

PARAG K. BHATT, PH.D.

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DEDICATED AND ADAPTIVE RESEARCH SCIENTIST

Creative and Analytical Researcher Seeking a Challenging Career in the Private Sector

Tenacious, enthusiastic professional with ten years of experience in a National Institute of Health-funded academic research laboratory. Regarded as an excellent communicator, respected for technical aptitude, versatility, and exceptional work ethic.

AREAS OF EXPERTISE

• UV-Vis Spectroscopy • HPLC • Biochemistry • Confocal Microscopy • MATLAB • SPSS • R Project • Data Analysis/ Interpretation • Manuscript Preparation • Presentations • Leadership • Teamwork • Project Management • GS Suites • MS Office •

PROFESSIONAL EXPERIENCE

Harris-Stowe State University

2019

Adjunct Professor in the Department of Biology – St. Louis, Missouri (May 2019 to December 2019)

Developed and dispensed course lecture materials and laboratory practicums for freshmen- and sophomore-level biology courses

- Designed and disseminated didactic lectures in addition to orchestrated laboratory practicums to measure student progress
- Cultivated an interactive experience to foster an intimate understanding of the fundamentals of biological research
- Curated course topics to enhance student's critical thinking and reading abilities by introducing peer-reviewed literature into curriculum
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St. Louis University School of Medicine

2011 to 2018

Doctoral Candidate/ Graduate Assistant in the Neckameyer Lab – St. Louis, Missouri (July 2011 to August 2018)

Pursued doctoral degree in behavioral genetics and neuroscience in the Department of Pharmacology and Physiology.

- Investigated the neurotrophic actions of serotonin and dopamine on a simple neural circuit in the fruit fly, *Drosophila melanogaster*. Used a combination of pharmacological and genetic approaches to target key enzymes, receptors, and transporters to affect the actions of target neurotransmitters during development.
- Used a combination of UV-Vis spectroscopy and immunofluorescence to assess efficiency of transgenic approach by quantitating neuronal concentrations of rate-limiting enzymes in serotonin and dopamine synthesis.
- Analyzed, interpreted, and generated models from large data sets to identify the possible gene interactions that defines the serotonergic and dopaminergic signaling pathways involved in the development of the nervous system.
- Led implementation of procedural laboratory equipment that involved assessing end user and departmental need for long-term research projects. Involved in financial negotiations with vendors in respect to departmental budget. Acted as liaison by becoming subject matter expert, developed materials and tutorials to train users in equipment protocol and provided on-site support.
- Successfully organized collaborative projects with colleagues from neighboring universities to enhance the body of the dissertation thesis.
- Evaluated and trained numerous high school, undergraduate, graduate, and medical students in laboratory practices whom have gone on to have successful careers in higher education.
- Effectively communicated research program details in large group settings such as laboratory, graduate, and departmental committee meetings as well as numerous regional and national research conferences.
- Published in peer-reviewed journals and a book chapter:
 - Neckameyer, W. S. and **Bhatt, P.** Neurotrophic actions of dopamine on the development of a serotonergic feeding circuit in *Drosophila melanogaster*. BMC Neuroscience. 2012; 13; 26.
 - **Bhatt, PK** and Neckameyer, W.S. Functional analysis of the larval feeding circuit in *Drosophila*. Journal of Visualized Experiments. 2013; 81; e51062.
 - Neckameyer WS, **Bhatt P.** Protocols to study behavior in *Drosophila*, in "*Drosophila: Methods and Protocols*", 2016, Springer.
 - **Bhatt, P.K.**, Vilza, I., Swamy, H., Avdagic, S., and Neckameyer, W.S. The neurotrophic actions of serotonin and dopamine on the larval feeding circuit in *Drosophila* are sexually dimorphic. Psychology and Neuroscience. 2018; 11(2), 216-227.
 - **Bhatt, P.K.**, Neckameyer, W.S. The Impact of Oxidative Stress on a Simple Neural Circuit. Psychology and Neuroscience. 2018; 11(3), 291-305.

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St. Louis University

2013 to 2016

Course Director and Instructor in the Department of Biology – St. Louis, Missouri (August 2013 to December 2016)

Responsible for designing curriculum, lecture materials, quizzes, and exams for senior-level undergraduate pharmacology course during fall semesters.

- Collaborated with graduate students to co-deliver didactic lectures to undergraduate students.
- Cultivated strategic partnerships with administrators and faculty.
- Tracked student progress across a variety of service programs.
- Directed program evaluations and designed strategies for enhancing course curriculum for the following year.

St. Louis University School of Medicine

2007 to 2011

Laboratory Supervisor in the Neckameyer Lab – St. Louis, Missouri (November 2007 – June 2011)

Responsible for managing daily operations, recruiting, scheduling, and supervised several researchers while also conducting federally-funded research.

- Utilized behavioral, biochemical, and pharmacological approaches to identify the molecular factors impacting neuronal homeostasis in the fruit fly, *Drosophila melanogaster*.
- Tasked with recruiting, interviewing, hiring, training, and evaluating research candidates.
- Ensured quality and timely completion of research programs.
- Developed and maintained the lab consumables inventory system.
- Performed calibration and preventative maintenance periodically on analytical balances, hot plates, water baths, UV-Vis, HPLC, epi-fluorescence microscope.

EDUCATION

Bachelor of Science in Biology (2011)

St. Louis University – St. Louis, Missouri

Related coursework: Analytical Chemistry, Organic Chemistry, Microbiology, Molecular Techniques, Biometry, Statistics, Calculus

Introduction to Molecular Spectroscopy (February 2018)

University of Manchester on Coursera

<https://www.coursera.org/account/accomplishments/certificate/JU3GJUEW2MX4>

ISO/IEC 17025: 2017 Accredited (June 2018)

A2LA Accreditation Body – University Center, Grayslake, Illinois

Doctor of Philosophy in Pharmacology and Physiology (August 2018)

St. Louis University School of Medicine – St. Louis, Missouri

Related Coursework: Pharmacology- and Physiology- related coursework, Microscopy Techniques, Bioinformatics, Biostatistics