THE TECHNOLOGY TRANSFER WORKING GROUP

Guide to Partnering with DOE's National Laboratories

This guide to partnering with DOE's National Laboratories was prepared by a committee of the Technology Transfer Working Group consisting of Mike Furey, committee chair, (Brookhaven National Laboratory), Jason Stolworthy (Idaho National Laboratory), Mark Reeves (Oak Ridge National Laboratory), and Mary McManmon (US Department of Energy). The guide is an adaptation of the 2003 guide "Doing Business with the National Labs", edited by Steven Weiner.

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INTRODUCTION

The U.S. Department of Energy's (DOE) National Laboratories and Facilities offer a wealth of resources to help industry develop new products and services that will contribute to energy independence, enhance our national security, protect our environment, and increase our economic prosperity. The purpose of this document is to provide an overview of the various mechanisms available for partnering with the national labs, provide contact information for technology transfer professionals, and to address Frequently Asked Questions.

PARTNERING MECHANISMS

There are numerous ways to partner with the labs to access their unique capabilities including:

- Cooperative Research and Development Agreement (CRADA)
- Work for Others (WFO) Agreement
- Agreements for Commercializing Technology[1] (ACT)
- Technical Assistance (TA) Agreement
- User Agreement
- Technology Licensing Agreement
- Material Transfer Agreement (MTA)
- Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR)

It is noted that not all technology transfer mechanisms are available at each of the laboratories. Please contact the laboratory that you are interested in partnering with for additional information.

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS (CRADA)

A CRADA is a collaborative agreement that allows the Federal Government, through its laboratories, and non-federal partners to optimize their resources, share technical expertise in a protected environment, access intellectual property emerging from the effort, and advance the commercialization of federally developed technologies.

Industry partner(s) must provide research funds or in-kind contributions which may include personnel, services, facilities, equipment, intellectual property or other resources. The Laboratory may provide personnel, services, facilities, equipment, intellectual property or other resources. While, the Laboratory may also provide

[1] The ACT agreement is currently being piloted at PNNL, INL, LLNL, BNL, NREL, and ORNL

funds to support the CRADA activities, the Laboratory does not provide funds directly to the partner.

Each party retains title to its own inventions. An option to negotiate an exclusive license to the Laboratory's CRADA inventions in a specified field of use is typically granted to the industry partner; any resulting license will be granted in exchange for reasonable compensation. CRADA-generated information may be protected from public disclosure for up to 5 years.

The CRADA Participant indemnifies the Government and the Contractor operating the Laboratory for product liability and the Government and the Contractor disclaim all warranties to work performed under a CRADA.

An Advance Payment is required before work can begin. This requirement was recently reduced from 90 to 60 days. Advance payment requirements may be waived for state and local governments that have a constitutional prohibition.

DOE's has developed a model CRADA that establishes uniform conditions for doing business with the laboratories. The modular CRADA can be viewed using the following link: http://techtransfer.energy.gov/TemplateCRADAagreement.pdf

WORK FOR OTHERS AGREEMENT (Non-Federal)

A WFO Agreement is a fee for service contract that enables Industry, non-profit institutions and other non-federal entities to pay the Laboratory to perform a defined scope of work or tasks that draws upon the unique facilities, equipment, and personnel of the Laboratory.

Rights to the inventions that arise under a WFO agreement will typically vest in the sponsor if the sponsor is a US entity and pays for the work with private funds. Sponsors are typically allowed to mark generated data as proprietary and obtain ownership of the data, subject to certain terms and conditions. If the sponsor is subcontracting federal funds to the national laboratory or the sponsor is a non-US entity, the rights in the intellectual property will typically vest with the laboratory. These dispositions can be varied based upon a variety of circumstances and are contingent upon approval from DOE. In all cases, the Government will retain a royalty-free license in Subject Inventions (inventions conceived or first actually reduced to practice under the WFO) for use by or on behalf of the government. Typically, this license is a broad license that enables the Government to use or enable others to use the inventions for any government purpose. However, a more limited Government research license may be obtained instead of the broader license upon DOE Patent Counsel approval. If a limited research license is applied, then the Government retains expanded data rights.

Laboratory Contractors cannot expend government resources without an appropriate allocation or set aside of funding to pay for those expenditures. Therefore, an Advance Payment is typically required before any work can begin on the project. The size of this set aside was recently reduced from 90 days to 60 days of expected cost. State and local governments that have a constitutional prohibition against such advance payments may obtain a waiver of this requirement from DOE.

