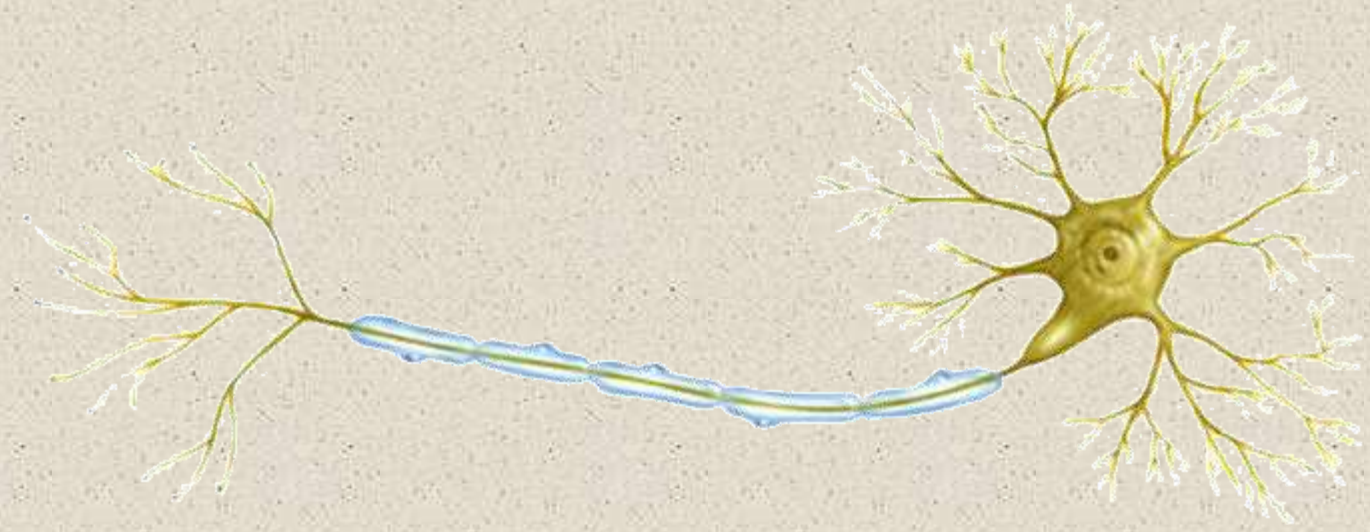
Tejido nervioso



TEJIDO NERVIOSO

TEJIDO NERVIOSO

FUNCIÓN — Recepción y conducción de estímulos.

SUS CÉLULAS — Son de dos tipos principalmente.

NEURONA

Unidad funcional que transforma los estímulos recibidos en impulsos nerviosos que transmite a otra neurona o a un órgano efector.

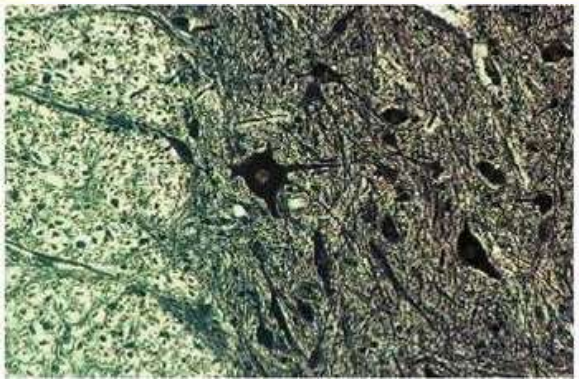
NEUROGLÍA

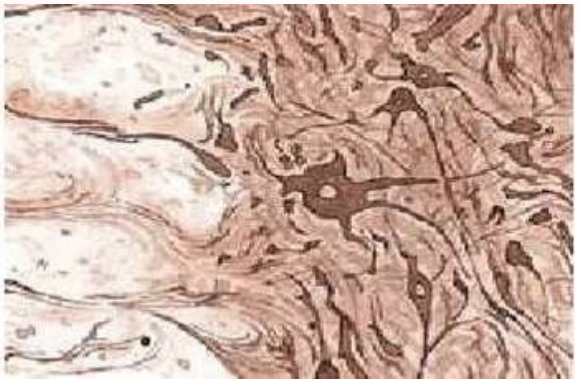
Variedad de células no neviosas que desempeñan funciones metabólicas, de soporte y protección de las neuronas.

TRANSMISIÓN DEL IMPULSO

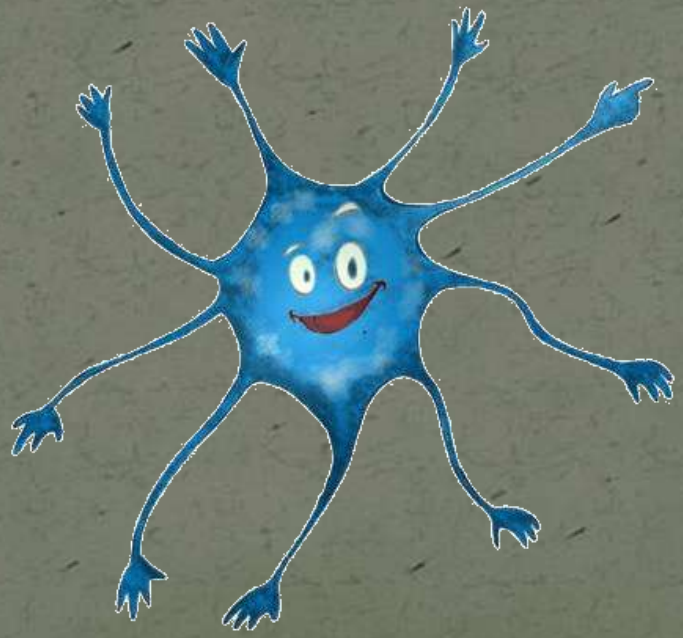
Dendritas
↓
Cuerpo neuronal o soma
↓
Axón
↓
Órgano efector

Neurona vista al microscopio óptico (X 625).

