Ten-Year Vision and Strategy

30 Years of research on Diseases of Poor
Rationale for the New Strategy
Context and Content
Outlook
Increased Funding for Infectious Diseases R&D

Figure 3. Donor funding in direct grants across two time periods for selected diseases*

Shiffman 2006.


Raising the bar. The rise in funds has triggered a rise in expectations.
Disparity with Disease Burden

Figure 2. Percentage of developing world burden and percentage of donor funding for selected communicable diseases*

*For the period 1996-2003, direct grants only. Sources as for Table 3.

Shiffman 2006.
Donor funding priorities for communicable disease control in the developing world

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Background: Priorities for funding for developing world health by recipient and donor do not correspond to developing world need. In this study I calculate donor funding for 20 historically high-burden communicable diseases for the years 1996 to 2003 and examine factors that may explain variance in priority levels among diseases. I consider funding for developing world health from 42 major donors, classifying grants according to the communicable disease targeted. Data show that funding does not correspond closely with burden. Acute respiratory infections comprise more than a quarter of the burden among these diseases but receive less than 3% of direct aid. Malaria also stands out as a high-burden neglected disease.

The evidence indicates that neither developing world need nor industrialized world interests explain all funding patterns, and that donors may be imitating one another in ways that do not take into account problems in the developing world. There is an urgent need for a major increase in funding for communicable disease control in the developing world, and for more balanced allocation of the resources already provided.

Key words: foreign aid for health, communicable disease control, HIV/AIDS, public health policy, priority setting
A Lot of Players


Thirty’s a crowd. A confusing cluster of efforts aims to help Tanzania with its HIV/AIDS epidemic.
Unmet Needs in Global Health


Estimated Percentage of People on Antiretroviral Therapy Among Those in Need (as of June 2005)

Coverage (%)
- 75–100
- 50–74
- 25–49
- 10–24
- Less than 10
- Data not available

SOURCE: WHO/UNAIDS
Some significant needs / gaps

Empowerment, pivotal role …

EDCTP

MMV

Microbicides

DNDi

GATB

IAVI

IOWH

FIND

GAELF

Trachoma

RBM

StopTB

Global Fund

APOC

NIH, Trust, Research councils, etc…

Grand Challenge
Many Organizations Should be Involved in Global Health Research

Which of the following government agencies and other types of organizations should be involved in research designed to improve health around the world?

- World Health Organization: 82%
- Centers for Disease Control and Prevention: 81%
- Red Cross: 68%
- Doctors Without Borders: 66%
- Pharmaceutical/biotech companies: 63%
- United Nations: 59%
- National Institutes of Health: 58%
- Private foundations: 51%
- Religious organizations: 45%
- USAID: 43%
- State Department: 20%
- Department of Defense: 15%
- Other: 3%

Attitudes: Global Health Research
Charlton Research for Research!America, 2006
Need for new TDR vision/strategy triggered by critical trends in global research environment

Growing regional variation

Enhanced research capabilities in DEC's

DEC's left behind in priority setting

Complexity and fragmentation

Epidemiological Changes

Infectious disease burden remains high

Global research environment for infectious diseases

Momentum through new players / initiatives

Rise in pharmaceutical product development

Infectious disease burden remains high

Rise in pharmaceutical product development

Complexity and fragmentation

Momentum through new players / initiatives

Growing regional variation
To foster:

an effective global research effort on infectious diseases of poverty in which disease endemic countries play a pivotal role.

http://who.int/tdr
Three Major Strategic Functions to achieve the objectives

- **Stewardship** for research on infectious diseases of poor populations
- **Empowerment** of researchers and public health professionals from disease endemic countries
- **Research on Neglected Priority Needs to:**
  - Foster innovation for products, emphasizing DEC engagement
  - Foster research to develop and evaluate interventions in real-life settings
  - Foster research for access to interventions
Conceptual framework for the strategy

1. Stewardship
2. Foster innovation for products, emphasizing DEC engagement
3. Foster research on development and evaluation of interventions in real life settings
4. Foster research for access to interventions
5. Empowerment

Health impact
Empowerment

- Empowerment of researchers and policy makers from disease endemic countries, going beyond classical research capacity building towards strengthening the role of disease endemic countries in health research planning, priority setting, research implementation and translation of research findings into policy and practice.
Empowerment for DEC: Utilizing Capacity for Ethical Review

• Legislative changes enacted or under preparation
  – Korea, Thailand, Indonesia, CIS (Armenia, Azerbaijan, Byelorussia, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Ukraine, Uzbekistan), India
  – Laos and Cambodia have established National Ethics Committees (no Ethical Committees before)
• Attempts to assist other regions under way with partners

