

Lessons for TB from HIV

by Mark Harrington

Treatment Action Group

11th Annual IUATLD NAR Meeting

Vancouver, British Columbia

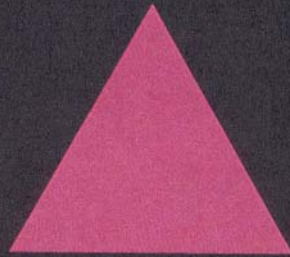
24 February 2007

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A Vision for the Way Forward

We have an opportunity to create a powerful global TB movement, based on an emerging alliance between scientists, front-line health providers, and treatment activists to drive political will, which in turn can unlock resources to scale up quality care and expanded, accelerated R&D to reduce TB incidence and mortality, improve cure rates, and ultimately make TB history with new diagnostics, drugs, and vaccines.





SILENCE = DEATH

Why is Reagan silent about AIDS? What is really going on at the Center for Disease Control, the Federal Drug Administration, and the Vatican?
Gays and lesbians are not expendable...Use your power...Vote...Boycott...Defend yourselves...Turn anger, fear, grief into action.

**THE GOVERNMENT HAS
BLOOD ON ITS HANDS**



**ONE AIDS DEATH
EVERY HALF HOUR**











AP

Treatment Activist Theory & Practice (I)

1. Policy change should be based on rigorous science.
2. The HIV and TB epidemics are political.
3. Human rights, public health, and social justice all demand a more comprehensive response to the HIV and TB epidemics worldwide.
4. Understanding that the political economy of health and research at the global and national levels is crucial to making headway...

Treatment Activist Theory & Practice (II)

5. Engaging informed community advocates and civil society organizations at local, national, and global levels is essential to unlocking the resources needed to transform health and research systems, and to discover, develop, and disseminate life-saving health technologies such as antiretroviral therapy and better TB diagnostics and treatment combinations to all who need them."

- Zackie Achmat, "Science & Social Justice,"
36th IUATLD keynote, 2005

TA Theory & Practice III

6. Language matters:

- "Kenya has 100% DOTS coverage." (?)
- "70% case detection" = <40% of TB cases!
- "Microscopy is the *best* diagnostic test for TB" (*but detects just 19% cases*).
- "85% treatment completion" ≠ 85% cure.
- "DOTS" ≠ directly-observed therapy.
- "Treatment is free." (*Diagnosis is not.*)

What do we have in common?

7. Scientists, health providers, and activists all:

- believe in personal agency through collective action to achieve change;**
- are optimists (mostly);**
- believe in science;**
- need access to information, networks (connections), money, and power to succeed.**

How are we different? (I)

- Education
- Socio-economic status
- Technical and scientific information
- Bring different approaches and expertise to bear on the situation

8. We need to learn to speak a common language if we are to collaborate.

How are we different? (II)

TB

Both are diseases of poverty, exclusion, social inequity

Old

Bacterial

Diagnosis old, insensitive

Curable (4 tx, 6m)

Preventable (BCG, INH)

Research poorly funded

Few new drugs

Conservative

Political will lacking

Little activism

HIV

New

Retroviral

Dx 99% sens/spec., \$1, 20m

Treatable (3 tx, lifelong)

Preventable (but no vaccine)

Research well-funded

Many new drugs

Embraces frequent improvements

Political will growing

Global activist movement

How can we succeed?

9. **Activists must become literate** in science, economics, and politics.
10. **Scientists must open to activism** and engage with affected communities.
11. **Together we can become an unstoppable force** for change.
12. We need the credibility which science brings; **scientists need public support to obtain resources and continue (expand) their research.**

Data-driven activism

13. **We need to work together** to mobilize the political will, funding for scientific research and high-quality medical care for all (not just HIV or TB care, but universal access to primary care including good HIV + TB care)!
14. **Care and research are interdependent.**
15. **Science and community need each other.**
16. **Follow the money...**

