Adrian M. Corbett

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EDUCATION

University of Miami, Fl

Ph.D., Pharmacology, 1984

Texas A&M University at Galveston

B.S., Marine Biology, 1978

EMPLOYMENT HISTORY

Wright State University	
Associate Professor, NCBP Department (several name changes)	1996- present
Assistant Professor, Physiology & Biophysics	1989-1996
University of Maryland	
Research Associate, Biochemistry Dept.	1987-1989
Postdoctoral Fellow, Physiology Dept.	1984-1987
University of Miami, Florida	
Predoctoral Trainee, Pharmacology Dept.	1979-1984

PUBLICATIONS (All peer-reviewed)

- 1. Dixon, D., A. Corbett and D.H. Haynes. (1982) Effect of ATP/ADP/phosphate potential on the maximal steady-state uptake of Ca²⁺ by skeletal sarcoplasmic reticulum. J. Bioenerg. and Biomem. 14(2): 87-96.
- **2. Corbett, A.M.**, A.H. Caswell, N.R. Brandt and J.P. Brunschwig. (1985) Determinants of triad junction reformation: Identification and isolation of an endogenous promotor for junction reformation in skeletal muscle. **J. Membrane Biol.** 86: 267-276.
- **3.** Caswell, A.H. and **A.M. Corbett** (1985) Interaction of glyceraldehyde-3-phosphate dehydrogenase with isolated microsomal subfractions of skeletal muscle. **J. Biol. Chem.** 260: 6892-6898.
- **4. Corbett, A.M.** and B.K. Krueger. (1989) Polypeptide neurotoxins modify gating and apparent single channel conductance of veratridine-activated sodium channels in planar lipid bilayers. **J. Membrane Biol.** 110: 199-207.
- **5. Corbett, A.M.** and B.K. Krueger. (1990) Isolation of two saxitoxin-sensitive sodium channel subtypes from rat brain with distinct biochemical and functional properties. **J. Membrane Biol.** 117: 163-176.
- **6. Corbett, A.M.**, J.H. Bian, J. Wade and M.F. Schneider. (1992) Depolarization-induced Ca²⁺ release measured with FURA-2 in isolated triads from rabbit skeletal muscle. **J. Membrane Biol.** 128:165-179.
- **7. Corbett, A.M.** and M. Vander Klok. 1994. Sodium channel subtypes in the rat display functional differences in the presence of veratridine. **Biochem. Biophys. Res. Comm.** 199: 1305-1312. (R)
- **8.** Jarnot, M. and **A.M. Corbett**.1995. High titer antibody to mammalian neuronal sodium channels produces sustained channel block. **Brain Res.** 674: 159-162
- **9.** Kramer, J.W. and **A.M. Corbett**. 1995. The voltage dependence of depolarization-induced calcium release in isolated skeletal muscle triads. **J. Membrane Biol.** 144:217-230
- 10. Ritucci, N.A. and A.M. Corbett. 1995. The effect of magnesium and ATP on depolarization induced

- calcium release in isolated skeletal muscle triads. American Journal of Physiology (Cell Physiology vol 38) 269:C85-C95.
- 11. Kramer, J.W. and A.M. Corbett. 1996. Comparison of calcium loading and retention in isolated skeletal muscle triads and terminal cisternae. American J. Physiology (Cell Physiology vol. 39) 270:C1602-1610.
- **12.** Castaneda-Castellanos, D.R, Cano, M., Wang, J.K.T., **Corbett, A.**, Benson, D., Blanck, J.J., Thornhill, W.B., and Recio-Pinto, E. 2000. CNS voltage-dependent Na+ channel expression and distribution in an undifferentiated and differentiated CNS cell line. **Brain Res.** 866: 281-285.
- **13.** Wheatly, M.G., Hubbard, M.G. and **Corbett, A.M.** 2001. Physiological characterization of the Na+Ca2+ exchanger (NCX) in hepatopancreatic basolateral membrane vesicles isolated from the freshwater crayfish *Procambarus clarkii*. **Comparative Biochemistry and Physiology** Part A 131: 343-361.
- **14.** Kramer, J.W., Ferguson, D.G. and **A.M. Corbett**. 2003. Enrichment of Triadic and Terminal Cisternae Vesicles from Rabbit Skeletal Muscle. J. Membrane Biol. 195 (1): 9-20.
- **15.** Jarnot, M. and **A.M. Corbett**. 2006. Immunolocalization of NaV1.2 Channel Subtypes in Rat and Cat Brain and Spinal Cord with High Affinity Antibodies. Brain Research 1107: 1-12.
- **16.** McGowin, A.E., Truong, T.M, **Corbett, A.M**., Bagley, D.A., Ehrhart, L.M., Bresette, M.J., Weeges, S.T. and Clark, Dave. 2011. Genetic barcoding of marine leeches (Ozobranchus spp.) from Florida sea turtles and their divergence in host specifity. **Molecular Ecology Resources.** 11(2), 271-278.
- **17. Corbett, A.**, McGowin, A., Sieber, S., Flannery, T., and Sibbitt, B. 2012. A method for reliable voluntary oral administration of a fixed dosage (mg/kg) of chronic daily medication to rats. **Laboratory Animals** 46 (4): 318-324
- **18.** Corbett, A.M., Sieber, S., Wyatt, N., Lizzi, J., Flannery, T., Sibbitt, B. and Sanghvi, S. 2015. Increasing Neurogenesis with Fluoxetine, Simvastatin and Ascorbic Acid Leads to Functional Recovery in Ischemic Stroke. **Recent Patents on Drug Delivery and Formulation.** 9: 158-166.
- **19.** Balch, MHH, Ragas, M, Wright, D, Hensley, A, Reynolds, K, Kerr, B, and Corbett, AM. 2015. Appropriate Timing of Fluoxetine and Statin Delivery Reduces the Risk of Secondary Bleeding in Ischemic Stroke Rats. **Journal of Neurology and Neuroscience.** 6: 29-36.

