

CURRICULUM VITAE

MARINA CHOLANIAN, PHD

CHRONOLOGY OF EDUCATION

- 2005 Quincy College, A.A. *Magna cum laude*
Major field: Humanities
- 2007 University of Massachusetts, Boston, B.A. *Summa cum laude*
Major field: Psychology
- 2013 University of Arizona, Ph.D.
Major field: Neuroscience; Minors: Medical Pharmacology and Molecular and Cellular Biology
Doctoral Dissertation: "Effects of estrogen on morphological and electrophysiological properties of arcuate NKB neurons." Advisor: Naomi E. Rance, M.D., Ph.D.

CHRONOLOGY OF EMPLOYMENT

- 2006-2008 Department Associate, Rosenstiel Center for Basic Medical Research, Brandeis University, Waltham, MA
- 2007-2008 Behavioral Neuroscience Teaching Assistant and Tutor, University of Massachusetts, Boston, MA
- 2008 Research assistant, Department of Psychology, University of Massachusetts, Boston, MA
Research: sex differences in addiction to amphetamines
Advisor: Tiffany Donaldson, Ph.D.
- 2008-2013 Research associate, Department of Pathology, University of Arizona College of Medicine, Tucson, AZ
Research: role of estrogens in modulating properties of GnRH pulse generator
Advisor: Naomi E. Rance, M.D., Ph.D.
- 2014-2016 Postdoctoral Research Associate II, Department of Physiology, University of Arizona College of Medicine, Tucson, AZ
Research: effects of prenatal nicotine exposure on medullary networks that control respiration in neonates
Advisor: Ralph F. Fregosi, Ph.D.
- 2016-2017 Postdoctoral Fellow, Massachusetts General Hospital/Harvard Medical School, Boston, MA
Research: role of mutations in RNF216 in neuroendocrine axis and cerebellum using mouse knock out models
Advisor: Stephanie B. Seminara, M.D., Ph.D.
- 2017-2018 Application Scientist, Neurotar Ltd, Helsinki, Finland
- 2018-2020 Adjunct Faculty, Department of Biology, Pima Community College, Tucson, AZ
- 2021-present Lecturer, Department of Neuroscience, University of Arizona, Tucson, AZ

HONORS AND AWARDS

- 2008-2010 Arizona Science Foundation (SFAz) Fellowship (\$30,000/year graduate stipend)
- 2011-2012 The Achievement Rewards for College Scientists (ARCS) Foundation Award
- 2011-2012 The Evelyn F. McKnight Brain Institute Fellowship
- 2011 The ARCS Foundation travel award to attend Society for Neuroscience Annual meeting
- 2011 GIDP in Neuroscience award to attend Society for Neuroscience Annual meeting
- 2012 The ARCS Foundation travel award to attend Society for Neuroscience Annual meeting
- 2012 H.E. Carter Travel Award to attend Society for Neuroscience Annual meeting
- 2012-2013 The Achievement Rewards for College Scientists (ARCS) Foundation Award, Steele Scholar
- 2015 Postdoctoral Fellow Poster Prize from the Respiration Section of the American Physiological Society

SERVICE/OUTREACH

Local/State Outreach

- 2009 Volunteer, Frandrau Science Center, Brain Awareness Week, Tucson, AZ
- 2011 Volunteer, BrainWorks station, Tucson Festival of Books, Tucson, AZ
- 2011 Instructor, Private Eye Teaching session for 5th grade students, Flagstaff Public School, Flagstaff, AZ
- 2013 Volunteer, BrainWorks station, Tucson Festival of Books, Tucson, AZ
- 2014 Member, Undergraduate Poster Judging Committee at the Arizona Physiological Society Annual Meeting, Tucson, AZ
- 2019 Grass Foundation Workshop “Low-Cost approaches for research in neuroscience”, Tucson, AZ

Departmental Committees

- 2022 Member, Junior Faculty Search Committee, Department of Neuroscience
- 2022 Member, Adjunct Faculty Search Committee, Department of Neuroscience
- 2022 Member, Undergraduate Scholarship Committee, Department of Neuroscience
- 2021-2022 Member, Strategic Plan in Neuroscience Teaching Committee, Department of Neuroscience

Graduate Program Committees

- 2011-2012 Elected Student Representative, Neuroscience Graduate Interdisciplinary Program (GIDP) Executive Committee
- 2012 GIDP in Neuroscience Admissions Committee Student Representative
- 2013 GIDP in Neuroscience Admissions Committee Student Representative

PROFESSIONAL AFFILIATIONS

- 2008-Present Member, Society for Neuroscience
- 2014-Present Member, American Physiological Society
- 2016-2017 Member, Endocrine Society

