Where Will The Funding Come From?

Trends in R&D by Agency
in billions of constant FY 2012 dollars

FY 2012 and FY 2013 figures are latest estimates.
1976-1994 figures are NSF data on obligations in the Federal Funds survey.
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CAREER TRENDS

Biological, Biomedical Sciences (Total)

Source: PhD Earner Data, NSF
Report Conclusions

- Current education opportunities for graduate students do not provide sufficient preparation for their careers after graduate school. **CHANGE (Breadth and Depth)**

**EXPECT:** Internships and other varied experiences; closer linkage to expectations of employers; greater diversity of employment characteristics.

- Departments should give thoughtful attention to maintaining a sustainable relationship between the availability of new graduates at all degree levels and genuine opportunities for them. **ATTENTION TO MARKET**

**EXPECT:** Market forces will continue to determine supply and demand, but they respond to each other with a 5-8 year delay.

- A postdoctoral appointment should be a period of accelerated professional growth that enhances scientific independence and future career opportunities.
Collaborations

• **Academic Chemistry** is a Cottage Industry, but there are significant movements to larger units (centers, institutes, start-up companies).
  - SBIR programs
  - “Providing Resources To Help Start-Ups Succeed” (ACS: *C&EN* March 31, 2014)

• **Collaborative Units:** Energy, Environment, Health