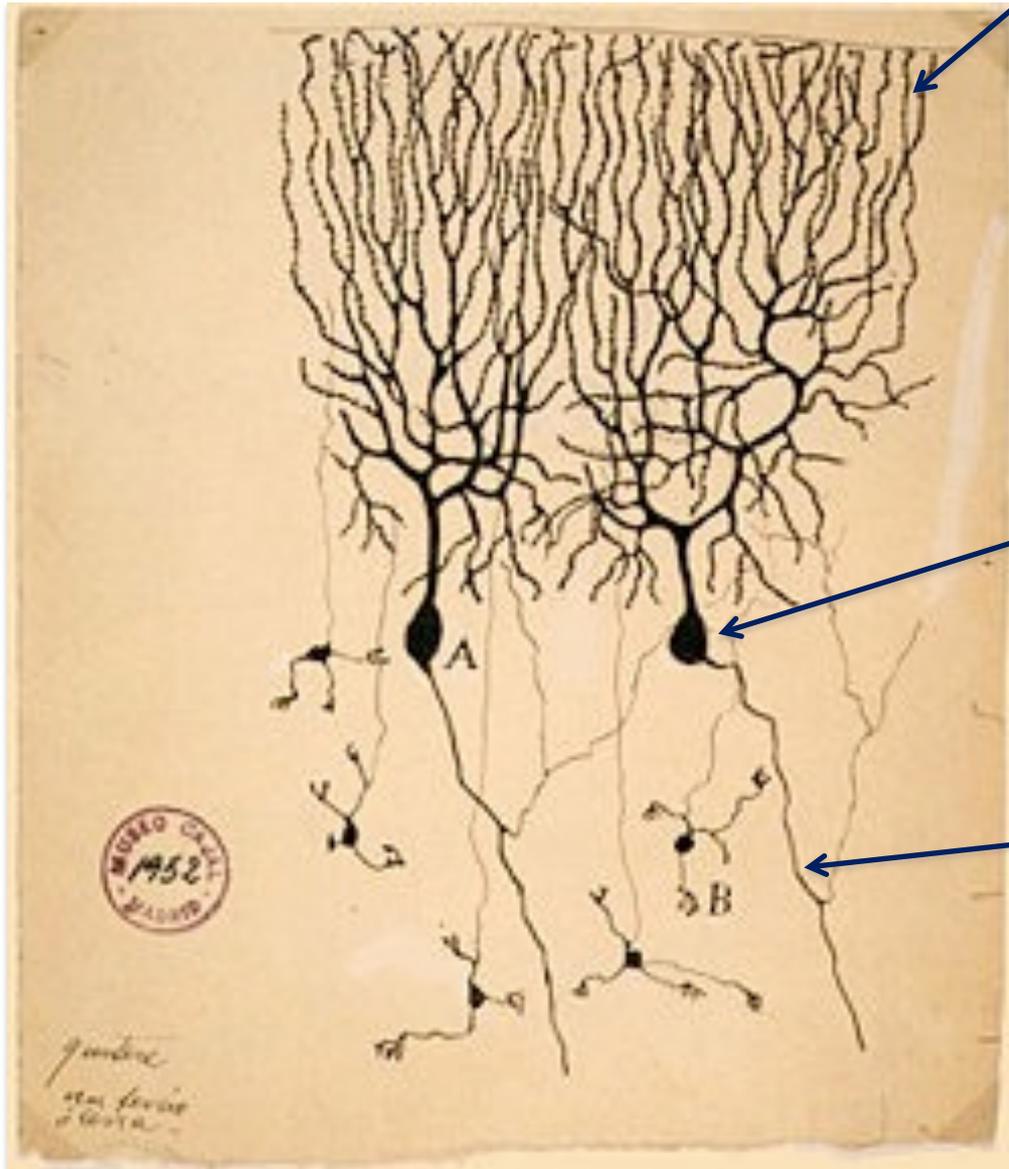


Il neurone

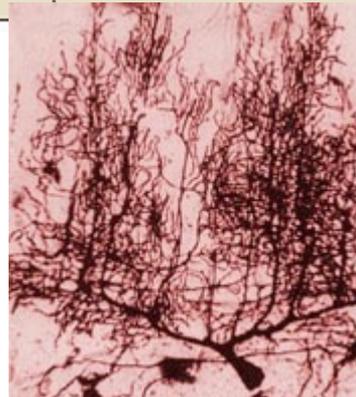
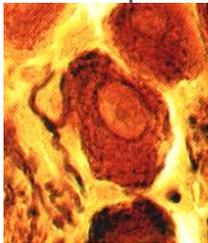
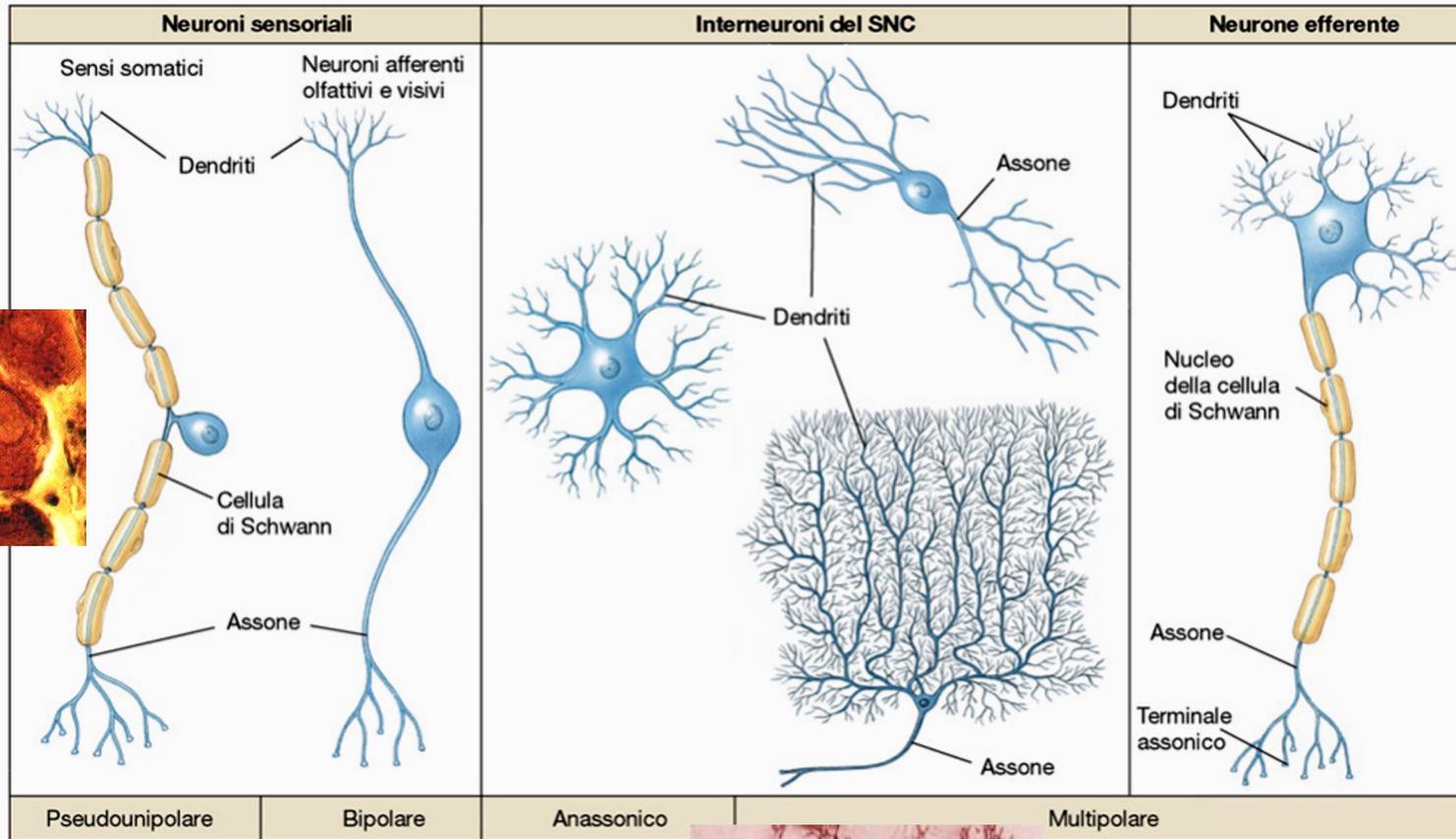
Dendriti (dal greco dèndron=albero)

