



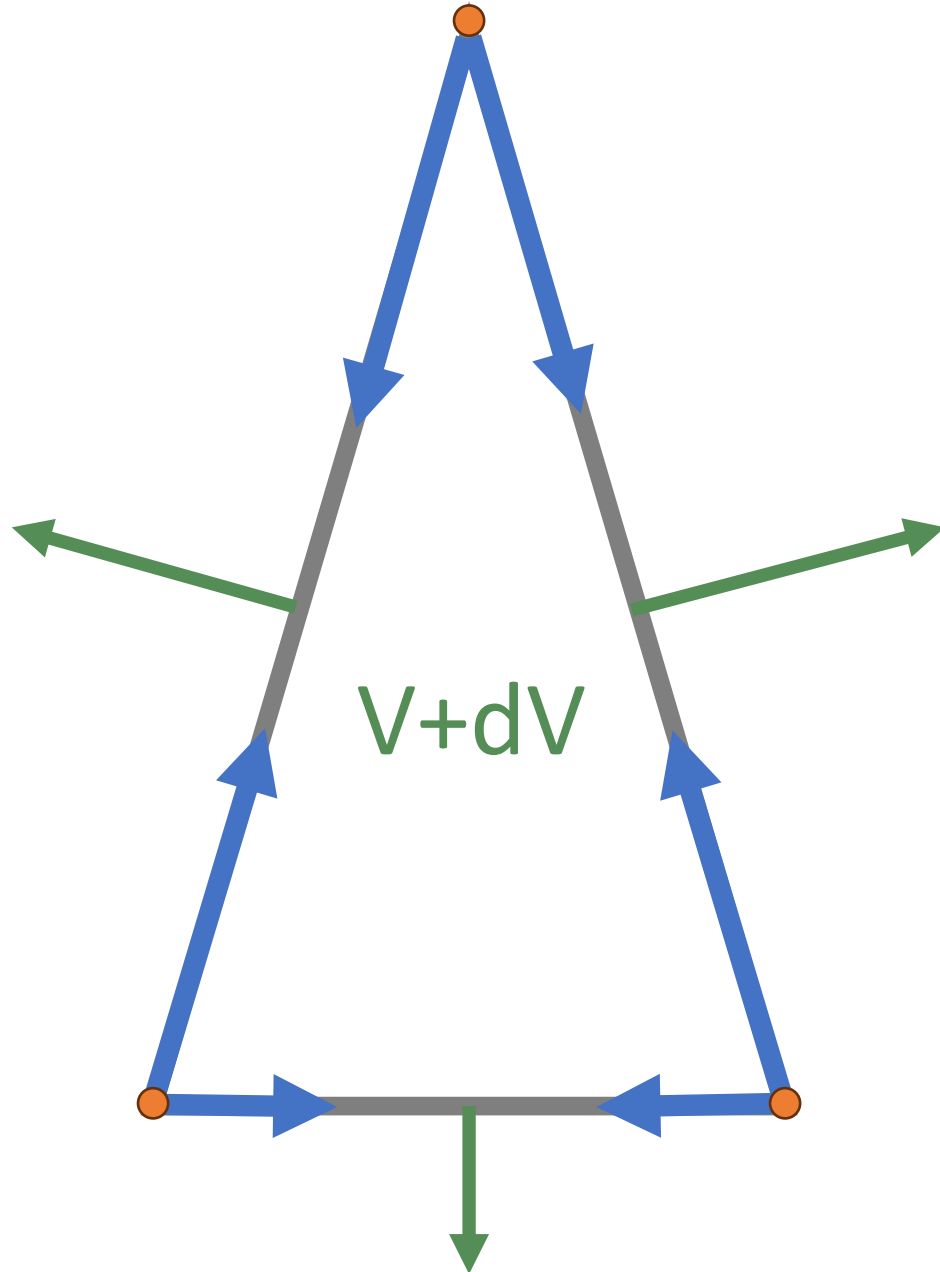
**The Rooty Tooty
Funny Fruities**

Jan Hurt
