Day 1: Wednesday, September 25, 2024

Session 1: Chair: Agnete Engelsen
09:00- 09:30 Introduction to cancer biomarker research (Lars A. Akslen)
09:30- 10:15 Basic techniques – Nucleotides (Elisabet Ognedal)
10:15- 11:00 Basic techniques – Proteins (Manuel Carrasco)
11:00- 11:15 BREAK

Session 2: Chair: Agnete Engelsen
11:15- 12:00 Epigenetics and miRNA (Erling Høivik)
12:00- 12:15 Information about assignments (Agnete Engelsen)
12:15- 13:00 LUNCH
   We suggest working lunch/ group assignment
13:00-13:45 Immunohistochemistry (Vandana Ardawatia)
13:45- 14:15 Proximity Ligation Assay (PLA) (Carina Strell)
14:15- 14:30 BREAK

Session 3: Chair: Agnete Engelsen
14:30- 15:00 Animal and cell models (Heidrun Vethe)
15:00- 15:45 Tissue microdissection and proteomics (Kenneth Finne)
15:45- Group assignment continued as agreed in the individual groups

Available online in mittUiB for self-study:
Lecture on In situ hybridization/RNAScope (by Agnete Engelsen)

Day 2: Thursday, September 26, 2024

Session 4: Chair: Agnete Engelsen
09:00- 09:45 Nanostring analysis (Kristin Dahl-Michelsen)
09:45- 10:15 Next Generation Sequencing (Olav Vintermyr)
10:15- 10:30 BREAK

Session 5: Chair: Agnete Engelsen
10:30-11:15 Strategies for analysis of cancer biomarkers (Elisabeth Wik/ Erling Høivik)
11:15- 12:00 Artificial Intelligence (Marit Valla)
12:00- 12:30 LUNCH
   We suggest working lunch for completion of group assignment

Session 6: Chair: Agnete Engelsen
12:30-13:15 Bioinformatics: data management and standardization (Ingeborg Winge)
13:15- 14:00 Biobanking (Ann Cathrine Krogsvæen)
14:00- 14:30 BREAK

Session 7: Chair: Agnete Engelsen
14:30-15:30 CCBIO Seminar (Auditorium 4, BBB): Scientific talk (TBD) (Marit Valla)
15:30- 16:15 Liquid biopsy (Oddmund Nordgård)
Day 3: Friday, September 27, 2024

Session 8: Chair: Agnete Engelsen
09:00- 09:45  Tissue organoids (Heidrun Vethe)
09:45- 10:15  Spatial omics analysis (Carina Strell)
10:15- 10:30  BREAK

Session 9: Chair: Agnete Engelsen
10:30- 11:00  Flow cytometry and Mass cytometry (Jørn Skavland)
11:00- 11:45  Imaging Mass Cytometry I (Vladan Milosevic)
11:45- 12:15  LUNCH
12:15- 12:45  Imaging Mass Cytometry II (Vandana Ardawatia & Kenneth Finne)
12:45- 13:15  Imaging Mass Cytometry III (Dimitrios Kleftogiannis)
13:15- 13:30  Questions/ BREAK

Session 10: Chair: Agnete Engelsen
13:30- 14:15  Clinical applications of Cancer Biomarkers (Oddbjørn Straume)
14:15- 14:30  BREAK
14:30- 16:00  Group assignments: presentations and discussion with peers and an expert panel (Katrin Kleinmanns, Heidrun Vethe, Cornelia Schuster)

This 5 ECTS credit course is open to PhD candidates affiliated with the Centre for Cancer Biomarkers CCBIO, UiB other PhD candidates, and students at the Medical Student Research Program. PhD students affiliated with the NorDoc network may be permitted guest student access to attend the course.

Academic responsibility:
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