

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors.  
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Elizabeth T. Ryan

eRA COMMONS USER NAME (credential, e.g., agency login): ETRYAN1

POSITION TITLE: Associate Director of the Behavioral Psychopharmacology Research Lab

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
The College of William and Mary	B.A.	05/2003	Psychology
Boston University	M.A.	05/2006	Psychology
The Ohio State University	M.A.	12/2009	Clinical Psychology
The Ohio State University	Ph.D.	05/2013	Clinical Psychology
Brown University	Postdoctoral	09/2014	Clinical Psychology

**Please refer to the Biographical Sketch sample in order to complete sections A, B, C, and D of the Biographical Sketch.**

**A. Personal Statement**

As a clinical psychologist, I possess the appropriate training background, level of proficiency, and leadership abilities to successfully complete the proposed project. While my background in psychology is broad, I have specific expertise in clinical diagnostics, empirically supported treatments for a variety of psychological disorders (in particular substance use, mood, and anxiety disorders), and research largely focused on improving the efficacy of psychological treatments and identifying factors that may influence clinical improvements. I have several years of experience mentoring undergraduate and graduate students in their clinical training, research activities, and professional development. In my current positions of Associate Director of the Behavioral Psychopharmacology Laboratory and Director of the Sleep Diagnostic and Treatment Laboratory, I am engaged in research programs to study the reinforcing effects of various drugs of abuse, develop medications for the treatment of substance use disorders, and understand the factors that interact with sleep mechanisms. I have collaborated on multiple studies investigating the behavioral, biological, and psychological impact of both legal and illegal drugs, including nicotine, alcohol, marijuana, cocaine, and ecstasy. Through this work, I gained expertise at every level of the research process, including proposing original research, developing and executing complex protocols, creating effective methods to collect and measure various psychological and physiological data, recruiting eligible research participants, efficiently training and managing research assistants, and successfully analyzing, writing, and publishing scientific peer-reviewed manuscripts. The current application is a logical extension of my prior experiences.

**B. Positions and Honors****Positions and Employment**

2013-2014 Fellow, Alpert Medical School of Brown University Clinical Psychology Training Consortium, Providence, RI

- 2014-2015     Psychological Consultant, Abu Dhabi Community Wellness Center, Abu Dhabi, United Arab Emirates
- 2014-         Research Associate, Alpert Medical School of Brown University/ Providence Veterans Affairs Medical Center, Providence, RI
- 2015-         Associate Director of the Behavioral Psychopharmacology Research Laboratory, Mclean Hospital, Belmont, MA
- 2015-         Director, Sleep Diagnostic and Treatment Laboratory, Mclean Hospital, Belmont, MA
- 2015-         Instructor, Department of Psychiatry, Harvard Medical School, Cambridge, MA

**Other Experience and Professional Memberships**

**Professional Societies**

- 2005-09     Member, Eastern Psychological Association (EPA)
- 2007-         Member, American Psychological Association (APA)
- 2008-         Member, Association of Cognitive and Behavioral Therapies (ABCT)
- 2012-         Member, Massachusetts Psychological Association (MPA)
- 2013-         Member, Rhode Island Psychological Association (RIPA)
- 2016-         Member-in-Training, College on Problems of Drug Dependence (CPDD)
- 2017-         Member, Society of Behavioral Sleep Medicine (SBSM)
- 2017-         Member, Sleep Research Society (SRS)

**Editorial Boards**

- 2009-         Reviewer (ad hoc), Behaviour Therapy and Research
- 2011-         Reviewer (ad hoc), Journal of Consulting and Clinical Psychology
- 2013-         Reviewer (ad hoc), Medical Care
- 2014-         Reviewer (ad hoc), Substance Abuse: Research and Treatment

**Honors**

- 2003         The College of William and Mary, Highest Honors for an Undergraduate Honor's Thesis
- 2007         The Ohio State University, University Fellowship
- 2007         The Ohio State University, School of Social and Behavioral Sciences Fellowship
- 2008         The Ohio State University, Graduate Student Presentation Award
- 2008         The Ohio State University, School of Social and Behavioral Sciences Fellowship
- 2009         The Ohio State University, Graduate Student Presentation Award
- 2010         The Ohio State University, Graduate Student Presentation Award
- 2012         The Ohio State University, Graduate Student Presentation Award

**C. Contribution to Science**

1. Several recent publications reflect my research into the process of cognitive behavioral therapy (CBT) for major depressive disorder. While CBT has been affirmed as an efficacious treatment for depression, there are questions as to which mechanisms it achieves its positive effects. Through process research, we can break down the practice of CBT and assess the extent to which specific (e.g., adherence to CBT manual and techniques) and general (e.g., working alliance between therapist and patient) therapeutic factors influence symptom improvement and the course of treatment. My work has revealed that adherence to several CBT-specific techniques (i.e., behavioral activation, homework, and negotiating/structuring therapy sessions) were related to early positive symptom change, while more general factors (i.e., therapeutic alliance) was predictive of longer engagement in treatment. This work is influential in identifying the key elements of CBT to better inform practitioners about the mechanisms by which therapeutic actions and choices can improve the course of recovery. By providing direct evidence, this research can change the standard of care for early intervention with patients diagnosed with major depressive disorder.

