



Life Sciences & Health: What Amsterdam can contribute

Jaap Goudsmit

Professor, AMC-UvA

Head, Life Sciences Cluster Amsterdam Economic Board

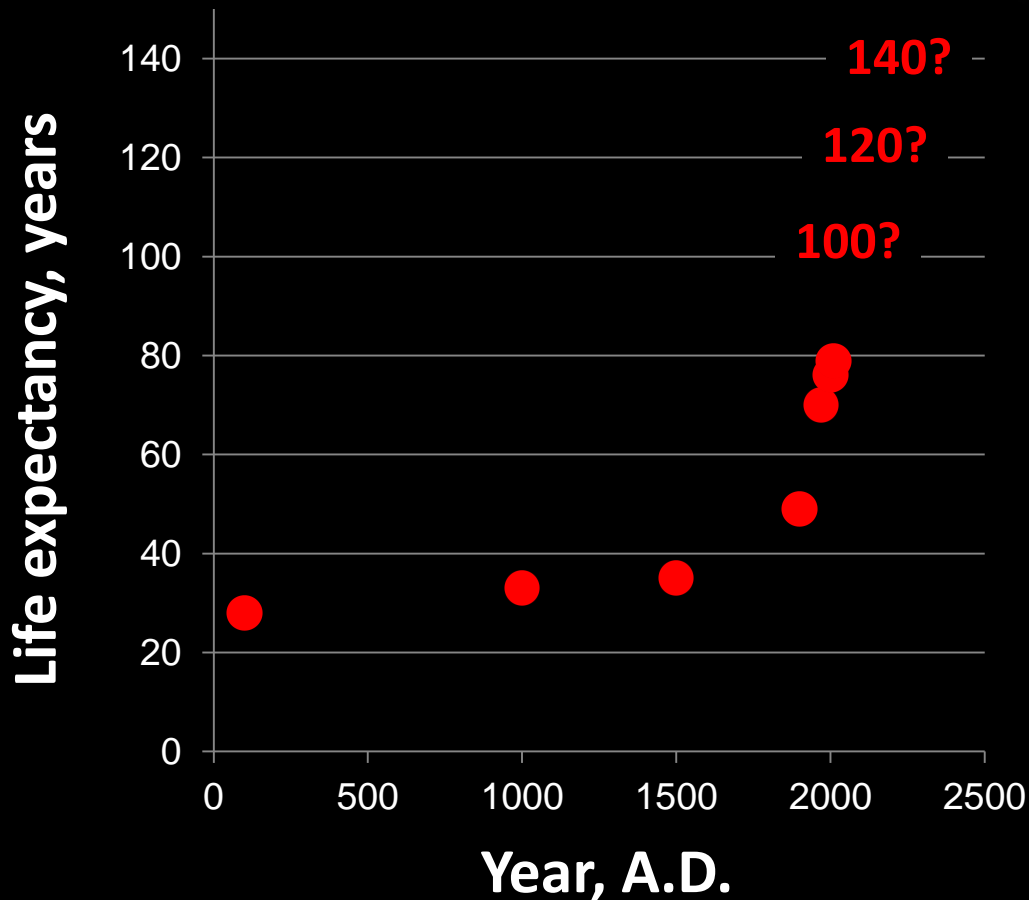
Director, Crucell Vaccine Institute



amsterdam economic board



Life expectancy almost doubled in one century



Where does it stop?

