Interested in Molecular Biology, Genomics, Biotechnology?

…Consider this opportunity…

Ten-Week Undergraduate Internships in Plant Genomics

Available between May 16 and September 16, 2011

Investigate a career and obtain first-hand experience in an active plant genomics laboratory. You will gain experience in the exciting fields of biotechnology and bioinformatics and an orientation to wheat, one of the world's most important food crop plants.

Description

The internships offer opportunities for undergraduates to join a plant genomics research laboratory for hands-on participation in wheat genomics research for a ten-week period. Each host laboratory (see list at right) is currently involved in a collaborative project to develop a physical map of one of the wheat genomes. The project involves screening of bacterial artificial chromosome (BAC) libraries, BAC fingerprinting, high-throughput genetic mapping, and Sanger and next-gen DNA sequencing.

Interns will gain appreciation for applications of genomics to solve problems in agriculture, particularly with food crops and will be instructed in and use a rich variety of laboratory and computer applications in molecular biology, genomics, and bioinformatics. Each intern will have close mentorship with a research scientist in the host laboratory, be an integral part of the wheat genome physical map development project, and be expected to produce a short written report at the end of the internship detailing his or her experiences.

Financial arrangements

Each intern will receive a stipend of **$3,250** for the internship. The stipend will be made available in two equal payments, one after three weeks of the internship have been satisfactorily completed and the other on successful completion of the full internship.

A payment of **$1,250** per person will be made at the outset to contribute to subsistence costs during the internship.

For travel from home location to host laboratory location, up to **$1,500** per person is available to reimburse actual travel costs incurred at the start and finish of the internship.

How to apply

Applications should consist of:

1. 250 words or less about your interests in plant molecular genetics, including any laboratory experience you have had;
2. A list of courses (and grades received) you have taken in biology, chemistry, genetics, and agricultural sciences, such as plant breeding;
3. An indication of your preferred host laboratory (see list at top right);
4. Preferences you have for the starting date of a ten-week internship period within the May 16 to September 16 timeframe; and
5. Personal contact information: email address, telephone and fax numbers, and home and school addresses.

Host laboratories

Dr. Olin Anderson
Genomics and Gene Discovery Unit
US Dept. of Agriculture
Western Regional Research Center
Albany, CA

Drs. Jan Dvořák and **Mingcheng Luo**
Dept. of Plant Sciences
University of California, Davis CA

Dr. Bikram Gill
Dept. of Plant Pathology
Kansas State University, Manhattan KS

Dr. Doreen Ware
Cold Spring Harbor Laboratory
Cold Spring Harbor, NY

Eligibility

Students must be USA citizens or permanent residents, have undergraduate, sophomore standing in an accredited USA college or university as of Fall 2011, and have completed courses in biology and genetics. Students must not be receiving compensation, either directly or indirectly, from other Federal government sources while participating in the internship.

Applications are encouraged from students in social groups traditionally underrepresented in science.

Timeline

Applications are due by **April 29, 2011**.
Notices of awards will be made by **May 10**.

Submit application by email to:

Patrick McGuire <pemcguire@ucdavis.edu>
Dept. of Plant Sciences
University of California, Davis CA

Sponsor

Financial support is provided by a grant from the National Science Foundation Plant Genome Research Program project: ***Physical Mapping of the Wheat D Genome***
(NSF IOS-0701916)
http://wheat.ucdavis.edu/wheatD/

| Applicants must be prepared to provide documentation of citizenship or permanent residency status. |