



Connecting Organizations for
Regional Disease Surveillance

CORDS Conference 2018
Side meeting of the
Prince Mahidol Award Conference
January 29-30 2018

Lessons learned from HIV for the next pandemic

Françoise Barré-Sinoussi,

Nobel Laureate,

*Honorary President of the Institut Pasteur
International Network*



HIV/AIDS, a global, coordinated and integrated response to health threats

Epidemiological Surveillance and Clinical Observations

Centers for Disease Control and Prevention

MMWR



Detection/Alert

**Information/Education
/Communication**

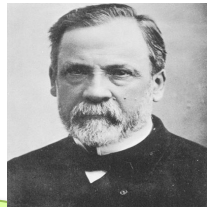
**Access to prevention,
care, treatment and
monitoring services**

**Basic research
(mechanisms;
biomarkers; targets...)**

People
Patients/Communities/ Activists

Media
Decision makers,
International Organisations

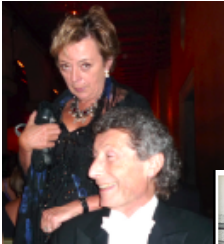
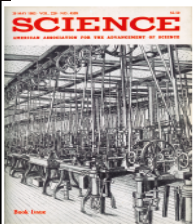
**Social
sciences**



**Tools for diagnosis
prevention and
treatment**

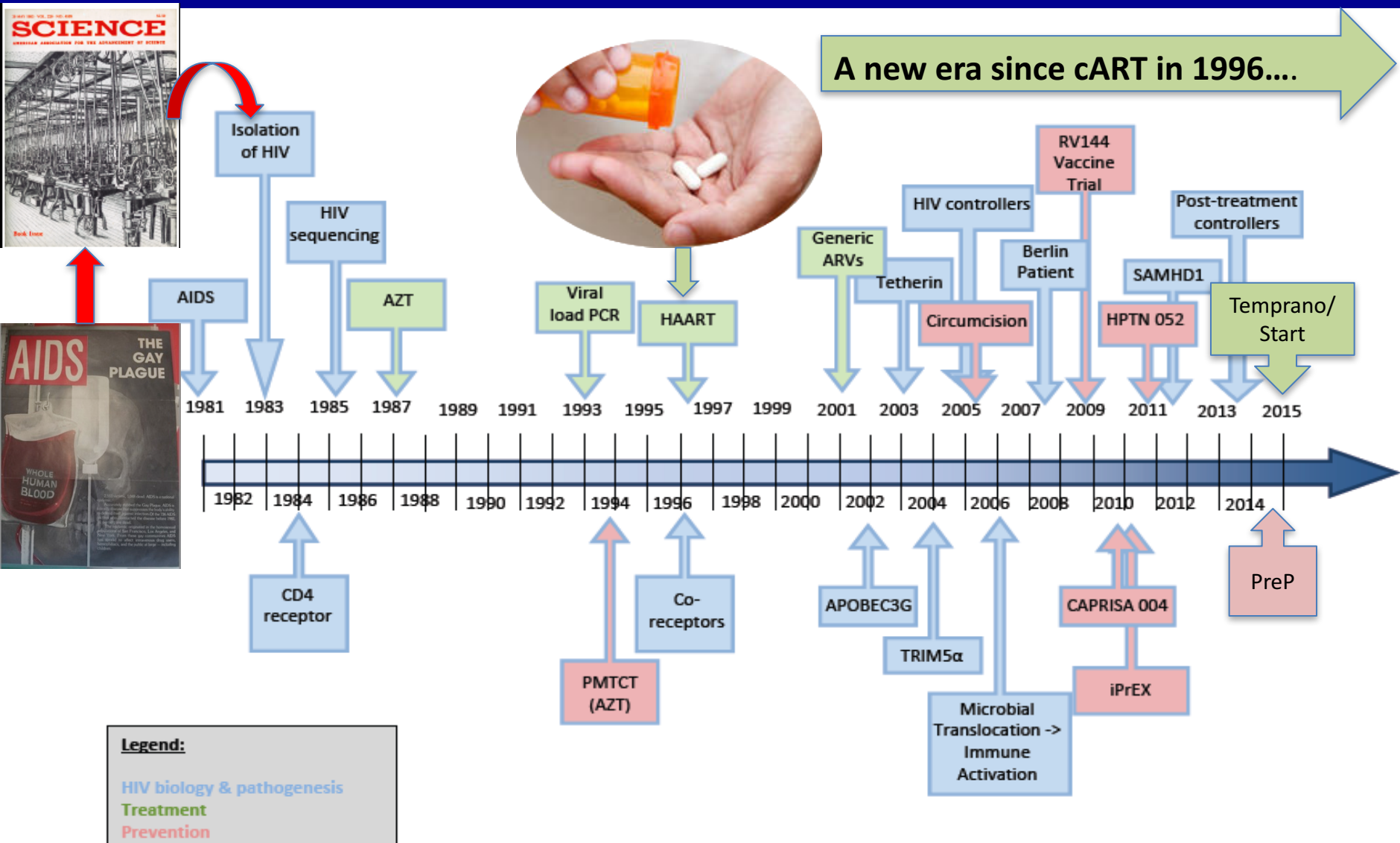
**Clinical and
Implementation
research -(validation)**

