

**The availability and amount of funding is unknown at the present time, and therefore part of this RFP or the entire RFP is subject to change depending on the situation of the economy and the amount of the Hatch funds from the federal government!!!**

**FY2009**

**AAES Hatch/Multistate Request for Proposals (RFP)**

- I. **The purpose of the program:** The purpose of this program is to strengthen agriculturally related research at Auburn University by providing seed monies for research.

The AAES Hatch/Multistate Funding Program is to be viewed as a source of funds to initiate, stimulate, or partially fund a research program; these funds should not be viewed as a primary source of research support. Principal investigators (PIs) are **required** to seek grant funds for additional research dollars from extramural sources, particularly regionally or nationally competitive grant programs. Proposed research projects should address Alabama agricultural needs and ultimately serve as economic engines for the state of Alabama through research and extension efforts. Therefore, the objectives of research projects should be aligned with Alabama's agricultural needs and with potential extramural funding opportunities.

- II. **Priority areas:**

1. **Enhancing Agricultural Production Systems and Value-Added Processing:** The goal of this area is to enhance competitiveness and sustainability of rural community and farm economies of Alabama in the global market through development and/or application of technologies, farming approaches, or organizational strategies that ensure the sustainability of rural communities and agricultural and forestry production systems. Specific areas of research include, but are not limited to: value-added food; improved cropping systems; improved poultry and animal systems; alternative specialty crops; fisheries and aquaculture; forest products and sustainable systems; market analysis and economics; rural communities, agricultural economics, and rural finance; needs of producers with limited resources; analysis of institutional and infrastructural constraints; integrated pest management; alternative and innovative products and new production methods; and organics, local food systems, and sustainable agriculture. Of particular interest are projects that present innovative synergies of disciplines and perspectives while advancing sustainability objectives. This priority is aligned with the USDA research priority cluster of Agricultural Production and Value-Added Processing, and with enhancing the competitiveness of Alabama agriculture in the global economy.
2. **Food, Nutrition, Health and Well-being, and Agricultural Biosecurity:** The goal of this area is to provide a secure food supply, improve nutrition and health, protect the safety of agriculture and food, and provide economic opportunities for agricultural

producers. Nutrition, obesity prevention, food safety, and strong families, youth, and communities are of paramount importance to Alabama agriculture. Specific areas of research include, but are not limited to issues that affect quality of life and economic well-being of families and children, bioactive food components for optimal health, human nutrition and obesity, food security, food safety and epidemiology, improvement in food quality and value, and development of the knowledge and technology base for rapid detection of threat agents, including existing and emerging diseases of plants and animals, risk assessment, and facility and personnel security. This priority is aligned with the USDA research priority clusters of Nutrition, Food Safety and Quality; Health; and Families, Youth, and Communities; and with the strategic goal of a healthy economy and healthy people in Alabama.

3. **Environment, Ecosystems, and Natural Resources:** The goal of this area is to understand interactions between agricultural and natural systems to promote the long-term sustainability of both and the environment; develop sustainable agricultural systems emphasizing energy conservation and utilization of renewable energy resources; improve understanding of the land-water interface and the urban-agriculture interface; contribute to solutions to the consequences of global climate change; provide a framework for understanding and addressing issues of water quality and quantity, water reuse, carbon sequestration, air quality, and invasive species; and seek economically viable practices for improved sustainability in large- and small-scale agriculture. Specific areas of research include, but are not limited to water quality and improvement; management of agricultural waste and residues generated through the animal and poultry and crop production systems; sustainable agriculture systems to enhance soil productivity and improve water infiltration and the plant-root environment; ecotourism; invasive species; soil conservation, quality, and bio-indicators; rural-urban interface and environmental issues; wildlife management; restoration and best management practices; remote sensing and precision agriculture; and science-based policy development. This priority is aligned with the USDA research priority cluster of Agroecosystems and Rural Prosperity with the long-term goal of best conserving and utilizing natural resources while sustaining the environment.
4. **Bioenergy and Bio-based Economy:** The goal of this area is to increase our knowledge of bioconversion of feedstocks to bioenergy and bioproducts, bioprocessing systems, biomass production, and conversion of byproducts into value-added products and to enhance understanding of the long-term sustainability of feedstock production and bioconversion systems including economics, social issues, land use policies, and energy security and the environment. Specific areas of research include, but are not limited to: alternative crops for efficient production of bioenergy feedstocks, biotechnology of bioenergy crops to enhance production or to enhance its utilization as an energy source, and technology development for bioenergy conversion. This priority is aligned with new initiatives on Bioenergy and Bioproducts Research in DOE, USDA, and several other federal agencies, and with the huge energy demands in the state and the nation.
5. **Agricultural Genomics and Other Basic Agricultural Research:** The goal of this area is to improve agricultural efficiency and sustainability, lower production costs, and aid in the discovery of new and improved food and forest products for consumers through understanding of genomes and other basic life processes and application of genome-

