

## Publications 2012

### Ph.D. Theses

1. Bastiaannet E. Diagnosis and Treatment of Melanoma Patients with Lymph Node Metastases. Ph.D.Thesis, University of Groningen, May 7, 2012. 206 pages. [co-promotor **Brouwers AH**] *NB Several chapters of this thesis involved FDG-PET.*
2. **Boerema AS**. The Brain at Low Temperature: Neuronal and Behavioural Dynamics in Mammalian Hibernation and Torpor. Ph.D.Thesis, University of Groningen, March 16, 2012. 214 pages. *NB not a Nuclear Medicine thesis, but author is employee of NMMI.*
3. Bruyn M. de. Targeted Delivery of TRAIL for Immunotherapy of Ovarian Cancer. Ph.D.Thesis, University of Groningen, April 11, 2012. 173 pages. *NB some chapters of this thesis were joint publications of the Helfrich lab and NMMI.*
4. Campbell-Verduyn, L.S. "Click for PET"- Click Chemistry as a Tool for [<sup>18</sup>F]Radiolabeling. Ph.D.Thesis, University of Groningen, March 19, 2012. 196 pages. [Promotores: Feringa BL, **Elsinga PH, Dierckx RA**]
5. **Farinha Antunes I**. Development and Evaluation of PET Tracers for Imaging  $\beta$ -Glucuronidase Activity in Cancer and Inflammation. Ph.D.Thesis, University of Groningen, January 25, 2012. 199 pages. [Promotores: **Dierckx RA**, Haisma HJ, **Elsinga PH**, copromotor **De Vries EFJ**]
6. **Gialleonardo V di**. Imaging of Insulinitis and Beta Cell Mass in Type 1 Diabetes Mellitus. Ph.D.Thesis, University of Groningen, June 25, 2012. 205 pages. [Promotores: **Signore A, Dierckx RAJO**, co-promotor: **De Vries EFJ**]
7. **Mees G**. Imaging of tumor vascularization and related hypoxia: Preclinical and clinical studies. Ph.D.Thesis, University of Groningen, September 17, 2012. 170 pages. [Promotores: C.van de Wiele, **R.A.J.O.Dierckx**]
8. **Mirfeizi L**. Application of Click Chemistry for PET. Ph.D.thesis, University of Groningen, November 12, 2012. 197 pages. [Promotores: **Elsinga PH**, Feringa BL, **Dierckx RAJO**]
9. **Rybczynska AA**. Sigma Receptor Ligands: Novel Applications in Cancer Imaging and Treatment. Ph.D.thesis, University of Groningen, February 29, 2012. 249 pages. [Promotores: **Dierckx RAJO, Elsinga PH**, co-promotor: **Van Waarde A**]
10. Stojanov K. Nanoparticles and Stem Cells for Drug Delivery to the Brain. Ph.D.thesis, University of Groningen, September 5, 2012. 189 pages. [Promotores: Hoekstra D, **Dierckx RAJO**, co-promotor: **De Vries EFJ**]

