

BS2150: Applications Of Molecular Genetics In Biology

View Online



[1]

Ahmad, P. et al. 2012. Role of Transgenic Plants in Agriculture and Biopharming. *Biotechnology Advances*. 30, 3 (2012), 524–540.
DOI:<https://doi.org/10.1016/j.biotechadv.2011.09.006>.

[2]

Alpha & Omega: Making Omega-3 Fish Oils in GM Camelina Plants: .

[3]

Anti-GMO Groups - United States | GMO Awareness:
<https://gmo-awareness.com/resources/anti-gmo-groups-america/>.

[4]

Betts, H.C. et al. 2018. Integrated Genomic and Fossil Evidence Illuminates Life's Early Evolution and Eukaryote Origin. *Nature Ecology & Evolution*. 2, 10 (2018), 1556–1562.
DOI:<https://doi.org/10.1038/s41559-018-0644-x>.

[5]

Brown, T.A. 2007. *Genomes 3*. Garland Science.

[6]

Brown, T.A. 2018. *Genomes 4*. Garland Science.

[7]

Brown, T.A. 2007. Microarrays. *Genomes 3*. Garland Science. 169–175.

[8]

Brown, T.A. 2007. Molecular Phylogenetics. *Genomes 3*. Garland Science. 609–620.

[9]

Brown, T.A. 2007. Replication Slippage. *Genomes 3*. Garland Science. 511–511.

[10]

Cai, N. 2015. Sparse Whole-Genome Sequencing Identifies Two Loci for Major Depressive Disorder. *Nature*. 523, 7562 (2015), 588–591. DOI:<https://doi.org/10.1038/nature14659>.

[11]

Chial, H. 2008. Human Genome Project: Sequencing the Human Genome | Learn Science at Scitable. *Nature Education*. 1, 1 (2008), 219–219.

[12]

Chun, Y.S. et al. 2011. Induced Pluripotent Stem Cells and Personalized Medicine: Current Progress and Future Perspectives. *Anatomy & Cell Biology*. 44, 4 (2011), 245–255. DOI:<https://doi.org/10.5115/acb.2011.44.4.245>.

[13]

Daniell, H. et al. 2009. Plant-Made Vaccine Antigens and Biopharmaceuticals. *Trends in Plant Science*. 14, 12 (2009), 669–679. DOI:<https://doi.org/10.1016/j.tplants.2009.09.009>.

[14]

Daniell, H. et al. 2009. Plant-Made Vaccine Antigens and Biopharmaceuticals. *Trends in Plant Science*. 14, 12 (2009), 669–679. DOI:<https://doi.org/10.1016/j.tplants.2009.09.009>.

[15]

'Different Types of Vaccines' on History of Vaccines Website:
<http://www.historyofvaccines.org/content/articles/different-types-vaccines>.

[16]

Durbin, R.M. 2010. A Map of Human Genome Variation From Population-Scale Sequencing. *Nature*. 467, 7319 (2010), 1061–1073. DOI:<https://doi.org/10.1038/nature09534>.

[17]

EMBL-EBI Gene Ensembl: <http://www.ensembl.org/index.html>.

[18]

Escors, D. and Breckpot, K. 2010. Lentiviral Vectors in Gene Therapy: Their Current Status and Future Potential. *Archivum Immunologiae et Therapiae Experimentalis*. 58, 2 (2010), 107–119. DOI:<https://doi.org/10.1007/s00005-010-0063-4>.

[19]

Espinoza, C. et al. 2013. Cisgenesis and Intragenesis: New Tools for Improving Crops. *Biological Research*. 46, 4 (2013), 323–331.
DOI:<https://doi.org/10.4067/S0716-97602013000400003>.

[20]

'First British volunteer injected with trial Ebola vaccine in Oxford' on The Guardian Website: 2014.
<https://www.theguardian.com/society/2014/sep/17/ruth-atkins-first-british-volunteer-injected-trial-ebola-vaccine-oxford>.

[21]

Freeland, J.R. et al. 2011. Predators and Prey. *Molecular Ecology*. Wiley-Blackwell. 309-313.

[22]

Freeland, J.R. et al. 2011. Predators and Prey. *Molecular Ecology*. Wiley-Blackwell. 309-313.

[23]

Gilbert, N. 2013. Case Studies: A Hard Look at GM Crops. *Nature*. 497, 7447 (2013), 24-26.
DOI:<https://doi.org/10.1038/497024a>.

[24]

GMWatch Home: <http://gmwatch.org/>.

[25]

Grada, A. and Weinbrecht, K. 2013. Next-Generation Sequencing: Methodology and Application. *Journal of Investigative Dermatology*. 133, 8 (2013), 1-4.
DOI:<https://doi.org/10.1038/jid.2013.248>.

