

PUBLICATIONS 2010

Theses

de Nijs, R. Corrections in clinical Magnetic Resonance Spectroscopy and SPECT: Motion correction in MR spectroscopy, Downscatter correction in SPECT. Defended March 2nd 2010 at Technical University of Denmark, Department of Informatics and Mathematical Modeling.

Ettrup, A. Serotonin receptor studies in the pig brain: pharmacological intervention and positron emission tomography tracer development. Copenhagen: Own publishing 2010:1-52. Defended October 15th 2010, University of Copenhagen, Faculty of Health.

Gutte H. Neuroendocrine activation and diagnostics in pulmonary embolism: translational studies. Defended October 25th 2010, University of Copenhagen, Faculty of Health Sciences.

Klein AB. Brain-Derived Neurotrophic Factor (BDNF): Interactions with the serotonergic system and its potential as a biomarker in neurological and neuropsychiatric diseases. Copenhagen: Own publishing 2010:1-62. Defended September 17th 2010, University of Copenhagen, Faculty of Health Sciences.

Tägil K. Improved Interpretation of Myocardial Perfusion Images by Artificial Neural Networks. Defended May 17th 2010 at University of Lund

Græbe M. PET/CT for detection of vulnerable carotid artery plaques. Defended November 5th 2010, University of Copenhagen, Faculty of Health Sciences.

Binderup T. Quantitative Gene Expression in Relation to Functional Imaging of Neuroendocrine Tumors with PET & SPECT: Translational Molecular Imaging Studies. Defended February 11th 2010, University of Copenhagen, Faculty of Health Sciences.

Scientific publications

Andersen AB, Law I, Krabbe KS, Bruunsgaard H, Ostrowski SR, Ullum H, Højgaard L, Lebech A, Gerstoft J, Kjær A. Cerebral FDG-PET scanning abnormalities in optimally treated HIV patients. *J Neuroinflammation*. 2010;7:13.

Andersen JB, Mortensen J, Damgaard K, Skov M, Sparup J, Petersen BL, Rechnitzer C, Borgwardt L. Fourteen-year-old girl with endobronchial carcinoid tumour presenting with asthma and lobar emphysema. *Clin Respir J*. 2010 Apr;4(2):120-4.

Andreassen M, Faber J, Kjaer A, Petersen CL, Kristensen LØ. Cardiac effects of three months treatment of acromegaly evaluated by magnetic resonance imaging and B-type natriuretic peptides. *Pituitary* 2010; 13: 329-36.

Anton-Rodriguez JM, Sibomana M, Walker MD, Huisman MC, Matthews JC, Feldmann M, Keller SH, Asselin MC. Investigation of Motion Induced Errors in Scatter Correction for the HRRT Brain Scanner. In: 2010 IEEE Nuclear Science Symposium Conference Record (MIC), IEEE, 2010.

Bajc M, Neilly B, Miniati M, Mortensen J, Jonson B. Methodology for Ventilation/Perfusion SPECT. *Semin Nucl Med*. 2010 Nov;40(6):415-25.

Barrington SF, Qian W, Somer EJ, Franceschetto A, Bagni B, Brun E, Almquist H, Loft A, Højgaard L, Federico M, Gallamini A, Smith P, Johnson P, Radford J, O'Doherty MJ. Concordance between four European centres of PET reporting criteria designed for use in multicentre trials in Hodgkin lymphoma. *Eur J Nucl Med Mol Imaging*. 2010 Oct;37(10):1824-33.

Bennett WD, Daviskas E, Hasani A, Mortensen J, Fleming J, Scheuch G. Mucociliary and Cough Clearance as a Biomarker for Therapeutic Development. *J Aerosol Med Pulm Drug Deliv*. 2010; 25 (5): 1-12.

