### CURRICULUM VITAE

Name: Robin (Rob) William Rockhold, PhD, FAPE

Title:Deputy Chief Academic Officer<br/>Professor of Pharmacology and Toxicology, School of Medicine<br/>Professor of Health Science, School of Health Related Professions<br/>Fellow, Academy of Pharmacology Educators (FAPE)<br/>UMMC American Heart Association Training Center Coordinator

Contact: Office of the Associate Vice Chancellor for Academic Affairs University of Mississippi Medical Center (UMMC) 2500 North State Street Jackson, MS 39216-4505 (601) 984-2810 FAX (601) 984-2970 rrockhold@umc.edu

### **Education:**

College:

Kenyon College Gambier, Ohio AB (Biology), 1973

#### Graduate:

University of Tennessee Center for the Health Sciences Memphis, Tennessee PhD (Pharmacology), 1978

## **Postgraduate Training:**

- Postdoctoral research fellow with Prof. Dr. Franz Gross, Pharmakologisches Institut, der Universitat Heidelberg, West Germany, 1978 – 1979
- Postdoctoral research fellow with Dr. Leonard Share, Department of Physiology & Biophysics, University of Tennessee Center for the Health Sciences, Memphis, TN, 1979 – 1982
- Fellow (FAPE), Academy of Pharmacology Educators, American Society for Pharmacology and Experimental Therapeutics, 2011

#### Administrative Service (UMMC):

Deputy Chief Academic Officer, 2010 – Present Assistant Vice Chancellor for Academic Affairs, 2005 - 2010 Assistant Vice Chancellor for Student Outreach, 2005

#### **Major Accomplishments:**

- Direct Office of Academic Development for the state's only academic health science center with seven professional schools
- Initiated major campus-wide teaching award Regions "Toward Excellence in Advancement of Care and Health" (TEACH) Award
- Initiated and lead campus-wide academic oversight group Academic Affairs Council
- Coordinated and lead campus-wide simulation education activities Office of Interprofessional Simulation, Training, Assessment, Research & Safety (ISTARS)

- Lead campus interprofessional education efforts
- Created planning and development group for instructional innovation NextGen Ed Thinktank
- Created and direct postbaccalaureate Professional Portal Program to enhance recruitment of rural and underrepresented students in medicine and dentistry
- Created and direct campus-wide teaching and learning initiatives:
  - Leadership Development Program for faculty and staff (2006-2016)
  - Academic Development and Discovery (formerly Faculty Scholarship Exchange) Seminar series
  - Academic Development and Discovery (formerly Faculty Scholarship Exchange) faculty small grants program
- Program Chair, 2012 Association of American Medical Schools combined Group of Faculty Affairs, Group on Diversity and Inclusiveness national meeting
- Led successful merger of American Heart Association Southeastern Affiliate structure
- Program Director for Howard Hughes Precollege Science Education initiative 1994-2012

## **Educational Service:**

- Over 40 years teaching to professional students in schools of Graduate Studies, Medicine, Dentistry, Pharmacy, Nursing and Health Related Professions.
- Major professor to 6 PhD recipients and 2 MS recipients.
- Directed over 17 major courses in Medical Pharmacology, Rural Health Policy, Cardiovascular Pharmacology, Research Methods, Academic Excellence, Analysis of Biomedical Information, Critical Thinking and Study Skills.
- Created and directed biomedical research mentorship program for high school students and teachers for over 29 years.

### **Research:**

Publications:	115 papers; 13 book chapters; 255 abstracts/presentations
Funding:	Principal Investigator, Co-Investigator or Investigator on 59 awards since 1975: Total awarded > \$14 million

### **Honors and Awards:**

John P. Maloney Award, 1989, American Heart Association - Mississippi Affiliate Medical Writers Group Award, 1991, Mississippi Writers Association Leadership Jackson, Class of 1994-1995 Phil Hardin Foundation Award for Innovative Uses of Computer Technology, 1997 Carl G. Evers, M.D. Society All Star Professor, 2001-2002 Pre-Clinical Professor of the Year, 2001-2002, School of Medicine Thomas M. (Peter) Blake Academy of Teaching Excellence, 2003 Awarded membership in Norman C. Nelson Order, 2004 for medical student teaching excellence Dudley F. Peeler Award for Outstanding Contributions to the Mississippi Academy of Sciences, 2007 (Lifetime Achievement Award) President's Award, 2008, American Heart Association Greater Southeast Affiliate Faculty Role Model Award, 2008, Minority Access, Inc. Leader in Diversity, Black History Month, The Board of Trustees of State Institutions of Higher Learning, February, 2011 Awarded fellowship in Academy of Pharmacology Educators, American Society of Pharmacology and Experimental Therapeutics, April, 2011 Governor's University Partnership Award - Base Pair, Mississippi Association of Partners in Education, March, 2013 Excellence in Research Award – Bronze Level, UMMC, 2016 Excellence in Research Award - Silver Level, UMMC, 2017

Southern Living Magazine's "Southerner of the Year", 2017, with Tim Medley for Base Pair Honorable Mention, The 2018 Pillars Diversity Award, 2018, 2019
Trailblazer Teaching Award, UMMC School of Medicine, 2018
Excellence in Community Engagement Award – "Base Pair – A Model for Biomedical Research Mentorship", McLean Institute for Public Service and Community Engagement, University of Mississippi, April 10, 2019
Inspiring Programs in STEM Award, "Base Pair", INSIGHT Into Diversity magazine, July, 2019.

Excellence in Research Award - Gold Level, UMMC, 2020

#### **Professional Memberships:**

American Association for the Advancement of Science American Society for Pharmacology and Experimental Therapeutics American Heart Association - Inactive IAMSE Mississippi Academy of Sciences Sigma Xi - Inactive Society for Neuroscience - Inactive Society for Simulation in Healthcare

#### **Digital Credentials:**



https://ummc.credly.com/#!/member-badges/c8940f523

### Academic Administration Service

#### **Appointments:**

Resuscitation Training Coordinator for UMMC Basic & Advanced Resuscitation Training Center, American Heart Association, 2020 - Present. Director, Office of Interprofessional Simulation, Training, Assessment, Research, and Safety (ISTARS); UMMC, Jackson, MS; 2018 - Present Simulation and Interprofessional Education Activities Coordinator, UMMC, Jackson, MS; 2014 -2018 Deputy Chief Academic Officer, UMMC, Jackson, MS; 2010 - Present Assistant Vice Chancellor for Academic Affairs; 2005 – 2010 Assistant Vice Chancellor for Student Outreach; 2005 - 2005 Professor of Health Science, School of Health Related Professions, UMMC; 2005 - Present Associate Professor (Research), Division of Emergency Medicine, UMMC; 1994 - Present Professor, Department of Pharmacology and Toxicology, UMMC; 1994 - Present Associate Professor, Department of Pharmacology and Toxicology; 1988 - 1994 Awarded tenure: Department of Pharmacology and Toxicology; 1988 Assistant Professor, Department of Pharmacology and Toxicology; 1983 – 1988 Full membership, UMMC Graduate Faculty; 1983 Assistant Professor, Department of Physiology and Biophysics, University of Tennessee for the

Health Sciences, Memphis, TN; 1982 - 1983

### Administrative Experience:

Training Center Coordinator, UMMC American Heart Association Community Training Center; 10-29-2020 - Present

Member, UMMC Council of Deans; 2010-2015; ex officio member 2015-Present

Deputy Chief Academic Officer, UMMC; 2010 – Present

Assistant Vice Chancellor for Academic Affairs, UMMC; 2005 - 2010 Assistant Vice Chancellor for Student Outreach, UMMC; 2005

Past-President, American Heart Association, Greater Southeast Affiliate; 2007-2008 President, American Heart Association, Southeastern Affiliate; 2005-2006 President-Elect, American Heart Association, Southeastern Affiliate; 2004-2005 Vice-President, American Heart Association, Southeastern Affiliate; 2003-2004

Program Director, *Base Pair*, Biomedical Research Mentorship Initiative between Jackson Public School District and UMMC; 1992 - Present

Chairman, Strategic Advisory Committee, Bailey Magnet School for Health-Related Professions, Jackson Public School District; 1997 - 2004

- Chairman, Evaluation Subcommittee of the Curriculum Committee, School of Medicine, UMMC; 1994 2005
- President, Faculty Senate, UMMC; 1991-1992

Chairman, Research Policy and Advisory Committee, American Heart Association, Mississippi Affiliate; 1990 - 1992

Chairman, Volunteer Leadership Council, The American Heart Association in Mississippi; 1998 - 2000

Program Chairman, Health Sciences Division, Mississippi Academy of Sciences; 1986 - 1987

### **University and Society Activities:**

## National:

- Member, IAMSE Annual Meeting Program Committee, 2017-18
- Member, Executive Committee, ASPET Division of Pharmacology Education, 2016-2019.

Coordinator, ASPET Division of Pharmacology Education Academy of Pharmacology Education Fellowship awards, 2016-present

- Member, ASPET SURF Task Force, 2015-present
- Member, ASPET Graduate Recruitment and Education Committee, 7/1/2013-6/30/2017
- Chair, Association of American Medical Colleges (AAMC) Group of Faculty Affairs (GFA) Professional Development and Program Sub-committee; 2010-2012
- Member, AAMC GFA Steering Committee; 2010-2012

Member, AAMC GFA Professional Development and Program Sub-committee; 2009-2012

UMMC Representative, AAMC GFA; 2008-present

- Member, American Society for Pharmacology and Experimental Therapeutics (ASPET) Graduate Recruitment and Education Committee; 2013-2017
- Panel moderator, How Technology is Used and Integrated into the Curriculum, 1996 Howard Hughes Medical Institute Precollege Program Directors' meeting, Chevy Chase, Maryland; 1996

Society for Neuroscience, Committee on Animals in Research; 1989-1992

Chairperson, Antihypertensive Drugs Section, FASEB Meetings; 1990, 1991

### State/Regional:

- Advocate, American Heart Association, "Rally for Medical Research", United States Capital, Washington, D.C., September 18, 2013
- Advocate, American Heart Association "Research Saves Lives Fly-In", March 9-10, 2010; April 11-12, 2011; June 6, 2013
- Member, Career and Technical Education Task Force, Mississippi Department of Education, August, 2010-February, 2011