ABSTRACTS

- 1. Corbett, A.M., A.H. Caswell, and J.P. Brunschwig. (1984) Identification and isolation of an endogenous promotor for the formation of the triad junction in skeletal muscle. **Biophys. J.** 45: 318a.
- **2. Corbett, A.M.**, A.H. Caswell, R.M. Kawamoto, F. Lugo-Gutierrez, and J.P. Brunschwig. (1985) Interaction of glyceraldehyde phosphate dehydrogenase and aldolase with microsomal subfractions of skeletal muscle. **Biophys. J.** 47:450a.
- **3. Corbett, A.M.**, W.C. Zinkand, and B.K. Krueger. (1986) Saxitoxin (STX) and calcium interactions with purified sodium channels reconstituted in planar lipid bilayers. Presented at the Neuroscience Meeting in Washington, D.C., November 10, 1986.
- **4. Corbett, A.M.,** W.C. Zinkand, and B.K. Krueger. (1987) Activation of single neuronal sodium channels by veratridine and polypeptide neurotoxin in planar lipid bilayers. **Biophys. J.** 51: 435a.
- **5. Corbett, A.M.** and B.K. Krueger. (1988) Purification and characterization of two sodium channels from rat brain with different alpha subunits and distinct functional properties. **Biophys. J.** 53: 15a
- **6. Corbett, A.M.**, J.H. Bian, J.B. Wade and M.F. Schneider. (1990) Depolarization-induced Ca²⁺ release measured with Fura-2 in isolated triads from rabbit skeletal muscle. **Biophys. J.** 57: 344a.
- **7.** Kramer, J.W. and **A.M. Corbett**. (1992) The voltage dependence of depolarization-induced calcium release in isolated skeletal muscle triads. **Biophys. J.** 61: A24

- **8.** Jarnot, M. and **A.M. Corbett**. (1992) High-titer antibody to rat brain sodium channel produced in chickens. **Biophys. J.** 61: A110
- **9.** Vander Klok, M. and **A.M. Corbett**. (1992) Single channel analysis of veratridine-activated sodium channels from cardiac ventricular sarcolemma. **Biophys. J.** 61: A112
- **10.** Kramer, J.W. and **A.M. Corbett** (1993) Calibration of transverse tubule membrane potential using the potential-sensitive dye DiSC3(5). **Biophys. J.** 64: A36
- **11.** Jarnot, M., F.J. Alvarez, D.A. Harrington, R.E.W. Fyffe and **A.M. Corbett**. Antibodies to rat brain sodium channel subtype III purified from the eggs of immunized hens. Society for Neuroscience Abstract, Washington, D.C. Presented November, 1993.
- **12.** Kramer, J.W., N.A. Ritucci and **A.M. Corbett**. (1994) Purification of triads through alterations of skeletal muscle homogenization and differential centrifugation. **Biophys. J.** 66:A86
- **13.** Ferguson, D.G., S. Lewis Carl and **A.M. Corbett**. (1994) Morphological characterization of a triad fraction highly enriched in ryanodine- and DHP-binding activity. **Biophys. J.** 66:A86
- **14.** Ritucci, N.A. and **A.M. Corbett**. (1994) The effect of magnesium on depolarization-induced calcium release in isolated skeletal muscle triads. **Biophys. J.** 66:A85
- **15.** Jarnot, M., M. Vander Klok and **A.M. Corbett**. (1994) Production of anti-peptide antibodies in rabbits and chickens: A comparative study. **Biophys. J.** 66:A28.
- **16.** Starr, S.E., M. Jarnot, **A.M. Corbett** and <u>J.H. Caldwell</u>. 1995. Sodium channel distribution in skeletal muscle. **J. Investigative Medicine** 43: 118A.
- **17.** Kramer, J.W. and **A.M. Corbett**. 1995. The kinetics and effect of calcium loading on depolarization-induced calcium release in isolated triads. **Biophys. J.** 68:A416
- **18.** Jarnot, M., F. Alvarez, R.E.W. Fyffe and **A.M. Corbett**. 1995 Immunolocalization of RII sodium channel in rat brain with high affinity antibodies. **Biophys. J.** 68: A153
- **19.** Jarnot, M., T. Miller and **A.M. Corbett**. 1995. Sodium channel subtypes in rat brain display differential susceptibility to proteolysis. **Biophys. J.** 68: A153
- **20.** Jarnot, M., and **A.M. Corbett**. 1995. Characterization of anti-peptide antibodies to rat brain RII sodium channel. **Biophys. J.** 68: A152
- **21. Corbett, A.M.** 1996. Purification of RI, RII and RIII sodium channel subtypes from adult rat brain with immunoaffinity columns. **Biophys. J.** 70:A239.
- **22. Corbett, A.M.** and M. Jarnot. 1996. Contrasting the localization of RI and RIII sodium channel subtypes in adult rat brain. **Biophys. J.** 70: A408
- **23.** Kramer, J.W. and **A.M Corbett**. 1996. Determination of releasable calcium in isolated rabbit triads/terminal cisternae. **Biophys. J.** 70:A285
- **24.** Corbett, A.M. 1997. High affinity antibodies to sodium channel β -1 and β -2 subunits demonstrate variability in subunit composition in the central nervous system. **Biophys. J.** 74: 297
- **25.** Atherton, A.J., A.J.Gillies, A.M. Corbett & G.W. Arbuthnott. The relationship between voltage-gated sodium channel inactivation firing frequency in the Subthalamic Nucleus projection neuron. The University of Edinburgh Centre for Neuroscience, PVS, Summerhall, EDINBURGH, EH9 1QH. and Department of Biochemistry, Wright State University. Presented at ENS meeting, Berlin, 1998.
- **26.** Castaneda-Castellanos, D.R., M Cano, A Corbett, J Wang, WB Thornhill and E. Recio-Pinto. Voltage dependent Na+ channels (VdNac) in a central neuronal brain cell line. Hospital for Special Surgery, Anesthesiology, NY NY 10021. Physiology and Biophysics, Mount Sinai School of Medicine, NY, NY,

