

AFRI; Competitive Programs (CP) Unit;
National Institute of Food and
Agriculture; U.S. Department of
Agriculture; STOP 2240; 1400
Independence Avenue, SW
Washington, DC 20250–2240

UNION OF CONCERNED SCIENTISTS
Comments for AFRI stakeholder listening session
June 7, 2010

**Comments prepared by Brise Tencer, Washington Representative for Food and
Environment at the Union of Concerned Scientists to USDA NIFA regarding the June 2,
2010 AFRI stakeholder meeting**

The Union of Concerned Scientists (UCS) is providing these comments on the Agriculture and Food Research Initiative (AFRI) in response to the stakeholder meeting held June 2, 2010.

Established in 1969, UCS is a leading science-based nonprofit working for a healthy environment and a safer world. UCS combines rigorous scientific analysis, innovative policy development, and effective citizen advocacy to facilitate changes in public policy, corporate practices, and consumer choices and to achieve practical solutions to some of the world's most challenging environmental and security problems. UCS has created a unique alliance among leading scientists and more than 250,000 committed citizens.

For more than 15 years, UCS's Food and Environment Program has provided leadership to advance scientifically sound and practical U.S. agriculture policy solutions. We promote the adoption of practices that are good for farmers, rural communities, and the environment and that will meet the environmental, economic, and public health challenges of the 21st century.

UCS acknowledges the administration's FY11 funding request which proposed a significant (\$167 million) increase over FY10 funding. For many years we have supported increased funding for USDA's agricultural research efforts. The department's new approach to orienting research towards outcome-oriented goals is an important and exciting one. However, we are concerned that the FY10 RFA's focus on fewer issues and emphasis on large multi-year, multi-institutional grants may mean that many critical areas of research will be excluded. We are also concerned that many important research areas do not have a clear home under the new structure. As a result, we encourage carving out more explicit homes in the FY11 RFA for some of these areas. Three examples are:

- classical plant and animal breeding
- organic and sustainable agriculture's potential contributions to reducing greenhouse gas emissions and nitrogen pollution

- antibiotics-related research

First, classical plant and animal breeding

Classical breeding has a stronger record dealing with multi-gene traits like yield and stress tolerance than other technologies, including genetic engineering. These classical methods are therefore critical to helping the agricultural sector adapt to climate change and address global food security. AFRI should play a more active role in reinvigorating the *public* agricultural research sector to enrich the array of classically bred plants and animals available to America's farmers. We are concerned that the FY10 RFA failed to meet the spirit of the statutory language in the 2008 farm bill, which prioritized classical breeding as part of AFRI. While we were pleased to see it in the Climate Change section of the RFA, we recommend that the FY11 RFA fund classical breeding through a funding line distinct from genomics and other technologies.

Second, organic and sustainable agriculture's potential contributions to reducing greenhouse gas emissions and nitrogen pollution.

UCS applauds AFRI's significant focus on climate change. Because organic and similar low-input methods have the potential to reduce greenhouse gas emissions and nitrogen pollution, a stronger emphasis should be given to understanding and improving the contribution of these methods to mitigating climate problems. Issues needing attention include:

- reducing over-reliance on synthetic fertilizers and other practices associated with excess nitrogen and heat-trapping gases;
- techniques for measuring and altering carbon and nitrogen content in agricultural systems;
- assessments of the climate impacts of conventional versus alternative practices;
- developing systems that reduce climate impacts and nitrogen pollution; and
- programs that facilitate farmers' transition to climate-friendly production practices.

Third, antibiotics-related research

The overuse of medically important antibiotics in animal agriculture contributes significantly to the public health crisis of antibiotic-resistant human pathogens, including foodborne pathogens. Research to develop animal production systems less dependent on antibiotics would help American producers reduce the use of antibiotics, add consumer value to their products, and position themselves advantageously in the global marketplace.

The new Farm Bill created a new competitive program to address this important issue- Section 7317, *Research and Education Grants for the Study of Antibiotic-Resistant Bacteria in Livestock*. The Farm Bill authorized appropriations for this program and the managers' statement made clear that other competitive research programs addressing animal health and water quality can and should include such research:

The Managers are aware that resistance to antibiotics is a serious and growing public health concern in the United States and around the world. The Managers intend that section 7521 of this Act provide the necessary research and

information for livestock producers as well as the general public to minimize the use of such drugs while still ensuring healthy animals and people. The Managers encourage the Secretary to fund research that can minimize the development and spread of antibiotic-resistant bacteria and to make this a priority research area within relevant competitive research programs, including national programs related to animal production and water quality.

We believe the AFRI RPR should include prioritize research projects that would address:

- movement of antibiotics and antibiotic resistance traits from animal confinement facilities into ground and surface waters
- livestock management and practices that ensure animal health and reduce use of antibiotics
- methods to transition to practices and systems that minimize antibiotic use

When the administration did not include any funding for this critical program in its budget request, we assumed it was because the AFRI RFA was going to have an explicit call for such research. However, even though the issue was briefly mentioned in the background of the FY10 Foundational Grant RFA, there did not seem to be any clear place in the priority areas for such research. Given the extremely high rates of antibiotic-resistance in *Campylobacter* and *Salmonella*, two important foodborne human pathogens, it is also critical that research relating to the movement of such resistant bacteria from animals to people via our food supply be included in the Food Safety section of the FY11 RFA. We urge that the FY11 RFA more appropriately address this important public health issue.

Thank you for your consideration of these comments.