Vice-President, Mississippi Chapter Society for Neuroscience, 1985-1986

President, Mississippi Chapter Society for Neuroscience, 1987-1988 American Heart Association-Mississippi Affiliate, Research Advisory and Policy Committee, 1983-1986, 1988-1991 American Heart Association - Mississippi Affiliate, Chairman, Research Advisory and Policy Committee, 1990-1992 Member, Nominating and Awards Committee, American Heart Association, Greater Southeast Affiliate, 2008-2009 Member, Advocacy Committee, American Heart Association, Greater Southeast Affiliate, 2008-2009 Chair, Mississippi Advocacy Subcommittee, American Heart Association, Greater Southeast Affiliate, 2008-2009 Immediate Past President, American Heart Association, Greater Southeast Affiliate, 2007-2008 President, American Heart Association, Southeastern Affiliate, 2005-2006American Heart Association - President-Elect, American Heart Association, Southeastern Affiliate, 2004-2005 Mississippi Affiliate, Board of Directors, 1991-1994 Vice-President, American Heart Association, Southeastern Affiliate, 2003-2004 Member, Mississippi Pesticide Advisory Task Force Technical Review Committee, 2000 Board of Directors, Southeastern Affiliate, American Heart Association, 1999-2002 President, Southeastern Pharmacology Society, 1998-1999 President-Elect, Southeastern Pharmacology Society, 1997-1998 President, Mississippi Academy of Sciences, 1998-1999 President-Elect, Mississippi Academy of Sciences, 1997-1998 Vice-President, American Heart Association - Mississippi Affiliate, 1997-1998 Secretary, American Heart Association - Mississippi Affiliate, 1996-1997 Mississippi Academy of Sciences, Board of Directors, 1994 - 1997 Treasurer, UMMC Sigma Xi Chapter, 1992-1993; 1993-1994 President, Southeastern Pharmacology Society, 1994-1995 Secretary/Treasurer, Southeastern Pharmacology Society, 1989-1990, 1993-1994 Program Chairman, Health Sciences Division, Mississippi Academy of Sciences, 1986-1987

### University:

UMMC:

#### Chair:

Simulation Strategic Oversight Executive Committee, 2019-Present **ISTARS** Directors sub-committee, 2019-Present Simulation Oversight Long-Range Planning Group, 2013-2015 Interprofessional Education Collaborative, UMMC, 2015-Present Interprofessional Education Committee, UMMC, 2013-2015 Interprofessional Education sub-committee, School of Medicine Curriculum Committee, 2011-2013 Library Faculty Advisory Committee, 2012-2015 SACS Quality Enhancement Plan Committee, 2007-2011 SACS Audit Committee, 2007-2008 Academic Affairs Council, 2007-present Faculty Development Committee, 2005-2015 President: Faculty Senate, 1991-1992 Member: Academic Integrity Council, 2014-Present SACSCOC Leadership Committee, March 6, 2006-Present Council of Deans, ex officio, 2017-Present Web Committee, 2017-Present Selection Committee - Learning Management System (LMS), RFP #3709, 2013. Selection Committee – Primary Group Purchasing Organization (GPO), RFP #1182, 2013.

Wayfinding, 2012-2017 Master Planning, 2012-2015 Faculty and Staff Recognition, 2012-2017 Diversity Advisory Council, 2012-2017 Continuing Health Professional Education Liaison, 2012-2018 Centers and Institutes, 2012-present Microsoft Office 2010 / Exchange 2010 Deployment Steering Committee, Division of Information Services, April 10, 2011-December 31, 2011 SACS Institutional Effectiveness Committee, August 17, 2005-2011 SACS Steering Committee, 2009-2011 SACS Compliance Certification Committee, 2008-2011 SACS Assessment Committee, 2008-2011 Committee on Non-Tenure Clinical Faculty, Appointment and Promotion, 2006-2009 Steering Committee, UMMC, Metro Jackson Heart Walk, July-October, 2006 Library Faculty Advisory Committee, August 17, 2005-present Health Careers Development Program Advisory Committee, 2003-2012 Tougaloo College – JHS-UTC Advisory Committee, 2000 – 2017 Faculty Senate, July 1989-1992 LCME Self-Study Committee, 1989 Commencement Committee, 1988 - present Pediatric Department Chairperson Search Advisory Committee, 1988 Institutional Animal Care and Use Committee 1986 - 2004

School of Medicine:

Member:

Admission Interview Committee, 2016-Present Curriculum Committee, 1994-Present LCME Self-Study Committee, 2018-Academic and Learning Environment Subcommittee, 2018-2020 Appointment, Promotion and Tenure Committee, 2009-2011 Department of Anesthesia Research Committee, 2005-2009 Cultural Proficiency Committee, 2004-2009 LCME Medical School Educational Program for the M.D. Committee, 2003 LCME Objectives Self-Study Committee, 1995-1996 Curriculum Steering Sub-committee, Curriculum Committee, 2008-2014 Continuing Education Liaison Committee, 1994 - 2012 Admissions Committee, 1991 - 1996

Graduate Studies in the Health Sciences:

#### Chair:

Clinical Health Sciences Progression Committee; 2012-2014 Member: Clinical Health Sciences Comprehensive Examination Committee; 2009-2014

Clinical Health Sciences Admission Committee; 2009-2011

## School of Dentistry:

## Member:

Curriculum Committee, 2004-2007 Task Force on Diversity, 2002-2011 Student Evaluation and Promotion Committee, 1995-1998

### **Community:**

Southern Living "Southerner of the Year", 2017, with Tim Medley for Base Pair Advisory Board, Germantown High School Health Academy, 2016-present

Advisory Board, Brandon High School Health Academy, 2014-present Partners Advisory Board, November, 2007-2011 Served as "Television Chef" to promote American Heart Association's "No-Fad Diet" cookbook on state-wide station (WLBT), July 13, 2005 (Chicken and toasted walnut salad) Speaker - Leadership Jackson Education Day, February 14, 2007 Facilitator - Parents for Public Schools Community Round Table, October 13, 2006 Jackson Public School District (JPSD), Early College High School Advisory Committee, 2004-2009 Jackson Local Law Enforcement Block Grant Advisory Board, 2003 - 2005 JPSD, Technology Planning Committee, 2003 Jackson Police Foundation, Board of Directors, 2000 - 2010 Millsaps Art and Lecture Series, Board of Directors, 1998 – 2004 JPSD, Curriculum Committee, Strategic Advisory Committee, Bailey Magnet School for Health-Related Professions, 1997 – 2005 JPSD, Curriculum Committee, Bailey Magnet School for Health-Related Professions, 1997 -2005 JPSD, ad hoc Committee for preparation of National Science Foundation application, 1995. (Funded; 11/96 - 10/2001; \$1.2 million for 1996-1998, with projected extension to \$3.6 million total over 5 years) JPSD, School Improvement Advisory Committee, 1995-1996 Leadership Jackson, Class of 1994-1995 JPSD, Member, Internet Committee, 1994 - 1996 JPSD, Co-Chairman, Human Resources Committee, Project 2005-2010, 1994 Silent auction acquisition chairman, Azalea Ball, Mississippi Arthritis Foundation, 1993

Research

### **Publications:**

**Summary:** 115 papers; 13 book chapters; 255 abstracts/presentations

- 1. Rockhold, R. W. Studies on the nucleus tractus solitarii (NTS) and the cardiovascular actions of clonidine. Doctoral Dissertation, University of Tennessee Center for the Health Sciences, 1978.
- 2. Rockhold, R. W. and Caldwell, R. W. Effect of lesions of the nucleus tractus solitarii on the cardiovascular actions of clonidine in conscious rats. Neuropharmacology 18: 347-354, 1979.
- Schaz, K., Simon, W., Rockhold, R. W., Unger, Th. and Ganten, D. Blood pressure responses to intraventricular leucine-enkephalin are increased in spontaneously hypertensive rats. Neurosci. Lett. Suppl. 3: 5330, 1979.
- 4. Rockhold, R. W. and Caldwell, R. W. Cardiovascular effects following clonidine microinjection into the nucleus tractus solitarii of the rat. Neuropharmacology 19: 919-922, 1980.
- 5. Schaz, K., Speck, G., Simon, W., Schlor, K. H., Unger, Th., Rockhold, R. and Ganten, D. Enkephalin effects on blood pressure, heart rate and baroreceptor reflex. Hypertension 2: 395-407, 1980.
- 6. Rockhold, R. W., Crofton, J. T. and Share, L. Increased pressor responsiveness to enkephalin in spontaneously hypertensive rats: role of vasopressin. Clin. Sci. 59: 235S-237S, 1980.
- 7. Unger, Th., Rockhold, R. W., Yukimura, T., Rettig, R. and Ganten, D. Blood pressure and heart rate responses to centrally administered substance P are increased in spontaneously hypertensive rats.

Clin. Sci. 59: 299S-302S, 1980.

- Rockhold, R. W., and Gross, F. Yohimbine stereoisomers: cardiovascular effects after central and peripheral application in the rat. Naunyn-Schmiedeberg's Archives of Pharmacology 315: 227-331, 1981.
- 9. Rockhold, R. W., Crofton, J. T. and Share, L. Vasopressin does not contribute to pressor action of enkephalin in SHR. Hypertension 3: 410-415, 1981.
- Unger, Th., Rockhold, R. W., Bonner, G., Rascher, W., Schaz, K., Speck, G., Schomig, A. and Ganten, D. Antihypertensive effects of the novel converting-enzyme inhibitor YS980 in spontaneously hypertensive rats. Clin. Exp. Hyper. 3: 121-140, 1981.
- Crofton, J. T., Rockhold, R. W., Share, L., Wang, B. C., Horovitz, Z. P., Manning, M. and Sawyer, W. H. The effect of intracerebroventricular captopril on vasopressin and blood pressure in spontaneously hypertensive rats. Hypertension 3, Suppl. II, II-71-II-74, 1981.
- 12. Rockhold, R. W., Crofton, J. T., Wang, B. C. and Share, L. Effects of morphine and naloxone on plasma vasopressin levels and blood pressure. J. Pharmacol. Exp. Ther. 224: 386-390, 1983.
- Matsui, K., Share, L., Brooks, D. P., Crofton, J. T. and Rockhold R. W. The splanchnic clearance of plasma vasopressin in the dog: evidence for pre-hepatic extraction. American Journal of Physiology 245: E611-615, 1983.
- 14. Rockhold, R. W. and Bealer, S. L. Modification of the cardiovascular response to enkephalin by preoptic-hypothalamic periventricular lesions. Neuropharmacology 23: 203-206, 1984.
- Brooks, D. P., Share, L., Crofton, J. T., Rockhold, R. W. and Matsui, K. The effect of vertebral artery infusions of oxytocin on plasma vasopressin concentration, plasma renin activity, blood pressure and heart rate and their responses to hemorrhage. Neuroendocrinology 38: 382-386, 1984.
- Rockhold, R. W., Share, L. Crofton, J. T. and Brooks, D.P. The cardiovascular response to vasopressin vasopressor antagonist administration during water deprivation in the rat. Neuroendocrinology 38: 139-144, 1984.
- Rockhold, R. W., Crofton, J. T., Brooks, D. P. and Share, L. The response of vasopressin and blood pressure to hemorrhage in SHR and WKY rats. Clinical and Experimental Hypertension A6: 827-849, 1984.
- Brooks, D. P., Share, L., Crofton, J., Matsui, K. and Rockhold, R. W. Effect of vertebral, carotid and intravenous infusions of lysine vasopressin on plasma vasopressin and cardiovascular function. Neuroendocrinology 39: 350-355, 1984.
- Rockhold, R. W., Crofton, J. T., Brooks, D. P. and Share, L. Naloxone does not improve cardiovascular or blunt vasopressin responses in spontaneously hypertensive rats following graded hemorrhage. Neuroendocrinology 43: 657-663, 1986.
- 20. Sladek, C. D, Blair, M. L., Chen, Y.-H. and Rockhold, R. W. Vasopressin and renin response to plasma volume loss in spontaneously hypertensive rats. Am. J. Physiol. 250(3): H443-452, 1986.
- Principles of Medical Pharmacology. Fourth Edition, Eds. H. Kalant, W. H. E. Roschlaw and E. M. Sellers. [Book Review, Rockhold, R. W.] J. Dental Educ. 50: 635, 1986.

