
Curriculum Vita

Christopher I. Brandon Jr., Ph.D.

Personal Information:

Born: Atlanta, Georgia, August 29, 1964
Address: Georgia Gwinnett College
School of Science and Technology
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Education:

- Ph.D. - Physiology, Department of Physiology and Pharmacology, College of Veterinary Medicine, University of Georgia. August, 2004.
- Master of Science - Reproductive Physiology, Department of Physiology and Pharmacology, College of Veterinary Medicine, University of Georgia, 1997.
- Bachelor of Science - Animal Science, College of Agriculture, University of Kentucky, 1990.

Professional Goals and Interests:

- Teaching undergraduate and/or graduate courses in the biological sciences and other related medical and health areas.
- Designing, implementing and evaluating teaching methods that include the use of new technologies and other innovative approaches to learning.
- Helping both traditional and nontraditional students accomplish their educational goals in effective and meaningful ways.

Positions and Training

- Assistant Professor of Biology, School of Science and Technology, Georgia Gwinnett College, Lawrenceville, GA 30043. August 2006 – Present.
- Assistant Professor of Biology, Department of Science and Mathematics, East Georgia College, Swainsboro, GA 30402. August 2004 – August 2006.
- Research Graduate Assistant, Department of Physiology and Pharmacology, College of Veterinary Medicine, University of Georgia, December, 1994-2004.
- Research Technician, Department of Large Animal Medicine, College of Veterinary Medicine, University of Georgia, July, 1991-August 1993.

Research Grants and Proposals:

- The Characterization of the Equine Adenosine A_{2A} and A₃ Receptors: Potential Therapeutic Targets for the Treatment of Equine Endotoxemia. Grant proposal submitted to The Morris Animal Foundations. April 2002. Accepted July 10, 2002. \$7,500.00
- The Characterization of the Equine Adenosine A_{2A} and A₃ Receptors: Potential Therapeutic Targets for the Treatment of Equine Endotoxemia. Ph.D. Research Proposal. Accepted
- Canine Immunosterilization: An Alternative to Traditional Sterilization Methods. Ph.D. Research Proposal.
- A Sterility Vaccine to Stop Unnecessary Euthanasia in Dogs. Morris Animal Foundation Proposal, 1996. (Not Funded)
- Canine Immunosterilization Utilizing Porcine Zona Pellucida: An Alternative Approach To Traditional Sterilization Methods. Faculty Research Commercialization Program Proposal, 1997. (Not Funded)
- Biochemical Evaluation of Equine Stallion Spermatozoa and Seminal Plasma, Masters Research Proposal, 1995.

Scientific Publications - Primary Author:

- Brandon CI, Vandenplas M, Dookwah H, Linden J, and Murray TF. The Pharmacological Characterization of the Equine Adenosine A_{2A} Receptor: A Potential Therapeutic Target for the Treatment of Equine Endotoxemia. *Veterinary Pharmacology and Therapeutics*. 29 (4): 243-253.
- Brandon CI, Vandenplas M, Dookwah H, Linden J, and Murray TF. The Pharmacological Characterization of the Equine Adenosine A₃ Receptor. *Veterinary Pharmacology and Therapeutics*. 29 (4): 255-263.
- Brandon CI, Barber MR, Brooks PM and Fayrer-Hosken RA. Canine immunosterilization with a porcine zona pellucida vaccine. *Theriogenology* 49 (1): 262
- Brandon CI, Heusner GL, Caudle, AB, Fayrer-Hosken RA. Two-dimensional Polyacrylamide Gel Electrophoresis Of Equine Seminal Plasma Proteins And Their Correlation With Stallion Fertility. *Theriogenology*. 52 (5): 863-873, 1999.
- Brandon CI, Srivastava PN, Heusner GL, Fayrer-Hosken, RA. Extraction and Quantification of Acrosin, β -N-acetylglucosaminidase, and Arylsulfatase A From Equine Ejaculated Spermatozoa. *Journal of Experimental Zoology*. 279 (3): 301-308, 1997
- Brandon CI. Biochemical Evaluation of Equine Stallion Spermatozoa and Seminal Plasma. Masters Thesis. 1997

Scientific Publications - Corresponding Author:

- Fayrer-Hosken RA, Dookwah HG, Brandon CI. Immunocontrol in dogs. *Animal Reproduction Science*, 60-61(1-4): 365-373, 2000.
- Fulton R, Kestintepe L, Brandon C, Fayrer-Hosken R. Assisted reproductive techniques for the treatment of canine infertility. *Society For Theriogenology Newsletter* 1998a; 21: 2-7.

