

Radica Stepanović-Petrović, PhD

Employment Information:

- 2007 – Full Professor
- 2002 – Associate Professor

Department of Pharmacology, Faculty of Pharmacy – University of Belgrade

- 1996 – Assistant Professor
- 1990 – Teaching Assistant
- 1985 – Assistant–trainee

Institute of Pharmacology, Faculty of Pharmacy – University of Belgrade

Education:

- 2019 – Pharmacy Specialist

Academic specialization *Pharmacotherapy in pharmaceutical practice*, University of Belgrade – Faculty of Pharmacy

- 2009 – Pharmacotherapy Specialist

Defended specialist thesis: *Therapeutic use of mitoxantrone*

Department of Pharmacology, University of Belgrade – Faculty of Pharmacy; advisor: Professor Nenad Ugrešić, PhD

- 1995 – Doctor of Medical Sciences

Defended doctoral dissertation: *Influence of potential antidotes on subsequent neurotoxic effects of organophosphorus compounds*;

Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine – University of Belgrade; advisor: Professor Bogdan Bošković, PhD, co-advisor: Professor Draginja Anđelković, PhD

- 1990 – Master of Medical Sciences

Defended master's thesis: *Effect of histamine on endothelium and smooth muscle of peripheral blood vessels of rats, guinea pigs and rabbits*;

Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine – University of Belgrade; advisor: Professor Milovan Krstić, PhD

- 1985 – Graduate Pharmacist

University of Belgrade – Faculty of Pharmacy

- 1977 – Finished elementary school (“Jelena Cvetković”) and high school (Sixth Belgrade High School) in Belgrade

Academic awards and distinctions:

- 2008 – Second Prize of the Ministry of Science and Technological Development of Serbia at the Competition for the Best Technological Innovation, Medicine and Genetics
- 2001 – Annual “Galenika Award” for the best doctoral dissertation
- 1985 – Award for the Best Student in the Generation, University of Belgrade

Teaching activities:

Integrated academic studies

- Preparation and implementation of classes in the following subjects: Pharmacology 1, Pharmacology 2, Pharmacotherapy, Pharmacotherapy in Pediatrics
- Final papers (advisor and member of the committee for preparation and defense of several final papers)

Specialist studies required by the healthcare system in pharmacotherapy

- Preparation and implementation of classes in the following subjects: Pharmacology, Pharmacotherapy

Specialist studies required by the healthcare system in pharmaceutical technology

- Preparation and implementation of classes in the following subject: Selected Chapters of Pharmacotherapy

Specialist academic studies – Pharmacotherapy in Pharmaceutical Practice

- Preparation and implementation of classes in the following subjects: Pharmacotherapy 1, Pharmacotherapy 2, Pharmacotherapy 3
- Specialist final papers (advisor and member of the committee for preparation and defense of specialist final papers)

Doctoral academic studies

- Preparation and implementation of classes in the following subjects: Pharmacology of Pain, Cardiovascular Pharmacology
- Doctoral dissertations: Advisor on two doctoral dissertations defended at the Faculty of Pharmacy – University of Belgrade (Ana Micov, PhD, Sonja Joksimović, PhD); Member of the committee for the defense of seven doctoral dissertations at the Faculty of Pharmacy – University of Belgrade: one in the field of immunochemistry (Vesna Vujić, PhD), one in the field of pharmaceutical microbiology (Miroslav Dinić, PhD), three in the field of pharmacology (Maja Tomić, PhD, Uroš Pecikoza, PhD, Marija Marinko, PhD), one in the field of pharmacognosy (Višnja Popović, PhD) and one in the field of pharmaceutical technology (Jelena Janićijević, PhD).

