Zero to One & One to Hundred

vaccine development challenges on different scales

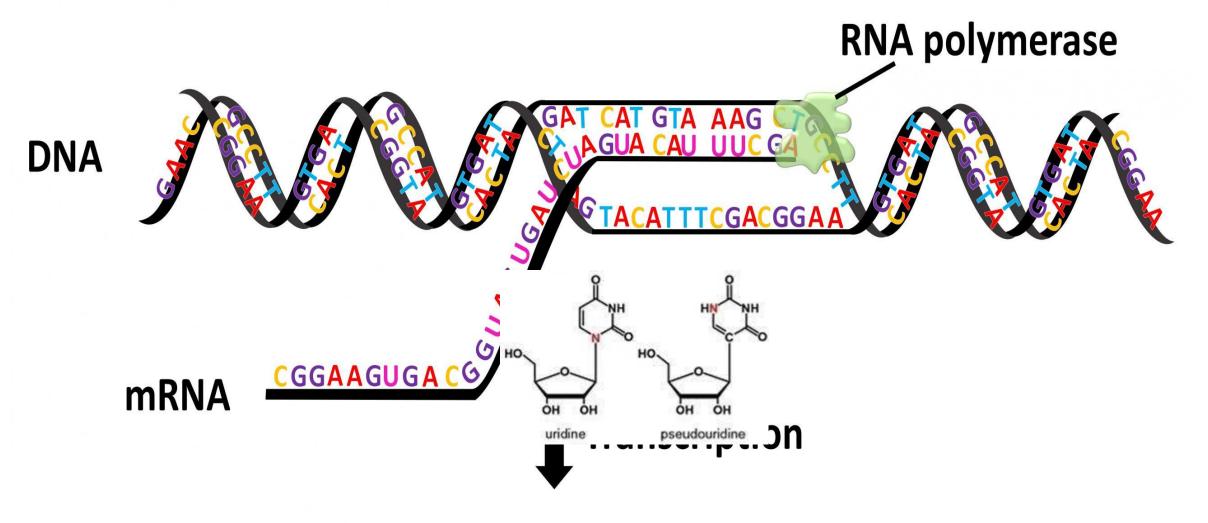
Marc Kaptein, M.D.
Country Medical Director Pfizer





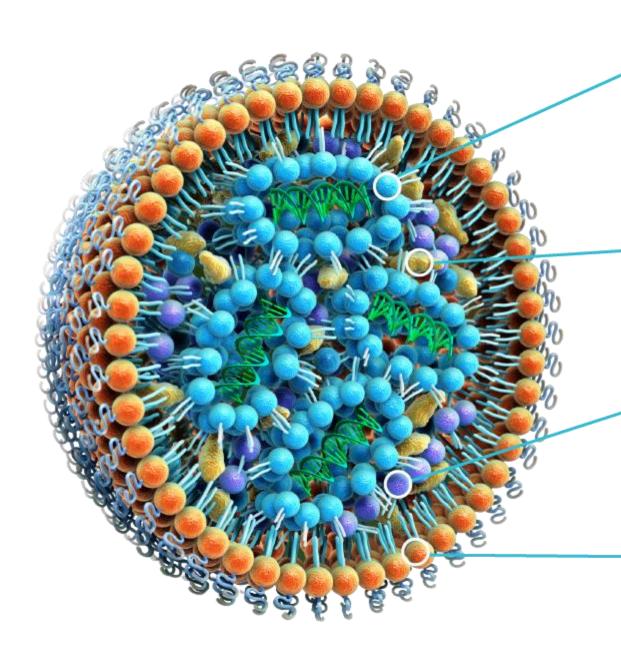
Zero to One





mrna cgg aag uga cgg uag uga ucu agu aca





Ionizable Cationic Lipid

- Binds & Protects RNA
- Facilitates Endosomal Escape
- O Neutral Charge at pH 7.4

Cholesterol

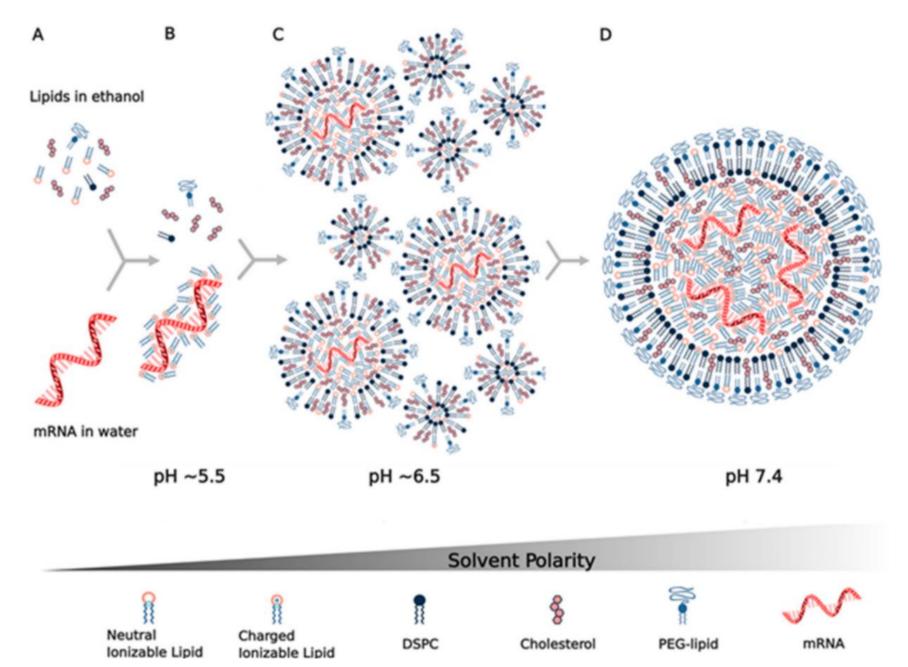
 Important for endocytosis via LDL receptor and ApoE

