



Initiative for Open Innovation

Creating a more open, inclusive
and equitable innovation system

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Conference on Intellectual Property and Public Policy Issues

www.openinnovation.org

Questions (Agriculture):

- Who has patented the rice genome, and where?
- Who controls the tools for agricultural biotechnology?
- What does this mean for agricultural researchers in the developing world and for food security?
- Who is reaping the benefits from the world's biodiversity? Where and how?
- What is going on in crop-based biofuels innovation? Who is controlling this technology

Questions (Environment):

- How important are the emerging firms from China and India in the development of new climate-friendly technologies?
- To what extent are the oil majors shifting their research effort into renewable energy?
- What opportunities are there for algal biofuels in what nations?
- What are the trends in Photovoltaic technology innovation?
- What new technologies are emerging for water treatment?

Questions (Health):

- Where can one legally produce and export generic versions of patented medicines?
- Who are the main players developing the next generation of AIDS treatments, and where are they investing resources?
- What obstacles do patents present for the rapid development and dissemination of vaccines for a flu pandemic?
- What are the patterns of new research into neglected diseases, and is this research likely to evolve into effective treatments?
- What opportunities are there for vaccines using new technologies?

Mapmakers, Mariners, Shipwrights & Sailors

Patent Intelligence and the struggle for equitable innovation parallels the development of navigation to enable maritime commerce and fair trade.



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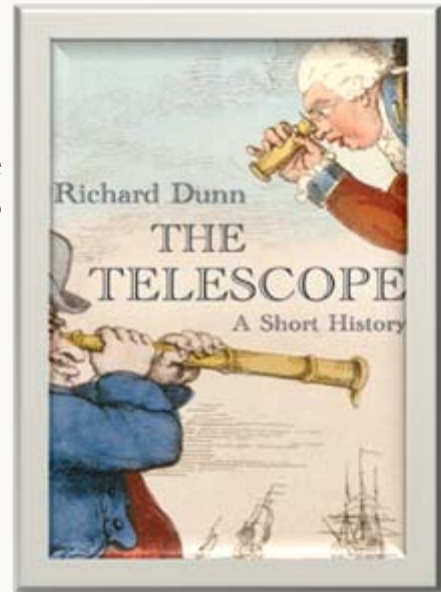
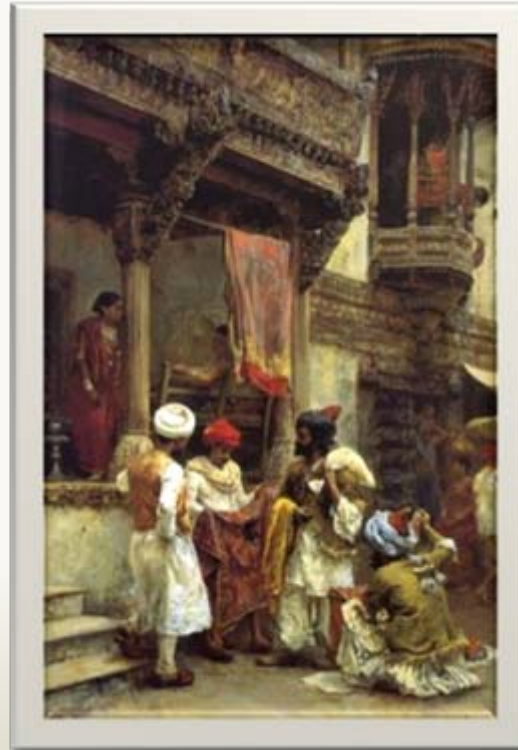
Measurement is essential and needs tools.



But Human judgment is critical

How deep is the water?

How close is the competition?



How much is it worth?



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When navigation is difficult and inaccurate, the voyage is expensive and risky

Maritime Trade & Commerce

- Little data
- Poor and outdated Maps
- Poor navigation tools
- Fragile ships
- Poor sailing properties
- Limited knowledge of trade partners

Innovation from Science & Tech

- Fragmented and poor patent information
- Little skilled interpretation
- Lack of freedom to operate advice
- Lack of collaborative legal and normative instruments to decrease costs and mitigate risk

When the voyage is expensive and risky, only the highest margins and markets are served.