- 22. Rockhold, R. W., Jin, C.-B., Huang, C. and Farley, J. Acute tachycardic and pressor effects following hypothalamic injections of kainic acid. Neuropharmacology 26: 567-573, 1987.
- 23. Rockhold, R. W. Circulatory Effects of Cocaine. J. Miss. Acad. Sci. 32: vii-x, 1988.
- Lamartiniere, C. A., Pearson, A. T. and Rockhold, R. W. Neonatal diethylstilbestrol alters blood pressure and CNS drinking response in SHR and WKY rats. J. Clin. Exp. Hypertension A10: 843-857, 1988.
- Ishizuka, Y., Rockhold, R. W., Hoskins, B. and Ho, I.K. Cocaine-induced changes in <sup>3</sup>H-naloxone binding in brain membranes isolated from spontaneously hypertensive and Wister-Kyoto rats. Life Sci. 43: 2275-2282, 1988.
- 26. Ishizuka, Y., Rockhold, R. W., Hoskins, B., Kirchner, K. and Ho, I. K. Sensitivity to cocaine in spontaneously hypertensive and Wistar-Kyoto rats. Life Sci. 45:223-232, 1989.
- Dulaney, M. D., Rockhold, R. W., Porter, A., Hoskins, B. and Ho. I. K. Changes in drinking activity, urine volume and urinary electrolyte excretion following intracerebroventricular administration of diisopropylfluorophosphate (DFP). J. Pharmacol. Exp. Ther. 250: 202-209, 1989.
- 28. Lim, D. K., Ito, Y., Hoskins, B., Rockhold, R. W. and Ho, I. K. Comparative studies of muscarinic and dopaminergic receptors in three strains of rat. Eur. J. Pharmacol. 165: 279-287, 1989.
- 29. Rockhold, R. W., Acuff, C. G and Clower, B. R. Excitotoxin-induced myocardial necrosis. Eur. J. Pharmacol. 166: 571-576, 1989.
- 30. Jin, C.-B. and Rockhold, R. W. Circulatory, baroreflex and renal responses to intracerebral kainic acid infusion in the conscious rat. J. Pharmacol. Exp. Ther. 251: 969-975, 1989.
- Langford, H. G., Rockhold, R. W., Wassertheil-Smoller, S., Oberman, A., Davis, B. R. and Blaufox, M. D. Effects of weight loss on thiazide produced erectile problems in men. Trans. Am. Clin. Climat. Assoc. 101: 190-194, 1989.
- 32. Ueno, E., Liu, D.D., Rockhold, R. W., Ho, I. K. and Hoskins, B., Evidence that calmodulin does not mediate cocaine-induced behaviors in rats. Res. Comm. Subs. Abuse 10: 261-264, 1990.
- 33. Ueno, E., Liu, D.D., Rockhold, R. W., Ho, I.K. and Hoskins B. Cocaine and cyclic nucleotides in brains of WKY and SHR. Res. Comm. Subs. Abuse 11: 77-80, 1990.
- 34. Rockhold, R. W., Acuff, C.G. and Clower, B.R. Excitotoxic lesions of the paraventricular hypothalamus: Metabolic and cardiac effects. Neuropharmacol. 29: 663-673, 1990.
- Yu, Z. J., Lim, D. K., Hoskins, B., Rockhold, R. W. and Ho, I. K. Effects of acute and subacute cocaine administration on the CNS dopaminergic system in Wistar-Kyoto and spontaneously hypertensive rats. I. Levels of dopamine and metabolites. Neurochemical Research 15: 613-619, 1990.
- Lim, D. K., Yu, Z. J., Hoskins, B., Rockhold, R. W. and Ho, I. K. Effects of acute and subacute cocaine administration on the CNS dopaminergic system in Wistar-Kyoto and spontaneously hypertensive rats. II. Dopamine receptors. Neurochemical Research 15: 621-627, 1990.
- Lim, D. K., Yu, Z. J., Hoskins, B., Rockhold, R. W. and Ho, I. K. Effects of acute and subacute cocaine administration on the CNS dopaminergic system in Wistar-Kyoto and spontaneously hypertensive rats. III. Dopamine uptake. Neurochemical Research 15: 629-634, 1990.

- Inada, T., Yagi, G., Kamijima, K., Ohnishi, K., Kamisada, M., Takamiya, M., Nakajima, S. and Rockhold, R. W. A statistical trial of subclassification for tardive dyskinesia. Acta Psychiatrica Scandinavica 82: 404-407, 1990.
- Ishizuka, Y., Rockhold, R. W., Hoskins, B. and Ho, I. K. Restraint alters temperature responses to cocaine in spontaneously hypertensive rats. Pharmacology, Biochemistry and Behavior 37: 773-777, 1990.
- Inada, T., Ohnishi, K., Kamisada, M., Matsuda, G., Tajimo, O., Yanagisawa, Y., Hashiguchi, K., Shima, S., Oh-e, Y., Masuda, Y., Chiba, T., Kamijima, K., Rockhold, R. W. and Yagi, G. A prospective study of tardive dyskinesia in Japan. Eur. Arch. Psych. Clin. Neurosci. 240: 250-254, 1991.
- 41. Inada, T., Yagi, G., Kamijima, K., Ohnishi, K., Kamisada, M. and Rockhold, R. W. Clinical variants of tardive dyskinesia in Japan. Jpn. J. Psychiatr. Neurol. 45: 67-71, 1991.
- 42. Rockhold, R. W., Carver, E. S., Ishizuka, Y., Ho, I. K. Dopamine receptors mediate cocaine-induced temperature responses in SHR and WKY. Pharmacol. Biochem. Beh. 40: 157-162, 1991.
- 43. Rockhold, R. W. Excitatory amino acid receptor antagonists: Potential implications for cardiovascular therapy and cocaine intoxication. Medical Hypotheses 35: 342-348, 1991.
- 44. Jin, C-B. and Rockhold, R. W. Sympathoadrenal control of paraventricular hypothalamic βendorphin in hypertension. Hypertension 18:503-515, 1991.
- 45. Rockhold, R. W., Oden, G., Ho, I.K., Andrew, M. and Farley, J.M. Glutamate receptor antagonists block cocaine-induced convulsions and death. Brain Res. Bull. 27: 721-723, 1991.
- 46. Jin, C., Rockhold, R. W., Hoskins, B. and Ho, I. K. Comparisons of cocaine receptors in brain regions from WKY and SHR. Brain Res. Bull. 27: 853-856, 1991.
- Rockhold, R. W., Surrett, R.S., Oden, G., Acuff, C.G., Zhang, T., Farley, J.M., Hoskins, B. and Ho, I.K. Inhibition of cocaine intoxication by excitatory amino acid receptor (EAA) antagonists. Ann. N.Y. Acad. Sci. 648: 335-337, 1992.
- Inada, T., Polk, K., Jin, C., Purser, C., Hume, A., Hoskins, Ho, I. K. and Rockhold, R. W. Cocaine elevates striatal extracellular dopamine efflux in spontaneously hypertensive and Wistar-Kyoto rats. Brain Res. Bull. 28: 227-231, 1992.
- 49. Rockhold, R. W. Thiazide diuretics and male sexual dysfunction. Drug Development Research 25: 85-95, 1992.
- Inada, T., Polk, K., Purser, C., Hume, A., Hoskins, B., Ho, I. K. and Rockhold, R. W. Behavioral and neurochemical effects of continuous infusion of cocaine in rats. Neuropharmacology 31: 701-708, 1992.
- 51. Qian, X.-B., Andy, O. J., Dearman, C., Andrews, M. and Rockhold, R. W. Cocaine induced brainstem seizures and behavior. Integ. Physiol. Beh. Sci. 27: 117-129, 1992.
- Rockhold, R. W., Surrett, R. S., Acuff, C. G., Zhang, T., Hoskins, B. and Ho, I. K. Antagonism of cocaine toxicity by MK-801: Differential effects in spontaneously hypertensive and Wistar-Kyoto rats. Neuropharmacology 31: 1269-1277, 1992.

