



Microbial Discovery Resource Program (MDRP)

Request for Proposals: QIAGEN DNeasy Blood & Tissue Kits https://wolbachiaproject.org/mdrp

Discover the Microbes Within! and the One Health Microbiome Center at Penn State invite proposals to the **Microbial Discovery Resource Program (MDRP)** for new and existing participants of the *Wolbachia* Project. Thanks to the generous support of QIAGEN, a limited number of DNeasy Blood & Tissue Kits (#69504, 50 extractions) will be available to biology, microbiology, and biotechnology classrooms at no cost.

The Wolbachia Project is an inquiry-based research experience for high school and postsecondary students. The integrative, 5-part lab series empowers young scientists to explore arthropod biodiversity within their communities, apply hands-on techniques in molecular biology and bioinformatics to extract and analyze DNA sequences, and communicate new scientific data on the bacterial endosymbiont Wolbachia via an international database. The MDRP supports the accessibility of equipment, reagents, and sequencing services to participating schools.

Eligibility

All new and existing participants of the *Wolbachia* Project are encouraged to apply. Applicants must meet the following criteria:

- 1. Recipients must plan to use the QIAGEN DNeasy Kit for "Lab 2: DNA Extraction" of the *Wolbachia* Project.
- 2. Recipients must be affiliated with a high school and/or postsecondary organization, including 2-year and 4-year institutions.
- 3. If the QIAGEN DNeasy Kit will be used for a student independent project, the proposal must be submitted by the supervising teacher and/or administrator.
- 4. Due to shipping expenses and restrictions on international shipping, recipients must be located within the US.

Proposal Requirements

Proposals should be submitted online via the MDRP portal:

https://wolbachiaproject.org/mdrp-proposal-submission/

Each proposal should include:

- Supervising teacher(s) and/or administrator(s).
- Name and address of the organization.
- Educational level of participants.
- Anticipated number of participants.
- Anticipated date that the DNeasy Kit(s) will be required.
- Summary (1-page maximum): A summary of the course, independent research project, and/or after-school program. Existing *Wolbachia* Project participants may include a testimonial of previous experiences.
- Acknowledgement that a ½ page testimonial is required upon completion of The *Wolbachia* Project.
- Acknowledgement that ethanol is required for the QIAGEN DNeasy kit and will be provided by the recipient.
- Statement of Diversity (optional, 100-word maximum): The MDRP supports the training of "Underrepresented Populations in the U.S. Biomedical, Clinical, Behavioral and Social Sciences Research Enterprise." https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-031.html Applicants are encouraged to describe how the Wolbachia Project will benefit you and/or student participants and encourage diversity in scientific education and research.

Submission and Review Process

Proposals may be submitted on a rolling basis between January 24 - December 31, 2024, via the MDRP portal: https://wolbachiaproject.org/mdrp-proposal-submission/

Proposals will be evaluated by the Director and Program Coordinator of The *Wolbachia* Project. Applicants will be notified within 2-weeks of their submission and Qiagen DNeasy Kits will be sent within one month of the initial application. Priority will be given to high schools.

Awardee Expectations

All awardees will submit a ½ page testimonial following completion of The *Wolbachia* Project. Testimonials should include the number and grade level of students participating in The *Wolbachia* Project, teacher and/or student perceptions of the experience, and any feedback for improving and/or building upon the project. Gel images and graphical summaries of data may be included.

Participants are encouraged to make *Wolbachia* Project data publicly accessible via online submission to The *Wolbachia* Project Database (https://wolbachiaprojectdb.org), publication in peer-reviewed journals (such as the *Journal of Emerging Investigators*), and/or submission of DNA sequences to NCBI-GenBank. Please include references to these publications in the ½ page testimonial.