- 10029. Dept. of Biochemistry, Wright State University. Abstract for Neuroscience Society National meeting, 1998.
- **27.** Corbett, A.M., S. Knisley, and F. Porter. 1999. Differences in glutamate receptor subtype density in the solitary tract nucleus of SHR versus WKY rat. Biophysical J. 76: A84.
- **28.** Truong, T., McGowin, A. and A. Corbett. 2010. Identification of Sea Turtle Leaches using DNA barcoding. WSU Research Forum and American Chemical Society meeting (Dayton, Ohio).
- **29.** Corbett, A., Sieber, S., Wyatt, N., Lizzi, J, Flannery, T., Sibbitt, B., Sanghvi, S. An effective Delayed Treatment for Ischemic Stroke uses Fluoxetine and Simvastatin. Presented at International Stroke Conference, Honolulu, Hawaii (2013).
- **30.** Ragas, M., Balch, M., Hensley, A., Reynolds, K., Wright, D. and Corbett, Adrian M. 2015. Stroke Physical Rehabilitation: Impact on Motor Functional Recovery in Drug-Treated versus Vehicle-Treated Rats. Presented at International Stroke Conference, Nashville, TN (2015).

DISSERTATION

Isolation and Identification of an Endogenous Promotor for the Reformation of the Triad Junction in Skeletal Muscle. Directed by Anthony Caswell (Ph.D), University of Miami, Fl 1989

PATENTS

U.S. Patent 9,254,281 B2. Composition and Method for the Treatment of Neurodegeneration. PI: Adrian M. Corbett. This patent describes an oral drug combination treatment for ischemic stroke or other forms of brain injury, which may be initiated up to 20-26 hours after the brain injury and, with daily treatment, result in significant motor function improvement.

US Patent Application WRU934MA. Submitted August 2016. Treatment of Neurodegeneration disorders and Pain. PI: Adrian M. Corbett. This application describes both an oral drug combination and an intravenous drug combination for treatment of brain injury, specifically reperfusion injury to the CNS, neurodegenerative diseases and chronic pain.

GRANTS

External Awards

- **1.** ABSA/Griffin Fund Grant. PI: Dawn Wooley, Co-PI: Adrian Corbett. *Shedding of virus from animals infected with viral vectors*. \$20,000. 1/2010-12/2013.
- 2. NIH Research Supplement for Underrepresented Minority Undergraduate Students (Student: Tahira Miller, Wilberforce University). "Sodium Channel Subtypes". \$5,380 total costs. Principal Investigator: Adrian M. Corbett. June 1994-April 1996
- NIH Small Instrumentation Grant (08-S5NS31312A-01) "Purchase of Confocal Microscope Attachment". \$25,323 total costs. Principal Investigator: Adrian M. Corbett. September 1993.
- **4.** NIH FIRST Award (1 R29 NS28377-01), "Sodium Channel Subtypes", \$512,000 total costs. Principal Investigator: Adrian M. Corbett. April 1990 1995. One year no-cost extension granted.
- **5.** American Heart Association Grant, Ohio Affiliate (MV-90-02), "Characterization of Cardiac Sodium Channels at the Single Channel Level", \$39,595 total costs. Principal Investigator: Adrian M. Corbett. July 1990 1992.

