

and to provide them with an education of the highest quality available anywhere in the world and which reflects the unique needs of the Nation. It is designed to stimulate and enable colleges and universities to provide the quality of education necessary to produce baccalaureate or higher degree level graduates capable of strengthening the Nation's food and agricultural scientific and professional work force. It is intended that projects supported by the program will:

(a) Address a State, regional, national, or international educational need;

(b) Involve a creative or nontraditional approach toward addressing that need which can serve as a model to others;

(c) Encourage and facilitate better working relationships in the university science and education community, as well as between universities and the private sector, to enhance program quality and supplement available resources; and

(d) Result in benefits which will likely transcend the project duration and USDA support.

§ 3405.5 Matching funds.

Each application must provide for matching support from a non-Federal source. CSREES will cite in the program announcement the required percentage of institutional cost sharing.

§ 3405.6 Scope of program.

This program supports projects related to strengthening undergraduate or graduate teaching programs as specified in the annual program announcement. Only proposals addressing one or more of the specific targeted need areas(s) identified in the program announcement will be funded. Proposals may focus on any subject matter area(s) in the food and agricultural sciences unless limited by determinations as specified in the annual program announcement. A proposal may address a single targeted need area or multiple targeted need areas, and may be focused on a single subject matter area or multiple subject matter areas, in any combination (e.g., curriculum development in horticulture; curriculum development, faculty enhance-

ment, and student experiential learning in animal science; faculty enhancement in food science and agribusiness management; or instruction delivery systems and student experiential learning in plant science, horticulture, and entomology). Targeted need areas will consist of one or more of the following:

(a) *Curricula design and materials development.* (1) The purpose of this initiative is to promote new and improved curricula and materials to increase the quality of, and continuously renew, the Nation's academic programs in the food and agricultural sciences. The overall objective is to stimulate the development and facilitate the use of exemplary education models and materials that incorporate the most recent advances in subject matter, research on teaching and learning theory, and instructional technology. Proposals may emphasize: the development of courses of study, degree programs, and instructional materials; the use of new approaches to the study of traditional subjects; or the introduction of new subjects, or new applications of knowledge, pertaining to the food and agricultural sciences.

(2) Examples include, but are not limited to, curricula and materials that promote:

(i) Raising the level of scholastic achievement of the Nation's graduates in the food and agricultural sciences.

(ii) Addressing the special needs of particular groups of students, such as minorities, gifted and talented, or those with educational backgrounds that warrant enrichment.

(iii) Using alternative instructional strategies or methodologies, including computer-assisted instruction or simulation modeling, media programs that reach large audiences efficiently and effectively, activities that provide hands-on learning experiences, and educational programs that extend learning beyond the classroom.

(iv) Using sound pedagogy, particularly with regard to recent research on how to motivate students to learn, retain, apply, and transfer knowledge, skills, and competencies.

(v) Building student competencies to integrate and synthesize knowledge from several disciplines.