



Sistema Nervoso



Sistema endócrino



# Funções de Coordenação

Prof Geraldo Lima



# Sistema Nervoso

neurônios

SNC

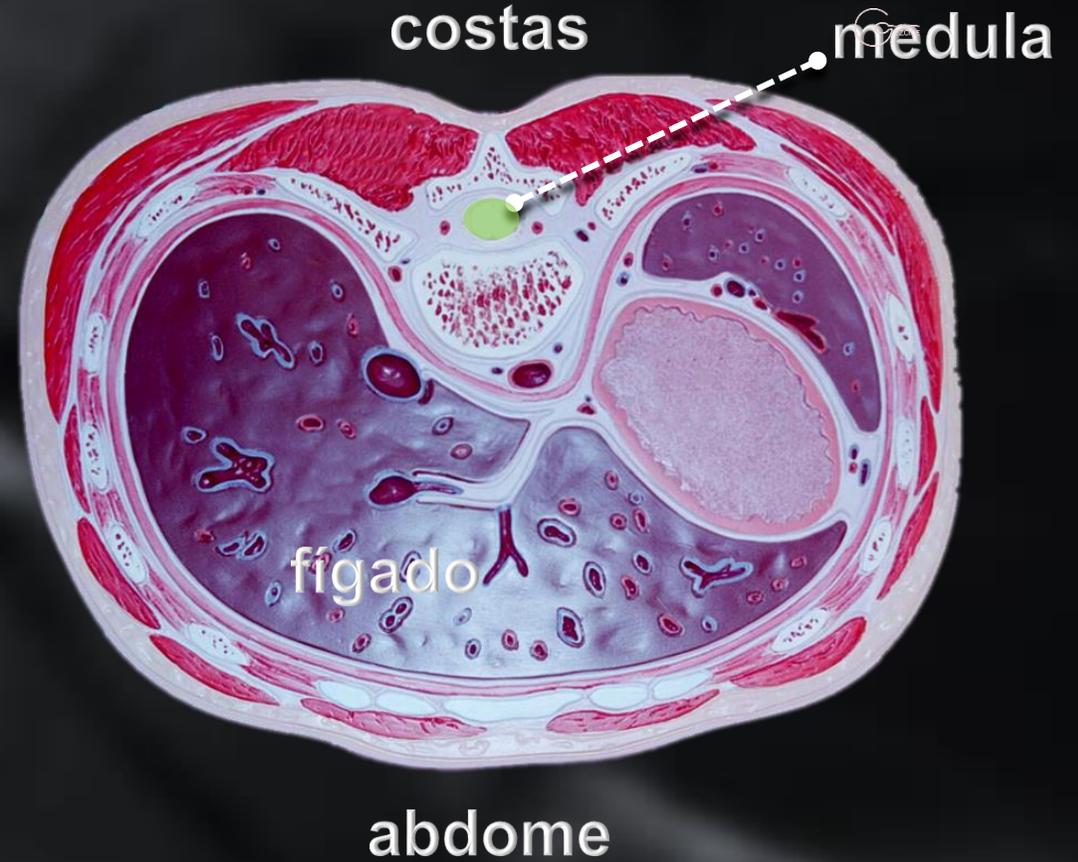
SNP

Doenças



# Ganglionar Dorsal Epineuro

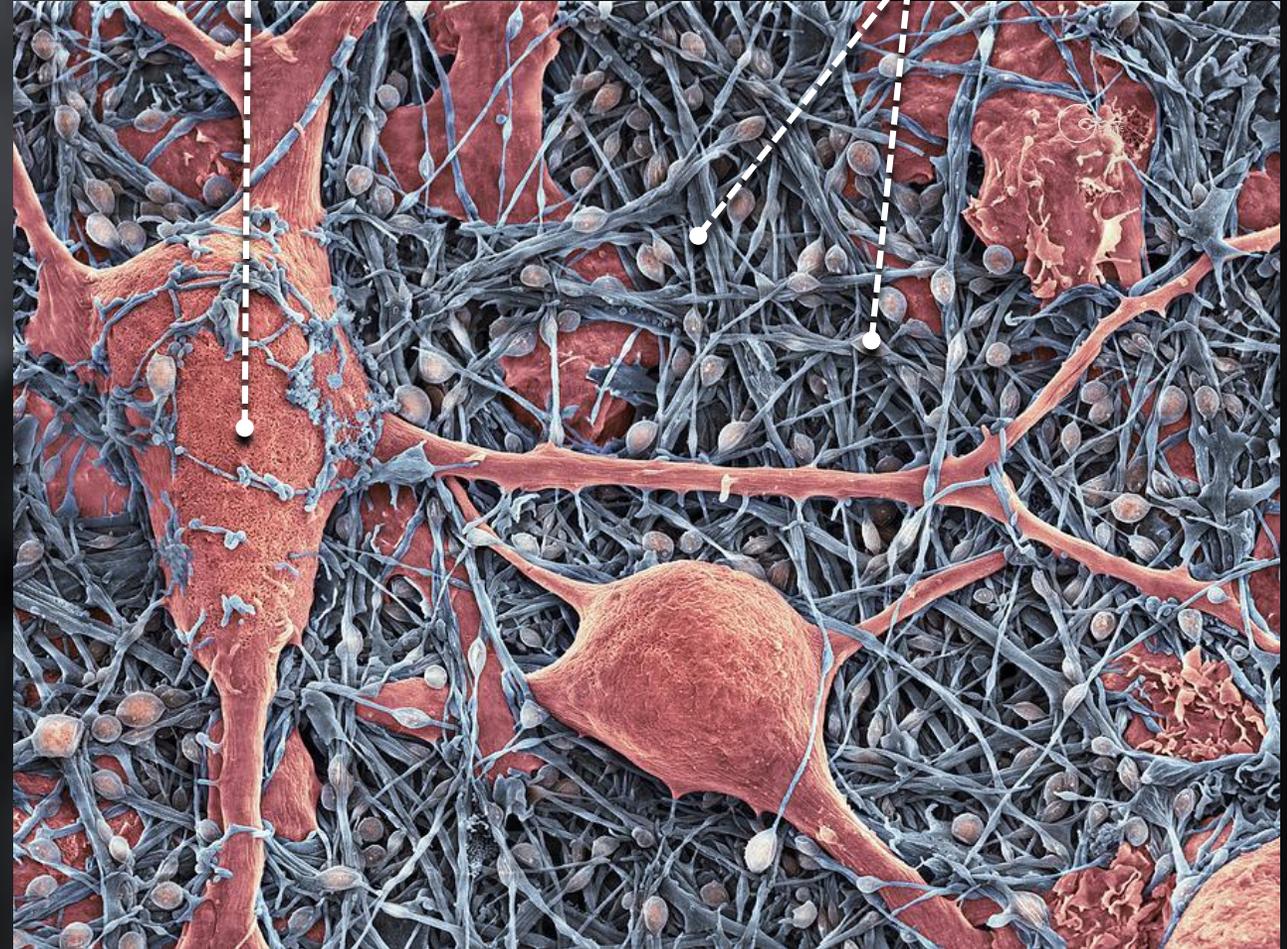
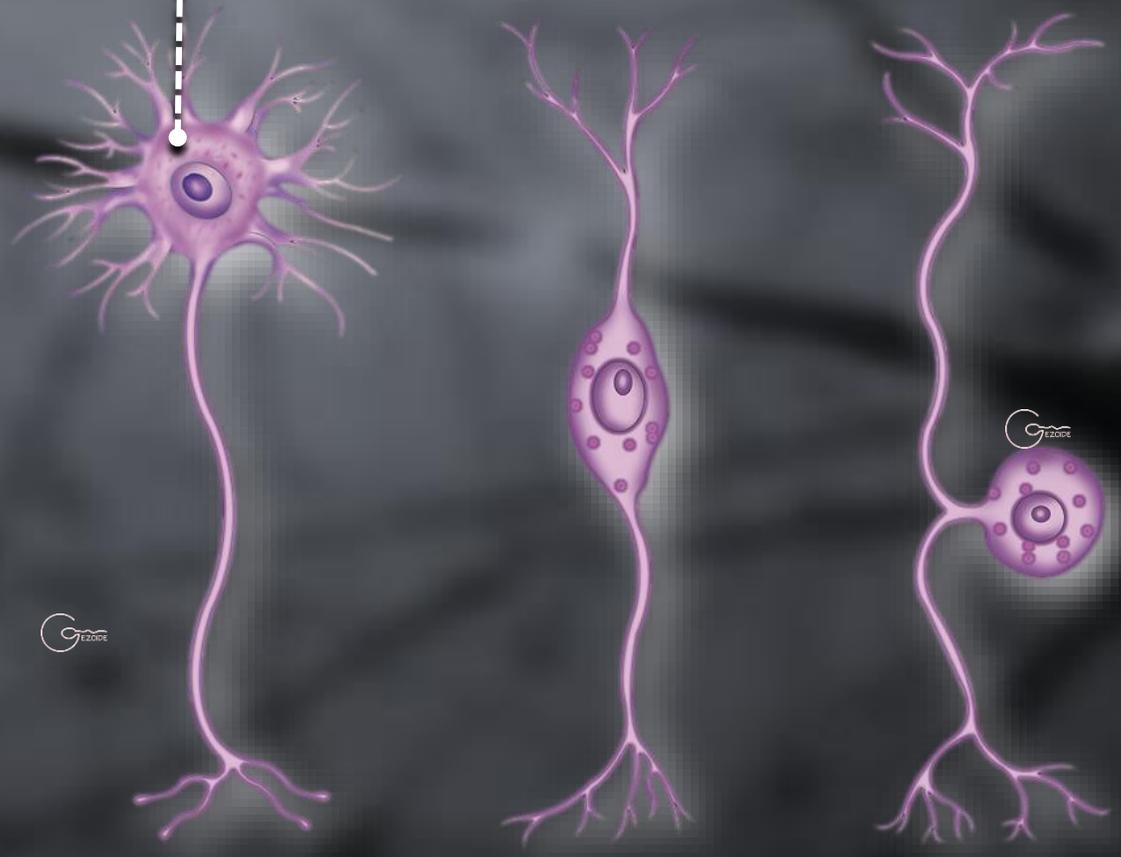
Cérebro  
Espinal



