

CRYO-ELECTRONIC MICROSCOPY COURSE

PROGRAM

2021-2022

Week 1 – Administrative Tasks, Demonstration Full workflow, Revisit Online course material, Data Reconstruction

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:30	9:00 -10:00 reception (All) 10:00 - 11:00 explanation setup course, curriculum Present learning objectives and fill in questionnaire and self-appraisal	Demonstration microscope setup, and screening	Group B starts with sample preparation vitrobot 1 and 2 Group A starts with microscope setup and info limit/thon rings test on Galcios 1 and 2	Group B starts with sample clipping and loading Group A starts with screening	Group B starts with sample freezing, clipping and loading Group A starts data collection
break					
10:45-12:30	introduction trainers and staff, introduction to facilities, passes handover, handover course materials (form to be determined), introduction students formation of two 3-person groups, A and B.	Demonstration data collection	Group B starts with sample preparation vitrobot 1 and 2 Group A starts with microscope setup and info limit/thon rings test on Galcios 1 and 2	Group B starts with sample clipping and loading Group A starts with screening	Group B starts with sample freezing, clipping and loading Group A starts data collection
Lunch					
13:30-15:00	Questions on video learning material, lecture on workflow sample prep, microscope setup, screening, data acquisition	Group A starts with sample preparation vitrobot 1 and 2 Group B starts with microscope setup and info limit/thon rings test on Glacios 1 and 2	Group A starts with sample clipping and loading Group B starts with screening	Group A starts with sample freezing, clipping and loading Group B starts data collection	Group A and B each uses 1 vitrobot and 1 Glacios and prepares, screens and starts a data collection weekend run within 4 hours as a group of 3 students.
break					
15:30-17:00	15:30 -17:00 demonstration sample preparation and clipping	Group A starts with sample preparation vitrobot 1 and 2 Group B starts with microscope setup and info limit/thon rings test on Glacios 1 and 2	Group A starts with sample clipping and loading Group B starts with screening	Group A starts with sample freezing, clipping and loading Group B starts data collection	Group A and B each uses 1 vitrobot and 1 Glacios and prepares, screens and starts a data collection weekend run within 4 hours as a group of 3 students.

Week 2 – Supervised Practice

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:30	Each group will have their own vitrobot and glacios microscopes. The aim is to practice the SPA workflow of microscope test, sample preparation, clipping, loading, screening and starting data collection in each half day block. Either before lunch break and before end of each day a data run should be started	same as monday	same as monday	EXAM. For half day blocks with 2 microscopes and 2 vitrobots. Each group has 3 students A1,A2,A3 and B1,B2,B3. A2 and B2 will start to prepare samples, setup microscope, screen grids and setup a data run within 3 hours time on epoferritin.	Evaluation of the exam results. Additional questions or topics can be discussed, free time to work with the systems if needed
break					
10:45-12:30	Each group will have their own vitrobot and glacios microscopes. The aim is to practice the SPA workflow of microscope test, sample preparation, clipping, loading, screening and starting data collection in each half day block. Either before lunch break and before end of each day a data run should be started	same as monday	same as Monday	EXAM. For half day blocks with 2 microscopes and 2 vitrobots. Each group has 3 students A1,A2,A3 and B1,B2,B3. A2 and B2 will start to prepare samples, setup microscope, screen grids and setup a data run within 3 hours time on epoferritin.	Certificate hand over, fill in course evaluation forms and feedback
Lunch					
13:30-15:00	same as morning block	same as monday	EXAM. For half day blocks with 2 microscopes and 2 vitrobots. Each group has 3 students A1,A2,A3 and B1,B2,B3. A1 and B1 will start to prepare samples, setup microscope, screen grids and setup a data run within 3 hours time on epoferritin.	EXAM. For half day blocks with 2 microscopes and 2 vitrobots. Each group has 3 students A1,A2,A3 and B1,B2,B3. A3 and B3 will start to prepare samples, setup microscope, screen grids and setup a data run within 3 hours time on epoferritin.	free data collection setup for weekend
break					
15:30-17:00	same as morning block	same as monday	EXAM. For half day blocks with 2 microscopes and 2 vitrobots. Each group has 3 students A1,A2,A3 and B1,B2,B3. A1 and B1 will start to prepare samples, setup microscope, screen grids and setup a data run within 3 hours time on epoferritin.	EXAM. For half day blocks with 2 microscopes and 2 vitrobots. Each group has 3 students A1,A2,A3 and B1,B2,B3. A3 and B3 will start to prepare samples, setup microscope, screen grids and setup a data run within 3 hours time on epoferritin.	free data collection setup for weekend