Maritime Trade & Commerce

- Usurious trade terms
- Low relevance to weaker partner
- Little reciprocity in trade

Innovation from science & tech

- High price drugs and seeds
- Neglected diseases remain neglected
- Environmental degradation increases

Global Patent Data

All jurisdictions, full text, all languages

Regulatory data

e.g. Orange Book,
USDA APHIS

Science & Technology literature

Nature Publishing Group,
NIH PubMed&PLOS

Business / Applicant

SEC filings, Grey Literature,
License Press releases

Legal Status & Family

INPADOC, WIPO PatentScope,
National Phase Data, Case Law

Genes and compounds

Patent Lens Sequence Server,
GenBank, PubChem, ChemBank

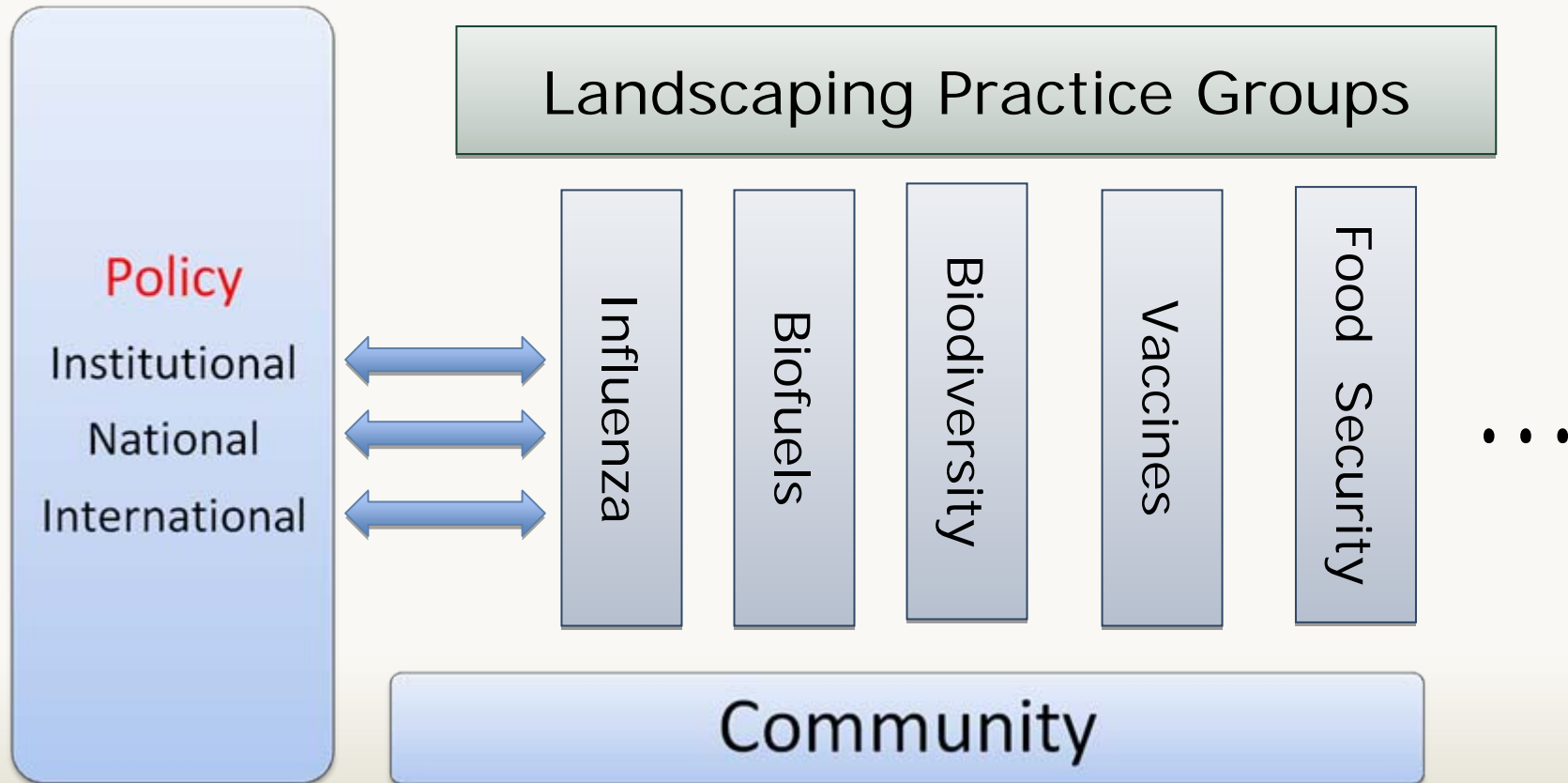
Cyberinfrastructure



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Web 2.0 Innovation Cyberinfrastructure



Lessons from BIOS (Biological Open Source)

1. We need vastly better patent intelligence and decision support to create shared platforms (commons) or to collaborate effectively.
2. We need new transparency, metrics and frameworks for public agencies to incentivize and reward collaborative approaches to speed innovation and decrease costs.
3. We need new legal and normative options *beyond* patent licenses or pools to cope with fragmentation of rights.

Beyond the Questions:

Even after answering the questions, how do we *act*, with limited resources, and actually achieve anything of value to society?

Concord

A new legal and normative tool to break the 'open' gridlock

- Open
- Stewarded
- Mutual–non assertion
- Field of use constrained
- Contract-based

Concordance for malaria

- Institute with malaria gravitas becomes a Steward
- Offers a Concord to all parties in which Concordance members agree
 - not to assert, or allow to be asserted over other Parties to the Concord,
 - any patented technology they have, acquire or control over any activity for
 - research, development, manufacture, delivery or support of any intervention exclusively for malaria.
- Universities A.....Z join
- Several Pharma companies join

Concordance for malaria..

- All of the patented technology of Member Universities A-Z and Member Pharma can be explored and combined to solve this problem – BUT ONLY THIS PROBLEM.
