PhD position (80% for 4 years, start 1.1.2019)

Importance of exercise training therapy timing with regard to cardiotoxicity and patient preference in early breast cancer patients undergoing adjuvant chemotherapy

The research project aims at finding the optimal time window for exercise therapy in order to reduce detrimental side effects of chemotherapy. It is a randomised controlled trial comparing the effects of an exercise intervention during chemotherapy with exercise after chemotherapy on heart function in breast cancer patients. Women with early breast cancer willing to perform a 12-week multidisciplinary oncology rehabilitation program at a hospital in Bern (Inselspital), Thun, or Solothurn will be recruited. Measured parameters include heart and vascular function, exercise capacity, chronic illness and fatigue, as well as physical activity assessed by questionnaire. Compliance with chemotherapy and exercise training will be monitored. Barriers to performing exercise during and after chemotherapy will be identified by questionnaire.

The candidate holds a Master degree in health sciences, medicine or other natural science, or equivalent, and is highly motivated and dedicated. He/she possesses excellent personal, social, organisational and communicational skills and has a high degree of empathy for patients with cancer. Proficient German is mandatory for performing patient counselling and interviewing. Good English writing skills are desirable, as are basic knowledge in statistics. He/she will perform patient measurements and interviews, guide and counsel patients with exercise programmes, liaise with other study sites, compose data bank, analyse data, draft manuscripts.

The Unit for Preventive Cardiology and Sports Medicine of the University Hospital Bern is a team of cardiologists, sports physicians, sports and natural scientists. It includes two PhD students and several Master students. It has expertise in cardiac rehabilitation, exercise stress testing, echocardiography, heart rate variability and vascular function. It is the core lab for exercise testing in a Horizon2020 project on cardiac rehabilitation in elderly patients (www.eu-care.org). It has recently been awarded a grant by the Swiss Cancer League for a project in Health Services Research. PhD students have to enroll at the Graduate School for Health Sciences of the University of Bern (www.ghs.unibe.ch).

We look forward to receiving your application including a cover letter, a detailed CV, study subjects including grades and contact information of two referees. Please apply to: prisca.eser@insel.ch

For further information about the position and the group please contact PD Dr. Sc.nat. Prisca Eser, prisca.eser@insel.ch