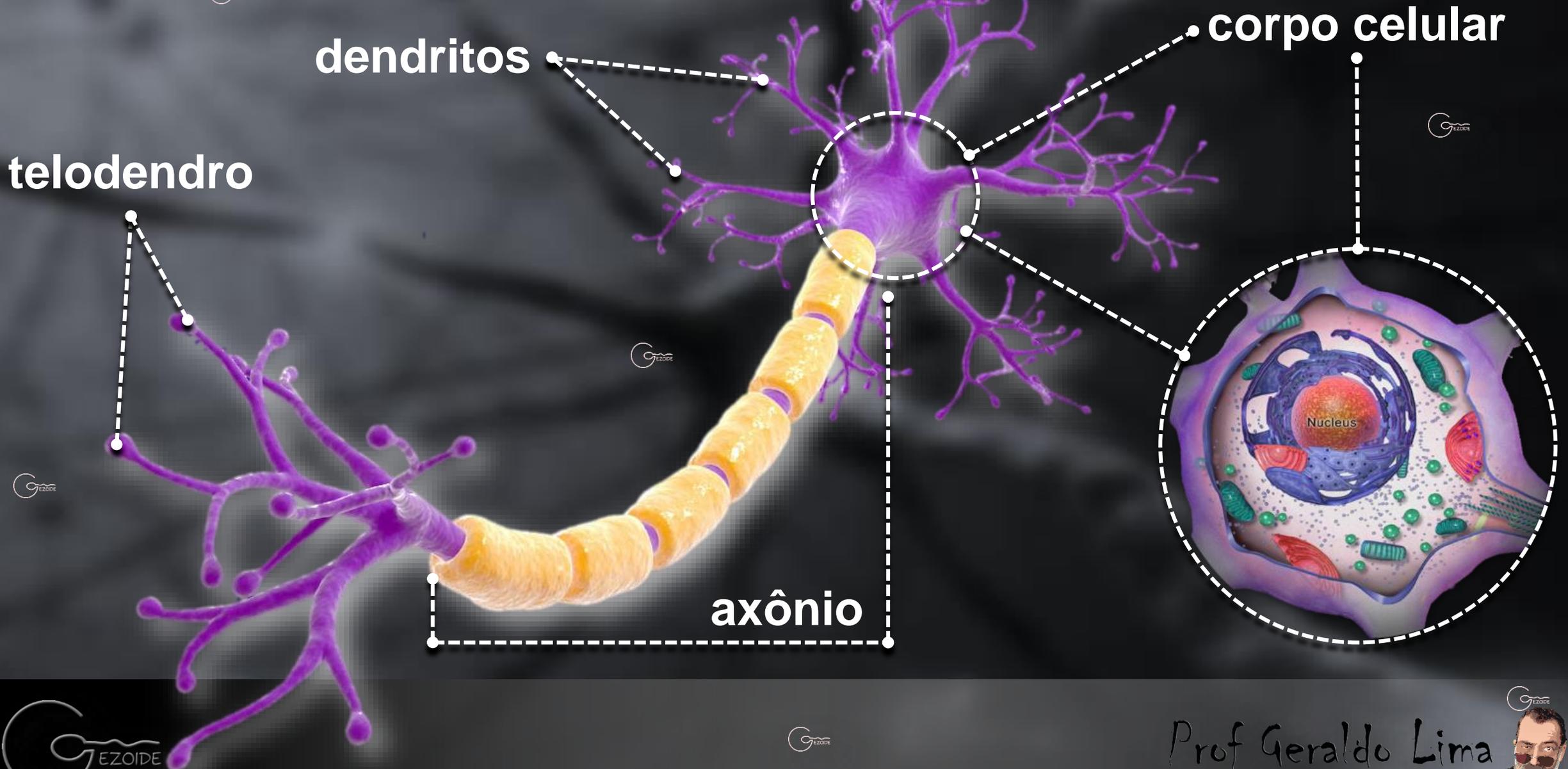
neurônios

Células nervosas

glia



# neurônio



# Sinapse

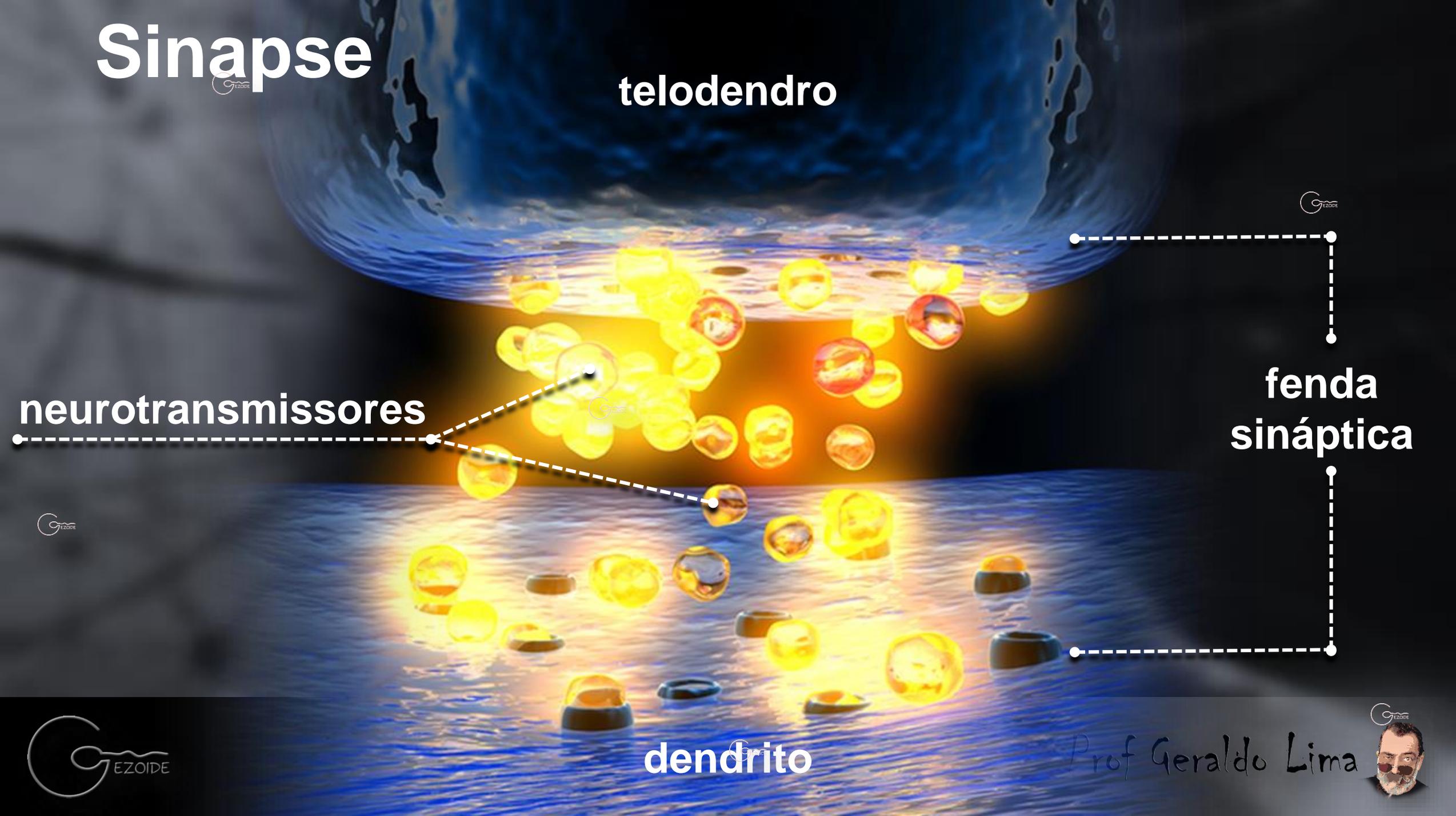
telodendro

fenda sináptica

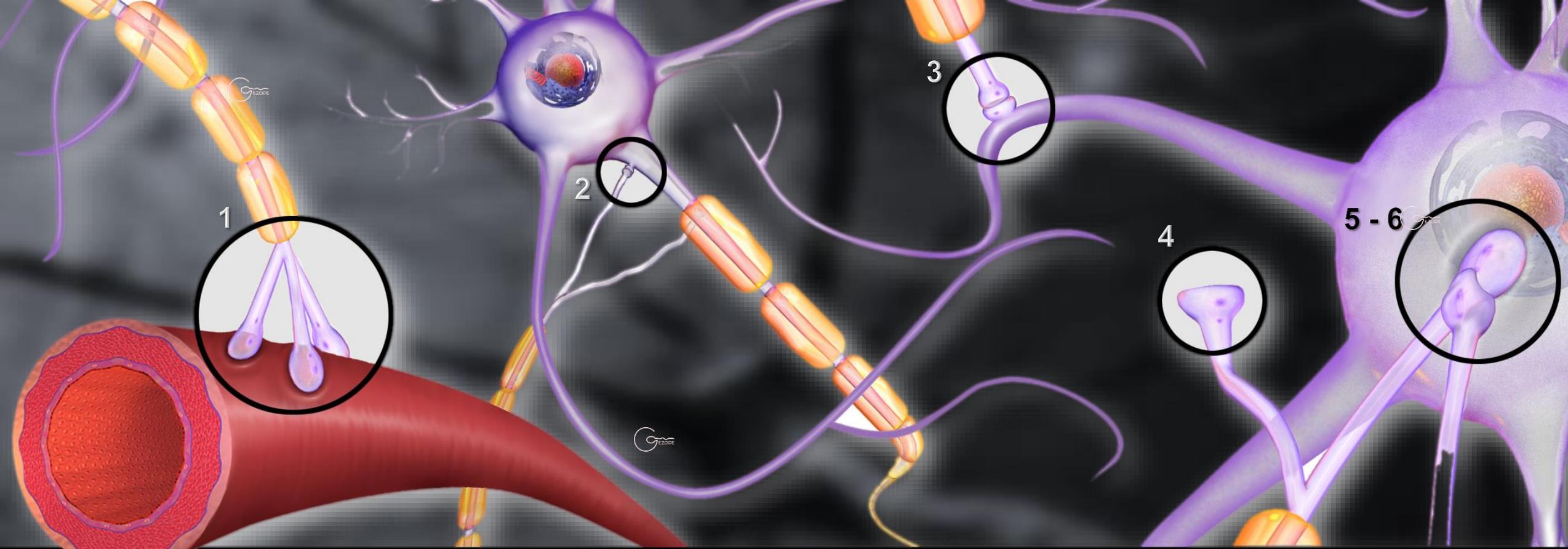
neurotransmissores

dendrito

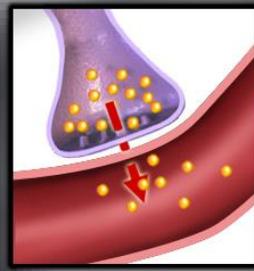
Prof. Geraldo Lima



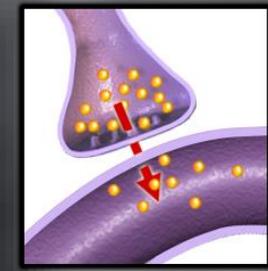




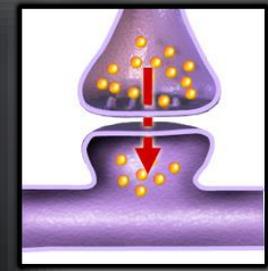
1. O terminal do axônio (TE) secreta na corrente sanguínea