## Papers in peer-reviewed international journals

1. **Abdoli, M., Dierckx, R. A.,** and Zaidi, H. Metal artifact reduction strategies for improved attenuation correction in hybrid PET/CT imaging. *Med.Phys.* 39:3343-3360, 2012.
2. **Antunes, I. F.,** Haisma, H. J., **Elsinga, P. H., Sijbesma, J. W., van Waarde, A., Willemsen, A. T., Dierckx, R. A., and de Vries, E. F.** In vivo evaluation of [(18)F]FEAnGA-Me: a PET tracer for imaging beta-glucuronidase (beta-GUS) activity in a tumor/inflammation rodent model. *Nucl.Med.Biol.* 39:854-863, 2012.
3. **Antunes, I. F.,** Haisma, H. J., **Elsinga, P. H., van Waarde, A., Willemsen, A. T., Dierckx, R. A., and de Vries, E. F.** In Vivo Evaluation Of 1-o-(4-(2-fluoroethyl-carbamoyloxymethyl)-2-nitrophenyl)-o-beta-d-glucopyronuronate: A Positron Emission Tomographic Tracer For Imaging beta-glucuronidase Activity In A Tumor/inflammation Rodent Model. *Mol.Imaging.* 11:77-87, 2012.
4. **Antunes, I. F., Doorduyn, J.,** Haisma, H. J., **Elsinga, P. H., van, Waarde A., Willemsen, A. T., Dierckx, R. A., and de Vries, E. F.** 18F-FEAnGA for PET of beta-glucuronidase activity in neuroinflammation. *J Nucl.Med.* 53:451-458, 2012.
5. **Antunes, I. F.,** Haisma, H. J., **Elsinga, P. H., Di Gialleonardo, V, van Waarde, A., Willemsen, A. T., Dierckx, R. A., and de Vries, E. F.** Induction of beta-glucuronidase release by cytostatic agents in small tumors. *Mol.Pharm.* 9:3277-3285, 2012.
6. Arjaans, M., Oude Munnink, T. H., Timmer-Bosscha, H., Reiss, M., Walenkamp, A. M., **Lub-de Hooge, M. N.,** de Vries, E. G., and Schröder, C. P. Transforming growth factor (TGF)-beta expression and activation mechanisms as potential targets for anti-tumor therapy and tumor imaging. *Pharmacol.Ther.* 135:123-132, 2012.
7. Assa, S., Dasselaar, J. J., **Slart, R. H.,** de Jong, P. E., Voors, A. A., Tio, R. A., and Franssen, C. F. Comparison of cardiac positron emission tomography perfusion defects during stress induced by hemodialysis versus adenosine. *Am J Kidney Dis.* 59:862-864, 2012.
8. Bastiaannet, E., Hoekstra, O. S., **de Jong, J.R., Brouwers, A. H.,** Suurmeijer, A. J., and Hoekstra, H. J. Prognostic value of the standardized uptake value for (18)F-fluorodeoxyglucose in patients with stage IIIB melanoma. *Eur.J Nucl.Med.Mol.Imaging.* 39:1592-1598, 2012.
9. Bastiaannet, E., Uyl-de Groot, C. A., **Brouwers, A. H.,** van der Jagt, E. J., Hoekstra, O. S., Oyen, W., Verzijlbergen, F., van, Ooijen B., Thompson, J. F., and Hoekstra, H. J. Cost-effectiveness of adding FDG-PET or CT to the diagnostic work-up of patients with stage III melanoma. *Ann.Surg.* 255:771-776, 2012.
10. **Benadiba, M., Luurtsema, G.,** Wichert-Ana, L., Buchpigel, C.A., and Busatto, G.F. New molecular targets for PET and SPECT imaging in neurodegenerative disease. *Rev.Bras.Psiq.* 34 Suppl 2:S125-S148

11. Beumer, W., Gibney, S. M., Drexhage, R. C., Pont-Lezica, L., **Doorduyn, J.**, Klein, H. C., Steiner, J., Connor, T. J., Harkin, A., Versnel, M. A., and Drexhage, H. A. The immune theory of psychiatric diseases: a key role for activated microglia and circulating monocytes. *J Leukoc.Biol.* 92:959-975, 2012.
12. Bollineni, V. R., Wiegman, E. M., **Pruim, J.**, Groen, H. J., and Langendijk, J. A. Hypoxia imaging using Positron Emission Tomography in non-small cell lung cancer: Implications for radiotherapy. *Cancer Treat.Rev.* 38:1027-1032, 2012.
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14. Boneschansker, L., Nijland, M., **Glaudemans, A. W.**, van der Meulen, S. B., Kluin, P. M., and Dullaart, R. P. Adrenal hemorrhage causing adrenal insufficiency in a patient with antiphospholipid syndrome: increased adrenal 18F-FDG uptake. *J Clin.Endocrinol.Metab.* 97:3014-3015, 2012.
15. Breeuwsma, A. J., Rybalov, M., Leliveld, A. M., **Pruim, J.**, and de Jong, I. Correlation of [11C]choline PET-CT with time to treatment and disease-specific survival in men with recurrent prostate cancer after radical prostatectomy. *Q.J Nucl.Med.Mol.Imaging.* 56:440-446, 2012.
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17. Conti, F., **Malviya, G.**, Ceccarelli, F., Priori, R., Iagnocco, A., Valesini, G., and **Signore, A.** Role of scintigraphy with (99m)Tc-infliximab in predicting the response of intraarticular infliximab treatment in patients with refractory monoarthritis. *Eur.J Nucl.Med.Mol.Imaging.* 39:1339-1347, 2012.
18. de Groot, M. J., Hoeksma, M., van, Rijn M., **Slart, R. H.**, and van Spronsen, F. J. Relationships between lumbar bone mineral density and biochemical parameters in phenylketonuria patients. *Mol.Genet.Metab.* 105:566-570, 2012.
19. **de Haas, H. J.**, van den Borne, S. W., **Boersma, H. H.**, **Slart, R. H.**, Fuster, V., and Narula, J. Evolving role of molecular imaging for new understanding: targeting myofibroblasts to predict remodeling. *Ann.N.Y.Acad.Sci.* 1254:33-41, 2012.
20. de Heide, L. J., **Glaudemans, A. W.**, Oomen, P. H., Apers, J. A., Totte, E. R., and van Beek, A. P. Functional imaging in hyperinsulinemic hypoglycemia after gastric bypass surgery for morbid obesity. *J Clin.Endocrinol.Metab.* 97:E963-E967, 2012.
21. de Waal, E. G., **Slart, R. H.**, and Vellenga, E. Is FDG PET a Better Imaging Tool Than Somatostatin Receptor Scintigraphy in Patients With Relapsing Multiple Myeloma? *Clin.Nucl.Med.* 37:939-942, 2012.

