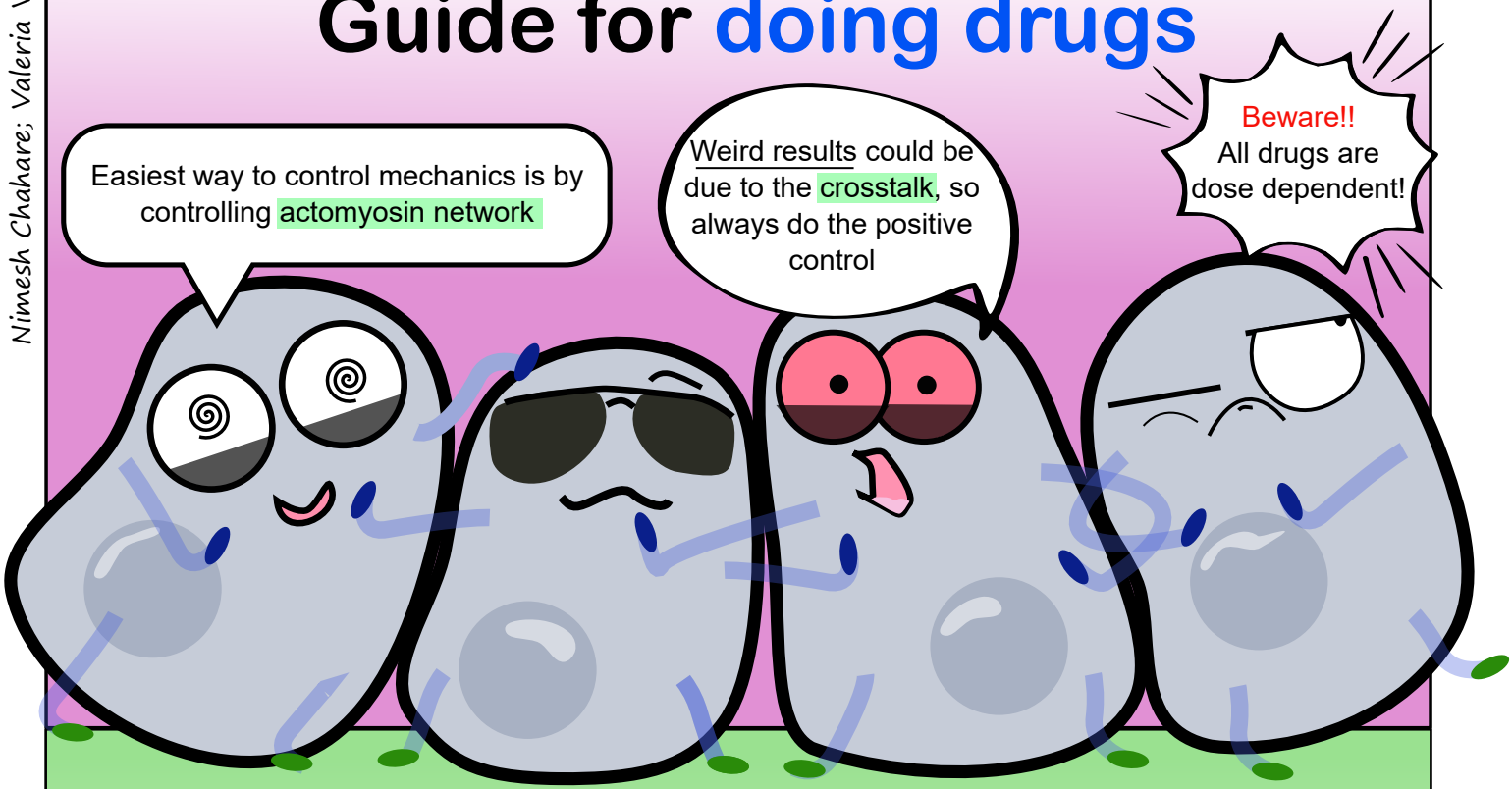
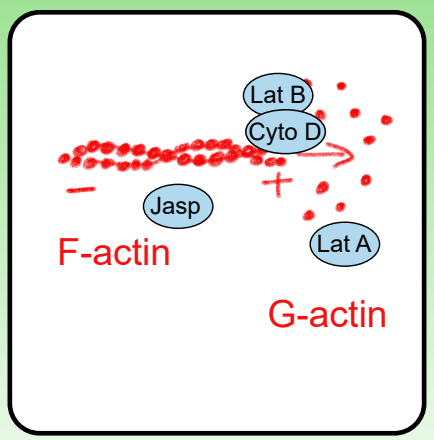
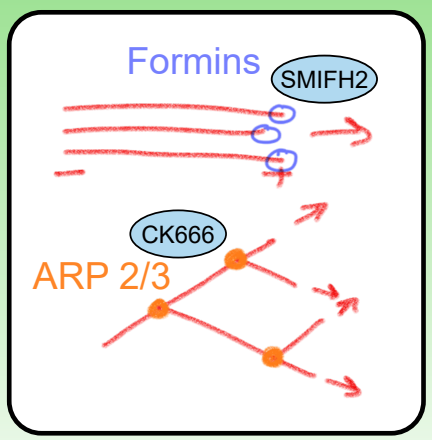
Nimesh Chahare; Valeria Venturini

Epithelial Mechanics Fan Club's Guide for doing drugs

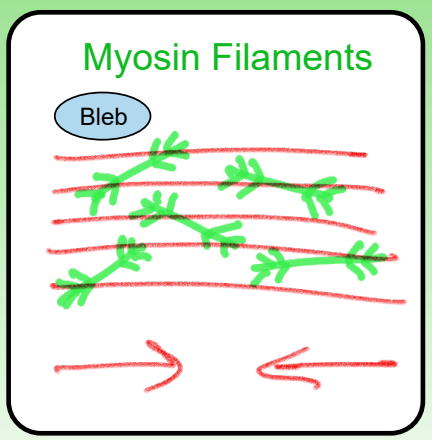




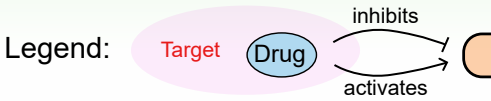
Polymerization

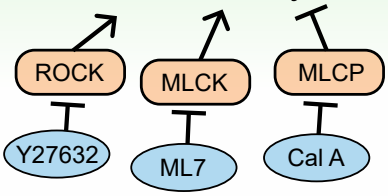


Bundling and Branching



Contractility





Interferes with:		Drug name	What it does
Actin polymerization	▼	Latrunculin A (Lat A)	binds to G actin
	▼	Latrunculin B (Lat B)	both bind to barb end of F actin
	▼	Cytochalisin D (Cyto D)	
	~▲	Jasplakinoide (Jasp)	binds to the side of F actin stabilizing it
Actin bundling and branching	▼	CK666	binds to Arp2/3 complex inhibiting nucleation of branches
	▼	SMIFH2	inhibits formin-driven actin polymerization (it also affects myosin)
Myosin II contractility	▼	Y27632	inhibits Rho Kinase (ROCK)
	▼	ML7	inhibits Myosin Light Chain Kinase (MLCK)
	▼	Blebbistatin (Bleb)	inhibits myosin ATPase activity
	▲	Calyculin A (Cal A)	inhibits Myosin phosphatase (MLCP)

References: Etienne-Manneville, S., & Hall, A., (2002); Fletcher, D. A., & Mullins, R. D. (2010); Suarez, C., & Kovar, D. R. (2016).

Authors note: This is a simplification, go read more papers! Good luck and be safe doing drugs.

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