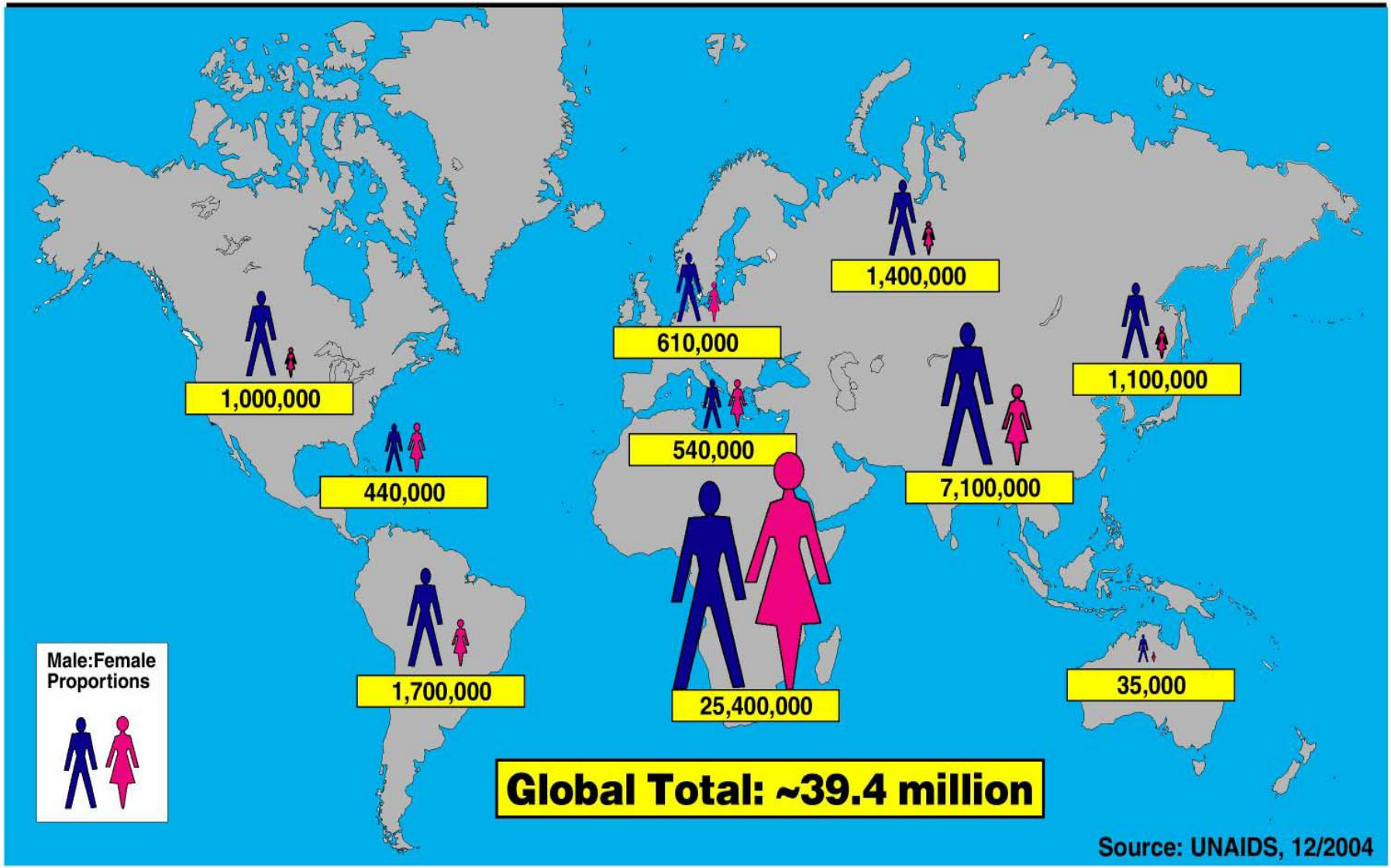
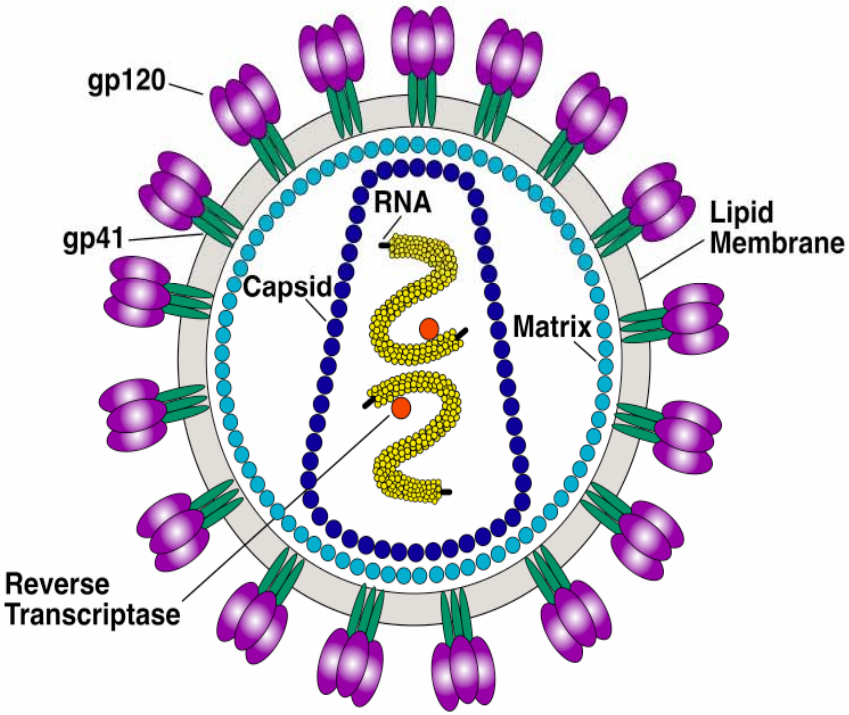
# Estimated Number of Persons Living with HIV/AIDS, December, 2004