Bie-Olsen LG, Pedersen-Bjergaard U, Kjaer TW, Lonsdale MN, Law I, Thorsteinsson B. Differences in cortical and pituitary activity in response to hypoglycaemia and cognitive testing in healthy men with different basal activity of the renin-angiotensin system. *J Renin Angiotensin Aldosterone Syst*. 2010; 11:173-179

- Binderup T, Knigge U, Loft A, Federspiel B, Kjaer A. 18F-fluorodeoxyglucose positron emission tomography predicts survival of patients with neuroendocrine tumors. *Clin Cancer Res*. 2010 Feb 1;16(3):978-85.
- Binderup T, Knigge U, Loft A, Mortensen J, Pfeifer A, Federspiel B, Hansen CP, Hoejgaard L, Kjaer A. Functional Imaging of Neuroendocrine Tumors – a Head to Head Comparison of Somatostatin Receptor Scintigraphy, MIBG Scintigraphy and Fluoro-Deoxyglucose-PET. *J Nucl Med* 2010; 51: 704-12.
- Bouchelouche K, Capala J. 3. “Image and treat”: an individualized approach to urological tumors. *Curr Opin Oncol*. 2010 May;22(3):274-80.
- Bouchelouche K, Choyke PL, Capala J. Prostate specific membrane antigen- a target for imaging and therapy with radionuclides. *Discov Med*. 2010 Jan;9(44):55-61.
- Bouchelouche K, Tagawa ST, Goldsmith SJ, Turkbey B, Capala J, Choyke P. PET/CT Imaging and Radioimmunotherapy of Prostate Cancer. *Semin Nucl Med*. 2011 Jan;41(1):29-44.
- Bouchelouche K, Turkbey B, Choyke P, Capala J. Imaging prostate cancer: an update on positron emission tomography and magnetic resonance imaging. *Curr Urol Rep*. 2010 May;11(3):180-90.
- Buch I, Oturai PS, Jensen LT. Radiographic absorptiometry for pre-screening of osteoporosis in patients with low energy fractures. *Scandinavian Journal of Clinical & Laboratory Investigations* 2010;70:269-74.
- Capala J, Bouchelouche K. Molecular imaging of HER2-positive breast cancer: a step toward an individualized ‘image and treat’ strategy. *Curr Opin Oncol*. 2010 Nov;22(6):559-66.
- Darcourt, J., Booi, J., Tatsch, K., Varrone, A., Vander Borgh T., Kapucu, Ö.L., Någren, K., Nobili, F., Walker, Z., Van Laere, K. 2010: EANM procedure guidelines for brain neurotransmission SPECT using 123I-labelled dopamine transporter ligands, version 2. - *European Journal of Nuclear Medicine and Molecular Imaging* 37:443-450.
- de Nijs R, Holm S, Thomsen G, Ziebell M, Svarer C. Experimental determination of the weighting factor for the energy window subtraction-based downscatter correction for I-123 in brain SPECT studies. *J Med Phys* 2010;35(4):215-222.
- Dejanović D, Widding Høyer A, Mortensen J, Højgaard L. Symmetrical nail bed uptake on a 99mTc-HDP bone scan in a patient with Wegener’s granulomatosis. *Eur J Nucl Med Mol Imaging*. 2010; 37(2): 410.
- Denholt CL, Kuhnast B, Dollé F, Hinnen F, Hansen PR, Gillings N, Kjaer A. Fluorine-18 labelling of a series of potential EGFRvIII targeting peptides with a parallel labelling approach using [18F] FPyME. *J Labelled Comp Radiopharm* 2010; 53: 774-8.
- Due AK, Korreman S, Bentzen SM, Tomé W, Bender E, Aznar M, Vogelius I, Berthelsen AK, Kristensen CA, Specht L. Methodologies for localizing loco-regional hypopharyngeal carcinoma recurrences in relation to FDG-PET positive and clinical radiation therapy target volumes. *Acta Oncol*. 2010 Oct; 49(7):984-90.
- Elgqvist J, Ahlberg D, Andersson H, Jensen H.J, Johansson B.R, Kahu H, Olsson M, Lindgren S. Intraperitoneal alpha-radioimmunotherapy of Advanced Ovarian Cancer in Nude Mice using Different High Specific Activities. *World Journal of Oncology*. 2010;1:101-110.
- Elgqvist J, Andersson H, Jensen H. J, Kahu H, Lindgren S, Warnhammar E, Hultborn R. Repeated intraperitoneal alpha-radioimmunotherapy of ovarian cancer. *J Oncol*. 2010; 2010:394913.
- Erritzøe D, Frøkjær VG, Haahr MT, Kalbitzer J, Svarer C, Holst KK, Hansen DL, Jernigan T, Lehel S. Cerebral serotonin transporter binding is inversely related to body mass index. *Neuroimage* 2010;1;52(1):284-9.

