

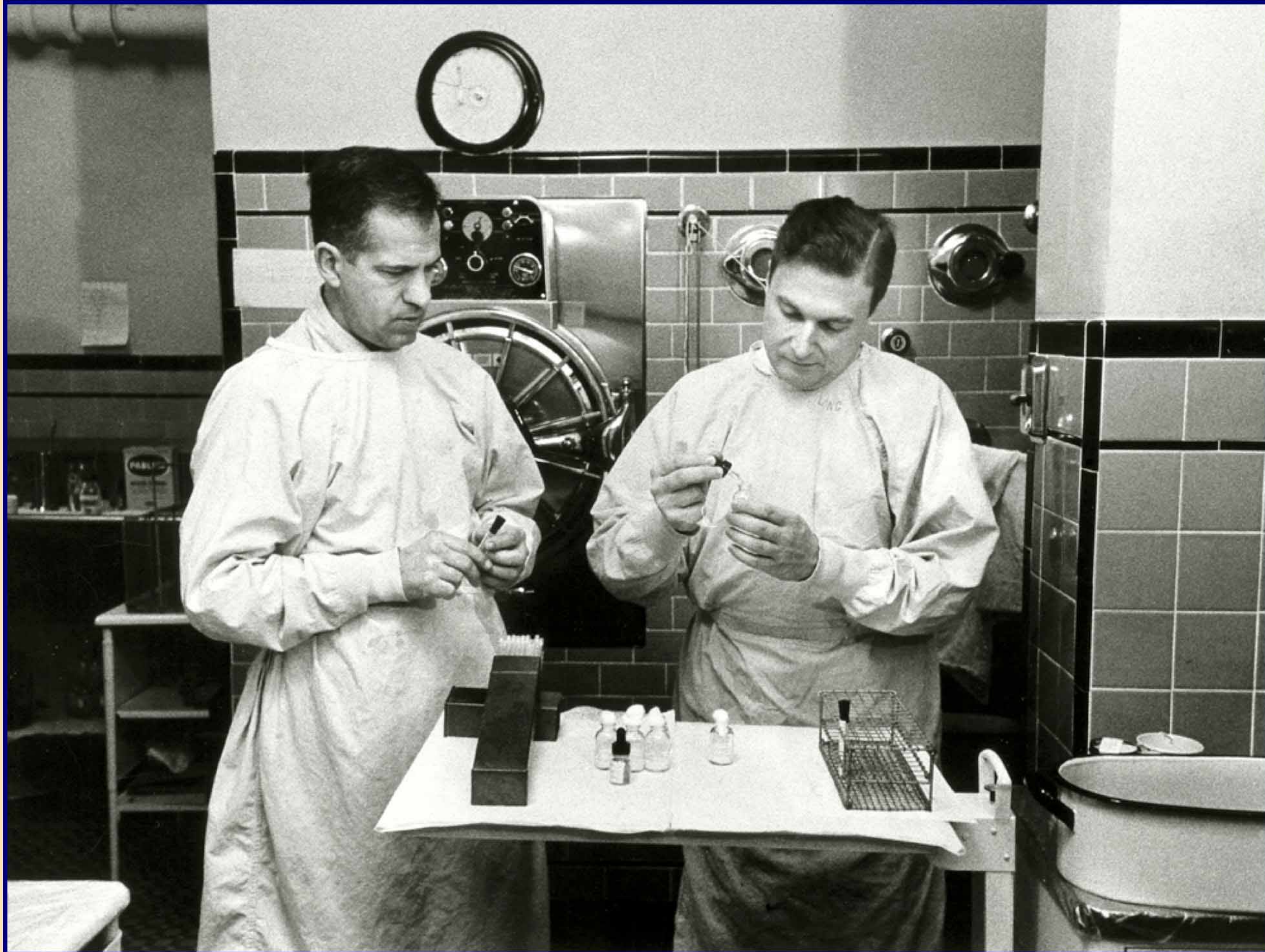


Jonas Salk (1914–1995)



