

July 27, 2018

Dr. Walter G. Copan National Institute of Standards and Technology (NIST) Under Secretary of Commerce for Standards and Technology 100 Bureau Drive Gaithersburg, Maryland 20899

Dear Dr. Copan:

On behalf of the Association of University Research Parks (AURP), we would like to offer the following comments on the Federal Technology Transfer Authorities and Processes Return on Investment (ROI) Initiative (*Federal Register*, May 1, 2018).

AURP represents over 700 university and community based research parks and innovation zones around the world, fostering innovation, commercialization and economic growth in a global economy through university, industry and government partnerships.

Federal laboratories are partners in many U.S. research parks and university startup firms developed from federally funded research frequently choose to locate in university research parks. AURP shares NIST's interest in developing procedures and policies to increase the economic impact of federal research. Accordingly, AURP has monitored federal research policy initiatives and established a government relations committee. These comments represent the committee's input:

AURP greatly appreciates NIST's leadership in examining ways to improve federal laws, regulations and practices to increase the economic impact of federally sponsored research. A few years ago, AURP issued *The Power of Place 2.0: The Power of Innovation*, which includes many of the suggestions we offer here.

See, https://www.aurp.net/assets/documents/AURPPowerofPlace2.pdf

- 1. Support research park infrastructure and the development of Communities of Innovation. The recently enacted federal Opportunity Zones designated in the Tax Cuts and Jobs Act of 2017 are important tools to help finance infrastructure at existing and planned university research parks. Additional ways the federal government can target centers of innovation in the US, such as research universities and federal laboratories, should be explored.
- 2. Keep more corporate R&D in the United States by eliminating the link to university intellectual-property licensing in "private use" IRS restrictions in university facilities. IRS regulations on research sponsored by the private sector performed in university facilities built with tax exempt bonds unnecessarily prohibits a negotiated 'arms-length' discussion on ownership of resulting intellectual property that link university technology transfer practices (IRS Revenue Procedure 97-14). Negotiations between corporations and universities on intellectual-property licensing should be a business decision, and not one linked to the tax status of the facility; otherwise, corporations will continue to ship R&D to countries whose governments, in many



cases, provide financial support for the facilities where the corporate R&D is conducted and do not intervene in the negotiations on intellectual-property licensing.

The reform would provide an exception to the private business limits on tax-exempt bonds for research arrangements relating to basic research at tax-exempt bond-financed research facilities that meet the following requirements: (1) A qualified user (a State and local government or section 501(c)(3) nonprofit entity) would be required to own the research facilities. (2) A qualified user would be permitted to enter into any bona fide, arm's-length contractual arrangement with a private business sponsor of basic research regarding the terms for sharing the economic benefits of any products resulting from the research, including arrangements in which those economic terms (such as exclusive or non-exclusive licenses of intellectual property, and licensing fees or royalty rates) are determined in advance at the time the parties enter into the contractual arrangement. Groups such as the Council on Competitiveness have been asking for reforms in this area for many years.

- **3. Improve university technology transfer.** Reforming the Office of Management and Budget federal grant and contract funding model to encourage commercialization efforts by principal investigators and universities. For example, under current A-21 OMB Guidance, costs to develop a patent or other commercialization initiatives are unallowable as a direct charge to a research program, and the administrative cap on general and administrative expenses. Being able to use part of a grant to file for patents ought to be encouraged not discouraged in the federal grant system.
- **4. Support proof-of-concept and applied research funding**. Some federal agencies have applied research programs but they are inconsistently funded. For example, new research shows that projects funded by ARPA-E are five times more likely to produce a patent and scientific publication than projects funded by other R&D programs at the Department of Energy. These programs should be expanded across the federal government research enterprise. Source: *Anna P. Goldstein and Venkatesh Narayanamurti, "Simultaneous Pursuit of Discovery and Invention in the US Department of Energy," November 2017.*
- 5. Improve technology commercialization from federal laboratories by creating a Congressionally chartered technology intermediary organization. This could be based on the models used by research universities or states to form quasi-independent entities to take on the business aspects or technology commercialization working with the private sector. This would eliminate many of the structural and legal impediments inhibiting efficient tech transfer from federal laboratories.
- 6. Connect federal researchers with private companies through expanded use of Entrepreneurs in Residence and other programs.
- 7. Create more private sector involvement near federal lab and regional research clusters. AURP recommends the expansion of Enhanced Use Lease (EUL) authority, which allows leasing of federal land and equipment, to all federal agencies, not just the Department of Defense agencies (see 10 USC 2667). We recommend as well that an Executive Order be issued to encourage federal leasing of research assets near existing innovation assets, such as universities, research parks, and technology incubators to create innovation cluster.
- 8. Expand the corporate R&D tax credit.



