James Culvin Morris, Ph.D.

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Eukaryotic Pathogens Innovation Center
Department of Genetics and Biochemistry
Clemson University
249 Life Science Building
190 Collins Street
Clemson SC 29634
(864) 656-0293
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imorri2@clemson.edu(email)

EDUCATION

Fellow, 1997-2003, Johns Hopkins University School of Medicine, Baltimore MD Molecular and Biochemical Parasitology

Ph.D., 1997, University of Georgia, Athens GA Cellular Biology

M.S., 1993, University of Georgia, Athens GA Entomology

B. S., 1990, The College of William and Mary, Williamsburg VA Biology with Minor, Anthropology

PROFESSIONAL EXPERIENCE

March 2015: Faculty Scholar, Clemson University School of Health Research.

<u>January 2013:</u> **Founding Member**, Eukaryotic Pathogens Innovation Center (EPIC), Clemson University

August 2012 - Present: **Professor**, Department of Genetics and Biochemistry, Clemson University

<u>August 2009-August 2012:</u> **Associate Professor with Tenure**, Department of Genetics and Biochemistry, Clemson University

<u>January 2003-August 2009:</u> **Assistant Professor**, Department of Genetics and Biochemistry, Clemson University

<u>July 1997-January 2003:</u> **Postdoctoral Fellow**, Laboratory of Dr. Paul T. Englund, Department of Biological Chemistry, Johns Hopkins University School of Medicine

<u>August 1992-July 1997:</u> **Research Assistant**, Laboratory of Dr. Kojo Mensa-Wilmot, Department of Cellular Biology, University of Georgia

<u>September 1990-August 1992:</u> **Research Assistant**, Laboratory of Dr. Michael Adang, Department of Entomology, University of Georgia

<u>May 1990-September 1990:</u> **Research Intern**, Laboratory of Dr. John Robbins, Chief, Laboratory of Development and Molecular Immunity, National Institutes of Health

AWARDS AND HONORS

Awarded Clemson University College of Science Outstanding Research Award (2017)

Nominated for College of AFLS Advising Award of Excellence (2015)

Awarded Honorable Mention, Council on Undergraduate Research Biology Mentor Award (2014)

Nominated for ODK Robert L. Morlan Faculty Secretary Award (2012)

Awarded "Faculty Spotlight" by the Clemson University Honors College (2011)

Nominated for College of AFLS Teacher of the Year (2005, 2008, 2009, 2011, 2015)

Awarded Clemson University National Scholars Program Award of Distinction (2005)

Elected Full Member of Sigma Xi (March 2004)

Elected Member, Clemson University Circle of Omicron Delta Kappa (2004)

Awarded Outstanding Oral Presentation, Molecular Parasitology Meeting (2002)

Awarded Outstanding Oral Presentation, Molecular Parasitology Meeting (1999)

Awarded First Place, President's Student Paper Presentation, Entomol. Soc. of America (1991)