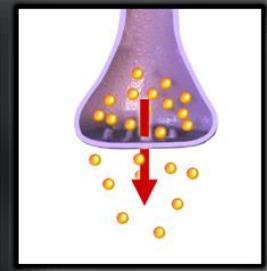
2. O TE secreta em outro axônio



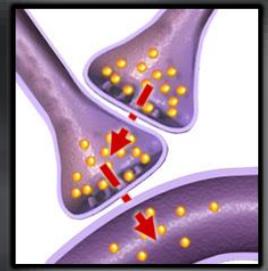
3. O TE secreta em outro dendrito



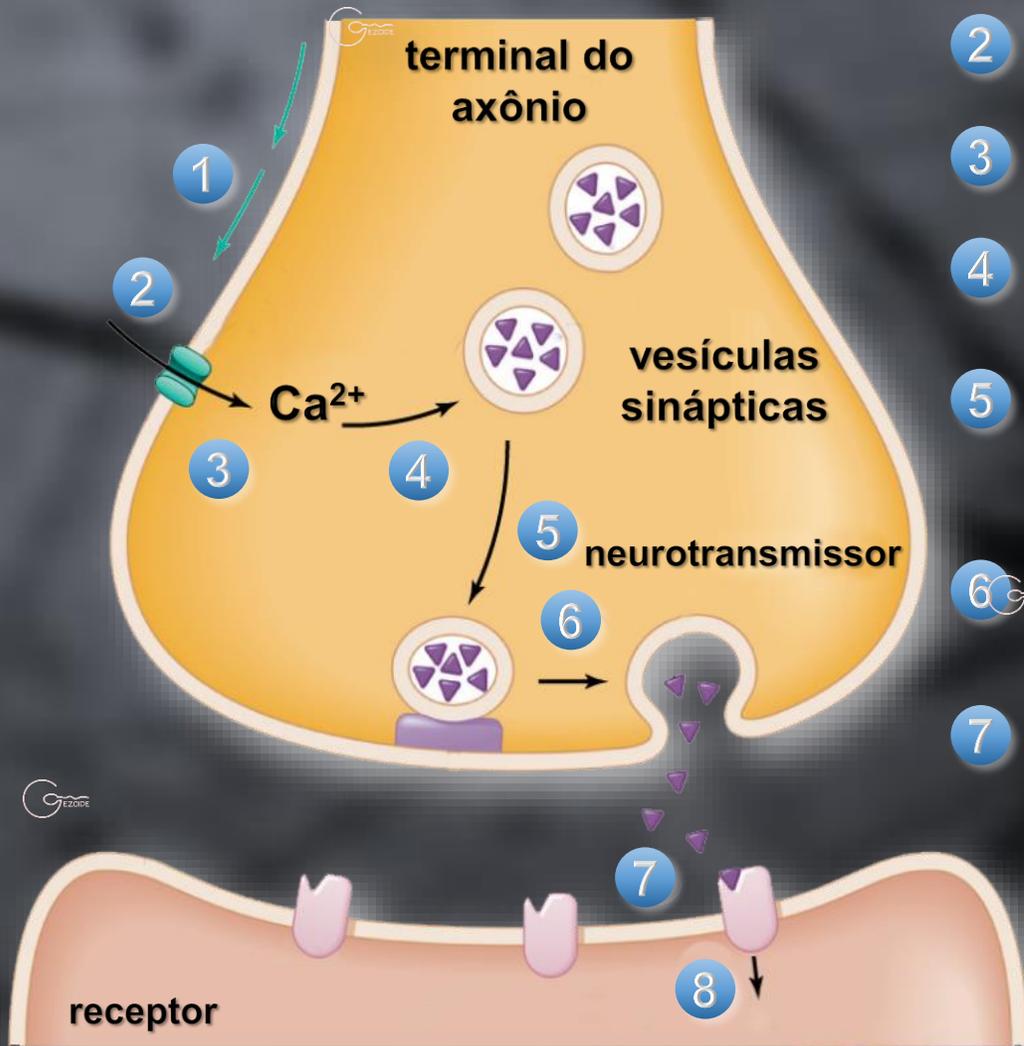
4. O TE secreta no líq. extracelular



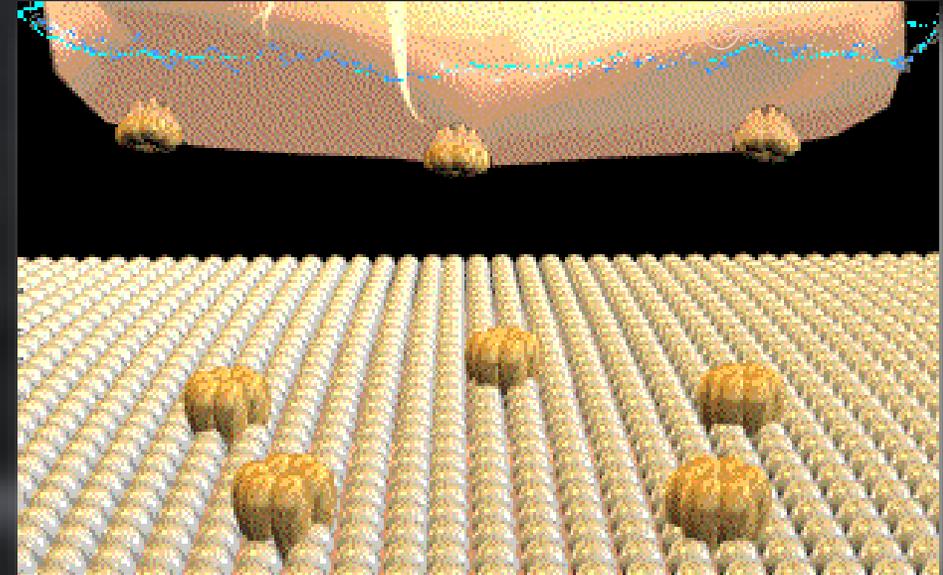
5. O TE secreta em outro TE



6. O TE secreta no corpo celular

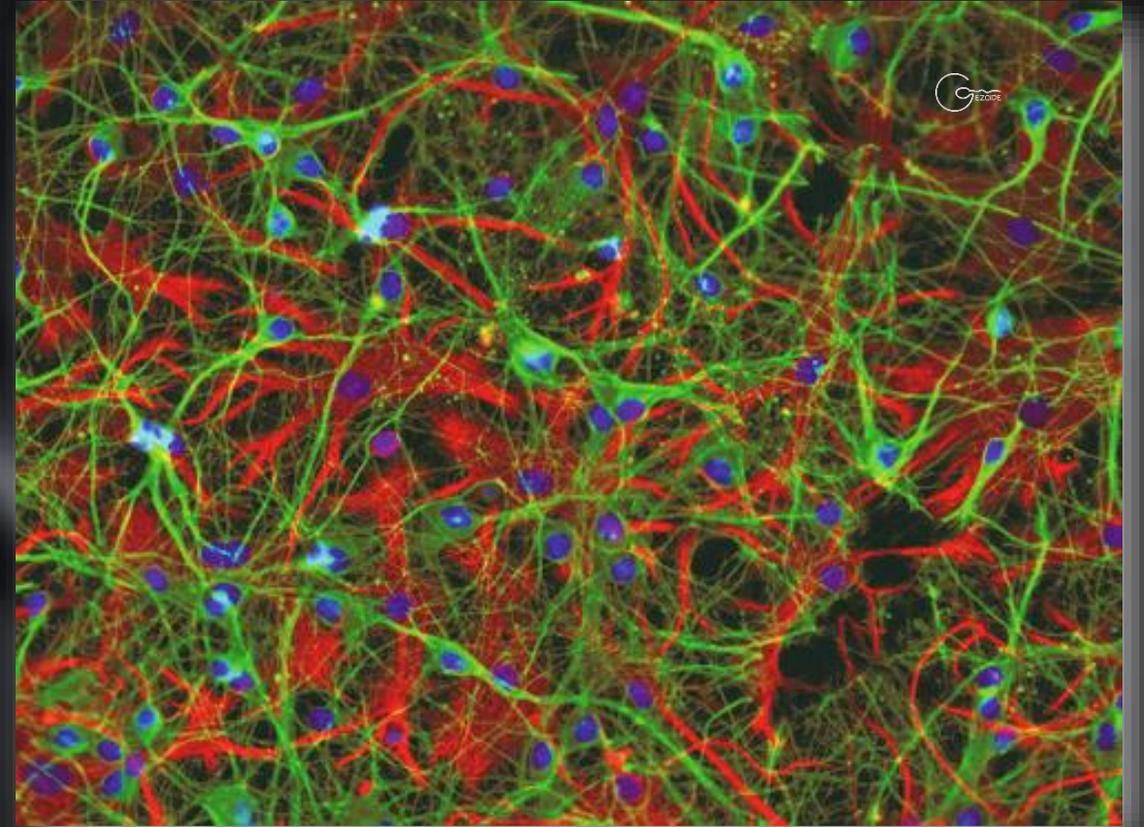


- 1 O potencial de ação chega ao terminal do axônio
- 2 Os canais de Ca controlados por voltagem se abrem
- 3 O Ca entra na célula
- 4 O Ca sinaliza para as vesículas
- 5 As vesículas se movem para as membranas
- 6 As vesículas liberam o neurotransmissor
- 7 O neurotransmissor atravessa a fenda sináptica
- 8 O neurotransmissor se liga ao receptor e ativa o sinal nervoso

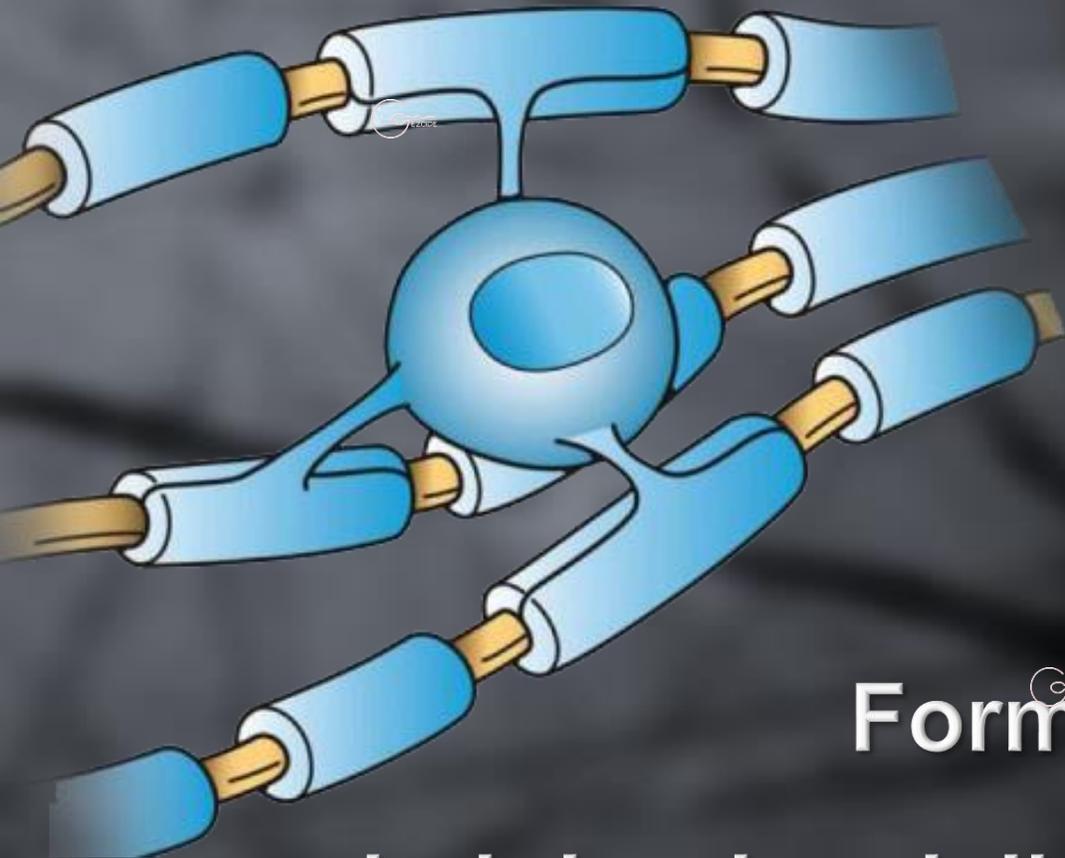


# Neuroglia ou células da glia

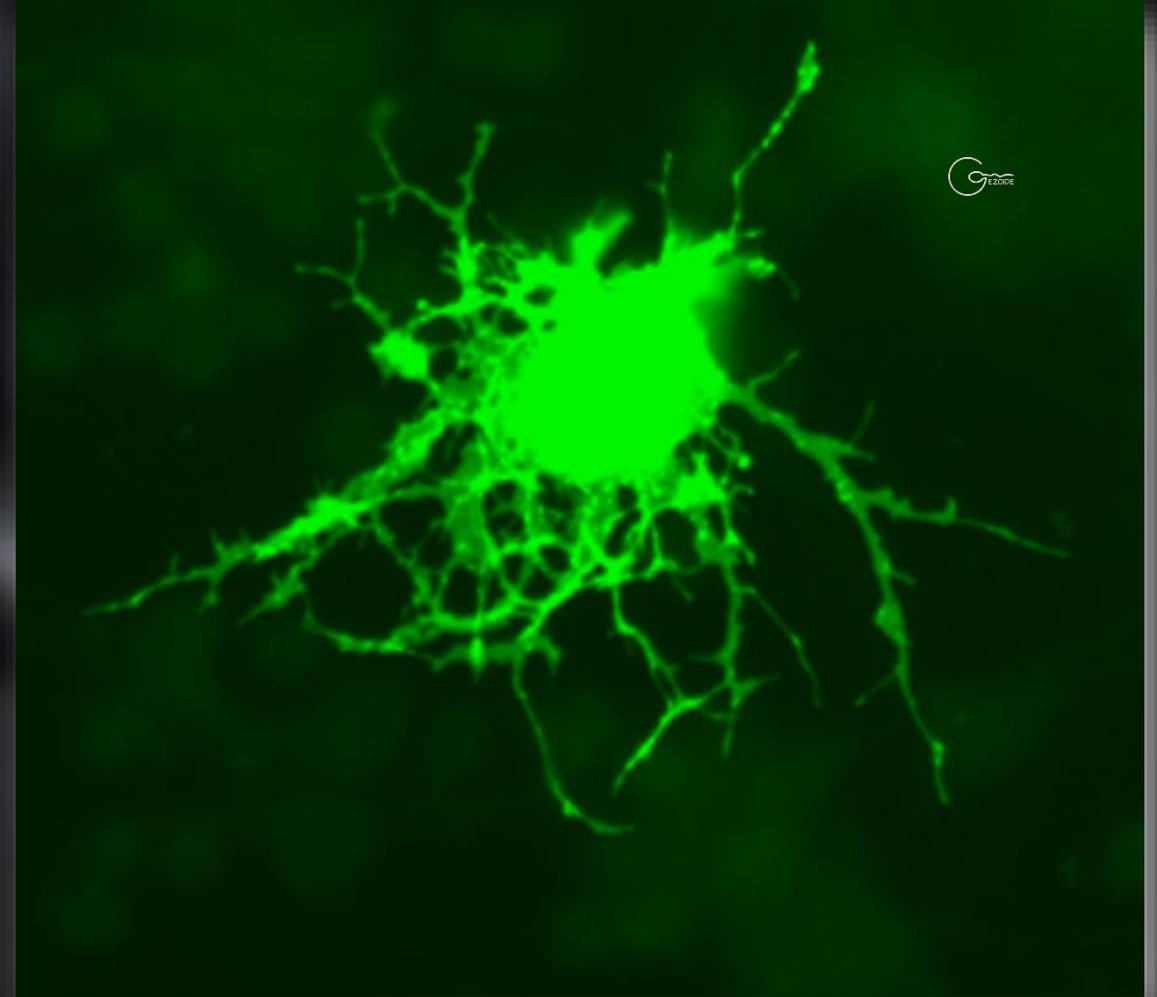
São células que auxiliam o SN nas funções de suporte, estima-se que haja 10X mais células da glia do que neurônios, mesmo assim ocupam metade do tecido nervoso



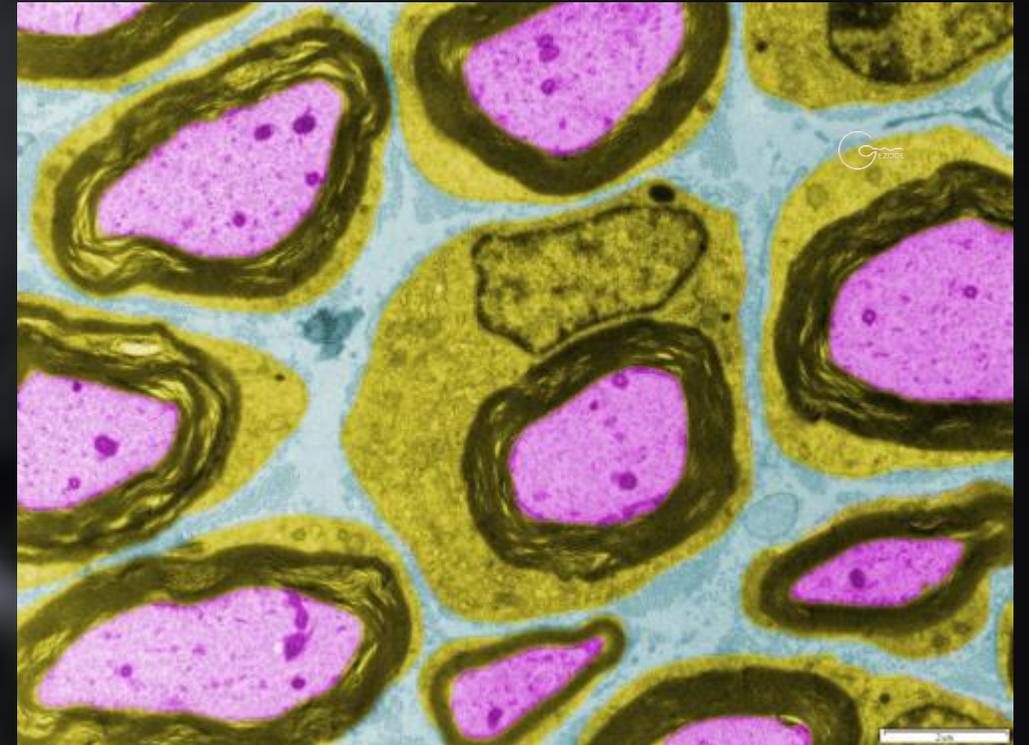
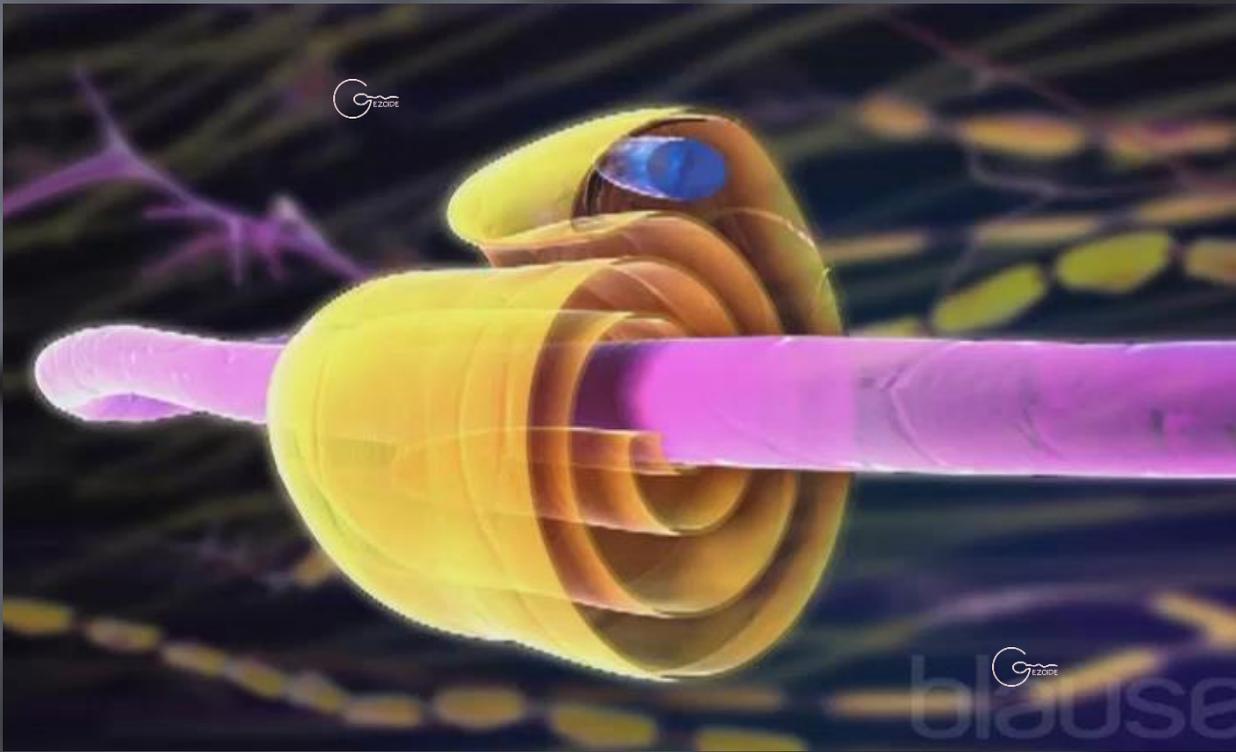
# oligodendrócitos