- Zhang, T. and Rockhold, R. W. Sucrose drinking reduces dorsal hypothalamic β-endorphin levels in spontaneously hypertensive rats but not in Wistar-Kyoto rats. Brain Research Bull. 32: 261-265, 1993.
- 54. Yu, Z. J., Jin, C.-B., Rockhold, R. W., Hoskins, B. and Ho, I. K. Site and mechanism of behavioral tolerance to cocaine: A study of dopamine release in Wistar-Kyoto and spontaneously hypertensive rats. Neurochem. Res. 18: 1203-1209, 1993.
- Rockhold, R. W. Byrne, M., Sprabery, S. and Bennett, J.G. Urethane anesthesia reverses the protective effect of noncompetitive NMDA receptor antagonists against cocaine intoxication. Life Sci. 54: 321-330, 1994.
- 56. Tseng, Y. T., Rockhold, R. W., Hoskins, B. and Ho, I. K. Cardiovascular toxicities of nandrolone and cocaine in spontaneously hypertensive rats. Funda. Appl. Toxicol. 22:113-121, 1994.
- 57. Zhang, T., Feng, Y., Rockhold, R. W., and Ho, I. K. Naloxone-precipitated morphine withdrawal increases pontine glutamate levels in the rat. Life Sci. (PL) 55: PL25 PL32, 1994.
- Feng, Y., Zhang, T., Rockhold, R. W. and Ho, I. K. Increased locus coeruleus glutamate levels are associated with naloxone-precipitated withdrawal from butorphanol in the rat. Neurochem. Res. 20: 675-681, 1995.
- 59. Zhang, T., Reid, K., Acuff, C. G., Jin, C. B. and Rockhold, R. W. Cardiovascular and analgesic effects of a highly palatable diet in SHR and WKY. Pharmacol. Biochem. Beh 48:57-61, 1994.
- Feng, Y.Z., Zhang, T., Tokuyama, S., Zhu, H., Rockhold, R. W. and Ho, I. K. μ- and δ-opioid receptor antagonists precipitate similar withdrawal phenomena in butorphanol and morphine dependence. Neurochem. Res. 21: 63-71, 1996.
- Acuff, C. G., Hoskins, G., Moore, N. A., and Rockhold, R. W. Acute cerebral artery constriction in the spontaneously hypertensive rat following blood and plasma administration into the subarachnoid space. J. Biomed. Sci. 3:117-125, 1996.
- 62. Lundien, M., Andy, O. J., Rockhold, R. W., Andrews, M. and Dearman, C. Dextrorphan effects on cocaine and brainstem perturbation. Integ. Physiol. Beh. Sci. 31: 224-230, 1996.
- 63. Andy, O. J., Qian, X-B., Lundien, M., Dearman, C., Andy, J., Rockhold, R. W. and Andrews, M. Adjunctive brainstem behaviors in the rat. Integ. Physiol. Beh. Sci. 31: 315-330, 1997.
- 64. Rockhold, R. W., Carlton, F. B., Jr., Corkern, R., Derouen, L. and Hume, A. S. Methcathinone intoxication in the rat: abrogation by dextrorphan. Ann. Emer. Med. 29: 383-391, 1997.
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- 200. Rockhold, R.W., Sullivan, D., McDaniel, O. Base Pair: High school teacher professional development creates generation science education impact. FASEB 26:518.11, 2012.
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- 203. Lerant, A., Rockhold, R. Simulation at UMMC. Mid-South Simulation Summit. Little Rock, Ar. Sept. 22-23, 2013.
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- 205. Pfiefle, A., Black, E., Leaphart, A., Rockhold, R., Schorn, M., Davidson, H.. Role of the basic scientist in interprofessional education. Full day workshop, IAMSE, June 6-8, 2014, Nashville, TN.
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- 207. Liu, H.Y., Rockhold, R.W., Fall, L.H., Lee, M.Y., Love, L.M., Birk, T.A. Flipping the curriculum: A toolkit to prepare your institution for success. 2014 GFA Professional Development Conference, July 17-20, 2014 Boston, MA.
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- 212. Rockhold RW, Parker DM, Shelby J, Lerant A, Orledge, J, Holder, MG: Cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED) training with performance feedback. (2016). JMAS 61(1): 168.
- 213. Rockhold RW (Organizer). Symposium "Simulation-based Education in Mississippi: A Statewide Organizational Meeting". (2016). 61(1): 167.
- 213. Cui D, Wilson TD, Rockhold RW, Lehman, MN, Lynch JC. Stereoscopic 3D Visualization Improves Medical Student Comprehension of Head and Neck Vascular Anatomy. FASEB J. April 2016, 30: 171.
- 214. Rockhold RW. Drug treatment of heart failure. In: MEET the new POPS-They'll flip your teaching. ASPET Division of Pharmacology Education symposium, FASEB J. April 2016, 30: 60.
- 215. Rockhold R, Sullivan, D, Coolen L, Compretta C, Dehon E, Pollard T, Taylor J. Science Teaching Excites Medical Interest (STEMI). (2016). SciEd 2016 meeting, May 10, Baltimore, MD
- 216. Rockhold R, Sullivan D, Bender S, Thibodeaux D. UMMC will flip your teaching. (2016). Mississippi Science Teachers Association meeting, October 24, Biloxi, MS.
- 217. Tipnis SM, Shoemake H, Douglas WC, Rockhold R, Jackson L. I earned it! Using Digital badging to mark EPA based milestones in a medical students journey to residency. (2017). Innovations in Medical Education, Keck School of Medicine, University of Southern California, Feb. 24.
- 218. Rockhold R. Innovations in STEM Education Symposium–The Mississippi Perspective (Organizer). (2017). JMAS 62(1): 27, 137.
- 219. Rockhold R, Bender S, Sullivan D. Funding success following STEM teacher mentoring drives classroom innovation. (2017). FASEB J 31: 810.5.
- 220. Rockhold R, Barnard M, Compretta C, Dehon E, Notebaert A, Pollard T, Rock D, Taylor J, Sullivan D. Education Collaboration: Science Teaching Excites Medical Interest (STEMI). (2017). UM/UMMC Research Day, Oxford, MS, April 13.
- 220. Barnard M, Compretta C, Dehon E, Notebaert, A, Pollard T, Sullivan D, Meyer E, Taylor J, Stray S, Rockhold R. Identifying, Assessing, and Visualizing Competencies for Teaching Science in a Flipped Learning Environment- the STEMI Competency Model. (2017). SciEd 2017 meeting, June 1, Washington, DC.
- 221. Rockhold R, Barnard M, Compretta C, Dehon E, Meyer E, Notebaert A, Pollard T, Stray S, Taylor J, Sullivan D. STEMI: Growing a Community for Teacher Innovation in STEM. (2017). SciEd 2017 meeting, June 1, Washington, DC.
- 222. Rockhold R. A Discussion of Science Identity Formation: Methods by Which Persons Find Their Space in STEM (Organizer). (2017). Science Identity Formation breakout session. SciEd 2017 meeting, June 1, 2017.

- 223. Rockhold R, Barnard M, Compretta C, Dehon E, Meyer E, Notebaert A, Pollard T, Stray S, Taylor J, Sullivan D, Elasri M. Community Collaboration for STEM Education in Mississippi: SEPA, STEMI and INBRE. (2017). Mississippi INBRE Symposium, July 21, 2017.
- 224. Barnard M, Compretta C, Dehon E, Notebaert A, Pollard T, Sullivan D, Meyer E, Taylor J, Stray S, Rockhold R. (2017, July 21<sup>st</sup>). Identifying, assessing, and visualizing competencies for teaching science in a flipped learning environment – the STEMI competency model. Poster presented at the Delta Regional Forum: Population Health, Development, and Entrepreneurial Problem Solving, Clarksdale, MS.
- 225. Rockhold R, Barnard M, Compretta C, Dehon E, Meyer E, Notebaert A, Pollard T, Rock D, Stray S, Taylor J, Sullivan D. (2017, July 21<sup>st</sup>). *Community formation: Science Teaching Excites Medical Interest (STEMI)*. Poster presented at the Delta Regional Forum: Population Health, Development, and Entrepreneurial Problem Solving, Clarksdale, MS.
- 226. Meyer ER, McKone K, Notebaert A, Rockhold R. The implications of integrating histology and pathological healthcare disparities in a secondary education classroom. Poster presented at 2018 AAAS meeting, Austin TX, February, 2018.
- 227. Rockhold R, Barnard M, Compretta C, Dehon E, Elasri M, Meyer E, Notebaert A, Stray S, Sullivan D, Taylor J. Evaluating Flipped Teaching in STEM: A Rubric. Poster presented at 2018 Experimental Biology meeting, San Diego, CA.
- 228. Bunton SA, Smith P, Rockhold R. Post-tenure review: A mechanism to maintain faculty productivity. Poster presented at 2018 AAMC Group on Business Affairs Conference, April 17, 2018, Portland OR.
- 229. McKone K, Barnard M, Sullivan D, Rockhold R. A *Wolbachia* Rodeo: Professional Teacher Training and Student Engagement. NIH SciEd 2018, Washington, DC, May 29-June 1, 2018.
- 230. Barnard M, Compretta C, Dehon E, Notebaert A, Pollard T, Sullivan D, Meyer E, Taylor J, Stray S, Rockhold R. Professional Competency Assessment of Flipped STEM Educators. NIH SciEd 2018, Washington, DC, May 29-June 1, 2018.
- 231. Gillespie T, Micklos D, Garneau N, Rockhold R, Couch J, Theisz K, Miller D. Citizen Science: Role & Best Practices in Science Education. NIH SciEd 2018, Washington, DC, May 29-June 1, 2018.
- 232. Rockhold R, Arora EK, Chester A, Godfrey M, Withy K, Brandl R. IDeA State Collaborative Experiences with SEPA. NIH SciEd 2018, Washington, DC, May 29-June 1, 2018.
- 233. Rockhold R, Barnard M, Compretta C, Dehon E, Elasri M, Meyer E, Notebaert A, Stray S, Sullivan D, Taylor J. Evaluating Flipped Teaching in STEM: A Rubric. NIH SciEd 2018, Washington, DC, May 29-June 1, 2018.
- 234. Meyer ER, McKone K, Notebaert A, Rockhold R. The Implications of Integrating Histology and Pathological Healthcare Disparities in a Secondary Education Classroom. AAAS, Austin, TX, February 15-19, 2018.
- 235. Rockhold R, McKone K, Sullivan B, Thibodeaux D, Stray S, Sullivan D. Roping the Future Using competition and biotechnology to engage students in STEM. Symposium. Mississippi Academy of Sciences. Hattiesburg, MS, February, 23, 2018.

