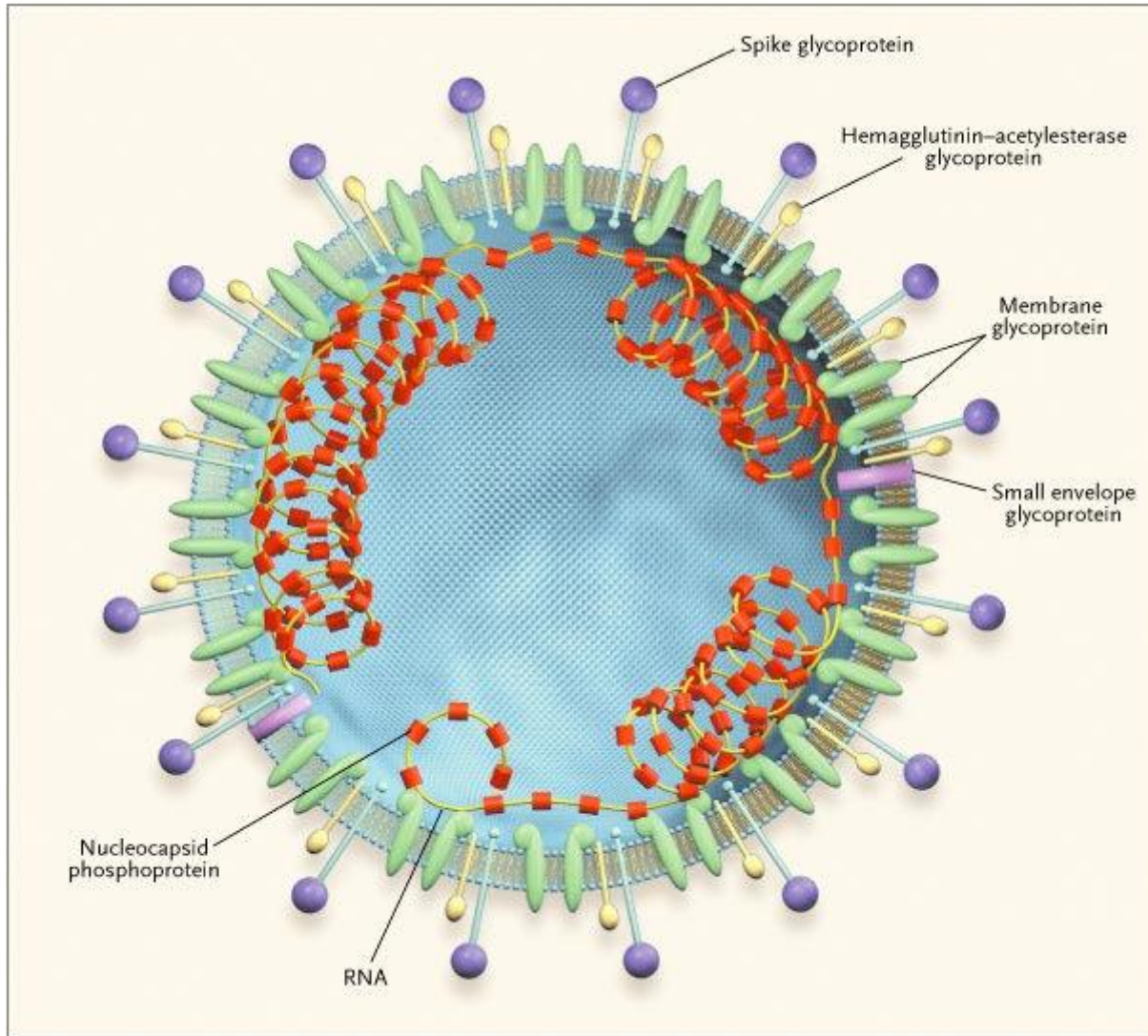


Onde o Coronavírus se replica? Contribuição de imagens nas células e no organismo.

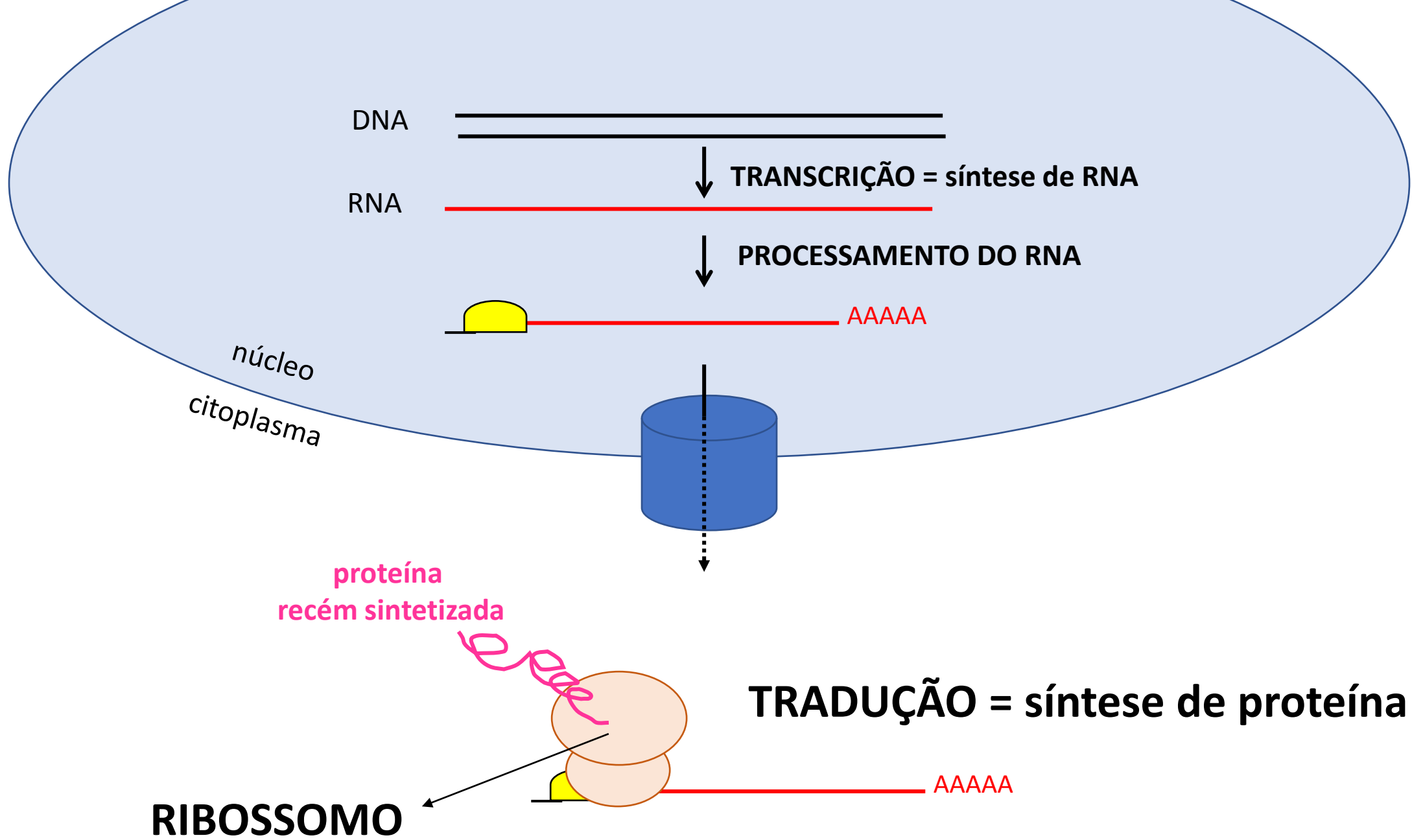
Metodologia científica

Nathalie Cella

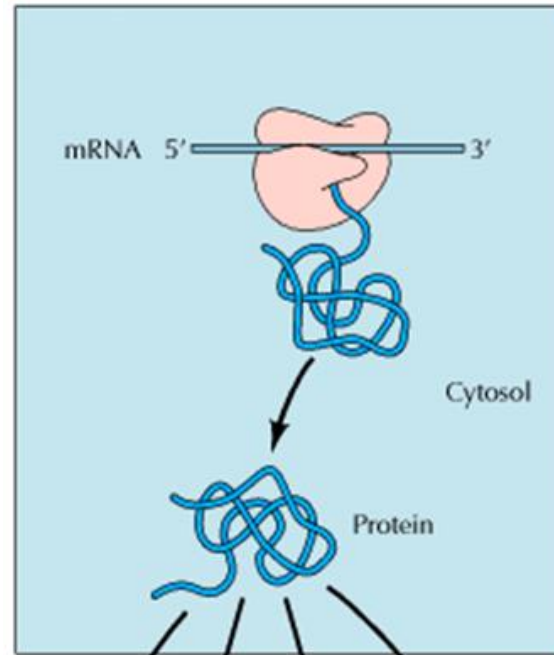
28/06/2021



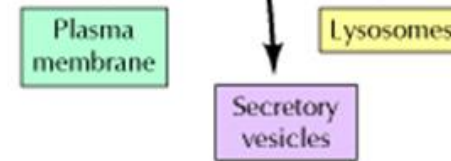
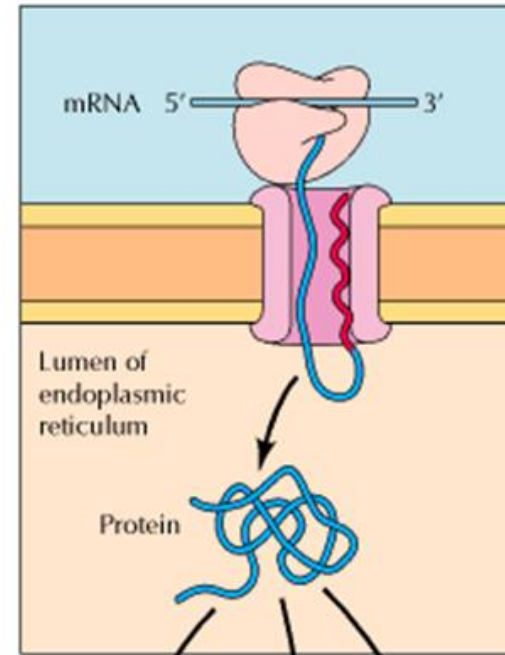
Breve introdução sobre
síntese proteica, via
endocítica e exocítica