Formam a  
bainha de mielina no  
Sistema Nervoso Central



# Células de Schwann

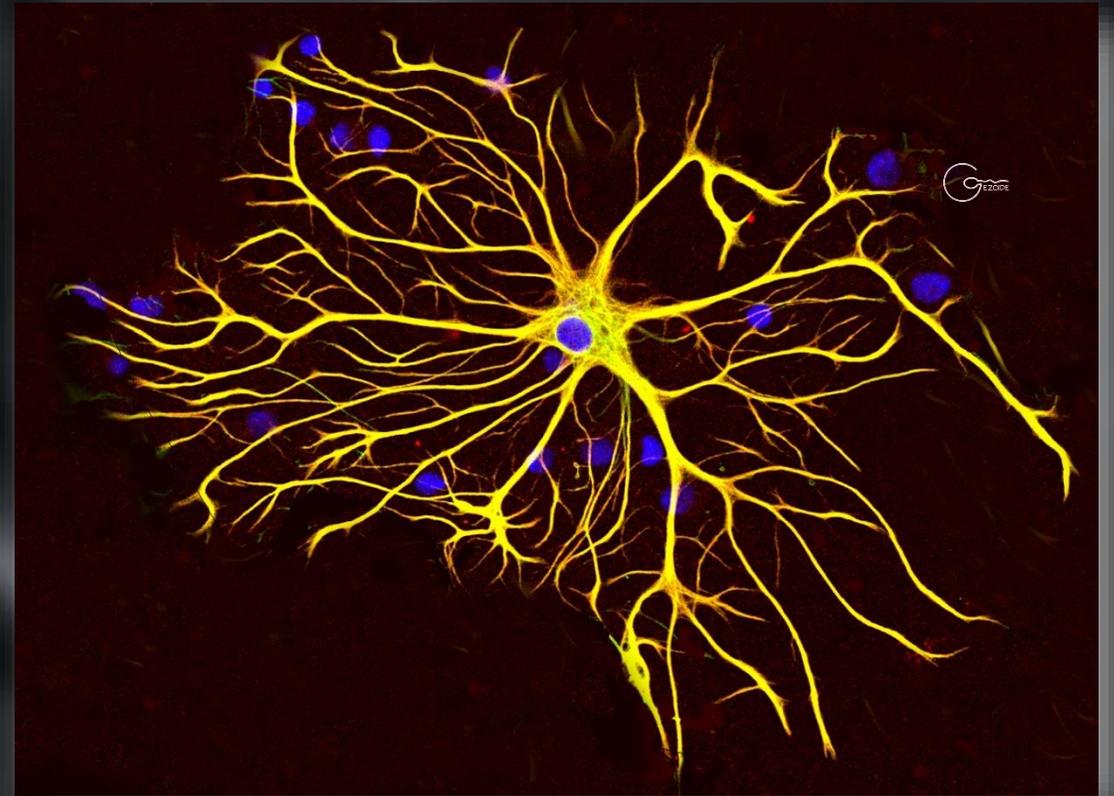


Formam a bainha de  
mielina no Sistema Nervoso  
Periférico

Regulam a concentração de íons e neurotransmissores, estão ligados aos vasos sanguíneos e à pia-máter