- 236. Rockhold R, Barnard M, Compretta C, Dehon E, Elasri M, Meyer E, Notebaert A, Stray S, Sullivan D, Taylor J. Evaluating Flipped Teaching in STEM: A Rubric. Experimental Biology 2018, San Diego, CA, April 21-25, 2018.
- 237. STEMI: An animated video introduction. Anderson R, Rockhold R. 2018 STEM for All Video Showcase, May 14 May 21, 2018. <u>http://stemforall2017.videohall.com/</u>.
- 238. McKone K, Barnard M, Sullivan D, Rockhold R. A *Wolbachia* Rodeo: Professional Teacher Training and Student Engagement. NIH SciEd 2018, Washington, DC, May 29-June 1, 2018.
- 239. Barnard M, Compretta C, Dehon E, Notebaert A, Pollard T, Sullivan D, Meyer E, Taylor J, Stray S, Rockhold R. Professional Competency Assessment of Flipped STEM Educators. NIH SciEd 2018, Washington, DC, May 29- June 1, 2018.
- 240. Rockhold R, Sullivan D. STEMI-Flipping our Future with Engagement. Innovative Institute. Mississippi Department of Education, Starkville, MS, June 18, 2018.
- 241. Meyer E, Notebaert A, Barnard M, Dehon E, Sullivan D, Rockhold R. STEMI Summer Workshop Anatomy Experiences with Clinical Relevance to Mississippi Healthcare Disparities Increase High School Teachers' Skills. INBRE, Jackson, MS, July 27, 2018.
- 242. Sullivan B, Jackson P, Rockhold R. Flipping in STEMI. Mississippi Science Teachers Association Meeting, Biloxi, MS, October 29, 2018.
- 243. Meyer ER, Barnard M, Crumby A, McInnis D, Lewis F, Notebaert A, Dehon E, Sullivan D, Compretta C, Stray S, Taylor J, Thompson S, Gordy X, Rockhold R. Observations Assess Flipped Modules on Healthcare Disparities in Secondary Education. American Association for the Advancement of Science (AAAS) Annual Meeting, Washington, DC, February 14-17, 2019.
- 244. Meyer E, McKone K, Barnard M, Compretta C, Dehon E, Gordy X, Notebaert A, Stray S, Taylor J, Thompson S, Sullivan D, Rockhold R. Active Learning Neuroscience Lesson Improves Students' Knowledge of Health Disparities Regarding Memory Loss and Stroke. 2019, JMAS 61(1):138.
- 245. Rockhold R, Barnard M, Compretta C, Dehon E, Gordy XZ, Iverson C, Meyer E, Notebaert A, Stray S, Taylor J, Thompson , Sullivan D, Elasri M. A New Collaborative Resource to Aid Innovative Curriculum Development by STEM Teachers. 2019, *JMAS* 64(1):135.
- 246. Meyer ER, Barnard M, Crumby A, McInnis D, Lewis F, Notebaert A, Dehon E, Sullivan D, Compretta C, Stray S, Taylor J, Thompson S, Gordy X, Rockhold R. Competency Assessment: Development and Delivery of Flipped Lessons on Healthcare Disparities by High School STEM Teachers. April 26, 2019. UM/UMMC Research Day, University of Mississippi, Oxford, MS.
- 247. Barnard M, Meyer ER, Crumby A, McInnis D, Lewis F, Notebaert A, Dehon E, Sullivan D, Compretta C, Stray S, Taylor J, Thompson S, Gordy X, Rockhold R. STEMI – Science Teaching Excites Medical Interest Observations of Flipped Modules on Healthcare Disparities. April 23-24, 2019, SciEd 2019, Washington, DC.
- 248. Meyer ER, Barnard M, Crumby A, McInnis D, Lewis F, Notebaert A, Dehon E, Sullivan D, Compretta C, Stray S, Taylor J, Thompson S, Gordy X, Rockhold R. STEM Outreach Models – Can We Improve Mississippi's Poor Health and Educational Status through a Broader Coalition? Innovative Institute. Mississippi Department of Education, Starkville, MS, June 17-18, 2019.

- 249. Ramsey L, Calimaran A, Kemp AM, Tipnis SM, Babel R, Cloy A, Kyle PB, Lavender J, Rockhold R, Skinner V, Stingily C. University of Mississippi Medical Center Opioid Task Force: Encouraged Balanced and Responsible Opioid Prescribing. Poster presented at the AAMC National Workshop to Advance Medical Education to Combat Opioid Misuse: Working Together Across the Continuum, Washington DC May 2019.
- 250. Rockhold R, Barnard M, Crumby A, McInnis D, Lewis F, Notebaert A, Dehon E, Sullivan D, Compretta C, Stray S, Taylor J, Thompson S, Gordy X, Meyer ER. Assessment Of Competencies in Management of Flipped Classroom Lessons On Healthcare Disparities By High School Teachers. Poster presented at the 2019 MS-IDeA Conference, August 2, 2019, Jackson, MS.
- 251. Meyer ER, Barnard M, Dehon E, Compretta C, Notebaert A, Sparkman, W, Stray S, Taylor J, Sullivan D, Thompson S, Gordy X, Roth, A, Rockhold R. Competency model implications for secondary science teacher professional development. Submitted 2020 AAAS Annual Meeting.
- 252. Rockhold R, Barnard M, Crumby A, McInnis D, Lewis F, Notebaert A, Dehon E, Sullivan D, Compretta C, Stray S, Taylor J, Thompson S, Gordy X, Meyer ER. Assessment of high school teachers' competencies in the management of flipped classroom lessons on healthcare disparities. 2020, JMAS 65(1): 27, 137.
- 253. Barnard M, Dehon E, Compretta C, Ford-Wade A, White W, Rockhold R. PROJECT SCORE (Student-Centered Outcomes Research Experiences). 2020, JMAS 65(1): 151.
- 254. Barnard M, Sparkman W, Compretta C, Dehon E, Gordy J, Meyer ER, Notebaert A, Roth, A, Stray S, Taylor J, Thompson S, Sullivan D, Rockhold R. A novel competency assessment model for use with STEM teachers utilizing flipped classroom pedagogical techniques. 2020, JMAS 65(1): 153.
- 255. Rockhold R. The history and future of Base Pair A model for high school research mentorship. Mini-Symposium. 2020, JMAS 65(1): 154.

#### **Other Activities and Appointments:**

Associate Editor, Journal of STEM Outreach, 2018-present Editorial Board, Journal of STEM Outreach, 2017-present Associate Editor, Journal of the Mississippi Academy of Sciences, 1999 – present Moderator: Virtual forum on Holiday Lectures on Science. 1999 http//hhmint6.hhmi.org/Forums/Thread.cfm Moderator, AAMC GFA Professional Development meeting, July, 2016 Vancouver, BC

### **Funding Record**

#### **Grant Support**:

Summary: Principal Investigator, Co-Investigator or Investigator on 60 awards since 1975: Total awarded > \$14 million

#### **Current Support:**

- 1. Robert M. Hearin Support Foundation "Mississippi Academy for Simulation Training (MAST)". \$536,940. 07-01-17 08-31-2021; PI; R.W. Rockhold, Ph.D.; Two-year no-cost extension till 6/30/2023
- 2. NIH R25 GM129212 "Science Teaching Excites Medical Interest (STEMI)"; \$1,100,850. 04-01-16-03-31-21; PI; R.W. Rockhold, Ph.D., No-cost extension till 05/31/2022
- 3. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2021
- 4. Administrative supplement to NIH R25 GM129212 "Science Teaching Excites Medical Interest (STEMI)"; \$149,727, 9-19-19 present

#### **Pending Support:**

 NIH/NIGMS "Project SCORE (Student Centered Outcomes Research Experience)"; Year 1 \$250,000; Total requested \$1,320,822; 7/1/2021-6/30/26; PI: Marie Barnard, PhD; Co-I; R.W. Rockhold, PhD, (0.06 calendar) – Awaiting final Council approval.

#### **Prior Support:**

- 1. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2020
- 2. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2019
- 3. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2018
- 4. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2017
- 5. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2016
- 6. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2015
- 7. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2014
- 8. Regions Bank Regions TEACH Prize for faculty recognition \$10,000, 1-1-2013
- 9. Flagship Constellations-Community Wellbeing Constellation, University of Mississippi "Student-centered outcomes research experience (SCORE) Pilot". \$4,293.24. 6-1-18 5-31-19; Co-investigator; R.W. Rockhold, PhD.
- Robert M. Hearin Support Foundation "Facilitation of Interprofessional Education: An Essential Step in Achieving National Accreditation of the UMMC Simulation Center".
   \$2,221,520. 07-01-13 06-30-2017; Co-investigator; R.W. Rockhold, Ph.D.; No cost extension approved through 5-31-18.
- Macy Foundation Southeast Consortium for Interprofessional Education: Using Interprof e-Learning. \$5,000/year, 07-01-12 – 06/30/15; Co-investigator; R.W. Rockhold, Ph.D., Multiple institution award.
- 12. Delta Regional Institute, Health and Human Services-Office of Minority Health, P.I. Warren Jones, M.D.; (October 2009 September 2013), Investigator: R.W. Rockhold, Ph.D.; Project component *Delta Region: Health Education Leadership Program (DR-HELP)*, \$180,000.
- 13. Howard Hughes Medical Institute *Base Pair*, \$695,923, 09/01/07 08/31/12; Investigator and Program Director; R.W. Rockhold, Ph.D.
- 14. Howard Hughes Medical Institute *A Muse of Fire*, \$50,000, 01/01/08 8/31/10; Investigator and Program Director; R.W. Rockhold, Ph.D.
- 15. Mississippi Institute for Geographic Minority Health Disparities Renewal: *Rural Scholars Program* \$100,000, 09/01/08-08/31/09; P.I.: R.W.Rockhold, Ph.D.
- 16. Mississippi Institute for Geographic Minority Health Disparities Renewal: *Rural Scholars Program* \$100,000, 09/01/07-08/31/08; P.I.: R.W.Rockhold, Ph.D.

