Sava Radović Pletikosić, PhD – molecular biologist

Personal Details

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Education

2013 – 2019 Ph.D. in Biology (Faculty of Sciences, University of Novi Sad) (GPA 9.83/10)
Thesis: "The role of insulin and IGF1 receptors in regulation of Leydig cells steroidogenesis and mitochondrial biogenesis"

2011 – 2012 M.Sc. in Molecular biology (Faculty of Sciences, University of Novi Sad) (GPA 9.14/10)
Thesis: "The effect of buckwheat on the level of oxidative damage and antioxidant status of some hyperlipidemic rat liver parameters"

2006 – 2011 B.Sc. in Molecular biology (Faculty of Sciences, University of Novi Sad)
Thesis: "Mechanisms of the cell membrane adaptation to low temperature and dehydration"

Work experience

2020 – pres. Research Associate (Faculty of Sciences, University of Novi Sad)
2016 – 2020. Research Assistant (Faculty of Sciences, University of Novi Sad)
2013 – 2016 Research Trainee (Faculty of Sciences, University of Novi Sad)
2013 (Feb - Sep) Volonteer – molecular biologist (Fruit Research Institute, Serbia, https://www.institut-cacak.org/kontakt.html)

Study visits & Trainings

05/12 – 17/12/2016 Centre of Animal Genomics, Veterinary Faculty, University of Ljubljana (supervisor Prof. Dr Gregor Majdič)

23/05 – 27/05/2016 IUBMB/IUPAB/IUPS Joint Advanced School "Receptors and signaling" Spetses Island, Greece

26/02 – 27/02/2015 Training on the welfare of animals used for scientific purposes, Ethics Commission on the protection of animals used for scientific purpose, University of Novi Sad

29/09 – 5/10/2014 The school of microscopy in Petnica Science center**,** Serbia

Research projects

01/01/2011 – 31/12/2019: OI173057, Kostic T (PI), Serbian Ministry of Education, Science and Technological Development Project: "*Molecular mechanisms and signal transduction pathways involved in regulation of steroidogenesis and adaptation of Leydig cells to disturbed steroidogenesis*", **Role: Co-investigator**

01/06/2016 – 31/05/2019: APV2856 Andric S (PI) APV Province Committee for Science and Technology Project: "*Are the reproductive hormones linking point between stress, metabolic syndrome and aging*" **Role: Co-investigator**

01/01/2016 – 31/12/2017: Bilateral cooperation Serbia-Slovenia, Andric S (PI) Project: "*Long-term effects of stress on development of male sexual behavior and steroidogenesis and mitochondrial signalosome in testis*" **Role: Co-investigator**

01/01/2014 – 31/12/2020: SASA-SANU, Andric S (PI-FS UNS), Serbian Academy of Sciences and Academy of Sciences of Check Republic, Project: "*The CNG channels in Leydig cell - identification, characterization and functional coupling to testosterone production*", **Role: Co-investigator.**

01/06/2011 – 31/12/2015: APV970, Andric S (PI), Province Committee for Science and Technology, Project: "*Signaling pathways and molecular mechanisms involved in maintenance of sex steroids homeostasis*", **Role: Co-investigator**

01/12/2009 – 31/11/2012: FNS SNFS IZ73Z0_128070, Nef S, Andric S (PIs), Swiss National Foundation (SNSF) SCOPES Eastern Europe program; Project: "*Investigating the role of the insulin receptor family in regulating testicular steroidogenesis*", **Role: Co-investigator**.

Publications

7 journal articles (3 as the first author), **1** oral presentation (international), **8** poster presentations

Teaching experience

2015 – pres	**Molecular and Cellular Physiology** (laboratory practice for 4th -year-bachelor-students of Molecular Biology)
2015 – pres	**Molecular and Cellular Immunology** (laboratory practice for 4th -year-bachelor-students of Molecular Biology)
2014 – pres	**Reproductive Endocrinology and Reproductive Physiology** (laboratory practice for master students of Reproductive Biology)

