



Madagascar Health: The Crucible

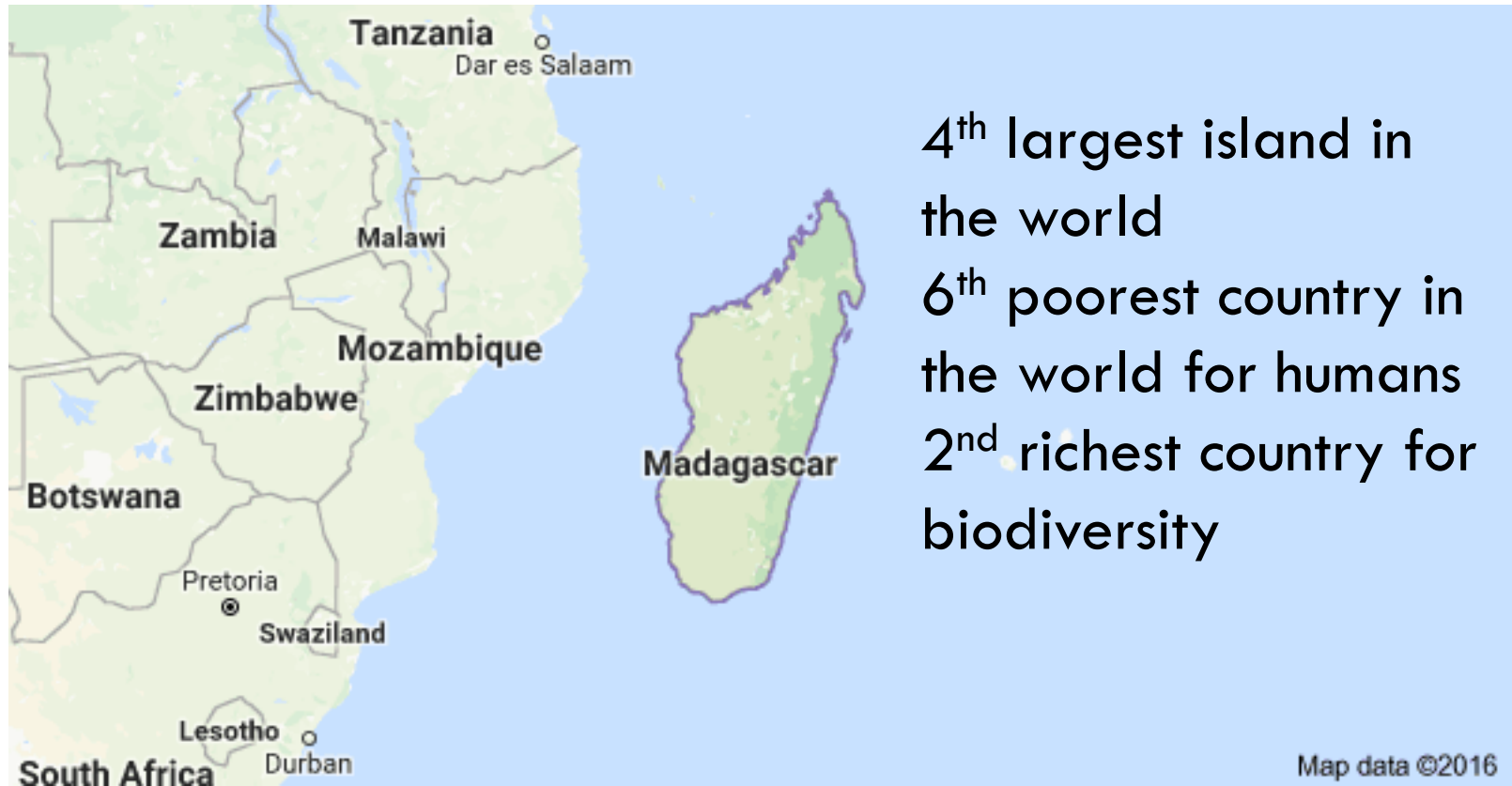


Dr. Patricia C. Wright
ICTE, Stony Brook University
Centre ValBio, Madagascar



Stanford, February 8, 2017

Madagascar: The Dilemma



the bridge of connection



Villages and forest together