WFO Agreements are "best efforts" contracts and the Sponsor receives no warranties for work performed under a WFO Agreement, and the Government and the Contractor operating the Laboratory are indemnified for certain risks including product liability. These are also full cost reimbursement contracts, so while a particular quantity may be agreed upon at the outset, all costs incurred in performing the work must be reimbursed by the sponsor. In the event that funds are exhausted the project may also be terminated. In view of these facts, successful WFO projects typically require communication between industry and the lab and an agreement on funding levels and sources before starting the WFO agreement process.

AGREEMENTS FOR COMMERCIALIZING TECHNOLOGY

Agreements for Commercializing Technology (ACT) is a pilot program which functionally enables Laboratory Contractors to act in a Private Capacity and conduct privately-sponsored research at the Contractor's risk for third parties. This program was put in place in response to concerns that were raised in public responses to a Notice of Inquiry regarding Technology Transfer practices at DOE laboratories. These responses can be viewed at the following link: http://techtransfer.energy.gov/responses.

Under an ACT arrangement typical concerns from a WFO arrangement, such as, requirements for advance payments, indemnification, lack of fixed price contracting, and lack of performance guarantees can be assumed by the Laboratory Contractor who may then contract with a business using terms that are more typically aligned with industry practice.

ACT may also provide a more flexible framework for negotiation of intellectual property (IP) rights to facilitate moving technology from the Laboratory to the marketplace. Unlike WFO and CRADAs, the parties in an ACT agreement may choose an IP Lead (which may or may not be the Participant), and ownership of inventions made under an ACT transaction (i.e. Subject Inventions) is waived to the IP Lead.

Like WFO Agreements, although the full Government Use License will apply to most ACT Subject Inventions, a limited Government Research License may be applied to an ACT invention with the approval of DOE Patent Counsel. The Government Research License permits the Government to use and enable others to use the ACT inventions for Government research purposes only.

ACT agreements typically allow the Participants to mark generated data as proprietary and obtain ownership of the data, subject to certain terms and conditions. If a limited research license is applied, the Government retains expanded rights in generated data.

ACT also provides flexibility for addressing the 60-day advance funding requirement and indemnification. Work may begin after the DOE reviews and approves an ACT proposal package.

Unlike WFO or CRADAs, the Contractor may negotiate an additional fee beyond the direct cost of work at the Laboratory to compensate for the additional risk that they are assuming. At the current time ACT arrangements are not available to non-federal parties who intend to use federal funds to pay for the work to be done at the Laboratory.

The Laboratories currently participating in the pilot include Brookhaven National Laboratory, Idaho National Laboratory, Lawrence Livermore National Laboratory, Oak Ridge National Laboratory, Pacific Northwest National Laboratory, and the National Renewable Energy Laboratory.

USER AGREEMENTS

Specialized, standard agreements are available to expedite user access to DOE Designated User Facilities. Each facility manages its allocation of facility resources, typically granting access through merit review of submitted research proposals. Prospective non-proprietary users may propose independent or collaborative research. In most cases there is no charge for users who are doing non-proprietary work, with the understanding that they are expected to publish their results; access is also typically available on a full cost recovery basis for proprietary research that is not intended for publication.

Under the provisions of the Patent Class Waivers, the non-proprietary user can elect title to his/her inventions, and research data generated under non-proprietary research is typically not protected. With limited exceptions the proprietary user retains as proprietary the technical data generated, as well as the rights to any new inventions. More complete descriptions and models of these Agreements are found in the Class Waiver for Non-Proprietary Users and the Class Waiver for Proprietary Users.

TECHNOLOGY LICENSING AGREEMENT

Intellectual Property (IP) developed by DOE's National Laboratories is typically held and licensed by the Contractor for the Laboratory where the technology was developed.

A licensing agreement typically provides commercialization rights to patented and/or copyrighted IP developed at DOE's National Laboratories. Due to the unique set of laws and policies governing the licensing of federally funded research and DOE policies regarding intellectual property, licensing agreements for technology developed at DOE Laboratories have some provisions that may not be present in a license agreement between private entities, including march-in-rights, government-use rights, and indemnification policies. A Guide to Licensing and Sample License has been created to describe a "typical" DOE Laboratory IP license agreement in order to provide prospective licensees with an understanding of the terms and conditions found in most DOE laboratory IP license agreements. This guide is

available at the following link: http://techtransfer.energy.gov/LicensingGuideFINAL.pdf.