*Soma
(corpo cellulare)*

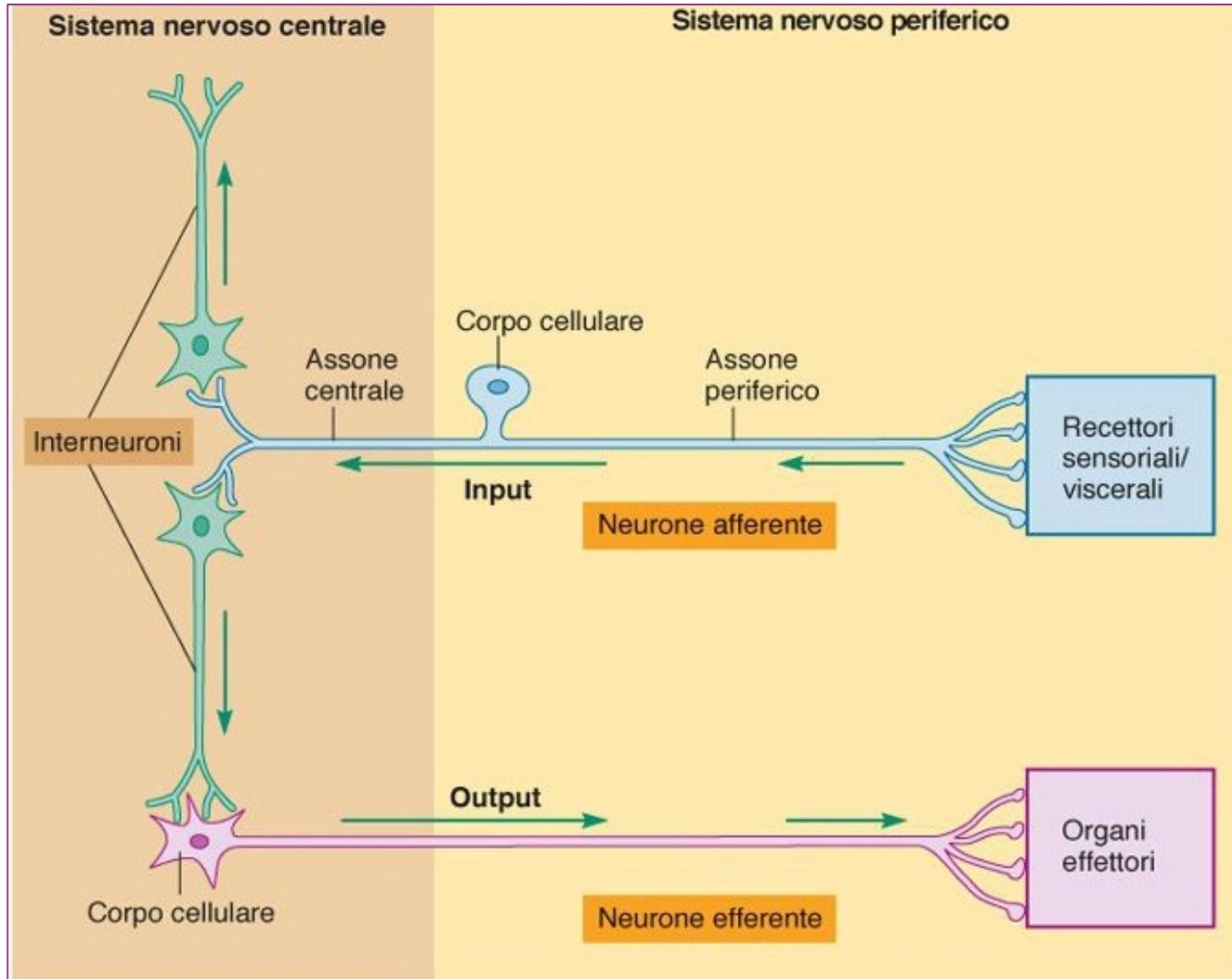
Assone

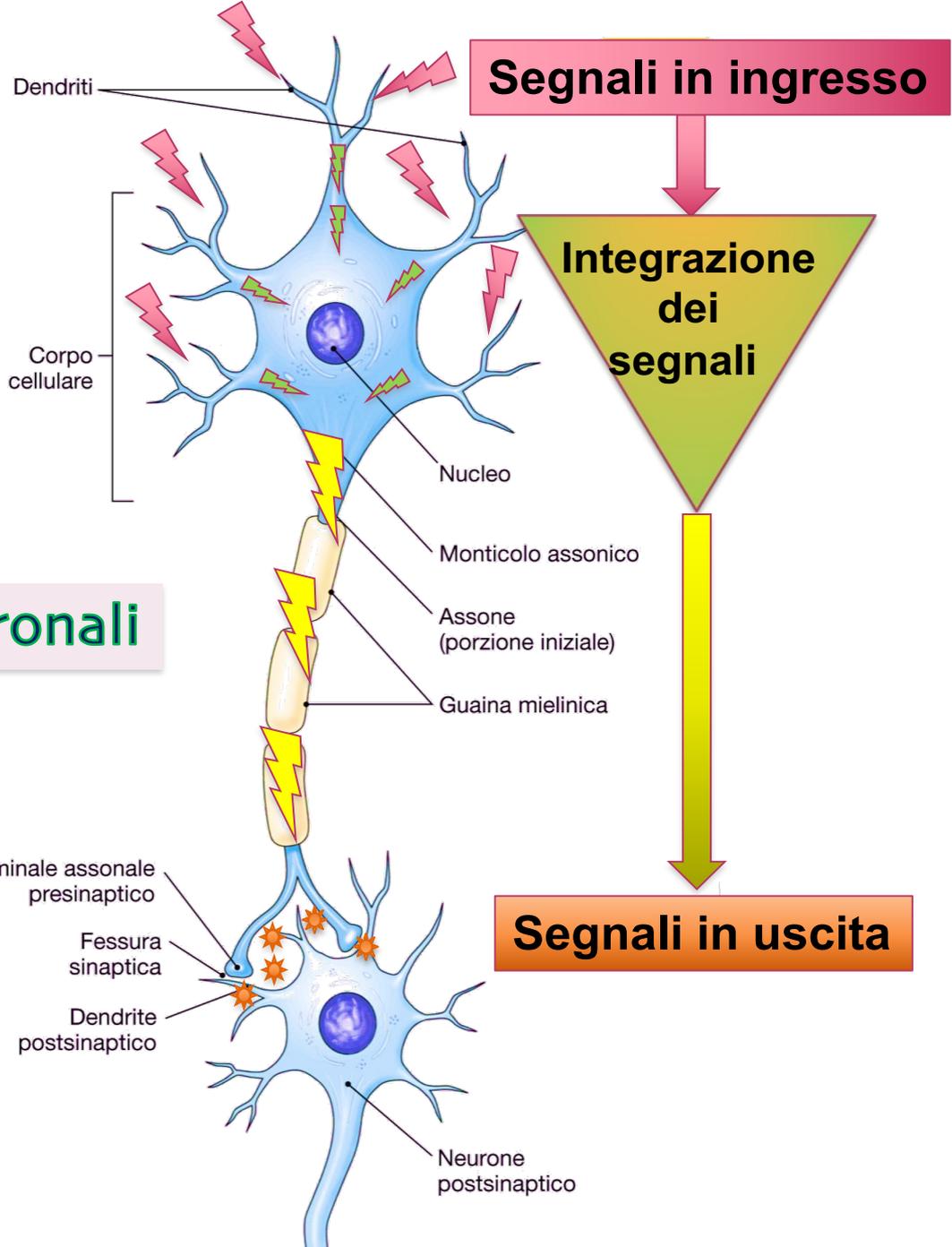


Classificazione anatomica e funzionale dei neuroni



Circuiti neuronali





Domini funzionali neuronali

