

Curriculum Vitae

Thomas Lund Andersen

Personalia

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Born: Odense, 17th of June, 1983

thomaslundandersen@protonmail.com

Education

Medical Physicist

2019

Dept. of Nuclear Medicine, Odense

Odense

University Hospital

Thesis title: Improving contrast and detectability – imaging with [⁵⁵Co]Co-DOTATATE in comparison with [⁶⁴Cu]Cu-DOTATATE and [⁶⁸Ga]Ga-DOTATATE

Thesis link: 10.2967/jnumed.119.233015

Ph.D. in Physics

2011

CINF, Technical University of Denmark

Kgs. Lyngby

Thesis title: Surface Compositions of Clean Materials for Solid Oxide Electrochemical Cells

Thesis link: http://thomasandersen.dk/pdf/phd_thesis.pdf

M.Sc. in Physics and Technology

2007

Dept. of Physics, University of Southern

Odense

Denmark

Thesis title: Beam Diagnostics for Particle Therapy Beam Line: Computer Simulations and Preliminary Experiments

Thesis link: http://thomasandersen.dk/pdf/master_thesis.pdf

Employments

PET/MR physicist

2017–

Dept. of Nuclear Medicine, Odense

Odense

University Hospital

Physicist

2013–2017

Dept. of Nuclear Medicine, Odense

Odense

University Hospital

Scientific Floor Manager

2011–2013

CINF, Technical University of Denmark

Kgs. Lyngby

Postdoc

2011–2011

CINF, Technical University of Denmark

Kgs. Lyngby

Awards and Recognitions

Society of Nuclear Medicine & Molecular Imaging

2020

Featured Basic Science Article

Improving contrast and detectability – imaging with [⁵⁵Co]Co-DOTATATE in comparison with [⁶⁴Cu]Cu-DOTATATE and [⁶⁸Ga]Ga-DOTATATE

Press release: <http://www.snmni.org/NewsPublications/NewsDetail.aspx?ItemNumber=33460>

Talks

<i>National user meeting on MRI</i> Plenary invited talk PET/MR – Technology and Research Applications	2020 Aalborg, Denmark
<i>Danish Society of Clinical Physiology and Nuclear Medicine Annual Conference</i> Plenary invited talk PET/CT – past, present, future	2018 Kolding, Denmark
<i>Abass Alavi Annual Meeting</i> Invited talk New digital scanners	2016 Odense, Denmark
<i>Staff Meeting</i> Invited talk Glomerular Filtration Rate – a modular webbased design	2016 Esbjerg, Denmark

Teaching

<i>Odense University Hospital</i> National course for Medical Secretaries Physics in Nuclear Medicine	2020 Odense, Denmark
<i>Norsk Radiografforbund and Radiograf Rådet</i> Scandinavian course on PET/CT and PET/MR PET/CT and PET/MR Technology	2019 Oslo, Norway
<i>University College Lillebælt</i> PET/CT and PET/CT Ongoing teaching on PET/CT and PET/MR theory and applications for Radiographers	2018- Odense, Denmark

Grants

<i>New MAgNetic resonance Technology for Response Adapted radiotherapy (MANTRA)</i> Role: Investigator	2018 3.75 MDKK
<i>New MAgNetic resonance Technology for Response Adapted radiotherapy (MANTRA)</i> Role: PI	2017 10.000 DKK

Supervision

<i>Neurobiological effects of work-related adjustment disorder</i> Ph.D. student Saga Steinmann Madsen	2018
<i>Printed custom-made radioactive phantoms for nuclear imaging</i>	2016

**M.Sc. Annizette Glintborg Hjarndrup
Larsen**

Comparative study of PET tracers 2015
M.Sc. Thomas Quist Christensen

NH₃ oxidation studied in μ -reactors 2012
M.Sc. Mathias Kjærgaard Christensen

Publications

C. Tipsmark, ..., T.L. Andersen, et al. 2020
**International Journal of Molecular
Sciences** DOI: 10.3390/ijms21051853
Drinking and water handling in the medaka intestine: A possible role of Claudin-15 in paracellular absorption?