Ravi Ranjan
Helen Scott

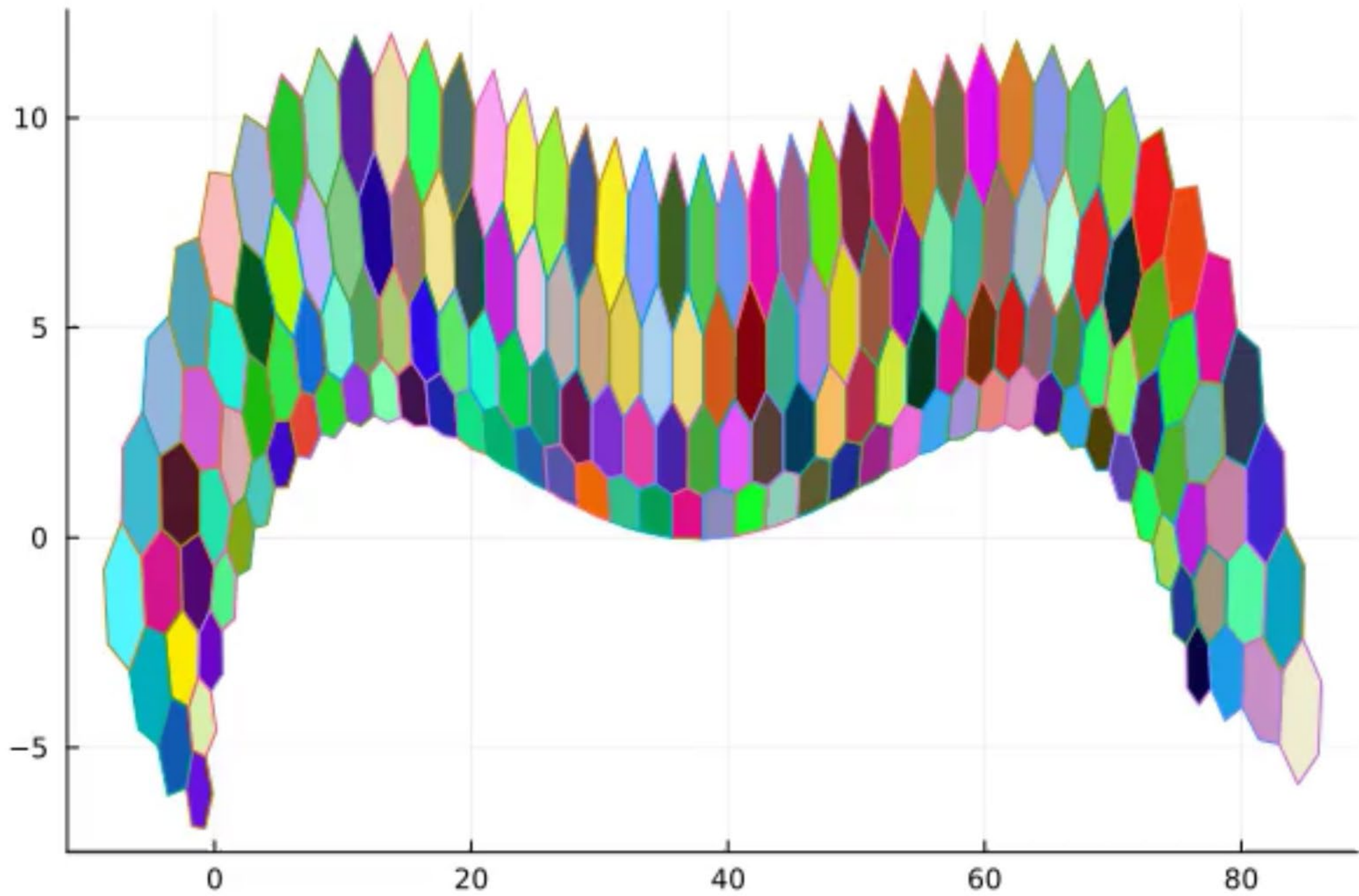
Plant Cells Stick Together!