- 17. Mississippi Institute for Geographic Minority Health Disparities *Rural Scholars Program* \$100,000, 09/01/06-08/31/07; P.I.: R.W.Rockhold, Ph.D.
- National Science Foundation (HRD-0450362) AGEP: Alliance for Graduate Education in Mississippi, \$427,700, 11/-1/2004-10/31/2009; Subcontract to UMMC from parent award to University of Mississippi, PI, M. Eftink; Co-PI – R.W. Rockhold, Ph.D. with I.K. Ho, Ph.D.
- 19. Howard Hughes Medical Institute *Base Pair*, \$600,000, 09/01/03 02/28/08, Funding approved at the level of \$538,307 on 06/2003; Investigator and Program Director; R.W. Rockhold, Ph.D.
- 20. Howard Hughes Medical Institute *HHMI Holiday Lecture DVD Utilization Project*, \$2,500, 2002-2003; Investigator and Program Director; R.W. Rockhold, Ph.D.
- 21. Centers for Disease Control and Prevention, Department of Health and Human Services, R06/CCR- 419466 Environmental signals and sensors: A virtual center for disease prevention in humans and ecosystems. Co-investigator; \$4,330,403, 09/30/2000-09/29/2003.
- 22. Aventis Pharma, *Evaluation of anticholinergic actions of desloratidine* (P.I.: R. W. Rockhold), \$115,290, 09/01/01-08/31/03.
- 23. Howard Hughes Medical Institute *Base Pair: Expanding the Influence.* \$425,000, 09/01/99 08/31/03; Investigator and Program Director; R.W. Rockhold, Ph.D.
- 24. National Institute on Drug Abuse *Mechanism of action of butorphanol* (P.I.: I. K. Ho, Co-P.I.: R. W. Rockhold), \$638,023, 07/15/97-06/30/02.
- 25. National Science Foundation *K-12 Higher Education Partnership*, \$89,947, 09/2000 09/2001; Investigator and Program Director; R.W. Rockhold, Ph.D.
- 26. Greater Jackson Foundation *High School Teacher Training Award*, \$2,000, June, 2000; Investigator and Program Director; R.W. Rockhold, Ph.D.
- 27. American Society of Pharmacology and Experimental Therapeutics *Summer Undergraduate Fellowship Program*, \$2,500, Summer, 2000, Preceptor
- 28. The Greater Jackson Foundation *Base Pair Summer Teacher Training* (P.I.), \$2,000, July, 1999; Investigator and Program Director; R.W. Rockhold, Ph.D.
- Agency for Toxic Substances and Disease Registry, Department of Health and Human Services., *The toxicokinetics and toxicodynamics of dermally applied methyl parathion* (PI: I. K. Ho, Co-P.I.: R. C. Baker, Investigators: D. B. Couch, J. M. Farley, A. S. Hume, R. E. Kramer, R. W. Rockhold, S. E. Wellman), \$249,940, 09/01/98-08/31/99.
- 30. Jackson Public School District-Health-Related Biomedical Information Training (P.I.), \$2,000, 11/24/97-03/31/98.
- 31. Howard Hughes Medical Institute *Base Pair: A biomedical research mentorship project between UMC and Jackson Public Schools.* \$175,000, 07/01/94 08/31/99; Investigator and Program Director; R.W. Rockhold, Ph.D.
- 32. Boehringer Mannheim Corp. Phase I (rodent studies): Cardiac damage associated with subarachnoid hemorrhage as measured with Troponin T assay. \$2,000 09/94-12/94.
- 33. American Society of Pharmacology and Experimental Therapeutics *Summer Undergraduate Fellowship Program.* \$2,000, Summer, 1994, Preceptor.
- 34. American Heart Association, Mississippi Affiliate (93077125) *RVLM glutamate receptors mediate central circulatory actions of cocaine*, \$45,000, 07/1/93 06/31/95.
- 35. American Society of Pharmacology and Experimental Therapeutics *Summer Undergraduate Fellowship Program.* \$2,000, Summer, 1992, Preceptor.
- 36. National Institutes of Health (1 S15 HL 47707 01) *Small Instrumentation Grant Program*, \$30,540, 01/09/91 31/08/92, PI.
- 37. BRSG Pilot Study Award (2 SO7 RR05386) Antagonism of cocaine-induced cfos expression with EAA receptor antagonists. \$6,190. 5/1/91 4/30/92.
- 38. National Institute on Drug Abuse *Mechanism of action of butorphanol* (P.I.: I. K. Ho, Co-P.I.: R. W. Rockhold, Co-P.I.: B. Hoskins), \$545,194, 05/91-04/97.
- 39. American Heart Association Mississippi Affiliate Central NMDA receptors mediate circulatory pathophysiology. \$45,000 7/1/90 6/31/92.
- 40. VA Medical Center *Is hypoxic ischemic injury to the brain remediable*. PI M. H. LeBlanc, Co-PI C. C. Parker, E. E. Smith, R. W. Rockhold, D. F. Peeler, \$19,000. 10/1/89 9/30/90.

- 41. BRSG Pilot Study Award (2 SO7 RR05386) *NMDA receptors mediate CNS-induced circulatory injury*, \$6,640. 9/1/89 7/31/90.
- 42. National Heart, Lung and Blood Institute (1 R01 HL 39387) Hypothalamic opiates in obesity-accelerated hypertension, \$230,433. 7/1/87 7/31/92, PI.
- 43. American Heart Association Mississippi Affiliate Excitotoxic lesions, hypothalamic opiates and hemodynamics, \$39,945. 6/1/87 5/30/89.
- 44. National Institute on Drug Abuse *Cocaine: pharmacodynamic and kinetic study in WKY and SHR*, \$566,015. 1/1/87 12/31/91, Co-PI with I.K. Ho, B. Hoskins.
- 45. American Heart Association Mississippi Affiliate Circulatory effects of hypothalamic excitotoxin injection, \$19,819. 7/1/86 6/31/87.
- BRSG Pilot Study Award (2 S07 RR 05386-24) Excitotoxic amino acid-induced medial hypothalamic lesions - implications for circulatory homeostasis in hypertensive rats, \$3,600. 11/1/85 - 10/31/87.
- 47. Cystic Fibrosis Foundation *Drug-induced changes in epithelial Cl- channels*, \$56,394. 11/1/85 10/31/87, Co-PI with J. M. Farley.
- 48. Pharmaceutical Manufacturers Association Foundation Research Starter Grant *Hypothalamic opioid peptides and neurogenic hypertension*, \$15,500. 1/1/84 12/31/86.
- 49. Vaughan Stroke Foundation Research Grant Definition of opiate receptor mechanisms promoting cerebral ischemic injury, \$1,425. 6/1/83 5/30/84.
- 50. Biomedical Research Grant Support (BRSG) New Faculty Award (2 S07 RR05386-22) *Analysis of specific brain loci and receptor sub-types mediating the cardiovascular actions of enkephalin peptides*, \$9,151. 5/1/83 4/30/84.
- 51. Pharmaceutical Manufacturer's Association Foundation Research Starter Award, 1/1/84 12/31/85.
- 52. NIH individual postdoctoral fellowship award (Opioids, Vasopressin and Blood Pressure Regulation), 7/1/81 6/30/82.
- 53. NIH postdoctoral fellowship award (Hypertension Training Grant), 1979 1981.
- 54. Southeastern Regional Educational Board Travel Award, 1976.
- 55. Tennessee Heart Association Predoctoral Fellowship, 1975-1976.

#### **Journal Editorial Boards:**

Journal of STEM Outreach Journal of the Mississippi Academy of Sciences

#### **Papers Reviewed for:**

Acta Endocrinologica American Journal of Hypertension American Journal of Physiology Brain Research Clinical and Experimental Hypertension Drug Development Research Education for Health Ethnicity & Disease European Journal of Pharmacology Hypertension Journal of Interprofessional Education & Practice Journal of Pharmacology and Experimental Therapeutics Journal of STEM Outreach Journal of the Mississippi Academy of Sciences Life Sciences Medical Science Educator New York Academy of Sciences (Symposium proposal) Peptides Pharmacology, Biochemistry and Behavior

Physiology and Behavior Toxicology and Applied Pharmacology

### **Invited Research Presentations:**

- "The Nucleus Tractus Solitarii and the Cardiovascular Actions of Clonidine." Physiologisches Institute, der Freie Universitat, Berlin, April, 1979.
- "Cardiovascular Regulation by the Nucleus Tractus Solitarii: Studies with Yohimbine Diastereoisomers." Department of Pharmacology, Vanderbilt University, April, 1981.
- "Enkephalins: Putative Central Regulators of the Cardiovascular System." Department of Pharmacology, Medical University of South Carolina, September, 1981.
- "Hypothalamic Paraventricular Nucleus: Neurotransmitters and Cardiovascular Regulation." Dept. of Anatomy. University of Rochester Medical School, March, 1985.
- "Hypothalamic Paraventricular Nucleus: Neurotransmitters and Cardiovascular Function." Dept. of Pharmacology, Texas College of Osteopathic Medicine, June, 1985.
- "Spontaneously Hypertensive and Wistar-Kyoto rats: A model system for analysis of cocaine pharmacodynamics". Platform Address, Southeastern Pharmacology Society meeting, 1990.
- "Excitatory Amino Acids and Cocaine." Dept. Anatomy and Cell Biology. University of Cincinnati Medical School, 1994.
- "Stimulatory Drugs of Abuse and the Glutamate Receptors". Tougaloo College Natural Science Colloquia Series. March 11, 1996.
- "Psychomotor Stimulant Toxicity: Role of Glutamate Receptors". Jackson State University NIMH-COR 1997 Colloquium, March 29, 1997.
- "A Muse of Fire: Fire Ant Research", Biotech Initiative Symposium for Southwest Mississippi, September 3, 2008, Bogue Chitto.

#### **Research Symposia:**

- Symposium Organizer and Speaker: Neurobiology and cardiovascular disease: Cellular mechanisms to therapeutic interventions. Presented at the Mississippi Academy of Sciences Meetings. February, 1986. Title of presentation: Hypothalamic regulation of autonomic function.
- Symposium Organizer and Speaker: Cocaine: Contemporary Issues in Research, Testing and Abuse. Presented at the Mississippi Academy of Sciences Meetings. February, 1987. Title of presentation: Circulatory effects of cocaine administration.
- Symposium Organizer and Speaker: Excitatory amino acid systems: A new era in modification of central cardiovascular neurotransmission. Presented at the 1992 FASEB meetings, Anaheim, CA. Title of presentation: Peripheral cardiovascular consequences of paraventricular hypothalamic excitotoxin administration.

#### **Research Workshops:**

- Ethical Implications of Genetic Research; D. G. DeGraw, R. W. Rockhold, Mississippi Academy of Sciences Meeting, February 27, 1998.
- Developing Simulation Sessions with ISD (Instructional System Design) and "ADDIE". Murray, B., Lerant, A., Bates, J., Orledge, J., Holder, M.G., Rockhold, R.W. (2017). 17<sup>th</sup> International Meeting on Simulation in Healthcare (IMSH 2017). January 31<sup>th</sup>, 2017.

#### **Research Grant Review Committee Service:**

Southern Regional Review Board, American Heart Association, 1990 – 1992

Ad hoc review of Mississippi IDEA (Institutional Development Award program, sponsored by NIH) proposals, 1993

Study Section, NIGMS ARRA P30 review, July 28-29, 2009

### **Educational Activities**

#### **Continuing Educational Training:**

Second Workshop of the Teaching of Pharmacology to Medical Students; San Diego, CA; 1995. Third Workshop of the Teaching of Pharmacology to Medical Students; Sea Island, GA; 1998.

- Options in Health Science Education; February 8 13, 1998; University of New Mexico; Albuquerque, NM.
- CurrMIT Medical Curriculum Management Workshop; Association of American Medical Colleges, February 24-25, 2002, Washington, DC.
- Participant, Arena IACUC 101; November 2003, Nashville, TN
- Participant, NBME Question Writing Workshop, UMC, January, 2004
- Participant, "Building Bridges to Cultural Proficiency, August 26-27, 2004 Multicultural sensitivity training provided by VISIONS, Inc., University, Mississippi
- Invitee, "A 2020 Vision of Faculty Development Across the Medical Education Continuum", Baylor College of Medicine, Houston, TX, Feb. 26-28, 2010
- Participant, Team-based Learning Collaborative, 2010 Meeting, New Orleans, LA, Mar. 3-5, 2010
- Elected Member, Academy of Pharmacology Educators, American Society of Pharmacology and Experimental Therapeutics, April, 2011
- Certificate (Statement of Accomplishment); "Instructional Methods in Health Professions Education", MOOC; Coursera/Michigan State University; November 7, 2013
- Certificate of Mastery Mobile Learning Mastery Series; Sloan Consortium, September 6-November 9, 2013
- Certificate of Completion; Teaching with Simulation: An Instructor Course Certification Program; Pennsylvania State University Milton S. Hershey Medical Center, Hershey, PA, March 31-April 4, 2014.

