

Curriculum Vitae



Name: Isidora Starovlah
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Nationality: Serbian
Date of birth: 03.09.1990.
Gender: Female

Education

- **2014 - Present** PhD Biology, Animal and Human Physiology, Faculty of Biology, University of Belgrade, Serbia
- **2013 - 2014** MSc Biology- Molecular biology, Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Serbia
GPA: 10/10.
- **2009 - 2013** BSc Biology- Molecular biology, Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Serbia
GPA: 9.03/10.

Research experience

2017 - present **Teaching assistant** - Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Serbia (<http://www.dbe.uns.ac.rs>)

2014 - 2017 **Research trainee** - Laboratory of Reproductive endocrinology and signaling, Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Serbia (<http://www.dbe.uns.ac.rs/en/nauka-eng/lares>)

Relevant research projects:

- European Union, EIT Jumpstarter, Project: "Mito-Fert-Signature: a new prognostic/diagnostic tool to detect male (in)fertility using mitochondrial markers in spermatozoa", Andric S (PI), Role: Co-investigator, 05.2021.-11.2021.
- Serbian Ministry of Education, Science and Technological Development, Project: "Introduction of new teaching contents in order to raise the diagnostic and digital

competencies of students of biology and biochemistry (BioDig)", Andric S (PI), Role: Co-investigator, 11.2020.-10.2021.

- EU4TPOC1593008532, Project: "Mito-Fert-Signature: a new prognostic/diagnostic tool to detect male (in) fertility using mitochondrial dynamics markers in spermatozoa", Andric S (PI), Role: Co-investigator, 01.09.2020. – 01.09.2021.
- Serbian Academy of Sciences and Arts and Academy of Sciences of the Czech Republic, Project: "The CNG channels in Leydig cell - identification, characterization and functional coupling to testosterone production" Role: Co-investigator.
- Serbian Ministry of Education, Science and Technological Development, Project – OI173057: "*Molecular mechanisms and signal transduction pathways involved in regulation of steroidogenesis and adaptation of Leydig cells to disturbed homeostasis*". Role: Co-investigator.
- Provincial Committee for Science and Technological Development of the Autonomous Province of Vojvodina, Project: "Are the reproductive hormones and their signalling, molecular mechanisms linking stress, metabolic syndrome and aging?", 142-451-2130, Andric S (PI), Role: Co-investigator, 01.06.2016.-31.12.2019.
- FNS SNFS IZ73Z0_128070, Nef S, Andric S (PIs), 01/12/2009 – 31/11/2012, Swiss National Foundation (SNSF) SCOPES Eastern Europe program; Project: "*Investigating the role of the insulin receptor family in regulating testicular steroidogenesis*". Role: Co-investigator.

Professional training

July 2019 5 days research training as part of the „Summer course at Radboud University: Molecules, Mice and Math: A Statistical Toolbox for the Lab” Radboud University Nijmegen, the Netherlands.

March 2016 5 days research training as part of the Serbian Academy of Sciences and Arts and Academy of Sciences of the Czech Republic project at Laboratory of Cellular and Molecular Neuroendocrinology, Institute of Physiology Academy of Sciences of the Czech Republic under the supervision of Hana Zemkova, PhD.

Skills and achievements

Laboratory skills

- Knock-out mice and Wistar rats
- Leydig cell primary culture preparation
- Immunocytochemistry of the Leydig cells
- Basic knowledge in fluorescence microscopy
- RNA and protein isolation
- Agarose gel electrophoresis

- PCR
- Real-time PCR
- SDS-PAGE
- Western blot
- Radioimmunoassay
- ELISAs

Language skills

Competence on a scale of 1 to 5 (5-excellent ; 1-basic)

Language	Reading	Speaking	Writing
English	5	5	4
German	2	1	1

Computer skills

Good command of MS Office and internet tools, GraphPad, ImageJ and Image Tool programs, SPSS.

Scholarships and awards

- **2021** ESMN2021 Poster prize, ESMN symposium “Inclusiveness in Sexual Health and Pleasure across the Lifespan”, Salzburg, Austria
- **2021** ERNEST5 Poster prize on the Fifth ERNEST Meeting COST Action, CA18133, Bridging Perspectives and Networking in Signal Transduction Research, Bari, Italy.
- **2021** Honorable mention of the best poster presentation, I Reproductive Sciences & Fertility Virtual Summit, WebRePRO 2021.
- **2020** Reward for the best teaching assistant at the Department of Biology and Ecology for the school year 2019/2020, Faculty of Sciences, University of Novi Sad, Novi Sad, Serbia
- **2019** Erasmus scholarship for the Summer course at Radboud University: Molecules, Mice and Math: A Statistical Toolbox for the Lab”, Radboud University Nijmegen, the Netherlands.
- **2018** Grant for YSF and 43st FEBS Congress, Prague, Czech Republic
- **2016** Grant for 41st FEBS Congress, Kusadasi, Turkey
- **2016** Fellowship and travel grant for the IUBMB/IUPAB/IUPS Joint Advanced School “Receptors and Signaling” Spetses island, Greece.

- **2010 - 2014** Holder of the scholarship awarded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.
- **2013** Reward for success during the study, awarded by the Faculty of Science, University of Novi Sad, Serbia.

Membership in scientific associations:

- **2015 - present** Serbian Society for Molecular Biology
- **2016 - present** Serbian Biochemical Society

Teaching experience

- **2017- present** Teaching assistant, Department of Biology and Ecology, Faculty of sciences, University of Novi Sad (subjects: Mechanism of cellular communication, Molecular and cellular physiology, Basic molecular and cellular immunology, Endocrinology, Reproductive endocrinology, Basic animal physiology)
- **2017- present** Work as a co-mentor with undergraduate students (day-to-day oversight of the student and project) that was on the exchange ERASMUS programs at UNS (mainly from Spain) on their Bachelor thesis projects
- **2015 – present** Work as a co-mentor (day-to-day oversight of the student and project) with undergraduate students of Molecular biology and Biochemistry on their Bachelor or Master projects

Relevant publications

- 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. International journal of molecular sciences, 22(11), 5693. <https://doi.org/10.3390/ijms22115693>.
- Medar M, Marinkovic DZ, Kojic Z, Becin AP, Starovlah I M, Kravic-Stevovic T, Andric SA, Kostic TS. (2020) Dependence of Leydig Cell's Mitochondrial Physiology on Luteinizing Hormone Signaling. Life (Basel, Switzerland), 11(1), 19. <https://doi.org/10.3390/life11010019>.
- 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. Scientific reports, 10(1), 16813. <https://doi.org/10.1038/s41598-020-73630-y>.
- Radovic Pletikosic SM, Starovlah IM, Miljkovic D, Bajic DM, Capo I, Nef S, Kostic TS, Andric SA (2020) Deficiency in insulin-like growth factors signaling in mouse Leydig cells increase

conversion of testosterone to estradiol due to feminization. *Acta Physiol (Oxf)* 2020 Sep 25:e13563. doi: 10.1111/apha.13563.

- Radovic SM, Starovlah IM, Capo I, Miljkovic D, Nef S, Kostic TS, Andric SA (2019) Insulin/IGF1 signalling regulates the mitochondrial biogenesis markers in steroidogenic cells of prepubertal testis, but not ovary. *Biology of Reproduction* 100 (1), 253-267.
- Starovlah IM, Radovic SM, Marinovic MA, Kostic TS, Andric SA (2017) Psychophysical stress disturbs expression of mitochondrial biogenesis markers in hypothalamus and adenohypophysis. *Biologia Serbica* 39(2): 43-51.