Erritzøe D, Holst K, Frøkjær VG, Licht CL, Kalbitzer J, Nielsen FA, Svarer C, Madsen J, Knudsen G. A Nonlinear Relationship between Cerebral Serotonin Transporter and 5-HT_{2A} Receptor Binding: An In Vivo Molecular Imaging Study in Humans. *J Neurosci* 2010;30(9):3391-7.

Ettrup A, Palner M, Gillings N, Santini MA, Hansen M, Kornum BR, Rasmussen LK, Någren K, Madsen J, Begtrup M, Knudsen GM. Radiosynthesis and evaluation of [¹¹C]Cimbi-5 as a 5-HT_{2A} receptor agonist radioligand for PET. *J Nucl Med* 2010;51(11):1763-70

Eugen-Olsen J, Andersen O, Linneberg A, Ladelund S, Hansen TW, Langkilde A, Petersen J, Pielak T, Møller LN, Jeppesen J, Lyngbæk S, Fenger M, Olsen MH, Hildebrandt PR, Borch-Johnsen K, Jørgensen T, Haugaard SB. Circulating soluble urokinase plasminogen activator receptor predicts cancer, cardiovascular disease, diabetes and mortality in the general population. *J Intern Med*. 2010; 268:296-308.

Flotats A, Knuuti J, Gutberlet M, Marcassa C, Bengel FM, Kaufmann PA, Rees MR, Hesse B; On behalf of the Cardiovascular Committee of the EANM, the ESCR and the ECNC. Hybrid cardiac imaging: SPECT/CT and PET/CT. A joint position statement by the European Association of Nuclear Medicine (EANM), the European Society of Cardiac Radiology (ESCR) and the European Council of Nuclear Cardiology (ECNC). *Eur J Nucl Med Mol Imaging*. 2010 Aug;37(9):1802-12.

Frøkjær VG, Erritzøe D, Juul A, Nielsen FA, Holst K, Svarer C, Madsen J, Paulson OB, Knudsen GM. Endogenous plasma estradiol in healthy men is positively correlated with cerebral cortical serotonin 2A receptor binding. *Psychoneuroendocrinology*. 2010;35(9):1311-20.

Frøkjær VG, Vinberg M, Erritzøe D, Baaré W, Holst KK, Mortensen EL, Arfan H, Madsen J, Jernigan TL, Kessing LV, Knudsen GM. Familial risk for mood disorder and the personality risk factor, neuroticism, interact in their association with frontolimbic serotonin 2A receptor binding. *Neuropsychopharmacology* 2010;35(5):1129-37.

Frost S, Jensen H. J, Lindegren S. In vitro evaluation of avidin antibody pretargeting using ²¹¹At-labeled and biotinylated poly-L-lysine as effector molecule. *Cancer*. 2010 Feb 15; 116(4 Suppl):1101-10.

Graebe M, Borgwardt L, Højgaard L, Sillesen H, Kjaer A. When to image carotid plaque inflammation with FDG PET/CT. *Nucl Med Commun*. 2010 Sep;31(9):773-9.

Graebe M, Pedersen SF, Højgaard L, Kjaer A, Sillesen H. ¹⁸F-FDG PET and ultrasound echolucency in carotid artery plaques. *JACC Cardiovasc imaging*. 2010 Mar;3(3):289-95.

Grüner J, Højgaard L, Kosteljanetz M, Broholm H, Laursen H, Law I: Perfusion CT compared to ¹⁵O-water PET for measurement of regional cerebral blood flow in brain tumors. Oral presentation ved EANM2010 Wien (+poster ved SNM, Salt Lake City)

Gutte H, Møller ML, Pfeifer AK, Thorp J, Borgwardt L, Borgwardt L, Kristoffersen US, Kjaer A. Estimating GFR in children with ^{99m}Tc-DTPA-renography: A comparison with single sample ⁵¹Cr-EDTA clearance. *Clin Physiol Funct Imaging* 2010; 30: 169-74.

