Dimes Grant Research Grant 1-FY98-1-0621; "Function of the Type III TGFβ Receptor in Development" (Joey V. Barnett, Principal Investigator)  
06/01/00-05/31/03 \$163,635 (total direct)

Pharmaceutical Manufacturers Foundation Fellowship; "Role of Type I TGF $\beta$  Receptor in Signaling Atrioventricular Cushion Transformation" (Joey V. Barnett, Sponsor; Jay Steven Desgrosellier, Fellow)  
07/01/00-06/30/02 \$25,000 (total direct)

American Heart Association Established Investigator Award 96001380; "Functional Analysis of Transforming Growth Factor Beta Receptors in Heart Development" (Joey V. Barnett, Principal Investigator)  
07/01/96-06/30/01 \$262,750 (total direct)

VUMC Intramural Discovery Grants Program; "Type III TGF $\beta$  receptor ligand binding specificity" (Joey V. Barnett, Principal Investigator; Andrzej Krezel, Co-investigator)  
07/01/99-06/30/01 \$50,482 (total direct)

NIH/NHLBI 1RO1 HL52922; "TGF $\beta$  Receptor Expression and Function in Cardiogenesis" (Joey V. Barnett, Principal Investigator)  
12/01/95-11/30/00 \$679,449 (total direct)

NIH/NHLBI 1RO1 HL52922; (Minority Supplement) "TGF $\beta$  Receptor Expression and Function in Cardiogenesis" (Joey V. Barnett, Principal Investigator)  
12/01/98-11/30/00 \$84,436 (total direct)

March of Dimes Grant Research Grant 1-FY98-1-0621; "Function of the Type III TGF $\beta$  Receptor in Development" (Joey V. Barnett, Principal Investigator)  
06/01/98-06/01/00 \$104,373 (total direct)

Howard Hughes Medical Research Institute, Research Training Fellowship for Medical Students; "Role of the Type I Transforming Growth Factor Beta Receptor in Signaling Atrioventricular Cushion Transformation" (Joey V. Barnett, Sponsor; Yen-Tsun Lai, Fellow)  
07/01/97-06/30/98 \$26,000 (total direct)

Vanderbilt Cancer Center Gene Therapy Pilot Project; "Shell-less Chick Embryo Culture: An Experimental System to Evaluate p53 as a Gene Therapy Target in Tumor Angiogenesis and Metastasis" (Thomas Daniel, Principal Investigator; Joey V. Barnett and Jennifer Pietenpol, Co-investigators)  
04/01/96-03/31/97 \$ 68,500 (total direct)

Vanderbilt Cancer Center Gene Therapy Pilot Project; "Endothelial-Cell Targeted Expression of Genes by Retroviruses" (Larry Kerr, Principal Investigator; Joey V. Barnett, Co-investigator)  
04/01/96-03/31/97 \$ 40,000 (total direct)

American Heart Association Grant-in-Aid 95008240; "Functional Role of the Type I TGF $\beta$  Receptor in Chick Cardiogenesis" (Joey V. Barnett, Principal Investigator)  
07/01/95-06/30/98 Award Declined

NIH/NHLBI F32-HL09221 Individual NRSA; "Function of the Type I TGF $\beta$  Receptor in AV Cushion Transformation" (Joey V. Barnett, Sponsor; Gregory P. Brames, Fellow)  
07/01/95-6/30/97 \$63,100 (total direct); Second year declined

American Heart Association Tennessee Affiliate Grant-in-Aid TN95G30; "The Role of the Type II and Type III TGF $\beta$  Receptors in Cardiovascular Development" (Joey V. Barnett, Principal Investigator)  
07/01/95-07/01/97 \$ 50,000 (total direct)  
Second year of the award was declined



University Research Council Direct Support Research Grant; "Role of the Type I TGF $\beta$  Receptor in Heart Development" (Joey V. Barnett, Principal Investigator)  
07/01/95-12/31/95 \$ 19,594 (total direct)

American Heart Association Tennessee Affiliate New Investigator Award TN93G28; "Role of the Type II and Type III TGF $\beta$  Receptors in Epithelial-Mesenchymal Transformation in the Atrioventricular Cushion" (Joey V. Barnett, Principal Investigator)  
07/01/93-06/31/95 \$ 80,000 (total direct)

American Heart Association Massachusetts Affiliate Grant-in-Aid 13527890; "A Coculture System for Examining the Development of Muscarinic Responsiveness of the Heart" (Joey V. Barnett, Principal Investigator)  
07/01/90-07/01/92 \$ 90,000 (total direct)

### **Invited Lectures:**

#### **Symposia:**

Invited Keynote Speaker, "Can Community Engagement be a Hub for Training Scientists?", Welsh Symposium at the Bloomberg School of Public Health at Johns Hopkins, Baltimore, MD, 2020

Invited Speaker, Integrated and Biomedical Physiology Training Program, Pennsylvania State University, 2020

Invited Speaker and Panelist, NIGMS Training Workforce and Diversity (TWD) meeting, "Leading Institutional Change – Becoming Change Agents", Bethesda, MD 2019

Organizer and Speaker with Dr. Sailaja from NIGMS, "National Directors of Graduate Studies in Pharmacology and Physiology – satellite meeting", Exp. Biol. Orlando, FL (April 2019)

Invited workshop leader with Dr. Robert Harrington, "What are the critical skills for science in the next 10 years", American Heart Association Leadership Academy, Salt Lake City, Utah, August 2018.

Invited Speaker, "Rethinking PhD training", Departments of Pharmacology and Pharmaceutical Sciences Retreat, University of Iowa, Iowa City, August 2018.

Invited Speaker, "Navigating the new NIGMS guidelines", University of Iowa, Iowa City, August 2018.

