

Early Career Members

A Career in Government: My Experiences Working for the USDA-ARS

The agricultural sector provides highly diverse career opportunities that include private companies, academic institutions, non-government organizations, and government agencies. One possible career path is with the federal government, which is one of the largest employers of scientists and engineers in the U.S. Although employment opportunities with the federal government are generally grouped into one large entity, in reality the federal system consists of numerous government agencies with distinct missions and cultures. I have had the opportunity to work for the USDA-ARS first as an undergraduate biological science aide, then a biological science technician, and now as a research scientist.



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USDA-ARS is the in-house research agency for USDA, employing approximately 2,200 full-time scientists and post-doc research associates as well as 4,000 support staff at about 100 locations throughout the nation. Employment opportunities can be found throughout the U.S. as stand-alone research laboratories, research units residing on college campuses, or as large, stand-alone research centers. The type of ARS facility may have a slightly different culture based on the size and the type of research being conducted. I have had the opportunity to work at both a stand-alone research laboratory as well as on a college campus. The former provides a close relationship with local stakeholders as the research laboratory is more visible to them and the surrounding community while the latter provides frequent interaction with faculty members and students. Most ARS locations are near colleges and universities and actively seek student employment especially during the summer. This can become a great way to learn novel research techniques early on in your career. Post-doctoral research associate positions are available to conduct critically needed research and receive highly specialized training. Positions for permanent support scientists are also available to assist in maintaining and conducting research directed by research scientists.

My experience with ARS started when I applied for a job as an undergraduate after seeing an advertisement in my college paper. I could say the reason I applied was to further my scientific understanding in applied biological systems, but that would be inaccurate. I applied because the pay was higher than most other jobs available, and the employer was very flexible around my class schedule.

At the time, my career path was unclear, but I knew that I wanted to do something that would make a contribution to society. I found the work rewarding, and it made me want to pursue my graduate degree. After completing my undergraduate degree, I decided to work as a full-

time ARS technician while also being a part-time graduate student. ARS supported my graduate course work for both my masters and Ph.D. degrees. Although my graduate work took longer than a traditional graduate program, the experience I received working as a full-time technician was invaluable as I became a research scientist.

Applying for a Federal Job

As with all career opportunities, preparation is crucial. Applying for a federal job can be slightly more time consuming than for other positions, so allow enough time to meet the required deadlines. Job applications for most government positions are posted on the website www.USAJOB.S.gov, and applicant submissions are done electronically. All ARS post-doc and permanent positions, as well as student jobs (now called Pathways), can be found on USA Jobs.¹ Vacancy announcements provide information for each job description, location, salary information and keyword searches by job title or government agency. Vacancies can remain open for as few as five working days, so applicants are encouraged to create an account with one or more resumes in advance to make the application process a little quicker, and to check the website at least weekly. Applicants should closely look at the "How to Apply" sections and follow the application package checklist for each announcement. All ARS job announcements have a point of contact to ensure that any question a candidate has can be answered via email or by phone. For more background information on a job vacancy, each ARS location has its own website, which details the size of the research unit and the type of research being conducted.

One thing that used to distinguish the federal application process from most academic and industry application processes was the Knowledge, Skills, and Abilities (KSA) assessment. Although the KSA is no longer mandatory for federal government applications, selective factors similar to

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¹ See www.usajobs.gov/JobSearch/Search/GetResults?OrganizationID=AG03



Congressional Science Fellowship

Early Career Members & Graduate Students

**Are you looking for hands-on learning experience in the Science Policy arena?
Do you want to monitor and analyze agricultural, natural resources & environmental legislation?**

Consider applying for the Congressional Science Fellowship offered through the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America.

As this program is aimed at highly qualified individuals in early or mid-career, applicants will have completed their Ph.D. prior to beginning the Fellowship. Applicants will be U.S. citizens and will have exceptional competence in the agronomic, crop, soil, or related fields of science and education.

What will you do?

Spend one year as a legislative assistant to a member of Congress or on a Congressional Committee and make practical contributions to the more effective use of science and technical knowledge in government:

- Learn the value of such science–government interaction
- Inform the scientific and education communities about public policy and the legislative process

What does it offer?

The Fellowship can begin anytime from September to early January; the exact dates are flexible. The Fellowship carries an annual stipend of \$60,000 plus relocation expenses.

Fellows will participate in two orientations: one, sponsored by the American Association for the Advancement of Science (AAAS), an intensive two-week orientation in September on legislative and executive branch operations, and the other a three-day agriculture/natural resources/environment orientation held at the end of August.

