Curriculum Vitae

Rodrigo Teodoro

Personal data

Name, Surname	Teodoro, Rodrigo
Nationality	Brazilian

Current position

Research collaborator at Helmholtz-Zentrum Dresden-Rossendorf, Institute of Radiopharmaceutical Cancer Research, Department of Neuroradiopharmaceuticals, Research site Leipzig

Education

08/2001 - 07/2005: Bachelor in Chemistry at Federal University of Uberlandia, Minas Gerais, Brazil

08/2005 - 03/2010: PhD at Nuclear and Energy Research Institute (IPEN/CNEN-Sao Paulo, Brazil), Radiopharmacy Center, University of Sao Paulo

PhD thesis: Preclinical evaluation of neurotensin(8-13) analog radiolabeled with ^{99m}Tc: in vitro and in vivo characterization

04/2010- 07/2011: Postdoctoral fellowship at Nuclear and Energy Research Institute (IPEN/CNEN-Sao Paulo, Brazil), Radiopharmacy Center, University of Sao Paulo

Project: Development of a method to purify Molibdenium-99 obtained from the uranium-235 (^{235}U) fission via the acid dissolution of low enriched U targets (LEU)

10/2011-current: Research collaborator at Helmholtz-Zentrum Dresden-Rossendorf – Institute of Radiopharmaceutical Cancer Research, Department of Neuroradiopharmaceuticals, Research site Leipzig

Current projects

- ConNanoPET: Convection-enhanced delivery (CED) of nanoparticles for the therapy of brain tumors (Responsible for the radiochemistry)
- Development of radiotracers for the molecular imaging of Purine receptors in tumors (Radiochemistry)
- Development of radiotracers for the molecular imaging of alpha7-nicotinic acetylcholine receptors (Radiochemistry)
- New PET-radioligands for the imaging of cannabinoids CB2-receptors in brain (Radiochemistry)

List of publications

2018

- Lindemann, M.; Hinz, S.; Deuther-Conrad, W.; Namasivayam, V.; Dukic-Stefanovic, S.; Teodoro, R.; Toussaint, M.; Kranz, M.; Juhl, C.; Steinbach, J.; Brust, P.; Müller, C.; Wenzel, B.; Radiosynthesis and in vivo evaluation of a fluorine-18 labeled pyrazine based radioligand for PET imaging of the adenosine A2B receptor. *Bioorganic and Medicinal Chemistry* **2018**, 26 (16), 4650-4663.
- Teodoro, R.; Scheunemann, M.; Wenzel, B.; Peters, D.; Deuther-Conrad, W.; Brust, P., Synthesis and radiofluorination of novel fluoren-9-one based derivatives for the imaging of α7 nicotinic acetylcholine receptor with PET. *Bioorganic & Medicinal Chemistry Letters* **2018,** *28* (9), 1471-1475.
- Schröder, S.; Wenzel, B.; Deuther-Conrad, W.; Teodoro, R.; Kranz, M.; Scheunemann, M.; Egerland, U.; Höfgen, N.; Briel, D.; Steinbach, J.; Brust, P., Investigation of an ^{18}F-labelled Imidazopyridotriazine for Molecular Imaging of Cyclic Nucleotide Phosphodiesterase 2A. *Molecules* **2018,** *23* (3), 556.

2017

- Hillmer, A. T.; Li, S.; Zheng, M.-Q.; Scheunemann, M.; Lin, S.-f.; Nabulsi, N.; Holden, D.; Pracitto, R.; Labaree, D.; Ropchan, J.; Teodoro, R.; Deuther-Conrad, W.; Esterlis, I.; Cosgrove, K. P.; Brust, P.; Carson, R. E.; Huang, Y., PET imaging of α7 nicotinic acetylcholine receptors: a comparative study of [^{18}F]ASEM and [^{18}F]DBT-10 in nonhuman primates, and further evaluation of [^{18}F]ASEM in humans. *European Journal of Nuclear Medicine and Molecular Imaging* **2017**, 1-9.