**PREDICT
PREVENT
CONTROL**

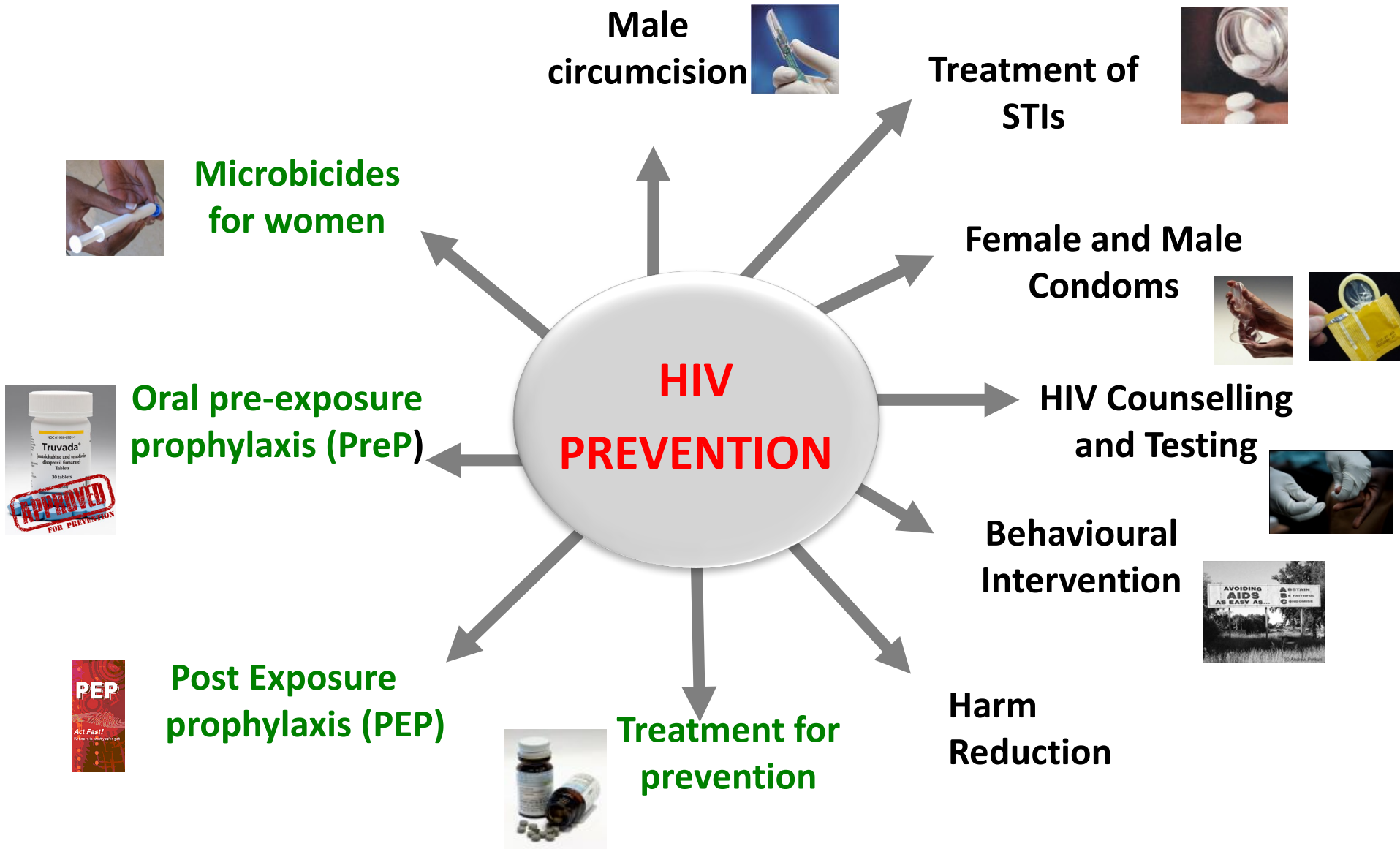


More than 35 years of HIV Science

A good example of translational research