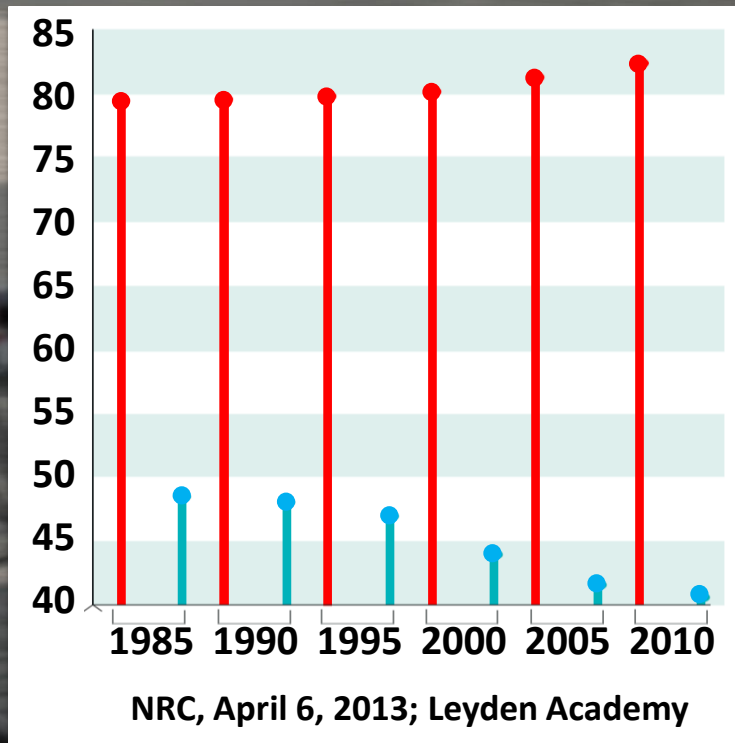
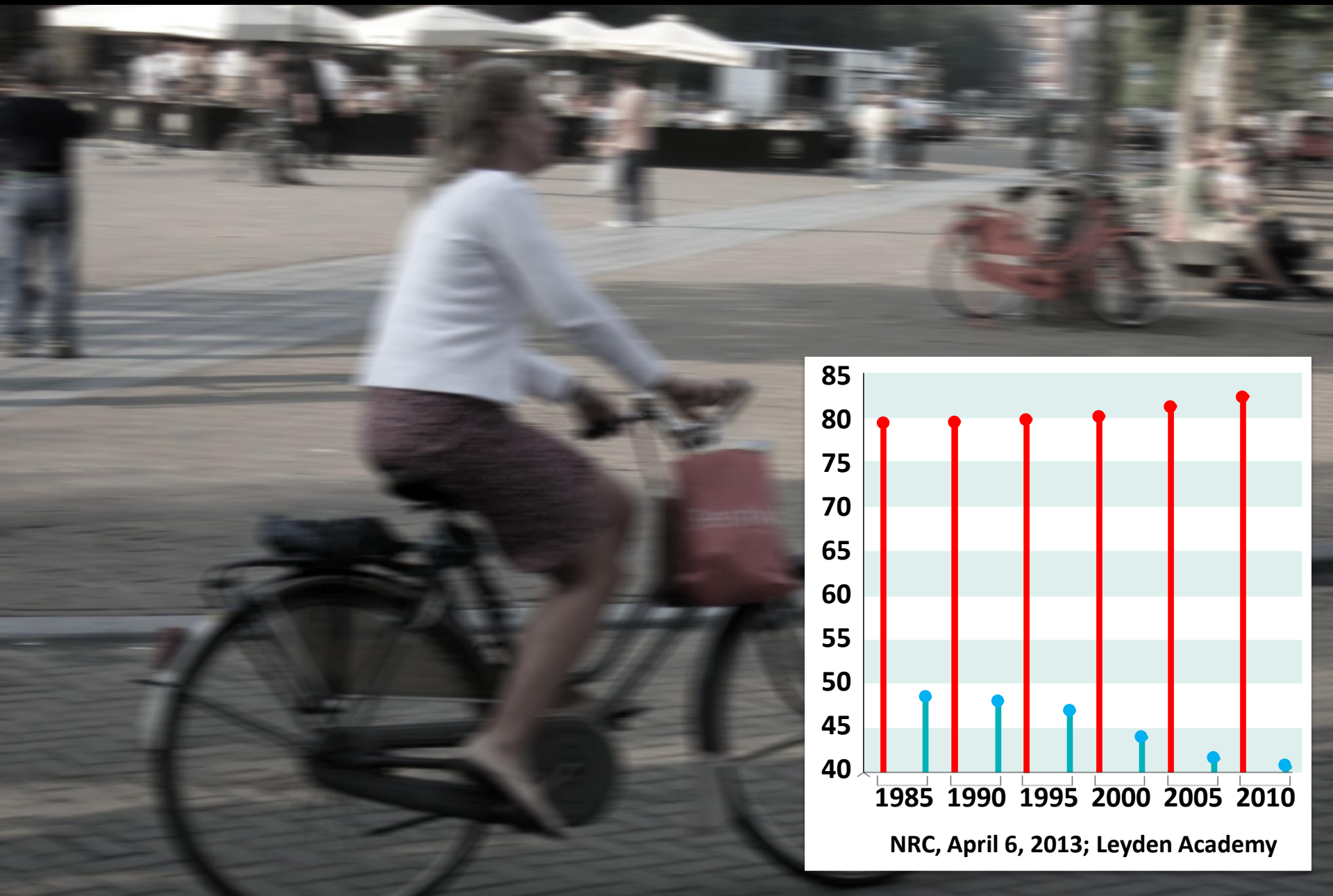
One in 2 baby girls
born this year