Gutte H, Mortensen J, Jensen CV, Johnbeck CB, von der Recke P, Petersen CL, Kristoffersen US, Kjaer A. SPECT kombineret med CT-angiografi giver bedre diagnostik af akut lungeemboli – sekundærpublikation. *Ugeskr Læger* 2010; 172 (1): 41-43.

Gutte H, Mortensen J, Jensen CV, von der Recke P, Petersen CL, Kristoffersen US, Kjaer A. Diagnostics of pulmonary embolism with V/Q-SPECT compared to CT angiography. *Ugeskr Laeger* 2010; 172: 41-3.

Gutte H, Mortensen J, Jensen CV, von der Recke P, Petersen CL, Kristoffersen US, Kjaer A. Comparison of V/Q-SPECT and planar V/Q-lung scintigraphy in diagnosing acute pulmonary embolism. *Nuclear Medicine Communications* 2010; 31: 82-86.

Gutte H, Mortensen J, Jensen CV, von der Recke P, Petersen CL, Kristoffersen US, Kjaer A. ANP, BNP and D-dimer predict right ventricular dysfunction in patients with acute pulmonary embolism. *Clin Physiol Funct Imaging*. 2010; 30: 466-471.

- Gutte H, Oxboel J, Kristoffersen US, Mortensen J, Kjaer A. Gene expression of ANP, BNP and ET-1 in the heart of rats during pulmonary embolism. *PLoS One* 2010; June 14; 5 (6): e11111-6.
- Hansen CP, Langer S, Frevert S, Mortensen J, Kjær A, Knigge U. Treatment of neuroendocrine tumours of the gastrointestinal tract. *Ugeskr Laeger*. 2010 Oct 25;172(43):2942-2945.
- Højgaard L et al. Human Stem Celle Research and Regenerative Medicine – A European Perspective on Scientific, Ethical and Legal Issues. Science Policy Briefing No. 38. ESF 2010: www.esf.org
- Højgaard L. Ageing, Health and Pensions in Europe: An Economic Perspective. Science Policy Briefing No. 39. ESF 2010: www.esf.org
- Højgaard L. ESF-EMRC Position on the Implications of the EMF Directive 2004/40/EC for European Biomedical Magnetic Resonance Research. Position paper. ESF 2010: www.esf.org
- Højgaard L. et al. Ageing, Health and Pensions in Europe: An Economic Perspective. Forward Look. ESF 2010: www.esf.org
- Højgaard L. Male Reproductive Health: its impacts in relation to general wellbeing and low European fertility rates. Science Policy Briefing No. 40. ESF 2010: www.esf.org
- Højgaard L. RNA Worlc: a new frontier in biomedical research. Forward Look. ESF 2010: www.esf.org
- Horn J, Sjøstrand H, Lock-Andersen J, Loft A. PET scanning for malignant melanoma and positive sentinel node diagnostics. *Ugeskr Laeger*. 2010 Apr 12;172(15):1126-30.
- H-Q Fan, Li Y, Thijs L, Hansen TW, Boggia J, Kikuya M, Björklund-Bödegard K, Richart T, Ohkubo T, Jeppesen J, Torp-Pedersen C, Dolan E, Kuznetsova T, Stolarz-Skrzypek K, Tikhonoff V, Malyutina S, Casiglia E, Nikitin Y, Lind L, Sandoya E, Kawecka-Jaszcz K, Imai Y, Wang J-G, Ibsen H, O'Brien E, Staessen JA, on behalf of the IDACO Investigators. Prognostic value of isolated nocturnal hypertension on ambulatory measurement in 8711 subjects from 10 populations. *J Hypertens*. 2010; 28:2036-2045.
- Huisman MC, Mourik JEM, van Velden FHP, Sibomana M, S. H. Keller SH, Wang S, Anton J, van Assema D, Froklage FEAM, Hoetjes NJ, R. Kloet W, van Berckel BNM, Schuit RC, Lubberink M, Boellaard R, Lammertsma AA: Quantitative Accuracy of the HRRT in an Interscanner Study with the HR+ and (R)-[11C]verapamil In: 2010 IEEE Nuclear Science Symposium Conference Record (MIC), IEEE, 2010.
- Hutchings M, Berthelsen AK, Barrington SF: Chapter 8: The Role of Imaging in Radiotherapy for Hodgkin Lymphoma; . Springer-Verlag Berlin Heidelberg 2010.
- Janson ET, Sørbye H, Welin S, Federspiel B, Grønbaek H, Hellman P, Mathisen O, Mortensen J, Sundin A, Thiis-Evensen E, Välimäki MJ, Oberg K, Knigge U. Nordic Guidelines 2010 for diagnosis and treatment of gastroenteropancreatic neuroendocrine tumours. *Acta Oncol*. 2010 Aug;49(6):740-56.
- Jensen MM, Erichsen KD, Björkling F, Madsen J, Jensen PB, Højgaard L, Sehested M, Kjær A. Early detection of response to experimental chemotherapeutic Top 216 with 18F-FLT and 18F-FDG PET in human ovary cancer xenografts in mice. *PloS One*. 2010 Sep 24;5(9):e12965.
- Jensen SA, Hasbak P, Mortensen J, Sørensen JB. Fluorouracil induces myocardial ischemia with increases of plasma brain natriuretic Peptide and lactic Acid but without dysfunction of left ventricle. *J Clin Oncol*. 2010 Dec 20;28(36):5280-6.
- Jeppesen J, Hansen TW, Torp-Pedersen C, Madsbad S, Ibsen H, Jørgensen T, Fenger M. Relationship between common lipoprotein lipase gene sequence variants, hyperinsulinemia, and risk of ischemic heart disease: a population-based study. *Atherosclerosis* 2010; 211:506-11.
- Jokinen, P., Scheinin, N., Aalto, S., Nägren, K., Savisto, N., Parkkola, R., Rokka, J., Haaparanta, M., Røyttä, M., Rinne, J.O. 2010: [11C]PIB-, [18F]FDG-PET and MRI imaging in patients with Parkinson's disease with and without dementia. – *Parkinsonism and Related Disorders* 16:666-670.

