

## Suggested Reading

### 17.1 Signaling Molecules and Their Receptors

Cohen, S. 2008. Origins of growth factors: NGF and EGF. *J. Biol. Chem.* 283: 33793–33797.

Cunningham, T. J., and G. Duester. 2015. Mechanisms of retinoic acid signalling and its roles in organ and limb development. *Nature Rev. Mol. Cell Biol.* 16: 110–123.

### 17.2 G Proteins and Cyclic AMP

Audet, M., and M. Bouvier. 2012. Restructuring G-protein-coupled receptor activation. *Cell* 151: 14–23.

Mayr, B., and M. Montminy. 2001. Transcriptional regulation by the phosphorylation-dependent factor CREB. *Nature Rev. Mol. Cell Biol.* 2: 599–609.

### 17.3 Tyrosine Kinases and Signaling by the MAP Kinase and PI 3-Kinase Pathways

Lemmon, M. A., and J. Schlessinger. 2010. Cell signaling by receptor tyrosine kinases. *Cell* 141: 1117–1134.

Vanhaesebroeck, B., L. Stephens, and P. Hawkins. 2012. PI3K signaling: the path to discovery and understanding. *Nature Rev. Mol. Cell Biol.* 13: 195–203.

### 17.4 Receptors Coupled to Transcription Factors

Nusse, R., and H. Clevers. 2017. Wnt/ $\beta$ -catenin signaling, disease, and emerging therapeutic modalities. *Cell* 169: 985–999.

Zhang, Q., M. J. Lenardo, and D. Baltimore. 2017. 30 years of NF- $\kappa$ B: a blossoming of relevance to human pathobiology. *Cell* 168: 37–57.

### 17.5 Signaling Dynamics and Networks

Mendoza, M. C., E. E. Er, and J. Blenis. 2011. The Ras-ERK and PI3K-mTOR pathways: cross-talk and compensation. *Trends Biochem. Sci.* 36: 320–328.

Purvis, J. E., and G. Lahav. 2013. Encoding and decoding cellular information through signaling dynamics. *Cell* 152: 945–956.