### **Mobile Device Application Reviewer:**

AAMC Content Reviewer in the Happtique Health App Certification Program (HACP); 7-1-2013-

#### **Teaching and Learning Activities:**

### **Teaching Honors and Awards:**

Outstanding Contribution to Science Award; 1996; Mississippi Academy of Sciences

- Phil Hardin Foundation Award for Innovative Uses of Computer Technology; 1997
- All Star Professor 2001-2002, Carl G. Evers, M. D. Society, UMMC
- Department of Pharmacology-Basic Sciences Department of the Year, 2001-2002, Carl G. Evers, M. D. Society, UMMC (Course Coordinator, RW Rockhold)
- Pre-Clinical Professor of the Year, UMMC School of Medicine, 2001-2002
- Thomas M. (Peter) Blake, M.D. Academy of Teaching Excellence, UMMC School of Medicine, 2003-present
- Norman C. Nelson Order, Inaugural class, 2004, UMMC School of Medicine
- Faculty Role Model Award, 2008, Minority Access, Inc.
- Fred Brown College Teacher of the Year Award. Mississippi Science Teachers Association, October, 2009
- Leader in Diversity, Black History Month, The Board of Trustees of State Institutions of Higher Learning, February, 2011

Governor's University Partnership Award – *Base Pair*, Mississippi Association of Partners in Education, May, 2013

Trailblazer Teaching Award, UMMC School of Medicine, 2018

Inspiring Programs in STEM Award, "Base Pair", INSIGHT Into Diversity magazine, July, 2019

### **Invited Education Presentations:**

- *"Base Pair*: Facilitating the system." Rockhold, R. and Ivey, K. Presented at the 1996 Howard Hughes Medical Institute Precollege Program Directors' meeting, Chevy Chase, Maryland, 1996.
- "Base Pair: A Biomedical Research Mentoring Program". Tougaloo College Faculty Symposium on Mentoring, April 12, 2002.
- "Pharmacology for Pediatricians What's New and Approved". Mississippi Chapter, American Association of Pediatrics, Vicksburg, MS, May 17, 2002.
- Television Chef on "Mid-Day Mississippi", WLBT Television, Jackson, Mississippi. Topic: Chicken and Smoked Walnut Salad, July 13, 2005.
- "Effective Teaching Techniques and Strategies in STEM Areas", Alliance for Graduate Education in Mississippi (AGEM) - Preparing Future Faculty Retreat, November 11, 2005.
- "Academic Service, Leadership, and Mentoring", Alliance for Graduate Education in Mississippi (AGEM) Preparing Future Faculty Retreat, November 11, 2005.
- Invited expert commentator-AHA press release "MP3 player headphones may throw off cardiac devices", WLBT-TV, November 10, 2008.
- "Closing the Loop: Better Student Outcomes Through Effective Goals and Objectives", UMMC School of Medicine Course Director's Retreat, January 28, 2009.
- "The Muse of Fire: Simple Insect Lab Activities for the Classroom", Mississippi Science Teachers Association Annual Meeting, Jackson, MS, October 25, 2010.
- "Inter-Professional Education (IPE): Synchronous, Asynchronous, Clinical Practice, Simulation Across Disciplines, Across Universities," Plenary. Schorn M (moderator), Black E, Davidson H, Wu A, Rockhold R. International Association of Medical Science Educators, Nashville, TN. June 8, 2014.
- "5 Keys Preparing the Superior Learner", Co-Lin Community College Science Quest, April 5, 2018.
- "5 Pearls Surviving the Fire Hose!", Co-Lin Community College Science Quest, April 5, 2018.

#### **Education Symposia:**

- Symposium Organizer and Speaker: Rural health professional training: Imperatives for Mississippi. J. Miss. Acad. Sci. 54: 81, 2009. Title of presentation: The Professional Portal Track: Another pathway to rural practice.
- Symposium Organizer and Speaker: DR-HELP: Rural physician pipelines and the Delta Regional Initiative. J. Miss. Acad. Sci. 56: 2011. Title of presentation: Professional Portal Program: Postbaccalaureate Training to Advance Rural Health Care.

#### **Education Workshops:**

- First National Conference on Capacity Building in Minority Health, Moderator and Presenter, May 3-5, 2000.
- Rockhold, R.W. Base Pair: Biomedical Research Mentorship Drives Educational Excellence. Presented at the First Annual Minority Access National Conference, Washington, D. C., September 16, 2000.
- Black E, Davidson H, Pfeifle A, Rockhold R, Schorn M. "Role of the Basic Scientist in Inter-Professional Education." Full day workshop. International Association of Medical Science Educators, Nashville, TN, June 7, 2014.
- Health Academies Training Jackson Public Schools, Moderator and Presenter; July 30-31, 2015; July 28-29, 2016; August 3, 2017; September 13, 2018; October 22 and November 19, 2019.

#### **Education Grant Review Committee Service:**

Review Panel, Howard Hughes Medical Institute, Precollege Science Education Initiative for Science Museums and Related Informal Science Education Institutions, 2000

Review Panel, Mississippi Department of Education, Mathematics and Science Partnerships Program, Jan. 9-10, 2006

Special Emphasis Panel, NIH-OD SEPA ZRG1 CBJ55R, 09/29/16-9/30/16

Special Emphasis Panel/Scientific Review Group National Cancer Institute Youth Enjoy Science (YES) Research Education Program 2017/10 ZCA1 GRB-I (O1) S, 6/21/17

Special Emphasis Panel NIGMS (SEPA) ZRG1 CBJ55R, 01/31/18 to 02/02/18.

Special Emphasis Panel NIGMS (SEPA) ZRG1 CBJ56R, 11/5/18 to 11/06/18.

Special Emphasis Panel NIGMS (SEPA) ZRG1 CBJ56R, 10/28/19 to 10/29/19.

Special Emphasis Panel NIGMS (SEPA) ZRG1 CBJ56R, To Be Held - 10/19/2020 to 10/21/2020.

### **Research Supervisory Functions:**

#### Visiting Faculty:

 Abram Dunbar, Ph.D.; Alcorn State University. Participant in Hypertension Training Program, NIH Grant No. 5T35 HL07392-07, Summer quarters, 1984, 1985, 1986
 Asoka Srinivasan, Ph.D.; Tougaloo College, 1993 - 1997

#### **Post-doctoral Fellows:**

Yoshihisa Ishizuka, Ph.D., 1987 -1989 Tianshu Zhang, M.D., 1989 -1994 T. Inada, M.D. 1989-1991 T. Nakai, Ph.D., 1998-1999

#### Medical Residents (Research rotations):

Toni Tubb, M.D, UMMC Emergency Medicine Division Resident, 1993
Robert Corkern, M.D., UMMC Emergency Medicine Division Resident, 1994
Misty Laughlin, M.D., UMMC Emergency Medicine Division Resident, 1994
Lynn DeRouen, M.D., UMMC Emergency Medicine Division Resident, 1994
B. Rustin McAlister, M.D., UMMC Emergency Medicine Division Resident, 1994
Brett Boes, M.D., UMMC Emergency Medicine Division Resident, 1996
Beverly Davidson, M.D., UMMC Dept. Otolaryngology Resident, 2001
Kurt Childress, M.D., UMMC Dept. Otolaryngology Resident, 2001

#### **Graduate Students:**

#### Graduate Advisor and Major Professor:

Changbae Jin, Ph.D., 1984-1990 Cory G. Acuff, Ph.D., 1989-1995 Niansen Liu, Ph.D., 1996-1998 LaShondra Powell, M.S., (Jackson State University) 1999–2001 Somchai Sinchaisuk, Ph.D., 2000–2002 Steven Commiskey, M.D., 2000-2003 George Howell, Ph.D., 2004-2007 Melissa Griggs (Parker), M.S., 2005-2006 Shemeka Hamlin Palmer, Ph.D., 2009-2012

### **Graduate Committee Member:**

Marland Dulaney, Ph.D., 1984 -1987 Chuen Mao Yang, Ph.D., 1985 - 1987 Caroline Burton, Ph.D., 1985 - 1989 William Paulsen (Physiology and Biophysics), Ph.D., 1987 - 1988 H. M. Yang (Physiology and Biophysics), Ph.D., 1987 - 1989

Hsiu-Ming Huang Saunders, 1987 - 1990 Peter Horan, Ph.D., 1987 - 1990 Paul Saunders, Ph.D. 1987 - 1991 Zhi Yu Jian, Ph.D., 1987 - 1991 Ming Huang (Physiology and Biophysics), Ph.D, 1987 - 1992 Lufei Hu (Physiology and Biophysics), Ph.D., 1993 - 1994 Satin Sawant, Ph.D., 1993 - 1995 Cathy Winter, Ph.D., 1993 - 1995 Leslie Chaney, Ph.D., 1997-1998 Hong Zhu, Ph.D., 1997-1999 Weilie Zhang, Ph.D., 2000 Buyean Lee, Ph.D., 1998-2000 Lir-Wan Fan, Ph.D., 2000-2002 Nuannoi Chudapongse, Ph.D., 2003 Seong-youl Kim, Ph.D., 2004 Lu-Tai Tien, Ph.D., 2004 Prashant Mandela, Ph.D., 2007 Amy Sullivan, Ph.D., (2007) Attila Hernedy, Ph.D., (2010) Stephen Crowder, Ph.D., (2016) Susan J. Daniel, Ph.D., (2013) Gay Henson, Ph.D., (2013) Dongmei Cui, Ph.D., (2015) Yolanda Griffin, Ph.D., (2017) Christa O'Hana San Luis, M.D., (UMMC, Master of Science in Clinical Investigation program, 2016-) Tarif Bakdash, M.D., (Johns Hopkins University, Master of Education in the Health Professions program, 2017-)

#### Medical Students (Summer research training):

Ellen S. Carver (1985-1987; Dean's Medical Summer Research Fellowship, 1986) Scott Story (1987) Scott Miasch (1989) Rachel Surrett (Dean's Medical Summer Research Fellowship, 1990) Michael Byrne (Dean's Medical Summer Research Fellowship, 1991) Scott Sprabery (Dean's Medical Summer Research Fellowship, 1992) James Gray Bennett (Dean's Medical Summer Research Fellowship, 1995) Steven Commiskey (Dean's Medical Summer Research Fellowship, 1999)