Guidelines
Training
Network
Regional forums
National forums
Local ownership!
Network for clinical trial support
### Overall objective:

to facilitate and support the discovery of new drug leads for infectious diseases of poverty through networks and partnerships between pharmaceutical companies, academia and DEC institutes

### Specific Objectives

- Identify quality lead compounds and facilitate their transfer
- Identify candidates for antihelmintics
- Prioritized list of Dx targets
- Global coordination through network and partnership model
- **Promote technology transfer and drug discovery in DECs**

### End Products

- 10 drug leads by 2013
- Open access database of targets
- Prioritized Dx targets by 2009
- Helminth initiative functional
- 2 antihelminthic candidates by 2013
- Coordinated drug discovery through networks/partnerships
**BL 4 – Innovation for Product Development in DECs**

### Overall objective:

To facilitate the transfer of health innovation technologies and foster the discovery and development of novel drugs, diagnostic tests and other products in DECs

### Specific Objectives

- Develop projects for discovery and development by DEC teams of investigators and institutions
- Develop platform to support DEC leadership and partnerships for discovery and development
- Facilitate south-based spin-offs
- Products developed or in late stage of development

### End Products (2013)

- 9 partnership R&D projects with DEC leadership
- 3 to 5 DEC centres with international renowned capacity for screening/lead identification
- Technology for target validation, lead optimization and toxicology established in 5 DEC centres
- Spin-offs of at least 4 project partnerships in DECs
- 2 Dx tests and 2 drug candidates through DEC led partnerships
Research on Neglected Priorities
Support for elimination of Visceral Leishmaniasis

New tools (miltefosine / diagnostics) stimulate India / Nepal / Bangladesh to sign MoU for elimination of VL by 2015

- Research acknowledged as integral
- Local ownership of research critical
- Close work with HQ and SEARO
- A major 'research activity' for 2006-7 to assist elimination strategy
  - Drugs alone and in combination
  - Integration with diagnostics
  - Implementation Research
## BL 10 – Research to support elimination of Kala azar from the Indian subcontinent

### Overall objective:
To develop intervention tools and generate evidence for influencing policies for elimination of visceral leishmaniasis

### Specific Objectives
- Play a stewardship role to define needs, priorities and provide technical guidance to research for elimination of visceral leishmaniasis
- Generate evidence on the most cost-effective elimination strategies using optimal interventions across treatment and vector control
- Develop and evaluate new and improved diagnostics, drugs and combination therapies

### End Products
- Functional link with RTAG/countries to advise on tools/strategies for elimination
- Consensus on VL elimination strategies
- Optimal and most cost-effective elimination strategy defined
  - Cost-effective and sustainable vector control strategy
  - Cost-effective strategy for case management
- Improved interventions: safe and affordable combination therapy
**BL 5 – Improved and innovative vector control methods for prevention of neglected diseases**

**Overall objective:**
To develop and evaluate improved and innovative vector control methods for the prevention of neglected diseases

**Specific Objectives**
- Develop new/improved methods for HAT vector traps
- Support generation/exploitation of Glossina genome sequence data
- Facilitate development/evaluation of innovative malaria/dengue vector control methods
- Progress development/evaluation of methods for control and prevention of re-infestation of Chagas vectors

**End Products**
- Improved odour baits/release systems for tsetse traps
- Tsetse mass trapping methods
- Glossina genome sequence
- Evaluation criteria for GM vectors
- Improved methods for malaria and dengue vector control
- Methods to identify origins of, and preventing triatomine reinfestation
- New methods for Chagas vector control
Stewardship for research on infectious diseases of poor populations

1. Provide a global information platform involving knowledge acquisition, management and sharing
2. Facilitate identification of priority needs and major research gaps
3. Provide a neutral platform for stakeholders to discuss their activities and reach the highest possible level of consensus
4. Advocate for support of health research and effective utilisation of its results in control of infectious diseases of poverty at international policy level
5. Foster research networks and kick-start innovative research initiatives
Stewardship for research on infectious diseases of poverty

Core functions:
- Knowledge Management
  - Acquisition
  - Sharing
  - Translation

Analysis:
- Synthesis
- Needs
- Gaps

Stakeholder dialogue:
- Consultation
- "Concertation"
- Consensus

Agenda setting:
- Global
- Regional
- National

UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR)

TDR Presentation
30th SEA-ACHR, Jakarta, Indonesia
14-16 March, 2007
Core functions

Knowledge Management

Stewardship for research on infectious diseases of poverty

Stakeholder dialogue

Analysis

Agenda setting
Knowledge acquisition, management and sharing

- Infectious Disease Resource KIT Web Site

- Modelling and profiling of diseases, opportunities and simulation of public health impact
Fostering networks and kick-starting innovative initiatives