Invited Panelist, Enhancing the Participation of Basic Research Investigators and Physician Scientists in the Biomedical Workforce, NIAID Research Funding Workshop, Meharry Medical College, Nashville TN, (April 2018)

Invited Speaker, "Establishing Cross-Institutional Partnership: Pharm.D.,-Ph.D. Partnership Pathway", American Association of Colleges of Pharmacy meeting, Los Angeles, CA (February 2018)

Member, Planning Committee and Workshop Facilitator, "Navigating New NIGMS Training Guidelines" co-sponsored by FASEB, HHMI, Council of Graduate Schools, and AAMC with support from NIGMS, Washington, DC (February 2018)

Organizer and Speaker with Dr. Doris Zuk from NIGMS, "Navigating the New NIGMS Training Guidelines", Exp. Biol. San Diego, CA (April 2018)

Session Co-Chair, Cardiovascular Developmental Biology Center Symposium. Charleston, SC (August 2017)

Invited Speaker, ORPHEUS (Organisation for PhD Education in Biomedicine and Health Sciences in the European System), Efforts to enhance rigor and reproducibility in science in the United States. Klaipeda, Lithuania (May 2017)

Organizer and Chair, ASPET Teaching Institute, Supporting Experiment Design and Rigor in Graduate Training, Exp. Biol. Chicago IL (April 2017)

Co-organizer and Co-chair, Amer. Assoc. Anatomy Symposium, Novel Function of Fibrinolysis in Tissue Repair, Exp. Biol. Chicago IL (April 2017)

Invited Speaker, NIGMS Symposium on Catalyzing the Modernization of Graduate Education, Rigor and Reproducibility, Bethesda MD (April 2016)

Invited Speaker, Experimental Biology Meeting Workshop ORPHEUS: Developing Best Practices for Graduate Education in Europe (April 2016).

Invited Speaker, ORPHEUS (*Organisation for **PhD** Education in Biomedicine and Health Sciences in the **European System***), Lost in Translation? From medical studies to clinical research. NIH-sponsored initiatives in Ph.D. training in the US – enhancing outcome and impact. Cologne, Germany (March 2016)

Invited Speaker, ORPHEUS (*Organisation for **PhD** Education in Biomedicine and Health Sciences in the **European System***), Lost in Translation? From medical studies to clinical research. M.D., Ph.D. training in the USA. Cologne, Germany (March 2016)

30<sup>th</sup> Annual Ralph J. Cazort Heritage Lecture, Meharry Medical College, April 2015

Invited Speaker, IUPHAR WorldPharma 2014 workshop on " ORPHEUS PhD Standards: bridging PhD programs to promote global", Do we need international Standards: US position. Capetown, South Africa (July 2014)

Session Chair, ORPHEUS (*Organisation for **PhD** Education in Biomedicine and Health Sciences in the **European System***), Ph.D.s around the world, Lausanne, Switzerland (April 2014)

Invited Speaker, Cardiovascular Developmental Biology Center Symposium, Charleston, SC (March 2014)

Invited Speaker, ORPHEUS (*Organisation for **PhD** Education in Biomedicine and Health Sciences in the **European System***), Prague, Czech Republic (April 2013)

Organizer/Invited Speaker FASEB Symposium on Training Models, Boston, MA (April 2013)

Invited Speaker, Association for Medical Education in Europe, Lyon, France (August 2012)

Session Chair, Cardiovascular Development, FASEB, San Diego, CA (April 2012)

Invited Speaker, Association of Med Sch Pharmacology Chairs, Maui, HA (Feb 2012)

Co-Organizer, National Directors of Graduate Study in Pharmacology and Physiology Meeting, East Lansing MI (July 2011)

Invited Speaker, ORPHEUS Report, National Directors of Graduate Study in Pharmacology and Physiology, East Lansing MI (July 2011)

Symposium Co-Organizer, Science, Scientist, Advocate: Making the case for increased funding for biomedical research. FASEB, Washington, DC (April 2011)

Symposium Co-Organizer, The ASPET Teaching Institute, "Creating Educational Partnerships from High School to Graduate School", FASEB, Washington, DC (April 2011)

Session Chair, Cardiovascular Development, FASEB, Washington, DC (April 2011)

Invited Speaker, ORPHEUS (*Organisation for **PhD** Education in Biomedicine and Health Sciences in the **European System***) 6<sup>th</sup> meeting, Izmir, Turkey (April 2011)

Invited Speaker, Association of Med Sch Pharmacology Chairs, Cancun, Mexico (Jan 2010)

IUPHAR WorldPharma2010 workshop on "Standards for Ph.D. Education in Pharmacology", Copenhagen, Denmark (July 2010)

Invited Speaker, Association of Med Sch Pharmacology Chairs, Tampa, Florida (Feb 2009)

Brody Lectureship, Michigan State University, East Lansing, MI (Oct 2009)

Invited Speaker, 4<sup>th</sup> EMT International Association Meeting, Tucson, AZ (Sept 2009)

Invited Speaker, Louisiana State University Health Sciences Center, New Orleans, LA (Nov 2008)