Typical financial and milestone terms present in a commercial license include:

- An issue fee, which is non-refundable and due upon execution of the agreement
- A running royalty, which is most commonly based on a percentage of sales
- A minimum annual royalty
- Other financial terms appropriate to the technology and market, such as milestone payments and patent cost reimbursements
- Equity ownership terms which may be negotiated in some cases in lieu of cash payments
- Milestone commitments for development (e.g. alpha & beta products) and introduction of commercial product in marketplace

Licenses may be exclusive for a particular field of use or geographic region, or non-exclusive.

Most of the technologies available for licensing will require additional development before they are commercially viable. An Option Agreement is available that protects an entity's right to license a technology at a future time. Option Agreements are generally available for a time period of one year. Many labs will approve an extension to the Option Agreement if sufficient milestones towards making the technology commercially-viable have been met.

Several of the technologies available for licensing can be found on the Energy Innovation Portal http://techportal.eere.energy.gov/. The Energy Innovation Portal was created as a one-stop resource for DOE Energy Efficiency and Renewable Energy (EERE) technologies. These technologies can be viewed as marketing summaries, which provide business friendly descriptions of the technology, or the patent itself. Online contact forms are provided to get directly in touch with the licensing representative from each laboratory. Many of the Labs also maintain their own online database of technologies available for licensing.

TECHNICAL ASSISTANCE

Many Labs offer a Technology Assistance Program, which leverages the expertise of laboratory scientists and engineers to help members of the small business community solve important challenges free of charge.

Examples of assistance include:

- advising on existing or emerging products
- providing advanced technology for hardware and software applications
- improving production and manufacturing processes
- resolving technical problems
- performing scientific peer reviews
- recommending energy conservation and environmental technologies

Funds for Technical Assistance are limited and are only available at certain DOE National Laboratories.

MATERIAL TRANSFER AGREEMENT

A Material Transfer Agreement (MTA) protects biological materials and tangible research products provided either to or by the Laboratory. This is an agreement that biological materials and tangible research products provided by one party to another will be protected from further transmittal. The agreement normally requires return or destruction of materials and products at the end of the agreement.

SMALL BUSINESS INNOVATION RESEARCH AND SMALL BUSINESS TECHNOLOGY TRANSFER

Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) are U.S. Government programs in which federal agencies with large research and development (R&D) budgets set aside a small fraction of their funding for competitions among small businesses only. Small businesses that win awards in these programs keep the rights to any technology developed and are encouraged to commercialize the technology.

Only U.S. small business concerns (SBCs) are eligible to submit SBIR and STTR applications. Joint ventures, as defined in "Appendices/Reference Material," may apply, provided the entity created also qualifies as a small business at the time of the award. An SBC is one that, at the time of award for both Phase I and Phase II SBIR/STTR awards, meets all of the following criteria:

- Organized for profit, with a place of business located in the United States (U.S.), which operates primarily within the U.S. or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor;
- In the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the form is a joint venture, there can be no more than 49% participation by foreign business entities in the joint venture;
- At least 51% owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the U.S., or it must be a for-profit business concern that is at least 51% owned and controlled by another for-profit business concern that is at least 51% owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the U.S. (except in the case of a joint venture, where each entity to the venture must be 51% owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the U.S.); and
- Has, including its affiliates, not more than 500 employees and meets the other regulatory requirements found in 13 CFR Part 121. Business concerns, other than investment companies licensed, or state development companies qualifying under the Small Business Investment Act of 1958, 15 U.S.C. 661,

et seq., are affiliates of one another when either directly or indirectly, (a) one concern controls or has the power to control the other; or (b) a third-party/parties controls or has the power to control both. Control can be exercised through common ownership, common management, and contractual relationships. The term "affiliates" is defined in greater detail in 13 CFR 121. The term "number of employees" is defined in 13 CFR 121.