22. **Di Gialleonardo, V, de Vries, E. F.,** Di Girolamo M., Quintero, A. M., **Dierckx, R. A.,** and **Signore, A.** Imaging of beta-Cell Mass and Insulinitis in Insulin-Dependent (Type 1) Diabetes Mellitus. *Endocr.Rev.* 33:892-919, 2012.
23. **Di Gialleonardo, V, Signore, A.,** Scheerstra, E. A., **Visser, A. K., van, Waarde A., Dierckx, R. A.,** and **de Vries, E. F.** 11C-Hydroxytryptophan Uptake and Metabolism in Endocrine and Exocrine Pancreas. *J Nucl.Med.* 53:1755-1763, 2012.
24. **Di Gialleonardo, V., Signore, A., Glaudemans, A. W., Dierckx, R. A., and de Vries, E. F.** N-(4-18F-Fluorobenzoyl)Interleukin-2 for PET of Human-Activated T Lymphocytes. *J Nucl.Med.* 53:679-686, 2012.
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31. Ghobadi, G., van der Veen, S., Bartelds, B., de Boer, R. A., Dickinson, M. G., **de Jong, J. R.,** Faber, H., Niemantsverdriet, M., Brandenburg, S., Berger, R. M., Langendijk, J. A., Coppes, R. P., and van Luijk, P. Physiological Interaction of Heart and Lung in Thoracic Irradiation. *Int.J Radiat.Oncol.Biol.Phys.* 84:e639-e646,2012.