Internal Awards

- 1. BSOM Translational Grant: Two years beginning July 2014. Co-PIs: Adrian M. Corbett, John Terry, M.D., Jeffrey Gearhart, Ph.D. (AFRL) Title: iTRAQ Proteomics to Identify Predictive Biomarkers of Stroke after Subarachnoid Hemorrhage. \$43,582
- 2. Women in Science Giving Circle (\$5,000) for one year, beginning October 2012. Pl: Adrian M. Corbett
- 3. Leader Consortium ADVANCE mini-grant. Adrian Corbett, PI; *Enhancement of Neurogenesis* as a Potential Stroke Treatment. \$5,000. 1/2010-12/2010
- 4. Genomics Center Seed Grant: (13,500) Calendar year 2008-2009. PI: Adrian M. Corbett. *Genetic Analysis of Cortical Brain Tissue following Stroke with Delayed Treatments*
- 5. School of Medicine Seed Grant: (\$9,985) for a one year period in 2008. PI: Adrian M. Corbett; Co-PI: Dawn Wooley. Role of Adult Brain Neurogenesis in Focal Ischemic Stroke: Can it be Manipulated to Aid in Functional Recovery?
- 6. School of Medicine Seed Grant. (\$7,500) for a one year period in 1997. PI: Adrian M. Corbett Sodium Channel Beta Subunit Antibodies
- 7. Research Challenge Award. (\$11,331) for a one year period in 1993 PI: Adrian M. Corbett. *Excitation-Contraction Coupling in Skeletal Muscle*
- 8. Research Challenge Award. (\$17,000) for a two year period beginning in 1990. PI: Adrian M. Corbett. *Sodium Channel Subtypes*.

Pending Grants_

1. PI: A.M. Corbett. Evaluating Changes in Alzheimer's Disease and a Possible Drug Treatment with Genomics. Co-Is: Jeff Gearhart, Michael Markey, Audrey McGowin, Andrea Hoffman, Nadja Grobe, Smita Krishnamurthy. Direct Costs: \$2,063,077. Total Costs: \$2,778,112. Five year grant, with a start date of July 2016.

HONORS AND AWARDS

- Invited Speaker to 1994 Gordon Conference on Excitation-Contraction Coupling. Tilton, New Hampshire
- 2. Invited Speaker to the Third Conference of the Membrane Biophysics Subgroup of the Biophysical Society. Beuford, North Carolina, 1993.
- 3. University representative to the Dayton Chapter Board of the Cystic Fibrosis Foundation. Member from February 1990-1996.
- 4. Grass Foundation Scholarship (for course at Hopkins Marine Station on Molecular Biology of Ion Channels). July-August 1989

GRANT REVIEW APPOINTMENTS

NATIONAL

- 1. Reviewer for Fulbright Senior Scholar Awards (Biochemistry Division), CIES, 1997-1999
- NIH Minority Biomedical Research Support (MBRS) Physiology review Panel (ad hoc member);
 Bethesda, Md., February 1995
- 3. NIH Minority Biomedical Research Support (MBRS) review panel (ad hoc member); Bethesda, Md; October 1992
- 4. Member of NIH Site Visit Team for an Minority Biomedical Research Support project grant; San Juan, Puerto Rico; September 1991

STATE/REGIONAL

- 1. American Heart Association (Ohio Valley Affiliate) review panel 4A; Tampa, FI; April 2007
- 2. American Heart Association (Ohio Valley Affiliate) review panel 4A; Orlando, FI; April 2006
- 3. American Heart Association (Ohio Valley Affiliate) review panel 4A; Orlando, FI; April 2005
- 4. American Heart Association (Ohio Affiliate) review panel (ad hoc member); Columbus, Ohio; March 1995
- 5. American Heart Association (Ohio Affiliate) review panel (ad hoc member); Columbus, Ohio; March 1994
- 6. American Heart Association (Ohio Affiliate) review panel (ad hoc member); Columbus, Ohio; March 1993
- 7. Reviewer for Yankee Ingenuity Initiative (Connecticut Department of Higher Education) 1991.
- 8. Reviewer for Yankee Ingenuity Initiative (Connecticut Department of Higher Education) 1990.