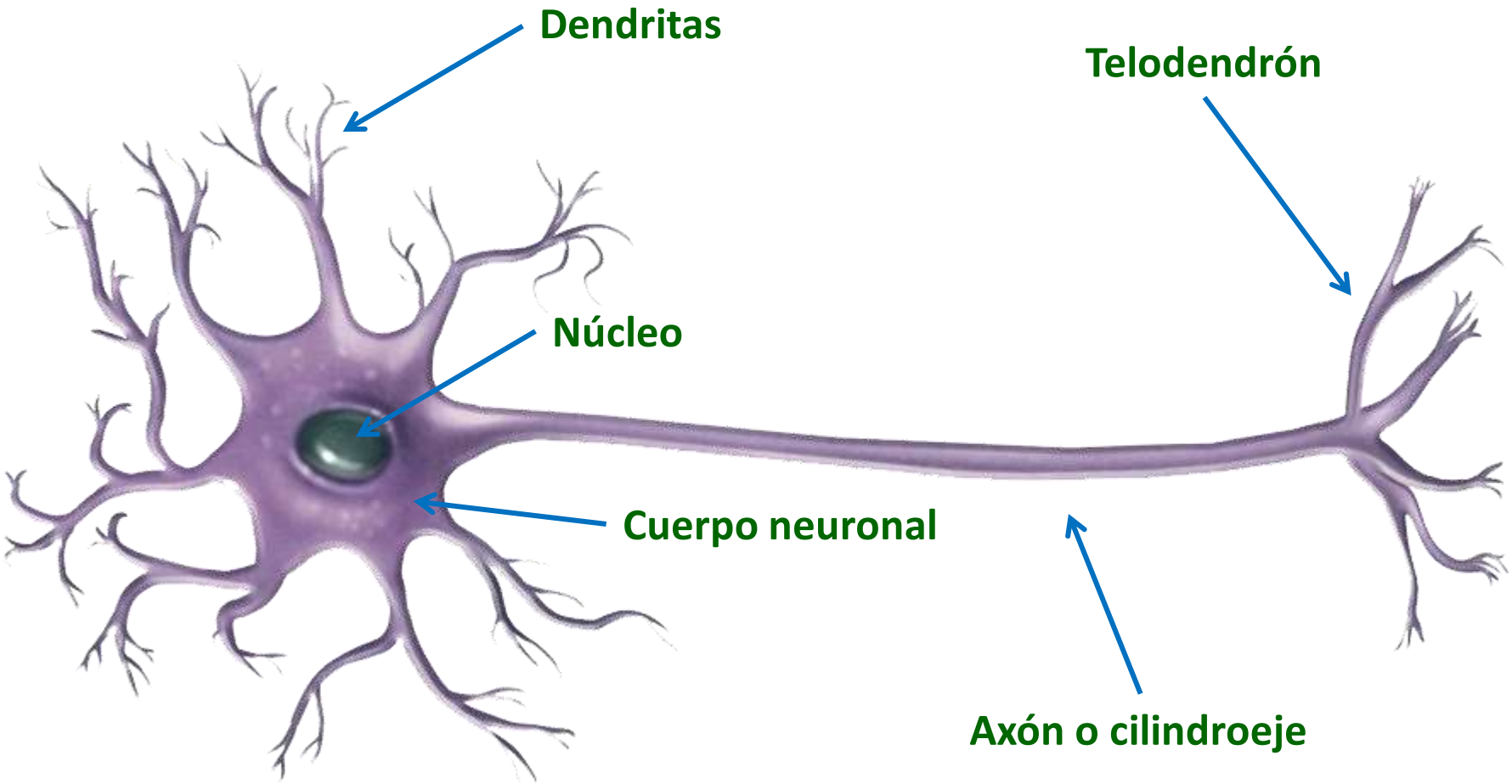




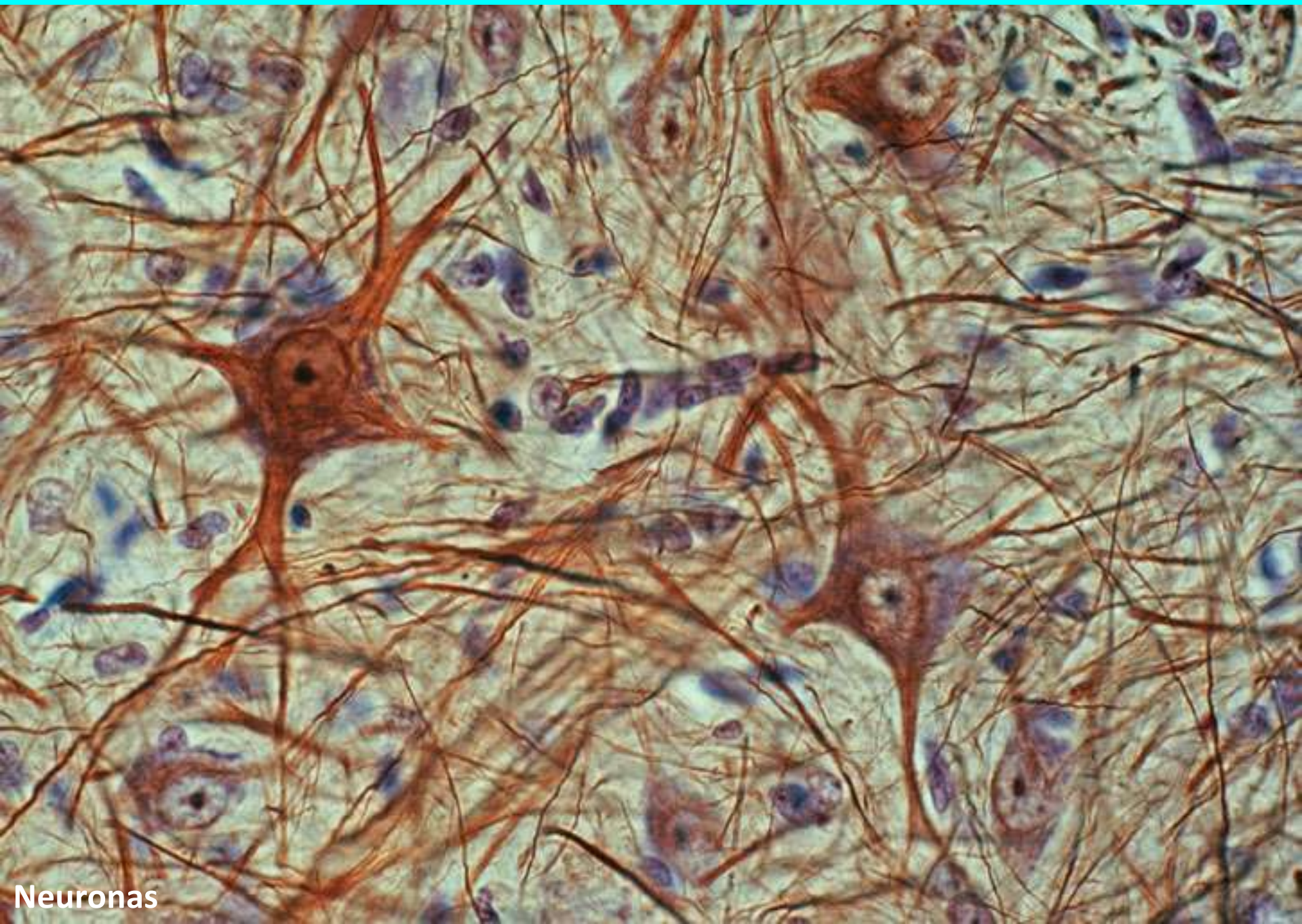
LAS NEURONAS



LAS NEURONAS

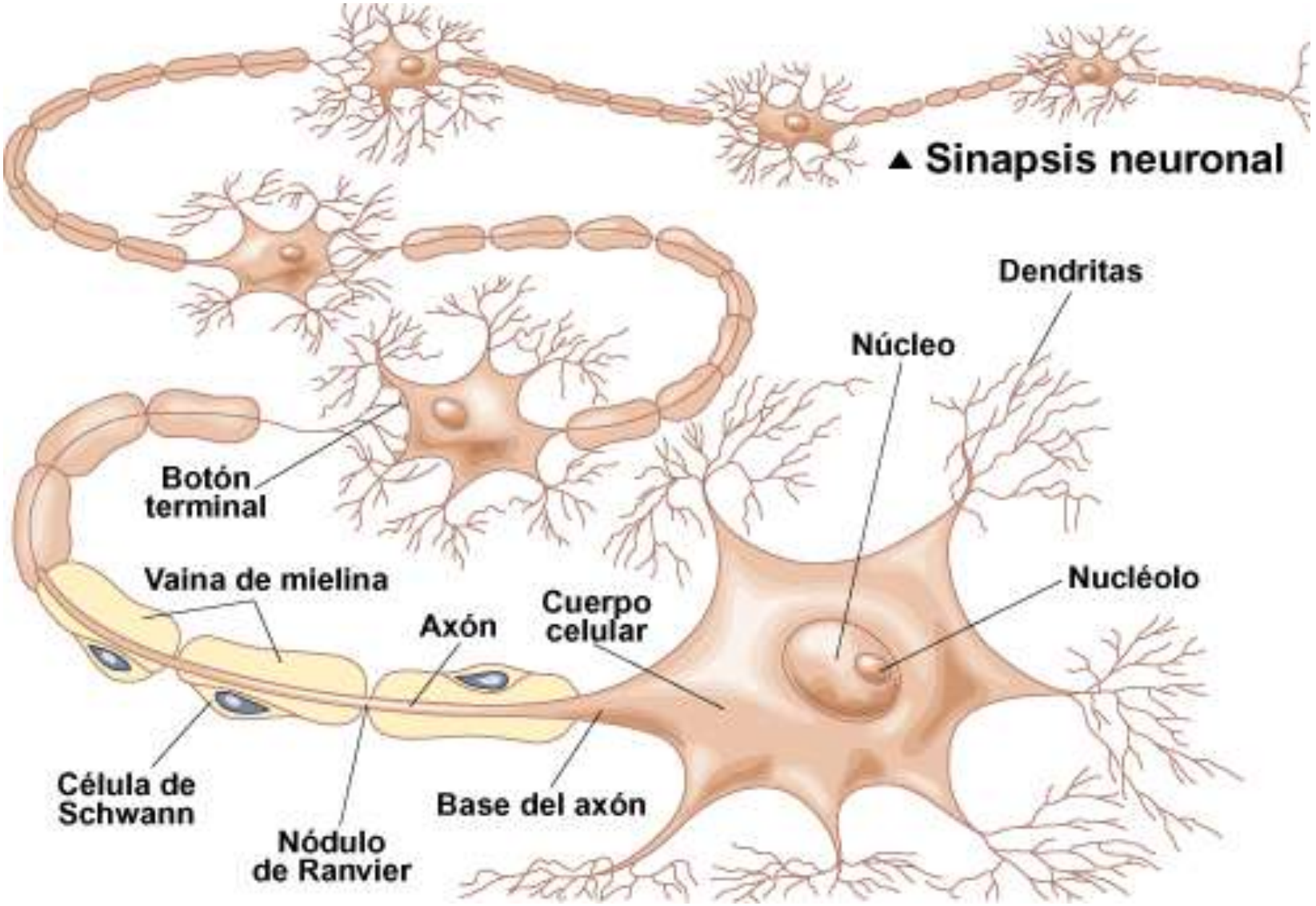


LAS NEURONAS

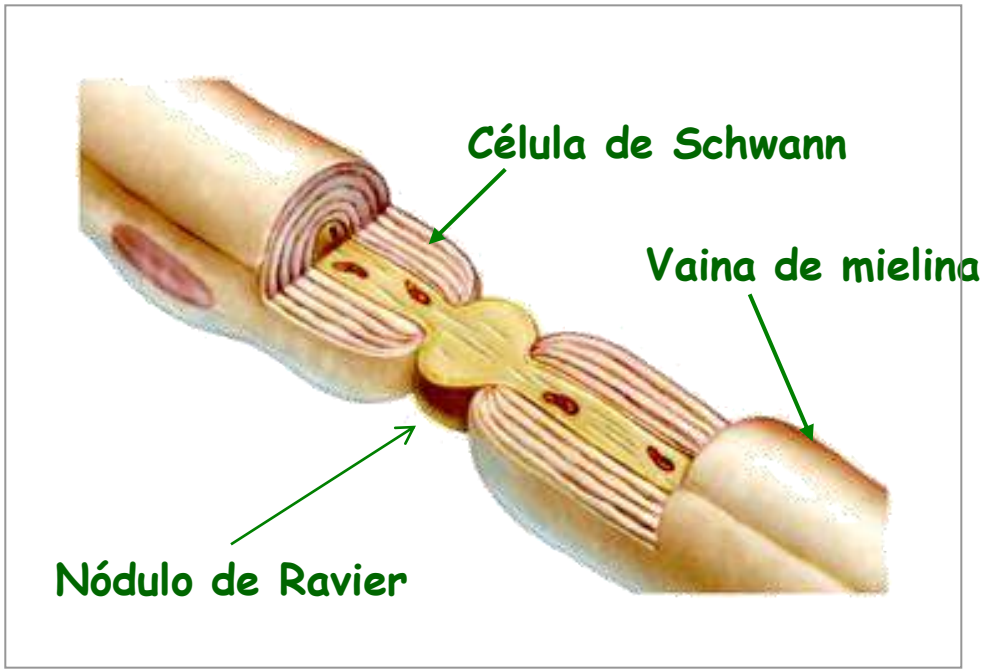


Neuronas

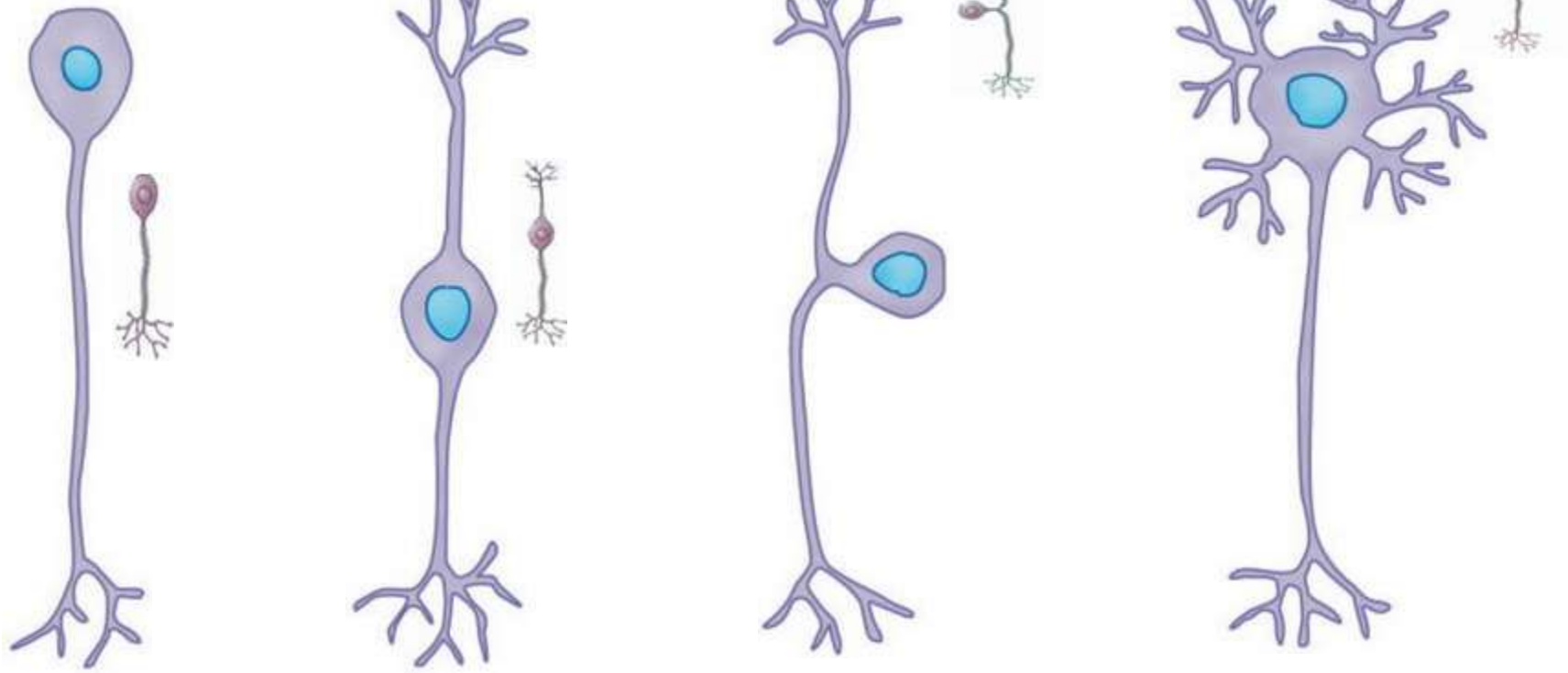
LAS NEURONAS SE COMUNICAN ENTRE SÍ



DETALLE DE LAS CÉLULAS DE SCHWANN Y LA VAINA DE MIELINA



TIPOS DE NEURONAS SEGÚN EL N° DE TERMINACIONES



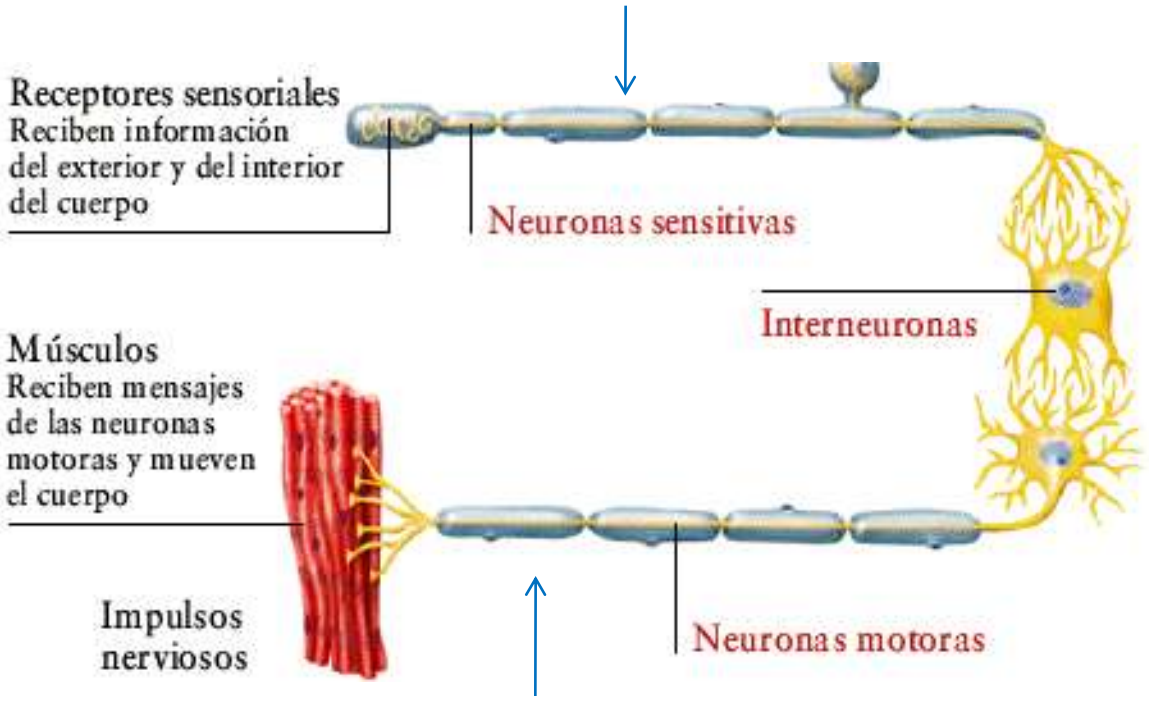
Monopolar **Bipolar** **Pseudomonopolar** **Multipolar**