PUBLICATIONS

- 1. Soe, TN, Wu, Y, Tun MW, Wu X, Ruan, Y, Win AYN, Nyunt, MH, Mon, NCN, Han, KT, Aye, KM Morris, J, Pincan, S, Yang, Z, Kyaw, MP, Cui, L. Genetic diversity of *Plasmodium falciparum* populations in southeast and western Myanmar, (2017) Accepted *Parasites & Vectors*.
- 2. Gordhan, HM, Milanes, JE, Qiu, Y, Patrick, SL, Golden, JE, Christensen, KA, **Morris, JC**, Whitehead, DC. A targeted delivery strategy for the development of potent trypanocides. (2017) Accepted ChemComm.
- 3. Lin, S, Voyton, C, Morris, MT, Ackroyd, CP, **Morris, JC**, Christensen, KA. pH regulation in glycosomes of procyclic form *Trypanosoma brucei*. (2017) *Journal of Biological Chemistry* **292**, 7795-7805.
- 4. Hackler, A, Patrick, SL, Kahney, EW, Flaherty, DP, Sharlow, ER, **Morris, JC**, Golden, JE. Antiparasitic lethality of sulfonamidebenzamides in kinetoplastids. (2017) *Bioorganic & Medicinal Chemistry Letters* **27**, 755-758.
- 5. Gordhan, HM, Patrick, SL, Swasy, MI, Hackler, AL, Anayee, M, Golden, JE, **Morris, JC**, Whitehead, D. Evaluation of substituted ebselen derivatives as potential trypanocidal agents, (2017) *Bioorganic & Medicinal Chemistry Letters* **27**, 537-541.
- 6. Qiu, Y, Patrick, SL, and **Morris JC**. Invited Review: Nutrient sensing in kinetoplastid parasites (2016). *Advances in Medicine and Biology. Vol 105*, 177-202.
- 7. Davis, MI, Patrick, SL, Blanding, WM, Dwivedi, V, Suryadi, J, Golden, JE, Coussens, NP, Lee, OW, Shen, M, Boxer, MB, Hall, MD, Sharlow, ER, Drew, ME, **Morris JC**. Identification of novel *Plasmodium falciparum* hexokinase inhibitors with anti-parasitic activity, (2016) *Antimicrobial Agents and Chemotherapy* **60**, 6023-6033.
- 8. Hu, Y, Zhou, G, Ruan, Y, Lee, M-C, Xu, X, Deng, S, Bai, Y, Zhang, J, **Morris, J**, Liu, H, Wang, Y, Fan, Q, Li, P, Wu, Y, Yang, Z, Yan, G, Cui, L. Seasonal dynamics and micro-geographical spatial heterogeneity of malaria along the China-Myanmar border, (2016) *Acta Tropica* **157**, 12-19.
- 9. Liu, H, Feng, G, Zeng, W, Li, X, Bai, Y, Deng, S, Ruan, Y, **Morris, J**, Li, S, Yang, Z, Cuih, L. A more appropriate white blood cell count for estimating malaria parasite density in *Plasmodium*

- vivax patients in northeastern Myanmar. (2016) Acta Tropica 156, 152-156.
- 10. Hackler, AL, Yijian, Q, Patrick, SL, Lee, SH, Acosta-Serano, A, **Morris, JC**. Characterization of an African trypanosome mutant refractory to lectin-induced death. (2015) *Biochemistry and Biophysical Reports* **4**, 33-38.
- 11. Harris, MT, Mitchell, WG, **Morris, JC**. Targeting protozoan parasite metabolism: glycolytic enzymes in the therapeutic crosshairs. (2014) *Current Medicinal Chemistry* **21**, 1668-78.
- 12. Joice, AC, Harris, MT, Kahney, EK, Dodson, HC, Maselli, AG, Whitehead, DC, and **Morris JC.** Exploring the mode of action of ebselen in *Trypanosoma brucei* hexokinase inhibition. (2013) *The International Journal for Parasitology: Drugs and Drug Resistance* **3**, 154-160. (*Selected as "Editor's Choice")
- 13. Bauer, ST, **Morris, JC**, Morris, MT. Environmentally-regulated glycosome protein composition in the African trypanosome. (2013) *Eukaryotic Cell* **12**, 1072-1079.
- 14. Harris, MT, Walker, DM, Drew, ME, Mitchell, WG, Dao, K, Schroeder, CE, Flaherty, DP, Weiner, WS, Golden JE, and Morris, JC. Interrogating a Hexokinase-Selected Small Molecule Library for Inhibitors of *Plasmodium falciparum* Hexokinase. (2013) *Antimicrobial Agents and Chemotherapy* 57, 3731-3737.
- 15. Lin, S, Morris, MT, Ackroyd, CP, **Morris, JC**, Christensen, KA. Peptide targeted delivery of pH sensor for quantitative measurements of intraglycosomal pH in live *Trypanosoma brucei*. (2013) *Biochemistry* **52**, 3629-3637.
- Joice, AC, Lyda, TL, Sayce, AC, Verplaetse, E, Morris, MT, Michels, PAM, Robinson, DR,
 Morris, JC. Extra-glycosomal localization of *Trypanosoma brucei* Hexokinase 2. (2012) *The International Journal for Parasitology* 42,401-409. (*Selected as "Editor's Choice")
- 17. Sharlow E, Golden JE, Dodson H, Morris M, Hesser M, Lyda T, Leimgruber S, Schroeder CE, Flaherty DP, Weiner WS, Simpson D, Lazo JS, Aubé J, **Morris JC**. <u>Identification of inhibitors of Trypanosoma brucei hexokinases</u>. (2010, updated 2011) *Probe Report from the NIH Molecular Libraries Program*. National Center for Biotechnology Information.
- 18. Dodson, HC, Morris MT, Morris JC. <u>Glycerol-3-phosphate alters *Trypanosoma brucei* hexokinase activity in response to environmental change</u>. (2011) *The Journal of Biological Chemistry* **286**, 33150-33157.
- 19. Coley, A, Dodson, H, Morris, M, Morris JC. <u>Glycolysis in the African Trypanosome: Targeting Enzymes and their Subcellular Compartments for Therapeutic Development.</u> (2011) *Molecular Biology International*, doi:10.4061/2011/123702.
- 20. Hesser, MW, **Morris**, **JC**, Gibbons, JR. <u>Advances in recombinant gonadotropin production for use in bovine superovulation.</u> (2011) *Reproduction in Domestic Animals*, doi: 10.1111/j.1439-0531.2011.01767.x.
- 21. Dodson, HC, Lyda TL, Chambers, JW, Morris MT, Christensen, KA, **Morris JC**. Quercetin, a <u>fluorescent bioflavanoid, inhibits *Trypanosoma brucei* hexokinase 1.</u> (2011) *Experimental Parasitology* **127**, 423-8.