But not the first to make a polio vaccine

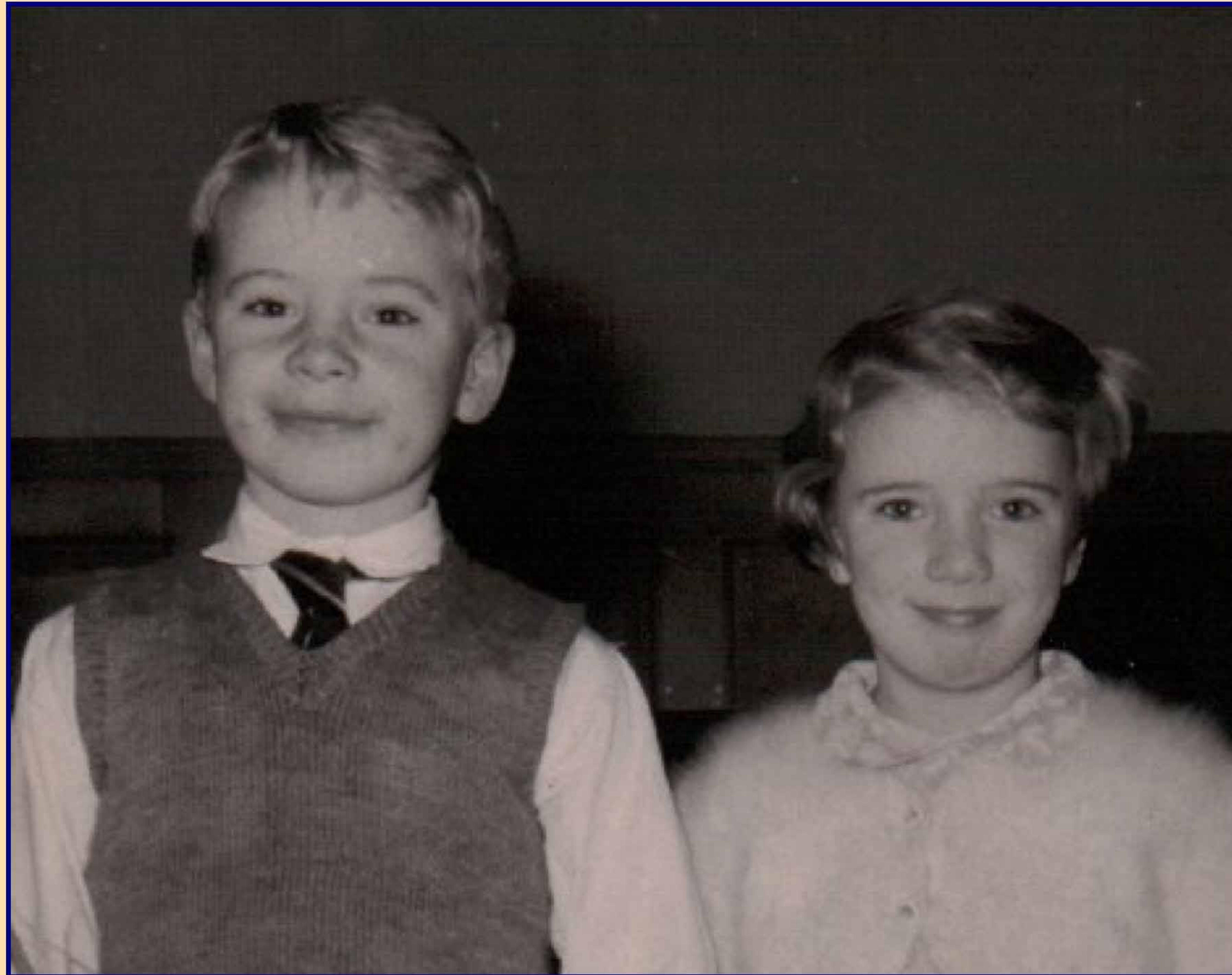
Hilary Koprowski (1916-2013)



Developed vaccines: rabies ... oral polio vaccine (1948)

Troubles in Belfast

George Dick, Professor of Microbiology, QUB



*Koprowski's vaccine:
"In like a lamb, out like a lion"*

Salk's vaccine put to the test ... sort of



The biggest clinical trial ever:

- 1.8 million children
- 200 locations, 44 States
- 20,000 doctors
- 40,000 nurses
- 60,000 teachers
- 144,000,000 pieces of data

April-June 1954

Not enough controls –
thanks to J. Salk

A busy fortnight



12 April 1955
“It works and is safe”

A busy fortnight



18 April 1955

“The 166-year war with polio is at an end”

A busy fortnight



24 April 1955
Salk's vaccine causes paralysis

Albert Sabin (1906–1993)



Oral polio vaccine (1956) took:
4 years, 20,000 monkeys, 500 chimps and 200 'volunteers'

Sabin oral polio vaccine: front runner



Better than Salk:

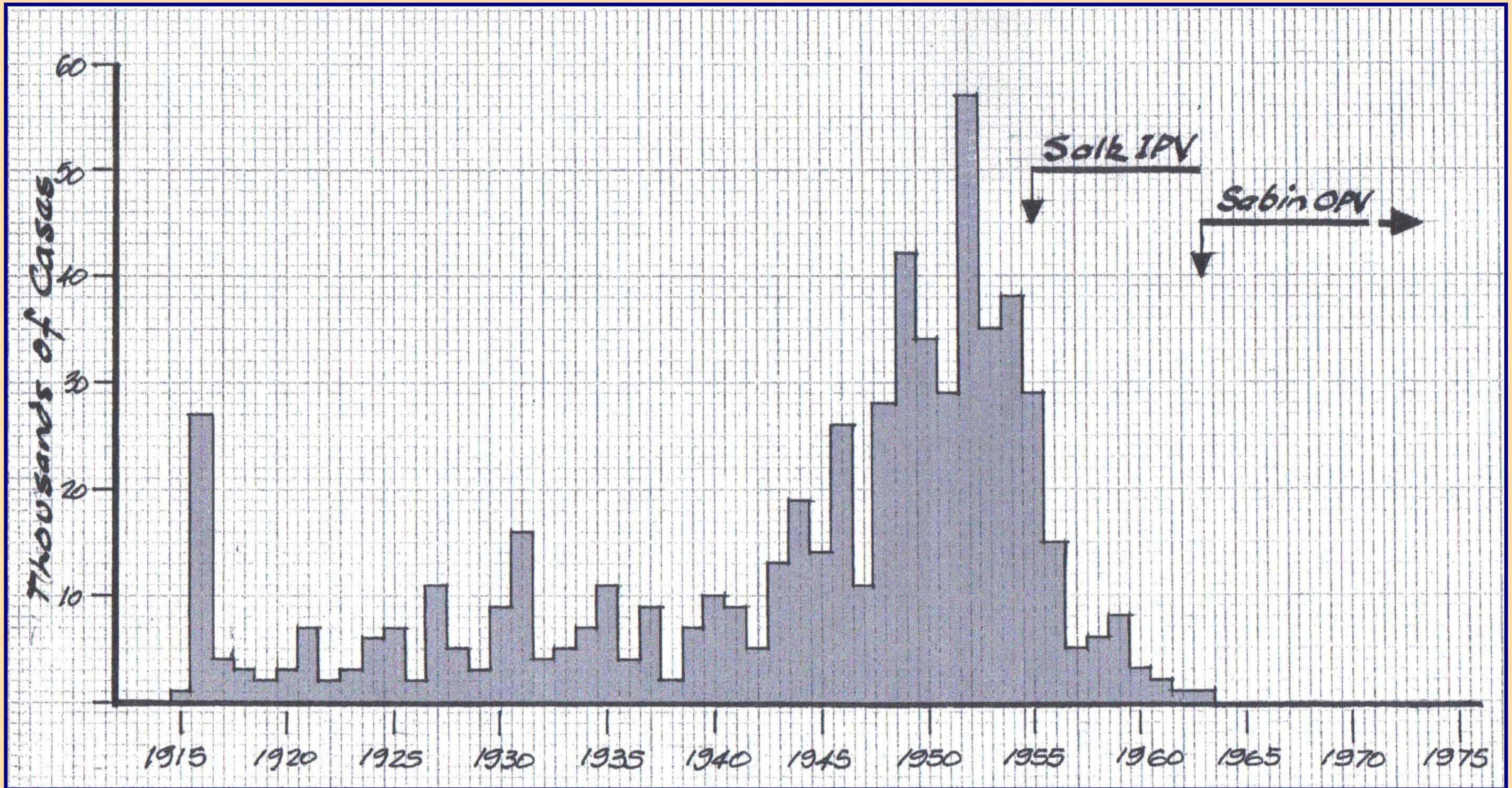
- 'gut' immunity
- better protection
- spreads itself
- cheap
- no needles

But:

- paralysis! (very rare)
- unreliable in tropics

Deadly Duo

Salk+Sabin = Success



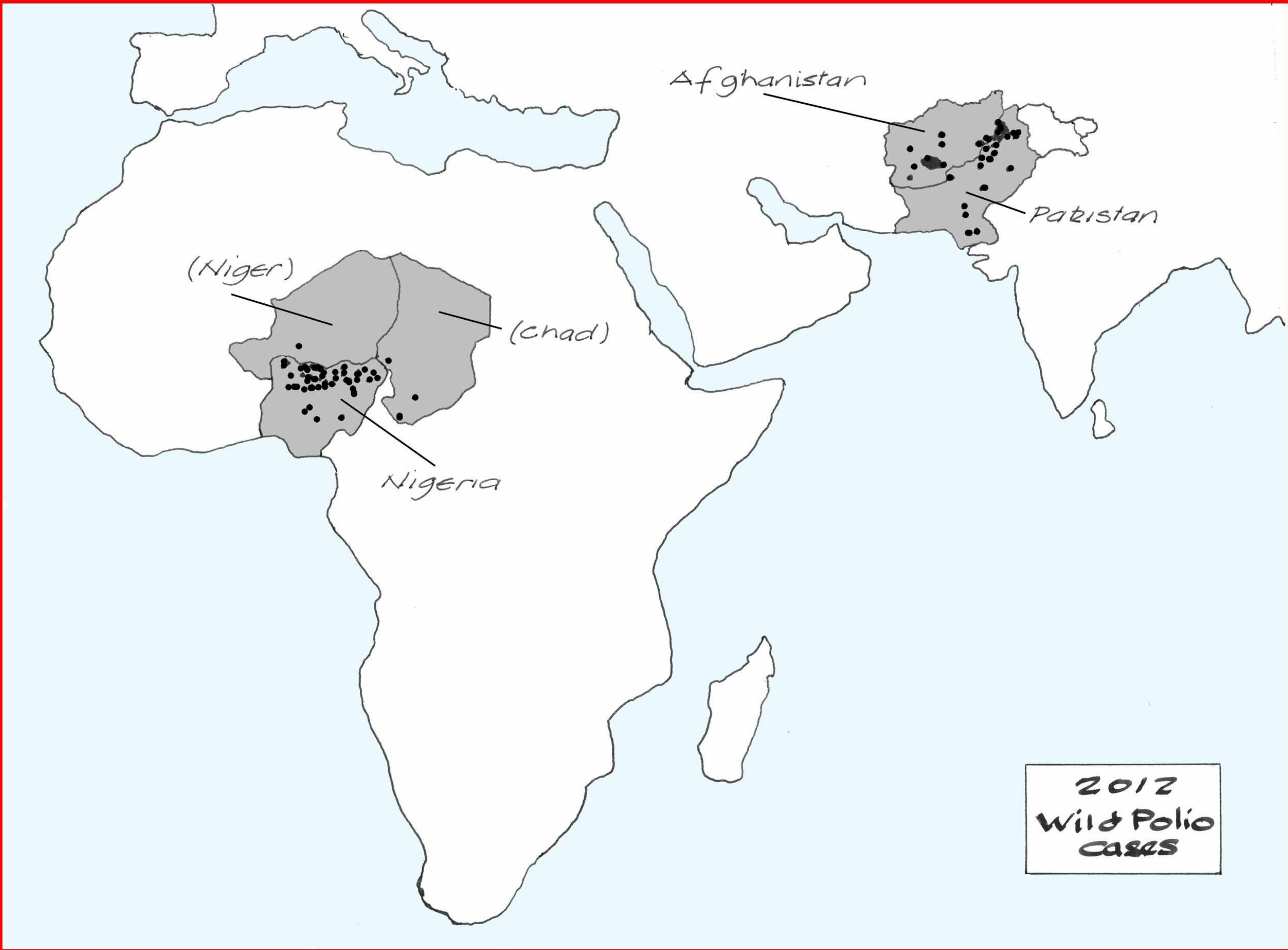
Good, bad and ugly:
The story of polio vaccines

