



Location: Albuquerque, NM; Livermore, CA
Full Time, Temporary

What Your Job Will Be Like

Are you interested in research at the forefront of biological sciences? Are you interested in research that will lead to transformative breakthroughs in fundamental science and technologies from a national security perspective? If so, you could join our dynamic team as Sandia's inaugural McClintock Fellow!

The Sandia Barbara McClintock Distinguished Postdoctoral Fellowship has been established in honor of Nobel-Prize winner, Barbara McClintock. McClintock's pioneering work in maize demonstrated that genes are responsible for turning physical characteristics on and off and her theories explained the suppression and expression of genetic information from one generation to the next.

As a Sandia McClintock Postdoctoral Fellow, you will spend half of your time on your own original, self-directed research and half of your time on your choice of an established Sandia research project. The established project could include:

- Testing novel phage platforms for the purpose of developing new vaccines or gene therapy delivery systems
- Developing phages and other techniques for altering microbiomes, removing pathogens, or safely altering microbiome genetics in situ with a focus on sustainable fuels production
- Designing and developing novel tools to employ anti-CRISPR CRISPR to harden bioeconomy organisms against tampering, inadvertent alteration, and unintended consequences
- Using advanced microfluidics systems capable of mimicking both the blood brain barrier and the central nervous system to study alphavirus pathogenesis
- Comprehensive discovery and characterization of prokaryotic mobile elements and horizontal gene transfer, and applications of discoveries to synthetic biology and microbiome engineering

This position is a temporary position for one year, which may be renewed at Sandia's discretion for up to two additional years. The selected Fellow will receive a highly competitive salary, moving expenses, an equipment budget, and a generous professional travel allowance. You are expected to publish the results of your work in leading journals and present it at top-tier conferences. Applicants on this requisition may be interviewed by multiple organizations and considered for this and other postdoctoral positions at Sandia National Laboratories. The selected candidate must be able to work onsite at either the Livermore, CA or Albuquerque, NM campus location.

To apply for the McClintock Fellowship:

- Click "Apply for Job" on this page and submit a single PDF file containing your cover letter, CV, and a 3 to 5 page research proposal.
- Have three letters of recommendation submitted to mcclintockfellowship@sandia.gov with "2023 McClintock Fellowship" as the subject line.
- You may email mcclintockfellowship@sandia.gov with any questions or for help identifying a staff member to provide a Sandia perspective on your proposed research.
- Complete applications received no later than 5 pm Pacific Time, October 16, 2023, will receive full consideration.

For more information on the McClintock Fellowship, please visit: [Barbara McClintock Bioscience Fellowship](#)

Apply online at:
sandia.gov/careers
Job #: 691119

About Sandia:

Sandia National Laboratories is the nation's premier science and engineering lab for national security and technology innovation, with teams of specialists focused on cutting-edge work in a broad array of areas. Some of the main reasons we love our jobs:

- Challenging work with amazing impact that contributes to security, peace, and freedom worldwide
- Extraordinary co-workers
- Some of the best tools, equipment, and research facilities in the world
- Career advancement and enrichment opportunities
- Flexible work arrangements for many positions include 9/80 (work 80 hours every two weeks, with every other Friday off) and 4/10 (work 4 ten-hour days each week) compressed workweeks, part-time work, and telecommuting (a mix of onsite work and working from home)
- Generous vacations, strong medical and other benefits, competitive 401k, learning opportunities, relocation assistance and amenities aimed at creating a solid work/life balance*

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<http://www.sandia.gov>

*These benefits vary by job classification.

Learn more at:
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Qualifications We Require

- Ph.D. in a field relevant to biological sciences, conferred within the past three years, or anticipated completion of PhD requirements by commencement of appointment
- A background that includes appropriate research experience as evidenced by a strong record of research publications and/or presentations

Qualifications We Desire

- Ability to obtain and maintain a DOE security clearance, which requires U.S. Citizenship
- Proven ability to advance the state-of-the-art in biological sciences or bioengineering and/or related fields of study
- Excellent written and oral communication skills and interpersonal skills
- Proven research community leadership through activities such as participation in student or professional organizations, outreach activities, etc.
- Related professional experience such as internships in industry or at other national labs, participation in visiting research programs, etc.
- Ability to work in a collaborative, interdisciplinary research environment alongside specialists in other domains
- A commitment to encourage an inclusive culture, as proven through your application materials

About Our Team

The Bioscience Research Foundation (RF), an investment area under Sandia's Laboratory Directed Research and Development (LDRD) program, performs R&D required to anticipate, detect, and counter the risks of natural and human-made bio-threats (biodefense) and to identify and mitigate the impacts of climate change by advancing scientific understanding and developing technological solutions (environmental security). In biodefense, we address both natural and human-made biological agents, digital biosecurity, and materials, which can be either enabling or a target for manipulation. In environmental security, we address the impacts of global climate change, bioresource security, and the need to drive the circular bioeconomy.

The team is composed of expert scientists, researchers, and engineers performing exploratory science and developing technologies to address pressing national needs in energy security, and national defense. Through extensive partnerships inside and outside Sandia, the Center is focused on understanding and countering natural, traditional and engineered biological threats, as well as on developing alternative lignocellulosic and algal-derived transportation biofuels. We continually work with experts and world class researchers along with our key sponsors which include the DOE Office of Science (BER and BES), the DOE Office of Energy Efficiency and Renewable Energy, NNSA, ARPA-E, DoD, the Defense Threat Reduction Agency, DHS, and the NIH.