Grants & Awards

2018	FEBS Grant for 18th Young Scientists' Forum and 43rd FEBS Congress 2018
2016	IUBMB Grant for IUBMB/IUPAB/IUPS Joint Advanced School "Receptors and signaling"; FEBS Grant for 16th Young Scientists' Forum and 41st FEBS Congress 2016
2010 – 2012	Scholarship for Yang Talents, Hemofarm Foundation (Stada Group), Serbia
2008 – 2009	Faculty Award for Academic Achievement
2006 – 2011	Scholarship for students, Ministry of Youth and Sports of the Republic of Serbia

Membership in scientific associations

2015 – pres.	Serbian Society for Molecular Biology (IUBMB member)
2014 – pres.	Serbian Society of Biochemistry (FEBS member)

Languages

Serbian (mother tongue), English (B2/C1 level), Russian (reading and writing knowledge)

Science popularization & Voluntary work

2019	International Festival of Science and Education (http://www.scifest.uns.ac.rs/index.php/en/)
2011 – 2018	"Night of Biology" (Faculty of Sciences, University of Novi Sad)
2013	Volunteer at Fruit Research Institute, Serbia (https://www.institut-cacak.org/kontakt.html)
2011 – 2012	"Nigh of Researchers" (University of Novi Sad)

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Relevant publications:

- Starovlah IM, **Radovic Pletikosic SM**, Tomanic TM, Medar MLj, Kostic TS, Andric SA (2022). Spermatozoal Mitochondrial Dynamics Markers and Other Functionality-Related Signaling Molecules Exert Circadian-like Response to Repeated Stress of Whole Organism. *Cells* 11(6):993.
- **Radovic Pletikosic SM**, Starovlah IM, Miljkovic D, Bajic DM, Capo I, Nef S, Kostic TS, Andric SA (2021). Deficiency in insulin-like growth factors signalling in mouse Leydig cells increase conversion of testosterone to estradiol because of feminization. *Acta Physiol (Oxf)* 231:e13563.
- Starovlah IM, **Radovic Pletikosic SM**, Kostic TS, Andric SA (2021). Mitochondrial Dynamics Markers and Related Signaling Molecules Are Important Regulators of Spermatozoa Number and Functionality. *Int J Mol Sci* 22:5693.
- Starovlah IM, **Radovic Pletikosic SM**, Kostic TS, Andric SA (2020). Reduced spermatozoa functionality during stress is the consequence of adrenergic-mediated disturbance of mitochondrial dynamics markers. *Sci Rep* 10:16813.
- **Radovic SM**, Starovlah IM, Cap I, Miljkovic D, Nef S, Kostic TS, Andric SA (2018). Insulin/IGF1 signalling regulates the mitochondrial biogenesis markers in steroidogenic cells of prepubertal testis, but not ovary. *Biol Reprod* doi: 10.1093/biolre/ioy177. [Epub ahead of print]
- Baburski AZ, Sokanovic SJ, Bjelic MM, **Radovic SM**, Andric SA, Kostic TS (2016) Circadian rhythm of the Leydig cells endocrine function is attenuated during aging. *Experimental Gerontology* 73:5-13.
- Gak IA*, **Radovic SM***, Dukic AR, Janjic MM, Stojkov-Mimic NJ, Kostic TS, Andric SA (2015). Stress triggers mitochondrial biogenesis to preserve steroidogenesis in Leydig cells. *BBA Mol Cell Res* 1853: 2217-2227.
- Stojkov-Mimic NJ, Bjelic MM, **Radovic SM**, Mihajlovic AI, Sokanovic SJ, Baburski AZ, Janjic MM, Kostic TS, Andric SA (2015) Intratesticular alpha1-adrenergic receptors mediate stress-disturbed transcription of steroidogenic stimulator NUR77 as well as steroidogenic repressors DAX1 and ARR19 in leydig cells of adult rats. *Molecular and Cellular Endocrinology* 412:309-319.
- Bjelic MM, Stojkov NJ, **Radovic SM**, Baburski AZ, Janjic MM, Kostic TS, Andric SA (2015). Prolonged in vivo administration of Testosterone-enanthate, the widely used and abused anabolic androgenic steroid, disturbs prolactin and cAMP signaling in Leydig cells of adult rats. *J Steroid Biochem Mol Biol* 149:58-69.