

Technology Transfer for NP 213 (307) Bioenergy:

*ARS Opportunities, Scientist's
Responsibilities, OTT Services*



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United States Department of Agriculture • Agricultural Research Service

Farmers IN A CHANGING WORLD



The challenges of today...



Bruce P. Mehlman
Former Assistant
Secretary of
Commerce for
Technology
Policy; “Partners
on a Mission:
Federal
Laboratory
Practices
Contributing to
Economic
Development,”
Nov. 2003

“...American leadership is anything but assured in today’s global economy – in fact, it’s very much at stake. We face more significant challenges to our innovative capacity and long-term competitiveness than ever before. To succeed in the face of growing challenges we’re going to need extraordinary efforts from industry, educators, and policy makers.

And we’re going to need our federal labs to continue in their long tradition of rising to meet our toughest challenges.”



Key Points to Take Away Today

- Your research outcomes in NP 213 (307) are critical to the economic security & sustainability of the United States.
- The nature of your research outcomes are likely to have profound value to U.S. industries, and likely will require protection of intellectual property to ensure transfer and adoption by the private sector for broad availability to the U.S. public.
- Every ARS scientist should know their Technology Transfer Coordinator (TTC) and Patent Advisor (PA) designated for their respective Area, and should keep in frequent contact with them.
- Decisions to protect intellectual property (IP) rest with the agency, not with the scientists. Please report potential inventions as soon as is practical (recognized).



Federal Law

“Technology transfer, consistent with mission responsibilities, is a responsibility of each laboratory science and engineering professional.”

15USC§3710(a)(2)



Federal Law

“Each laboratory director shall ensure that efforts to transfer technology are considered positively in laboratory job descriptions, employee promotion policies, and evaluation of the job performance of scientists and engineers in the laboratory.”

15USC§3710(a)(3)



Annual Report to Congress on Technology Transfer --- FY 2006 Metrics

- **Licenses:**
 - **Active: 332**
 - **New: 25**
 - **Biological Materials: 5**
- **Licenses with products on market: 100**
- **Total Income: \$3,142,931**
 - **To inventors: \$982,756**



Goals of Technology Transfer

- Public mission – a problem solving agency
- *Transfer* of technology is the primary objective --- not income
- Protect intellectual property primarily if it enhances technology transfer
- Facilitate development of cooperative research agreements



Office of Technology Transfer

Centralized in policy and approvals, licensing, marketing;
decentralized in negotiation and implementation of CRADAs

Patenting

- 8 registered patent agents
- Located in Beltsville, MD; Peoria, IL; Albany, CA

Marketing

- Targeted marketing
- Web subscribe *Tech Alerts*
- Partnering opportunities

Licensing

- 4 senior licensing specialists
- HQ based

Tech Transfer Coordinators

- 7 specialists with life science / ag background
- Distributed across geographic Areas of ARS



Office of Technology Transfer

Manages intellectual property issues for the Secretary of Agriculture

- **Has sole authority for licensing any inventions developed within any of the USDA agencies (including Forest Service, Food Safety Inspection Service (FSIS), Animal Plant Health Inspection Service (APHIS))**

Has authority to develop and sign Cooperative Research And Development Agreements (CRADAs) for ARS

Coordinates all Tech Transfer activities in ARS



Professional Services of ARS OTT

- Training to all ARS scientists and Research Leaders
- Negotiation, review, approval, and management of CRADAs, Material Transfer Agreements, and Confidentiality Agreements
- Review of other partnership instruments for implications to management of intellectual property



Professional Services of ARS OTT

- Create, manage & convene Patent Review Committees (e.g., Invention Disclosure)
- Prepare, file, and prosecute U.S. patent applications, & process Plant Variety Protection Certificate applications
- Coordinate cooperator-filed PVP and U.S. patent applications
- Facilitate and direct foreign filings with contractor



Commercialization: A Complex (and Expensive) Process

- Basic discoveries require further R&D for commercial feasibility (\$)
- Regulatory aspects require further validation and documentation (\$)
- Marketing strategies likely have international implications requiring intellectual property (IP) protection outside the U.S. (\$)
- Private sector investors will look to recover costs by acquiring some exclusivity / marketing advantage (protected IP, service exclusivity, trade secret know how)