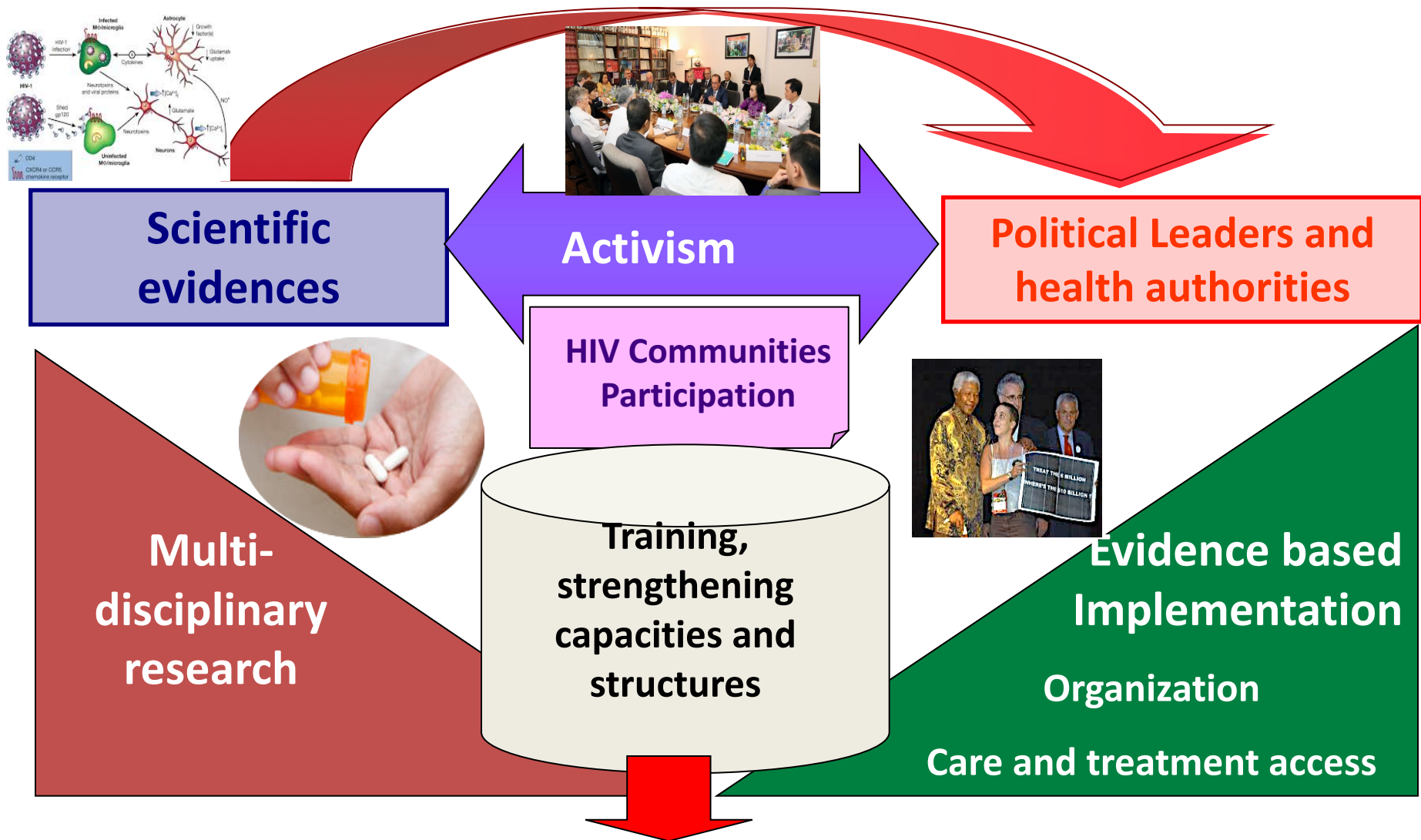
Combination of tools scientifically validated for prevention



ARV prophylaxis (0-96% efficacy..)

