

Curriculum Vitae

Milos Petrik, Ph.D.

Personal data

Date of Birth March 30, 1981
Place of Birth Olomouc, Czech Republic
Nationality Czech

Education

1999-2004 Pharmacy, Charles University in Prague Faculty of Pharmacy in Hradec Kralove, Czech Republic
2004-2008 Ph.D. in drug control, Charles University in Prague Faculty of Pharmacy in Hradec Kralove, Czech Republic

International research experience

2006 October - January - Clinical Department of Nuclear Medicine Innsbruck (Erasmus)
2008-2011 March 08 - October 11 - postdoc Clinical Department of Nuclear Medicine Innsbruck
2010 November - Department of Nuclear Medicine, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands

Employment

2011- December - Institute of Molecular and Translational Medicine, Faculty of Medicine and Dentistry, Palacky University Olomouc, Olomouc, Czech Republic; <http://imtm.cz/>

Research interests

Radiopharmaceuticals, radiometal labelled peptides for diagnosis and therapy, infection imaging, 68-gallium, small animal imaging

Key international cooperation partners

Clinical Department of Nuclear Medicine, Medical University Innsbruck, Austria
Helmholtz-Zentrum Dresden-Rossendorf, Institute of Radiopharmaceutical Cancer Research, Germany
German Cancer Research Center, Molecular Biology of Systemic Radiotherapy, Heidelberg, Germany

Awards

THP Preis für Naturwissenschaftler in der Nuklearmedizin (2011)
Best Basic Science paper EJNMMI (2012)
Dean's prize for outstanding publication – Palacky University (2013, 2015 and 2021)
Czech Nuclear Medicine Society meeting – prize for best lecture or poster (2017, 2018 and 2019)
The prize of Vladimir Hanus (2018)
Czech Nuclear Medicine Society – prize for the best publication in 2018 and 2021 (2019, 2022)
DDPEO - best poster prize (2019)

Participation in research projects funded in the past

2007 University Development Fund (703/2007: Development of tasks for the subjects methods of nuclear analysis and radiopharmaceuticals)
2009-2011 FWF Austrian Science Fund (L676: ⁶⁸Ga-siderophores for diagnosis of aspergillosis with PET)
2012-2019 Technology Agency of the Czech Republic (TE01020028: Center for development of original drugs)
2014-2019 The Ministry of education, youth and sports (LO1304: Support of sustainability of the Institute of Molecular and Translational Medicine)
2016-2018 Czech Science Foundation (16-20229S: Multimodal imaging)
2016-2019 Czech Health Research Council (16-30544A: New multistage nanodiagnostics for cancer imaging and prediction of antiangiogenic therapy efficacy)

2018- 2023	The Ministry of education, youth and sports (CZ.02.1.01/0.0/0.0/16_019/0000868: Molecular, cellular and clinical approach to healthy ageing)
2019-2021	Czech Science Foundation (19-10907S: Analytical Chemistry of Mixed Microbial Infections)
2022-	The Ministry of education, youth and sports (LX22NPO5103: The project National Institute of virology and bacteriology)

Publications

57 scientific articles; □ 150 abstracts and lectures; h-index = 20; 1305 citations

Membership

European Society for Molecular Imaging
Czech Nuclear Medicine Society

Teaching

Charles University, Faculty of Pharmacy, Hradec Kralove (2004-2008)
Palacky University, Faculty of Science and Faculty of Medicine and Dentistry, Olomouc (2013-)

Diploma/Bachelor thesis

11 students

PhD students

1 student

Further qualifications

National radiation safety course certificate and special competence authorization in radiation protection (2012)
European specialisation certificate in radiopharmacy (2013)
Authorization to design animal experiments (2013)
Good laboratory practice course certificate (2018)

List of 10 most important publications

- 1) **Petrik M.**, Haas H., Dobrozemsky G., Lass-Floerl C., Helbok A., Blatzer M., Dietrich H., Decristoforo C.: ⁶⁸Ga-Siderophores for PET imaging of Invasive Pulmonary Aspergillosis: Proof of Principle. *J. Nucl. Med.* 51, 639-645 (2010)
- 2) Knetsch PA., **Petrik M.**, Griessinger CM., Rangger C., Fani M., Kesenheimer C., von Guggenberg E., Pichler BJ., Virgolini I., Decristoforo C., Haubner R.: [⁶⁸Ga]NODAGA-RGD for imaging αvβ3 integrin expression. *Eur. J. Nucl. Med. Mol. Imaging.* 38, 1303-1312 (2011)
- 3) **Petrik M.**, Franssen GM., Haas H., Laverman P., Hörtnagl C., Schrettl M., Helbok A., Lass-Flörl C., Decristoforo C. Preclinical evaluation of two ⁶⁸Ga-siderophores as potential radiopharmaceuticals for *Aspergillus fumigatus* infection imaging. *Eur. J. Nucl. Med. Mol. Imaging.* 39, 1175-1183 (2012)
- 4) **Petrik M.**, Haas H., Laverman P., Schrettl M., Franssen GM., Blatzer M., Decristoforo C.: ⁶⁸Ga-Triacetylfusarinine C and ⁶⁸Ga-Ferrioxamine E for *Aspergillus* infection imaging: uptake specificity in various microorganisms. *Mol. Imaging Biol.* 16, 102-108 (2014)
- 5) Haas H., **Petrik M.**, Decristoforo C.: An iron-mimicking Trojan horse entering fungi - has the time come for molecular imaging of fungal infections? *PLoS Pathog.* 11, 1-7 (2015)
- 6) Zhai C., Franssen GM., **Petrik M.**, Laverman P., Summer D., Rangger C., Haubner R., Haas H., Decristoforo C.: Comparison of Ga-68-labeled fusarinine C-based multivalent RGD conjugates and [⁶⁸Ga]NODAGA-RGD - in vivo imaging studies in human xenograft tumors. *Mol. Imaging Biol.* 18, 5, 758-767 (2016)
- 7) Luptakova D., Pluhacek T., **Petrik M.**, Novak J., Palyzova A., Sokolova L., Skriba A., Sediva B., Lemr K., Havlicek V. Non-invasive and invasive diagnoses of aspergillosis in a rat model by mass spectrometry. *Sci. Rep.* 7:16523 (2017)
- 8) **Petrik M.**, Umlaufova E., Raclavsky V., Palyzova A., Havlicek V., Haas H., Novy Z., Dolezal D., Hajduch M., Decristoforo C.: Imaging of *Pseudomonas aeruginosa* infection with Ga-68 labelled pyoverdine for positron emission tomography *Sci. Rep.* 8, 15698 (2018)
- 9) **Petrik M.**, Umlaufova E., Raclavsky V., Palyzova A., Havlicek V., Pfister J., Mair C., Novy Z., Popper M., Hajduch M., Decristoforo C.: ⁶⁸Ga-labelled desferrioxamine-B for bacterial infection imaging. *Eur. J. Nucl. Med. Mol. Imaging.* 48, 372-382 (2021)
- 10) Reissig F., Zarschler K., Novy Z., **Petrik M.**, Bendova K., Kurfürstova D., Bouchal J., Ludik M., Brandt F., Kopka K., Khoylou M., Pietzsch H., Hajduch M., Mamat C.: Modulating the pharmacokinetic profile of Actinium-225-labeled macropa-derived radioconjugates by dual targeting of PSMA and albumin. *Theranostics.* 12, 7203-7215 (2022)