TIPOS DE NEURONAS SEGÚN SU FUNCIÓN

Según la dirección en la que transmiten el impulso nervioso se clasifican en:

SENSITIVAS	Receptores	→	Centros nerviosos
MOTORAS	Centros nerviosos	→	Órganos efectores
DE ASOCIACIÓN	Neuronas sensitivas	↔	Neuronas motoras

Vías nerviosas sensitivas

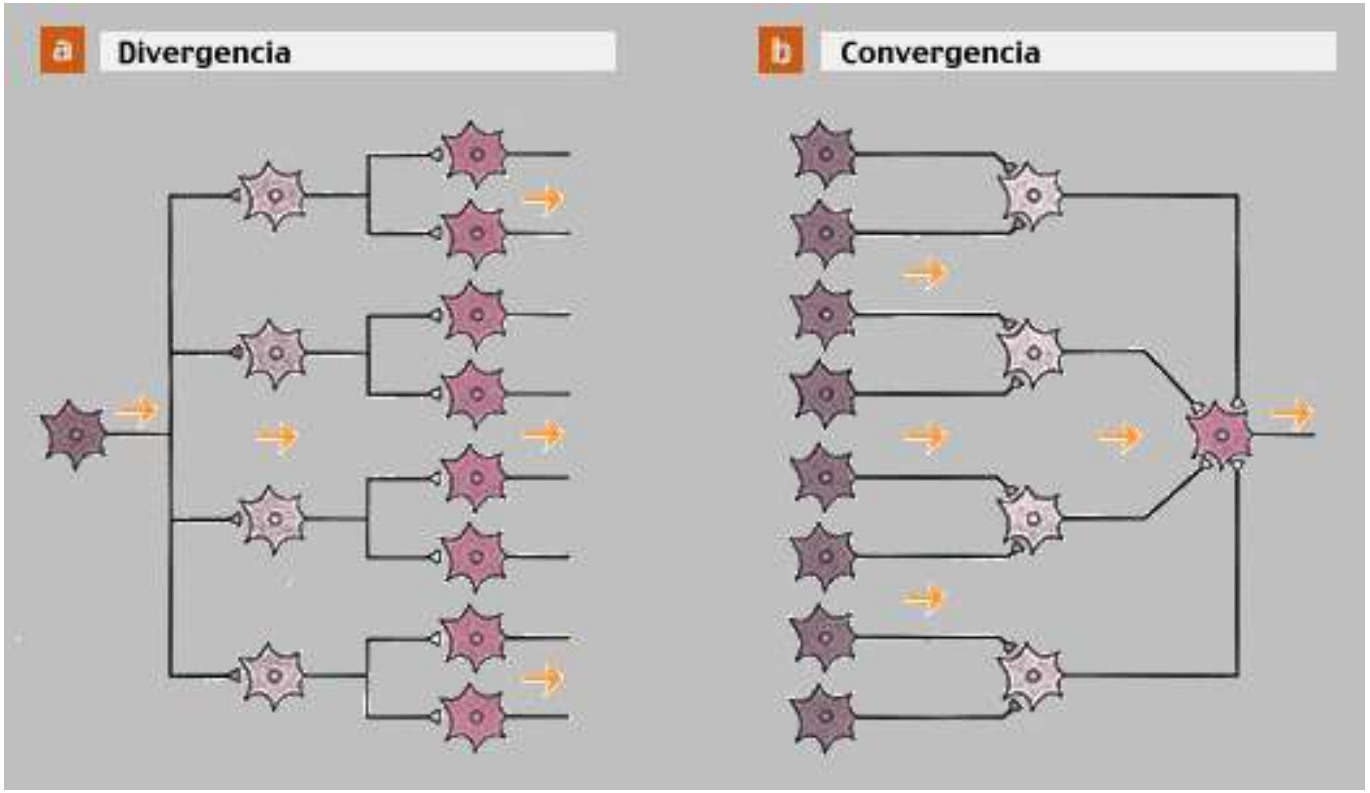


Vías nerviosas motoras

CIRCUITOS NERVIOSOS

Circuitos nerviosos

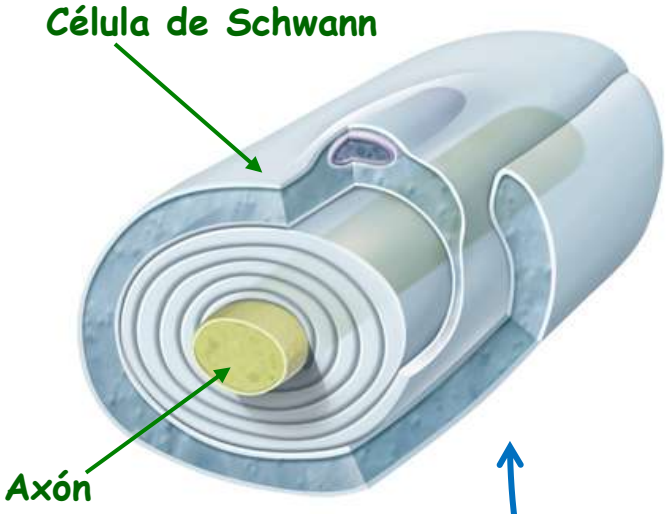
- Divergentes
- Convergentes



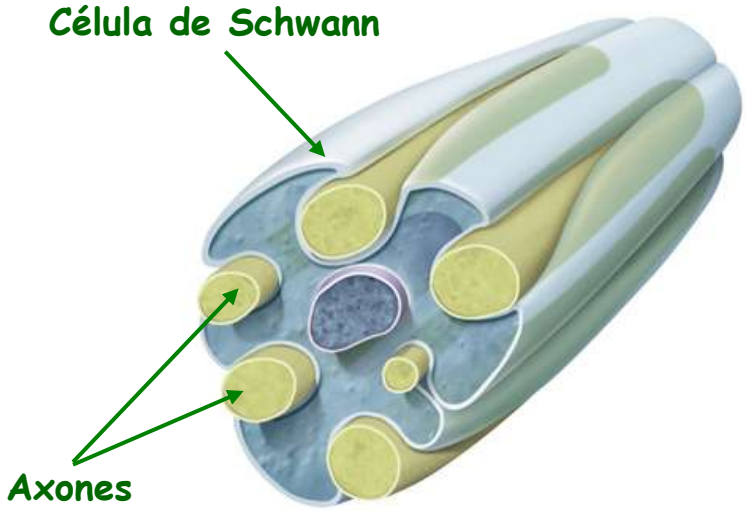
LOS NERVIOS

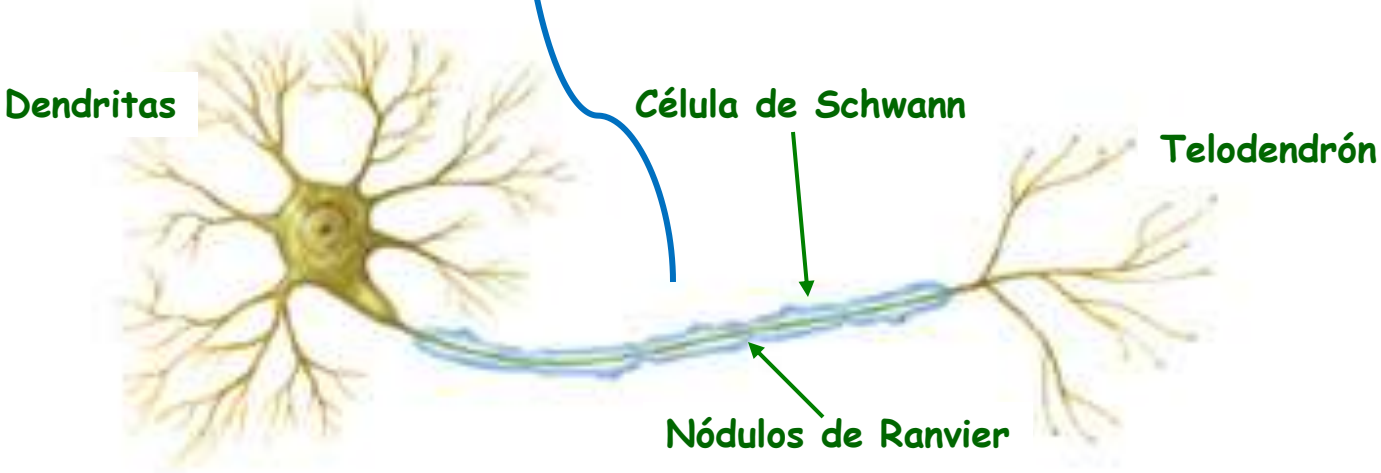
