Ideas Lab
Briefing for HPAC
Dec 18, 2018

Dr. Mary Voytek
Senior Scientist for Astrobiology
“If you always do what you always did, you’ll always get what you always got.”

Unknown author
How Did the Ideas Lab Originate?

Summer 2007, EPSRC contacts NSF in response to NSB report.

Begin dialog to share best practices.
NSF/NASA Ideas Lab

Inputs: Grand Challenge Topic, Creative People, Money

Creative Environment: “Ideas Lab”

Outputs: Potentially Transformative, Novel, Adventurous, Innovative, Interdisciplinary Ideas
Who is Involved?

Mentors
  • focus on the topic

Facilitators
  • focus on the process

Participants
Participant Selection Process

Open call for participants
• 2-page application
  • Expertise, experience
  • Teamwork, communication, “outside the box”

Selection panel
• Panel of Experts
• Advised by organizational psychologist

Selection of participants made by NSF/NASA Program Officers
Five day residential Ideas Lab

Real time peer review
Select project ideas

2 months
Submit full proposals
Theme: “The Origin of Translation”

Timeline

Due Aug 5, 2016
Participant Selections Aug 20, 2016
In Person “Ideas Lab” Late September 2016
Final Proposals Due December 2016
Origins of Life Ideas Lab Selections

NASA-funded:

2. The emergence of evolvable surface-associated interacting molecular ensembles: A chemical ecosystem selection approach, PI: David Baum (U Wisconsin)
3. Understanding Translation through Experimental Evolution, PI: Michael Travisano (U Minnesota)

NSF-funded:

1. Life Out of Water - Possibility of Evolution in Non-Aqueous Environments, PI: Loren Williams (GA Tech)
2. Biochemical, Genetic, Metabolic and Isotopic Constraints on an Ancient Thiobiosphere, PI: Boswell Wing (U Colorado, Boulder)