based biotechnologies, as well as to find alternatives to pesticides and antibiotics to control disease outbreaks. Knowledge and technologies gained from genome and basic life science research should also provide a foundation to respond to new and re-emerging pathogens or pests that threaten both industry viability and consumer access to safe and affordable food. This priority is aligned with the USDA research priority cluster of Agricultural Genomics and Biosecurity, and with the development of a technology-driven economy in Alabama. Modernization of Alabama's research institutions should also provide the state-of-the-art platform for higher education in agriculture.

6. **Investigator-initiated Innovative Research and Emerging Issues**: This priority area is open to innovative ideas dealing with significant agricultural issues, and to research projects dealing with emerging issues in agriculture.

### III. Investigator Eligibility

The leading principal investigator must have AAES appointment and have a CSREES-approved (or pending USDA approval) Hatch project (or be an official participant in a Multistate project). A leading principal investigator with ongoing AAES-funded project(s) is not eligible to submit a proposal until completion of the project (eligible if expiration date of your current project is on September 30, 2009, or earlier). Leading principal investigators who were funded through competition in 2008 are not eligible for this competition. Leading principal investigators funded through this cycle of competition (FY 2009 funding) must submit proposal(s) for extramural funding before becoming eligible for FY 2011 funding. Leading principal investigators previously funded with AAES or Ag Initiative grants must submit proposal(s) for extramural funding before being considered for funding in this competition (see Section VI 2.G.). These rules do not apply to co-principal investigators.

### IV. Project Duration

In order to provide flexibility, all funding for this FY09 competition is for two years, but monies will be distributed annually, not as a total amount.

### V. Types of application

1. **Major Research Projects or Integrated Research-Extension Projects**: To address urgent and significant agricultural issues facing Alabama through collaborative efforts of researchers with complementary and synergistic expertise, or through collaborative efforts of the Alabama Agricultural Experiment Station and the Alabama Cooperative Extension System (ACES) involving multiple investigators. Recommended funding levels are \$100,000-125,000 per year for two years. **Participation by extension/research faculty is highly encouraged., but their portions of actual budget for extension must come from ACES.**

*Due to very limited funding availability, it is anticipated that no more than three projects will be funded under this category. Unless rejected by the P.I., unfunded proposals submitted into this category will also be considered for funding under the Research*

*Support Program (as detailed in V.3 below) based on merits at a maximal budget of \$25,000 per year for two years.*

2. **Young Investigator Research Support Program:** To fund new faculty (not yet tenured tenure-track assistant professors only) to build research careers and produce data for grant applications from extramural sources. Recommended funding levels are \$25,000 per year for two years.
3. **Research Support Program:** To provide research support to associate and full professors to enhance research capacity for extramural grant applications. Recommended funding levels are \$25,000 per year for two years.

## VI. Project Format

### 1. Format

- A. Margin - 1 inch: top, bottom, left, and right
- B. Minimum font size - 12 points
- C. Single- or double-spaced, single-sided 8.5 x 11 inch pages
- D. Pages should be numbered.

