



LETTER TO SECRETARY LOCKE

**RECOMMENDATIONS TO FACILITATE
UNIVERSITY-BASED TECHNOLOGY
COMMERCIALIZATION**



Department of Commerce

National Advisory Council on
Innovation and Entrepreneurship

April 2011





DEPARTMENT OF COMMERCE
NATIONAL ADVISORY COUNCIL ON INNOVATION AND ENTREPRENEURSHIP

April 19, 2011

The Honorable Gary Locke
Secretary of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Secretary Locke:

Enclosed please find another copy of the letter that I and members of the National Advisory Council on Innovation and Entrepreneurship, have prepared for your consideration. After presenting the letter with our recommendations, we informed our higher educational colleagues at the Association of American Universities (AAU) and the Association of Public and Land-Grant Universities (APLU) who expressed a keen interest in adding their support to these recommendations. I am attaching a list of those names and institutions for your information.

Thank you for the opportunity to present these recommendations to you on these important matters.

Sincerely,

A handwritten signature in black ink that reads "Mary Sue Coleman".

Mary Sue Coleman
Co-Chair, National Advisory Council on
Innovation and Entrepreneurship



DEPARTMENT OF COMMERCE

NATIONAL ADVISORY COUNCIL ON INNOVATION AND ENTREPRENEURSHIP

April 15, 2011

The Honorable Gary Locke
Secretary of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Secretary Locke:

As the leaders of America's leading research universities, we are grateful for the commitment demonstrated by this administration to the research conducted by our students and faculty. At a time of significant budgetary challenges, we appreciate this administration's recognition of the continued need to invest in research and education through its support of strong budgets for the National Science Foundation, the National Institutes of Health, the Department of Energy's Office of Science, the Department of Commerce's National Institute of Standards and Technology, the Department of Defense Research and Engineering Organizations, and other such agencies.

Fueled by federal funding and encouraged by enlightened federal policies such as the Bayh-Dole Act of 1980, America's colleges and universities spur economic growth and prepare the next generation of scientists, engineers and entrepreneurs. Breakthroughs from university-based research have led to entirely new industries in sectors such as information technology, biotechnology, clean energy, and nanotechnology. Universities participate in regional innovation clusters, partner with existing companies to commercialize federally-funded research, nurture startups, attract and motivate commercialization talent, and educate and train a world-class workforce.

Already engaged in many activities that promote innovation, entrepreneurship, and the commercialization of research results, we are committed to working even more closely with industry, private foundations, venture capitalists and local, state and federal governments to enhance our efforts. These organizations, too, have significant roles to play in improving the technology commercialization processes, encouraging entrepreneurship, and instituting policies and programs that support regional economic development.

In pursuit of these shared goals, many of our universities are actively building campus-wide innovation ecosystems and expanding them into regional and national networks. But as we move forward, we also will employ new strategies, enhance existing activities, and expand our efforts in several areas.

Promoting Student Innovation and Entrepreneurship

Many campuses already offer courses aimed at teaching entrepreneurship, provide new opportunities for experiential learning, run student business plan competitions, support student clubs, and sponsor programs that put multidisciplinary student teams to work solving real world challenges. To promote student innovation and entrepreneurship further, we will:

- Build upon and expand these activities.
- Create new programs and grow existing activities on our campuses to encourage undergraduates, graduate students, and post-doctoral students to pursue careers as innovators and entrepreneurs.
- Develop new cross-college, cross-disciplinary programs that connect business with science, math, technology and engineering fields.
- Extend these programs to reach young people in underserved and low-income areas by involving community colleges in consortia for training and mentoring in innovation and entrepreneurial activities.

Encouraging faculty innovation and entrepreneurship

Financial incentives, faculty industry sabbatical leaves, campus prizes and other forms of recognition encourage faculty innovation and entrepreneurship. To promote these ideals further, we will:

- Expand efforts to encourage, recognize and reward faculty interest in research commercialization by providing incentives and encouraging engagements with industry, entrepreneurs and venture partners.
- Create or expand programs that connect faculty and students to the resources they need: industry partners, entrepreneurial mentors, translational research and “proof-of-concept” funds, accelerator facilities and venture creation services.
- Encourage streamlining and reduction in reporting and compliance requirements, which would allow faculty to increase time spent on proposal writing and research.

