Bradley Howlett

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LinkedIn Portfolio Github

Summary

Research Scientist\Engineer with 8 years of relevant experience (2017 – present) in Genomics and Neuroscience research, coupled with professional writing experience.

Areas of expertise:

- Computational Neuroscience
- Programming
- Technical Writing
- Epigenetics
- Neuroanatomy
- Biotechnology

Technical Skills

Programming-related: Linux (CentOS, Ubuntu, WSL2), Command Line Interface, Bash Shell Scripting, Git/GitHub, SVN, Markdown, HTML5, CSS3, JavaScript, Jupyter Lab, Python, Java, Docker

Current Work

Research Scientist/Engineer (RS/E1)

University of Washington, Harborview Medical Center

Mar. 2022 - Present

Contributor on Dr. Christine Mac Donald's research team working with open-source software for MRI processing, such as FreeSurfer. Scripted a procedural protocol for white matter hyperintensity segmentation, implementing HyperMapp3r.

Writer

Freelance

Jun. 2018 - Present

Straive (formerly SPi Global)

Accessibility writer and editor for K-12 to college-level STEM textbooks. Detail-oriented service provider developing content for leading publishers in science education, such as Pearson and McGraw Hill.

- Writing samples available upon request:
  - McKnight's Physical Geography: A Landscape Appreciation, 13e

- Chemistry: The Central Science, 14e
- University Physics with Modern Physics, 12e
- Campbell Biology in Focus, 3e

ContentWriters
Content writer and editor for Computational Sciences and Biotechnology.

- Writing samples available upon request:
  - Codecademy (Skillsoft)
  - Udemy
  - Questex/Merit Solutions

Research Assistant/Laboratory Manager/Clinical Researcher

Aug. 2017 - Jul. 2021

Wayne State University, Eugene Applebaum College of Pharmacy and Health Sciences

An involved member of Dr. Kyle Burghardt's research team investigating the epigenetic and/or protein-based dysregulations caused by atypical antipsychotics. Such findings could lead to the reduction of medication side effects and ultimately help prevent cardiovascular mortality.

- Contributed to all phases of research: grant writing, experimental design, clinical recruitment (n=75+), regulatory document preparation, data collection, genetic bench work, development of automated processes with OT-2, results acquisition, data analytics and validation, scientific manuscript authorship, and poster presentation at conferences.
- Performed database screening and data acquisition for literature reviews, systematic reviews, and meta-analyses.
- Contributed to clinical recruitment and completion of over 100+ clinical study visits for Dr. Zhengping Yi's research team.
- First author of a textbook chapter on DNA methylation in Bipolar Disorder - published January 21, 2022.
- CPNP 2019 Original Research Awardees and Finalists for Best Poster Award.

Education

Grand Valley State University

Aug. 2014 - Jun. 2018

Bachelors of Science Degree; double major

- Cell and Molecular Biology
- Behavioral Neuroscience

Publications and Poster Abstracts (ORCID)

2024. Mossa-Basha, Mahmud. Comparison of brain imaging and physical health between research and clinical neuroimaging cohorts of ageing. Oxford University Press.

2024. Burghardt, Kyle J. Alterations in Skeletal Muscle Insulin Signaling DNA Methylation: A Pilot Randomized Controlled Trial of Olanzapine in Healthy Volunteers. MDPI.

2023. Chang, Kelly. Advanced Diffusion MRI Modeling Sheds Light on FLAIR White Matter Hyperintensities in an Aging Cohort.

2022. Howlett, Bradley H. DNA methylation in bipolar disorder. Elsevier.

2022. Burghardt, Kyle J. Profiling the Skeletal Muscle Proteome in Patients on Atypical Antipsychotics and Mood Stabilizers. MDPI.

2021. Burghardt, Kyle J. Bibliometric data based on the Pharm. D. and Ph. D. degree in United States research-intensive colleges of pharmacy. Oxford University Press UK.

2021. Burghardt, Kyle J. Personal genotyping and student outcomes in genetic and pharmacogenetic teaching: a systematic review and meta-analysis. Future Medicine Ltd London, UK.

2020. Burghardt, Kyle J. A bibliometric analysis of the top 50 NIH-Funded colleges of pharmacy using two databases. Elsevier.

2020. Bagley, James R. Epigenetic responses to acute resistance exercise in trained vs. sedentary men. LWW.

2020. Kyle J. Burghardt. Three Commonly Utilized Scholarly Databases and a Social Network Site Provide Different, But Related, Metrics of Pharmacy Faculty Publication. MDPI.

2020. Burghardt, Kyle J. Olanzapine Increases Skeletal Muscle DNA 5-hydroxymethylation in Healthy Volunteers.

2019. Burghardt, Kyle J. Skeletal muscle DNA methylation modifications and psychopharmacologic treatment in bipolar disorder. Elsevier.

2019. Leshcorn, MBA. CPNP Annual Meeting Poster Abstracts.

2018. Burghardt, Kyle J. Atypical antipsychotics and the human skeletal muscle lipidome. MDPI.