

Research & innovation for health, equity and development

A global look

The COHRED Group



Carel IJsselmuiden

6th Philippine National Health Research System Week
Manila, 8-10 August 2012



HEALTH RESEARCH

ESSENTIAL
LINK TO
EQUITY IN
DEVELOPMENT



Commission
on
Health Research
for
Development

1990

Findings:

“10/90 Gap”

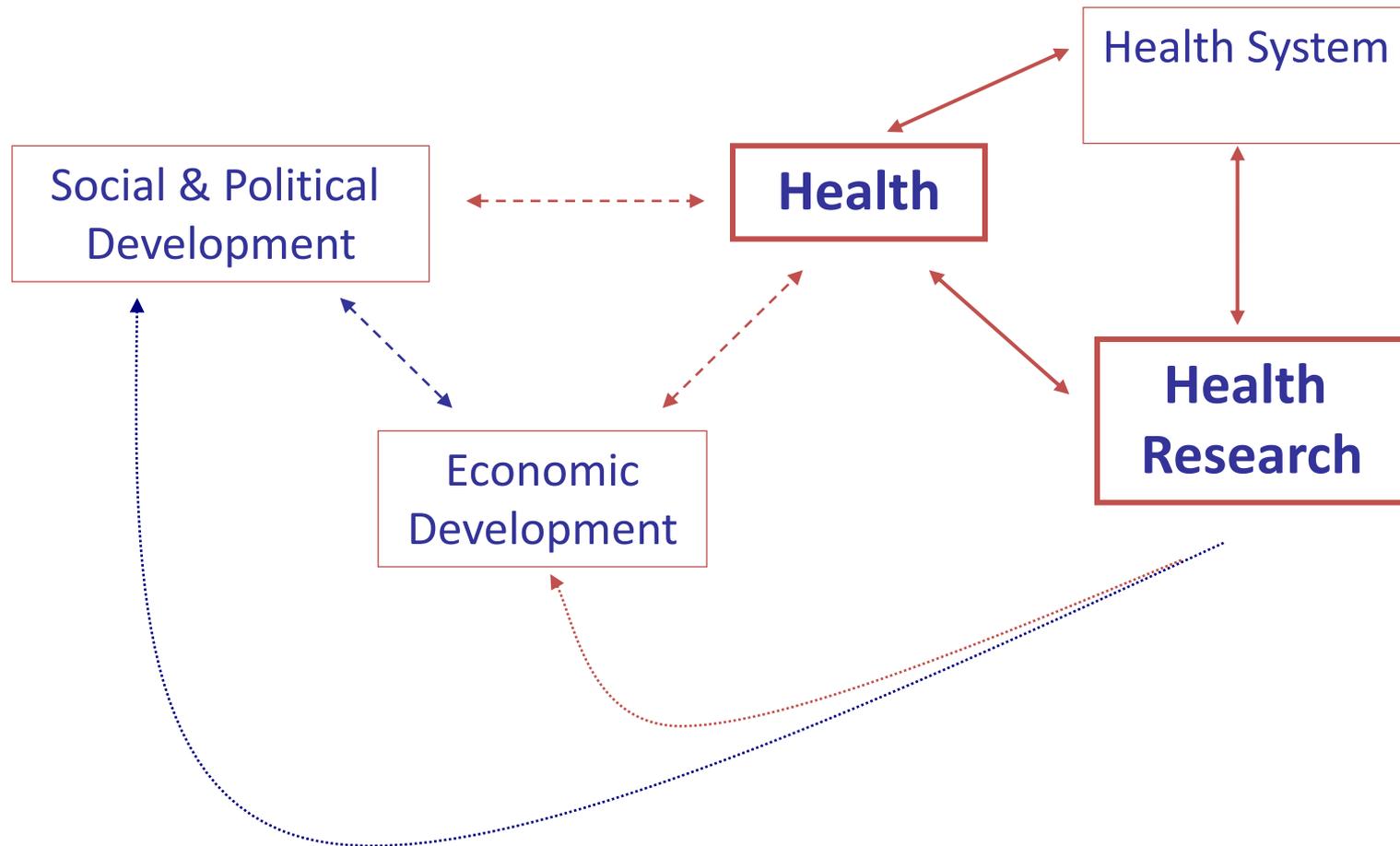
Recommendations:

- 1. ENHR**
2. Increased Global Funding
3. Research Partnerships
- 4. Global Platform**

COHRED's own evolution

- 1993
 - **Essential National Health Research (ENHR)**
- 2000
 - **National Health Research Systems (NHRS)**
- 2008
 - **Research for Health**
- 2012
 - **Research & Innovation for Health, Equity and Development**