32. Giovacchini, C., and **Breeuwsma, A.J.** Restaging prostate cancer patients with biochemical failure with PET/CT and radiolabeled choline. *Q.J.Nucl.Med.Mol.Imag.* 56:354-366
33. **Glaudemans, A. W.**, Quintero, A. M., and **Signore, A.** PET/MRI in infectious and inflammatory diseases: will it be a useful improvement? *Eur.J. Nucl.Med.Mol.Imaging.* 39:745-749, 2012.
34. **Golestani, R., Slart, R. H.**, Dullaart, R. P., **Glaudemans, A. W.**, Zeebregts, C. J., **Boersma, H. H.**, Tio, R. A., and **Dierckx, R. A.** Adverse cardiovascular effects of anabolic steroids: pathophysiology imaging. *Eur.J Clin.Invest.* 42:795-803, 2012.
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37. Habibzadeh, M.A., Ay, M.R., Asl, A.R.K., Ghadiri, H., and **Zaidi, H.** Impact of miscentering on patient dose and image noise in X-ray CT imaging: Phantom and clinical studies. *Phys.Med.Eur.J.Med.Phys.* 28:191-199
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47. Mees, G., **Dierckx, R.A.**, Mertens, K., Vermeire, S., Van Steenkiste, M., Reutelingsperger, C., D'Asseler, Y., Peremans, K., Van Damme, N., and Van de Wiele, C. Tc-99m-labeled tricarbonyl His-CNA35 as an imaging agent for the detection of tumor vasculature. *J.Nucl.Med.* 53:464-471.
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50. **Noordzij, W.**, **Glaudemans, A. W.**, **Slart, R. H.**, **Dierckx, R. A.**, and Hazenberg, B. P. Clinical use of differential nuclear medicine modalities in patients with ATTR amyloidosis. *Amyloid* 19:208-211, 2012.
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71. **van Rheenen, R. W.**, Bongaerts, A. H., and **Glaudemans, A. W.** Peritoneal lymphomatosis found on <sup>18</sup>F-FDG PET/CT. *Eur.J Haematol.*39:1609-1617,2012.
72. Verbeek, H. H., Plukker, J. T., Koopmans, K. P., de Groot, J. W., Hofstra, R. M., Muller Kobold, A. C., van der Horst-Schrivers AN, **Brouwers, A. H.**, and Links, T. P. Clinical Relevance of <sup>18</sup>F-FDG PET and <sup>18</sup>F-DOPA PET in Recurrent Medullary Thyroid Carcinoma. *J Nucl.Med.*53:1863-1871,2012.
73. Verbeek, J., Syvanen, S., Schuit, R. C., Eriksson, J., de Lange, E. C., Windhorst, A. D., **Luurtsema, G.**, and Lammertsma, A. A. Synthesis and preclinical evaluation of [<sup>11</sup>C]D617, a metabolite of (R)-[<sup>11</sup>C]verapamil. *Nucl.Med.Biol.* 39:530-539, 2012.
74. Wendker-van Wattum, M., Wouters, R. S., van der Wal, J. E., **Glaudemans, A. W.**, and Wolffenbüttel, B. H. An unusual cause of hyperandrogenism. *Neth.J Med.* 70:41-45, 2012.



75. Xie, T.W., Liu, Q., and **Zaidi, H.** Evaluation of S-values and dose distributions for Y-90, I-131, Ho-166 and Re-188 in seven lobes of the rat liver. *Med.Phys.* 39:1462-1472.
76. Zaidi, H., **Abdoli, M.**, Fuentes, C. L., and El Naqa, I. Comparative methods for PET image segmentation in pharyngolaryngeal squamous cell carcinoma. *Eur.J Nucl.Med.Mol.Imaging.* 39:881-891, 2012.

## Symposium abstracts

### ACC – National Heart Institute of Mexico (Mexico City)

1. **R.H.Slart**. PET myocardial perfusion (lecture).

### Asia Oceania Congress of Nuclear Medicine and Biology (Tehran, Iran)

2. **M. Abdoli, J.R. de Jong, J. Pruijm, R. A. J. O. Dierckx** and H. Zaidi. 2D interpolation of virtual sinogram in an irregular grid for metal artifact reduction of PET/CT images (oral presentation).

### BiomaGune (San Sebastian, Spain)

3. **P.H.Elsinga**. 18F-radiochemistry (invited lecture)

### Chirurgendagen (Veldhoven, Netherlands)

4. R.Buijs, J.J. van der Dungen, **R.H.Slart**, R.A.Tio, I.Tielliu, T.Willems, H.H.Boersma, C.J.Zeebregts. Calcificatie als prognostische factor voor ruptuur risico van het abdominale aorta aneurysma.

### EANM (Milan, Italy):

5. **Antunes IF**, Haisma HJ, **Elsinga PH**, van Waarde A, **Willemsen ATM**, **Dierckx RAJO**, de **Vries EFJ**. Induction of  $\beta$ -glucuronidase release in small tumors with a single cytostatic dose treatment. Eur J Nucl Med Mol Imaging 39(Suppl.2):S242-S243,2012
6. **Boersma HH**. How to Setup cGRPP in an Academic Environment Collaborating with Industry. (invited lecture, EANM Milan)
7. **De Groot EH**, Boellaard R, Post N, Wagenaar NRL, **Willemsen ATM**, van Dalen JA. Improved dose regimen for whole-body FDG-PET imaging. Eur J Nucl Med Mol Imaging 39(Suppl.2):S185,2012
8. **Elsinga PH**. PET-radiochemistry: miniaturization and other technologies (invited lecture)
9. **Elsinga PH**, Kunkel F, de **Vries M**, de **Vries EFJ**, **Luurtsema G**. Cassette-based synthesis of  $^{11}\text{C}$ -raclopride. Eur J Nucl Med Mol Imaging 39(Suppl.2):S408,2012
10. Galli F, Piaggio G, Manni I, **Dierckx RAJO**, **Signore A**. Role of a novel superagonist rhTSH analogue labeled with  $^{99\text{m}}\text{Tc}$  as a potential radiopharmaceutical to image thyroid cancer metastases. Eur J Nucl Med Mol Imaging 39(Suppl.2):S291-S292,2012

