

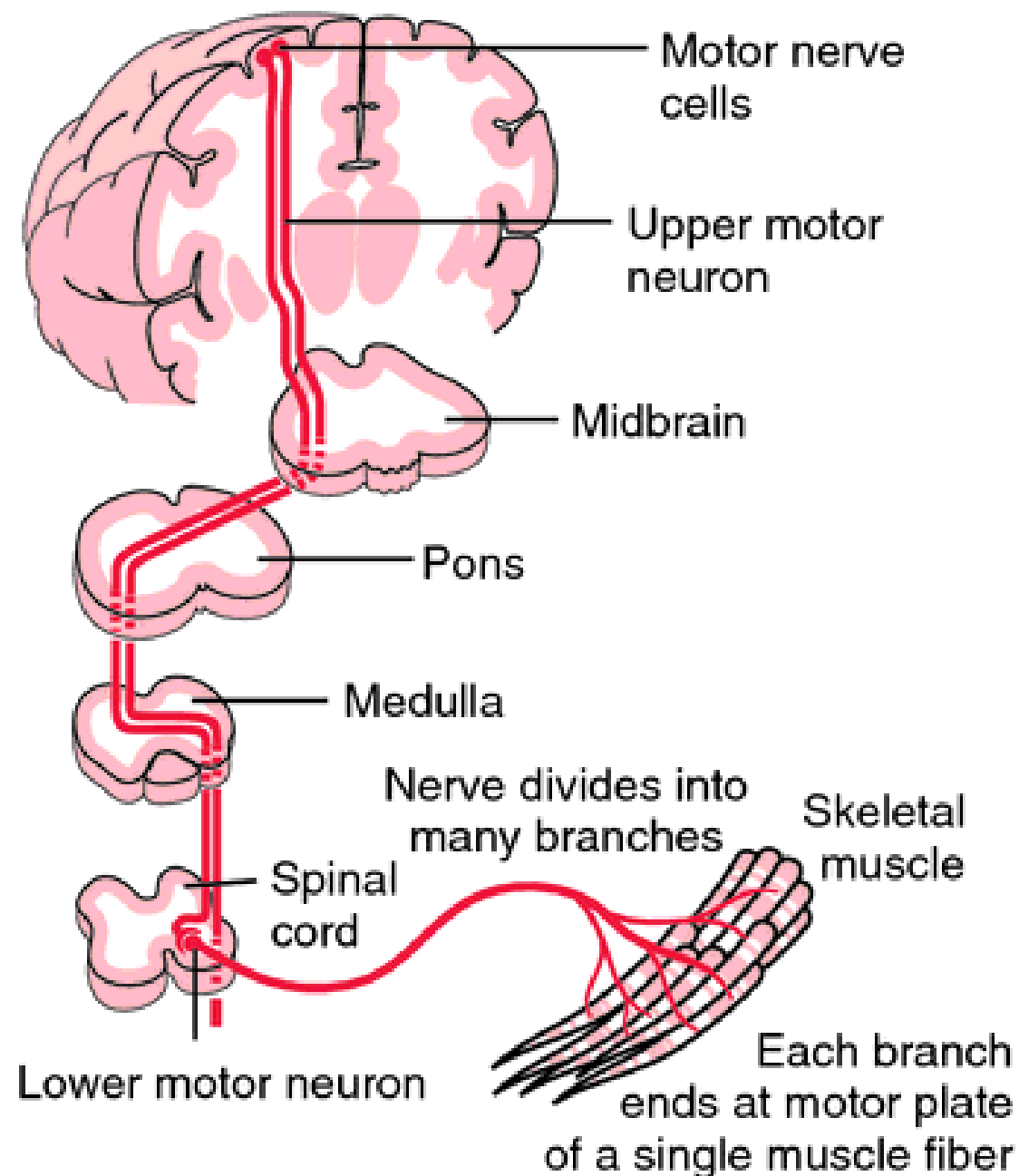


# ESCLEROSE LATERAL AMIOTRÓFICA

Neurobiologia dos Estados Patológicos  
Discentes: Helmut Kennedy, Isaac Braga e Júlia Xavier

# Esclerose Lateral Amiotrófica

- Doença neurodegenerativa progressiva que atinge os neurônios motores do córtex cerebral, tronco encefálico e medula espinal.
- 2 casos por 100.000 habitantes