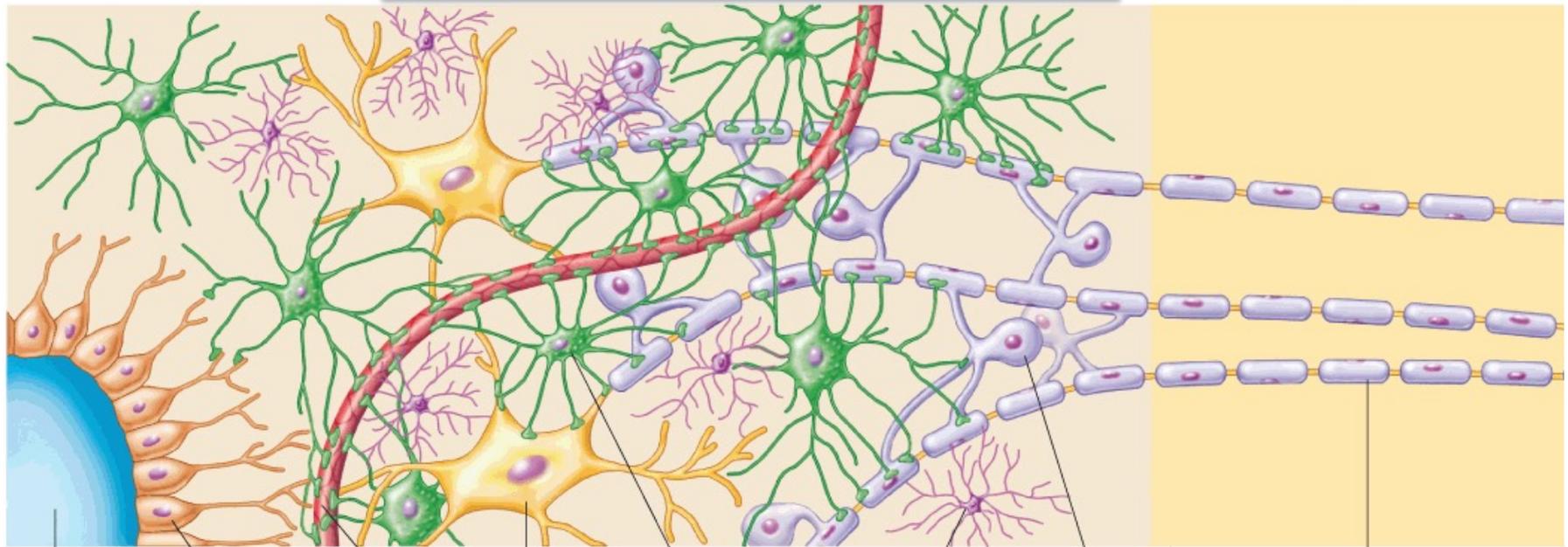
Labels for the postsynaptic neuron and synapse:

- Sinapsi
- Terminale assonale presinaptico
- Fessura sinaptica
- Dendrite postsinaptico
- Neurone postsinaptico

