

MICHAEL P. BLACK, PH.D.

Neuroscience Institute
Georgia State University, PO Box 5030
Atlanta, GA 30302-5030
(404) 413-5081
Email: seawater@gsu.edu

CURRENT POSITIONS:

- Senior Lecturer, Neuroscience Institute, Georgia State University, August 2017-present.
- Affiliate Faculty, Urban Studies Institute, Georgia State University, August 2019-present.
- Adjunct Faculty Member, Georgia Aquarium Research Institute, February 2014-present.

PAST POSITIONS:

- Faculty Associate, Sustainability Office, Georgia State University, August 2013-May 2017.
- Lecturer, Neuroscience Institute, Georgia State University, August 2011-August 2017.
- Instructor, Science Department, Georgia Perimeter College, Decatur Campus, June 2011-August 2011
- Visiting Scientist, Neuroscience Institute, Georgia State University, June 2011-August 2011.
- Visiting Lecturer, Biology Department, Georgia State University Fall 2010-May 2011.
- Adjunct Faculty, Biology Department, Georgia State University Fall 2005-2006.

EDUCATION:

- Postdoctoral Researcher, Center for Behavioral Neuroscience, Psychology Department, Georgia State University 2005-2010. Advisor: Dr. Walt Wilczynski (co-advised by Dr. Kerry Ressler at Emory University, Psychiatry and Behavioral Sciences Department)
- Ph.D. in Biology, Georgia State University 2001-2005. Advisor: Dr. Matthew Grober
- M.S. in Biology, Georgia State University, awarded 2004. Advisor: Dr. Matthew Grober
- M.S./Ph.D. Candidate in Biology, Arizona State University 1997-2001. Advisor: Dr. Matthew Grober
- B.S. in Biology, Ecology and Systematics, Cornell University, 1993-1997.

GRANTS/FELLOWSHIPS RECEIVED:

- GSU Technology Fee Award (\$143,470), 2015.
- Atlanta Regional Commission Community Choices Grant to develop a bike plan for GSU campus, 2014.
- Ray C. Anderson Foundation Grant (\$41,600), 2013.
- STEM Mini-Grant, "Preparing Students for Creative Experimentation in Neuroscience" (\$7750), 2013.
- NSF Science and Technology Center Research Venture Grant, 2007 (with co-PIs Dr. Walter Wilczynski and Dr. Kerry Ressler)
- NIH Research Service Award (NRSA) 3-year Postdoctoral Fellowship, 2007-2010.
- Center for Behavioral Neuroscience 2-year Postdoctoral Fellowship, 2005-2007.
- GSU Brains and Behavior Program Fellowship, 2004-2005.
- Center for Behavioral Neuroscience Graduate Fellowship, 2002-2005.
- Arizona Graduate Research Support Program (\$2,200), 2000.
- Sigma Xi Grant-in-Aid of Research (\$300), 1996.
- Cornell Tradition Grant for Research (\$2000), 1996.
- Cornell Tradition Fellowship. Cornell University, 1994-1997.

PEER REVIEWED PUBLICATIONS AND PUBLISHED ABSTRACTS:

Schuppe, E.R., Pradhan, D.S., Thonkulpitak, K., Drilling, C., Black, M., and Grober, M.S. (2017) Sex differences in neuromuscular androgen receptor expression and sociosexual behavior in a sex changing fish. *PLoS ONE* 12(5): e0177711.

Wilczynski, W., Black, M.P., Salem, S.J., and Ezeoke, C.B. (2015). Behavioral Persistence during an Agonistic Encounter Differentiates Winners from Losers in Green Anole Lizards Behaviour. *Behaviour*, 152 (5): 563-591.

Black, M. P., Balthazart, J., Ballien, M., and Grober, M.S. (2011) Rapid increase in aggressive behavior precedes the decrease in brain aromatase activity during socially mediated sex change in *Lythrypnus dalli*. *General and Comparative Endocrinology*, 170:119-124.

Black, M. P., Balthazart, J., Ballien, M., and Grober, M.S. (2005) Socially induced and rapid increases in aggression are inversely related to brain aromatase activity in a sex-changing fish, *Lythrypnus dalli*. Proceedings of the Royal Society B: Biological Sciences, 272:2435-2440.

