

Shivam Bhardwaj, PhD

Program Manager · Lab Manager · Research Scientist
shivam.lep@gmail.com · [LinkedIn](#) · [Google Scholar](#) ·
San Francisco · +1 662 370 9984 · H4 EAD : No Sponsorship Required

SUMMARY

Scientist-and-operator with **10+ years** of bench research and operations leadership at top institutions across the US, UK, and Singapore. At King's College London, delivered **\$2.2M+ in cost savings** while managing a **\$5M+ annual research infrastructure fund** and directing BSL-2 core facility operations for **100+ scientists** at 99%+ audit readiness. Author of **7 peer-reviewed papers** in *eLife*, *MBE*, *PLoS Genetics*, and *J Neuroscience*. Certified Biological Safety Supervisor and Radiation Safety Officer (UK/EU/USA). PhD, National University of Singapore.

EDUCATION

PhD, Life Sciences · National University of Singapore · 2018
BS-MS, Life Sciences (Integrated) · IISER Mohali, India · 2013

EXPERIENCE

Program Manager — Research Infrastructure & Lab Operations · King's College London · London, UK
June 2024 – July 2025

- Managed a **\$5M+ annual research infrastructure fund** across 20+ departments; achieved **\$2.2M in cost savings (>25%)** within year one through PowerBI analytics and strategic vendor renegotiation.
- Oversaw strategic planning, contract management, and procurement for all scientific equipment and services; delivered 10+ complex facility upgrade projects on schedule and within budget.
- Led cross-functional teams spanning academics, procurement, regulatory bodies, suppliers, and estates; primary point of contact for all vendor and stakeholder negotiations.

Technical Manager — Lab Operations & BSL-2 Compliance · King's College London · London, UK
November 2022 – June 2024

- Directed daily operations for **100+ scientists** across BSL-2 molecular biology, tissue culture, chemistry, histology, and radioisotope facilities in a preclinical cancer research centre; maintained **99%+ audit readiness** with zero safety incidents.
- Implemented LIMS (FreezerPro) for **10,000+ human tissue and blood samples**; reduced sample retrieval time by **40%** and ensured full data integrity across long-term storage.
- Certified Biological Safety Supervisor and Radiation Protection Advisor; designed and maintained all EHS programs — Chemical Hygiene Plan, BBP, hazardous waste streams — in full compliance with UK, EU, and USA regulatory standards.
- Authored and validated 20+ SOPs; trained 50+ scientists and technicians; led equipment validation projects and coordinated external regulatory audits.

Postdoctoral Research Scientist & Lab Operations Lead · Auburn University & Mississippi State University · USA
December 2018 – July 2021

- Co-designed and launched a new NSF-funded research lab from scratch; procured, installed, and validated **\$500K+ in equipment** (confocal, imaging, molecular biology); built all inventory, chemical safety, and workflow systems.
- Led CRISPR-Cas9 program performing **2,000+ embryonic microinjections** and KO experiments across **15+ genes in 3 insect species**; assembled de novo transcripts and conducted differential gene expression analysis in R.
- Mentored 6 undergraduates in independent research projects; peer-reviewed for *Nature Communications* and *Journal of Experimental Biology*.

Staff Research Associate II — DNA Sequencing Core · University of California, Berkeley · CA, USA
August – September 2021

- Operated high-throughput sequencing workflows for 50+ researchers using Beckman Coulter Biomek (NX/FX) and ABI 3730XL analyzers; maintained **95%+ facility uptime**; consulted on experimental design, sample prep, and genotyping strategy.

Research Scholar — PhD Candidate · National University of Singapore · Singapore · 2013–2018

- Published **4 first-author papers** on molecular cell biology and evolution (*eLife* cover, *MBE* ×2, *J. Insect Sci*) across a fully self-managed experimental pipeline.
- Teaching assistant for 5 modules (feedback: 4.5/5.0); supervised 3 honours students, 2 contributing to publications.

SKILLS & CERTIFICATIONS

Operations & Management: Budget management (\$10M+), procurement, contract negotiation, vendor management, PowerBI, LIMS/ELN (FreezerPro), SOP development, EHS program management, BSL-2 compliance, regulatory affairs (UK/EU/USA), cross-functional team leadership, project management

Research & Technical: CRISPR-Cas9, confocal microscopy (Leica/Zeiss/Keyence), high-throughput NGS, RNA-Seq, de novo assembly, PCR/qPCR, ISH, immunostaining, tissue culture, lab automation (Beckman Biomek NX/FX, Opentrons), R, Python, GraphPad Prism, Fiji/ImageJ, IMARIS, SPSS

Certifications: Biological Safety Supervisor (UK/EU/USA) · Radiation Safety Officer · Chemical Safety & Hazardous Waste Management · IOSH Biological Safety : Management & Practice

SELECTED PUBLICATIONS — 7 PEER-REVIEWED · 3 COVER ARTICLES [\(Full list on Google Scholar\)](#)

Bhardwaj S et al. Origin of the mechanism of phenotypic plasticity in satyrid butterfly eyespots. *eLife* 9 (2020).

★ Cover article.

Bhardwaj S et al. Sex differences in 20-hydroxyecdysone control sexual dimorphism in butterfly wing patterns. *Mol. Biol. Evol.* 35(2) (2018). ★ Year in Review Cover.