Le cellule gliali e le loro funzioni

Sistema nervoso centrale

Sistema nervoso periferico



Ventricolo

Cellula ependimale

Capillare

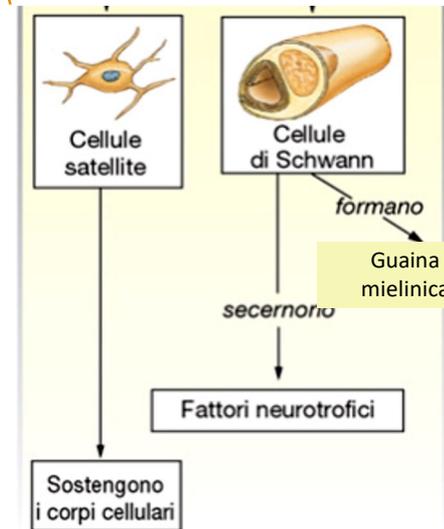
Neurone

Astrocita

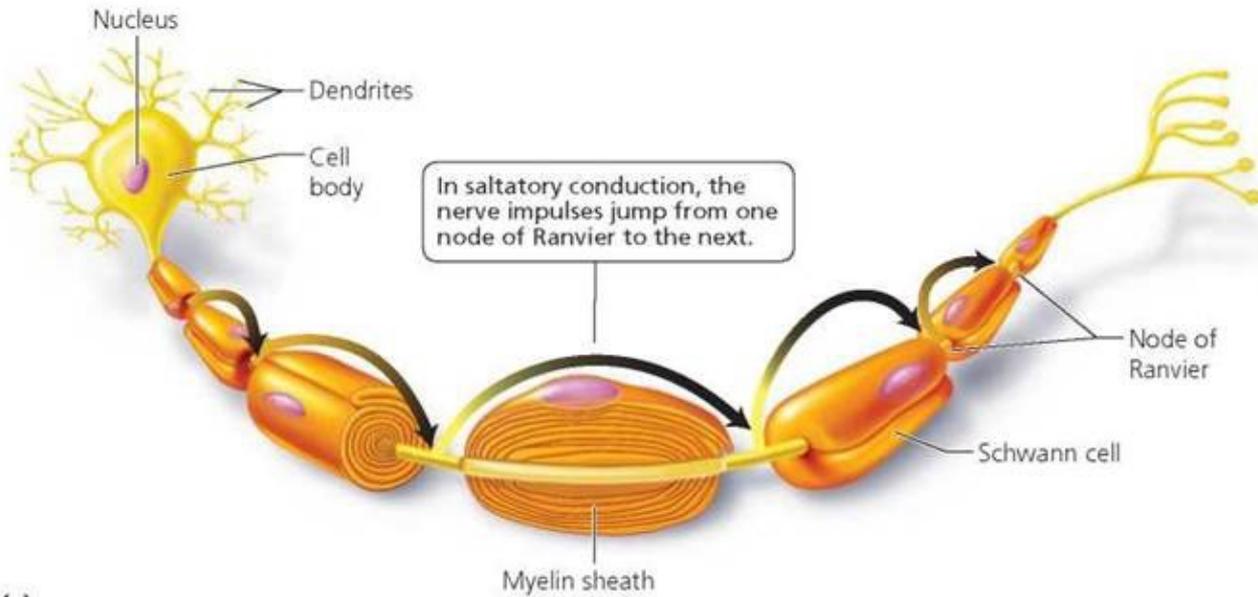
Cellula della microglia

Oligodendrocita

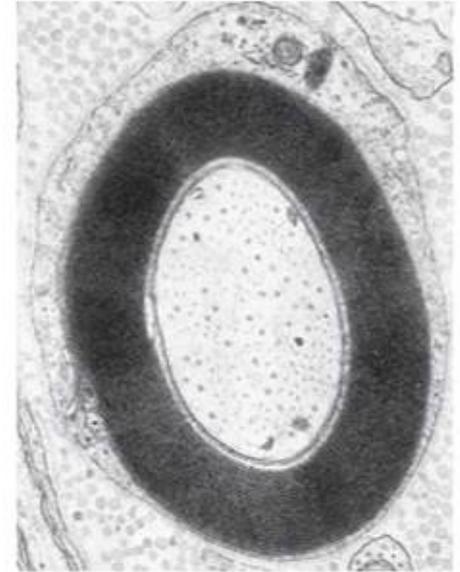
Cellula di Schwann



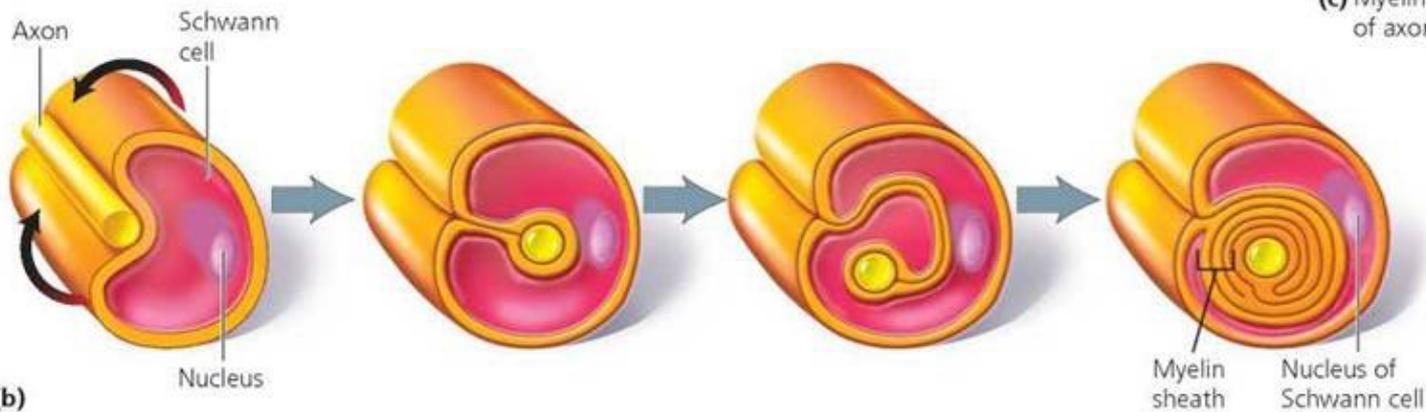
Cellule di Schwann e formazione della guaina mielinica



(a)

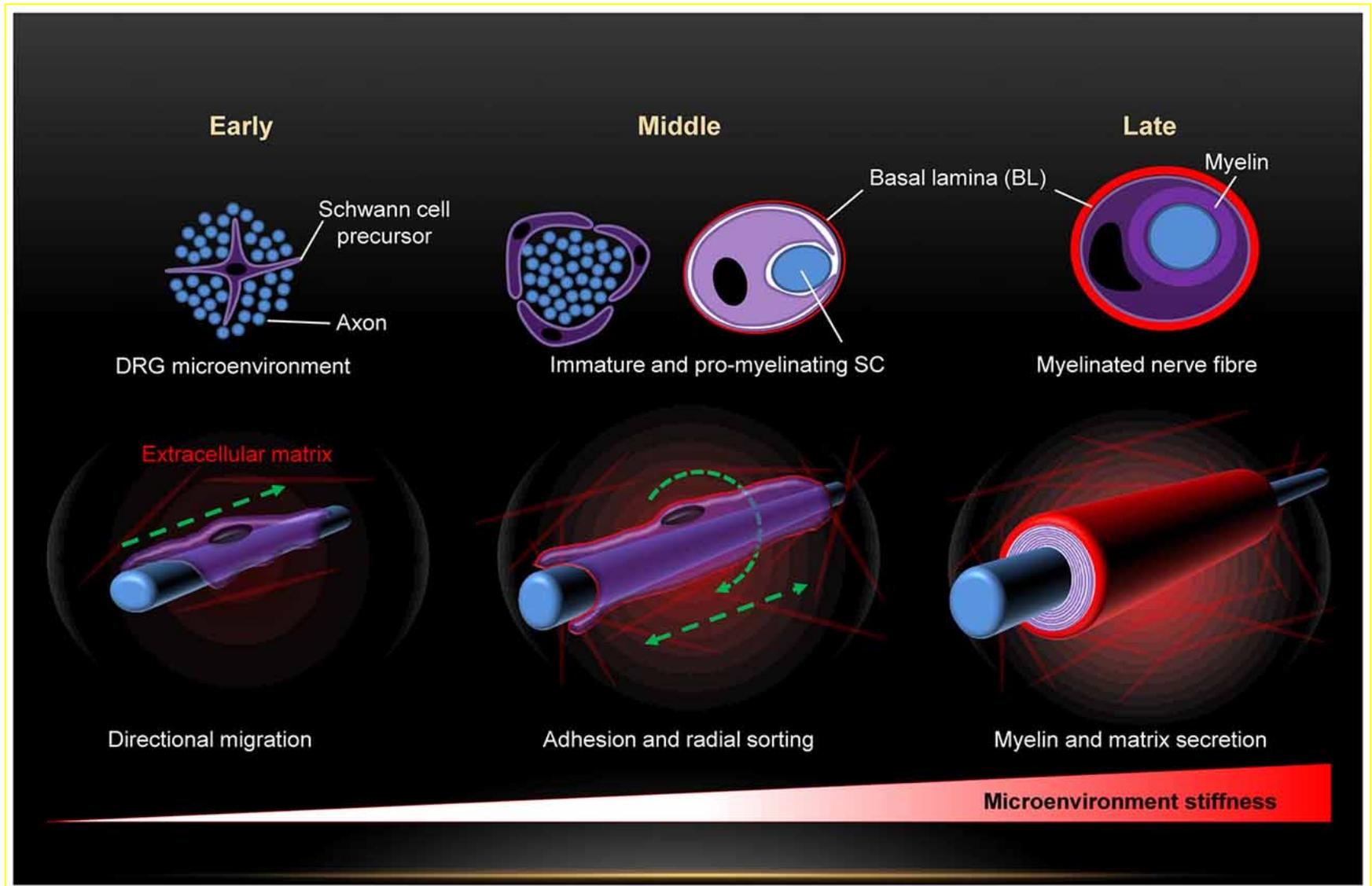


(c) Myelin sheath surrounding cut end of axon



(b)