**S E M I O L O G I A**

ISTO É *possível*



# ETIOLOGIA

**ELA**

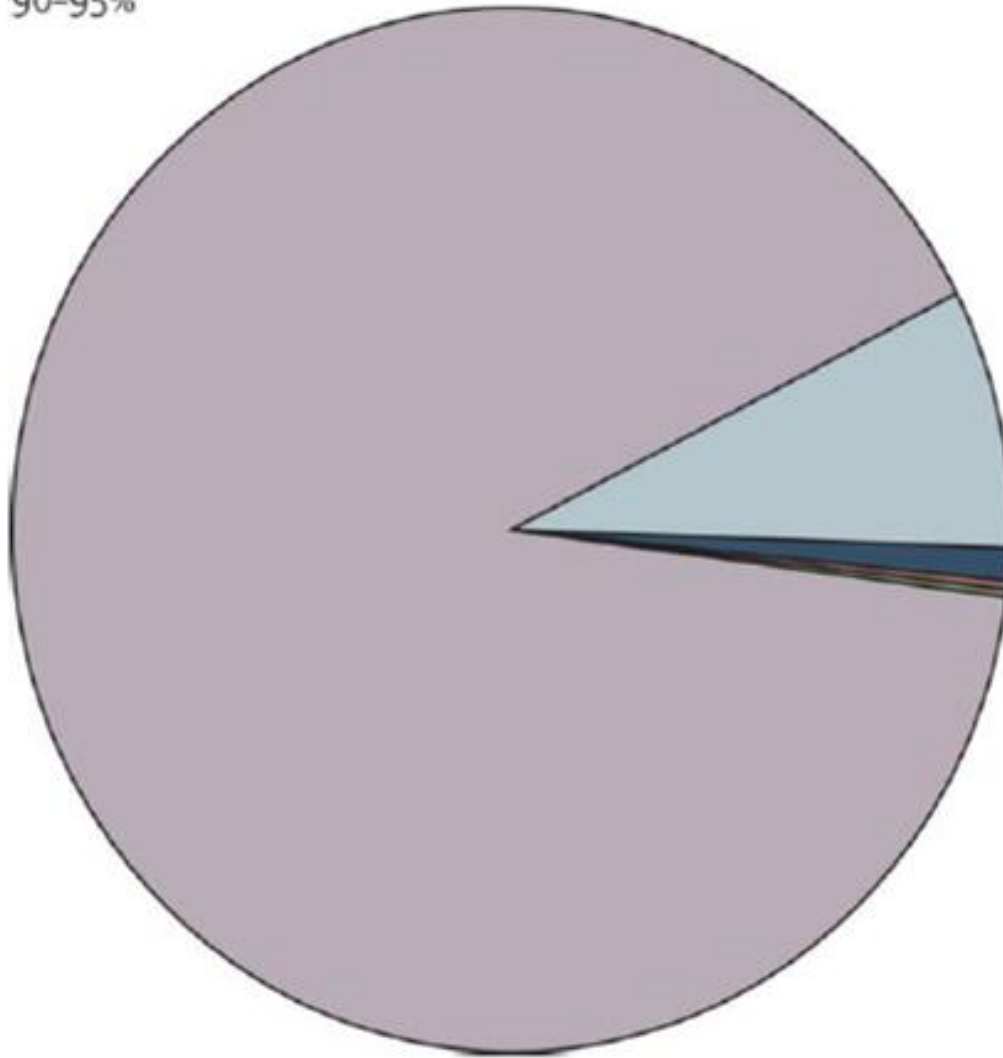


**ESPORÁDICA**

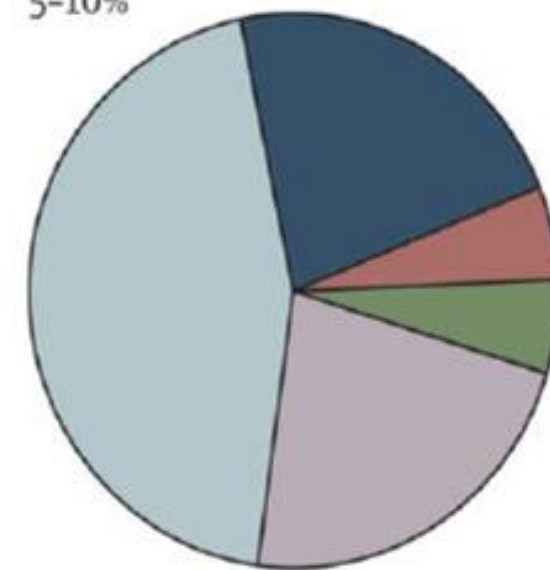


