

CELL3050: Advanced Molecular Cell Biology

And CELL3050A

View Online



Akin, Orkun, and R. Dyche Mullins, 'Capping Protein Increases the Rate of Actin-Based Motility by Promoting Filament Nucleation by the Arp2/3 Complex', *Cell*, 133.5 (2008), pp. 841–51, doi:10.1016/j.cell.2008.04.011

Alberts, Bruce, *Essential Cell Biology*, 3rd ed (Garland Science, 2010)

——, *Molecular Biology of the Cell*, Reference ed., 5th ed (Garland Science, 2008)

——, *Molecular Biology of the Cell*, Reference ed., 5th ed (Garland Science, 2008)

——, *Molecular Biology of the Cell*, Reference ed., 5th ed (Garland Science, 2008)

Baker, Darren J., and others, 'Clearance of p16Ink4a-Positive Senescent Cells Delays Ageing-Associated Disorders', *Nature*, 479.7372 (2011), pp. 232–36, doi:10.1038/nature10600

Bartek, Jiri, and Jiri Lukas, 'DNA Damage Checkpoints: From Initiation to Recovery or Adaptation', *Current Opinion in Cell Biology*, 19.2 (2007), pp. 238–45, doi:10.1016/j.ceb.2007.02.009

Bordeleau, François, and others, 'Keratin 8/18 Regulation of Cell Stiffness-Extracellular Matrix Interplay through Modulation of Rho-Mediated Actin Cytoskeleton Dynamics', *PLoS ONE*, 7.6 (2012), doi:10.1371/journal.pone.0038780

Brock, Amy, Hannah Chang, and Sui Huang, 'Non-Genetic Heterogeneity — a Mutation-Independent Driving Force for the Somatic Evolution of Tumours', *Nature Reviews Genetics*, 10.5 (2009), pp. 336–42, doi:10.1038/nrg2556

Brunet, Anne, and others, 'Akt Promotes Cell Survival by Phosphorylating and Inhibiting a Forkhead Transcription Factor', *Cell*, 96.6 (1999), pp. 857–68, doi:10.1016/S0092-8674(00)80595-4

Campellone, Kenneth G., and Matthew D. Welch, 'A Nucleator Arms Race: Cellular Control of Actin Assembly', *Nature Reviews Microbiology*, 11.4 (2010), pp. 237–51, doi:10.1038/nrm2867

Chang, L., and others, 'The Dynamic Properties of Intermediate Filaments during Organelle Transport', *Journal of Cell Science*, 122.16 (2009), pp. 2914–23, doi:10.1242/jcs.046789

Chen, Chia-Yen, and others, 'Accumulation of the Inner Nuclear Envelope Protein Sun1 Is Pathogenic in Progeric and Dystrophic Laminopathies', *Cell*, 149.3 (2012), pp. 565–77,

doi:10.1016/j.cell.2012.01.059

Chhabra, Ekta Seth, and Henry N. Higgs, 'The Many Faces of Actin: Matching Assembly Factors with Cellular Structures', *Nature Cell Biology*, 9.10 (2007), pp. 1110–21, doi:10.1038/ncb1007-1110

Chipuk, Jerry E., and others, 'The BCL-2 Family Reunion', *Molecular Cell*, 37.3 (2010), pp. 299–310, doi:10.1016/j.molcel.2010.01.025

Colakoglu, G., and A. Brown, 'Intermediate Filaments Exchange Subunits along Their Length and Elongate by End-to-End Annealing', *The Journal of Cell Biology*, 185.5 (2009), pp. 769–77, doi:10.1083/jcb.200809166

DANIAL, N, 'Cell DeathCritical Control Points', *Cell*, 116.2 (2004), pp. 205–19, doi:10.1016/S0092-8674(04)00046-7

DATTA, S, 'Akt Phosphorylation of BAD Couples Survival Signals to the Cell-Intrinsic Death Machinery', *Cell*, 91.2 (1997), pp. 231–41, doi:10.1016/S0092-8674(00)80405-5

Dekens, Marcus P.S., and others, 'Light Regulates the Cell Cycle in Zebrafish', *Current Biology*, 13.23 (2003), pp. 2051–57, doi:10.1016/j.cub.2003.10.022

Delorme, Violaine, and others, 'Cofilin Activity Downstream of Pak1 Regulates Cell Protrusion Efficiency by Organizing Lamellipodium and Lamella Actin Networks', *Developmental Cell*, 13.5 (2007), pp. 646–62, doi:10.1016/j.devcel.2007.08.011

