

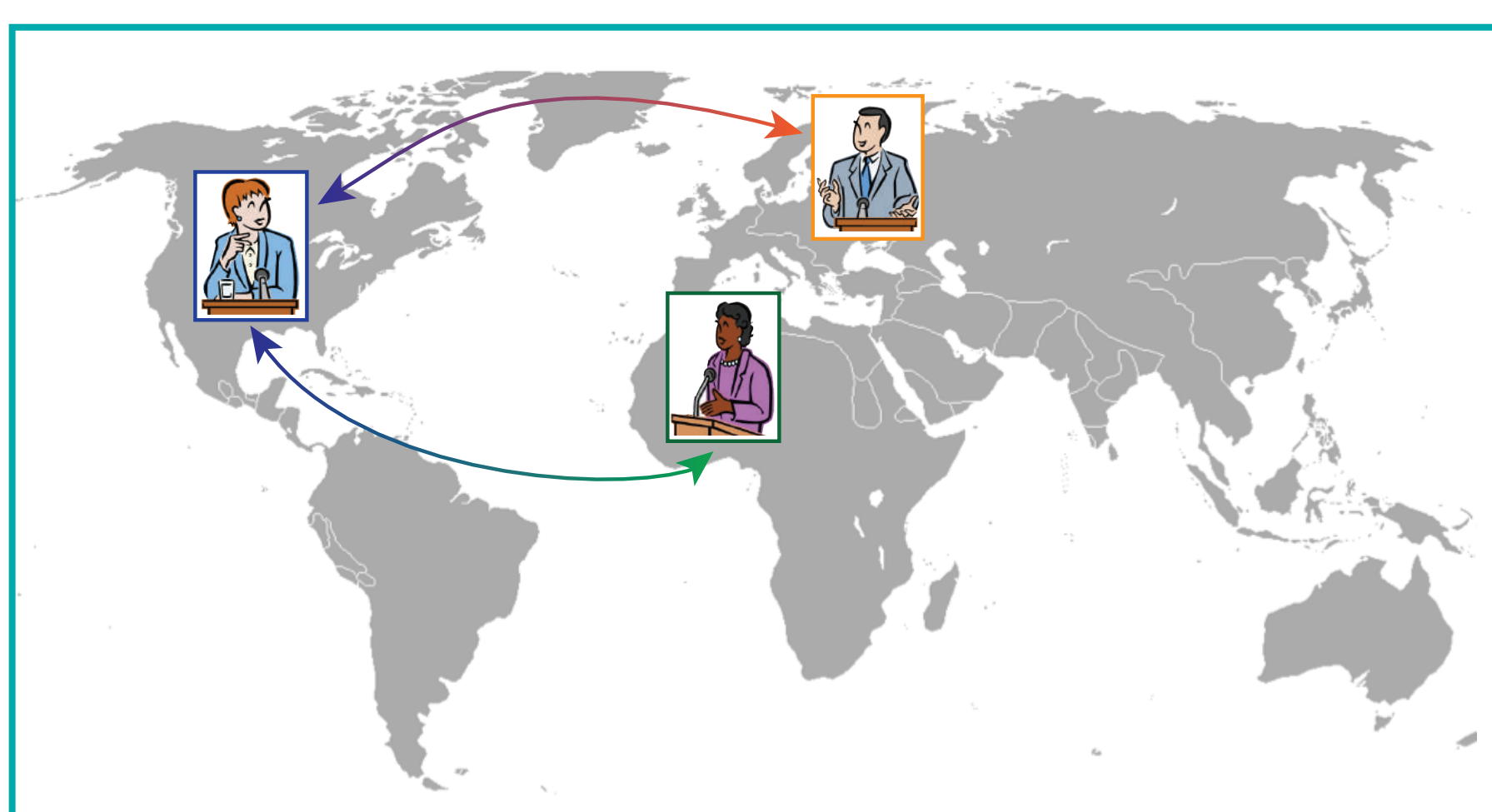
# STEM Ambassador Program

Synergistically bridging scientists with other communities

<http://stem-ambassadors.org>

## Premise

Just as U.S. Foreign Service trains ambassadors to interact positively with people in other cultures, STEM Professionals can engage as "STEM Ambassadors" to science-inattentive public groups if they receive academically appropriate rewards, contacts, and training.