TIPOS DE FIBRAS NERVIOSAS

Fibras mielínicas

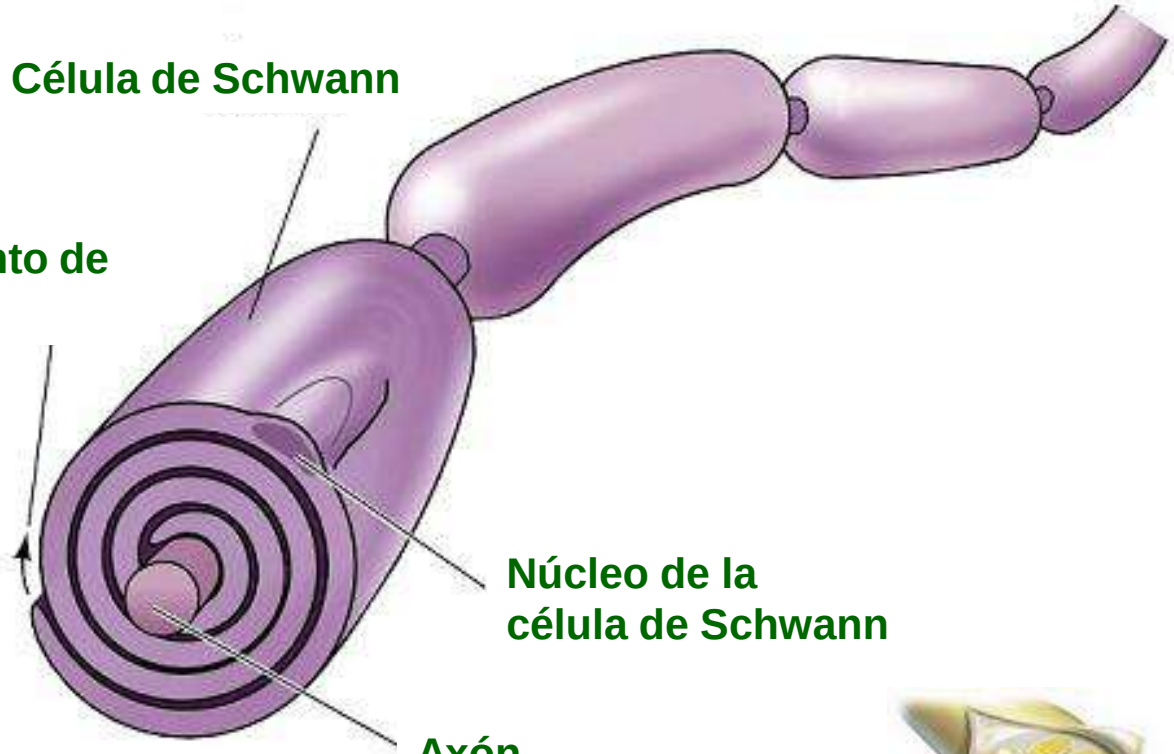


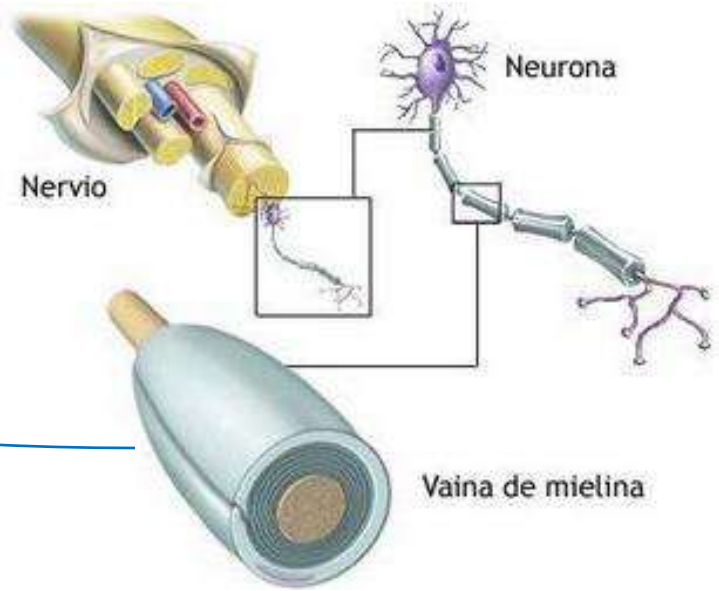
Fibras amielínicas



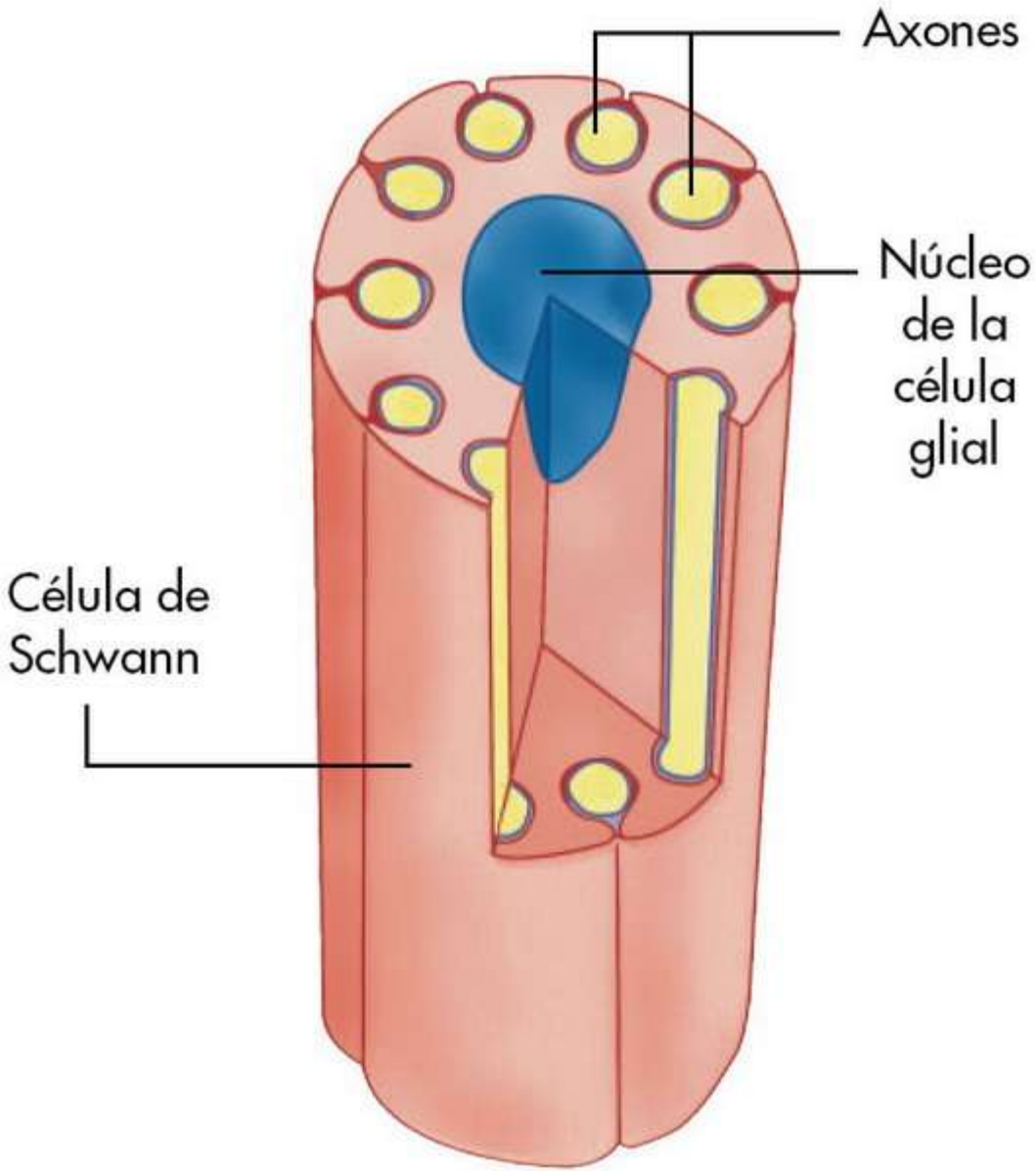


AXÓN MIELÍNICO

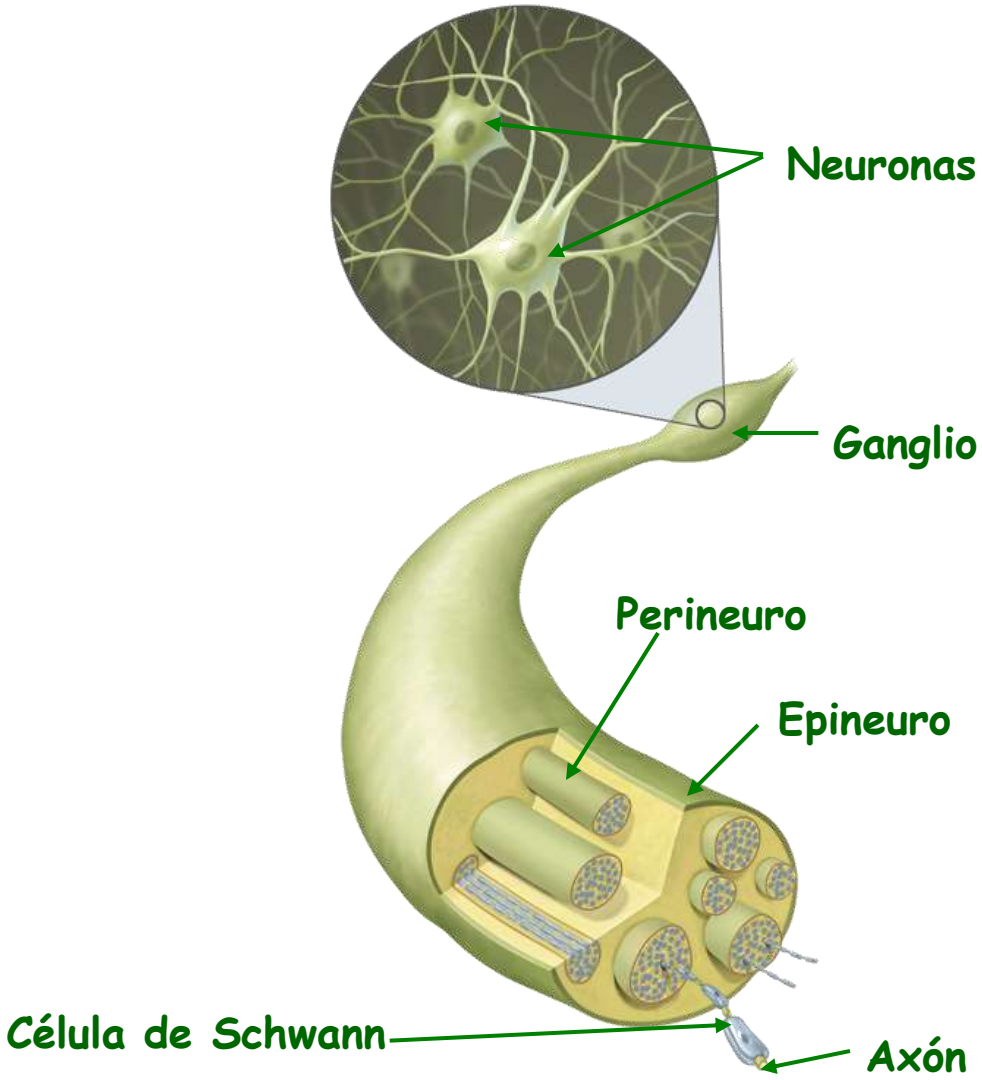




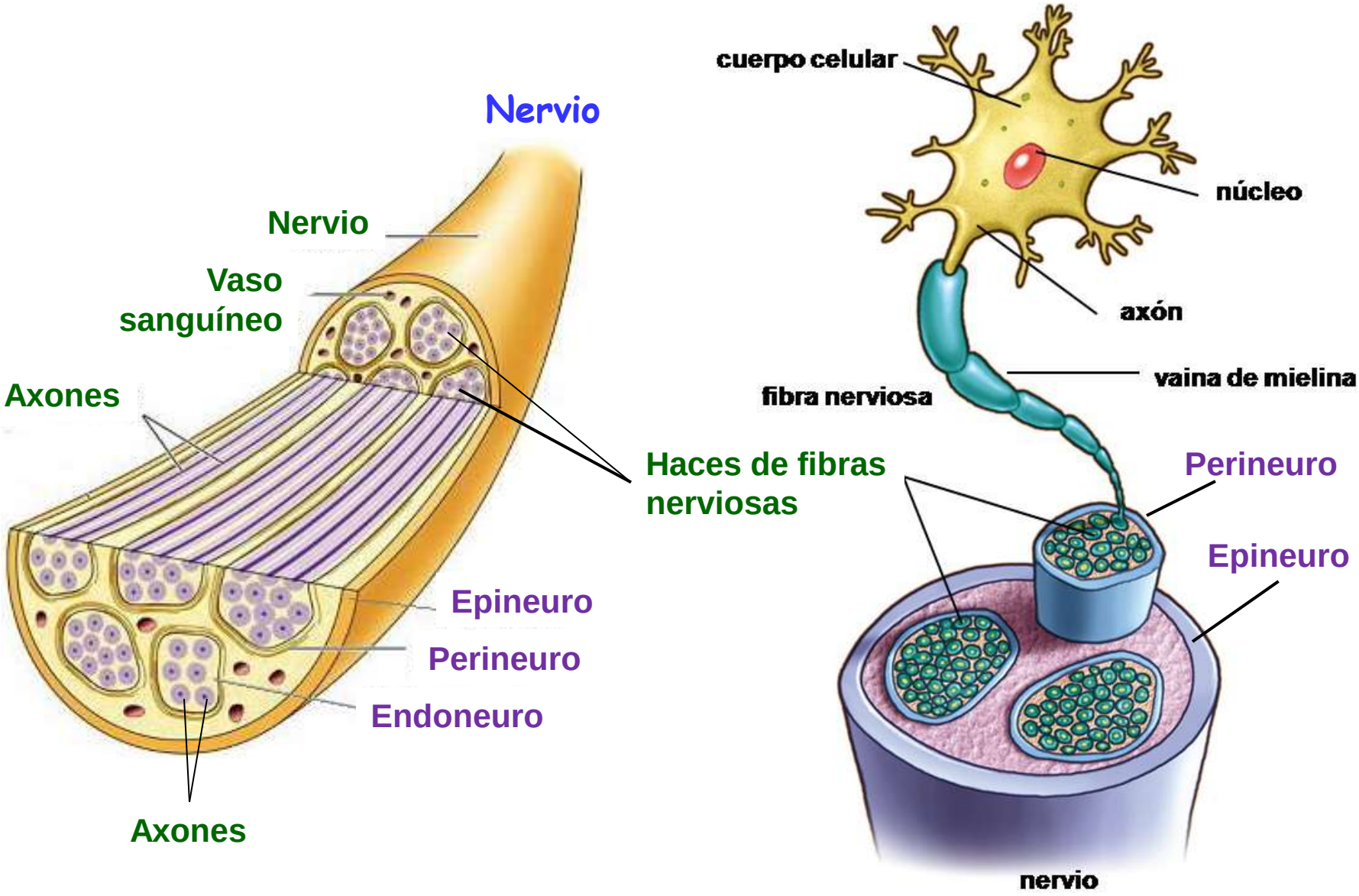
FIBRA AMIELÍNICA



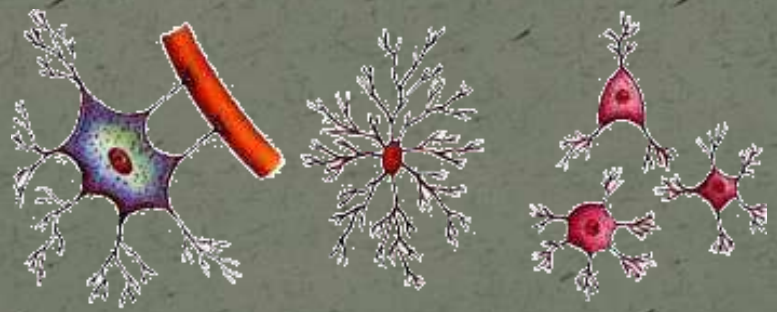
NERVIOS Y GANGLIOS



LOS NERVIOS


Nervio
Nervio
Vaso sanguíneo
Axones
Haces de fibras nerviosas
Epineuro
Perineuro
Endoneuro
Axones
cuerpo celular
núcleo
axón
vaina de mielina
fibra nerviosa
Perineuro
Epineuro
nervio

