

July 30, 2018

RE: RFI Response: Federal Technology Transfer Authorities and Processes
Docket Number: 180220199-819-01

Via email: roi@nist.gov

**Wisconsin Alumni Research Foundation Response to
NIST Request for Information:
Federal Technology Transfer Authorities and Processes**

The Wisconsin Alumni Research Foundation (“WARF”) appreciates the opportunity to respond to the Request for Information (“RFI”) issued by the National Institute of Standards and Technology (“NIST”) on May 1, 2018, regarding federal technology transfer authorities and processes. WARF commends NIST for responding to the Lab-to-Market Cross-Agency Priority in the President’s Management Agenda by undertaking a Return on Investment (“ROI”) initiative, and we thank NIST in particular for soliciting viewpoints and conducting public forums on this important public policy concern.

As home to one of the oldest university patenting operations in the world, the Wisconsin Alumni Research Foundation has an inherent, enduring interest in improving the transfer of technologies from the laboratory to the marketplace. For more than ninety years, we have pursued that goal in close partnership with the University of Wisconsin-Madison, whose scientific research our nonprofit mission pledges to support. Our work has also fostered strong, longstanding relationships with the State of Wisconsin and its citizens; fellow research institutions, universities, and businesses in Wisconsin; our colleagues at the Association of University Technology Managers (“AUTM”), its members, and affiliated institutions; and the various agencies and public servants of the federal government.

Drawing upon these partnerships and our long institutional experience, WARF asks that the NIST ROI initiative pursue actions consistent with the principles we hold to be foundational to technology transfer: the freedom to invent and local empowerment.



Researchers—the people best situated to understand the applications of their science—should be allowed the freedom to develop their technologies for the overall benefit of humankind, and universities and local businesses should be empowered to ensure the widespread, ethical distribution of the social benefits of those technologies. We find inspiration for these tenets of academic freedom and local empowerment in the Wisconsin Idea, the long tradition that the University of Wisconsin System, and by extension its supporting organizations like WARF, should strive to serve every family in our state.

Wisconsin traditions of public service informed the fundamental role that WARF played, under the leadership of our late patent counsel Howard Bremer, in the passage of the University and Small Business Patent Procedures Act of 1980, commonly known as the Bayh-Dole Act. We strongly recommend that Bayh-Dole remain unchanged as the statutory framework for promoting the transfer of federally funded research to the public.

For forty years, Bayh-Dole has provided an elegant legislative solution by authorizing U.S. universities, nonprofit organizations, and small businesses to retain title to their federally funded intellectual property. In exchange, these institutions must serve a clear public interest by pursuing the development of the underlying technologies, submit to transparent and enumerated government protections, and direct their revenue to research and educational purposes. This legislation, as currently written, gives individual researchers and their universities clear guidance on both the rights to their inventions and their obligations to the public. That combination of clarity and local control has been a central reason for the enormous successes of the technology transfer industry, including more than 80,000 patents issued to research institutions, four million jobs created, a \$600 billion contribution to the U.S. GDP, and \$1.3 trillion in U.S. gross industrial output.

The results of Bayh-Dole have exceeded the hopes of the act's authors by providing significant social and economic benefits to the nation. At the same time, WARF recognizes that nothing in science and technology remains static, which is why we have been an eager participant in promoting the well-being of Bayh-Dole by defending its purpose and participating in subsequent amendments and regulatory forms to enhance and expand its efficacy.



In that spirit, WARF recommends that the framework at the heart of the law be extended as a template for other federal agencies. The government should presume that researchers and tech transfer professionals, whether at universities or federal laboratories, will be best equipped to bring technology from lab to market. When WARF collaborates with federal laboratories, we find that government employees must often seek out several extra layers of approval, frequently at agency offices across the country, before they can proceed with inter-institutional agreements or licensing contracts with WARF. We gratefully acknowledge the well-intentioned desire to protect taxpayers and citizens by preventing conflicts of interest and other undesirable outcomes. But Bayh-Dole offers the template for a better solution. Give federal laboratories the resources to succeed at technology transfer, empower them with a clear statement of their mission to develop inventions, and enact a simple, straightforward enforcement mechanism designed to provide confidence in the system as much as to capture the rare instances of abuse. Like Bayh-Dole, all technology transfer processes and policies can unleash innovation by trusting local experts, giving them freedom to operate, and ensuring they have adequate resources to fulfill their mission.

WARF recommends the following specific actions in pursuit of the above:

- **Reassert Technology Transfer as a Priority of Federal Research:** A clearly stated priority of technology transfer for federal laboratories would further empower the tech transfer professionals to enable a spectrum of industrial partnership opportunities, finding ways to say yes when delegated authority and given clear guidelines.
- **Enable Local Control:** Technology professionals within the federal government, regardless of where their offices may be located, must often obtain legal review and approvals from Washington, D.C., which slows down the process and leads to inefficiency. We propose that deal-making authority be delegated to those working at federal laboratories and branch offices, as they best understand the precise circumstances and can determine the relative importance of every decision.
- **State Enumerated Obligations for Federal Laboratories:** A clear interpretation of the federal rules governing technology transfer would make partnerships more attractive to industry, give technology transfer professionals the confidence to



successfully carry out their duties, and give federal agencies a definite means of overseeing the industry.