**FAMILIAR**

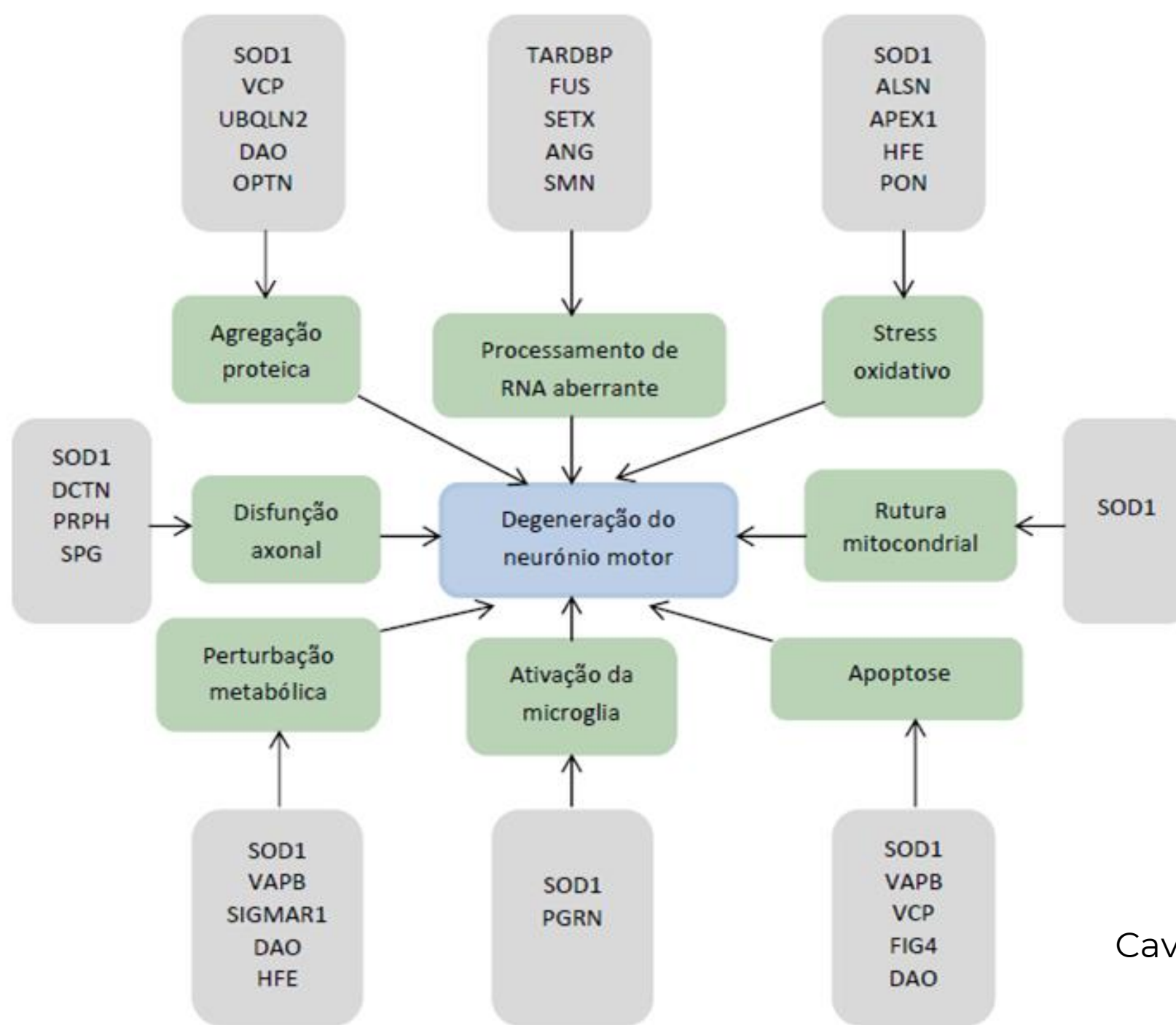
**Apparently sporadic ALS**  
90-95%



**Familial ALS**  
5-10%

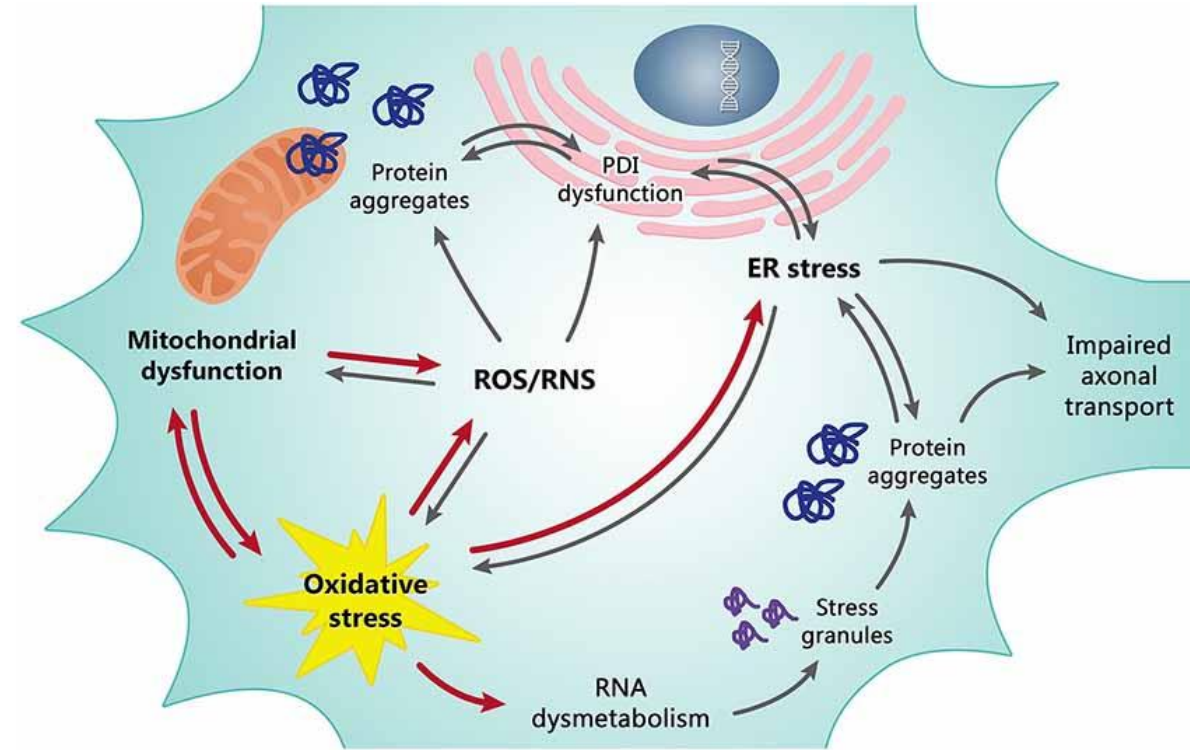
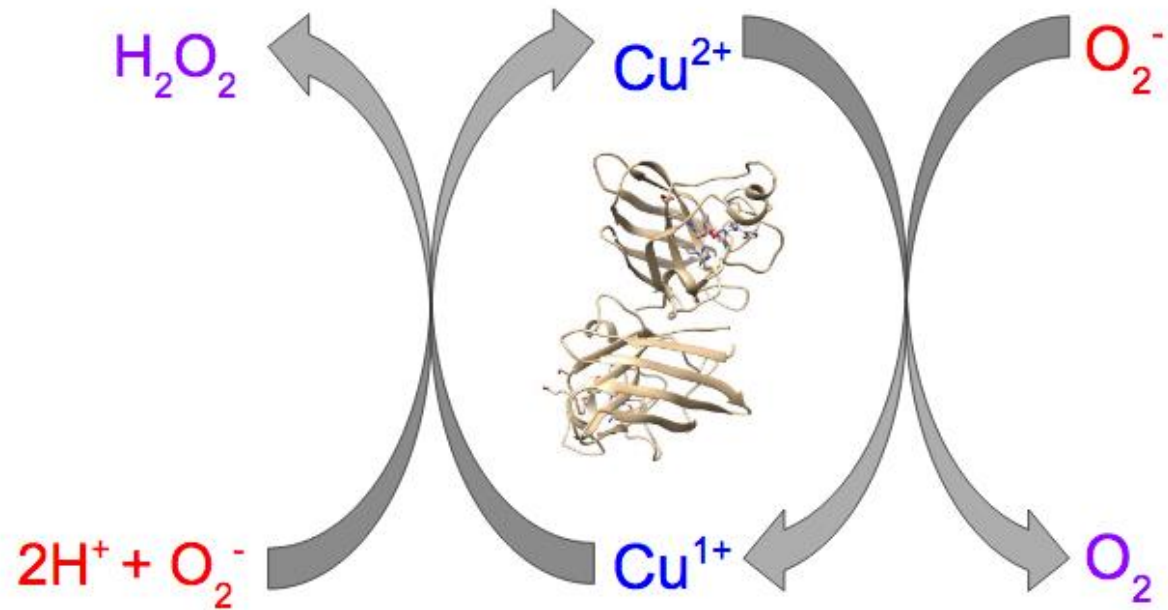