Remote villages 2 day walk from road

9

8

7

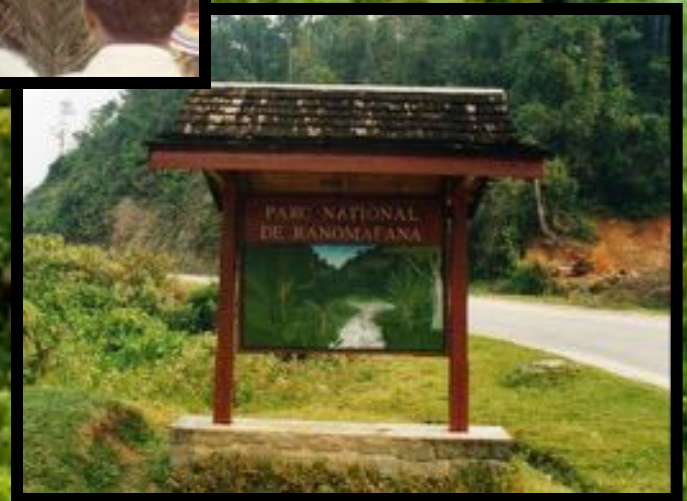


First health team 1988- Key

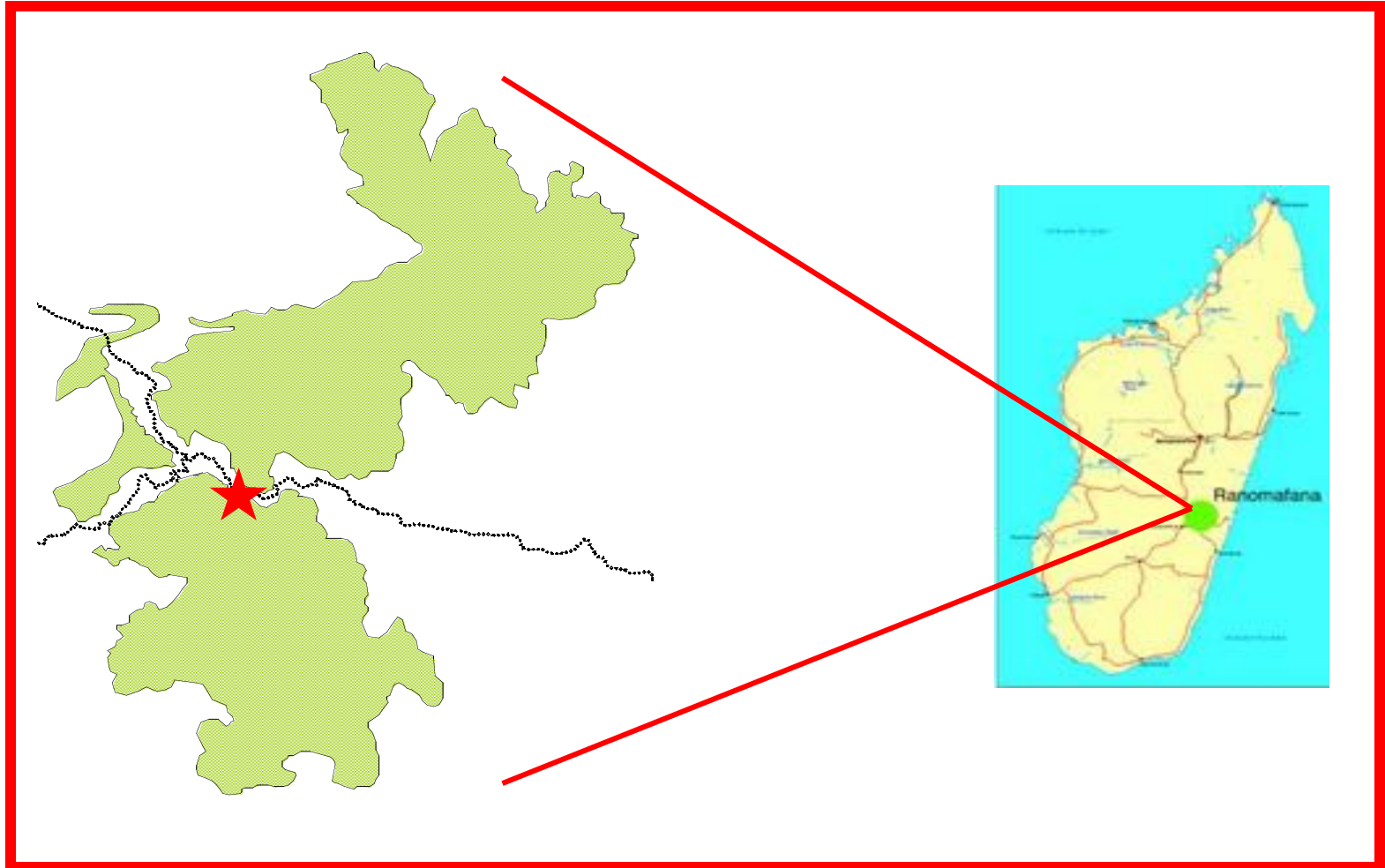


Ranomafana National Park

Inaugurated 1991
UNESCO World Heritage Site 2007

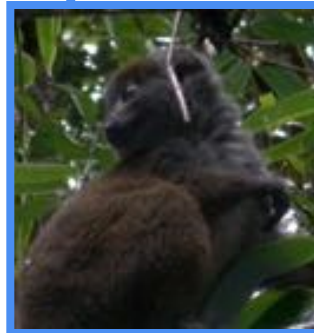