- 22. Sharlow, ER, Lyda, TA, Dodson, HC, Mustata, G, Morris, MT, Leimgruber, SS, Lee, K-H, Kashiwada, Y, Close, D, Lazo, JS, **Morris JC**. A target-based high throughput screen yields

 <u>Trypanosoma burcei</u> hexokinase small molecule inhibitors with antiparasitic activity. (2010) *PLoS Neglected Tropical Diseases* 4, e659.
- 23. Clemmens CS, Morris MT, Lyda TL, Acosta-Serrano, A, Morris JC. <u>Trypanosoma brucei AMP-activated kinase subunit homologs influence surface molecule expression.</u> (2009) Experimental Parasitology **123**, 250-7.
- 24. Chambers, JW, Kearns, M, Morris MT, Morris JC. <u>Assembly of heterohexameric trypanosome hexokinases reveals that hexokinase 2 is a regulable enzyme.</u> (2008) *The Journal of Biological Chemistry* **283**, 14963-70.
- 25. Wilson ME, Morris JC, Gibbons JR. Bioactive, bacterial-derived recombinant bovine follicle-stimulating hormone. (2008) *Reproduction, Fertility and Development* **21**(1) 246-247.
- 26. Wang, X, Beckham, T, **Morris, JC**, Chen, F, and Gangemi, JD. <u>Bioactivities of gossypol, 6-methoxygossypol, and 6,6'-dimethoxygossypol.</u> (2008) *The Journal of Agricultural and Food Chemistry* **56**, 4393-4398.
- 27. Chambers, JW, Fowler, ML, Morris MT, **Morris JC**. <u>The anti-trypanosomal agent lonidamine inhibits *Trypanosoma brucei* hexokinase 1. (2008) *Molecular and Biochemical Parasitology* **158**, 202-7.</u>
- 28. Chambers, JW, Morris, MT, Smith, KS and Morris, JC. Residues in an ATP binding domain influence sugar binding in a trypanosome hexokinase. (2008) *Biochem Biophys Res Comm* **365**, 420-5.
- 29. Selvapandiyan, A, Kumar, P, **Morris, JC**, Salisbury, JL, Wang, CC, and Hakhasi, HL. <u>Centrin1 is</u> required for organelle segregation and cytokinesis in *Trypanosoma brucei*. (2007) *Molecular Biology of the Cell* **18**, 3290-301
- 30. **Morris, JC**, Morris, MT, Lee, SY, Toole, WP, Seifert, CM, and Acosta-Serrano, A. Chapter 3 Reverse and forward genetics as practical approaches for post-genome studies. In: Barry, D., Mottram, J., McCulloch, R., Acosta-Serrano, A., eds. Trypanosomes -After the Genome. Horizon Bioscience, 2007. 49-70.
- 31. Morris, MT, DeBruin, C, Yang, Z, Chambers, JW, Smith, KS and **Morris, JC**. Activity of a second <u>Trypanosoma brucei</u> hexokinase is controlled by an 18 amino acid C-terminal tail. (2006) Eukaryotic Cell **5**, 2014-2023
- 32. Drew, ME, Motyka, SA, **Morris, JC**, Wang, Z, and Englund, PT. Inducible RNAi as a forward genetic tool in *Trypanosoma brucei*. In: Appasani, K, editor. RNA Interference: From Basic Science to Drug Development. Cambridge: Cambridge University Press. 2005. 247-256.
- 33. **Morris, JC,** Wang, Z, Motyka, SA, Drew, ME, and Englund, PT. An RNAi-based genomic library for forward genetics in the African trypanosome. In: Sohail, M, editor. Gene Silencing by RNA Interference: Technology and Application. Boco Raton: CRC Press LLC, 2004. 241-257.

