

Curriculum Vitae

Dr. Winona Booher

Office Address

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Education

Certificate of Cannabis Science & Medicine University of Colorado Anschutz	2022-current
Postdoctoral Research Fellow in Behavior Genetics University of Colorado Boulder, Institute for Behavioral Genetics	2021-current
Doctor of Philosophy, Integrative Physiology University of Colorado Boulder	2018-2021
Certificate of Training in Behavioral Genetics University of Colorado Boulder, Institute for Behavioral Genetics	2018-2021
Master of Science, Integrative Physiology University of Colorado Boulder	2016-2018
Bachelor of Science, Applied Health Science with a Specialization in Health Science Bowling Green State University	2012-2016

Academic Positions

Postdoctoral fellow on a T32 training grant (DA017637), awarded to the Institute for Behavioral Genetics University of Colorado Boulder/Anschutz Medical Campus	2021-current
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Professional Memberships

International Behavioural and Neural Genetics Society (IBANGS)	2018-current
Behavioral Genetics Association (BGA)	2020
Research Society on Alcoholism (RSA)	2017

Manuscript Reviews

Psychology of Addictive Behaviors 2020

Research Experience

Postdoctoral Researcher 2021-current
Laboratory of Dr. Richard Radcliffe at University of Colorado
Anschutz Medical Campus

Graduate Research Assistant 2016-2021
Laboratory of Dr. Marissa Ehringer at University of Colorado Boulder

Undergraduate Research Assistant 2013
Laboratory of Dr. Vipaporn Phuntumart at Bowling Green State University

Honors and Awards

Postdoctoral Fellow Travel Award 2021
International Behavioural and Neural Genetics Society

Postdoctoral Training Fellow, NIDA T32 (DA017637) 2021-current
University of Colorado Boulder, Institute for Behavioral Genetics

Graduation Commencement Speaker 2021
University of Colorado Boulder

Graduate Student Travel Award 2019
International Behavioural and Neural Genetics Society

Graduate Student Travel Award 2019
University of Colorado Boulder

Graduate Student Travel Award 2018
International Behavioural and Neural Genetics Society

Dean's List 7/10 Academic Terms 2012-2016
Bowling Green State University

Teaching Positions

Basic Human Anatomy and Physiology (Bio 106) 2020-current
Front Range Community College

Guest Lecturer (3X) for Physiological Genetics 5200 University of Colorado Boulder	2020
Human Anatomy and Physiology Summer High School Instructor University of Colorado Boulder, Pre-Collegiate Development Program	2019-current
Human Anatomy Graduate Teaching Assistant University of Colorado Boulder	2016, 2019

Anatomy & Physiology Experience

Cadaver Dissection Intern Red Rocks Community College	2018-2020
Lead Graduate Cadaver Dissector University of Colorado, Boulder	2017-2019

Grants and Scholarships

Postdoctoral fellow on a NIDA T32 Training Grant (DA017637) University of Colorado Boulder, Institute for Behavioral Genetics	2021-current
Predoctoral fellow on a NIMH T32 Training Grant (MH016880) Training Grant awarded to the Institute for Behavioral Genetics University of Colorado Boulder, Institute for Behavioral Genetics	2019-2021
Fund for Science, Engineering, and Technology Gateway Ohio (SetGo) Summer Stipend Bowling Green State University	2013

Mentoring Experience and Outreach

Instructor for Summer Pre-Collegiate Development Program (PCDP) University of Colorado	2019-current
10+ Undergraduate Research Assistants University of Colorado Boulder	2016-2021
1 High School Student University of Colorado Boulder <ul style="list-style-type: none"> • 1st place at Fairview High School Science Fair <ul style="list-style-type: none"> ◦ Received the American Statistical Association's best use of statistical analyses award • 3rd place at Colorado State Science Fair 	2018-2019
3 Summer Multicultural Access to Research Training (SMART) Students	2017-2019

Publications (Peer Reviewed)

Booher WC, Vanderlinden LA, Hall LA, Thomas AL, Saba LM, Ehringer MA. Hippocampal RNA sequencing in Mice Selectively Bred for High and Low Activity. *Genes Brain Behav.* 2022 (under review).

Booher WC, Hall LA, Thomas AL, Merhroff EA, Reyes Martínez GJ, Scanlon KE, Lowry CA, Ehringer MA. Anxiety-related defensive behavioral responses in mice selectively bred for High and Low Activity. *Genes Brain Behav.* 2021 Sep;20(7):e12730.