**FISIOPATOLOGIA**



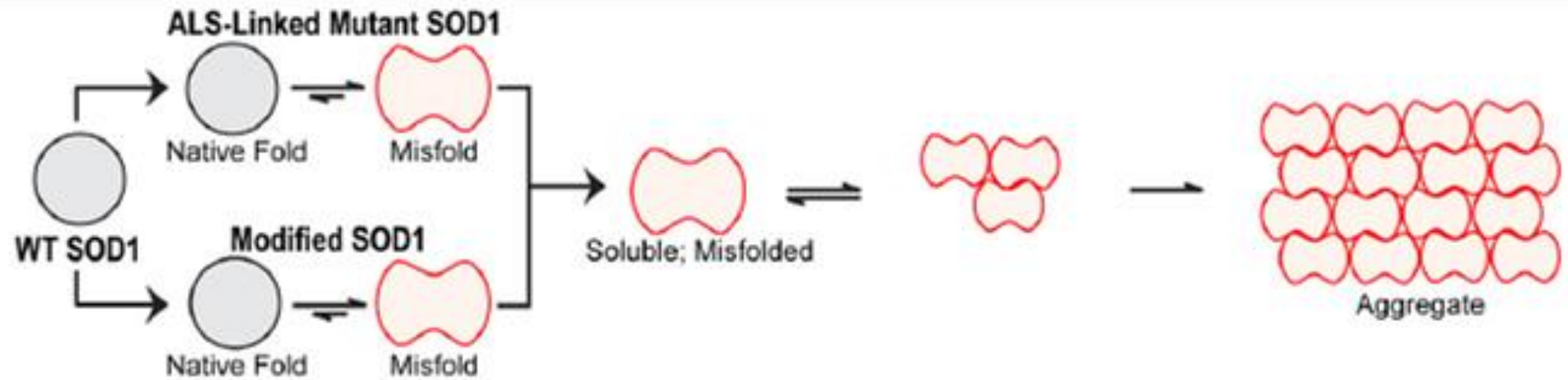


# Stress Oxidativo



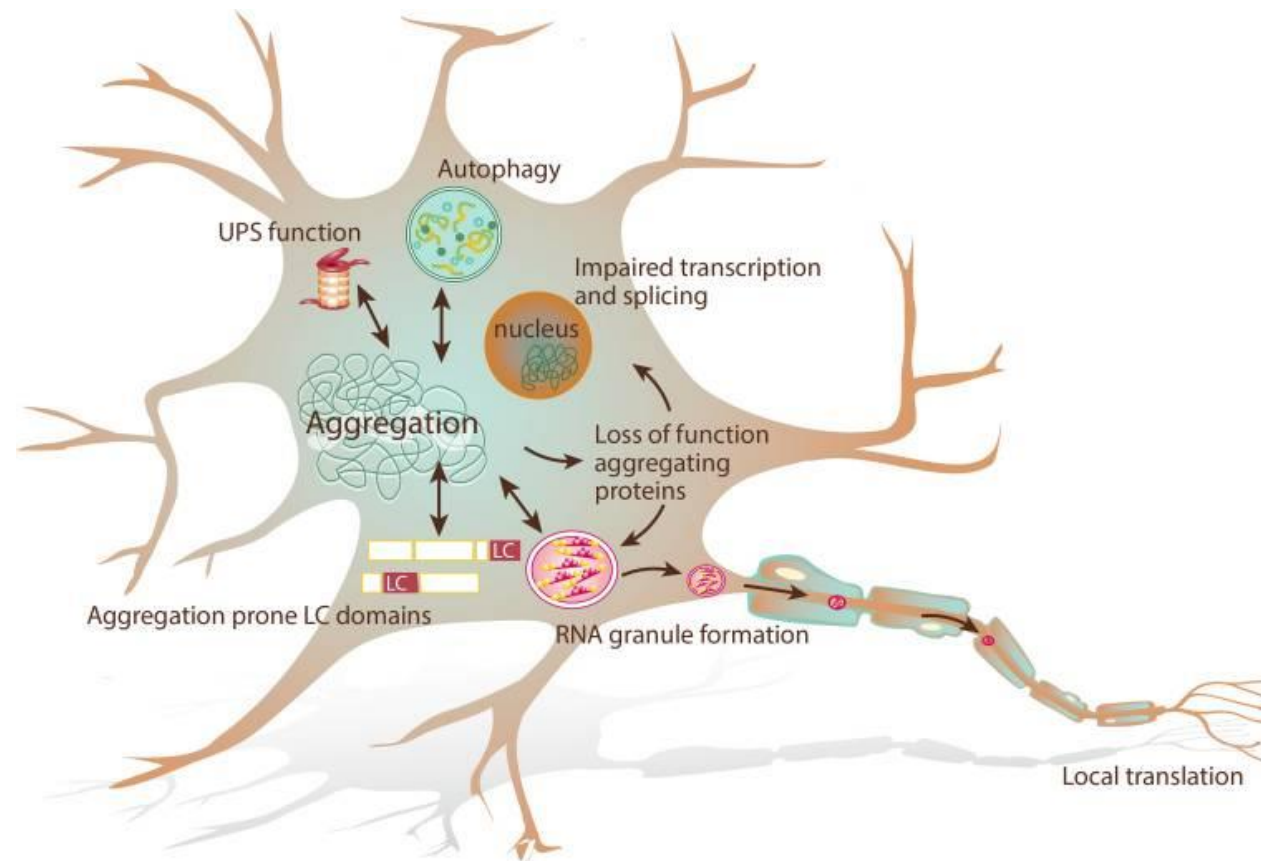
Carri et al, 2015

# Agregação Proteica