Tuberculosis Research & Development: A Critical Analysis

second edition

by Cindra Feuer

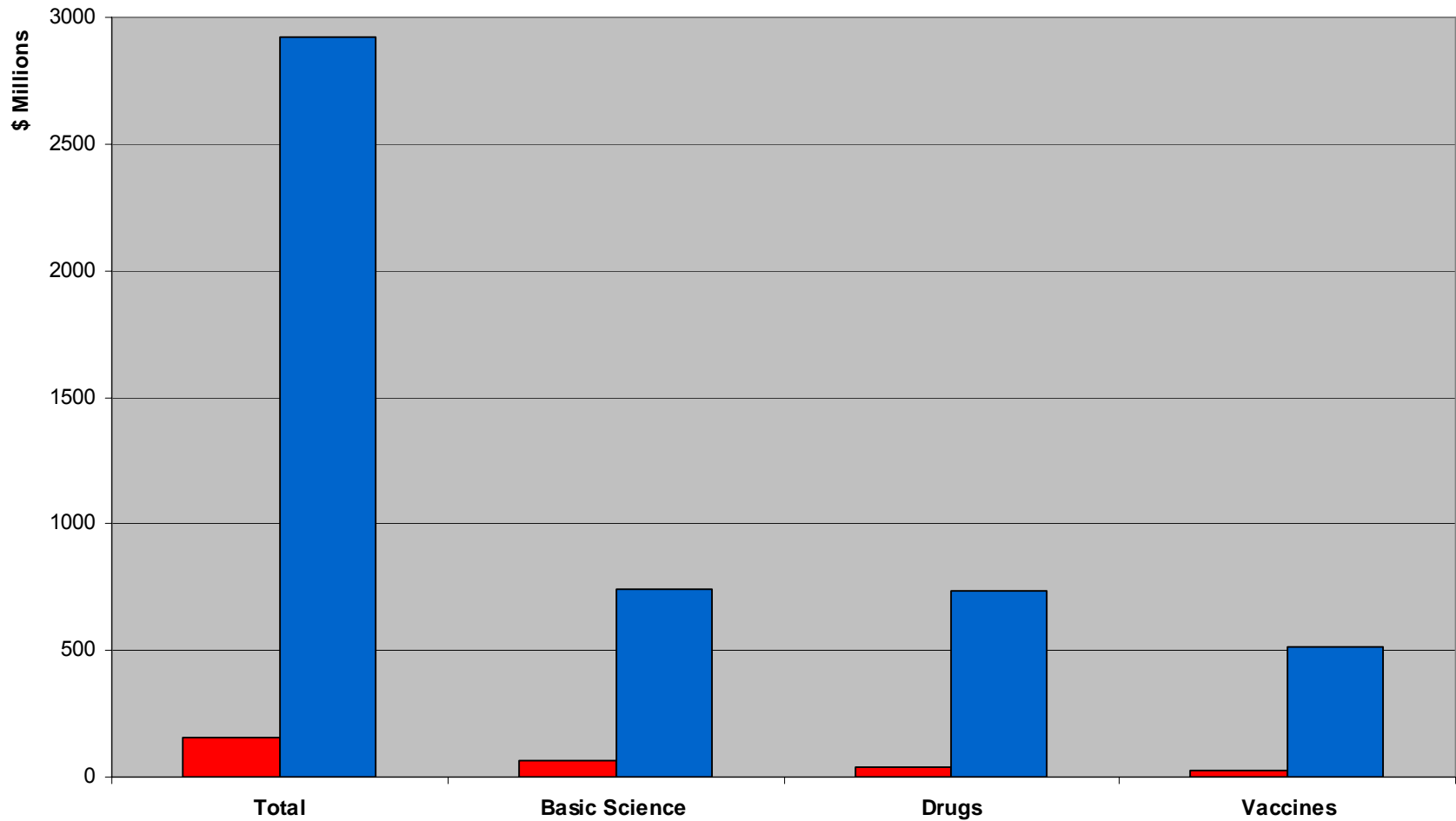
edited by Javid Syed and Mark Harrington
with Bob Huff

October 2008



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NIH Investment: TB vs. HIV (2005)

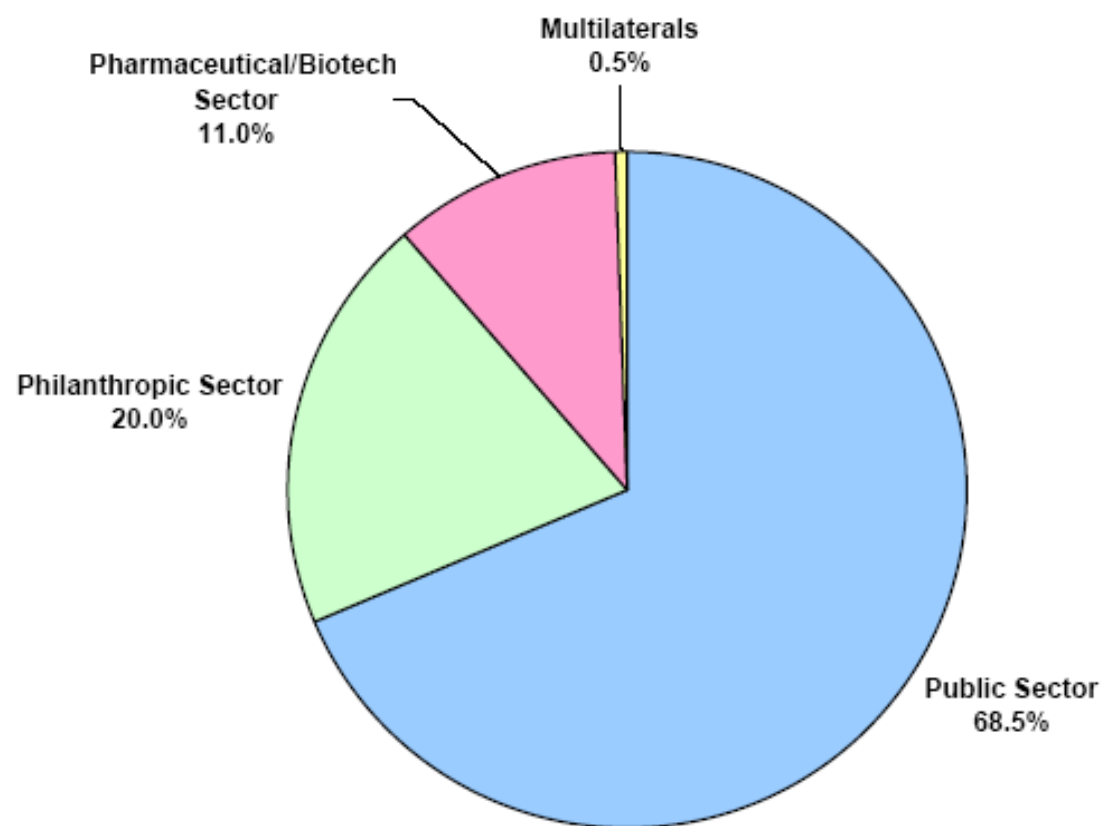


■ TB ■ HIV

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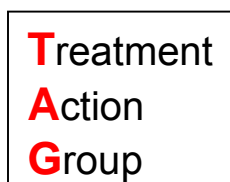
Who Are the Funders?