[26]

Greenpeace UK: <http://www.greenpeace.org.uk/>.

[27]

Guidance for Clinicians on the Use of RT-PCR and Other Molecular Assays for Diagnosis of Influenza Virus Infection | Health Professionals | Seasonal Influenza (Flu):
<http://www.cdc.gov/flu/professionals/diagnosis/molecular-assays.htm>.

[28]

Gunn, A. 2008. DNA Profiling. Essential Forensic Biology. Wiley-Blackwell. 88–91.

[29]

Hoffman, E.P. et al. 2011. Restoring Dystrophin Expression in Duchenne Muscular Dystrophy Muscle. The American Journal of Pathology. 179, 1 (2011), 12–22.
DOI:<https://doi.org/10.1016/j.ajpath.2011.03.050>.

[30]

Home - Genome - NCBI: <http://www.ncbi.nlm.nih.gov/genome/>.

[31]

International Service for the Acquisition of Agri-biotech Applications: <http://www.isaaa.org/>.

[32]

Istrail, S. and Sutton, G.G. 2004. Whole-Genome Shotgun Assembly and Comparison of Human Genome Assemblies. Proceedings of the National Academy of Sciences of the United States of America. 101, 7 (2004), 1916–1921.

[33]

James, C. 2014. ISAAA Report on Global Status of Biotech/GM Crops. ISAAA International Service for the Acquisition Of Agri-biotech Applications (ISAAA) <http://www.isaaa.org>.

[34]

Jedelský, P.L. et al. 2011. The Minimal Proteome in the Reduced Mitochondrion of the Parasitic Protist *Giardia intestinalis*. PLoS ONE. 6, 2 (2011).
DOI:<https://doi.org/10.1371/journal.pone.0017285>.

[35]

Jones, N.G. et al. 2018. Genetically Validated Drug Targets in Leishmania: Current Knowledge and Future Prospects. *ACS Infectious Diseases*. 4, 4 (2018), 467–477. DOI:<https://doi.org/10.1021/acsinfecdis.7b00244>.

[36]

Kaltenboeck, B. and Wang, C. 2005. Advances in Real-Time PCR: Application to Clinical Laboratory Diagnostics. *Advances in Clinical Chemistry*. 40, (2005), 219–259. DOI:[https://doi.org/10.1016/S0065-2423\(05\)40006-2](https://doi.org/10.1016/S0065-2423(05)40006-2).

[37]

Kindt, T.J. et al. 2007. *Immunology*. W. H. Freeman.

[38]

Klee, H.J. et al. 1987. Cloning of an Arabidopsis Thaliana Gene Encoding 5-Enolpyruvylshikimate-3-Phosphate Synthase: Sequence Analysis and Manipulation to Obtain Glyphosate-Tolerant Plants. *MGG Molecular & General Genetics*. 210, 3 (1987), 437–442. DOI:<https://doi.org/10.1007/BF00327194>.

[39]

Klümper, W. and Qaim, M. 2014. A Meta-Analysis of the Impacts of Genetically Modified Crops. *PLoS ONE*. 9, 11 (2014). DOI:<https://doi.org/10.1371/journal.pone.0111629>.

[40]

Koch, L. 2015. Genomics: Adding Another Dimension to Gene Regulation. *Nature Reviews Genetics*. 16, 10 (2015), 563–563. DOI:<https://doi.org/10.1038/nrg4007>.

[41]

Krieger, S. 2002. Trypanosomes Lacking Trypanothione Reductase Are Avirulent and Show Increased Sensitivity to Oxidative Stress. *Molecular Microbiology*. 35, 3 (2002), 542–552. DOI:<https://doi.org/10.1046/j.1365-2958.2000.01721.x>.

[42]

Lander, E.S. 2011. Initial Impact of the Sequencing of the Human Genome. *Nature*. 470, 7333 (2011), 187–197. DOI:<https://doi.org/10.1038/nature09792>.

[43]

Leadbeater, E. et al. 2011. Nest Inheritance Is the Missing Source of Direct Fitness in a Primitively Eusocial Insect. *Science*. 333, 6044 (2011), 874–876. DOI:<https://doi.org/10.1126/science.1205140>.

[44]

Leger, M.M. et al. 2017. Organelles That Illuminate the Origins of Trichomonas Hydrogenosomes and Giardia Mitosomes. *Nature Ecology & Evolution*. 1, 92 (2017). DOI:<https://doi.org/10.1038/s41559-017-0092>.

[45]

Martincová, E. 2015. Probing the Biology of Giardia intestinalis Mitosomes Using In Vivo Enzymatic Tagging [open access]. *Molecular and Cellular Biology*. 35, 16 (2015), 2864–2874.