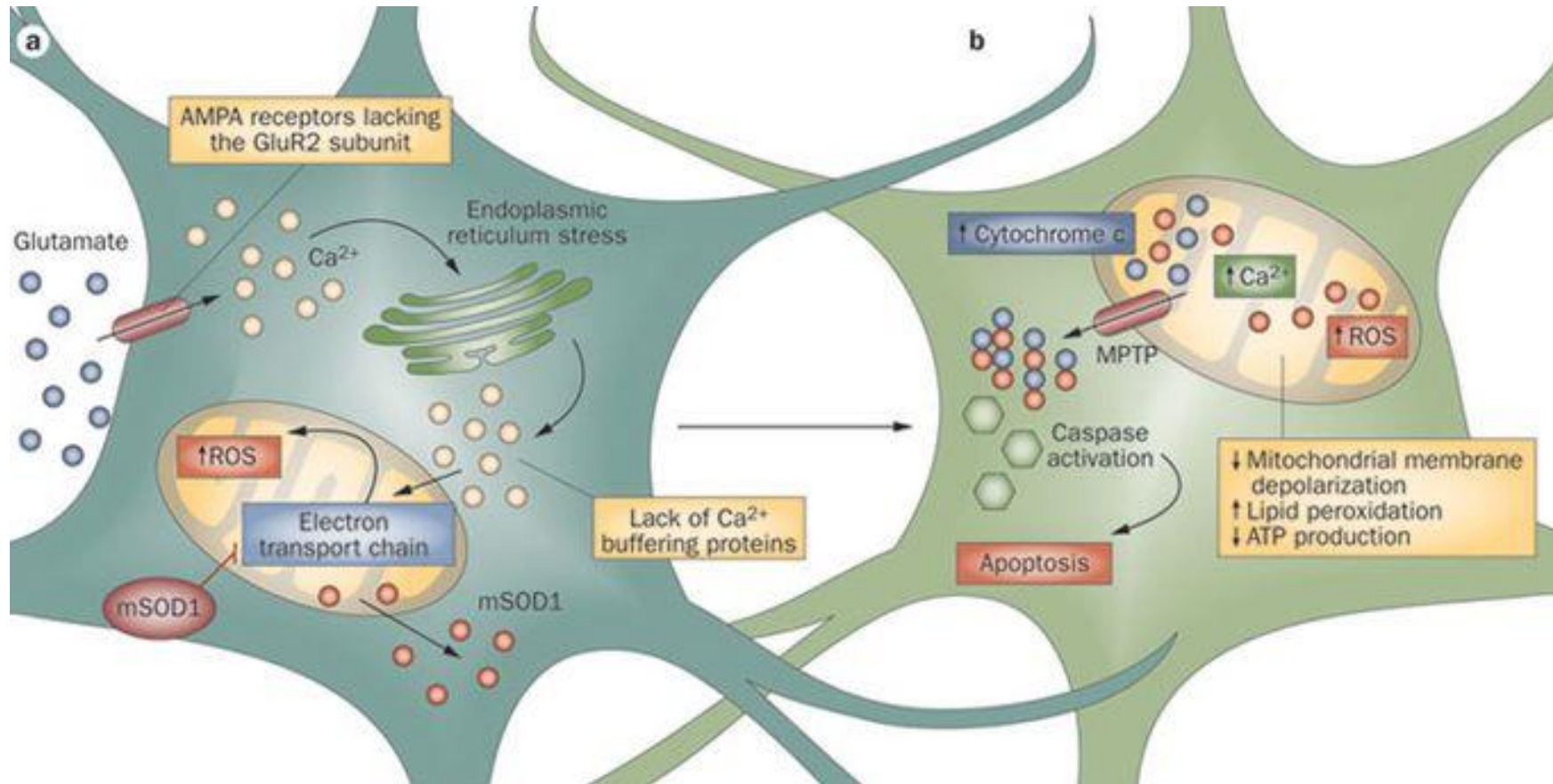


Rotunno and Bosco , 2013

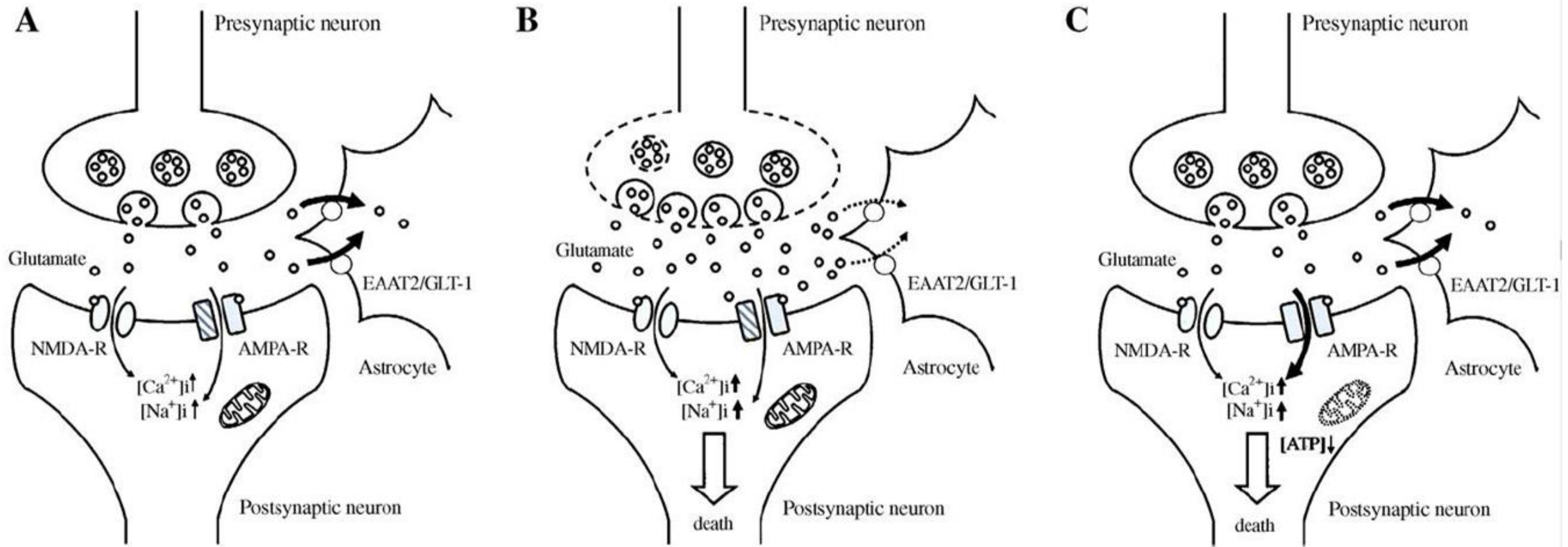
# Agregação Proteica



# Disfunção Mitochondrial

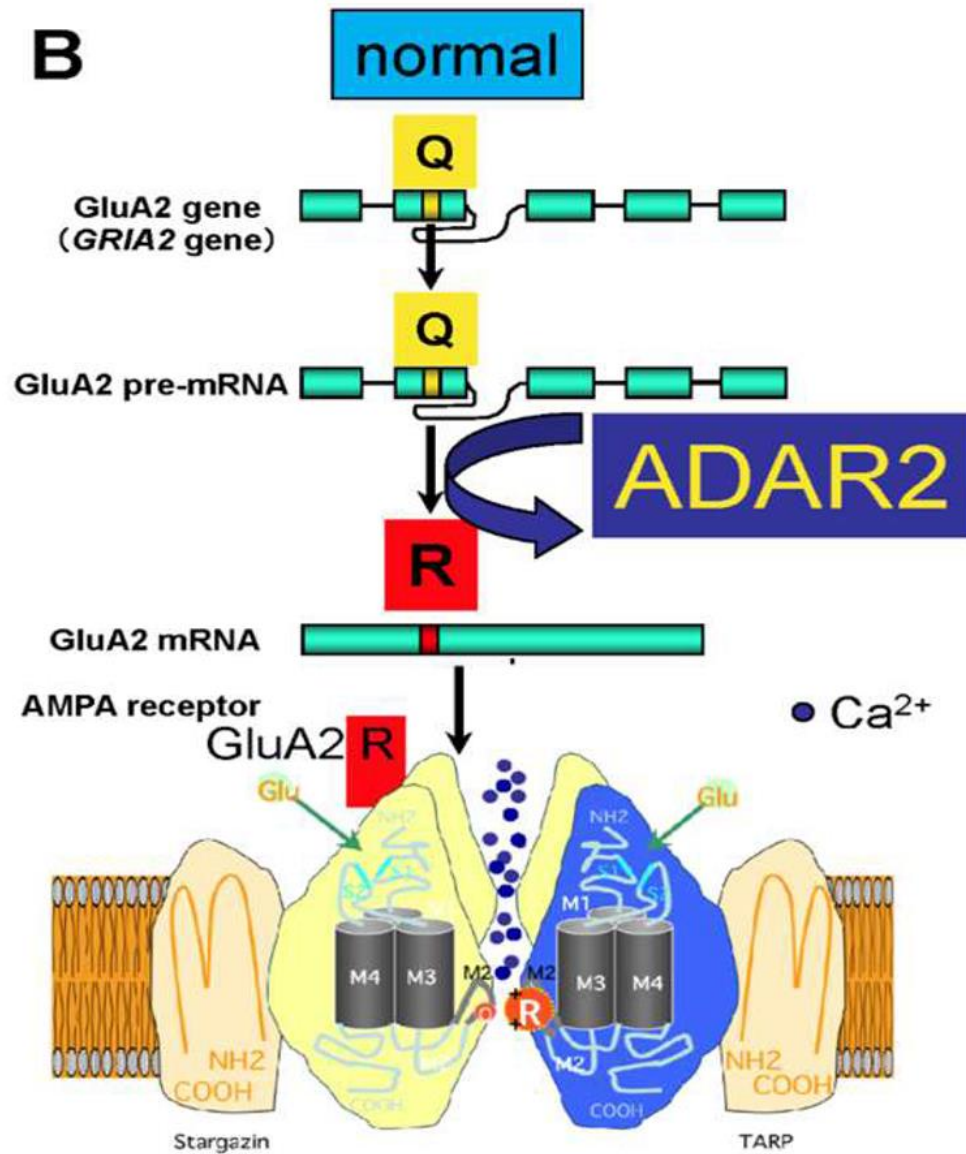
