HEALTHY BIRTH, GROWTH & DEVELOPMENT

knowledge integration

December 6, 2017

Grand Challenges Explorations: Motivations and Opportunities

Dr. Thea Norman, Senior Program Officer, Quantitative Sciences

Department of Biotechnology Govt. of India

birac
Ignite Innovate Incubate

Grand Challenges India

HBGD*ki* India: Leading the way toward investigator empowerment and global partnership

HBGD*ki*

HBGD*ki India*

HBGD*ki Brazil*

GCE: Analyzing large data sets with strategic value for HBGD

> **Proposed Grand Challenge Explorations**

India-focused GCE

To build interactive collaborations between India medical and scientific researchers and Indian data scientists.

Answer India-specific questions.

Brazil-focused GCE

To foster a research community based in Brazil and working with the 100 million person Bolsa Familia program.

Answer Brazil-specific questions.

Global GCE

To catalyze open research around key studies focused on enteric and diarrheal disease (EDD).

Answer EDD-specific questions and develop cutting edge data science tools.

India-focused GCE (1 of 2)

Building defined collaborations between Indian study investigators and data scientists

Desired outcomes:

1 *This GCE will* seed **Indian research science/data science collaborations** that are currently lacking. These collaborations will enable PI's to develop and apply cutting edge data science approaches.

2 *This GCE will* provide career opportunities for Indian data scientists to **impact global health.**

3 *This GCE will* identify India data resources (i.e., ICMR, programmatic government data, other) that would be of **high value** for answering India's toughest HBGD data problems.

HBGD*ki India*

India-focused GCE (2 of 2)

Building defined collaborations between India study investigators and India-local data science experts

Proposed Partners:
- India BIRAC PMU: managing the call
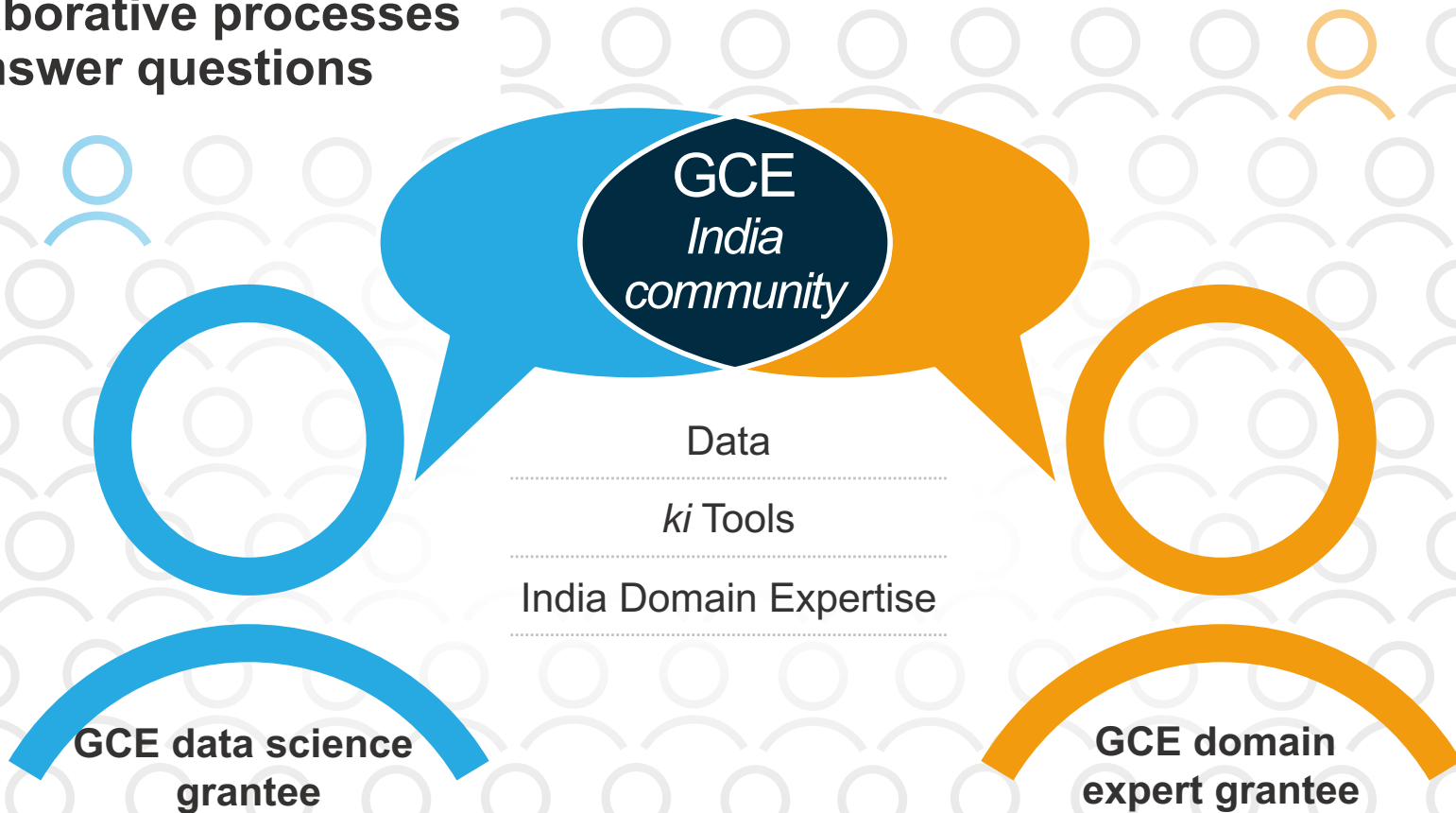- Other potential partnership opportunities: ICO, KNIT and ICMR

