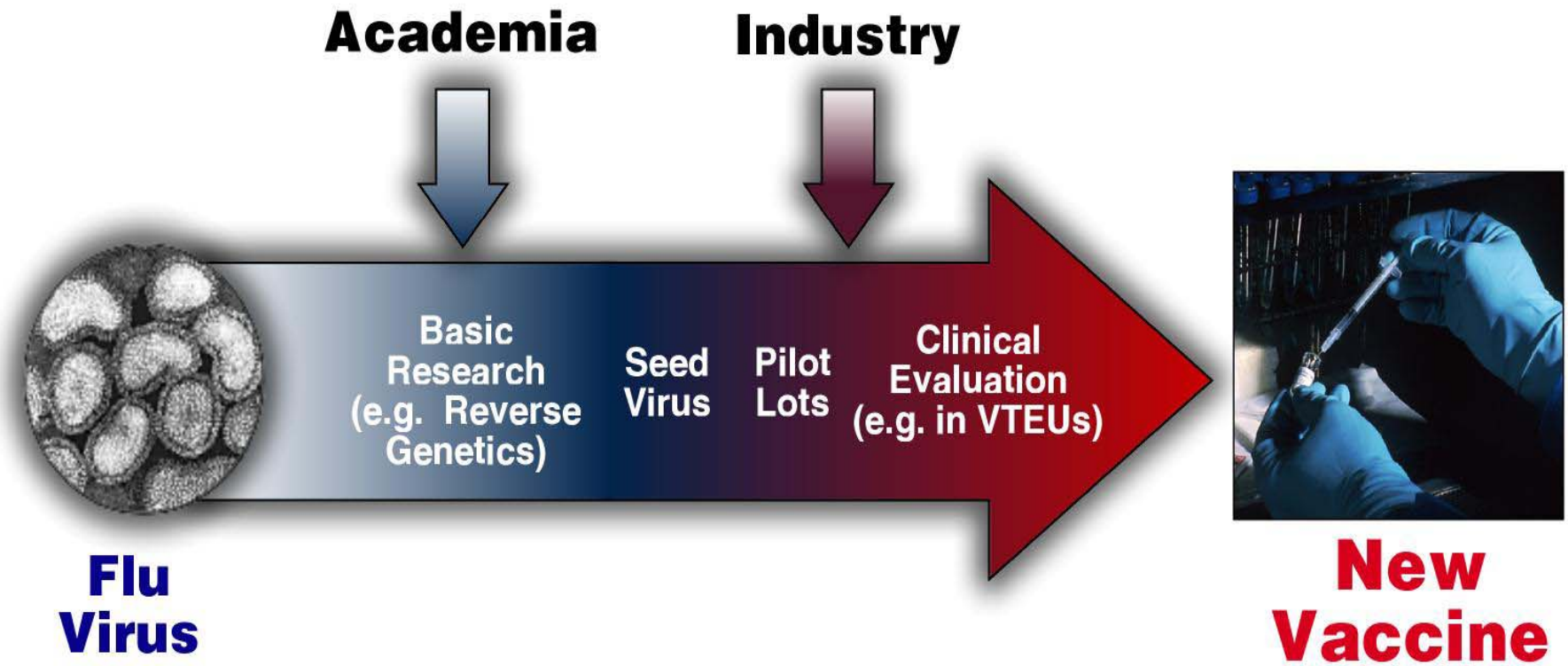
