INGRID TULLOCH Ingrid.Tulloch@Morgan.edu

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GRADUATE CENTER OF THE CITY UNIVERSITY OF

NEW YORK, NEW YORK CITY, NY

2/2011 PhD. Biological Psychology and Behavioral Neuroscience

M. Phil. Biological Psychology and Behavioral Neuroscience

6/2006 HUNTER COLLEGE OF THE CITY UNIVERSITY OF

NEW YORK, NEW YORK CITY, NY

BA Cum Laude, Thomas Hunter Interdisciplinary Honors &

Psychology

RESEARCH EXPERIENCE

8/2018-present

MORGAN STATE UNIVERSITY

<u>Assistant Professor, Director of Rodent Research Facility and</u> <u>Principal Investigator of the Neurobiology of Risky Behavior Lab</u>

- Duties include the establishment of a rodent vivarium
- Develop SOPs for vivarium operations
- Train staff and faculty for animal care and use
- Primary investigator: behavioral neurobiology of Risky Behaviors and substance use disorders

6/2014-6/2018

STEVENSON UNIVERSITY

Department of Psychology Crustacean and Drosophila Laboratory

- Oversee a behavioral establishment of a neuroscience lab involving interdisciplinary collaboration between Stevenson University's psychology, biology, and biochemistry departments.
- Train and supervise undergraduate students to conduct invertebrate research for biological psychology and behavioral neuroscience
- Design and implement behavioral neuroscience research
- Write grants for funding research projects
- Write and publish research manuscripts.
- Review abstracts, travel awards, and research proposals for the Annual Biomedical Research Conference for Minority Students

3/2011-2013

NATIONAL INSTITUTES ON HEALTH NATIONAL INSTITUTE ON DRUG ABUSE, BALTIMORE, MD Molecular Neuropsychiatry Branch- Post-Doctoral Fellow

- Developed and implemented studies on the effects of psychoactive drugs of abuse on brain molecular activity (gene and protein expression) and behavior.
- Drafted research proposals with appropriate animal care and use protocols
- Collected, analyzed, and presented data at professional conferences and symposia
- Prepared manuscripts of research findings for scholarly journals and presentations for professional conferences
- Supervised undergraduate and graduate student researchers

8/2006-3/2011 HUNTER COLLEGE OF THE CITY UNIVERSITY OF NEW YORK, NEW YORK, NY

<u>Jesus Angulo Molecular Neurobiology lab-Pre-Doctoral Research</u> Fellow

- Designed and implemented studies on methamphetamine-induced neurochemical changes and behavior
- Assisted in preparing the method and materials section of grant applications
- Drafted and implemented IACUC protocols
- Trained and supervised student laboratory assistants

1/2007-6/2007

<u>Vanya Quinones-Jenab Molecular Neuroendocrinology lab-Pre-</u> Doctoral Research Fellow

 Collected and analyzed data on sex differences in cocaine-induced behavioral sensitization

8/2004-1/2007

<u>Cheryl Harding Behavioral Neuroendocrinology Laboratory-</u> <u>Research Assistant</u>

- Designed and implemented a study on the estrogenic modulation of reproductive behavior
 Collected data from a study on the opioidergic modulation of singing behavior
- Analyzed data from studies of dopaminergic modulation of reproductive behavior

COLUMBIA UNIVERSITY CENTER FOR NEUROBIOLOGY AND BEHAVIOR, NEW YORK CITY, NY

8/2005-8/2006

Eric Kandel -Neurobiology Laboratory Research Assistant
Collected and analyzed behavior data in order to develop animal
models for studying schizophrenia

5/2005-8/2005

Research Fellow

 Performed molecular and behavioral analysis of dopamine 2 receptor (D2R) transgenic mice.

TEACHING EXPERIENCE

8/2018- Present MORGAN STATE UNIVERSITY

Assistant Professor

Prepare and deliver course content, train and mentor student researchers through use of best practices within and across the biopsychology field. Courses include:

- Psychology 101: General Psychology
- Psychology 108: Scientific Methods
- Psychology 301: Physiological Psychology
- Psychology 487: Senior Research Thesis

STEVENSON UNIVERSITY, STEVENSON MD

8/2013-5/2018

Assistant Professor

Designed courses in psychology.