CITOSOL



RETÍCULO ENDOPLASMÁTICO RUGOSO



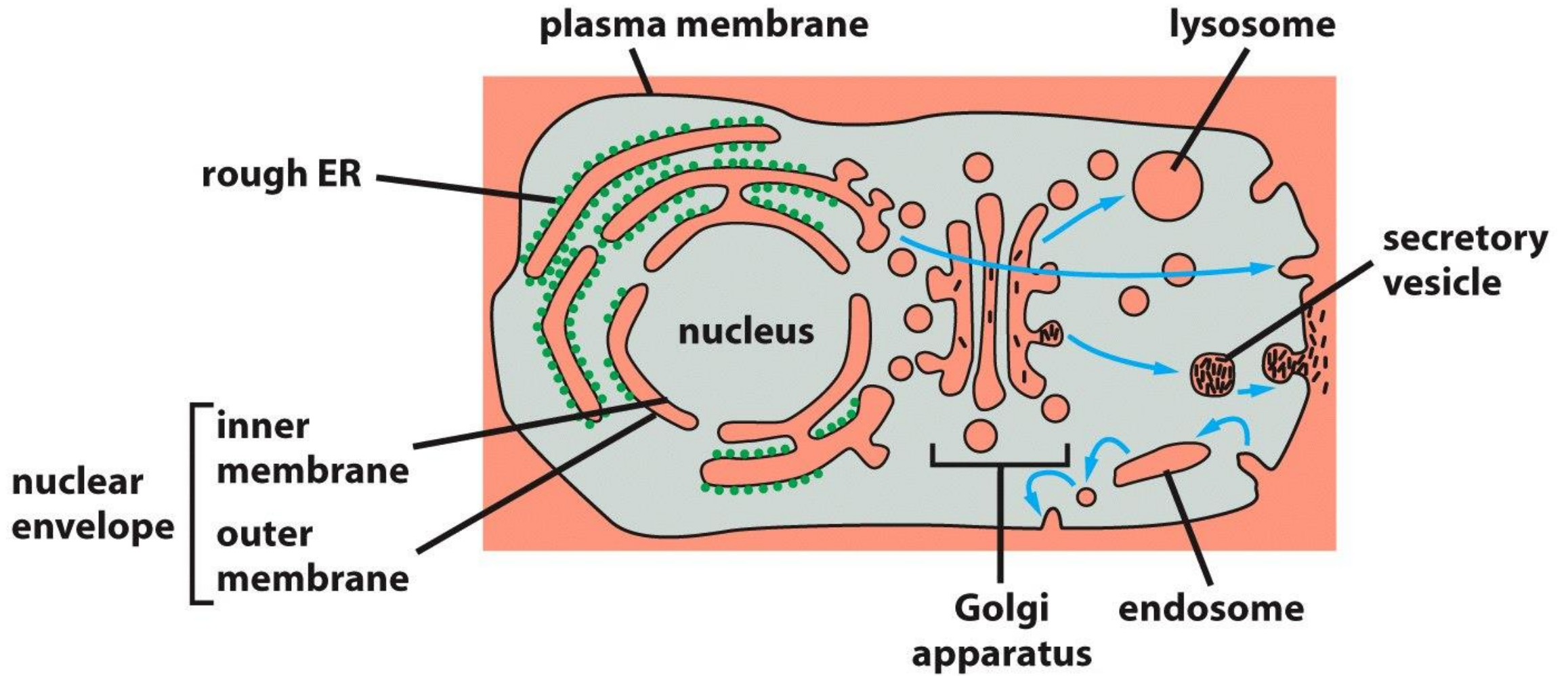


Figure 12-5 Molecular Biology of the Cell 5/e (© Garland Science 2008)

O retículo endoplasmático

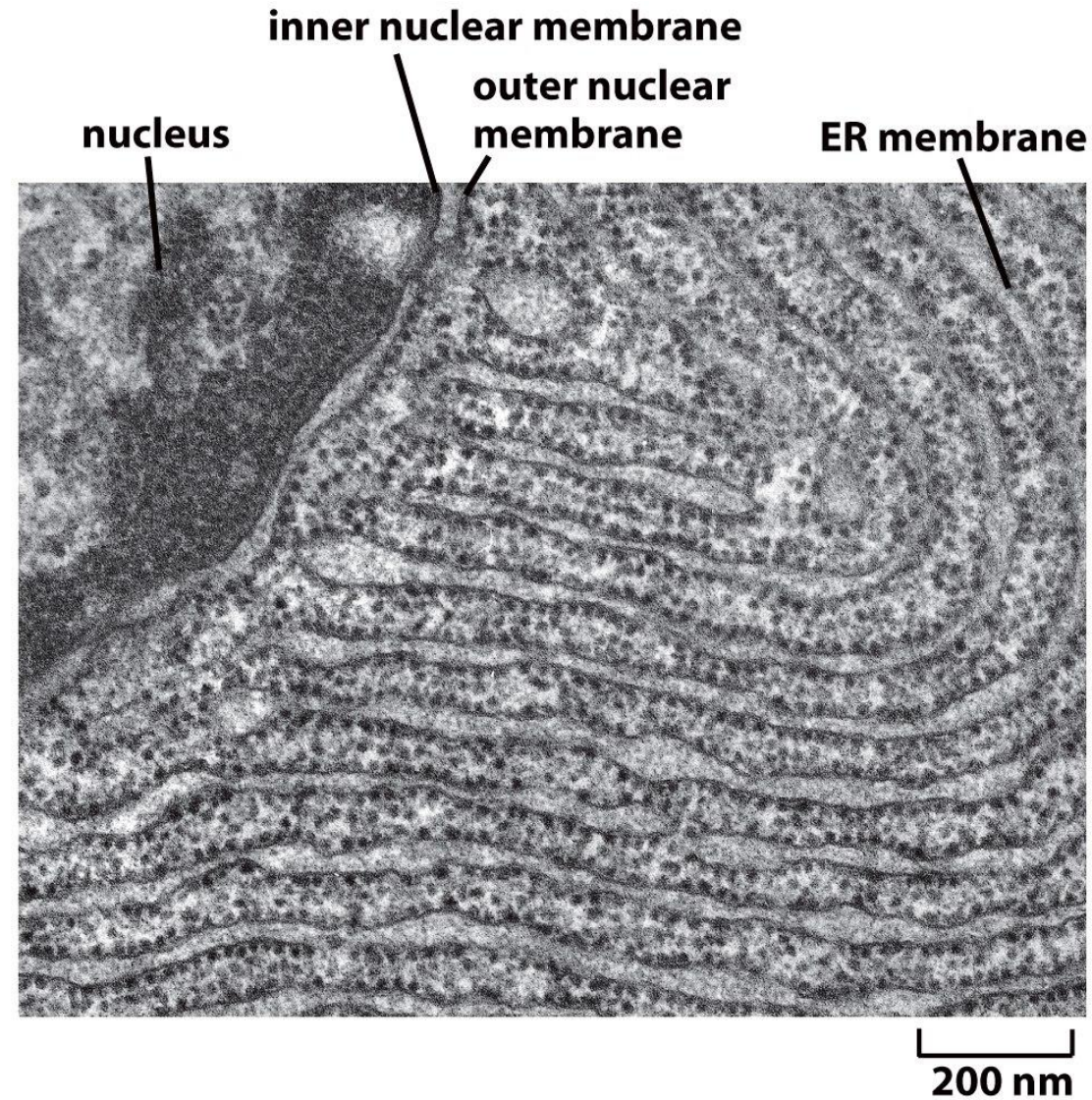
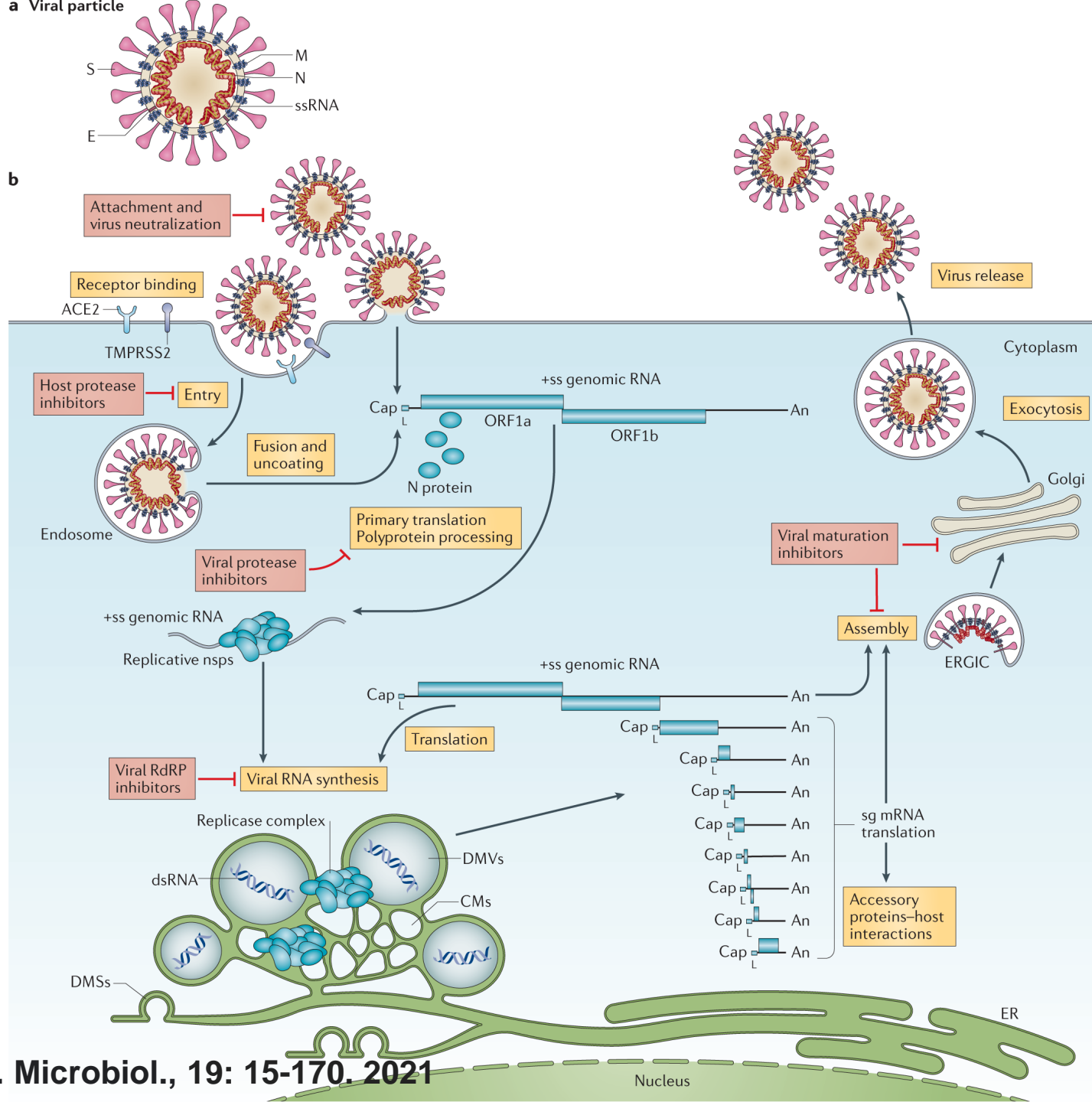
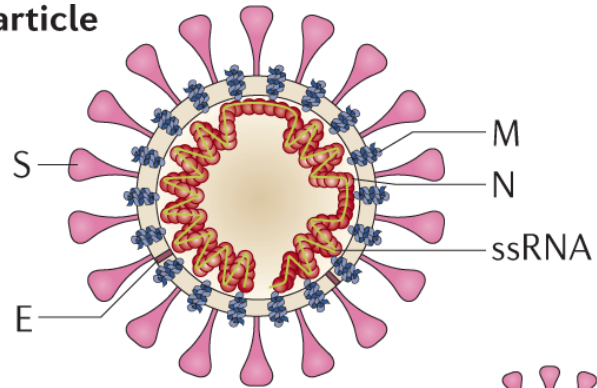