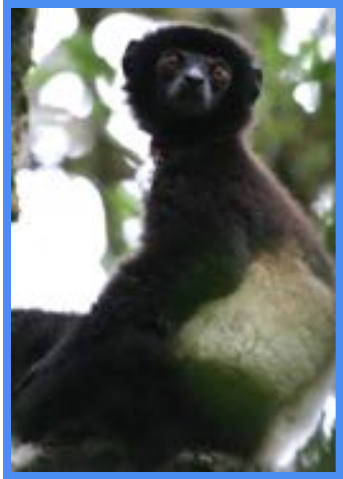
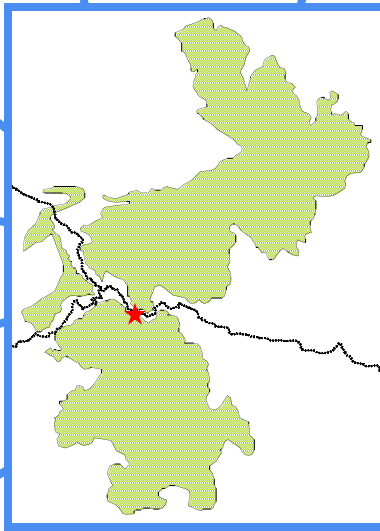


Ranomafana National Park



Stronger Bridge: Forest and Village





From the local level



To the Ministerial Level,



Centre ValBio Research Station, 2003



NamanaBe Hall (2012)