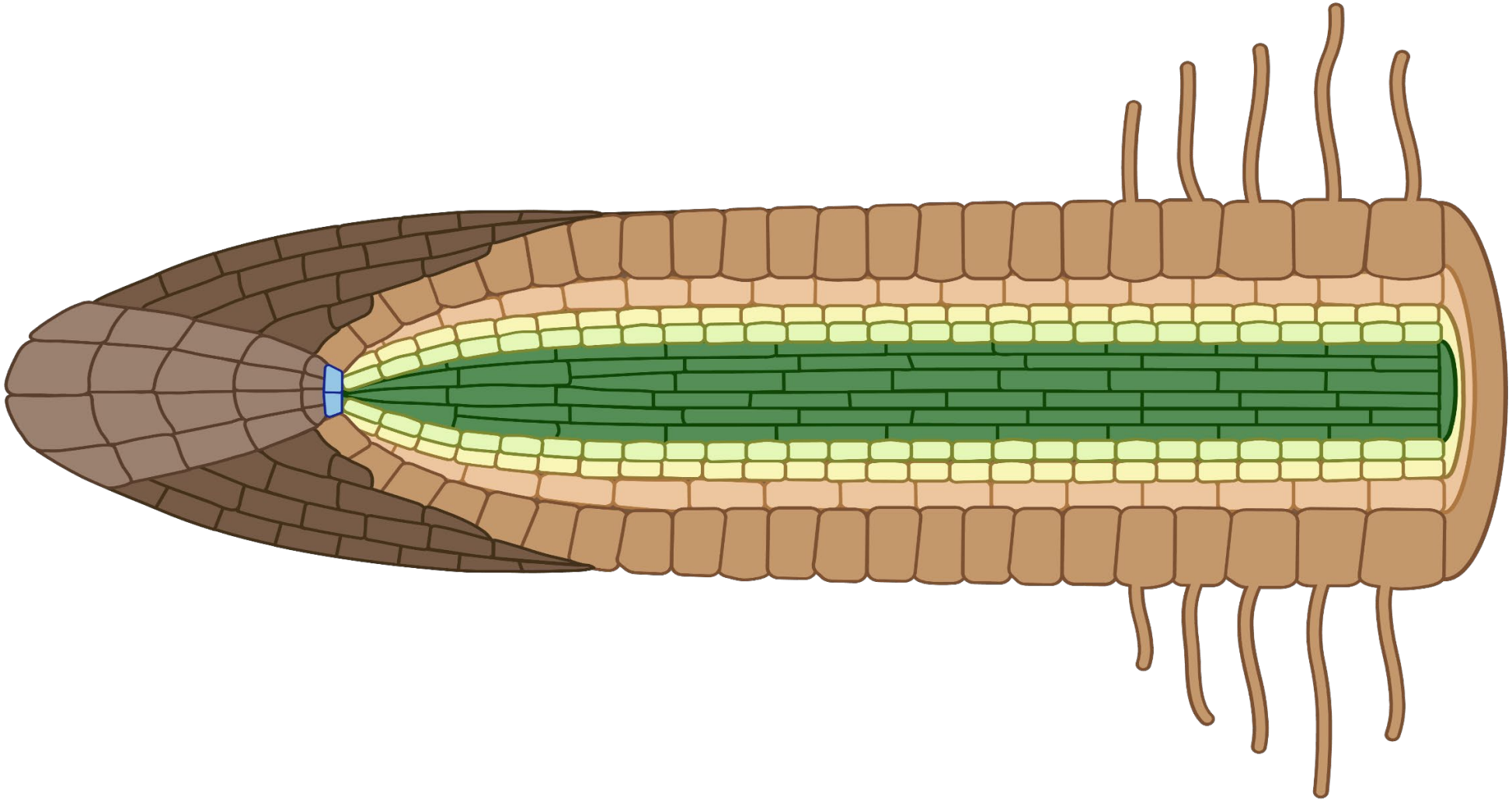
The Physics of Plant Cells



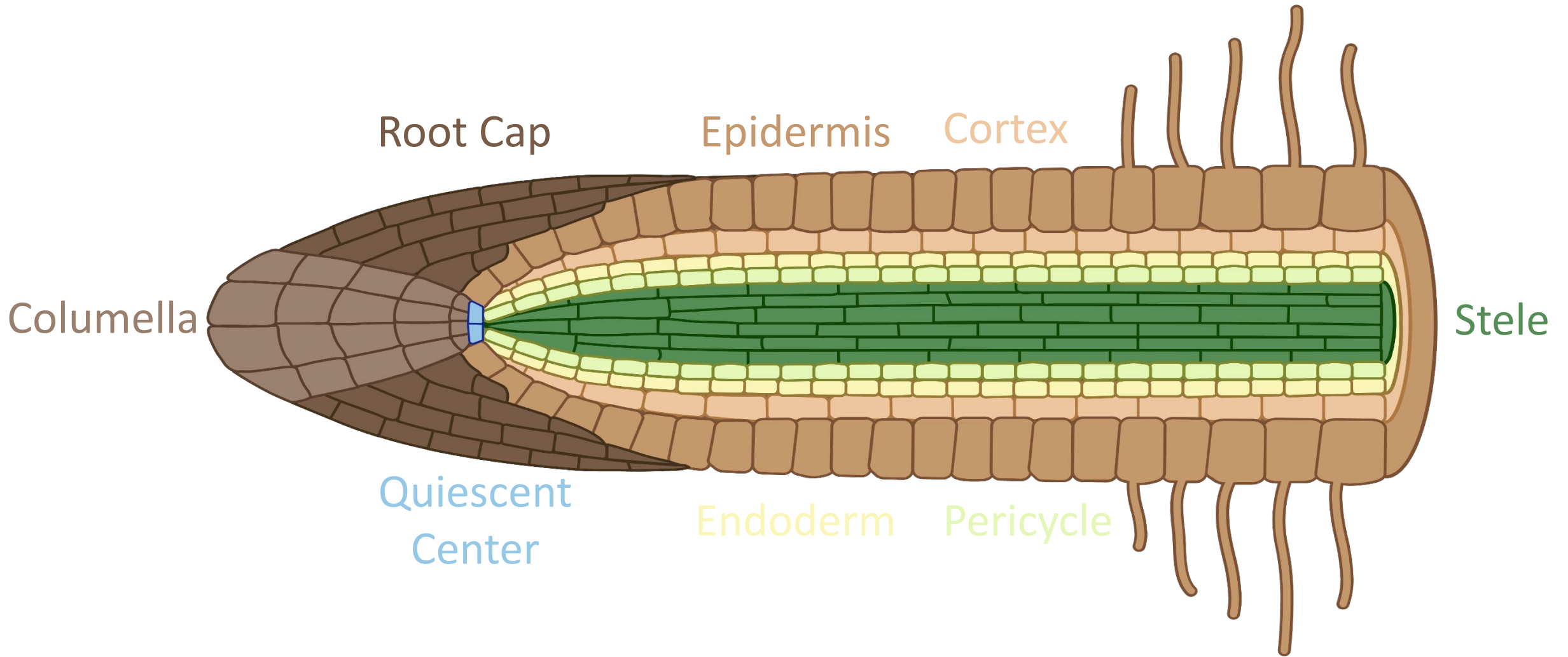
- Pressure forces on each Cellwall proportional its length.
- Cellwalls act as springs – minimizing the circumference/area