CÉLULAS DE LA GLÍA

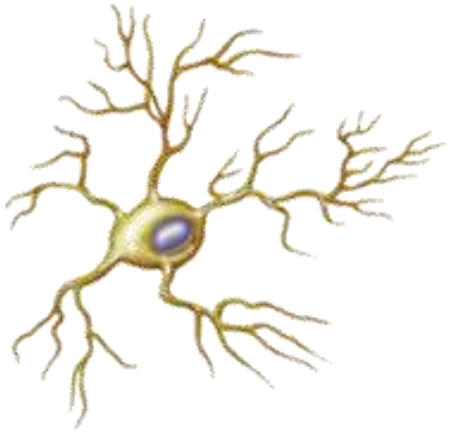


CÉLULAS GLIALES O DE LA NEUROGLÍA

Astrocitos

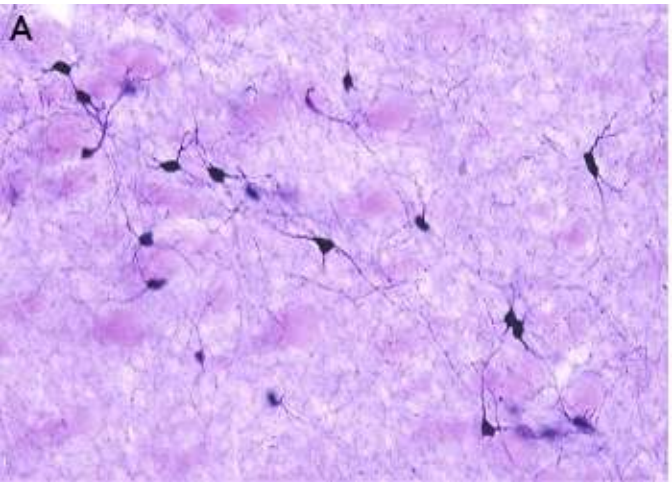
Oligodendrocitos

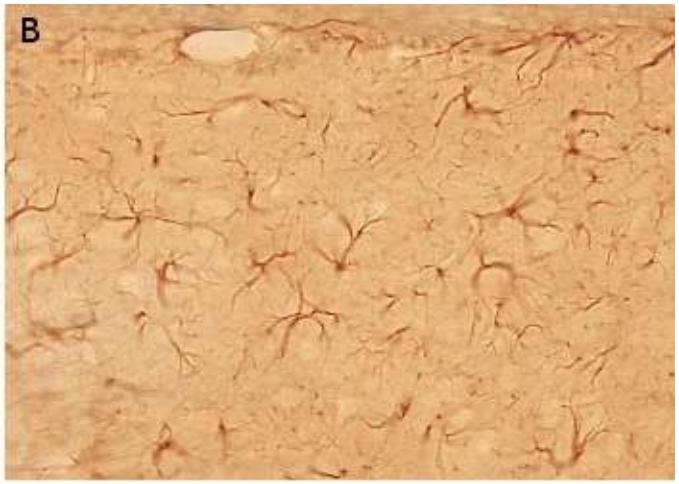
Microglía



Células de Schwann

ASTROCITOS

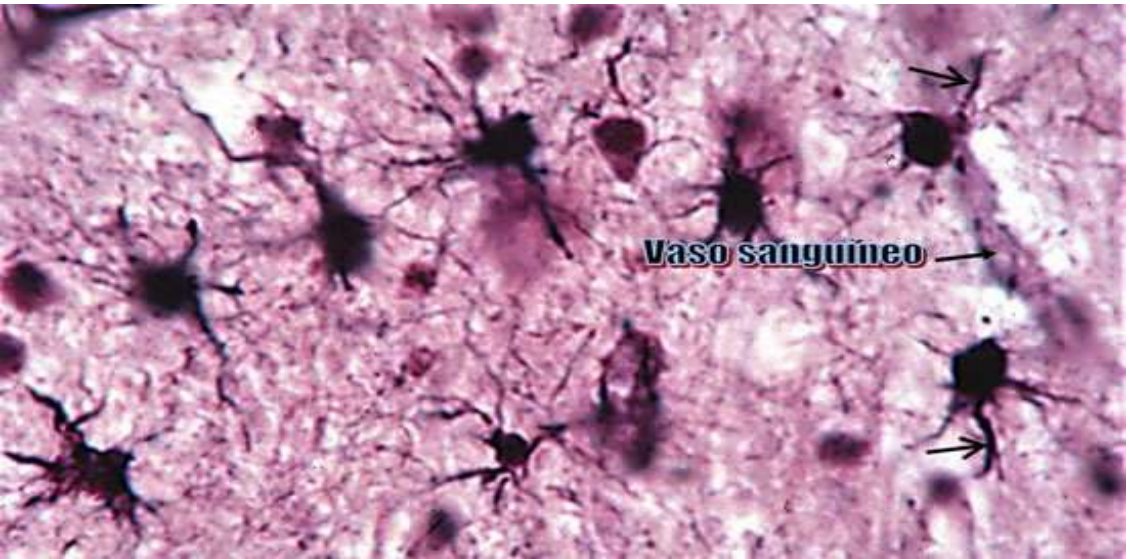


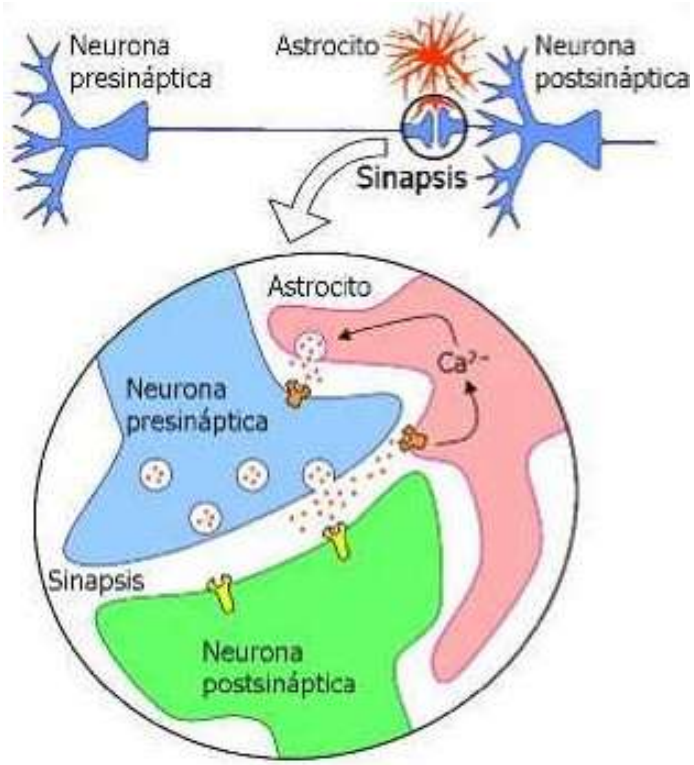


Neuronas

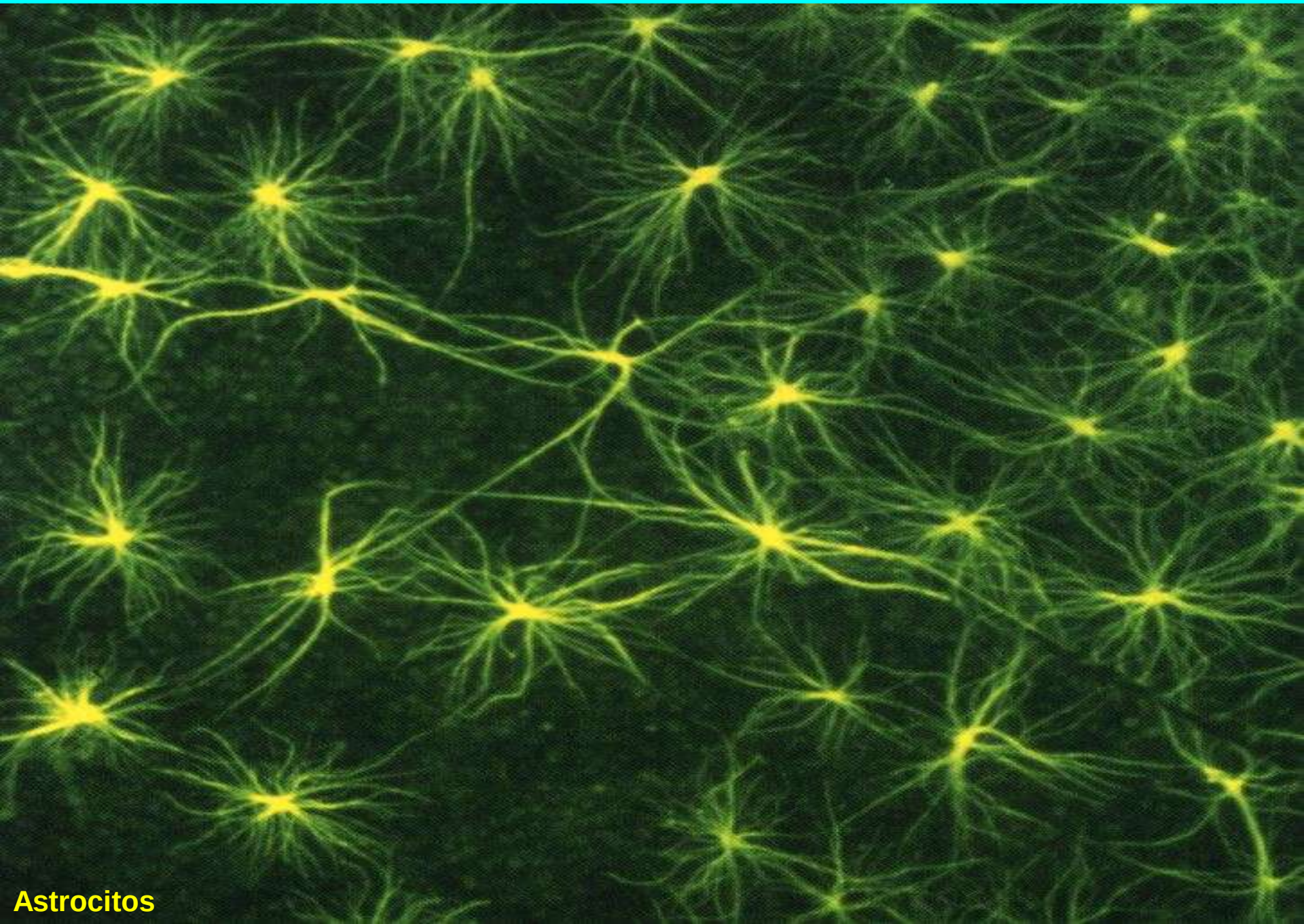
Astrocitos

Comunican las neuronas con los vasos sanguíneos. Nutren a las neuronas y las sostienen.



