



# GLOBAL EVENT

JOHANNESBURG SOUTH AFRICA

Theme 3: Keeping science relevant and future-focused

## **VIRTUAL LABS**

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# The Challenge

“With modern communications technologies, it may be possible for North-South collaboration to link labs in a way that optimizes what each does best, given their equipment, location and supply realities.”

*“Can we reflect on the way that developing country labs can collaborate in cutting edge projects but do not need to buy everything and replicate labs instantly, but utilize partnerships, staff linkages and exchanges, modern communications technology and collaborative projects as virtual labs?”*

Merle Faminow, IDRC



# Background

- Development funding cycles short - often 2-4 years
- project may require analytical lab capability that is not available locally
- Building local lab capacity often difficult or impossible within the project time line as delays in securing equipment (university and national bureaucracies, etc)
- How does one achieve project objectives while at the same time contribute to local capacity development?
- Your thoughts on models that have proven successful?

# Canadian International Food Security Research (CIFSRF) Fund Model

- Eligible partners are research, development and private sector organizations from Canada and designated countries
- Two or more partners in project
- At least one partner must be a Canadian organization
- Where possible laboratory work is done in developing country but Canadian labs provide assistance when local capacity is not available

# Two CIFSRF Examples

- APM project – alleviating poverty and malnutrition in agrobiodiversity hotspots in India
- Partners Swaminathan Foundation and University of Alberta
- Project objectives to examine the impact of sustainable-integrated agriculture systems on nutritional security
- Laboratory work conducted in both India and Canada

# Vaccine Development

- livestock vaccine development project - ARC in South Africa working with University of Alberta and VIDO
- Development of heat stable vaccine against multiple livestock diseases (lumpy skin, rift valley fever, sheep and goat pox) in sub-Saharan Africa
- Goal to produce low cost vaccine that would have wide acceptance among small farmers
- Basic science at UAlberta, vaccine development in Africa

# Turning a challenge into an opportunity

- Students as the glue that bind the partners together
- Canadian and development partner students (and staff) work in Canada as well as on development project
- A model that results in a two-way transfer of knowledge, truly a win-win







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