Workshops and Conferences



Modern Laboratories

Molecular Lab

Infectious Disease Lab



Health/ Hygiene to Remote Villages



Health and hygiene lessons for
10,000 Malagasy people

Understanding cultural barriers



Reaching out to schools

- 52 villages
- 38 schools



Helping through disasters-Pivot & CVB



Developing the economy

CVB and PIVOT employ
200 Malagasy
Women's groups
Essential Oils



Increasing tourism for economic growth



The Foundation: Long-Term Research



Ecological Data

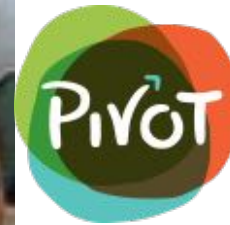


Behavioral Data



Capture Data

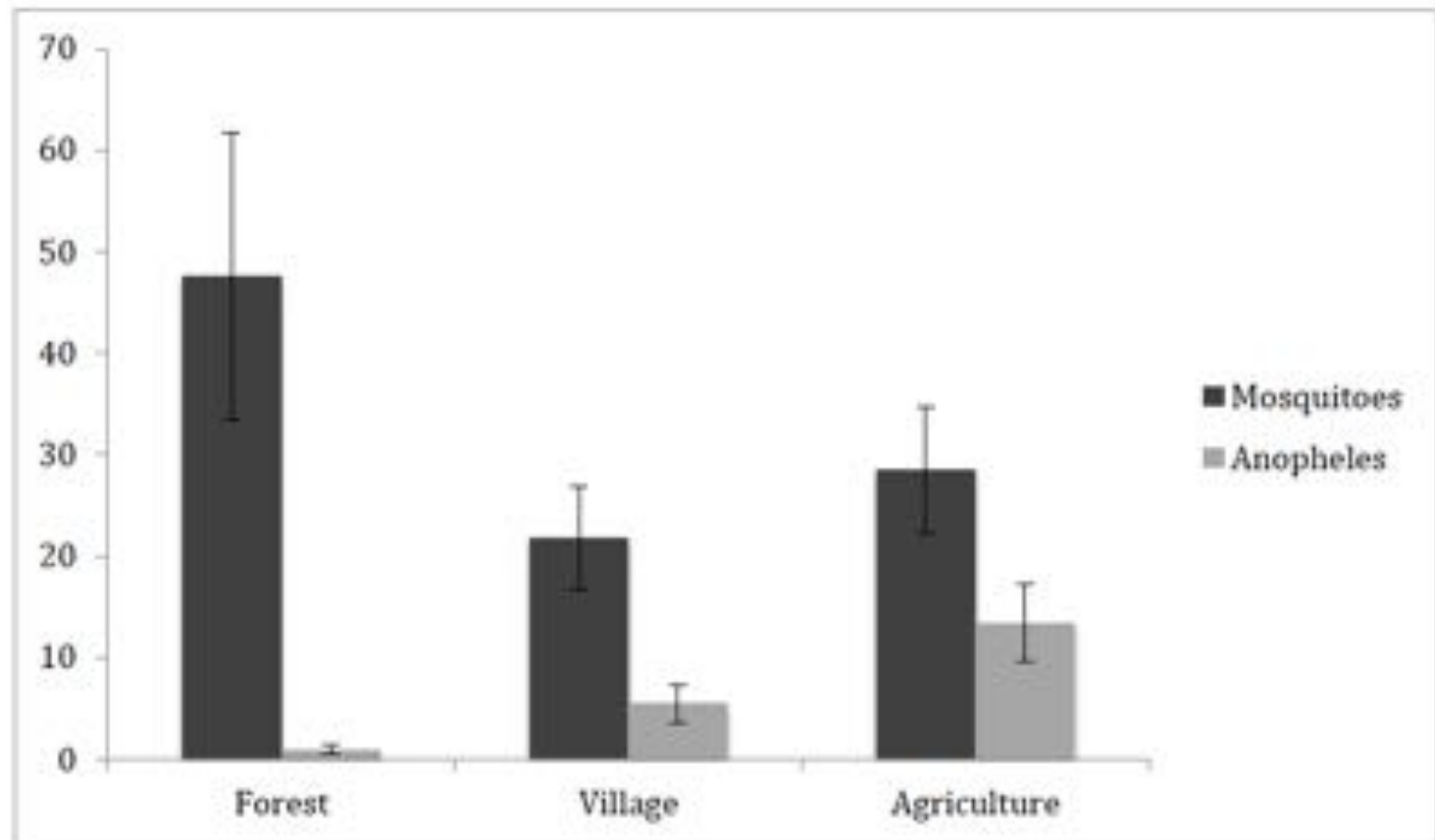
