

# PharmDr. Zbynek Novy, Ph.D.

**Date of birth:** July 13, 1981  
**Place of birth:** Kutna Hora, Czech Republic  
**Nationality:** Czech

## Education:

2001 – 2007 Faculty of Pharmacy in Hradec Kralove, Charles University in Prague, Czech Republic, **MSc.** in pharmacy  
2007 – 2015 Faculty of Pharmacy in Hradec Kralove, Charles University in Prague, Czech Republic, Department of Pharmacology and Toxicology, **PhD.** and **Pharm.D.** in pharmacology

## Teaching experience:

2007 – 2012 Teaching of laboratory part in subjects Radiopharmaceuticals for pharmacist and Methods of nuclear analysis (Charles University in Prague, Faculty of Pharmacy, Czech Republic)  
2015 – 2017 Fundamentals of pharmacy and pharmaceutical chemistry (Palacky University Olomouc, Faculty of Science, Czech Republic)

## Interships:

January – July 2009 Institut de Recherche en Cancérologie de Montpellier (U1194), Montpellier, France (Erasmus)

## Employment:

2012 – now Institute of Molecular and Translational Medicine, Faculty of Medicine and Dentistry, Palacky University in Olomouc, junior researcher (radiopharmacist)

**Language skills:** Czech, English, French

## Focused in:

- Preparation and analysis of radiolabeled compounds
- Biodistribution of radiolabeled compounds *in vivo*
- Preclinical PET/SPECT/CT imaging
- Studies of accumulation of radiolabeled compounds *in vitro*

## Grant projects as PI:

Development of new exercises for subject Methods of nuclear analysis and radiopharmaceuticals. University Development Fund, 2009.

Mechanisms of membrane transport of radiolabeled derivatives of somatostatin and dimercaptosuccinic acid. Grant Agency of Charles University in Prague, 2009 – 2011.

**Publications: 18**

**SCI: 87**

**H-index: 7**

## List of publications:

**Novy Z**, Stepankova J, Hola M, Flasarova D, Popper M, Petrik M. Preclinical Evaluation of Radiolabeled Peptides for PET Imaging of Glioblastoma Multiforme. *Molecules*. 2019, 24(13), pii: E2496. ISSN 1420-3049. IF: 3.060. PMID: 31288488.

Socan A, Petrik M, Peitl Kolenc P, Kroselj M, Rangger C, **Novy Z**, Svaiger U, Gmeiner T, Decristoforo C. On-cartridge preparation and evaluation of <sup>68</sup>Ga-, <sup>89</sup>Zr- and <sup>64</sup>Cu-precursors for cell radiolabelling. *Nuclear Medicine and Biology*. 2019, 71, 23-31. ISSN 0969-8051. IF: 2.203. PMID: 31128475.

Lobaz V, Konefal R, Panek J, Vlk M, Kozempel J, Petrik M, **Novy Z**, Gurksa S, Znojek P, Stepanek P, Hruby M. In Situ In Vivo radiolabeling of polymer-coated hydroxyapatite nanoparticles to track their biodistribution in mice. *Colloids and surfaces. B, Biointerfaces*. 2019, 179, 143-152. ISSN 0927-7765. IF: 3.997. PMID: 30954015.

Kaeopookum P, Summer D, Pfister J, Orasch T, Lechner B, Petrik M, **Novy Z**, Matuszczak B, Rangger C, Haas H, Decristoforo C. Modifying the Siderophore Triacetylfusarinine C for Molecular Imaging of Fungal Infection. *Molecular Imaging and Biology*. 2019, 21(6), 1097-1106. ISSN 1536-1632. IF: 3.626. PMID: 30838551.

Janousek J, Barta P, **Novy Z**, Zilkova K, Trejtnar F. Antiangiogenic Human Monoclonal Antibody Ramucirumab Radiolabelling: In Vitro Evaluation on VEGFR2-positive Cell Lines. *Anticancer Research*. 2019, 39(2), 735-744. ISSN 0250-7005. IF: 1.865. PMID: 30711952.

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. *Scientific Reports*. 2018, 8(1), 15698. PMID:30356077.

Skriba A, Pluhacek T, Palyzova A, **Novy Z**, Lemr K, Hajduch M, Petrik M, Havlicek V. Early and Non-invasive Diagnosis of Aspergillosis Revealed by Infection Kinetics Monitored in a Rat Model. *Frontiers in Microbiology*. 2018, 9, 2356. PMID: 30349512.