Office of Technology Transfer

Tech Transfer Coordinators

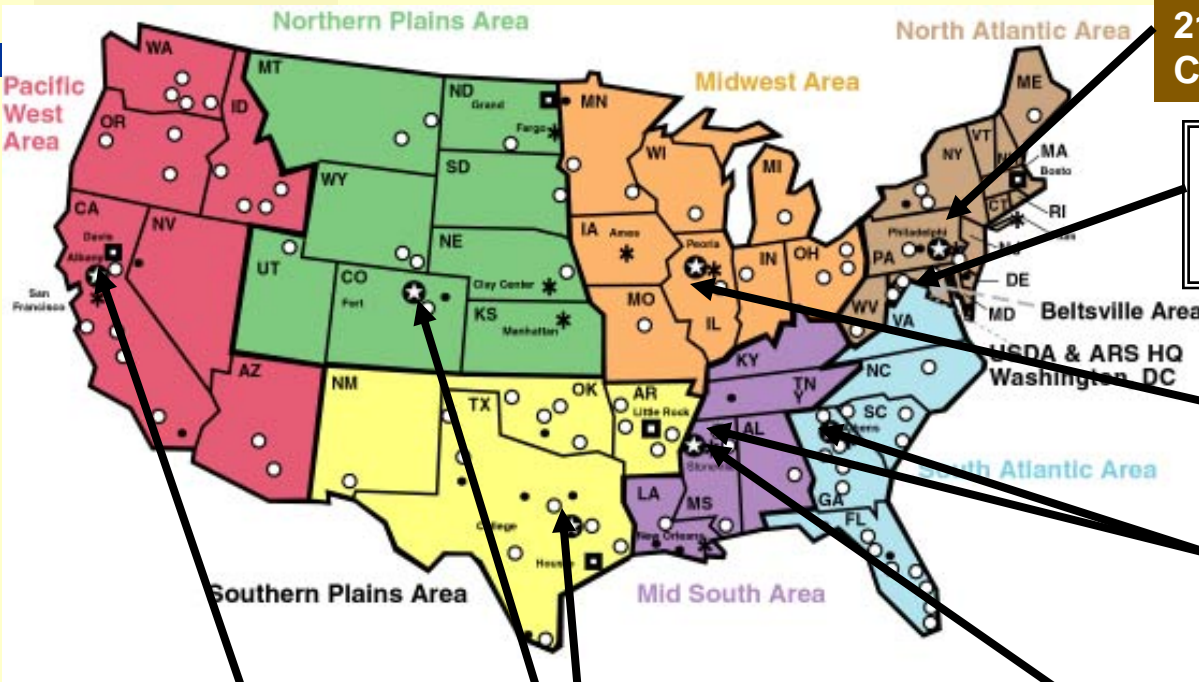
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- Human Nutrition Centers
- Research Locations
- Research Worksites

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Office of Technology Transfer

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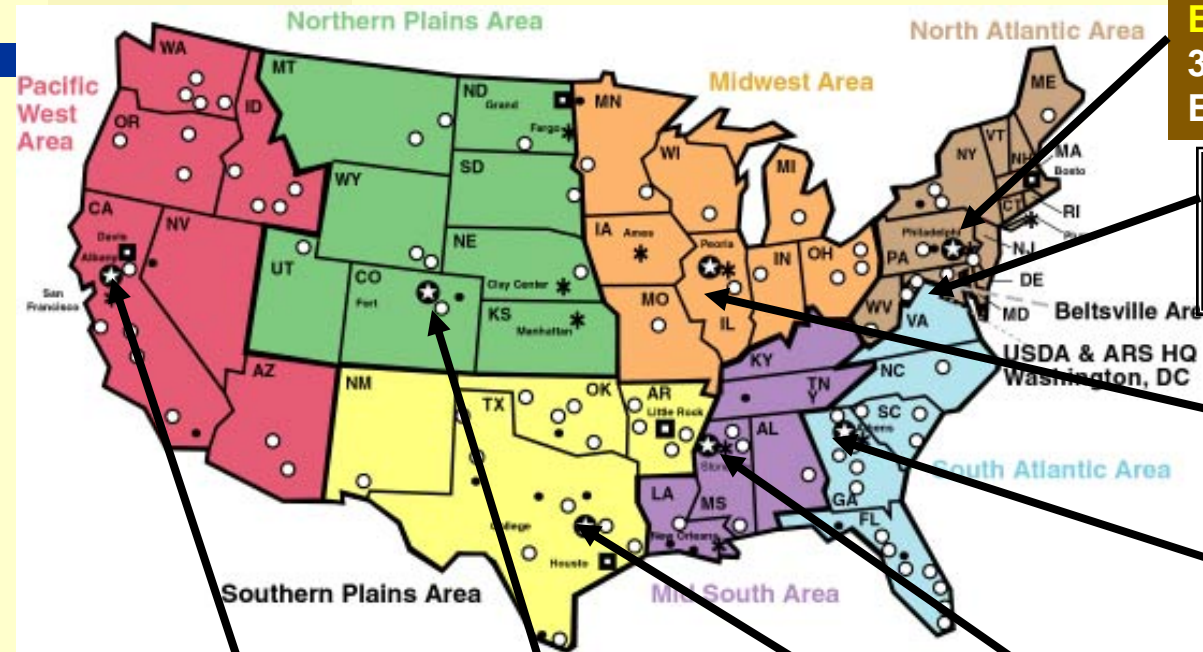
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- Research Locations

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How Can We Increase the Likelihood that Research Outcomes Have Impact ?

- Understand customer / stakeholder needs & industry perspectives and how to attain desired outcomes of maximum impact.
 - We recommend a T2 workshop for NP213 / 307 scientists - -- when and where?

Define technology transfer strategies and timelines in the 5 year research plan

- Help us develop a “partnership workshop” in summer 2007 with USG scientists and potential research partners from the private sector: let’s bring complementary assets together to achieve our research goals and adoption of research outcomes.





Photo: Quiet Waters Park, Annapolis, MD
(Joann Perkins)



At your service....

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**[http://www.ars.usda.gov/Business/
Business.htm](http://www.ars.usda.gov/Business/Business.htm)**

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