

D.W. SVENSON – GRADUATE STUDENT

17935 Heritage Dr., Macomb, MI, 48044 | (586)291-7472 | dwsvenson@wayne.edu

EDUCATION

Wayne State University	
M.A.	2021
Ph.D. (In Progress)	2021 - Present
Behavioral & Cognitive Neuroscience	
Oakland University	
B.A.	2017
Bachelor of Arts	
Psychology	

GRANTS, FELLOWSHIPS, & STIPENDS

Thomas C. Rumble Fellowship (Internal)	2022
NIH/NIDA R36 Dissertation Grant, PI: D.W. Svenson, Status: Submitted (External)	2021
TITLE: <i>“An exploration of the mechanisms and effects of toluene-induced oxidative stress in the lung and brain using a rodent model”</i>	
DESCRIPTION: The present project will assess the behavioral effects and physiological mechanisms of toluene induced oxidative stress and inflammation in the lung and brain. Swiss-Webster mice will be exposed to abuse-like concentrations of toluene and examined using various behavioral and neurochemical assays. The goal of this research is to further inform clinical practices in the assessment and treatment of inhalant related pathology.	
AMOUNT REQUESTED: \$108,000	
Social & Behavioral Determinants of Health Internal Grant, PI: D.W. Svenson, Status: Submitted (Internal)	2021
TITLE: <i>“An investigation of the mechanisms and pathways of toluene-induced oxidative stress and apoptosis in the lung and brain using a rodent model”</i>	
DESCRIPTION: The present project will assess the behavioral effects and physiological mechanisms and pathways of toluene induced oxidative stress and inflammation in the lung and brain, with particular emphasis on toluene-derived benzaldehyde production. Swiss-Webster mice will be exposed to abuse-like concentrations of toluene and examined using various behavioral and neurochemical assays. The goal of this research is to further shape existing literature and inform clinical practices in the assessment and treatment of inhalant related pathology.	
AMOUNT REQUESTED: \$5,000	

AWARDS

CPDD Travel Award for Early Career Investigators	2020
Graduate Student Poster Day Award.	2020
Graduate Student Poster Day Award	2019
Nominated for Writing Excellence Award	2017

TEACHING EXPERIENCE

Wayne State University	
Lab Instructor – PSY 3993: Experimental Psychology	2020
Taught writing-intensive lab course designed to supplement the student’s learning.	
Instructor – PSY 2080: Drugs Behavior & Society	2019 & 2020
Developed syllabus and overall course structure, and administered all grades.	
Lab Instructor – PSY 1010: Introduction to Psychology	2018 & 2019
Taught supplementary course under the advisory of a doctoral professor.	
Graduate Student Head TA	2019 - 2020

Developed teaching materials for incoming graduate student Teaching Assistants and attended weekly meetings to brief them on their lesson plan for the week.

TALKS

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| CPDD Oral Presentation | 2020 |
| <i>Acute Abuse Toluene Exposure Induces Lung and Brain Pathology in Swiss-Webster Mice</i> | |
| Brownbag Faculty and Student Talk | 2019 |
| <i>The Neurobehavioral Implications of Chronic Exposure to Environmental BTEX</i> | |
| Drug and Alcohol Research Network | 2019 |
| <i>Chronic Exposure to Volatile Organic Compounds Induces Mu Opioidergic and Dopaminergic Potentiation</i> | |

CONFERENCES & PRESENTATIONS

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| Graduate Student Poster Day | 2020 |
| <i>"An Exploration of the Pathological Effects of Acute Abuse-Like Toluene in the Lung"</i> | |
| Graduate Student Poster Day | 2019 |
| <i>"Abuse-Like Toluene Exposures Induce Lung Pathology in Swiss-Webster Mice"</i> | |
| GHJE | 2019 |
| <i>"Acute and long-term effects of environmental-like concentrations of combined exposure to benzene, toluene, ethylbenzene, and xylene (BTEX)"</i> | |

PUBLICATIONS & PAPERS

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| Kirwan, M., Svenson, D. W. , Pickett, S. M., & Parkhill, M. R. (2019). Emotion regulation as a mediator between sleep quality and interpersonal aggression, <i>Personality and Individual Differences</i> , 148, 33-37 | 2019 |
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BOOK CHAPTERS

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| Davidson, C.J., Svenson, D.W. , & Bowen, S.E. (Under Review). Inhalant-related disorders. In B.J. Sadock, V.A. Sadock, & Ruiz, P. (Eds), <i>Comprehensive Textbook of Psychiatry</i> , 11th Edition. Lippincott Williams & Wilkins, Baltimore, MD. | 2021 |
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PUBLICATIONS IN PROGRESS

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| Svenson, D. W. , Davidson, C. J., Thakur, C., & Bowen, S. E. (In Progress). An exploration of the effects of exposure to abuse-like concentrations of toluene on the expression of pathogenic markers in the lung and brain in a rodent model | 2021 |
| Davidson, C. J., Svenson, D. W. , Hannigan, J. H., Perrine, S. A., & Bowen, S. E. (In Progress). A novel preclinical. Model of environmental-like combined benzene, toluene, ethylbenzene, and xylenes (BTEX) exposure: Behavioral and neurochemical findings | 2021 |
| Naddaf, M. M., Svenson, D. W. , Davidson, C. J., & Bowen, S. E. (In Progress). Creating a methodology for the Detection and analysis of toluene in biologics | 2021 |
| Skully, J. M., Svenson, D. W. , & Bowen, S. E. (In Progress). Is it therapeutically effective? A meta-analysis on the effects of commonly used analgesic drugs | 2021 |

JOURNAL REVIEWS

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| Aided in peer-review process | |
| Brain Research | 2020 |
| Drug and Alcohol Dependence | 2020 |
| Toxicology and Applied Pharmacology | 2019 |
| Neuropharmacology | 2019 |