Kalbitzer J, Erritzøe D, Holst KK, Nielsen FA, Marner L, Lehel S, Arentzen T, Jernigan TL, Knudsen GM. Seasonal changes in brain serotonin transporter binding in short 5-HTTLPR-allele carriers but not in long-allele homozygotes. *Biol Psych* 2010;67(11):1033-9.

Karmi, A., Iozzo, P., Viljanen, A., Hirvonen, J., Fielding, B.A., Virtanen, K., Oikonen, V., Kempainen, J., Viljanen, T., Guiducci, L., Haaparanta-Solin, M., Nägren, K., Solin, O., Nuutila, P. 2010: Increased brain fatty acid uptake in metabolic syndrome. – *Diabetes* 59:2171-2177.

Keller SH, Lauze F, Nielsen M. Temporal Super Resolution Using Variational Methods In Marta Mrak, Mislav Grgic and Murat Kunt, editors: *High-Quality Visual Experience: Creation, Processing and Interactivity of High-Resolution and High-Dimensional Video Signals* Springer, 2010, ISBN: 978-3-642-12801-1.

Kjaer A, Knigge U, Mortensen J, Hansen CP, Fallentin E. Localization diagnostics of neuroendocrine gastrointestinal tumours. *Ugeskr Laeger* 2010; 172: 2953-6.

Klein AB, Trajkovska V, Erritzøe D, Haugbøl S, Madsen J, Baaré W, Aznar S, Knudsen GM. Cerebral 5-HT_{2A} receptor and serotonin transporter binding in humans are not affected by the val66met BDNF polymorphism status or blood BDNF levels. *J Cereb Blood Flow Metab* 2010;30(11):e1-7.

Koziorowski J, Larsen P, Gillings N. A quartz-lined carbon-11 target: striving for increased yield and specific activity, *Nucl Med Biol* 2010; 37: 943-948.

Kristoffersen U, Gutte H, Skovgaard D, Andersen PA, Kjaer A. Radiation exposure for medical staff performing quantitative coronary perfusion PET with ¹³N-ammonia. *Radiat Prot Dosimetry* 2010; 138: 107-10.

Kristoffersen US, Wiinberg N, Petersen CL, Gerstoft J, Gutte H, Lebech AM, Kjaer A. Reduction in coronary and peripheral vasomotor function in patients with HIV after initiation of antiretroviral therapy: a longitudinal study with positron emission tomography and flow-mediated dilation. *Nucl Med Commun* 2010; 31: 874-80.

