



**ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS**

Creating Communities of Innovation

Building America's Communities of Innovation

Brian Darmody
Vice President
Association of University Research Parks

Associate Vice President
Research and Economic Development
University of Maryland



Headquarters
6262 N. Swan Rd., Ste. 105
Tucson, AZ 85718
P 520.529.2521
F 520.529.2499

Washington D.C. Office
10 G St. NE, Ste. 710
Washington D.C. 20002
P 202.248.5026
F 202.248.5099

www.aurp.net





Technology Challenges Facing the U.S.

- National governments abroad are building large research parks and science centers, attracting top U.S. researchers and corporate research dollars
- Science and technology are now global commodities
- U.S. private corporate research centers are greatly downsized or no longer exist
- Corporate and federal support [*sans* stimulus funding] for R&D at universities is declining
- We are in midst of global economic turmoil





The Power of Place: Goals

- Increasing the commercialization of U.S. Government R&D to help feed innovation to U. S. Communities of Innovation
- Increasing domestic corporate research in the U.S.
- Strengthening existing and developing new Communities of Innovation
- Creating, retaining and importing technology innovation start-ups





North American Research Parks

- Direct employment of more than 300,000
- Every research park job generates an average of 2.57 additional jobs, supporting over 750,000 jobs
- Only 13% of research park graduates failed, compared to 40% of technology start ups nationally





ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS

Creating Communities of Innovation

Jobs Impact of R and D Funding



According to U.S.
Department of
Commerce, every \$1
million in R&D
spending generates 36
jobs

American Association of State Colleges and
Universities: *Policy Matters*, October 2008





ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS

Creating Communities of Innovation

Wainova Atlas of Innovation

[1951 Edition, if it existed then]



Research Park

The U.S. invented the Research Park
100% of the Research Parks in the world
were in the U.S. in 1951





ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS

Creating Communities of Innovation

Wainova Atlas of Innovation: 2009 Edition

U.S. research parks make up only 70 pages
of the 500 pages describing research
parks around the world





U.S. National Innovation Policies: Disaggregation

- **Association level:** AURP, NBIA, SSTI, AUTM, National Angel Association, NASVF, FLC, NVCA, America's Defense Communities, Government-Industry-University Roundtable, COC
- **Federal level:** EDA, NIST, Dept of Commerce, OSTP, SBA, NSF, DOE



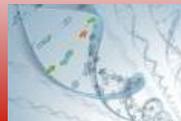


ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS

Creating Communities of Innovation

Power of Place Policy Initiatives

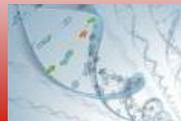
- Human Capital
- Physical Capital
- Technology Capital





Physical Capital

- Expansion and creation of new Communities of Innovation through federal loan guarantees [S. 583-Senator Pryor]
- Reforms in tax exempt financing of research facilities [private use issue]
- Enhanced Use Leasing (EUL) authority extended to all federal agencies for land and equipment





Human Capital

- Support entrepreneurs and Science, Technology, Engineering and Math (STEM)
- Reform immigration laws to import smart entrepreneurs to U.S.
- A 21st Century Land Grant Act and Entrepreneurial Leave policies for federal researchers to connect with the private sector





**ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS**

Creating Communities of Innovation

Land Grant Universities in the U.S.

This year we celebrate Lincoln's
200 birthday

President Lincoln signed the
original Land Grant Morrill Act.

This federal law connected public
universities with the then leading
industry – agriculture—to advance
science and to feed the world.

The Land Grant Act was the
nation's first technology transfer
program





**ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS**

Creating Communities of Innovation

THE WHITE HOUSE

WASHINGTON

August 4, 2009

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Peter R. Orszag
Director, Office of Management and Budget

John P. Holdren
Director, Office of Science and Technology Policy

SUBJECT: Science and Technology Priorities for the FY 2011 Budget

Agencies should empower their scientists to have ongoing contact with people who know what's involved in making and using things, from cost and competitive factors to the many practical constraints and opportunities that can arise when turning ideas into reality.





Financial Capital

- Reauthorize and expand SBIR/STTR/TIP programs
- Develop new access to seed capital for small entrepreneurial firms [Innovation America National seed fund]
- Create Congressionally chartered federal lab technology foundation to allow private sector access to \$20B. of fed lab internal research



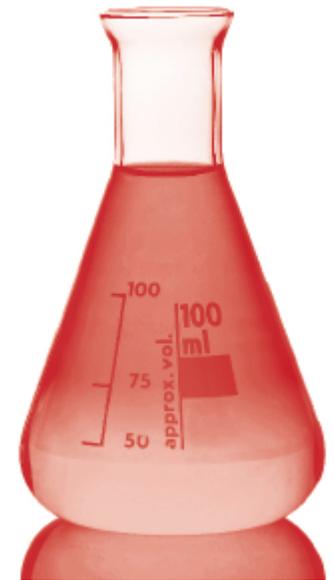


**ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS**

Creating Communities of Innovation

Federal Labs: Communities of Innovation

**Develop National Federal Laboratory
Foundation to help better commercialize the
\$20 billion of internal Research and
Development spending within federal Labs in
our communities**



PAGE 15



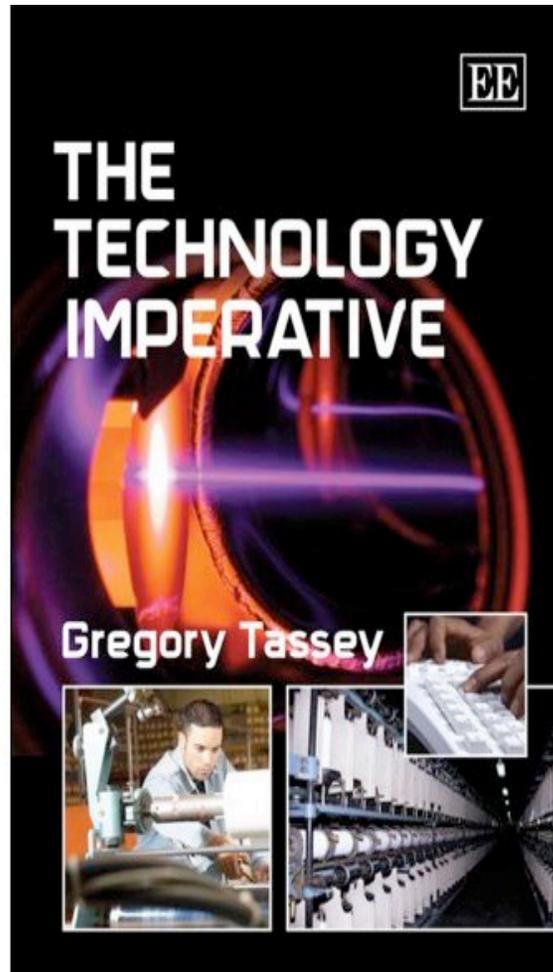
15

Integrating Federal, Academic and Private R&D Assets:

The Power of Place

Energy Innovation Hubs
'Science Under One Roof'





Why is Power of Place important?

‘Direct personal contact has been demonstrated by numerous studies to be the most effective way of diffusing technology knowledge’

-Gregory Tassef of the National Institute of Standards and Technology (NIST), *The Technology Imperative*, pg. 68





**ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS**

Creating Communities of Innovation



Better Science; Better Innovation; A Better World



PAGE 18



18



ASSOCIATION OF
UNIVERSITY
RESEARCH
PARKS

Creating Communities of Innovation



An Improved Economy

**Better Science;
Better Innovation;
A Better World**



PAGE 19



19