Black, M. P., Moore, B. M., Canario, A.V.M., Ford, D., Reavis, R. H., and Grober, M.S. (2005) Reproduction in Context: Field Testing a Lab Model of Socially Controlled Sex Change in *Lythrypnus dalli* (Gilbert). Journal of Experimental Marine Biology and Ecology, 318: 127-143.

Black, M. P., Reavis, R. H., and Grober, M.S. (2004) Socially induced sex change regulates forebrain isotocin in *Lythrypnus dalli*. Neuroreport, 15(1):185-189.

Black, M. P. and Grober, M.S. (2003) Group sex, sex change, and parasitic males: Sexual strategies among the fishes and their neurobiological correlates. Annual Review of Sex Research, 14:160-84.

Poznanski, A.A., Basu, G.D., Black, M. and Grober, M.S. (1999) The examination of neuropeptide expression in the preoptic area of the brain of the zebrafish, *Danio rerio*. Federation of American Societies for Experimental Biology Journal, 13 (5): A1120-A1120, Part 2, Suppl. S MAR 15 1999.

SYMPOSIA/PRESENTATIONS:

- “Writing in Science” 2018 University System of Georgia Teaching and Learning Conference: Best Practices for Promoting Engaged Student Learning, Atlanta, GA, July 2018.
- “Whale shark (*Rhincodon typus*) behavior: A multi-year analysis of individuals at Georgia Aquarium” International Whale Shark Conference, Atlanta, GA, October 2013.
- “Forging Sustainable Campus Collaborations and Partnerships” M.P. Black. Georgia Environmental Conference, Jekyll Island, GA, August 2013.
- “Aggressive Behavior and Steroid Metabolism during Sex Change in *Lythrypnus dalli*” Animal Behavior Conference, Indiana University, Bloomington, IN, April 2006.
- “Sex change in a hurry: Fast changes in aromatase” Southeast Nerve Net Conference, Agnes Scott College, March 2004.
- “Field dynamics of sex change in *Lythrypnus dalli*” Southeast Ecology and Evolution Conference, Georgia Tech, March 2004.
- “West Coast Sex Change: Brain and Behavior of *Lythrypnus dalli* (Pisces)” Keck Behavioral Biology Graduate Student Symposium, February 2003.
- “Social Isolation in *Lythrypnus dalli*.” Center for Behavioral Neuroscience Retreat, Spelman College, February 2002.
- “Behavioral Sex Change in *Lythrypnus dalli*: An Integration of Lab and Field Observations.” Southwestern Association of Biologists Conference, Southwestern Research Station, October 1998.
- “Behavioral Sex Change in *Lythrypnus dalli*: An Integration of Lab and Field Observations.” Western Regionals Conference in Comparative Endocrinology, March 1998.

SYMPOSIA/POSTERS:

- “Progress, Vision, and Change at the Classroom Level” _ M.P. Black, J. Parilla, and K. Oommen. Southeast Scientific Teaching Network Conference, Athens, GA, July 2016.
- “Progress, Vision, and Change at the Institutional Level” _ M.P. Black, J. Parilla, and K. Oommen. Southeast Scientific Teaching Network Conference, Athens, GA, July 2016.
- “Helping Students Transition from Cookbook Labs to Real Research: The Neurobiology Lab at Georgia State University” M.P. Black. Course-based Undergraduate Research Experiences (CURE) meeting at Cold Spring Harbor Laboratory (CSHL), March-April 2014.
- “Building Sustainability From What Appears to Be Ground Zero with Zero Funding: A Georgia State University Case Study” M.P. Black and P. Stilson. Association for the Advancement of Sustainability in Higher Education, Portland, OR, October 2013.
- “How to Form a Regional Environmental Network” M.P. Black. Association for the Advancement of Sustainability in Higher Education, Portland, OR, October 2013.
- “Characterization of whale shark (*Rhincodon typus*) behavior using a novel university/aquarium/volunteer program” M.S. Grober, B. Carlson, M.P. Black, C. Coco, C. Johansson, A. Desiderio, and A. Dove. Association of Zoos and Aquariums, Atlanta, GA, September 2011.
- “Social Status and Brain Neurotrophins in *Anolis carolinensis*” M.P. Black K.J. Ressler, R.L.