11. Gaykema SBM, Timmer-Bosscha H, **Lub-de Hooge MN**, Van der Meulen SB, Bart J, Jansen L, De Vries J, **Dierckx RAJO**, de Vries EGE, Schröder CP, **Brouwers AH**. Feasibility of <sup>89</sup>Zr-bevacizumab PET imaging in primary breast cancer. Eur J Nucl Med Mol Imaging 39(Suppl.2):S296,2012
12. Haggkvist J, Tóth M, **Doorduyn J**, Nagy K, Máthé D, Varrone A, Farde L, Halldin C, Gulyás B, Test-retest of [<sup>11</sup>C]raclopride in rat: a PET/MRI study. Eur J Nucl Med Mol Imaging 39(Suppl.2):S361,2012
13. **Khayum MA, Doorduyn J, Glaudemans AW, Dierckx RAJO, de Vries EFJ**. In vivo imaging of brain estrogen receptors in rats: a [<sup>18</sup>F]FES PET study. Eur J Nucl Med Mol Imaging 39(Suppl.2):S360,2012
14. **Lemstra C, Brouwers AH**. Task reallocation in health care: possible medical tasks and procedures to be performed by a Physician Assistant in a Nuclear Medicine Department. Eur J Nucl Med Mol Imaging 39(Suppl.2):S198,2012
15. Makris NE, Boellaard R, Visser EP, **De Jong JR**, Vanderlinden B, Lammertsma AA, Huisman MC. Multi-centre <sup>89</sup>Zr cross calibration of PET/CT scanners: assessment of image quality and quantitative accuracy. Eur J Nucl Med Mol Imaging 39(Suppl.2): S184-S185,2012
16. **Mirfeizi L, De Jong IJ, Elsinga PH, Dierckx RAJO, de Vries EFJ**. New and automated synthesis method for 16β-[<sup>18</sup>F]fluoro-5α-dihydrotestosterone, a new clinical tracer for PET imaging of the androgen receptor. Eur J Nucl Med Mol Imaging 39(Suppl.2):S267-S268,2012
17. Oosting SF, Nagengast WB, Oude Munnink TH, **Lub-de Hooge MN**, Hollema H, **De Jong JR**, De Jong IJ, De Haas S, Scherer SJ, Sluiter WJ, Bongaerts AHH, Gietema JA, **Dierckx RAJO**, De Vries EGE, **Brouwers AH**. Serial <sup>89</sup>Zr-bevacizumab PET imaging in metastatic renal cell carcinoma patients treated with sunitinib, or bevacizumab plus interferon. Eur J Nucl Med Mol Imaging 39(Suppl.2):S188,2012
18. **Paul S, Khanapur S, Khayum MA, Sijbesma JWA, Doorduyn J**, Ishiwata K, Meerlo P, **Elsinga PH, Dierckx RAJO, van Waarde A**. Encephalitis changes binding of the adenosine A1 receptor antagonist <sup>11</sup>C-MPDX in rat pons. Eur J Nucl Med Mol Imaging 39(Suppl.2):S303,2012
19. **Ramakrishnan NK, Reddy VP, Proost JH, Nyakas CJ, Kwizera C, Sijbesma JWA, Elsinga PH, Ishiwata K, Dierckx RAJO, van Waarde A**. Population pharmacokinetics of cutamesine in rats using NONMEM, <sup>11</sup>C-SA4503, and microPET. Eur J Nucl Med Mol Imaging 39(Suppl.2):S301-S302,2012
20. **Ramakrishnan NK, Visser AKD, Kwizera C, Sijbesma JWA, Elsinga PH, Nyakas CJ, Ishiwata K, Dierckx RAJO, van Waarde A**. Dose-dependent sigma-1 receptor occupancy by donepezil in rat brain can be assessed with <sup>11</sup>C-SA4503 and microPET. Eur J Nucl Med Mol Imaging 39(Suppl.2):S303,2012