health research – research for health



July 6, 2010

India Expands Role as Drug Producer

By **HEATHER TIMMONS**

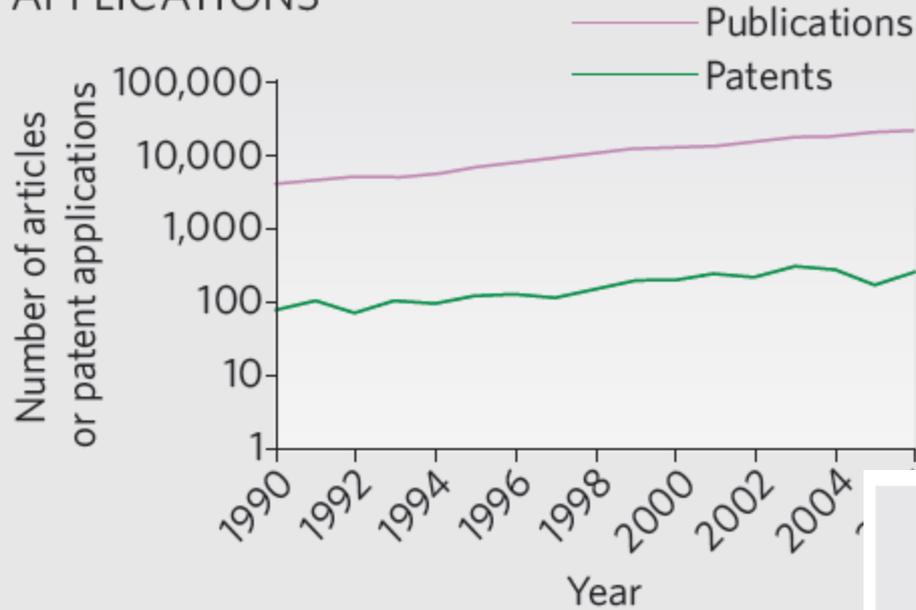
HALOL, India — Below an ancient hilltop temple to Kali, the Hindu goddess associated with destruction and change, Sun Pharmaceutical Industries churns out generic versions of [cancer](#) drugs and [epilepsy](#) medications bound for the United States.

Business is so brisk that Sun, with revenue of 41 billion rupees (\$880 million) last year, predicts sales will grow 20 percent this year as it expands its Halol factory.

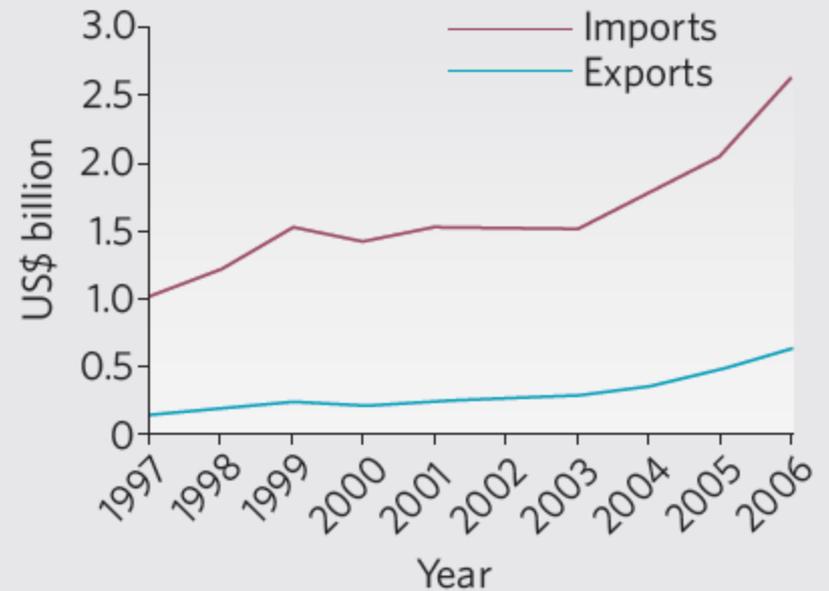
“This site specializes in making difficult things,” Sampad Bhattacharya, Sun’s vice president in charge of operations, said during a recent factory tour. The blue and gray concrete building, which will be nearly 800,000 square feet after the expansion, would not look out of place in the pharmaceutical manufacturing centers of New Jersey, except for the herds of cattle and buffalo wandering nearby.

India’s drug industry — on track to grow about 13 percent this year, to just over \$24 billion — was once notorious for making cheap knockoffs of Western medicines and selling them in developing countries. But India, seasoned in the basics of medicine making, is now starting to take on a more mainstream role in the global drug industry, as a result of recent strengthening of patent law here and cost pressures on name-brand drug makers in the West.