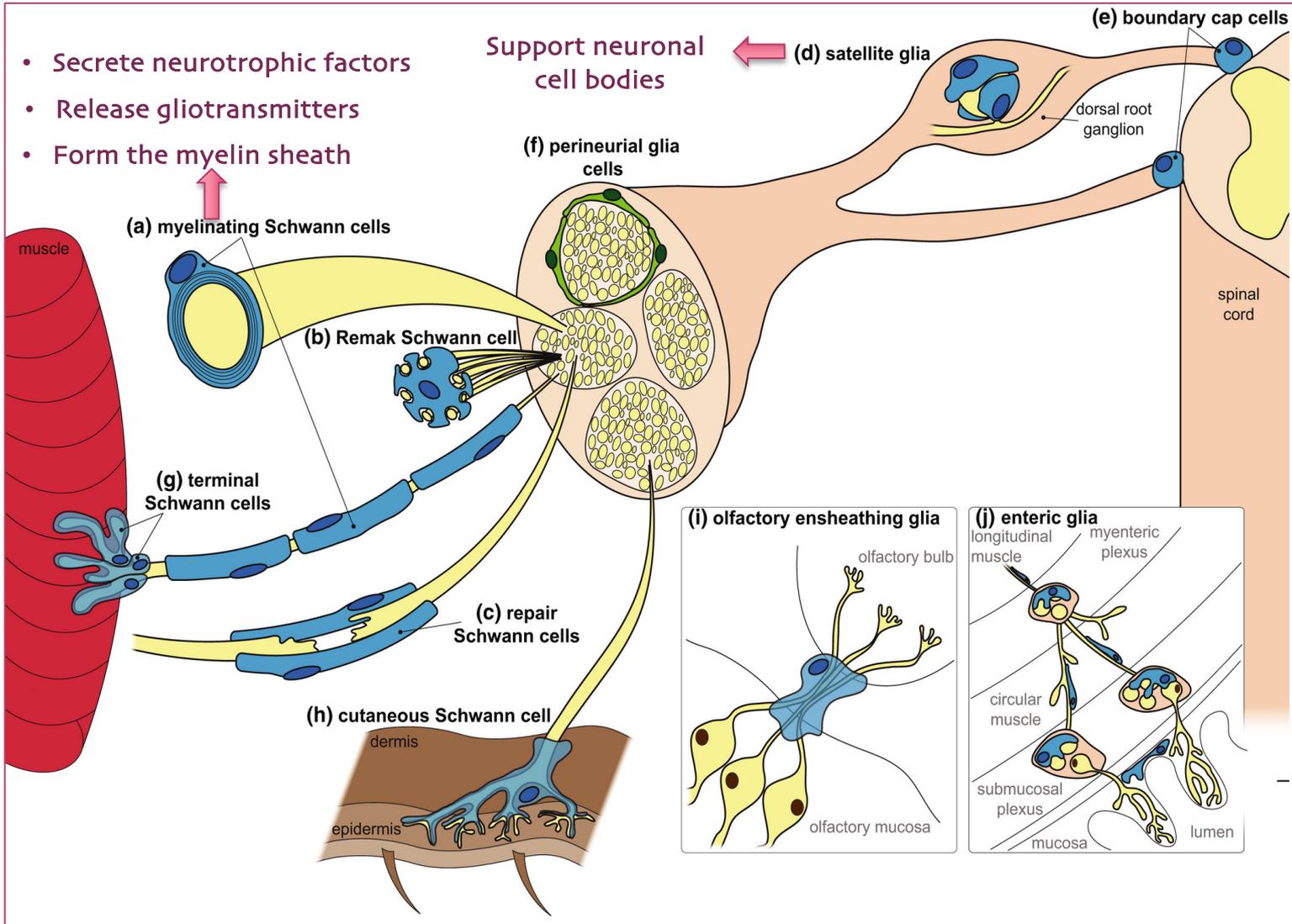
Maturazione cellule di Schwann in un fenotipo mielinizzante



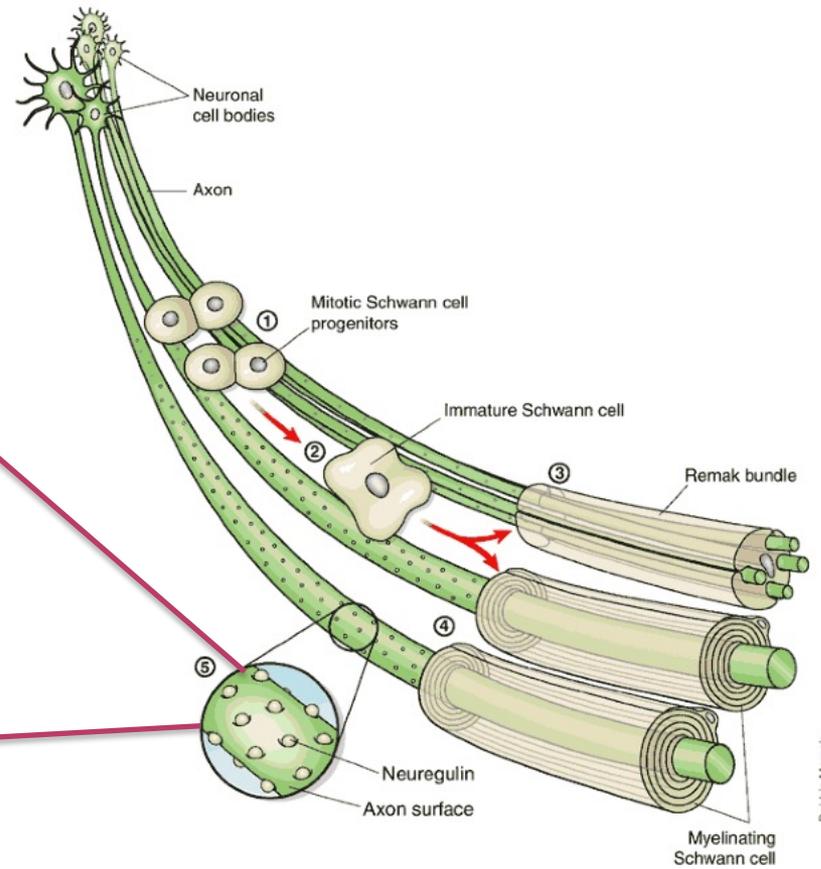
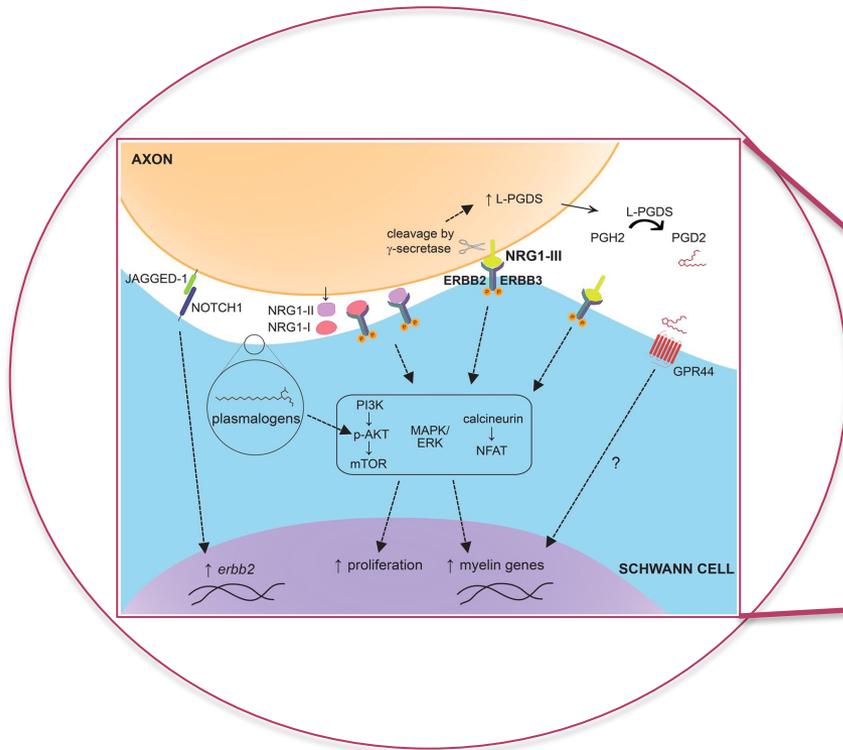
La neuroglia periferica

Cellule funzionalmente diverse

- Secrete neurotrophic factors
- Release gliotransmitters
- Form the myelin sheath

