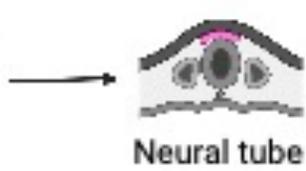
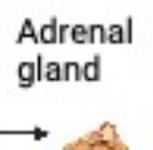
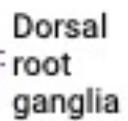


Sympathoadrenal development and neuroblastoma tumorigenesis

Human sympathoadrenal development



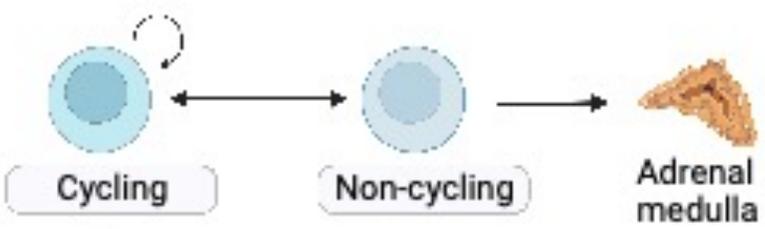
EMT



Mesenchymal/neural crest state

- Low MHC-I expression (immune evasion)
- Mesenchymal state (chemoresistance)

Mesenchymal/adrenergic cell state



Proliferation status and grade of differentiation

- Mitotic karyorrhexis index and differentiation status (INPC)
- Adrenergic state (chemoresponsive)

Neuroblastoma heterogeneity and plasticity

Developmentally regulated expression of precision medicine targets

- Human norepinephrine transporter (MIBG uptake)
- GD2 biosynthesis (immunotherapy target)