

PMPB

CPSC 598/IB 513 SEMINAR

WEDNESDAY, SEP. 4, 2013

W-109 TURNER HALL

NOON TO 1:00 PM



“Modifying soybean oil fatty acid composition for improved functionality in food, feed, and industrial applications”

Presented by:

Dr. Thomas Clemente

University of Nebraska

Soybeans are desired on the marketplace as a valuable source of protein and oil. The former is primarily used as feed, with some food applications, while the later is more broadly incorporated into food, feed and some industrial applications (e.g., biodiesel). Our soybean biotechnology program has focused its attention on genetic approaches to improve oxidative stability and enhance nutritional quality of the oil through alterations in the fatty acid profiles. We have demonstrated utility of targeted fatty acid profile changes in various end use applications. For example, an oil low in saturated fatty acids and elevated in oleic acid leads to a soydiesel with improved cold flow properties, and reduced NOx emissions, while an oil high in omega-3 fatty acids has been demonstrated to have value in aquaculture feeds. The presentation will summarize the various perturbations in soybean oil biosynthesis that have been carried out and future direction of the program.

Graduate Students and post-docs: Please join Dr. Clemente for lunch and discussion following the seminar in room 350B ERML. Please R.S.V.P. to pasarver@illinois.edu so we know how many to plan for.

This semester's seminar series would not have been possible without the generous support from the Departments of Plant Biology and Crop Sciences, the School of Molecular and Cellular Biology, the College of Liberal Arts and Sciences, the College of Agriculture, Consumer & Environmental Sciences, and the Physiological and Molecular Plant Biology program.