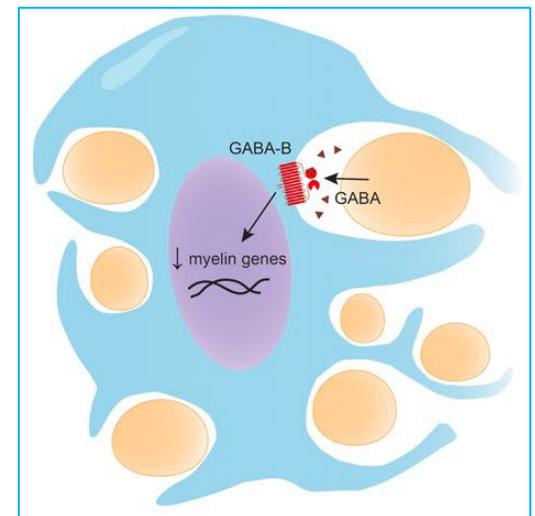
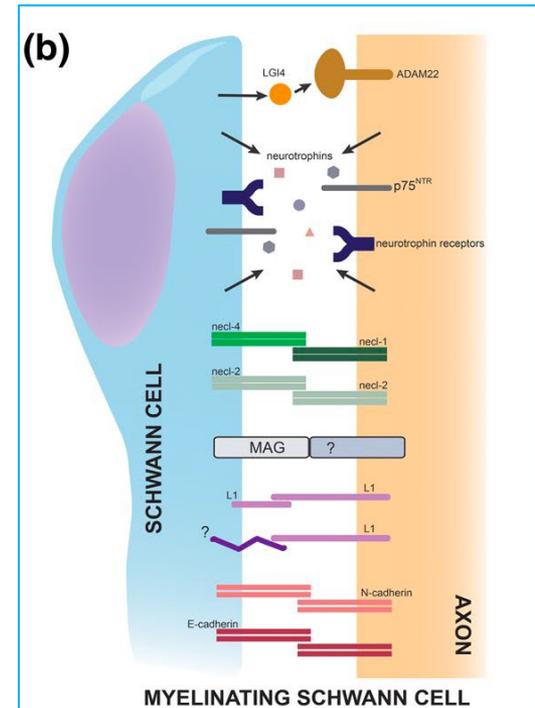
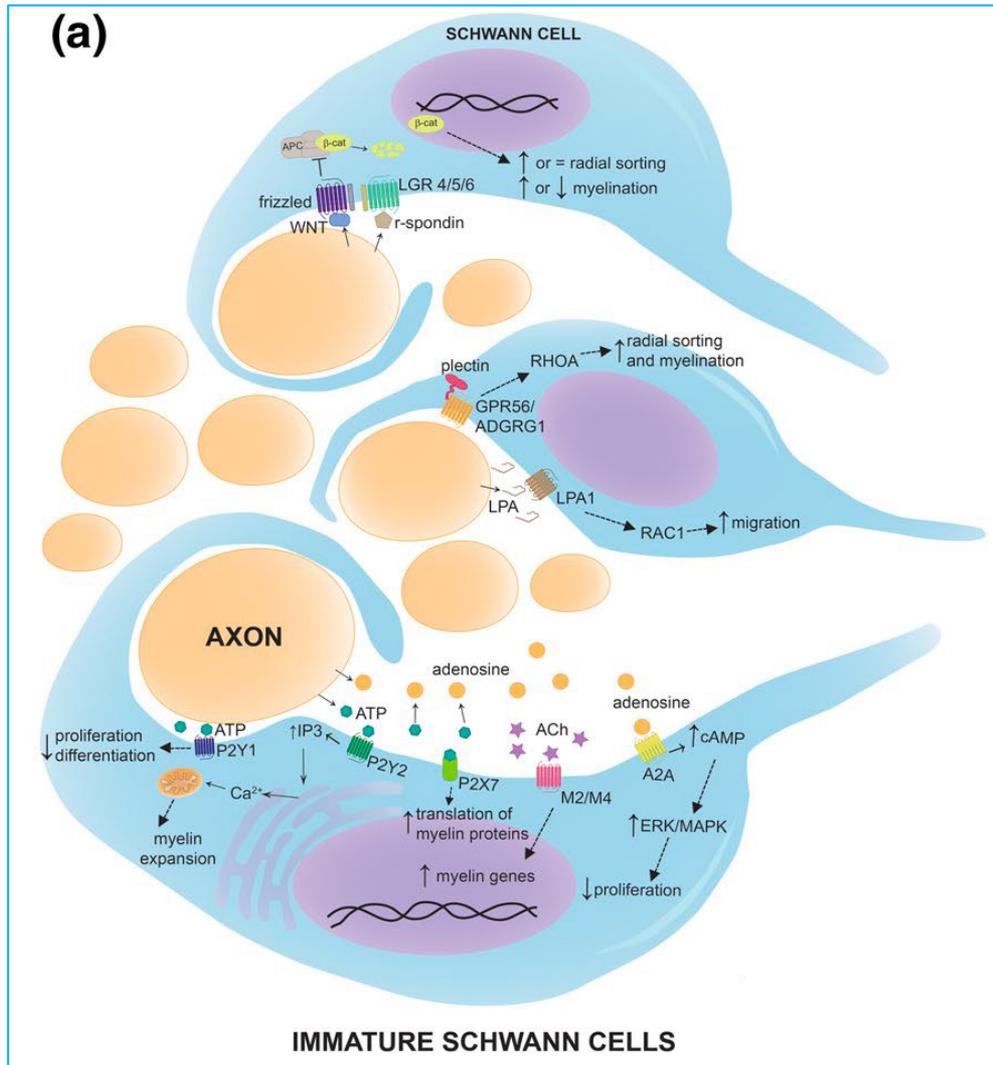


Non tutti gli assoni periferici sono mielinizzati



L'espressione di neuregulina-1 sull'assone determina se una cellula di Schwann immatura differenzierà in una cellula di Schwann mielinizzante

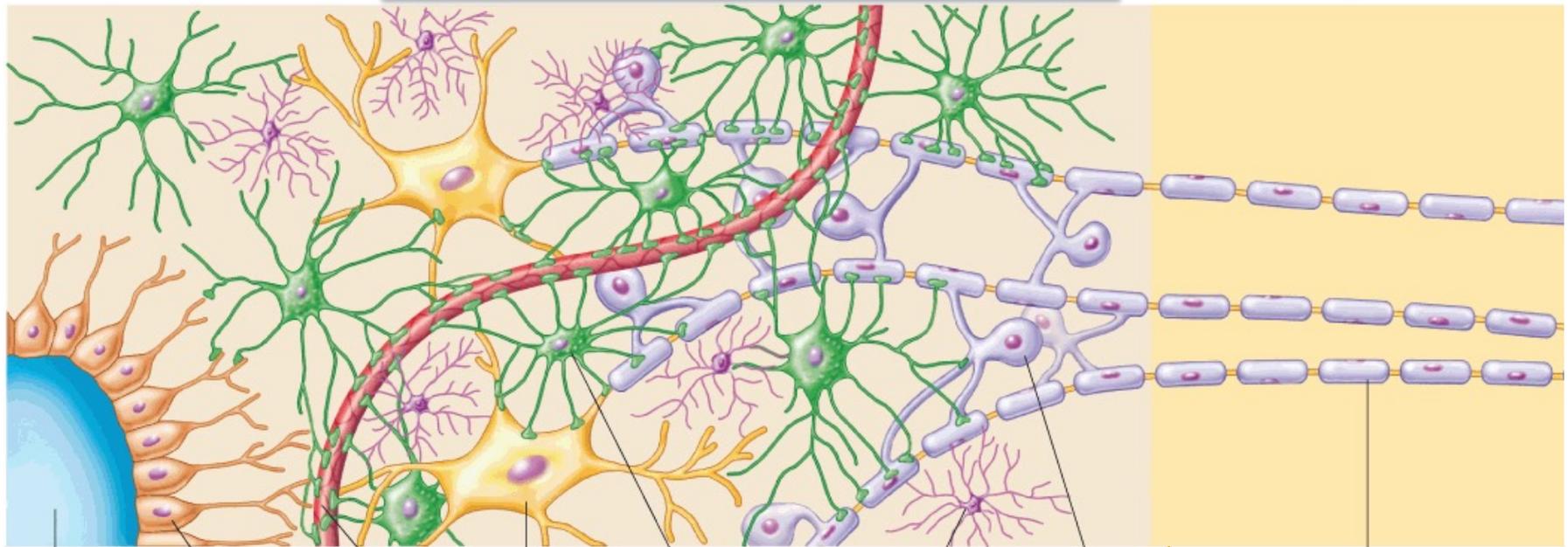
Ma la Neuregulina-1 non è la sola via di segnalazione



