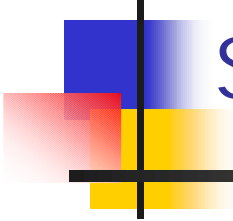


Allocation of Federal Resources for S&T

Evaluating and identifying priorities for federal research: the role of the Science and Engineering Communities



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for the CRA
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In “violent agreement” ...

- With the draft
- With most of what was said by previous speakers/panelists

- Here present a few additional emphases



Purely scientific allocation of S&T not possible

- We fund research for a variety of reasons that are not comparable
 - fundamental understanding
 - national security
 - increasing competitiveness/productivity
 - diagnose, cure and prevent diseases
 - protect environment
 - train scientists, engineers, tech. workforce
- Ultimately a question of competing values at least as much as ROI (DCF, NPV...)



Improving allocation process (1/3)

- Identify S&T areas without a strong mission agency champion
 - e.g., Learning S&T
- Set priorities within fields or to support a given policy objective
 - PCAST review of energy R&D portfolio
 - PITAC emphasis on software research
 - Astronomy, data base scientists prioritize



Improving allocation process (2/3)

- Extramural vs. intramural research
 - 1995 NAS Press report: Fund projects, not institutions
- Goals with respect to size, duration of grants
 - \$110K per PI for 2 years often inadequate
- General assessment of balance
 - especially biomedical compared to physical sciences and engineering, e.g., doubling NIH vs. (not yet) NSF



Improving allocation process (3/3)

- Identify research initiatives that are strong candidates for increased funding
 - exciting research challenges and new ideas
 - supports important national goals (quality of life, national security, economic growth)
 - under-funded areas (low funding rate, e.g., 3.2B\$ proposed, 90M\$ funded in ITR)
 - private sector under-investment (e.g., in IT)
 - national need to expand S&T workforce
 - accelerate discovery in other fields (e.g., IT)



Thanks for the opportunity!

- CRA happy to provide further input