

THE
NOBEL
PRIZE

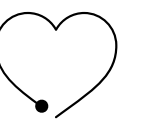
MEDICINE PRIZE 2023

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Discoveries that laid
the foundation for
mRNA vaccines

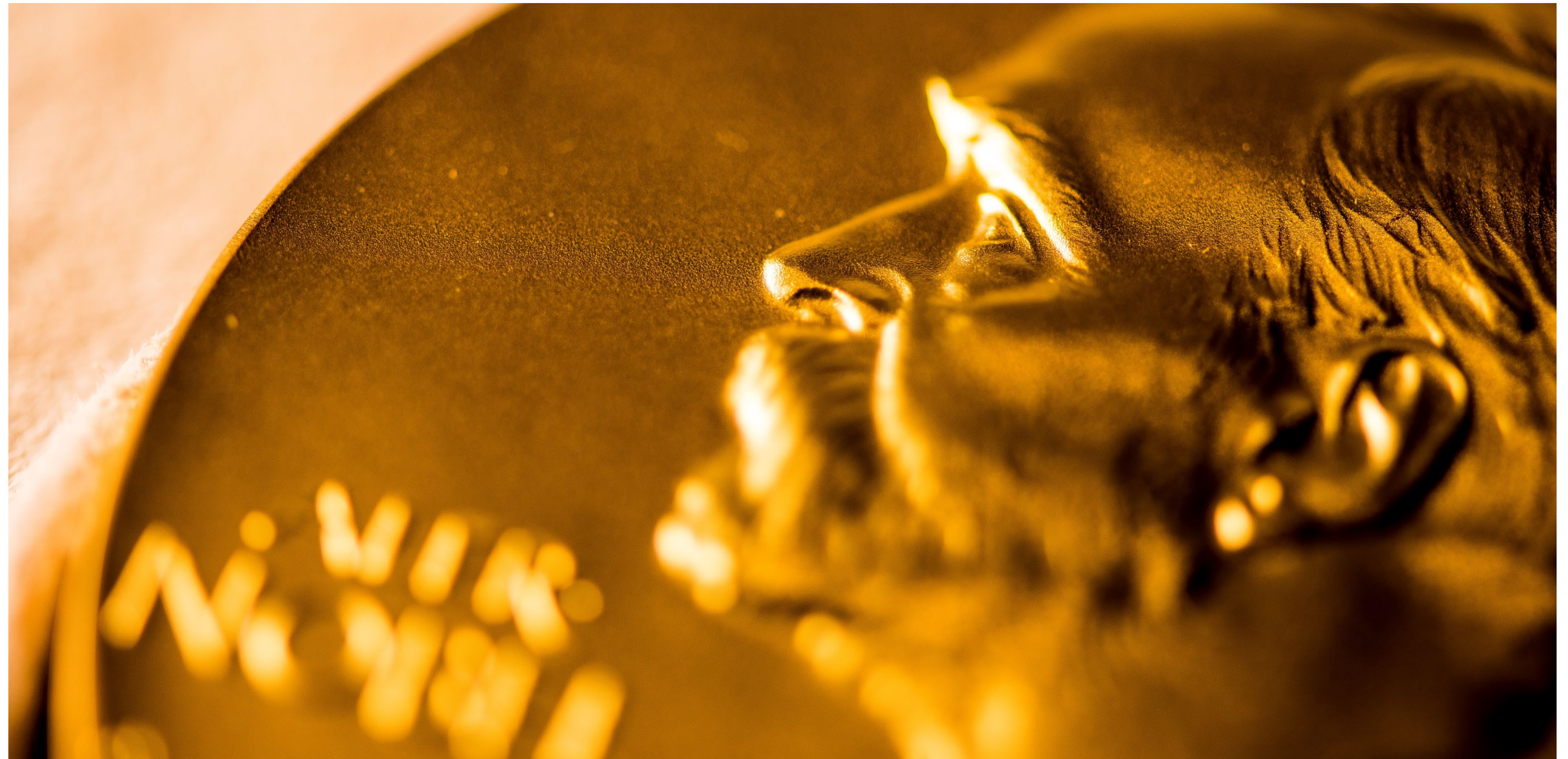


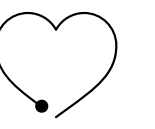
Nobel Prize lessons



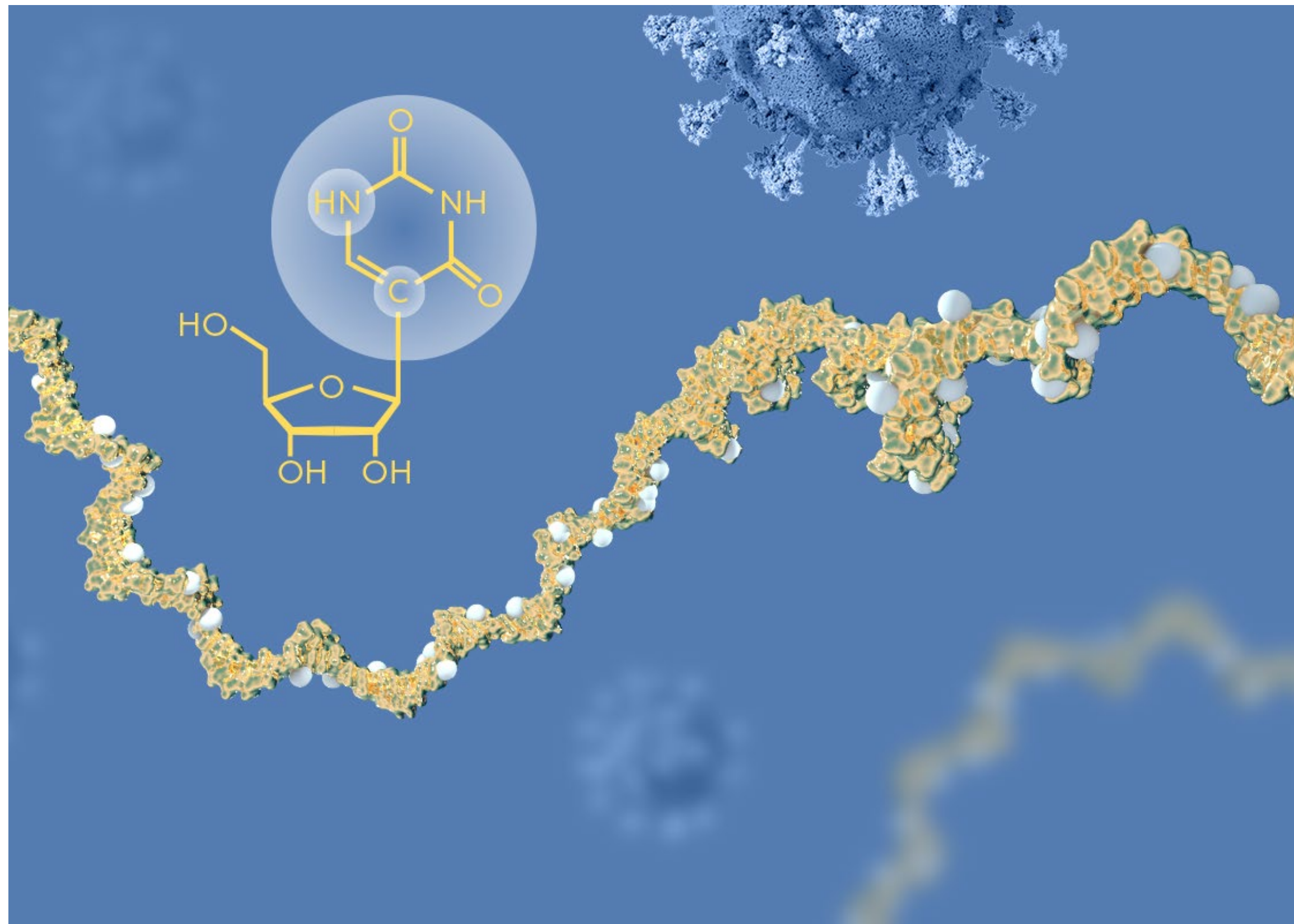
The Nobel Prize in Physiology or Medicine

“the person who shall have made the most important discovery within the domain of physiology or medicine”

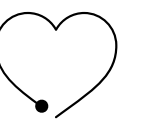




The 2023 medicine prize



The 2023 medicine prize honours discoveries that played a decisive role in the fight against the coronavirus pandemic. The laureates' research made it possible for effective vaccines to be developed against COVID-19, an airborne viral infection.



