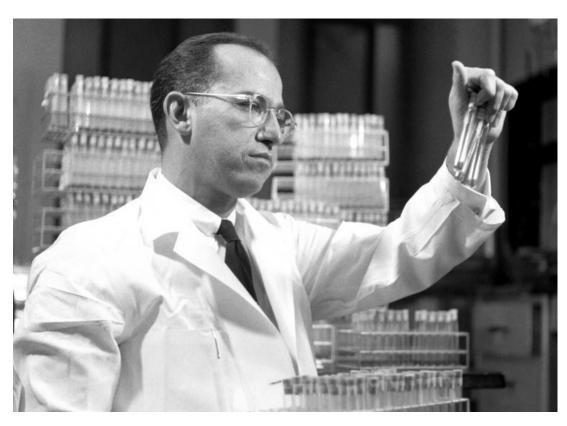
# Pittsburgh does vaccines ...

from poliovirus ... to SARS-2-coronavirus ...





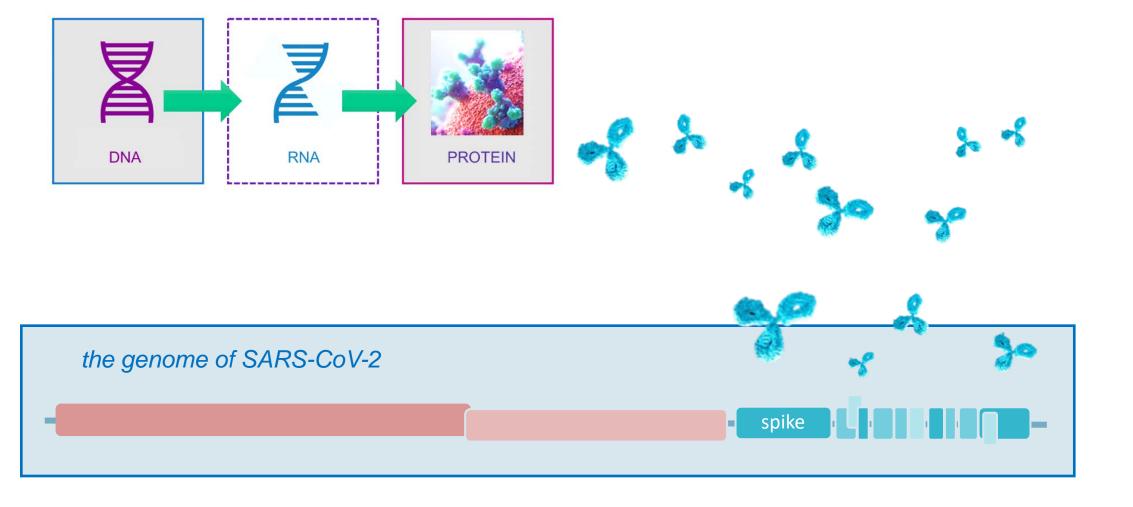
at the Center for Vaccine Research



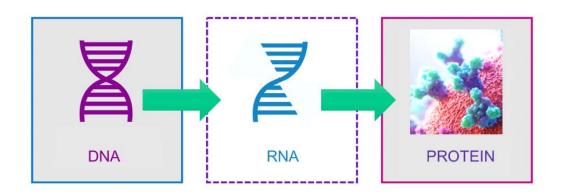


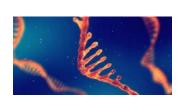
#### ... creative vaccinology ...

today we can make vaccines in ways Jonas Salk could only have dreamed of when he was inactivating poliovirus



## ... creative vaccinology ...











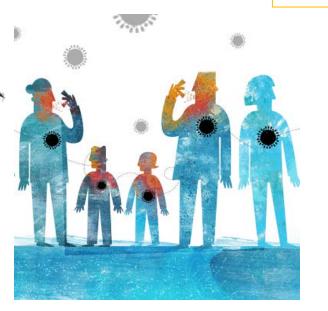


















#### ... it's a race ... but it isn't ...

vaccines are slow ... fast but not rushed ...



first may not be best

## it's not a vaccine ... until it's a product ...

... and that means hundreds of millions of doses ...





which have to be distributed to the world

## bridges not bubbles ...



collaboration and healthy competition ... for the good of global public health