Invited Speaker, Association of Med Sch Pharmacology Chairs, Ixtapa, Mexico (Feb 2008)  
Co-Chair, Pharmacology Education for the next 100 years: preparing the next generation of pharmacologists, San Diego, CA (April 2008).  
Invited Speaker, ASPET Teaching Institute, San Diego, CA (April 2008)  
Invited Speaker, ASPET Graduate Student Colloquium, San Diego, CA (April 2008)  
Invited Speaker, Association of Med Sch Pharmacology Chairs, Newport Beach, CA (Feb 2008)  
Invited Speaker, National Directors of Graduate Study in Pharmacology Meeting, Salt Lake City UT (July 2007)  
Invited Speaker, Association of Med Sch Pharmacology Chairs, Quito Ecuador (Feb 2007)  
Keynote Speaker, Thirty Third Annual Pharmacology Colloquium, Michigan State University, East Lansing, MI (June 2006)  
Invited Speaker, Association of Med Sch Pharmacology Chairs, Tucson, AZ (Feb 2006)  
Invited Speaker, Association of Medical School Pharmacology Chairs, Panama (Feb 2005)  
Co-Organizer, Updates in Genetics and Development, Harvard Med Sch, Boston, MA (2004)  
Speaker and Co-Organizer, Coronary Vessel Development, Estes Park, CO (April 2004)  
Invited Speaker, Gordon Conference on Vascular Biology, Ventura, California (Jan 2003)  
Invited Speaker, Etiology and Morphogenesis of Congenital Cardiovascular Disease in the Post-Genomic Era, Tokyo Women's Medical Univ., Tokyo, Japan (Dec 2002)  
Invited Speaker, FASEB National Meeting, TGF $\beta$  Minisymposia, New Orleans, LA (April 2002)  
Invited Speaker, 3rd Annual Spring Symposium of the Cardiovascular Developmental Biology Center at the Medical University of South Carolina, Valvuloseptal Development and Disease, Charleston, SC (March 2002)  
Session Moderator, Weinstein Cardiovascular Development Meeting, Dallas, TX (May 2001)  
Session Moderator, Weinstein Cardiovascular Development Meeting, St. Louis, MO (June 2000)  
Invited Speaker, Res Opportunity Meeting for Cardiovascular Dev., Saint Louis, MO (2000)  
Invited Speaker, American Heart Association Research Symposium, Dallas, TX (May 2000)  
Invited Speaker (declined), Weinstein Cardiovascular Development Meeting, Tucson, AZ (1999)  
Invited Speaker, The Role of Cholesterol and Lipids in Embryonic Development and Congenital Disease, Nashville, TN (1998)  
Invited Participant, Sarnoff Foundation Annual Meeting, Washington, DC (1996)  
Invited Participant, NHLBI Workshop "From Developmental Biology to Molecular Medicine", Bethesda, MD (1996)  
Invited Speaker, Weinstein Cardiovascular Development Meeting, Philadelphia, PA (1996)  
Invited Speaker of the Councils on Cardiovascular Disease in the Young and Basic Science, American Heart Association, 68th Scientific Sessions, Anaheim, CA (1995)  
Invited Speaker, Weinstein Cardiovascular Development Meeting, Rochester, NY (1995)  
Invited Speaker, Weinstein Cardiovascular Development Meeting, Charleston, SC (1994)

#### **Research Seminars:**

Invited Speaker, Grand Rounds for the Institute for Excellence in Education, "Developing Best Practices in Graduate Education – A European Perspective", Johns Hopkins University School of Medicine, Baltimore, MD (January 2018)  
MARC Program, University of Arizona, (Nov 2016)  
MARC Program, Tennessee State University, (Nov 2014)  
MARC Program, Tennessee State University, (Sept 2013)  
Dept of Pharmacology, Eastern Virginia Medical School, Norfolk, VA (April 2013)  
Division of Biomedical Sciences, Florida Atlantic University, Boca Raton (Nov 2012)

MARC Program, Tennessee State University, (Oct 2012)  
University of Cincinnati, Cincinnati, OH (Oct 2011)  
State University of New York, Stony Brook (Oct 2011)  
MARC Program, Tennessee State University, (Oct 2011)  
Molecular and Cellular Biology, University of Arizona, Tucson, AZ (May 2011)  
Indiana University Sch of Med. Northwest Center, Gary IN (March 2011)  
Institute of Pharmacology and Toxicology, Univ. of Bonn, Bonn, Germany (February 2011)  
MARC Program, University of Arizona, Tucson, AZ (Nov 2010)  
Dept of Pharmacology, St. Louis University, St. Louis, MO (Oct 2010)  
MARC Program, Winston Salem State University, Winston Salem, NC (Nov 2009)  
Div of Cardiovascular Biology, Meharry Medical College, Nashville, TN (Dec 2008)  
Indiana University School of Medicine, Evansville Center, Evansville, Indiana (Nov 2008)  
MARC Program, Tennessee State University (September 2008)  
Dept. of Anatomy and Cell Biology and Sarver Heart Center, Univ. of Arizona (Oct 2007)  
Dept. of Neurobiology and Anatomy, University of Utah, (July 2007)  
Cardiology Grand Rounds, University of Chicago, (December 2006)  
MARC Program, Tennessee State University (November 2006)  
Department of Biology, Belmont College (October 2006)  
Department of Biology, Spelman College (October 2006)  
School of Science and Engineering Colloquia, University of Southern Indiana (Sept 2006)  
Dept of Cell Biology and Anatomy and University Heart Center, Univ of Arizona, (Feb 2006)  
Department of Biology, Middle Tennessee State University (November 2005)  
MARC Program, Tennessee State University (October 2005)  
Department of Molecular Medicine, Tufts-New England Medical Center (April 2005)  
Department of Pharmacology, Meharry Medical College (January 2005)  
Dept of Cell Biology and Anatomy and University Heart Center, Univ of Arizona, (Oct 2004)  
Developmental Biology Colloquium Series, Duke University (April 2004)  
Dept of Biochemistry and Cell Biology, State University of New York Stony Brook (April 2004)  
Austin Peay State University, (April 2004)  
University of Kansas Medical Center, Dept of Cell Biology and Anatomy (September 2002)  
University of Tennessee-Memphis, Department of Pharmacology (March 2002)  
University of Pennsylvania, Departments of Medicine and Pharmacology (April 2001)  
University Heart Center, University of Arizona, (February 2001)  
Children's Research Center, University of Arizona, (February 2001)  
Department of Cell and Molecular Biology, Tulane University, (November 2000)  
Department of Cell Biology and Anatomy and the Cardiovascular Developmental Biology Center, Medical University of South Carolina (October 1999)  
Institute of Molecular Medicine and Genetics, Medical College of Georgia (December 1998)  
Graduate Program in Molecular Biology, Loyola University-Chicago (October 1998)  
Department of Cell Biology and Anatomy and the Cardiovascular Developmental Biology Center, Medical University of South Carolina (January 1998)  
Department of Cell Biology and Anatomy, University of Arizona (October 1997)  
Indiana University School of Medicine-Evansville Center (December 1996)  
Cardiovascular Division, Brigham and Women's Hospital and Harvard Med Sch (March 1996)  
Austin Peay State University (March 1996)  
Department of Cell Biology and Anatomy and the Cardiovascular Developmental Biology Center, Medical University of South Carolina (August 1995)  
Longwood Area Heart and Muscle Development Group, Brigham and Women's Hospital and Harvard Medical School (August 1994)