- 34. Leal, S, Acosta-Serrano, A, **Morris, JC**. and Cross, GAM. <u>Transposon mutagenesis of Trypanosoma brucei identifies glycosylation mutants resistant to concanavalin A.</u> (2004) *The Journal of Biological Chemistry* **279**, 28979-28988. (*"Recommended" by *Faculty of 1000*.)
- 35. Drew ME*, **Morris**, **JC***, Wang, Z*, (*<u>All Contributed Equally</u>), Wells, L, and Englund, PT. <u>The adenosine analog tubercidin inhibits glycolysis in *Trypanosoma brucei* as revealed by an RNAi <u>library</u>. (2003) *The Journal of Biological Chemistry* **278**, 46596-46600.</u>
- 36. Wang, Z, Drew, ME, Morris, JC, and Englund, PT. <u>Asymmetrical division of the trypanosome's kinetoplast DNA network.</u> (2002) *The EMBO Journal* **21**, 4998-5005.
- 37. **Morris, JC***, Wang, Z*, Drew, ME*, (*<u>All Contributed Equally</u>), and Englund, PT. <u>Glycolysis modulates trypanosome glycoprotein expression as revealed by an RNAi library.</u> (2002) *The EMBO Journal* **21**, 4429-4438. (*Rated "Exceptional" by *Faculty of 1000*.)
- 38. Grams, J., **Morris, JC**, Drew, ME, Wang, Z, Englund, PT, and Hajduk, SL. <u>Identification of a mitochondrial RNA polymerase from *Trypanosoma brucei* using RNA interference analysis. (2002) *The Journal of Biological Chemistry* **277**, 16952-16959.</u>
- 39. Klingbeil, MM, Drew, ME, Liu, Y, **Morris, JC**, Motyka, SA, Saxowsky, TT, Wang, Z, and Englund PT. Unlocking the secrets of trypanosome kinetoplast DNA network replication. (2001) *Protist* **152**, 255-262.
- 40. **Morris**, **JC***, Wang, Z*, Drew, ME*, Paul, KS* (*<u>All Contributed Equally</u>), and Englund, PT. Inhibition of bloodstream form *Trypanosoma brucei* gene expression by RNA interference using the pZJM dual T7 vector. (2001) *Molecular and Biochemical Parasitology* **117(1)**, 111-113.
- 41. **Morris JC**, Drew, ME, Klingbeil, MM, Motyka, SA, Saxowsky, TT, Wang, Z, and Englund, PT. Replication of kinetoplast DNA: An update for the new millennium. (2001) *The International Journal for Parasitology* **31(5-6)**, 453-458.
- 42. Wang, Z*, **Morris, JC***, Drew, ME*, (*<u>All Contributed Equally</u>) and Englund, PT. <u>Inhibition of Trypanosoma brucei gene expression by RNA interference: A survey using an integratable vector with opposing T7 promoters</u>. (2000) *The Journal of Biological Chemistry* **275**, 40174-40179.
- 43. **Morris, JC**, Ping-Sheng, L, Zhai, Hai-Xiao, Shen, T-Y, and Mensa-Wilmot, K. <u>Inhibition of GPI phospholipase C from *Trypanosoma brucei* by fluoro-inositol dodecylphosphonates.</u> (1998) Biochemical and Biophysical Research Communications **244**, 873-876.
- 44. **Morris, JC** and Mensa-Wilmot, K. Role of 2,6-dideoxy-2,6-diamino-glucose in activation of an eukaryotic phospholipase C by aminoglycoside antibiotics. (1997) *The Journal of Biological Chemistry* **272**, 29554-29559.
- 45. **Morris**, **JC**, Ping-Sheng, L, Shen, T-Y, and Mensa-Wilmot, K. <u>Phosphatidylinositol</u> <u>phospholipase C is activate allosterically by the aminoglycoside G418: 2-Deoxy-2-Fluoro-Scyllo-Inositol-1*O*-Dodecylphosphonate and its analogs inhibit glycosylphosphatidylinositol <u>phospholipase C.</u> (1996) *The Journal of Biological Chemistry* **271**, 15468-15477.</u>

