

THE NATIONAL

DIVISION ON EARTH AND LIFE STUDIES

ACADEMIES

Roadmap for the Future

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Workshop on Key Challenges in the Implementation of Convergence

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THE NATIONAL ACADEMIES
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Essential Characteristics for Successful Convergence

People

- Leadership is Key
 - Build from established strengths; expand in complementary directions
- Bottom Up and Top Down Involvement

Organizational

- Governance
- Program Management Culture
- Goal Orientated Efforts
- Core Facilities
- Funding Sources
 - Seed Money Critical

Culture

- Open, inclusive & values diversity
- Involves a Common Language
- Encourages a melting pot for interactions
 - Events to gather & share knowledge/ideas
 - Shared buildings or space
 - Local ecosystem important: “Technology moves by 2 feet”
- Flexibility

Barriers to Convergence

- Culture of Mutual Respect Across Disciplines
- Bureaucratic Overload
- Seed Funding
- Biologists are Averse to Math
- Disciplinary Constraints on Faculty Hiring and Promotion
- Academic accounting structures and barriers
 - Indirect cost returns
- Changes in the Academic Health Center Funding Model
 - NIH picks up gap?
- Funding Model for Convergence
- There aren't Sugar Daddies for Everyone!

Convergence Solutions on a Steady State Budget

- Cluster Hires
- Reduce bureaucratic boundaries
- Initiate Executive-in-Residence Programs
- Suggest online resources for convergent classes be developed or identified
- Encourage Social Events: coffee, pizza
- Repurpose Journal Clubs to Convergence Themes