**Request for Information**

**Federal Technology Transfer Authorities and Processes**

**Last day to submit the responses: July 30, 2018**

### Introduction

In order to advance the President's Management Agenda to modernize government for the 21st century, including the associated Lab-to-Market CAP Goal in coordination with the White House's OSTP, NIST is initiating a Return on Investment (ROI) Initiative [4] with the intent of conducting a comprehensive assessment of the Federal technology transfer system that will identify opportunities to improve Federal technology transfer efforts, policies, and practices. The goal of this effort is to, where appropriate, streamline and accelerate transfer of technology from Federal R&D investments to attract greater private-sector investment for innovative products, processes, and services, as well as new businesses and industries that will create jobs, grow the economy, and enhance national security.

NIST is seeking broad input and participation from stakeholders in Federal R&D, intellectual property, and technology transfer to assist in identifying and prioritizing issues and proposed solutions. This assessment will address: (a) Core Federal technology transfer principles and practices that should be protected, and those which should be adapted or changed; (b) approaches to improve efficiency and reduce regulatory burdens for technology transfer to attract private sector investment in later-stage R&D, commercialization, and advanced manufacturing; (c) new partnering models and technology transfer mechanisms with the private sector, academia, other Federal agencies, state, and other public-sector entities to support technology development and maturation; (d) new approaches that will reduce or remove barriers, and enable accelerated technology transfer, with a focus on areas of strategic national importance; (e) better metrics and methods to evaluate the ROI outcomes and impacts arising from Federal R&D investment; and (f) new approaches to motivate significantly increased technology transfer outcomes from the Federal sector, universities, and research organizations.

This information will only be used as input to the Return on Investment initiative. All submissions, including attachments and other supporting materials, will become part of the public record and subject to public disclosure. Sensitive personal information, such as account numbers or Social Security numbers, or names of other individuals, should not be included. Submissions will not be edited to remove any identifying or contact information. Do not submit confidential business information, or otherwise sensitive or protected information. Comments that contain profanity, vulgarity, threats, or other inappropriate language or content will not be considered.

### Instructions

This template is designed to facilitate responses to the RFI. Use of this form is optional.

It is not required to fill out all of the sections, for example a participant may elect to only provide input on one question.

Save and email it to [roi@nist.gov](mailto:roi@nist.gov).

# Contact Information

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Questions

1. What are the core Federal technology transfer principles and practices that should be protected, and those which should be adapted or changed?

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| Past Federal TT legislation including Bayh Dole and Stevenson Wydler have been and continue to be instrumental in enabling the transition of research conducted at the National Laboratories to commercial use, deliver beneficial societal impact and the return of value to the US taxpayer. As such, we believe that these acts have enabled significant impact, consistent with the expectations from when they were formulated and any proposed modifications should be limited in focus to reducing barriers to greater commercialization impacts. |

1. What are the issues that pose systemic challenges to the effective transfer of technology, knowledge, and capabilities resulting from Federal R&D? Please consider those identified in the RFI as well as others that may have inhibited collaborations with Federal laboratories, access to other federally funded R&D, or commercialization of technologies resulting from Federal R&D?

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| The DOE National Laboratories are mission-driven organizations. The mission of the DOE is to ensure America's security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions. Argonne National Laboratory is a DOE Office of Science multi-program laboratory that conducts cutting-edge science and technology research and development in multiple scientific domains in support of the DOE mission. Our focus is typically on longer term, multidisciplinary challenges rather than near-term solutions to commercial issues. We leverage investments from DOE and other federal and non-federal sponsors to develop science and technology expertise and infrastructure to execute on the mission. In so far as the DOE emphasizes and supports technology transfer as a part of the mission (which it clearly is, given statutes and policy), the DOE Laboratories will prioritize related efforts which will lead to increased technology transfer/commercialization outcomes.  We define technology transfer in the broad sense as the process of transferring scientific findings from one organization to another for the purposes of further research, development and/or commercialization. As such, Argonne, as with other DOE National Laboratories, has a number of ways in which we execute technology transfer including through: (a) publications (presentations, etc.) of our research efforts (b) hosting scientific users at our cutting-edge user facilities (c) sponsored research activities conducted with non-DOE federal sponsors, as well as with non-Federal sponsors including industry, not-for-profits, foundations, etc. (d) personnel exchange with industry/joint appointments with academia (e) licensing of patents and copyrights secured through our research efforts (f) spin-outs of start-ups run by entrepreneurs who want to move our science and technology into commercial applications and (g) novel commercialization mechanisms sponsored by the DOE that leverage the use of Lab expertise such as the Small Business Voucher (SBV) program, the Lab Embedded Entrepreneurship program (LEEP), the Technology Commercialization Fund (TCF), etc. Direct funding support from DOE for commercialization and technology transfer, whether it is through vehicles such as the above programs such as TCF, SBV, etc. or it is through funding/co-funding of industry-Laboratory research engagements, will be important for increased technology transfer/commercialization outcomes. |

1. What is the proposed solution for each issue that poses a systemic challenge to the effective transfer of technology, knowledge, and capabilities resulting from Federal R&D? Please consider the approaches identified in the RFI.

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| We have the following additional suggestions for enhancing commercialization impacts from federally-funded research:  a) The role of software in research and development has grown significantly over the years since the initial technology transfer legislation. There is an opportunity to create clear and uniform policy and procedures for asserting software copyright ownership, and in enabling transfer and licensing of federal-funded software. We believe that the absence of such policies has created confusion and served as an obstacle to commercialization success.  b) We recommend clarification of US competitiveness provisions such as ‘substantial manufacture in the United States’ in relation to sponsored research and licensing activities conducted by the National Labs. Given multinational firms and global supply chains, even US companies balk at this provision which is an obstacle to greater commercialization activities.  c) We recommend making available federal funds to support technology maturation to proof-of-concept and/or prototype stages of development to partially bridge the valley of death in translating early stage technology into commercial applications. This can be done in a number of ways including making funds available to Labs for this effort, motivating entrepreneurs/small businesses to increase such activities and supporting collaborative commercialization efforts between Labs and industry. Since commercialization is not a one-size-fits-all activity, we recommend all of the above approaches.  d) We recommend a review of conflict of interest policies that currently make it challenging for Laboratory staff to engage in entrepreneurial pursuits in relation to their field of research.  e) We recommend offering flexibility in cost share expectations when industry collaborates with Laboratories (as opposed to more stringently requiring 1:1 matching funds). |

1. What are other ways to significantly improve the transfer of technology, knowledge, and capabilities resulting from Federal R&D to benefit U.S. innovation and the economy? What changes would these proposed improvements require to Federal technology transfer practices, policies, regulations, and legislation?

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## Thank you for your time and participation.