Grant applications submitted to a DOE SBIR/STTR Funding Opportunity Announcement (FOA) by small businesses must be responsive to a specific Topic and Subtopic as included in the open FOA. These topics may be found on the DOE SBIR/STTR web page "Funding Opportunities." SBIR/STTR programs have three distinct phases listed below:

- At DOE, Phase I explores the feasibility of innovative concepts with awards up to $225,000 over 9 months.
- Phase II is the principal R&D effort, with awards up to $1,000,000 over two-years.
  NOTE: Only DOE Phase I award winners may compete for DOE Phase II funding.
- Phase III offers opportunities to small businesses to continue their Phase I and II R&D work to pursue commercial applications of their R&D with non-SBIR/STTR funding. Under Phase III, Federal agencies may award non-competitive, follow-on grants or contracts for products or processes that meet the mission needs of those agencies, or for further R&D.

Under SBIR Phase I a minimum of two-thirds of the funded research or analytical effort must be performed by the grantee; a maximum of one-third of the effort may be performed by consultants or subcontractors, including the DOE's Government-owned Contractor Operated (GOCO) National Laboratories. Under SBIR Phase II a minimum of one-half of the research and analytical effort of Phase II must be performed by the grantee and up to one-half of the research or analytical effort may be performed by consultants or subcontractors.

Under STTR Phase I and II a minimum of 40% of the work must be performed by the small business and at least 30% of the work must be performed by the non-profit research institution partner. Such institutions include Federally Funded Research and Development Centers (FFRDCs), all of DOE's National Laboratories with the exception of NETL, universities, teaching hospitals, and other non-profits. A minimum of 40% of the funding, excluding any purchased or leased equipment, materials, and supplies, must be allocated to the small business; a minimum of 30% of the funding, excluding any purchased or leased equipment, materials, and supplies, must be allocated to the research institutions.

In addition, there are also some SBIR/STTR topics that include a Technology Transfer Opportunity (TTO). A Technology Transfer Opportunity (TTO) is an opportunity to leverage technology that has been developed at a DOE National Laboratory. Typically the technology was developed with DOE funding of either basic or applied research at a DOE National Laboratory and is available for transfer to the private sector. The level of technology maturity will vary and applicants are

encouraged to contact the appropriate Laboratory prior to submitting an application.

FREQUENTLY ASK QUESTIONS

Question #1: Why does DOE retain a government-use license and march-in rights?

Answer #1: Retention of these rights in agreements involving federally-funded research is required by law. The Government license is viewed as recognition of the Government investment that created the facility and the research from which the technology arises. March-in rights are retained by the Government to assure that technology arising from laboratories is made available to the public. Should a laboratory licensee or CRADA partner abandon use or dissemination of the technology yet retain a license to the technology, the government has the right to require the partner to license to a third party, who is interested in commercializing the technology, at a reasonable royalty.

Question #2: How can companies protect their confidential and proprietary information while working with the DOE national laboratories?

Answer #2: CRADAs, WFOs, and ACT arrangements can be contracted to contain provisions addressing protection of a partner's proprietary data. User Agreements often include such provisions as well. In addition, Nondisclosure Agreements (NDA) can easily be put in place to protect a partner's proprietary information prior to the initiation of any work or even at the discussion stage if necessary. While a company's proprietary information agreement template can be used as a starting point the nature and contractual requirements of the National Laboratories will require amendments and the use of the standard agreement offered by the Laboratory of interest often expedites the signature of these agreements. Data generated in the performance of a CRADA can be protected from public release by the laboratory or the Government for five years. It is important that companies mark all of the information that they provide to the laboratories' staff in accordance with the agreements between the parties for protection of data. Data generated under a WFO or ACT can be kept proprietary by the Sponsor indefinitely in many cases.

Question #3: How can the intellectual property interests of multiple collaborators be accommodated?

Answer #3: There are examples of successful multi-party collaborations that accommodated the interests of various organizations, including multiple DOE laboratories. Clear communications and up-front negotiations of intellectual property rights can help save time. For example, in the alternative feedstocks for chemicals program, five laboratories set up agreements for sharing intellectual property among themselves and with a company. The intellectual property developed by one laboratory was used by other laboratories, and the company

benefited from inventions at several laboratories. The new Agreement for Commercializing Technology (ACT) also provides flexibility in addressing multi-party collaborations.

Question #4: How long does it take to negotiate a license?
Answer #4: This varies from lab to lab and technology to technology. It generally takes a few months.

Question #5: How much does a license cost?
Answer #5: This varies depending on the market value of the technology, common licensing practices in the relevant industrial sector, additional development costs involved in bringing the technology to market, and the scope of the field of use or geographic region.