Figure 12-36a Molecular Biology of the Cell 5/e (© Garland Science 2008)

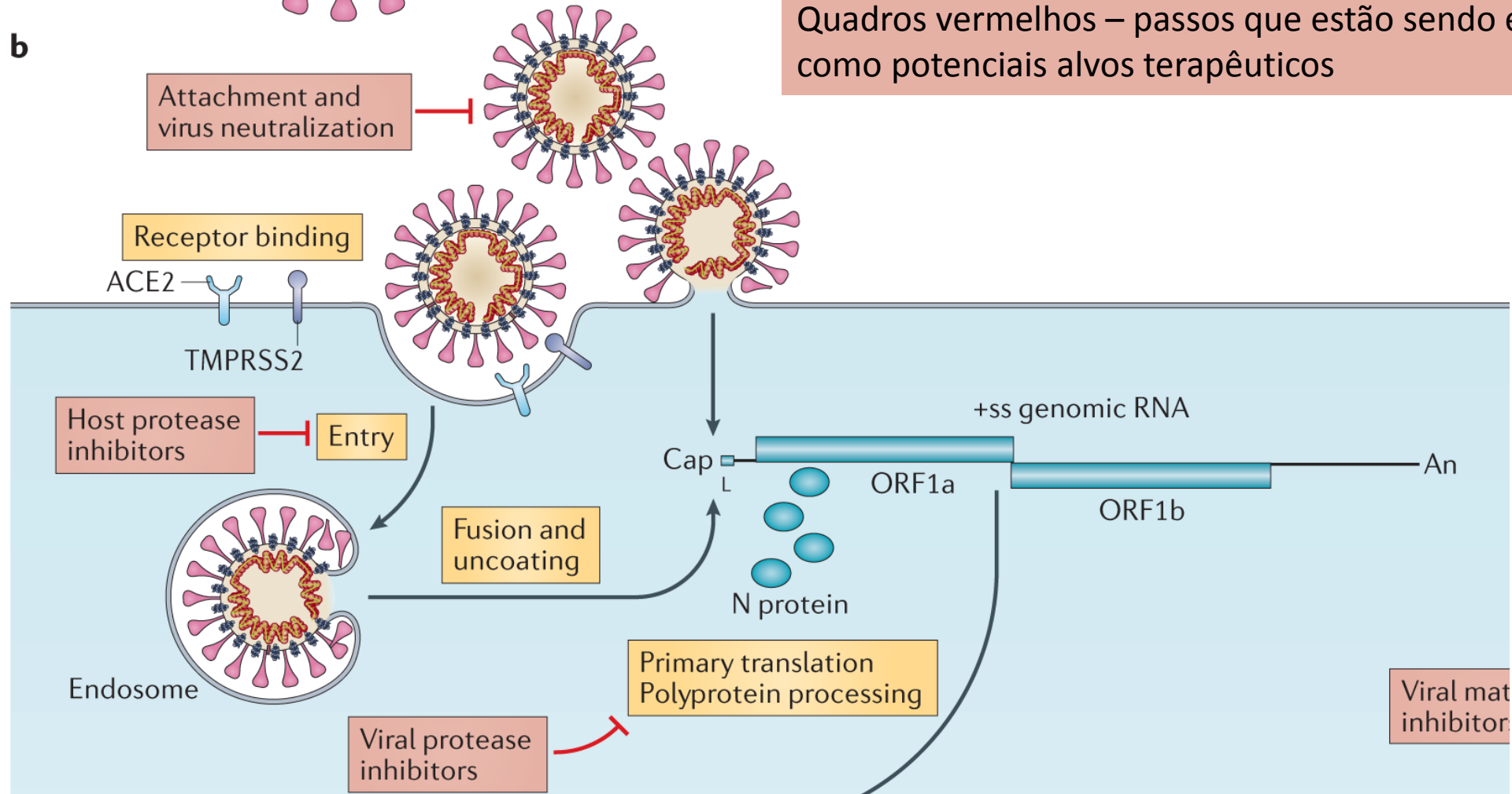


a Viral particle



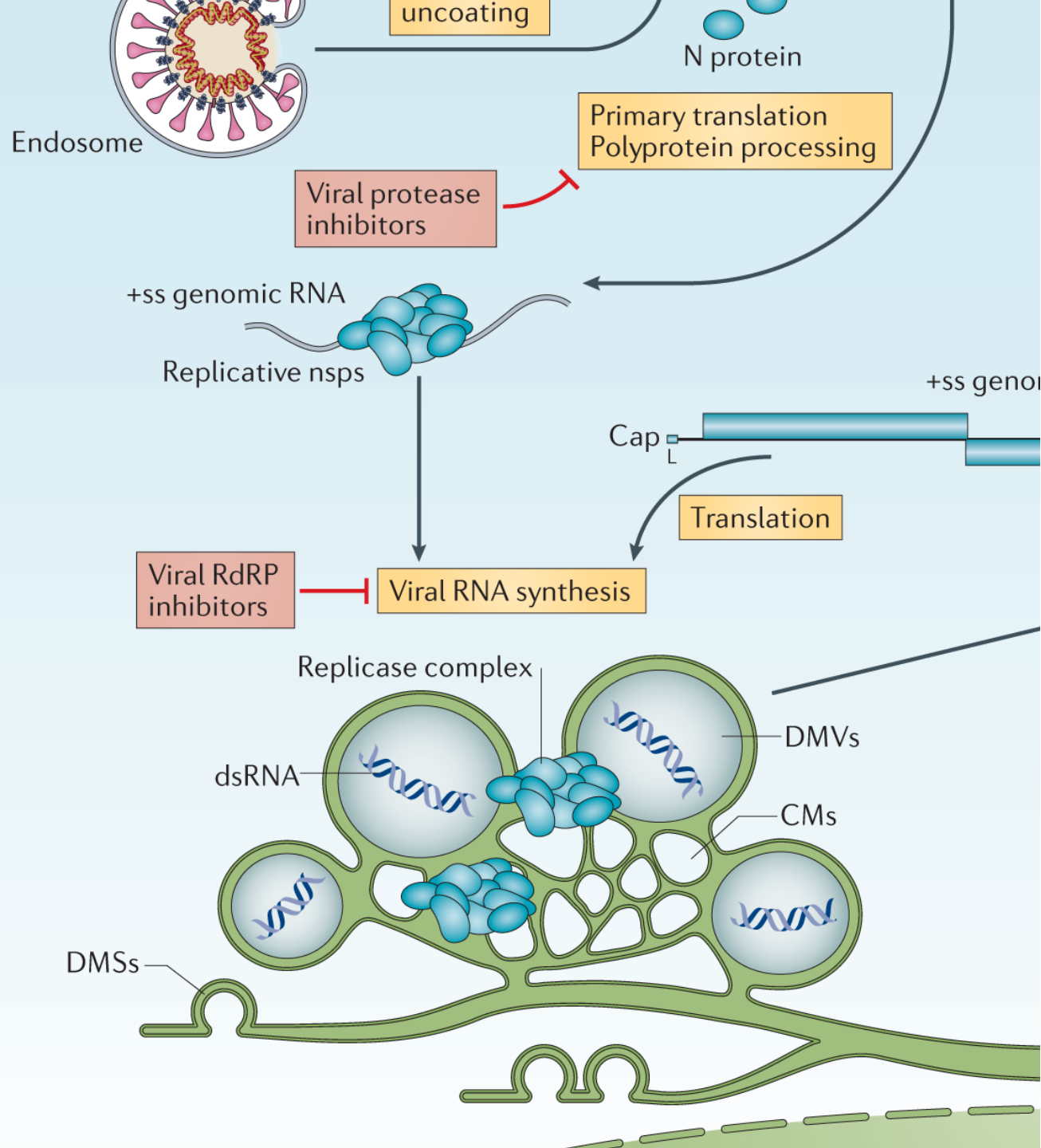
+ss genomic RNA - single strand genomic RNA