BRAZILIAN PUBLICATIONS AND PATENT APPLICATIONS



COMMERCIAL TRADE OF PHARMACEUTICALS IN BRAZIL



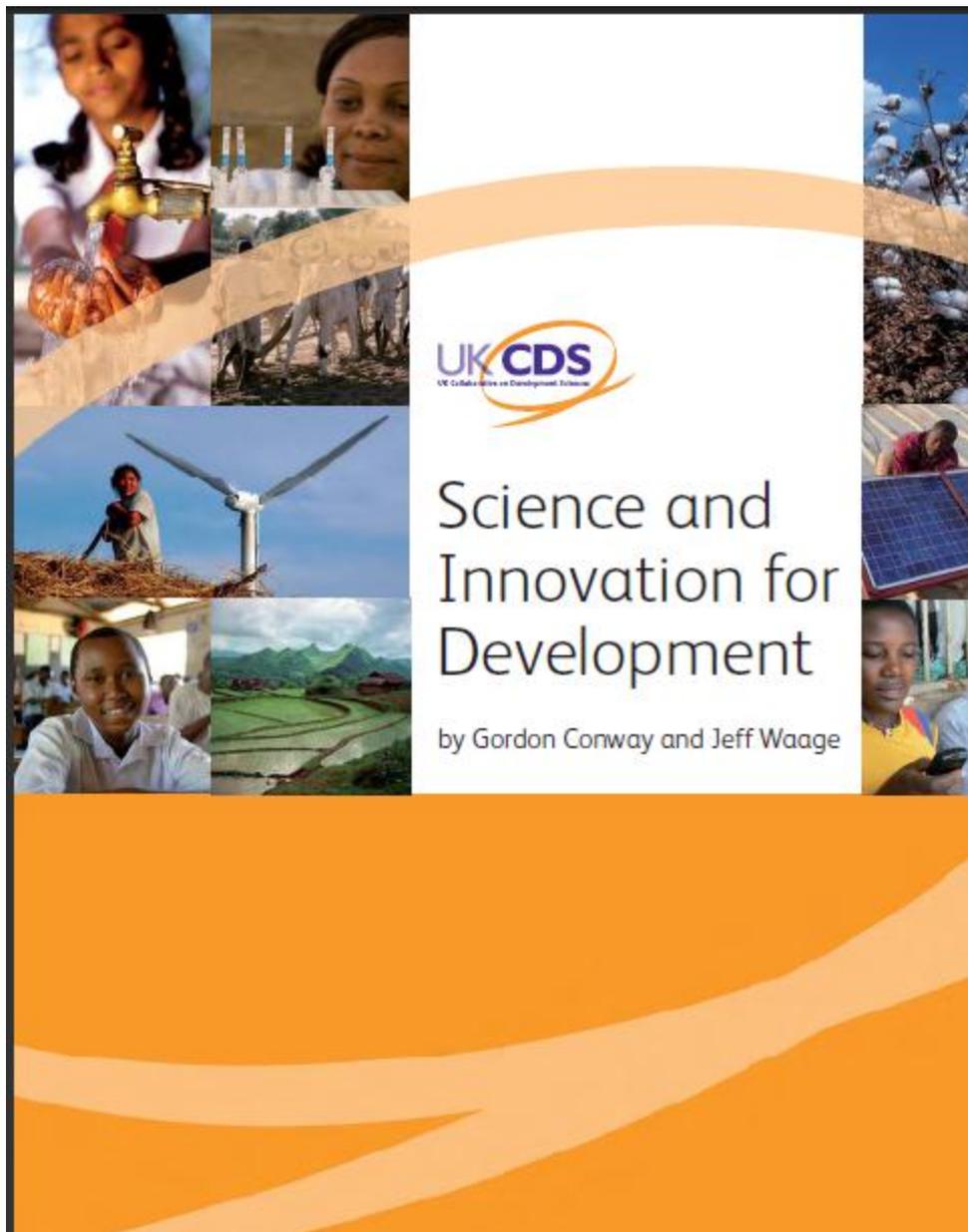
OUTLOOK NEGLECTED DISEASES

The road to recovery

Brazil urgently needs to improve infrastructure for generating pharmaceuticals to alleviate the plight of its poor and marginalized populations, say **Carlos M. Morel** *et al.*

investing in research & innovation

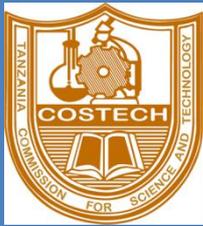
- old examples: *USA, Western Europe*
 - *Lisbon treaty – 3% of GNP on S&T*
- more recent examples : *South Korea, Taiwan, Singapore*
- actively changing now : *India, Brazil, South Africa, Thailand, China, many more*
- aspiring low income countries : *Rwanda, Uganda, Tanzania*



Examples from Forum 2012

- Tanzania : from LIC to MIC by 2025
- South Africa : National Innovation System
- Equity : seems to become the domain of NGOs
- *Impregnated bednets ... a success story*





Health: products



- Insecticide-treated nets made in Tanzania exported to other African countries.
- 30,000,000 olyset nets (50% of the worlds production) made by A - Z company Tanzania
- Tanzania's worth of export of nets have increased from Tsh 65bn in 2008 to 105bn in 2010
- 7000 people employed in the industry



Economic Impact of the Human Genome Project

*How a \$3.8 billion investment drove \$796 billion in economic impact,
created 310,000 jobs and launched the genomic revolution*

Prepared by Battelle Technology Partnership Practice

May 2011



defining research & innovation

- Research = generating new knowledge
- Technology ('Development') = transforming new knowledge in new products, technologies, services, approaches
- Innovation = scaling these up for impact

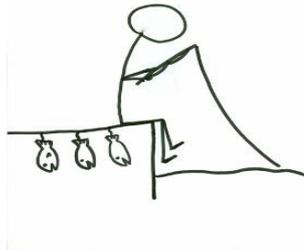
'COHRED – redefining development'

doing it

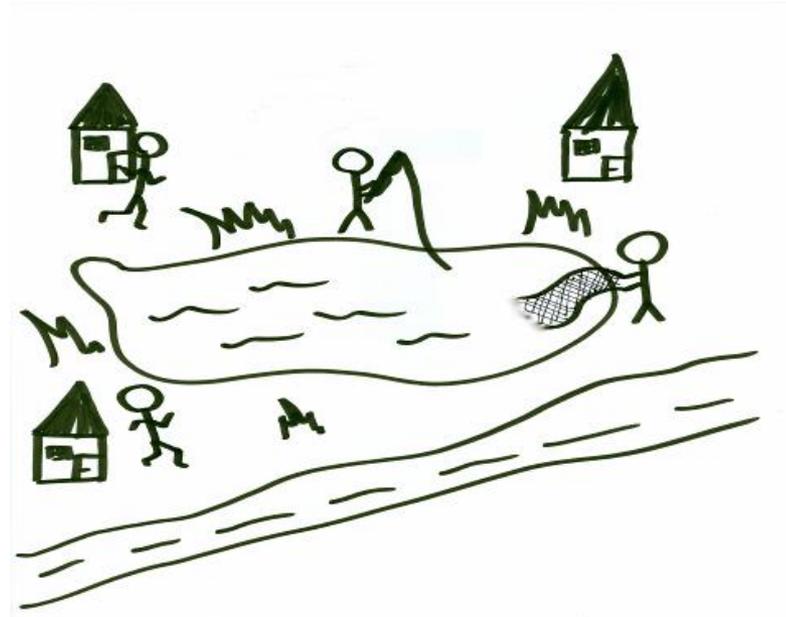
enabling it



charity



vertical
programmes



development

Networks & collaboration

- local – international
- inter-sectoral
- public – private
- expert – beginner
- south – south
- share human resources (HRHR) , facilities, data

A Guide for Transboundary Research Partnerships

11 Principles

Swiss Commission for Research Partnerships
with Developing Countries (KFPE)

sc | nat 

Swiss Academy of Sciences
Akademie der Naturwissenschaften
Accademia di scienze naturali
Académie des sciences naturelles

The Guide

This Guide is intended for:

Researchers considering or planning to engage in fair and equal partnership towards common goals;

Partnership arrangements striving for innovative research and a fruitful learning culture, both based on mutual trust and responsibility;

Funding agencies designing programmes for effective and intercultural research collaboration;

Policy makers aiming at establishing an enabling environment for effective research collaborations;

Development organisations encouraging contextualisation of scientific knowledge through facilitation and brokering;

International organisations dealing with knowledge-based solutions to global challenges.