- **9. Reform export controls** Reforming export controls and removing troublesome clauses from research projects not affecting the fundamental security of our country will encourage more partnerships between academia and industry. Uncertainty and the too strict application of the current export-control system have proved barriers in developing research relationships with industry and universities.
- **10.** Encourage entrepreneurship as a national goal and include entrepreneurship in STEM initiatives. Job creation in the United States will largely depend on start-up companies and individual entrepreneurs. The U.S. needs to embed the concept of entrepreneurship in all of our STEM (Science, Technology, Engineering, and Math) activities and policies, including under-represented minorities and women. The new paradigm should be ESTEEM (Encouraging Science, Technology, Engineering, Entrepreneurship, and Math).

Dr. Copan, as you may know AURP is hosting its 2018 International Conference at the Hotel at the University of Maryland College Park and we are hoping you will be able to participate as a speaker at the 5:30PM on October 25, 2018 at the event to provide the audience an update on the ROI initiative.

Sincerely yours,

Brian Darmody

Vice-chair, AURP Government Relations Committee

David Baker,

Vice-chair, AURP Government Relations Committee



UNIVERSITY OF ILLINOIS RESEARCH PARK | DISCOVERY DISTRICT OF UMD | SANDIA SCIENCE & TECHNOLOGY PARK | STANFORD RESEARCH PARK



APPENDIX A

AURP SUSTAINING RESEARCH PARK MEMBERS















Centennial Campus



Arizona State University Research Park

Tempe, Arizona

Phone: (480) 752-2016

Website: researchpark.asu.edu

Arrowhead Park at New Mexico State University

Las Cruces, New Mexico Phone: (575) 646-2596

Website: arrowheadcenter.nmsu.edu/arrowhead-park/

bwtech@UMBC

Baltimore, Maryland Phone: (410) 455-8400

Website: http://www.bwtechumbc.com

Buffalo Niagara Medical Campus

Buffalo, New York

Phone: (716) 854-BNMC Website: www.bnmc.org

Castle Innovation Plaza of Innovation

Nanjing, Jiangsu Province, China

Phone: 025-58537777 Website: www.castdnj.com/

Centennial Campus, North Carolina State University

Raleigh, North Carolina Phone: (919) 515-8810

Website: www.centennial.ncsu.edu/

Clemson University International Center for Automotive Research

Greenville, South Carolina Phone: (864) 283-7100 Website: www.CU-ICAR.com

















Coldstream Research Campus - University of Kentucky

Lexington, Kentucky Phone: (859) 231-8324

Website: www.uky.edu/coldstream/

Cummings Research Park

Huntsville, Alabama Phone: (256) 535-2018

Website: http://www.cummingsresearchpark.com

David Johnston Research + Technology Park, University of Waterloo

Waterloo, Ontario Canada Phone: (519) 888-4567 x36339 Website: www.rtpark.uwaterloo.ca

Delaware Innovation Space

Wilmington, Delaware Phone: (610) 203-6031

Website: www.deinnovates.org

Delaware Technology Park Inc.