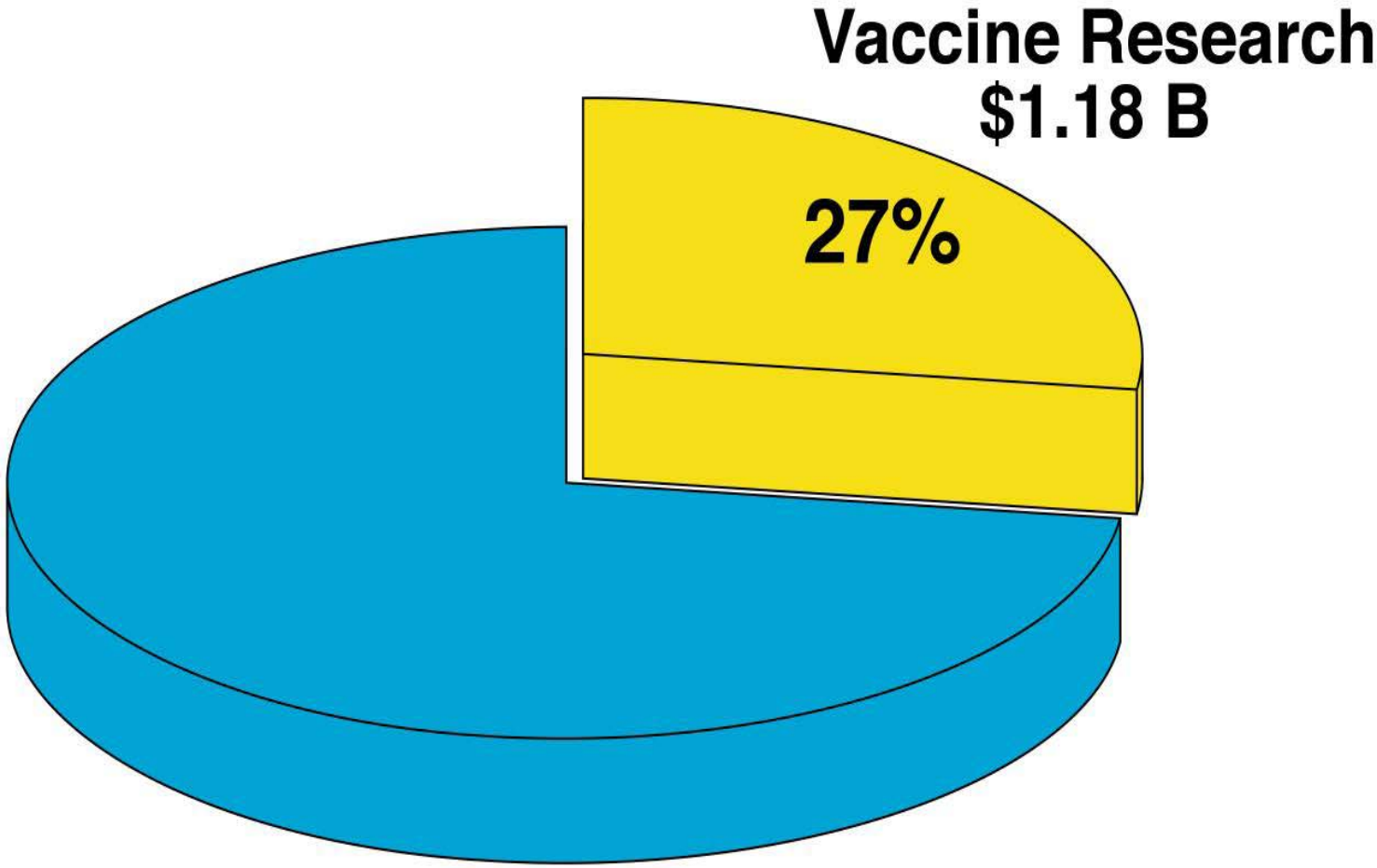
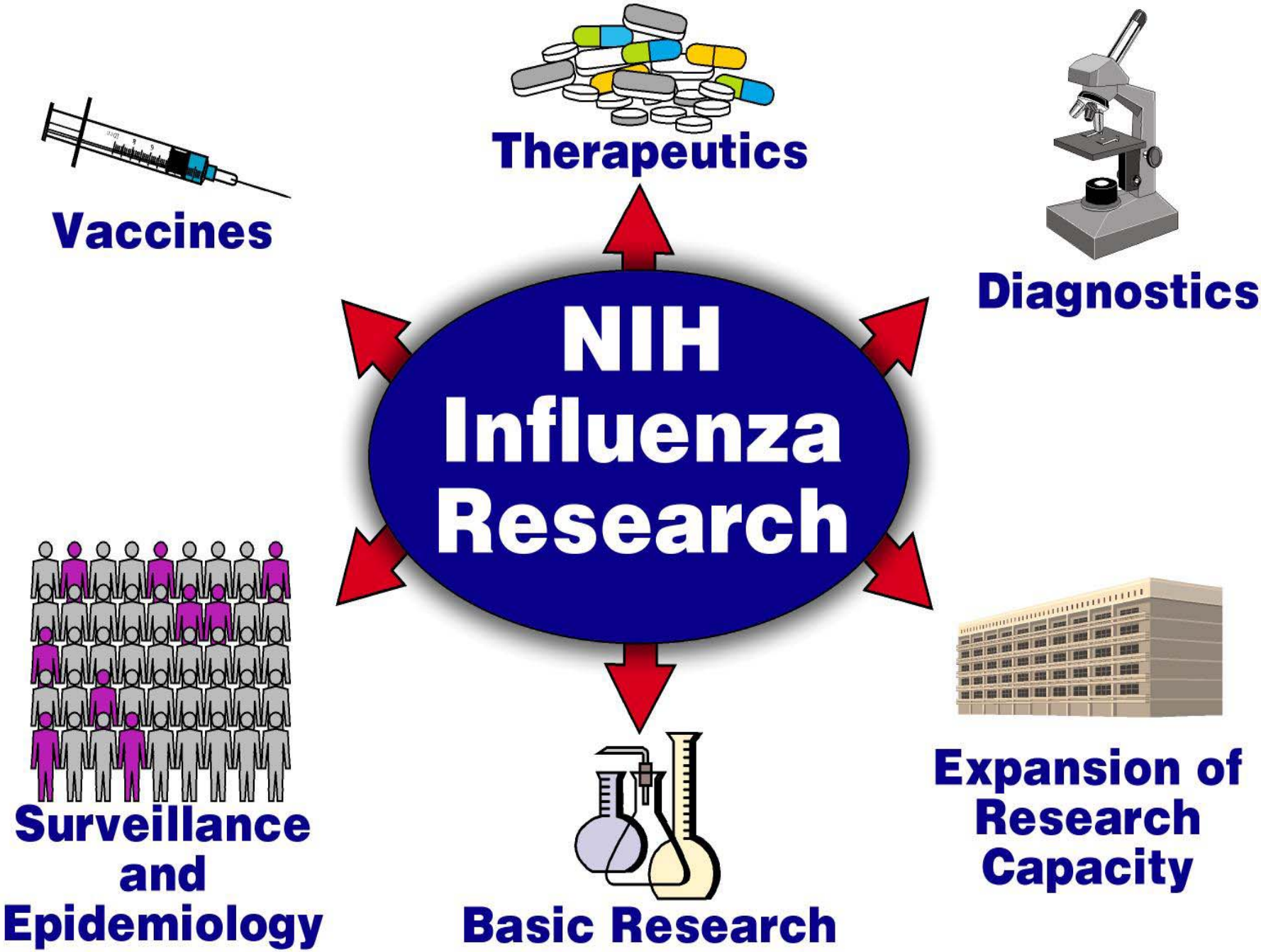
NIH Role in Influenza Vaccine Development



