

53. Cell adhesion

1 unit, Michael Overholtzer, November 13, 2025

GAP junctions

Desmosomes

Adherens junctions and their diverse biological functions

Cadherins, catenins, and the assembly of adherens junctions

Cadherin-mediated adhesion and signaling

Coordination of junctional complexes, Rho-GTPases and the cytoskeleton

Disruption of adherens junctions facilitates EMT and tumor cell invasion

[Discussion Paper:](#)

DiSalvo S, Haselkorn TS, Bashir U, Jimenez D, Brock DA, Queller DC, Strassmann JE. Burkholderia bacteria infectiously induce the proto-farming symbiosis of Dictyostelium amoebae and food bacteria. Proc Natl Acad Sci U S A. 2015 Sep 8;112(36):E5029-37. doi: 10.1073/pnas.1511878112. Epub 2015 Aug 24. PMID: 26305954; PMCID: PMC4568666.

Additional papers:

Fischer KR, et al. Epithelial-to-mesenchymal transition is not required for lung metastasis but contributes to chemoresistance. Nature. 2015 Nov 26;527(7579):472-6.

Thiery JP, Sleeman JP. Complex networks orchestrate epithelial-mesenchymal transitions. Nat Rev Mol Cell Biol. 2006 Feb;7(2):131-42 (Review).