

CanFaster-

Project titles, research subjects and special requirements

- 1. Molecular investigations of mantle cell lymphoma and development of companion diagnostic tools**
Research subject: Immunotechnology
Special requirements: Experience of cell culture assays, flow cytometry, bioinformatics/statistical methods, transcriptional/RNA analysis and immunohistochemistry or immunofluorescence microscopy will be regarded as a merit.
- 2. Novel Methods for Diagnosis of Clear Cell Renal Cell Carcinoma**
Research subject: Laboratory medicine
- 3. The role of microRNAs in Homing and Seeding of Prostate Cancer Metastases in Bone**
Research subject: Laboratory medicine - Medical Molecular biology.
Special requirements: Outstanding, documented training in molecular and cell biology. Documented cancer research interest. Completed FELASA certification for work with animal research and other completed courses in mouse models of cancer, is merit as well as experience working with microRNAs or extracellular vesicles.
- 4. Precision medicine for advanced cancers through molecular genomics and analysis of circulating tumour DNA**
Research subject: Biomedicine - cancer genomics
- 5. Molecular diagnostics for precision medicine - Development and application of the protein biomarker discovery platform GPS (Global Proteome Survey)**
Research subject: Immunotechnology
Special requirements: Competence and interest in bioinformatics is a merit.
- 6. Patient stratification through affinity-based proteomics of liquid and tissue biopsies**
Research subject: Immunotechnology
Special requirements: Special requirements: Outstanding, documented training in molecular and cell biology and with an interest in both experimental and data/bioinformatic analysis will be regarded as a merit.
- 7. Dendritic Cell Subsets in Head and Neck Cancers**
Research subject: Immunotechnology
Special requirements: Experience of cell culture, flow cytometry, analysis of FCS data, statistical methods, RNA analysis and immunohistochemistry or immunofluorescence microscopy will be regarded as a merit.
- 8. Paediatric Brain Tumour Immunology and Immunotherapy**
Research subject: Biomedicine - Cancer-Immunotherapy
Special requirements: Experience of in vivo methodology, cell culture techniques, histology- and microscopy techniques and common molecular biology techniques are required. It is not a requirement, but it is a plus if the candidate has a background in medicine, alt. medical student.

- 9. CRISPR/Cas9 Screens to Identify New Therapeutic Targets in Leukaemia**
Research subject: Laboratory medicine
- 10. Psychological Resilience - Emotion Regulation, Quality of Life and Biomolecular Fingerprints**
Research subject: Psychology
- 11. Development of novel targeted therapies against acute myeloid leukemia and novel tools for prediction of treatment efficacy**
Research subject: Laboratory medicine - Molecular medicine.
Special requirements: Outstanding, documented training in molecular and cell biology. Documented cancer research interest. Experience from working with animal models, cell cultures, stem cell biology, signal transduction, or receptor tyrosine kinase signalling is an advantage.
- 12. Delineating the Cellular Taxonomy of the Cancer Microenvironment**
Research subject: Laboratory medicine
Special requirements: Applicants with documented expertise in bioinformatic analyses and/or advanced mouse models of cancer (including FELASA C certificate) will be prioritized.
- 13. Studies of tumour cell stress adaptation for the identification of new treatment targets**
Research subject: Biomedicine - Experimental Oncology
Special requirements: Experience of in vivo methodology, cell culture techniques, histology- and microscopy techniques and common molecular biology techniques are required. It is not a requirement, but it is a plus if the candidate has a background in medicine, alt. medical student.
- 14. PROTECT women by PReventiOn and early deTECTion of breast cancer initiation – cellular and molecular effects of reducing breast density**
Research subject: Biomedicine - Experimental Oncology
Special requirements: A successful candidate must be familiar with histology- and microscopy techniques and have direct experience of general molecular- and cell biology laboratory techniques, including handling of cell cultures. It is not a prerequisite, but a background in medicine is a merit.
- 15. Understanding genetic predisposition for multiple myeloma**
Research subject: Laboratory medicine
Special requirements: Outstanding, documented training in molecular biology or related discipline, preferably combined with an understanding of computer programming. Previous experience in working with cross-disciplinary teams.
- 16. Translating genomic discoveries into improved clinical decision making, mechanistic understanding, and therapy of acute leukaemia**
Research subject: Laboratory medicine -Experimental clinical genetics
Special requirements: A strong interest in cancer genetics and experience of genomic technologies and bioinformatics are a requirement. A basic understanding and experience of common molecular genetic methods is also preferred.