Kupers R, Frokjaer V, Erritzoe D, Naert A, Budtz-Joergensen E, Nielsen FA, Kehlet H, Knudsen GM. Serotonin transporter binding in the hypothalamus correlates negatively with tonic heat pain ratings in healthy subjects: a [¹¹C]DASB PET study. *Neuroimage* 2010 Sep. 19 [Epub ahead of print]

Kupers R, Frokjaer V, Erritzoe D, Naert A, Budtz-Joergensen, E, Aarup Nielsen, F, Kehlet, H, Moos Knudsen, G. Serotonin transporter binding in the hypothalamus correlates negatively with tonic heat pain ratings in healthy subjects: a [¹¹C]DASB PET study. *NeuroImage*. 2011 Jan 15;54(2):1336-43.

Kupers R, Matteau I, Ricciardi E, Pietrini P, Pfito M. Beyond visual, aural and haptic movement perception: hMT+ is activated by electrotactile motion stimulation of the tongue in sighted and in congenitally blind individuals. *Brain Res Bull*. 2010 Jul 30;82(5-6):264-70.

Kupers R, Van Laere KV, Calenbergh FV, Gybels J, Dupont P, Baeck A, Plaghki L. Multimodal therapeutic assessment of peripheral nerve stimulation in neuropathic pain: Five case reports with a 20-year follow-up. *Eur J Pain*. 2011 Feb;15(2):161.e1-9.

Laitinen, I.E.K., Luoto, P., Nägren, K., Marjamäki, P.M., Silvula, J.M.U., Hellberg, S., Laine, V.J.O., Ylä-Herttuala, S., Knuuti, J., Roivainen, A. 2010: Uptake of ¹¹C-choline in mouse atherosclerotic plaques – *Journal of Nuclear Medicine* 51:798-802.

Luoto, P., Laitinen, I., Suilamo, S., Nägren, K., Roivainen, A. 2010: Human dosimetry of carbon-11 labeled N-butan-2-yl-1-(2-chlorophenyl)-N-methylisoquinoline-3-carboxamide extrapolated from whole-body distribution kinetics and radiometabolism in rats. – *Molecular Imaging and Biology* 12:435-442.

Lyngbaek S, Ripa RS, Haack-Sørensen M, Cortsen A, Kragh L, Andersen CB, Jørgensen E, Kjaer A, Kastrup J, Hesse B Serial In Vivo Imaging of the Porcine Heart after Percutaneous, Intramyocardially Injected ¹¹¹In-Labeled Human Mesenchymal Stromal Cells. *Int J Cardiovasc Imaging* 2010; 26: 273-84.

Madsen K, Erritzøe D, Mortensen E, Gade A, Madsen J, Baaré WF, Knudsen GM, Hasselbalch SG. Cognitive Function is Related to Fronto-striatal Serotonin Transporter Levels - A Brain PET Study in Young Healthy Subjects. *Psychopharmacology (Berl)*. 2011 Feb;213(2-3):573-81.

Marner L, Gillings N, Madsen K, Erritzøe D, Baaré WF, Svarer C, Hasselbalch SG, Knudsen GM. Brain Imaging of Serotonin 4 Receptors in Humans with [11C]SB207145-PET. *NeuroImage* 2010;50(3):855-61.

Marner L, Knudsen GM, Madsen K, Holm S, Baaré W, Hasselbalch SG. The reduction of Baseline Serotonin 2A Receptors in Mild Cognitive Impairment is stable at Two-year Follow-up. *J Alzheimer Dis*. 2011 Jan 1;23(3):453-9.

Mattace-Raso FU, Hofman A, Verwoert GC, Wittemana JC, Wilkinson I, Cockcroft J, McEniery C, Yasmin, Laurent S, Boutouyrie P, Bozec E, Hansen TW, Torp-Pedersen C, Ibsen H, Jeppesen J, Vermeersch SJ, Rietzschel E, De Buyzere M, Gillebert TC, Van Bortel L, Segers P, Vlachopoulos C, Aznaouridis C, Stefanadis C, Benetos A, Labat C, Lacolley P, Stehouwer CD, Nijpels G, Dekker JM, Stehouwer CD, Ferreira I, Twisk JW, Czernichow S, Galan P, Herberg S, Pannier B, Guérin A, London G, Cruickshank JK, Anderson SG, Paini A, Agabiti Rosei E, Muiesan ML, Salvetti M, Filipovsky J, Seidlerova J, Dolejsova M. The Reference Values for Arterial Stiffness? Collaboration. Determinants of pulse wave velocity in healthy people and in the presence of cardiovascular risk factors: 'establishing normal and reference values'. *Eur Heart J*. 2010; 31:2338-2350.

