Lecture program CCA oncology course

Every day two themes will be discussed by 30 min lectures followed by interactive discussions. The topics of these lectures are specified underneath. Furthermore, during a part of the day participants will be divided in workgroups. Each workgroup will get a tumor type assigned, the 8 CCA themes serve as guidance for the discussions and daily homework assignments. Workgroups will present their findings at the end of the week.

Theme: Cancer Biology
1 Hallmarks of cancer
2 Cell cycle checkpoints and cancer
3 Cancer genes and cancer pathways, Epigenetic alterations in cancer
4 Cancer stem cells

Theme: Cancer immunology
1 Cancer immunity cycle
2 Immunotherapy I (ACT and vaccination)
3 Immunotherapy II (ICI and other strategies)
4 Immunotherapy resistance

Theme: Target discovery & preclinical therapy development
1 Functional genomic screens
2 Identification of drug targets through cancer genomics (for example targeting BRAFV600E)
3 Cell culture systems that mimic an in vivo situation

Theme: Imaging
1 Principles of modern imaging
2 Molecular imaging
3 Guidance of cancer treatment by imaging

Theme: Biomarkers
1 Liquid biopsies
2 Tissue based biomarkers currently used in clinic
3 Population based screening programs
4 Intertumoral heterogeneity

Theme: Clinical therapy development
1 Ethics in clinical trials
2 Principles of surgery
3 Principles of radiotherapy
4 Costs of cancer therapies
Theme: Evaluation of cancer care
1 Cancer risk factors
2 Impact of physical activity on cancer
3 Treatment Outcomes

Theme: Quality of Life
1 Patient reported outcome measures
2 Adaptation to cancer
3 Ethics of end of life decisions

Topic: Clinical trial
1 Clinical trial design