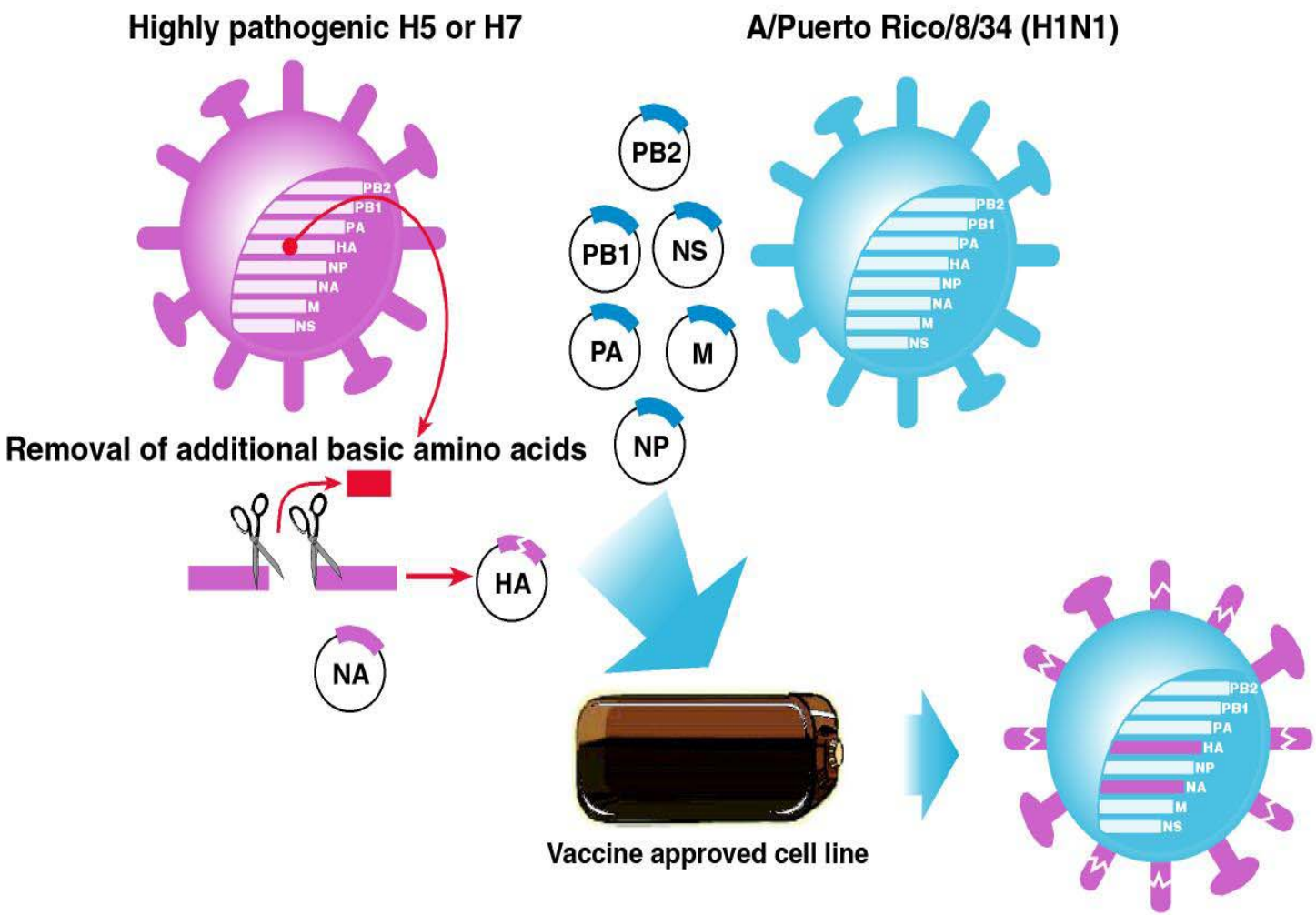
NIAID FY 2004 Budget



FY 2004 NIAID Budget
$4.30 B


Therapeutics
Vaccines
Diagnostics
NIH Influenza Research
Surveillance and Epidemiology
Basic Research
Expansion of Research Capacity

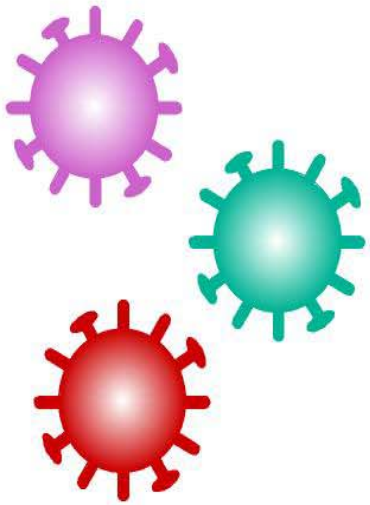
Influenza Vaccine Seed Virus Production Using a Reverse Genetics System



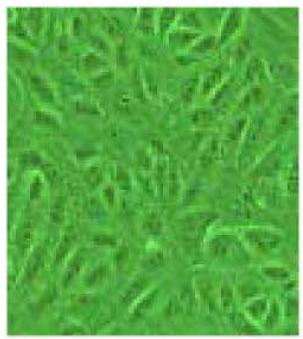
Source: Webster et al: *Vaccine* 20:3165 (2002); Science 302:1519 (2003)