Gareth Williams

Emeritus Professor of Medicine, University of Bristol
Ambassador, British Polio Fellowship



Global Polio Eradication Initiative: 1988-2000



So near, yet so far
Polio eradication in 2013 ... 2014 ... 2015?

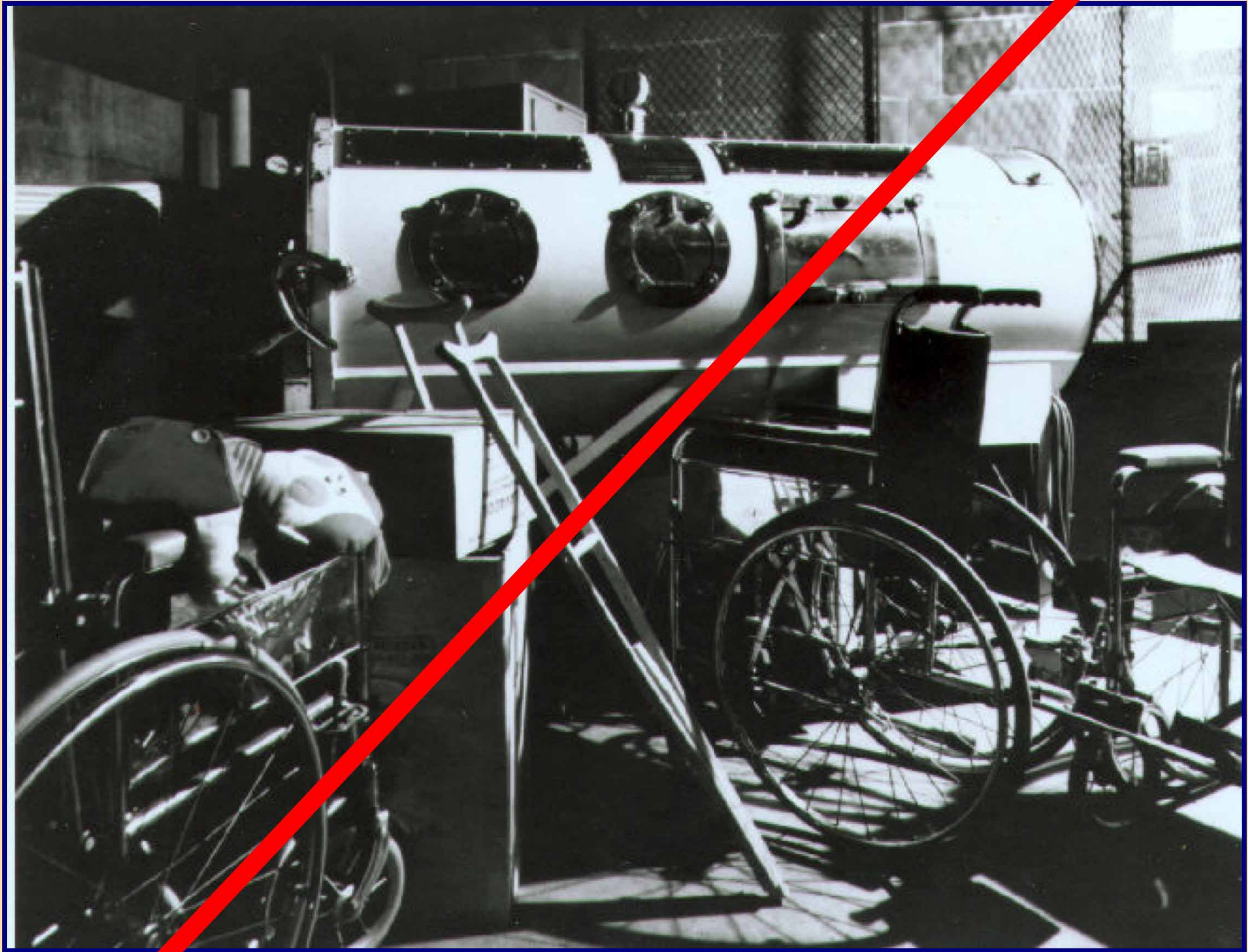


Thanks to the Taliban

So near, yet so far
Polio eradication in 2013 ... 2014 ... 2015?



