The Seeds of Future Science
Arboretum Fellowship and Awards Opportunities Boost Research and Careers

An interview with Faye Rosin, Director of Research Facilitation

With the addition of the Weld Hill Research and Administration Building, the Arnold Arboretum offers scientists from a wide range of disciplines state-of-the-art facilities to conduct studies on material collected from living plants in our landscape. To foster both independent and collaborative work focused on its remarkable collections, the Arboretum offers a research fellowship and a number of research awards to students, post-doctoral researchers, and professionals of the biological and horticultural sciences. Endowed through past and present philanthropy, these competitive funding opportunities provide student researchers and scientists with the means and support to launch novel inquiries or to pursue new directions in their ongoing studies. Award recipients not only tap into the Arboretum’s collections and research facilities, but also take advantage of staff expertise and vast information resources to advance their investigations. The awards not only promote the scientific use of the Arboretum, but also contribute fresh perspectives, viewpoints, and ideas to the institution’s network of associates and collaborators.

As Director of Research Facilitation, Dr. Faye Rosin serves on the committees that select the recipients of the fellowship and awards. She also helps orient these individuals as new members of the Arboretum community, introducing them to the full complement of the institution’s resources as a scientific collection, research facility, and division of Harvard University. Part of this coordination involves providing operations assistance and safety training for the use of Weld Hill’s highly specialized equipment for plant study, as well as offering ongoing laboratory support, critical analysis, and a friendly spirit of camaraderie. At every step, Faye helps establish a welcoming and stimulating environment necessary for fellows and award recipients to make the most of their investigations and their overall experience as guest researchers at the Arnold Arboretum.

Q. What types of funding does the Arboretum make available on a competitive basis to student and post-doctoral researchers in the plant sciences?
A. The Putnam Fellowship was established in the 1990s
and provides salary and research support to a researcher embarking on an independent project utilizing the Arboretum’s collections. Funding is granted for a year with an option to renew for a second year. This award is particularly important in that it can really represent a springboard for the career of a young scientist, supporting the critical time between their educational training and dissertation work and their entry into a laboratory or teaching position of their own. Our Putnam Fellows integrate fully into the Arboretum community as a member of the staff, conducting their research but also contributing to the vibrancy of the institution by giving lectures, participating in team initiatives, or writing articles for Silva and Arnoldia.

In contrast, recipients of our various research awards—the Sargent Award for Visiting Scholars, the Cunin-Sigal Research Award, the Deland Award for Student Research, the Ashton Award for Student Research, and the Jewitt Prize—obtain funding mainly for travel, laboratory work, and supplies, and may not even visit the Arboretum at all if the material they need to study from our collections can be supplied to them by other means. Considered together, our research awards provide backing for a broad range of individuals, from undergraduate and graduate students to post-doctoral fellows and established scientists.

Q. How are the award recipients chosen, and what do you look for in a winning proposal?
A. We have a rigorous peer-review process to select awardees from the proposals we receive. There really isn’t a formula for a successful proposal, other than representing good science, matching any requirements specified by the award endowments, and demonstrating the thoughtful use of our collections. Beyond that, applicants need to be realistic and set out goals that are technically feasible under the amount of time and funding requested. After these fundamental considerations, the competitive nature of the process comes to the fore, and we look more critically at the finalists in terms of their creativity, their novelty, and their potential to spur further scholarship on their topic of interest. It’s also highly desirable to us that the work reflect the unique resources of the Arnold Arboretum. If it’s research that can only be done here—with this collection and its curated information—that’s a characteristic we certainly value quite highly.

Q. How do awards and fellowship recipients participate as part of the Arboretum community and in the broader realm of sciences at Harvard?
A. Our awardees collaborate not only with other researchers here, but also with our curatorial and horticultural staffs in selecting and accessing plants in the collection. In some cases, the plans of our guest scientists have changed significantly once they’ve conferred with those who track these plants on a daily basis. These relationships are important for us all, and there are side benefits in having outsiders looking closely at our plants. Any time we single out specific organisms for study, we learn new information, and are able to check and verify our existing data on any given accession. These programs also serve to constantly demonstrate the value and relevance of the living collections for research, both to the public at large and to our staff who are responsible for growing and documenting our plants.

Working side by side with Arboretum staff creates real opportunities for a cross pollination of ideas, and our facilities at Weld Hill lend themselves to supporting collaboration. Equipment and workspaces in our open laboratories are shared, along with fresh perspectives and expertise. This environment and their participation in the daily life of the institution really goes a long way toward cultivating a vibrant community for discovery. Awardees in residence are invited to attend our weekly research seminars, which feature our own researchers as well as guest lecturers from other parts of the country and the world. Awardees can participate fully in these offerings, and are encouraged to give research talks of their own design. These opportunities enable them to interact with other researchers in various fields at Harvard and expand their professional network. Experiences like these can also help awardees look outside their own silos to consider other paths of research, which can be quite valuable to an emerging scientist.

Q. How does the Arboretum gather and leverage new information obtained from projects conducted by its fellows and awardees?
A. The recipients of our fellowship and awards are selected in spring, and by the following December they are required to submit a report on their research and its status, including what they learned, what they may still need to do, and how the outcomes might influence future investigations. Resulting data can be linked to our curatorial information on the plants studied, and is also reported annually to the donors and families who have established the awards. During the course of their stay, awardees often give public talks, or share details of their work on our website and in our publications. In this way, the knowledge accumulated in our collections through these awards feeds back into our core mission to increase the appreciation and understanding of our plants for the benefit of everyone. The interaction of bright minds, outstanding labs, and a richly documented collection of living plants create endless possibilities for new applications and fresh inspiration.