Newark, Delaware Phone: (302) 452-1100

Website: www.deltechpark.org

Embry-Riddle Aeronautical University

Daytona Beach, Florida Phone: (386) 226-7770 Website: www.erau.edu

Science +Technology Park at Johns Hopkins

Baltimore, Maryland Phone: (410) 900-100 Website: www.forestcity.net

















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King Abdullah University of Science and Technology Research & Technology Park

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Knowledge Park, Inc. & Ignite Fredericton

Fredericton, NB Canada Phone: (506) 462-5021

Website: www.knowledgepark.ca

Knowledge Park @ Penn State

Erie, Pennsylvania Phone: (814) 898-6756

Website: www.knowledgepark.psu.edu/

Lehigh University

Bethlehem, Pennsylvannia Phone: (610) 758-3892 Website: www.lehigh.edu

LSU Innovation Park

Baton Rouge, Louisiana Phone: (225) 578-7555 Website: <u>www.lbtc.lsu.edu</u>













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Nanjing, Jiangsu Province, China

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Website: http://www.njhrcyy.com

Nebraska Innovation Campus

Lincoln, Nebraska Phone: (402) 472-5535

Website: www.innovate.unl.edu

PIIT / Instituto de Innovacion y Transferencia de Tecnologia

Monterrey Nuevo Leon, Mexico Phone: +52(81)8286-6600 Website: www.piit.com.mx/

Puerto Rico Science, Technology and Research Trust

San Juan, Puerto Rico Phone: (787) 523-1592

Website: www.prsciencetrust.org

Purdue Research Park

West Lafayette, Indiana Phone: (765) 588-3381

Website: www.purdueresearchpark.com

Research Park at the University of Illinois Urbana-Champaign

Champaign, Illinois Phone: (217) 333-8324

Website: www.researchpark.illinois.edu/

Research Triangle Foundation of North Carolina

Research Triangle Park, North Carolina

Phone: (919) 549-8181 Website: www.rtp.org

















UNIVERSITY of HOUSTON ENERGY RESEARCH PARK



Sandia Science & Technology Park

Albuquerque, New Mexico Phone: (505) 845-8107 Website: www.sstp.org

Texas State University - STAR Park

San Marcos, Texas Phone: (512) 245-7827

Website: www.txstate.edu/starpark

Texas Tech Univeristy Innovation Hub at Research Park

Lubbock, Texas

Phone: (806) 834-7283

Website: www.depts.ttu.edu/vpr/research-park/

University of Delaware STAR Campus (Science, Technology & Advanced Research Campus)

Newark, Delaware Phone: (302) 831-6629 Website: www.udel.edu/star

The University City Science Center

Philadelphia, Pennsylvania Phone: (215) 966-6000

Website: www.sciencecenter.org

The University Financing Foundation Inc. (TUFF)

Atlanta, Georgia Phone: (404) 214-9210 Website: www.tuff.org

Tech Parks Arizona

Tucson, Arizona Phone: (520) 626-4843

Website: www.techparks.arizona.edu

University of Houston Energy Research Park

Houston, Texas

Phone: (713) 743-3326 Website: www.uh.edu/erp

University of Maryland BioPark

Baltimore, Maryland Phone: (410) 706-8282

Web site: www.umbiopark.com



















The University of Maryland Discovery District

College Park, Maryland Phone: (301) 405-1990

Web

site: https://greatercollegepark.umd.edu/discovery-

district.html

University of Missouri System-Missouri Research Park

Columbia, Missouri Phone: (573) 882-6756 Web site: www.um-mrp.org

University of North Texas - Discovery Park

Denton, Texas

Phone: (940) 565-4459

Web site: www.discoverypark.unt.edu

University of South Florida Research Foundation

Tampa, Florida

Phone: (813) 974-5095

Web site: www.research.usf.edu

University Research Campus - University of Oklahoma

Norman, Oklahoma Phone:(405) 325-4625 Web site: www.urc.ou.edu

University Research Park, University of Wisconsin-Madison

Madison, Wisconsin Phone: (608) 441-8000

Web site: www.universityresearchpark.org

University Technology Park at IIT

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