



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



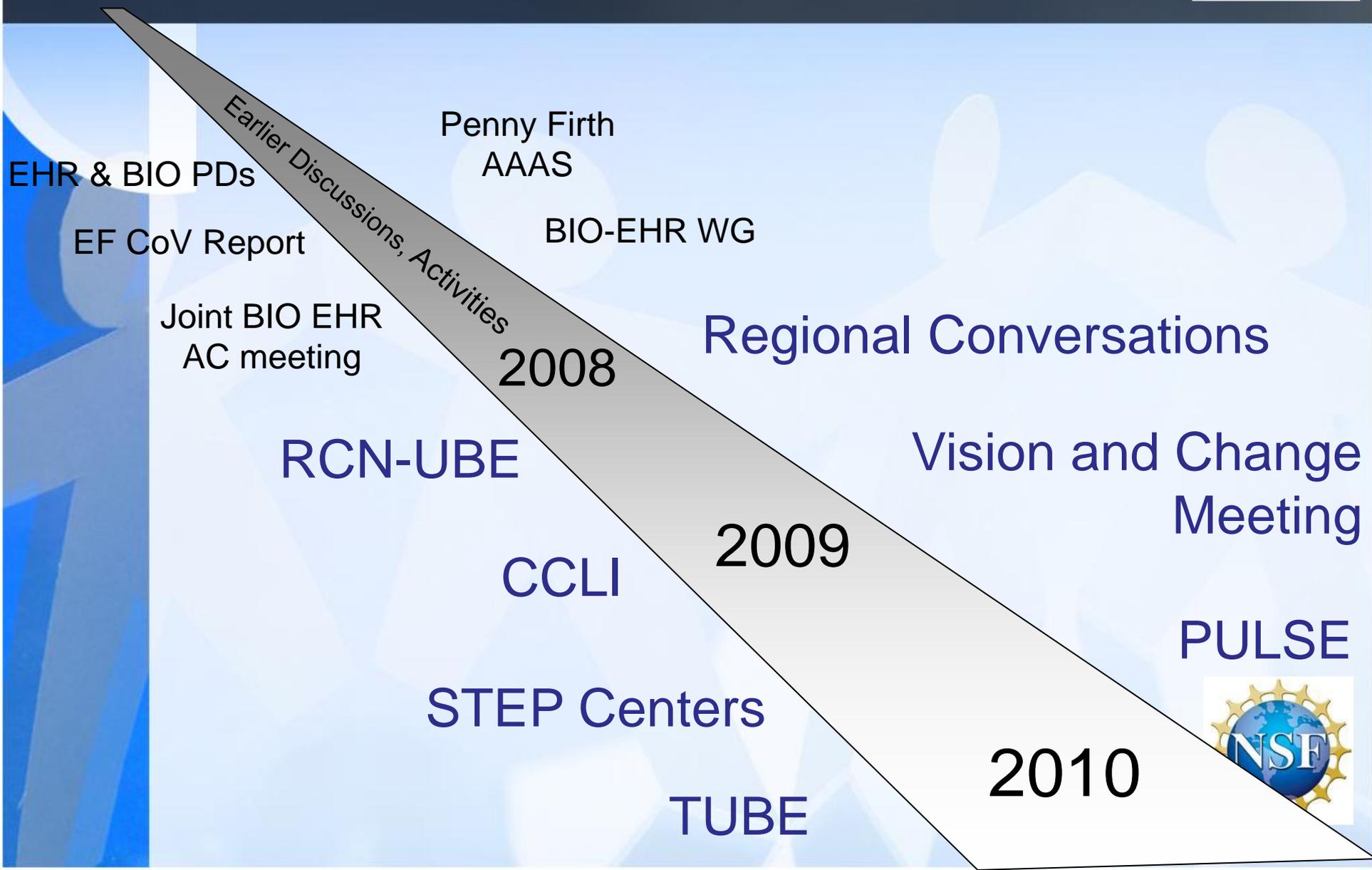
# Soliciting your advice and perspectives



- 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...



# 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?