- Earley, and W. Wilczynski, Anolis Conference, Harvard University, October 2009.
- “Social status and brain-derived neurotrophic factor expression in the adult green anole (*Anolis carolinensis*)” M.P. Black K.J. Ressler, R.L. Earley, and W. Wilczynski, Society for Neuroscience, November 2007.
 - “Dominant/Subordinate Relationships and Brain-derived Neurotrophic Factor Expression in *Anolis carolinensis*” M.P. Black, K.J. Ressler, R.L. Earley, and W. Wilczynski, Society for Behavioral Neuroendocrinology, June 2007.
 - “Brain-derived neurotrophic factor expression in the adult green anole (*Anolis carolinensis*)” M.P. Black K.J. Ressler, T. Hattori, G. Julian, R.L. Earley, and W. Wilczynski, Society for Neuroscience, October 2006.
 - “Brain-derived neurotrophic factor in *Anolis carolinensis*” M.P. Black, K.J. Ressler, T. Hattori, G. Julian, R.L. Earley, and W. Wilczynski, Society for Behavioral Neuroendocrinology, June 2006.
 - “Isolation of a Social Fish: Effects on Brain and Behavior in *Lythrypnus dalli*” M.P. Black, C. L. Mizell, and M.S. Grober, Society for Neuroscience, November 2005.
 - “Rapid and correlated changes in brain aromatase activity and aggressive behavior are socially-mediated in *Lythrypnus dalli*” M.P. Black, J. Balthazart, M. Baillien, and M.S. Grober, Society for Behavioral Neuroendocrinology, July 2004.
 - “Rapid Decreases in Brain Aromatase Activity at the Onset of Vertebrate Sex Change” M.P. Black, J. Balthazart, M. Baillien and M.S. Grober, Society for Neuroscience, November 2003.
 - “Sex differences in behavior and isotocin in a sex changing vertebrate” M.P. Black, R.H. Reavis, M.S. Grober, Society for Neuroscience, November 2002.

INVITED TALKS:

- Environmental Justice Conference, “Public Health and Climate Change”, April 25, 2015
- Green Business Conference and Expo, “Cities and Counties Leading by Example”, August 24, 2013.
- Emory University, “Control of Gene Expression in Eukaryotes”, February 7, 2011
- Georgia State University, “Why Pirates Wear Eyepatches and Other Things That Make Sense”, February 4, 2011
- Susquehanna University, “Social Exchanges and Fast Brain Changes in *Lythrypnus*”, February 18, 2010.
- Oglethorpe University, “Social Interactions and the Brain: What Fish Can Tell Us”, December 5, 2008.
- Oglethorpe University, “Dominants, Subordinates, and Sex Change: An Integrative Study”, October 20, 2006
- Psychology Department, University of Texas, Austin, “Socially-mediated sex change in an adult fish: neuropeptides, steroid metabolism, and behavior”, March 9, 2005
- Wrigley Institute for Environmental Studies Marine Research Station, “Sex and Aggression in *L.dalli*: The Catalina Story”, July 2002.

ACADEMIC AWARDS/HONORS:

- Top 3 award for EPA Environmental Justice Academy Piranha Bowl presentation, 2017.
- Tuition award for Institute for Georgia Environmental Leadership, 2015.
- Atlanta Bicycle Coalition Blinky Award for Bike Program/Plan to Georgia State University Sustainability Office and Bike Committee, 2015.
- Sparks Award from Georgia State, 2013
- Faculty of the Year Award from Georgia State Signal, 2013
- Finalist for Advisor of the Year (for Sustainable Energy Tribe), 2013
- Society for Neuroscience Next Generation Award, 2009
- Center for Behavioral Neuroscience Postdoc of the Year, 2006.
- Tuition award for Advanced Techniques in Molecular Neuroscience Course, Cold Spring Harbor Laboratory, 2006.
- GSU Neurobiology and Behavior Research Award, 2005.
- GSU Biology Department Graduate Award for Outstanding Instruction, 2004.
- Best Talk at Southeast Nerve Net, 2004.
- Tuition award for Neural Systems and Behavior Course, Marine Biological Laboratory, Woods Hole, 2000.
- National Merit Scholarship. Cornell University, 1994-1997.
- Environmental Challenge Scholarship. Beaver Lake Nature Center, 1994-1997.