Other activities

- Student research papers (advisor or co-advisor on several student research papers)
- Master's thesis: member of the committee for the defense of one master's thesis in pharmacology at the Faculty of Medicine – University Belgrade

Textbooks:

- Co-author of the textbook *Pharmacotherapy for pharmacists* (Faculty of Pharmacy, University of Belgrade, 1st edition: 2011, 2014; 2nd edition: 2016, 2017, 2018, 2021)
- Co-author of the *Practicum in Pharmacology for students of pharmacy* (Faculty of Pharmacy, University of Belgrade, 1st edition: 2009; 2nd edition: 2011)
- Co-author of a professional publication of national importance *Pharmacotherapeutic Guide* (1st–4th editions I-IV; 6th edition: 2004, 2005, 2006, 2008, 2016; Medicines and Medical Devices Agency of Serbia)
- Co-author of the translation of the textbook *Pharmacology*, author Rank HP, Dale MM, Ritter JM, Moore PK (5th edition: 2003)
- Co-author of the book *Antibiotics 2001* (Zavod za udžbenike i nastavna sredstva, Belgrade, 2001)

Activities within the Faculty:

- 2016– Head of the Department of Pharmacology
- 2012– Member of the Council of Scientific Areas of Medical Sciences of the University of Belgrade
- 2012–2019 – Member of the Council of the Faculty of Pharmacy
- 2008–2021 – Member of the Ethics Committee for Work with Experimental Animals)
- 2007–2019 – Member of the Committee for Specialist Studies
- 2007–2019 – Member of the Program Council of the Faculty of Pharmacy
- 2004 – Member of the Working Group for Drafting the Syllabus of the Faculty of Pharmacy in Belgrade, as well as member of the Working Group for Drafting the Document on Continuing Education of Pharmacists
- Head of specialist studies required by the healthcare system in Pharmacotherapy

Activities within the Academic Community:

Membership in professional organizations:

- Member of the Expert Board of the Association of Pharmaceutical Societies of Serbia (SFUS)

- Expert of the Medicines and Medical Devices Agency of the Republic of Serbia (ALIMS), as well as the Medicines and Medical Devices Agency of the Republic of Montenegro (CALIMS)
- In 2006, 2010, and 2014, member of the Scientific Committee of the IV, V, and VI Congress of Pharmacists of Serbia with international participants
- Was a member of the Committee for Rational Drug Therapy of the Ministry of Health of the Republic of Serbia

Invited lectures at national continuing education courses/professional conferences:

- *Antibiotics – mechanisms of action and clinical significance of resistance*
- *Obesity – a challenge for modern pharmacy*
- *Rational hypertension therapy – hypertension in pregnant women*
- *Dyslipidemia – what pharmacists can do*

Lectures given at the Symposiums of the Association of Pharmaceutical Societies of Serbia (SFUS):

- *Benefits and risks of hormone replacement therapy*, 71st Symposium, Zlatibor, 2019.
- *Opioid and adjuvant analgesics in modern pain management*, 69th Symposium; Kopaonik, 2018
- *Old and new oral anticoagulants: pros and cons*, 68th Symposium, Zlatibor, 2017.
- *Treatment of peptic ulcer and gastroesophageal reflux disease*, 67th Symposium; Kopaonik, 2017.
- *Pharmacology of antihypertensives*, 66th Symposium, Zlatibor, 2016.
- *Treatment of hypertension in pregnancy*, 65th Symposium, Kopaonik, 2016.
- *Novelties in the treatment of osteoarthritis*, 65th Symposium, Kopaonik, 2016.
- *Novelties in the treatment of multiple sclerosis*, 64th Symposium, Zlatibor, 2015.
- *What should a pharmacist know about non-steroidal anti-inflammatory drugs?* 62nd Symposium, Kopaonik, 2014.
- *Drugs in the prevention and treatment of venous thromboembolism*, 60th Symposium, Kopaonik, 2013.
- *Use of sedatives and analgesics in pediatrics*, 59th Symposium, Zlatibor, 2012.
- *Influence of drugs on appetite and body weight*, 57th Symposium, Vrnjačka Banja, 2011.
- *Pharmacotherapy of bronchial asthma and chronic obstructive pulmonary disease*, 56th Symposium, Kopaonik, 2011.
- *Oral contraception and hormone replacement therapy*, 55th Symposium, Kopaonik, 2010.
- *Therapy of cardiovascular diseases in elderly patients*, 54th Symposium, Belgrade, 2009.