One in 3 baby boys
born this year



100 will become **years old**

Are we dying more slowly?



Will all of us live a longer life of suffering?

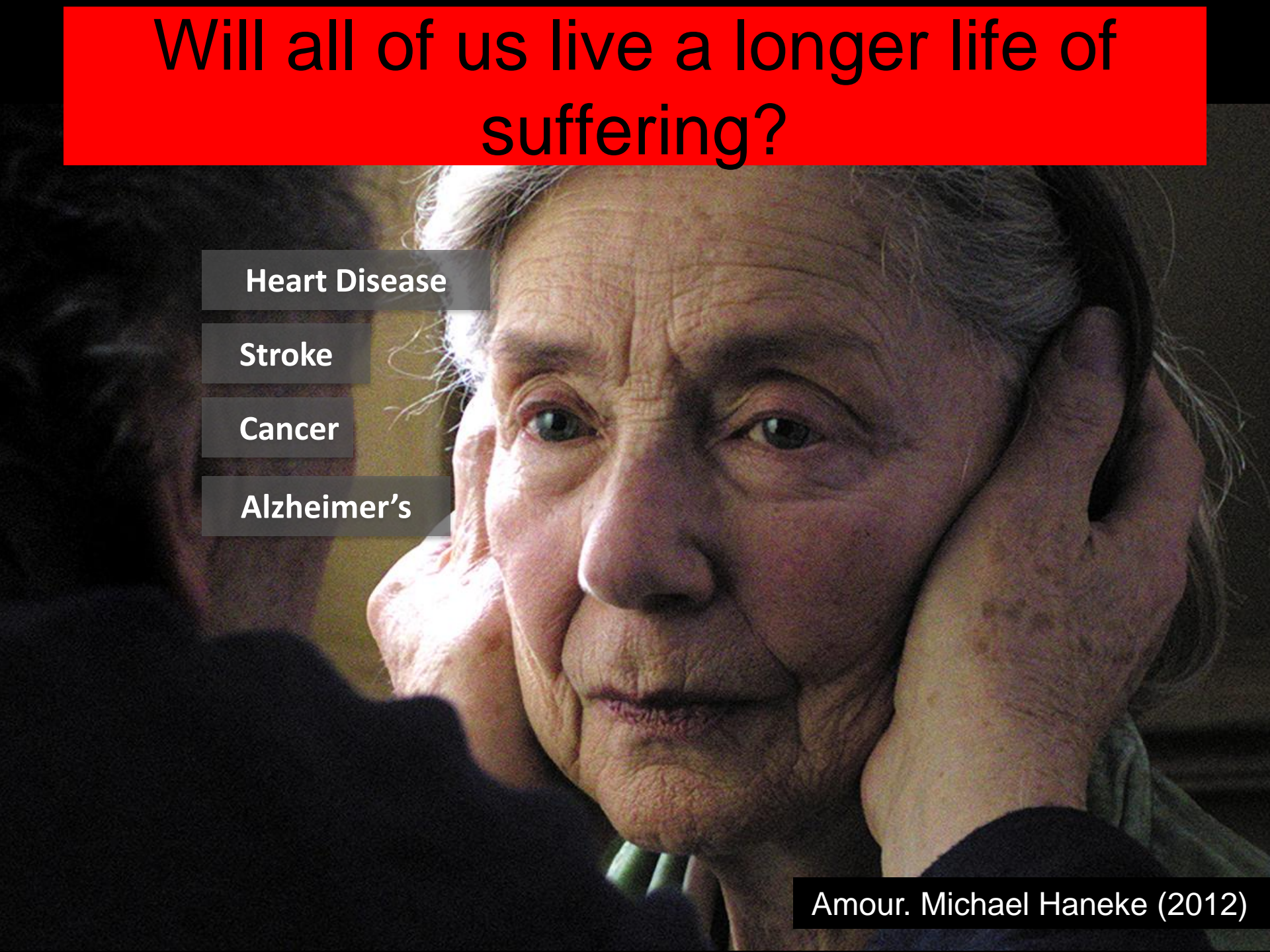
Heart Disease

Stroke

Cancer

Alzheimer's

Amour. Michael Haneke (2012)



Immorbidity

Search results

For search options, see [Help:Searching](#).

Did you mean: [immortality](#)

*The page "**Immorbidity**" does not exist. You can [ask for it to be created](#), but consider checking the search results below to see whether the topic is already covered.*

For search help, please visit [Help:Searching](#).



WIKIPEDIA

How to reduce morbidity and increase healthy aging?

Onset



morbidity



prevention

treatment

Death



health span

senescent span

How to reduce morbidity and increase healthy aging?

primordial



primary



Onset

secondary



tertiary



morbidity



prevention

treatment

Death

health span

senescent span

Geriatric Killers



Cancer

Heart Disease

Stroke

Alzheimer's

Geriatric Killers

Risk Factors

Cancer *Smoking*

Heart Disease *Smoking, obesity*

Stroke *Smoking, obesity*

Alzheimer's *???*

Key Areas of Regional Importance

- Obesity



**** matches the region's
triple helix excellence
the best**

- Oncology




- Alzheimer's



The worldwide prevalence of obesity has more than doubled between 1980 and 2008

WHO, 2013



A photograph of a person sitting on a grey metal bench outdoors. The person is wearing a bright yellow tank top and grey shorts. Their hands are resting on their thighs. The background is slightly blurred, showing green foliage and a white fence. Overlaid on the person's torso is text in a black, monospaced font.