Question #6: Are licenses available to non-U.S. companies?
Answer #6: Yes, although as federally-funded facilities, DOE's National Laboratories and Facilities, have a preference to license to U.S. companies and an obligation to consider US Competiveness in all license agreements. The requirement for U.S. competiveness can be satisfied by either substantially manufacturing in the United States or by having a business unit in the United States and providing a significant economic and technical benefit to the United States. All DOE Laboratories are also required to include an export control clause in their license agreement. This clause simply states that the Licensee agrees to comply with export control laws designed to protect items and information important to the United States. It restates the existing requirement and does not impose additional requirements.

Question #7: I am interested in working with a National Lab on my particular technology. What is the best way to determine which lab(s) are doing research in my technology area?
Answer#7: The Federal Lab Consortium (FLC) has set up a Technology Locator tool to put a potential partner in contact with a federal laboratory with expertise and capability in a specific area of interest. This Technology Locator service may determine that a federal lab outside of the DOE laboratory system is best suited to work on the specific interest, in which case different agreements and requirements may be applicable.

CONTACT INFORMATION: Licensing, CRADAs and WFOs

If you are interested in learning more about Licensing, CRADA, or WFO opportunities at DOE's National Laboratories the first step is to visit the technology transfer section of each of the lab's websites to determine mutual areas of interest. The following tables provide a list of the Technology Transfer Websites for each of the National Laboratories and Facilities, as well as the Licensing, CRADA, and WFO contacts.

Laboratory or Facility	Technology Transfer Websites
Ames Laboratory	https://www.ameslab.gov/techtransfer
Argonne National Laboratory	http://web.anl.gov/techtransfer/Available_Technologies/high-impact_technologies.html
Brookhaven National Laboratory	http://www.bnl.gov/techtransfer/
Fermi National Accelerator Laboratory	http://www.fnal.gov/directorate/techtransfer/
Idaho National Laboratory	https://inlportal.inl.gov/portal/server.pt/community/technology_transfer
Kansas City Plant	http://honeywell.com/sites/aero-kcp/Partnering/Pages/partnering-agreements.aspx
Lawrence Berkeley National Laboratory	http://www.lbl.gov/tt/
Lawrence Livermore National Laboratory	https://ipo.llnl.gov/
Los Alamos National Laboratory	http://www.lanl.gov/partnerships
National Energy Technology Laboratory	http://www.netl.doe.gov/tech-transfer/index.html
National Renewable Energy Laboratory	http://www.nrel.gov/technologytransfer/
Oak Ridge National Laboratory	http://www.ornl.gov/partnerships/
Pacific Northwest National Laboratory	http://www.pnl.gov/business/tech_transfer.aspx
Pantex Plant	http://www.pantex.com/
Princeton Plasma Physics Laboratory	http://www.pppl.gov/organization/technology-transfer
Sandia National Laboratories	https://ip.sandia.gov/
Savannah River National Laboratory	http://srnl.doe.gov/tech_transfer/tech_transfer.htm
SLAC National Accelerator Laboratory	http://www6.slac.stanford.edu/general/doing-business-with-slac.aspx
Thomas Jefferson National Accelerator Facility	https://www.jlab.org/exp_prog/techtransfer/
Y-12 National Security Complex	http://www.y12.doe.gov/technologies