We also call upon the federal government to refrain from enacting policies, such as overly stringent regulations on conflict of interest, that discourage our faculty from working with industry or developing innovative technologies.

Actively supporting the university technology transfer function

Moving an idea effectively across the “valley of death” requires critical programs that include funding for proof of concept research and new mechanisms within the existing grant process that help defray the costs and risks. To actively support the university technology transfer function we will:

- Work to further reduce barriers to technology transfer to accelerate the rate at which ideas move from the lab to the marketplace. Central to this effort will be to ensure that our technology transfer offices are adequately staffed with skilled professionals who are provided with the resources to effectively and efficiently perform their jobs.
- Publicly promote the importance of technology transfer, to encourage participation by our researchers and encourage engagements with potential partners.
- Establish policies to encourage technology transfer offices to strive to maximize the societal and economic development benefits of discoveries, rather than maximizing revenues.

We also encourage government and state governments, and business collaborators to

- Expand networking conferences and events to exchange best practices and attract talent and resources for commercialization activities.
- Assist in these efforts by subsidizing the costs of research commercialization.
- Create a new SBIR program that could focus on commercialization with Phase 0 awards to be used by universities to engage in prototyping, funding mentoring talent and supporting market-readiness initiatives.
- Establish federal tax credits that could be provided to industry to encourage businesses and venture partners to leverage university technologies and start-up venture opportunities.

Facilitating University-Industry Collaboration

To increase the presence of industries on campus, many of our institutions have established a "front door" or portals to enhance access to research expertise, intellectual property, and commercial opportunities. To facilitate university-industry collaboration, we will:

- Further support programs that facilitate sharing of labs, facilities, student-faculty teams, and other resources.
- Strengthen strategic investments in university-industry collaborations aimed at advancing technologies of mutual interest and renowned research programs, designed to enhance market-pull of research.
- Develop ways to incentivize and support industry R&D professionals to collaborate with universities.
- Encourage the development of accelerators and public-private partnerships on or within close proximity to campuses; and find ways to provide innovation services to new enterprises external to the university.

We also call on federal agencies to assist by:

- Building entrepreneurship and innovation components into agency grants;
- Creating opportunities within federal agencies for high-risk innovative research;
- Allowing, as appropriate, commercial potential to be a part of grant proposals through the development of commercialization plans;
- Including the evaluation of market potential of new technologies as a milestone component in research;
- Facilitating the presence of industry on campus by creating an IRS exemption for university-industry collaborations built around university-owned intellectual property and conducted in university buildings;
- Promoting a DARPA-hybrid model of collaboration between small firms and universities; and
- Funding talent collaborations, especially for universities with less-developed innovation ecosystems.

Engaging with regional and local economic development efforts

Our universities will promote efforts to link regional and national stakeholders together in support of research and education critical to local businesses and industry by:

- Striving to expand existing university participation in national, regional and local economic development efforts.
- Fostering consortia of research universities and industries across regions.
- Working with the federal government and other stakeholders and professional associations to improve the coordination of the nation's venture accelerators, including development of a searchable database of all federally funded intellectual property.
- Working with local, regional, state and business leaders to promote access to assets such as research parks, accelerators, and laboratories to support regional industries, especially existing and small, young companies.
- Participating in developing and implementing economic strategies
- Partnering in community development and revitalization efforts.

Recognizing exemplary economic engagement

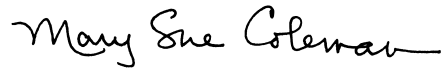
To accelerate achievement of the goals outlined in this letter, we call on the National Advisory Council on Innovation and Entrepreneurship and the Obama Administration to work with the higher education community to develop a national program to identify, recognize and celebrate exemplars of “economically engaged” universities. This program would:

- Raise awareness about the importance of higher education and economic engagement in driving regional and national economic growth
- Assist with the creation of organizational assessment tools and measurement criteria that capture the full range of our impact
- Educate higher education leaders about the practices of best-in-class institutions
- Recognize national role models and honor them with a Presidential Award for economic engagement.