Moller S, Iversen JS, Krag A, Bie P, Kjaer A, Bendtsen F. Reduced baroreflex sensitivity and pulmonary dysfunction in alcoholic cirrhosis: effect of hyperoxia. *Am J Physiol Gastrointest Liver Physiol* 2010; 299: G784-90.

Mortensen J, Oturai P, Højgaard L, Knigge U, Hansen CP, Martiny L, Rasmussen P, Kjaer A. Radionuclide therapy for neuroendocrine tumors. *Ugeskr Laeger*. 2010 Oct 25;172(43):2950-3
Mortensen J, Oturai P, Højgaard L, Knigge U, Hansen CP, Martiny L, Rasmussen P, Kjaer A. Radionuclide therapy for neuroendocrine tumours. *Ugeskr Laeger* 2010; 2942-5.

Nielsen CH, Kimura RH, Withofs N, Phuoc TT, Miao Z, Cochran J, Cheng Z, Felsher D, Willmann JK, Kjaer A, Gambhir SS. PET Imaging of Tumor Neovascularization in a Transgenic Mouse Model Using a Novel ⁶⁴Cu-DOTA-Knottin Peptide. *Cancer Res* 2010; 70: 9022-30.

Nielsen SJ, Jeppesen J, Torp-Pedersen C, Hansen TW, Linneberg A, Fenger M. Tyrosine Hydroxylase Polymorphism (C-824T) and Hypertension: a Population-Based Study. *Am J Hypertens*. 2010; 23:1306-1311.

Olesen OV, Jørgensen MR, Paulsen RR, Højgaard L, Roed B, Larsen R. Structured light 3D tracking system for measuring motions in PET brain imaging. *Proc. SPIE Medical Imaging*, 2010; 7625:76250X

Olesen OV, Keller SH, Sibomana M, Larsen R, Roed B, Højgaard L. Automatic Thresholding for Frame-Repositioning Using External Tracking in PET Brain Imaging. 2010 IEEE Nuclear Science Symposium Conference Record (MIC), IEEE, 2010.

Olesen OV, Paulsen RR, Højgaard L, Roed B, Larsen R. Motion tracking in narrow spaces: A structured light approach. *Medical Image Computing and Computer-Assisted Intervention – MICCAI 2010*, ser. Lecture Notes in Computer Science, T. Jiang, N. Navab, J. P. Pluim, and M. A. Viergever, Eds., vol. 6363. Springer, 2010, 253–260.

Olesen OV, Svarer C, Sibomana M, Keller S, Holm S, Jensen J, Andersen F, Højgaard L. A Movable Phantom Design for Quantitative Evaluation of Motion Correction Studies on High Resolution PET Scanners. *Nuclear Science, IEEE Transactions on*, vol. 57, no. 3, 1116–1124, 2010.

Palner M, McCormick P, Gillings N, Begtrup M, Wilson AA, Knudsen GM. Radiosynthesis and ex vivo evaluation of (R)-(-)-2-chloro-N-[1-¹¹C-propyl]n-propylnorapomorphine, *Nucl Med Biol* 2010; 37: 35-40.

Pedersen SF, Græbe M, Hag AMF, Højgaard L, Sillesen H, Kjaer A. Gene expression and ¹⁸F-FDG uptake in atherosclerotic carotid plaques. *Nucl Med Comm* 2010; 31: 423-9.