Thanks to the Taliban – and the CIA

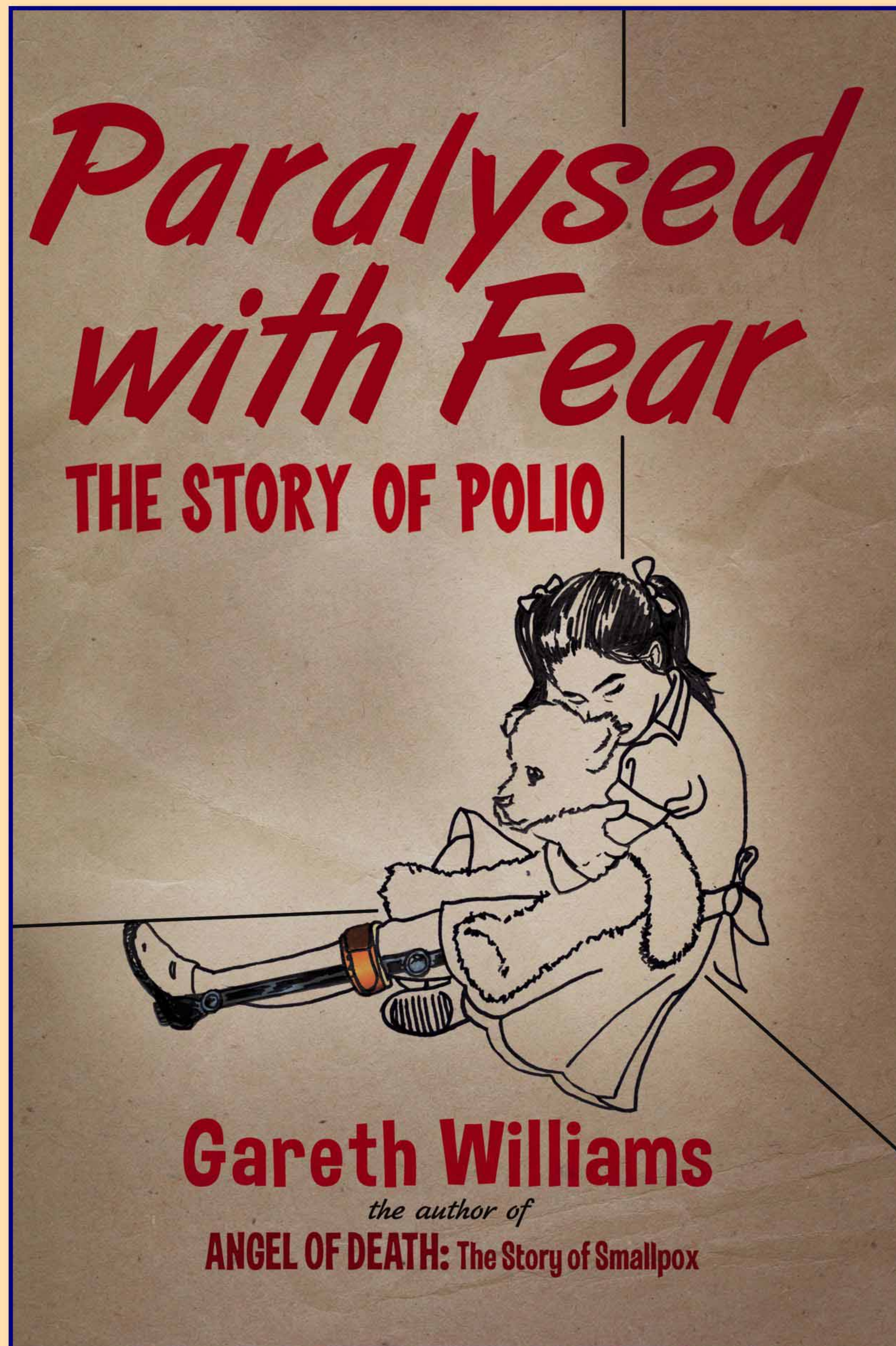


Dr. Jenner's House, Berkeley

'One of the 5 most important places in world history'