[46]

Nicholl, D.S.T. 2008. *An Introduction to Genetic Engineering*. Cambridge University Press.

[47]

Nicholl, D.S.T. 2008. *An Introduction to Genetic Engineering*. Cambridge University Press.

[48]

Nussbaum, R.L. et al. 2016. *Thompson & Thompson Genetics in Medicine*. Elsevier.

[49]

Nussbaum, R.L. et al. Thompson & Thompson Genetics in Medicine.

[50]

OMIM - Online Mendelian Inheritance in Man: <http://www.omim.org/>.

[51]

Primrose, S.B. and Twyman, R. 2009. Principles of Gene Manipulation and Genomics. Wiley.

[52]

Primrose, S.B. and Twyman, R.M. 2006. Principles of Gene Manipulation and Genomics. Blackwell.

[53]

Pyrosequencing Technology and Platform Overview - QIAGEN:
<https://www.qiagen.com/gb/resources/technologies/pyrosequencing-resource-center/technology-overview/>.

[54]

Rahman, M.M. et al. 1969. Influenza and Respiratory Syncytial Viruses: Efficacy of Different Diagnostic Assays. Pakistan Journal of Medical Sciences. 31, 4 (1969), 791-794.
DOI:<https://doi.org/10.12669/pjms.314.7003>.

[55]

Regoes, A. et al. 2005. Protein Import, Replication, and Inheritance of a Vestigial Mitochondrion. Journal of Biological Chemistry. 280, 34 (2005), 30557-30563.
DOI:<https://doi.org/10.1074/jbc.M500787200>.

[56]

Rowe, G. et al. 2017. An Introduction to Molecular Ecology. Oxford University Press.

[57]

Rowe, G. et al. 2017. Assignment Tests. An Introduction to Molecular Ecology. Oxford University Press.

[58]

Rowe, G. et al. 2017. DNA Barcoding. An Introduction to Molecular Ecology. Oxford University Press.

[59]

Rowe, G. et al. 2017. Identifying Relatives in Behavioural Ecology. An Introduction to Molecular Ecology. Oxford University Press.

[60]

Rowe, G. et al. 2017. Microsatellites. An Introduction to Molecular Ecology. Oxford University Press.

[61]

Rowe, G. et al. 2017. mtDNA and rRNA. An Introduction to Molecular Ecology. Oxford University Press.

[62]

Rowe, G. et al. 2017. Mutation Rates. An Introduction to Molecular Ecology. Oxford University Press.

[63]

Rowe, G. et al. 2017. Prey ID. An Introduction to Molecular Ecology. Oxford University Press.

[64]

Say NO to GM - Alliance for Natural Health International:
<http://anhinternational.org/campaign/say-no-to-gm/>.

[65]

Schlott, A.C. et al. 2018. Myristoylation as a Drug Target in Malaria: Exploring the Role of -Myristoyltransferase Substrates in the Inhibitor Mode of Action. *ACS Infectious Diseases*. 4, 4 (2018), 449–457.
DOI:<https://doi.org/10.1021/acsinfecdis.7b00203>.

[66]

Schouten, H.J. et al. 2006. Cisgenic Plants Are Similar to Traditionally Bred Plants: International Regulations for Genetically Modified Organisms Should Be Altered to Exempt Cisgenesis. *EMBO reports*. 7, 8 (2006), 750–753.
DOI:<https://doi.org/10.1038/sj.embor.7400769>.

[67]

Serruto, D. and Rappuoli, R. 2006. Post-Genomic Vaccine Development. *FEBS Letters*. 580, 12 (2006), 2985–2992. DOI:<https://doi.org/10.1016/j.febslet.2006.04.084>.

[68]

Slatkin, M. 2008. Linkage Disequilibrium - Understanding the Evolutionary Past and Mapping the Medical Future. *Nature Reviews Genetics*. 9, 6 (2008), 477–485.
DOI:<https://doi.org/10.1038/nrg2361>.

[69]

Small, J.C. and Ertl, H.C.J. 2011. Viruses - From Pathogens to Vaccine Carriers. *Current Opinion in Virology*. 1, 4 (2011), 241–245.
DOI:<https://doi.org/10.1016/j.coviro.2011.07.009>.

[70]

Small, J.C. and Ertl, H.C.J. 2011. Viruses From Pathogens to Vaccine Carriers. *Current Opinion in Virology*. 1, 4 (2011), 241–245.
DOI:<https://doi.org/10.1016/j.coviro.2011.07.009>.

[71]

Soil Association: <https://www.soilassociation.org/>.

[72]

Strachan, T. et al. 2011. Genetic Approaches to Treating Disease. *Human Molecular Genetics*. Garland Science. 677–718.