- Every new party to the Concord adds new potential and new incentive for they and others to combine and create new interventions.
- Imposes no constraints on Concordance members' use of their IP for any other purpose.
- 'Free riders' are not a drag, but potential innovators.
- The Concordance lends itself to prizes and other incentive schemes.

Concords in Agriculture

- Genetic Resources and Enabling Technologies lend themselves to Open Concordances.
- Shared, pre-competitive and low cost tools and platforms can revitalize an activity that is now monolithic and widely distrusted.
- It will do so by letting new, smaller players join to create competitive products and services using shared 'open source' toolkits to serve neglected priorities and small markets.



Initiative for Open Innovation

Increasing the efficiency, effectiveness and equity of science-and technology-enabled innovation for public good.

An independent, sector, discipline, jurisdiction, & language agnostic open public resource.

Near term outputs from IOI

- Built on Cambia Patent Lens platform (www.patentlens.net)
- Fully internationalize search and interface
- Add complete full text of Chinese, Japanese, Korean, Brazilian, and other patent data as it becomes available.
- Reciprocally integrate Science & Technology Literature
- Integrate Orange Book and other regulatory data.
- Create open, standardized patent landscaping architecture and web applications
- Prepare model open landscape(s) around key infectious disease
- Articulate model Concord agreements
- Convene International Advisory Council (August 2009)

International Advisory Council

- Convening August 16-19 in Far North Queensland, Australia
- Co-chaired by Dr Sibusiso Sibisi, President, CSIR South Africa & Dr Terry Cutler, Chair, Australian Innovation System Review
- ~ 30 IAC members and resource persons, including science, technology, intellectual property, social enterprise, business, law and policy leaders and visionaries.
- Initially funded by Bill & Melinda Gates Foundation, the Lemelson Foundation & the Queensland University of Technology (QUT).
- Managed by Cambia (www.cambia.org)
- www.openinnovation.org