

CHARLES CHRISTOPHER SWART

TRINITY COLLEGE, NEUROSCIENCE PROGRAM
300 SUMMIT ST. LSC 214, HARTFORD, CT 06106
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SR. LECTURER AND LABORATORY COORDINATOR FOR NEUROSCIENCE 08/05- PRESENT

Courses Taught:

Neuroscience 201 Principles of Neuroscience, Lecture and Laboratory:

Neuroscience 120 Nervous Connections, Lecture and Laboratory

Psychology 261 Brain and Behavior Lecture and Laboratory

Neuroscience 301 Neuroscience Methods Laboratory

Neuroscience 262 Introduction to Animal Behavior

Neuroscience 362 Neuroethology

NIH POST-DOCTORAL RESEARCH ASSOCIATE

06/04 – 08/05

Trinity College, Psychology/Neuroscience, Hartford, CT

Project: Regulation of extracellular adenosine in the mammalian hippocampus; electrophysiology, immunofluorescence microscopy and immunogold electron microscopy, enzyme kinetics, and behavior.

RESEARCH TECHNICIAN

06/03 – 07/04

University of Louisiana at Lafayette, Electron Microscopy Center, Lafayette, LA

Duties: Technical support for university faculty and students, and extramural business and academic clients. Analysis of Materials and biological tissues in Confocal fluorescence microscopy, scanning and transmission microscopy, x-ray fluorescence scanning electron microscopy.

LOUISIANA BOARD OF REGENTS DOCTORAL FELLOW

08/99 – 04/03

University of Louisiana at Lafayette, Lafayette, LA

Duties: Taught a variety of lab courses including: Histology and General Physiology, and a lecture course in Introductory Biology

BIOLOGY LECTURE AND LAB INSTRUCTOR

08/96 - 08/98

University of Richmond, Richmond VA

Duties: Teach Introductory Biology lecture and labs to non-science majors

MEDICAL TECHNOLOGIST I (ASCP#190855)

09/98 – 07/99

Chippenham/Johnston-Willis Medical Center & Retreat Hospital (HCA)

Duties: Chemistry, Hematology, Microbiology, Phlebotomy, Specimen Processing. Richmond, VA

MEDICAL TECHNOLOGIST I (ASCP#190855)

03/93 - 07/96

Our Lady of the Lake RMC , Baton Rouge, LA

Duties: Medical technologist in hematology lab, charge tech for Phlebotomy and pathology labs.

COMBAT MEDICAL SPECIALIST (92A)

08/89 – 08/92

United States Army National Guard

769th Combat Engineering Battalion, Monroe, LA,

508th Combat Engineers Baton Rouge, LA

Duties: Medical support for National Guard training and work projects

EDUCATION:

- DOCTORATE OF PHILOSOPHY - Environmental & Evolutionary Biology*
University Of Louisiana-Lafayette (Advisor: Dr. Bruce Felgenhauer) May 2003
- MASTERS OF SCIENCE - Biology*
University Of Richmond (Advisor: Dr. Rafael O. de Sá) August 1998
- BACHELORS OF SCIENCE - Medical Technology (ASCP 190855)*
Louisiana Tech University March 1993

CAMPUS SERVICE:

Director, Health Professions Advisory Program 1/2019 - Current
Internal Animal Care and Use Committee (IACUC): Trinity College 2006-Current
Health Professions Advisory Program (HPAP): Trinity College 2013-Current

PUBLICATIONS:

- Swart, C., D. Isaman, A. Hackett, A. Wattenberger. 2017. Anatomy and lifetime neurogenesis in the cerebral ganglion of the freshwater snail, *Cipangopaludina chinensis*. *Brain and Behavior* DOI: 10.1002/brb3.652.
- Shin-ya, Ohba and C. Swart. 2009. Intraguild predation of water scorpion *Laccotrephes japonensis* (Nepidae: Heteroptera). *Ecological Research*: DOI 10.1007/s11284-009-0605-6.
- Swart, C. C., R. R. Mowrer, and M. Butler. 2006. Instructor's Resource Manual and Test Bank for: S. Klein and B. M. Thorne Eds *Biological Psychology*. Worth Publishers. New York.
- Swart, C. C., B.E. Felgenhauer, and L. E. Deaton. 2006. The salivary gland and salivary enzymes of the Giant Waterbugs (Heteroptera; Belostomatidae). *Comparative Biochemistry and Physiology A*. 145:114-122.
- Swart, C.C. and D. C. Adams. 2004. The role of muscle mass and tooth number in ecological character displacement between *Plethodon cinereus* and *P. hoffmani* (Caudata: Plethodontidae). *Herpetologica* 60: 8-13.
- Swart, C. and R. Taylor. 2004. Behavioral interactions between the Giant Water Bug (*Belostoma lutarium*) and tadpoles of *Bufo woodhousii*. *Southeastern Naturalist* 3: 13-24.
- Swart, C. C. and B. E. Felgenhauer. 2003. Structure and function of the mouthparts and salivary gland complex of the Giant Waterbug, *Belostoma lutarium* Stål (Heteroptera: Belostomatidae). *Annals of the Entomological Society of America* 96:870-882.
- Smyers, S., M. Rubbo, V. Townsend, and C. Swart 2002. Resource partitioning among juvenile Ambystomatid salamanders inside experimental burrows. *Herpetologica* 58: 422-429.
- de Sá, R. O. and C. C. Swart. 1999. Development of the Ethmoid Plate in Pipoid Frogs, *Journal of Morphology* 240: 143-153.
- Swart, C. C. and R. O. de Sá. 1999. The chondrocranium of the Mexican Burrowing Toad, *Rhinophrynus dorsalis* (Amphibia; Anura). *Journal of Herpetology* 33: 23-28.

PRESENTATIONS:

- Swart, C., A. Wattenberger, A. Hackett. 2012. Neurogenesis and Gender Change in the Chinese Mud Snail, *Cipangopaludina chinensis*. Poster given at the Society for Neuroscience, New Orleans LA, October 2012.
- Jeremy W. Gawryluk , John F. Wagener , Jason Gockel , Daniel Coleman, Charles C. Swart, Susan A. Masino, Jonathan D. Geiger. Effects of ketogenic diet on levels of high-energy brain metabolites. Society for Neurochemistry. San Antonio Tx, March 2008.
- Jeremy W. Gawryluk, John F. Wagener, Jason Gockel, Daniel Coleman, Charles C. Swart, Susan A. Masino, Jonathan D. Geiger. Effects of ketogenic diet on levels of high-energy brain metabolites. International Society for Neurochemistry & American Society for Neurochemistry. Cancún, Mexico. August, 2007.
- Charles C. Swart, Susan A. Masino, Daniel Tsukanov, Bertil B. Fredholm, Michael A. Schwarzschild, Jiang-Fan Chen. OCTOBER 2006. Electrophysiological Responses to Adenosine and Caffeine in Hippocampal Slices from the Adenosine A1-A2a Double Knockout Mouse. Society for Neuroscience, Atlanta, GA. November, 2006.
- Swart, C., C. Edwards, S. Masino, and D. Tsukanov. 2005. Chronic temperature-dependent effect of adenosine on synaptic transmission in hippocampal slices. Society for Neuroscience, Washington, DC. November 2005.
- Swart, C.C., B. E. Felgenhauer, and R. G. Jaeger. 2003. Temperature effects on life-history characteristics of the Giant Waterbug, *Belostoma lutarium*. Ecological Society of America, Savannah, GA, August 4-9.
- Swart, C. and B. E. Felgenhauer. 2003. Temperature Effects on growth rate in the Giant Waterbug, *Belostoma lutarium* (Hemiptera: Belostomatidae). Poster presentation at the 77th Annual Meeting Southeaster Branch Entomological Society of America. Baton Rouge, LA. (First Prize PhD display presentation).
- Swart, C. D., L. Deaton, and B. E. Felgenhauer. 2002. Structure and Function of the Salivary Gland of *Belostoma lutarium*. Oral presentation at the Annual Meeting of the Southeastern Branch of the Entomological Society of America, Little Rock, Arkansas. March 3-8, 2002.
- Swart, C. C., C. McCardle, B. Barras, and B. E. Felgenhauer. 2001. Morphological and Behavioral Aspects of Predation in the Giant Water Bug, *Belostoma lutarium* (Hemiptera). Oral presentation Florida Entomological Society, Stuarts Island, Florida.
- Swart, C. and R. Taylor. 2001. Interactions between *Bufo woodhousei* larvae and *Belostoma lutarium*; background matching leads to predator advantage. 75th Annual Meeting of the Association of Southeastern Biologists. New Orleans, LA.
- Swart, C. and R. O. de Sá. 1999. Variation in chondrocranial morphology among Pipoid frogs. Fifth Latin American Congress of Herpetology. Montevideo, Uruguay.
- Swart, C. and R. O. de Sá. 1999. Morphometric Comparison of the larval chondrocranium of three species of *Xenopus*. Poster presented at joint symposia of the Societies for the study of Ichthyology and Herpetology, State College, PA.
- de Sá, R. O. and C. C. Swart. 1998. Development of the Ethmoid Plate in Pipoid Frogs, Poster presented at the joint symposia of the Societies for the study of Ichthyology and Herpetology, University of Guelph, Ontario.
- Swart, C.C., de Sá, R.O. The chondrocranium of *Rhinophrynus dorsalis*. 1997. Poster presented at the joint symposia of the Societies for the study of Ichthyology and Herpetology, University of Washington, Seattle, Washington.