Delivered course content, train, and mentor student researchers through use of best practices within and across the discipline. Select courses I have taught include:

- Psychology 101 Introductory Psychology
- Psychology 261 Biological Psychology
- Psychology 270 Research Methods and Data Analysis I
- Psychology 343 Research Methods and Data Analysis II
- Psychology 350 Special topics: The Nature and Nurture of Psychological Disorders,
- Psychology 350 Special topics: Animal Behavior
- Psychology 350 Special topics: Health Psychology
- Psychology 350 Special topics: Altered States of Consciousness
- Psychology 350 Special Topics: Community Psychology, Stress, and Health
- Psychology 350 Special Topics: Drugs and Behavior
- Special Topics in Psychology 350: The Psychology of Black Identity Development
- Psychology 470: Senior Research Thesis
- OCO-205 Psychology Research
- OCO-305 Psychology Research

1/2013-8/2013

Adjunct Professor

Psychology 370: Biological Psychology.

NATIONAL INSTITUTES OF HEALTH-NATIONAL INSTITUTE ON DRUG ABUSE, BALTIMORE MD

Neurobiology Lecture for Summer Research Fellows

The Serotonin System

2012	The Serotonin System
2011	The Dopamine system
2011	The Serotonin system
	HUNTER COLLEGE OF THE CITY UNIVERSITY OF
	NEW YORK, NEW YORK CITY, NY
	Adjunct Professor
2010	Psychology 180: Introduction to Brain and Behavior
2008	Psychology 100: Introduction to Psychology
	Teaching Assistant
2006	Psychology 248: Statistics for Psychology
2005	Psychology 248: Statistics for Psychology

LEADERSHIP AND COMMUNITY ENGAGEMENT

8/2014-2019 GOUCHER COLLEGE PRISONER EDUCATION PROGRAM

<u>Instructional Design and Tutor</u>

 Tutor or instruct incarcerated individuals enrolled in math and psychology undergraduate courses through the Goucher Prisoner Education Program. Statistics course design and delivery.

2014-Present THE INTERNATIONAL BRAIN BEE COMPETITION

Baltimore County Coordinator

Organize and implement the annual Brain Bee Competition for

high school students in Baltimore County

Chaperone and Judge Students participating in the National

Championship

STEVENSON UNIVERSITY

2016-5/2018

Governance Self-study Committee member for MSHEC reaccreditation.

- Assist in implementing a self-study on institutional governance
- Collect data needed for self-study report
- Drafted reports for Middle States Review and Accreditation

8/2015-5/2017

Executive Committee Member of Faculty Council

- Reviewed, edited and voted on institutional policies as a standing committee member of the faculty council executive committee
- Served as recording chair for the faculty council
- Maintained and distributed council meeting minutes, and information regarding council proposals, activities, and initiatives.

2014- 2018 <u>Abstract/Travel Award Application Reviewer and Judge</u>

- Reviewed abstracts for the Annual Paul D Lack Scholars Showcase
- Reviewed neuroscience abstracts, travel grant applications, and serve as judge for the Annual Biomedical Research Conference for Minority Students

2013-2018

- Presented a talk on Genes, Hormones and Aggression" for the Psi Chi Honor Society Speaker Series 2018
- Presented a talk as part of a panel on Academic Publishing for the 2017 Writing Workshop sponsored by the Office of Sponsored Programs and Research
- Presented a fall 2016 talk "The Psychology of Black Women" as part of the RISE speaker series.
- Served as panelist for a discussion on the sex and love sponsored by the Psychology Club for spring 2016.
- Served as a presenter for a two sessions of a recurring event sponsored by the College of Humanities and Social Sciences. My participation involved giving a short talk about personal experiences and changes in perspective in the fall 2014 and spring 2015 semesters.
- Presented a fall 2013 research and career talk sponsored by the psychology club

NATIONAL INSTITUTES OF HEALTH-NATIONAL INSTITUTE ON DRUG ABUSE, BALTIMORE, MD

2015-2016 External Ad-Hoc Reviewer

 Reviewed applications for post-baccalaureate and post-doctoral training fellowship and submitted reports regarding on my recommendations for fellowship

2011-2013 Mentoring Award Committee Member

 Served as a member of the 2013 committee that selected awardees for various mentoring honors within the Intramural Research Program

Founding Peer Mentor Committee Member

 Established a committee to assist new fellows adjusting to life at the NIH in Baltimore

Planning committee co-chair

 Organized the 2012 NIH Baltimore Post-Doctoral Fellows Research and Career Symposium

Mentor

 Served as research mentor for undergraduate and postbaccalaureate interns to guide them in acquisition of research skills

4/2012-8/2012

JOHNS HOPKINS CENTER FOR ADDICTION AND PREGNANCY, BALTIMORE, MD

Volunteer

 Designed and provided stress-reduction workshops, for patients being treated for substance abuse and assisted patients in accessing social services.

