

# CV

## Mark Lubberink



### Current position

Professor of molecular imaging physics (May 2020 –)  
Department of Surgical Sciences / Radiology & Nuclear Medicine, Uppsala University, Uppsala, Sweden

*Main research interest: quantitative PET methodology; development of methods for automated analysis to enable clinical use of true functional imaging with PET; image-based dosimetry of targeted therapy. Combined with a 30% appointment as senior medical physicist and head of diagnostic medical physics at Uppsala University Hospital.*

Co-founder and chief scientific officer, MedTrace Pharma A/S (2018 –)  
*MedTrace makes PET perfusion imaging with  $^{15}\text{O}$ -water clinically available using the MT-100 point-of-care chemistry system and the aQuant software for automated analysis and visualisation.*

### Previous positions

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| 2010-2020 | Senior medical physicist<br>Department of Medical Physics, Uppsala University Hospital<br><i>Head of diagnostic medical physics 2015-2020</i><br><i>Professor (adj. 20%) of molecular imaging 2015-2020</i><br><i>Head of nuclear medicine physics 2012-2015</i> |
| 2005-2010 | Medical physicist, Department of Nuclear medicine & PET research<br>VU university medical centre, Amsterdam  |
| 2003-2005 | Post-doctoral researcher, Department of Nuclear medicine & PET research<br>VU university medical centre, Amsterdam   |
| 2002-2003 | Research scientist, clinical physicist<br>Uppsala Imanet AB, Uppsala   |
| 2001-2002 | Physicist, Department of Nuclear Medicine<br>Uppsala University Hospital   |

### Education

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| 2005 | Certified medical physicist in nuclear medicine, Dutch Society of Clinical Physics (renewed 2010, 2015) |
| 2003 | Certified medical physicist, Swedish National Board of Health and Welfare                               |
| 2001 | PhD, Medical radiation physics, Uppsala University  |
| 1997 | MSc, Technical physics, Eindhoven University of Technology, Eindhoven, The Netherlands                  |

## Publications

188 publications (Pubmed); H-index 51

Key publications:

1. Ilan E, ..., Lubberink M. Tumor-to-blood ratio for assessment of somatostatin receptor density in neuroendocrine tumors using  $^{68}\text{Ga}$ -DOTATOC and  $^{68}\text{Ga}$ -DOTATATE. *J Nucl Med* 61:217-221, 2020
2. Lindström E, ..., Lubberink M, Evaluation of penalized-likelihood estimation reconstruction on a digital time-of-flight PET/CT scanner for  $^{18}\text{F}$ -FDG whole body examinations. *J Nucl Med* 59:1152-1158, 2018
3. Johansson E, Lubberink M *et al.* Whole-body imaging of tissue-specific insulin sensitivity and body composition by using an integrated PET/MR system: a feasibility study. *Radiology* 286:271-278, 2018
4. Sörensen J, ..., Lubberink M *et al.* Measuring HER2-receptor expression in metastatic breast cancer using [ $^{68}\text{Ga}$ ]ABY-025 affibody PET/CT. *Theranostics* 6:262, 2016
5. Jonasson M, ..., Lubberink M. Tracer kinetic analysis of (S)- $^{18}\text{F}$ -THK5117 as a PET tracer for assessing tau pathology. *J Nucl Med* 57:574-581, 2016
6. Ilan E, ..., Lubberink M. Dose response of pancreatic neuroendocrine tumors treated with peptide receptor radionuclide therapy using  $^{177}\text{Lu}$ -DOTATATE. *J Nucl Med* 56:177-182, 2015
7. Antoni G, Lubberink M *et al.* In-vivo visualization of amyloid deposits in the heart with [ $^{11}\text{C}$ ]PIB and PET. *J Nucl Med* 54:213-220, 2013
8. Sandström M, ..., Lubberink M. Comparative biodistribution and radiation dosimetry of  $^{68}\text{Ga}$ -DOTATOC and  $^{68}\text{Ga}$ -DOTATATE in patients with neuroendocrine tumors. *J Nucl Med* 54:1755-1759, 2013
9. Sandström M, ..., Lubberink M. Individualized dosimetry of kidneys and bone marrow in patients undergoing  $^{177}\text{Lu}$ -DOTA-octreotide treatment. *J Nucl Med* 54:33-41, 2013
10. Van der Veldt AA, Lubberink M *et al.* Rapid decrease in delivery of chemotherapy to tumors after anti-VEGF therapy: implications for scheduling of anti-angiogenic drugs. *Cancer Cell* 21:82-91, 2012
11. Van Assema DM, Lubberink M *et al.* Blood-brain barrier P-glycoprotein function in Alzheimer's disease. *Brain* 135:181-189, 2012
12. Harms HJ, ... , Lubberink M. Parametric images of myocardial viability using a single [ $^{15}\text{O}$ ]H<sub>2</sub>O PET/CT scan. *J Nucl Med* 52:745-749, 2011
13. Harms HJ, ... , Lubberink M. Automatic generation of absolute myocardial blood flow images using [ $^{15}\text{O}$ ]H<sub>2</sub>O and a clinical PET-CT scanner. *Eur J Nucl Med Mol Imaging* 38:930-939, 2011
14. Van der Veldt AA, ... , Lubberink M. Quantitative parametric perfusion images using  $^{15}\text{O}$ -water and a clinical PET/CT scanner: test-retest variability in lung cancer. *J Nucl Med* 2010 51:1684-1690, 2010
15. Lubberink M *et al.* Development of a tracer kinetic model of [ $^{11}\text{C}$ ](R)-verapamil and its radioactive metabolites as PET tracer for p-glycoprotein function. *J Cereb Blood Flow Metab* 27:424-433, 2007

## Academic merits

- Completed supervision of 6 PhD students as main supervisor and of 9 PhD students as co-supervisor.
- Ongoing supervision of 5 PhD students as main supervisor and of 5 PhD students as co-supervisor.