- **Balance Conflicts of Interest:** In a university setting, our intellectual property and licensing managers identify and protect against conflicts of interest while still allowing university researchers to assist in licensing their technologies or form startup companies to commercially develop those technologies. Federal laboratories would have better success in technology transfer if they empower their researchers with the same authority.
- **Emphasize the Social Benefits of Technology Transfer:** The generation of revenue, profit, and other financial returns gives a certain indication of the important contributions of technology transfer, but that can never tell the whole story. We recommend that the federal government, in consultation with universities, broaden our understanding of return on investment to emphasize the underlying social and public mission inherent in the development of federal research into products benefiting American taxpayers.

A strong patent system that asserts certainty of ownership serves a vital role in the transfer of federally funded technology. For that reason, we define the current challenge facing technology transfer as fine-tuning a patenting system and expanding the public-private partnerships in research and development that have produced extraordinary scientific and economic gains since 1980. To do so will mean finding more ways to extend the benefits technology transfer has achieved to more and more of the American public.

At WARF, we believe the future must be built on history. We were founded in 1925 when UW Professor Harry Steenbock wanted to ensure that science developed in his lab would benefit Wisconsin industry and Wisconsin's university but discovered that university administrators were reluctant to take on the financial and political risks of commercializing research. Instead, Steenbock collaborated with two of his deans and a handful of UW alumni to form the Wisconsin Alumni Research Foundation as an independent nonprofit. WARF's statutory purpose, still in effect today, is not to manage intellectual property but "to promote, encourage and aid scientific investigation and research at and within the University of Wisconsin-Madison" and "to provide or assist in providing means and machinery by which their scientific



discoveries, inventions and processes may be developed for the overall benefit of humankind." In 2018, we believe that mission, and the national mission of federal technology transfer, can still be served with Steenbock's combination of academic freedom, the removal of bureaucratic roadblocks, and an investment in the future of scientific discovery.

Sincerely,

Erik Iverson
Managing Director

Michael Falk
General Counsel



**Office of the Vice Chancellor for
Research and Graduate Education**
UNIVERSITY OF WISCONSIN-MADISON

July 30, 2018

Department of Commerce, National Institute for Standards and Technology

Request for Information Regarding Federal Technology Transfer Authorities and Process

Docket Number: 180220199-819-01

The University of Wisconsin-Madison (UW-Madison) appreciates the opportunity to respond to the Request for Information Regarding Federal Information Technology Transfer Authorities and Processes issued on May 1, 2018 by the National Institute of Standards and Technology (NIST). See 83 FR 19052.

Background about UW-Madison and its Relationship with the Wisconsin Alumni Research Foundation (WARF)

UW-Madison was founded in 1848 and was among the first group of land-grant universities in 1862. As Wisconsin's flagship university, UW-Madison prides itself on its "firsts." Among our "firsts" was the discovery in 1924, by Professor Harry Steenbock, of methods to enrich food with vitamin D. It was this "first" that precipitated the creation of the WARF. Since 1925, WARF has managed UW-Madison's patents and the resulting revenue, helping the University become a top-tier research institution.

UW-Madison's achievements are inextricably linked to WARF's support. WARF has sponsored several dozen WARF Named Professorships, providing research funding to faculty from a variety of disciplines. WARF has contributed to UW2020, an effort to stimulate highly innovative and groundbreaking research. WARF and UW-Madison have partnered on Discovery to Product, an initiative focused on entrepreneurship and providing faculty, staff, and students with mentorship and resources to translate their ideas into commercial products and services. These, and other, efforts have enabled WARF and UW-Madison to make vital contributions to the Wisconsin economy and to ensure that federally-supported inventions find their way to the marketplace. WARF plays an integral role in assisting UW-Madison in fulfilling the Wisconsin Idea – that the work of the University goes beyond the boundaries of the classroom and impacts the world.

Written Comments of WARF

UW-Madison is aware of the comments filed by WARF in this docket and wishes to associate itself with these comments.

UW-Madison agrees with WARF that the "current challenge facing technology transfer [is defined] as fine-tuning a patenting system and expanding the public-private partnerships in

research and development that have produced extraordinary scientific and economic gains since 1980.”

Conclusion

UW-Madison is grateful for the openness and breadth with which NIST is conducting this assessment of the Federal technology transfer system. Thank you again for the opportunity to comment on this important topic.

Sincerely,

A handwritten signature in black ink, appearing to read "Norm Drinkwater".

Norman R. Drinkwater, Ph.D.
Interim Vice Chancellor for Research and Graduate Education
Professor of Oncology
University of Wisconsin-Madison

A handwritten signature in black ink, appearing to read "Kim Moreland".

Kim Moreland
Associate Vice Chancellor for Research Administration, and
Director, Research and Sponsored Programs
University of Wisconsin-Madison