TB Research Funding by Donor Category (2005)

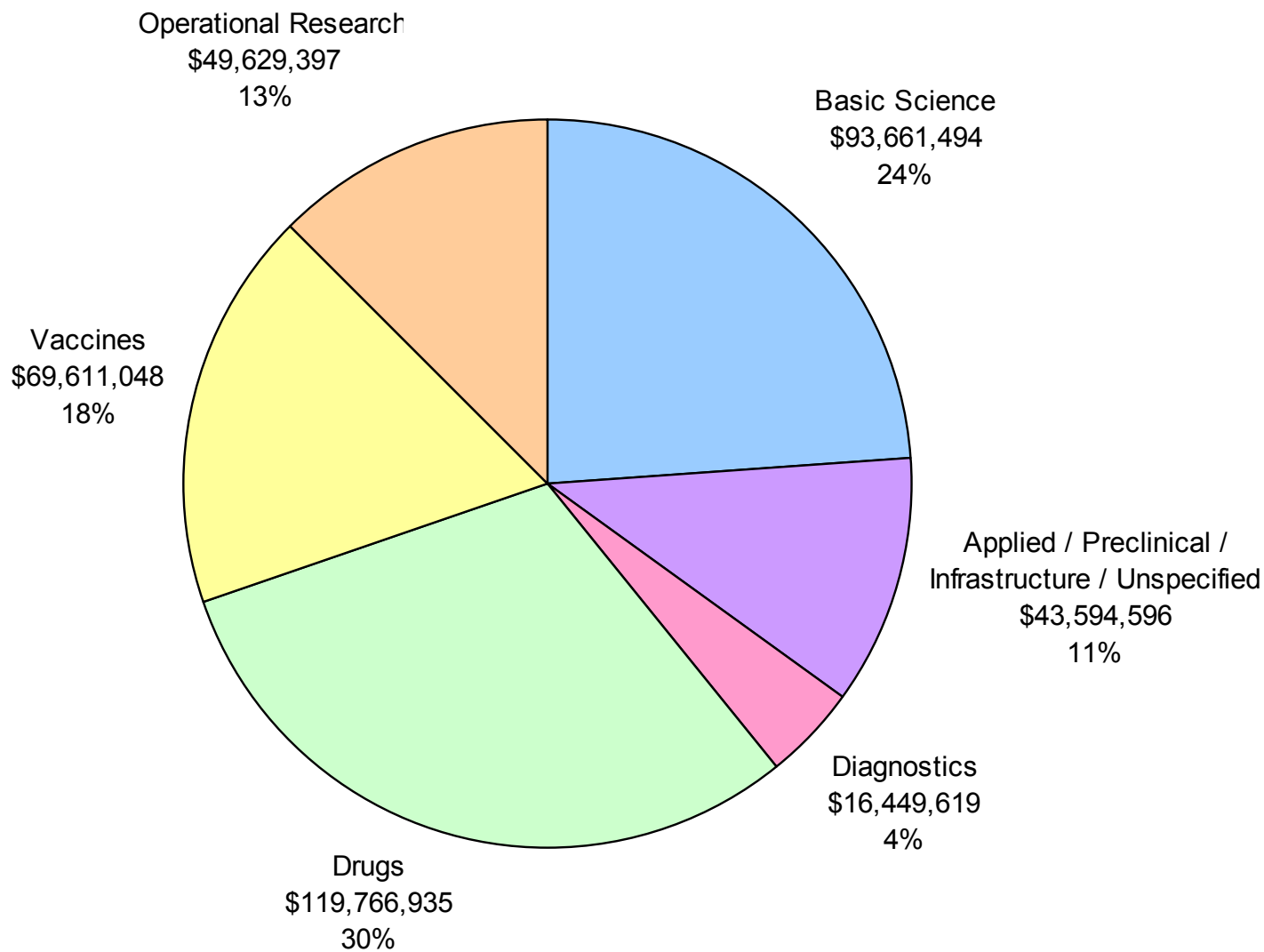


TOP 10 Donors to TB Research (2005)

- 1 NIAID / NIH
- 2 Gates Foundation
- 3 Medical Research Council (UK)
- 4 Other Institutes & Centers / NIH
- 5 Centers for Disease Control
- 6 Company X
- 7 Wellcome Trust
- 8 NHLBI / NIH
- 9 European Commission 6th Framework
- 10 Otsuka



Overall TB R&D Investment (2005 = \$392.7M)

