IGC-Industry Genetics and Genomics

Courses

IGC 620. Applied Advanced Medical Genetics and Genomics. 3 Hours.
Medical applications of advances in genetics and genomics with a review of current strategy for detection of mutations associated with genetic disorders. Provides a basic understanding of genetic risk assessment and population genetics, genomics approaches to diagnosis and risk stratification.

IGC 621. Clinical Genomic Testing Technologies and Methodologies. 3 Hours.
Critically compare and contrast genetic and genomic testing methodologies and platforms and the benefits and limitations of their use in diverse clinical scenarios.

IGC 622. Clinical Tools for Genomic Variant Curration and Analysis. 3 Hours.
A comprehensive review of the key principles of bioinformatics used in the curation of genetic variants for clinical medicine. This course will explore the software and data used in bioinformatics pipelines to curate and analyze variants.

IGC 623. Genomic Variant Interpretation Using Clinical Application. 3 Hours.
Explore the evolution of current interpretation guidelines used in clinical diagnostic laboratories for genetic variant interpretation. Learn to critically examine functional, computational, and statistical data and how the data may influence variant interpretation.

IGC 624. Genetics and Genomics Diagnostics Regulation. 3 Hours.
An introduction to the nuances of regulation, certification and ethical practices in the genetics and genomics industry.

IGC 625. Implementation of Variant Interpretation Practices in the Genetics and Genomics Industry. 3 Hours.
Active engagement in variant analysis and interpretation through direct application of variant analysis and interpretation skills in an assigned setting.