- Forces on each node is the vectorsum of these.



Roots: A Model System of Plant Organogenesis



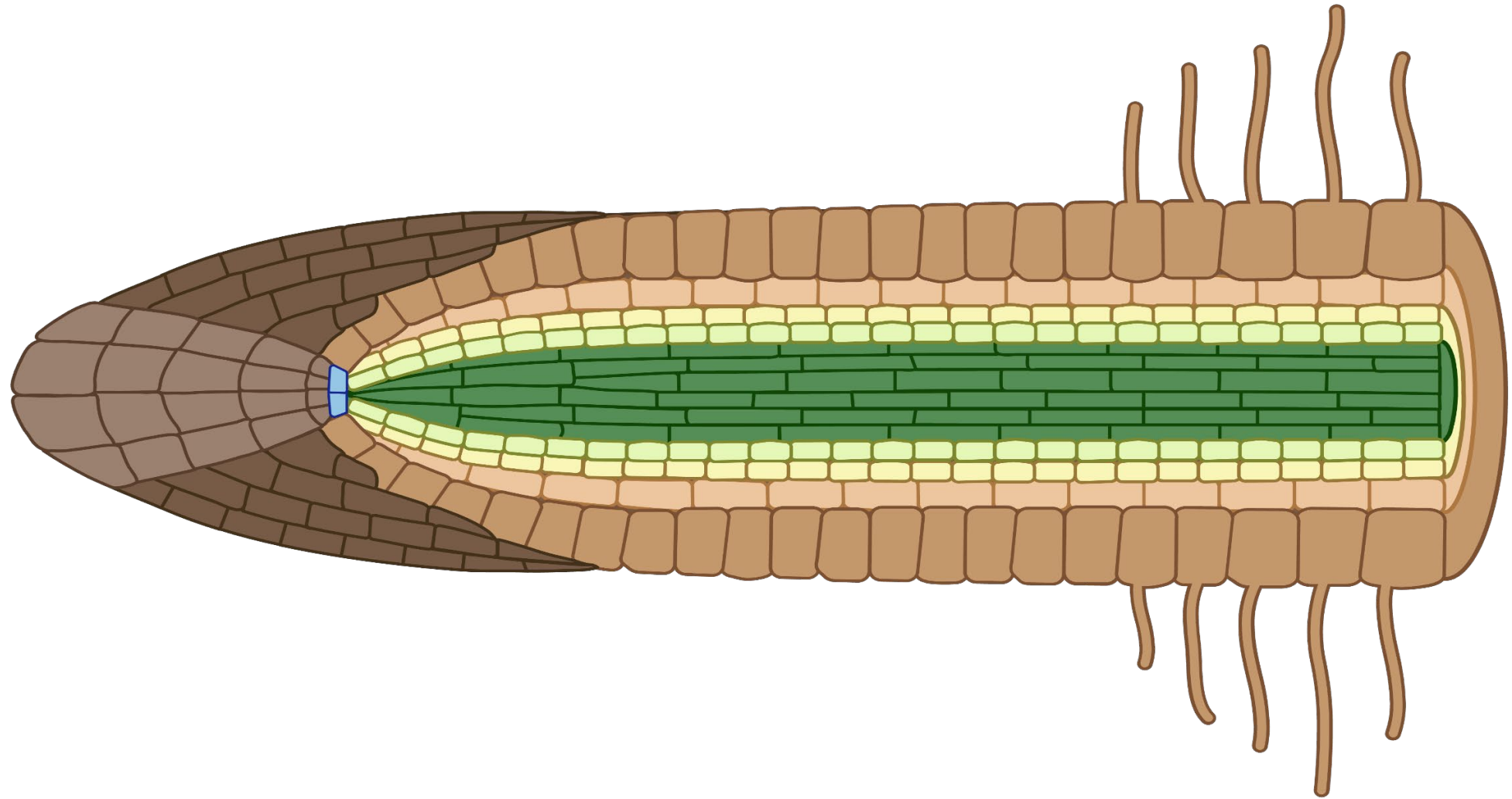
Roots: A Model System of Plant Organogenesis