Helper Lipid

Structural

Stabilizer

- Stabilizes Particle
- Protect from opsonization









One to Hundred

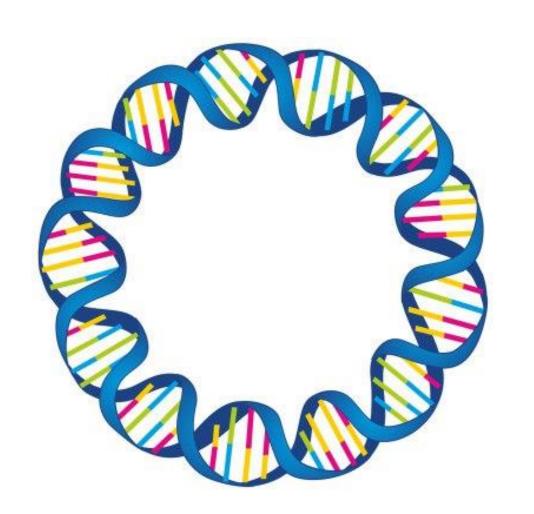
Quickly Please





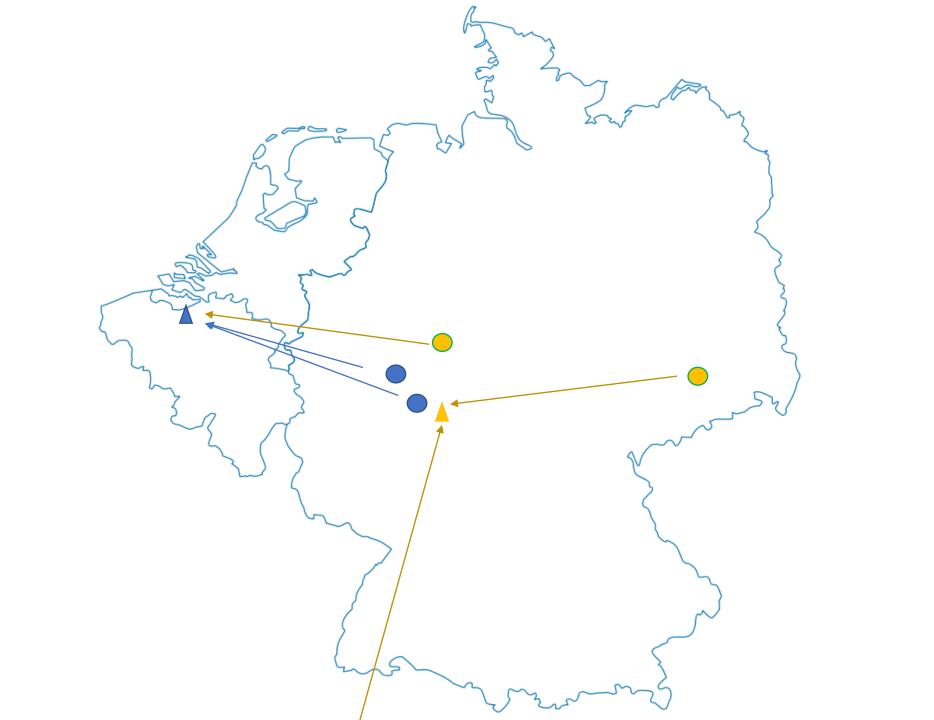






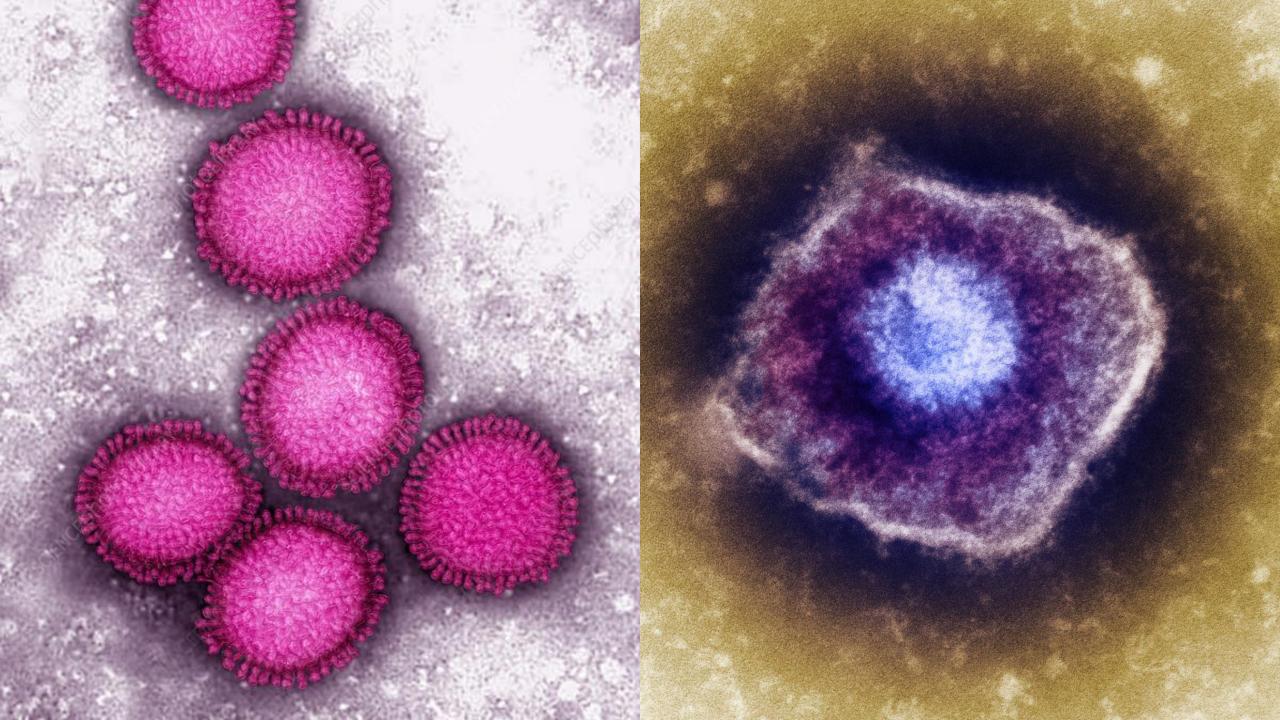


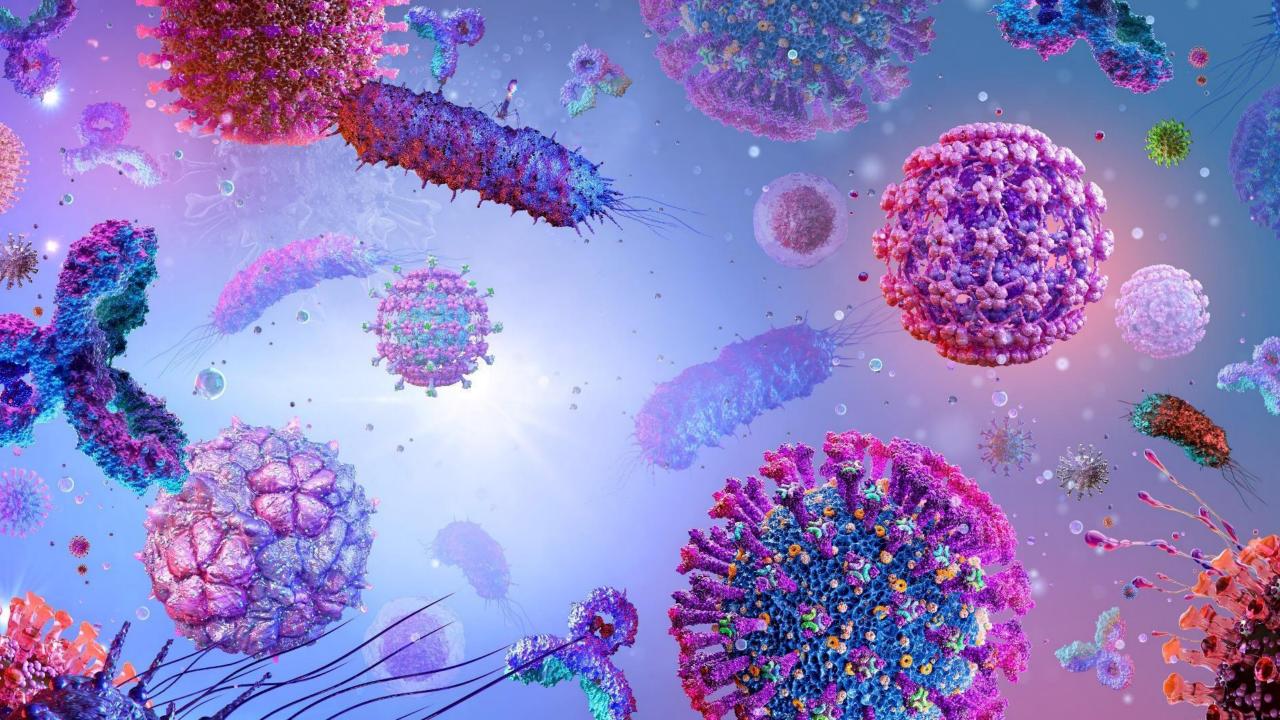












Thank you for your attention