Call Topic:
- India's toughest HBGD problems where data and models can help provide answers and accelerate the delivery of solutions.
- Today's design-thinking session is all about getting everyone here to help select the best call topic.
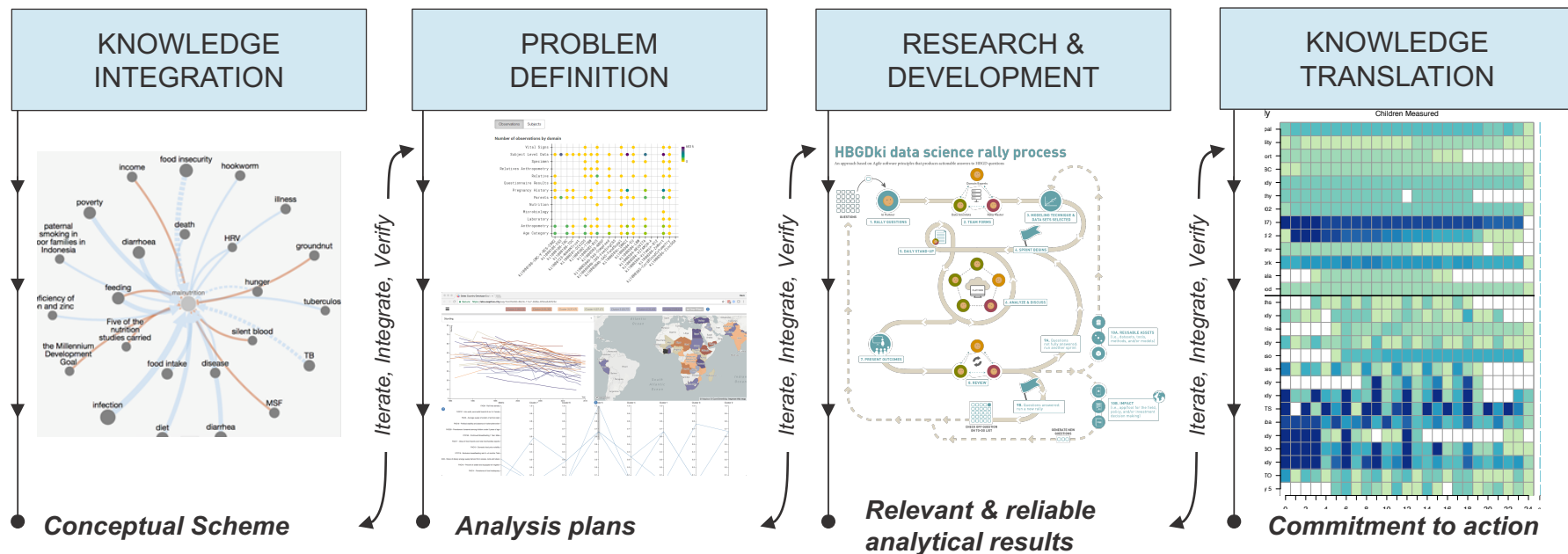
Proposal Considerations:
- Ideally each proposal team is multi-disciplinary.
- How to help PIs and data scientists find each other?
- How/where to access India-local data science talent?
- What data sets will be most important to make available to GCE teams?
- What tools and resources will the teams need to maximize their effectiveness?