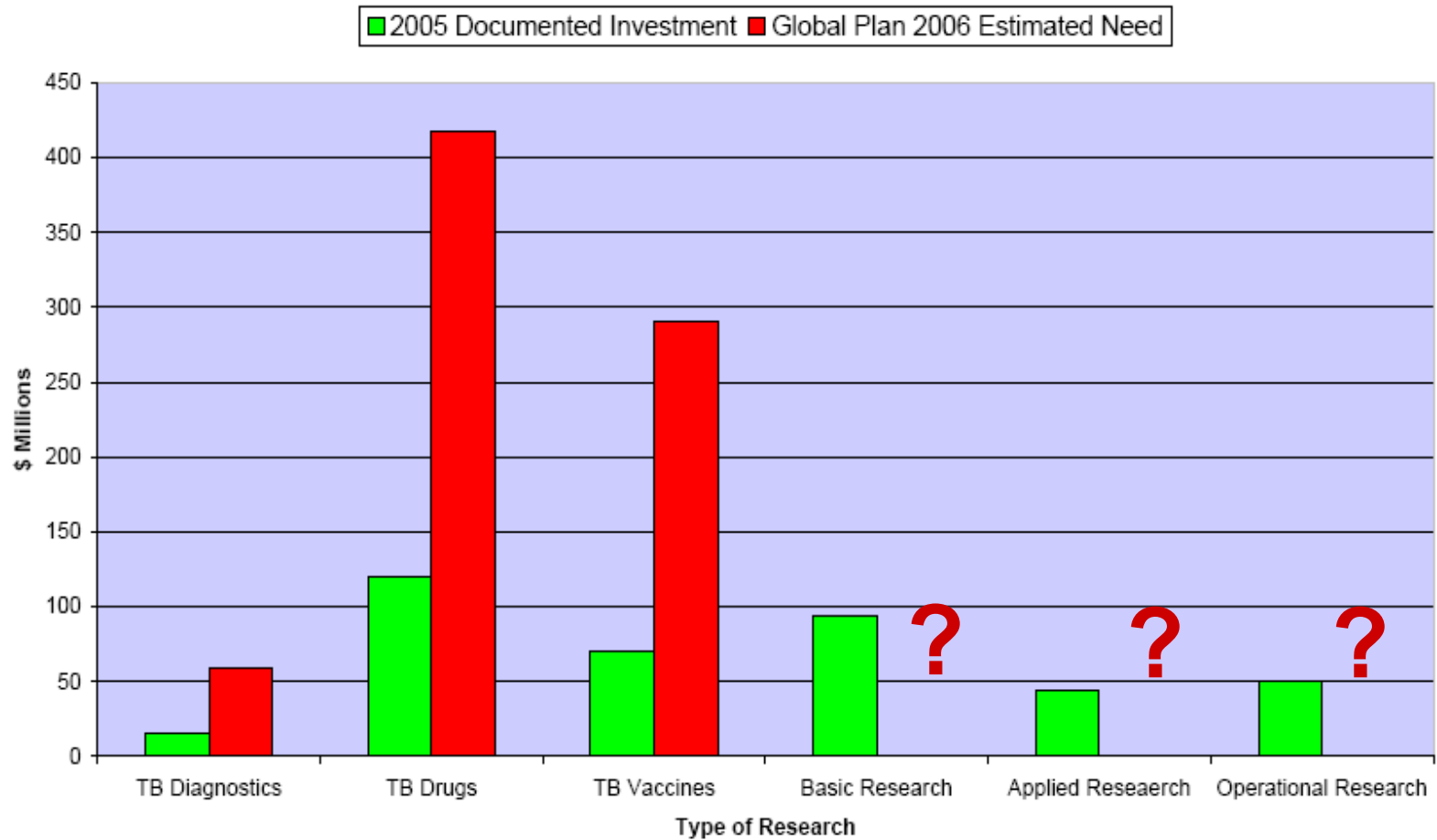


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Gaps in the Global Plan

Actual vs. Need

(2005)