- 46. Hai-Xiao, Z, Ping-Sheng, L, **Morris**, **JC**, Mensa-Wilmot, K, and Shen, T-Y. Synthesis of 2-deoxy-2-fluorinated inositol-1-0-dodecylphosphonates as inhibitors of glycosyl phosphatidylinositol phospholipase C. (1995) *Tetrahedron Letters* **36**, 7403-7406.
- 47. Mensa-Wilmot, K, **Morris, JC**, Al-Qahtani, A, and Englund, PT. Purification and use of recombinant glycosylphosphatidylinositol phospholipase C in <u>Methods in Enzymology</u> (1995). **250**, 641-655.
- 48. **Morris, JC**, Ping-Sheng, L, Shen, T-Y, and Mensa-Wilmot, K. <u>Glycan requirements of glycosylphosphatidylinositol phospholipase C from *Trypanosoma brucei*: <u>Glucosaminylinositol derivatives inhibit phosphatidylinositol phospholipase C.</u> (1995) *The Journal of Biological Chemistry* **270**, 2517-2524.</u>
- 49. Mensa-Wilmot, K, LeBowitz, JH, Chang, K-P, Al-Qahtani, A, McGwire, BS, Tucker, S, and Morris JC. A GPI-negative phenotype in *Leishmania major* caused by GPI phospholipase C from *Trypanosoma brucei*: I. Implications for GPI-negative mammalian cells; II. Topography of two GPI pathways. (1994) *Brazilian J Med Biol Res* 27, 177-184.
- 50. Mensa-Wilmot, K, LeBowitz, JH, Chang, K-P, Al-Qahtani, A, McGwire, BS, Tucker, S, and **Morris JC**. A glycosylphosphatidylinositol (GPI)-negative phenotype produced In *Leishmania major* by GPI phospholipase C from *Trypanosoma brucei*: Topography of two GPI pathways. (1994) *Journal of Cell Biology* **124**, 935-947.

RESEARCH FUNDING HISTORY

- National Institutes of Health PI, "Identification of kinetoplastid parasite glucose uptake and subcellular distribution inhibitors as therapeutic leads" (1R21Al127575-01) (R21/33 R21/33 Phased Innovation Award Mechanism)
- 2. National Institutes of Health TI, "Glucose sensing and the African trypanosome" (1P20GM109094-01A1)
- 3. National Institutes of Health PI, "Probe identification by HTS for *Plasmodium falciparum* hexokinase" (1R03HD081723-01).
- 4. National Institutes of Health Co-PI, "Measuring pH and Glucose in *Trypanosoma brucei* Glycosomes" (1R21Al105656-01A1).
- 5. Clemson University PSA Experiment Station Competitive Proposal. PI, "Exploring a Selective Library of Known Hexokinase Interactive Molecules (SLHIM) for Human Glucokinases Activators and Inhibitors".
- 6. National Institutes of Health PI, "Nutrient sensing and hexokinases in *T. brucei*" (2 R15 Al075326-01A1).
- 7. National Institutes of Health PI, "Nutrient sensing and hexokinases in *T. brucei*" (3 R15 Al075326-01AS1).
- 8. National Institutes of Health PI, "Nutrient sensing and hexokinases in *T. brucei*" (1 R15 Al075326-01A1).
- 9. American Heart Association, Beginning Grant-in-Aide. PI, "Exploring RNAi in Trypanosoma cruzi".
- 10. Clemson University Research Investment Equipment Fund Program Award.
- 11. National Institutes of Health PI, "Inhibition of *T. brucei* hexokinases" (1 R03 MH082340-01).
- 12. Charles E. Culpeper Foundation Biomedical Pilot Initiative Grant PI "Use of an RNA Interference-based Genomic Library to identify Genes Required for Host-specific Surface Protein Expression in the African Trypanosome."