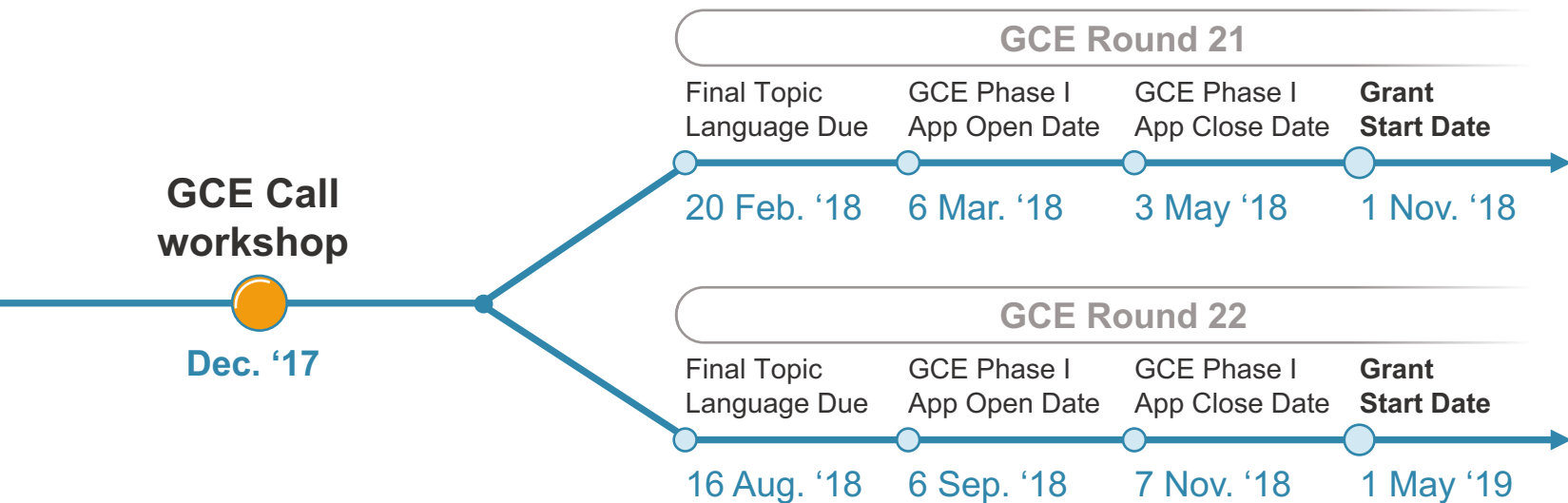# GCE India: Leveraging Ki tools to accelerate team-based innovation

Training funded GCE teams on collaborative data science tools and approaches

KNOWLEDGE INTEGRATION	PROBLEM DEFINITION	RESEARCH & DEVELOPMENT	KNOWLEDGE TRANSLATION

Iterate, Integrate, Verify (between each stage)

Conceptual Scheme

Analysis plans

Relevant & reliable analytical results

Commitment to action

Timeline for India GCE

GCE Call workshop

Dec. '17

GCE Round 21

Final Topic Language Due	GCE Phase I App Open Date	GCE Phase I App Close Date	**Grant Start Date**
20 Feb. '18	6 Mar. '18	3 May '18	1 Nov. '18

GCE Round 22

Final Topic Language Due	GCE Phase I App Open Date	GCE Phase I App Close Date	**Grant Start Date**
16 Aug. '18	6 Sep. '18	7 Nov. '18	1 May '19

Q&A