Division Zone

Transition Zone

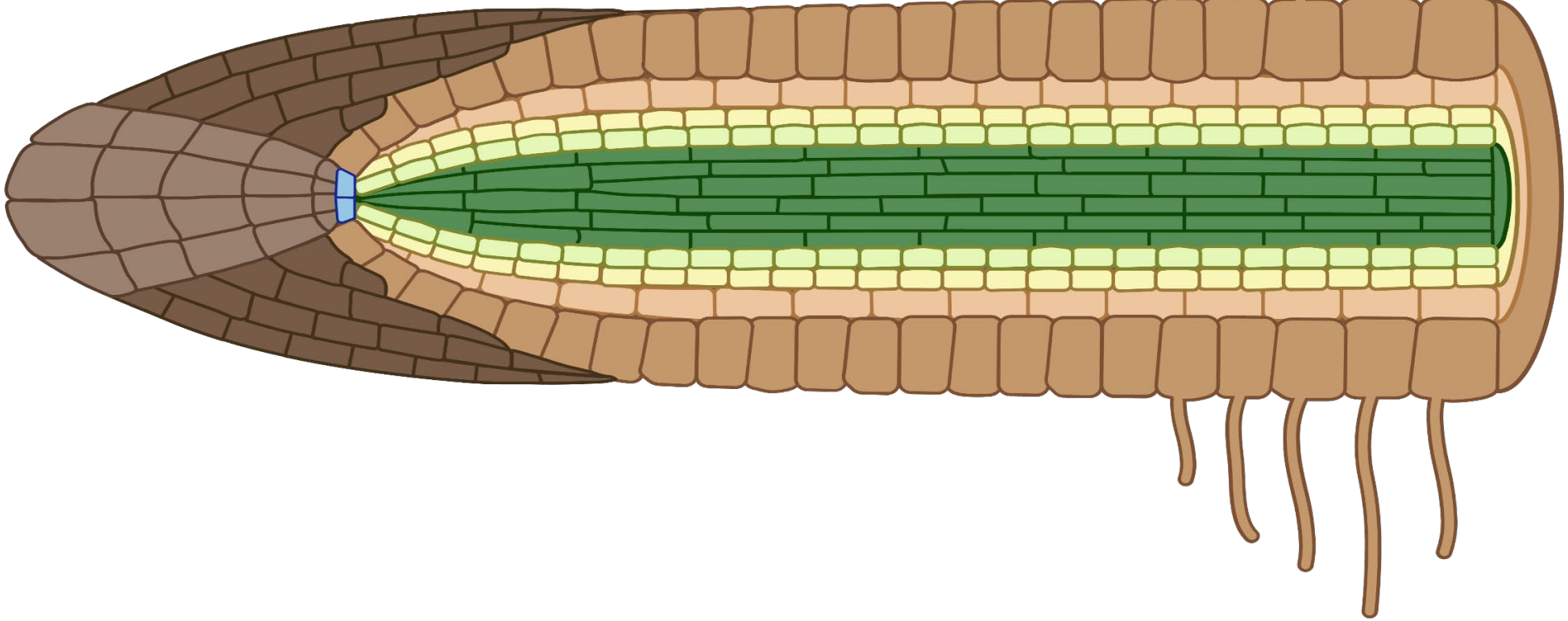
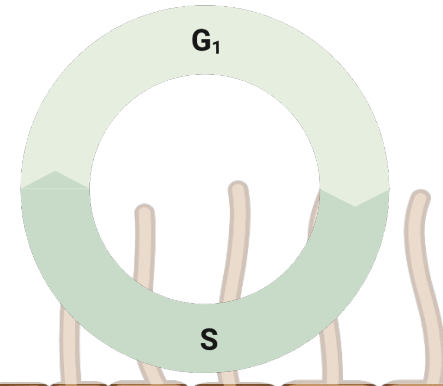
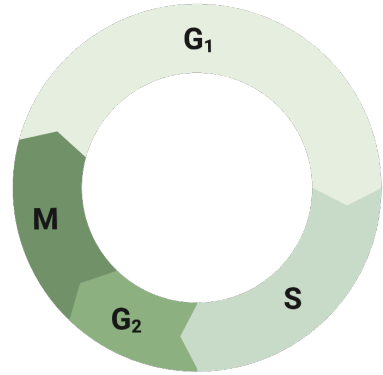
Elongation Zone