b

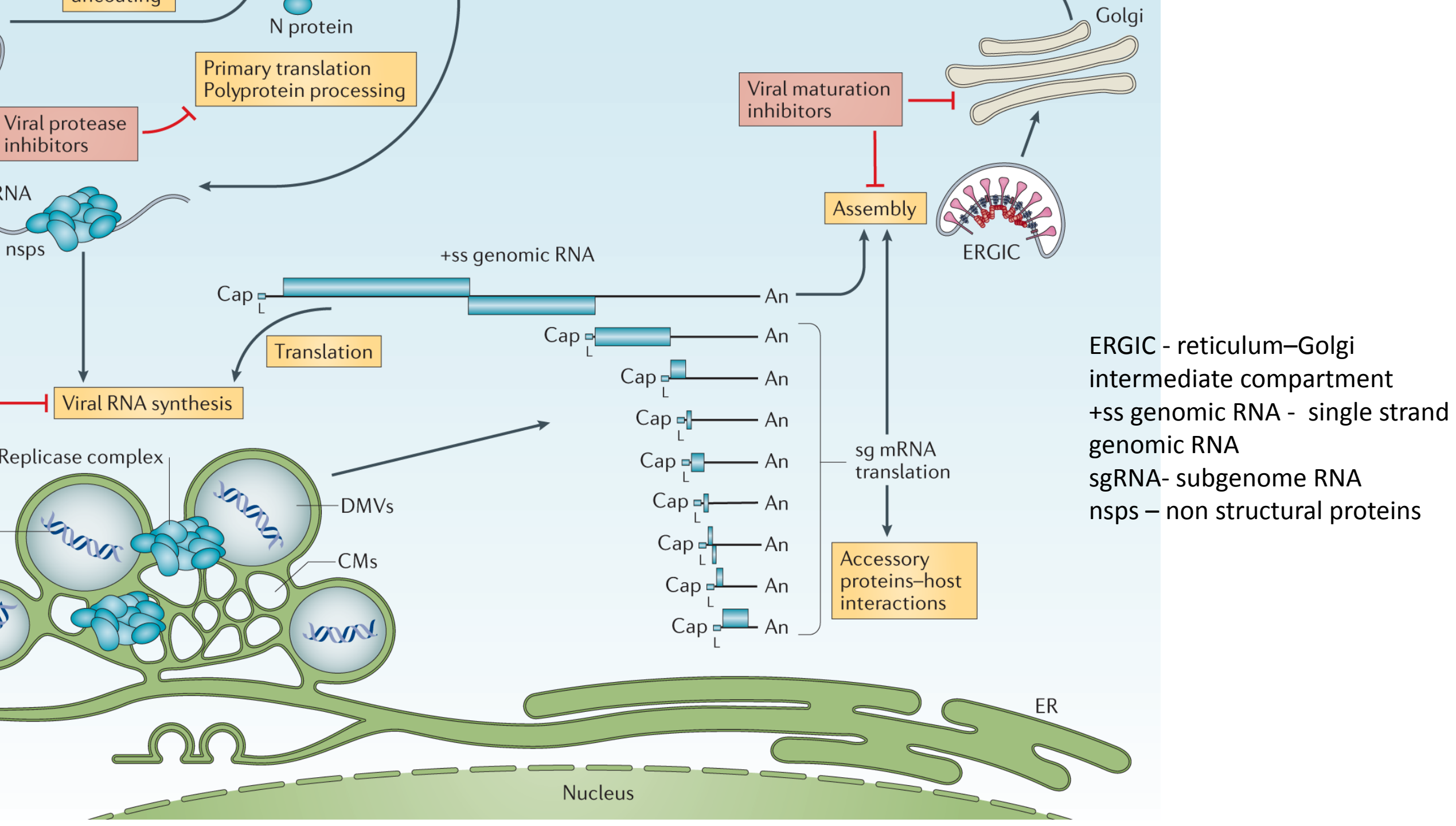


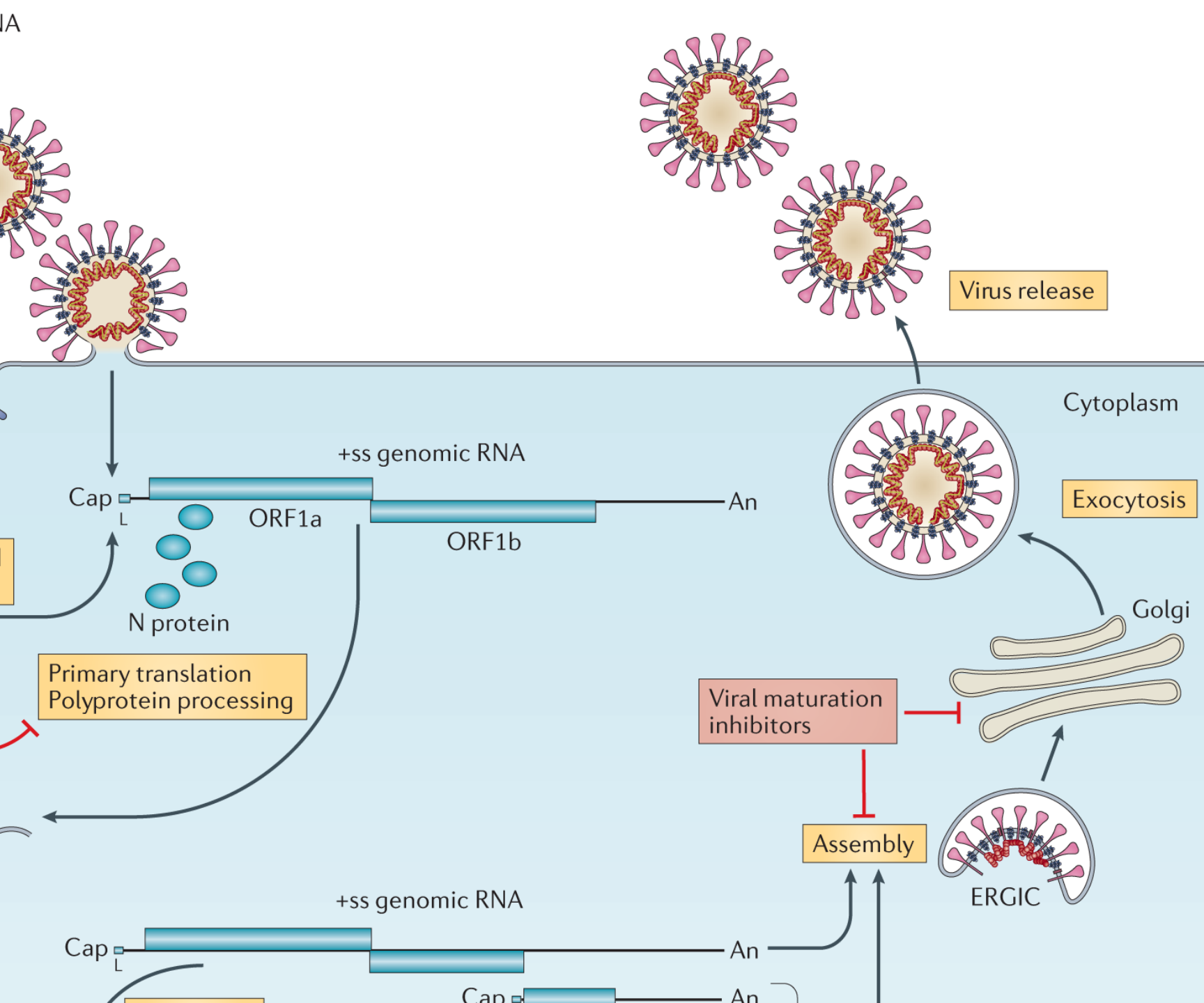
Quadros vermelhos – passos que estão sendo estudados como potenciais alvos terapêuticos