SERVICE IN SCIENCE

- 1. Temporary Member, ZRG1 IDM-V (12), Non-HIV Infectious Agent Detection/Diagnostics, Food Safety, Sterilization, Disinfection and Bioremediation, NIH Spring 2017, Summer 2017
- 2. Temporary Member, AREA Infectious Diseases and Microbiology Study Section (ZRG1 IDM-S (81) A), NIH Fall, 2016, Spring 2017
- 3. Panel Member for the US Army/ Army Medical Research and Material Command (2015)
- 4. Member, Scientific Advisory Committee, 3rd Annual Cell Biology of Eukaryotic Pathogens Meeting (supported by NIH and the ASCB)
- 5. Temporary Member, Pathogenic Eukaryotes Study Section (PTHE), NIH Fall 2014, Fall 2015, Spring 2016
- 6. Reviewer, Medical Research Council Proposals (United Kingdom) (2014)
- 7. Editorial Board Member, *Eukaryotic Cell* (until 2015, when Journal was incorporated into mBio)
- 8. Reviewer, Terry Fox Foundation Cancer Research Grant (2013)
- 9. Associate Editor Scientifica
- 10. Pickens County Health Science-Biomedical Advisory Committee
- 11. Reviewer, the Grant Agency of the Academy of Science of the Czech Republic (2008)
- 12. Associate Editor International Journal for Parasitology Drugs and Drug Resistance
- 13. Editorial Board Member, Journal of RNAi and Gene Silencing
- 14. Editorial Board Member, Journal of Parasitology and Vector Biology
- 15. Ad hoc reviewer, ACS Chemical Biology, Eukaryotic Cell, FEBS Letter, Molecular and Biochemical Parasitology, BMC Genomics, PLoS One, PLoS Neglected Tropical Diseases, PLoS Pathogens, Experimental Parasitology, Molecular Microbiology, Parasitology International, Parasitology, Chemical Biology and Drug Design, Protist, Marine Drugs, Trends in Parasitology, Parasitology Open, ACS Medicinal Chemical Lett, BBA Molecular Cell Research, Molecules, International Journal for Parasitology:Drugs and Drug Resistance

DEPARTMENTAL AND UNIVERSITY SERVICE (Standing Committees Only)

- 1. Chair, Clemson University Institutional Biosafety Committee (2012-present).
- 2. Member, Clemson University Institutional Biosafety Committee (2009-12).
- 3. Member, Chair Advisory Committee (2010-2015)
- 4. Genetic Program Graduate Coordinator (2007-09)
- 5. Graduate Program Committee (2005-09)
- 6. Faculty Advisor, Clemson University Circle of Omicron Delta Kappa (2005-13, 2015-present)
- 7. Faculty Advisor, Genetics and Biochemistry Graduate Student Association (2004-present)
- 8. Member, Clemson University Infection Control Committee (2012-present)
- 9. Faculty Secretary, Clemson University Circle of Omicron Delta Kappa (2013-present)
- 10. Faculty Advisor, Eukaryotic Pathogens Innovation Center Scholars (2013-present)

TEACHING EXPERIENCES

<u>GEN300:</u> Introduction to Genetics for Non-majors. Spring 2012. Service course for life science majors. (3 hrs/week).

<u>BIOCH305/BCHM3040:</u> Introduction to Biochemistry for Non-majors. Fall 2012, Fall 2014. Service course for life science majors. (3 hrs/week).

<u>GEN302/302H</u>: Introduction to Genetics and the Honors College course, Introduction to Genetics. Spring 2004, Fall 2004-09, Fall 2013. Core course for GEN/BIOCH majors, also taken by pre-medical BIOSCI and pre-veterinary AVS students. (3 hrs/week)

<u>GEN303</u>: Introduction to Genetics Laboratory. Spring 2004, Fall 2004-07, Fall 2013. Core course for BIOCH majors, also taken by pre-medical BIOSCI and pre-veterinary AVS students. (1 hr/week)

<u>BIOCH443/643</u>: Biochemical Basis of Disease. Fall 2010-Fall 2011, Fall 2014, Fall 2016. Case study-based course, connecting disease to molecular genetics and biochemistry. (3 hrs/week)

<u>GEN491/491H</u>: Directed Research in Genetics, and Honors College course, Directed Research in Genetics. Fall 2003-Fall 2011. Capstone course for GEN majors, directed research project in my lab involving research on African trypanosome biology.