Division Zone

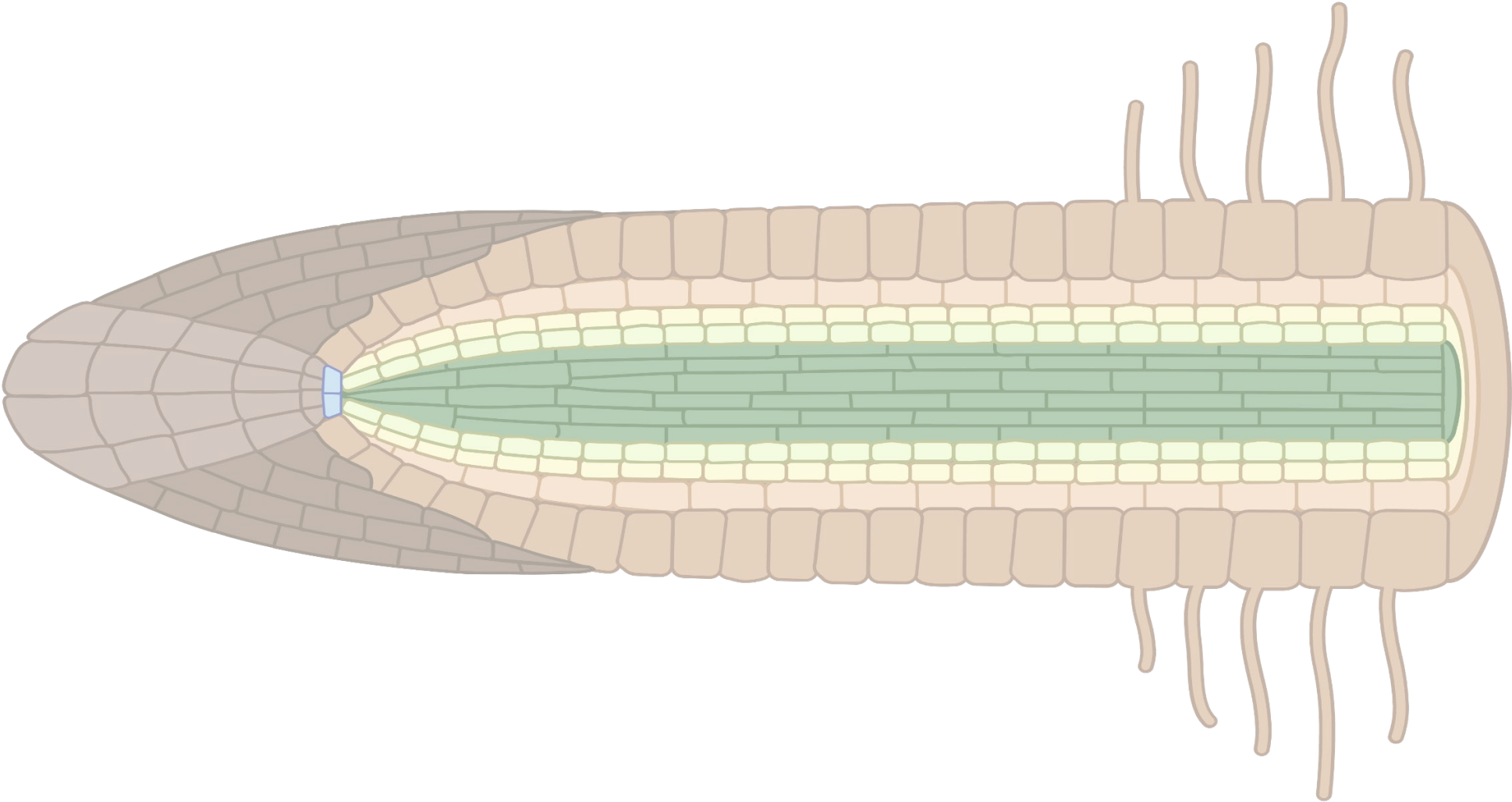
Transition Zone

Elongation Zone