Le cellule gliali e le loro funzioni

Sistema nervoso centrale

Sistema nervoso periferico



Ventricolo

Cellula ependimale

Capillare

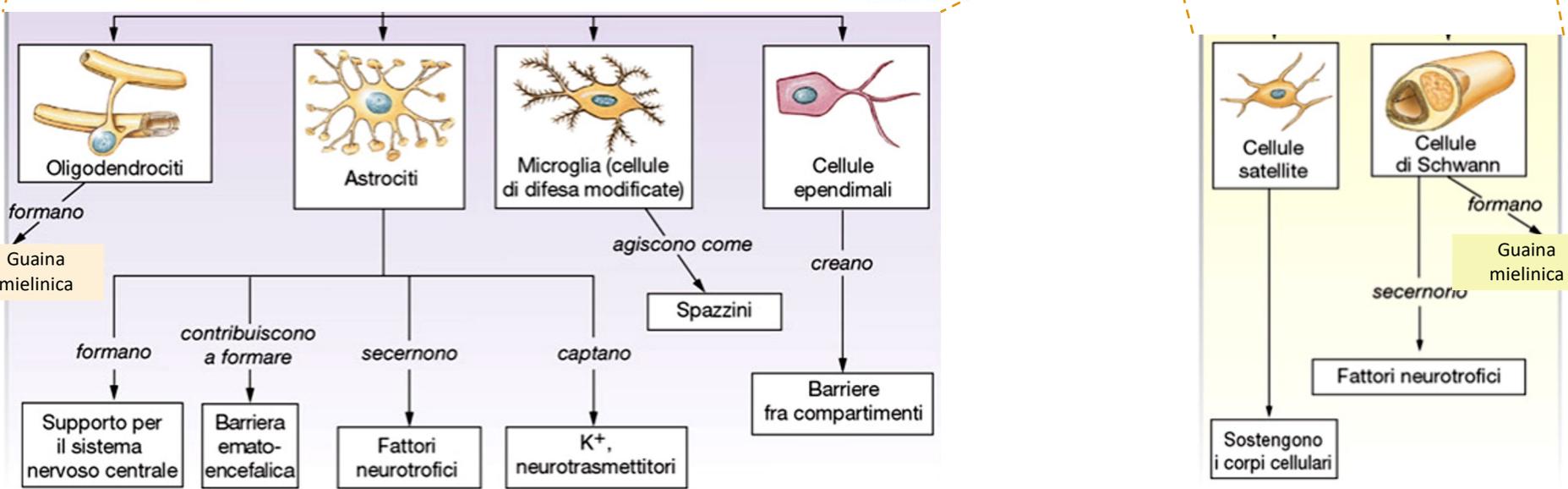
Neurone

Astrocita

Cellula della microglia

Oligodendrocita

Cellula di Schwann



La neuroglia centrale

Cellule funzionalmente diverse

Create barriers among compartments
(i.e. blood brain barrier, BBB)

Form the
myelin sheath

Release
gliotransmitters

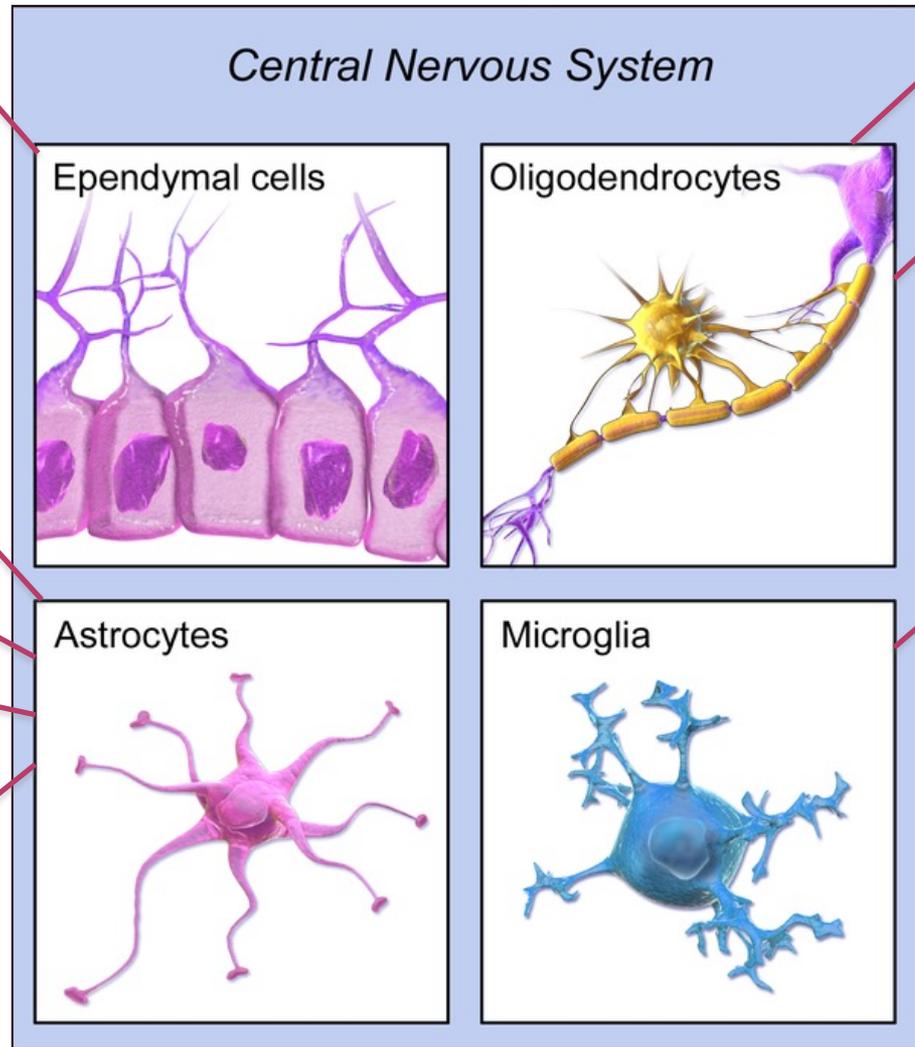
Mechanical support to
the nervous system