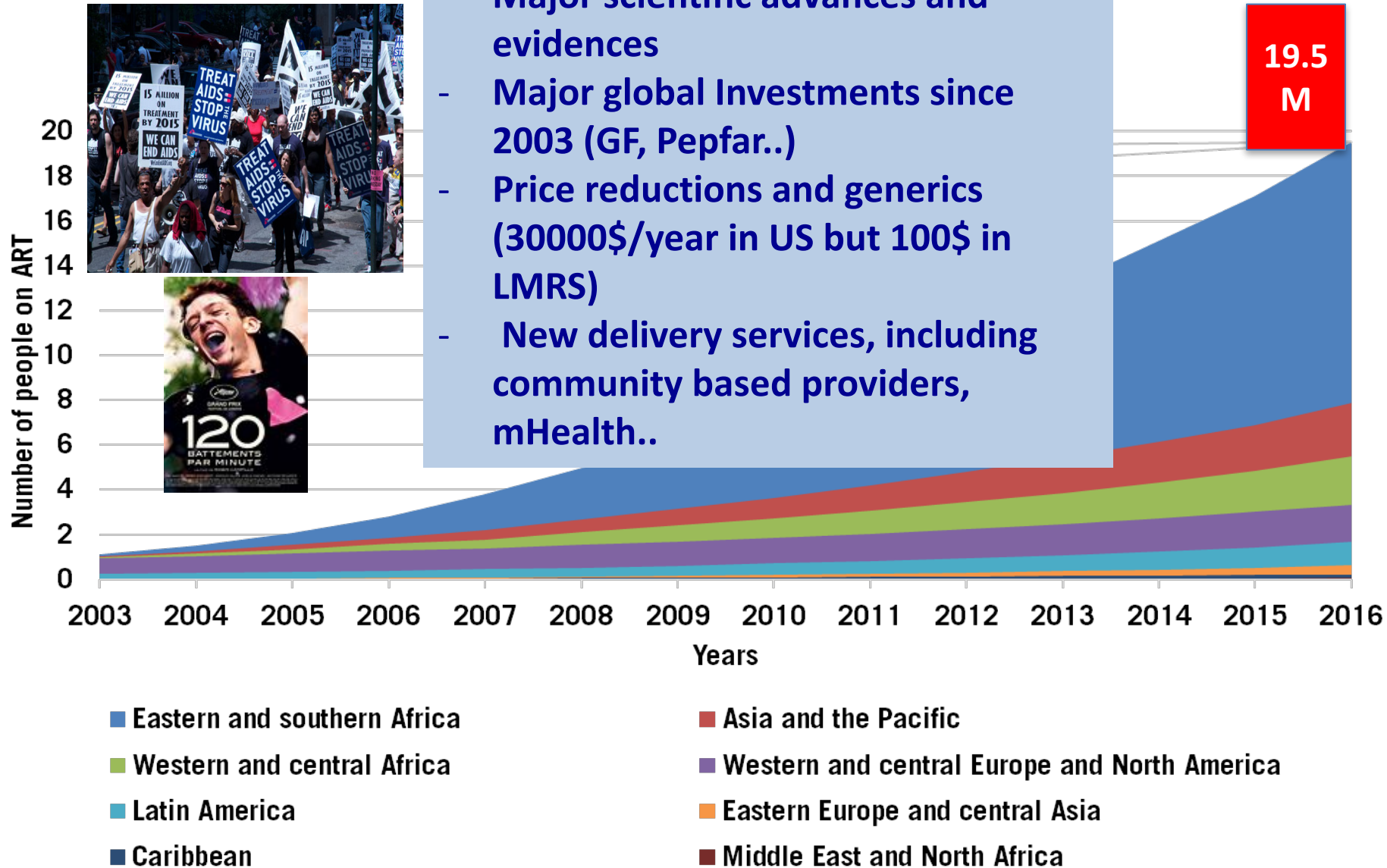
Future PreP: long-lasting ARVs?

International mobilization for evidence-based interventions...