Viral maturation inhibitor

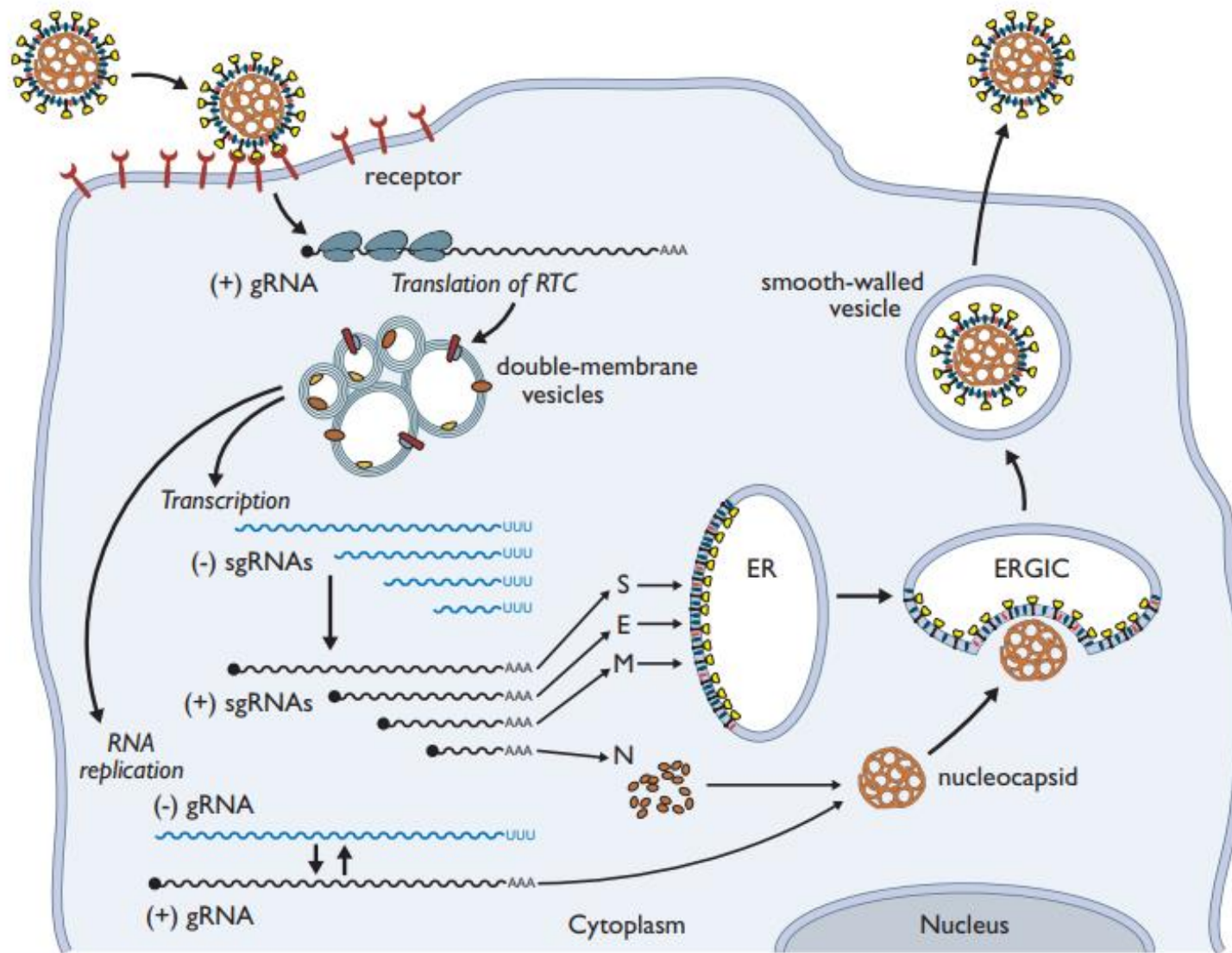


+ss genomic RNA - single strand genomic RNA
 dsRNA – double strand genomic DNA
 DMV – double membrane vesicle
 CMs – convoluted membranes



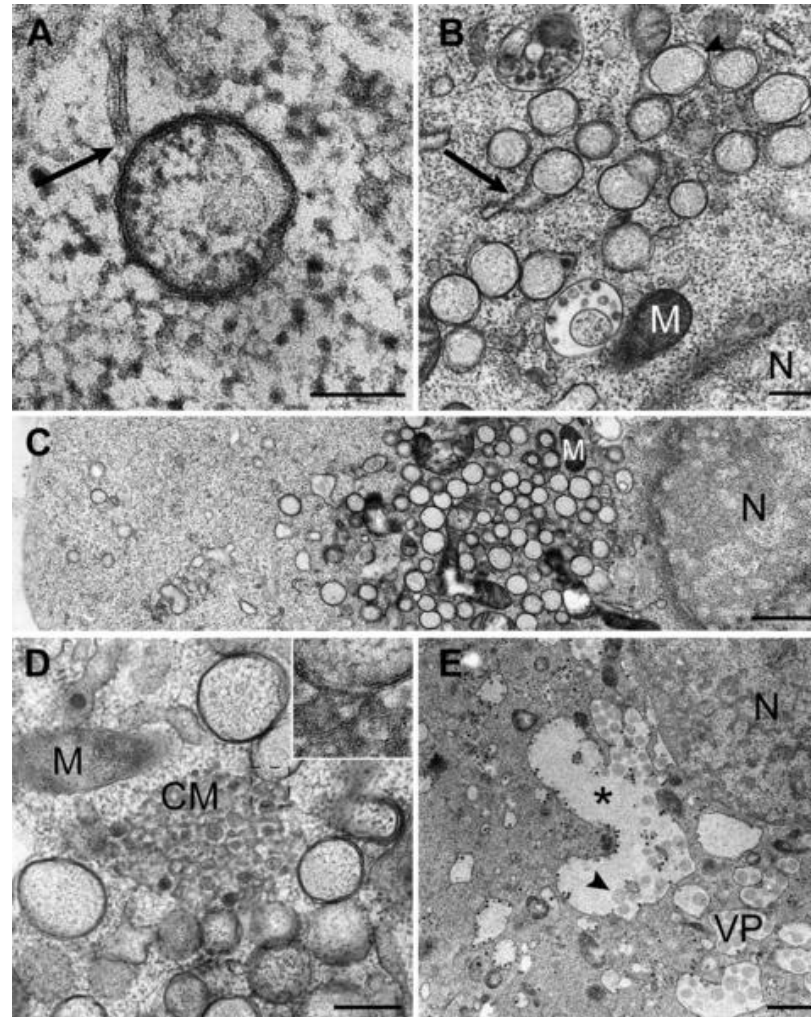


ERGIC - reticulum-Golgi intermediate compartment
 +ss genomic RNA = single strand genomic RNA



ERGIC - reticulum-Golgi intermediate compartment
 RTC - replicase-transcriptase complex
 gRNA- genome RNA
 sgRNA- subgenome RNA

Figure 2. Overview of Membrane Structures Induced by SARS-CoV Infection

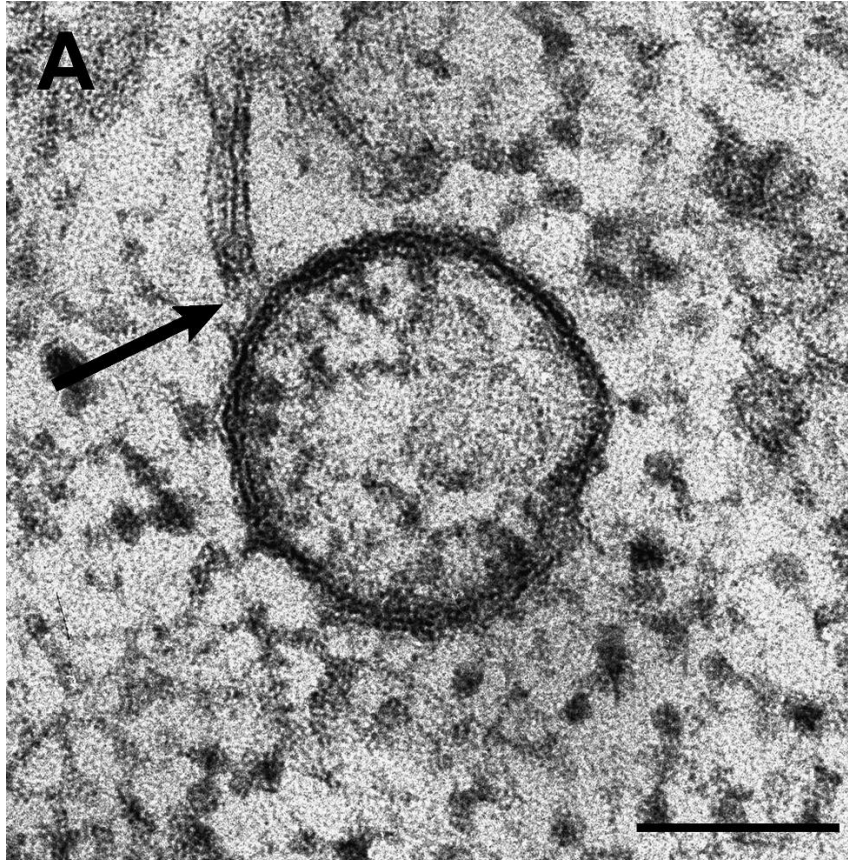


Knoops K, Kikkert M, Worm SHEvd, Zevenhoven-Dobbe JC, van der Meer Y, et al. (2008) SARS-Coronavirus Replication Is Supported by a Reticulovesicular Network of Modified Endoplasmic Reticulum. *PLOS Biology* 6(9): e226.