# Approaches to HIV Prevention

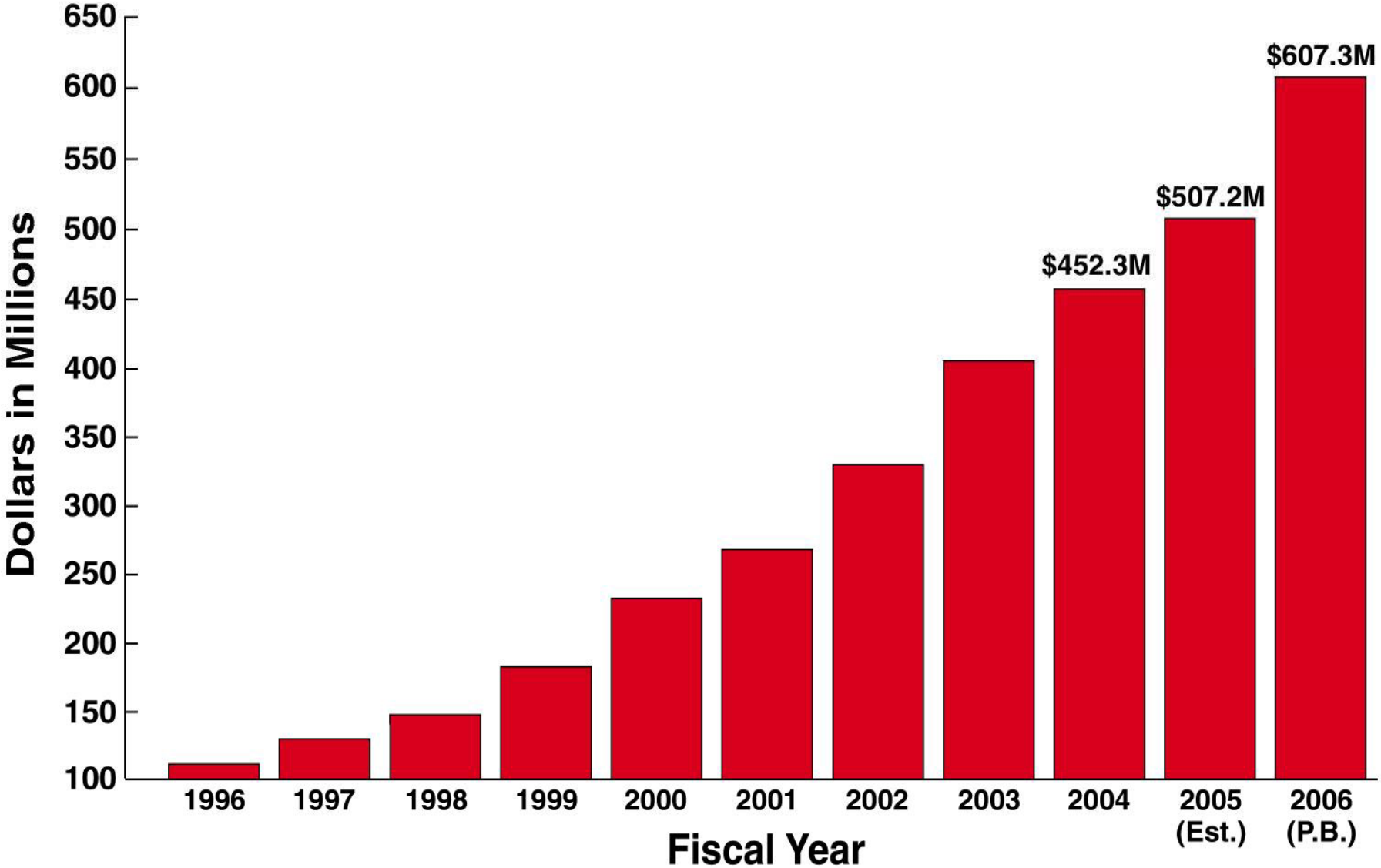
- Interruption of transmission from mother to child
- Education and behavior modification
- Drug abuse treatment (e.g. methadone)
- Condoms, clean syringes
- Topical microbicides
- Treatment of other sexually transmitted diseases
- Antiretroviral therapy
- **Vaccination**

