BUILDING CAPACITY: LESSONS FROM THE TRENCHES

Allan Ronald
University of Manitoba
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*Statistics have worsened in past decade
Millenium development goals
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*Goal #5*   Reduce maternal mortality by 3/4
Millenium development goals

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*Goal #5*   Reduce maternal mortality by 3/4

*Goal #6*   Halt and reverse the epidemics of HIV, Malaria and Tuberculosis
Unparalleled opportunity
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*Burden of disease recognized with established links to poverty and societal failure*
Unparalleled opportunity

*B Burden of disease recognized

*Science has answers
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*Global political commitment-10 billion $ for HIV/AIDS in 2007
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*Grassroots expectations*
Unparalleled opportunity

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*Science has answers
*Global political commitment-10 billion in 2007 for HIV
*Grassroots expectations
*HIV/AIDS can show us the way
The human resource crisis
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*Why does it exist?
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*What are the lessons to be learned from our current efforts?
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*Do we need a “Grand Challenge” equivalent to harness global energies?
The human resource crisis

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* What are the lessons to be learned from our current efforts?

* Do we need a “Grand Challenge” equivalent to harness global energies?

* What role might Canada have in addressing these needs?
Why the crisis?
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*Too few individuals trained*
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* Illness/death (largely due to AIDS in E & S Africa)
Why the crisis?

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*Illness/death (largely due to Aids is E & S Africa)*

*Migration*
Outcome of the 77 graduates of the 1984 Makerere class

- Remain in Uganda: 47%
- Died of HIV/AIDS: 21%
- Other deaths: 6%
- Unknown: 5%
- Migrated: 21%
MIGRATION

- Zambia has only 27% of its medical graduates
- Over 4000 nurses leave each year for the UK from Africa
- The USA obtains ~25% of its health human resources from poor countries
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*Ineffectiveness of donors*
University of Nairobi STI/HIV Program (1980-2006)

*Universities of Manitoba, Antwerp, Washington, Ghent, Oxford, Toronto*
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*Impact- needs evaluation
Why a Grand Challenge process?
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* Enables collaboration among participating countries and institutions
Why a Grand Challenge process?

* Focuses our attention on outcomes & timelines
* Creates public/private partnerships
* Identifies new resources
* Enables collaboration
* Addresses neglected areas
The Grand Challenges

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What kind of providers; nurses, clinical officers, community health workers are required for primary care?
The Grand Challenges

Explores how “traditional” care-givers can be incorporated into health systems and be complimentary?
The Grand Challenges

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Addresses what training processes and professional development best prepares individuals and how these processes can be most effectively scaled up?
The Grand Challenges

IV

How can villages/communities become part of their own health solution and develop local “Healthy Practices”? 
The Grand Challenges

How can the benefits of the billions invested in bio-technology be realized to develop simple specific sensitive multiplex tests?

What will be the need for laboratory infrastructure in this emerging reality?
Current malaria diagnosis in the field with microscopy

- Correctly diagnosed: 42%
- Overdiagnosis: 33%
- Missed diagnosis: 25%
Children who die of febrile illness in Kilifi Kenya (ages 2 months-5 years)**

- **Died with bacterial sepsis**: 52%
- **Died with malaria**: 26%
- **Died of unknown causes**: 22%

The Grand Challenges

VI

How do we build the “Academic” infrastructure to sustain the science, training expertise and professional role models?
The Grand Challenges

VII

How can academic centers be integrated with Ministries of Health to lead together in addressing the nations’ health needs?
The Grand Challenges

VIII

What are the best options with regards to drug manufacture, pricing, regulation, quality, logistics, and distribution systems and pharmacy training?
The Grand Challenges

IX

What information systems will connect health care systems and ensure efficiencies, track products, and tabulate outcomes?
How can faith-based institutions/providers partner with national health systems?
The Grand Challenges

XI

What are the “real world” determinants of health and can we combine addressing them with our health responses?
The Grand Challenges

XII

How do we move “Research” to “Action”? 
Research to action
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*“Not just a Gap but a Chasm”*
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*1601 lemon juice cures scurvey...
In 1865 it finally becomes policy*
Research to action

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*400 000 are stillborn or have congenital syphilis*
Research to action

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*Science of innovation diffusion*

(Berwick JAMA 2003:289,1969)
“For the happiness of the people and the power of the country, the care of public health is the first duty of the statesman”
Why a Role for Canada?

- An ‘identity of interests’ - we are threatened as well by Infectious Diseases
- Canadian values - widespread commitment to sharing our resources
- Capacity - 20% of our development assistance if put into assisting with a Public Health response with a Grand Challenge for a Health Workforce could make a difference
Possible Next Steps

Build the vision
Lobby political leaders, the media and the public
Identify demonstration projects
Create exchange opportunities with institutions, governments, individuals
Use the Diaspora
Be creative and accept risks-failures will occur
Be prepared for the Long Haul
Make Science a mantra
OUR TASK- ROBERT KENNEDY

GREAT SOCIAL OUTCOMES ARE THE MERE ACCUMULATIONS OF INDIVIDUAL ACTIONS. FEW HAVE THE GREATNESS TO BEND HISTORY BUT WE EACH CAN WORK TO CHANGE EVENTS AND FROM A MILLION CENTERS OF ENERGY A CURRENT SWEEPS AWAY OPPRESSION AND INJUSTICE
SOUTH AFRICA LIFE EXPECTANCY
40 YEARS

NORTH AMERICA LIFE EXPECTANCY
80 YEARS
A ROLE FOR THE

VISION, LEADERSHIP, GOALS, PASSION, AND A BUSINESS PLAN WITH SUPPORTING INFRASTRUCTURE
ADVOCACY AS ‘AN INSIDER’ A LEADING ROLE IN INTEGRATING NATIONAL AND WESTERN UNIVERSITIES IN DEVELOPING INFECTIOUS DISEASE TRAINING SITES
DEVELOP POSTGRAD TRAINING COURSE IN ‘TROPICAL’ MEDICINE WITH AFRICAN INSTITUTIONS- ‘GORGAS EQUIVALENTS’
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*You combine excellence and academic achievements along with professional stature*

*You have substantial resources and partners*
IDSA opportunities
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*Identify leadership with vision and passion
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* Build advocacy
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* Develop training sites for ID fellowships
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* Develop training sites for ID fellowships
* Create tropical medicine “Gorgas” in Africa
* Mentor other professional ID societies
* Compete for a “Grand Challenge”
Conclusion

Human resources are the critical missing piece in our efforts to prevent millions from dying from infectious diseases.
How will we respond?