- Morris AC, Brandon CI, Sekhar CK, Fayer-Hosken RA. Immunocytochemical Localization of Equine Zona Pellucida Glycoproteins During Follicular Development. *Theriogenology*, 45 (1): 292-296, 1996.
- Hunt RJ, Brandon CI, McCann ME. Effects of Acetylpromazine, Xylazine, and Vertical Load on Digital Arterial Blood Flow in Horses. *American Journal of Veterinary Research*, 55: 375-379, 1994
- Barber MR, Rampecek GR, Brandon CI and Fayer-Hosken RA. The use of KLH conjugated porcine zona pellucida (pZP) vaccine as an immunocontraceptive and potential immunosterilant in pigs. *Vaccine*.
- Faircloth JG, Heusner G, Hoitnik C, Brandon C and Fayer-Hosken RA. Follicular Wall Changes and Ovulation Induction in the Mare. *The Equine Veterinary Journal*.

GenBank Submissions:

- Vandenas, M.L., Okinaga, T., Brandon, C.I., Eastman, A., Cordonnier-Pratt, M.M., Pratt, L.H. and Moore, J.N. Cloning and expression of a full-length transcript for the equine adenosine A_{2A} receptor. Accession Number: AY39485. October 15, 2003.

Presentations:

- The Kama Sutra of Critical Thinking: Strategies for Scaffolding of Critical Thought in the Classroom, The 16th Annual Georgia Conference on College and University Teaching – Poster Session, Kennesaw State University, April 2009.
- Use of Scaffolding in the Classroom. Presented to the Human Anatomy and Physiology Society (HAPS) annual meeting. March, 2009.
- The Construction of "Delight" in the Classroom: Pedagogical Principles from the Kama Sutra of Vatsyayana. Presented to the Governor's Teaching Fellows. The Institute of Higher Education and Center for Teaching and Learning. University of Georgia, Athens, Georgia. March, 2009.
- Acquired Immunity: The Body's Defense against Infectious Disease. Science Odyssey - Collins Hill High School. February, 2009.
- The Principle of 'Scaffolding' in the Kama Sutra and the Classroom, the Center for Teaching Excellence, Georgia Gwinnett College, Fall 2008.
- Characterization of the Equine Adenosine A_{2A} Receptor. School of Science and Technology Professional Development Seminar. Georgia Gwinnett College, March 2008.
- Expression of the Insulin Gene. Science Odyssey - Collins Hill High School. April 2007.
- From Gene to Protein: Gene Transcription and Translation. Meadowcreek High School, Lawrenceville, GA October, 2006.
- Ten Minutes from My Classroom. Presented to the Governors Teaching Fellows. The Institute of Higher Education and Center for Teaching and Learning. University of Georgia, Athens, Georgia. May, 2007.
- The Three Faces of Scholarship. Presented to the Department of Animal Science, College of Agriculture, University of Georgia. May 2005.