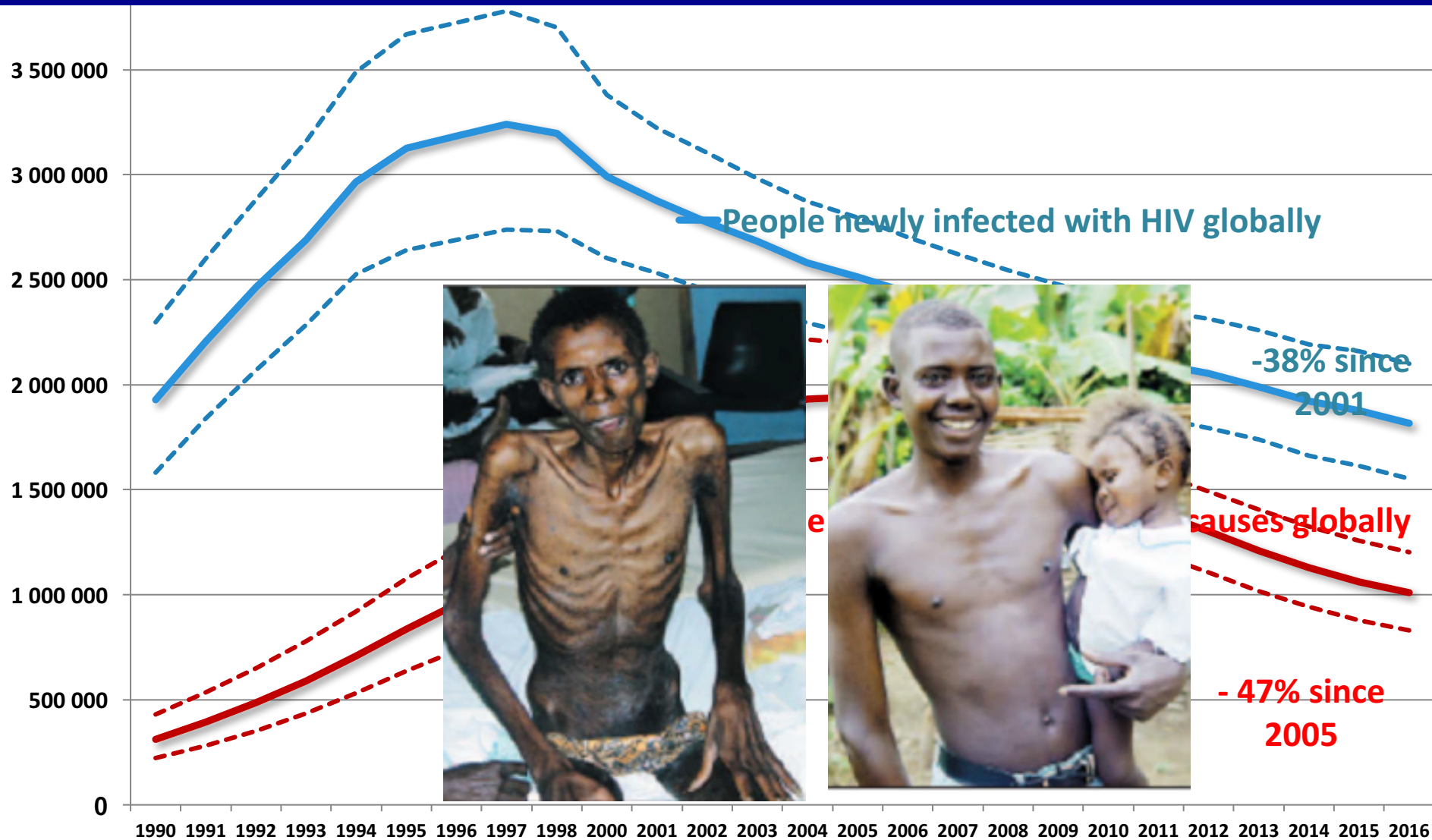


Decisions for the benefit of all patients wherever they are, whoever they are

2003-2016: Global Scale-up of HIV Treatment



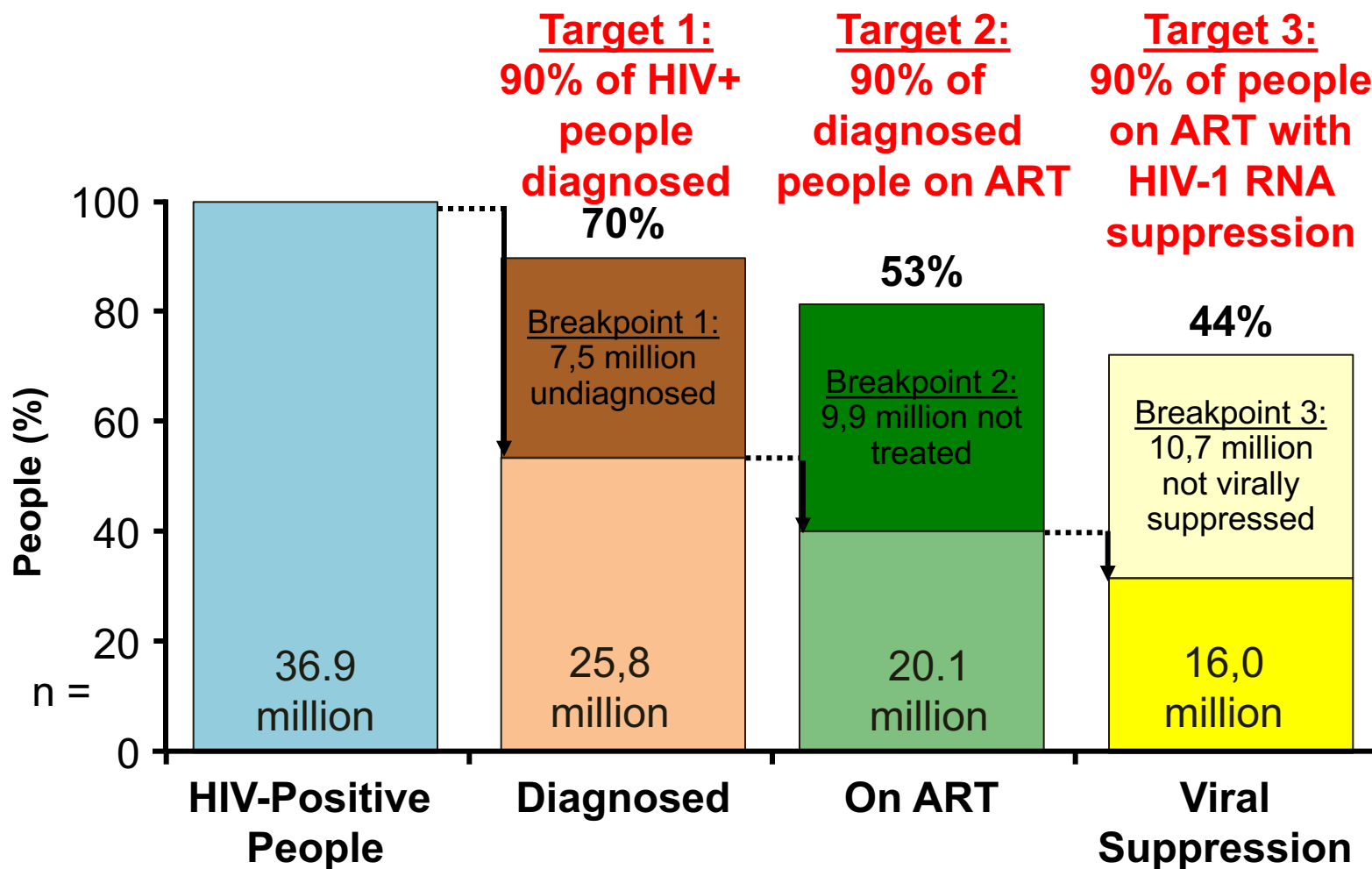
Decline in HIV incidence and mortality over time



But, only 53% PLWH on cART, 1 M HIV-related deaths/year and 1.8 M people newly infected/year....

Ending the HIV Epidemic by 2030?

UNAIDS/WHO 90-90-90 ambitious targets...



Key Challenges and Priorities in HIV/AIDS today

MANY CHALLENGES *(Social, Structural, Behavior, Biomedical..)*

Prevent new infections

(education, condoms, circumcision, risk reduction...)

Test, treat and retain

- 30-50% of HIV+ people ignore their status
- Cascade of continuum of care (only 25 to 60% of viral suppression...)

- Strengthen health systems and services *(linking prevention, care and treatment services)*
- Leadership/governance/National integrated policies
- Innovations across the continuum of care and optimization of care package *(early test and treat, POC, long acting drugs, community cART delivery and support, mHealth...)*