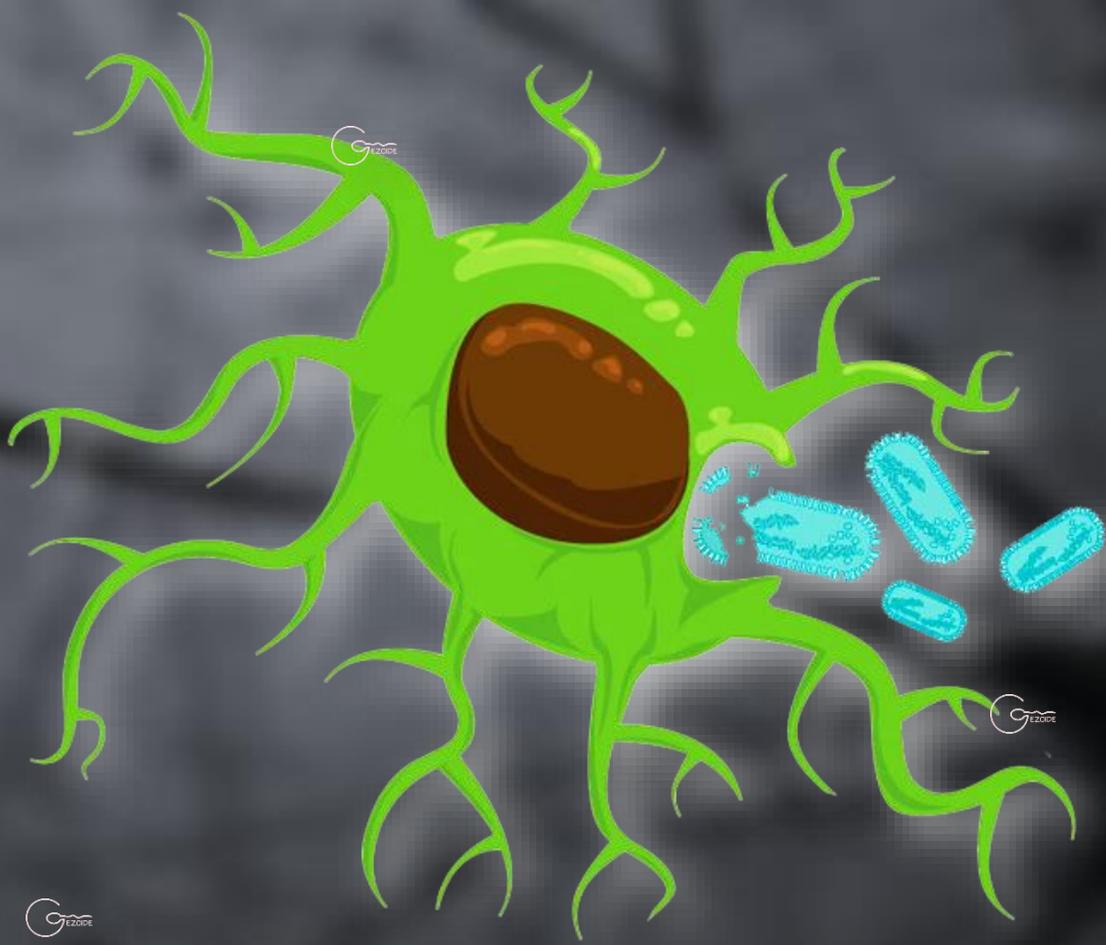


# astrócitos

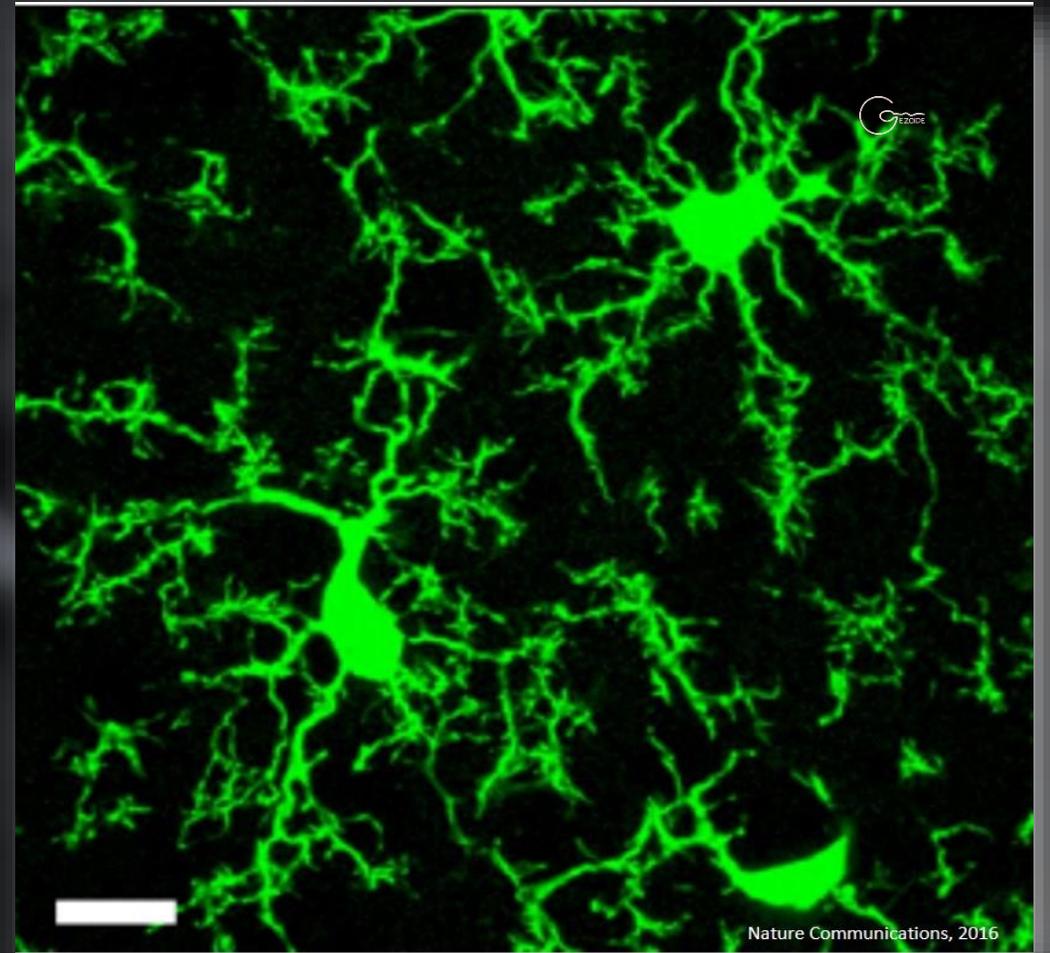


São as células mais abundantes do SN

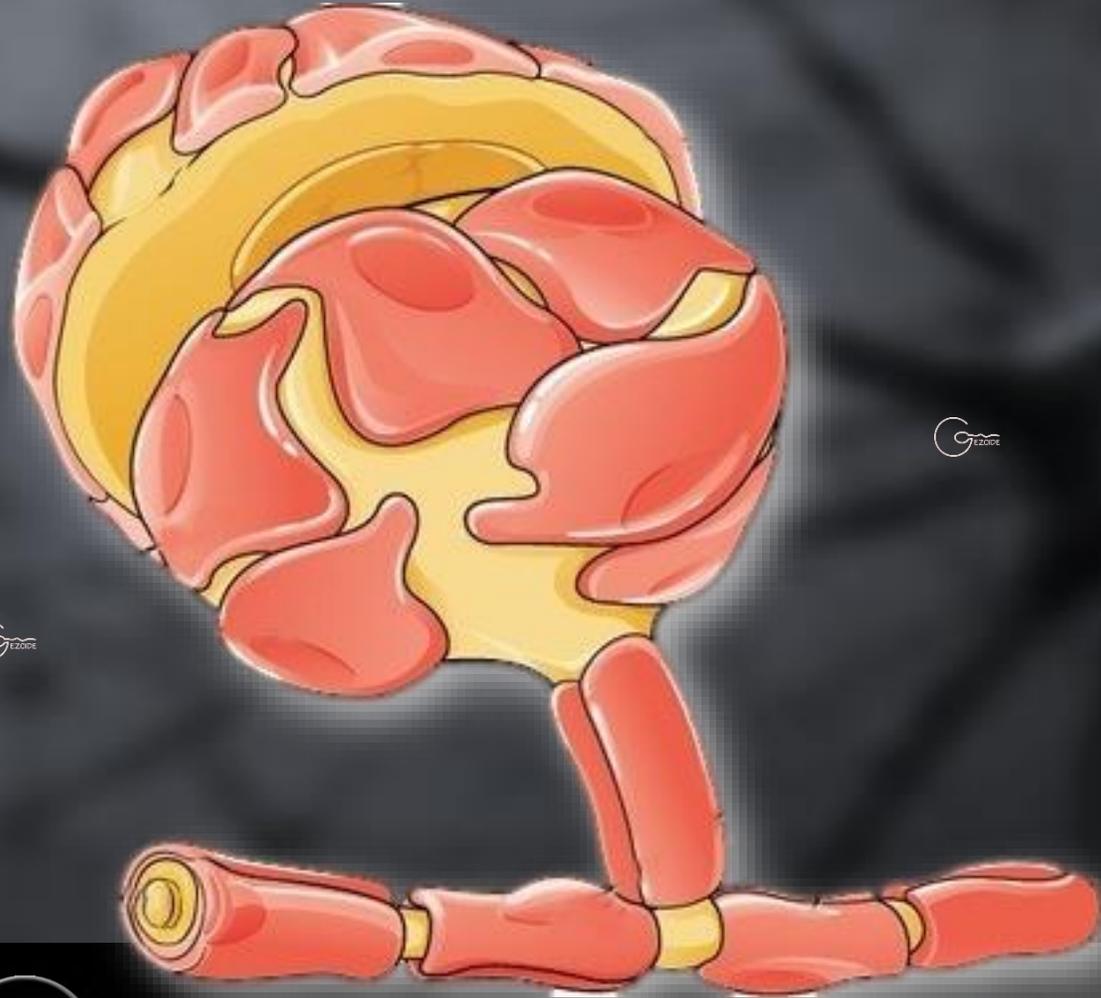
# micróglia



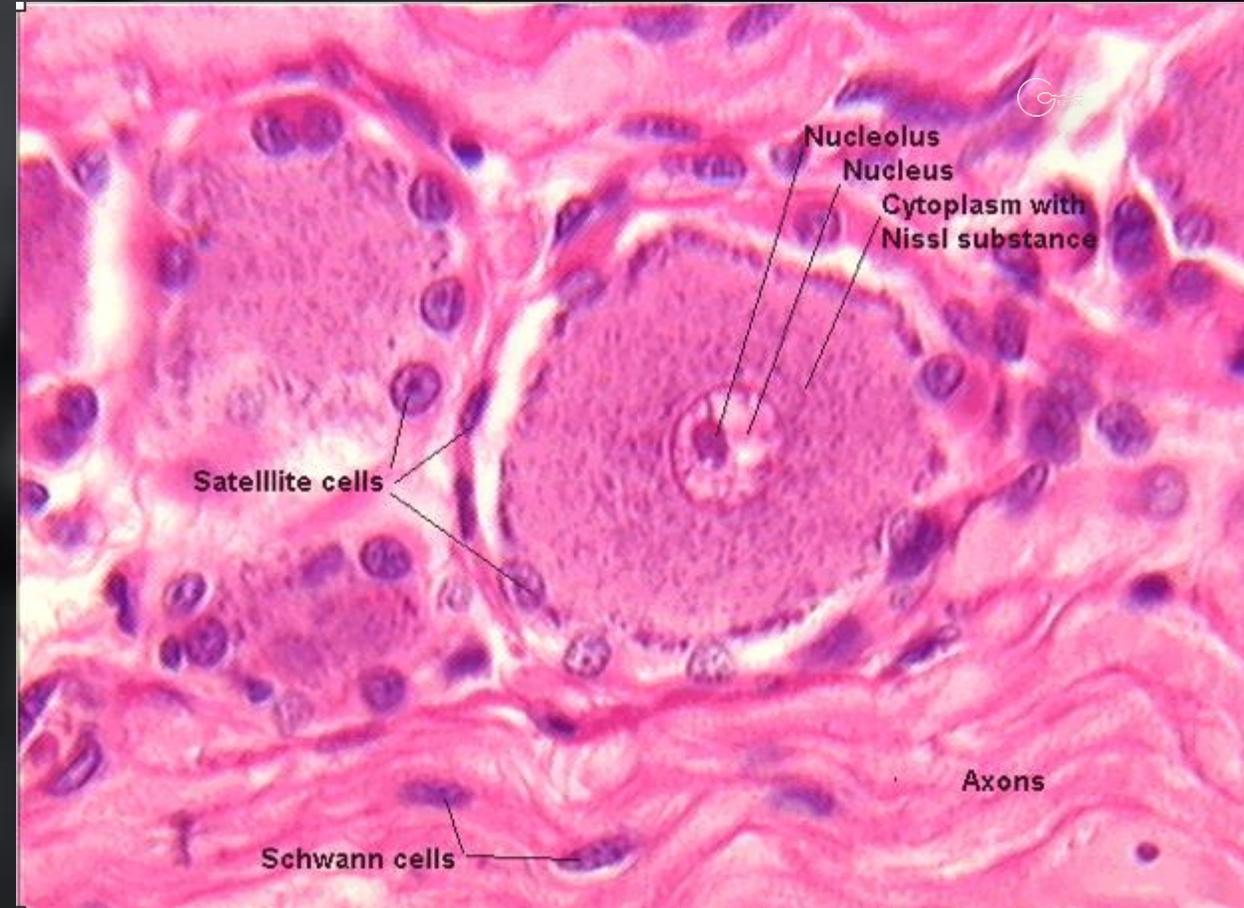
Responsáveis pela  
defesa do SN



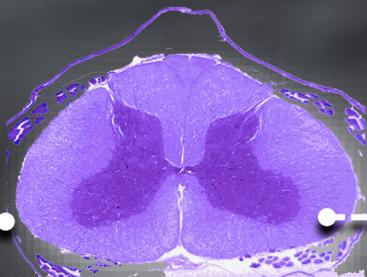
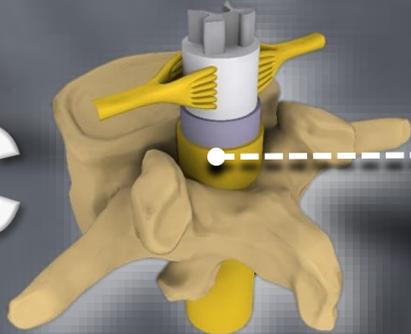
Semelhantes aos  
astrócitos no SNP



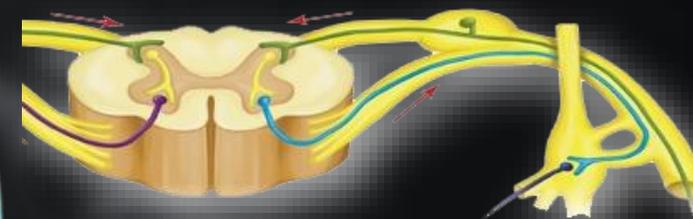
# Células satélites

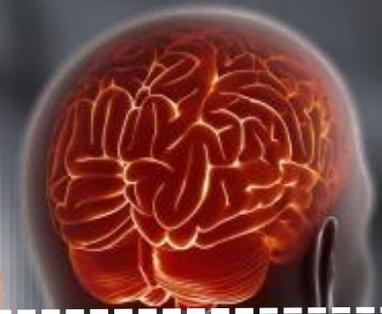
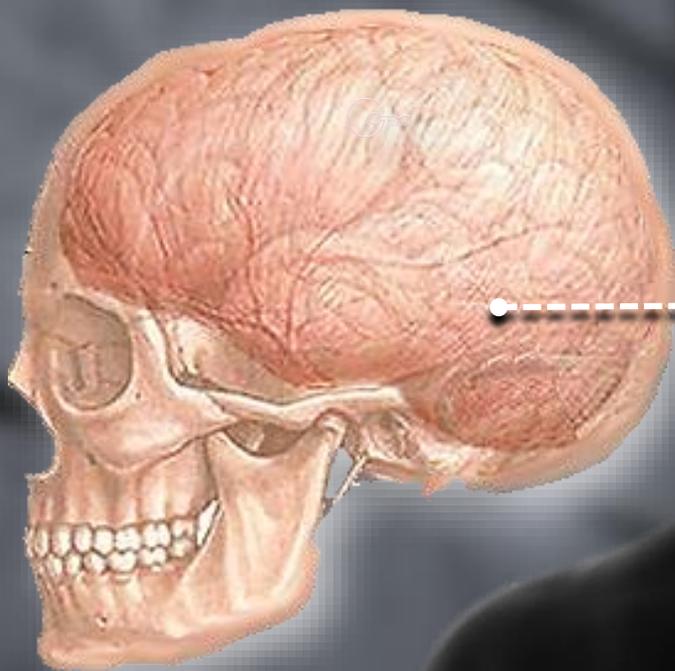


SNC

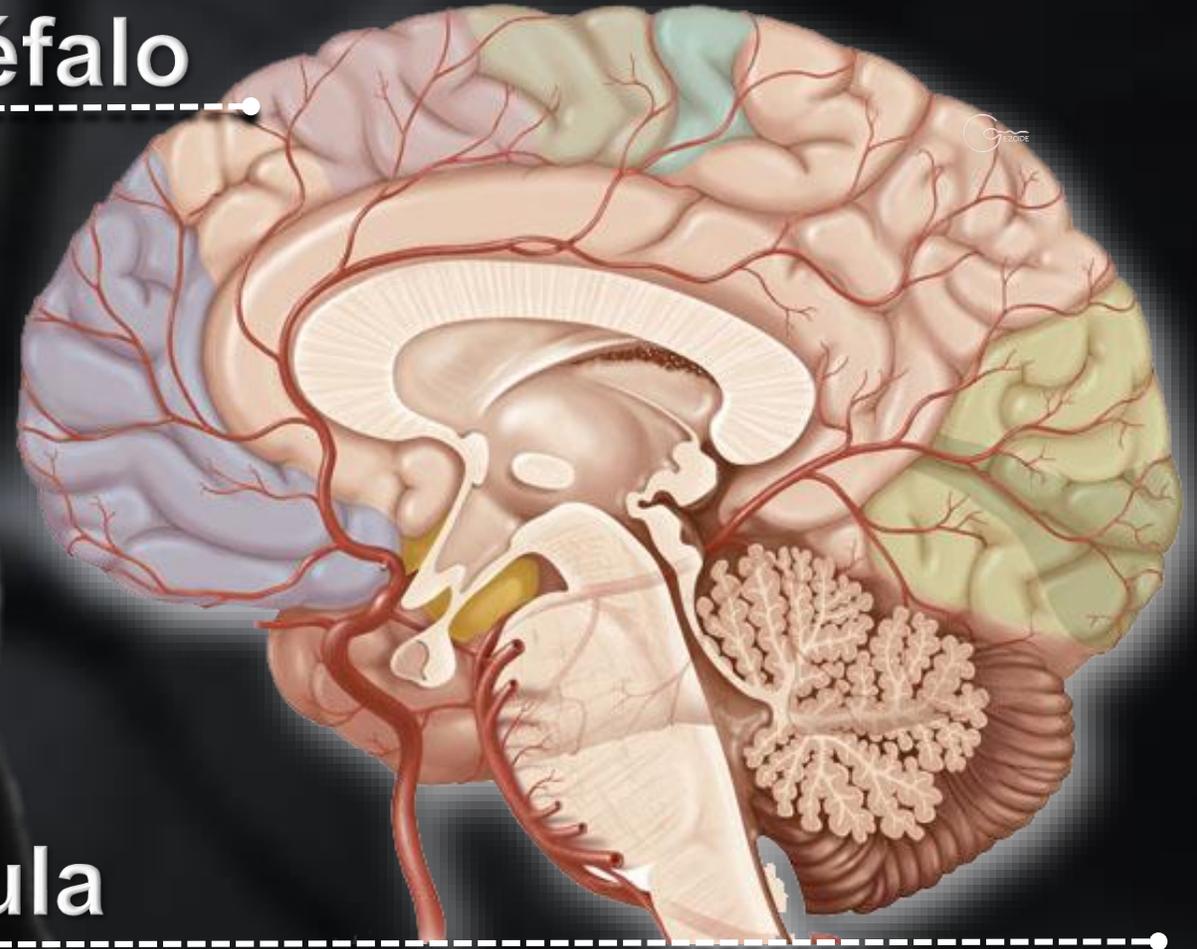


SNP





Encéfalo



medula

# hemisférios cerebrais

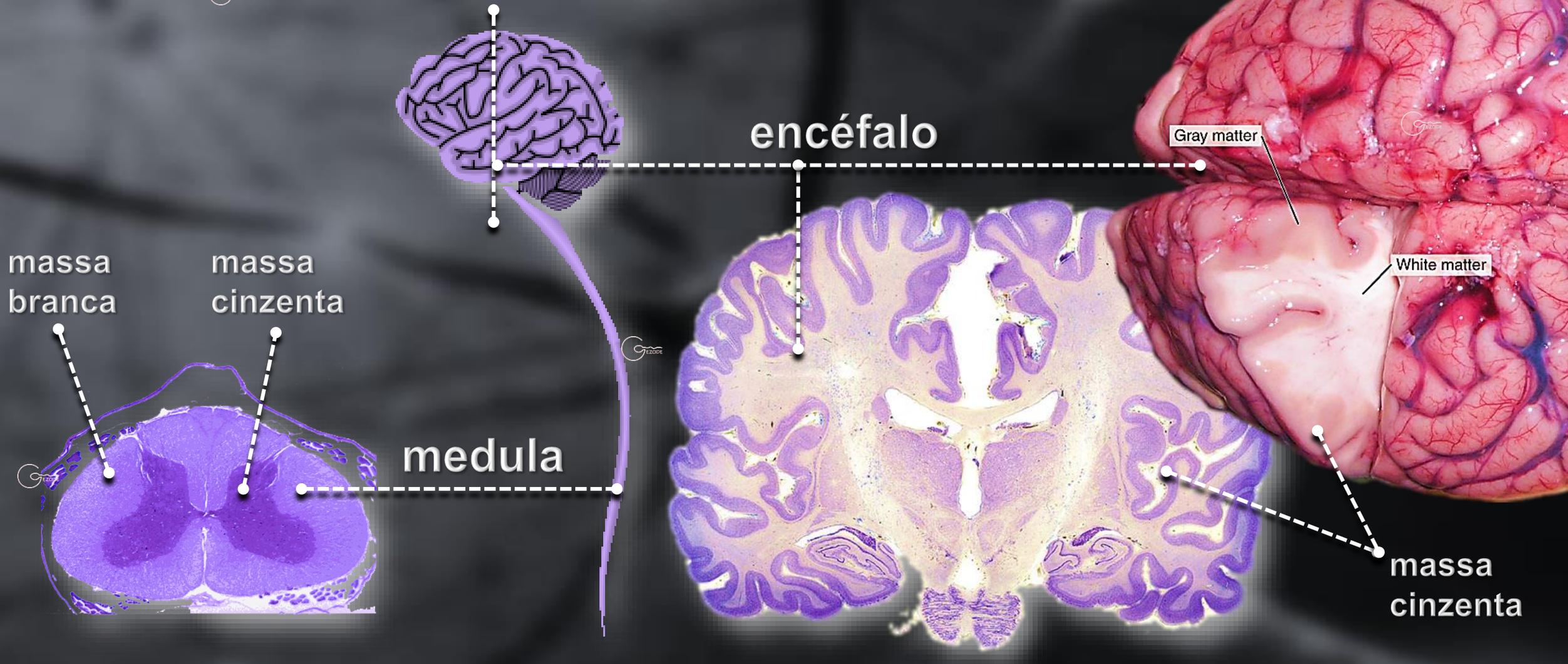
## Left brain

I am the left brain.  
I am a scientist. A mathematician.  
I love the familiar. I categorize. I am accurate. Linear.  
Analytical. Strategic. I am practical.  
Always in control. A master of words and language.  
Realistic. I calculate equations and play with numbers.  
I am order. I am logic.  
I know exactly who I am.