[73]

Strachan, T. et al. 2011. Genetic Mapping of Mendelian Characters. *Human Molecular Genetics*. Garland Science. 441–467.

[74]

Strachan, T. et al. 2011. *Human Molecular Genetics*. Garland Science.

[75]

Strachan, T. et al. 2011. Identifying Human Disease Genes and Susceptibility Factors. *Human Molecular Genetics*. Garland Science. 497–536.

[76]

Strachan, T. et al. 2011. Mapping Genes Conferring Susceptibility to Complex Diseases. *Human Molecular Genetics*. Garland Science. 467–493.

[77]

'The Development of HIV Vaccines' on History of Vaccines Website:
<http://www.historyofvaccines.org/content/articles/development-hiv-vaccines>.

[78]

The Future of Food: <http://www.thefutureoffood.com/About.html>.

[79]

'The Future of Immunization' on History of Vaccines Website:
<http://www.historyofvaccines.org/content/articles/future-immunization>.

[80]

The Genetics of Society | The Scientist Magazine:
<http://www.the-scientist.com/?articles.view/articleNo/41704/title/The-Genetics-of-Society/>.

[81]

The Golden Rice Project: <http://www.goldenrice.org/>.

[82]

'The Human Immune System and Infectious Disease' on History of Vaccines Website:
<http://www.historyofvaccines.org/content/articles/human-immune-system-and-infectious-disease>.

[83]

Tovar, J. et al. 1998. Evidence That Trypanothione Reductase Is an Essential Enzyme in *Leishmania* by Targeted Replacement of the Trya Gene Locus. *Molecular Microbiology*. 29, 2 (1998), 653–660. DOI:<https://doi.org/10.1046/j.1365-2958.1998.00968.x>.

[84]

Tovar, J. et al. 1999. The Mitosome, a Novel Organelle Related to Mitochondria in the Amitochondrial Parasite *Entamoeba Histolytica*. *Molecular Microbiology*. 32, 5 (1999), 1013–1021. DOI:<https://doi.org/10.1046/j.1365-2958.1999.01414.x>.

[85]

'Types of Vaccines' on History of Vaccines Website:
<http://www.historyofvaccines.org/content/types-vaccines>.

[86]

UCSC Genome Browser Home: <https://genome.ucsc.edu/>.

[87]

Urwin, R. and Maiden, M.C.J. 2003. Multi-Locus Sequence Typing: A Tool for Global Epidemiology. *Trends in Microbiology*. 11, 10 (2003), 479–487.
DOI:<https://doi.org/10.1016/j.tim.2003.08.006>.

[88]

Vaccination: The Present and the Future: 2011.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3238332/>.

[89]

Venter, J.C. 2001. The Sequence of the Human Genome. *Science*. 291, 5507 (2001), 1304–1351. DOI:<https://doi.org/10.1126/science.1058040>.

[90]

Voleman, L. 2017. Giardia Intestinalis Mitosomes Undergo Synchronized Fission but Not Fusion and Are Constitutively Associated With the Endoplasmic Reticulum. *BMC Biology*. 15, 1 (2017). DOI:<https://doi.org/10.1186/s12915-017-0361-y>.

[91]

Wang, Z. et al. 2009. RNA-Seq: A Revolutionary Tool for Transcriptomics. *Nature Reviews Genetics*. 10, 1 (2009), 57–63. DOI:<https://doi.org/10.1038/nrg2484>.

[92]

Wang, Z. et al. 2009. RNA-seq: A Revolutionary Tool for Transcriptomics. *Nature Reviews Genetics*. 10, 1 (2009), 57–63. DOI:<https://doi.org/10.1038/nrg2484>.

[93]

What Are Genome-Wide Association Studies? - Genetics Home Reference:
<https://ghr.nlm.nih.gov/primer/genomicresearch/gwastudies>.

[94]

Williamson, S.J. et al. 2012. Metagenomic Exploration of Viruses Throughout the Indian Ocean. *PLoS ONE*. 7, 10 (2012). DOI:<https://doi.org/10.1371/journal.pone.0042047>.

[95]

Wright, M.H. 2014. Validation of N-Myristoyltransferase as an Antimalarial Drug Target Using an Integrated Chemical Biology Approach. *Nature Chemistry*. 6, 2 (2014), 112–121. DOI:<https://doi.org/10.1038/nchem.1830>.

[96]

2001. Erratum: Initial Sequencing and Analysis of the Human Genome. *Nature*. 411, 6838 (2001), 720–720. DOI:<https://doi.org/10.1038/35079657>.

[97]

2000. Human Genome Announcement at the White House.

[98]

2015. Recent Debate on GMOs | Standard Media.

[99]

2014. The Pyrosequencing Reaction Cascade System.