TEACHING:

- Lecturer/Senior Lecturer, Neuroscience Laboratory (NEUR 3010), Scientific Method in Neuroscience (NEUR 3020), Introduction to Human Physiology (BIOL 2240), Scientific Perspectives on Global Problems (Green Sustainability) (PERS 2002), GSU New Student Orientation (GSU 1010), Urban Sustainability (HON 1000), and Fundamentals of Evolution (BIO 7440), Georgia State University, August 2011-present.
- Lecturer, Year Two Neuroscience for Emory-Tibetan Science Initiative, June 2019.
- Instructor, Cell Biology and Genetics (1402) and Cell Biology and Genetics Laboratory (1402L), Georgia Perimeter College, Decatur Campus, 2011.
- Visiting Lecturer, Introduction to Biology for Majors (BIOL 2108), Introduction to Biology for Non-majors (BIOL 1104), and Animal Biology (BIOL 3840), Georgia State University, 2010-2011
- Coordinator for Georgia State Whale Shark Internship at Georgia Aquarium, 2008-present.
- Instructor, Introduction to CBN - Graduate Student Seminar, Center for Behavioral Neuroscience, Fall 2006.
- Guest Instructor, Marine Vertebrates, Shoals Marine Laboratory, Summer 2006.
- Adjunct Faculty/Instructor, Animal Biology, Georgia State University, Fall 2005.
- Assistant Lab Director, Human Anatomy and Physiology, Georgia State University, 2003-2004.
- Teaching Assistant, Human Anatomy and Physiology, Georgia State University, 2001-2004.
- Teaching Assistant, Human Anatomy and Physiology, Arizona State University, 2001.
- Teaching Assistant, Physiology, Arizona State University West, 1998-2000.
- Teaching Assistant, Vertebrate Zoology, Arizona State University West, 1998.
- Teaching Assistant, Genetics, Arizona State University West, 1997.

OUTREACH/EDUCATION/TRAINING:

- CURENet (Course-Based Undergraduate Research Experience Network) Training, 2019.
- CURE (Course-Based Undergraduate Research Experience) Faculty Teaching and Learning Community Training, 2018.
- K-12 Public school outreach programs on Biology and Neuroscience, 2002-present.
- Brain Awareness Visits to Northwestern Middle School, 2012-2019.
- Environmental Protection Agency Environmental Justice Academy, 2017.
- Outreach to Northwood Elementary for Eco-Summit presentations, September 11, 2015.
- Project Kaleidoscope Summer Leadership Institute, July 21-26, 2015.
- Institute for Georgia Environmental Leadership, 2015.
- Communicating Climate Science AAAS Communicating Science Workshop, January 16, 2015.
- HHMI/National Academies Southeast Summer Institute, May 12-16, 2014.
- "Mentoring Up: The Craft of Effective Mentoring Relationships" Workshop, with Richard McGee, March 14, 2014.
- Global Education Initiative Workshop, May 9-10, 2013
- Craw-Fly Workshop, Cornell University, June 21-27, 2013.
- Writing Across the Curriculum Workshop, Georgia State University, May 3-4, 2012.
- Sustainability in the Curriculum Train the Trainer Workshop, Agnes Scott College, May 17-18, 2011
- Bean Beetle Curriculum Development Network Workshop, Emory University, June 2-4, 2010
- 2009 national SFN Next Generation Award from the Society for Neuroscience (SFN) for Brain Awareness efforts
- Top three places in student's choice award for Brains Rule booth at ZooAtlanta, 2006 and 2009 (2nd) and 2007 (3rd).
- 1st place student's choice award for Brains Rule booth at SciTrek, 2004.
- 2nd place student's choice for Brains Rule booth at Sci Trek in Atlanta, 2003.