- *Coronary vasodilators*, 52nd Symposium, Novi Sad, 2008.
- *Pharmacology of antidepressants*, 49th Symposium, Kopaonik, 2007.
- *Drugs in the treatment of peptic ulcer, gastroesophageal reflux and inflammatory bowel disease*, 44th Symposium, Kopaonik, 2004.

Lectures at the Congresses of the Pharmaceutical Society of Serbia:

- *Antiepileptics in the light of new indications*, VII Congress of Pharmacists of Serbia with international participation, Belgrade, 2018.
- *Depression and pain*, VI Congress of Pharmacists of Serbia with international participation, Belgrade, 2014.
- *Resistance to clopidogrel*, V Congress of Pharmacists of Serbia with international participation; Belgrade, 2010.
- *Opioid and adjuvant analgesics*, IV Congress of Pharmacists of Serbia with international participation; Belgrade, 2006.

Lectures at other symposiums:

- *The use of opioid analgesics in the modern treatment of pain*. Second International Congress of Healthcare Workers in the Private Sector, Belgrade, 2020.
- *New oral anticoagulants - pros and cons*. The First International Congress of Health Workers in the Private Sector, Belgrade, 2019.
- *Direct oral anticoagulants: safety and efficacy*. Symposium of the Association of Cardiologists of Serbia (UKS); Course of the Academy of Medical Sciences of the Serbian Medical Association: "New anticoagulant drugs: questions and answers from practice", SLD, 2016.
- *Side effects and interactions of antihypertensives*. III Sombor Pharmaceutical Days: "Through better regulation of hypertension", ZU Apoteka Sombor, 2015.
- *Use of analgesics in pediatrics and geriatrics*. II Sombor Pharmaceutical Days: "Pain - the fifth vital sign", ZU Pharmacy Sombor, 2013.
- *Hypertension in pregnancy*. I Sombor Pharmaceutical Days: "Chronical illness treatment in pregnancy", ZU Pharmacy Sombor, 2011.
- *Oral hypoglycaemic drugs*. 9th Symposium of Masters of Pharmacy and Biochemistry of the Republic of Srpska; Vrućica Spa, 2012.
- *Pharmacology of antiepileptics*. IX Symposium of Pharmacists and Biochemists of the Republic of Srpska; Teslić, 2007.

Membership in domestic/foreign professional organizations:

- Member of the Pharmaceutical Society of Serbia, Pharmacological Society of Serbia, Society for Neuroscience of Serbia and International Association for the Study of Pain (IASP)

- 2018– Editor-in-Chief of the national pharmaceutical journal *Archives of Pharmacy*, located in the SCOPUS database.
- 2012–2018. Deputy Editor-in-Chief of the national pharmaceutical journal *Archives of Pharmacy*
- 2002–2012 – Member of the Editorial Board of the national pharmaceutical journal *Archives of Pharmacy*
- 2016. Visiting editor in the thematic issue of the *Archives of Pharmacy: Modern treatment of osteoarthritis*.

Reviewer in national journals: *Archives of Pharmacy* and *Vojnosanitetski preglad*

Reviewer in international journals:

European Journal of Pain, Neuroscience Letters, Fundamental and Clinical Pharmacology, Canadian Journal of Physiology and Pharmacology, Life Sciences, Archives of biological sciences, Evidence-Based Complementary and Alternative Medicine, Current Medicinal Chemistry, Future Medicinal Chemistry, Neuropsychiatry, Frontiers in Neurology, Frontiers in Physiology, British Journal of Clinical Pharmacology, Neuropharmacology.

Projects:

- 2022–2024 – Head of the project funded by the Science Fund of the Republic of Serbia – The IDEAS Program: *Multimodal control of chronic pain and comorbidities with atypical analgesics - “two birds with one stone”*, Acronym: Fight_PainAndComorb.
- 2020– Head of the research group within the institutional financing of scientific research work at the Faculty of Pharmacy in Belgrade by the Ministry of Education, Science and Technological Development of the Republic of Serbia
- 2011–2020 – Head of the basic research project funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia: *Examination of the mechanism of action, interactions and toxic effects of adjuvant analgesics*, basic research project in the field of Medicine, No. 175045.
- 2006–2010 – Head of the basic research project funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia: *Examination of the mechanism of action, interactions and toxic effects of analgesics and vasoactive substances*, basic research project in the field of medicine, No. 145030.
- 1991–2012 – Associate on the national research project *Mechanism of action of biologically active substances that modify the tone of blood vessels*.
- 1986–1990 – Associate on the national research project *Chemical and pharmacokinetic testing of drugs*

