

**Draft**  
**JUNE 2023**

Period	Week	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
		29	30	31	1	2
9:00-12:00 น.	Week1: Clinical Genomics				Clinical Genomics and Application of Rare Disease Variant Interpretation	Patterns of single gene inheritance (AR)
13:00-16:30					Patterns of single gene inheritance (AD)	Patterns of single gene inheritance (x-linked)
		5	6	7	8	9
9:00-12:00	Week 2: Molecular genomics (sequencing technologies, DNA, gene, chromosome, mitochondria), Tools in Human Molecular Genetics	หยุดชดเชย วันวิสาขบูชา	Cancer Genetics	Non Medelian inheritance 2 (mitochondrial disorders)	Basic to Advanced molecular genetics: From Sanger to NGS and their application	From DNA to computer files: CU Excellence Center for Genomics and Precision Medicine sequencing workflow (1)
13:00-16:30			Non Medelian inheritance1 (imprinting genetics, dynamic repeats, mosaicism)	Personalized medicine for patients with rare disorders: real-world application	CU Excellence Center for Genomics and Precision Medicine Workflow: From Clinics/bedside to bench and back again	From DNA to computer files: CU Excellence Center for Genomics and Precision Medicine sequencing workflow (2)
		12	13	14	15	16
9:00-12:00	Week 3-4: Online softwares and tools, Standards and guidelines for the interpretation of sequence variants (ACMG, AMP)	Basic Bioinformatics: From FASQ to variants	Variant characteristics: population, disease-specific databases, in silico prediction, mutation types, segregation data, literature/functional data search (1)	New disease gene discovery and validation	Overview of the ACMG variant classification (1)	Nomenclature - describing variants: work shop (1)
13:00-16:30		Variant Interpretation work flow (clinical data, HPO, filtering, prioritization, interpretation)	Variant characteristics: population, disease-specific databases, in silico prediction, mutation types, segregation data, literature/functional data search (2)	Interpretation tools/platforms (VI, Emedgene, Franklin etc.)	Overview of the ACMG variant classification (2)	Nomenclature - describing variants: work shop (2)
		19	20	21	22	23
9:00-16:30		Online databases for variant interpretation (1)	Report form	Case demonstration from request form to report: AD de novo	Case demonstration from request form to report: AR compound heterozygous	Case demonstration from request form to report: X-linked inherited
13:00-16:30		Online databases for variant interpretation (2)	Case demonstration from request form to report: AD inherited	Case demonstration from request form to report: AR homozygous	Case demonstration from request form to report: Mitochondrial inheritance	Case demonstration from request form to report: X-linked de novo
		26	27	28	29	30
9:00-16:30	Week 5: Real case practice: AD inherited (เขົ່າ+น່ານ)	Variant: affect DNA, RNA and protein (เขົ່າ)/ How molecular diagnosis changes patient care (น່ານ)	Real case practice: AD	Real case practice: AD	Real case practice: AD	Real case practice: AD

# Draft JULY 2023

Period	Week	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
09.00-16.30 น.	Week 6: Real case practice: AD de novo (เช้า+บ่าย)	3	4	5	6	7
		Real case practice: AD de novo	Real case practice: AD de novo	Real case practice: AD de novo	Real case practice: AD de novo	Real case practice: AD de novo
09.00-16.30 น.	Week 7: Real case practice: AR homozygous (เช้า+บ่าย)	10	11	12	13	14
		Real case practice: AR homozygous	Real case practice: AR homozygous	Real case practice: AR homozygous	Real case practice: AR homozygous	Real case practice: AR homozygous
		17	18	19	20	21
09.00-16.30 น.	Week: 8 Real case practice: AR compound heterozygous (เช้า+บ่าย)	Real case practice (AR compound heterozygous)	Real case practice (AR compound heterozygous)	Real case practice (AR compound heterozygous)	Real case practice (AR compound heterozygous)	Real case practice (AR compound heterozygous)
09.00-16.30 น.	Week 9: Real case practice : X-linked (เช้า+บ่าย)	24	25	26	27	28
		Real case practice (X-linked)	Real case practice (X-linked)	Real case practice (X-linked)	Real case practice (X-linked)	วันหยุด วันเฉลิมพระชนมพรรษา ร.10
09.00-16.30 น.	Week 10: Real case practice: Mitochondrial disorder, germline cancer (เช้า+บ่าย)	31	1	2	3	4
		Real case practice (Mitochondrial disorder; Germline cancer)				

**Draft**  
**AUGUST 2023**

Period	Week	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
09.00-16.30 น.	Week 10: Real case practice (Mitochondrial disorder; Germline cancer) เข้า+นำม	31	1	2	3	4
			Real case practice (Mitochondrial disorder; Germline cancer)	วันหยุด วันอาสาฬหบูชา	Real case practice (Mitochondrial disorder; Germline cancer)	Real case practice (Mitochondrial disorder; Germline cancer)
09.00-16.30 น.	Week 11-13: Real case practice เข้า+นำม	7	8	9	10	11
		Real case practice	Real case practice	Real case practice	Real case practice	Real case practice
09.00-16.30 น.		14	15	16	17	18
		วันหยุดชดเชย วันแม่แห่งชาติ	Real case practice	Real case practice	Real case practice	Real case practice
09.00-16.30 น.		21	22	23	24	24
		Real case practice	Real case practice	Real case practice	Real case practice	Real case practice
09.00-16.30 น.	Week 14: Examination	28	29	30	31	1-September
		Self directed: case analysis (2 case)	Self directed: case analysis (2 case)	Self directed: case analysis (2 case)	Self directed: case analysis (2 case)	Applying variant interpretation to new disease genes, Evaluation, Certificate ceremony