The 2023 medicine laureates

“For their discoveries concerning nucleoside base modifications that enabled the development of effective mRNA vaccines against COVID-19.”

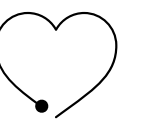


Katalin Karikó
Born: 1955, Hungary



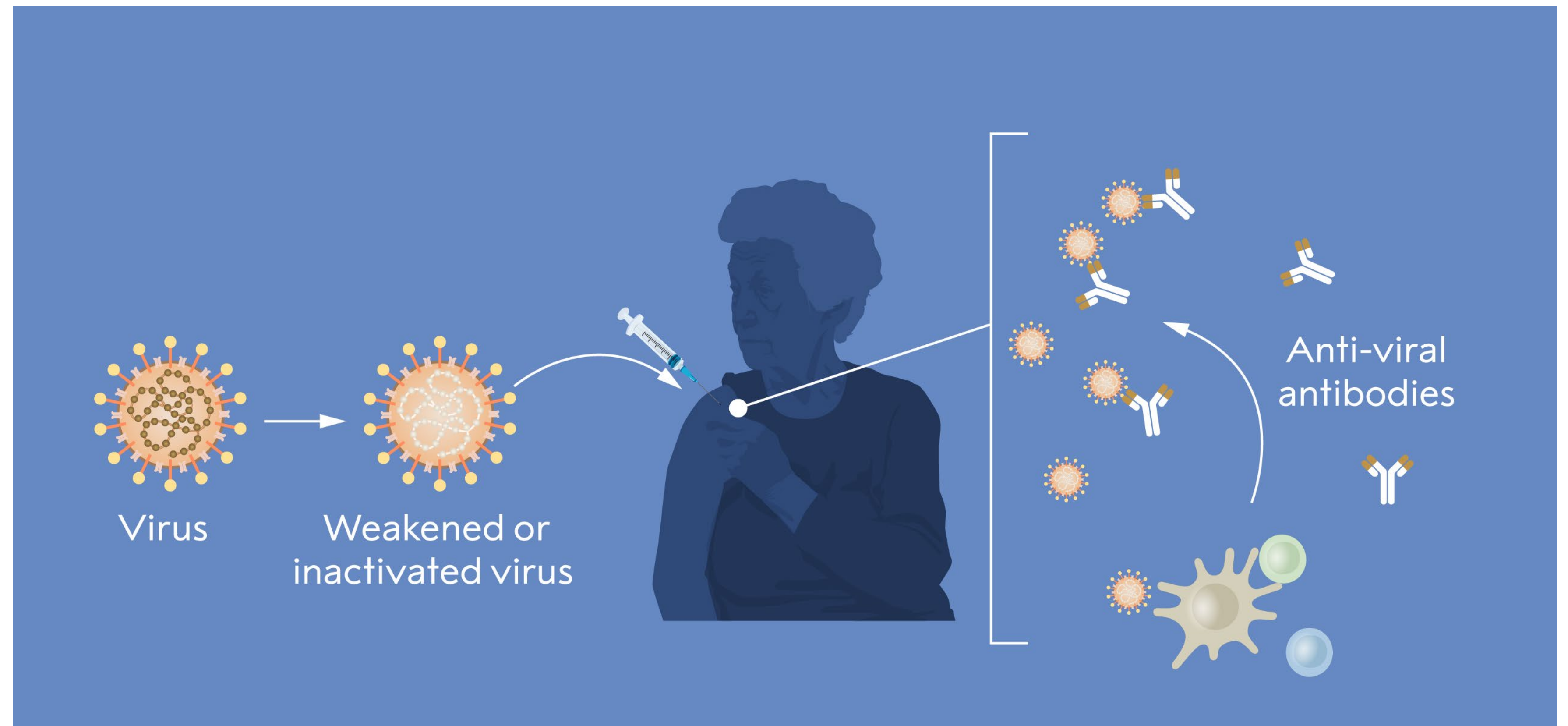
Drew Weissman
Born: 1959, USA

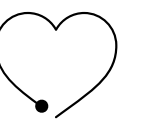
ILL. NIKLAS ELMHED © NOBEL PRIZE OUTREACH



Traditional vaccines

Traditional vaccines are often made up of weakened or inactivated virus.

