

National Institute of Food and Agriculture  
Institute of Bioenergy, Climate, and Environment  
Biological Science Specialist  
Working Title: NIFA Climate Change Fellow  
GS-0401-13

## A. Introduction

The mission of the National Institute of Food and Agriculture (NIFA), an agency in the Research, Education, and Economics (REE) mission area of the United States Department of Agriculture (USDA), is to invest in and advance agricultural research, education, and extension to solve societal challenges. NIFA staff provides national leadership and support for science, extension, and education programs and other cooperative activities in the food, agriculture, natural resources, and human sciences disciplines. NIFA's vision is to catalyze transformative discoveries, education, and engagement to address agricultural challenges. NIFA is committed to identifying and meeting research, education, and extension priorities as legislated by the Congress and in accordance with the USDA and NIFA Strategic Plans.

USDA NIFA seeks a Climate Change fellow who is well versed in policies addressing climate adaptation and mitigation at a federal level. The Climate Change Policy Fellows will address the intricacies of federal policymaking and provides scientific expertise and analysis to decision-makers in support of complex scientific and technical issues surrounding the current USDA programs addressing climate resilient agricultural systems and communities.

The Climate Change Fellow will be responsible for providing analytical and technical support to the Institute Deputy Director, Division Director and/or National Program Leader(s) in the development of policy, planning and programmatic activities.

In addition, they will participate in USDA interagency committees addressing climate change along with interagency work to support USDA's work on climate smart agriculture.

## B. Major Duties

The Climate Change Fellow will be provided with the opportunity to learn first-hand how science and technology policies are formulated and implemented in NIFA, through directly working with the Institute Deputy Director, Division Director and/or National Program Leader(s) in assessing, communicating, and applying science and technology in policy contexts and advancing knowledge. Mentoring also includes experience in public policy education and outreach experiences.

The Climate Change Fellow will participate in the establishment of critical links between federal decision-makers and scientific professionals to support public policy. In addition, they will lead in the implementation of and reporting on NIFA's Climate Adaption Plan and serve on relevant climate adaptation groups at the federal levels. The fellow will provide information and analyses to address challenges that involve scientific and technological issues. The fellow will be involved in responding to data inquiries related to climate change as well as will writing policy briefing on a range of topics.

NIFA administers grants for high priority research, education, and extension activities based on competition among projects sponsored by qualified institutions throughout the U.S. to further the mission of USDA as the lead agency for food and agricultural science education in the Federal Government. As such, the Climate Change Fellow will work on the following activities related to establishing and coordinating program objectives, policies, and schedules:

- Providing input and producing reports, statistical analysis, and correspondence regarding the climate smart agriculture. As required, this will include developing drafts to answer questions from Congress, USDA, OMB, and the public regarding NIFA programs especially policy issues related to programs utilized agricultural research, education, and extension to address climate change and its impact on rural communities and agricultural systems.
- Serve as the agency lead for reporting for NIFA's Climate Adaptation Plan.
- Serve as a member of the core team for NIFA's cross-institute Climate Priority Team.
- Assessing relevant Executive Orders, initiatives, and newly enacted bills to develop action plans for the agency as they relate to climate change.
- Functioning on teams which develop program solicitations (including the development of Requests for Applications [RFA]) and regulations. Working with a wide range of teams to incorporate climate change into their RFA priorities, particularly with the AFRI program and Justice 40 covered programs. Assure that the RFAs not only meet legislative and administrative mandates, but with groups such as the Global Change Task Force to ensure that RFAs align with administrative priorities.
- Work on outreach to highlight the breadth of work on addressing climate change being conducted by USDA NIFA. The Climate Change Fellow will be involved in the webpage redesign, working with communications on stakeholder outreach, and will work with data analyst to redesign reporting standards for climate to

address budget reporting requests more efficiently. The fellow will participate in scientific conferences and professional society meetings relevant to NIFA programs.

- Participates in interagency program planning and implementation meetings, such as the US Global Change Research Program to promote cooperative and harmonious relationships in the effective planning and coordination of the program(s).

The Fellow will be responsible for understanding the ways in which science and technology inform policy decision-making and displaying sensitivity to political, economic, and social factors.

### C. Evaluation Factors

#### 1. Knowledge Required by the Position

Knowledge of the mission, functions and policies of NIFA as well as knowledge of the science and education programs of other Federal research and education agencies.

Knowledge of the structure and programs of the scientific communities and constituents of the NIFA Institutes and offices.

Knowledge of recent developments and techniques used for study or education.

Skill in providing analytical assessments of complex variables in the use of science and technology in the decision-making process.

Skill in conducting science/engineering and communicating the science to support policy at the national and international levels (academia, industry, and the non-profit sectors).

Skill in communicating and applying science to enhance public understanding of technological issues and support improved policy.

Skill and flexibility in tackling problems beyond the scope of a specific area(s) of scientific and technical expertise.

Skill in applying scientific and technical expertise to advance knowledge and serve society.

Communication skills to articulate to non-scientific audiences and work effectively with decision-makers and others outside the scientific and engineering communities.

Skill in providing initiative and flexibility in working independently as well as in groups.

Skill in interpreting and analyzing research/extension/education proposals; participating in developing program solicitations, regulations and project summaries; responding to programmatic inquiries; and providing program guidance to the scientific community.

Knowledge of the purpose, policies, operations, methods and procedures of a granting agency to ensure efficient and effective conduct of work and coordination of operations and provide recommendations for a more effective means of reaching program goals.

Knowledge of the biological, agricultural, natural resource, and/or social sciences relevant to agency research, education, and extension programs.