University of Southern Indiana (April 1994)  
Austin Peay State University (November 1993)

### **Vanderbilt University**

Vanderbilt Vascular Biology Center, "How to" series. Rigor and Reproducibility (Sept 2016)  
Pediatric Research Rounds, (January 2013)  
Bone Center, Division of Clinical Pharmacology (March 2010)  
1<sup>st</sup> Annual Samuel S. Riven Cardiovascular Research Day (March 2009)  
Dept. of Microbiology & Immunology Research Conference (Oct 2007)  
Bone Research Center Conference (May 2007)  
Pediatric Research Conference (2007)  
Div. of Neonatology, Dept. Pediatrics (2006)  
Department of Pathology (2005)  
Lung Research Conference (2005)  
Vanderbilt-Ingram Cancer Center (2005)  
Vascular Biology Retreat (2002)  
Host-Tumor Interaction Program (2002)  
Renal Research Conference (2001)  
Cardiology Grand Rounds (2001)  
Vascular Biology Center Retreat (2000)  
Vanderbilt-Ingram Cancer Center Retreat (1999)  
Molecular Biology (1999)  
Endocrine Grand Rounds (1999)  
Host-Tumor Interaction Group, Cancer Center (1999)  
Renal Research Conference (1999)  
Medicine Research Seminar (1997)  
Molecular Biology (1996)  
Cardiology Grand Rounds (1996)  
Pharmacology (1996)  
Cell Biology (1995)  
Vascular Biology Training Program (1995)  
Medicine Research Seminar (1994)  
Cardiology Grand Rounds (1993)  
Neonatology, Topics in the Biology of Growth and Development (1993)  
Pediatric Cardiology Research Conference (1993)  
Cardiology Grand Rounds (1993)

### **Teaching Experience:**

#### **Vanderbilt University**

Lecturer, CBIO8310 Cell Fate and Developmental Biology, Experimental Design, 2015  
Course Developer, Rigor and Reproducibility Course, 2015  
**Director**, Office of Medical Student Research, Oversee Research Course 1 & 2, 2014-  
**Director**, Third year Research Clerkships, 2013-  
Member, Undergraduate Medical Education Committee 2012-  
Targets, Systems, and Drug Action (Pharm 320), 2015-  
**Section leader**, Targets, Systems, and Drug Action (Pharm 320), 2011  
**Director**, Targets, Systems, and Drug Action (Pharm 320), 2008-2010  
Lecturer, NIGMS short course: Organ systems approaches to metabolic syndrome, 2009-2012

**Director**, Principles of Drug Action (Pharm 324-5), 2003-2008  
Lecturer, Molecular Dev Biology-Stem Cells and Organogenesis (Cell Biol 341), 2002  
Lecturer on Molecular Biology of Development for the Molecular Medicine Course for the Master's of Clinical Investigation Program, 2001-2006  
**Co-Director**, Section on Cardiovascular Development (Cell Biol 399), 2000  
Lecturer, The Nature of Discovery from America to Mars, Coll of Arts and Sciences (undergraduate course), (AST 115W), 2000-2006  
**Co-Director**, Principles of Drug Action (Pharm 324-5), 1997-2002  
**Co-Director**, Pharmacological Targets and Mechanisms (Pharm 324-5), 1997-2002  
Lecturer on Cardiovascular Dev, Cellular and Molecular Basis of Vascular Disease (Path 337), 1997-2005  
**Section Coordinator**, Molecular Cardiology, MSTP Journal Club, 1997  
Bioregulation II, Discussion leader, signal transduction section, 1997  
**Coordinator**, Cardiovascular and Autonomic Systems Section, Pharmacological Targets and Mechanisms (Pharm 324-5), 1997  
**Director**, Principles of Drug Action (Pharm 324-5), 1996  
**Director**, Cardiovascular Pharmacology, (Pharm 325), 1996-  
**Coordinator**, Sections on the Autonomic, Cardiovascular, and Renal Systems, Principles of Drug Action (Pharm 324-5), 1996  
Bioregulation II, Lecturer, Cardiac Development 1994,1995

#### **Harvard University**

Metabolism and Function of Human Organ Systems, Conference leader, Biochemistry section, 1988-1990