<u>BIOCH491/491H</u>: Directed Research in Biochemistry, and Honors College course, Directed Research in Biochemistry. Fall 2003-Fall 2011. Capstone course for BIOCH majors, directed research project in my lab involving research on African trypanosome biology.

<u>GEN/BIOCH820</u>: Proteomics and Genomics. Spring 2006. At the time, a core course for all GEN/BIOCH graduate students that explored topics in advanced proteomic and genomic concepts and techniques. (3 hrs/week)

<u>GEN/BIOCH890</u>: Special Topics, "Molecular Pathogenesis". Spring 2008. Graduate course designed to introduce topics in molecular and biochemical pathogenesis. (3 hrs/week)

<u>GEN/BIOCH890</u>: Special Topics, "Molecular Parasitology". Fall/Spring 2010-11. Graduate course designed to introduce topics in molecular and biochemical parasitology. (1 hr/week)

<u>HON2060</u>: "Pandemics: Pending extinction?" Fall 2015. Calhoun Honors College discussion course. (3 hr/week)

BCHM4430: Biochemical Basis of Disease. Spring 2013, Fall 2014, Fall 2016.

FELLOW MENTORSHIP

Dr. Jimmy Suryadi, Post-doctoral Fellow, 2016- present

Dr. Cuixiang Wan, Post-doctoral Fellow, 2013-2014

Dr. Heidi Dodson, Post-doctoral Fellow, 2011, currently a faculty member at North Greenville College

Dr. Zhaoqing Yang, Post-doctoral Fellow, 2004-05, currently in faculty position at Kunming Medical College

STUDENT ADVISORY COMMITTEES

Ph.D. Advisor

Jeremy W. Chambers, 2003-07, PhD granted Fall 2007, currently Assistant Professor, College of Medicine, Florida International University

Todd A. Lyda, 2005-09, PhD granted Fall 2009, currently a Research Associate, Clemson University Heidi C. Dodson, 2007-11, PhD granted Spring 2011, currently Assistant Professor, North Greenville University.

Marcia Wilson, Animal and Veterinary Sciences, 2007-11, PhD granted Spring 2011, currently faculty member, Southern Polytechnical College

April C. Joice, 2008-12, PhD granted Spring 2012, currently a post-doctoral fellow at the Ohio State University

Michael Harris, 2010-2015, PhD granted Spring 2015 currently a post-doctoral fellow at Indiana University School of Medicine.

