Schedule for 2310523

GENOMICS AND PROTEOMICS (2 credits)

Second semester (2019)

Time: TU 10.00 - 12.00

Room: 519 Co-ordinator: Kunlaya

Topic	Hrs.	Date	Instructor
1. Genome Features (a review)	2	7 Jan	Anchalee
1.1 Morphology and classification			
1.2 Genome size and shape			
1.3 Gene content and organization			
2. Genome Analysis	2	21 Jan	Anchalee
2.1 Physical mapping and sequencing of genome			
2.2 The Human Genome Project			
2.3 Sequencing project of model organisms	4	28 Jan, 4 Feb	Anchalee
2.4 Comparative genomics			
3. Analysis of transcriptome	6	11 Feb, 18 Feb, 25 Feb	Teerapong
3.1 Analysis of gene expression			
3.2 Expressed sequence tags (ESTs)			
3.3 Serial analysis of gene expression			
3.4 Differential display			
3.5 DNA microarray			
Mid-term	examination:		
4. Proteomics and applications			
4.1 Proteomics			
· Introduction to proteomics	2	10 March	Kunlaya
· Expression Proteomics	4	17 March, 24 March	Kunlaya
· Structural Proteomics	4	31 March, 7 April	Kuakarun
· Interaction Proteomics	2	21 April	Kunlaya
4.2 Applications	2	28 April	Kunlaya
Final ex	amination:	T	
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