Vrablikova A, Czernekova L, Cahlikova R, **Novy Z**, Petrik M, Imran S, Novak Z, Krupka M, Cerovsky V, Turanek J, Raska M. Lasioglossins LLIII affect the morphogenesis of *Candida albicans* and reduces the duration of experimental vaginal candidiasis in mice. *Microbiol Immunol*. 2017, 61(11), 474-481. ISSN 0385-5600. IF: 1.706. PMID: 28892177.

Summer D, Grossrubatscher L, Petrik M, Michalcikova T, **Novy Z**, Rangger C, Klingler M, Haas H, Kaeopookum P, von Guggenberg E, Haubner R, Decristoforo C. Developing Targeted Hybrid Imaging Probes by Chelator Scaffolding. *Bioconjug Chem*. 2017 Jun 21;28(6):1722-1733. doi: 10.1021/acs.bioconjchem.7b00182. Epub 2017 May 10. PubMed PMID: 28462989; PubMed Central PMCID: PMC5481817.

Petrik M, Zhai C, **Novy Z**, Urbanek L, Haas H, Decristoforo C. In Vitro and In Vivo Comparison of Selected Ga-68 and Zr-89 Labelled Siderophores. *Mol Imaging Biol*. 2016 Jun;18(3):344-52. doi: 10.1007/s11307-015-0897-6. PubMed PMID: 26424719; PubMed Central PMCID: PMC4870302.

Petrik M, Vickova A, **Novy Z**, Urbanek L, Haas H, Decristoforo C. Selected <sup>68</sup>Ga-siderophores versus <sup>68</sup>Ga-colloid and <sup>68</sup>Ga-citrate: biodistribution and small animal imaging in mice. *Biomed Pap Med Fac Univ Palacky Olomouc Czech Repub*. 2015 Mar;159(1):60-6. doi: 10.5507/bp.2014.052. Epub 2014 Oct 29. PubMed PMID: 25363728; PubMed Central PMCID: PMC4843960.

**Novy Z**, Laznickova A, Mandikova J, Barta P, Laznicek M, Trejtnar F. The effect of chelator type on in vitro receptor binding and stability in <sup>177</sup>Lu-labeled cetuximab and panitumumab. *J Labelled Comp Radiopharm*. 2014 Jun 15;57(7):448-52. doi: 10.1002/jlcr.3204. Epub 2014 May 29. PubMed PMID: 24889367.

Mattová J, Poučková P, Kučka J, Skodová M, Vetrík M, Stěpánek P, Urbánek P, Petřík M, **Nový Z**, Hrubý M. Chelating polymeric beads as potential therapeutics for Wilson's disease. *Eur J Pharm Sci*. 2014 Oct 1;62:1-7. doi: 10.1016/j.ejps.2014.05.002. Epub 2014 May 9. PubMed PMID: 24815561.

**Novy Z**, Barta P, Mandikova J, Laznicek M, Trejtnar F. A comparison of in vitro methods for determining the membrane receptor expression in cell lines. *Nucl Med Biol*. 2012 Oct;39(7):893-6. doi: 10.1016/j.nucmedbio.2012.02.007. Epub 2012 Apr 10. PubMed PMID: 22497959.

Trejtnar F, Laznickova A, Laznicek M, **Novy Z**, Maina T, Nock BA, Behe M. Distribution, elimination, and renal handling of (99m)technetium-Demogastrin 1. *Cancer Biother Radiopharm*. 2012 Mar;27(2):169-74. doi: 10.1089/cbr.2011.1008. PubMed PMID: 22409267.

**Nový Z**, Mandíková J, Trejtnar F. Study on <sup>99m</sup>Tc-MAG3 and <sup>99m</sup>Tc-DMSA renal accumulation using in vitro cellular model. *Ceska Slov Farm*. 2011 Feb;60(1):7-10. PubMed PMID: 21648170.

Trejtnar F, **Novy Z**, Petrik M, Laznickova A, Melicharova L, Vankova M, Laznicek M. In vitro comparison of renal handling and uptake of two somatostatin receptor-specific peptides labeled with indium-111. *Ann Nucl Med*. 2008 Dec;22(10):859-67. doi: 10.1007/s12149-008-0192-6. PubMed PMID: 19142704.