

Genes, Molecules and Cells-2

Second year course, running in Semester-2, for all Biomolecular science students.

View Online



Alberts, Bruce. Molecular Biology of the Cell. 5th ed. New York, N.Y.: Garland Science, 2008. Print.

'Bacterial Transformation Using Heat Shock and Competent Cells | Protocol'. N.p., n.d. Web.

<<https://www.jove.com/science-education/5059/bacterial-transformation-the-heat-shock-method>>.

Boyle, Jennifer, and Scott Ramsay. Writing for Science Students. London: Palgrave, 2017. Print.

'Circadian Rhythms, Biological Clock, Chronobiology - Crystalinks'. N.p., n.d. Web.

<<http://www.crystalinks.com/biologicalclock.html>>.

Clapham, David E. 'Calcium Signaling'. Cell 131.6 (2007): 1047–1058. Web.

'Concepts in Biochemistry - Concept Reviews'. n. pag. Web.

<https://www.wiley.com/legacy/college/boyer/0470003790/reviews/redox/reduction_potentials.htm>.

'DNA Gel Electrophoresis | Protocol'. N.p., n.d. Web.

<<https://www.jove.com/science-education/5057/dna-gel-electrophoresis>>.

'Enzyme Kinetics'. N.p., n.d. Web.

<<http://www.biology-pages.info/E/EnzymeKinetics.html>>.

'Enzyme Kinetics - YouTube'. Web.

<<https://www.youtube.com/playlist?list=PLbKSbFnKYVY3j6ubaW1zgTXj5C4443v8s>>.

'Enzymes and Activation Energy | Biomolecules | MCAT | Khan Academy - YouTube'. Web.

<<https://www.youtube.com/watch?v=j00Ep0Byu0Y>>.

'Experimental Methods in Protein Structure Determination: Protein Crystallization and Protein Crystallography'. N.p., n.d. Web.

<<https://proteinstructures.com/experimental/experimental-methods/>>.

Falchi, Mario et al. 'Low Copy Number of the Salivary Amylase Gene Predisposes to Obesity'. Nature Genetics 46.5 (2014): 492–497. Web.

'Gel Electrophoresis'. N.p., n.d. Web. <<http://learn.genetics.utah.edu/content/labs/gel/>>.

'GPCR | Learn Science at Scitable'. N.p., n.d. Web.
<<https://www.nature.com/scitable/topicpage/gpcr-14047471>>.

Griffiths, Anthony J. F. et al. Introduction to Genetic Analysis. Eleventh edition. New York, NY: W.H. Freeman & Company, a Macmillan Education imprint, 2015. Print.

'Identification of Cyclin-Dependent Kinase 1 Specific Phosphorylation Sites by an In Vitro Kinase Assay | Protocol'. N.p., n.d. Web.
<<https://www.jove.com/video/57674/identification-cyclin-dependent-kinase-1-specific-phosphorylation>>.

'Induced Fit Model of Enzyme Catalysis | Chemical Processes | MCAT | Khan Academy - YouTube'. Web. <<https://www.youtube.com/watch?v=8IUB2sAQkzw>>.

'Interactive Concepts in Biochemistry - Content by Chapter'. n. pag. Web.
<https://www.wiley.com/legacy/college/boyer/0470003790/chapter/chapter_list.htm#>.

'Introduction to Enzymes and Catalysis | Chemical Processes | MCAT | Khan Academy - YouTube'. Web. <<https://www.youtube.com/watch?v=G7ZAwUdBNFE>>.

'Introduction to Protein Homology / Comparative Modeling, Step in Homology Modeling'. N.p., n.d. Web. <<https://proteinstructures.com/structure/introduction/>>.

'Introduction to Sequence Alignment and Sequence Analysis'. N.p., n.d. Web.
<<https://proteinstructures.com/sequence/introduction/#:~:text=Introduction%20to%20Protein%20Sequence%20Alignment%20and%20Analysis.%20Amino,meaning%20and%20are%20unable%20to%20extract%20the%20information.>>>.

Jeremy M Berg. 'Biochemistry'. W H Freeman, 2002. Web.
<<https://www.ncbi.nlm.nih.gov/books/NBK21154/?depth=2>>.

Karra, Aroon S., Steve Stippec, and Melanie H. Cobb. 'Assaying Protein Kinase Activity with Radiolabeled ATP'. Journal of Visualized Experiments 123 (2017): n. pag. Web.