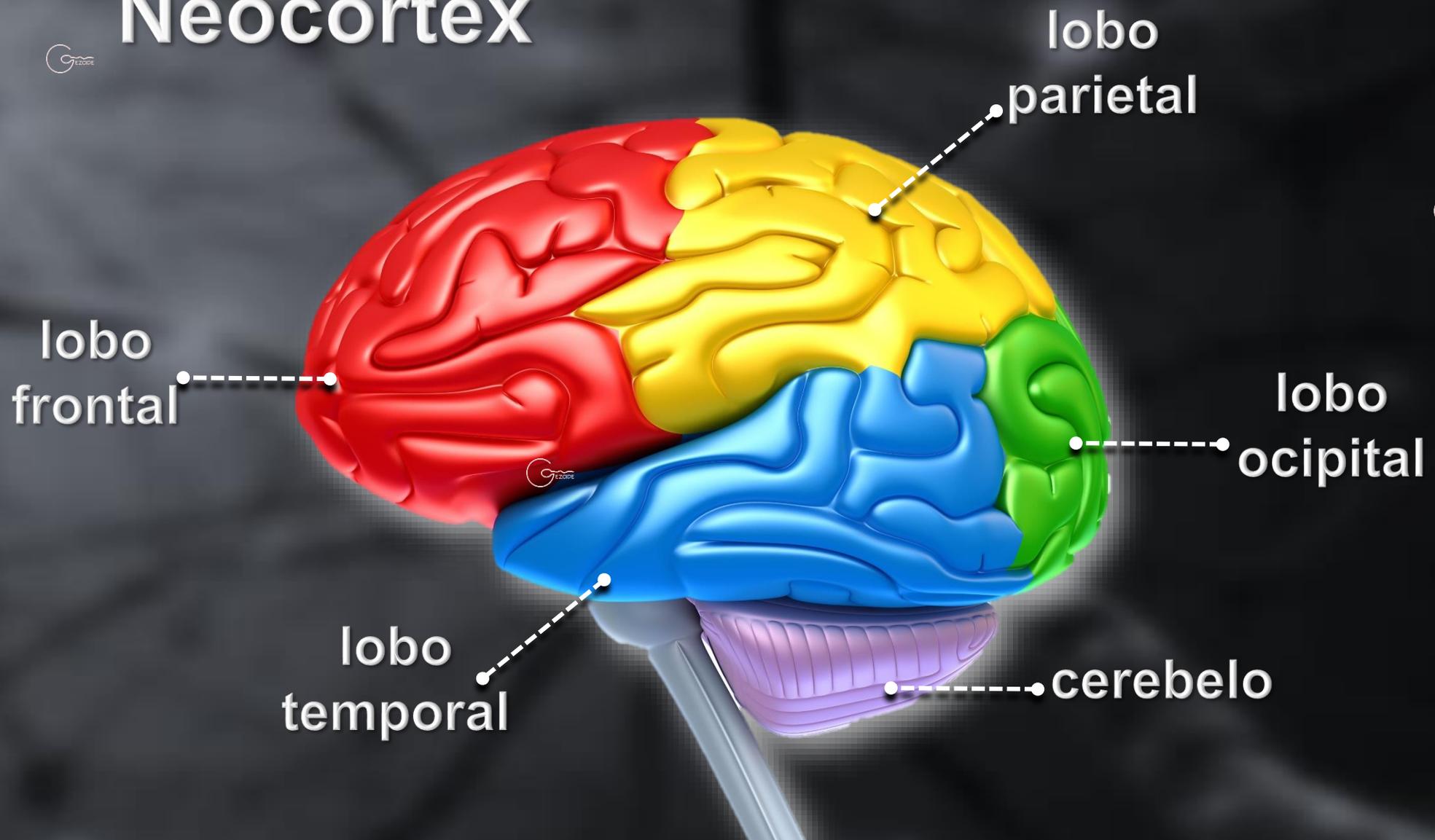
## Right brain

I am the right brain.  
I am creativity. A free spirit. I am passion.  
Yearning. Sensuality. I am the sound of roaring laughter.  
I am taste. The feeling of sand beneath bare feet.  
I am movement. Vivid colors.  
I am the urge to paint on an empty canvas.  
I am boundless imagination. Art. Poetry. I sense. I feel.  
I am everything I wanted to be.