Poulsen MH, Bouchelouche K, Gerke O, Petersen H, Svolgaard B, Marcussen N, Svolgaard N, Ogren M, Vach W, Høilund-Carlsen PF, Geertsen U, Walter S. [18F]-fluorocholine positron-emission/computed tomography for lymph node staging of patients with prostate cancer: preliminary results of a prospective study. *BJU Int.* 2010 Sep;106(5):639-43;

Rasmussen H, Erritzoe D, Andersen R, Ebdrup BH, Aggernaes B, Oranje B, Kalbitzer J, Madsen J, Pinborg LH, Baaré W, Svarer C, Lublin H, Knudsen GM, Glenthøj B. Decreased Frontal Serotonin2A Receptor Binding in Antipsychotic-Naive Patients With First-Episode Schizophrenia. *Arch Gen Psychiatry.* 2010;67(1):9-16.

Rinne, J.O, Någren, K. 2010: Positron emission tomography in at risk patients and in the progression of mild cognitive impairment to Alzheimer's disease. – *Journal of Alzheimer's Disease* 19:291-300.

Risum S, Høgdall C, Loft A, Berthelsen AK, Høgdall E, Lundvall L, Nedergaard L, Engelholm SA. Does the use of diagnostic PET/CT cause stage migration in patients with primary advanced ovarian cancer? *Gynecol Oncol.* 2010 Mar; 116(3):395-8.

Schroter S, Groves T, Højgaard L. Surveys of current status in biomedical science grant review: funding organisations' and grant reviewers' perspectives. *BMC Med.* 2010 Oct 20;8:62.

Skovgaard D, Bayer ML, Mackey AL, Madsen J, Kjaer M, Kjaer A . Increased Cellular Proliferation in Rat Skeletal Muscle and Tendon in Response to Exercise: Use of FLT and PET/CT. *Mol Imaging Biol* 2010 12:626-634.

Skovgaard D, Holmvang L, Bang L, Lønborg J, Hasbak P. Imaging of Takotsubo Cardiomyopathy *Clinical Nuclear Medicine.* 35(12):967-971.

Stolarz-Skrzypek K, Thijs L, Richart T, Li Y, Hansen TW, Boggia J, Kuznetsova T, Kikuya M, Kawecka-Jaszcz K, Staessen JA. Blood pressure variability in relation to outcome in the International Database of Ambulatory blood pressure in relation to Cardiovascular Outcome (IDACO). *Hypertension Research.* 2010; 33:757-66.

Stolarz-Skrzypek K, Thijs L, Wizner B, Richart T, Ogedegbe G, Li Y, Hansen TW, Boggia J, Kikuya M, Kuznetsova T, Wang J-G, Lurbe E, Imai Y, Kawecka-Jaszcz K, Jan A. Staessen. From pioneering to implementing automated blood pressure measurement in clinical practice: Thomas Pickering's legacy. *Blood Pressure Monitoring* 2010, 15:72-81.

Svenstrup K, Giraud G, Boespflug-Tanguy O, Danielsen ER, Thomsen C, Rasmussen K, Law I, Vogel A, Stokholm J, Crone C, Hjermand LE, Nielsen JE. Hereditary spastic paraplegia caused by the PLP1 "rumpshaker mutation". *J Neurol Neurosurg Psychiatry.* 2010;81:666-672.

Van Laere K, Varrone A, Booij J, Vander Borght T, Nobili F, Kapucu Ö L, Walker Z, Någren, K, Tatsch, K., Darcourt, J. 2010: EANM procedure guidelines for brain neurotransmission SPECT/PET using dopamine D2 receptor ligands version 2. - *European Journal of Nuclear Medicine and Molecular Imaging* 37:434-442.

Vandenberghe R, Van Laere K, Ivanoiu A, Salmon, E, Bastin, C, Triau, E, Hasselbalch, S, Law, I, Andersen, A, Korner, A, Minthon, L, Garraux, G, Nelissen, N, Bormans, G, Buckley, C, Owenius, R, Thurfjell, L, Farrar, G, and Brooks, DJ. 18F-flutemetamol amyloid imaging in Alzheimer disease and mild cognitive impairment: a phase 2 trial. *Ann Neurol.* 2010;68:319-329.

Ziebell M, Pinborg LH, Thomsen G, de Nijs R, Svarer C, Wagner A, Knudsen GM. MRI-guided region-of-interest delineation is comparable to manual delineation in dopamine transporter SPECT quantification in patients: a reproducibility study. *J Nucl Med Technol* 2010;38(2):61-8.

As in previous annual reports we have listed scientific papers only and not the many abstracts and proceedings from the department.