11 Principles

Transboundary and intercultural research in partnership is a continuous process of sound knowledge generation, building mutual trust, mutual learning and shared ownership.

The KFPE's 11 principles underscore this process. However, there are many types of research in partnership; these have different requirements in terms of interaction, communication, and mutuality. In other words, the principles may have to be applied selectively depending on the partnership.

7 Questions

The 7 fundamental questions on transboundary research partnerships point to factors that hinder or enable partnerships in different contexts; they are designed to help readers better understand the nature and type of a given partnership.

In addition, the 7 key questions are meant to trigger a debate on how to organise transboundary research collaboration in an effective manner, and on how best to translate scientific knowledge into benefits for society.

Towards equitable and effective collaboration!

example : health technologies

The Lancet Commissions

Imperial College
London

THE LANCET

Technologies for global health



Peter Howitt, Ara Darzi, Guang-Zhong Yang, Hutan Ashrafian, Rifat Atun, James Barlow, Alex Blakemore, Anthony M J Bull, Josip Car, Lesong Conteh, Graham S Cooke, Nathan Ford, Simon A J Gregson, Karen Kerr, Dominic King, Myutan Kulendran, Robert A Malkin, Azeem Majeed, Stephen Matlin, Robert Merrifield, Hugh A Penfold, Steven D Reid, Peter C Smith, Molly M Stevens, Michael R Templeton, Charles Vincent, Elizabeth Wilson

Executive summary

Availability of health technology is inversely related to health need. Although health-care systems in high-income countries make extensive use of technology, people in the world's poorest countries often lack the

careful consideration given to achievement of successful implementation and scale-up, requiring a focus not only on technology but also on associated process innovations that enable effective use. Introduction and use of technology in resource-poor settings raises several issues

Lancet 2012; 380: 507-35
Published Online
August 1, 2012
[http://dx.doi.org/10.1016/S0140-6736\(12\)61127-1](http://dx.doi.org/10.1016/S0140-6736(12)61127-1)

example : global health

Consortium of Universities for Global Health | Making the university a transforming force in global health

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Apple Yahoo! Google Maps YouTube Wikipedia News (672) Popular

Consortium of Universities for Global Health 

Making the university a transforming force in global health

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Consortium of Universities for Global Health Annual Meeting

GLOBAL HEALTH **INNOVATION IMPLEMENTATION IMPACT**

Consortium of Universities for Global Health  **FOURTH ANNUAL MEETING**
MARCH 14-16, 2013 | WASHINGTON, DC



CUGH Member Spotlights

Latest Announcements

USAID/ NIH: Partnerships for Enhanced Engagement in Research (PEER) Health

eLearning Course on Gender

Fogarty: Framework Programs for Global Health Innovation (D43)

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Expanding the Boundaries of Nutrition

Ed Baetge, Head of the Nestlé Institute of Health Sciences and Luis Cantarell, CEO Nestlé Health Science S.A., are explaining how to expand the boundaries of nutrition

▶ SEE THE VIDEO

DISCOVER THE INSTITUTE



MULTI-DISCIPLINARY INNOVATION



JOIN OUR TEAM



Go to "http://www.nestleinstitutehealthsciences.com/vision/Pages/ExpandingtheBoundariesofNutrition.aspx"