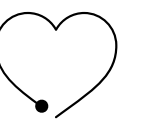




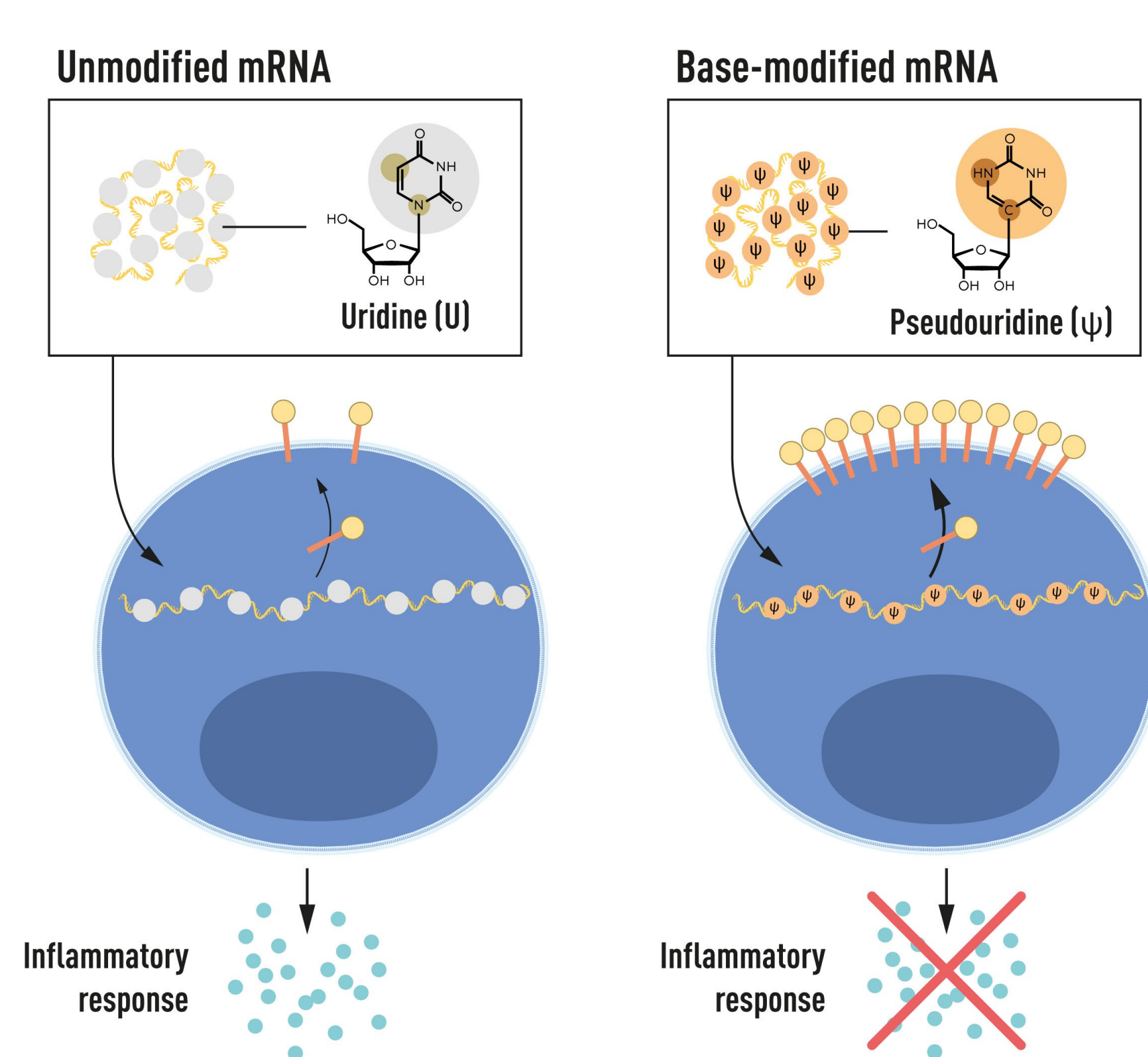
New questions – and new possibilities

It was a big advantage that biochemist Katalin Karikó and immunologist Drew Weissman came from different fields of research.

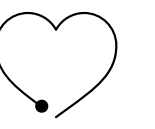




The breakthrough



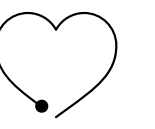
By modifying mRNA, the inflammatory response is reduced and protein production increased.



