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Curriculum Vitae RAM KUMAR SELVARAJU

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ADDRESS

Dag Hammarskjöldsv 14C;
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LANGUAGES

Tamil: Native
English: Excellent
Swedish: Elementary

EXPERTISE

- Handling radionuclides
- Cell studies
- Autoradiography
- Organ distribution
- PET/SPECT/CT/MRI
 - Rodents (mice/rats)
 - Porcine
 - Non-human primates
- Image analysis /PMOD)
- Basic kinetic modeling
- Dosimetry
- Publications (34)
 - Citations: 852; h-index: 18
- Publication reviewer
 - Theranostics [IF-8.71]
 - Mol. Pharm. [IF-4.56]
 - Sci. Rep. [IF-3.99]
 - Bioorg. Chem. [IF-3.93]
 - EJNMMI Res . [IF-3.00]
 - Life [IF – 2.99]
 - Eur. J. Cell Biol. [IF-2.94]
 - Nucl.Med.Biol. [IF-2.41]
- Teaching (>120 hrs.)

Work Experience

- 2017- Researcher, Preclinical PET-MRI Platform, Uppsala University, Sweden
- 2016-2017 Postdoc, Preclinical PET-MRI Platform, Uppsala University, Sweden
- 2010-2011 Research assistant, Preclinical PET Platform, Uppsala University, Sweden

Education

- 2011-2015 Ph. D. in Pharmacy, Uppsala University, Sweden
- 2009-2011 M. Sc. in Medical Nuclide Techniques, Uppsala University (UU), Sweden
- 2005-2009 B.Tech in Biotechnology, VIT University, India

Conferences

- 2020 EMIM, Thessaloniki, Greece (*Invited speaker, MEDISO Workshop*)
- 2019 WMIC, Montreal, Canada. Oral (*Invited speaker, MEDISO Workshop*)
- 2019 ISRS, Beijing, China. *Poster(s)*

Pedagogical merits

Lecturing

- 2017- Lecture, Course: Bioimaging and Cell Analysis, UU, Sweden
- 2014- Lecture and Lab, Course: Molecular imaging with focus on PET, UU, Sweden

Invited Lectures

- 2018 IMIM day, Uppsala University, Sweden
- 2018 SOFOSKO course, Uppsala University, Sweden
- 2016 Keynote speaker at Biomaterial meeting, Uppsala, Sweden

Courses attended

- 2018 Supervising Students for Degree Projects, Uppsala University, Sweden
- 2017 Supervising at doctoral level at Domain of Medicine and Pharmacy, UU, Sweden
- 2016 Academic Teacher Training Course, UU, Sweden

Popular Science

- 2019 - SciFest Exhibition, Science is Art, Uppsala, Sweden

Supervision (co-supervisor)

- 2019 - Emmi Puuvuori (*Ph.D. thesis*)
- 2015 Mariam Willny (*Master's thesis*)
- 2015 Martin Krajcovic (*Master's thesis*)
- 2014 Thomas N Bulenga (*Master's thesis*)

Publications (Citations: 852; h-index: 18)