**IMPLEMENT
EFFICIENT PUBLIC
HEALTH PROGRAM!**

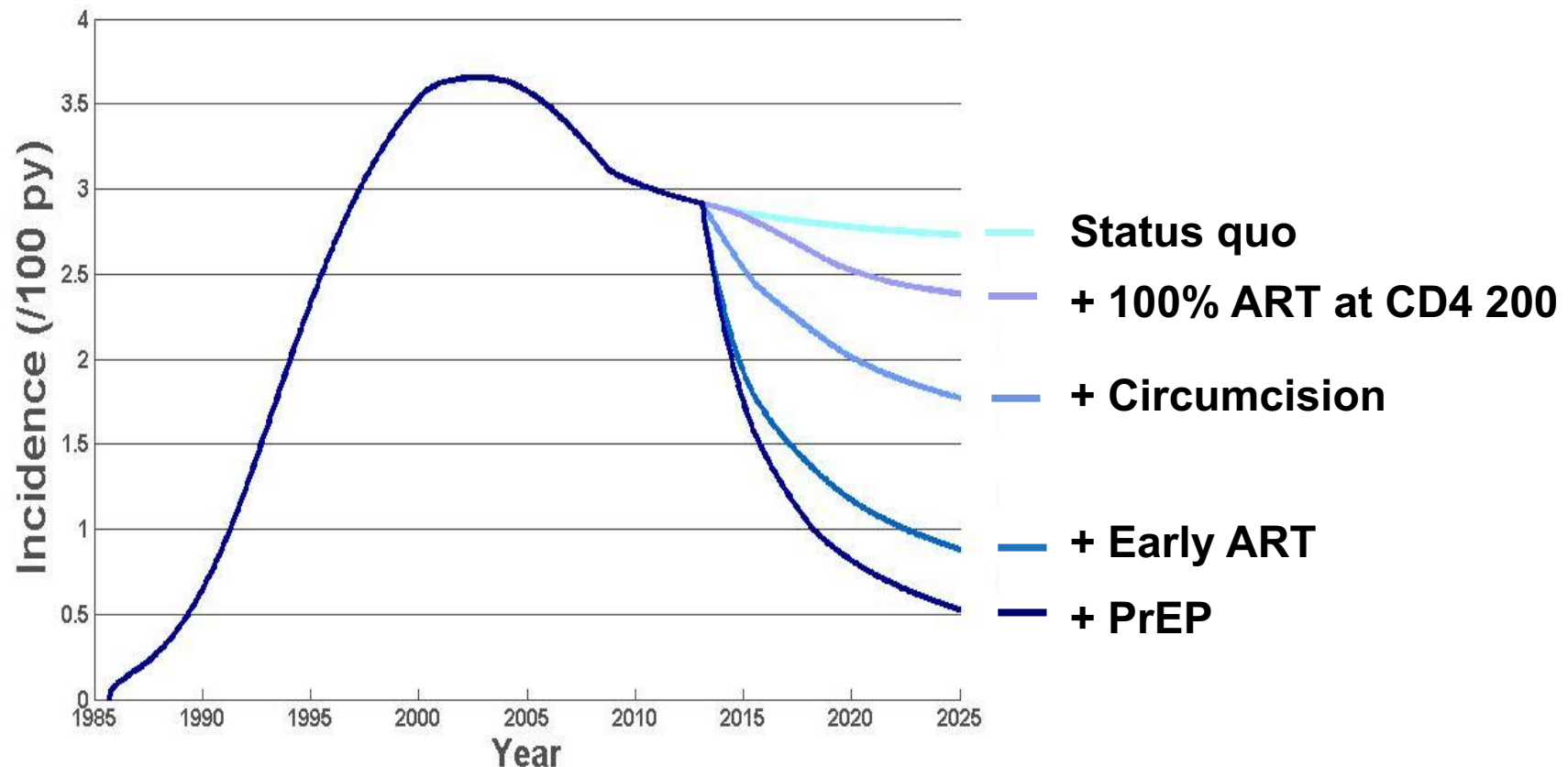
- Political willingness
- International Investments
- Fighting against repressive legislation/stigma/discrimination *(74 countries..).....*



Focus on weaknesses of the AIDS response

- Failure to provide large scale effective prevention interventions
- Commodity security: second line, third line ART; treatment for MDR TB, hepatitis C.
- People left behind (*Men who have sex with men, Sex workers, People who inject drugs, People in prisons, Adolescent girls and young women in Eastern and Southern Africa, Migrants...*): insufficient research agenda and not enough integrated, multidisciplinary research studies, including social sciences
- Over-reliance on biomedical approaches. Insufficient focus on reducing stigma, gender-based violence, discrimination and inappropriate legal and policy environments
- Insufficient implementation science
- Insufficient programmatic coordination: data collection, evaluation reporting, strategic frameworks, delivery. Early days for integration of health services
- Resource gap: short term funding cycles; insufficient focus on sustainability

Is HIV epidemic control achievable?

