

Elizabeth I. M. Flandreau, PhD

Psychology Department, Grand Valley State University, 2129 Au Sable Hall

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EDUCATION

- **Emory University, Atlanta Georgia**
 - PhD in Neuroscience, February 2009
 - *Dissertation: Corticotropin-Releasing Factor Overexpression in the Central Amygdala: Gene Expression, HPA Axis Function, and Behavior*
 - Advisor Dr. Charles B. Nemeroff
 - Department of Psychiatry and Behavioral Sciences

- **Lawrence University, Appleton, WI**
 - B.A. Biology *Summa cum Laude*, June 2003
 - *Thesis: Nicotine-ethanol interactions in flash-evoked potentials and behavior of rats.*
 - Psychology Minor, Interdisciplinary Neuroscience

ACADEMIC EMPLOYMENT

Grand Valley State University, Department of Psychology, Allendale, MI

- Assistant Professor: 01/2015 – Present
 - *Research Focus:* Neurobiology of Stress Sensitivity and Resiliency
 - *Courses Taught:*
 - Psychology 300: Research Methods in Psychology (Writing Intensive)
 - Psychology 330: Foundations of Behavioral Neuroscience
 - Psychology 430: Physiological Psychology
 - *Service Activities:*
 - Curriculum Committee (Chair)
 - Library Committee
 - Faculty Advisor, Psi Chi GVSU Chapter (2015- Present)
 - Psychology Department Meeting Recorder (2015)
 - Ad Hoc Journal Reviews (2009 – Present)
 - *Behavioral Brain Research*
 - *Biological Chemistry*
 - *Pharmacology Biochemistry & Behavior*
 - *Plos One*
 - *Psychoneuroendocrinology*
 - *Psychopharmacology*
 - *Neurobiology of Stress*
 - *Additional Responsibilities*
 - Mentor for undergraduate McNair Fellow (Summer 2016)
 - Advisor for undergraduate research with academic credit (499) (Winter 2016-Present)
 - Thesis advisor for Masters student in Cell Molecular Biology (2016-2017)
 - Research Advisor for undergraduate research volunteers (Winter 2016- Present)
 - Academic Advisor for Behavioral Neuroscience Majors (Fall 2016-Present)

University of California at San Diego, Department of Psychiatry

- Postdoctoral Research Fellow: 03/2012 – 12/2014
 - *Advisors:* Dr. Victoria Risbrough (UCSD) & Dr. Richard Hauger (VA, La Jolla, CA)
 - *Research Focus:* Environmental and genetic impacts on behavioral, endocrine, and gene-expression response to stress.

University of San Diego, Department of Psychology

- Adjunct Instructor: 2013
 - *Courses Taught:* NEUR 310 Behavioral Neuroscience

Salk Institute for Biological Studies, Peptide Biology, La Jolla, CA

- Postdoctoral Research Fellow 06/2009 – 02/2012
 - *Advisor:* Dr. Wylie Vale
 - *Research Focus:* Interactions between stress and diet on sensitivity to social stress
 - *Additional Responsibilities:*
 - Mentor for Research Volunteers (2010 – 2011)
 - Salk Featured Fellows Lecture Series (SFFS) Organizer (2010 – 2012)
 - Science Education Outreach Volunteer, San Diego Area Middle Schools (2011)
 - Society for Research Fellows (SRF) Executive Committee (2009 – 2012)
 - High School Science Day Teacher (2009)

RESEARCH SUPPORT

- CSCE Catalyst Grant, GVSU 2017 – 2018
- CSCE Early Faculty Supplemental Startup, GVSU 2016 – 2017
- CSCE Catalyst Grant, GVSU 2015 – 2016
- T32 Biological Psychiatry Postdoctoral Fellowship MH18399-25 2011 – 2013
NIH, Salk Institute for Biological Studies, and UCSD
- T32 Endocrine/Metabolism Postdoctoral Training Grant DK007044-30 2009 – 2010
NIH, Salk Institute for Biological Studies, and UCSD
- F32 Ruth L. Kirschstein National Service Award (NRSA) MH079667 2007 – 2009
NIH, Emory University
- T32 Neurobiology of Drug Abuse Training Grant DA015040 2006 – 2007
NIDA, Emory University
- Howard Hughes ORDER Teaching Fellowship, Emory University 2005 – 2006
- T32 Training in Systems and Integrative Biology: Neuroscience GM08605 2003 – 2005
NIH, Emory University

