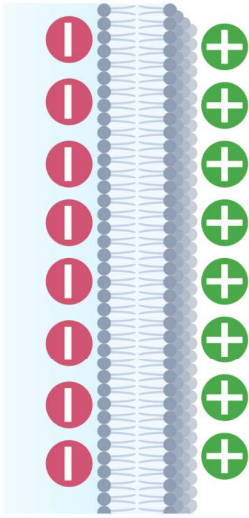


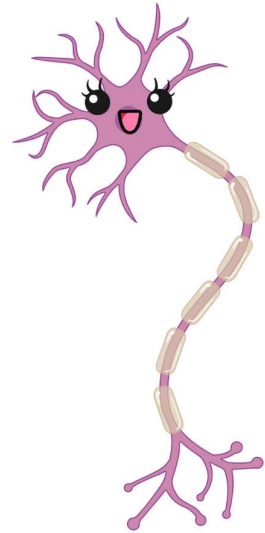
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A scientist
measured my
membrane
potential and it
was negative...
why is this?

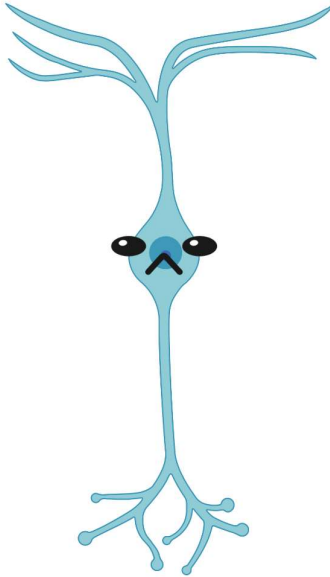
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Hey mate! Ions
are a big deal to
me...dare to
know why?

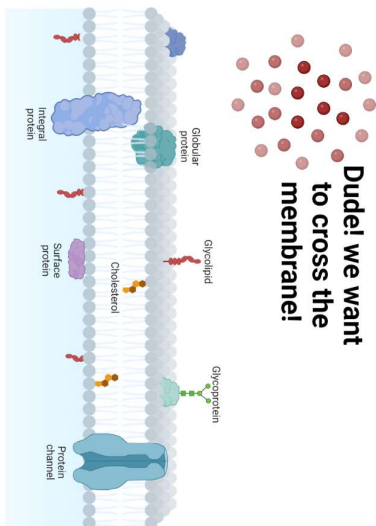
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Let me rest! Do
you really have to
measure me now?

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Can this group of
angry ions cross
the plasma
membrane?

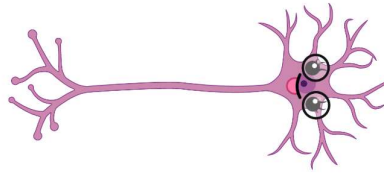
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Where are my ions?

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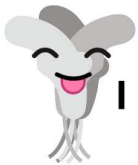


Ion	Extracellular (mM)	Intracellular (mM)	[Ion] _{out} / [Ion] _{in}	E _{ion} (mV)
Na ⁺	145	12	12	+67
K ⁺	4	155	0.026	-98
Ca ²⁺	1.5	10 ⁻⁷	15,000	+129
Cl ⁻	123	4.2	29	-90

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Can you tell me when my membrane has been depolarised or hyperpolarised?

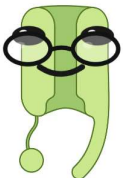
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I use energy...



May the force be with me...

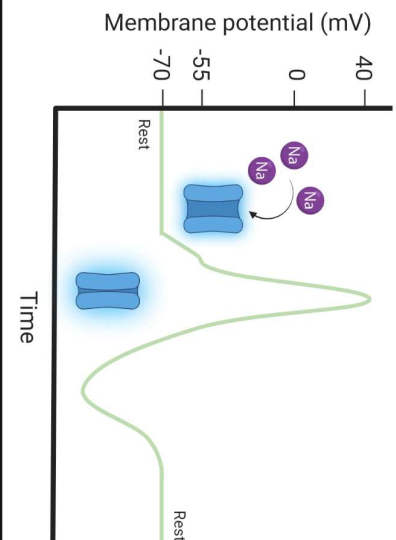


Membrane potential is my buddy!

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Who are we?

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Depolarise, hyperpolarise... I'm confused!

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Ouch! It really hurts even if I haven't had an injury...



My arm always hurts!

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What type of pain are these patients suffering from?

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Where is my body at?

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I am fast and large!



I have the slowest action potential!

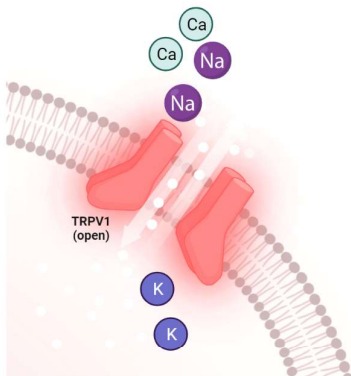


I am thinly myelinated!

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Who are they?

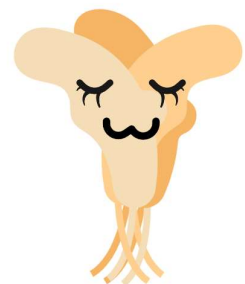
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I am a non selective cation channel...

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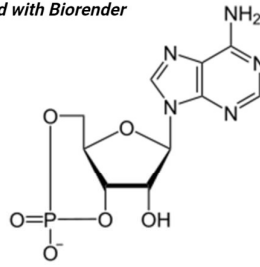


Shhh...P2X receptor is sleeping...

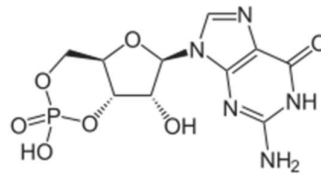
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How do we wake a P2X receptor up?

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I use Adenylyl cyclase!

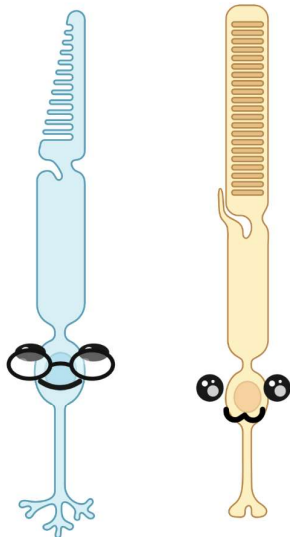


I use Guanylyl cyclase!

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Who are we?

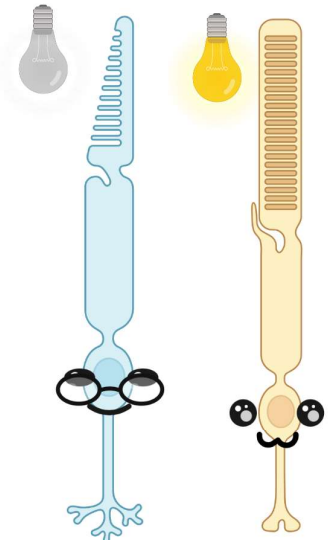
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Who are we and why are we important?

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Do these photoreceptors depolarise or hyperpolarise in the presence and absence of light?