SHIFTING PARADIGM



How the **BRICS** Are
Reshaping Global Health
and Development



24-26 APRIL 2012
Cape Town, South Africa

Beyond Aid

—

Research and innovation as key drivers
for health, equity and development



science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

The COHRED Group



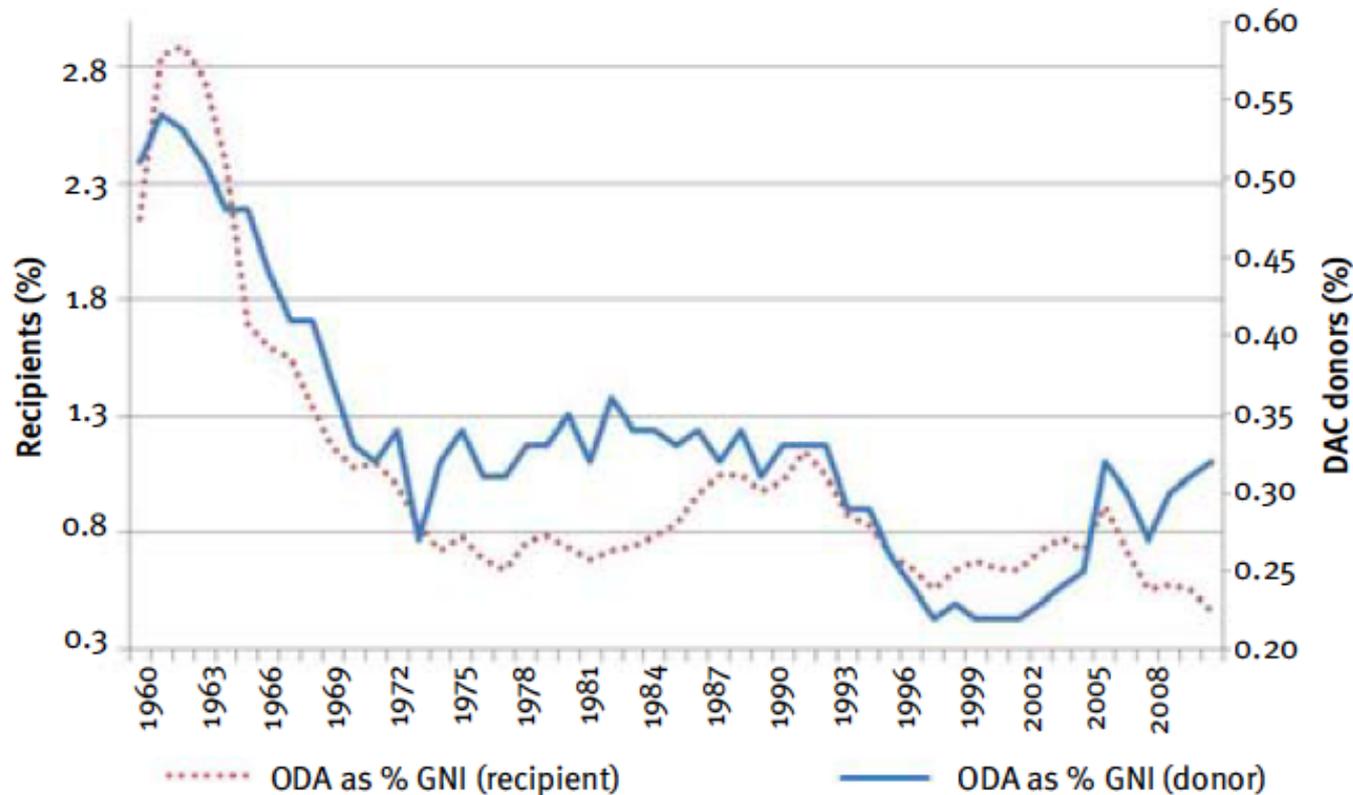
Supporting research and innovation systems for health, equity and development



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

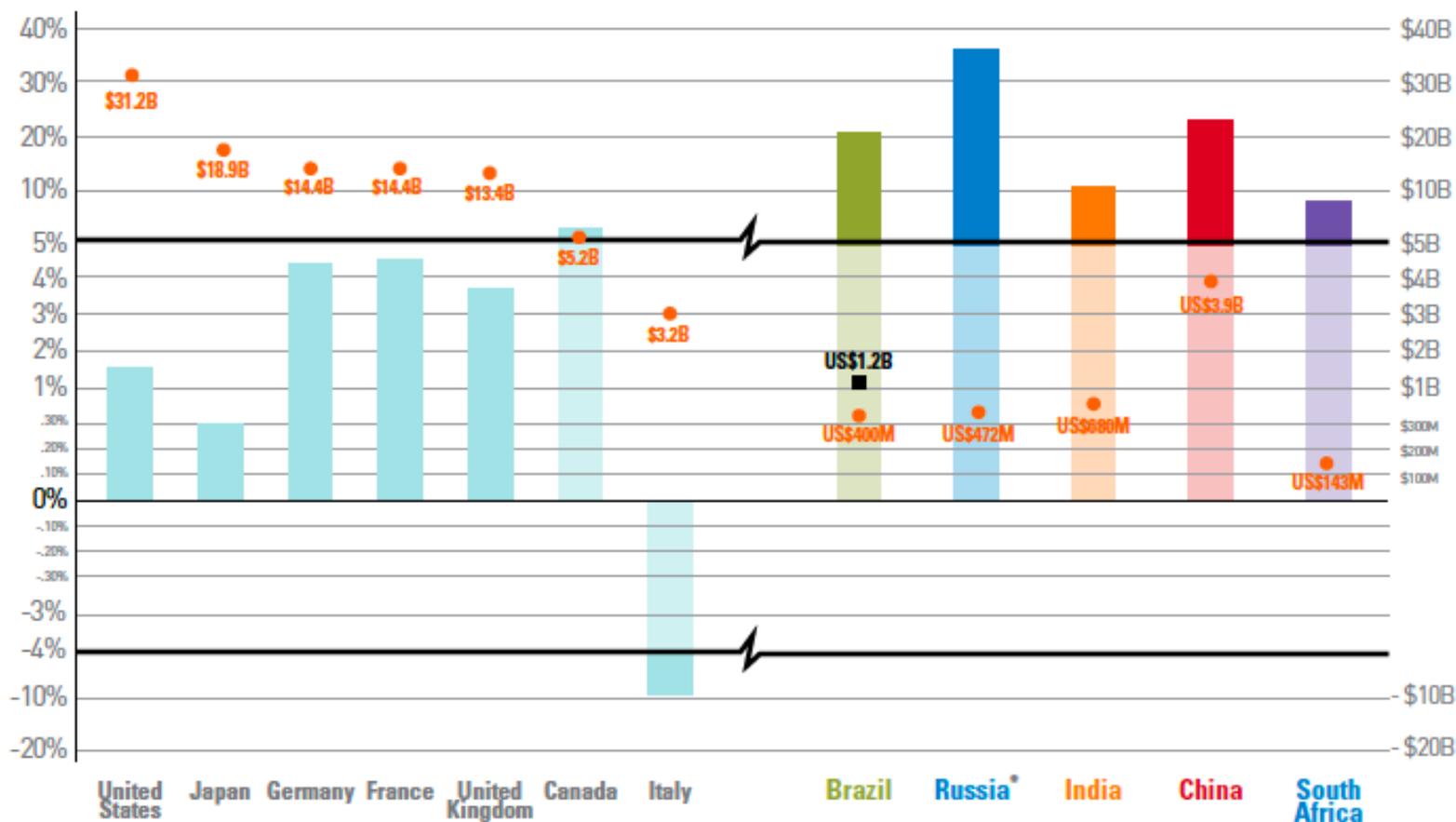
Figure 1: Total net ODA as a proportion of donors and recipients GNI 1960-2010



Correlation coefficient by decade	
1960s	0.92
1970s	0.25
1980s	-0.40
1990s	0.96
2000s	0.09

Notes: ODA as a % of GNI (Recipient) includes aid to all Part I Developing country recipients from DAC donors. ODA as a % of GNI (DAC Donors) includes DAC Donors only. The correlation coefficient illustrates the linear relationship between aid to GNI from donors and recipients' perspectives. Source: DAC Aggregate Aid Statistics, accessed 4 January 2012.