Dickmeis, Thomas, and others, 'Glucocorticoids Play a Key Role in Circadian Cell Cycle Rhythms', *PLoS Biology*, 5.4 (2007), doi:10.1371/journal.pbio.0050078

Dong, Guogang, and others, 'Elevated ATPase Activity of KaiC Applies a Circadian Checkpoint on Cell Division in *Synechococcus Elongatus*', *Cell*, 140.4 (2010), pp. 529–39, doi:10.1016/j.cell.2009.12.042

Evans, Tom, and others, 'Cyclin: A Protein Specified by Maternal mRNA in Sea Urchin Eggs That Is Destroyed at Each Cleavage Division', *Cell*, 33.2 (1983), pp. 389–96, doi:10.1016/0092-8674(83)90420-8

Fuchs, Yaron, and Hermann Steller, 'Programmed Cell Death in Animal Development and Disease', *Cell*, 147.4 (2011), pp. 742–58, doi:10.1016/j.cell.2011.10.033

Gavathiotis, Evripidis, and others, 'BAX Activation Is Initiated at a Novel Interaction Site', *Nature*, 455.7216 (2008), pp. 1076–81, doi:10.1038/nature07396

Giepmans, B. N. G., 'The Fluorescent Toolbox for Assessing Protein Location and Function', *Science*, 312.5771 (2006), pp. 217–24, doi:10.1126/science.1124618

Godsel, Lisa M., Ryan P. Hobbs, and Kathleen J. Green, 'Intermediate Filament Assembly: Dynamics to Disease', *Trends in Cell Biology*, 18.1 (2008), pp. 28–37, doi:10.1016/j.tcb.2007.11.004

Goldman, Robert D, and others, 'Intermediate Filaments: Versatile Building Blocks of Cell Structure', *Current Opinion in Cell Biology*, 20.1 (2008), pp. 28–34,

doi:10.1016/j.ceb.2007.11.003

Hartwell, L. H., 'Twenty-Five Years of Cell Cycle Genetics', *Genetics*, 129.4 (1991), pp. 975–80, doi:<https://doi.org/10.1093/genetics/129.4.975>

Helfand, B. T., and others, 'Vimentin Organization Modulates the Formation of Lamellipodia', *Molecular Biology of the Cell*, 22.8 (2011), pp. 1274–89, doi:10.1091/mbc.E10-08-0699

Herrmann, Harald, and others, 'Intermediate Filaments: From Cell Architecture to Nanomechanics', *Nature Reviews Molecular Cell Biology*, 8.7 (2007), pp. 562–73, doi:10.1038/nrm2197

—, and others, 'Intermediate Filaments: Primary Determinants of Cell Architecture and Plasticity', *Journal of Clinical Investigation*, 119.7 (2009), pp. 1772–83, doi:10.1172/JCI38214

Howell, B.J., and others, 'Visualization of Mad2 Dynamics at Kinetochores, along Spindle Fibers, and at Spindle Poles in Living Cells', *The Journal of Cell Biology*, 150.6 (2000), pp. 1233–50, doi:10.1083/jcb.150.6.1233

Hübner, Anette, and others, 'Multisite Phosphorylation Regulates Bim Stability and Apoptotic Activity', *Molecular Cell*, 30.4 (2008), pp. 415–25, doi:10.1016/j.molcel.2008.03.025

'iBioSeminars: Free Biology Videos Online', n.d.

Idda, Maria Laura, and others, 'Circadian Timing of Injury-Induced Cell Proliferation in Zebrafish', *PLoS ONE*, 7.3 (2012), doi:10.1371/journal.pone.0034203

Insall, Robert H., and Laura M. Machesky, 'Actin Dynamics at the Leading Edge: From Simple Machinery to Complex Networks', *Developmental Cell*, 17.3 (2009), pp. 310–22, doi:10.1016/j.devcel.2009.08.012

Johnson, Carl Hirschie, 'Circadian Clocks and Cell Division', *Cell Cycle*, 9.19 (2010), pp. 3864–73, doi:10.4161/cc.9.19.13205

'Julie Theriot', iBiology, Science Communication lab., n.d.