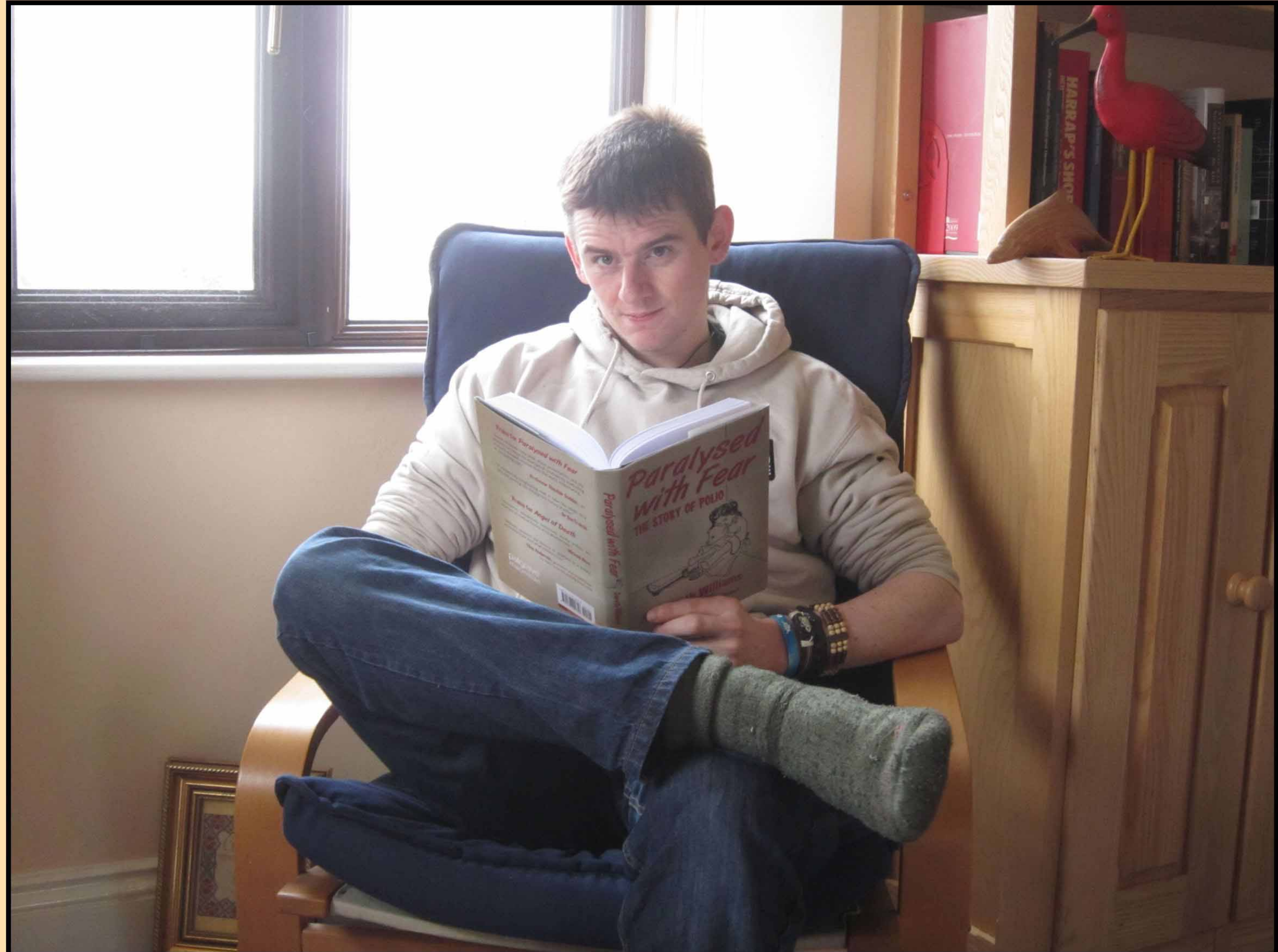
www.jennermuseum.com



Why buy this book?

- No better way to spend £20
- All royalties go to the Edward Jenner Museum
- Just 193 shopping days to Christmas

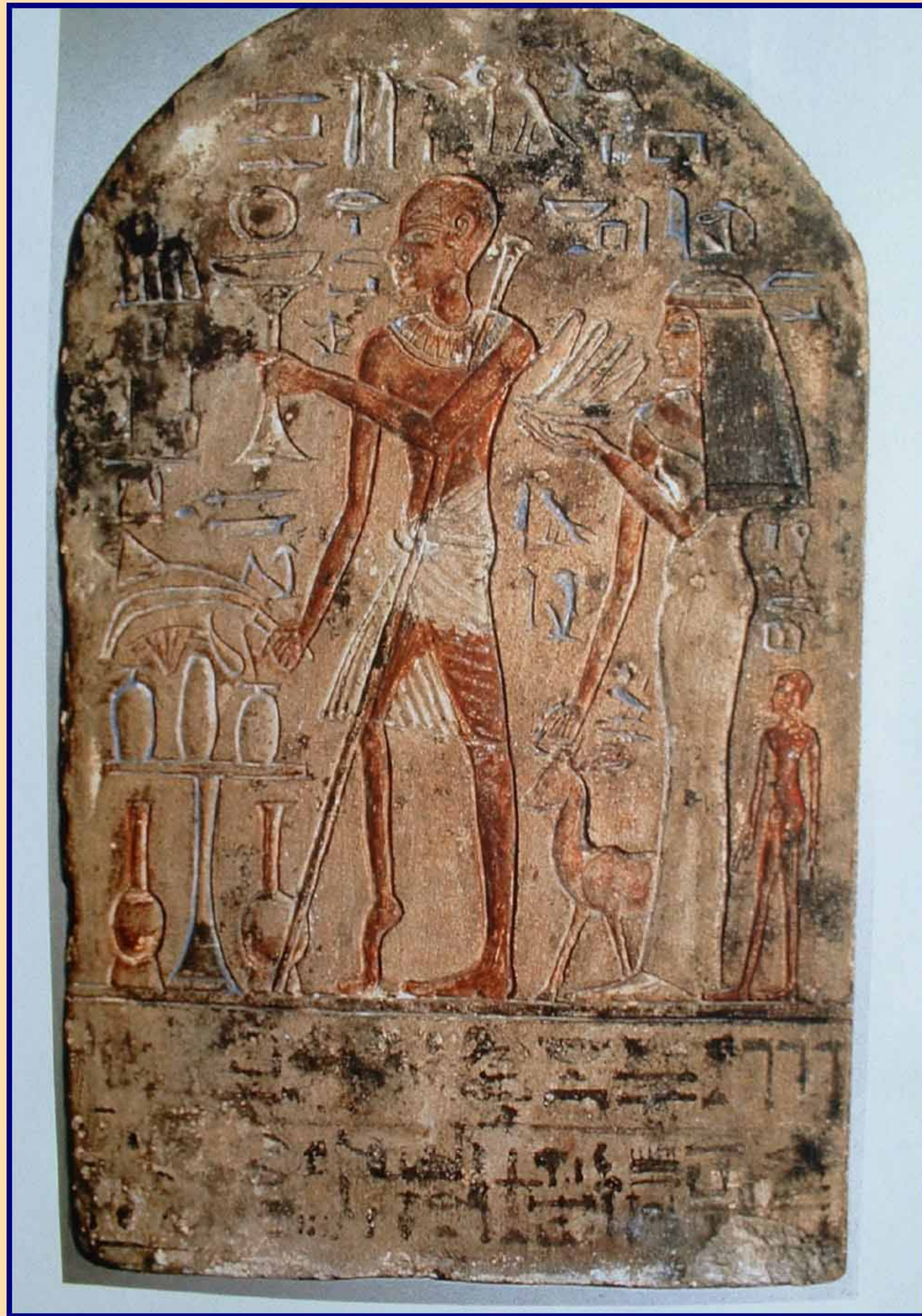
And it could change your life ...