21. **Segbers M, De Jong JR, Klaassen R, Teune LK, Dierckx RAJO, Willemsen ATM.** The effect of PSF and ToF reconstruction on the use of FDG PET brain normal databases. Eur J Nucl Med Mol Imaging 39(Suppl.2):S229,2012

**EANO (Marseille, France):**

22. M.A.A.M. Heesters, H.L. van der Weide, R.A. Bolt, R.H. Enting, **A.W.J.M. Glaudemans**, H.P. Bijl, J.M.C. van Dijk, J.A. Langendijk. <sup>11</sup>C-methionine PET and radiotherapy dose distribution in the differentiation of radionecrosis and tumour progression after radiosurgery of brain metastases. Neuro Oncol (2012) 14 (suppl 3)

**EAS (European Association of Surgery)**

23. **Reza Golestani**; Clark J. Zeebregts; Anton G.T. Terwisscha van Scheltinga; **Marjolijn N. Lub-de Hooge**; Gooitzen M. van Dam; **Andor W.J.M. Glaudemans**; **Rudi A.J.O. Dierckx**; René A. Tio; **Hendrikus H. Boersma**; Wouter B. Nagengast; **Riemer H.J.A. Slart**. Feasibility of VEGF Imaging in Human Atherosclerotic Plaque using <sup>89</sup>Zr-bevacizumab Positron Emission Tomography.

**ESMO (Vienna, Austria):**

24. E.G.E. de Vries, G.M. van Dam, **A.W.J.M. Glaudemans**, A.K. Reyners, A.G.J. van der Zee, G.A.P. Hospers, **M.N. Lub-de Hooge**. Molecular imaging of gynecological cancers: ovarian cancer as role model.

**ESRR (Nantes, France):**

25. Vial-based and microfluidic synthesis of 4-[<sup>18</sup>F]fluorobutyl tosylate – A comparative study. **Shalgunov, Vladimir, de Vries, Erik F.J., Dierckx, Rudi A.J.O., Elsinga, Philip H.**
26. Evaluation of a hydroxamate-based MMP-inhibitor, <sup>18</sup>F-FB-ML5, in a mouse model of pulmonary inflammation and in a HT1080 fibrosarcoma xenograft mouse model with PET. **Matusiak N., Castelli R., Overkleeft H.S., Bischoff R., Rozeveld D., van Oosterhout A., van Waarde A., Dierckx R.A.J.O., Elsinga P.H.**
27. Preclinical study of <sup>111</sup>In labelled Bombesin homodimer for GRPR positive prostate cancer imaging. G.Carlucci , **Z. Yu**, Hildo J.K. Ananias, **R.A.J.O. Dierckx**, I. J. de Jong, **P.H. Elsinga**.

**IEEE Nuclear Science Symposium and Medical Imaging Conference (Anaheim, California, USA):**

28. **M. Abdoli, R. A. J. O. Dierckx** and H. Zaidi. Deformable Model-based PET Segmentation for Heterogeneous Tumor Volume Delineation (poster presentation)

#### **IMPAKT 2012 (Brussels, Belgium)**

29. S.B.M. Gaykema, **A.H. Brouwers**, H. Timmer-Bosscha, **M.N. Lub-de Hooge**, S. van der Meulen, J. Bart, L. Jansen, J. de Vries, E.G.E. de Vries, C.P. Schröder. <sup>89</sup>Zr-bevacizumab PET imaging in primary breast cancer

#### **International Pharmaceutical congress (Chennai, India)**

30. **S. Khanapur, S. Paul**, A.Shah, S.Vatakuti, **M.J.B.Koole**, R.Zijlma, **R.A.J.O.Dierckx, G.Luurtsema**, P.Garg, **A. van Waarde, P.H.Elsinga**. Development of F-18 labeled SCH442416 analog for imaging adenosine A2A receptors in early diagnosis of Parkinson's disorder (Poster)
31. **Hartimath S, Dierckx RA, de Vries EFJ**. Radiosynthesis and evaluation of [<sup>99m</sup>Tc]-O2-AMD3100 as a diagnostic agent for CXCR4 receptor imaging in a tumour model (oral presentation)

