Accelerating Innovation Research (AIR)

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Innovation Strategy for Sustainable Growth and Creation of Quality Jobs

EXECUTIVE OFFICE OF THE PRESIDENT: SEPT 2009

- Catalyzing breakthroughs for national priorities
- Promoting competitive markets that spur productive entrepreneurship
- Investing in building blocks of American Innovation

OFFICE OF SCIENCE AND TECHNOLOGY POLICY, FEBRUARY 1, 2010

- Promote the commercialization of promising technologies:

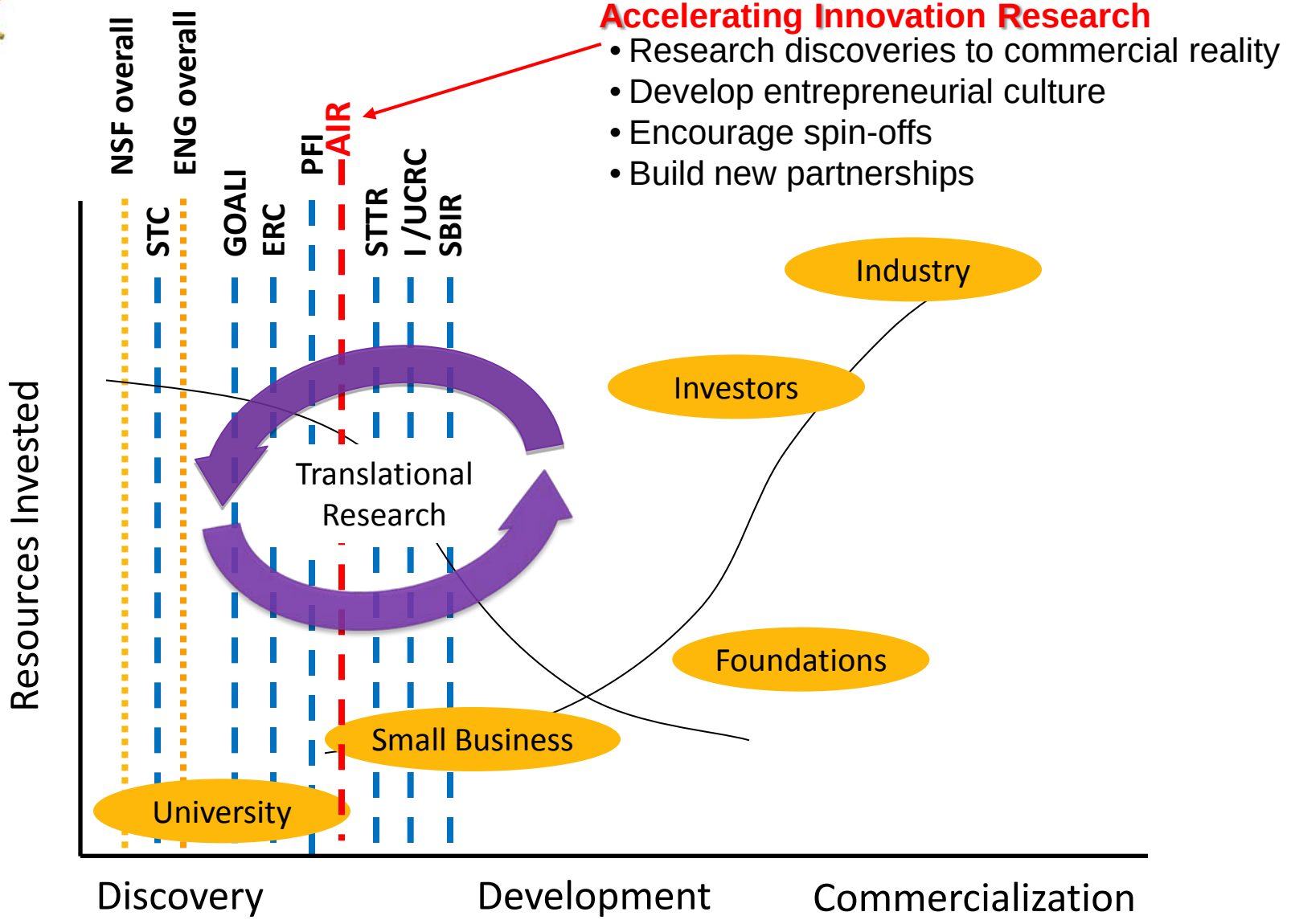
> The Budget proposes $12 million for the National Science Foundation (NSF) for a new Innovation Ecosystem in which universities partner with other institutions to increase the impact of the most promising innovations through commercialization, industry alliances, and start-up formation.

