Research Associate (Postdoc) – Bacterial Genetics, Systems Biology, Synthetic Biology
Location – University of Wisconsin-Madison, USA
Expected start date – as soon as available
Application deadline – no worries, just turn in your application!

Job Description
Postdoctoral research positions are available in **Jason Peters's lab at the University of Wisconsin-Madison, School of Pharmacy** (https://sites.google.com/wisc.edu/jasonpeterslab/) to study antibiotic-resistant Gram-negative bacteria (e.g., *Enterobacter*, *Klebsiella*, *Pseudomonas*, *Acinetobacter*) using CRISPR-based functional genomics.
We seek a motivated candidate to work with us on our newly funded ARPA-H collaborative grant to combat antibiotic resistance (https://arpa-h.gov/news/darts/). We seek to identify gene/pathways involved in antibiotic resistance as well as novel physiological weaknesses that can be exploited in future therapies.
The candidate will be responsible for constructing and phenotyping genome-scale CRISPRi libraries in Gram-negative pathogens—including clinical isolates, quantifying CRISPR screen results using Next Generation Sequencing (e.g., Illumina sequencing), bioinformatic analysis to identify and characterize screen hits, and follow up experiments to validate hit genes in terms of their contributions to viability/antibiotic resistance.

Required Degree
Ph.D. in Microbiology, Genetics, Molecular Biology, Systems Biology, Synthetic Biology, Biological/Biomolecular/Biomedical Engineering, or related fields.
Candidates must be within 1 year of Ph.D. graduation and Ph.D. must be granted by the start date.

Minimum Requirements
- Strong written and oral communication skills to collaborate and communicate effectively with a team of researchers from diverse scientific backgrounds.
- Meticulous record keeping and ability to respond quickly to written requests for research progress.

Desired Qualifications
- Strong candidates will have knowledge of and skills in microbiology, genetics, and molecular biology.
- Experience in the genetic manipulation of model and non-model microbes and/or synthetic biology, systems biology, and bioinformatics are highly desirable.

Required Application Materials
Send a cover letter (up to 2 pages) describing your interest(s) in this position and relevant skills, a CV, and the name and contact information of three professional references.
To apply – Please direct completed applications to Jason Peters (jason.peters@wisc.edu).

Additional Information
Initial appointment is available for one year with strong potential for continuation depending upon funding and performance. Salary is commensurate with experience, in accordance with the NIH NRSA Stipend Level for Postdoctoral Trainees.

About ARPA-H
ARPA-H advances high-potential, high-impact biomedical and health research that cannot be readily accomplished through traditional research or commercial activity. ARPA-H awardees are developing entirely new ways to tackle the hardest challenges in health (https://arpa-h.gov/about/about-arpa-h/).

School Statement
The University of Wisconsin–Madison School of Pharmacy is committed to creating an inclusive learning and working environment for all students, staff, and faculty. Our school is welcoming to learners and professionals from any background, and our academic programs reflect a dedication to providing outstanding care and support to communities around the world (https://pharmacy.wisc.edu/student-life/diversity-and-inclusion/).