PUBLICATIONS/CREATIVE ACTIVITY

- N.E. Rance, S.J. Krajewski, M.A. Smith, **M. Cholanian**, P.A. Dacks (2010) Neurokinin B and the hypothalamic regulation of reproduction, *Brain Research*, Dec. 10; 1364:116-28.
- M. Cholanian**, S.J. Krajewski-Hall, R.B. Levine, N.T. McMullen, N.E. Rance (2014) Electrophysiology of Arcuate Neurokinin B neurons in female *Tac2*-EGFP transgenic mice, *Endocrinology*, Jul; 155 (7): 2555-65.
- M. Cholanian**, A. Lobzova, B. Das, C. Yelleswarapu, S.T. Donaldson (2014) Digital holographic microscopy discriminates sex differences in medial prefrontal cortex GABA neurons following amphetamine sensitization, *Pharmacology, Biochemistry, and Behavior*, Sep; 124: 326-32
- M. Cholanian**, S.J. Krajewski-Hall, N.T. McMullen, N.E. Rance (2015) Chronic oestradiol reduces the dendritic spine density of KNDy neurones in the arcuate nucleus of ovariectomized *Tac2*-EGFP transgenic mice, *Journal of Neuroendocrinology*, Apr; 27(4): 253-63
- M. Cholanian**, J. Wealing, R.B. Levine, R.F. Fregosi (2017) Developmental nicotine exposure alters potassium currents in hypoglossal motoneurons in neonatal rat, *Journal of Neurophysiology*, Apr. 1: 117 (4):1544-1552.
- M. Cholanian**, P.L. Powell, R.B. Levine, R.F. Fregosi (2017) Influence of developmental nicotine exposure on glutamatergic neurotransmission in rhythmically active hypoglossal motoneurons, *Experimental Neurology*, Jan. 28(7): 254-260.
- J.Wealing, **M. Cholanian**, E.G. Flanigan, R.B. Levine, R.F. Fregosi (2019) Diverse physiological properties of hypoglossal motoneurons innervating intrinsic and extrinsic tongue muscles, *Journal of Neurophysiology*, Nov. 1: 122(5):2054-2060.

CONFERENCES/SCHOLARLY PRESENTATIONS

National/International Conferences

Submitted Abstracts & Poster Presentations

KEY: *maiden name

T. Nixon, D. Bolen, **M. Perebeyeveva*** and S.T. Donaldson (2007) Subchronic amphetamine pretreatment increases locomotor activity and stereotypy response to environmental and low dose amphetamine challenges. Poster presentation at the Annual Biomedical Research Conference for Minority Students (ABRCMS) Austin, TX

A. Lobzova, **M. Perebeyeveva*** and S.T. Donaldson (2008) Evidence for increased amphetamine neurobehavioral sensitization in ovariectomized rats. Poster presentation at the 22nd Annual Conference on Undergraduate Research (NCUR) Salisbury, MD.

M. Cholanian, S.J. Krajewski, N.T. McMullen, and N.E. Rance (2011) Characterization of a Tac2-EGFP mouse for the study of arcuate NKB neurons. Poster presentation at the Society for Neuroscience Annual Meeting, Washington, DC.

M. Cholanian, S.J. Krajewski, and N.E. Rance (2011) A novel Tac2-EGFP transgenic mouse model to study arcuate NKB neurons: characterization of reproductive function and hypothalamic neuropeptide expression. Poster presentation at the Science Foundation Arizona Grand Challenges Summit, Flagstaff, AZ.

M. Cholanian, S. J. Krajewski-Hall, R. B. Levine, N. T. McMullen, N. E. Rance (2012) Long-term estradiol treatment reduces firing rate of arcuate neurokinin B (NKB) neurons in ovariectomized Tac2-EGFP mice. Poster presentation at the Society for Neuroscience Annual Meeting, New Orleans, LA.

M. Cholanian, S.J. Krajewski-Hall, N.T. McMullen, N.E. Rance (2014) 17 β -Estradiol reduces the dendritic spine density of KNDy neurons in the arcuate nucleus of ovariectomized *Tac2*-EGFP transgenic mice. Poster presentation at the Society for Neuroscience Annual Meeting, Washington, DC.

M. Cholanian, R.B. Levine, R.F. Fregosi (2015) Developmental Nicotine Exposure Results in Exaggerated Response to AMPA Receptor Activation in Hypoglossal Motoneurons in Neonatal Rats. Poster presentation at the Experimental Biology Annual Meeting, Boston, MA.

J. Wealing, **M. Cholanian**, R.F. Fregosi (2016) Hypoglossal Motoneuron Differentiation through Fluorescence Mapping and Patch Clamp Electrophysiology. Poster presentation at the Undergraduate Biology Research Program Annual Conference, Tucson, AZ.

AWARDED GRANTS (Postdoctoral Training and Research)

2016-2017 Ruth L. Kirschstein Institutional National Research Service Award (NRSA), 5 T32 HD007396-23
Applicant was chosen as a trainee for a 3-year T32-funded project at Reproductive Endocrine Unit at Harvard Medical School/Massachusetts General Hospital.

2016 National Ataxia Foundation Postdoctoral Research Awards (\$35,000)
Applicant received but declined the award due to the change in employment. The decision to switch the employer was made due to the toxic and incompatible environment.