UNDERGRADUATE ADVISEE PRESENTATIONS :

- Meregalli, T. 2015. Effects of Soil Salinity on Resting Muscle Membrane Potential of Red Earthworms, *Lumbricus rubellus*. N.E.U.R.O.N. February 2015, Quinipiac University.

- Deng, X. 2014. Acetylcholinesterase in the Brain of the Chinese Mud Snail: Molecular Weight and Formation of Polymers. N.E.U.R.O.N. October 2014, Quinnipiac University.
- Stewart, N. 2010. The Effect of Increased Ascorbic Acid on Acetylcholinesterase Enzyme Activity in the Pond Snail *Helisoma trivolvis*. N.E.U.R.O.N. October 2010, Quinnipiac University.
- Lisa Saa and Jim Fisher. 2011. Interaction of Beta-Carotene, Cadmium toxicity and Acetylcholinesterase in the Cerebral Ganglion of the Chinese Mud Snail, *Cipangopaludina chinensis*. N.E.U.R.O.N. Quinnipiac University November 2011.

Professional

AWARDS:

- NASA Experimental Program to Stimulate Competitive Research (EPSCoR) Grant 2005. Proposal Title: Interaction between low carbohydrate diet and sleep regulation. Award: \$10,000.
- Board of Regents Doctoral Fellowship, August 1999-2003. Department of Biology, University of Louisiana at Lafayette.

PROFESSIONAL MEMBERSHIPS:

- Northeast Association of Advisors for Health Professions
- *Nu Rho Psi*, the National Honor Society for Neuroscience, (Former Treasurer for National Office)
- Society for Neuroscience
- Faculty for Undergraduate Neuroscience
- Association of Biology Laboratory Educators
- Connecticut Entomological Society
- American Association for the Advancement of Science

JOURNALS REVIEWED FOR:

- Herpetologica
- Hydrobiologia
- Neuron
- Journal of Zoology
- Marine Biology
- Southeastern Naturalist
- RNA Biology

CERTIFICATIONS:

- Medical Technologist – American Society of Clinical Pathologists (ASCP 190855)
- Emergency Medical Technician – 1989

OTHER:

Volunteer for the Connecticut Department of Energy and Environmental Protection. Night Bird Monitoring Program – 2014 – Present.

Foster family for Connecticut Greyhound Adoption 2014- Present.

Volunteer Coach for Little League Baseball, Newington CT, Summer/Fall 2017