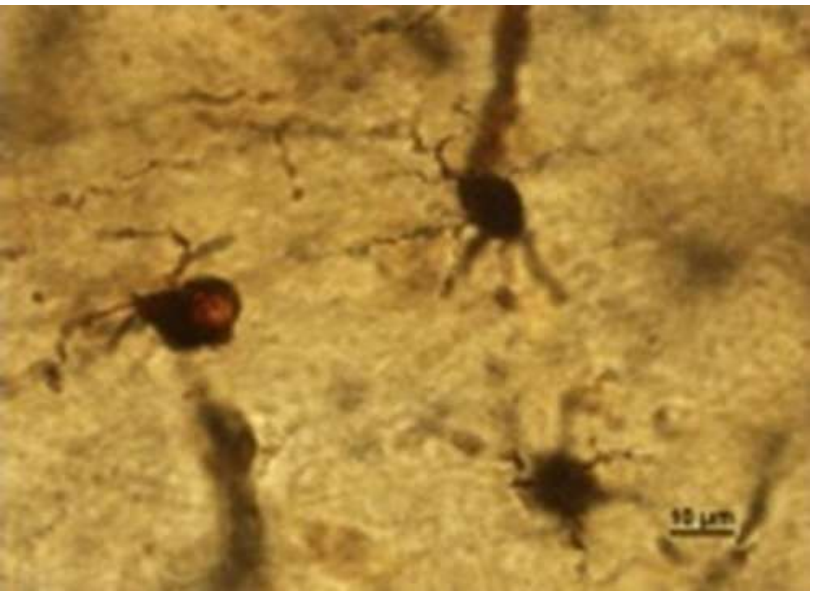


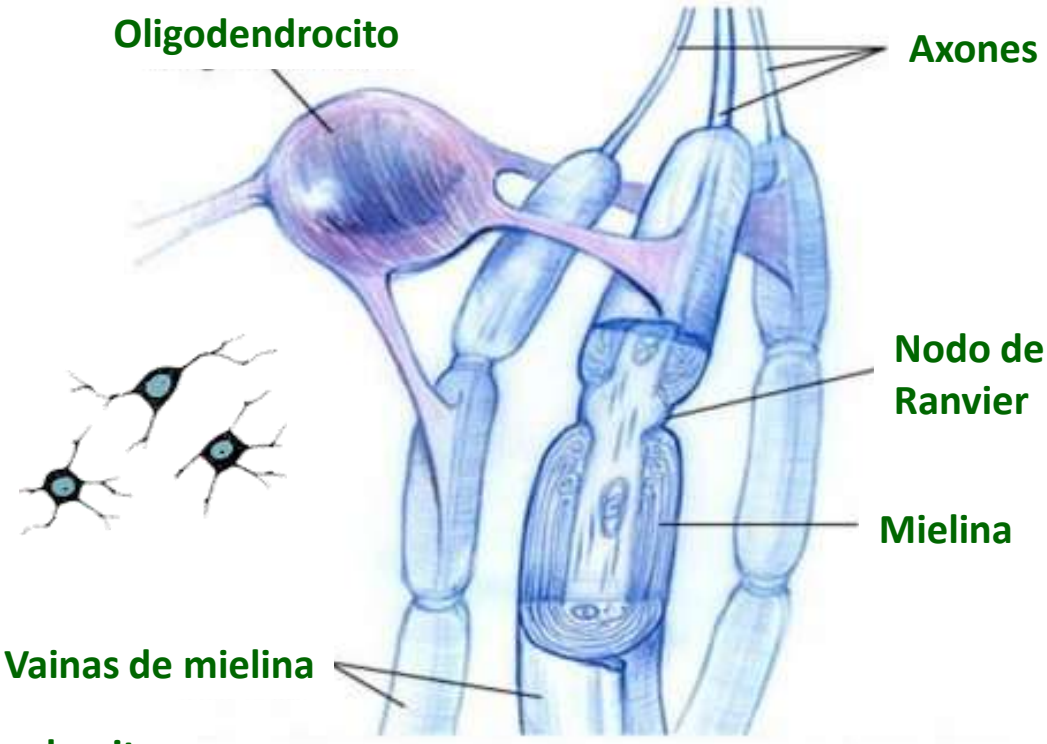
ASTROCITOS

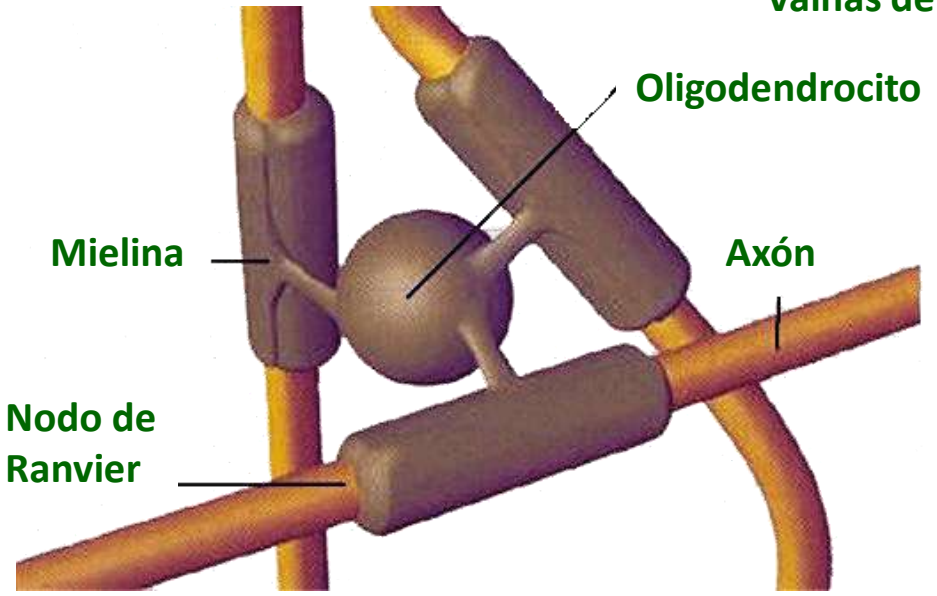


Astrocitos

OLIGODENDROCITOS



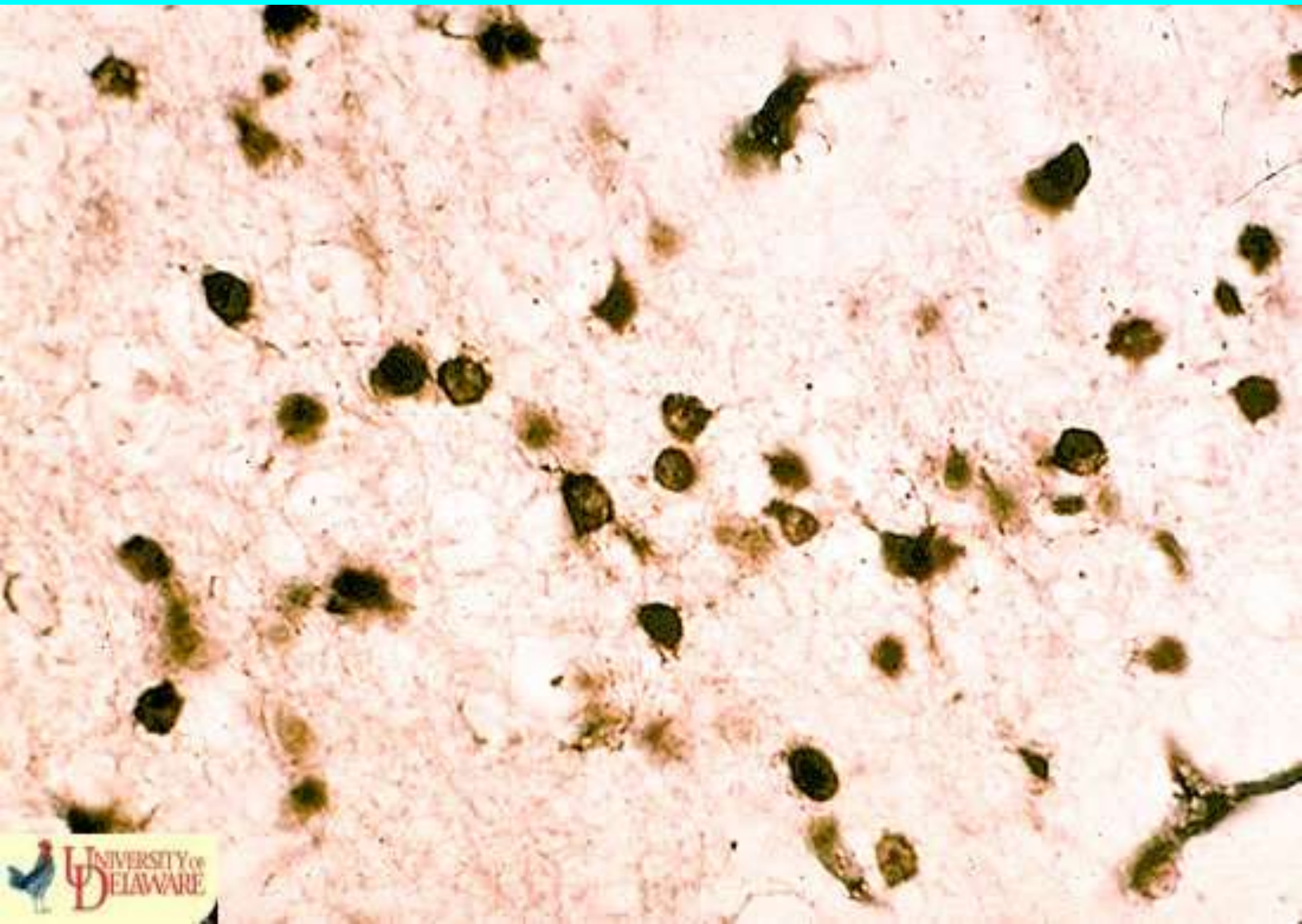




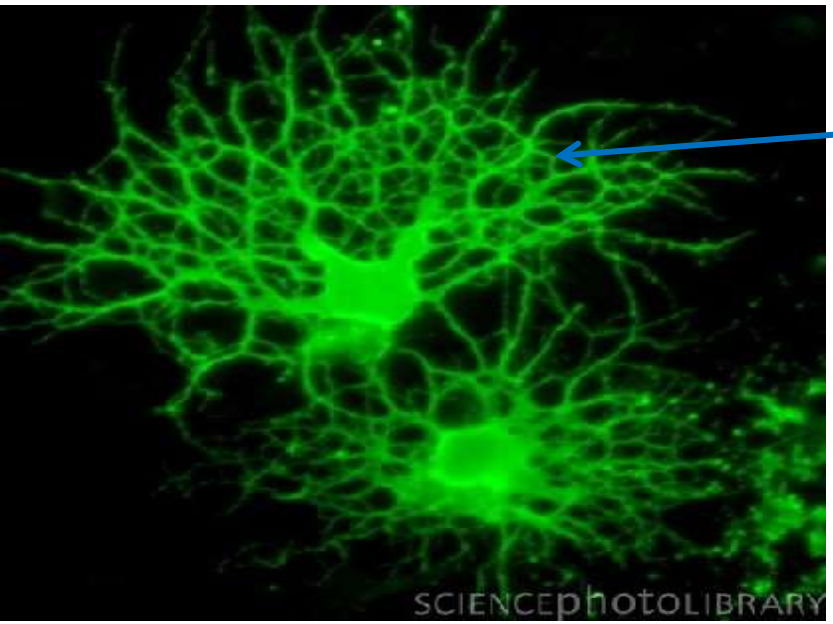
Recubren de *mielina* los axones de las neuronas del SNC.

Las células de Schwan recubren los axones del SNP (nervios).