Influenza Vaccine Production: Cell Culture as an Alternative to Chicken Eggs

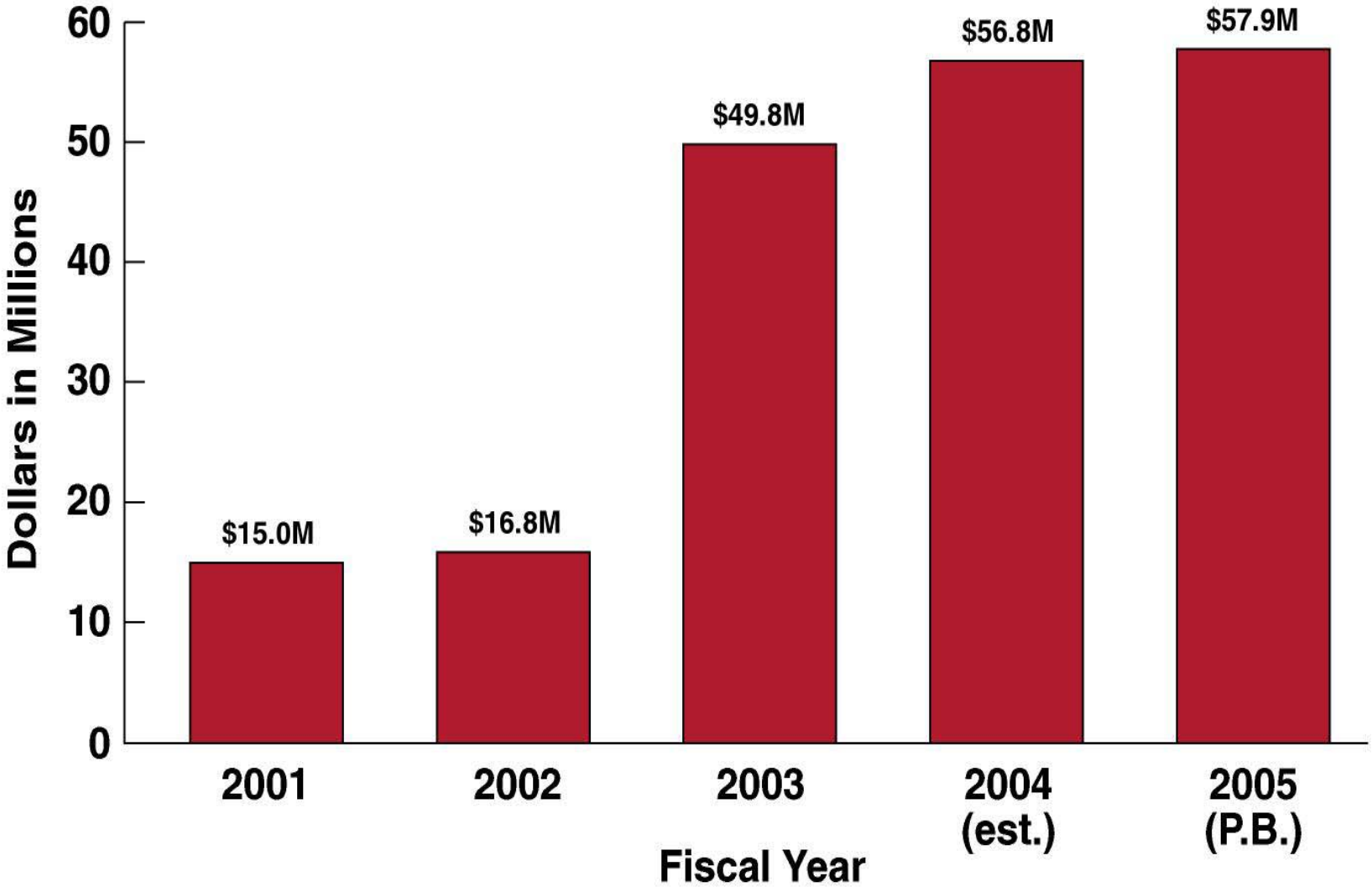
Identify target flu strains



Provide target viruses to vaccine manufacturers



Potential Advantages of Cell Culture-Based Influenza Vaccines

- Supports faster vaccine production than egg-based vaccines.
- Allows rapid response to discovery of new and evolving flu strains.
- Requires less manufacturing space.
- Circumvents possible problems presented by highly virulent flu strains (i.e., lethality to chicken embryos).
- Tolerated by people with egg allergies.

NIAID Influenza Research Funding