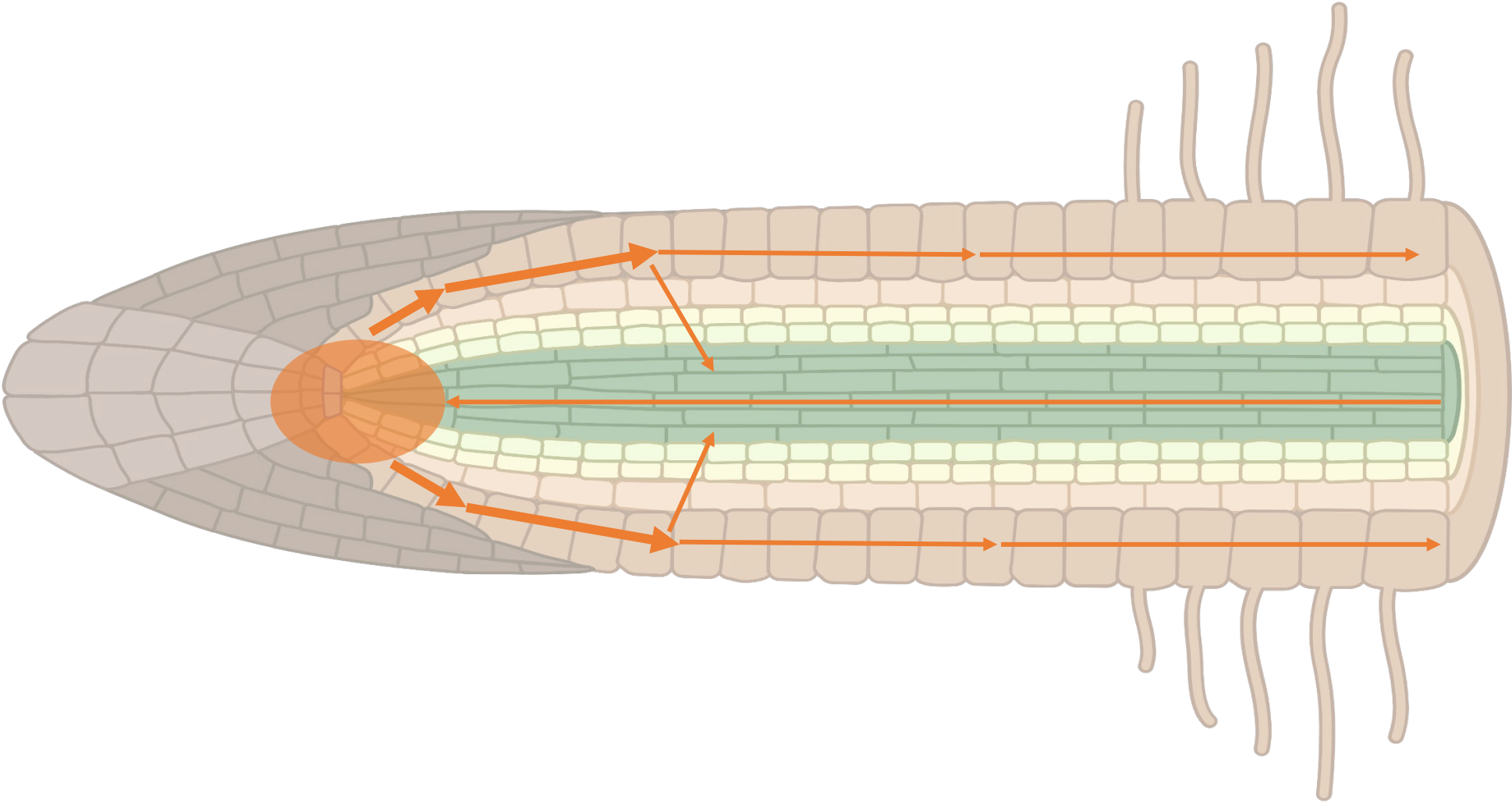
Auxin

Cytokinin