By 2030 in the EU
Obesity
and its co-morbidities
will cost
€100 billion/yr



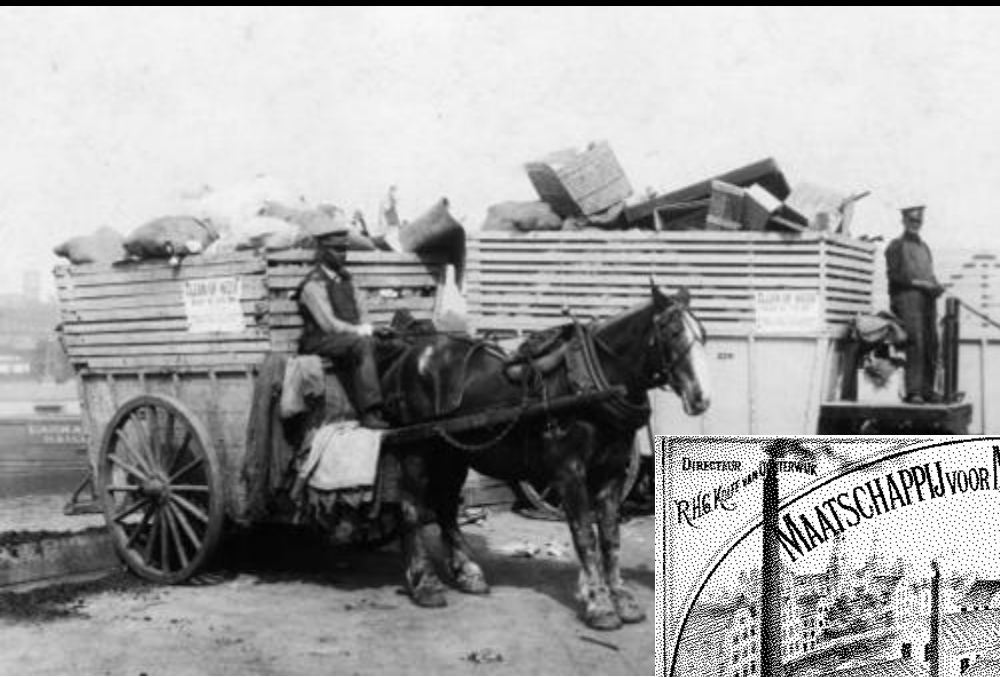
The
“triple helix”
route to innovation

**Government
University
Industry**

Triple Helix Icon of Amsterdam



Samuel Sarphati 1813-1866





EXPRESSION OF HUMAN IMMUNODEFICIENCY VIRUS ANTIGEN (HIV-Ag) IN SERUM AND CEREBROSPINAL FLUID DURING ACUTE AND CHRONIC INFECTION

Jaap Goudsmit^a, Deborah A. Paul^c, Joep M. A. Lange^a, Hans Speelman^b, Jan Van Der Noordaa^a, Hayo J. Van Der Helm^b, Frank De Wolf^{a, f}, Leon G. Epstein^d, Willy J. A. Krone^a, Eric Ch. Wolters^e, James M. Oleske^d, Roel A. Coutinho^f

THE LANCET

BMJ

Declining incidence of AIDS dementia complex after introduction of zidovudine treatment

BMJ VOLUME 299 30 SEPTEMBER 1989

Peter Portegies, Jan de Gans, Joep M A Lange, Mayke M A Derix, Hans Speelman, Margreet Bakker, Sven A Danner, Jaap Goudsmit

Human herpesvirus 8 infections in the Amsterdam Cohort Studies (1984–1997): Analysis of seroconversions to ORF65 and ORF73

4838–4843 | PNAS | April 25, 2000 | vol. 97 | no. 9

PNAS

Proceedings of the National Academy of Sciences of the United States of America

Jaap Goudsmit^{*†}, Neil Renwick^{*}, Nicole H. T. M. Dukers[‡], Roel A. Coutinho[‡], Siem Heisterkamp[§], Margreet Bakker^{*}, Thomas F. Schulz[¶], Marion Cornelissen^{*}, and Gerrit J. Weverling[§]



THE LANCET

Zidovudine sensitivity of human immunodeficiency viruses from high-risk, symptom-free individuals during therapy