Recent RESEARCH ABSTRACTS & PRESENTATIONS

- Eudave, D.^{1,3} and **Flandreau EI** (04/05/2017) Effects of unhealthy diet on sensitivity to social defeat stress, *Psychology Department Colloquium*, GVSU.
- BeLow, M.^{1,3} and **Flandreau EI** (2017) "The Tail Suspension Test: The Effects of Diet on Stress-Induced Depressive-like Behavior in Mice", *Student Scholars Day*, GVSU
- Eudave, D.^{1,3}, Mittner, K.², Bomya, R.¹, and **Flandreau, EI** (10/22/2016) Effects of Diet on Sensitivity to Social Defeat Stress in Mice *MGLUR Conference*, Ohio State University

- Eudave, D.^{1,3}, Mittner, K.², Bomya, R.¹, and **Flandreau, EI** (11/5/2016) Effects of Diet on Sensitivity to Social Defeat Stress in Mice *WMRUGS Conference*, Van Andel Research Institute, Grand Rapids, MI.
- Bomya, R.^{1,3}, Mittner, K.², Eudave, D.¹, and **Flandreau, EI** (11/5/2016) Impact of High Fat or High Sucrose Diet on Body Weight in Mice Exposed to Social Defeat Stress *WMRUGS Conference*, Van Andel Research Institute, Grand Rapids, MI.

¹ Undergraduate Psychology / Behavioral Neuroscience Student

² Graduate student in Cell Molecular Biology Master's Program

³ Presenting Author

PUBLICATIONS in preparation & in review

- Eudave, D.¹, BeLow, M¹, and **Flandreau, EI** Impact of high fat or high sucrose diet on behavioral and metabolic response to social stress (Primary Research Article, Submitted).
- **Flandreau, E.I.**, Risbrough, V., Fear learning and sensorimotor gating phenotypes in six strains of laboratory mice (Primary Research Article in Preparation)

PUBLICATIONS

- Toth, M., **Flandreau, EI.**, Deslauries, J., Geyer, M., Mansuy, I., Merlo-Pich, E., and Risbrough, V (2016) Overexpression of forebrain CRH during early life increases trauma susceptibility in adulthood *Neuropsychopharmacology* 2016, 41(6):1681-90.
- **Flandreau, E.I.**, Risbrough, V., Lu A., Ableitner, M., Geyer, M.A., Holsboer, F., Deussing, J.M. (2015). Cell type-specific modulations of corticotropin-releasing factor (CRF) and its type 1 receptor (CRF1) on startle behavior and sensorimotor gating. *Psychoneuroendocrinology*, 53:16-28.
- Toth, M., Gresack, J.E., Bangasser, D.A., Plona, Z., Valentino, R.J., **Flandreau, E.I.**, Mansuy, I., Merlo-Pich, E., Geyer, M.A., Risbrough, V., 2013. Forebrain-Specific CRF Over-Production During Development is Sufficient to Induce Enduring Anxiety and Startle Abnormalities in Adult Mice. *Neuropsychopharmacology*, 39 (6):1409-19.
- **Flandreau, E.I.**, Bourke, C.H., Ressler, K.J., Vale, W.W., Nemeroff, C.B., Owens, M.J., (2013). Escitalopram alters gene expression and HPA axis reactivity in rats following chronic overexpression of corticotropin-releasing factor from the central amygdala. *Psychoneuroendocrinology*. 38, 1349-61.
- Gafford, G.M., Guo, J.D., **Flandreau, E.I.**, Hazra, R., Rainnie, D.G., Ressler, K.J., 2012. Cell-type specific deletion of GABA(A)alpha1 in corticotropin-releasing factor-containing neurons enhances anxiety and disrupts fear extinction. *Proceedings of the National Academy of Science (PNAS) USA*. 109, 16330-5.
- Sink, K.S., Walker, D.L., Freeman, S.M., **Flandreau, E.I.**, Ressler, K.J., Davis, M., 2013. Effects of continuously enhanced corticotropin releasing factor expression within the bed nucleus of the stria terminalis on conditioned and unconditioned anxiety. *Molecular Psychiatry*. 18, 308-19.
- **Flandreau, E.I.**, Ressler, K.J., Owens, M.J., Nemeroff, C.B., 2012. Chronic overexpression of corticotropin-releasing factor from the central amygdala produces HPA axis hyperactivity and behavioral anxiety associated with gene-expression changes in the hippocampus and paraventricular nucleus of the hypothalamus. *Psychoneuroendocrinology*. 37, 27-38.
- **Martin EI***, Ressler KJ*, Jasnow AM, Dabrowska J, Rainnie DG, Nemeroff CB, and Owens MJ (2010); A novel transgenic mouse for gene-targeting within cells that express corticotropin-releasing factor, *Biological Psychiatry* 67, 1212-6.