AWARDS

2017	SEED grant award to study "The Effects of Ethanol on Adult
	Neurogenesis and Behavior"
2015	Stevenson University S3RP Funding Award for research and mentoring
2014	Stevenson University Faculty Development Research Grant Award
2011-2013	NIH Intramural Research Program Post-Doctoral Fellowship
2010	Hunter College Gene Center for Structure and Function Harold Amos
	Award for Research Excellence

PEER REVIEWED PUBLICATIONS

*Asterisk indicate a co-author was an undergraduate student mentee was at the time of publication.

Fort, L* & **Tulloch IK** (2016) Behaviors of a captive *Coenobita clypeatus* in the presence of varying light stimuli. *Modern Psychological Studies* 21(2): 23-32

Torres OV, McCoy MT, Ladenheim B, Jayanthi S, Brannock C, **Tulloch IK**, Krasnova IN, Cadet JL. (2015) CAMKII-conditional deletion of histone deacetylase 2 potentiates acute methamphetamine-induced expression of immediate early genes in the mouse nucleus accumbens *Nat Sci Rep.* 5:13396

Braren SH, Drapala D*, **Tulloch IK**, Serrano P (2014) Methamphetamine-induced short-term increase and long-term decrease in spatial working memory affects protein Kinase M zeta (PKMζ), dopamine, and glutamate receptors. *Front Behav Neurosci* 18; 8:438

Tulloch IK, Afanador L, Baker L,* Ordonez D,* Payne H,* Mexhitaj I, * Olivares E,* Chowdhury, A J. A. Angulo (2014) Methamphetamine Induces Low Levels of Neurogenesis in Striatal Neuron Subpopulations and Differential Motor Performance. *Neurotoxicity Research* 25(2): 115-129

Saint-Preux F*, Bores, LR, **Tulloch I**, Ladenheim B, Kim R., Thanos PK, Volkow ND and Cadet ,JL (2013) Chronic co-administration of nicotine and methamphetamine causes differential expression of immediate early genes in the dorsal striatum and nucleus accumbens. *Neuroscience*. 243:89-96.

Garrett, T, Tulloch I, McCoy MT, Ladenheim B, Jayanthi S, Krasnova IN, Beauvais G, Hodges A, Davis C,* Cadet JL (2012) Chronic methamphetamine causes differential expression of immediate early genes in the nucleus accumbens and midbrain of rats Journal of *Drug and Alcohol Research*, 1: 1-7

Tulloch I, Afanador L, Mexhitaj I., Ghazaryan N*, Garza- Gongorra A,* Angulo, JA (2011) A single high dose of methamphetamine induces apoptotic cell loss lasting up to three months in mice. *Neuroscience*, 193:162-9

Tulloch I., Gharzaryan N., Mexhitaj I.*, Ordonez D*., Angulo JA (2011). The role of neurokinin-1 and dopamine receptors on the striatal methamphetamine-induced proliferation of new cells in mice. *Brain Res.*, 1399:33-9.

Tulloch I., Afanador L., Zhu J. Angulo J. A. (2011) Methamphetamine induces striatal cell death followed by the generation of new cells and a second round of cell death in mice. *Journal of Current Neuropharmacology*, 9(1): 79-83

Rauceo S, Harding CF, Maldonado A, Gaysinkaya L, **Tulloch I**, Rodriguez E*. (2008) Dopaminergic modulation of reproductive behavior and activity in male zebra finches. *Behavioral Brain Research*, 187(1):133-139

SELECTED CO-AUTHORED CONFERENCE PRESENTATIONS AND PAPERS

Tulloch IK & Frederick M (2019) Sociosexuality and Serum Biomarkers: Developing a Theoretical Framework for Studying Sexual Harassment. Paper presented at the 89th Eastern Psychological Association Annual Meeting.

Leister B*, Kennedy C*, Nash A*, **Tulloch IK,** Danna C* (2019) Neurodevelopmental Effects of Early Alcohol Exposure in Transgenic *Drosophila melanogaster* Poster Abstracts and proceedings from the 89th Eastern Psychological Association Annual Meeting, NYC, NY

Frederick M & **Tulloch IK** (2018) Using Interleukin-6 to Predict Life History Variation. Human Behavior and Evolution Society 30th Annual Meeting. July 6th Amsterdam. Poster 52