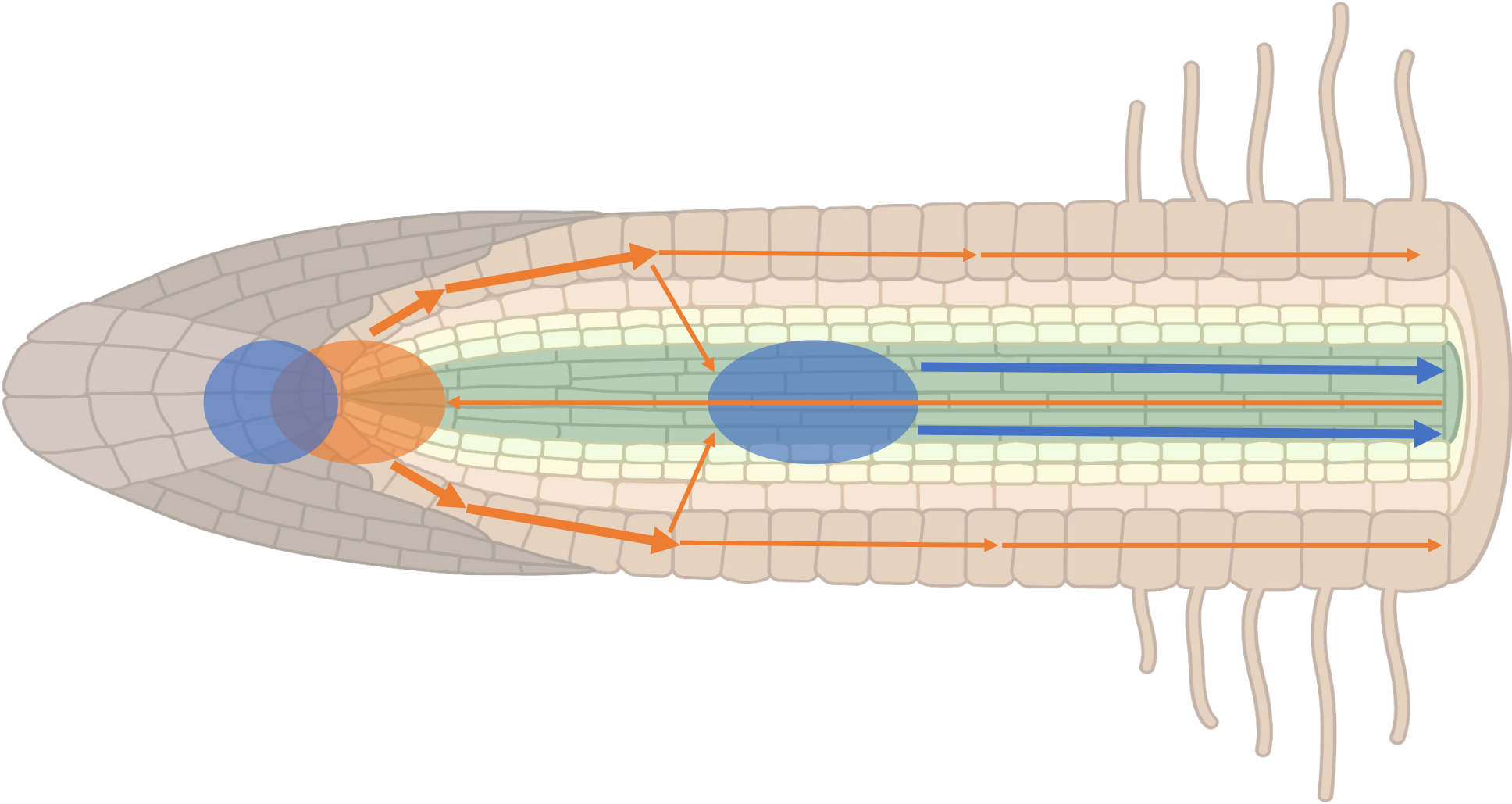
Auxin

Cytokinin



Auxin

Cytokinin



Future Directions