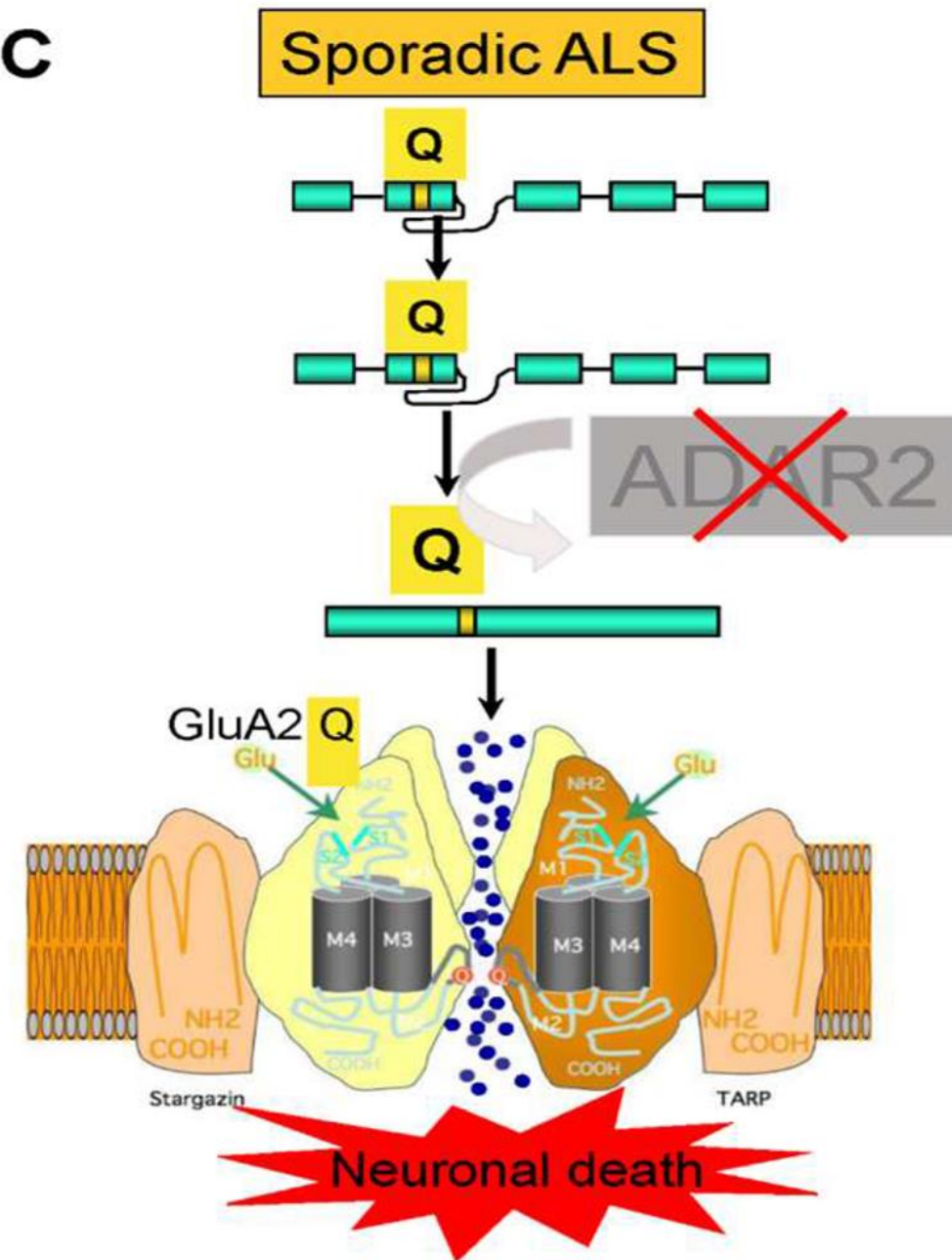


# Excitotoxicidade por Glutamato

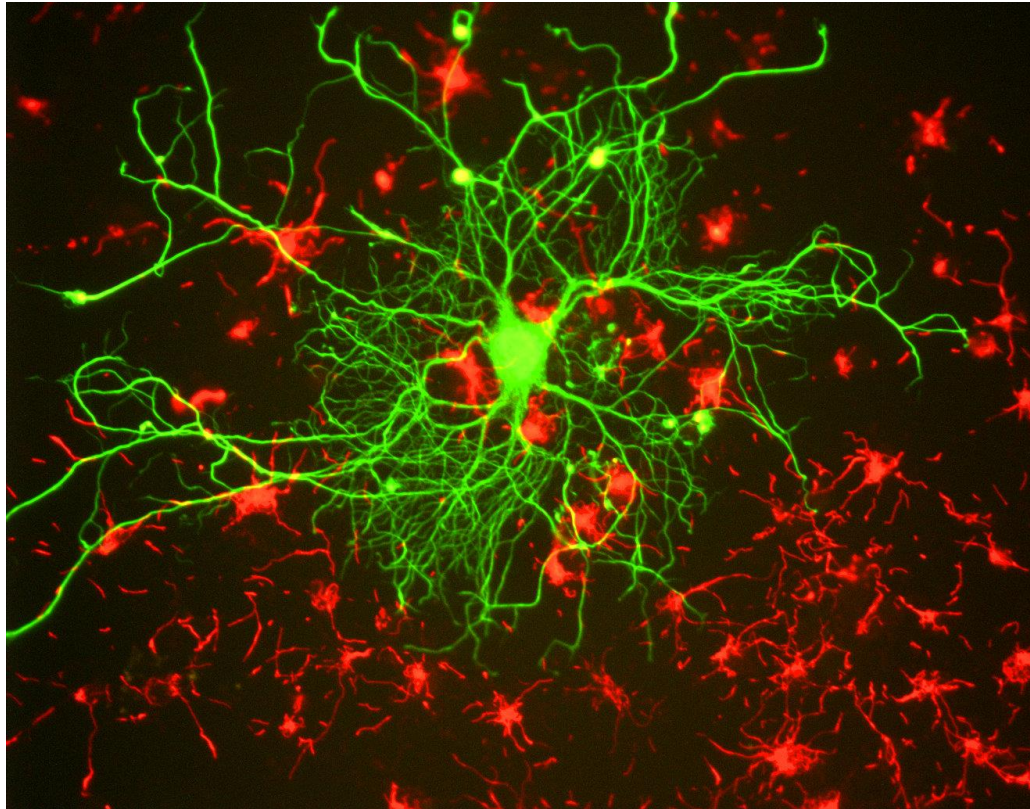


Van Den Bosch, L. et al, 2006.