Licensing

Laboratory or Facility	Representative	Email Addresses	Phone #
Ames Laboratory	Stacy Joiner	joiner@ameslab.gov	(515) 294-5932
Argonne National Laboratory	Carl Shurboff	cshurboff@anl.gov	(630) 252-4962
Brookhaven National Laboratory	Connie Cleary	ccleary@bnl.gov	(631) 344-3035
Fermi National Accelerator Laboratory	Cherri Schmidt	cherri@fnal.gov	(630) 840-5178
Idaho National Laboratory	Steven McMaster	steven.mcmaster@inl.gov	(208) 526-1340
Kansas City Plant	Zachariah Carlon	zcarlonr@kcp.com	(816) 488-2902
Lawrence Berkeley National Laboratory	Viviana Wolinsky	viwolinsky@lbl.gov	(510) 486-6463
Lawrence Livermore National Laboratory	Roger Werne	werne1@llnl.gov	(925) 423-9353
Los Alamos National Laboratory	Laura Barber	ljbb@lanl.gov	(505) 667-9266
National Energy Technology Laboratory	Jessica Sosenko	jessica.sosenko@netl.doe.gov	(412) 386-7417
National Renewable Energy Laboratory	Kristin Gray	kristin.gray@nrel.gov	(303) 275-3050
Oak Ridge National Laboratory	Jen Caldwell	Caldwelljt@ornl.gov	(865) 574-4180
Pacific Northwest National Laboratory	Peter Christensen	peter.christensen@pnnl.gov	(509) 371-6159
Pantex Plant	Perry Kent	pkent@pantex.com	(806) 477-5422
Princeton Plasma Physics Laboratory	Lewis Meixler	lmeixler@pppl.gov	(609) 243-3009
Sandia National Laboratory	Pete Atherton	prather@sandia.gov	(505) 284-3768
Savannah River National Laboratory	Dale Haas	dale.haas@srnl.doe.gov	(803) 725-4185
SLAC National Accelerator Laboratory	Jan Tulk	jtulk@slac.stanford.edu	(650) 926-5701
Thomas Jefferson National Accelerator Facility	Rhonda Scales	scales@jlab.org	(757) 269-7384
Y-12 National Security Complex	Tom Berg	bergta@y12.doe.gov	(865) 574-0907

CRADA Contacts

Laboratory or Facility	Representative	Email Addresses	Phone Number
Ames Laboratory	Debra Covey	covey@ameslab.gov	(515) 294-1048
Argonne National Laboratory	Carl Shurboff	cshurboff@anl.gov	(630) 252-4962
Brookhaven National Laboratory	Mike Furey	mfurey@bnl.gov	(631) 344-2103
Fermi National Accelerator Laboratory	Cherri Schmidt	cherri@fnal.gov	(630) 840-5178
Idaho National Laboratory	Steven McMaster	steven.mcmaster@inl.gov	(208) 526-1340
Kansas City Plant	Nancy Kellerman	nkellerman@kcp.com	(816) 997-2711
Lawrence Berkeley National Laboratory	Rick M. Inada	RMInada@lbl.gov	(510) 486-5882
Lawrence Livermore National Laboratory	Roger Werne	werne1@llnl.gov	(925) 423-9353
Los Alamos National Laboratory	John Mott	jmott@lanl.gov	(505) 665-0883
National Energy Technology Laboratory	Jessica Sosenko	jessica.sosenko@netl.doe.gov	(412) 386-7417
National Renewable Energy Laboratory	Anne Miller	anne.miller@nrel.gov	(303) 384-7353
Oak Ridge National Laboratory	Mark Reeves	reevesme@ornl.gov	(865) 576-2577
Pacific Northwest National Laboratory	Bruce Simanton	bruce.simanton@pnnl.gov	(509) 371-7608
Pantex Plant	Perry Kent	pkent@pantex.com	(806) 477-5422
Princeton Plasma Physics Laboratory	Lewis Meixler	lmeixler@pppl.gov	(609) 243-3009
Sandia National Laboratories	Pete Atherton	prather@sandia.gov	(505) 284-3768
Savannah River National Laboratory	John Olschon	john.olschon@srnl.doe.gov	(803) 725-8125
SLAC National Accelerator Laboratory	Jan Tulk	jtulk@slac.stanford.edu	(650) 926-5701
Thomas Jefferson National Accelerator Facility	Joe Scarello	scarcell@jlab.org	(757) 269-7027
Y-12 National Security Complex	Tom Berg	bergta@y12.doe.gov	(865) 574-0907