1. Nordeman P, Jayendra ZP, Briard E, *et al.* ^{18}F -Radiolabeling and Preliminary Evaluation of a HSP90 ligand. *Eur J Pharm Sci.* 2021 Feb 1;157:105647.
2. Espes D, Carlsson PO, **Selvaraju RK**, *et al.* Longitudinal Assessment of ^{11}C -5-Hydroxytryptophan Uptake in Pancreas After Debut of Type 1 Diabetes. *Diabetes.* 2021 Jan 21;. doi: 10.2337/db20-0776. [Epub ahead of print] PubMed PMID: 33479059.
3. Eriksson O, **Selvaraju RK**, Berglund M, Espes D. Metabolically Active Brown Adipose Tissue Is Found in Adult Subjects with Type 1 Diabetes. *Int J Mol Sci.* 2019 Nov 20;20(23).
4. Eriksson J, Roy T, Sawadjoon S, *et al.* Synthesis and preclinical evaluation of the CRTH2 antagonist [^{11}C]MK-7246 as a novel PET tracer and potential surrogate marker for pancreatic beta-cell mass. *Nucl Med Biol.* 2019 Apr;71:1-10.
5. Jahan M, Johnström P, **Selvaraju RK**, *et al.* The development of a GPR44 targeting radioligand [^{11}C]AZ12204657 for in vivo assessment of beta cell mass. *EJNMMI Res.* 2018 Dec 27; 8(1):113.
6. Hulsart-Billström G*, **Selvaraju RK***, *et al.* Non-invasive tri-modal visualisation via PET/SPECT/ μCT of recombinant human bone morphogenetic protein-2 retention and associated bone regeneration: A proof of concept *J Control Release.* 2018; 285:178-186. *Equal contributions.
7. Mitran B, Güler R, Roche FP, *et al.* Radionuclide imaging of VEGFR2 in glioma vasculature using biparatopic affibody conjugate: proof-of-principle in a murine model. *Theranostics* 2018; 8(16):4462-4476.
8. Eriksson O, Johnström P, Cselenyi Z, *et al.* In vivo visualization of beta cells by targeting of GPR44. *Diabetes.* 2018; 67(2):182-192.
9. Eriksson O, Korsgren O, **Selvaraju RK**, *et al.* Pancreatic imaging using an antibody fragment targeting the Zinc Transporter type 8 - a direct comparison with radio-iodinated Exendin-4. *Acta Diabetol.* 2018; 55(1):49-57.
10. Eriksson O, Rosenström U, **Selvaraju RK**, *et al.* Species differences in pancreatic binding of DO3A-VS-Cys40-Exendin4. *Acta Diabetol.* 2018; 54(11):1039-1045.
11. Eriksson O, **Selvaraju RK**, Eich T, Willny M, *et al.* Positron Emission Tomography to assess the outcome of intraportal islet transplantation. *Diabetes.* 2016; 65(9):2482-9.
12. Espes D, **Selvaraju RK**, Velikyan, *et al.* Quantification of beta-cell mass in intramuscular islet grafts using radiolabeled exendin-4. *Transplantation Direct.* 2016; 2(8): p e83.
13. Mitran B, Varasteh Z, **Selvaraju RK**, *et al.* Selection of optimal chelator improves the contrast of GRPR imaging using bombesin analogue RM26. *Int J Oncol.* 2016. 48: 2124-2134.
14. Haylock AK, Spiegelberg D, Mortensen AC, *et al.* Evaluation of a novel type of imaging probe based on a recombinant bivalent mini-antibody construct for detection of CD44v6-expressing squamous cell carcinoma. *Int J Oncol.* 2016; 48(2):461-70.
15. Spiegelberg D, Mortensen AC, **Selvaraju RK**, *et al.* Molecular imaging of EGFR and CD44v6 for prediction and response monitoring of HSP90 inhibition in an in vivo squamous cell carcinoma model. *Eur J Nucl Med Mol Imaging.* 2016. 43(5):974-82. 6- 6.
16. **Selvaraju RK***, Bulenga TN*, Espes D, Lubberink M, *et al.* Dosimetry of [^{68}Ga]Ga-DO3A-VS-Cys⁴⁰-Exendin-4 in rodents, pigs, non-human primates and human – repeated scanning in human is possible. *Am J Nucl Med Mol Imaging.* 2015; 5(3): 259–269.
17. Velikyan I, Bulenga TN, **Selvaraju RK**, *et al.* Dosimetry of [^{177}Lu]-DO3A-VS-Cys⁴⁰-Exendin-4 – impact on the feasibility of insulinoma internal radiotherapy. *Am J Nucl Med Mol Imaging.* 2015; 15; 5(2):109-26.
18. Eriksson J, Åberg O, **Selvaraju RK**, *et al.* Strategy to develop a MAO-A resistant 5-hydroxy-L-[β - ^{11}C] tryptophan isotopologue based on deuterium kinetic isotope effects. *EJNMMI Res.* 2014; 4:62.