THESIS/DISSERTATIONS SUPERVISED

- 1. Sayali Ravindra Dharmadhikari. Master of Science (Thesis Director). 2015-2016. Thesis Title: Examining Infarct Sizes in Female Sprague Dawley Rats in Response to Delayed Post-stroke Pharmacological Treatment Combination with Physical Rehabilitation.
- 2. Deviprianka Nagarajan. Master of Science (Thesis Director) 2015-2016. Thesis Title: Correlating Innate Functional Recovery from Either with Stem Cell Proliferation and/or Limb Rehabilitation.
- **3.** Ankita Anil Patel. **Master of Science (Thesis Director).** 2015 2106. Thesis Title: Examination of a Post-Stroke Drug Treatment for its Effect on Blood Brain Barrier Permeability and Gene Expression Changes in the Peri-Infarct Region.
- **4.** Amber Hensley. **Master of Science (Thesis Director)** 2013 2016. Thesis Title: The Use of Doublecortin to Quantify the Effects of Pharmacological Treatment on Neurogenesis and Functional Recovery after Stroke.
- **5.** Maria Helen Balch. **Master of Science (Thesis Director)** 2013-2014. Thesis Title: Effects of Delayed Pharmacological Treatment and Limb Rehabilitation on Infarct Size and Functional Recovery after Stroke.
- 6. Moner Ragas. **BMS Program Ph.D student (Dissertation Director)** 2012-2016. Dissertation Title: Refining a Post-stroke Pharmacological and Physical Treatment to Reduce Infarct Volume or Improve Functional Recovery, Using Gene Expression Changes in the Peri-Infarct Region to Examine Potential Mechanisms in Male and Female Rats.
- 7. Danny Wright. Master of Science (Thesis Director) 2012 present
- 8. Kenney Reynolds. Master of Science (Thesis Director) 2012- present
- **9.** Saagar Kamlesh Sanghvi. Graduated April 2013. **Master of Science (Thesis Director)**; Thesis Title: Effect of Rat Strain and Stereotactic Coordinates on Infarct Volume.
- 10. Kelly Rebecca Leach. Graduated 2012. **Master of Science Committee Chair (Thesis Director)**Thesis Title: The Use of Forelimb Asymmetry Functional Tests to Determine Motor Recovery with Various Drug Treatments Following Endothelin-Induced Stroke.
- **11.** Kailyn Marie Hagerty. Graduated 2012 **Master of Science Committee Chair (Thesis Director)**Thesis Title: Comparing Two Different Statins in a Delayed Pharmacological Treatment for Ischemic Stroke.
- **12.** Nick Ritucci, Department of Physiology & Biophysics, Wright State University. **Master of Science Committee Chair (Thesis Director)**; Graduated 1994. Thesis Title: "Partial Purification of Triad Vesicles from a Mixture of Triad/Terminal Cisternae Vesicles".
- 13. Jim Kramer, Biomedical Sciences Program, Wright State University. **Doctor of Philosophy Committee Chair (Dissertation Director)**; Graduated December 1995. Thesis title:

- "Characterization of Depolarization -Induced Calcium Release from Isolated Skeletal Muscle Triads."
- 14. Miranda Jarnot, Biomedical Sciences Program, Wright State University. **Doctor of Philosophy Committee Co-Chair (Dissertation Director)**; Graduated 1995. Thesis title: "Production and Characterization of Sodium Channel Subtype Antibodies for the Localization of RII and RIII Subtypes in the Adult Rat Brain."

THESIS/DISSERTATION COMMITTEE MEMBER

- 1. April Daubenspeck, Doctor of Philosophy Committee member. 2016 present
- **2.** Tiffany Flannery, Biological Sciences Masters program. **Thesis Committee member.** 2012-present.
- **3.** Christopher Ruark. Biomedical Sciences Program. **Doctor of Philosophy Committee member.** 2012 2014. Graduated.
- **4.** Elaine Merrill; Biomedical Sciences Program. **Doctor of Philosophy Committee member** 2006-2012 Graduated 2012. Dissertation Title: A Mechanism-Based Model to Describe the Kinetics and Magnitude of Benzodiazepine Pharmacoresistance during Status Epilepticus.
- 5. Dierdre Mahle; Biomedical Sciences Program. **Doctor of Philosophy Committee member.** 2006-2012. Graduated 2012. Dissertation Title: 'Omic' Evaluation of the Region Specific Changes Induced by Non-Cholinergic Diisopropylfluorophosphate (DFP) Exposure in Fischer 344 Rat Brain.
- **6.** Swathee Chinnasamy; Masters of Science in Microbiology. Graduated 2011. Thesis title: Developing a Quantitative PCR Assay for Detecting Viral Vector Shedding From Animals.
- 7. Petronilla Fruasaha. Masters Student. **Thesis Committee member**. Graduated 2008. Thesis title: Regulation of Calcium entry pathways in Jurkat T cells
- 8. Nathan Weir; Biomedical Sciences Program (MD/PhD). **Doctor of Philosophy Committee member** 2009-2011. Had to step down when I couldn't meet during expected defense.
- **9.** Zeenat Jamal; Masters Student. **Thesis Committee member**. Graduated 2008. Thesis Title Sarco-endoplasmic reticulum Calcium ATPase (SERCA) mRNA and protein expression in cardiac muscle of *Procambarus clarkia*
- **10.** Joe Bartoszek; Biomedical Sciences Program; **Doctor of Philosophy Committee member.** Graduated 2009. Dissertation Title: Genetic Differentiation in Ambystomatid Salamders Across a Fragmented Landscape.
- 11. Melinda Hubbard; Biological Sciences; **Thesis Committee member**, Wright State University. Master's Degree. Graduated 2000. Physiological characterization of the Na2/Ca2+ exchanger in Ca2+-transporting epithelia isolated from the freshwater crayfish procambarus clarkii.
- **12.** Michael Kent; Biomedical Sciences Program, Wright State University. **Doctor of Philosophy Committee member.** Graduated 2002. Thesis title: "Antiphospholipid Antibodies and Neurological Disorders: Monoclonal and Naturally Occurring Patient Antibodies Bind Central Nervous System.
- **13.** Nick Ritucci; Biomedical Sciences Program, Wright State University. **Doctor of Philosophy Committee member**. Graduated 1997. Thesis title: "The Comparison of Intercellular pH regulation between individual neurons from chemosensitive and non-chemosensitive areas of the medulla oblongata in a brain slice preparation."
- **14.** Danita Eatman, Biomedical Sciences Program, Wright State University. **Doctor of Philosophy Committee member**; Graduated 1996. Thesis title: "Regulation of Muscarinic Acetylcholine Receptor Expression in Cultured Embryonic Chick Cardiomyocytes by FGF-2 and TGF-β1."
- **15.** Stephanie Carl-Lewis; Department of Physiology and Biophysics, University of Cincinnati. **Doctor of Philosophy Committee member**. Graduated 1996.