... possibly for ever



'Morning paralysis' *A Curse from Nowhere*

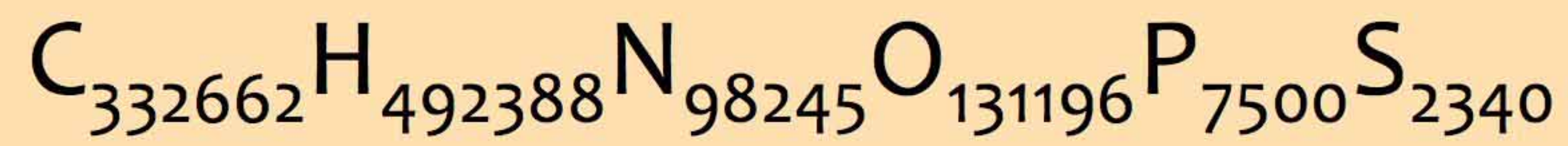
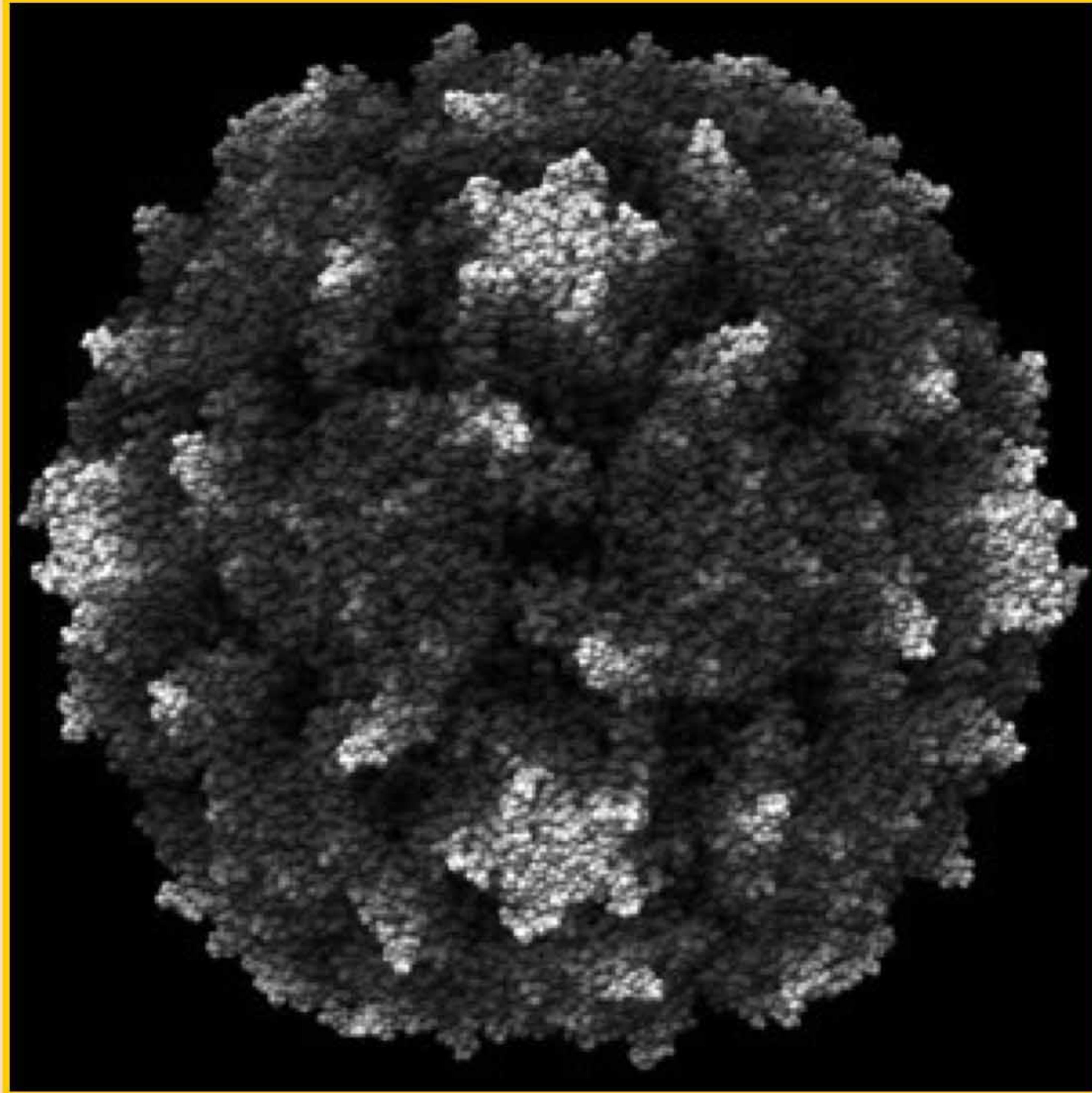