#### **Community Education/Service:**

**Chair**, Amer. Heart Assoc., "H32" working group to explore predoctoral training, 2019.  
**Member**, Advisory Committee Member, Burroughs Wellcome Fund Postdoctoral Enrichment Grant Program, 2019-  
**Member**, Amer. Heart Assoc. Partners to Promote Diversity in Science: Supporting Undergraduate Research Experiences (SURE) Oversight Advisory Committee 2018-  
**Founder**, Greater Southeast Affiliate, Amer. Heart Assoc., HBCU Scholars Program, 2015-  
**Member**, Members of the Task Force on Building the Research Pipeline, 2019-  
**Member**, National Funding Subcommittee, Amer. Heart Assoc., 2016-2019  
**Member**, National Diversity Leadership Committee, Amer. Heart Assoc., 2013-2017  
**Member**, Greater Southeast Affiliate Nomination Committee, Amer. Heart Assoc., 2013-2018  
**Member**, Greater Southeast Affiliate Multicultural Initiatives Committee, Amer. Heart Assoc., 2013-2018  
**Past President**, Greater Southeast Affiliate, Amer. Heart Assoc. Board of Directors, 2013-2014  
**President**, Greater Southeast Affiliate, Amer. Heart Assoc. Board of Directors, 2012-2013  
**President-elect**, Greater Southeast Affiliate, Amer. Heart Assoc. Board of Directors, 2010-2012  
**Vice President**, Greater South East Affiliate Amer. Heart Assoc. Board of Directors, 2009-11  
Scientific Advisor, Greater South East Affiliate American Heart Assoc. Board of Directors, 2008  
Member, Advisory Board of Pott School of Science and Engineering, USI, 2007-  
Expert Opinion, Provided testimony to Tennessee State Senate on trans fat legislation. 2007-  
**Organizer**, National Meeting for Directors of Graduate Study in Pharmacology, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2020

Member, South East Affiliate American Heart Association Board of Directors, 2005-2007

**Prepared grant proposal (funded at \$3,000)** to American Association of Anatomists to support postdoctoral fellows and graduate students to teach cardiovascular health in Nashville area High Schools

**Teaching Volunteer 2000-present**, Prepared and delivered program for high school students on cardiovascular health. Presentations given to local schools with the assistance of graduate students and postdoctoral fellows.

Member, Cumberland Science Museum Health Hall Redesign Comm, Nashville, TN 2002-2003

**Executive Advisory Board Member**, Amer. Heart Assoc., Nashville., TN 2001-

**President**, Amer Heart Assoc Board of Directors, Nashville and Davidson County, TN 2001

**Prepared grant proposal (funded at \$10,000)** to American Heart Association for a tobacco informational exhibit directed at English and Spanish speaking elementary school students for the Cumberland Science Museum in Nashville, TN

**President-Elect**, AHA Board of Directors, Nashville and Davidson County, TN 2000

**Prepared and Featured in Educational Videotapes** for American Heart Association Southeast Affiliate, Heart Disease: In Search of a Cure and Your Money at Work: Research, A Path to a Cure, 2000.

Member, Amer Heart Assoc Board of Directors, Nashville and Davidson County, TN 1998-2001

**Director**, University of Southern Indiana Foundation, Evansville, IN 1997-

**Expert Speaker and Media Consultant** for American Heart Association since 1997

Presented over a hundred lay research summaries to groups ranging from corporate boards to Metro teachers and students and community groups. Multiple local network television and radio interviews to publicize American Heart Association research support. Numerous interviews for local newspapers, regional magazines, and inhouse American Heart Association publications.

#### **University Service:**

Member, UME Accreditation Standards Committee, 2018-

**Co-Chair**, Medical School Admissions Committee, 2016-

Member, Search Committee for Vice-Provost for Equity, Diversity, and Inclusion, 2016

Member, Selection Committee, Vanderbilt Faculty Research Scholars Program, 2016

Member, Advisory Board for the Masters of Science in Clinical Investigation. 2015-

Member, Internal Advisory Board, Training Program in Clinical Pharmacology, 2015-

Member, Search Committee for Director of the Medical Scientist Training Program, 2015

Member, Search Committee for Chair of Obstetrics and Gynecology, 2015

Member, Search Committee for Dean of the Graduate School, 2015

Member, Exploratory Committee for Ph.D. to M.D. Program, 2014

Member, Training Advisory Group, Biomedical Research and Training (BRET) Office, 2014

**Director**, Office of Medical Student Research, 2014-

**Director**, Research Clerkship for Third Year Medical Students, 2013-2014

**Acting Chair**, Department of Pharmacology, 2013-2016; 2018-2019

Member, Standardization of Student Evaluations across Med School & IGP Retreat, 2011

Member, Working Group on Graduate Accreditation, BRET, 2010

Member, Working Group on Responsible Conduct in Research Recommendations, BRET, 2010

Member, Review of the Vanderbilt Biomedical Research Education and Training Office, 2009

Member, Ad Hoc Committee on Standardization of Educator Portfolios, Medical School, 2009

Member, Biological and Biomedical Sciences Sub-committee of the Task Force on Graduate Education (University-wide Review), 2008

Co-chair, Graduate & Post Doc Education Committee of the Basic Science Strategic Plan, 2008

Appointed representative to AAMC GREAT Group, 2007-2012

Institutional Minority Scientist Development Program Admissions Committee, 2007-

Member, Advisory Board, MARC Program, Tennessee State University (2006-2011)

Member, Disease, Diagnoses, and Therapy course development team for second year curriculum, 2006-2007

Member, Strategic Plan Committee on Graduate Education, 2005

**Chair**, University Senate Faculty Life Committee, 2005

Elected Member, University Senate, 2004-2007

Member, Neuroscience Program Evaluation Committee, 2004-

Member, Department of Pharmacology Development Committee, 2003-

Member, Graduate Faculty Council, 2003-2004

Member, Emphasis Program Advisory Committee, Laboratory Sciences Section, 2003-

**Chair**, Emphasis Medical School Curriculum Comm, Laboratory Sciences Section, 2002-2003

Member, Laboratory Security and Accountability Work Group, 2002

**Director**, Graduate Studies in Pharmacology, 2001-2011

Member, Search Committee for Chair of Cell Biology, 2001

Member, Department of Medicine Taskforce on Acquiring and Developing Trainees for Research, 2000

**Director**, Morphology Core Laboratory, Cardiovascular Division, 1999-2002

**Basic Science Consultant** for the Fetal Diagnosis and Therapy Center planning comm, 1999

**Coordinator**, Division of Cardiology Bridge Lecture Program, 1999-

Member, Examination Committee, Department of Pharmacology, 1998-1999

Member, Liaison Committee on Medical Education Self-Study Task Force, Subcommittee on Resources for the Educational Program: Faculty, 1998