- **16.** Susan Waltz, Biomedical Sciences Program, Wright State University. **Doctor of Philosophy Committee member**. Graduated 1994. Thesis title: "Analysis of the Human c-myc DNA Replication Origin."
- **17.** Michael Gallagher, Department of Molecular Genetics, Biochemistry and Microbiology; University of Cincinnati; **Doctor of Philosophy Committee member**; Graduated 1993. Thesis title: "Determination of the Functional Roles of Unique Cationic Residues in the Activity of the Cardiotonic Polypeptide Anthopleurin B from the Sea Anemone *Anthopleura xanthogrammica*."
- **18.** Vickie Roettger, Biomedical Sciences Program, Wright State University, **Doctor of Philosophy Committee member**; Graduated 1991. Thesis title: "Studies on the Role of the Extracellular Microenvironment in the Cat Cuneate Nucleus."

CLASSES TAUGHT

SMD 552	Renal	~100 students	team taught	2009-2015
BMS 875	Neuroscience & Physiology	limit 20 students	team taught	2009-present
SMD 543	Cardiovascular	~100 students	team taught	1994- 2015
BMS 805	Intercellular Communication	limit 20 students	team taught	1993-present
P&B 808	Neuroscience Seminar	limit 10 students		1994-present
P&B 776	Ion Channels	limit 20 students	team taught	1994-2013
Taugl	nt every other year			
PHY 2450	Concepts in Physics for Early C	hildhood Ed. ~3	30 students	1997-2001
P&B 705	Cell Physiology	limit 20 students	team taught	1990-1995

UNIVERSITY SERVICE

UNIVERISTY COMMITTEES

Scientific Misconduct Investigation Committee Chair 2016

- Investigated charges of plagiarism against a faculty member by NSF in regards to a grant application.
- Conducted Interviews with faculty member and graduate student
- Analyzed other grants and papers for any evidence of plagiarism
- Filed final report in May of 2016.

Promotion and Tenure Appeals Committee Chair and Co-Chair 2014

- Justin Gibb (COLA)
- Judy Ribak (CONH)

5 year Review of CONH Dean member 2016

Lab Animal Care & Use Committee Chair 2009-2011

- This is a University Compliance Committee, which must adhere to Federal guidelines for animal research.
- Oversaw complete revision and update of the IACUC (Institutional Animal Care and Use Committee) Policies and Procedures

- Surveyed faculty and then began complete revision of Animal Use Protocol Form, moving toward a modular form. Put this project on hold until InfoEd was ready for final revisions into its software, but basic modular forms were approved by complete committee.
- Reviewed software provider presentations and then helped choose InfoEd as the software provider for electronic protocol and amendment review in the IACUC.
- Suggested and implemented a modification of review style, which highlighted problems with the protocols, allowing us to review more protocols in less time.
- Participated in new committee member training.

Lab Animal Care & Use Committee

2006-2008

- Reviewed one to two new protocols per monthly meeting
- Participated in all protocol investigations
- Participated in new member training
- Acted as reporter on Semi-Annual Inspection teams

Lab Animal Care & Use Committee

Member

Vice-Chair

2003-2005

Reviewed one new protocol per meetings and participated in all Semi-Annual Inspections.

Strategic Planning Committee

Member

2002-2003

• Gathered input from constituencies represented and worked to constitute that input into a 5 year Strategic Plan for Wright State University.