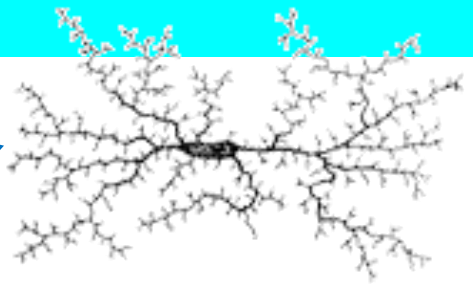
OLIGODENDROCITOS



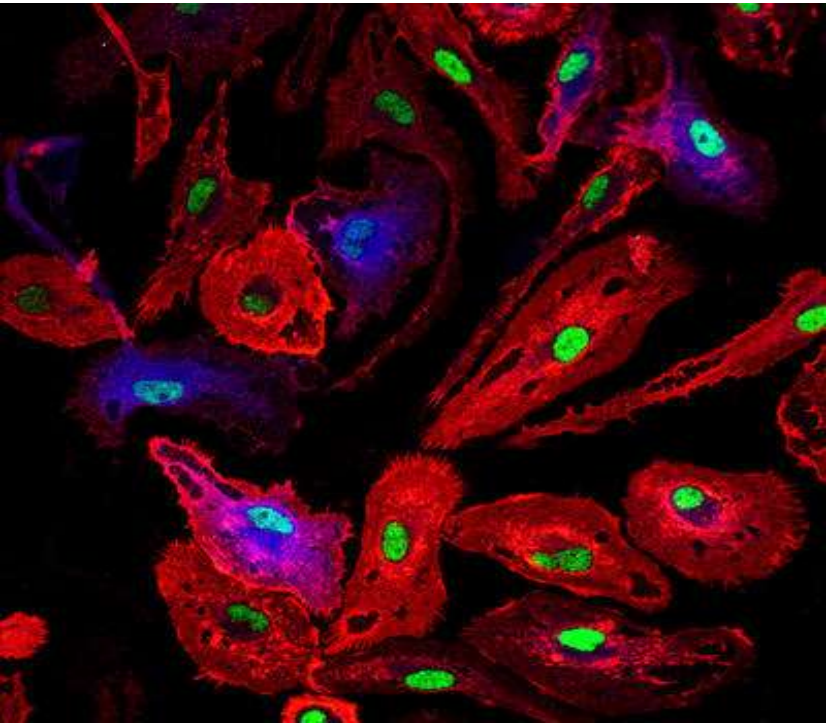
CÉLULAS DE LA MICROGLÍA



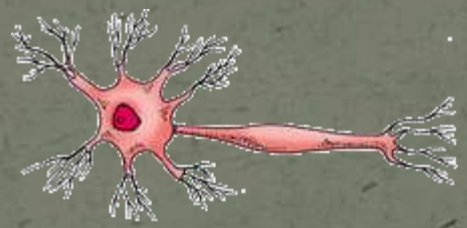
Prolongaciones espinosas



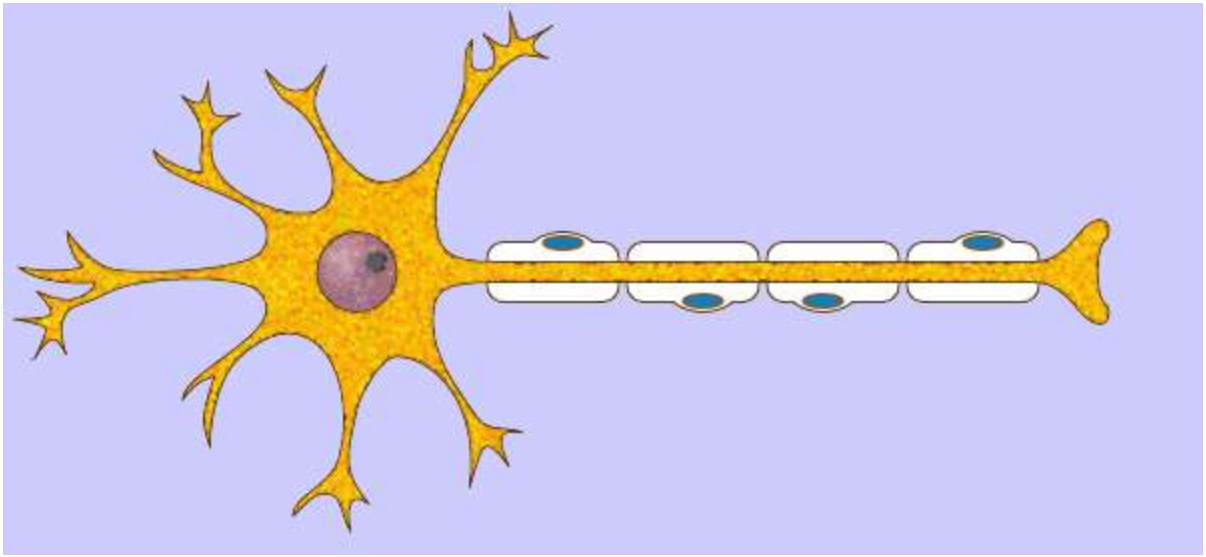
Realizan una función de limpieza y defensa, *fagocitando* desechos celulares y microorganismos (SNP).

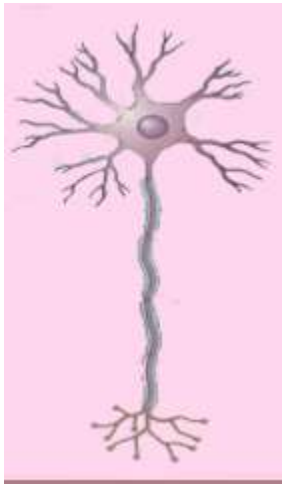


PROPAGACIÓN DEL IMPULSO NERVIOSO



SENTIDO DE PROPAGACIÓN DEL IMPULSO NERVIOSO



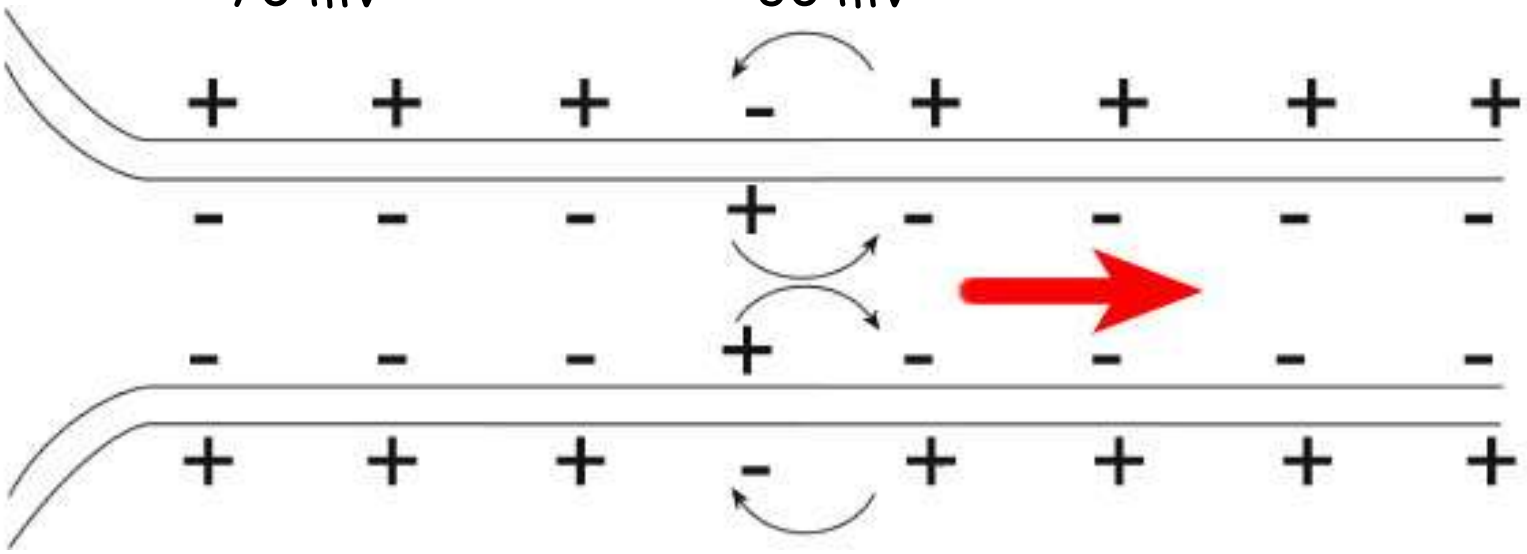


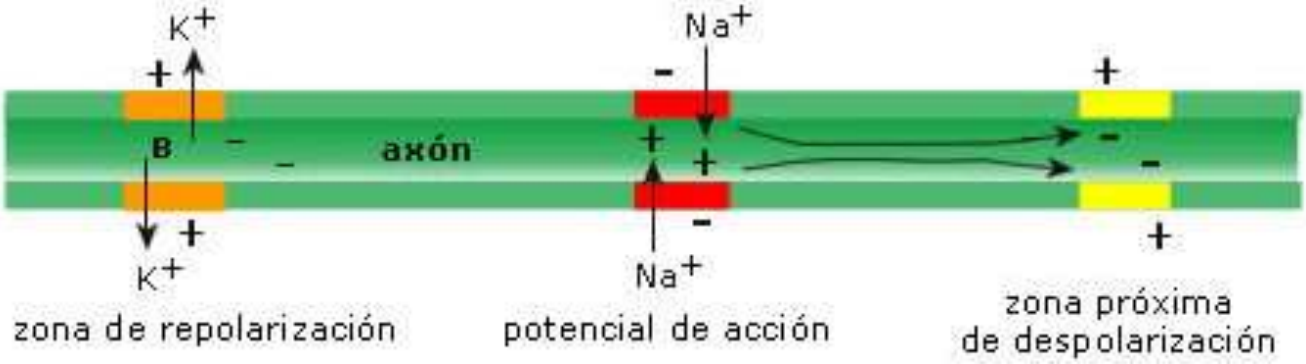
Sigue la Ley del todo o nada:
el estímulo debe llegar con un umbral de excitación.