2016

- Liu, J.; Wenzel, B.; Dukic-Stefanovic, S.; Teodoro, R.; Ludwig, F.-A.; Deuther-Conrad, W.; Schröder, S.; Chezal, J.-M.; Moreau, E.; Brust, P.; Maisonial-Besset, A., Development of a New Radiofluorinated Quinoline Analog for PET Imaging of Phosphodiesterase 5 (PDE5) in Brain. *Pharmaceuticals* **2016,** *9* (2), 22.
- Hillmer, A. T.; Zheng, M.-Q.; Li, S.; Scheunemann, M.; Lin, S.-f.; Holden, D.; Labaree, D.; Ropchan, J.; Teodoro, R.; Deuther-Conrad, W.; Carson, R. E.; Brust, P.; Huang, Y., PET imaging evaluation of [^{18}F]DBT-10, a novel radioligand specific to α7 nicotinic acetylcholine receptors, in nonhuman primates. *European Journal of Nuclear Medicine and Molecular Imaging* **2016,** *43* (3), 537-547.
- Wagner, S.; Teodoro, R.; Deuther-Conrad, W.; Kranz, M.; Scheunemann, M.; Fischer, S.; Wenzel, B.; Egerland, U.; Hoefgen, N.; Steinbach, J.; Brust, P., Radiosynthesis and biological evaluation of the new PDE10A radioligand [^{18}F]AQ28A. *Journal of Labelled Compounds and Radiopharmaceuticals* **2016,** *60* (1), 36-48.
- Wenzel, B.; Mollitor, J.; Deuther-Conrad, W.; Dukic-Stefanovic, S.; Kranz, M.; Vraka, C.; Teodoro, R.; Günther, R.; Donat, C. K.; Ludwig, F.-A.; Fischer, S.; Smits, R.; Wadsak, W.; Mitterhauser, M.; Steinbach, J.; Hoepping, A.; Brust, P., Development of a Novel Nonpeptidic ^{18}F-Labeled Radiotracer for in Vivo Imaging of Oxytocin Receptors with Positron Emission Tomography. *Journal of Medicinal Chemistry* **2016,** *59* (5), 1800-1817.
- Moldovan, R.-P.; Teodoro, R.; Gao, Y.; Deuther-Conrad, W.; Kranz, M.; Wang, Y.; Kuwabara, H.; Nakano, M.; Valentine, H.; Fischer, S.; Pomper, M. G.; Wong, D. F.; Dannals, R. F.; Brust, P.; Horti, A. G., Development of a High-Affinity PET Radioligand for Imaging Cannabinoid Subtype 2 Receptor. *Journal of Medicinal Chemistry* **2016,** *59* (17), 7840-7855.

2015

- Teodoro, R.; Scheunemann, M.; Deuther-Conrad, W.; Wenzel, B.; Fasoli, F.; Gotti, C.; Kranz, M.; Donat, C.; Patt, M.; Hillmer, A.; Zheng, M.-Q.; Peters, D.; Steinbach, J.; Sabri, O.; Huang, Y.; Brust, P., A Promising PET Tracer for Imaging of α7 Nicotinic Acetylcholine Receptors in the Brain: Design,

Synthesis, and in Vivo Evaluation of a Dibenzothiophene-Based Radioligand. *Molecules* **2015,** *20* (10), 18387.

- Teodoro, R.; Wenzel, B.; Oh-Nishi, A.; Fischer, S.; Peters, D.; Suhara, T.; Deuther-Conrad, W.; Brust, P., A high-yield automated radiosynthesis of the alpha-7 nicotinic receptor radioligand [^{18}F]NS10743. *Applied Radiation and Isotopes* **2015,** *95*, 76-84.
- Schröder, S.; Wenzel, B.; Deuther-Conrad, W.; Teodoro, R.; Egerland, U.; Kranz, M.; Scheunemann, M.; Höfgen, N.; Steinbach, J.; Brust, P., Synthesis, ^{18}F-Radiolabelling and Biological Characterization of Novel Fluoroalkylated Triazine Derivatives for in Vivo Imaging of Phosphodiesterase 2A in Brain via Positron Emission Tomography. *Molecules* **2015,** *20* (6), 9591.