Provost Search Committee

Member

2002-2003

- Participated in Search that ultimately brought Dr. David Hopkins to WSU as Provost. This search involved telephone conference calls, airport interviews, and then final on-campus interviews of top candidates.
- Hosted the Group Faculty interviews with each candidate.

Health Care Task Force

Co-Chair

2001-2002

- Surveyed Health Care Benefits in all public Universities in State
- Determined what health care coverage Wright State Univ. was lacking and how co-pays and coverage aligned between Universities
- Added Vision Care to Health Care Benefits and recommended modifications to some levels of coverage and co-pay

COSM Dean Search

Member

2001-2002

- Participated in Search that resulted in Dr. Michele Wheatly's appointment as the COSM Dean position
- This was an external search, which had over 50 applicants

Radiation Safety Committee

Member

2001-present

• This is a University compliance committee that meets quarterly and has yearly internal inspections and external inspections.

Chemical Hygiene Committee

Member

2001-2006

• Worked out basic Policy and Procedures to be used in handling Chemicals

Faculty Governance Committee

Member

2000-2003

- Reviewed language proposed for all departmental bylaws. Suggested changes to the language to make the criteria clearer and more objective where possible.
- Generally it took close to 3-10 revisions on each set of bylaws before they received committee approval.
- At the end of the this period, any bylaws that had not received faculty approval as well as
 Dean and Faculty Governance Committee approval, the Faculty Governance Committee
 worked on to make the final department bylaws, with faculty interests represented by
 the Union representatives.

• Since the bylaws would be part of the union contract, we had to remove extraneous sentiments (department mission statement), that should change as the department changes, limiting language in the bylaws to the essentials covered by the contract.

University Budget Review

Member

1997-1999

Reviewed proposed budgets and made recommendations for yearly raises, if any

Building and Grounds

Member

1992-1993

- Reviewed proposed changes to the roads and Master Plan for the University
- Reviewed proposal for a parking garage

Faculty Affairs

Member (appointed)

1994-1995

Reviewed proposal from Nursing Dean to add Clinical Faculty to the Program

COLLEGE AND DEPARTMENT COMMITTEES

COSM Faculty Development Committee

Member

2015-2016

Voted on P&T files and professional development leave proposals

NCBP Promotion & Tenure Committee

Chair

2016 - present

- Had to take over committee when previous chair violated bylaws and contract and then resigned.
- Re-wrote cumulative progress towards tenure letters with committee input.

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NCBP Advisory Committee

Chair

2013-present

- Tasked with developing learning objectives for the Graduate Programs in Anatomy and in Neuroscience and Physiology, as well as developing the evaluation rubrics which will be used to evaluate success in meeting these learning objectives.
- Give suggestions for any new courses in the department or curricular changes

NCBP Faculty Search

Member

2013

Reviewed all candidate files and suggested 5 candidates for campus interviews.

PharmD/Therapeutics Search

Member

2013

- Reviewed all candidate files and suggested 3 candidates for campus interviews
- Suggested one candidate for hire.

Renal Steering Comm

Chair

2012-2013

• Changed course to approximately 50% active learning beginning in 2014.

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BMS Curriculum Comm.	Member		2011-2013
Depart. Chair 5 year Review	Member		2009-2010
BMS Nominating Comm	Member		2005-2007
BMS Curriculum Comm.	Member		2006-2007
Physiology P&T Comm	Chair		2004-2010

- Performed recommendations to Chair for yearly annual evaluations
- Performed yearly cumulative progress towards tenure evaluations for probationary faculty
- Arranged yearly peer review of probationary faculty teaching
- Performed peer review of a tenured faculty member's teaching when he received bad comments from the medical school classes. Recommended changes to his teaching and said would re-evaluate in 2 years. Following the re-evaluation, when it became clear that the faculty member had not responded to suggested changes in his teaching, recommended that the Chair remove him from all medical school teaching. Almost all of the faculty on the committee took on the burden of taking over his medical school teaching: I personally took over his Renal teaching.

 Assisted a probationary faculty member in putting together his P&T package, sought external letters, and wrote committee recommendations for the candidate. Volunteered to be on the COSM P&T committee that year, so I could see his promotion package through the COSM committee, answering any questions about his work.

COSM P&T Comm Member 2003-2006

- Fought some battles to ensure that if a faculty member went up under the department bylaws, those bylaws were followed when the college committee made its decision.
- Fought similar battles to ensure that if a faculty member went up under the department's
 past practice, that the past practice was examined and adhered to. In these instances, it
 was inappropriate to try to force bylaws criteria to be applied for that individual.

Cardiovascular Steering Comm	Member	1998-present
BMS Admissions Comm	Member	1992-1993
Graduate Studies (COSM)	Member	1990-1995
Graduate Studies (COSM)	Chair	1991-1992

• Started a system where we shared files through routing and got comments back from email, enabling every member of the committee to have a vote on items.