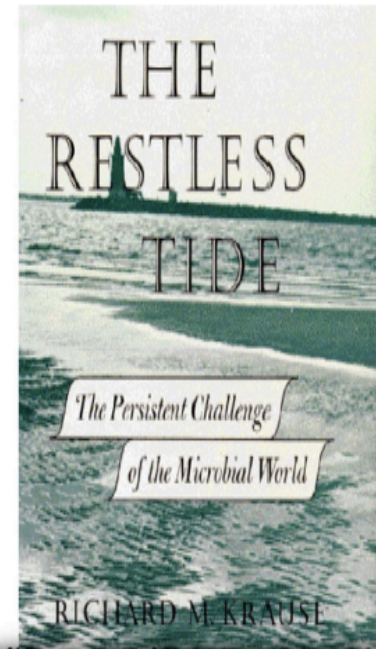


Yes, HIV epidemic control is achievable!
However, a vaccine or cure is essential for elimination

HIV/AIDS, the 1st largest epidemic of the 20th century at the origin of the GLOBAL HEALTH concept...

- Evolution of the society in the globalization era...
- Impact at all the levels (*health standards, societal, media, economical, political...*) with an **unprecedented international response** and **profound changes in public health practices, policies and development...**

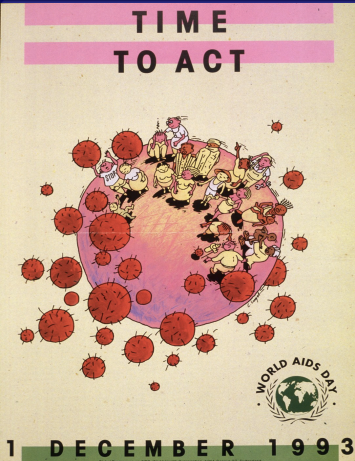
A reminder of the persistent threats of emerging/re-emerging diseases...



“We must be alert to the sovereignty of the evolutionary tide, lest we be swept away... by the microbial world...”

-Richard M. Krause, 1981

2014: Ebola outbreak in West Africa

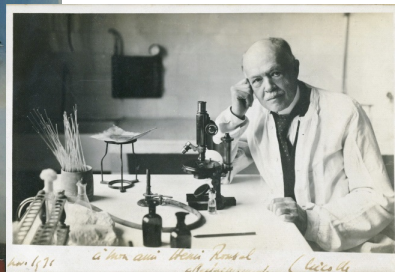
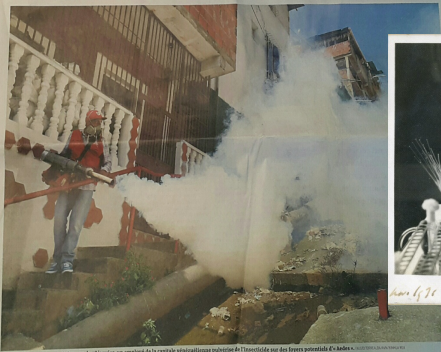


- International coordination in response to the emergency (*Governments, International organizations, NGOs, Research institutions....*)
- Implication of the local HIV/AIDS community network in information, counseling and prevention campaigns
- Vaccine and therapeutic research: promising preclinical and clinical studies (*siRNA, cocktail Nabs, Favipiravir*)

Ebola: learn from the past

Drawing on his experiences in previous outbreaks, David L. Heymann calls for rapid diagnosis, patient isolation, community engagement and clinical trials.

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March 2016: End of the Ebola epidemic

**“There will be always new diseases (*pandemic*). It's a fatal fact ...”
Charles Nicolle, 1930**

A new context for Global Health

- Demography, Urbanization, Globalization....
- New patterns of inequities with Social Justice and Human Rights issues to highly consider
- Virtual connectedness and individualism
- Inter-dependent global crisis and challenges (*both communicable and non communicable diseases, education, food, climate, energy, water*)
- New economic and security agenda with less political mobilization around global health and global solidarity as well as uneven commitment to multilateralism
- Lack of significant progress of a framework for intellectual property rights



A narrow “HIV” focused approach to HIV is self defeating

HIV infection is now
considered as a
preventable, chronic
condition like many
other diseases...

We are stumbling
against non-medical
barriers in the fight
against HIV (*patient
behavior, functional
health systems...*)

**E. Duflo,
IAS 2017, Paris**