### 2. Proposal Content

- A. *AAES Hatch/Multistate Grant Proposal Cover Form* – A template can be found at <http://www.aaes.auburn.edu/funding/>. Signatures are needed on the cover form.
- B. *Project Summary/Abstract* –The Project Summary is limited to **one typed page**.
- C. *Project Narrative* (Project Description) – limited to **10 single- or double-spaced pages, including figures and tables**. The page limit will be strictly enforced to ensure fair and equitable competition. Proposals that fail to comply with the page limit will be returned without review.
  - (a) ***Response to Previous Review***. This requirement only applies to Resubmitted Applications to AAES Hatch/Multistate Funding Program. P.I. must respond to the previous review panel summary on **no more than one page**, titled “RESPONSE TO PREVIOUS REVIEW.” When a Response to Previous Review is included in the Project Narrative, the page limitation is increased to 11 total pages to include the one-page response.
  - (b) ***Introduction***. The introduction should include a clear statement of the research question/problem, long-term goal(s), and supporting objectives or research questions of the proposed project. Summarize the body of knowledge or other past activities that substantiate the need for the proposed project. Describe ongoing or recently completed significant activities related to the proposed project including the work of key project personnel. Include preliminary data/information pertinent to the proposed research. All works cited should be referenced (see item (D) References Cited of this section). This is the section to set the stage for your project to answer a significant scientific question or to resolve a significant problem.

- (c) ***Rationale and Significance.*** Concisely present the rationale behind the proposed research or research/extension integrated project; the specific relationship of the project's objectives to one or more of the particular program priorities; the potential long-term impact on improvement in and sustainability of U.S. agriculture and food systems; and the potential of this project to enhance future extramural grant applications. This is the section to make a case why your project should be funded.
- (d) ***Approach.*** The activities proposed or problems being addressed must be clearly stated and the approaches being applied clearly described. Specifically, this section must include: a description of the activities proposed and the sequence in which the activities are to be performed; methods to be used in carrying out the proposed project, including the feasibility of the methods; considerations of alternative methods and if the proposed method is state of the art; expected outcomes; means by which results will be analyzed, assessed, or interpreted; how results or products will be used; pitfalls that may be encountered and the alternative approaches to compensate the pitfalls; limitations to proposed procedures; a full explanation of any materials, procedures, situations, or activities related to the project that may be hazardous to personnel, along with an outline of precautions to be exercised to avoid or mitigate the effects of such hazards; and a brief timeline of the proposed project.
- D. ***References Cited –No Page Limit.*** All work cited in the text, including that of key personnel, should be referenced in this section of the application. All references must be complete, including titles and all co-authors in a professional journal format, listed in alphabetical order, using the last name of the first author or listed by number in the order of citation.
- E. ***Facilities & Equipment –No Page Limit.*** In addition to describing available equipment, list items of nonexpendable equipment, and facilities in the outlying units, as appropriate, that are necessary to conduct and successfully complete the project.
- F. ***Functions of Key Personnel***–Clearly describe the roles and responsibilities of the P.I. and co-P.I.s. Biographical sketches for key personnel should be attached.
- G. ***Results from Prior AAES Support –2-Page Limit per Award.*** If the P.I. or co-P.I. has received AAES support in the past five years, information on results from that prior funding is required. This information will be used in the review of the application. Required information includes funding year and dollar amount, publication list, patents, products or other significant research output as appropriate, proposals submitted since the funding, and successes and dollar amount of extramural grant applications.
- H. ***Budget-*** Provide a budget for each year. A USDA standard template can be found at: <http://www.aes.auburn.edu/funding/>. Funds can be requested for:
1. Salaries and Wages
  2. Fringe Benefits (for FY 2008, 26% on estimated salaries)
  3. Materials and Supplies, including payment to human subjects
  4. Travel directly relevant to proposed effort
  5. Equipment – research requests limited to \$2,500 per annum
  6. Publication Costs
- I. ***Budget Justification.*** Provide a brief justification for requests. Requests can be made for technical or post-doctorate salary support and undergraduate or graduate student assistantships; request for summer salary for P.I.s on 9-month appointment is allowed

only for the leading P.I. up to one month salary per year regardless of the number of collaborators; fringe benefits for all salaries as appropriate; payments for various materials, chemicals, and supplies; travel directly related to the project; publication costs; and/or equipment (up to \$2,500 per annum). Funds cannot be requested for phones, cell phones, Internet service, subscriptions, memberships, or office computers. Salaries already supported by AAES funds cannot be charged to these projects.