To Apply

For information on application and eligibility, visit our Congressional Science Fellowship page online:

www.agronomy.org/science-policy/congressional-science-fellowship
www.crops.org/science-policy/congressional-science-fellowship
www.soils.org/science-policy/congressional-science-fellowship

For more information about the position, contact Dr. Karl Glasener, Director of Science Policy, kglasener@sciencesocieties.org or 202-408-5382.

Deadlines

The Congressional Science Fellowship Application process opens on November 1, 2012. Reference Letters and Final Nomination Submissions are due on **March 14, 2013**.



The top five teams received team scholarships from the Kansas City sponsors, and the top five individuals in Chicago received scholarships from the CME Group.

Contest sponsors included The Kansas City Board of Trade, CME Group/Chicago Board of Trade, CHS Foundation, ASA, CSSA, Society of Commercial Seed Technologists, Growmark, Association of Official Seed Analysts, South Dakota Crop Improvement Association, DuPont Pioneer, and The American Royal.

The Australian National Team consisted of the top three individuals from the 2012 Australian Universities Crops Competition held in September and hosted by the Grain Growers of Australia. As an exchange, Grain Growers helped the top-placing Kansas State team from 2011 travel to Australia to compete in the Australian contest this past September. The Collegiate Crops Contest program is seeking financial support to formalize and continue this exchange for the future so that the top individuals in the U.S. contest can also compete in Australia.

March Undergraduate Regional Meeting

Register for the 2013 Students of Agronomy, Soils, and Environmental Sciences (SASES) Regional Conference in Texas. Regionals will take place 2–3 Mar. 2013 in College Station, hosted by the Texas A&M Agronomy Club. For local agricultural tours, students will choose between (1) Soils of the Brazos Valley and Central Texas; (2) Forage Systems of Central and East Texas; (3) Urban Soil, Plant, and Environmental Sciences; and (4) Plant Breeding. Participants get to tour the Texas A&M Agricultural Research Facilities and attend an International Agriculture Symposium. In addition, there will be a Hunger Banquet, as well as a presentation on Mexican culture and economics as they relate to agronomy, crops, and soils. The weekend will also include fun social events featuring a mariachi band, laser tag, bowling, and a dance. Register early as space may be limited.

For more information and to register, contact Texas A&M Agronomy Club adviser Steve Hague at shague@tamu.edu or visit: www.agronomy.org/students, www.crops.org/students, or www.soils.org/students.

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the KSAs are still found in government job descriptions. If specific selection factors are listed, then applicants should address the specialized experience requirements either in their resume or in some other application document. The selection factors are found under the job qualification section and can be used to evaluate an individual candidate's qualifications. Selection factors will differ by job announcement so a generic resume may not be adequate. The interview process for an ARS scientist position is similar to the interview process for an academic position with candidate interviews generally lasting a day along with a seminar presentation focusing on your research experience and how you can contribute to the location's research goals.

How USDA-ARS is Different

There are a number of differences in how research is planned and implemented among ARS, academic institutions, and private industry. The primary mission of ARS is to develop and transfer basic and applied research solutions to agricultural problems of high national priority. ARS is a mission-driven organization, and research is conducted based on priority research items determined by customers, stakeholders, partners, and ARS scientists. Priority research items can be shorter-term objectives to address an immediate need or long-term objectives where societal returns can be highly beneficial. ARS units and scientists are assigned to a priority research item(s), and five-year projects are

developed with clear objectives and milestones to meet these goals. The five-year projects are peer-reviewed by extramural scientists to ensure the quality and practicality of the project. All ARS scientists receive intramural funding for specific mission-driven assignments, which is sufficient to maintain permanent support staff, infrastructure, and equipment. Additional funding is available through competitive grants, other federal agencies, international collaborations, or private companies similar to other institutions. Most ARS scientists work directly with other federal agencies, companies, academic institutions, and with producers to solve current agricultural challenges. One of the key strengths of ARS is that the funding, infrastructure, and organization structure is in place to conduct long-term and coordinated research at the regional or national level.

Another important distinction between ARS and other institutions is the retention, promotion, and evaluation system for scientists. Every three to five years, the career accomplishments of an ARS scientist are reviewed by a panel of peers. Research scientists have open-ended promotion potential and are evaluated on their personal research and leadership accomplishments.

A career in government provides a long-term career path to conduct quality science while providing competitive benefits and maintaining a healthy work-life balance. ARS employees generally have high satisfaction with their work and understand how their research is relevant to the organizational mission. ARS is constantly hiring new scientists, post-doctorate research associates, and technical staff to meet the agricultural challenges of the 21st century. To learn more, go to www.ars.usda.gov.