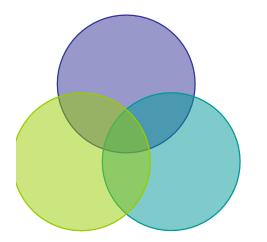
Working with scientists: some ideas

Carlos Casasús

AMPATH Workshop: Fostering Collaborations and Next Generation Infrastructure



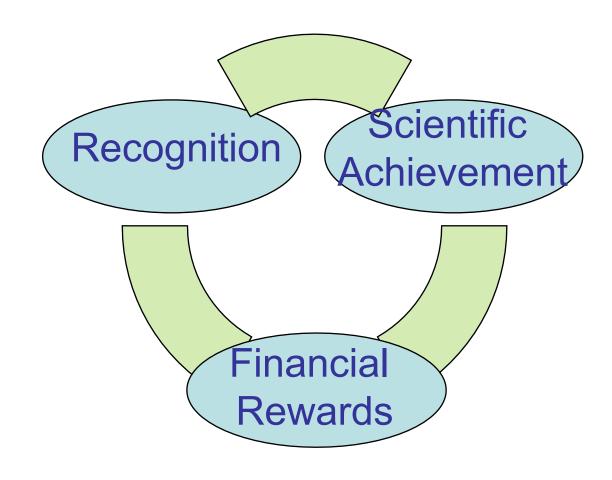
Miami January 31, 2003

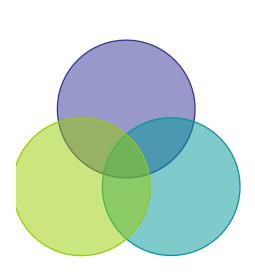
3 ideas

- Scientist also respond to incentives
- Scientific discovery is increasingly dependent on cross fertilization of disciplines
- Physical networks ease the workings of human networks

Scientist respond to incentives...

 Complex profile of needs...





What gets measured gets done...

 If you want to influence scientific development it is important to define desired outcomes and to measure them

 Dispense the incentives in response to the achievement of desired outcomes

Some aspects of the US scientific system...

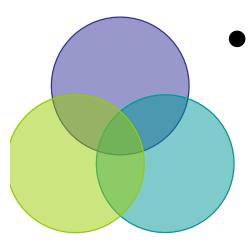
- NSF competitive calls for proposals (financial awards follow clear scientific objectives)
- Scientists can obtain financial rewards from the markets (industry- academic partnerships, venture capital)
- Tenure systems in academia (recognition and financial security follow the achievement of specific career mileposts)

Scientific discovery is increasingly dependent on cross fertilization of disciplines

- It is about human networks
- It is about the cross fertilization of human networks
 - Multiple disciplines
 - Multiple regions
 - Multiple organizations
- It is about human NAP's

The human nap...

- Participates in many human networks
 - Can speak the language of each network
 - Is respected and known in each network
- Connects human networks
- Works without formal power (usually can not dispense formal incentives)



Human naps

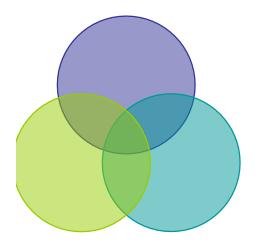
- Born
 - Social
 - Curious and informed
 - Multiple backgrounds
 - Predictable
 - Trusted
- or made?

Fostering human naps...

- Recruiting
- Imparting networking skills (the rolodex, the mailing list)
- Measuring and rewarding human naps
- Networking events (as diverse as possible)
- Networking projects (Ampath, Clara, El niño)

Human networks are created and operate at human speeds

- Take time to be created
- Can not be reconfigured at will
- Can not "designate" human Nap's at will



Physical networks ease the workings of human networks

- Physical networks without human networks don't work
- Efficient physical networks follow human networks, but
- Global and diverse human networks can not be sustained without physical networks

Six degrees of separation...

 This can happen because some people can bridge human networks