**J. Curriculum Vitae.** Provide a biosketch for each investigator, **limited to two pages in length** excluding the publications list. The CV should be limited to presentation of academic and research credentials. Do not include meetings attended, seminars given, or personal data. The publications list shall include a chronological or reverse chronological list of all publications in refereed journals during the past four years.

**K. Current and Pending Support Form for each P.I.** A template can be found at <http://www.aaes.auburn.edu/funding/>.

**L. Conflict of Interest List for each P.I.** You can provide an alphabetical list, or use the USDA Conflict of Interest List template that can be found at <http://www.aaes.auburn.edu/funding/>.

No additional materials, appendices, or supplementary documentation will be accepted.

## VII. Proposal Submission

**Application deadline:** Proposals must be received by 5:00 PM April 30, 2009. Proposals should be submitted in one single pdf file to [terrykl@auburn.edu](mailto:terrykl@auburn.edu).

## VIII. Proposal Review and Evaluation

- 1. Each application will be evaluated in a two-part process.** First, each application will be screened to ensure that it meets the administrative requirements as set forth in this RFP. **Applications that do not meet the guidelines as stated in the RFP will be eliminated from the competition and will be returned to the applicant without review.** Second, a review panel will technically evaluate applications that meet these requirements. In addition to the review panel, written comments may be solicited from *ad hoc* reviewers. Prior to recommending an application for funding, the peer review panel and *ad hoc* reviewer comments, if applicable, will be presented and discussed.
- 2. Review Panel Selection and Evaluation Process:** A Review Panel will be selected considering representation of expertise of research areas. This review panel may include internal, external, or a mix of internal/external members. The Review Panel will meet, discuss, evaluate, and make recommendations for funding.
- 3. Evaluation Criteria:**

The peer reviewers and the review panel will be asked to take the following factors into account.

A. Overall merit of the application, including comments on: novelty, uniqueness, and originality; conceptual adequacy of the hypothesis, research question, or problem(s) to be addressed; clarity and delineation of objectives; adequacy of the description of the undertaking and suitability and feasibility of methodology; and probability of success of project. **(30 points)**

B. Qualifications of proposed project personnel and adequacy of facilities. Research productivity and quality: research productivity and quality as measured by peer-reviewed publications in high-quality professional journals, patents awarded, or products developed as reflected in the biosketch; experience, track record, and training; and adequacy of available or obtainable support personnel, facilities, and instrumentation. **(20 points)**

C. Relevance of the project to Alabama and/or US agriculture: Justification for the research directed toward specific priority areas identified in this RFP; merit of the proposed research for enhancing agriculture and agribusiness for the state of Alabama and the nation. **(20 points)**

D. Efforts and successes for extramural funding, and compliance with federal reporting requirements: Justification of how the project will help extramural grant applications in relation to specific funding sources and potential projects; for researchers who were previously funded through AAES funds, demonstrated efforts of extramural funding applications are required before eligible again for AAES funding (see above under “Eligibility”). Successes and the level of successes in extramural funding from all sources (e.g., federal, regional, state, industry, commodity groups, private, etc.) will be considered. Timely and satisfactory reports as required by federal laws or regulations are required for continued AAES funding. **(20 points)**

E. Appropriateness of the budget. **(10 points)**

**For Major Research Project, the following additional criteria will be considered:**

F. Complementary expertise and potential synergy of the research team **(25 points)**

G. Potential impact of the project on social and economic issues in Alabama **(25 points)**

**For Integrated Research-Extension Project, the following additional criteria will be considered:**

H. True integration of the project between research and extension **(20 points)**

I. Impact of the project on social and economic issues in Alabama **(20 points)**

J. Documentation of how research findings will be incorporated into extension programming or otherwise disseminated to the public **(10 points)**

Ad hoc reviewers as well as the review panel will be asked to comment on the above evaluation criteria for each proposal, and rate each criterion as excellent, very good, good, fair, and poor. The review panel will rank all the proposals into categories of must fund, high priority for funding, medium priority for funding, lower medium priority for funding, low priority for funding, and do not fund. Funding decisions and funding levels will be determined based on the evaluation ranking in consideration of the availability of funds as

discussed by the AAES Associate Director and the AAES Business Office. Final funding decisions will be approved by the AAES Director.

