On July 27, 2018, several of our associations jointly submitted extensive comments on the NIST Request for Information (RFI) on *Federal Technology Transfer Authorities and Processes* (Docket No. 18022019-819-01). Our comments contained a series of recommendations corresponding to the four principal questions on which NIST requested comments in the RFI.

We were very pleased to see that in the draft "Green Paper" (NIST SP 1234) NIST has responded positively too many of our comments and recommendations. We particularly note the recommendations related to Strategy 1 in the L2M CAP goal of identifying regulatory impediments and administrative improvements and Strategy 4 on innovative tools and services. These recommendations, if implemented, will be very helpful for technology transfer at our member institutions. The report also recognizes the variations in federal agency technology transfer practices and differences in interpretation which long have been of concern to our member institutions. Streamlining of and greater uniformity in such practices and interpretations would facilitate the ability of our members to transfer discoveries and inventions for economic value creation and public benefit.

We strongly support most of the Intended Actions in the Green Paper, including defining the scope of the government use license and clarifying the proper statutory uses of the "march-in" rights provided by the Bayh-Dole Act; streamlining the waiver process for the U.S. manufacturing requirement and providing a single government-wide point of application; allowing for limited use of federal research funds for intellectual property protection; implementing harmonized government-wide requirements for managing conflicts of interest involving recipients of federal R&D funding; and establishing a modernized platform for reporting data on intellectual property resulting from federal R&D funding with consistent government-wide reporting requirements. These actions address serious concerns in the current system. If implemented, they would have a direct positive impact on technology transfer at our institutions.

We also support other Intended Actions, including; allowing funds from government grants to be used to support intellectual property protection; summarizing public comments on SBIR/STTR technology maturation and determining appropriate follow-up actions to enhance these programs; establishing and expanding government-wide technology entrepreneurship programs, such as the highly successful NSF I-Corps program; streamlining partnership agreements for collaborations with federal laboratories; and expanding the metrics that are used to evaluate success of federal R&D investments and their resulting social and economic impacts. These will strengthen U.S. technology transfer over the longer term. This also is the case with concerns that the Paper identifies with respect to the America Invents Act, including Patent Trial and Appeals Board Proceedings, the grace period, and the scope of patent eligible subject matter. We had discussed these concerns in our comments as well, and we support NIST's plan to refer these concerns to the U.S. Patent and Trademark Office (USPTO). We also note that NIST will refer

the issue of the need for more flexibility in the use of SBIR/STTR funds to the Small Business Administration (SBA). We look forward to further discussions with USPTO and SBA on these important issues as part of the PMA reform process. Similarly, we appreciate that NIST will refer the suggestions received from us and others to appropriate policy-making bodies with regard to changes in the tax code and tax incentives.

We do have a few concerns with the Paper. First, the discussion of Partnership Intermediary Agreements (PIAs) and other technology partnership mechanisms in Strategy 2.C is somewhat confusing. It encompasses a wide range of activities and agreements that are not necessarily comparable, such as university research parks, open campuses, DOE Agreements for Commercializing Technology, etc. It is not clear if the establishment of new Research Transaction Authority (RTA) agreements is intended to supersede or replace these other arrangements or only to provide "modernized" CRADAs. Of particular concern is the recommendation that they be modeled after Other Transaction Authority (OTA) agreements. The Paper asserts that OTAs "offer greater speed, flexibility and accessibility in performing research," and recommends that OTA authority be extended to all agencies (footnote 152). We are not aware of empirical evidence to back up the assertion of the benefits of OTAs. Our institutions have found them somewhat troublesome and often requiring extensive negotiation.

The Paper also is confusing in regard to the recommendation that RTAs be "strictly limited to R&D and not for use in procurement or financial assistance actions." Performance of R&D for the government typically occurs under procurement or financial assistance mechanisms, and OTAs tend to be used currently in place of normal R&D funding mechanisms (i.e., contracts, grants or cooperative agreements). The Paper also suggests that RTAs should convey intellectual property rights consistent with the Bayh-Dole Act, but, in fact, agencies have used OTAs to circumvent normal Bayh-Dole rights. (As an example, the revised Other Transactions Guide recently released by DOD encourages non-Bayh-Dole rights negotiations). We do fully support the overall strategy to develop streamlined new partnership mechanisms. However, we urge NIST to better focus the discussion in this section and reconsider the OTA-related recommendations.

Many of the strategies and recommendations in the Paper pertain to government agencies and federal employees (e.g., copyright protections for "government works," federal employee invention rights, Stevenson-Wydler Act interpretation, and federal scientists' ability to engage in entrepreneurial activities). They appear well-considered and we have no particular comments. We note, though, that the Paper does not address rights in software inventions by federal contractors. As discussed in our previous comments, the government's approach is inconsistent. Clarifying guidance from NIST would be helpful.

In conclusion, as the Paper rightly observes, federal technology laws and activities have served the nation well over nearly four decades and continue to support innovation. The Bayh-Dole Act was transformational when enacted in 1980, and the results for U.S. economic and job growth

are amply documented in the Paper. The basic structure remains strong, but we fully agree that the ability of our member institutions to transfer federally funded R&D to innovative products, processes and services for the American people would benefit from the clarifications specified in the Paper. Implementing the recommendations would help realize the PMA vision of enabling the government to adapt to changing needs. We look forward to continuing to work with NIST to achieve the L2M CAP Goal of improving the transfer of technologies resulting from federally funded R&D to the private sector to promote U.S. innovation, economic growth, and national security.