Preclinical Molecular Imaging Platform in Kuopio

Kimmo Jokivarsi¹, Pekka Poutiainen² and Olli Gröhn¹ ¹A.I.Virtanen institute, University of Eastern Finland, Kuopio, Finland ²Radiopharmacy, Kuopio University Hospital, Kuopio, Finland



Introduction: Kuopio Biomedical Imaging Unit (Kuopio BIU) together with Kuopio University Hospital (KUH) have a preclinical molecular imaging platform to develop molecular imaging in the Eastern Finland area. The new radiopharmacy facilities at KUH and production of radioactive tracers for **Positron Emission** the **Tomography** (PET) (launched in 2016) to support the PET imaging also for research purposes at the University of Eastern Finland (UEF) and the surrounding region.

KUOPIO UNIVERSITY HOSPITAL



Equipment: The experimental PET tracer development platform at KUH is equipped with two hot cells with the ability to do multistep synthesis. Radiopharmaceutical production for carbon-11 and fluorine-18 labeled ligands for preclinical use has been established and also gallium-68 is available. This complement the PET imaging service for small animal scanning as a part of the Kuopio BIU's multimodal in vivo imaging facility including PET, SPECT, CT, MRI, ultrasound and optical imaging. Also, the second generation preclinical





¹⁸F-Fallypride

(Dopamine D2-receptors)







GE PETTrace 860 cyclotron and the experimental hot lab (at KUH) and Siemens Inveon DPET (at Kuopio-BIU)



(Glucose metabolism)

For more information:

Project leader:	Experimental PET Imaging	Radiopharmacy and tracer development:
Olli Gröhn, Prof., PhD	Kimmo Jokivarsi, PhD	Pekka Poutiainen, PhD
Director of the Kuopio BIU UEF, AIV Institute olli.grohn@uef.fi	Biomedical Imaging Unit UEF, AIV Institute kimmo.jokivarsi@uef.fi	Radiopharmacy Kuopio Univ. Hospital pekka.poutiainen@kuh.fi
A.I.VIRTANEN INSTITUTE	UNIVERSITY OF EASTERN FINLAND	KUOPIO UNIVERSITY HOSPITAL

www.structuralfunds.fi uef.fi/kuopiobiu

Acknowledgements: The authors wish to thank the European Union European Regional Development Fund for the crucial financial support and the staff members of the amme for Sustainable Growth an

Leverage from

2014-2020



European Union **European Regional** Development Fund