WFO Contacts

Laboratory or Facility	Representative	Email Addresses	Phone Number
Ames Laboratory	Debra Covey	covey@ameslab.gov	(515) 294-1048
Argonne National Laboratory	Diane Hart	dhart@anl.gov	(630) 252-7677
Brookhaven National Laboratory	Mike Furey	mfurey@bnl.gov	(631) 344-2103
Fermi National Accelerator Laboratory	Cherri Schmidt	cherri@fnal.gov	(630) 840-5178
Idaho National Laboratory	Steven McMaster	steven.mcmaster@inl.gov	(208) 526-1340
Kansas City Plant	Nancy Kellerman	nkellerman@kcp.com	(816) 997-2711
Lawrence Berkeley National Laboratory	Rick M. Inada	RMInada@lbl.gov	(510) 486-5882
Lawrence Livermore National Laboratory	Mark Javier	javier1@llnl.gov	(925) 423-2135
Los Alamos National Laboratory	Jerome J. Garcia	jgarcia@lanl.gov	(505) 665-4842
National Renewable Energy Laboratory	Anne Miller	anne.miller@nrel.gov	(303) 384-7353
Oak Ridge National Laboratory	Mark Reeves	reevesme@ornl.gov	(865) 576-2577
Pacific Northwest National Laboratory	Marlene K. Meeks	marlene.meeks@pnl.gov	(509) 372-6258
Pantex Plant	Perry Kent	pkent@pantex.com	(806) 477-5422
Princeton Plasma Physics Laboratory	Lewis Meixler	lmeixler@pppl.gov	(609) 243-3009
Sandia National Laboratories	Pete Atherton	prather@sandia.gov	(505) 284-3768
Savannah River National Laboratory	John Olschon	john.olschon@srnl.doe.gov	(803) 725-8125
SLAC National Accelerator Laboratory	Jan Tulk	jtulk@slac.stanford.edu	(650) 926-5701
Thomas Jefferson National Accelerator Facility	Joe Scarello	scarcell@jlab.org	(757) 269-7027
Y-12 National Security Complex	Gerald DeVault	devaultgl@y12.doe.gov	(865) 241-0365

CONTACT INFORMATION: OMBUDSMEN

Pursuant to Section 11 of the Technology Transfer Commercialization Act of 2000, Public Law 106-404, each DOE national laboratory and research facility has appointed a technology partnership ombudsman (ombuds). The role of the ombuds is prevention and early resolution of disputes between the lab and inventors or private companies over technology transfer issues such as infringement, intellectual property rights, royalties and licensing, etc.

Laboratory or Facility	Representative	Email Addresses	Phone Number
Ames Laboratory	Todd Zdorkowski	zdorkowski@ameslab.gov	(515) 294-5640
Argonne National Laboratory	Richard Cirillo	cirillor@anl.gov	(630) 252-5629
Brookhaven National Laboratory	Peter Bond	bond@bnl.gov	(631) 344-4063
Fermi National Accelerator Laboratory	David Christian	dcc@fnal.gov	(630) 840-4001
Idaho National Laboratory	Michael Derbidge	michael.derbidge@inl.gov	(208) 526-7711
Kansas City Plant	Tanya Snyder	tsnyder@kcp.com	(816) 997-5937
Lawrence Berkeley National Laboratory	Karena McKinley	karenamckinley@comcast.net	(510) 583-0138
Lawrence Livermore National Laboratory	Steve Zevanove	zevanove1@llnl.gov	(925) 423-2872
Los Alamos National Laboratory	Mary Beth Stevens	marybeth@lanl.gov	(505) 665-2837
National Energy Technology Laboratory	Ralph P. (Paul) Detwiler	paul.detwiler@netl.doe.gov	(412) 386-4839
National Renewable Energy Laboratory	Donna Louden	donna.louden@nrel.gov	(303) 275-3221
Oak Ridge National Laboratory	Michael Frietze	frietzemj@ornl.gov	(865) 576-3650
Pacific Northwest National Laboratory	Carolynn Novich	novich@pnnl.gov	(509) 375-6682
Pantex Plant	Steve Hallett	shallett@pantex.com	(806) 477-5226
Princeton Plasma Physics Laboratory	John Lacenere	jlacenere@pppl.gov	(609) 243-3308

Sandia National Laboratories	Jennifer Stinebaugh (NM)	jstineb@sandia.gov	(505) 844-7638
Sandia National Laboratories	Mauricio A. Ramos (CA)	maramos@sandia.gov	(925) 294-2065
Savannah River National Laboratory	Michael Wamsted	mike.wamsted@srs.gov	(803) 725-3751
SLAC National Accelerator Laboratory			
Thomas Jefferson National Accelerator Facility	Chip Watson	watson@jlab.org	(757) 269-7101
Y-12 National Security Complex	Willie Wilson	wilsonwj@y12.doe.gov	(865) 576-3456

Additional Links

FLC – Technology Transfer Desk Resource
http://globals.federallabs.org/pdf/T2_Desk_Reference.pdf

FLC Federal Technology Transfer Legislation and Policy
https://secure.federallabs.org/pdf/FLC_Legislation_and_Policy.pdf

CRADA Order and Manual
https://www.directives.doe.gov/references/subject_index/crada

WFO Guide and Manual
https://www.directives.doe.gov/references/subject_index/work-for-others