

**POST-DOCTORAL FELLOWSHIP  
RISK ASSESSMENT AND MANAGEMENT OF GENE DRIVE ORGANISMS  
PRE-ADVERTISEMENT ANNOUNCEMENT**



The US Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Biotechnology Regulatory Service (BRS) will soon announce the availability of an APHIS Science Fellowship focusing on risk assessment and management methods and strategies for the use of gene drives (and secondarily, RNAi technologies) for control of agricultural pests and for conservation purposes. The Fellow's work will provide clearer understanding of how gene drive organisms can be evaluated in a regulatory and risk management context and help shape policy that will inform product development and use. This two year position, with the possibility of a two year extension, will be housed in APHIS' Biotechnology Regulatory Services and would work closely with APHIS' Wildlife Services (WS), National Wildlife Research Center (NWRC).

Duties and Responsibilities

The Fellow would focus on topics such as:

- Identifying aspects of risk assessment approaches in various domains (e.g., environmental releases of genetically engineered organisms and biological control organisms, insect resistance management) that could be useful for risk assessment of gene drive organisms.
- Identifying data and information needs for risk assessment of gene drive applications, and assessing their dependence on the type, target, and intended use of a gene drive (including gene drives for phytophagous insects and small mammals). Identifying and assessing the impact of data absence and uncertainty on risk assessment outcomes. Evaluating the uses and limitations of mathematical models in risk assessment.
- Developing conceptual risk assessment approaches that APHIS and other agencies could use for gene drive applications as the scale of experimentation increases and containment level decreases from laboratory to small scale field testing to large scale release, and identifying potential risk thresholds or assessment outcomes that could inform decision-making.
- Evaluating the role of risk management (mitigation, monitoring, response, communication) in the risk assessment and regulatory decision-making process for gene drive applications. As part of this activity, the Fellow would engage in identifying best practices and strategies of science-based risk management approaches used in other domains and evaluating how gene drive technologies fit into current US government regulatory risk assessment frameworks.

Location and Work Environment

The Fellow would be located at the APHIS Riverdale, Maryland offices. This will provide direct access to BRS managers and staff, as well as other regulatory agencies with interests in gene drive technologies, all of which are headquartered in the Washington DC area. Interactions with WS NWRC staff would be primarily long-distance, but the Fellow would also engage in face-to-face interactions each year. There would also be the opportunity to interact with scientists in academia and elsewhere who are involved in gene drive research.

Application Process

The job will be announced and the application process will be managed through <https://www.usajobs.gov/>. The position will be advertised as a Biological Scientist at the GS 11 level. We seek applications from anyone who believes they have the experience required for the position. The posting will be open for five business days, plus one weekend, so we encourage you to set up a USAJobs.gov account and start preparing your application documents in advance. These documents include transcripts, a CV/resume, and a cover letter. Resumes should list technical skills along with education, experience, publications, and other typical resume information, and should demonstrate that you have the specialized experience required for the position.

Questions regarding the position can be e-mailed to: [alan.pearson@usda.gov](mailto:alan.pearson@usda.gov).