Krizhanovsky, Valery, and others, 'Senescence of Activated Stellate Cells Limits Liver Fibrosis', *Cell*, 134.4 (2008), pp. 657–67, doi:10.1016/j.cell.2008.06.049

Larson, D. R., and others, 'Real-Time Observation of Transcription Initiation and Elongation on an Endogenous Yeast Gene', *Science*, 332.6028 (2011), pp. 475–78, doi:10.1126/science.1202142

Lee, C.-H., and P. A. Coulombe, 'Self-Organization of Keratin Intermediate Filaments into Cross-Linked Networks', *The Journal of Cell Biology*, 186.3 (2009), pp. 409–21, doi:10.1083/jcb.200810196

Lionnet, Timothée, and Robert H Singer, 'Transcription Goes Digital', *EMBO Reports*, 13.4 (2012), pp. 313–21, doi:10.1038/embor.2012.31

Liu, Xuesong, and others, 'Induction of Apoptotic Program in Cell-Free Extracts: Requirement for dATP and Cytochrome c', *Cell*, 86.1 (1996), pp. 147-57, doi:10.1016/S0092-8674(00)80085-9

Lodish, Harvey F., *Molecular Cell Biology*, 6th ed (Palgrave Macmillan, 2007)

Matsuo, T., 'Control Mechanism of the Circadian Clock for Timing of Cell Division in Vivo', *Science*, 302.5643 (2003), pp. 255-59, doi:10.1126/science.1086271

'Milestones Timeline : Nature Milestones in Cytoskeleton', n.d.

Miyoshi, T., and others, 'Actin Turnover-Dependent Fast Dissociation of Capping Protein in the Dendritic Nucleation Actin Network: Evidence of Frequent Filament Severing', *The Journal of Cell Biology*, 175.6 (2006), pp. 947-55, doi:10.1083/jcb.200604176

'Molecular Probes', ThermoFisher Scientific, n.d.

Morgan, David Owen, *The Cell Cycle: Principles of Control* (New Science Press in association with Oxford University Press and Sinauer Associates, 2007), *Primers in biology*

Murray, Andrew Wood and Hunt, Tim, *The Cell Cycle: An Introduction* (Oxford University Press, 1993)

Musacchio, Andrea, and Edward D. Salmon, 'The Spindle-Assembly Checkpoint in Space and Time', *Nature Reviews Molecular Cell Biology*, 8.5 (2007), pp. 379-93, doi:10.1038/nrm2163

Narita, Masashi, and Scott W Lowe, 'Senescence Comes of Age', *Nature Medicine*, 11.9 (2005), pp. 920-22, doi:10.1038/nm0905-920

Nasmyth, K., and A. Schleiffer, 'From a Single Double Helix to Paired Double Helices and Back', *Philosophical Transactions of the Royal Society B: Biological Sciences*, 359.1441 (2004), pp. 99-108, doi:10.1098/rstb.2003.1417

Nature Publishing Group, *Encyclopedia of Life Sciences* (Macmillan, 2001)
<<http://www.els.net>>

'Nikon MicroscopyU', Nikon MicroscopyU, n.d.

North, A. J., 'Seeing Is Believing? A Beginners' Guide to Practical Pitfalls in Image Acquisition', *The Journal of Cell Biology*, 172.1 (2006), pp. 9-18, doi:10.1083/jcb.200507103

Oltersdorf, Tilman, and others, 'An Inhibitor of Bcl-2 Family Proteins Induces Regression of Solid Tumours', *Nature*, 435.7042 (2005), pp. 677-81, doi:10.1038/nature03579

Pelkmans, L., 'Using Cell-to-Cell Variability--A New Era in Molecular Biology', *Science*, 336.6080 (2012), pp. 425-26, doi:10.1126/science.1222161

Pollard, Thomas D, and Gary G Borisy, 'Cellular Motility Driven by Assembly and Disassembly of Actin Filaments', *Cell*, 112.4 (2003), pp. 453-65,

doi:10.1016/S0092-8674(03)00120-X

Pollard, Thomas D. and Earnshaw, William C., *Cell Biology*, 2nd ed (Saunders/Elsevier, 2008)

Pop, C., and G. S. Salvesen, 'Human Caspases: Activation, Specificity, and Regulation', *Journal of Biological Chemistry*, 284.33 (2009), pp. 21777–81, doi:10.1074/jbc.R800084200

Raj, Arjun, and Alexander van Oudenaarden, 'Nature, Nurture, or Chance: Stochastic Gene Expression and Its Consequences', *Cell*, 135.2 (2008), pp. 216–26, doi:10.1016/j.cell.2008.09.050

Ridley, Anne J., 'Life at the Leading Edge', *Cell*, 145.7 (2011), pp. 1012–22, doi:10.1016/j.cell.2011.06.010