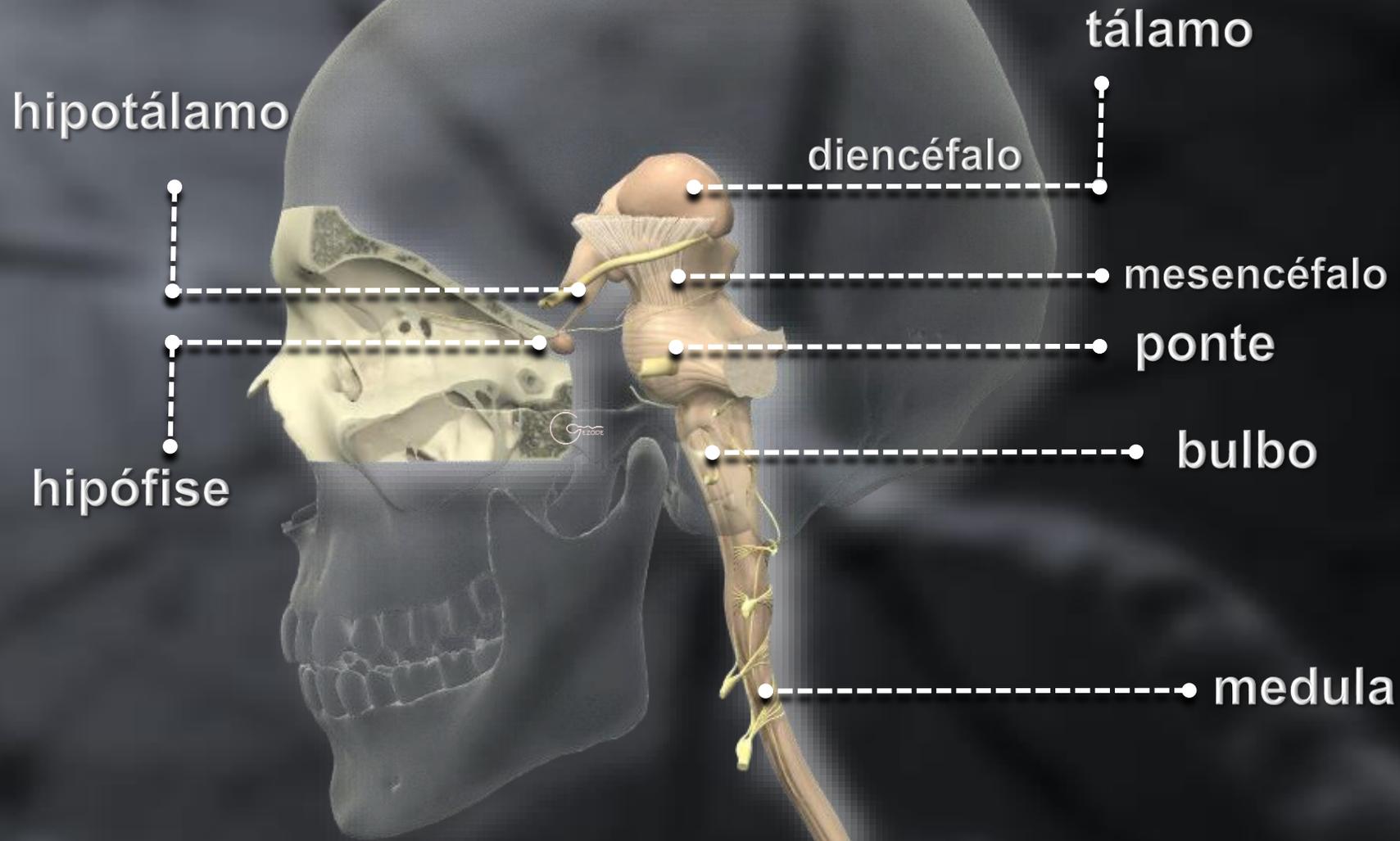
# massa cinzenta e branca



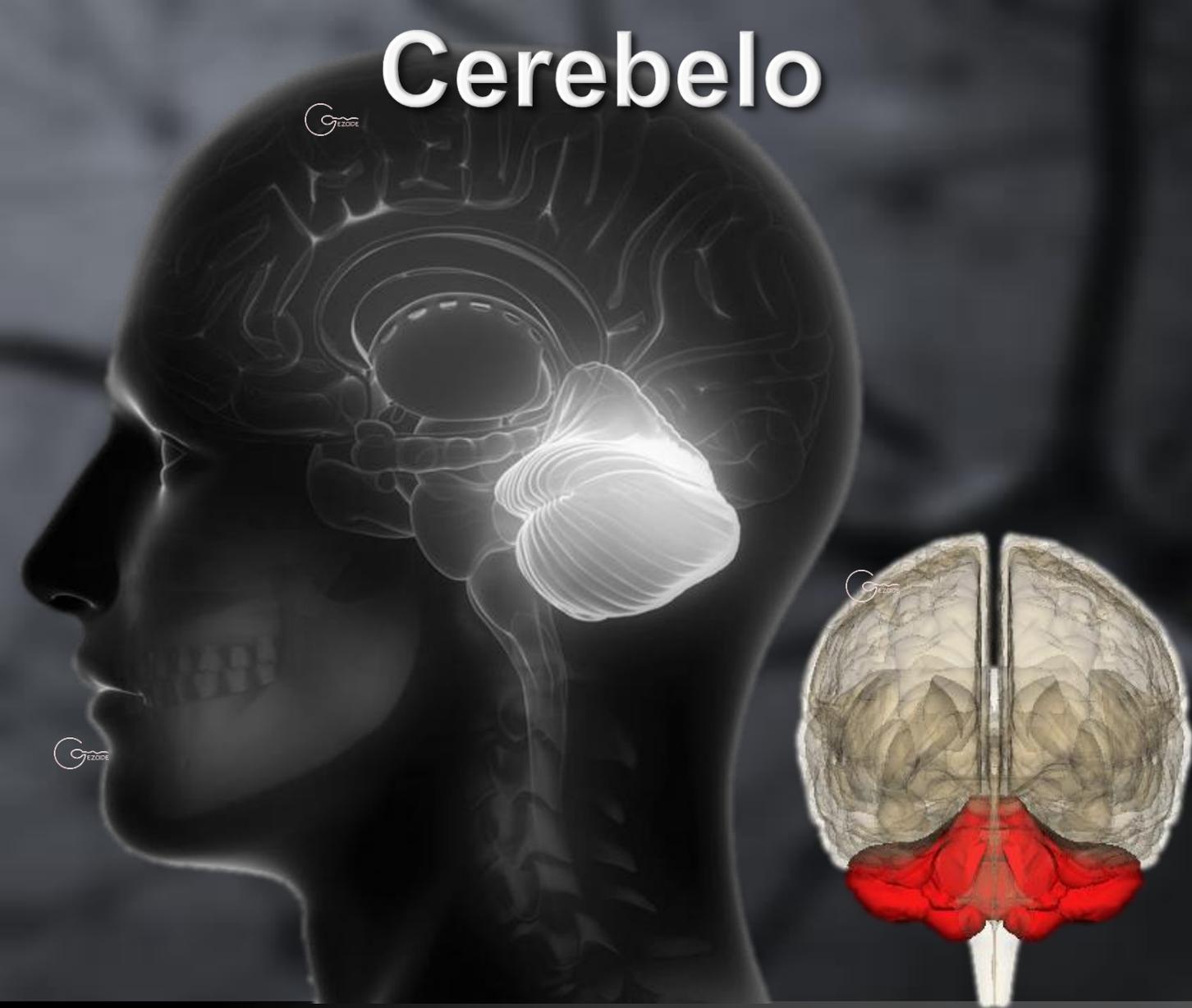
# Neocórtex



# Tronco encefálico



# Cerebelo

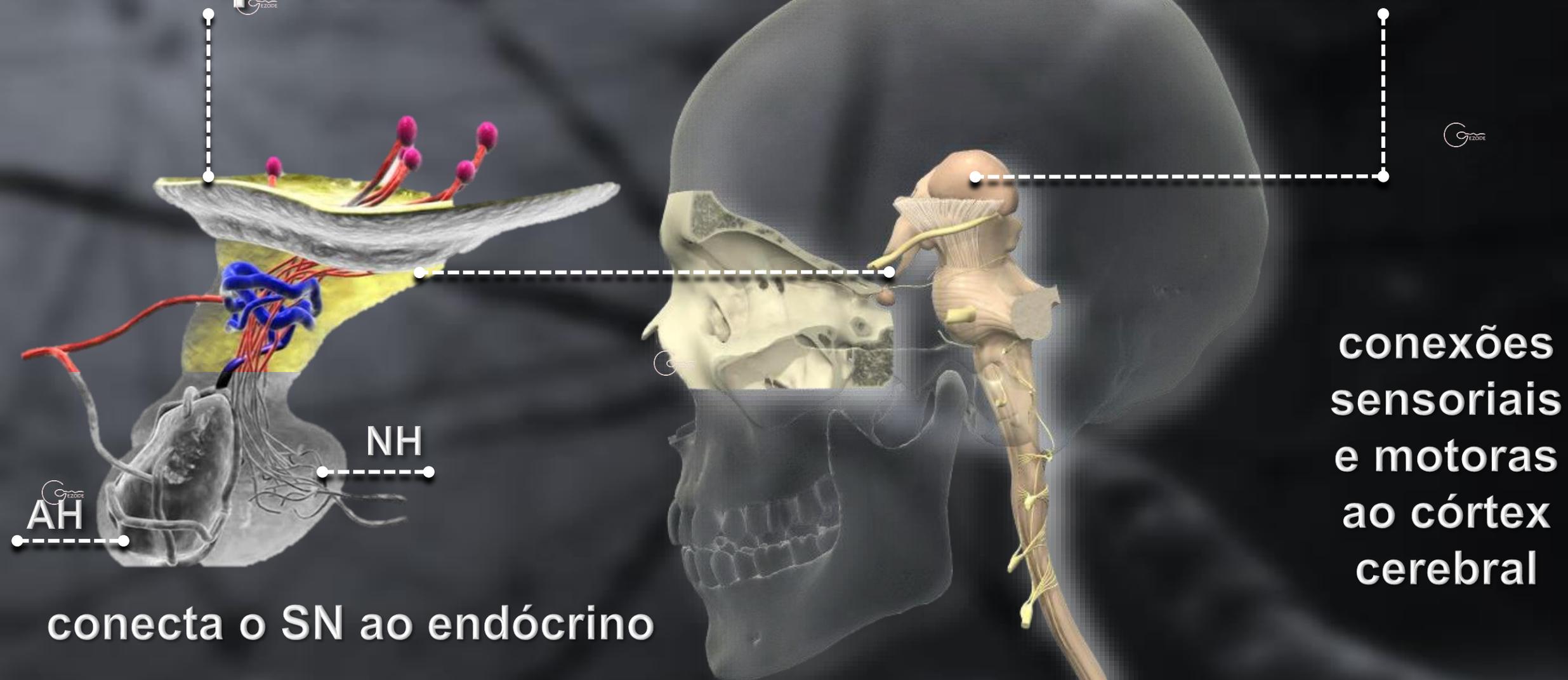


ataxia cerebular

controle do tônus muscular  
e coordenação do  
movimento

# hipotálamo e

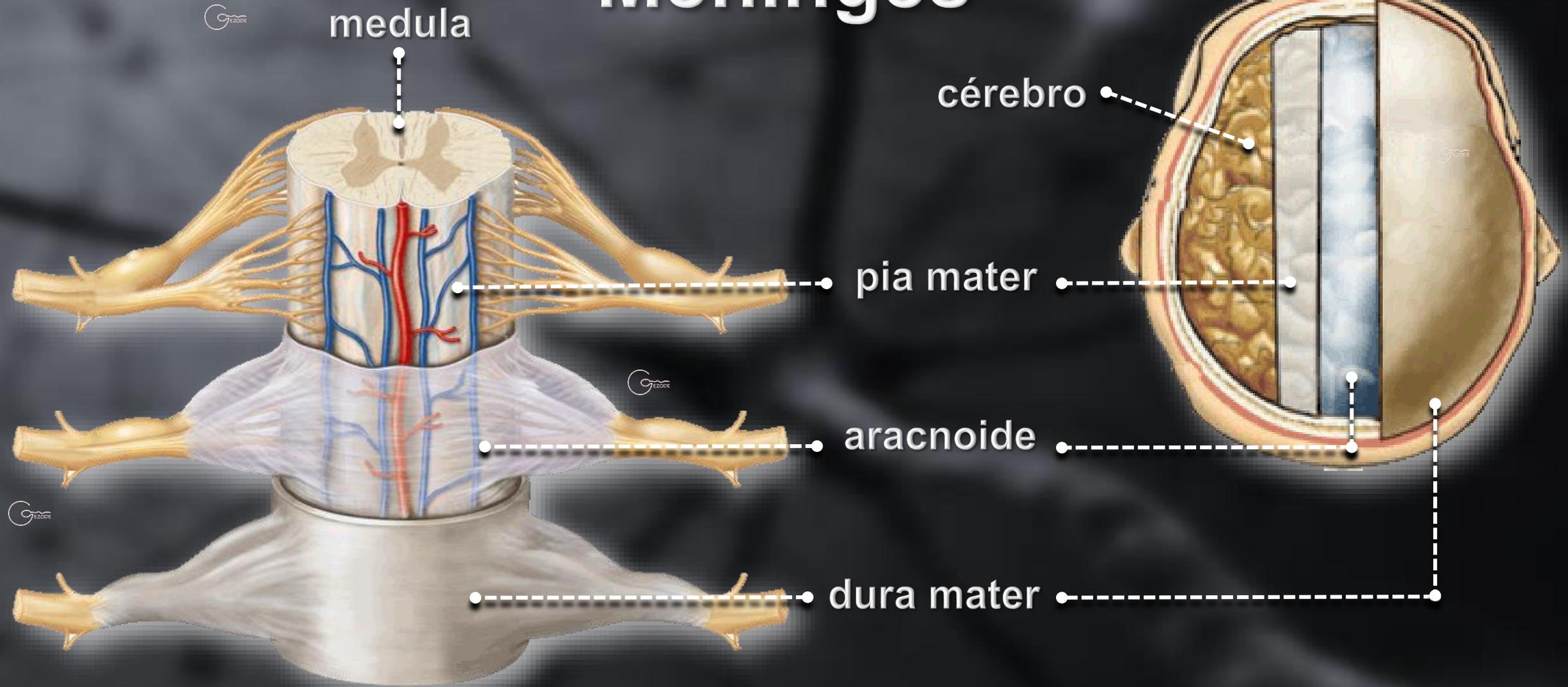
# tálamo



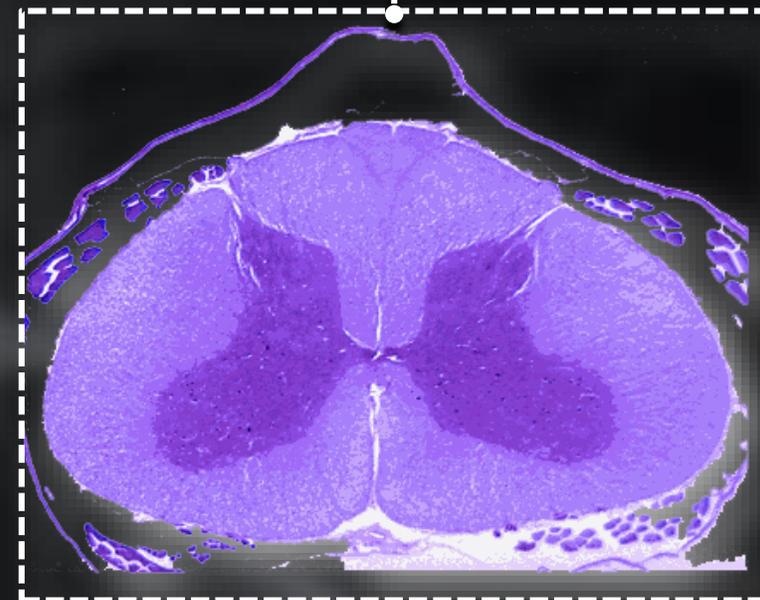
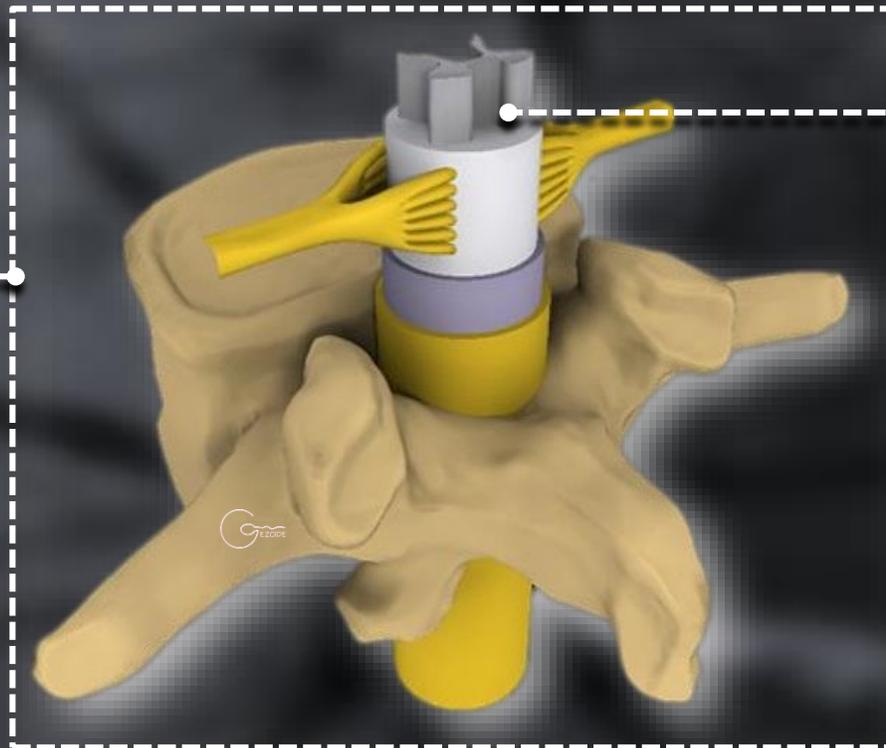
conecta o SN ao endócrino

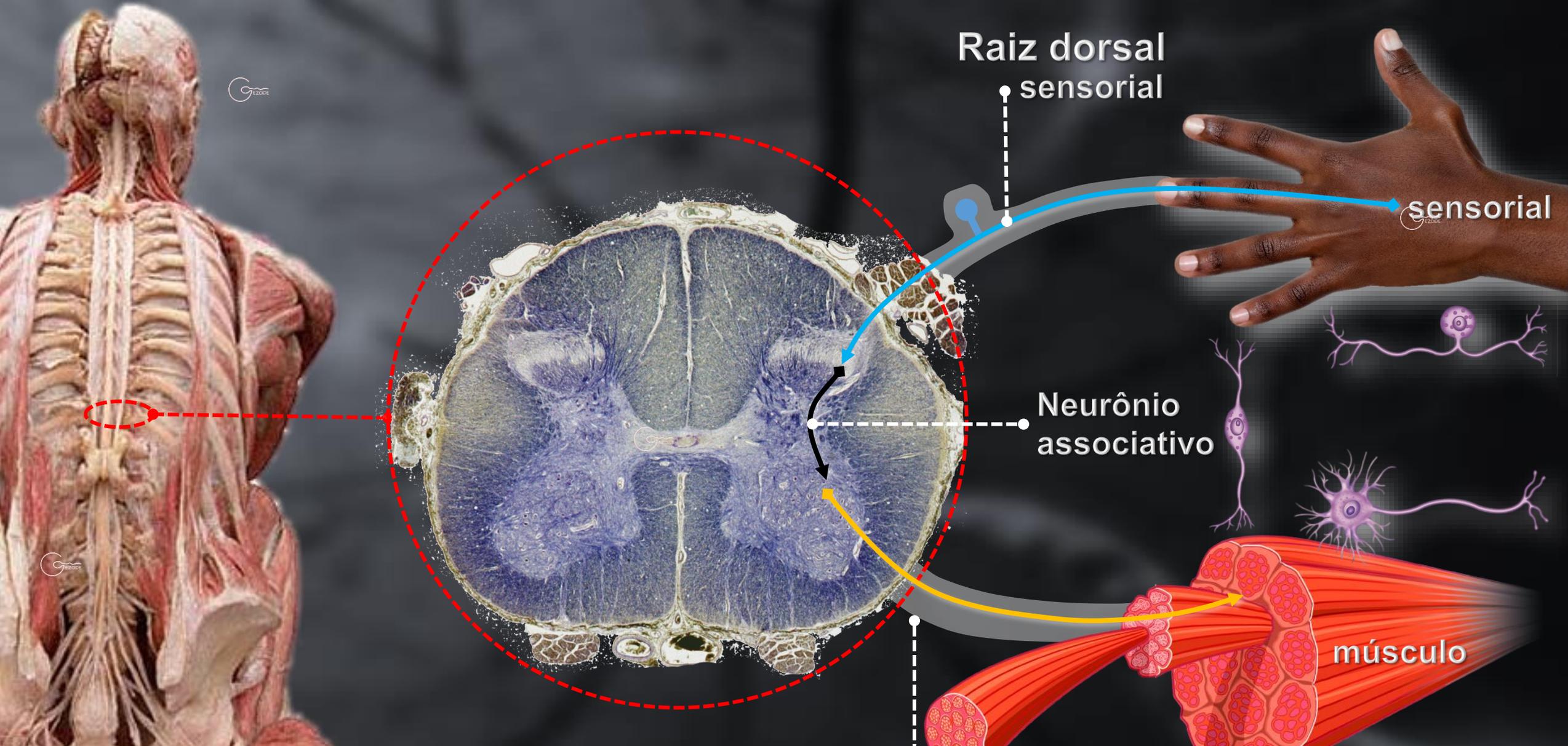
conexões sensoriais e motoras ao córtex cerebral

