## INTERACTION WITH ARS TO FACILITATE THE DEVELOPMENT AND TRANSFER OF TECHNOLOGY Donald A. Nordlund USDA, ARS, Office of Technology Transfer Athens, GA

## Abstract

The USDA's Agricultural Research Service (ARS) is the largest agriculture focused research organization in the world. ARS research addresses a wide range of agriculture related problems. Numerous mechanisms exist for cooperative research activities to address specific issues of interest to a cooperator. Such interactions focus the research on specific problems and transfer of technology to appropriate end users. Also, to facilitate commercialization of ARS developed technology, ARS patents and licenses inventions that have commercial potential.

The USDA's Agricultural Research Service (ARS) is the largest agriculture focused research organization in the world, having a budget of approximately \$1 billion, more than two thousand research scientist, and about one hundred research locations. Its research "portfolio" includes natural resources; plant and animal production, protection, and processing; alternative uses of agricultural products; and human nutrition. Additional information on ARS research programs, is available in the National Programs section of the ARS website (www.ars.usda.gov). ARS research revolves around solutions to problems of farmers and agriculture related industries. To accomplish this, ARS scientists interact with individuals, commercial companies, and other organizations to identify researchable problems, conduct cooperative research, and transfer technology to end users. Mechanisms for such interaction include traditional activities; such as attending meetings like this one, consulting with others working in the area, and scientific or trade publications. In addition, a variety of formal agreements are available; including Confidentiality Agreements, Material Transfer Agreements, Cooperative Research and Development Agreements (CRADAs), Trust Fund/Reimbursable Cooperative Research Agreements, and Memoranda of Understanding; to facilitate the development and establishment of formal cooperative research activities. Finally, ARS does patent and license inventions that have commercial value, to facilitate the transfer of technologies developed by ARS scientists to commercial entities for further development and marketing. Interacting ARS to develop and transfer technology is a relatively straightforward process. The process involves the identification of specific researchable problems, identification of an ARS scientist with research responsibilities related to that specific problem and the required expertise, negotiating an appropriate plan of work, determining the appropriate formal mechanism for the interaction, and doing the work. ARS also has a portfolio of patents available for licensing.

There are several tools available to assist potential cooperators in identifying specific ARS research projects, scientists working in specific areas, or patented technologies available for license. The ARS Information Staff publishes *Agricultural Research* monthly and issues news releases daily. The Information Staff also maintains current and back issues of *Agricultural Research*, in electronic form, on its web site at: http://www.ars.usda.gov/is/. Through the ARS website, mentioned above, one can access and search the web sites of each ARS location and research unit. The National Agricultural Library maintains the TekTran database, at: www.nal.usda.gov/tic/tektran/tektran.html, which contains the technical abstract and interpretive summary of articles, written by ARS scientists, that have been approved for publication. The ARS Office of Technology Transfer maintains a listing of patents available for licensing at: www.ott.ars.usda.gov. ARS has several Technology Transfer Coordinators to assist in the development of cooperative interactions and licensing.

In summary, ARS research addresses a wide range of agriculture related problems and has numerous mechanisms for undertaking cooperative research activities to address specific issues of interest to a cooperator. These interactions focuses the research on problems needing solution and in the transfer of technology to the appropriate end user. Also, to facilitate commercialization of ARS developed technology, ARS patents and licensed inventions that have commercial potential.