I. Jankovic, ..., T.L. Andersen et al. 2020
European Congress of Neuropathology
Preclinical cerebral cryoablation, efficacy and safety

*S. Dalby, M. Jakobsen, T. Andersen and H.
Petersen.* 2020
**Pediatric Nutrition, Gastroenterology and
Child Development**
Colitis at presentation in a child with chronic granulomatous disease evaluated by positron emission tomography combined with magnetic resonance imaging

P.E.N. Braad, T.L. Andersen et al. 2019
**European Journal of Nuclear Medicine
and Molecular Imaging** DOI: 10.1007/s00259-019-04486-2
Accuracy of [¹⁸F]-FDG brain activity quantification on the GE SIGNA PET/MR system with MR derived attenuation correction

L. Bøtker-Rasmussen et al. 2019
DSKFNM
GFR by radioisotope

L. Bøtker-Rasmussen et al. 2019
DSKFNM
Glomerular filtration rate

T.L. Andersen et al. 2019
Journal of Nuclear Medicine DOI: 10.2967/jnumed.119.233015
Improving contrast and detectability – imaging with [⁵⁵Co]Co-DOTATATE in comparison with [⁶⁴Cu]-DOTATATE and [⁶⁸Ga]Ga-DOTATATE
Selected as Featured Basic Science Article in the Journal of Nuclear Medicine
Press release: <http://www.snmmi.org/NewsPublications/NewsDetail.aspx?ItemNumber=33460>

A. Morsing et al. 2019

- European Journal of Nuclear Medicine and Molecular Imaging* DOI: 10.1007/s00259-019-04402-8
Hybrid PET/MRI in major cancers: a scoping review
- H. Thisgaard et al. 2019
Journal of Labelled Compounds and Radiopharmaceuticals
[⁵⁵Co]Co-DOTATATE improves PET imaging contrast of somatostatin receptor expressing tumours
- T.L. Andersen et al. 2017
European Journal of Nuclear Medicine and Molecular Imaging DOI: 10.1007/s00259-017-3822-1
Large bed overlap and short acquisition time or vice versa?
- P.E.N. Braad, T.L. Andersen et al. 2016
Medical Physics DOI: 10.1118/1.4967267
Strategies for CT tissue segmentation for Monte Carlo calculations in nuclear medicine dosimetry
- K. Någren et al. 2016
European Journal of Nuclear Medicine and Molecular Imaging
[¹¹C]NS14444, a new radiotracer for alpha-7 nACh receptors. Synthesis and preclinical evaluation
- T.L. Andersen et al. 2016
Journal of Nuclear Medicine
The Q.Clear PET reconstruction algorithm: Evaluation using the NEMA IQ phantom
- A.N. Trommelholt Holm, ..., T.L. Andersen et al. 2015
American Journal of Physiology – Lung Cellular and Molecular Physiology DOI: 10.1152/ajplung.00351.2014
Characterization of spontaneous airspace enlargement in mice lacking microfibrillar-associated protein 4
- T.L. Andersen et al. 2015
Journal of Nuclear Medicine
Impact of high radioactivity concentrations on PET image quality and quantification accuracy
- K. Nielsen, T.L. Andersen et al. 2014
Journal of Laboratory Automation DOI: 10.1177/2211068213503824
An Open-Source Data Storage and Visualization Back End for Experimental Data
- R. Jensen, T.L. Andersen et al. 2013
Physical Chemistry Chemical Physics DOI: 10.1039/C2CP43684A
Self-sustained carbon monoxide oxidation oscillations on size-selected platinum nanoparticles at atmospheric pressure
- T.L. Andersen et al. 2012
Review of Scientific Instruments DOI: 10.1063/1.4732815
High mass resolution time of flight mass spectrometer for measuring products in heterogeneous catalysis in highly sensitive microreactors
- T.L. Andersen et al. 2011
Solid State Ionics DOI: 10.1016/j.ssi.2011.02.024
Electrochemical removal of segregated silicon dioxide impurities from yttria stabilized zirconia surfaces at elevated temperatures

T.L. Andersen et al. 2011
Solid State Ionics DOI: 10.1016/j.ssi.2011.02.025
Strontium zirconate as silicon and aluminium scavenger in yttria stabilized zirconia

Other non-peer-reviewed projects

Quantification of NAA, choline and creatine in the human brain by MRI spectroscopy 2018
Technical University of Denmark Kgs. Lyngby
Free induced decay (FID) measurements and subsequent analysis of individual metabolites implemented in MATLAB.

T1 and relative PD estimation from a 3D spoiled gradient echo sequence 2018
Technical University of Denmark Kgs. Lyngby
Algorithm implementation for calculation of absolute T1 values and relative PD from a variable flip angle 3D gradient spoiled echo sequence.

ClearCalc 2016
Odense University Hospital <https://github.com/andersenthomas/ClearCalc>
Main developer of an open source PHP/MySQL-based software for calculation of glomerular filtration rate based on radioactive tracers. Implemented in all Nuclear Medicine Departments in the Region of Southern Denmark.

PyExpLabSys 2011
Technical University of Denmark <https://github.com/CINF/PyExpLabSys>
Past main developer and initiator. This project contains various python code useful in experimental labs, such as equipment drivers, data logging and network data exchange components.