#### **International Symposium on Amyloidosis (Groningen, Netherlands)**

32. Iodine-123 metaiodobenzylguanidine for the evaluation of cardiac sympathetic denervation in early stage amyloidosis. Walter Noordzij, **Andor W.J.M. Glaudemans**, Bouke P.C. Hazenberg, René A. Tio, **Rudi A.J.O. Dierckx, Riemer H.J.A. Slart**
33. **RWJ. van Rheenen**, Bouke P.H. Hazenberg, **Rudi A.J.O. Dierckx, Riemer H.J.A. Slart, Andor W.J.M.Glaudemans**. The added value of SPECT(-CT) compared with planar <sup>123</sup>I-SAP scintigraphy in patients with systemic amyloidosis.

#### **Istituto de Radiologica – HCFMUSP, University of Sao Paulo (Brazil)**

34. **E.F.J. de Vries**. Radiopharmaceuticals for PET (Invited lecture, October 8, 2012).

#### **NNW/KNCV meeting (Enschede, Twente)**

35. **P.H.Elsinga**. PET-radiochemistry as a driving force for nuclear molecular imaging

#### **NVZA (Nunspeet, Netherlands)**

36. **H.H.Boersma, R.Golestani**, N.A.Jager, H.J.de Haas, A.G.Terwisscha van Scheltinga, **M.N.Lub-de Hooge, L.Mirfeizi, P.H.Elsinga, G.Luurtsema**, P.A.Low, J.Narula, R.A.Tio, J.Westra, M.Bijl, G.M.van Dam, C.J.Zeebregts, **R.H.Slart**. New tracers and methodology for determination of atherosclerotic plaque vulnerability

#### **PET and SPECT imaging in Neurology and Psychiatry (Groningen, Netherlands)**

37. Sigma-1 receptor occupancy by donepezil in the rat brain: a dose-response study with microPET and 11C-SA4503. **Nisha Ramakrishnan**

- 38. In vivo imaging of brain estrogen receptors in rats: a [18F]FES PET study. **Mohammed Khayum**
- 39. Cost-effectiveness of FDG-PET to manage patients with cognitive function impairments: budget impact from a French society perspective. Renaud Guignard, **AK van Zanten, RAJO Dierckx**
- 40. The effect of social defeat on 5-HT<sub>2A</sub> binding in the rat brain measured with PET. **Anniek Visser**
- 41. Visualization of adenosine A<sub>1</sub> receptors in rat brain, using 11C-MPDX and microPET. **Soumen Paul**
- 42. Development of a F-18 labeled SCH442416 analog for imaging adenosine A<sub>2A</sub> receptors. **Shivashankar**
- 43. Intra-peritoneal administration of lipopolysaccharide in male C57BL/6J mice: effects on neuroinflammation and depressive-like behaviour. **Ate Boerema**
- 44. A PET/MRI study on the validation of SUV as an outcome measure for [11C]PBR28. **Janine Doorduyn**
- 45. Validation of MS model for PET myelin tracer evaluation. **Danielle Paula Faria**
- 46. MicroPET with a sigma ligand, 11C-SA4503, detects spontaneous pituitary tumors in aged rats. **Nisha Ramakrishnan**
- 47. In vivo investigation of neuroinflammation and changes in brain metabolism after brain irradiation. **Andrea Parente**
- 48. [18F]FEAnGA for PET imaging of  $\beta$ -glucuronidase activity in neuroinflammation. **Ines Farinha Antunes**

**PETRad (Warsaw, Poland)**

- 49. **P.H.Elsinga**. The future of PET-radiopharmaceuticals (invited lecture)

**Roche Postdoc Symposium (Penzberg, Germany)**

- 50. **V.Mahajan, S.Hartimath, R.Comley, M.Stefan-Gueldner, A.Roth, K.Poelstra, C.Smit, J.Kamps, R.A.Dierckx, E.F.J. de Vries**. Functional PET imaging of Kupffer cells status using radiolabeled mannosylated albumin. (Poster presentation)
- 51. **G. Malviya, E.F.J. de Vries, A. Signore, T. Nayak, C. Gerdes**. In vivo assessment of the distribution of natural killer cells induced by therapeutic antibodies in a mouse tumour model. (Poster presentation)