- Keen-Rhinehart E, Michopoulos V, Toufexis DJ, **Martin EI**, Nair H, Ressler KJ, Davis M, Owens MJ, Nemeroff CB, Wilson ME (2009). Continuous expression of corticotropin-releasing factor in the central nucleus of the amygdala emulates the dysregulation of the stress and reproductive axes. *Molecular Psychiatry*. 14, (37-50).
- Hetzler BE and **Martin EI** (2006) Nicotine-ethanol interactions in flash-evoked potentials and behavior of Long-Evans rats. *Pharmacology, Biochemistry, and Behavior* 83:76 – 89.

REVIEW ARTICLES, BOOK REVIEWS & BOOK CHAPTERS

- **Flandreau EI**, Toth M. (2017). Animal Models of PTSD: A Critical Review. *Curr Top Behav Neurosci* Epub ahead of print.
- **Martin EI**, Nemeroff CB (2010) The Biology of Generalized Anxiety Disorder and Major Depressive Disorder: Commonalities and Distinguishing Features. In: *The Future of Psychiatric Diagnosis: Refining the Research Agenda Depression and Generalized Anxiety Disorder*, American Psychiatric Institute Press.
- **Martin EI**, Ressler KJ, Binder E, Nemeroff CB (2009) The Neurobiology of Anxiety Disorders: Brain Imaging, Genetics, and Psychoneuroendocrinology. *Psychiatric Clinics*, 32(3):549-575.
- **Martin EI**, Nemeroff CB (2008) The role of corticotropin-releasing factor in the pathophysiology of depression: Implications for antidepressant mechanisms of action. *Psychiatric Annals* April 2008, Vol 38, Number 4.
- **Martin EI**, Nemeroff CB (2005) The War of the Soups and the Sparks: The Discovery of Neurotransmitters and the Dispute over How Nerves Communicate. *New England Journal of Medicine* 353:2093-2094.

Complete List of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/16yhpycv5JeQW/bibliography/49569051/public/?sort=date&direction=ascending>

PROFESSIONAL DEVELOPMENT

○ “Online and Hybrid Classes” Round Table	GVSU	11/2017
○ “Engaging Difference” Workshop	GVSU	08/2016
○ “Classroom Climate” Workshop	GVSU	08/2016
○ SWS Syllabus Workshop	GVSU	01/2016
○ Integrated Course Design Workshop	GVSU	08/2015
○ College Classroom (Evidence-Based Teaching)	UCSD	09 – 12/2014
○ Clinical Research Certification (CREST)	UCSD	2010 – 2012
○ Lab Management Symposium	Salk Institute	03/2012

PROFESSIONAL MEMBERSHIP

○ Phi Beta Kappa Honor Society	2003 – Present
○ Psi Chi Psychology Honor Society	2003 – Present
○ International Society for Neuroscience	2003 – Present
○ International Society of Psychoneuroendocrinology	2008 – Present