

Elizabeth Glenn Guy  
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*Diverse technical background as a research scientist and technical sales representative. Over six years of analytical experience and three years of technical consulting, marketing, software testing, and project management. Excellent written and oral communication – course instructor at the university level and first or co-author of 8 peer-reviewed original research papers.*

## Experience and Expertise:

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*Data Analysis: Understand, Manipulate, and Make Decisions.*

- Expert in Complex Univariate Analyses and Regression
- Experience and extensive training in supervised and unsupervised machine learning techniques including – K Nearest Neighbors, Linear and Logistic Regression, and Decision Trees
- Independently prepared and analyzed all data for graduate work. Considered resource for statistical analysis during graduate career for other students and post-docs.
- Over 7 years of experience with statistical and database software including: Python, SQL, SPSS, Excel, R

*Management:*

- **Project management (Oct 2015 – Sept 2018; Plexon, Inc):**
  - Prioritize feature development and manage tasks
  - Disseminate relevant articles to engineering team for cutting-edge development
  - Analyze consumer responses to drive feature ideas and development
  - Troubleshoot, test, and provide feedback for pre-release software
- **Post-Doctoral Fellowship and Graduate Work (2008-2015; Wake Forest University, University of Toronto, Seattle Children's Research Institute):**
  - Designed and implemented all projects for graduate work. Supervised both graduate students and undergraduates in designing and executing experiments.
  - In charge of managing and conducting multiple simultaneous projects using cutting edge techniques
  - Independently set up and successfully began data collection with sophisticated electrophysiological recording platform at the Center for Integrative Brain Research (Seattle Children's Research Institute)
  - Excellent ability to identify and prioritize key bottleneck points in projects to ensure fluid implementation

*Communication:*

- **Course Instructor (2013 – 2015):**
  - Psychology of Learning and Plasticity (Fall 2013)- *University of Toronto*
  - Psychopharmacology for Clinical Practitioners (Spring 2014 and 2015)- *Antioch University in Seattle*
- Extensive presentation experience at numerous local and international scientific conferences.
- Proficient in technical writing for abstracts, grants, and academic publications (see below)
- Effective in communicating complex technical information to expert and lay audiences

## Education

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**PhD Psychology:** Brain and Behaviour Concentration - University of Toronto (GPA: 4.00)

**M.A. Experimental Psychology:** Wake Forest University (GPA: 3.91)

**B.S. Psychology:** Appalachian State University (Honors, *Summa Cum Laude*; GPA: 3.99)

## Additional Work and Experience:

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### *Additional Teaching and Research*

- **Post-Doctoral Fellow (April 2014-October 2015):** University of Washington- Center for Integrative Brain Research-Turner Lab. Using optogenetic, transgenic, and electrophysiological techniques to selectively manipulate brain regions to examine their roles in anxiety, reward, and addiction.
  - National Institute on Drug abuse (NIDA) F32 Training Grant Awardee (July 2014-October 2015) – University of Washington
- **Teaching Assistant (2010-2013):** University of Toronto Department of Psychology- consists of grading, fielding student questions, proctoring examinations, and guest lecturing for various Psychology classes.
- **Research Assistant (2008-2010):** Wake Forest University, Department of Physiology and Pharmacology. Performed various duties in neuroimaging lab of Dr. Linda Porrino, including radioligand binding studies, use of MCID imaging software, concocting and pH balancing drug reagents, and formulating drug dose-response curves.

## Publications

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### Peer-Reviewed Publications:

- Hsu, Y-W. A., Morton, G., **Guy, E.G.**, Wang, S. D., and Turner, E. E. (2016). Dorsal medial habenula regulation of mood-related behaviors and primary reinforcement by tachykinin-expressing habenula neurons. *E Neuro*, 0109-16.2016. doi: <https://doi.org/10.1523/ENEURO.0109-16.2016>.
- Guy, E. G.**, Fisher, D. C., Higgins, G. A., and Fletcher, P. J. (2014). Examination of the effects of varenicline, bupropion, lorcaserin, or naltrexone on responding for conditioned reinforcement in nicotine-exposed Rats. *Behavioural Pharmacology*, 25, 775-83. doi: 10.1097/FBP.0000000000000092.
- Guy, E. G.** and Fletcher, P. J. (2014). Responding for a conditioned reinforcer, and its enhancement by nicotine, is blocked by dopamine receptor antagonists and a 5-HT<sub>2C</sub> receptor agonist but not by a 5-HT<sub>2A</sub> receptor antagonist. *Pharmacology, Biochemistry, and Behavior* doi: 10.1016/j.pbb.2014.08.006.
- Guy, E. G.** and Fletcher, P. J. (2013). The effects of nicotine exposure during Pavlovian conditioning in rats on several measures of incentive motivation for a conditioned stimulus paired with water. *Psychopharmacology* DOI: 10.1007/s00213-013-3375-3.
- Guy, E. G.** and Fletcher, P. J. (2013). Nicotine-induced enhancement of responding for conditioned reinforcement in rats: Role of prior nicotine exposure  $\alpha$ 4 $\beta$ 2 nicotinic receptors. *Psychopharmacology*, 225(2), 429-40.
- Pratt, W. E., Choi, E., and **Guy, E. G.** (2012). An examination of the effects of subthalamic nucleus inhibition or  $\mu$ -opioid receptor stimulation on food-directed motivation in the non-deprived rat. *Behavioural Brain Research*, 230, 365-373.
- Guy, E. G.**, Choi, E., and Pratt, W. E. (2011). Nucleus accumbens dopamine and mu-opioid receptors modulate the reinstatement of food-seeking behavior by food-associated cues. *Behavioural Brain Research*, 219, 265-272.
- Skelly, M. J., **Guy, E. G.**, Howlett, A. C., and Pratt, W. E. (2010). CB1 receptors modulate the intake of a sweetened fat diet in response to mu-opioid receptor stimulation in the nucleus accumbens. *Pharmacology, Biochemistry and Behavior*, 97, 144-151.

**Hobbies:** road running, mountain running, fiddle/violin, cycling, hiking, skiing, coffee

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