CENTER NAME CHANGE AT IOWA STATE UNIVERSITY
CENTER FOR DESIGNER CROPS TO CENTER FOR METABOLIC BIOLOGY

Action Requested: Consider approval of the request by Iowa State University to change the name of the Center for Designer Crops to the Center for Metabolic Biology.

Executive Summary: The Board of Regents approved the creation of the Center for Designer Crops in the Plant Sciences Institute at Iowa State University in 1999. The purpose of the Center for Designer Crops was to conduct fundamental research aimed at designing crops specifically suited to their end use. Such uses included improved human and animal nutrition, novel and environmentally friendly industrial feedstocks, and production of medicinal chemicals. Iowa State University has determined that a name change and re-orientation of the Center is necessary at this time to support needed research. The proposed name change will expand the scope of the Center to include research of metabolic biology, irrespective of biological kingdoms. This request addresses the Board’s Strategic Plan priority (2.0) to “discover new knowledge through research, scholarship, and creative activities.”

Background:

◇ New goals. The Center for Metabolic Biology will facilitate, encourage, and sponsor innovative and fundamental molecular research that will lead to a comprehensive understanding of metabolic networks and systems. The goal of the Center is “to generate the fundamental understanding of metabolism that will provide the basis for designing novel pathways for biochemical constituents that improve the nutritional quality of agricultural products and generate new biorenewable sources of industrial feedstocks.”

◇ Reason for change. The change will enhance the capabilities of the Center by including plant researchers as well as researchers investigating metabolism in microbial systems. This will take advantage of approximately 1,500 microbial genomes that have been sequenced and that offer a resource for finding metabolic solutions to issues associated with biorenewables and food/feed.

◇ Re-orientation of Center. Re-orientation of the Center will also facilitate the submission of a proposal to the National Science Foundation for an Engineering Research Center whose goal is generating biorenewable chemicals through the manipulations of plant and microbial systems. It will provide support for the anticipated faculty expansion in the area of microbial fermentation/metabolism. In turn, the Center will play a better bridge role between the Plant Sciences Institute and the Office of Biorenewables Programs. The re-orientation of the Center will also provide a larger critical mass of researchers to support the funding of new instrumentation for the WM Keck Metabolomics Research Laboratory due to advances in technologies for these types of analyses.

◇ Budget. Funding for the Center FY 08 budget of $180,000 is provided by the Plant Sciences Institute, Biotechnology Council, Provost’s Office, College of Agriculture and Life Sciences, and fees generated by the WM Keck Metabolomics Research Laboratory. The Center budget is likely to increase with an expansion of faculty in metabolic biology; additional fees generated by the use of the WM Keck Metabolomics Research Laboratory are anticipated.

Details about the proposed name change are available in the Board Office.