

RESOURCES FOR SELECTING BEST-IN-CLASS STRATEGIC AREAS

Grand Challenges

- Current 21st Century Grand Challenges
<http://www.whitehouse.gov/administration/eop/ostp/grand-challenges>
- NAE Grand Challenges for Engineering <http://www.engineeringchallenges.org/>

External Documents

- Technology and Innovation Enablers for Superiority in 2030, Defense Science Board Report <http://www.acq.osd.mil/dsb/reports/DSB2030.pdf>, October 2013
- The Heart of the Matter, American Academy of Arts and Sciences, http://www.humanitiescommission.org/pdf/hss_report.pdf, 2013
- US DOT's Strategic Plan for Research, Development, and Technology http://www.rita.dot.gov/rdt/sites/rita.dot.gov/rdt/files/rdt_strategic_plan_2013.pdf, 2013
- Novel Processes for Advanced Manufacturing: Summary of a Workshop, 2013
http://www.nap.edu/catalog.php?record_id=18345
- Adaptive Materials and Structures: A Workshop Report, 2013
http://www.nap.edu/catalog.php?record_id=18296
- Energy 20/20, A Vision for America's Energy Future, US Senator Lisa Murkowski, Feb. 2013 http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=099962a5-b523-4551-b979-c5bac6d45698
- National Network for Manufacturing Innovation: A Preliminary Design, Executive Office of the President, National Science and Technology Council, Advanced Manufacturing National Program Office, January 2013
http://www.whitehouse.gov/sites/default/files/microsites/ostp/nstc_nnmi_prelim_design_final.pdf
- Designing a Digital Future: Federally Funded Research and Development in Networking and Information Technology, prepared by your President's Council of Advisors on Science and Technology (PCAST), January 2013
http://www.whitehouse.gov/sites/default/files/microsites/ostp/nitrd_strategic_plan.pdf
- Biomaterials: Important Areas for Future Investment, 2012 NSF Biomaterials Workshop
- Fueling Innovation and Discovery: The Mathematical Sciences in the 21st Century, 2012
http://www.nap.edu/catalog.php?record_id=13373
- A National Strategic Plan for Advanced Manufacturing, National Science and Technology Council,
http://www.whitehouse.gov/sites/default/files/microsites/ostp/iam_advancedmanufacturing_strategicplan_2012.pdf, February 2012
- Materials Genome Initiative for Global Competitiveness, National Science and Technology Council,
http://www.whitehouse.gov/sites/default/files/microsites/ostp/materials_genome_initiative_final.pdf, June 2011
- NSF Strategic Plan for Fiscal Years (FY) 2011-2016
http://www.nsf.gov/news/strategicplan/nsfstrategicplan_2011_2016.pdf, 2011

Internal Documents

- Research Capacity Task Force Recommendations
<http://sponsoredprograms.mst.edu/media/research/sponsoredprograms/documents/msw/ord/Research%20Capacity%20Task%20Force%20Recommendations%20Report.pdf>
- Task Force on Educational Capacity <http://enrollment.mst.edu/capacity/>
- Blue Sky Task Force Combined Report, April 2010

External Efforts

- Arizona State University Center for Science and the Imagination <http://csi.asu.edu/>
- Purdue University Faculty Cluster Hiring Program
<http://www.purdue.edu/provost/documents/Faculty%20Cluster%20Hiring%20Sept%2010%202012-13%202.pdf>
- MnDRIVE: Minnesota Discovery, Research and Innovation Economy
College of Science & Engineering Cluster Hiring in Robotics, Sensors and Manufacturing
<http://cse.umn.edu/research/mndrive/>
- Stony Brook University Cluster Hiring Initiative
<http://www.stonybrook.edu/commcms/clusterhires/>
- Utah Science Technology and Research Initiative (USTAR)
<http://www.innovationutah.com/>
- UCLA Grand Challenge Project <http://www.grandchallenges.ucla.edu/>
- University of Connecticut Cluster Hires in the School of Engineering
<http://www.engr.uconn.edu/clusterhire/>
- University of Iowa Grand Challenges Initiative <http://ambi.uiowa.edu/>
- University of Rhode Island Cluster Hire Initiative <http://www.uri.edu/provost/cluster/>
- USC Viterbi Research on the NAE Grand Challenges
<http://viterbi.usc.edu/research/grand-challenges/>