Communication skills in order to deal effectively with eminent scientists, high-level management officials, administrative specialists, Congressional aides, and program staff.

Skill in interacting with specialists and experts and dealing with large amounts of complex issues and information.

Skill in developing and giving public presentations.

Knowledge of basic computer systems used for communication, data storage, data analysis, and accessing information.

Knowledge of laws which guide behavior and activities of public employees (e.g., Hatch Act, Civil Rights Act, and other related legislation).

## 2. Supervisory Controls

The incumbent is supervised by the Institute Deputy Director. The incumbent also works closely with the National Program Leader(s). The incumbent works in collaboration with management of NIFA at all levels within the Institute. The incumbent discusses assignments and timeframes with supervisor or designee, and then independently plans and carries out projects within the framework of applicable legislation and Departmental and NIFA policies, guidelines, and objectives. The incumbent keeps the supervisor informed of progress, potential controversy, or far-reaching implications. As appropriate, completed work, recommendations, decisions, and commitments are reviewed by the supervisor for responsiveness and conformance with NIFA policy. Completed work may also be subjected to substantive review by professional peers. Success is measured in terms of the incumbent's overall contribution to the advancement of research, education and extension policies serving the national interest.

## 3. Guidelines

Guidelines include legislation authorizing programs administered by NIFA; other statutes and Executive Orders affecting the management of science and education programs; Congressional hearings; regulations established by NIFA, USDA and other Federal agencies; broad NIFA and USDA policies; and general precedents within the program. Although the guidelines are extensive, they are usually in general terms and may give rise to conflicting interpretations and applications. Judgment and ingenuity are needed, and the incumbent often is required to deviate from traditional, professional methods and to develop subject-specific guidelines and policies to meet stated objectives. In the absence of firm guidelines, critical judgment must be exercised to develop original approaches to scientific/technical policy problems. There are no guidelines to govern the important diplomatic aspects of the position.

#### 4. Complexity

The incumbent performs a wide variety of tasks involving selecting, organizing and analyzing data with complex variables; interpreting data; planning, developing, recommending and implementing program objectives and policies and developing policy options where applicable; providing input into the development of review protocols to be used in the evaluation of research proposals; participating in the coordination of program activities with other agencies; and developing and maintaining effective relationships with Federal and non-Federal officials. The tasks require tact, flexibility and sound judgment.

Guidelines do not specifically address the situations and/or may be inapplicable. The incumbent uses ingenuity in tailoring guidelines and policies to meet the needs of assignment. The work involves intensity of effort involving complex aspects and interrelationships. Tasks are frequently accomplished within severely limited time frames and in a rapidly changing environment.

In providing input to policy formulation, the incumbent must be aware of and make adjustments for economic, social, and technical trends that might impact the policy decisions. The incumbent must also be fully informed on issues and activities relevant to NIFA and its partners and be able to analyze and assess their relationship as relates to policy recommendations and decisions.

In reviewing unresolved issues, the incumbent interacts with eminent scientists, leaders in academia, and high echelon management officials in both public and private organizations and/or institutions in order to define, describe and compare policy alternatives and assess political, economic and social constraints. Issues confronted are often sensitive and the incumbent must anticipate problems, evaluate their potential impact and effect appropriate solutions that are acceptable to a wide range of officials without compromising the Institute/NIFA/USDA programs and policies.

## 5. Scope and Effect

The incumbent represents the Institute and NIFA and the programs and policies; promotes solid programmatic management of assigned research, education or extension programs; develops and interprets a wide range of complex policies; and provides advice and technical support to NIFA scientists, other Federal agencies where necessary, and a large, complex body of client institutions.

The research, education, and extension programs in the Institute are national in scope but have international impact. The decisions made by the incumbent are significant because they impact the shaping of current and future direction and policies of the Institute and NIFA programs. Creativity in identifying and resolving problems and promoting cooperation to facilitate the growth and improvement of programs and policies is required. The incumbent must maintain an awareness of the impact of policies and procedures, interpretations, and advice provided. Tact and diplomacy are required in dealing and interacting with NIFA management, other Federal Agencies and client institutions.

The incumbent provides managerial expertise in planning and conducting large national conferences, events and initiatives; technical expertise in the review and recommendation of grant proposals; formulation, recommendation, and implementation of objectives, policies and priorities relating to the programmatic management of assigned program areas; and advice to high level NIFA management other Federal Agencies and client institutions.

The incumbent provides scientific/technical expertise to assigned programs and activities; provides analysis of, formulates, recommends and implements policies and priorities relating to programmatic management of assigned research areas; and provides advice to NIFA management, other Federal agencies, and client institutions. The work has impact on the courses of action taken by the Institute involving long-term duration, is precedent setting, and has a direct impact on the research activities of the Nation's colleges and universities, other governmental as well as private institutions and industries.

## 6. Personal Contacts

Contacts include key administrative officials; other Federal agencies; academic and research institutions; eminent scientists; industry executives; representatives of State agencies; professional organizations; and Congressional aides.

## 7. Purpose of Contacts

Contacts are made to exchange program information; consult on the development and implementation of program policies and practices; coordinate assigned areas of

responsibility with other NIFA programs as well as those of other Federal Agencies; consult with scientific experts; consult with experts on the preparation of award recommendations and declinations; provide advice on NIFA and Institute goals, policies, and procedures; ensure accurate and timely processing of proposals; and resolve research related issues.

#### 8. Physical Demands

The work is basically sedentary, although travel outside the incumbent's duty station is required.

#### 9. Work Environment

The work is normally performed remotely at the incumbent's residence using equipment provided by the agency. The incumbent is expected to obtain access to the internet.