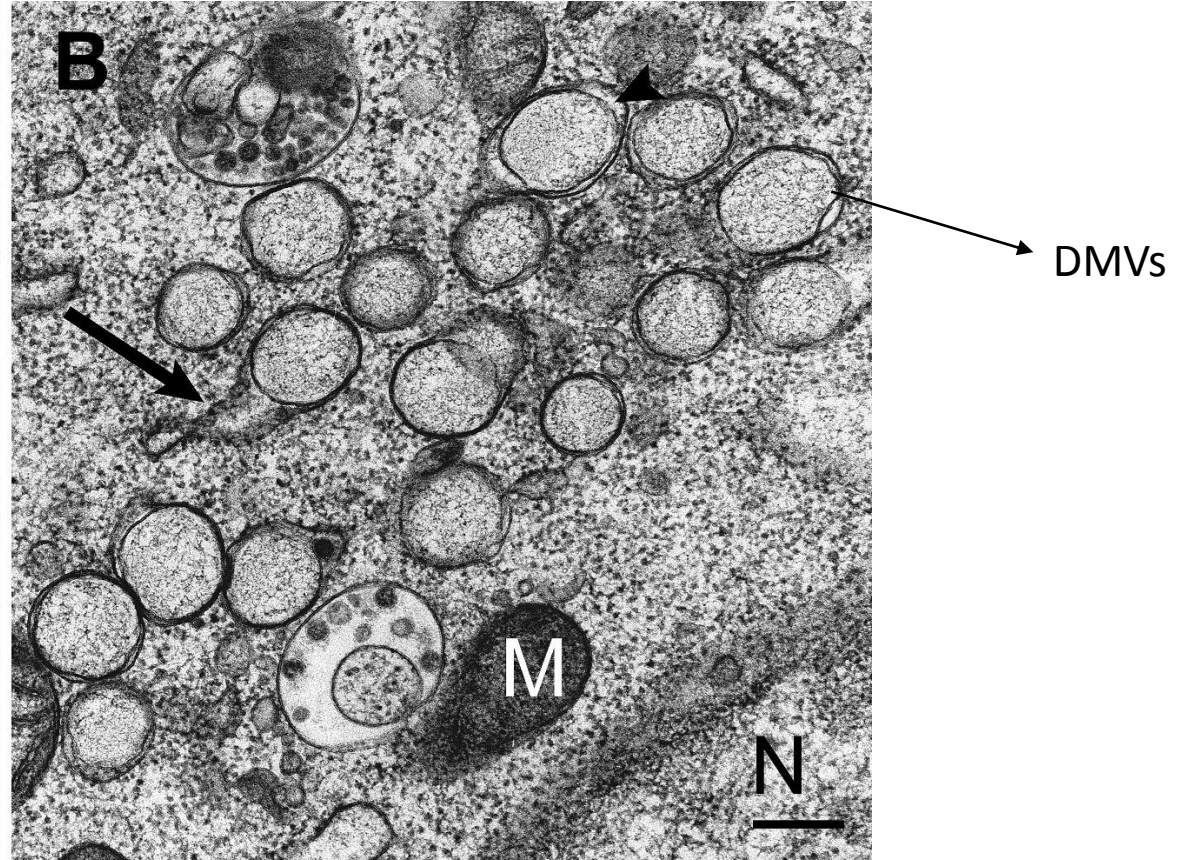
<https://doi.org/10.1371/journal.pbio.0060226>

<https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.0060226>

2h p.i.

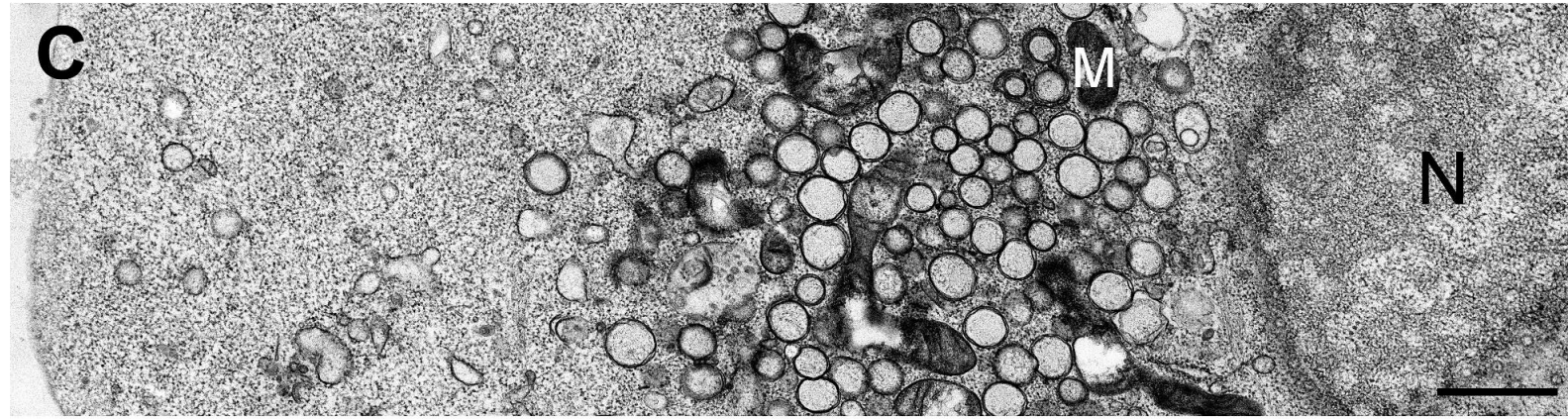


8h p.i.

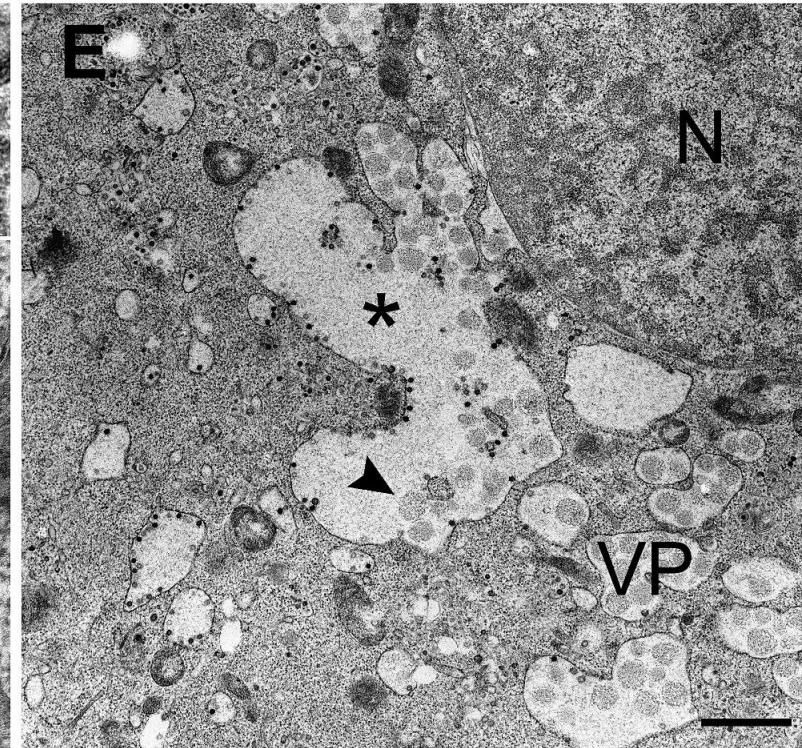
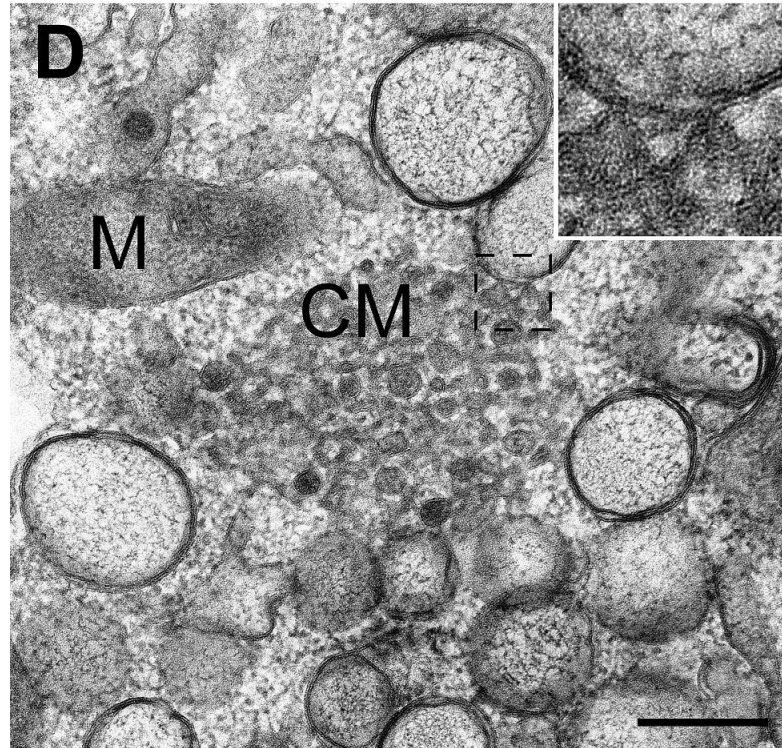


N - -núcleo M – mitocôndria DMV – vesículas com dupla membrana

8h p.i.