- Pharmacological Characterization of the Equine Adenosine A_{2A} and A₃ Receptors: Potential Therapeutic Targets for the Treatment of Equine Endotoxemia. Doctoral Defense. Department of Physiology and Pharmacology, College of Veterinary Medicine, University of Georgia, Athens, GA. June, 2004.
- Pharmacological Characterization of the Equine Adenosine A_{2A} Receptor. Fall Seminar Series, Department of Physiology and Pharmacology, College of Veterinary Medicine, University of Georgia, Athens, GA. November 2003.
- Cryopreservation of Stallion Semen. Guest lecturer and laboratory session for the Student Chapter of the American Association of Equine Practitioners. University of Georgia, Athens, Georgia, October 2000.
- Stallion Semen Freezing: Principles and Practices. University of Georgia, Equine Reproduction Short Course - Stallion Session. February 2000.
- Stallion Fertility Evaluation. University of Georgia, Equine Reproduction Short Course - Stallion Session. February 2000.
- Equine Reproductive Physiology. Guest lecturer, Rockdale County 4-H team, July 1999.
- Biochemical characterization of stallion spermatozoa and seminal plasma: Alternative approaches for estimation of fertility. University of Georgia, Department of Animal and Dairy Science, Reproduction Short Course, Guest Speaker, January 1999.
- Canine Immunosterilization: An Alternative to Traditional Sterilization Methods. Physiology and Pharmacology seminar, College of Veterinary Medicine, University of Georgia, Athens, GA, February, 1998.
- Canine Immunosterilization: A Safe and Practical Sterilization Method. The International Embryo Transfer Society Annual Meeting - Poster Session, Boston, MA, January 1998.
- Canine Immunosterilization: Principles and Practices. University of Georgia, Veterinary Medicine Diagnostic Lab Continuing Education Short Course, September 1997
- Two Dimensional Polyacrylamide Gel Electrophoresis of Equine Seminal Plasma Proteins and Their Correlation with Fertility. Presented to: Society for Theriogenology Annual Meeting, Graduate student competition. Montreal, Canada, 1997
- Canine Semen Freezing - Laboratory Session. The American College of Theriogenology, 1997 Canine Male Reproduction Symposium. Montreal, Canada, 1997.
- Identification of Four Fertility-Associated Proteins from Equine Seminal Plasma. University of Georgia, Department of Animal and Dairy Science Seminar, Guest speaker, 1997.
- Stallion Semen Collection. University of Georgia, Equine Reproduction Short Course for Breeding Managers. March 1997.
- Semen Collection and Evaluation in the Stallion. University of Georgia, Equine Reproduction Short Course for Veterinary Practitioners. April 1997.
- Biochemical Evaluation of Equine Stallion Spermatozoa and Seminal Plasma. Masters Defense, University of Georgia, Athens, Georgia, 1996.

- Stallion Collection and Semen Evaluation. Laboratory lectures for Advanced Animal Reproduction Classes, Department of Animal and Dairy Science, University of Georgia, 1994, 1995, and 1996
- Immunocytochemical Localization of Equine Zona Pellucida Glycoproteins in Fetal and Adult Ovaries. International Embryo Transfer Society, Poster Session - Annual Meeting, Salt Lake City, Utah, 1996.

Laboratory Skills:

- Basic Molecular Biology Techniques:
- DNA/RNA Purification and Amplification
- Plasmid Preparations (mini, midi, and maxi)
- Agarose Gel Electrophoresis
- Polymerase Chain Reaction (PCR)
 - Including RT-PCR, Degenerate PCR
- cDNA Cloning, Subcloning
- Restriction Enzyme Mapping
- BLAST Homology Screening
- Membrane receptor characterization: Radioligand binding techniques
- Intracellular cell signaling assays
- Cell culture techniques
- One and Two Dimensional Polyacrylamide Gel Electrophoresis
 - Protein analysis and purification

Academic Experience

Instruction:

- Principles of Biology I/Principles of Biology Lab (BIOL 1107K-01, BIOL 1107K-02). Georgia Gwinnett College, Lawrenceville, GA. Fall 2009.
- Principles of Cell Biology/Cell Biology Lab (BIOL 3400/3400L). Georgia Gwinnett College, Lawrenceville, GA. Spring 2009.
- General Biology I/General Biology Lab (BIOL 1101/1101L). Georgia Gwinnett College, Lawrenceville, GA. Spring 2009.
- Introductory Microbiology/Microbiology Lab (BIOL 3300/3300L). Georgia Gwinnett College, Lawrenceville, GA. Fall 2008.
- General Biology/General Biology Lab (BIOL 1101/1101L). Georgia Gwinnett College, Lawrenceville, GA. Fall 2008.
- Freshmen Seminar (GGC 1000). Georgia Gwinnett College, Lawrenceville, GA. Fall 2008.
- Anatomy, Physiology and Histology (BIOL 3600). Georgia Gwinnett College, Lawrenceville, Georgia. Spring 2008
- Principles of Cell Biology (BIOL 1600). Georgia Gwinnett College, Lawrenceville, Georgia. Spring 2008
- Cell Biology (BIOL 3400). Georgia Gwinnett College, Lawrenceville, Georgia. Fall 2007.
- Principles of Biology II (BIOL 1108). Georgia Gwinnett College, Lawrenceville, Georgia. Spring 2007.