Contribute forming the
BBB

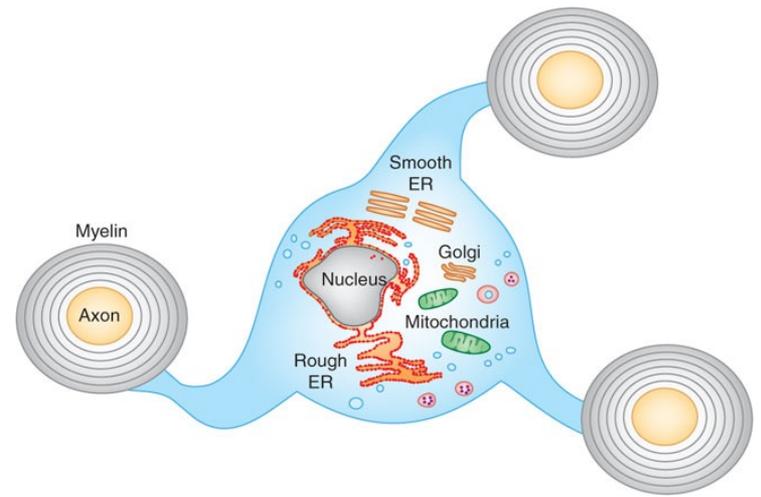
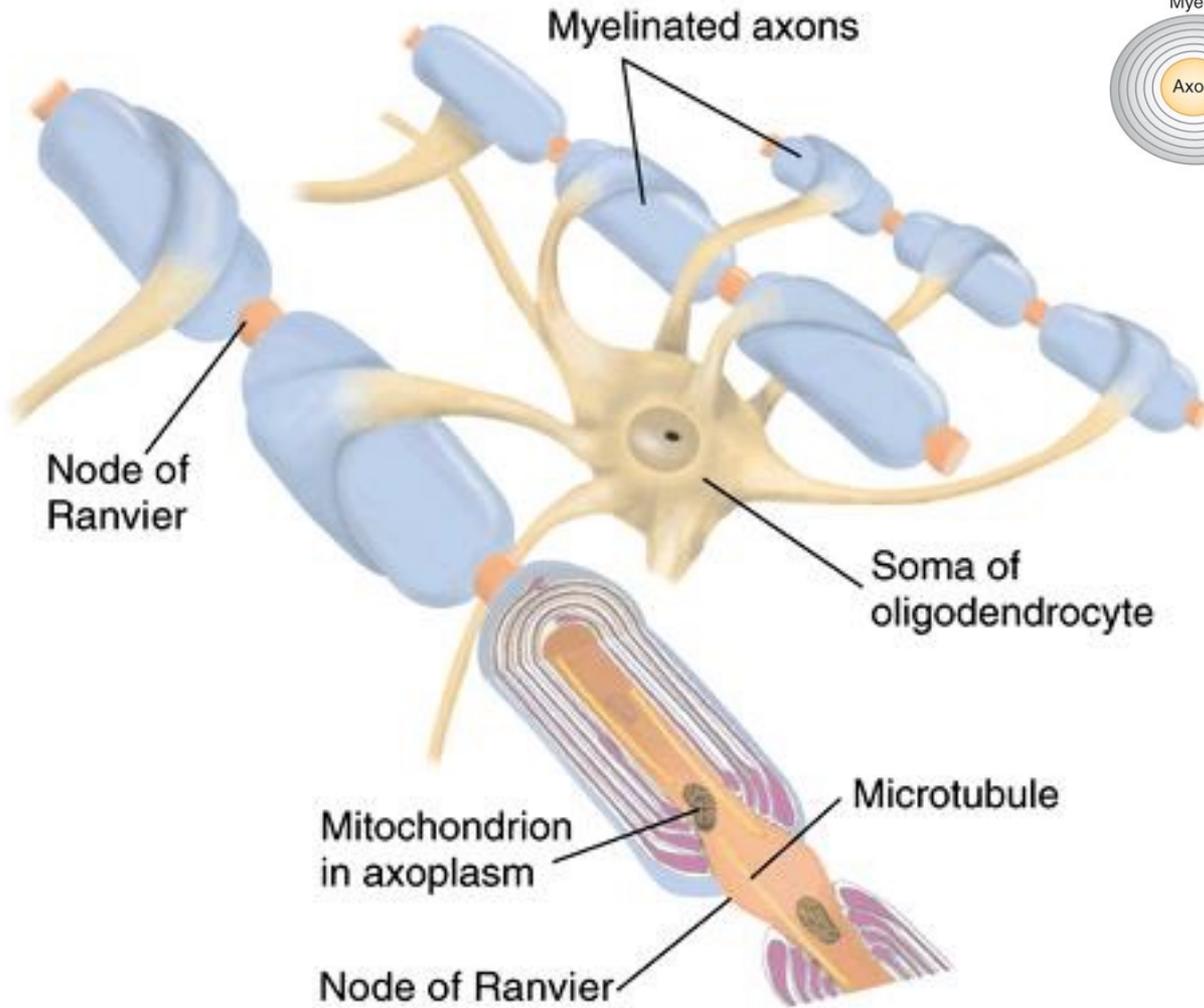
Secrete neurotrophic
factors

Recapture
neurotransmitters
and K^+ from the
extracellular space

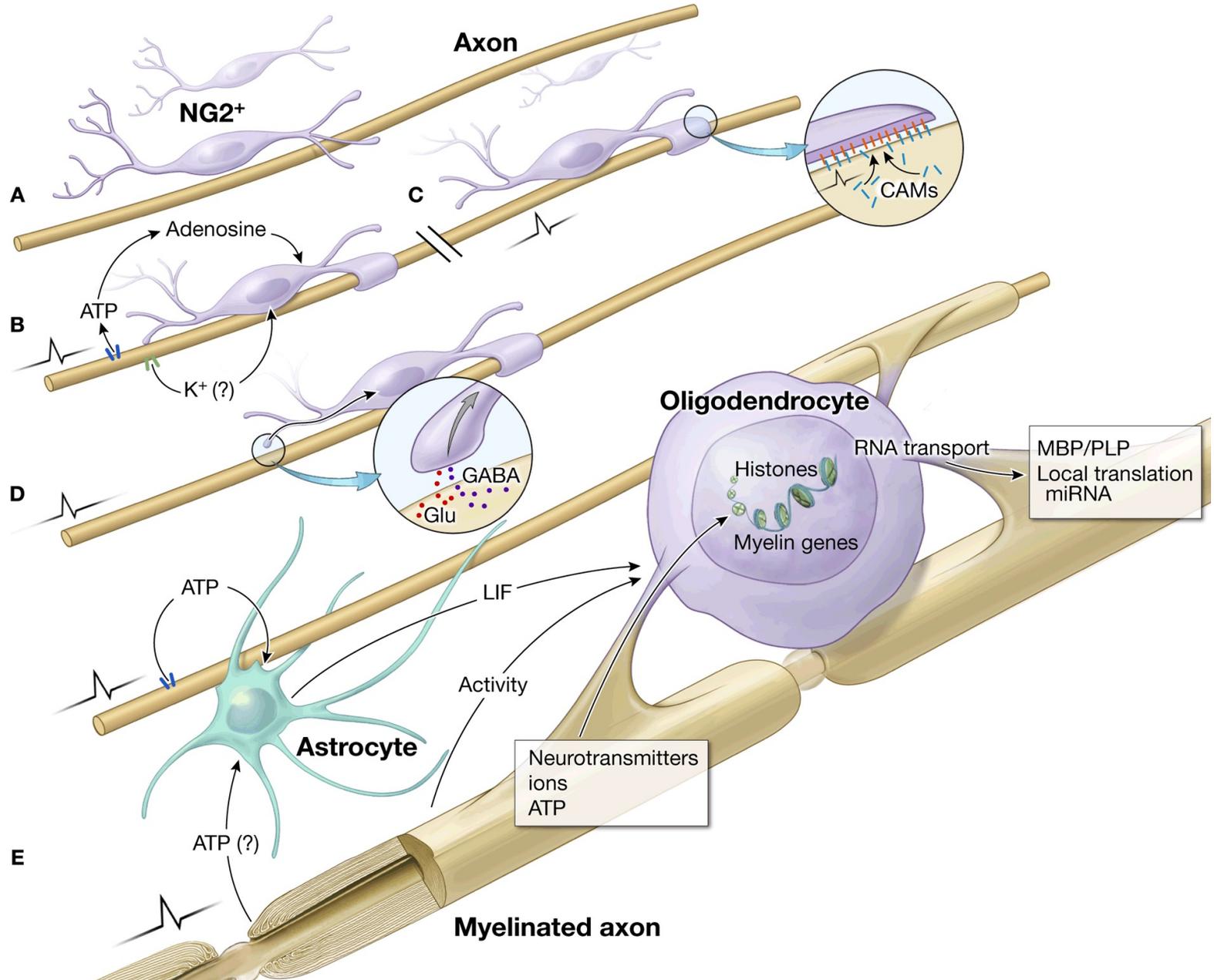
Immune function:
"scavengers"



Oligodendrocyti



Relazione funzionale oligodendrociti-assoni



Interazioni neuroni-neuroglia