Our universities, and the national associations that represent us, are committed to sharing best practices, and to identifying additional federal policies that will help to leverage investments made by government, and industry, in the research conducted at our institutions. Further, we will continue to use national forums, such the Association of University Technology Managers (AUTM), the University Industry Demonstration Partnership (UIDP) and the Commerce Department's National Advisory Council on Innovation and Entrepreneurship, to engage in an ongoing dialogue with industry, non-profit foundations and the government on how we can advance our shared objectives. We are also seeking ways to collectively implement recommendations made by the National Research Council in its October 2010 report, *Managing University Intellectual Property in the Public Interest*.

Although the specifics of our strategies will vary, reflecting the diverse missions and resources of our institutions, we pledge our universities to greater efforts to advance regional and national economic growth. We are dedicated to ensuring that the knowledge and technological breakthroughs developed at our institutions are rapidly and broadly disseminated to advance the nation's social and economic interests.

Sincerely,



Mary Sue Coleman
Co-Chair, National Advisory Council on
Innovation and Entrepreneurship (NACIE)



Michael Crow
Member, NACIE



G.P. "Bud" Peterson
Member, NACIE



Holden Thorp
Member, NACIE



Attachment: University Signatories

Mary Sue Coleman, President University of Michigan	Michael Crow, President Arizona State University
G.P. "Bud" Peterson, President Georgia Institute of Technology	Holden Thorp, Chancellor University of North Carolina at Chapel Hill
Robert M. Berdahl, President Association of American Universities	M. Peter McPherson, President Association of Public and Land-Grant Universities
MRC Greenwood, President University of Hawaii System	Stan L. Albrecht, President Utah State University
Edward R. MacKay, Chancellor University System of New Hampshire	Jack M. Wilson, President The University of Massachusetts
Randy Woodson, Chancellor North Carolina State University	James B. Milliken, President University of Nebraska
Michael F. Adams, President University of Georgia	G. David Gearhart, Chancellor University of Arkansas
R. Bowen Loftin, President Texas A&M University	Philip E. Austin, Interim President University of Connecticut
Philip L. Dubois, Chancellor University of North Carolina at Charlotte	Phyllis Wise, Interim President University of Washington
Luis M. Proenza, President The University of Akron	Rosemary DePaolo, Chancellor University of North Carolina Wilmington
Thomas F. George, Chancellor University of Missouri-St. Louis	Lou Anna Simon, President Michigan State University
John Dunn, President Western Michigan University	James W. Abbott, President The University of South Dakota
Eric J. Barron, President Florida State University	Milton D. Glick, President University of Nevada, Reno
James R. Ramsey, President University of Louisville	Gregory L. Geoffroy, President Iowa State University
Patrick T. Harker, President University of Delaware	James D. Spaniolo, President The University of Texas at Arlington
Daniel D. Reneau, President Louisiana Tech University	Roderick J. McDavis, President Ohio University
Scott S. Cowen, President Tulane University	Timothy P. White, Chancellor University of California, Riverside
Allen L. Sessoms, President University of the District of Columbia	Samuel L. Stanley, Jr., President Stony Brook University
Brady Deaton, Chancellor University of Missouri	Robert N. Shelton, President The University of Arizona
John D. Welty, President California State University, Fresno	Brian Rogers, Chancellor University of Alaska-Fairbanks
Glenn D. Mroz, President Michigan Technological University	Gary K. Ostrander, Vice Chancellor University of Hawaii at Manoa
Judy Genshaft, President University of South Florida System	Philip P. DiStefano, Chancellor University of Colorado, Boulder