- Principles of Biology I (BIOL 1107). Georgia Gwinnett College, Lawrenceville, Georgia. Fall 2006, Fall 2007.
- Principles of Biology I (BIOL 1107). East Georgia College, Swainsboro, Georgia. Fall 2004, Spring 2005, Summer 2005, Fall 2005, Spring 2006. This course is an introduction to the science of biology. Topics covered include the chemical and cellular basis of life, genetics, and evolutionary biology.
- Principles of Biology II (BIOL 1108). East Georgia College, Swainsboro, Georgia. Fall 2004, Spring 2005, Fall 2005, Spring 2006. This course is an introduction to the science of biology. Topics covered include cellular genetics, evolutionary biology, plant and animal form and function, and ecology.
- Anatomy and Physiology I (BIOL 2511). East Georgia College, Swainsboro, Georgia. Fall 2004, Spring 2005, Summer 2005, Fall 2005, Spring 2006, Summer 2006. This course is an introduction to the structure and function of the human body.
- Anatomy and Physiology II (BIOL 2512). East Georgia College, Swainsboro, Georgia. Fall 2004, Spring 2005, Fall 2005, Summer 2006. This course is a continuation of BIOL 2511 and serves as an introduction to the structure and function of the human body.
- Introductory Microbiology (BIOL 2611). East Georgia College, Swainsboro, Georgia. Fall 2004, Spring 2005, Summer 2005. This course is an introduction to the study of microorganisms including prokaryotic and eukaryotic organisms. Primary topics include the history of microbiology, bacteria, bacterial disease, viruses, protozoa, and the control of microorganisms.
- Problem Solving I and II (PROB 1101 and 1102). East Georgia College, Swainsboro, Georgia. Summer 2005, Fall 2005, Summer 2005, Fall 2005, Spring 2006, Summer 2006. This is an interdisciplinary course series in science and mathematics, and both are required for biology majors. Students taking this course series conduct research projects in the area of biology, chemistry, geology, mathematics or physics over the course of the semester under faculty guidance. An emphasis is placed on the interdisciplinary nature of the sciences.

Acknowledgements:

- Faculty Standard Bearer, School of Science and Technology. Georgia Gwinnett College Convocation, Lawrenceville, GA March 2008.
- Governors Teaching Fellow. The Institute of Higher Education and Center for Teaching and Learning. University of Georgia. May 2007.
- Faculty Member of the Month. East Georgia College, Swainsboro, Georgia, March 2005.

Additional Responsibilities:

- Chair, School of Science and Technology Internship Committee. Georgia Gwinnett College; Lawrenceville, GA
- Chair, Parking Appeals Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2009-2010.

- Biology Outcome Goals Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2009-2010.
- Allied Health Building Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2009-2010.
- Science Education Curriculum Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2008-2009
- Chair, Integrated Educational Experience Goal-1 Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2008-2009
- Faculty Search Committee – Math. Georgia Gwinnett College; Lawrenceville, Georgia. 2008-2009.
- Institutional Review Board (IRB) Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2008-2009
- Chair, Integrated Educational Experience Goal-1 Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2007-2008
- Professional Concerns (Grievance) Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2007-2008
- Institutional Review Board. Georgia Gwinnett College; Lawrenceville, Georgia. 2007-2008
- Biology Outcome Goals Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2007-2008
- Biology Internships Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2007-2008
- New Faculty Selection Task Force. Georgia Gwinnett College; Lawrenceville, Georgia. 2007-2008
- Georgia Gwinnett College Convocation Mace Selection Committee. Georgia Gwinnett College, Lawrenceville, Georgia 2007-2008
- Chair, Student Orientation Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2006-2007.
- Chair, Social Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2006-2007.
- Chair, Parking Appeals Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2006-2007.
- Faculty Search Committee – Chemistry and Physics. Georgia Gwinnett College; Lawrenceville, Georgia. 2007.
- Student Affairs Search Committee – Chemistry and Physics. Georgia Gwinnett College; Lawrenceville, Georgia. 2007.
- Admissions Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2006-2007.
- Student Affairs Committee. Georgia Gwinnett College; Lawrenceville, Georgia. 2006-2007.
- Academic Appeals Committee. East Georgia College; Swainsboro, Georgia. 2004-2006
- Faculty and Staff Development Committee. East Georgia College; Swainsboro, Georgia. 2004-2006

