

§ 450g. Authorization of appropriations for cooperative research projects

There is authorized to be appropriated such sums as may be necessary to carry out the purposes of sections 450c to 450g of this title.

(Apr. 4, 1940, ch. 75, § 5, 54 Stat. 82.)

CODIFICATION

Section was formerly classified to section 516e of Title 5 prior to the general revision and enactment of Title 5, Government Organization and Employees, by Pub. L. 89-554, § 1, Sept. 6, 1966, 80 Stat. 378.

§ 450h. Transferred

CODIFICATION

Section, act July 24, 1919, ch. 26, 41 Stat. 270, as amended, was transferred to section 2220 of this title.

Section was formerly classified to sections 67 and 564 of Title 5 prior to the general revision and enactment of Title 5, Government Organization and Employees, by Pub. L. 89-554, § 1, Sept. 6, 1966, 80 Stat. 378.

§ 450i. Competitive, special, and facilities research grants

(a) Establishment of grant program

(1) In order to promote research in food, agriculture, and related areas, a research grants program is hereby established in the Department of Agriculture.

(2) **SHORT TITLE.**—This section may be cited as the “Competitive, Special, and Facilities Research Grant Act”.

(b) Agriculture and food research initiative

(1) Establishment

There is established in the Department of Agriculture an Agriculture and Food Research Initiative under which the Secretary of Agriculture (referred to in this subsection as “the Secretary”) may make competitive grants for fundamental and applied research, extension, and education to address food and agricultural sciences (as defined under section 3103 of this title).

(2) Priority areas

The competitive grants program established under this subsection shall address the following areas:

(A) Plant health and production and plant products

Plant systems, including—

- (i) plant genome structure and function;
- (ii) molecular and cellular genetics and plant biotechnology;
- (iii) conventional breeding, including cultivar and breed development, selection theory, applied quantitative genetics, breeding for improved food quality, breeding for improved local adaptation to biotic stress and abiotic stress, and participatory breeding;
- (iv) plant-pest interactions and biocontrol systems;
- (v) crop plant response to environmental stresses;
- (vi) unproved nutrient qualities of plant products; and
- (vii) new food and industrial uses of plant products.

(B) Animal health and production and animal products

Animal systems, including—

- (i) aquaculture;
- (ii) cellular and molecular basis of animal reproduction, growth, disease, and health;
- (iii) animal biotechnology;
- (iv) conventional breeding, including breed development, selection theory, applied quantitative genetics, breeding for improved food quality, breeding for improved local adaptation to biotic stress and abiotic stress, and participatory breeding;
- (v) identification of genes responsible for improved production traits and resistance to disease;
- (vi) improved nutritional performance of animals;
- (vii) improved nutrient qualities of animal products and uses; and
- (viii) the development of new and improved animal husbandry and production systems that take into account production efficiency, animal well-being, and animal systems applicable to aquaculture.

(C) Food safety, nutrition, and health

Nutrition, food safety and quality, and health, including—

- (i) microbial contaminants and pesticides residue relating to human health;
- (ii) links between diet and health;
- (iii) bioavailability of nutrients;
- (iv) postharvest physiology and practices; and
- (v) improved processing technologies.

(D) Renewable energy, natural resources, and environment

Natural resources and the environment, including—

- (i) fundamental structures and functions of ecosystems;
- (ii) biological and physical bases of sustainable production systems;
- (iii) minimizing soil and water losses and sustaining surface water and ground water quality;
- (iv) global climate effects on agriculture;
- (v) forestry; and
- (vi) biological diversity.

(E) Agriculture systems and technology

Engineering, products, and processes, including—

- (i) new uses and new products from traditional and nontraditional crops, animals, byproducts, and natural resources;
- (ii) robotics, energy efficiency, computing, and expert systems;
- (iii) new hazard and risk assessment and mitigation measures; and
- (iv) water quality and management.

(F) Agriculture economics and rural communities

Markets, trade, and policy, including—

- (i) strategies for entering into and being competitive in domestic and overseas markets;