Yijian (Evan) Qiu, 2014-present Jessica Jones, 2017-present

Thesis Committee Member

Shamik Sharma, Bioengineering, PhD, 2005

Emily Caldwell, Genetics and Biochemistry, MS, 2005

Jennifer Mook, Animal and Veterinary Sciences, PhD, 2006

Traci Pawlowski, Genetics and Biochemistry, PhD, 2007

Arijit Mukherjee, Genetics and Biochemistry, PhD, 2007

Yu Meng, Genetics and Biochemistry, PhD, 2009

Monica Munoz Torres, Genetics and Biochemistry, PhD, 2009

Matthew Fowler, Genetics and Biochemistry, PhD, 2011

Manish Kumar, Genetics and Biochemistry, MS 2008

Liang Dong, Genetics and Biochemistry, PhD, 2009

Rongjuan Mi, Genetics and Biochemistry, PhD, 2009

Terri Bruce, Biological Sciences, PhD, 2009

Patrick Vigueira, Biological Sciences, PhD, 2011

Erin Curry, Animal and Veterinary Sciences, PhD, 2010

Amanda Say, Genetics and Biochemistry, PhD, 2012

Deepti Sharma, Genetics and Biochemistry PhD, 2012

Amrita Koushik, Genetics and Biochemistry, PhD, 2013

Richa Kohl, Genetics and Biochemistry, PhD, 2014

Josh Vandenbrink, Genetics and Biochemistry, PhD, 2013

Ciara McKnight, Biological Sciences, MS in Biological Sciences, 2012

Sunayan Ray, Genetics and Biochemistry, PhD, 2013

Tonya Johnson, Genetics and Biochemistry, PhD, 2016

Katie Glenn, Genetics and Biochemistry, PhD 2014

Xinfu Zhang, Genetics and Biochemistry, MS, 2013

Keri Tabb, Genetics and Biochemistry, PhD, 2013

Krystal Cadle, Genetics and Biochemistry, PhD, 2016

Ning Yuan, Genetics and Biochemistry, PhD, 2016

Heeren Gordhan, Chemistry, PhD, 2017

Thanh Dang, Genetics and Biochemistry, PhD, 2017

Andrew Kelso, Genetics and Biochemistry, PhD, 2017

Zheng Wang, Electrical and Computer Engineering (enrolled in PhD program)

Charles Voyton, Chemistry (enrolled in PhD program)

Diptee Chaulagain, Genetics and Biochemistry (enrolled in PhD program)

UNDERGRADUATE RESEARCH ADVISOR

(These students completed at least one term of research in my laboratory. *Indicates completion of Calhoun Honors College Thesis research in my group. **Indicates completion of Honors Research in two different majors completed in my laboratory.)

Name Last Known Location

Peyton Toole* Residency, University of Florida

Clarice Seifert* Faculty Member, Medical University of South Carolina

Kimberly Doering* PhD, Johns Hopkins SOM CMM graduate program, MD UCSF

Catherine Riding* MUSC SOM

Josh Duffy UGA Cellular Biology graduate program

Aaron Grubbs MUSC SOM Kevin Gibbs MUSC SOM

LeeAnn Boerma* PhD, UAB Pharmacology graduate program

Andrew Gettys MUSC SOM

Courtney DeBruin* Ph.D., U. Wisconsin Neurobiology Margaret Kearns* Enrolled U. of Cincinnati SOM

Ryan Fecteau** Enrolled Case Western SOM MD/PhD program

Brennan Shutt Enrolled VPI DO program

Jarrod Smith* Technology, Design, and Innovation Teacher, Durham NC

Eric Knapp* Enrolled MUSC SOM

Daniel Ebner** Enrolled, Graduate School of Engineering, University of Tokyo

Paul Griffith Enrolled UGA Genetics graduate program

Andrew Sayce** Enrolled Oxford University Biochemistry graduate program

Stephen Carek Enrolled MUSC SOM

Sameka Rouse Enrolled UNC-Charlotte Medical Technicians Program Kristen MacDonald Employed as Associate Scientist, Nutra Manufacturing

Nikesh Patel* Enrolled MUSC SOM Katie Gray* Enrolled MUSC SOM

Sean Carnell National Coordinator, Tigers for Tigers Foundation

Natalie Hohos Enrolled UGA Nutrition graduate program

Jeremy Sullivan* Enrolled MUSC SOM Cody Gathers* Enrolled MUSC SOM

William McAlpine** Enrolled UT SW SOM MD/PhD program Haaris Khan** Enrolled UT SW SOM MD/PhD program

Ceren Simsek Bilkent University visiting student

Amber Hackler* Enrolled The Scripps Research Institute PhD program

Lauren Fredric* Enrolled MUSC SOM Kevin Dao* Enrolled VCOM SOM

Mark Griffith Graduate from Clemson University

Allen Lollis* Enrolled MUSC SOD
Stephen Patrick* Enrolled MUSC SOM

Sarah Jenkins* Enrolled at U. of Louisville SOM
Nelson Yeung* Current Clemson University Student
Phillip Burkhardt** Current Clemson University Student

Taylor Werner* Enrolled UNC SOP

Neal Patel Current Clemson University Student

Kiley Lawrence* Working as Laboratory Tech

James Oristian Current Clemson University Student

Callie Martin Working in Private Sector William Newton Enrolled in Medical School

Sarah G. McAlpine Current Clemson University Student
Luke Nesbitt Current Clemson University Student
Neil Monahan Current Furman Student (summer intern)
Darian Thomas Current Clemson University Student