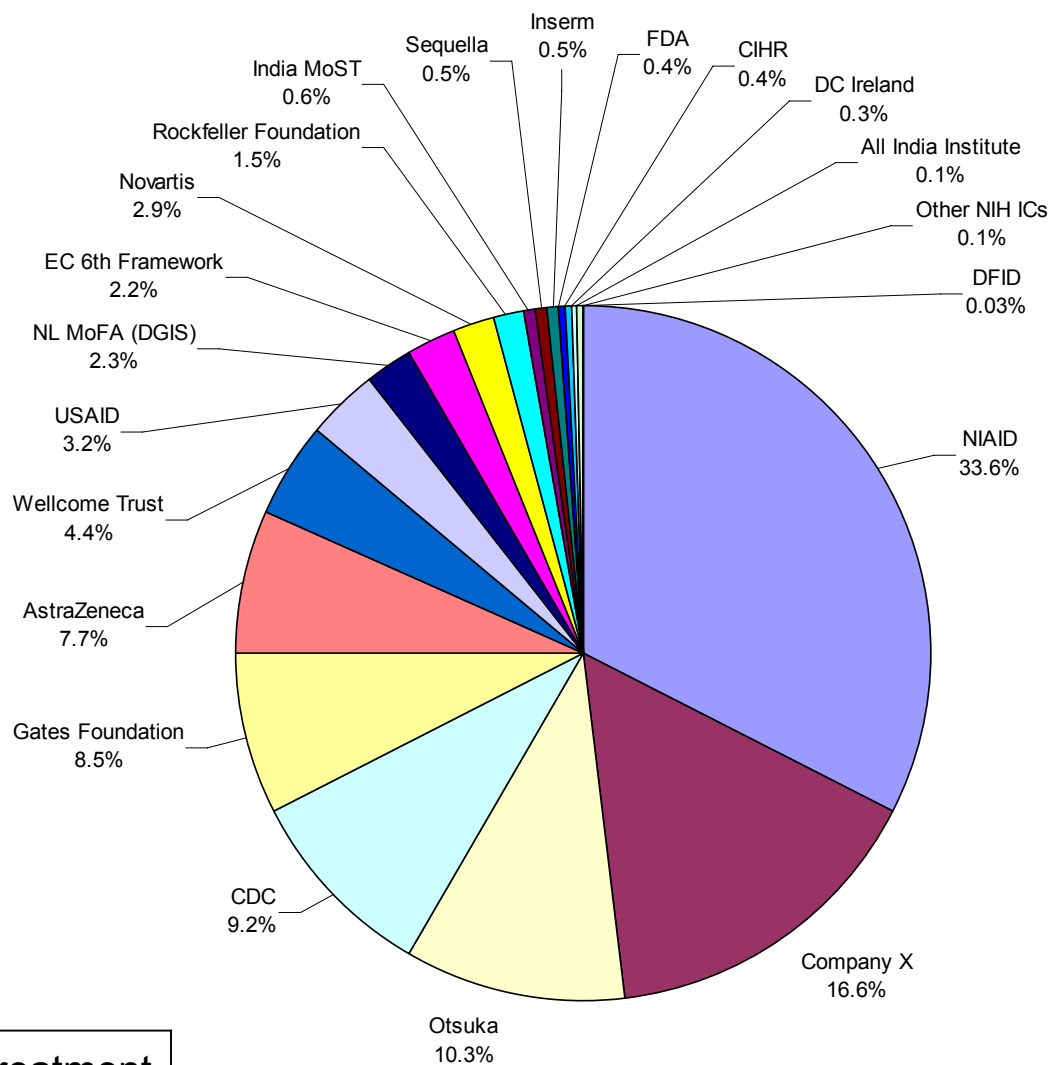


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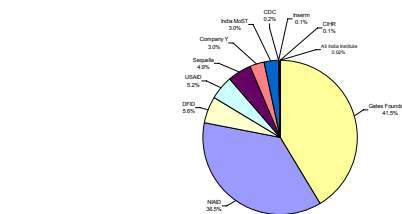
Feuer C. Tuberculosis Research & Development: A Critical Analysis. Treatment Action Group (TAG); 2006

TB R&D: Drugs/Diagnostics/Vaccines

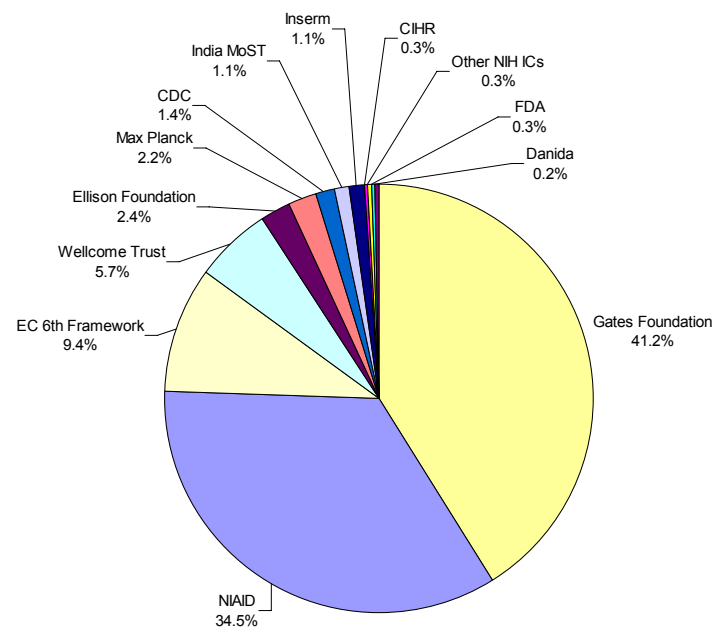
(2005 = \$206M)