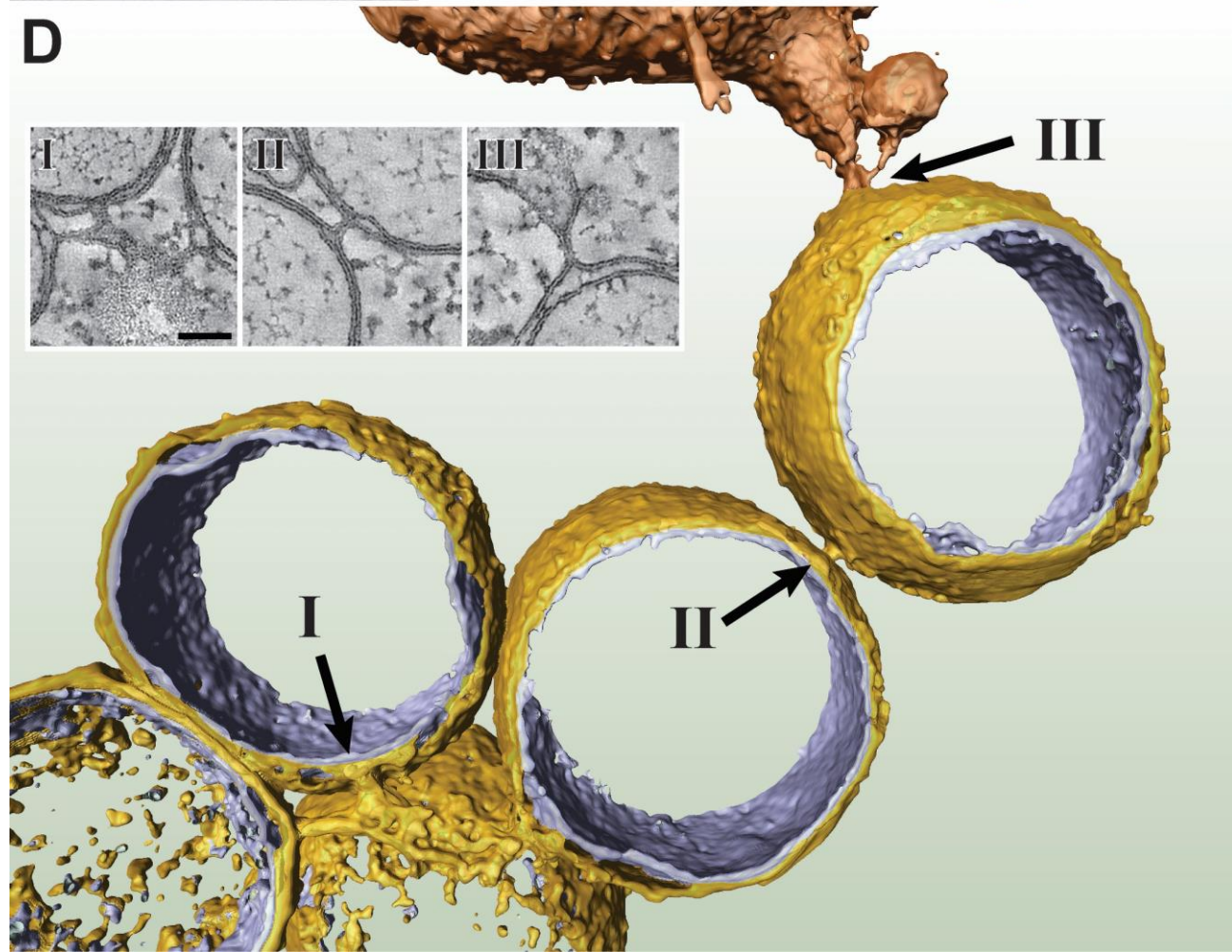
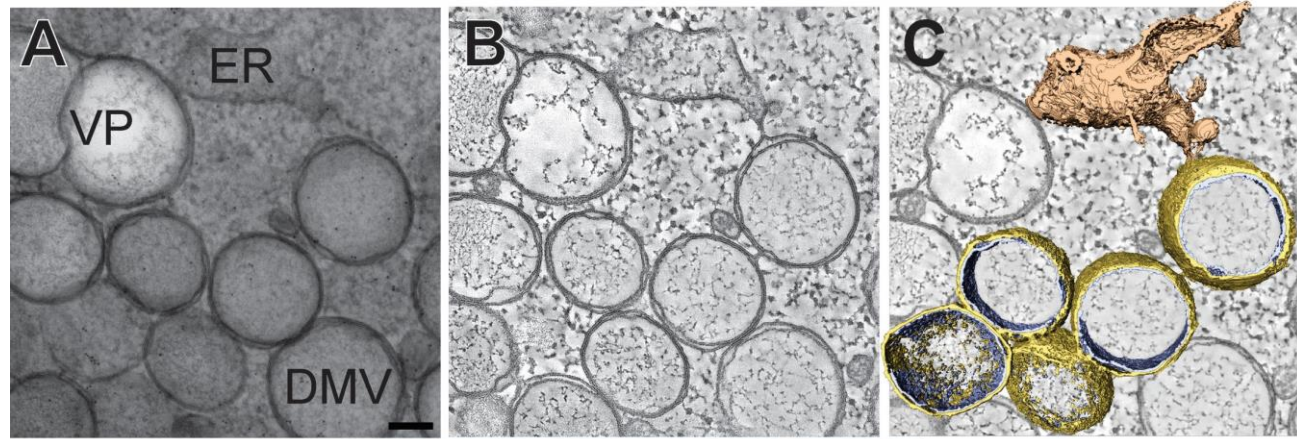


8h p.i.

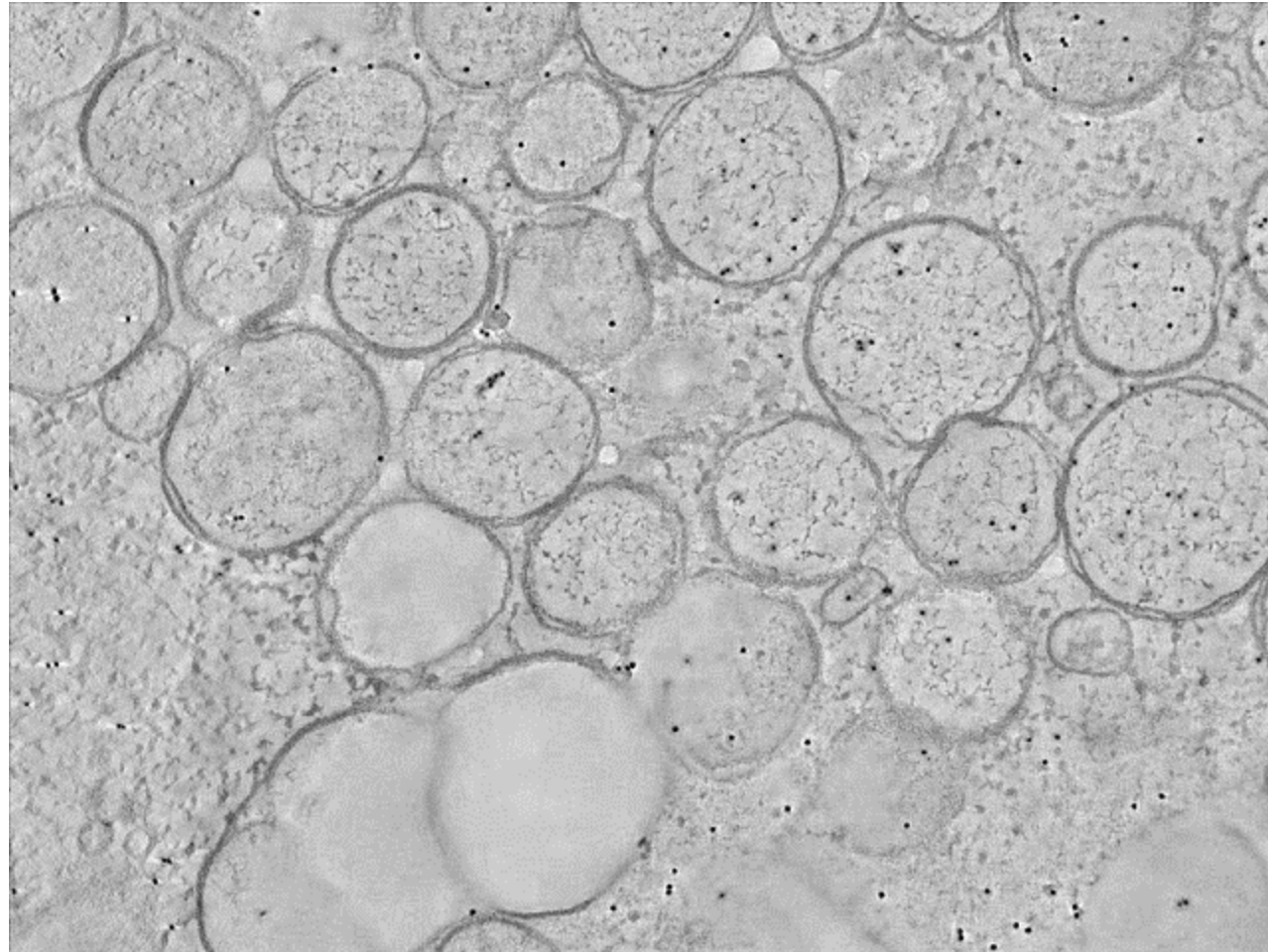


10h p.i.