C.A.B. Boucher, MD,^a J.M.A. Lange, MD,^{a, b} Prof J. Goudsmit, MD,^a J.W. Mulder, MD,^{b, d} M. Tersmette, MD,^c R.E.Y. de Goede^c, P. Kellam, BSc^e, G. Darby, PhD,^e B.A. Larder, PhD^e



The Sarphati Institute
Triple Helix Research Center
for New Epidemics

www.SarphatiInstitute.nl

Government

An aerial photograph of Amsterdam, Netherlands, showing the city's layout with canals, buildings, and green spaces. The image is used as a background for the text.

History of strong public-private partnerships

Municipal Health Services (GGD) infrastructure

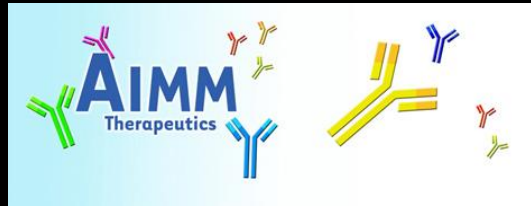
**National commitment “topsector”
life sciences & health**

**National and Amsterdam funding
available to life sciences & health**

University

- VU and UvA expertise and leadership in EU collaborations on obesity
- High profile projects with European Commission funding
 - EPODE childhood obesity prevention techniques
 - ENERGY prevent excess weight gain in youth
 - SPOTLIGHT sustainable prevention of obesity
 - Healthy Living Israeli childhood obesity prevention

Industry



Life Sciences & Health Team



Jaap Goudsmit
Head of Cluster
A'dam Economic Board



Sandra Migchielsen
Cluster Manager
A'dam Economic Board



Quido Valent
Cluster Manager
A'dam Economic Board



Elzeline de Jong
Policy Advisor
A'dam Economic Affairs



Jessica Meijer
Cluster Member
Crucell Vaccine Institute



Life Science Cluster

Cluster decentralization

Collaborative groups representing triple helix

Seminars, symposia, debates