A panel summary, along with reviews, will be sent to the leading P.I. upon completion of the funding cycle evaluations.

## **IX. Award Notice**

Upon the completion of funding decisions, the leading P.I. will be notified of funding or not. In case of funding, the award announcement will include the following:

1. Title of project
2. Project period, specifying the duration of the project AAES intends to support the project without requiring re-competition for funds
3. Total dollar amount as approved by the AAES Director during the project period
4. Instructions on completion of the required CRIS forms and a non-technical abstract

## **X. Requirements for approved projects, for release of funds:**

In order to reduce redundant reporting, a single page of the P.I. Pledge Form will be included as a part of the AAES Hatch/Multistate Funding application. On this form, the P.I. will be asked if the proposed project falls under the scope of his/her existing Hatch/Multistate project(s). If the answer is yes, then the P.I. will be asked to pledge by signing that all the methodologies and procedures in the project are covered by the existing Hatch/Multistate project in compliance with federal and state regulations concerning human subjects, animal welfare, recombinant DNA, and any other hazardous materials, and that the P.I. will comply with all the reporting requirements as set for Hatch projects or the AAES/Multistate Funding program.

If the proposed project does not fall under the existing Hatch/Multistate project(s), the P.I. must complete the following before the release of funds:

1. Projects approved by the Director of the AAES must complete USDA forms CRIS-AD-416, CRIS-AD-417, and CSREES 2008 for approval by USDA-CSREES. CRIS forms can be found at <http://cwf.uvm.edu/cris/> and these must be completed prior to the release of funds.
2. Each year, a progress report CRIS AD-421 must be completed for the period of January 1 to December 31. Hatch funds will be withheld if CRIS reports are not completed to the satisfaction of the Director.
3. All recipients of AAES Hatch/Multistate Program Funds should also communicate their results and impact to the public by submitting a non-technical abstract to the AAES through the office of Ag Communications and Marketing.
4. Approvals for work with animals, human subjects (including those participating in surveys), hazardous materials (including biological agents and toxins), and recombinant DNA are required. Such approvals must be finalized and documented by completing the form CSREES-2008 Assurance Statement (available on CRIS home

page, see above), or by signing the P.I. Pledge Form prior to release of funds on approved projects. The P.I. should notify the research office when these forms are completed. Information for each category is listed below.

A. **Animals** – an approved Animal Subjects Review Form (ASRF) will be needed for approved projects before funds are released. See <http://www.auburn.edu/research/vpr/animals>.

B. **Recombinant DNA, Radioactive Products, Hazardous Materials and Biologicals** – contact the Office of Safety and Environmental Health, Leach Science Center, 844-4870. See also: [http://www.auburn.edu/administration/rms/documents/s\\_bua.doc](http://www.auburn.edu/administration/rms/documents/s_bua.doc).

C. **Human Subjects** – training and IRB approvals needed. For more information, go to [www.auburn.edu/research/vpr/ohs/index.htm](http://www.auburn.edu/research/vpr/ohs/index.htm).

The Director of the AAES reserves the right to redistribute or retract monies if problems arise relative to satisfactory progress or compliance of all terms as set with this RFP, or due to economic necessity of the AAES. An annual progress report and a termination report are required, and should be made in lieu of a CRIS report. The federal deadline for CRIS reports may vary, but CRIS reports should be completed annually no later than April 1. Notification of the required annual reports will be sent to each P.I. yearly. Nonproductive projects may not be funded for the second year if satisfactory progress is not documented.

#### **XI. Additional Information:**

Applications containing proprietary information will be evaluated with due consideration for protection of this information to the extent permitted by law provided such information is clearly identified by inclusion of the Proprietary Information Disclosure Statement.

#### **XII. Timetable summary:**

April 30, 2009	Proposals due
August 15, 2009	Review Panel meets and recommends projects for approval and funding
August 20, 2009	AAES Director will finalize and approve funding decisions; final decisions will be mailed to lead P.I.s
September 1, 2009	P.I. completion of requirements for release of funding

October 1, 2009

Projects start, pending CSREES approval