'Kevin B. Jones: Why Curiosity Is the Key to Science and Medicine : TED.Com : Free Download & Streaming : Internet Archive'. N.p., n.d. Web.
<https://archive.org/details/KevinJones_2015X>.

'---'. N.p., n.d. Web. <https://archive.org/details/KevinJones_2015X>.

Lehninger, Albert L., David L. Nelson, and Michael M. Cox. Lehninger Principles of Biochemistry. 6th ed. New York, N.Y.: W.H. Freeman, 2013. Print.

Lemmon, Mark A., and Joseph Schlessinger. 'Cell Signaling by Receptor Tyrosine Kinases'. Cell 141.7 (2010): 1117–1134. Web.

'LifeSkills | Developing Work and Life Skills'. N.p., n.d. Web.
<<https://www.barclayslifeskills.com/>>.

Lindquist, Susan. 'Interview: Protein Folding and Studies of Neurodegenerative Diseases'. Journal of Visualized Experiments 17 (2008): n. pag. Web.

Nurse, Paul M. 'Cyclin Dependent Kinases and Cell Cycle Control'. Bioscience Reports 22.5/6 (2002): 487–499. Web.

'PCR'. N.p., n.d. Web. <<http://learn.genetics.utah.edu/content/labs/pcr/>>.

'PCR: The Polymerase Chain Reaction | Protocol'. N.p., n.d. Web. <<https://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5056/pcr-the-polymerase-chain-reaction>>.

'PDB-101: cAMP-Dependent Protein Kinase (PKA)'. N.p., n.d. Web. <<http://pdb101.rcsb.org/motm/152>>.

'---'. N.p., n.d. Web. <<http://pdb101.rcsb.org/motm/152>>.

'PDB-101: Insulin Receptor'. N.p., n.d. Web. <<http://pdb101.rcsb.org/motm/182>>.

'---'. N.p., n.d. Web. <<http://pdb101.rcsb.org/motm/182>>.

'PDB-101: Learning Resources: Methods for Determining Structure'. N.p., n.d. Web. <<https://pdb101.rcsb.org/learn/guide-to-understanding-pdb-data/methods-for-determining-structure>>.

Perry, George H et al. 'Diet and the Evolution of Human Amylase Gene Copy Number Variation'. Nature Genetics 39.10 (2007): 1256–1260. Web.

'PombeNet at The Forsburg Lab - University of Southern California'. N.p., n.d. Web. <<https://dornsife.usc.edu/pombenet/>>.

'Protein Structure | Learn Science at Scitable'. N.p., n.d. Web. <<https://www.nature.com/scitable/topicpage/protein-structure-14122136>>.

'Protein Three-Dimensional Structure: Levels of Protein Structure, Proteins Motifs, Domains and Databases'. N.p., n.d. Web. <<https://proteinstructures.com/structure/protein-domains/>>.

'Proteins - YouTube'. Web. <<https://www.youtube.com/playlist?list=PLbKSbFnKYVY0By5uwg3eAmGeuynvGqCQw>>.

Reece, Jane B., and Neil A. Campbell. Campbell Biology: Jane B. Reece ... [et Al.]. 9th ed., Global ed. Boston, Mass: Pearson Education, 2011. Print.

'Regulation of the Lactase Gene | HHMI BioInteractive'. Web. <<http://www.hhmi.org/biointeractive/regulation-lactase-gene>>.

'Restriction Enzyme Digests | Protocol'. N.p., n.d. Web. <<https://www.jove.com/science-education/5070/restriction-enzyme-digests>>.

'Second Messengers'. N.p., n.d. Web. <http://www.biology-pages.info/S/Second_messengers.html>.

'Separating Protein: SDS-Polyacrylamide Gel Electrophoresis (SDS-PAGE) | Protocol'. N.p., n.d. Web.

<<https://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5058/separating-protein-with-sds-page>>.

'The 2017 Nobel Prize in Physiology or Medicine - Press Release'. N.p., n.d. Web. <https://www.nobelprize.org/nobel_prizes/medicine/laureates/2017/press.html>.

'University of Glasgow - Information for Current Students - Graduate Attributes'. N.p., n.d. Web. <<http://www.gla.ac.uk/students/attributes/>>.

Williamson, Michael P. How Proteins Work. New York, N.Y.: Garland Science, 2012. Print.

Wyckoff, Gerald J., Wen Wang, and Chung-I Wu. 'Rapid Evolution of Male Reproductive Genes in the Descent of Man'. Nature 403.6767 (2000): 304–309. Web.