

David Bergkamp, PhD
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Summary of qualifications and career objectives

Passionate researcher with 8 years of experience designing, directing, and analyzing results from experiments in bioinformatics, molecular biology, and behavioral neuroscience. My primary objective is to find a **research scientist or data scientist position** in order to grow as a scientist and pivot to a career in drug discovery and drug development.

EXPERIENCE:

Research Scientist
University of Washington
Seattle, WA

July 2019 - Present

- 4 years managing research teams performing biochemistry assays:
 - 96-well plate-based ligand binding assays using cultured cells
 - ELISA and MSD for determination of cytokine concentrations
 - RT-qPCR
 - Mammalian and bacterial cell culture
 - Subcloning of plasmids for Adeno-associated virus production (AAVs)
 - Other molecular biology techniques: enzymatic digests, gel electrophoresis, E. coli transformation, plasmid preps, UV/Vis spectroscopy, and Sanger sequencing
- 4 years coding in R, Python, Matlab, and Java programming languages used for statistical analyses (also confident using SPSS, Prism, and JMP).
- Proficient in Windows and Unix operating systems as well as cluster scheduling software
- 2 years processing big data generated during next generation RNA sequencing and proteomics experiments
- 2 years processing and 100+ gigabyte image collections from confocal microscopy
- Hands-on experience and training with HPLC, GC-MS protein characterization, FACS separation of cells, and CRISPR knock-down screens toward completion of PhD work.

American Nanotechnologies Inc
Research contractor
Knoxville, TN

May 2015 to June 2020

- 2 years modeling carbon nanotube sensor behaviors by simulating field effect transistor responses to VOCs and other commercially important analytes
- Developed high yield web-scraping program to collect data from online scientific journal publications allowing for efficiency gains in research and development.
- Wrote and successfully received various grants including a National Science Foundation SBIR grant (Award number: 2111945) and a Colorado state grant from the Office of Economic Development and International Trade leading to investment in the company by outside sources.

Previous employment information available upon request

EDUCATION

University of Washington - School of Medicine, Seattle, WA

Graduation: 07/2024

PhD in Pharmacology

Academic Honors & Awards: NIDA T3232DA007278 training grant 2019 – 2021

Relevant Course Work: Phcol 510: Drug Discovery/Emerging Therapeutics, Phcol 562 Molecular Basis of Motivated Behavior, CSE 586 Introduction to Synthetic Biology

University of Colorado - College of Liberal Arts and Sciences, Denver, CO

Graduation: 05/2014

Bachelor of Science in Chemistry, *Cum Laude*

Bachelor of Arts in Philosophy

Relevant Course Work: Chem 3011 Inorganic Chemistry, Chem 4121 Instrumental Analysis, Chem 4511 & 4521 – Physical Chemistry, Chem 3481 & 3491 – Majors Organic Chemistry

PUBLICATIONS

- In preparation (PhD thesis work): Bergkamp D et al, "Multiple opioid withdrawal experiences compound symptoms in mice and induce microglial morphology and gene expression changes in the striatum."
- Bergkamp DJ and Neumaier JF (2024). "How omics is revealing new roles for glia in addiction." *Glia*, 1-11. Manuscript ID: GLIA-00029-2024. DOI: 10.1002/glia.24584
- Levinstein MR, Bergkamp D, Lewis Z, Tsobanoudis A, Hashikawa H, Stuber G, and Neumaier JF, "PACAP-expressing neurons in the lateral habenula diminish negative emotional valence." *Genes, Brain, and Behavior* (2022): <https://doi.org/10.1111/gbb.12801>
- Allen RM, Mandt BH, Laggart J, Hackley A, Shickedanz A, and Bergkamp D, "Continuous Exposure to Dizocilpine Facilitates the Acquisition and Escalation of Cocaine Consumption in Male Sprague-Dawley Rats." *Drug and Alcohol Dependence* (2014): <https://doi.org/10.1016/j.drugalcdep.2014.11.027>

PROFESSIONAL SKILLS

- Strong organizational skills designing and conducting experiments in behavioral pharmacology and neuroscience. Confident and comfortable in positions of leadership and high responsibility.
- Comfortable managing teams, setting and articulating research strategy.
- Excellent analytic/operations skills, including:
 - Programming in Python and R for RNA NGS sequencing analyses, data mining, and signal processing using both Unix and Windows operating systems.
 - Practical hands-on work with UV-Vis-NIR, FTIR, atomic absorbance spectroscopy, GC-MS, and HPLC.
 - Drug-receptor, molecular docking simulations (DOCK and Autodock Vina).
- Confident, persuasive interpersonal communication skills, both verbal and written, including public speaking and presentations of research design and outcomes.

LEADERSHIP, COMMUNITY INVOLVEMENT

Highland View Villas Condominiums Homeowners Association Seattle, WA

2022 - Present

Board President (volunteer position)

- Oversee monthly meetings with HOA board members and residents.
- Plan and manage operations to maintain building functionality and increase property values.

University of Washington, School of Medicine Seattle, WA

2019 - 2021

UW Pharmacology Student Association Representative (volunteer position)

Led students in performing assessment of prospective applicants.

- Liaison with faculty to communicate needs of students and report on changes to curriculum.
- Provided leadership/guidance to incoming students.