PROPAGACIÓN DEL IMPULSO NERVIOSO

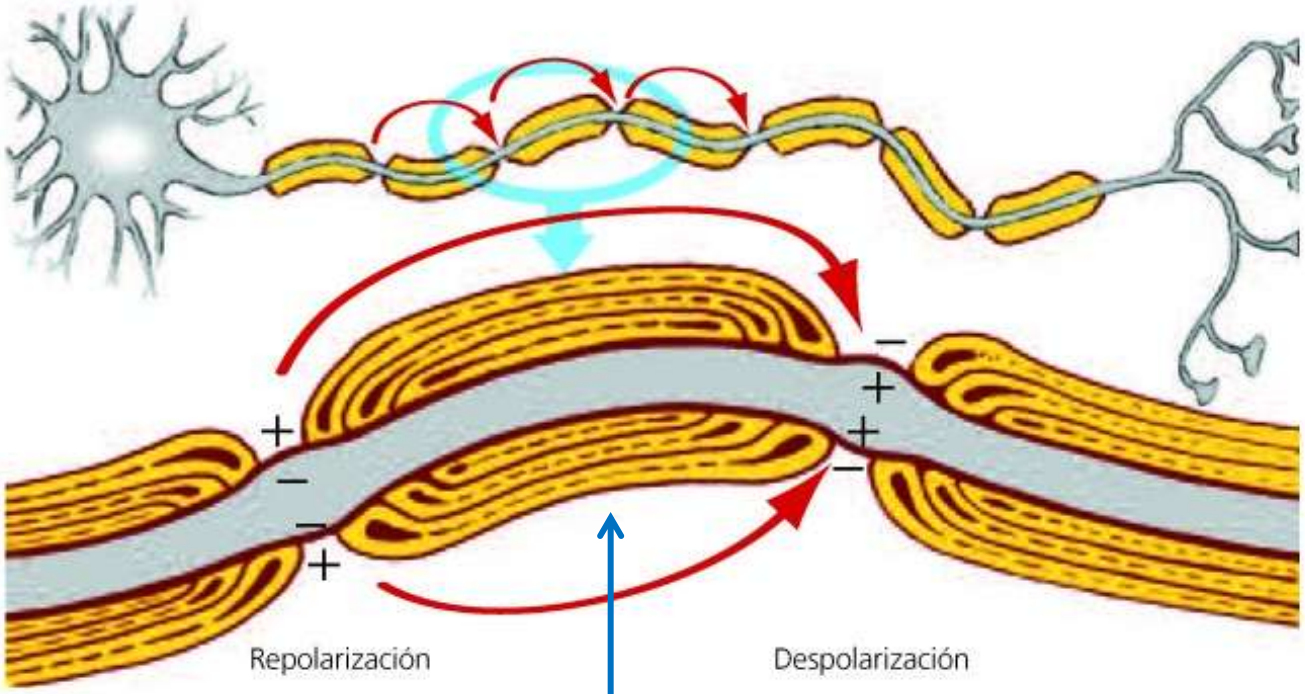
Potencial de reposo -70 mV

Potencial de acción +30 mV





PROPAGACIÓN DEL IMPULSO NERVIOSO



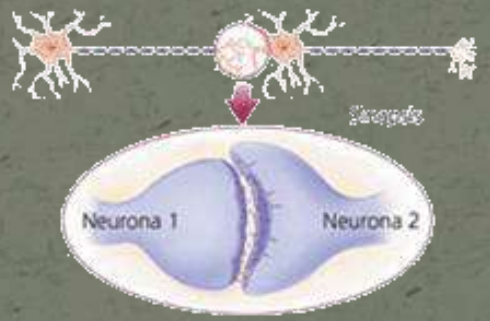
Células de Schwan

PROPAGACIÓN DEL IMPULSO NERVIOSO

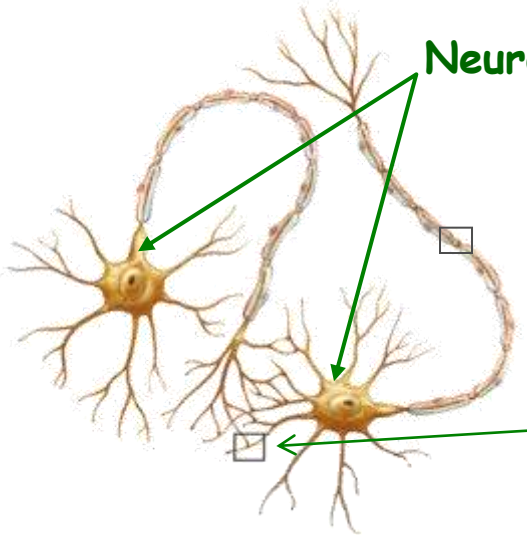
Con vaina de mielina

Sin vaina de mielina

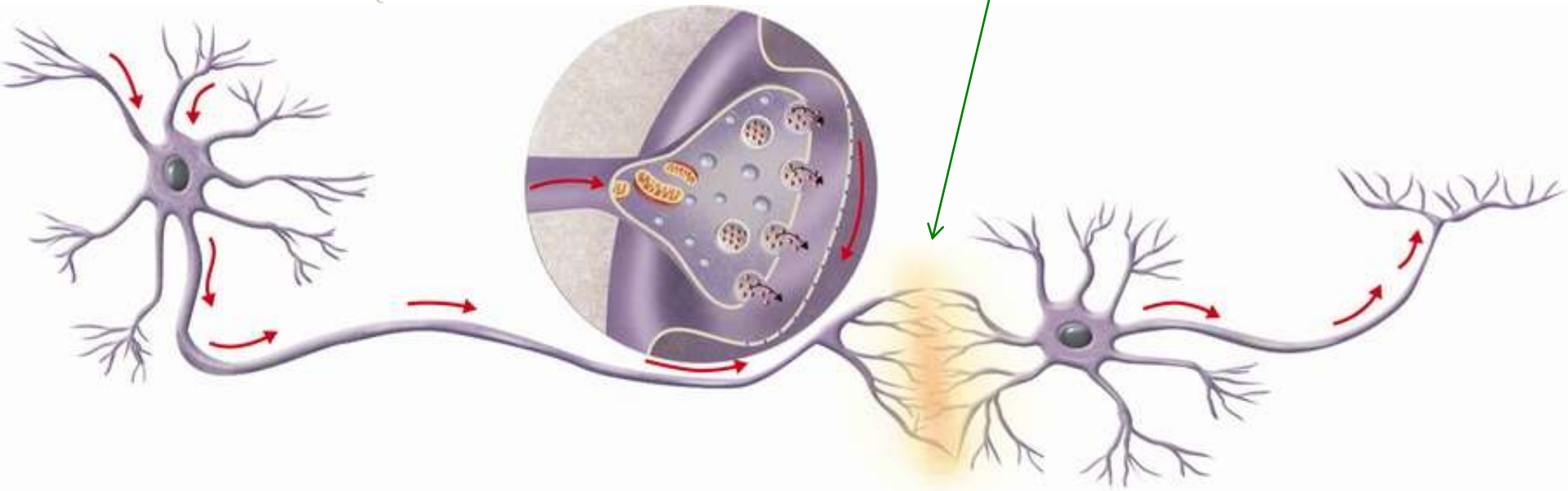
SINAPSIS



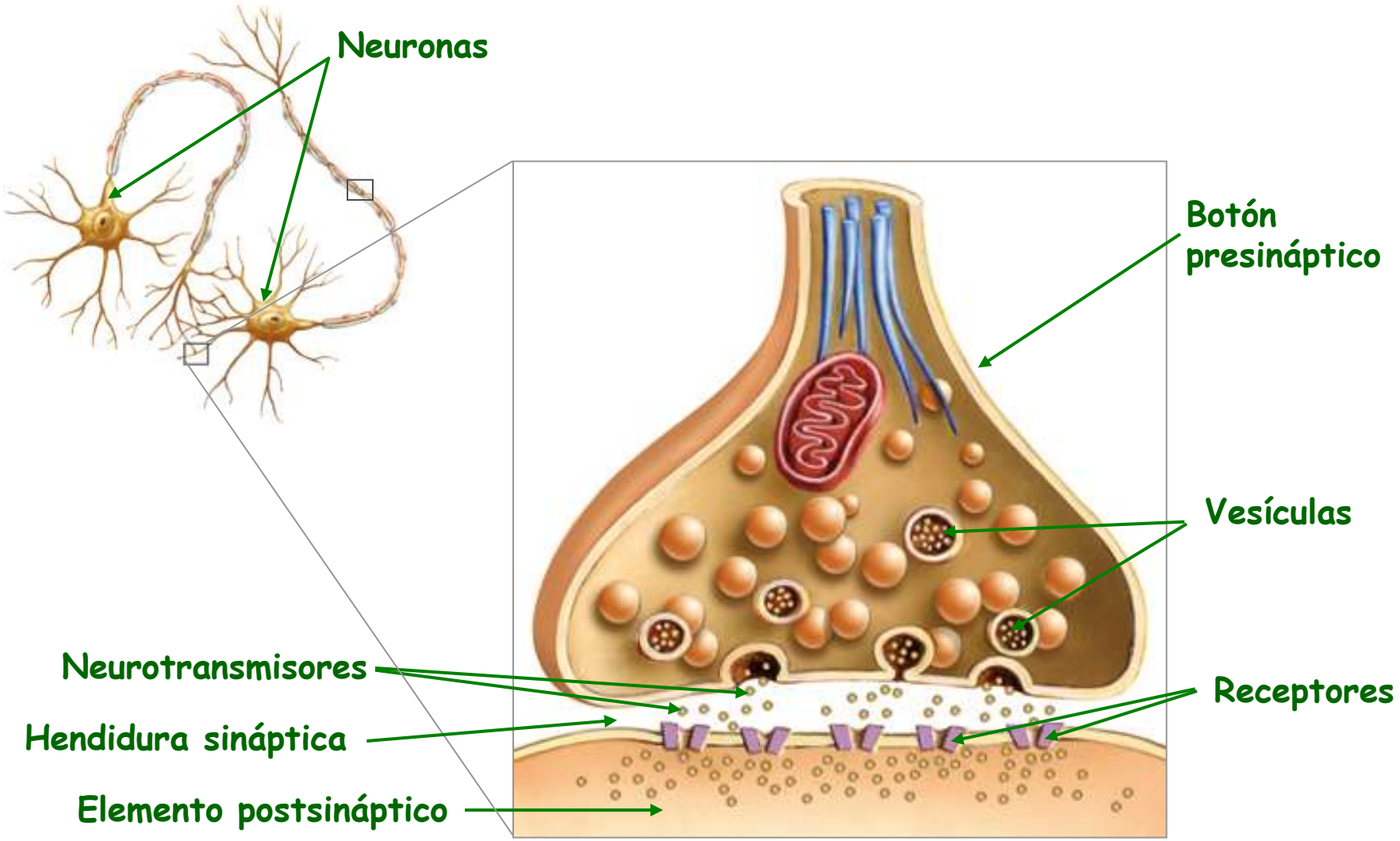
TRANSMISIÓN DE NEURONA A NEURONA → SINAPSIS



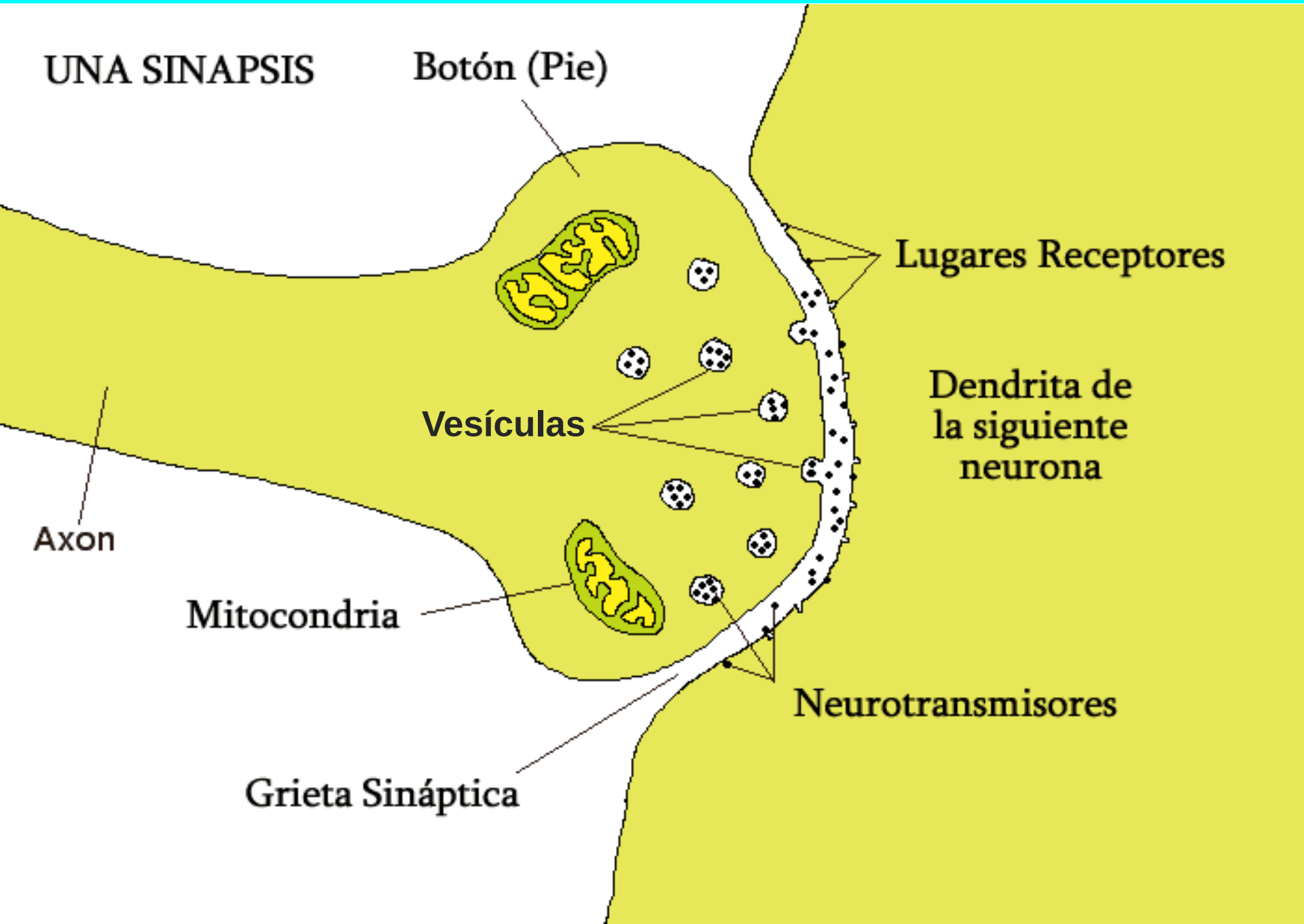
Sinapsis



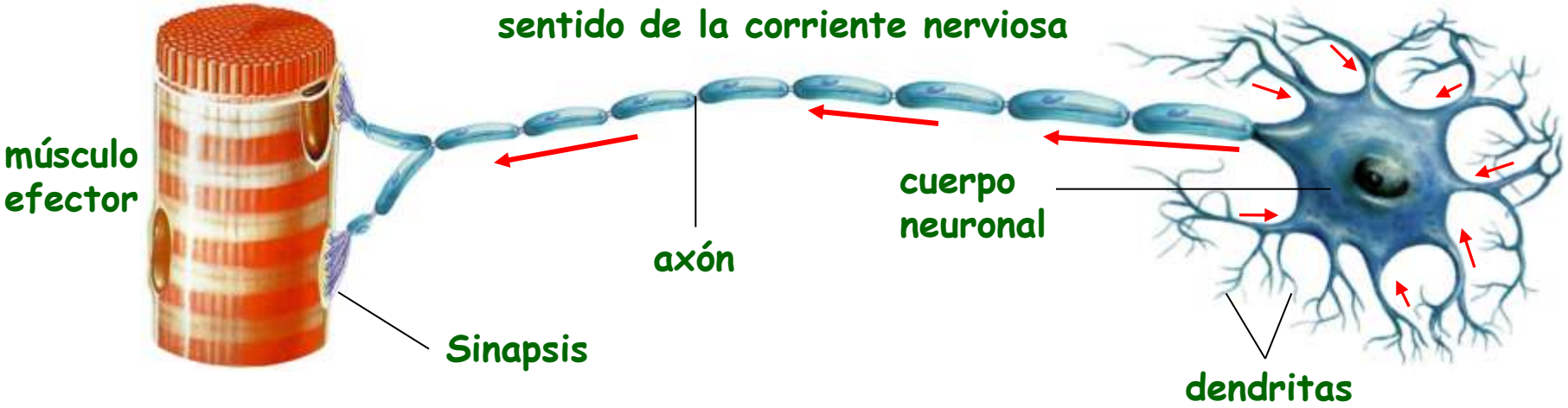
LA SINAPSIS


Neuronas
Botón presináptico
Vesículas
Neurotransmisores
Hendidura sináptica
Elemento postsináptico
Receptores

DETALLE DE LA SINAPSIS



SINAPSIS DE NEURONA A MÚSCULO




FIN