Ruma, ~1450 BC

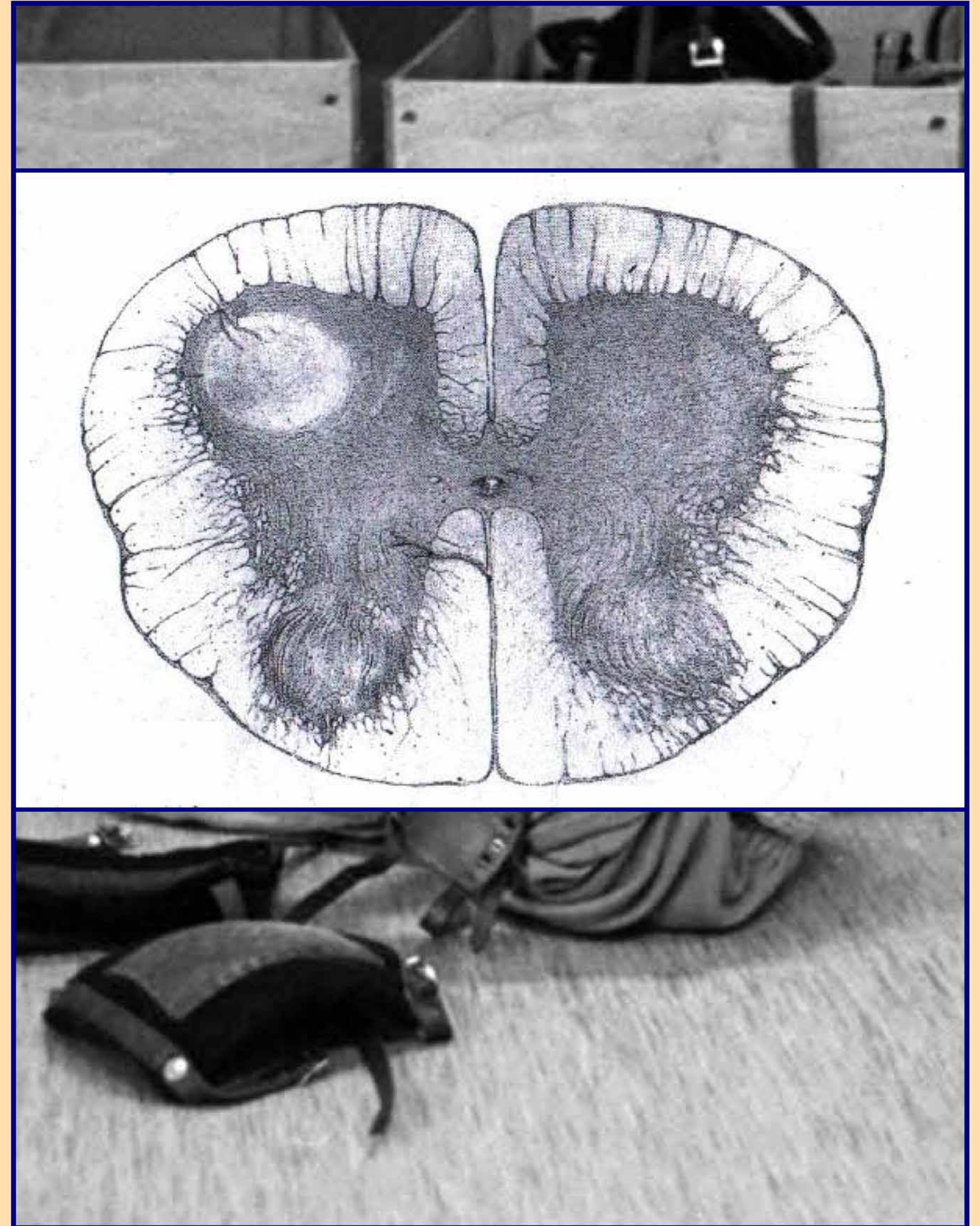


Jacob von Heine, 1840

The poliovirus



Small, simple ...
...and accidental villain



Ordeal by therapy



‘Polio patients are not cured – they recover’

Paralysed with Fear



1953: second only to the atom bomb

No holds barred

The race for a polio vaccine



Albert Sabin
OPV (1963)

Jonas Salk
IPV (1955)

Basil O'Connor
Wheeler/dealer

Franklin D. Roosevelt (1882–1945)



President, mover, shaker ... and a badly-kept secret

The March of Dimes (est. 1938)

FDR and Basil O'Connor



Dimes went from White House to: New York (1938), Tokyo (1954) ...