Drugs, \$120M

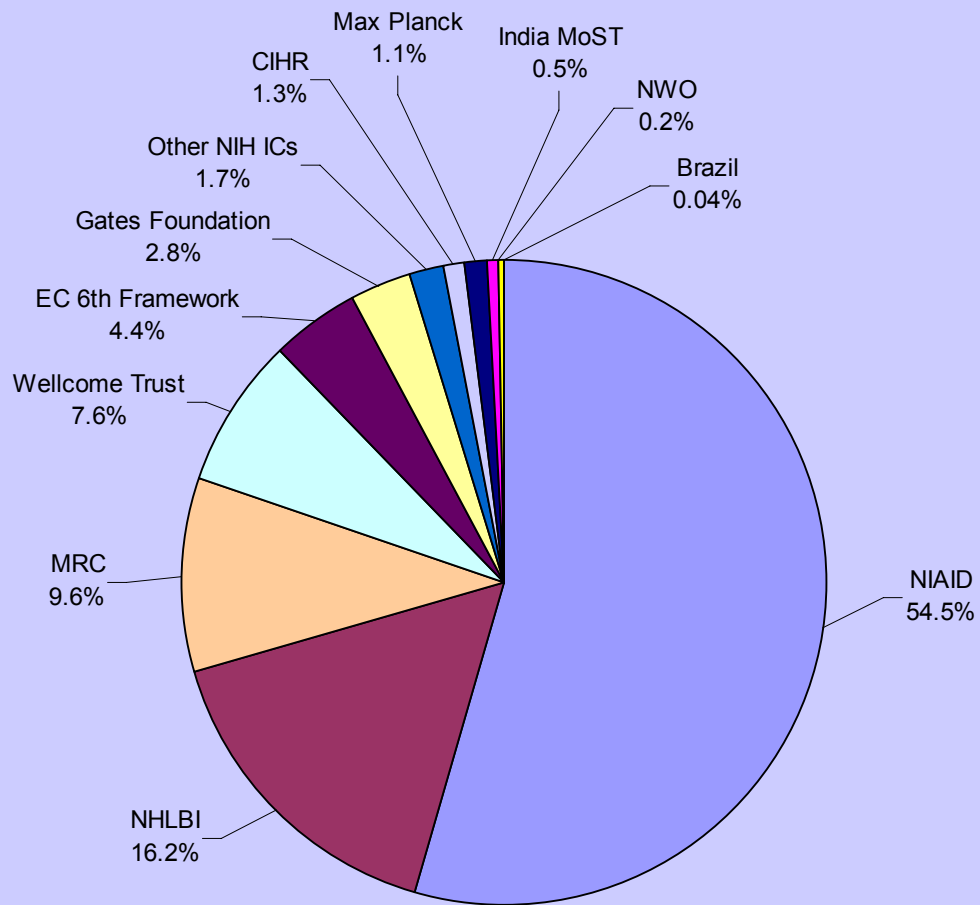


Diagnostics, \$16M



Vaccines, \$70M

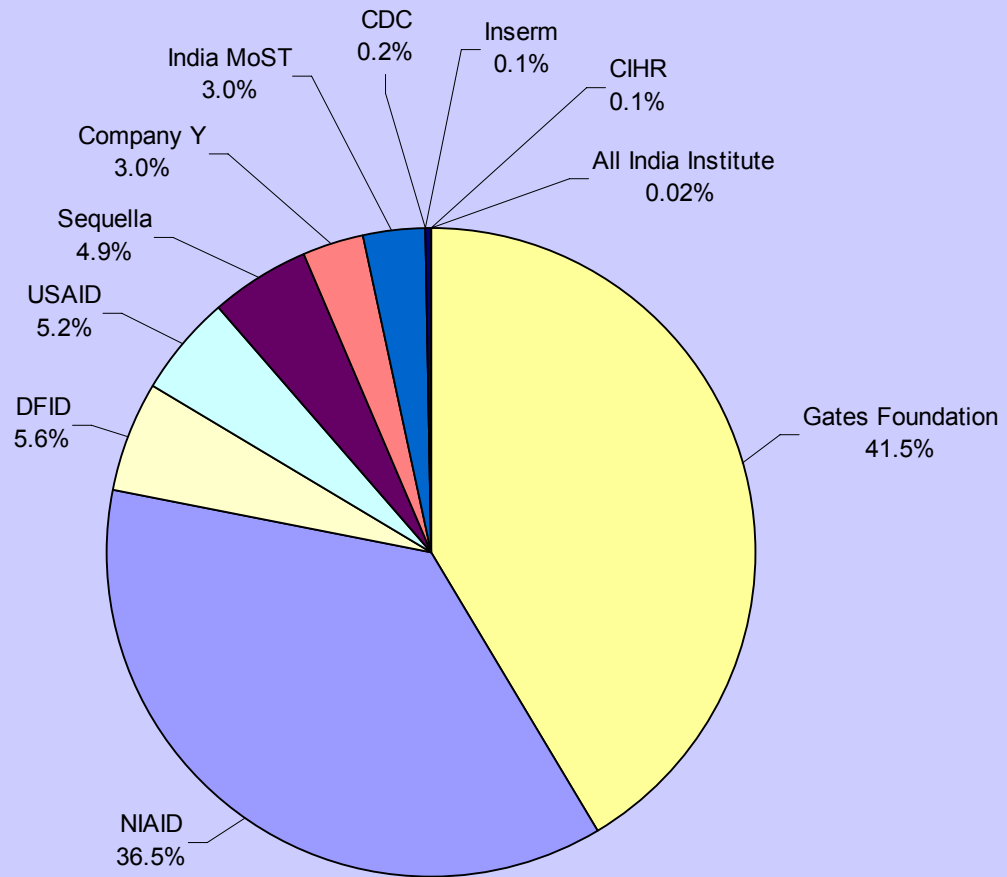
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Basic Science

