



SCHOOL OF POPULATION HEALTH



**Health Research:
(Some) Global Funding Schemes**

**Professor Alan Lopez
School of Population Health
The University of Queensland**

Global Health Research: Some Issues

- Domestic / International focus
- Commitment of major local health research funds, eg. NHMRC, Australian Dept of Health, AusAID
- Innovation / Competence / Feasibility / Need



Paradigm for Classifying/Prioritising Global Health Research

- What is the size of the problem (ie. burden of disease)?
- Do effective interventions exist?
- Do cost-effective interventions exist?
- Major barriers to population-wide application (eg. logistics, behavioural change).



Principal Funding Schemes

- Global Forum for Health Research
- US NIH
- Bill & Melinda Gates Foundation
- Global Fund: HIV/TB/Malaria
- Rockefeller Foundation
- Wellcome Trust
- Multilaterals (UN/WHO/World Bank) / Bilaterals (eg. USAID)



Global Forum for Health Research (GFHR)

- US\$70 billion per year spent on health R&D by public and private sectors
- 90% of this in developed countries, yet only 10% of global disease burden
- Forum based in Geneva (linked to WHO, but separate)
 - helps develop priority-setting methodologies
 - supports networks in key health research areas (eg. Malaria)
- Disburses approx US\$*x* million per year for research funding



GFHR Priorities

1. Priority-setting methodologies (eg. burden of disease, cost-effectiveness analysis, resource flows)
2. Cross-cutting issues (gender, health policy & systems, poverty, public-private partnerships)
3. Risk factors (child abuse, nutrition, RTAs, violence against women)
4. Diseases/conditions (CVD, HIV/AIDS, Malaria, mental health, TB)



National Institutes of Health

Office of the Director (OD)
National Cancer Institute (NCI)
National Eye Institute (NEI)
National Heart, Lung, and Blood Institute (NHLBI)
National Human Genome Research Institute (NHGRI)
National Institute on Aging (NIA)
National Institute on Alcohol Abuse and Alcoholism (NIAAA)
National Institute of Allergy and Infectious Diseases (NIAID)
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
National Institute of Child Health and Human Development (NICHD)
National Institute on Deafness and Other Communication Disorders (NIDCD)
National Institute of Dental and Craniofacial Research (NIDCR)
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)



National Institutes of Health (Cont.)

National Institute on Drug Abuse (NIDA)
National Institute of Environmental Health Sciences (NIEHS)
National Institute of General Medical Sciences (NIGMS)
National Institute of Mental Health (NIMH)
National Institute of Neurological Disorders and Stroke (NINDS)
National Institute of Nursing Research (NINR)
National Library of Medicine (NLM)
Warren Grant Magnuson Clinical Center (CC)
Center for Information Technology (CIT)
National Center for Complementary and Alternative Medicine (NCCAM)
National Center for Research Resources (NCRR)
John E. Fogarty International Center (FIC)
Center for Scientific Review (CSR)



NIH Funding Trends

- Research: \$26 B
- This is 75% of the US R&D budget for Life Sciences Research
- Universities: 58%
- Intramural: 19%



FY04 R&D Funding at NIH

- AIDS Research: \$2.9 B
- Allergy and Infectious Diseases: \$4.4 B
- Cancer Research: \$4.7 B
- Heart Lung and Blood: \$2.8 B



NIH Foreign Funding

Country	FY02	FY03
• Canada	\$28M	\$48M
• U.K.	\$16M	\$36M
• Australia	\$13M	\$20M
• China	\$ 3M	\$ 5M



Components of an NIH Research Proposal (PHS 398)

- Abstract
- Research Plan - 25 pages
 - Specific Aims - 1 page
 - Background and Significance - 2-3 pages
 - Preliminary Studies/Progress Report - 6-8 pages
 - Research Design and Methods - 13-16 pages



Review Process

- Two Levels
 - Peer Review - Scientific and Technical Merit
 - Institute Advisory Council - Funding Authority

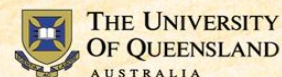


I. Gates Grand Challenges

- US\$200 million to address set of 14 “Grand Challenges” to health, including vaccine development, vector control, nutrition, chronic infections, measuring health and disease in poor countries.
- >1500 LOI. Grants up to US\$20 million each.

II. Gates Foundation

- Founded January 2000. Program areas include Education, Global Health.
- Grants in 2003: \$US1.18 billion (average grant ~ \$US1 million) in more than 100 countries.



Global Fund Against HIV/TB/Malaria

- 3 diseases kill 6 million per year, mostly in Africa.
- Fund focus on programs that reflect national ownership, with balance of prevention/ treatment. Increasing concern with evaluation (accountability).
- Proposals peer-reviewed.
- US\$4.7 billion pledged or received, 2001-2008.
- First two rounds, US\$1.5 billion in grants for 154 programs in 93 countries.
- Priority given to effective proposals from countries with highest burden of disease and least financial resources for disease control.



Rockefeller Foundation

- Four Themes for grants: Food security, health equity, creativity & culture, working communities.
- Approx 1000 grants funded per year, worth \$US180-200 million.
- Health equity focus on development of drugs and vaccines for poor countries, health systems development, HIV/AIDS (including International AIDS Vaccine Initiative).
- Other initiatives include
 - International Partnerships for Microbicides (against STDs);
 - Global Alliance for TB drug development.
- Proactive (seek out opportunities) rather than reacting to unsolicited proposals.



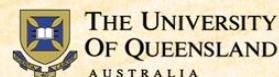
Wellcome Trust

- £400 million in grants (3,500 researchers in 45 countries)
- International peer-reviewed (7,500 reviewers in 2003)
- Funding across all areas of biomedical science, for both UK and non-UK researchers
- Major areas of biomedical science funding include
 - Immunology and Infectious Disease
 - Populations and Public Health
 - Neuroscience and Mental Health
 - Physiological Sciences
 - Molecules, Genes and Cells



Wellcome Trust (Cont.)

- Support major population / public health research schemes in developing countries. Two principal schemes:
 - Health Consequences of Population Change scheme: 5-year program to support research into health impacts of demographic transition in poor countries;
 - International Collaborative Research Grants scheme: partnership with NHMRC & HRC (NZ). A\$30 million allocated to 11 projects over 5 years in Asia-Pacific region.



Multilateral Funding

- WHO. Not a major funding organisation. Key role is normative/technical support to countries. Some programs (eg. TDR) have explicit research role. Minor amounts from Technical Programs (typically < \$100,000).
- World Bank. More decentralized structure than WHO. Some support from central Divisions possible (eg. Population, Health and Nutrition Division), but more likely through country-desks (eg. Burden of disease research in Turkey).
- UNICEF/UNPF.