Long term Health team plus PIVOT



Planetary Health-forests protect water

- Forests act as filters for clean water
- Forests protect from malaria (Zohdy et al. 2015)
- Forests protect against erosion and cyclone damage. (Herrera and Wright, in prep)

Forests protect from malaria Zohdy et al., 2015



Forests filter



Diarrhea, typhoid, schistosomiasis



T. Gillespie, D. Bublitz, Bodager, etc.

Forests prevent erosion



Forests reduce river silting



Reforestation for Planetary Health

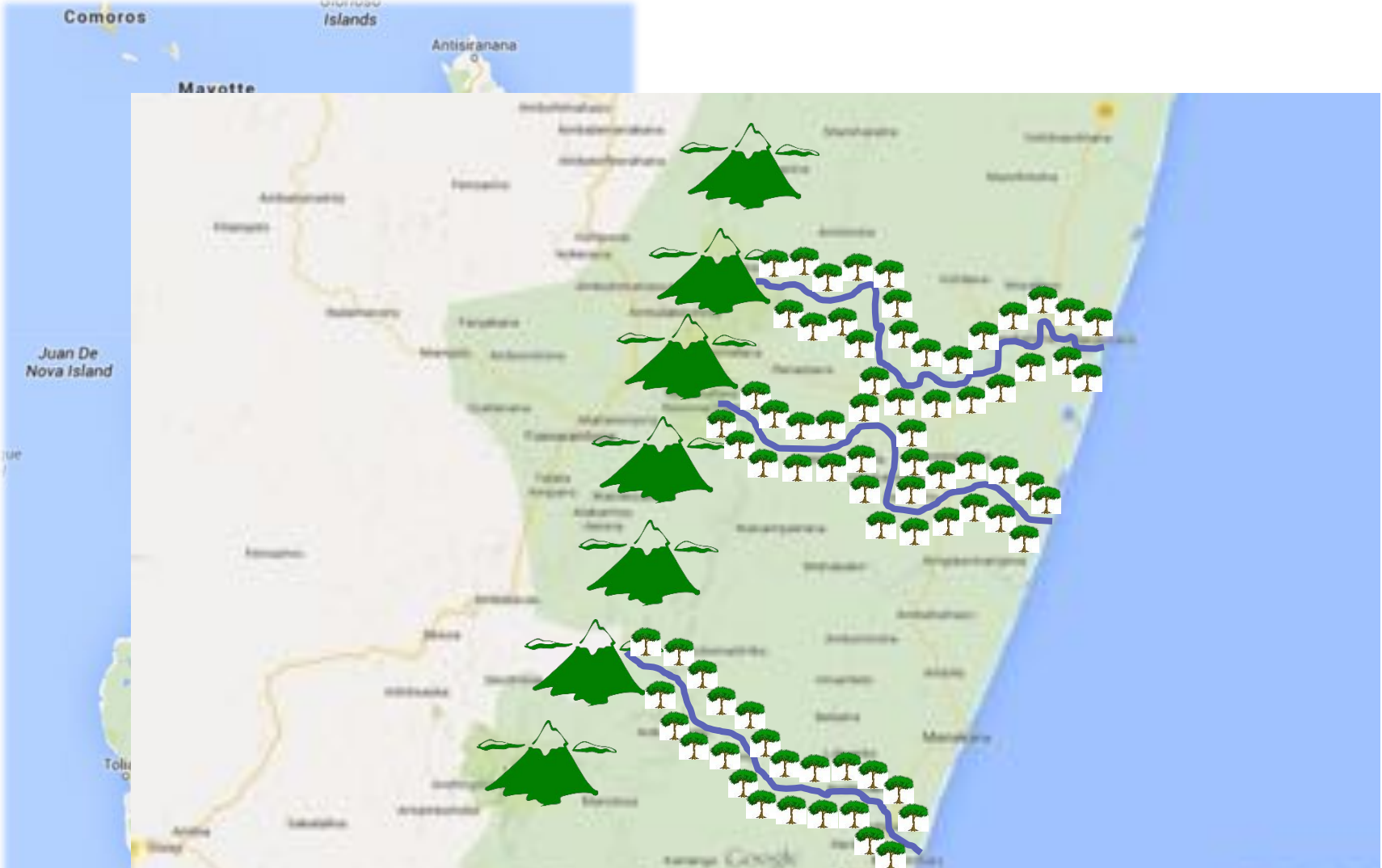
Restoring degraded habitats with endemic trees



