In-Training Evaluation Report – Genetic and Genomic Diagnostic Specialty

NAME: Last Name _____ First Name _____

Date Training Started: _____ Full Time ☐ Part time ☐

Training Stage: **Foundations of Discipline** Unit: **Prenatal Genetics**

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 most appropriate available testing techniques in prenatal diagnosis based on clinical indication, gestational age and specimen type			
ME 1.3 Describe the role of advanced maternal age on reproductive success in humans			
ME 1.3 Provide appropriate recommendations for follow-up of uniparental disomy (UPD) in the context of a familial rearrangement or marker involving an imprinted chromosome			
ME 1.3 Understand the statistical concepts associated with prenatal screening and testing and differentiate prenatal screening from prenatal testing			
ME 1.3 Apply knowledge of basic human embryology (including development of the placenta vs embryo proper), the sources of cells studied in prenatal genetic tests, the types of twinning and their impacts on cell source in prenatal genetic testing and the timing of organ system development			
ME 1.4 Analyze chromosomes from amniotic fluid, chorionic villus sampling and fibroblast tissue culture preparations and demonstrate ability to detect chromosome aneuploidy, Robertsonian translocations, large chromosome translocations, whole G-band size deletions and duplications in metaphase images			
ME 3.1 Describe the benefits and limitations of non-invasive prenatal screening in comparison to a biochemical screening program and its effect on a prenatal diagnosis program			
ME 3.2 Describe the methodology, benefits and limitations of the FISH and QF-PCR RAD testing kits available, including probe choice (location, size), possible artefacts, appropriate use of controls, cut-off determination and approaches to MCC detection			
ME 3.4 Perform all laboratory and analytical steps of the procedure to obtain chromosomes from prenatal specimens: set-up (or observation), culture maintenance, harvest and slide-making			

ME 3.4 Understand the parameters that influence cell growth (including cell types present in direct versus short and long term chorionic villi cultures), nucleic acid yield, and chromosome preparation including roles of gaseous atmosphere, humidity, temperature, and components of tissue culture media			
ME 4.1 Design and implement a plan to investigate prenatal mosaicism in chromosome studies and understand the concept and the definitions of mosaicism levels in flask vs in situ cultures of prenatal specimens			
ME 4.1 Design and implement a troubleshooting plan to investigate situations such as bacterial/fungal contamination in cultures or incubators, unexplained growth failure of tissue culture, or maternal cell contamination as a possible confounder of result interpretation			
ME 4.1 Implement a plan to investigate, report and follow up abnormal RAD or karyotype results			
COM 2.3 Apply proper use of the most recent ISCN to describe simple prenatal testing results			
COM 4.2 Report appropriately mosaic findings in a prenatal result and provide consultation to the ordering clinician as necessary			
COL 1.3 Understand the role of ultrasound examination in prenatal care and the common occurrences in this type of examination [hydrops, cystic hygroma, Congenital Cystic Adenomatoid Malformation (CCAM), gastroschisis, omphalocoele, brain abnormalities, etc.] through attendance at prenatal rounds or clinics			

Longitudinal Competencies:	Never	Rarely	Sometimes	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 _____