Panelist, Graduate Education Day, Vanderbilt University, 1999

Member, Vanderbilt-Ingram Cancer Center, Host-Tumor Interaction Program, 1997-

**Coordinator**, Division of Cardiology participation in Heart Walk, 1997-2000

Member, Medical Scholars Program Advisory Committee, 1997-

**Author**, Medical Scholars Program, 1997

**Faculty Judge**, Cell and Molecular Biology Section, Graduate Student Research Day, Vanderbilt University, 1997-

**Graduate Faculty Marshall**, Investiture Ceremony, Vanderbilt University, 1997-

**Chair**, Pharmacology Curriculum Committee, 1996-2001

Member, Medical Scientist Training Program Advisory Committee, 1996-2000

Member, Task Force on Graduate (Ph.D. and M.D., Ph.D.) and Postgraduate Education in the Biomedical Sciences, 1996

Member, Selection Committee, Lamson Lecture, 1996

Member, Conference Committee, Division of Cardiology, 1995-1996

**Coordinator**, American Heart Association Practice Sessions Division of Cardiology, 1995-1998

**Chair**, Division of Cardiology Retreat Planning Committee, 1994

**Scientific Sessions Coordinator**, Department of Pharmacology Retreat, 1994-1996

#### **Trainees:**

Graduate Students:

Jamille Robinson, 2009-2012 (Masters)

Cyndi Hill, 2009-2012



Daniel DeLaughter (co-mentor), 2008-2013  
Nora Sanchez, 2006-2012  
Todd Townsend, 2004-2009  
Brian Culbreath, 2002-2007 (Masters)  
Leigh Compton, 1999-2006  
Jay Desgrosellier, 1998-2004  
Harold Olivey, 1996-2003  
Paul Bushdid, Ph.D. 1998-2000  
Chris Brown, Ph.D., 1992-1997; 1997-1998

Postdoctoral Fellows:

Joseph Prinsen, D.O., Ph.D. (co-mentor with Kathy Murray), 2014-  
Joseph Prinsen, D.O., Ph.D. (fall 2013)  
Young Wok Chun, Ph.D. (co-mentor with David Merryman), 2010-2012  
Jon Soslow, M.D., 2009-2010  
Anita Austin, Ph.D., 2003-2009  
Michael Marlow, Ph.D., 2002-2003  
Bettye Ridley, Ph.D., 1998-2002  
K. Beth Beason, Ph.D., 1996-1998  
Brenda Rongish, Ph.D., 1996-1997  
Marlene V. Shaw, Ph.D., Visiting Scholar: summers of 1994,  
1995, 1996, 1997, 1998  
Gregory P. Brames, M.D., 1993-1995

Undergraduate Students:

Joey Love (University of Southern Indiana) Summers 2003-2007  
Robert Garza (University of Tennessee), Summer 1997  
Alfredo Ceballos (Duke University), Summer 1998  
Heather Crawford (Xavier University), Summer 1999  
Efrain Garcia (Barry University), Summer 2000  
Kelie Tipton (Kentucky State University), Summer 2001  
Shannan Hill (Northern Illinois University), Summer 2001  
Alec Peterson (Vanderbilt University) 2006  
Gary Wilson (Vanderbilt University) 2007  
Christopher Deig (Wabash College) 2009  
Alex Bick (Harvard College) 2009  
Christopher Thomas (Lipscomb College) 2009  
Julian Arrieta (Vanderbilt University) 2011  
Mark Crowder (Fisk University) 2014  
Darian Williams (Tennessee State University) 2015-2017  
Bianca Walker (Tennessee State University) 2019-2020

Medical Students (IBR-Introduction to Biomedical Research):

Yokko Tamura, Spring 1996; IBR  
Robert Garza, Spring 1998; IBR; Summer 1998  
Andy Lai, 1996-1998; Howard Hughes Fellow 1997-1998  
Jon Shin, 2003  
Vorannaddha (Bim) Vacharathit, 2011

Medical Student Research Year

David Trykall, 2019-2020

#### High School Students

Joey Love, 2001-2003  
Ryan Mundry, 2004  
Will Sugg, 2004  
Anh Pham 2009-1010  
Paula Jones, 2011  
Jonathan Keefe, 2011  
Jasmine Martin, 2014  
Cody Kennedy, 2014

#### Rotation Students

(IGP-Interdisciplinary Graduate Students; MSTP-Medical Scientist Training Program):

TK Feaster, Pharm admit, 2010  
Kristi Aarnodt, MSTP, 2009  
Jeff Bylund, IGP, 2009  
Jamilie Robinson, IMSD, 2008  
Dario Gutierrez, IGP 2007  
Amir Agribata, MSTP 2007  
Nora Sanchez, IGP 2006  
Mike Casha, IGP 2005  
Christopher Barton, IGP 2004  
Todd Townsend, IGP 2003  
Jennifer Rosenbluth, MSTP 2003  
Lauren Manderfield, IGP 2002  
Melissa Barty, IGP 2002  
Brian Culbreath, Meharry 2001  
Sue Buckheister, IGP 2001  
Scott Boyle, IGP 2001  
Elizabeth Hamilton, IGP 2001  
Leigh Carmody, IGP 2000  
Efrain Garcia, IGP 2000  
Heather Farmer, IGP 2000  
Yi Ling, IGP 1999  
Victor Sokuolis, MSTP 1999  
Leigh Compton, MSTP 1999  
Katie Whittinghill, IGP 1998  
Stephanie Sherck, IGP 1998  
Jay Desgrosellier, IGP 1997  
Chris Samsan, IGP 1997  
Harold Olivey, IGP 1996  
Amanda Carmondy, IGP 1996  
Caroline Erter, IGP 1995  
Kim Leiktag, IGP 1995  
Kim Fekany, IGP 1995  
Christopher Brown, IGP 1993