Selected publications:

1. Micov AM, Tomić MA, Todorović MB, Vuković MJ, Pecikoza UB, Jasnic NI, Djordjevic JD, **Stepanović-Petrović RM**. Vortioxetine reduces pain hypersensitivity and associated depression-like behavior in mice with oxaliplatin-induced neuropathy. *Prog Neuropsychopharmacol Biol Psychiatry*. 2020 Dec 20;103:109975. doi: 10.1016/j.pnpbp.2020.109975.
2. Tomić M, Pecikoza U, Micov A, Vučković S, **Stepanović-Petrović R**. Antiepileptic drugs as analgesics/adjuvants in inflammatory pain: current preclinical evidence. *Pharmacol Ther*. 2018 Dec;192:42-64. doi: 10.1016/j.pharmthera.2018.06.002.
3. Dinić M, Pecikoza U, Djokić J, **Stepanović-Petrović R**, Milenković M, Stevanović M, Filipović N, Begović J, Golić N, Lukić J. Exopolysaccharide Produced by Probiotic Strain *Lactobacillus paraplantarum* BGCG11 Reduces Inflammatory Hyperalgesia in Rats. *Front Pharmacol*. 2018 Jan 17;9:1. doi: 10.3389/fphar.2018.00001.
4. Pecikoza UB, Tomić MA, Micov AM, **Stepanović-Petrović RM**. Metformin Synergizes With Conventional and Adjuvant Analgesic Drugs to Reduce Inflammatory Hyperalgesia in Rats. *Anesth Analg*. 2017 Apr;124(4):1317-1329. doi: 10.1213/ANE.0000000000001561.
5. **Stepanovic-Petrovic RM**, Micov AM, Tomic MA, Kovacevic JM, Bošković BD. Antihyperalgesic/antinociceptive effects of ceftriaxone and its synergistic interactions with different analgesics in inflammatory pain in rodents. *Anesthesiology*. 2014 Mar;120(3):737-50. doi: 10.1097/ALN.0000435833.33515.ba.
6. **Stepanović-Petrović RM**, Micov AM, Tomić MA, Ugrešić ND. The local peripheral antihyperalgesic effect of levetiracetam and its mechanism of action in an inflammatory pain model. *Anesth Analg*. 2012 Dec;115(6):1457-66. doi: 10.1213/ANE.0b013e31826c7fc2.
7. Micov A, Tomić M, Popović B, **Stepanović-Petrović R**. The antihyperalgesic effect of levetiracetam in an inflammatory model of pain in rats: mechanism of action. *Br J Pharmacol*. 2010 Sep;161(2):384-92. doi: 10.1111/j.1476-5381.2010.00877.x.
8. **Stepanovic-Petrovic RM**, Tomic MA, Vuckovic SM, Paranos S, Ugresic ND, Prostran MS, Milovanovic S, Boskovic B. The antinociceptive effects of anticonvulsants in a mouse visceral pain model. *Anesth Analg*. 2008 Jun;106(6):1897-903. doi: 10.1213/ane.0b013e318172b993.
9. Vucković SM, Tomić MA, **Stepanović-Petrović RM**, Ugrešić N, Prostran MS, Bosković B. The effects of alpha2-adrenoceptor agents on anti-hyperalgesic effects of carbamazepine and oxcarbazepine in a rat model of inflammatory pain. *Pain*. 2006 Nov;125(1-2):10-9. doi: 10.1016/j.pain.2006.04.023.
10. Tomić MA, Vučković SM, **Stepanović-Petrović RM**, Ugrešić N, Prostran MŠ, Bošković B. The anti-hyperalgesic effects of carbamazepine and oxcarbazepine

are attenuated by treatment with adenosine receptor antagonists. *Pain*. 2004 Oct;111(3):253-260. doi: 10.1016/j.pain.2004.07.010.