

First Announcement

Short course on

Marker-Assisted Plant Breeding

20–23 June 2016

Saint Paul, Minnesota, USA

Offered jointly by the

University of Minnesota and **University of Wisconsin-Madison**

Primary Instructors

Dr. Rex Bernardo (University of Minnesota)

Dr. Lucia Gutiérrez (University of Wisconsin-Madison)

Course Description

This short course will focus on principles, concepts, and practices regarding the use of molecular markers to improve quantitative traits in plants. The course will include both theory and hands-on computer sessions in an active-learning format.

Target Audience and Prerequisites

Graduate students, postdocs, and industry scientists who are interested in the fundamentals of marker-assisted plant breeding are invited. Participants should be familiar with basic terminology, concepts, and methods in plant breeding and statistics.

Program

Monday, June 20

Review of plant breeding; overview of marker-assisted selection strategies; review of population and quantitative genetics; computer exercises on quantitative trait locus (QTL) mapping

Tuesday, June 21

Linkage mapping in biparental populations; association mapping; computer exercises with R-based software for linkage and association mapping

Wednesday, June 22

Marker-assisted selection for major QTL; F_2 enrichment; genomewide selection; computer exercises on breeding strategies

Thursday, June 23

Best practices and challenges in integrating markers in a breeding program

Costs

\$550 for graduate students, postdocs, and faculty

\$775 for industry participants

These fees include breakfast, lunch, and morning and afternoon breaks from Tuesday to Friday noon.

Dinners and accommodations are not included.

We regret that scholarships or reduced fees are unavailable.

Computers

Participants should bring a laptop computer that can run Windows applications.

Location

Continuing Education and Conference Center, University of Minnesota

(<http://cce.umn.edu/Continuing-Education-and-Conference-Center/>)

Online Registration

Online registration begins in January 2016. Space is limited to 72 participants.

Detailed registration information will be provided in a Second Announcement.

Payment will be by credit card only (VISA, MasterCard, Discover, or American Express).

Accommodations

Hotel rooms close to campus will be available at the rate of about \$100 + tax per night.

A shuttle from the hotel to the Saint Paul campus will be available.

Those who come by car may avail of cheaper, alternative accommodations (e.g., airbnb or other hotels).

Further information will be available in January 2016.

Questions?

Contact Dr. Bernardo by email (bernardo@umn.edu).