The Ohio State University Center for Applied Plant Sciences (CAPS) is a new partnership between Ohio State's College of Arts and Sciences and College of Food, Agricultural, and Environmental Sciences. It supports building a strong connection between basic research and potential applications, and the creation of new bioproducts and enhanced crop performance are among CAPS top priorities.

**MISSION**
To find practical solutions to challenging problems within four main Strategic Areas:
- Photosynthesis & Carbon Fixation
- Biomass & Bioproducts
- Crop Improvement & Functional Food
- Plant-Microbe Interactions

**GOALS**
Bring together interdisciplinary scientific teams to tackle challenges in four strategic areas:
- Photosynthesis & Carbon Fixation
- Biomass & Bioproducts
- Crop Improvement & Functional Food
- Plant-Microbe Interactions

Provide improved access to research facilities
Increase opportunities to attract top PhD students with graduate and postdoctoral fellowships through Interdisciplinary Graduate Program in Translational Plant Sciences (TPS)

**QUarterly Gatherings**
Quarterly scientific updates cover topics related to each of CAPS strategic areas develop interactions and spur synergistic connections among researchers in diverse fields. Speakers summarize the highlights of their work, focusing on questions and problems that might be more easily and productively solved in collaboration with other researchers.

*Individual experts working in tandem translating basic biological concepts into applications that revolutionize plant sciences locally, nationally and globally.*
PROGRAMMING

CAPS sponsors/co-sponsors a variety of events and initiatives, including:

GREENING OF THE CLASSROOM INITIATIVE
Introduces high school students to the use of plants to study and solve key global issues

TRIPARTITE CONFERENCE OF THE AMERICAS ON BIOTECHNOLOGY AND BIOENERGY
Unique research partnership of three major universities—Ohio State, Rutgers, and the University of Sao Paulo, Brazil—committed to intensive, collaborative research on Bioenergy and Biofuels

PRACTICAL SUMMER WORKSHOP IN FUNCTIONAL GENOMICS
Lectures in genomics, RNA expression analysis and proteomics; hands-on laboratory experience; bioinformatics sessions, all aimed at solving cutting-edge problems in these areas. Open to graduate students, postdoctoral researchers, junior faculty members, qualified undergraduate students, and high school teachers

HISTORY

CAPS builds on earlier initiatives to increase research work across disciplines and colleges, such as:

• The Plant Molecular Biology and Biotechnology Program — collaborations between Columbus and Wooster campus scientists

• The Translational Plant Sciences Targeted Investment in Excellence (TIE) — $6 million investment in new faculty, equipment, and fellowships to increase leadership in the molecular plant sciences

PARTNERSHIPS

To bridge the gap between basic and applied research, CAPS works with the Ohio Agricultural Research and Development Center (OARDC), the Ohio BioProducts Innovation Center (OBIC), and the Office for Energy and the Environment (OEE).

“CAPS allows us to tap into the incredible scientific expertise available at Ohio State. I envision interdisciplinary teams that can take a very basic biological concept and translate it into an application that would be a practical solution to a problem, such as a new plant-based industrial product or a food that helps prevent cancer.”

{Erich Grotewold, Director, CAPS}