

Joel Michael Mumma

Address: 1253 Church Street, Apt. 2, Decatur, GA 30030 • Telephone: 610-751-7422 • E-mail: jmumma6@gatech.edu

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY

Atlanta, GA

Ph.D. in Engineering Psychology (in progress), Mentor: Frank Durso, Ph.D.

August 2014 - Present

- GPA: 4.0/4.0
- George Fellowship (Health Systems Institute)
 - Award based upon academic merit and the potential to improve healthcare systems and delivery.

UNIVERSITY OF ROCHESTER

Rochester, NY

BA Brain and Cognitive Sciences, *Magna cum laude*

2008-2010

- GPA: 3.93/4.0
- Dean's List (4/4 semesters)
- Rush Rhees Transfer Scholarship

UNIVERSITY OF PITTSBURGH

Pittsburgh, PA

Psychology, Neuroscience minor

2006 - 2008

- GPA: 3.6/4.0
- Dean's List (3/4 semesters)

RESEARCH AND PROFESSIONAL EXPERIENCE

GEORGIA INSTITUTE OF TECHNOLOGY

Atlanta, GA

Graduate Teaching Assistant

- Introduction to Psychology (Fall 2014), Instructor: Olga Remick, MS
 - Graded exams and written assignments.
- Psychology of Aging (Spring 2015), Instructor: Christopher Hertzog Ph.D.
 - Graded exams and written assignments.
 - Met with students to discuss their class performance.

UNIVERSITY OF PENNSYLVANIA, CENTER FOR STUDIES OF ADDICTION

Philadelphia, PA

Clinical Research Assistant (Supervisor: Teresa Franklin, Ph.D.)

2013 - 2014

- Develop and execute protocols involving the functional brain imaging (fMRI) of nicotine-dependent adult human subjects for two NIDA-funded projects.
- Preprocess functional and structural MRI data using SPM8.
- Enter data and perform statistical analyses for abstracts.
- Assist in manuscript preparation.
- Administer questionnaires, subject interviews, and computerized measures of attentional bias.
- Build and maintain laboratory's interactive website using HTML and CSS.
- Consent, screen, and coordinate study visits involving therapists, nurses, and hospital MRI scanner.

UNIVERSITY OF PITTSBURGH MEDICAL CENTER

Pittsburgh, PA

Research Specialist, Nicotine Addiction Laboratory (Supervisor: Cynthia Conklin, Ph.D.)

2010 - 2013

- Develop and execute protocols involving nicotine-dependent adult human subjects for two NIDA-funded projects.
- Write syntax in SPSS for statistical analyses.
- Create and manage databases in Excel, Microsoft Access, and SPSS.
- Edit pictorial stimuli using Adobe Photoshop CS5.
- Assist with grant preparation and IRB modification.
- Consent, screen, and coordinate laboratory visits.

ABSTRACTS

- Conklin, C., Soreca, I., Kupfer, D., Salkeld, R., **Mumma, J.**, Cheng, Y., Joyce, C., Capozzi, N., & Pikalova, P. (2015, February). Exercise to reduce abstinence-induced craving and negative mood during nicotine withdrawal. Presented at the 21st annual meeting of the Society for Research on Nicotine and Tobacco (SRNT) in Philadelphia, PA.
- Mumma, J.**, Franklin, T., Jagannathan, K., Bender, J., Wetherill, R., Johnson, B., . . . & Childress, A.R. (2014, April). Modulation of resting brain cerebral blood flow by the GABA B agonist, baclofen: A longitudinal perfusion fMRI study in marijuana dependent, treatment seeking individuals. Presented at the 30th annual retreat of the Mahoney Institute for Neurosciences in Philadelphia, PA.
- Soreca, I., Conklin, C., Richardson, A., **Mumma, J.**, Wettlaufer, B., & Curet, D. (2011, June). Sleep continuity is impaired as a function of average number of daily cigarettes and time since smoking onset in otherwise healthy smokers. Presented at the 25th annual meeting of the American Academy of Sleep Medicine (AASM) in Minneapolis, Minnesota.
- Mumma, J.**, & Miller, T. (2009, July). Adding music to the therapeutic milieu of Adult Transitions. Presented at the Lehigh Valley Health Network Research Scholar Poster Presentation Day in Allentown, PA.

PUBLICATIONS

- Franklin, T., **Mumma, J.**, Jagannathan, K., Wetherill, R., & Childress, A.R. Morphometric biomarkers of addiction and treatment response: Can we get there from here? in Feldstein Ewing, S., Withiewitz, K., & Filbey, F. (eds.) Chapter 8 Neuroimaging and Psychosocial Addiction Treatment, In Press.
- Wetherill, R., Jagannathan, K., **Mumma, J.**, Johnson, B., Rao, H., Childress, A.R., & Franklin, T. (2015). Effects of cannabis and cigarette smoking on gray matter volume: A voxel-based morphometry study. *Drug & Alcohol Dependence*, 146, e20-e21.
- Franklin, T., Wetherill, R., Jagannathan, K., Johnson, B., **Mumma, J.**, Hager, N., . . . & Childress, A.R. (2015). Influence of sex on gray matter volume differences between smokers and nonsmokers. *Drug & Alcohol Dependence*, 146, e282.
- Franklin, T., Jagannathan, K., Wetherill, R., Johnson, B., Kelly, S., Langguth, J., **Mumma, J.**, & Childress, A.R. (Accepted, 2014 August) Influence of menstrual cycle phase on neural and craving responses to appetitive smoking cues in naturally cycling females. *Nicotine & Tobacco Research*.
- Franklin, T., Wetherill, R., Jagannathan, K., Johnson, B., **Mumma, J.**, Hager, N., . . . & Childress, A.R. (2014). The effects of chronic cigarette smoking on gray matter volume: influence of sex. *PLoS ONE*, 9(8), e104102.

GRANTS

NIH-NICHD, Frank Durso, Ph.D. (PI), Submitted February, 2015. *Connecting Performance and Processes in Respiratory Therapists*.

The goal of the proposed project is to use a high-fidelity infant mannequin and a mobile eye-tracker to examine the relationship between the performance of manual ventilation and how providers with varying levels of experience use visual cues, such as electronic vital signs and patient cues, to guide their performance.

Role: Graduate Research Assistant

Effort: 11 calendar months

Total Award Amount: \$138,430

SKILLS

- SPSS (ANOVA and Regression).
- Applied Science Laboratories' Mobile Eye-XG and proprietary calibration (EyeVisionXG) and analysis software (ASL Results Plus).
- Proficiency in HTML and CSS.
- Microsoft Office Suite (Excel, Access)