## Leadership Team

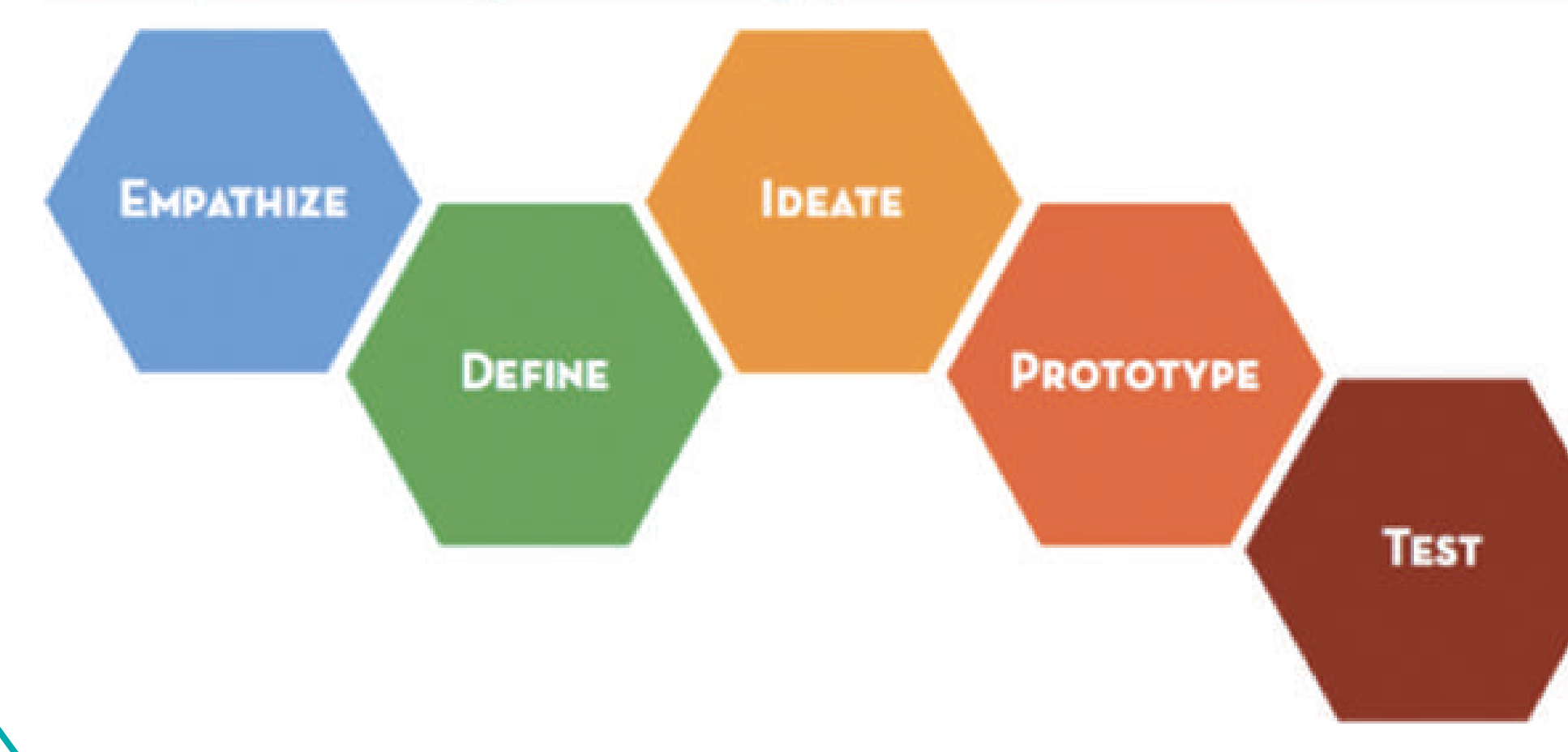
<b>Co-PIs:</b> Nalini Nadkarni, University of Utah Shelley Goldman, Stanford University Becky Menlove, Natural History Museum of Utah	<b>Senior Researchers:</b> Dennis Schatz, Pacific Science Center Sue Allen, Maine Mathematics and Science Alliance Becky Carroll, Inverness Research Associates	<b>Program Manager:</b> Natalie Toth, University of
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## Project Implementation

We have designed research to investigate 3 NSF-funded informal science education models to create a new model that more effectively engages STEM Professionals in the venues of science-inattentive publics.

- Portal to the Public (PoP):** Assists informal science education institutions to bring scientists face to face with the public in informal science institutions
- Design Thinking (DT):** Helps solve "wicked" problems through empathy, creativity, and prototyping
- Research Ambassador Program (RAP):** trains ecologists to engage non-traditional groups, such as urban youth and faith-based groups in community venues.

### 5 steps of design thinking process



## Creating Connections

- STEM Ambassadors will connect with community groups via:
- Common interest in science topic
  - Common hobbies/personal interests of the STEM Ambassador
  - Engaging groups with whom we have already connected (e.g., inmates, refugees, etc.)



UU Professor, Nalini Nadkarni presents her research on tree ecology to inmates at the Salt Lake County Jail.

## Intended Outcomes

- 50 STEM Professionals trained on best practices to engage science-inattentive publics
- 100 outreach events in Salt Lake Valley communities
- A suite of case studies research and participant evaluations
- A STEM Ambassador Program website and database network
- A systematic, authentic model and training that result in scientists advancing informal science education activities
- A potential model for other universities and communities
- Answers to our research questions about shifts in science learning and communication identities



Students observe and record details about the weather in their school yard.

## Research Questions

### Addressing Changes in Identity

- How can the STEM Ambassador Program integrate existing informal science education models to shift the self-identity of:
  - STEM researchers to STEM communicators?
  - STEM-inattentive publics to science-learning publics
- How can these interactions be shaped to be synergistic and sustainable?

## Audience/Communities

**STEM Professionals** from the University of Utah who seek to effectively connect their research with society.

**"Science-inattentive" public audiences**--those who are unaware of, or hostile to science or who do not physically have access to informal science education institutions.



Pothole Ecologist, Tim Graham, showcases the invertebrates caught in his pitfall traps, Moab, UT.