2013

- Teodoro, R.; Moldovan, R.-P.; Lueg, C.; Günther, R.; Donat, C. K.; Ludwig, F.-A.; Fischer, S.; Deuther-Conrad, W.; Wünsch, B.; Brust, P., Radiofluorination and biological evaluation of N-aryl-oxadiazolyl-propionamides as potential radioligands for PET imaging of cannabinoid CB(2) receptors. *Organic and Medicinal Chemistry Letters* **2013,** *3*, 11-11.

2012

- Osso, J. A.; Catanoso, M. F.; Barrio, G.; Brambilla, T. P.; Teodoro, R.; Dias, C. R. B. R.; Suzuki, K. N., Technetium-99m – New Production and Processing Strategies to Provide Adequate Levels for SPECT Imaging. *Current Radiopharmaceuticals* **2012,** *5* (3), 178-186.

2011

- Teodoro, R.; Faintuch, B. L.; Núñez, E. G. F.; Queiróz, R. G., Neurotensin(8–13) analogue: radiolabeling and biological evaluation using different chelators. *Nuclear Medicine and Biology* **2011,** *38* (1), 113-120.
- Faintuch, B. L.; Núñez, G. E. F.; Teodoro, R.; Moro, A. M.; Mengatti, J., Radiolabeled nano-peptides show specificity for an animal model of human PC3 prostate cancer cells. *Clinics* **2011,** *66*, 327-336.
- Núñez, E. G. F.; Teodoro, R.; Wiecek, D. P.; da Silva, N. G.; Martinelli, J. R.; de Oliveira Filho, R. S., Size and specificity of radiopharmaceuticals for sentinel lymph node detection. *Acta Radiologica* **2011,** *52* (7), 774-778.
- Fernández Núñez, E. G.; Linkowski Faintuch, B.; Teodoro, R.; Pereira Wiecek, D.; da Silva, N. G.; Papadopoulos, M.; Pelecanou, M.; Pirmettis, I.; de Oliveira Filho, R. S.; Duatti, A.; Pasqualini, R., Parameters optimization defined by statistical analysis for cysteine–dextran radiolabeling with technetium tricarbonyl core. *Applied Radiation and Isotopes* **2011,** *69* (4), 663-669.
- Faintuch, B. L.; Teodoro, R.; Oliveira, E. A. d.; Nuñez, E. G. F.; Faintuch, J., Neovascularization after ischemic injury: evaluation with 99mTc-HYNIC-RGD. *Acta Cirurgica Brasileira* **2011,** *26*, 58-63.

2009

- Núñez, E. G. F.; Faintuch, B. L.; **Teodoro, R.**; Wiecek, D. P.; Martinelli, J. R.; Silva, N. G. d.; Castanheira, C. E.; Filho, R. S. d. O.; Pasqualini, R., Influence of colloid particle profile on sentinel lymph node uptake. *Nuclear Medicine and Biology* **2009,** *36* (7), 741-747.
- Núñez, E. G. F.; Faintuch, B. L.; **Teodoro, R.**; Wiecek, D. P.; Martinelli, J. R.; Silva, N. G. d.; Castanheira, C. E.; Filho, R. S. d. O.; Pasqualini, R., Influence of colloid particle profile on sentinel lymph node uptake. *Nuclear Medicine and Biology* **2009,** *36* (7), 741-747.

2008

- Santos, R. L. S. R.; Faintuch, B. L.; **Teodoro, R.**, Estudos in vitro e in vivo de análogo da timidina marcada com complexo organometálico de tecnécio-99m para potencial uso em diagnóstico tumoral. *Revista Brasileira de Ciências Farmacêuticas* **2008,** *44*, 85-95.
- Faintuch, B. L.; **Teodoro, R.**; Duatti, A.; Muramoto, E.; Faintuch, S.; Smith, C. J., Radiolabeled bombesin analogs for prostate cancer diagnosis: preclinical studies. *Nuclear Medicine and Biology* **2008,** *35* (4), 401-411.

2006

- Decristoforo, C.; Faintuch-Linkowski, B.; Rey, A.; von Guggenberg, E.; Rupprich, M.; Hernandez-Gonzales, I.; **Teodoro, R.**; Haubner, R., [99mTc]HYNIC-RGD for imaging integrin αvβ3 expression. *Nuclear Medicine and Biology* **2006,** *33* (8), 945-952.