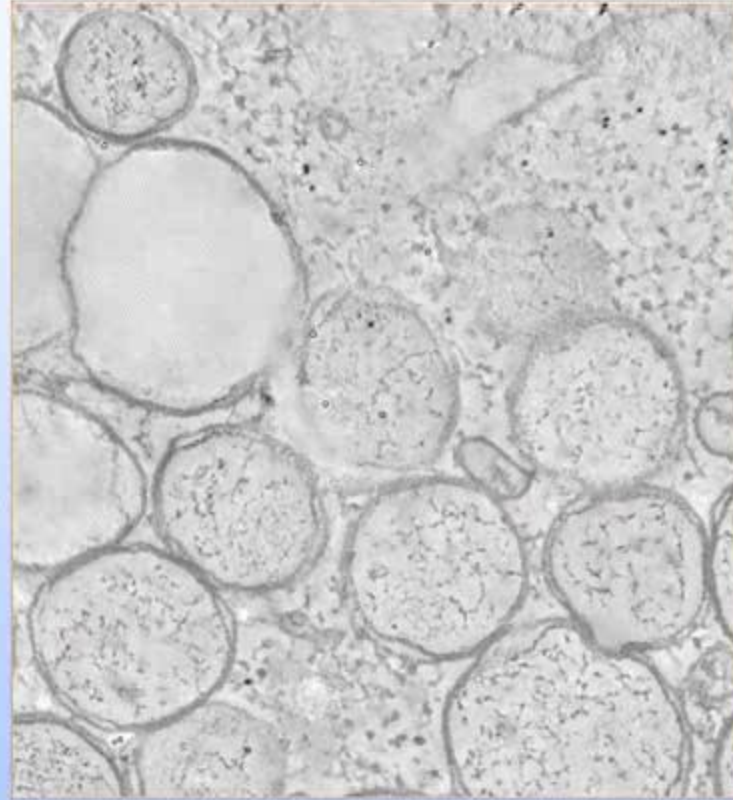
N - -núcleo M – mitocôndria CM - membranas convolutas VP – pacote vesicular (derivado da fusão de DMVs)



Células Vero E6 7 h p.i. (pós infecção) – tomografia eletrônica



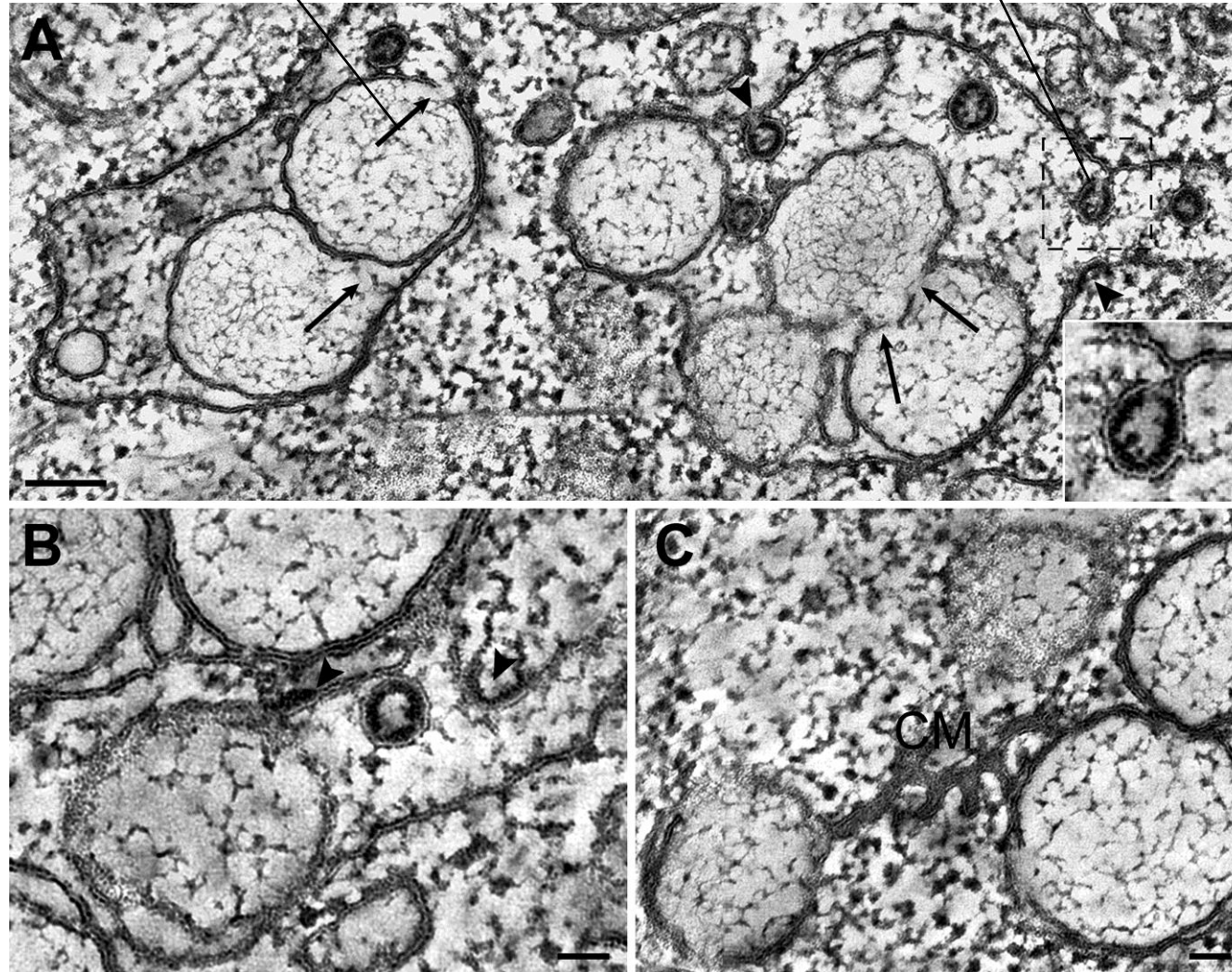
<https://doi.org/10.1371/journal.pbio.0060226.sv001>

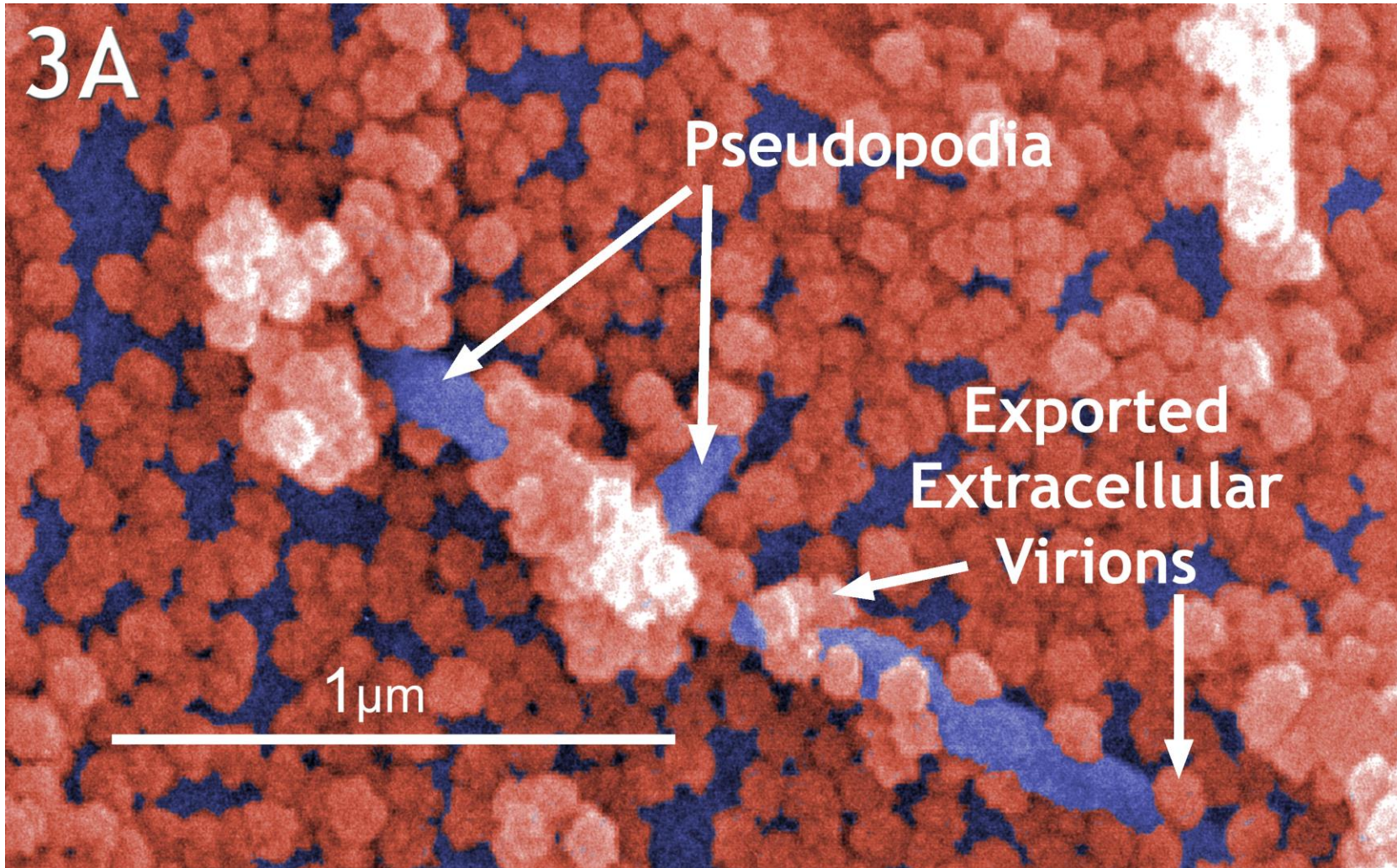


<https://doi.org/10.1371/journal.pbio.0060226.sv002>

Descontinuidade da membrana da DMV

Partícula viral brotando para o interior de um pacote vesicular (VP)





Células Vero em cultura. Mmicroscopia eletrônica de varredura