LCME Research Review (SOM) Member 1993-1994

COURSE DIRECTORSHIP (TEAM TAUGHT COURSES)

Renal (2nd year Medical); approximately 100 students; completely revised content and approach to teaching this year, increasing the active learning content in the course.

Intercellular Communication (Graduate Course for BMS and Dept); 9-16 students each year. We have weekly quizzes (55% of grade), a scientific paper to summarize and critique (11% of grade), a neuro-immune presentation that the students do at the end of course, indicating how stress can lead to exacerbation of various disease states (14% of grade), and a cumulative final exam (20%).

Ion Channels (Graduate Course for BMS and Dept): 1-5 students every other year. Weekly homework. I created this course in the 1990's. Another Faculty member was assigned course directorship in 2013.

Neuroscience & Physiology: Co-Director with Kathrin Engisch. Kathrin Engisch directs the course now. I just helped to get it set up. Graduate Course.

WSU-AAUP SERVICE

Chief Negotiator Assigned 2015-2017

Ran pre-bargaining surveys on workload. Negotiated Memorandums of Understanding.

Bargaining Council Member 2010-2011

- Wrote some proposed contract language for bargaining council approval
- Organized some letter writing and petition signing for State House Bill 5 (later Issue 2)

WSU-AAUP Executive Council President 2002-May 2003

- Oversaw revision of the Chapter's Constitution and Bylaws
- Began The Right Flier newsletter about Chapter activities

Negotiating Team Member 2002-June 2002

- Wrote some proposed changes to the contract
- Took notes on computer throughout negotiations
- Took over part of negotiations when we were talking about Intellectual Property Rights, and returns to faculty from external funding

WSU-AAUP Executive Council

Treasurer

2000-2001

- Took all of the Chapter records since we became a collective bargaining unit and put them into Quick Books
- Re-audited all years based on the Quick Books records and re-filed some previous tax returns with corrections
- Helped hire a part-time Secretary for the Chapter, Connie Jacobs
- Oversaw all Chapter Finances (over \$100,000), including correcting Payroll deductions, correcting any problems with National AAUP dues assessment, obtaining a better return on the Chapter's money with some Certificates of Deposit (right before the market crashed), paying payroll and applying correct deductions.
- Presented for Chapter approval the previous year's expenditures and the proposed budget for the upcoming year.
- Surveyed all faculty for Fair-Share objectors, and arranged for return of all national dues or chapter dues that were NOT related to collective bargaining activities

Negotiating Team

Member

1999 (Jan –Nov)

- Wrote approximately half of the Union's proposed contract language
- Took notes on computer through negotiations
- Worked on positions for mediator
- Researched and worked on positions for Fact-Finder
- Found out that other University unions had Fair Share, which enabled our Chapter to get Fair Share from the Fact-Finder.
- Did Market research on salaries throughout state public universities.

WSU-AAUP Executive Council

President

1998-2000

- Was the founding Chapter President for the Collective Bargaining Unit
- Participated in SERB hearings about the definition of the bargaining unit members
- Wrote the original Chapter Constitution and Bylaws
- Organized the first elections for the Chapter and for the Bargaining Council
- Oversaw the first Bargaining Council, which debated and revised each proposed contract article.

UNIVERSITY OUTREACH ACTIVITIES

I participated in various university outreach programs which sought to increase minority interest in science. When a name is listed, I provided guidance for a summer long research project, culminating in a research paper as well as formal presentation of the results of that project (orally and in poster form). These presentations were judged by faculty participants and awards given to the best presentations.

Horizons in Medicine (Minority High School Student)	Regina Crawford	Summer 1991
Summer Research Program (Minority H.S. Student)	Mikaa Bayless	Summer 1992
Horizons in Medicine (Minority H.S. Students)	Panel Member	Summer 1993

Panel on Healthcare Careers			
Summer Research Program (Minority H.S. Student)	Presentation	Summer 1993	
Summer Research Program (Minority H.S. Student)	Presentation	Summer 1994	
Research Supplement for Minority Undergrad Students (NIH)	Tahira Miller	Summer 1994	
STREAMS Program	Mikaa Bayless	Summer 1995	
Student Apprenticeship Program	Veronica Fleming	Summer 1995	
Student Apprenticeship Program	Ashley Bobo	Summer 1997	
Student Apprenticeship Program	Sarah Knisely	Summer 1998	
Student Apprenticeship Program	Erin Armour	Summer 1999	
 Student won an award for her research. She had cerebral palsy. 			
Student Apprenticeship Program	Nicole Human	Summer 2000	
• Created introductory 3-day lab experience for student to get them quickly up to speed for their			
laboratory research over the summer.			
Student Apprenticeship Program	Lab for members	Summer 2001	
 This used a hands-on laboratory course I created for students and teachers, lasting 3 days 			
Student Apprenticeship Program Phuong Cao Summer 2002			
 Student won an award for her research; also taught 3-day lab overview course 			
Student Apprenticeship Program	Tomovi Roberson	Summer 2003	