- King C*, Caffrey* J & **Tulloch IK** (2018) Exploring Differences in Empathetic Responses to Social Media & Printed Media. Proceedings and Abstracts of the Annual Biomedical Research Conference for Minority Students Abstract. Poster B-333
- Briscoe A*, Dennis M* & **Tulloch IK** (2018) Influences of Social Environment on Procambarus clarkii Behavioral Responses to Alcohol. Proceedings and Abstracts of the Annual Biomedical Research Conference for Minority Students Abstract. Poster E-253
- Kennedy CK*, Nash A*, Leister B*, Wasicko NJ* & **Tulloch IK** (2018) Multi-Generational Behavioral Responses to Alcohol in Drosophila Melanogaster Larvae. Abstracts of the Annual Biomedical Research Conference for Minority Students Abstract. Poster
- Dennis M*, Ali U*, Pham B* & **Tulloch IK** (2017) Altering Light Exposure is Associated with Altered Exploration, Aggression and Brain Protein Levels in Invasive Crayfish *Orconectes Virilis* and *Orconectes Rusticus*, Proceedings and Abstracts of the Annual Biomedical Research Conference for Minority Students Abstract. Poster D-264
- Guzman EC* & **Tulloch IK** (2017). Consciousness Quotient Predicts Spirituality. *The* 88th Annual Eastern Psychological Association Meeting Proceedings & Abstracts. Poster 27. Boston, MA.
- Cooper D*, **Tulloch, IK** (2016). Sex differences in alcohol consumption in Drosophila melanogaster *The 87th Annual Eastern Psychological Association Meeting* Proceedings & Abstracts, 23. NYC, NY
- Shields L*, Henderson H*, Conteh S*, Angulo J, **Tulloch IK** (2016). The effects of methamphetamine on the developmental genes *Otx2* and *Gbx2* in the rodent striatum. *The* 87th Annual Eastern Psychological Association Meeting Proceedings & Abstracts, poster 52. NYC, NY
- Fort LD*, Hastings S*, **Tulloch IK** (2016). Behaviors of *Coenobita clypeatus* in the Present of varying light stimuli. *The 87th Annual Eastern Psychological Association Meeting* Proceedings & Abstracts, poster 54pm. NYC, NY
- Jean ST*, Grant C*, Conteh, S*, **Tulloch IK** (2016). The immunohistochemical measures of BDNF and its receptor TrkB in the mouse brain after methamphetamine. *The* 87th *Annual Eastern Psychological Association Meeting* Proceedings & Abstracts, poster 55 NYC, NY
- Clein RS*, **Tulloch IK**. Fort LD*, Hastings SL* & Shah S* (2016). Varying Wavelengths of Light *Alters Serotonin Positive Cells and Associated Behaviors in Coenobita clypeatus*. *Annual Biomedical Research Conference for Minority Students* Poster Abstract C214, Tampa, FL

- Shields L*, Henderson H*, Angulo JA, **Tulloch IK** (2015). OTX2 in the brain of Rodents after Methamphetamine-Induced Toxicity. Poster Presentation. *The 15th Annual Biomedical Research Conference for Minority Students Poster Session Abstracts*, 7G-259, Seattle, WA
- **I.K. Tulloch,** I. N. Krasnova, J. Justinova, B. Ladenheim, C. Barnes*, S. R. Goldberg, J. L. Cadet (2013). Methamphetamine self-administration differentially alters expression of stress-related peptide transcripts in the rat hippocampus. *Annual meeting of the Society for Neuroscience*
- **I. K.Tulloch**, T. Garrett, M. T. McCoy, A. B. Hodges, J.L. Cadet (2012). Acute and multiple injections of methamphetamine induce differential expression of immediate early genes in the nucleus accumbens and midbrain of rats. *Annual meeting of the Society for Neuroscience*
- **I.K. Tulloch,** D Ordonez*, J L Cadet, J A Angulo (2011). Methamphetamine stimulates low levels of neurogenesis in striatal neuron subpopulations that underwent methamphetamine-induced apoptotic cell death. *Annual meeting of the Society for Neuroscience*
- **I.K. Tulloch**, J.A. Angulo J. (2010) Methamphetamine-induced striatal cytogenesis requires dopamine-1 receptor function. *Annual meeting of the Society for Neuroscience*
- **I. K. Tulloch**, L. Afanador, J. A. Angulo (2009). A neurotoxic dose of methamphetamine induces two distinct phases of cell death in the striatum. *Annual meeting of the Society for Neuroscience*
- **I. K. Tulloch**, L. Afanador, J.A. Angulo (2008). Characterization of the newly generated cells of the striatum in the aftermath of methamphetamine in mice.. *Annual meeting of the Society for Neuroscience*

PROFESSIONAL MEMBERSHIPS

Eastern Psychological Association Faculty for Undergraduate Neuroscience International Drug and Alcohol Research Society Society for Neuroscience Association of Black Psychologists

Professional References Available Upon Request *Asterisks denote student or peer mentees