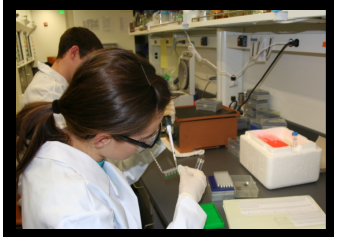
PLANT GENOMICS @ Michigan State University

Summer Research Experience for Undergraduates 2017

plantgen@msu.edu



What is Plant Genomics @ Michigan State University?

Plant Genomics @ MSU is a National Science Foundation funded summer research program for visiting undergraduate students and guest faculty. Students will participate in a full-time, mentored research experience and will be fully immersed within a host laboratory where they will interact with MSU faculty, postdoctoral associates and graduate students. Participants will conduct laboratory or computational-based research alongside their mentors, participate in group meetings and activities, and attend weekly informal seminars and networking activities. Emphasis is placed on career preparation and development with the aim of providing insight into life as a graduate student. Participants will complete several professional development workshops and will have the opportunity to discuss life in graduate school with a panel of current graduate students. At the end of the program, participants will present summaries of their research to all the project teams in both poster and oral presentation form.

Who should apply to Plant Genomics @ MSU?

We are interested in recruiting motivated undergraduate students entering their sophomore, junior or senior year who have declared a major in one or more of the following or closely related disciplines: Biology, Plant Sciences, Biochemistry, Biotechnology, Bioengineering, Chemistry, Math and Computer Science. Applicants must also be US citizens or permanent residents and be able to attend the full 10 weeks of the program, May 21 – July 29.

Genomics research at Michigan State University

Plants are essential to human health and nutrition and we utilize them as sources of food, fuel, fiber and pharmaceuticals. Worldwide population growth, coupled with increasingly limited natural resources and the associated problem of climate change, necessitate that we increase the yield of current crops and explore the feasibility of developing new food and biofuel crops that can be grown on marginal lands with reduced inputs. Michigan State University is a leader in plant science research with over 100 faculty members engaged in research and teaching that spans the applied to basic science continuum. Faculty affiliated with the Plant Genomics @ MSU REU Program, utilize a combination of wet-lab and computational-based approaches in model and crop plant species as well as photosynthetic micro-organisms to improve understanding of fundamental processes in plants. Diverse research projects are available ranging from probing fundamental questions in cell biology to developing the next generation of biofuel crops and elucidating biochemical pathways involved in the biosynthesis of nutritionally and pharmaceutically important compounds.

Participating host labs may include:

Plant Research Laboratory
www.prl.msu.edu
Dr. Christoph Benning
Dr. Federica Brandizzi
Dr. Shi-You Ding
Dr. Danny Ducat
Dr. Sheng Yang He
Dr. Gregg Howe
Dr. Jianping Hu
Dr. Cheryl Kerfeld
Dr. Dave Kramer
Dr. Beronda Montgomery
Dr. Mike Thomashow

Dept. of Plant Biology
www.plantbiology.msu.edu
Dr. Kevin Childs
Dr. Eva Farre
Dr. Maren Friesen
Dr. David Lowry
Dr. Danny Schnell
Dr. Yair Shachar-Hill
Dr. Shinhan Shiu

Dept. of Horticulture
www.hrt.msu.edu
Dr. Cornelius Barry
Dr. Pat Edger
Dr. Ning Jiang
Dr. Steve van Nocker

Dept. of Biochemistry & Molecular Biology
www.bch.msu.edu
Dr. Björn Hamberger
Dr. Susanne Hoffman-Benning
Dr. Dan Jones
Dr. Robert Last
Dr. Tom Sharkey
Dr. Hideki Takahashi
Dr. Kevin Walker

Dept. of Plant, Soil and Microbial Sciences
www.psm.msu.edu
Dr. Brad Day
Dr. Greg Bonito

Participant support: Students receive a stipend of $5250, housing and meals on campus, plus some travel assistance.

Applications available at: www.plantgenomics.msu.edu
Questions? Email plantgen@msu.edu

Application deadline: February 8, 2017

MICHIGAN STATE UNIVERSITY