- With community input, NSF designed the program

Accelerating Innovation Research (AIR)

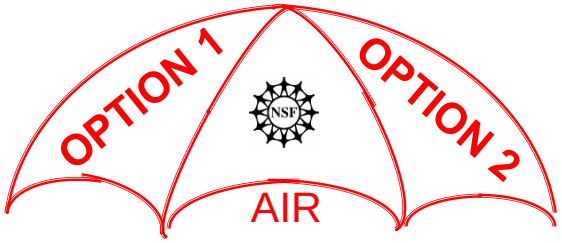
to spur the translation of fundamental research discoveries towards economic and/or societal impact

NSF Innovation Investments



AIR: Accelerating Innovation Research

Universities in partnerships with other institutions



OPTION 1

- Technology Translation Plan Competition
  - –Develop tech translation plan – path towards a full business plan
  - –**Prior/current NSF** awardee, and a faculty member
  - –Final Tech Translation Plan**:** 18 months
  - –Technology Showcase**:** 21 months

OPTION 2

- Research Alliance Competition
  - –Build synergistic research alliances between **NSF-funded** research consortia *and* others
  - –Others: Another research entity, small business consortium, local/regional innovation entity, …
  - –Third-party investment (1:1)

Additional Review Criteria

OPTION 1

- Quality of the description of the technology developed
- Plan for a fully functioning prototype (available by year 1)
- Funding: sources, amount, timing, contribution to technology maturation
- Preliminary market research study and patent search
- Plans to employ business consulting, advisory services, …
- Plans to engage students

OPTION 2

- Quality of the strategic plan, milestones, and deliverables
- Effectiveness of the plan to translate research and/or technology
- Commitment of partners, third party investors, stakeholders
- Effectiveness of partnership in catalyzing an innovation ecosystem
- Quality of management plan
- Effectiveness of assessment plan
- Relevance of proposed metrics
- Net added value to the students

Final Tech Translation Plan: Option 1

- Technical: results of proof-of-concept and prototype development
  - Evaluation, design issues/parameters, development strategy
- Legal: current status of IP, patent disclosures, licensing, EHS, liability.
- Manufacturing: estimate of capital investment at the commercial scale, projected unit costs, potential processes, …
- Marketing: competitive technologies, product launch plan
- Financial: required funds, estimated revenue, capital expenditures, payback period
- Human resources: management structure, key personnel, growth areas, …

Assessment & Metrics: Option 2

- Number of products developed
- Number of patent applications
- Partner revenue growth
- Increase in number of partners
- Number of jobs created
- Number of products transferred to industry
- Increase in baseline funding

10-608 Solicitation Results

- Option 1
  - 49 proposals
  - 15 awards (30.6%)
  - 2 EPSCoR states
  - $3.0M+
  - Sensors, Environment, Info/Computing, Nano, Materials
- Option 2
  - 18 proposals
  - 7 awards (39%)
  - 3 PFI*, 3 I/UCRC, 1 STC
  - $6.2M
  - Energy, Plant Genetics, 3D products, Water, Health, Biophotonics

* PFI: Partnerships for Innovation
I/UCRC: Industry University Cooperative Research Centers
STC: Science & Technology Center
EPSCoR: Experimental Program to Stimulate Competitive Research

Current AIR Award Locations

Option 2

Option 1

Questions