Amelia K. Schmidt, PhD

WORK EXPERIENCE

Stanford Medicine, Division of Infectious Disease

May. 2025 - Present

Stanford, CA

- Post-Doctoral Scholar Lead a multidisciplinary team to design and execute bacteriophage engineering projects, demonstrating collaboration, creative problem-solving, and adaptability in a fast-paced research environment.
- Translate complex molecular biology and bioinformatics workflows into clear, engaging presentations and written reports for scientists and non-technical audiences.
- Partner with cross-functional colleagues including clinicians, computational biologists, and lab managers to align project outcomes with organizational goals.

Bacteriophage Pathobiology Laboratory

Aug. 2020 - Sept. 2024

Missoula, MT

Research Assistant

- Authored 10+ peer-reviewed publications and contributed to two patents by distilling complex datasets into compelling scientific narratives that influenced research direction and grant funding.
- Developed novel molecular biology tools and bioinformatics pipelines—translating experimental results into accessible figures, whitepapers, and presentations for diverse stakeholders.
- Managed multiple high-priority projects, balancing shifting timelines while maintaining a reputation for precision, reliability, and creative problem-solving.

University of Montana

Aug. 2020 – Dec. 2022

Teaching Assistant

Missoula, MT

- Delivered lectures and hands-on instruction for undergraduate and graduate courses, using storytelling, visual aids, and real-world examples to make microbiology engaging and memorable.
- Designed and graded assignments, providing constructive feedback that fostered student growth and scientific curiosity.

EDUCATION

University of Montana

Sept. 2024

Ph.D. – Cellular, Molecular, & Microbial Biology

Missoula, MT

Quest University Canada

May. 2020

B.A.Sc. – Synthetic Biology & Scientific Communication

British Columbia, Canada

CORE COMPETENCIES

- Science Communication & Storytelling Skilled at translating technical concepts into engaging content for websites, whitepapers, brochures, and presentations.
- Collaboration & Stakeholder Engagement Experienced working with scientists, product managers, clinicians, and external partners to deliver high-quality content on time.
- Adaptability & Creative Thinking Thrive in agile environments, finding innovative solutions and adapting to changing priorities.
- Technical Expertise Molecular biology, synthetic genome engineering, sequencing workflows, bioinformatics (R, Python, Bash).

SELECTED PUBLICATIONS

(1) Schmidt, AK et al., MBio. doi: 10.1128/mbio.02441-21. 2022. (2) Schwartzkopf, CM; Taylor, VL; Groleau, MC; Faith, DR; Schmidt, AK; Lamma, TL; Brooks, DM; Déziel, E; Maxwell, KaL; Secor, PR; Molecular Microbiolog. doi: 10.1111/mmi.15202. 2024. (3) Schmidt, AK et al., Journal of Bacteriology. doi: 10.1128/jb.00402-23. 2024. (4) Schwartzkopf, CM; Robinson, AJ; Ellenbecker, M; Faith, DR; Schmidt, AK; Brooks, DM; Lewerke, L; Voronina, E; Dandekar, AA; Secor, PR; PLoS Pathogens. doi: 10.1371/journal.ppat.1010925. 2023. (5) Copeland, CJ; Roddy, JW; Schmidt, AK; Secor, PR; Wheeler, TJ; NAR Genomics and Bioinformatics. doi: 10.1093/nargab/lqae030. 2024. (6) Pourtois, JD; Haddock, NL; Gupta, A; Khosravi, A; Martinez, H; Schmidt, AK; Prakash, PS; Jain, R; Fleming, P; Chang, TH; Milla, C; Secor, PR; De Leo, GA; Bollyky, PL; Burgener; EB; bioRxiv; doi: 10.1101/2025.01.14.632786. 2025.