19. Tugues S, Roche F, Noguer O, *et al.* Histidine-Rich Glycoprotein uptake and turnover is mediated by mononuclearphagocytes. *PLoS One*. 2014; 9(9):e107483.
20. Honarvar H, Strand J, Perols A, *et al.* Position for site-specific attachment of a DOTA chelator to synthetic Affibody molecules has a different influence on the targeting properties of ⁶⁸Ga- compared to ¹¹¹In-labeled conjugates. *Mol Imaging*. 2014; 13(0):1-12.
21. Eriksson O*, Espes D*, **Selvaraju RK**, *et al.* The Positron Emission Tomography ligand [¹¹C]5-Hydroxy-Tryptophan can be used as a surrogate marker for the human endocrine pancreas. *Diabetes*. 2014; 63(10):3428-37.
22. **Selvaraju RK**[#], Velikyan I, Asplund V, *et al.* Pre-clinical Evaluation of [⁶⁸Ga]Ga-DO3A-VS-Cys⁴⁰-Exendin-4 For Imaging of Insulinoma. *Nucl Med Biol*. 2014; 41(6):471-6.
23. Nalin L*, **Selvaraju RK**^{**}, Velikyan I, *et al.* Positron Emission Tomography imaging of the glucagon like peptide-1 receptor in healthy and streptozotocin-induced diabetic pigs. *Eur J Nucl Med Mol Imaging*. 2014; 41(9):1800-10.
24. Eriksson O*, Velikyan I*, **Selvaraju RK**[#], *et al.* Detection of Metastatic Insulinoma by Positron Emission Tomography with [⁶⁸Ga]Exendin-4 - a case report. *J Clin Endocrinol Metab*. 2014; 99(5):1519-24.
25. Orlova A, Malm M, Rosestedt M, *et al.* Löfblom J. Imaging of HER3-expressing xenografts in mice using a ^{99m}Tc(CO)3-HEHEHE-Z08699 affibody molecule. *Eur J Nucl Med Mol Imaging*. 2014; 41(7):1450-9.
26. Eriksson O, **Selvaraju RK**, Johansson L, *et al.* Quantitative Imaging of Serotonergic Biosynthesis and Degradation in the Endocrine Pancreas. *J Nucl Med*. 2014; 55(3):460-5.
27. Rosik D, Thibblin A, Antoni G, *et al.* Incorporation of a triglutamyl spacer improves the biodistribution of synthetic Affibody molecules radiofluorinated at the N-terminus via oxime formation with ¹⁸F-fluorobenzaldehyde. *Bioconjugate Chem*. 2014; 25 (1): 82–92.
28. Spiegelberg, D, Kuku, G, **Selvaraju, R**, Nestor, M. Characterization of CD44 variant expression in head and neck squamous cell carcinomas. *Tumor Biol*. 2014; 35(3): 2053–2062.
29. Altai M, Strand J, Rosik D, **Selvaraju RK**, *et al.* Influence of Nuclides and Chelators on Imaging Using Affibody Molecules: Comparative Evaluation of Recombinant Affibody Molecules Site- Specifically Labeled with ⁶⁸Ga and ¹¹¹In via Maleimido derivatives of DOTA and NODAGA. *Bioconjug Chem*. 2013; 24 (6):1102–1109.
30. Strand J, Honarvar H, Perols A, *et al.* Influence of macrocyclic chelators on the targeting properties of ⁶⁸Ga-labeled synthetic Affibody molecules: comparison with ¹¹¹In-labeled counterparts. *PLoS One*. 2013; 8(8).
31. Varasteh Z, Velikyan I, Lindeger G, *et al.* Synthesis and characterization of a high-affinity NOTA-conjugated bombesin antagonist for GRPR-targeted tumor imaging. *Bioconjug Chem*. 2013; 24:1144-53.
32. Eriksson O, **Selvaraju R**, Borg B, *et al.* 5-Fluoro-[β-¹¹C]-L-tryptophan is a functional analogue of 5-hydroxy-[β-¹¹C]-L-tryptophan in vitro but not in vivo. *Nucl Med Biol*. 2013; 40(4):567-75.
33. **Selvaraju RK**[#], Velikyan I, Johansson L, *et al.* In Vivo Imaging of the Glucagonlike Peptide 1 Receptor in the Pancreas with ⁶⁸Ga-Labeled DO3A-Exendin-4. *J Nucl Med*. 2013; 54(8):1458-63.
34. Perols A, Honarvar H, Strand J, *et al.* Influence of DOTA chelator position on biodistribution and targeting properties of (¹¹¹In)-labeled synthetic anti-HER2 affibody molecules. *Bioconjug Chem*. 2012; 23(8):1661-70.

[#]Publications included in Ph.D. thesis.