\$93,661,494

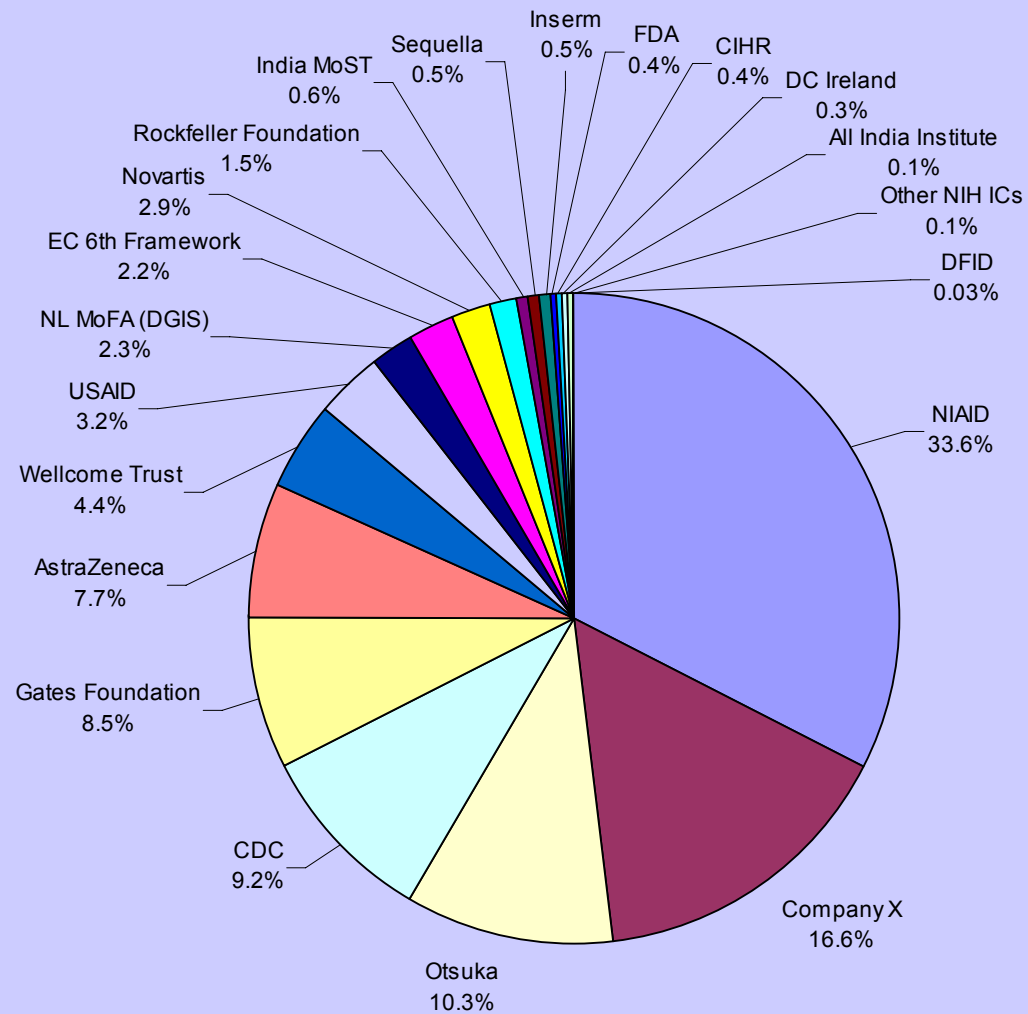
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Diagnostics Research

\$16,449,619

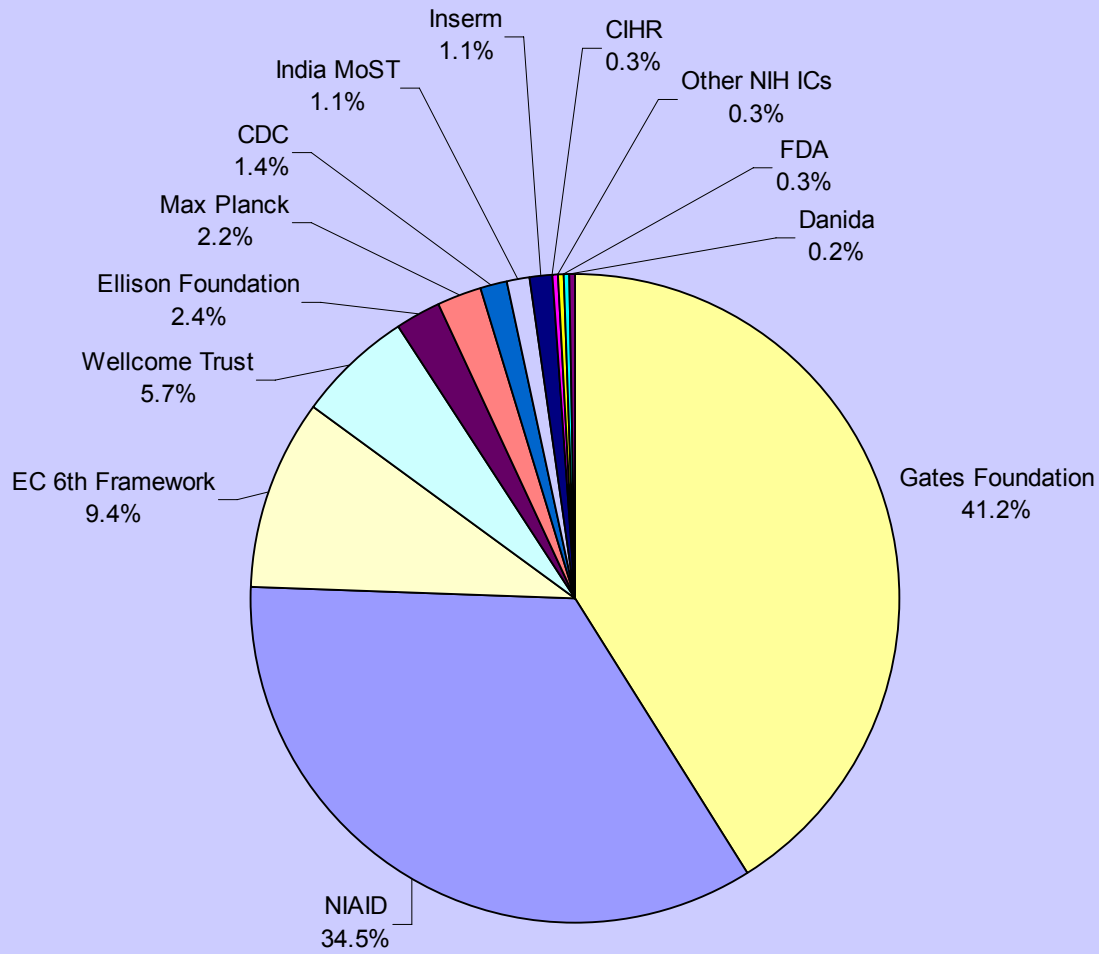
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Drug Research

