

2 Postdoc opportunities in Precision Drug Delivery

Lab of Cancer Biology, Tartu University, Estonia (part time @SBP, USA)

Two postdoctoral researcher positions are available at the **Laboratory of Cancer Biology of the Institute of Biomedicine of the University of Tartu** (www.cancerbiology.ee). Both positions require spending significant (~50%) effort at the **Cancer Center of the Sanford Burnham Medical Discovery Institute, La Jolla, Calif. USA** (<https://www.sbpdiscovery.org/medical-discovery/disease-focused-centers/nci-designated-cancer-center/overview>).

We use phage display screens to identify homing peptides that bind to specific targets in the diseased tissues. Corresponding synthetic peptides are explored for targeting drugs, biologicals, and nanoparticles into target tissues to increase their therapeutic index. You will be part of a dynamic and well-equipped team at modern Center for Translational Medicine, of the University of Tartu (9T MRI small animal imager, HT sequencing systems, two-photon and confocal microscopy systems etc.), and in the USA at SBP's NCI-designated cancer center (one of only seven) with excellent infrastructure and research environment.

We look for outstanding postdoctoral researchers willing to contribute to the success of transatlantic partnership of interdisciplinary and translationally-oriented research labs.

Position 1. You will work on advanced mouse models of neurodegenerative diseases and glioblastoma to identify and validate new systemic homing peptides and establish their translational relevance. You are expected to hold a Ph.D. in biology, medicine, or related fields. In addition to laboratory experience, record of scientific publications and proven ability of creative thinking, you must be a team player, an avid learner and passionate about developing in-depth understanding of cancer and CNS biology and targeted (nano)therapies.

Identification of a peptide recognizing cerebrovascular changes in mouse models of Alzheimer's disease. Nat Commun. 2017 Nov 10;8(1):1403. <https://www.ncbi.nlm.nih.gov/pubmed/29523838>

Position 2. You will work on identification and validation of peptides for systemic targeting of sites of bacterial inflammation and on establishment of their translational relevance. You are expected to hold a Ph.D. in biology, medicine, or related fields. In addition to laboratory experience, track record of scientific publications and proven ability of creative thinking, you must be a team player, an avid learner and passionate about developing in-depth understanding of precision therapies and nanomedicine.

Antibiotic-loaded nanoparticles targeted to the site of infection enhance antibacterial efficacy. Nature Biomedical Engineering, p 95–103, 2018. <https://www.nature.com/articles/s41551-017-0187-5>

To apply, send your CV and a cover letter summarizing your research interests and career goals to Tambet Teesalu (tambet.teesalu@sbpdiscovery.org).