#### **Undergraduate Students:**

James Gray Bennett; ASPET Undergraduate Fellowship, 1992 (Accepted UMMC Medical School Class of 1998)
Jason McCool; ASPET Undergraduate Fellowship, 1994
Erica Woodall (Millsaps College, 1998-1999)
Jonathan Shook, 1999 (Matriculated UMMC Medical School, 1999)
Anna Lister; ASPET Undergraduate Fellowship, 2000
Matthew VanLandingham, Neuroscience Summer Scholar, 2005
Deandria Magee, Tougaloo College, Mississippi Functional Genomics Network REO student, summer, 2006
Ryan Veach, Neuroscience Summer Scholar, 2006
Kirk Monaghan, Summer, 2007

## **Minority Research Training Programs:**

Brenda Middleton, High School Teacher, 1993

Chris Harvey, High School Student, 1994, 1995 (Accepted UMMC Medical School class of 2002)
Richard West, High School Teacher, 1995
Annette Davis, High School Teacher, 1996
Lori Hill, High School Student, 1996
Richard West, High School Teacher, 1997
Crystal Berry, High School Student, 1997
Renee Harris, Byram Middle School Teacher, 1998, 2000
Eric Burton, Tougaloo College Student, 1997-1998
Dominick Coleman, Tougaloo College MARC Student, 2001
Jemekia Holloway, Tougaloo College MARC Student, 2002
Colibri Jenkins, Tougaloo College MARC Student, 2002

#### **Others:**

Tetsuo Kado; Japanese Pharmaceutical Company Employee, 1992
George Haymans; High School Junior, *Base Pair*, 1996
Laura Eichhorn; High School student, 1994, 1995, 1996; Westinghouse High School Science Contest Semi-finalist, 1998
Allison McClure, High School Senior, *Base Pair*, 1998-1999
Ashley Ringer, High School Student, 2000
David Yokum, High School Student, 2000-2002
Mandy Wallace, High School Student, 2002
Brandon Lineberry, High School Student, 2002
Jordan Butler, High School Student, *Base Pair*, 2002-2004

### Summer Teacher Research Training – Supported by Base Pair Program:

Theophilus King, 1994 Mary Spann, 1995 Isa Mahmod, 1996 Jennifer Lipscomb, 1997 Helen Farrish-Aseeri, 1997, 1999 Karen Redhead, 1998, 2000 Sherry Baker, 1999 Willie Ford, 1999, 2000 Richard West, 1999 Karen Evans, 2000, 2004 John Groat, 2000 Windey Walker, 2000 Cindy Cook, 2000-2005 Susan A. Bender, 2001-2005 Elizabeth Henderson, 2001 Annette Lawson, 2001 Angela Reiken, 2001 Jennifer Pittman, 2001 Gwin Wyatt, 2001 Charlotte Boyd, 2002 Shannon Clark, 2002 Jeff Stokes, 2002, 2004, 2005 Greg Wilson, 2002 Consuella Davis, 2003 Tabitha Hardy, 2003 Miriam Ighoavodka, 2003 Linder Luse, 2003

Chyrissee Moore, 2003 Janice Kennebrew, 2004 Ben Lundy, 2004, 2005 Jamey Hemphill, 2004, 2005 Sandra Hardy, 2004 Lorie Lundy, 2005 Lorenzo Clarke, 2005 Chris Daniels, 2005 Bettye Cook, 2005

- Additional teachers trained each summer in the *Base Pair* Summer Research Institute each summer from 2006-2013; 6-20 teachers each summer.
- Additional teachers trained under the NIGMS STEMI teacher professional development award from 2016-present; 6-24 teachers each year.

#### Summer Teacher Research Training – Supported by NSF KHEP Program (2001):

Laura Alexander Veleria Brown Cora Chaffin Annie Derrick Helen Farrish Willie Ford Charles Gentry Corrinda Govan Sandra Hardy Jammy Hemphill Janice Kennebrew Angela Leach Annie McClure Windey Walker

## **Teaching Experience:**

#### **Initial Graduate Experience:**

Pharmacology dog laboratory teaching 2<sup>nd</sup> year medical students, 1976, 1978, University of Tennessee Center for the Health Sciences (UTCHS).

### **Professional Students Taught:**

**Course Coordinator Experience:** Introduction to Pharmacology and Therapeutics (PH620/722); Co-Coordinator, 2<sup>nd</sup> vear Medical School/Graduate Course, UMMC, 1994 – 2005 Introduction to Remedial Pharmacology and Therapeutics, 2<sup>nd</sup> year Medical School Course, UMMC, 1986 - 1995 Special Topics in Pharmacology and Toxicology (Dental students), PH796, 1986-87, 1995, 1998 Renal - Cardiovascular Pharmacology (Graduate students), PH784, 1993 Cardiovascular Pharmacology, PH784, 1999 – present (taught alternate years) Orientation to Pharmacological Research (1st year Graduate students), PH703, 2002-2009 Academic Excellence (Graduate students), PPT100, 2004-present Analysis of Biomedical Information (Graduate students), CHS618, 2004-2006 Study Skills Practicum (Graduate students), CHS618, 2007-present Pharmacological Considerations in Health Practice, CHS 624/724, 2006, 2007 Special Topics, CHS 790, 2009 Academic Year 2010-2011 CHS 790, Professional Portal Track Capstone Course (Rural Health Policy)

PHARM 790, Special Topics in Pharmacology and Toxicology, Fourth Year Medical School Elective Course, spring semester, 2010 CHS 730, Critical Thinking in the Health Sciences, fall semester, 2010 Academic Year 2011-2012 CHS 790, Professional Portal Program Capstone Course (Rural Health Policy) CHS 704, Research Methods 1 Academic Year 2012-2013 CHS 790, Professional Portal Program Capstone Course (Rural Health Policy) Academic Year 2014-present PPP 790, Professional Portal Program Lecture Experience: Cardiovascular physiology – Pharmacy students (1981 – 1982; UTCHS). Medical Neuroscience II (CONJ628) - Medical (M-2) students (2017 - present). Analgesics Opioids **Opioid** analgesics Non-opioid analgesics Migraine medications Drugs of abuse Pharmacology and Toxicology -Medical (M-2) students (1984 – present; compiled, not all taught each year; UMMC) Acute management of myocardial infarction Anticoagulants Antidepressants Antihypertensives Drug abuse Drug interactions Heart failure Introduction to CNS pharmacology Drug management of acute myocardial infarction Migraine Drugs Nonsteroidal antiinflammatory drugs **Opioid** analgesics **Regulatory** peptides Parkinson's Disease therapeutics Simulation interactive exercise - myocardial arrhythmias Psychomotor stimulants Sedative-hypnotics Vasoactive peptides Dental (D-2) students (1984 – present; UMMC; Includes Fundamental Pharmacology with dental students and Graduate School Masters students) Antidepressants Anxiolytic and hypnotic drugs Antihypertensive agents Heart failure therapies Opioid agonists and antagonists Drugs of abuse Nursing students Endocrine pharmacology (1984, UMMC) Biobehavioral Theories for Psychiatric Mental Health Nurse Practitioner (2004) Graduate students (UMMC, 1984 –2018, individual hours and courses not listed)

# Lecture Hours:

S:
2010-2011:
Introduction to Pharmacology and Therapeutics (PH620/722) – 13 hours
Dental Pharmacology (DENT626) – 2 hours
Mechanisms of Drug Action (PHARM723) – 6 hours
2011-2012:
Introduction to Pharmacology and Therapeutics (PH620/722) – 14 hours
Dental Pharmacology (DENT626) – 1 hour
Mechanisms of Drug Action (PHARM723) – 6 hours
Professional Skills for Graduate Students and Post-docs (ID714) – 12 hours
Medical Conditions $(OT317) - 2$ hours
2012-2013:
Introduction to Pharmacology and Therapeutics (PH620/722) – 13 hours
Dental Pharmacology (DENT626) – 1 hour
Mechanisms of Drug Action (PHARM723) – 6 hours
Professional Skills for Graduate Students and Post-docs (ID714) – 6 hours
2013-2014:
Introduction to Pharmacology and Therapeutics (PH620/722) – 15 hours
Dental Pharmacology (DENT626) – 4 hours
Professional Skills for Graduate Students and Post-docs (ID714) – 9 hours
2014-2015:
Introduction to Pharmacology and Therapeutics (PH620/722) – 23 hours Dental Pharmacology (DENT626) – 5 hours
Professional Skills for Graduate Students and Post-docs (ID714) – 9 hours
2015-2016:
Introduction to Pharmacology and Therapeutics (PH620/722) – 6 hours
Dental Pharmacology (DENT626) – 5 hours
Professional Skills for Graduate Students and Post-docs (ID714) – 6 hours
2016-2017:
Introduction to Pharmacology and Therapeutics (PH620/722) – 17 hours
Dental Pharmacology (DENT626) – 5 hours
Professional Skills for Graduate Students and Post-docs (ID714) – 6 hours
2017-2018:
Medical Pharmacology (PH620 – 12 hours
Medical Neuroscience II (CONJ628) – 6 hours
Dental Pharmacology (DENT626) – 8 hours
Professional Skills for Graduate Students and Post-docs (ID714) – 6 hours
2018-2019:
Medical Pharmacology (PH620 – 14 hours
Medical Neuroscience II (CONJ628) – 5 hours
Dental Pharmacology/Fundamental Pharmacology (DENT626/PHARM726) – 7
hours
Professional Portal Program (PPP790) – 15 hours
2019-2020
Course Director
Professional Portal Program (PPP790) – 15 hours
Lecturer
Medical Pharmacology (PH620) – 12 hours: Autonomic Simulation; Autonomic
Small Groups; Heart Failure; Myocardial Infarction; Arrhythmia Simulation;
Cardiovascular Small Groups; Migraine Treatment Medical Neuroscience II (CON1628) — Conves course online — 7 hours
Medical Neuroscience II (CONJ628) – Canvas course online – 7 hours Dental Pharmacology/Fundamental Pharmacology (DENT626/PHARM726) – 8
hours
10013

Instruction to M3 students on "Scrubbing, Gowning and Gloving for the Operating Room" – 12 hours

## 2020-2021

Course Director

Professional Portal Program (PPP790) - 15 hours

Lecturer

Medical Pharmacology (PH620) – 12 hours: Autonomic Simulation; Autonomic Small Groups; Heart Failure; Myocardial Infarction; Arrhythmia Simulation; Cardiovascular Small Groups

Medical Neuroscience II (CONJ628) - Canvas course online - 7 hours

Dental Pharmacology/Fundamental Pharmacology (DENT626/PHARM726) – 8 hours

Instruction to M3 students on "Scrubbing, Gowning and Gloving for the Operating Room" – 12 hours

2021-2022