# Scientific Challenges in the Development of an HIV Vaccine

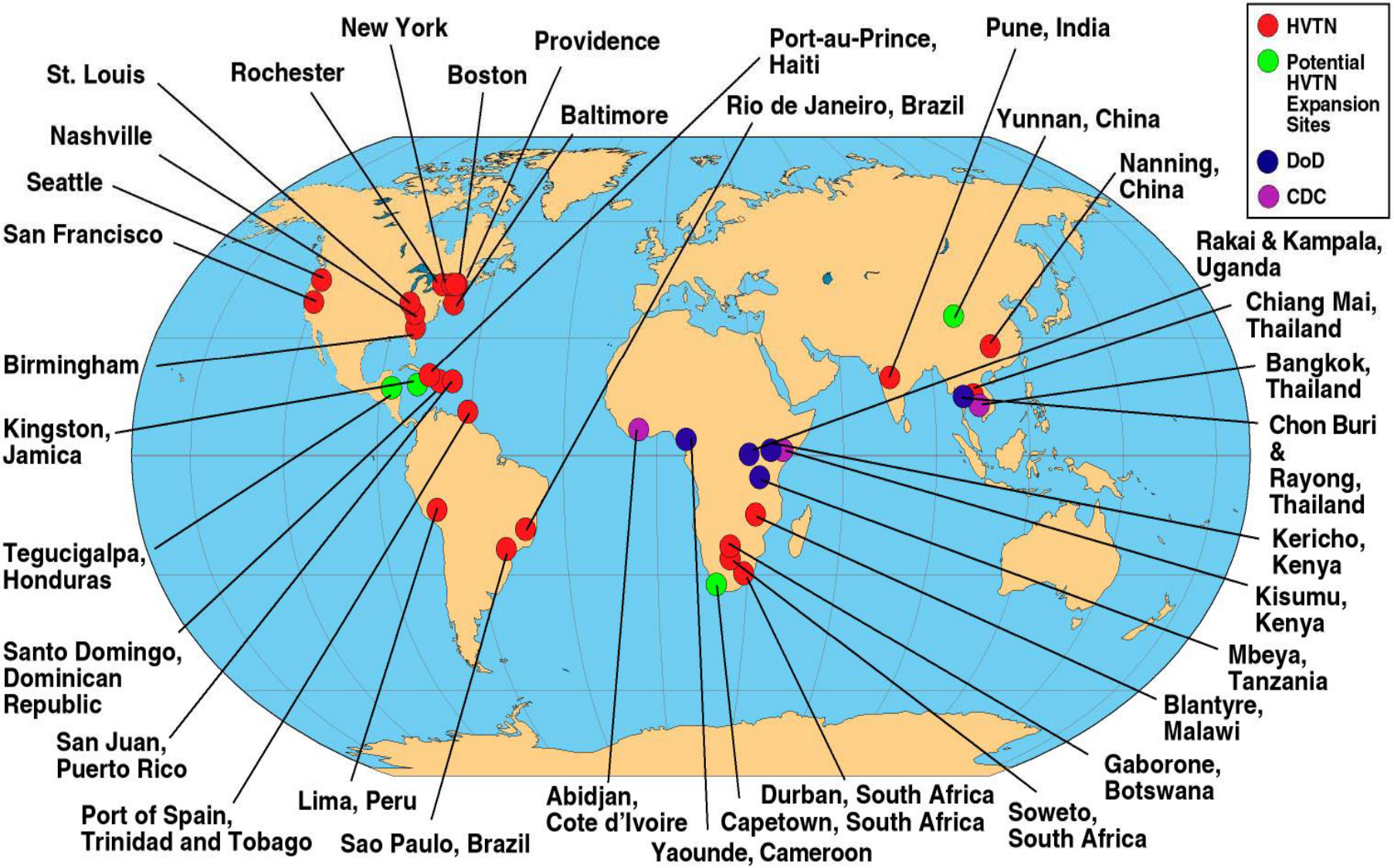



- The natural immune response to HIV is inadequate
- HIV hides from the immune system
- HIV targets and destroys the immune system
- HIV mutates rapidly

# NIH HIV Vaccine Research Funding



# International Evaluation of HIV Vaccines: U.S. Government Sponsored Sites



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# The Need for a Global HIV Vaccine Enterprise

R.D. Klausner, A.S. Fauci, L. Corey, G.J. Nabel, H. Gayle, S. Berkley, B.F. Haynes, D. Baltimore, C. Collins, R.G. Douglas, J. Esparza, D.P. Francis, N.K. Ganguly, J.L. Gerberding, M.I. Johnston, M.D. Kazatchkine, A.J. McMichael, M.W. Makgoba, G. Pantaleo, P. Piot, Y. Shao, E. Tramont, H. Varmus, J.N. Wasserheit

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Policy Forum

# The Global HIV/AIDS Vaccine Enterprise: Scientific Strategic Plan

Coordinating Committee of the Global HIV/AIDS Vaccine Enterprise

www.plosmedicine.org

# NIAID Vaccine Research Center

Basic Research → Clinical Trials

- 5-story state-of-the-art facility, opened fall 2000
- 170 employees
- HIV, smallpox, ebola and other HFVs, SARS, WNV
- Close collaborations with clinical trials groups - HVTN, WRAIR, CDC

# The Center for HIV/AIDS Vaccine Immunology (CHAVI)

- "Virtual" center to address key scientific roadblocks
- Request for Applications released September 30, 2004
- Applications reviewed in June/July, 2005
- One 7-year award expected in August, 2005
  - FY 2005: $14M (est.)
  - FY 2006: $48M (est.)

# Confronting AIDS in the 21st Century