

TISSUE ANALYSIS COURSE, HBS-DP, 2024

<https://www oulu.fi/en/tissue-analysis-course>

Time: 15.3. – 21.3.2024

Organizers: Health and Biosciences Doctoral Programme, Biocenter Oulu, Biobank Borealis of Northern Finland, Faculty of Medicine Laboratory Unit and Research Units of Translational Medicine and Clinical Medicine

Target group: Doctoral students in the fields of Health and Biosciences, **lectures open for all**

Credits: 1 ECTS (participation to all lectures, providing feedback)

Course enrolment: Registration via Peppi 24.1.-23.2. 2024, course code: *DP00AL85-3003*

Evaluation criteria: Passed/failed according to participation in lectures and providing feedback

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LECTURE PROGRAMME

Friday 15th March, 2024, Theme - Mouse sample collection

Computer class 286A/B, lecture

8:30-9:00	Introduction to the course
9:00-10:00	Mouse as a model for human diseases Anniina Hiltunen, BCO TTP Core and RU of Clinical Medicine
10:00-10:15	<i>Coffee break</i>
10:15-11:15	From tissue to biomedical sample Anne Heikkinen, BCO TTP Core
11:15-11:45	Introduction to mouse necropsy Miia Salo, BCO TTP Core

Monday 18th March, 2024, Theme - Biological sample preparation

Computer class 286A/B, lecture

10:00-11:30	Sample preparation for electron microscopy Introduction to the Electron Microscopy Image Library Ilkka Miinalainen, BCO EM Core
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Tuesday 19th March, 2024, Theme - Sample Visualization

Lecture hall F202, lecture

9:15-10:15	Common histological staining methods and artefacts Markus Mäkinen, RU of Translational Medicine
10:15-10:30	<i>Coffee break</i>
10:30-11:30	Histological structures and pathological findings Markus Mäkinen, RU of Translational Medicine

Computer class 286A/B, lecture

12:30-13:30	Principles of IHC and <i>In situ</i> hybridization methods Katja Porvari, Faculty of Medicine Laboratory Unit
13:30-14:00	Possibilities in utilizing Biobank samples in research Raisa Serpi, Biobank Borealis of Northern Finland

Wednesday 20th March, 2024, Theme - Preparing for image analysis

Computer class 286A/B, lecture

10:15-11:15	Basics in image analysis Veli-Pekka Ronkainen, BCO LM Core
11:15-12:15	Prospects of the open-access QuPath image analysis tool Juha Väyrynen, RU of Translational Medicine

Thursday 21st March, 2024, Theme - Image analysis

Computer class 286A/B, lecture

12:00-13:00	The Visiopharm image analysis software features Anne Heikkinen, BCO TTP Core
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