

The Doctoral Programme in Molecular Medicine in the University of Eastern Finland (Kuopio, Finland) invites applicants for 20 PhD student (early stage researcher) positions in biomedical sciences starting on 1.1.2012. Students with a relevant degree in natural sciences, medicine or other suitable background, and who aim at a doctoral degree are eligible to apply. The doctoral students will join the research groups at the A. I. Virtanen Institute for Molecular Sciences or the School of Medicine to work on the following projects:

- Does memory impairment in Alzheimer's disease start with a failure in systems level memory consolidation? Professor Heikki Tanila, email: heikki.tanila@uef.fi
- Genetic, epigenetic and functional characterization of risk genes in Alzheimer's disease. Research Director Mikko Hiltunen, email: mikko.hiltunen@uef.fi
- Molecular and cell biological characterization of pathways and genes related to Alzheimer's disease pathogenesis. Dr. Annakaisa Haapasalo, email: annakaisa.haapasalo@uef.fi
- Multimodal approach to biomarkers of Alzheimer's disease. Professor Hilkka Soininen, email: hilkka.soininen@uef.fi
- Integration of imaging and genetic data in Alzheimer's disease. Professor Hilkka Soininen, email: hilkka.soininen@uef.fi
- Development of stem cell/ iPS cell based models for neurodegeneration, especially for studies on Alzheimer's disease. Professor Jari Koistinaho, email: jari.koistinaho@uef.fi
- Role of amyloidogenesis in the development of epilepsy. Professor Asla Pitkänen, email: asla.pitkanen@uef.fi
- Lentiviral vectors as tools for gene regulation. Promoter targeted small RNAs in epigenetic gene regulation and their applications in gene therapy. Dr. Mikko P. Turunen, email: mikko.turunen@uef.fi
- Immunology in cancer and cardiovascular diseases. The immunological environment in pathological inflammation. Dr. Thomas Wirth, email: thomas.wirth@uef.fi
- Role of non-coding RNAs in the regulation of angiogenesis and VEGF expression *in vitro* and *in vivo*. Dr. Minna Kaikkonen, email: minna.kaikkonen@uef.fi
- Developing novel tools to study and treat malignant gliomas by identifying novel cell surface molecules on glioma initiating cells and discovering targeting molecules. Professor Pirjo Laakkonen, email: pirjo.laakkonen@uef.fi
- Replicative alphaviruses as oncolytic vehicles: analysis of immunological and cellular factors affecting therapy efficacy in preclinical models. Professor Ari Hinkkanen, email: ari.hinkkanen@uef.fi
- Therapeutic angiogenesis and atherogenesis in animal models. Academy Professor Seppo Ylä-Herttuala, email: seppo.ylaherttuala@uef.fi
- VEGF signaling and cloning and analysis of the effects of new VEGFs Academy Professor Seppo Ylä-Herttuala, email: seppo.ylaherttuala@uef.fi
- RNA processing in obesity and type 2 diabetes: The project investigates alternative splicing of genes in individuals with obesity and type 2 diabetes. Dr. Jussi Pihlajamäki, email: jussi.pihlajamaki@uef.fi
- Nutrigenetics and nutrigenomics in clinical dietary interventions. Professor Matti Uusitupa, email: matti.uusitupa@uef.fi
- Genetics of type 2 diabetes, insulin resistance and cardiovascular disease. Academy Professor Markku Laakso, email: markku.laakso@kuh.fi
- Transcriptional regulation by coregulator proteins that mediate post-translational SUMO modifications. Professor Jorma Palvimo, email: jorma.palvimo@uef.fi
- Analysis of apoptotic pathways in B cell lymphomas. Professor Jukka Pelkonen, email: jukka.pelkonen@uef.fi
- Technically oriented PhD student position in biomedical imaging. The research focus will be on experimental magnetic resonance imaging and spectroscopy. Senior Scientist Timo Liimatainen, email: timo.liimatainen@uef.fi

Applicants are asked to submit a signed cover letter indicating the three most preferred projects and including a short description of the applicant's skills and a summary of his or her previous research experience. In addition, a *Curriculum Vitae* including a list of publications, two letters of recommendation, true copies of university degree certificate(s), and a transcript of academic records are required.

Salary will be paid according to levels 1 - 4 of the university salary scale for teaching and research staff, in addition to which the PhD student will be paid a salary component based on personal work performance.

The fixed-period appointments will commence on January 1, 2012, and the length of the appointments will be up to four years.

The application should be addressed to the Steering Committee of the Doctoral Programme in Molecular Medicine and delivered in six copies to the Registry office of the University of Eastern Finland, Kuopio Campus, P.O.B. 1627, 70211 Kuopio (street address: Yliopistonranta 1 E, Snellmania) or Joensuu Campus, P.O.B. 111, 80101 Joensuu (street address: Yliopistonkatu 2, Aurora) by August 31, 2011 at 3:00 pm (Finnish time).

Further information on the projects can be found at www.uef.fi/dpmm/news. Any queries should be addressed to Coordinator Riikka Pellinen (email: riikka.pellinen@uef.fi, tel. +358 40 355 2453), or to the above mentioned research directors and professors.