G7 VS. BRICS: ESTIMATED ANNUAL GROWTH OF FOREIGN ASSISTANCE PROGRAMS (2005-2010) AND ABSOLUTE ASSISTANCE (2010) (% , USD)



Source: OECD; Institute of Applied Economic Research (IPEA) Report, 2011; *Inter-Press Service*, "Brazil, Emerging South-South Donor"; *The Economist*, "Speak Softly and Carry a Blank Cheque"; Deauville Accountability Report G8 Commitments on Health and Food Security, Ministry of Finance of Russian Federation, 2011; Union Budget and Economic Survey, Ministry of External Affairs, Ministry of Finance, Government of India; Government of India official; "The Dragon's Gift: The Real Story of China in Africa," D. Brautigam; World Bank Open Data; GHSi Analysis

Note: *Russia pledged to steady foreign assistance disbursements between US\$400M and US\$500M

- Annual Growth (2005-2010)
- Absolute Foreign Assistance (2010)
- High Estimate, Absolute Foreign Assistance (2010)

HEALTH

Global Diseases, Local Needs

The diseases that get funded tend to be the ones for which funders can take credit.

By Jessica Ruvinsky | 3 | Winter 2012

Extraordinary and expensive medical treatments are available to people in poor regions, thanks in large part to commitment and funding from Bill & Melinda Gates and other private foundations. But while antiretroviral therapies help millions with HIV live longer and healthier lives, their neighbors continue to die of simple diarrheal diseases.

Private foundations don't fund the issues that people surveyed in 27 countries think should be the national priority, says Daniel Esser, assistant professor in the international development program at American University. "Whereas national financial assistance for global health shows a weak but at least significant response to preference," says Esser, "private foundations seem to be responsive to neither preferences nor disease burdens at the national level."



(Photo by Richard Rudisill Photography/iStock)

Norway's Refleks project

- The current ministers of foreign affairs and international development intend to step up the integration of foreign policy and development policy. It was agreed recently that Norway's engagement with Africa will focus less on the aid channels and more on the foreign policy ones. The message that the two ministers want to get across is that Africa is changing in that it is no longer simply a poverty-stricken continent that needs our charity.
- An illustration of this change is that Norwegian companies pay more to the Angolan government in taxes than Norway's aid budget for all of Africa.

www.thebrokeronline.eu

The Broker issue 24, Special Report February/March 2011

COHRED responses (1)

Low & Middle Income Country focused



'Improbable partnerships for action'

- Government
- Researchers, academia
- Private sector, business
- Social enterprise, NGOs, CSOs
- Financing organisations
 - Donors, research sponsors
 - Venture capital
- International organisations
- Media

COHRED responses (2)

Health Research Web (HRWeb)

http://www.healthresearchweb.org/

Log in / Create an account

Health Research Web

POWERED BY COHRED BETA

Main Page

Content

- Governance & Policies
- National Priorities
- Key Institutions
- Regulation and Ethics
- Financing & Partnership
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- Information Resources

Regions

Afghanistan

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- Français
- Português

RHInno | Your research management process at your fingertips

http://rhinno.net/

RHInno Research for Health and Innovation Organisation

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COHRED Council on Health Research for Development

RHInno Ethics

- Speed up the review process
- Avoid loss of submitted materials
- Improve cost effectiveness

read more

HRWeb

The overall o

COHRED responses (3)

Bulletin of the World Health Organization

Improving international research contracting

David A Sack ^a, Vanessa Brooks ^a, Michael Behan ^a, Alejandro Cravioto ^a, Andrew Kennedy ^b, C

- a. International Centre for Disease Control, Dhaka, Bangladesh.
- b. Council on Health Research and Statistics, Geneva, Switzerland.
- c. Faculty of Medicine, Makerere University, Kampala, Uganda.

Correspondence to Andrew Kennedy (a.kennedy@icdc.org)

Bulletin of the World Health Organization
10.2471/BLT.08.058099

The screenshot shows the website for the Rockefeller Foundation Bellagio Center. The header includes the Rockefeller Foundation logo and navigation links: News & Media, Bellagio Center, About Us, and Mobile Site. A secondary navigation bar lists: WHO WE ARE, WHAT WE DO, GRANTS & GRANTEEES, and OUR CENTENNIAL. Below this are dropdown menus for Conferences, Residency Program, Bellagio Creative Arts Fellows, Profiles, and Alumni News & Bellagio Reports. The main content area is titled 'The Bellagio Center' and features a photograph of the building at night. The text describes the center's mission to promote innovation and identify impact-oriented solutions to critical global problems. Below this is a 'Conferences' section with a photo of a presentation. A right-hand sidebar contains 'BELLAGIO CENTER NEWS' with two tweets from @mahim_maher and @andrewsfleming.

FRAMEWORK FOR DEVELOPING A NATIONAL HEALTH RESEARCH SYSTEM

USING HEALTH RESEARCH TO IMPROVE POPULATION HEALTH, HEALTH EQUITY, AND DEVELOPMENT.