- a) Ryan, E.T. & Strunk, D.R. (under review). Sudden gains in cognitive therapy for depression with novice therapists.

- b) Cooper, A.A., Ryan, E.T., Strunk, D.R., DeRubeis, R.J., Hollon, S.D., & Gallop, R. (2015). Therapist adherence and alliance as predictors of dropout from cognitive therapy for depression when combined with antidepressant medications. *Journal of Behavior Therapy and Experimental Psychiatry*, 50, 113-119.
  - c) Strunk, D.R., Cooper, A.A., Ryan, E.T., DeRubeis, R.J. & Hollon, S.D. (2012). The process of change in cognitive therapy for depression when combined with antidepressant medication: Predictors of early inter-session symptom gains. *Journal of Consulting and Clinical Psychology*, 80, 730-738.
2. My pharmacology research experience reflects ongoing collaborations and publications focused on the behavioral, biological, and psychological impact of both legal and illegal drugs, including nicotine, alcohol, marijuana, cocaine, and ecstasy. These publications range from identifying harmless and reliable processes to collect data, patterns of substance use among habitual users, and differential subjective experiences while under the influence. With the presentation of carefully collected scientific evidence, this body of work has the potential to increase our knowledge of the reinforcing effects of drugs and vastly improve the understanding of substance abuse.
- a) Lindsey, K.P., Bracken, B.K., MacLean, R.R., Ryan, E.T., Lukas, Scott E., Frederick, B.B. (2013). Nicotine content and abstinence state have different effects on subjective ratings of positive versus negative reinforcement from smoking. *Pharmacology, Biochemistry, and Behavior*, 103, 710-716.
  - b) Lindsey, K.P., Lukas, S.E., MacLean, R.R., Ryan, E.T., Reed, K.R., & Frederick, B. B. (2009). Design and validation of an improved nonferrous smoking device for self-administration of smoked drugs with concurrent fMRI neuroimaging. *Clinical Electroencephalography and Neuroscience*, 40, 21-30.
  - c) Penetar, D.M., McNeil, J.F., Ryan, E.T. & Lukas, S.E. (2008). Comparison among plasma, serum, and whole blood ethanol concentrations: Impact of storage conditions and collection tubes. *Journal of Analytical Toxicology*, 32, 505-510.
  - d) Hopper, J.W., Su, Z., Looby, A.R., Ryan, E.T., Penetar, D.M., Palmer, C.M. & Lukas, S.E. (2006). Incidence and patterns of polydrug use and craving for ecstasy in regular ecstasy users: An ecological momentary assessment study. *Drug and Alcohol Dependence*, 85, 221-235.
3. Current pharmacotherapies for treating substance abuse are not universally effective, thus new therapies and an evaluation of alternative therapies are necessary to counter this devastating medical and social problem. These studies reflect our efforts to verify the safety of pharmacological treatment methods, and investigate the effectiveness of therapeutic approaches targeting substance abuse. This continuing line of research is essential in informing the community how to more effectively treat substance abuse disorders and improving the standard of care for this population.
- a) Penetar, D.M., Looby, A.R., Ryan, E.T., Maywalt, M.A. & Lukas, S.E. (2012). Bupropion reduces some of the symptoms of marijuana withdrawal in chronic marijuana users. *Substance Abuse: Research and Treatment*, 6, 63-71.
  - b) Bracken, B.K., Penetar, D.M., Rodolico, J., Ryan, E.T. & Lukas, S.E. (2011). Eight weeks of citicoline treatment does not perturb sleep/wake cycles in cocaine-dependent adults. *Pharmacology, Biochemistry and Behavior*, 98, 518-524.
  - c) Licata, S.C., Penetar, D. M., Ravichandran, C., Rodolico, J., Palmer, C., Berko, J., Geaghan, T., Looby, A, Peters, E., Ryan, E.T., Renshaw, P.F., & Lukas, S.E. (2011). Effects of daily treatment with citicoline: A double-blind, placebo-controlled study in cocaine-dependent volunteers. *Journal of Addiction Medicine*, 5, 57-64.

