Short CV – Natasa J Stojkov-Mimic

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Education:

- 2005 BSc in Biology (FSUNS; http://www.pmf.uns.ac.rs/en)
- 2012 PhD in Biochemistry (FSUNS; http://www.pmf.uns.ac.rs/en)

Career:

- 2006 – 2013 Research Assistant (PMFUNS; *http://www.pmf.uns.ac.rs*)
- 2013 – present Assistant Professor of Animal Physiology (FSUNS; *http://www.pmf.uns.ac.rs/en*)

Study visits/trainings:

- 30.04.2011.- 12.06.2011. "Frontiers in Reproduction", Marine Biological Laboratory, Woods Hole, Massachusets
- 01.07.2010.- 01.09.2010. Cellular Signalling Section (Dr Stanko Stojilkovic's group), Endocrinology and Reproduction Research Branch, National Institute of Child Health and Human Development, NIH, Bethesda, USA.

Ongoing Research Support:

- OI173057, Kostic T (PI), 01/01/2011 – 31/12/2014 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

Teaching (Bachelor level):

- Comparative animal physiology

Languages: English, Russian, Hungarian, Romanian

Research area: Cell signaling, reproductive endocrinology, stress

Relevant publications:

- Gak IA*, Radovic SM*, Dukic AR, Janjic MM, **Stojkov-Mimic NJ**, Kostic TS & Andric SA (2015). Stress stimulates mitochondrial biogenesis to preserve steroidogenesis in Leydig cells of adult rats. BBA Mol Cell Res 1853: 2217-2227.

- Baburski AZ, Sokanovic SJ, Janjic MM, **Stojkov NJ**, Bjelic MM, Andric SA & Kostic TS (2015). Melatonin replacement restores the circadian behavior in adult rat Leydig cells after pinealectomy. Mol Cell Endo 413: 26-35.

- **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. Mol Cell Endo 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.

- Bjelic MM, **Stojkov NJ**, Mihajlovic AI, Baburski AZ, Sokanovic SJ Janjic MM, Kostic TS & Andric SA (2014). Molecular adaptations of testosterone-producing Leydig cells during systemic in vivo blockade of the androgen receptor. Mol Cell Endo 396 (1-2): 10-25.

- Sokanovic SJ, Janjic MM, **Stojkov NJ**, Baburski AZ, Bjelic MM, Andric SA & Kostic TS (2014). Age-related changes in cAMP and MAPK signaling in Leydig cells of Wistar rats. Exp Gerontol 58: 19-29.

- **Stojkov NJ**, Baburski AZ, Bjelic MM, Sokanovic SJ, Mihajlovic AI, Drljaca DM, Janjic MM, Kostic TS & Andric SA (2014). In vivo blockade of alpha1-adrenergic receptors mitigates stress-disturbed cAMP & cGMP signaling in Leydig cells. Mol Hum Reprod 20 (1):77-88.

- **Stojkov NJ**, Janjic MM, Kostic TS & Andric SA (2013). In vitro blockade of □1-adrenergic receptors (□1-ADRs) affects testosterone production in Leydig cells of adult rats. Biol Serb 35 (1-2):48-56.

- Sokanovic SJ, Baburski AZ, Janjic MM, **Stojkov NJ**, Bjelic MM, Lalosevic D, Andric SA, Stojilkovic SS & Kostic TS (2013). The opposing roles of nitric oxide and cGMP in the age-associated decline in rat testicular steroidogenesis. Endocrinology 154(10): 3914-3924.

- **Stojkov NJ**, Baburski AZ, Janjic MM, Bjelic MM, Mihajlovic AI, Drljaca DM, Sokanovic SJ, Kostic TS & Andric SA (2013) Sustained in vivo blockade alpha1-adrenergic receptors prevented some of stress-triggered effects on steroidogenic machinery in Leydig cells. Am J Physiol Endocrinol Metab 305 (2): E194-E204.

- **Stojkov NJ**, Janjic MM, Kostic TS & Andric SA (2013) Orally applied Doxazosin disturbed testosterone homeostasis and changed the transcriptional profile of steroidogenic machinery, cAMP/cGMP signaling and adrenergic receptors in Leydig cells of adult rats. Andrology 1 (2): 332-347.

- Andric SA, Kojic Z, Bjelic MM, Mihajlovic AI, Baburski AZ, Sokanovic SJ, Janjic MM, **Stojkov NJ**, Stojilkovic SS & Kostic TS (2013). The opposite role of glucocorticoid and alpha1-adrenergic receptors in stress-triggered apoptosis of Leydig cells. Am J Physiol Endocrinol Metab 304 (1): E51-E59.

- Andric SA, Janjic MM, **Stojkov NJ** & Kostic TS (2012) NO-cGMP signaling increases the mitochondrial membrane potential and affects androgenesis in Leydig cells. Biol Serb 34 (1): 12-16.

- Janjic MM, **Stojkov NJ**, Andric SA & Kostic TS (2012) Anabolic-androgenic steroids induce apoptosis and NOS2 (nitric oxide synthase 2) in adult rat Leydig cells following in vivo exposure. Reprod Toxicol 34(4):686-693.

- Janjic MM, **Stojkov NJ**, Bjelic MM, Mihajlovic AI, Andric SA & Kostic TS (2012) Transient rise of serum testosterone level after single sildenafil treatment of adult male rats J Sex Med 10 (9): 2534-2543.

- **Stojkov NJ**, Janjic MM, Bjelic MM, Mihajlovic AI, Kostic TS & Andric SA (2012) Repeated immobilization stress disturbed steroidogenic machinery & stimulated the expression of cAMP signaling elements & adrenergic receptors in Leydig cells. Am J Physiol Endocrinol Metab 302(10): E1239-E1251.

- Kostic TS, **Stojkov NJ**, Bjelic MM, Mihajlovic AI, Janjic MM & Andric SA. (2011) Pharmacological doses of testosterone up-regulated androgen receptor (AR) and 3-beta-hydroxysteroid dehydrogenase/delta-5-delta-4 isomerase (3bHSD) and impaired Leydig cells steroidogenesis in adult rat. Toxicol Sci 121(2): 397–407.

- Andric SA, Janjic MM, **Stojkov NJ** & Kostic TS (2010): Sildenafil treatment in vivo stimulates Leydig cell steroidogenesis via cAMP and cGMP signaling pathway. Am J Physiol Endocrinol Metab 299(4): E544-E450.

- Andric SA, Janjic MM, **Stojkov NJ** & Kostic TS (2010): Testosterone-induced modulation of Nitric Oxide-cGMP signaling pathway and androgenesis in the rat Leydig cells. Biol Reprod 83(3): 434-442.

- Kostic TS, **Stojkov NJ**, Janjic MM & Andric SA (2010): Structural complexity of the testis and PKG-I/StAR interaction regulate the Leydig cell adaptive response to repeated immobilization stress. Int J Androl 33(5): 717-729.