# Meninges



# Medula nervosa





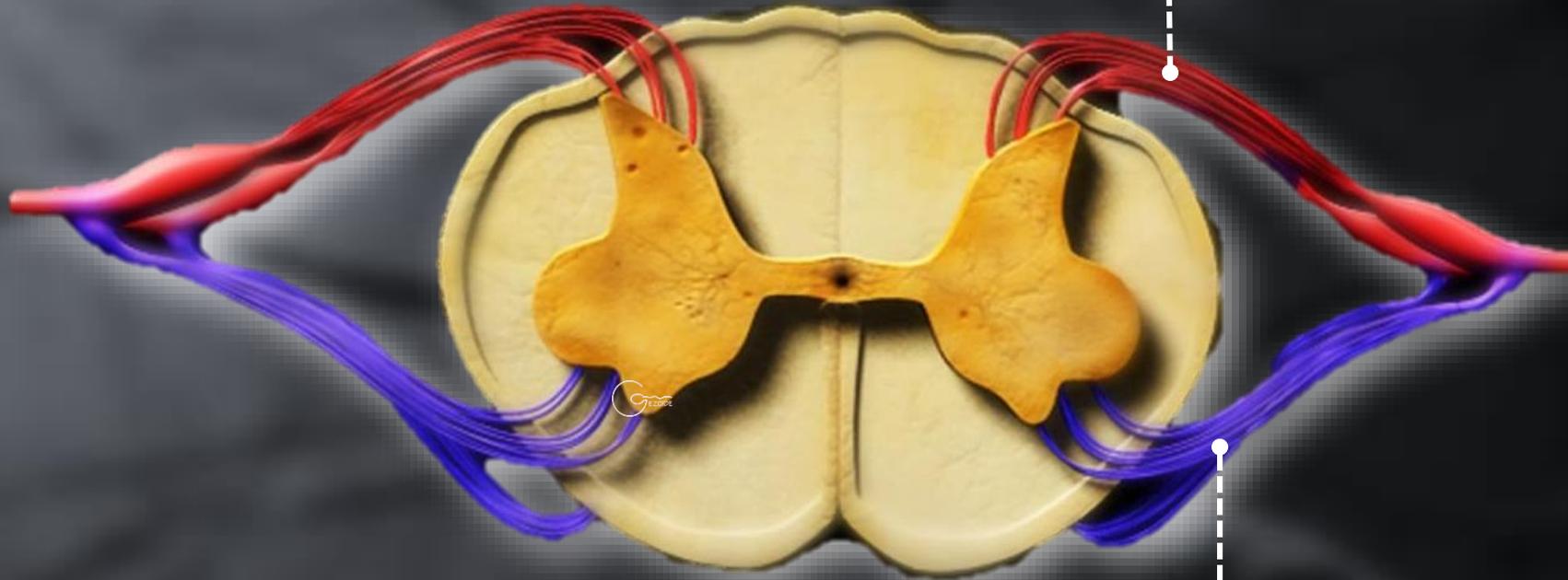
Raiz dorsal  
sensorial

sensorial

Neurônio  
associativo

músculo

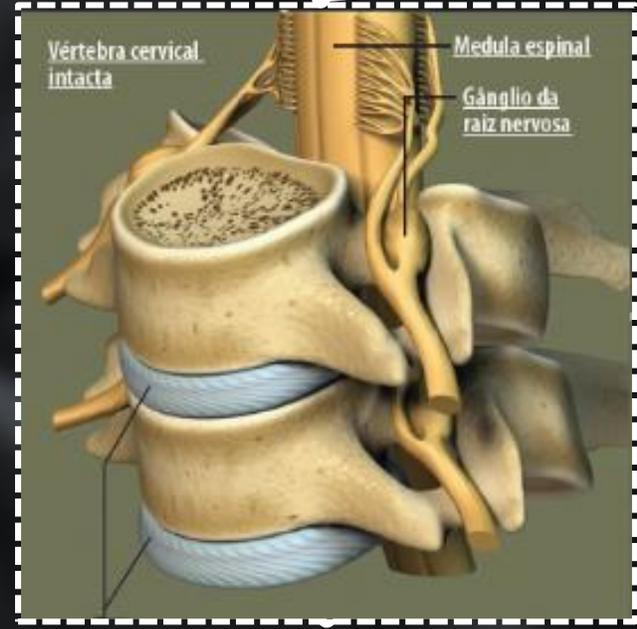
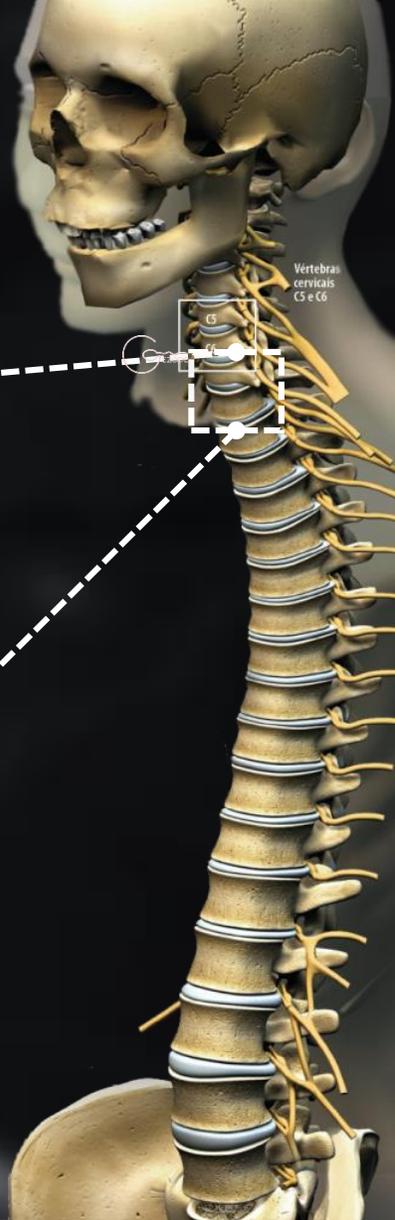
motora  
Raiz ventral



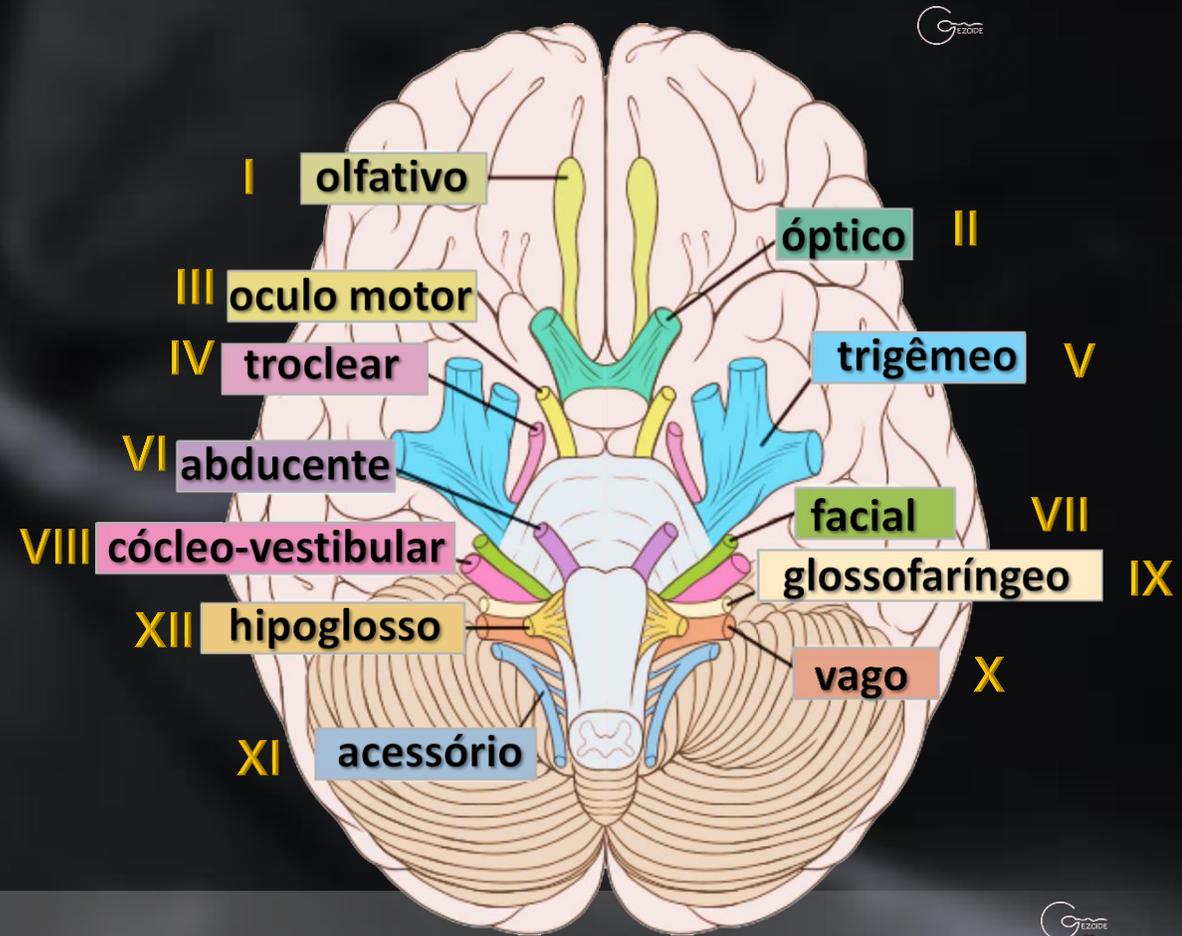
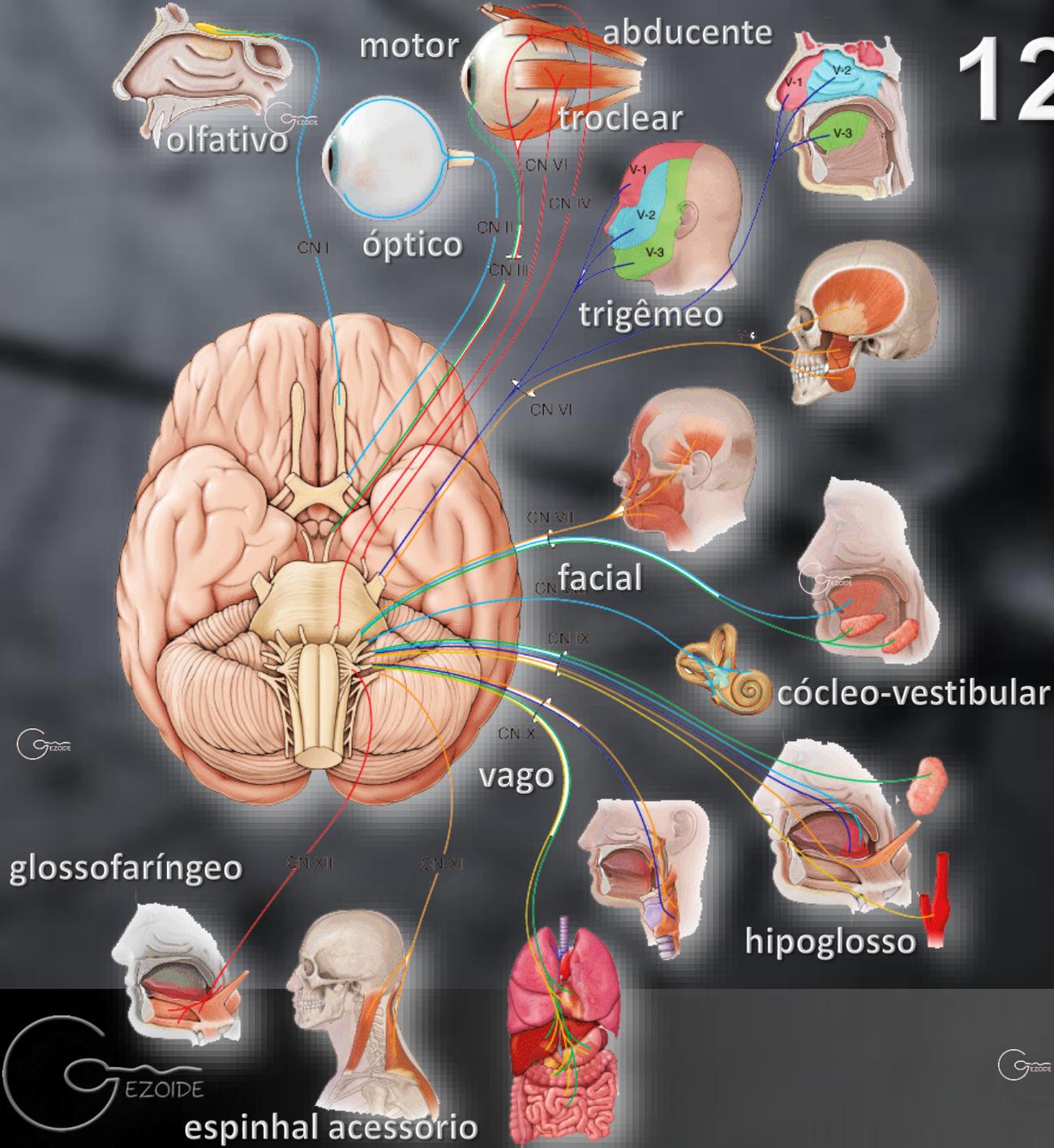
Raiz dorsal  
sensorial

motora  
Raiz ventral

# Sistema Nervoso Periférico



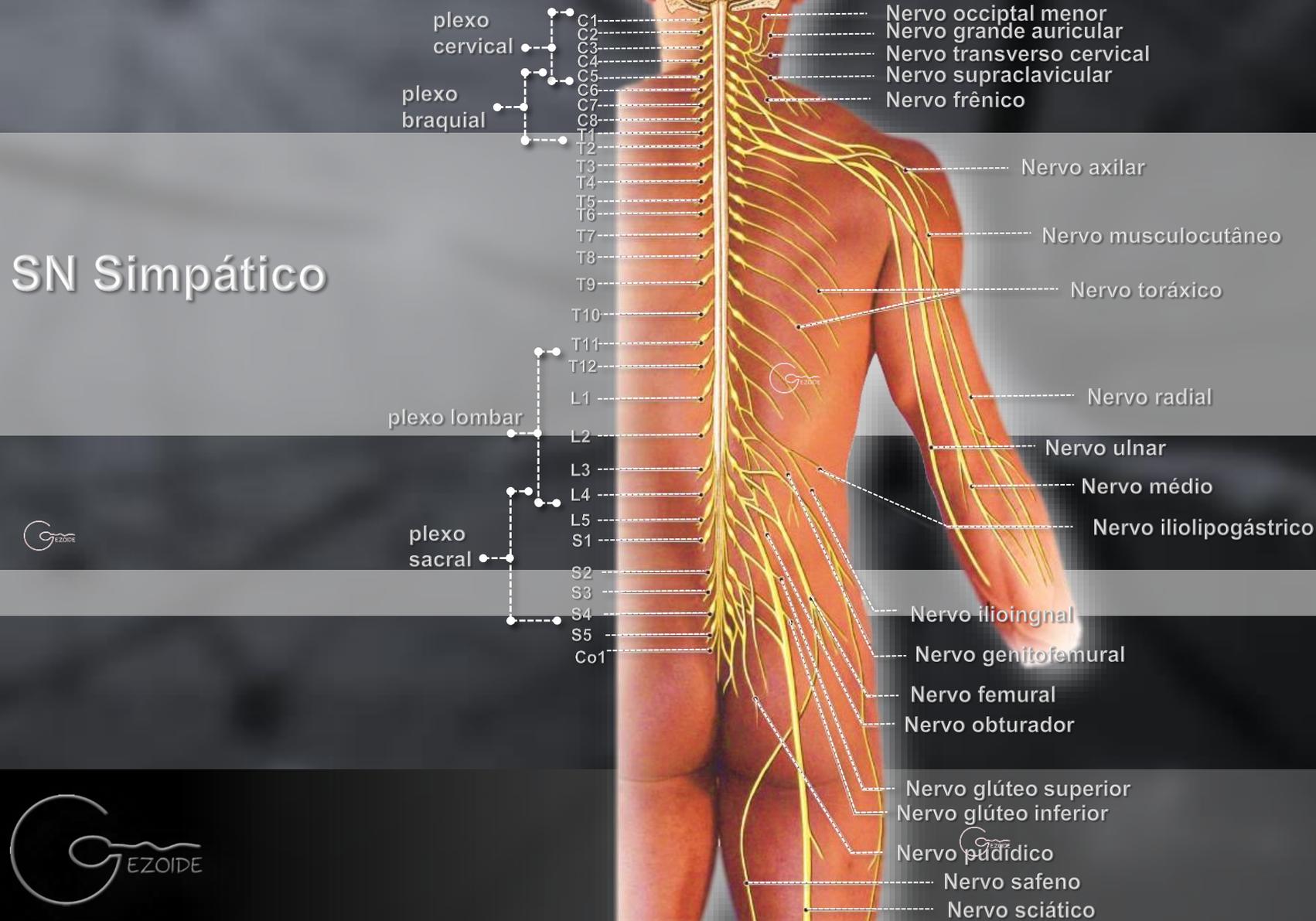
# 12 pares de nervos cranianos



Prof Geraldo Lima



# Os plexos cervical, braquial, lombar e sacral, à esquerda e à direita os principais nervos periféricos



SN Parassimpático

SN Simpático

SN Parassimpático