Outbreak of the coronavirus pandemic.

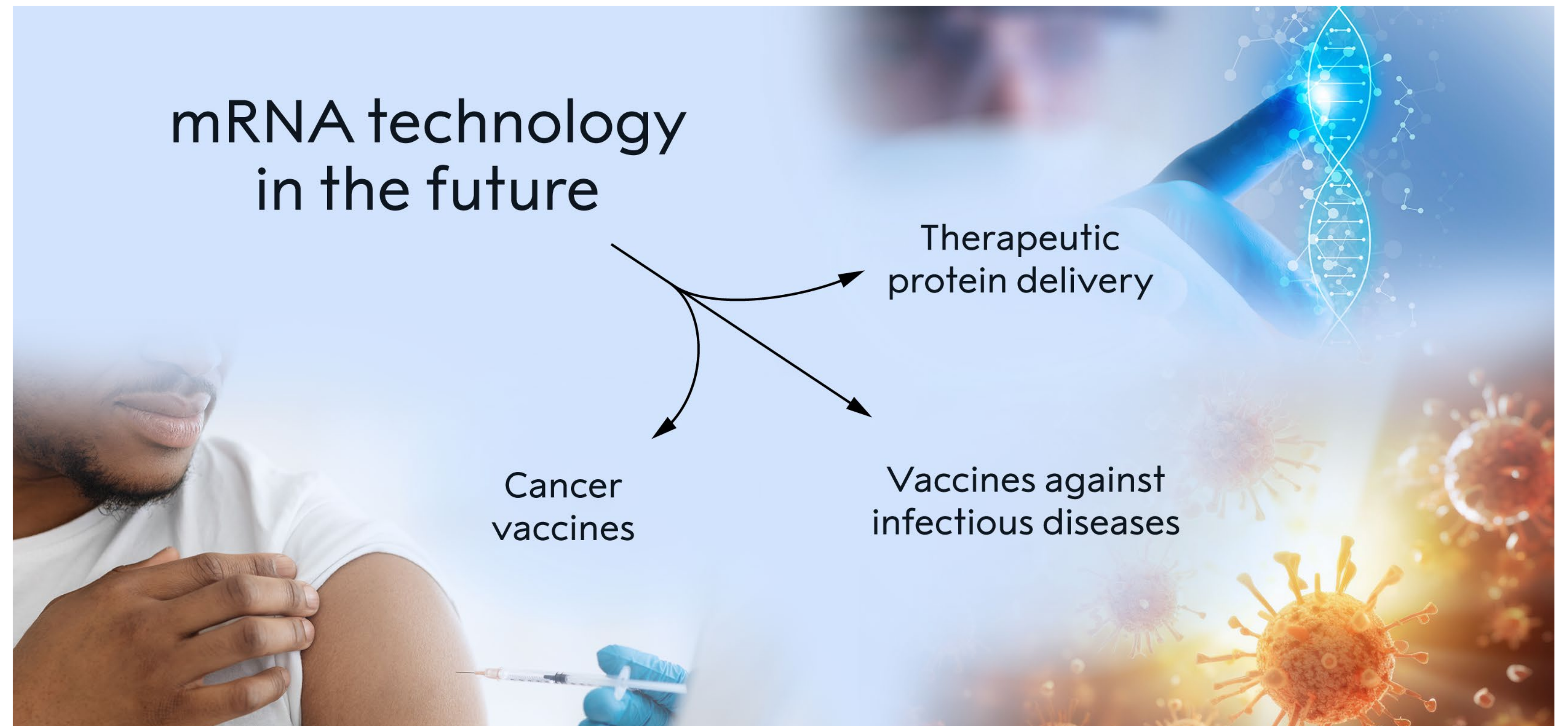
mRNA technology is deployed when the coronavirus pandemic breaks out in early 2020.

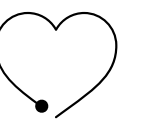




For the greatest benefit to humankind

These vaccines have saved millions of people's lives.





“As important as the vaccine is,
if you don’t take it, it doesn’t
work!”

Drew Weissman, 2023 medicine laureate

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FOR THE GREATEST
BENEFIT TO
HUMANKIND

Nobel Prize lessons