

Plant Genome Research Outreach Portal. A Gateway to Plant Genome Research "Outreach" Programs and Activities¹

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Plant genome outreach programs increasingly play an important role in providing opportunities for the community at large to participate more fully in the latest developments in plant genomics. In particular, the National Science Foundation (NSF; <http://www.nsf.gov/>) strongly encourages outreach programs to promote teaching, training, and learning and to broaden the participation of underrepresented groups (based on e.g. gender, ethnicity, disability, or geographic location). As a consequence, there are now many types of outreach resources and opportunities available, including tutorials, demonstrations, workshops, professional development opportunities, internships, and research or educational collaborations.

As more plant genome research outreach resources become available, efficient methods for finding the right resources to suit a particular individual's needs must be created. For example, a high school teacher might need to find tutorials on bioinformatics appropriate for classroom use in grades 10 through 12. An undergraduate student could be looking for summer internships that provide experience in plant genomics. In addition, the student might wish to locate programs that particularly encourage participation by members of underrepresented groups that offer specific assistance. A member of congress could be looking for nontechnical descriptions of current federally funded research projects on particular crop species. An aspiring principal investigator on an NSF Plant Genome Research Program (http://www.nsf.gov/bio/dbi/dbi_pgr.htm) grant application might want to review outreach success stories for guidance in fulfilling the NSF merit review criterion addressing the broader impacts of the proposed activity.

To facilitate such diverse searches, we have developed the Plant Genome Research Outreach Portal (PGROP). PGROP seeks to provide a gateway to all plant genome research outreach programs and activities, making these resources easily accessible to a wide-ranging audience. At the core of the project is the PGROP Web site (<http://www.plantgdb.org/pgrop>), a database-driven online application that comprehensively organizes and presents outreach resources gathered from a broad collection of projects and initiatives that are focused on plant genome research and related topics. Resources can be searched by user type, species of interest, topic, resource type, and various other criteria. The site is ancillary to the PlantGDB homepage (<http://www.plantgdb.org/>), a highly visible resource for plant genome data at Iowa State University. The PGROP site is both a repository of outreach content and a portal to other online outreach resources and Web sites.

Of particular note is a function within PGROP that enables providers to input descriptions of their own outreach content directly into the PGROP database. Once in the database, this content becomes accessible to anyone who visits the PGROP site. We encourage outreach providers to take advantage of this, so that the results of their efforts may benefit a wider audience. We also encourage interested persons to provide us with comments and feedback regarding their experiences while using the site (e-mail to pgropDBA@iastate.edu).

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