Update: Undergraduate Biology Education (UBE)
BIO AC Meeting, March 17-18, 2010
Overview

• Your advice and perspectives
• A very brief history
• FY 2010 investments and activities
• A baseline assessment
• Looking ahead: Components of a portfolio of investments
Soliciting your advice and perspectives

- **A future portfolio of activities**
  - **Institutional Change**
    - What issues should we be considering in developing support?
    - What possible elements would attract you to apply?
How we arrived here...

- EHR & BIO PDs
- EF CoV Report
- Joint BIO EHR AC meeting
- Penny Firth AAAS
- BIO-EHR WG
- Regional Conversations
- Vision and Change Meeting
- PULSE

2008

2009

2010
Activities in FY 2010

• RCN-UBE
  – “…to move a field forward or to create new research or education directions or opportunities through increased coordination and networking.”
  – Partnering with EHR
  – In FY 10, committed $1.38M
    • 5 full awards at $500K/5years, max
    • 7 incubator awards at $50K/1 year
Activities in FY 2010

- CCLI
  - Improve quality of STEM education for all undergraduates
  - Partnering with EHR
  - In FY 10
    - Type I awards: 8 for a total of ~$750K
    - Type 2 proposals in review
Activities in FY 2010

• STEM Talent Expansion Program (STEP) Center
  – Identify a national challenge or opportunity in undergraduate STEM education; propose a comprehensive set of activities to address it
  – EHR-BIO STEP Center activity is under development
    • Consistent with goals and recommendations of Vision & Change
    • Anticipated announcement in FY 10
Activities in FY 2010

- Recommendation from Vision & Change: “Boogle”
- A community web resource for UBE materials
  - Search like Google
  - Recommend like Amazon
  - Vet like Consumer Reports
  - Annotate like Wikipedia
    - Peter Bruns, HHMI
- A new Partnership for Undergraduate Life Sciences Education (PULSE)
A baseline assessment

External portfolio analysis

• Working with EHR partners who have extensive expertise
• Identify gaps and opportunities
• Point to development of metrics for assessment going forward

The Portfolio

• Research mentoring
  – REU Sites, Supplements
  – Undergraduate Research Mentoring in Biology (URM)
  – Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences (UBM)
• Networking, Best Practices
  – RCN-UBE, CCLI
• Research
  – RUI
Looking ahead

A future portfolio…

- BOOGLE
- Fellowships: Postdoc, Mid-Career
- Institutional Change
- STEP Center
- REU Sites, Supplements
- URM
- UBM
- RCN-UBE, CCLI
- RUI

Your advice and perspectives

- Institutional Change
  - What issues should we be considering in developing support?
  - What possible elements would attract you to apply?