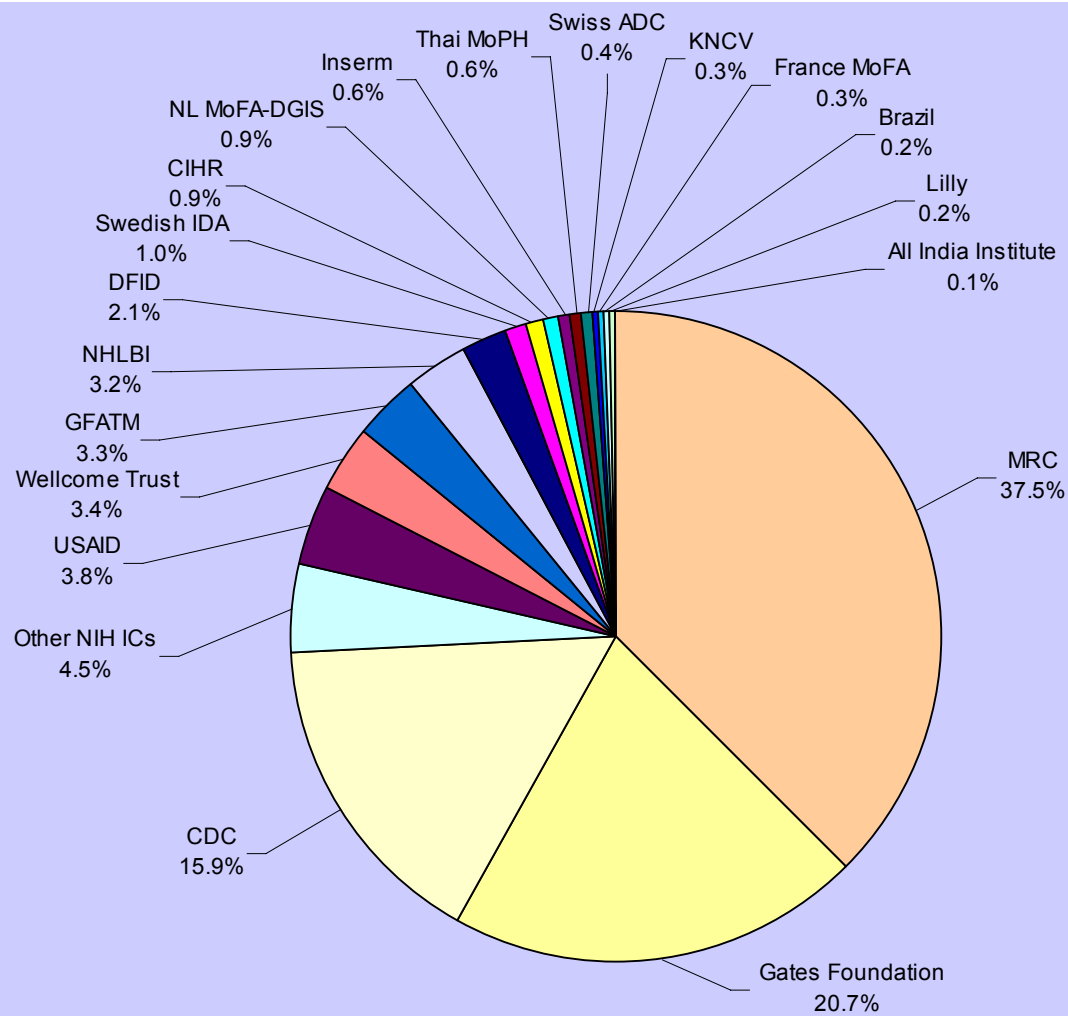
\$119,766,935

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Vaccine Research
\$69,611,048

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Operational Research

\$49,629,397

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Final Recommendations (I)

17. **A comprehensive global TB R&D agenda is urgently needed.**
 - TB R&D needs better global/national coordination.
 - Industry needs to be more transparent.
18. **Reporting consistency is needed** to better track and annually update TB R&D.

Final Recommendations (II)

- **Only \$400M was spent on TB R&D in 2005,** but *GPSTB* estimates \$900M /year is necessary.
 - *GPSTB* omits basic science, infrastructure development, and operational research.
19. TAG estimates that:
- **\$1,050B is needed each year for R&D on new TB tools** (drugs, diagnostics, vaccines)
 - **\$950M is needed each year for basic science, infrastructure, and operational research.**

Final Recommendations (III)

20. **A five-fold (400%) increase in annual TB R&D expenditures is the minimum necessary to achieve *Global Plan* goals.**
- 70% from public sector
 - Emerging countries such as Brazil, China, India, Russia, South Africa, Thailand, should play a bigger role.

A Call to Action

- \$2B/year for TB R&D.
- A global TB R&D movement.
- Focus on M/XDR-TB as a fast track to accelerated approval for new TB drugs.
- Involve the community!
- Let's make this year's IUATLD meeting in Cape Town a global festival of TB activism!

Gracias - Merci - Thank You!

- Cindra Feuer, Bob Huff, Javid Syed, TAG;
- Donors who reported information (but not those such as GSK who declined);
- BMGF for funding this critical analysis;
- IUATLD NAR and Stop TB Canada
- MSF, PIH, TAC, and our TB and HIV research and treatment activist colleagues who inspire us every day.