- Application of innovative technologies in discovery of interventions, diagnostics, drugs, vaccines and insecticides
Stewardship at Policy Level
Stewardship at policy level

- Regional consultations (upon demand)
  Responding to initiatives of Ministers of Health Science and Technology
- Ministers from DECs
- Ministers from Developed Countries
- Opinion Leaders
High Level Ministerial Meetings and Support for preparations for Bamako 2008

Commitments African ministers to:
- 2% of health expenditure on research
- 5% of health aid on research

Assist Regional dialogue in preparation for Bamako 2008 (EMRO 2007, PAHO)

Ghana Communiqué

Health research for disease control and development


4. The Ministers and Heads of Delegation considered the report and recommendations that emanated from the technical sessions and also reviewed highlights of presentations on regional perspectives on health research priorities and challenges in developing countries. The Ministerial session further considered a Call for Immediate Action for Disease Control and Development in the African Region and its input into the 20th session of the Joint Coordinating Board (JCB) of the TDR Programme to be held from the 19th-21st June 2006 in Accra, the 50th African Regional Committee Meeting, to be held from 26th August to 2nd September 2006, in Addis Ababa, and the Global Ministerial Conference, to be held in Accra, in November 2008.

TDR Presentation
30th SEA-ACHR, Jakarta, Indonesia
14-16 March, 2007
Impact Measurement and Progress Monitoring
## Supporting Interim Impact Dimension Measurement

### TDR Interim Impact Dashboard

<table>
<thead>
<tr>
<th>15 Supporting interim impact dimensions</th>
<th>Interim monitoring metrics</th>
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<tbody>
<tr>
<td>1. Global consensus on priority research needs</td>
<td>- # of quality consultations/reports for consensus facilitated by TDR</td>
</tr>
<tr>
<td>2. Equitable access to health research information</td>
<td>- Surveyed user satisfaction levels with knowledge platform</td>
</tr>
<tr>
<td>3. Greater engagement of key institutions/networks</td>
<td>- % of key institutions/networks actively involved in TDR forums</td>
</tr>
<tr>
<td>4. Quality research led by DEC scientists and institutions</td>
<td>- # of publications with DEC researchers as lead authors</td>
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<tr>
<td>5. Sustainable regional research and knowledge networks</td>
<td>- # of DEC research institutions/networks improved towards international standards</td>
</tr>
<tr>
<td>6. DEC effectively negotiating research partnerships</td>
<td>- # of partnerships with DEC researchers as leads</td>
</tr>
<tr>
<td>7. Promising leads identified &amp; transferred to partnerships</td>
<td>- % of lead development/transfers at planned milestones</td>
</tr>
<tr>
<td>8. Effective north-south innovation networks established</td>
<td>- # of innovation networks established / expanded / strengthened</td>
</tr>
<tr>
<td>9. Product R&amp;D managed by DEC institutions</td>
<td>- # of key R&amp;D projects managed by DEC institutions</td>
</tr>
<tr>
<td>10. Evidence on real life safety and effectiveness of tools</td>
<td>- % of real-life safety/effectiveness evaluations at planned milestones</td>
</tr>
<tr>
<td>11. Effective intervention tools and strategies</td>
<td>- % of intervention tools and strategies at planned milestones</td>
</tr>
<tr>
<td>12. Cost-effective elimination and surveillance strategies</td>
<td>- % elimination/surveillance strategies at planned milestones</td>
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<tr>
<td>13. Integrated strategies for large scale intervention delivery</td>
<td>- % integrated intervention delivery strategies at planned milestones</td>
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<tr>
<td>14. Cost-effective strategies for scale-up of interventions</td>
<td>- % cost-effective scale-up strategies at planned milestones</td>
</tr>
<tr>
<td>15. Research culture within control programmes</td>
<td>- # of control programmes actively involved in research projects</td>
</tr>
</tbody>
</table>
Identification of priority needs and major gaps

- Disease-Reference Groups (DRGs) 7 – 9 members
  - Malaria
  - Tuberculosis, Leprosy and Buruli Ulcer
  - Chagas disease, Human African Trypanosomiasis and Leishmaniasis
  - Helminth diseases (Onchocerciasis, Filariasis and Schistosomiasis)
  - Dengue and other emerging viral diseases of public health importance
  - Other emerging infectious diseases

- Topic Reference Groups (TRGs)
  - Social science research and gender,
  - Innovation and biotechnology platforms,
  - Implementation and health systems issues, and Product development.

- Based at Country level (Technical officer as rapporteur)
- Annual review meetings in the country
- Regional consultations on research needs for disease control
Fostering an effective global research effort on infectious diseases of poverty in which disease endemic countries play a pivotal role.
Thank you