SERVICE/LEADERSHIP:

- Nu Rho Psi National Council President Elect, November 2019-present.
- Georgia State University Senator (Planning and Development and Sustainability Committees), 2019-present.
- Georgia State University Senate Sustainability Co-Chair, 2019-present.
- Neuroscience Institute Executive Committee Member (non-voting), 2018-present.
- Pre-Med Committee Member, 2012-present
- Neuroscience Institute Lecturer Search Committee Chair, 2019.
- GSU Student Environmental Team (SET), faculty advisor, 2010-present.
- GSU Herpetology Club, founder and faculty advisor, 2006-present. 2007 award for Outstanding Leadership Program of the Year.
- Nu Rho Psi GSU Chapter, co-founder and advisor, 2013-present. Awarded National Chapter of the Year in 2016.
- Collegiate Neuroscience Society (CNS), faculty advisor, 2011-present
- Georgia State University Research Conference Judge, 2015-2019.
- Neuroscience Institute Non-Tenure Track Promotion Review Subcommittee Member, 2017-2018.
- Neuroscience Institute Undergraduate Program Committee Member, 2018.

- Speaker on Competitive Edge for Georgia State University College of Arts and Sciences Fall Med-Fest, September 28, 2018.
- Georgia State University Panther Preview, (October 6, 2017; November 2 and 9, 2018)
- Georgia State University Research Conference Abstract Reviewer, 2016-2017.
- Emory University Sustainability Case Competition Judge, 2016.
- “Teaching Effectively at Georgia State” Lecturer Panelist for Faculty Orientation, College of Arts and Sciences, 2016
- Institute for Georgia Environmental Leadership Class of 2015 Development Co-Chair (2015) and Chair (2016-2018)
- College of Arts and Sciences Technology Fee Committee Chair, 2016.
- College of Arts and Sciences Technology Fee Committee Member, 2015.
- Environmental Programs Advisory Committee Member, 2012-2016
- STEM (Science, Technology, Engineering and Mathematics) Faculty Representative, 2011-2016
- Coral Restoration Foundation volunteer, 2015-2016, 2018.
- Cycling Club at GSU advisor, 2015-present.
- Tree Campus USA at GSU, co-founder and advisor, 2014-2018.
- LeftBRAIN (Behavioral Research Advancements in Neuroscience) Undergraduate Research Coordinator, 2012
- Organizer/Host of Georgia Campus Sustainability Network Meeting, 2012
- Co-Founder and organizer of Sustainability Forum seminar series, 2009-2017
- Convener of “Green Roof and Urban Agriculture Expansion in Atlanta” at White House Community Partnership Summit, Atlanta, Georgia, February 10th, 2012.
- ONE Campus Challenge, founder and faculty advisor, 2011-2018.
- Wesley Foundation at Georgia State University, faculty advisor, 2011-2018.
- Atlanta Chapter of the Society for Neuroscience - postdoctoral representative, 2005-2010; organized Brain Awareness Month from 2005-2008, reaching over 7,600 students in over 100 schools with public education by neuroscientists in 2007.
- Volunteer Diver, Georgia Aquarium, 2006-present.
- Georgia Aquarium Dive Safety Control Board Voting Member, 2008-2010.
- Biotechnology Scholars mentor for two biotechnology scholars as part of the Howard Hughes program in Biology at Georgia State, 2006-2007.
- ION (Institute on Neuroscience) Mentor for high school lab experiences (summer-long mentorship program), 2007.
- J.B. Johnston Club organizer of publisher donations, book raffle, and fundraising for Luis Carneiro Memorial International Student Travel Fund, 2006-2008; chair of the Luis Carneiro Memorial International Student Travel Fund Selection Committee, 2009-2011
- Watermargin, Inc. Nonprofit - Chairman of the Board 2005-2011; board member and webmaster, 2002-2011.
- Georgia Aquarium - volunteer (education, docent, dive programs, husbandry, and water quality), 2004-Present. 2007 Golden Snorkel Award and 2013 Coral Hugger Award for service to the aquarium.

PROFESSIONAL ORGANIZATIONS:

- American Association for the Advancement of Science
- Animal Behavior Society
- Society for Neuroscience
- Society for Behavioral Neuroendocrinology
- Society for Integrative and Comparative Biology
- Faculty for Undergraduates in Neuroscience
- Nu Rho Psi