Grow high value crops inside forest



Reforest the Riverbanks first!



Health Hazard-Goldmining (Hg)



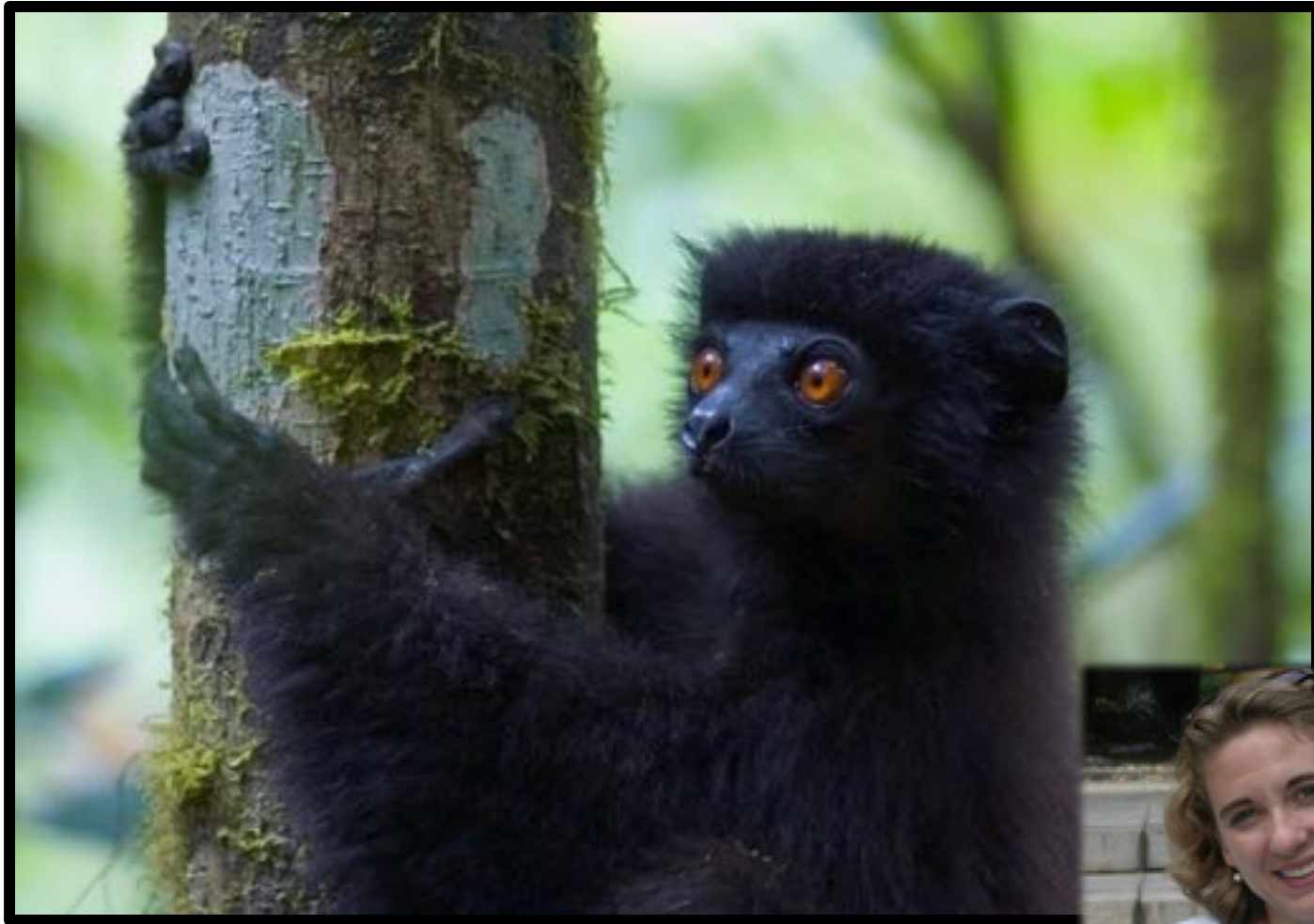
Molecular Health- Alzheimer's



Genomic Medicine-Diabetes



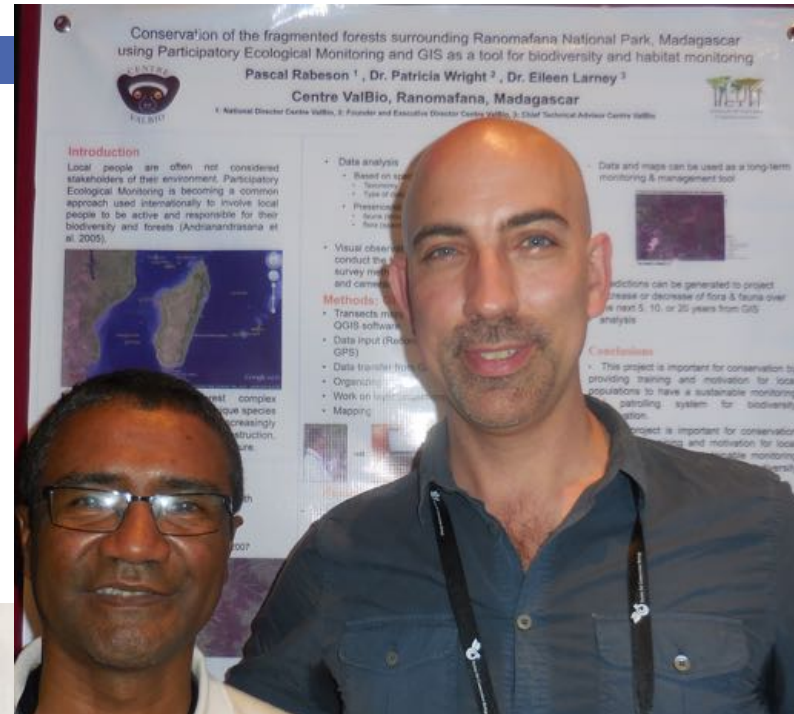
Milne Edwards' Sifaka - Aging



Golden Bamboo – Cyanide Diet



Core of People for Health Innovation



Ingredients for success

- Trust of the people (30 years)
- Working at all levels-Ministers to villages
- Technology and Innovations
- Respect the culture
- PIVOT's infrastructure upgrades
- Collaboration with villages for restoration ecology and Ecocrops
- Health with systems approach
- Molecular medicine

A photograph of a person standing on a concrete balcony with a white metal railing, overlooking a dense, lush green forest. The balcony is part of a modern building with concrete pillars and a brick wall. The person is wearing a white t-shirt and shorts, and is looking out over the forest. The sky is clear and blue.

Planetary Health for Madagascar

Thank you



<http://www.centrealbio.org>



Centre ValBio is the hub



If they held our world in their hands



From the local level