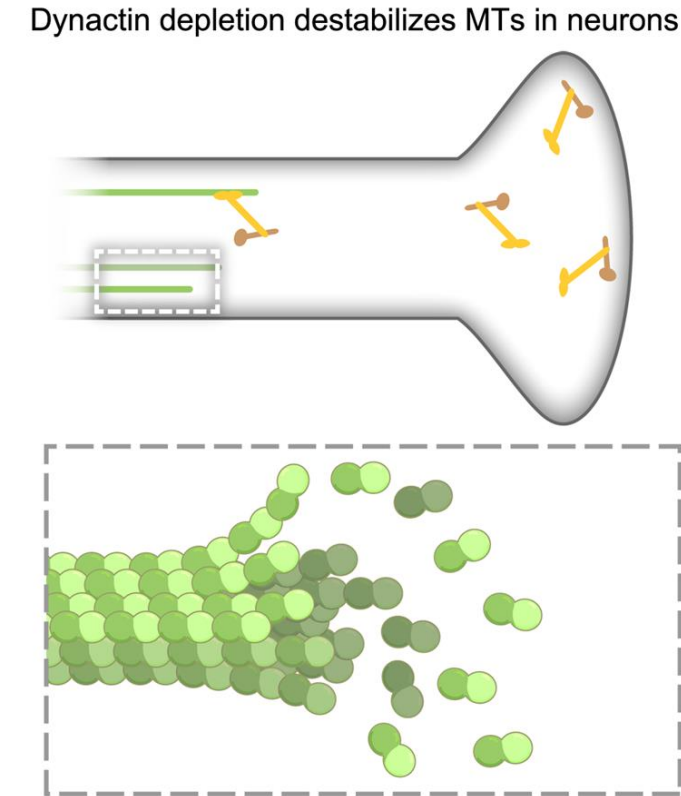
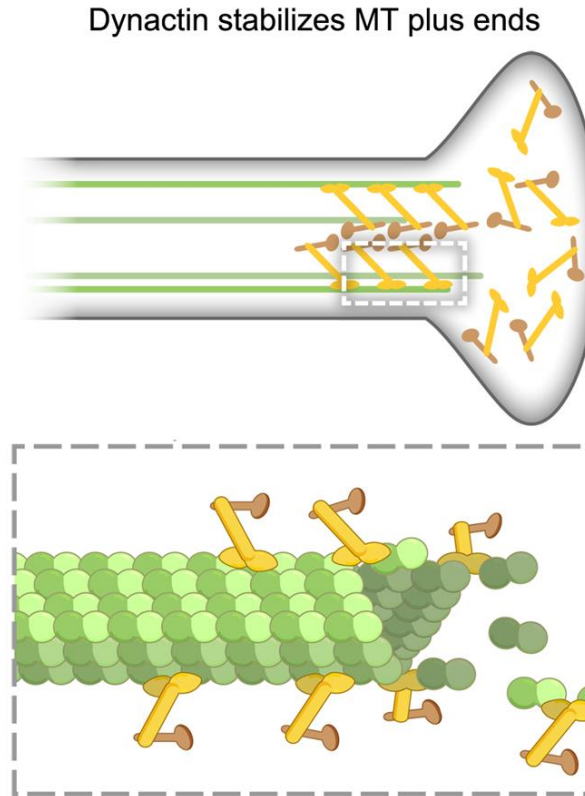


**B****C**

# Disfunção Axonal



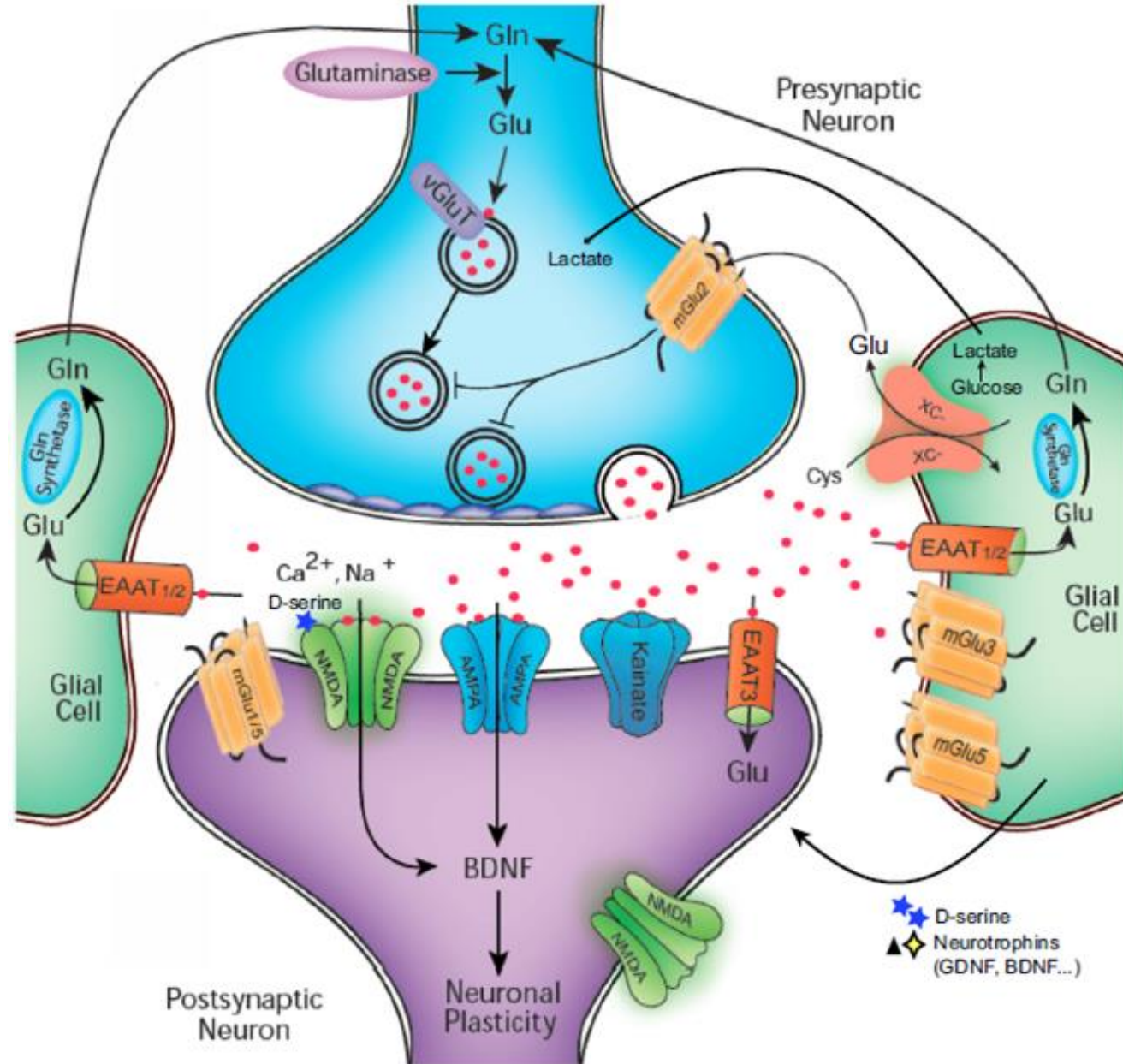
Rat brain cells grown in tissue culture and stained, in green, with an antibody to neurofilament subunit NF-L. -