Nancy Cantor, President Syracuse University	Graham Spanier, President Penn State University
Harvey Perlman, Chancellor University of Nebraska-Lincoln	Wallace Loh, President University of Maryland
Shirley C. Raines, President The University of Memphis	E. Gordon Gee, President The Ohio State University
M. Duane Nellis, President University of Idaho	Mark Nordenberg, Chancellor University of Pittsburgh
Guy Bailey, President Texas Tech University	Jean-Lou A. Chameau, President California Institute of Technology
Kirk Schulz, President Kansas State University	Bernadette Gray-Little, Chancellor University of Kansas
Satish K. Tripathi, Officer-in-Charge University of Buffalo	Mark P. Becker, President Georgia State University
Linda P.B. Katehi, Chancellor University of California Davis	Jay Gogue, President Auburn University
Ed Ray, President Oregon State University	Michael J. Hogan, President University of Illinois
John Sexton, President New York University	Robert C. Holub, Chancellor University of Massachusetts, Amherst
John C. Hitt, President University of Central Florida	James W. Wagner, President Emory University
Jared Cohon, President Carnegie Mellon University	David L. Chicoine, President South Dakota State University
V. Lane Rawlins, President University of North Texas	Dean L. Bresciani, President North Dakota State University
David M. Dooley, President The University of Rhode Island	Robert Bruininks, President University of Minnesota
Mark E. Keenum, President Mississippi State University	Sally Mason, President University of Iowa
Carol Z. Garrison, President The University of Alabama at Birmingham	Lloyd A. Jacobs, President The University of Toledo
James F. Barker, President Clemson University	Harold M. Maurer, Chancellor University of Nebraska Medical Center
Lee T. Todd, President University of Kentucky	David J. Schmidly, President University of New Mexico
Leo Morton, Chancellor University of Missouri – Kansas City	Jeffrey D. Armstrong, President California Polytechnic State University
E. Joseph Savoie, President University of Louisiana at Lafayette	John Peters, President Northern Illinois University
Michael K. Young, President University of Utah	Richard W. Lariviere, President University of Oregon
Elson S. Floyd, President Washington State University	David Leebron, President Rice University
John V. Lombardi, President Louisiana State University System	Matthew Goldstein, Chancellor The City University of New York (CUNY)
Jimmy G. Cheek, Chancellor The University of Tennessee, Knoxville	Richard H. Brodhead, President Duke University

Gregory H. Williams, President University of Cincinnati	Robert A. Wharton, President South Dakota School of Mines & Technology
Mark W. Huddleston, President University of New Hampshire	Bernard J. Machen, President University of Florida
Allan Gilmour, President Wayne State University	Mary Jane Saunders, President Florida Atlantic University
Peter Magrath, President Binghamton University	Muriel Howard, President American Association of State Colleges and Universities
Amy Gutmann, President University of Pennsylvania	Mark B. Rosenberg, President Florida International University
Robert A. Corrigan, President San Francisco State University	Diana Natalicio, President The University of Texas at El Paso
Richard L. McCormick, President Rutgers, The State University of New Jersey	Joel Seligman, President Rochester University
Barbara R. Snyder, President Case Western Reserve University	Carolyn (Biddy) Martin, Chancellor University of Wisconsin-Madison
Mark S. Wrighton, Chancellor Washington University in St. Louis	Susan Hockfield, President Massachusetts Institute of Technology
Teresa Sullivan, President University of Virginia	Marye Anne Fox, Chancellor University of California-San Diego
Michael McRobbie, President Indiana University	Morton Shapiro, President Northwestern University
Donald L. Beggs, President Wichita State University	George C. Wright, President Prairie View A&M State University
Bruce Benson, President University of Colorado System	David J. Skorton, President Cornell University
Ruth J. Simmons, President Brown University	Denise M. Trauth, President Texas State University
Daniel W. Jones, Chancellor The University of Mississippi	Stephen L. Weber, President San Diego State University
Ronald J. Daniels, President The Johns Hopkins University	David Boren, President University of Oklahoma
M. W. Scoggins, President Colorado School of Mines	Ann Weaver Hart, President Temple University
Mark G. Yudof, President University of California	Henry T. Yang, Chancellor University of California-Santa Barbara
George Blumenthal, Chancellor University of California, Santa Cruz	Shirley M. Tilghman, President Princeton University
Gene D. Block, Chancellor University of California-Los Angeles	Linda Brady, Chancellor The University of North Carolina at Greensboro
Renu Khator, Chancellor University Houston System & President of The University of Houston	Michael F. Adams, President University of Georgia
Francisco Cigarroa, Chancellor University of Texas System	C.L. Max Nikias, President University of Southern California

George M. Philip, President University at Albany, State University of New York	Carol Cartwright, President Bowling Green State University
Jerry Wartgow, Chancellor University of Colorado Denver	Kevin P. Reilly, President University of Wisconsin System



National Advisory Council on Innovation and Entrepreneurship
<http://www.eda.gov/nacie>