- ▶ The starting point for strengthening a country's health research system is to have a clear picture of the current state of health research – and the areas where development should be targeted.
- ▶ Using this view, countries can apply various approaches, tools and methods to start a strategy of system strengthening.

Stage of development	Actions needed
Basic requirements - socio-political environment	
0. Political commitment to health research	Advocacy, awareness, data and discussion.
0. Political & socio-economic climate human rights	human rights respect & investment friendly.
Level 1 needs – a research-conducive environment	
COHRED's framework, developed in work with many developing countries.	
1. Credibly set and regularly updated health research priorities	Priority setting and updating
2. Health research policy framework	Developing policies/policy framework for research and health research
3. Research management office/mechanism	Exploring mechanisms and structures appropriate to countries' existing structures and aspirations for research.
Level 2 needs - Research implementation	
4. Human Resources for Health Research	Developing a medium and long-term HR-HR strategy and plan.
5. Stable, predictable research financing	Developing medium-long term health (health) research financing mechanisms, including donor alignment and harmonization.
Level 3 needs – Optimizing the system	
6. Improving health research system components	for example: <ul style="list-style-type: none"> - Research ethics. - Research communication, including evidence to policy & practice. - Peer review vs committee review. - Merit-based promotion system. - Community demands for research. - Monitoring & evaluation of impact. - Health systems research needs. - Good research contracting. - Technology transfer arrangements. - Intellectual property rights. - Institution building.
Level 4 needs – Integrating the national system internationally	
7. Collaborative arrangements	<ul style="list-style-type: none"> - bilateral - regional - international - organisations - donors / research sponsors



Zentrum für Entwicklungsforschung
Center for Development Research
University of Bonn

Annual Report 2010

More science for development

The key role that science can play in enhancing opportunities and reducing societal risks remains undervalued in developing countries and in international development policy.

Focus: Science Policy for Development

Knowledge
Global scientific c



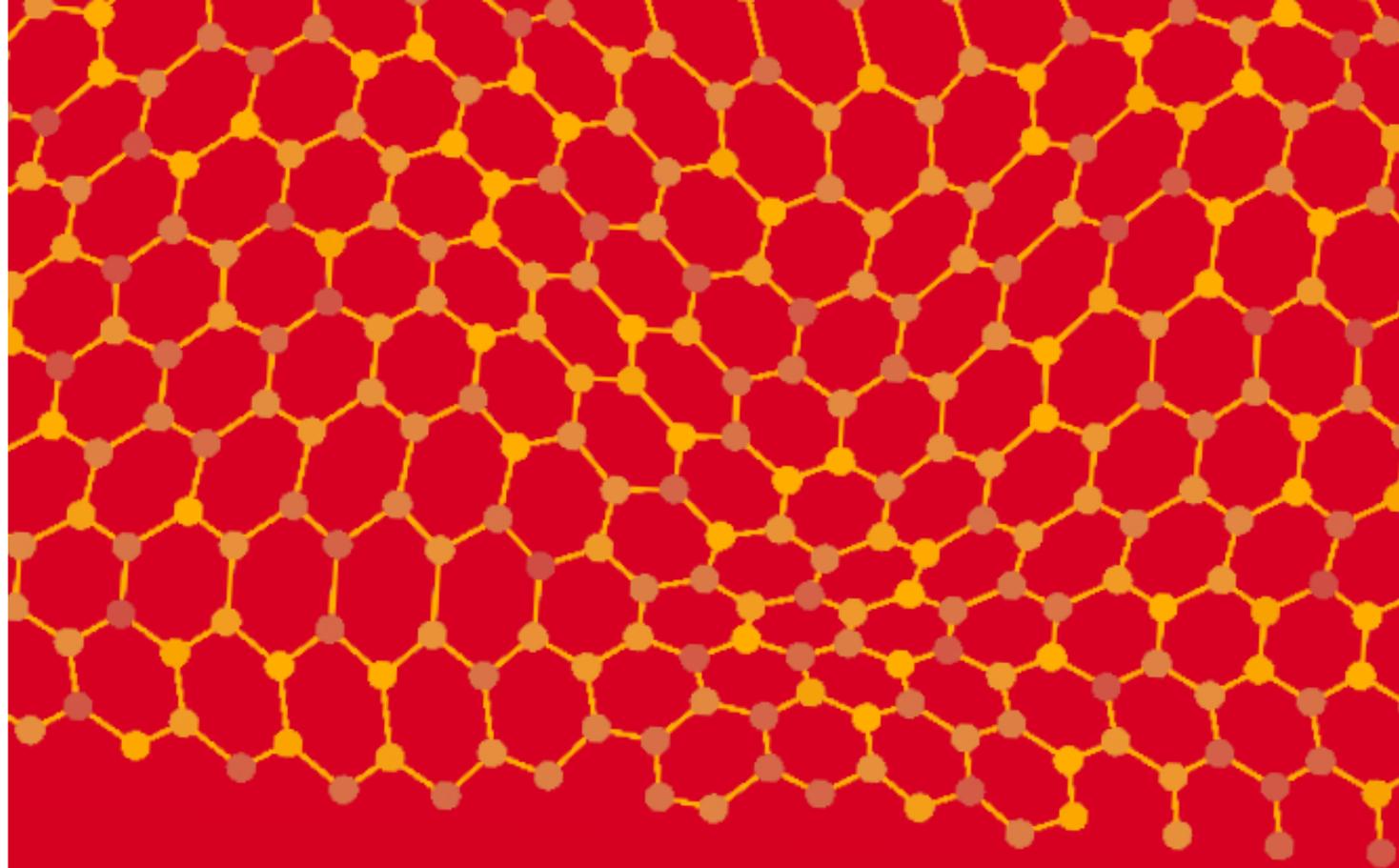
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Michael Ehst, Editors