#### Dissertation Committees:

Elke Stein, (Daniel, Pharmacology)  
Kim Fekany, (Solnica-Krezel, Molecular Biology)  
Amanda Frisch, (Wright, Cell Biology)

Paul Bushdid, (Kerr, Microbiology and Immunology)  
Maureen McDonnell, (Moses, Cell Biology)  
Heather Tynes-Roselli, (Vaughan, Pharmacology)  
Eric Barker, (Dermody, Microbiology and Immunology)  
Jongho Lee, (Emeson, Pharmacology)  
April Bragg, (Moses, Cell Biology)  
Michael Marlow, (Krezel, Molecular Biology)  
David Reese, (Bader, Cell Biology)  
Harris Smith, (Vaughan, Pharmacology)  
Robert Carson, (Robertson, Pharmacology)  
Chris Samsan, (Emeson, Pharmacology)  
John Schoenhard, (Vaughan, Pharmacology)  
Erika Nurmi, (Blakely, Pharmacology)  
Nicholas Chim, (Krezel, Molecular Biology)  
Jamie McConnell (Wadzinski, Pharmacology)  
Scott Miller, (Wiley, Neuroscience)  
Eric Barton (Dermody, Microbiology & Immunology)  
Elizabeth Forrester (Moses, Cancer Biology)  
Scott Myers (Chung, Pharmacology)  
Amanda Antons (Unamutz, Microbiology & Immunology)  
Sameer Chopra (Roden, Pharmacology)  
Brian Bierie (Moses, Cancer Biology)  
Nathan Mundell (Barnett, Pharmacology)  
Josh Barnett (Penn, Pharmacology)  
Cindy Hill (Barnett, Pharmacology)  
Sara Savage (Penn, Pharmacology)  
Bojana Jovanovic (Moses, Cancer Biology)  
Celestial Jones-Paris (Hudson, Pathology)  
LeShanna Sanders (Hatzopoulos, Cell and Developmental Biology)  
Josh Hutchinson (Merryman, Biomedical Engineering)  
Bryan Fioret (Hatzopoulos, Pharmacology)  
Jeff Bylund (Hatzopoulos, Pharmacology)  
MK Sewell (Merryman, Biomedical Engineering)  
Rachel Crouch (Stephens) (Daniels, Pharmacology)  
Dikshya Bastakoty (Young, Pathology)  
Ebrahim Tahaei (Elefteriou, Pharmacology)  
Elizabeth Gibson (Osheroff, Pharmacology)  
Stephanie Moore (Schoenecker, Pharmacology)  
Brittany Duerk (Spitznagel) (Weaver, Pharmacology)  
Michele Salzman (Riess, Pharmacology)  
Mark Crowder (Blind, Pharmacology)  
Yuantee Zhu (Elefteriou, Pharmacology)  
Yuanjin Guo (Force and Lal, Pharmacology)  
Matt Murhy (Murray, Pharmacology)  
Anna Moore (Hohman, Pharmacology)  
Mabel Sato (Hohman, Pharmacology)  
ex officio on an all Pharmacology Student Committees 2000-2011

Medical Scientist Training Program Advisees:

Dan Ebert, 1996-1998

Franklin Mullens, 1997-1999  
William Tu, 1998-2000  
Christopher Barbieri, 1999-2000  
Alexander Eshaghian, 2000-2001  
Scott Miller, 2002-2004

Faculty Mentoring Committees

Michelle Southard-Smith (medicine)  
Tom Kume (medicine)  
Richard Nass (anesthesia)  
Kevin Currie (anesthesia)  
Tina Iverson (pharmacology)  
Yangli Elefteriou (medicine)  
Rob Caldwell (orthopedics)  
Steve McElroy (pediatrics)  
Steve Goudy (pediatric surgery)  
David Merryman (biomedical engineering)  
Ben Spiller (Pharmacology)  
Jon Schoenecker (orthopedics)  
Jon Soslow (pediatrics)

**Publications:**

1. Barnett, J.V., Kuczenski, R.T. Desensitization of rat striatal dopamine-stimulated adenylate cyclase following acute amphetamine administration. *J. Pharmacol. Exp. Therap.* 237:820-825, 1986.
2. Barnett, J.V., Segal, D.S., Kuczenski, R.T. Repeated amphetamine pretreatment alters the responsiveness of striatal dopamine-stimulated adenylate cyclase to amphetamine induced desensitization. *J. Pharmacol. Exp. Therap.* 242:40-47, 1987.
3. Chen, C.J., Barnett, J.V., Congo, D.A., Brown, E.M. Divalent cations suppress cyclic adenosine monophosphate accumulation by stimulating a pertussis toxin-sensitive guanine nucleotide-binding protein in cultured bovine parathyroid cells. *Endocrinology.* 124:233-239, 1989.
4. Barnett, J.V., Haigh, L.S., Marsh, J.D., Galper, J.B. Effects of low density lipoproteins and mevinolin on sympathetic responsiveness in cultured chick atrial cells: regulation of beta-adrenergic receptors and  $\alpha$ s. *J. Biol. Chem.* 264:10779-10786, 1989.
5. Barnett, J.V., Shamah, S.M., Lassegue, B., Griendling, K.K., Galper, J.B. Muscarinic cholinergic stimulation of the production of inositol phosphates in cultured embryonic chick atrial cells: evidence for a role of two G-proteins. *Biochem. J.* 271:437-442, 1990.
6. Barnett, J.V., Shamah, S.M., Lassegue, B., Griendling, K.K., Galper, J.B. The development of muscarinic cholinergic stimulation of inositol phosphate production in cultured embryonic chick atrial cells: evidence for a switch in G-protein coupling. *Biochem. J.* 271:443-448, 1990.
7. Tan, W., Barnett, J.V., Hehn, G.M., Quay, S.C., Galper, J.B. Effect of manganese(II)bis(glycinate)dichloride on Ca channel function in cultured chick atrial cells. *Toxicology* 68:63-73, 1991.