Sarin, Kavita Y., and others, 'Conditional Telomerase Induction Causes Proliferation of Hair Follicle Stem Cells', *Nature*, 436.7053 (2005), pp. 1048–52, doi:10.1038/nature03836

Serrano, Manuel, and Maria A. Blasco, 'Cancer and Ageing: Convergent and Divergent Mechanisms', *Nature Reviews Molecular Cell Biology*, 8.9 (2007), pp. 715–22, doi:10.1038/nrm2242

Shaner, Nathan C, Paul A Steinbach, and Roger Y Tsien, 'A Guide to Choosing Fluorescent Proteins', *Nature Methods*, 2.12 (2005), pp. 905–09, doi:10.1038/nmeth819

Simon, Dan N., and Katherine L. Wilson, 'The Nucleoskeleton as a Genome-Associated Dynamic "Network of Networks"', *Nature Reviews Molecular Cell Biology*, 12.11 (2011), pp. 695–708, doi:10.1038/nrm3207

Siton, Orit, and others, 'Cortactin Releases the Brakes in Actin- Based Motility by Enhancing WASP-VCA Detachment from Arp2/3 Branches', *Current Biology*, 21.24 (2011), pp. 2092–97, doi:10.1016/j.cub.2011.11.010

Spencer, Sabrina L., and others, 'Non-Genetic Origins of Cell-to-Cell Variability in TRAIL-Induced Apoptosis', *Nature*, 459.7245 (2009), pp. 428–32, doi:10.1038/nature08012

Suraneni, P., and others, 'The Arp2/3 Complex Is Required for Lamellipodia Extension and Directional Fibroblast Cell Migration', *The Journal of Cell Biology*, 197.2 (2012), pp. 239–51, doi:10.1083/jcb.201112113

Symons, M. H., 'Control of Actin Polymerization in Live and Permeabilized Fibroblasts', *The Journal of Cell Biology*, 114.3 (1991), pp. 503–13, doi:10.1083/jcb.114.3.503

Tamai, T. K., and others, 'Light Acts on the Zebrafish Circadian Clock to Suppress Rhythmic Mitosis and Cell Proliferation', *Journal of Biological Rhythms*, 27.3 (2012), pp. 226–36, doi:10.1177/0748730412440861

Ted A. Weinert and Leland H. Hartwell, 'The RAD9 Gene Controls the Cell Cycle Response to DNA Damage in *Saccharomyces Cerevisiae*', *Science*, 241.4863 (1988), pp. 317–22

Ura, Seiji, and others, 'Pseudopod Growth and Evolution during Cell Movement Is Controlled through SCAR/WAVE Dephosphorylation', *Current Biology*, 22.7 (2012), pp. 553–61, doi:10.1016/j.cub.2012.02.020

VANTROYS, M, and others, 'Ins and Outs of ADF/Cofilin Activity and Regulation', *European Journal of Cell Biology*, 87.8–9 (2008), pp. 649–67, doi:10.1016/j.ejcb.2008.04.001

Vatine, Gad, and others, 'It's Time to Swim! Zebrafish and the Circadian Clock', *FEBS Letters*, 585.10 (2011), pp. 1485–94, doi:10.1016/j.febslet.2011.04.007

Watson, James D., *Molecular Biology of the Gene*, 6th ed (Pearson/Benjamin Cummings, 2008)

Whitfield, Jonathan, and others, 'Dominant-Negative c-Jun Promotes Neuronal Survival by Reducing BIM Expression and Inhibiting Mitochondrial Cytochrome c Release', *Neuron*, 29.3 (2001), pp. 629–43, doi:10.1016/S0896-6273(01)00239-2

Windoffer, R., and others, 'Cytoskeleton in Motion: The Dynamics of Keratin Intermediate Filaments in Epithelia', *The Journal of Cell Biology*, 194.5 (2011), pp. 669–78, doi:10.1083/jcb.201008095

Wright, K M, A E Vaughn, and M Deshmukh, 'Apoptosome Dependent Caspase-3 Activation Pathway Is Non-Redundant and Necessary for Apoptosis in Sympathetic Neurons', *Cell Death and Differentiation*, 14.3 (2006), pp. 625–33, doi:10.1038/sj.cdd.4402024

Xue, Wen, and others, 'Senescence and Tumour Clearance Is Triggered by P53 Restoration in Murine Liver Carcinomas', *Nature*, 445.7128 (2007), pp. 656–60, doi:10.1038/nature05529