- Faculty Search Committee. East Georgia College; Swainsboro, Georgia. 2004-2005.
- Vision Series Organization Committee. East Georgia College; Swainsboro, Georgia. 2004-2006.

Continuing Education:

- The 16th Annual Georgia Conference on College and University Teaching – Poster Session, Kennesaw State University, April 2009.
- Human Anatomy and Physiology Society (HAPS) annual meeting. Macon State College, March, 2009
- Advances in G-Protein Coupled Receptor (GPCR) Research. Science Webinar Series. June 17, 2008.
- Governor’s Teaching Fellows Teaching and Learning Conference. The Institute of Higher Education and Center for Teaching and Learning. University of Georgia, January 2008.
- Resistance & Sensitivity to Molecularly Targeted Therapies in Lung Cancer, GIST, & Other Solid Tumors: Mechanisms, Challenges, and Future Solutions. Webinar hosted by Biosymposia. December 14, 2007
- The SoTL Commons: A Conference for the Scholarship of Teaching and Learning. Georgia Southern University, Statesboro, GA. November 1-2, 2007.
- Governor’s Teaching Fellow. Governor’s Teaching Fellows Program – Faculty Development Symposium. The Institute of Higher Education and Center for Teaching and Learning. University of Georgia. May 2007.
- Interactive Physiology Focus Group. Strategies for Success Science Education Workshop. Auburn University, Auburn, Alabama, Saturday, November 11, 2005.
- Strategies for Success Science Education Workshop. Auburn University, Auburn, Alabama, Saturday, November 12, 2005.
- Medical College of Georgia 2004 Academic Advisors Conference. Medical College of Georgia, Augusta, Georgia. September 24, 2004.

Professional Memberships:

- American Association for the Advancement of Science.
- The Georgia Academy of Science.
- Multi Educational Resource for Learning and Online Teaching (MERLOT).

Extracurricular Activities:

- Georgia Gwinnett College Tennis Club. 2008, 2009, 2010
- Georgia Gwinnett College Golf Club. 2008, 2009, 2010
- Faculty Advisor. Georgia Gwinnett College Equine Club. 2007, 2008, 2009.
- Relay for Life Team Captain. Georgia Gwinnett College. May 2008.
- Judge – ZaneRocks Science Fair. Rock Springs Elementary School. January 28, 2008.
- Relay for Life Team Captain. Georgia Gwinnett College, May 2007
- Faculty mentor. Peachtree Ridge High School Science Fair, Suwannee, Georgia, November 2007.

- Faculty mentor. Peachtree Ridge High School Science Fair, Suwannee, Georgia, November 2006.
- Biology Club – Georgia Gwinnett College, Lawrenceville, GA. Academic year 2006-2007.
- Faculty sponsor – East Georgia College Tennis Club. East Georgia College. Swainsboro, GA. Academic year 2005-2006.
- Co-Faculty Sponsor - East Georgia College Golf Club. East Georgia College. Swainsboro, GA. Academic year 2004-2005, 2005-2006.
- Moderator - Georgia 4-H Equine Quiz Bowl, Athens, Ga. January, 2001
- Judge - 52nd Georgia Science & Engineering Fair. University of Georgia, April, 2000
- Moderator - 4-H State Quiz Bowl. Perry, GA. 1998, 2000
- Judge - 4-H State Equine Quiz Bowl. Rockdale Co., GA. 1994, 1995, 1996, 1997
- Judge - 4-H State Finals - Equine Oral Presentations. Atlanta, GA 1997