Lazarus J.E., et al, 2013



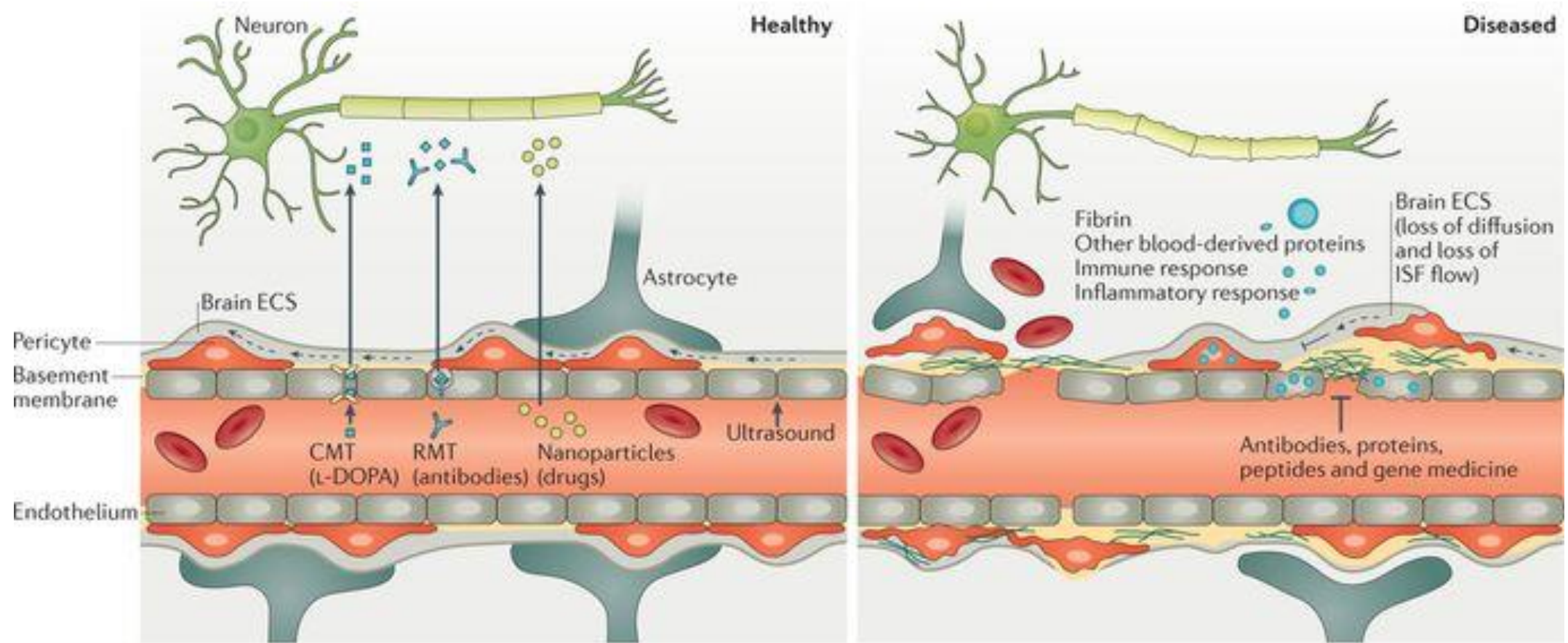
# Alteração da função dos Astrócitos



G. Sanacora and  
M. Banasr., et al, 2013



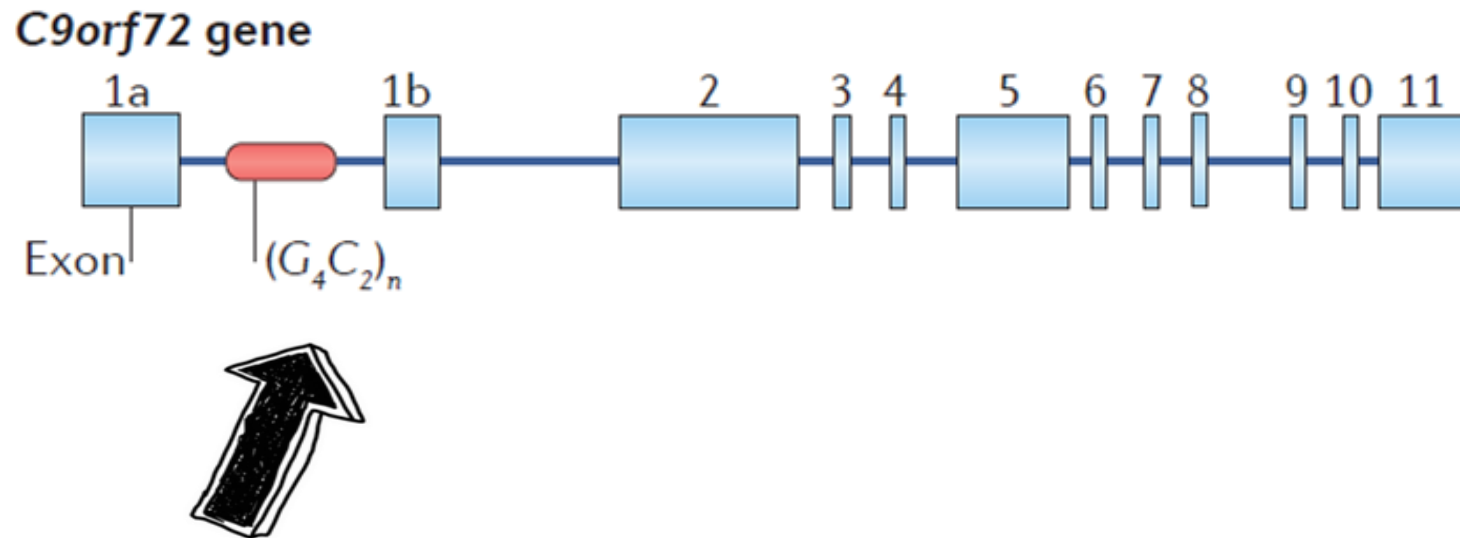
# Alterações neurovasculares



Nature Reviews | **Neurology**

Melanie D. Sweeney et al, 2018

# Transporte Núcleocitoplasmático?



Não repitam isso em casa

# Referências

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Apresentação disponível



SLIDES



# ESCLEROSE LATERAL AMIOTRÓFICA



VÍDEO