8. Ogawa, S., Barnett, J.V., Sen, L., Galper, J.B., Smith, T.W., Marsh, J.D. Sympathetic innervation in vitro increases L-type calcium channel expression in rat myocytes. *J. Clin. Inves.* 89:1085-1093, 1992.
9. Barnett, J.V., Taniuchi, M., Yang, M.B., Galper, J.B. Co-culture of embryonic chick heart cells and ciliary ganglia induces parasympathetic responsiveness in embryonic chick heart cells. *Biochem. J.* 292:395-399, 1993.
10. Tan, W., Barnett, J.V., Pietrobon, D., Hehn, G., Grieser, C., Marsh, J., Galper, J.B. Effect of low density lipoproteins, mevinolin, and G-proteins on calcium response in cultured chick atrial cells. *American Journal of Physiology* 265:H191-H197, 1993.
11. Barnett, J.V., Moustakas, A., Lin, W., Fang, X-F., Lin, H.Y., Galper, J.B., Maas, R.L. Cloning and developmental expression of the chick Type II and Type III TGF $\beta$  receptors. *Developmental Dynamics* 199:12-27, 1994.
12. Loh, E., Barnett, J.V., Couper, G.S., Vatner, D. S., Feldman, A.M., Colucci, W.S., Galper, J.B. Decreased levels of Gs and adenylate cyclase activity in human myocardium following orthotopic cardiac transplantation. *Circulation Research* 76:852-860, 1995.
13. Brown, C.B., Boyer, A., Runyan, R.B., Barnett, J.V. Antibodies to the Type II TGF $\beta$  receptor block cell activation and migration during atrioventricular cushion transformation in the heart. *Developmental Biology* 174:248-257, 1996.
14. Brown, C.B., Drake, C.J., Barnett, J.V. Antibodies directed against the chicken Type II TGF $\beta$  receptor identify endothelial cells in the developing chicken and quail. *Developmental Dynamics* 215: 79-85, 1999. (Cover)
- 15\*. Brown, C.B., Boyer, A., Runyan, R.B., Barnett, J.V. Requirement of the Type III TGF $\beta$  receptor for endocardial cell transformation in the heart. *Science* 283:2080-2082, 1999.  
\* Profiled in "This week in *Science*". A Heartfelt Role.
16. Lai, Y-T., Beason, K.B., Brames, G.P., Desgrosellier J.S., Shaw, M.V., Brown, C.B., Barnett, J.V. Activin receptor-like kinase 2 (ALK2) can mediate atrioventricular cushion transformation. *Dev. Biol.* 222: 1-11, 2000.
17. Marlow, M.S., Chim, N., Brown, C.B., Barnett, J.V., Krezel, A., <sup>1</sup>H, <sup>13</sup>C, and <sup>15</sup>N backbone assignments of the ligand binding domain of the Type II TGF-beta receptor. *Journal of Biomolecular NMR* 17: 349-350, 2000.
18. Bulus, N.M., Sheng, H-M., Sizemore, N., Oldham, S.M., Barnett, J.V., Coffey, R.J., Beauchamp, R.D., Barnard, J.A. Ras-Mediated Suppression of TGF $\beta$ RII Expression in Intestinal Epithelial Cells Involves Raf-independent Signaling. *Neoplasia* 2: 357-364, 2000.
19. Shin, H-G., Barnett, J.V., Wiley, R.G., Murray, K.T. Molecular heterogeneity of protein kinase C expression in human heart. *Cardiovascular Research* 48: 285-299, 2000.
20. Jeyakumar, L.H., Ballester, L., Cheng, D.S., McIntyre, J.O., Chang, P., Olivey, H.E., Rollins-Smith, L., Barnett, J.V., Murray, K., Xin, H.B., Fleischer, S. FKBP binding characteristics of heart microsomal fractions from diverse animals. *BBRC* 281: 979-986, 2001.
21. Bushdid, P.B., Chen, C., Brantley, D.M., Yull, F., Raghov, R.J., Kerr, L.D., Barnett, J.V. NF- $\kappa$ B mediates FGF signal regulation of msx-1 expression. *Dev. Biol.* 237: 107-115, 2001.

22. Ward, S.M., Gadbut, A.P., Tang, D., Wu, L., Li, G., Barnett, J.V., Galper, J.B. Regulation of the farnesylation and membrane localization of ras: a mechanism for TGF $\beta$  signaling. *Journal of Molecular and Cellular Cardiology* 34: 1217-1226, 2002.
23. Ward, S.M., Desgrosellier, J.S., Zhuang, X., Barnett, J.V., Galper, J.B. TGF $\beta$  Signaling via Differential Activation of Activin Receptor-Like Kinases 2 and 5 during Cardiac Development: Role in Regulating Parasympathetic Responsiveness. *J Biol Chem* 277: 50183-50189, 2002.
24. Jeyakumar, L., Gleaves, L.A., Ridley, B.D., Chang, P., Atkinson, J., Barnett, J.V., Fleischer, S. The skeletal muscle ryanodine receptor isoform 1 is found at the intercalated discs in human and mouse hearts. *The Journal of Muscle Research and Cell Motility* 23: 285-292, 2002.
25. Marlow, M.S., Brown, C.B., Barnett, J.V., Krezel, A, Solution structure of the TGF $\beta$  Type II receptor ligand binding domain. *Journal of Molecular Biology* 326: 989-997, 2003.
26. Olivey, H.E., Ridley, B.D. Barnett, J.V. Expression of the Type III TGF $\beta$  Receptor During Chick Organogenesis. *Anatomical Record* 272A: 383-387, 2003.
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