### **SIG Radiofarmacie (Nijmegen, Netherlands)**

52. **Elsinga PH.** Radiopharmaceutical development: from bench to bedside (invited lecture)

### **SNM (Miami, FL, USA):**

53. **P.H.Elsinga.** Translation of radiopharmaceuticals to the clinic (invited lecture)
54. **W. Noordzij, AWJM Glaudemans, BPC Hazenberg, RA Tio, RAJO Dierckx, RHJA Slart.** Iodine-123 metaiodobenzylguanidine for the evaluation of cardiac sympathetic denervation in early stage amyloidosis.. **(Oral)**
55. LE Juárez Orozco, J. Glauche, CJ Zeebregts, **HH Boersma, AWJM Glaudemans, RA Dierckx, RA Tio, RHJA Slart** Left ventricle ejection fraction correlates with infarct size as well as myocardial perfusion reserve.
56. Esther G.M. de Waal, **Riemer H.J.A. Slart**, Edo Vellenga. Is FDG-PET a better imaging tool than somatostatin receptor scintigraphy in relapsing multiple myeloma?

### **SNM Mid-Winter Meeting (Orlando, FL, USA):**

57. **A. van Waarde.** Receptor-Based Imaging of Cancer Versus Inflammation. (Invited lecture)

### **Symposium of the Brazilian Nuclear Medicine Society (Salvador de Bahia, Brazil)**

58. **E.F.J. de Vries.** Non-conventional PET isotopes for labeling of peptides and proteins. (Invited lecture, Oct 11-14, 2012)
59. **E.F.J. de Vries.**  $^{11}\text{C}$  and  $^{18}\text{F}$ -labeled radiopharmaceutical for brain imaging. (Invited lecture, Oct 11-14, 2012)

### **World Molecular Imaging Congress (Dublin, Ireland)**

60. Validation of  $^{11}\text{C}$ -MPDX for imaging of cerebral adenosine A1 receptors in rodents. **Soumen Paul, Mohamed A. Khayum, Shivashankar Khanapur, Jurgen W. Sijbesma, Kiichi Ishiwata, Philip H. Elsinga, Rudi A. Dierckx, Aren van Waarde**

### **Books and book chapters**

1. **Boersma HH, Sturkenboom MGG, Lub-de Hooge MN, Elsinga PH, Luurtsema G, Dierckx RAJO, Kosterink JGW.** Basic Aspects of Good Manufacturing Practice. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.727-750.
2. **Elsinga PH, Van Waarde A, Paans AMJ, Dierckx RAJO** (editors) Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012 [book with 26 chapters, 768 pages]

3. **Elsinga PH, Van Waarde A, Paans AMJ, Dierckx RAJO.** Preface. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.xxvii-xxx.
4. **Elsinga PH, Van Waarde A, Paans AMJ, Dierckx RAJO.** Epilog. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.751-762.
5. **Gaykema SBM, De Vries EGE, Oude Munnink TH, Nagengast WB, Terwisscha van Scheltinga AGT, Hospers GAP, Dierckx RAJO, Brouwers AH, Schröder CP, Lub-de Hooge MN.** Molecular Imaging of the Receptor HER2 and the Ligand VEGF as Role Models for the Use of ImmunoPET in Drug Development. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.681-690.
6. **Glaudemans AWJM, De Vries EFJ, Chianelli M, Lanzolla T, Dierckx RAJO, Signore A.** The Role of Nuclear Medicine in Inflammatory Diseases: Drug Targets and Clinical Applications. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.629-680.
7. **Glaudemans AWM, Dierckx RAJO, Otte A, Kusic Z, Pruim J, De Deyn PP.** Good Clinical Practice and Nuclear Medicine. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.691-726.
8. **Van Waarde A.** Introduction on PET: Description of Basics and Principles. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.1-13.
9. **Wierds R, Dierckx RAJO, Paans AMJ.** The Cyclotron Production of Short-Lived Positron Emitting Radionuclides. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.383-416.
10. **Willemsen ATM, Paans AMJ.** An Introduction to Kinetic Modeling and Quantification and Its Role in Drug Development. In: Trends on the Role of PET in Drug Development. Hackensack, NJ: World Scientific, 2012, p.417-454.