Industry Technology
Science
Innovation
Industry Technology
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Knowledge, networks and nations

Global scientific collaboration in the 21st century



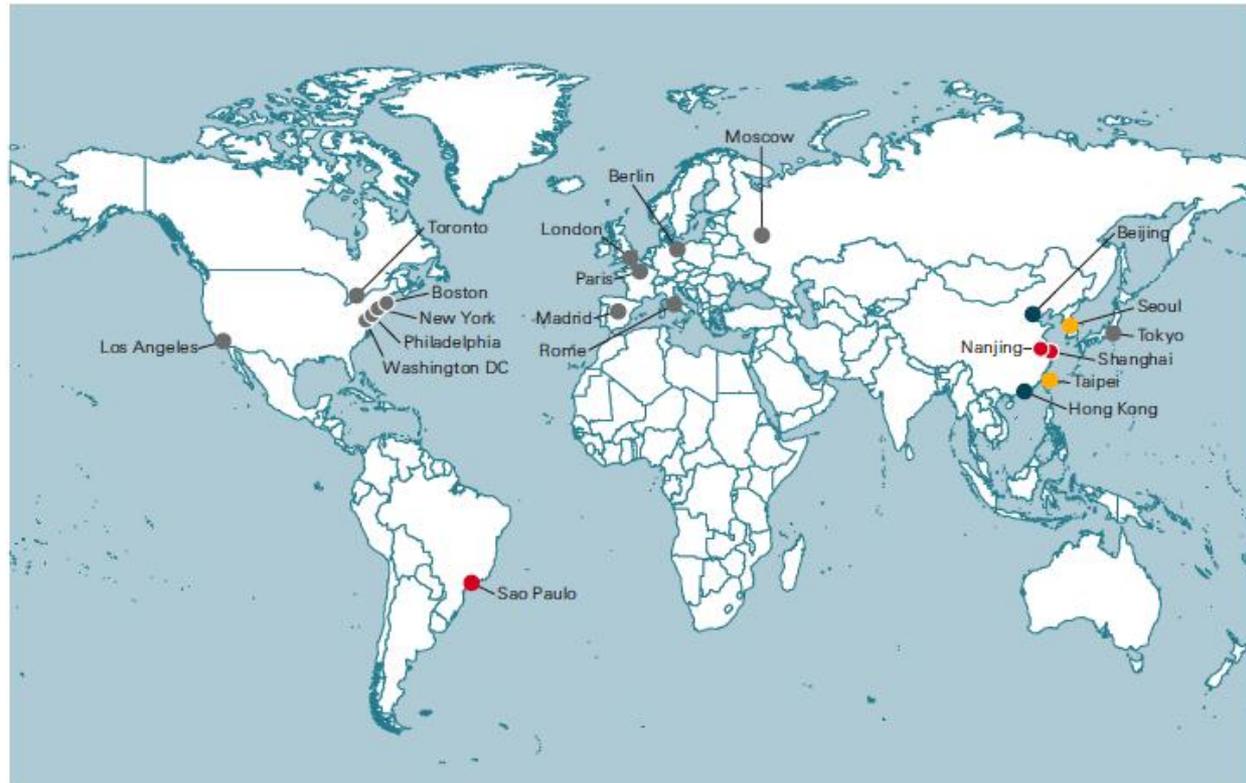
THE ROYAL SOCIETY

From royal society report

PART 1

Scientific landscape
in 2011

Figure 1.4. Top 20 publishing cities 2004–2008, and their growth since 1996–2000.¹²⁶



Key City with highest publication output in the period 2004–2008; growth is since period 1996–2000.

- Decreased or stayed constant
- Increased 5–10 places
- Increased 10–20 places
- Increased 20+ places

conclusions

- Achieving global health goals depends increasingly on research and innovation
- Aid becoming less charitable more mutualistic
 - *Means more local investments are needed, like health systems research*
 - *Needs better Monitoring and Evaluation **
- Locus for this is shifting / can shift more to LMICs
 - Need to optimise system support for research and innovation
 - Technologies based on competitive advantage
 - Internationalisation of research and actions
 - Enabling access to global and private sector funds

conclusions

- Needs good info and priorities
- Needs partnerships and networks
- And ... behaving more competitively
 - ‘research competitiveness’ becoming more important

Operational research and MDG tuberculosis control targets

Published Online
March 7, 2012
DOI:10.1016/S1473-



**GLOBAL REPORT
FOR RESEARCH ON
INFECTIOUS DISEASES
OF POVERTY**

2012

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Implementation S
Implementation science is
integration of research find
and practice. It seeks to u
OPEN ACCESS Freely avail

Policy Forum
**The Role of
System Stre**

Peter Bloland^{1*}, Patr
1 Division of Public Health Systems and Workforce Development, Center for Global Health, Centers for Disease Control
America, 2 Center for Global Health, Centers for Disease Control and Prevention, Atlanta, Georgia, United States of Ar
Global Health, Centers for Disease Control and Prevention, Atlanta, Georgia, United States of America

**Closing the gap
in a
generation**

Health equity through action on
the social determinants of health

tuberculosis service delivery, policy,
unclear. More coordinated efforts are



PLOS MEDICINE
Second Global Sym
ON HEALTH SYSTEMS F

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- Symposium background
- Symposium objectives
- Symposium program

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FOR CONTROL OF
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Country-Level Decision Making for Control of Chronic Diseases: Workshop Summary
Board on Global Health (BGH)

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**COUNTRY-LEVEL
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Research and Development to Meet Health Needs in Developing Countries: Strengthening Global Financing and Coordination

Report of the Consultative Expert Working Group on Research and Development: Financing and Coordination

April 2012

