Training Resources

DOH 420-411 May 2022

Training Resource	Details
Gen Epi Resources https://czgenepi.org/resources	Allison Black, affiliated with the Chan-Zuckerberg Initiative, hosts a 15-week webinar on the foundations of genomic epidemiology: Week 1: Mutations, substitutions, and genetic divergence trees. Week 2: Molecular clocks and temporally-resolved trees. Week 3: Phylogeography and trait reconstruction on trees. Week 4: Under the hood with Nextstrain. Week 5: Consensus genome quality control. Week 6: Genomic surveillance data management. Week 7: Phylogenetic nomenclature systems. Week 8: Sampling design in genomic epidemiology. Week 9: Phylodynamic analysis. Week 10: Aspen demo + phylogenetic placements. Week 11: Antigenic evolution. Week 12: Phylogenetic placements versus phylogenetic trees. Week 13: Introduction to genomic epi of TB Week 14: Local cases studies in using genomic epidemiology. Week 15: Genomic epidemiology of mumps virus. CZ Gen Epi Tutorial: This tutorial introduces self-serve tree building in CZ Gen Epi, and discusses what the different tree types are useful for.
Viruses and Vaccines Seminar "SARS-COV-2 evolution in light of Omicron" https://www.youtube.com/watch?v=Nd9Kk79jauI	Trevor Bedford presents Viruses and Vaccines Seminar at Brotman Baty Institute on "SARS-CoV-2 evolution in light of Omicron"
Wellcome Connecting Science https://www.futurelearn.com/partners/wellcome-genome-campus	UK-based programme providing open postgraduate courses and conferences focused on biomedicine.
COVID-19 Genomic Epidemiology Toolkit https://www.cdc.gov/amd/training/covid-19-gen-epi-toolkit.html	CDC's Advanced Molecular Detection COVID-19 Gen EPI toolkit consists of 3 parts. Part 1: Introduction Part 2: Case studies Part 3: Implementation

Epidemiology for Public Health Specialization https://www.coursera.org/specializations/public-health-epidemiology?utm_source=gg&utm_medium=sem&utm_campaign=27-EpidemiologyforPH-Imperial-US&utm_content=B2C&campaignid=16738014393&adgroupid=133004444537&device=c&keyword=epidemiology%20and%20public%20health&matchtype=b&network=s&devicemodel=&adpostion=&creativeid=590764129843&hide_mobile_promo&gclid=EAIaIQobChMIuc-h3cqj9wIVDsLCBB2X1wfKEAAYAiAAEgKZ-fD_BwE	Coursera presents specialized courses that help master skills that help with the conduct and critically assess research in epidemiology.
Future Learn https://www.futurelearn.com/	Future Learn has some data science and basic programming courses
Allison Black's Gen Epi Handbook https://alliblk.github.io/genepi-book/	An applied genomic epidemiological handbook