Thomas AL, Evans LM, Nelsen MD, Chesler EJ, Powers MS, **Booher WC**, Lowry CA, DeFries JC, Ehringer MA. Whole-Genome Sequencing of Inbred Mouse Strains Selected for High and Low Open-Field Activity. *Behav Genet.* 2021 Jan;51(1):68-81.

Booher WC, Hoft NR, Ehringer MA. The effect of voluntary wheel running on 129/SvEvTac and C3H/lbg alcohol consumption. *Alcohol.* 2019 Jun;77:91-99.

Review Articles

Booher WC, Reyes Martínez GJ, Ehringer MA. Behavioral and neuronal interactions between exercise and alcohol: Sex and genetic differences. *Genes Brain Behav.* 2020 Mar;19(3):e12632.

Peer Reviewed Abstracts from Participation in Conferences

W.C. Booher, L.A. Vanderlinden, L.A. Hall, C.A. Lowry, L.M. Saba, M.A. Ehringer. (2021) Hippocampal RNA sequencing in mice selectively bred for High and Low Activity. 22nd Annual Meeting of the International Behavioural and Neural Genetics Society, virtual. *Selected talk.

L.A. Hall, K.T. Brown, D. Foster, **W.C. Booher**, L. Saba, R.K. Bachtell, M.A. Ehringer. (2021) Differential gene expression responses to oxycodone self-administration in the amygdala and prefrontal cortex of inbred rat strains. 22nd Annual Meeting of the International Behavioural and Neural Genetics Society, virtual. *Selected talk.

M.A. Ehringer, L.A. Hall, K.T. Brown, D. Foster, **W.C. Booher**, L. Saba, R.K. Bachtell (2021) Differential gene expression responses to oxycodone self-administration in the amygdala and prefrontal cortex of inbred rat strains. NIDA Genetics and Epigenetics Cross-Cutting Research Team meeting, virtual.

W.C. Booher, A.L. Thomas, L.A. Hall, G.J. Reyes, M.A. Ehringer (2020) Alcohol related behaviors in mice selectively bred for high and low activity. Proceedings, 50th Annual meeting of the Behavior Genetics Association, virtual. *Behavior Genetics*, 50:443-444.

E. Elliotte, **W.C. Booher**, M.A. Ehringer (2018) Alcohol-Related Behaviors in Mice Selected for High and Low Activity. Annual Biomedical Research Conference for Minority Students. Oral Presentation #36.

W.C. Booher, M.S. Powers, X. Gallego, M.A. Ehringer (2018) AAV-Mediated miR-138 Injections into the Medial Habenula of Mice Reduces Nicotine Consumption. 20th Annual Meeting of the International Behavioural and Neural Genetics Society.

W.C. Booher, V. Phuntumart (2013) DNA Methylation by Bisulfite Treatment. Science, Engineering & Technology Gateway Ohio (SETGO) conference, Bowling Green, Ohio.

Published Abstracts

L.J. Bunch, M.S. Powers, L.A. Hall, E.A. Mehroff, **W.C. Booher**, P.N. Romero-Villela, M.A. Ehringer (2021) Initial characterization of GCKR human SNP rs1260326 (P446L) in a mouse model of alcohol behaviors. *Alcohol Clin Exp Res.* 45, 81A

E.E. Elliotte, **W.C. Booher**, **M.A. Ehringer** (2019) Alcohol-Related Behaviors in Strains of Mice Selected for High and Low Open-Field Activity. *Alcohol Clin Exp Res.* 43, 85A.

W.C. Booher, B.T. Gallager, K.R. Burrow, **M.A. Ehringer** (2017) Hedonic substitution of voluntary exercise and voluntary ethanol consumption in C3H and 129S mice. *Alcohol Clin Exp Res.* 41(S1), 116A

Symposium Talks Selected for Meetings

W.C. Booher, L.A. Vanderlinden, L.A. Hall, C.A. Lowry, L.M. Saba, **M.A. Ehringer**. (2021) Hippocampal RNA sequencing in mice selectively bred for High and Low Activity. 22nd Annual Meeting of the International Behavioural and Neural Genetics Society.

L.A. Hall, K.T. Brown, D. Foster, **W.C. Booher**, L. Saba, R.K. Bachtell, **M.A. Ehringer**. (2021) Differential gene expression responses to oxycodone self-administration in the amygdala and prefrontal cortex of inbred rat strains. 22nd Annual Meeting of the International Behavioural and Neural Genetics Society.

W.C. Booher, E. Elliotte, A. Prakash, **M.A. Ehringer** (2019) Alcohol-related behaviors in mice selectively bred for High and Low Activity. 21st Annual Meeting of the International Behavioural and Neural Genetics Society, Edinburgh, United Kingdom.