



In-Training Evaluation Report – Genetic and Genomic Diagnostic Specialty

NAME: Last Name _____ First Name _____

Date Training Started: _____ Full Time Part time

Training Stage: **Core** Unit: **Next Generation Sequencing**

Unit Start Date: _____ Unit End Date: _____

Training Site: _____ Supervisor: _____

Learning objectives associated with this unit:	Below expectations	Meets expectations	Exceeds expectations
ME 1.3 Apply knowledge of the different analysis parameter settings to interpret a NGS-based assay			
ME 1.6 Judge the performance of a NGS test run and/or troubleshoot a false result or a failed NGS test run by applying knowledge of how different parameters (e.g. library preparation, sequencing chemistries, bioinformatics tools, genomic content, specimen type, etc.) influence the sensitivity/specificity and QC metrics of a NGS-based test			
ME 1.6 Assess the relevance (or absence of relevance) of a gene to a disease using current guidelines/criteria			
ME 2.2 Recognize the complementarity of NGS-based assays with results obtained using other testing methods (i.e. FISH, MLPA)			
ME 2.2 Appreciate the utility of NGS-based testing to detect copy-number variations (CNVs) including aneuploidy and chromosome rearrangements			
ME 2.2 Integrate data from WES/WGS trio analysis when appropriate			
ME 3.1 Understand the advantages and limitations of different NGS platforms			
ME 3.4 Analyze NGS-based test results by proper use of analysis software/bioinformatics tools			
ME 3.4 Interpret and classify the variants identified by applying knowledge of the pathophysiology of the disorder and human variation, current guidelines and interpretation criteria in use, including proper use of disease-specific databases, general population datasets and in silico algorithms			
ME 3.4 Compose validation plans for NGS-based tests, including validation in both wet-lab and dry-lab (bioinformatics) steps as well as in both constitutional (germline) and cancer (somatic) setting			
L 2.2 Select the most efficient approach for a diagnosis from NGS panel, whole-exome sequencing or whole-genome sequencing, based on clinical scenario, cost, sensitivity, material available, etc.			

Longitudinal Competencies:	Never	Rarely	Someti mes	Usually	Always
ME 1.3 Apply knowledge of the main clinical features of genetic disorders in the context of choice of testing procedure, result interpretation and report writing					
ME 1.6 Demonstrate insight into limits of expertise and seek consultation as necessary					
ME 2.1 Prioritize specimens and testing based on clinical indication and impact on medical management					
ME 2.2 Select ancillary tests in a resource-effective and ethical manner that balances costs with potential utility of results					
COM 4.1 Prepare clear, concise, comprehensive, and timely written reports for genetic tests that incorporate personal and family history and results from other relevant testing in answering the clinical question					
COL 1.2 Discuss trouble-shooting issues with colleagues in the genetic laboratory including laboratory members					
COL 1.2 Work effectively with laboratory technologists and laboratory assistants, directing their assistance as appropriate					
COL 2.1 Respond to requests and feedback in a respectful and timely manner					
L 1.1 Actively participates in quality control, quality assurance, and quality improvement initiatives					
L 3.1 Review quality control data, and take appropriate action for deficiency follow-up, including possible sample mix-up					
HA 1.3 Understand the clinical implications of incidental findings, approaches to minimize the chance of finding them, and policies for reporting					
S 1.2 Identify opportunities for learning and improvement by regularly reflecting on and assessing personal performance					
S 2.4 Participate in available learning activities					
P 1.2 Demonstrate a commitment to excellence in all aspects of laboratory practice					
P 3.1 Adhere to the relevant codes, policies, standards, and laws governing laboratory practice including accreditation, standard operating procedures, training and competency, safety, and privacy					

Technical and Interpretative requirements have been completed for this unit Yes No

If no, justify in the section below.

Summarize the trainee's performance for this unit and formulate recommendations for future improvement

Name/Signature of evaluator(s) _____

Date _____

Name/Signature of Program Director _____

This is to attest that I have read this document

Signature of Trainee _____