

## Professor Gordana Matic - CURRICULUM VITAE

### PERSONAL AND CONTACT DATA

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Nationality: Serbian

Civil status: Married, two grown-up children

Born: August 12, 1953., Belgrade.

### EDUCATION

- 1990 - Ph.D. in Biology, Faculty of Natural Sciences-Mathematics, University of Belgrade.
- 1984 - M.Sc. in Biology, Faculty of Natural Sciences-Mathematics, University of Belgrade.
- 1977 - B.Sc. in Molecular Biology and Physiology, Faculty of Natural Sciences-Mathematics, University of Belgrade.

### SPECIALIZATION ABROAD

- 2006 - A study visit to Department of Biochemistry and Molecular Biology, Faculty of Life Sciences, University College London (UCL), London, U.K within the frames of the Course Development Program funded by the Austrian NGO, World University Service (WUS). The aims of the study visit were (1) to observe lectures, practicals, tutorials and other teaching activities within the courses Molecular Biology, Biochemistry and Cell Biology at the UCL; (2) to participate in different teacher-oriented activities at the UCL's Centre for the Advancement of Teaching and Learning and (3) to obtain training from the staff of the UCL's Learning Technologies Support Service.
- 1989 - Specialization in Professor William B. Pratt's laboratory at the Department of Pharmacology, University of Michigan Medical School, Ann Arbor, MI, USA. The subject of specialization was research on steroid receptor biochemistry and molecular biology with special focus on redox regulation of glucocorticoid receptor function; funded by the Ministry for Science of the Republic of Serbia.

## **POSITIONS**

- 2006 - present Coordinator of Ph.D. program Molecular Biology, Faculty of Biology, University of Belgrade.
- 2004 - present Full Professor, Faculty of Biology, University of Belgrade.
- 2001 - present Senior Research Fellow, Institute for Biological Research. "Siniša Stanković", University of Belgrade.
- 1998 - present Head of the Department of Biochemistry, Institute for Biological Research "Siniša Stanković", University of Belgrade.
- 1998 - 2004 Associate Professor, Faculty of Biology, University of Belgrade
- 1996 - 2001 Senior Research Associate, Institute for Biological Research. "Siniša Stanković", University of Belgrade.
- 1994 - 1998 Assistant Professor, Faculty of Biology, University of Belgrade.
- 1992 - 1998 Assistant Professor, University Svetozar Marković, Kragujevac, Serbia
- 1991 - 1996 Research Associate, Institute for Biological Research. "Siniša Stanković", University of Belgrade.
- 1978 - 1991 Research Assistant, Institute for Biological Research. "Siniša Stanković", University of Belgrade.

## **TEACHING**

- 2011 - present *Molecular mechanisms of Signal Transduction*, an elective undergraduate course, Faculty of Biology, University of Belgrade; the course introduced and created by G. Matić.
- 2008 - present *Fundamentals of Molecular Biology*, a compulsory undergraduate course, Faculty of Biology, University of Belgrade; the program of the course innovated by G. Matić.
- 2006 - present *Molecular Biology of the Cell I*, a compulsory course for Ph.D. students of Molecular Biology, Faculty of Biology, University of Belgrade; the course introduced and created by G. Matić.
- 2006 - present *Molecular Biology of the Cell II*, a compulsory course for Ph.D. students of Molecular Biology, Faculty of Biology, University of Belgrade; the course introduced and created by G. Matić.
- 1998 - 2008 *Fundamentals of Molecular Biology*, a compulsory undergraduate course, Faculty of Biology, University of Belgrade; the program of the course innovated and adapted by G. Matić.
- 1993 - 1998 *Biochemistry II*, a compulsory course for undergraduate students of Biochemistry, Faculty of Biology, University of Belgrade; the program of the course innovated and adapted by G. Matić.
- 1992 - 1995 *Fundamentals of Molecular Biology*, a compulsory course for undergraduate students of Biology, University Svetozar Marković, Kragujevac, Serbia; the program of the course co-opted and slightly modified by G. Matić.

## MENTORING

Served as a mentor of the following 12 Ph.D. students and 8 M.Sc students.

### **Ph.D. theses:**

1. Biljana Bursać: "Dietary fructose-induced metabolic syndrome: the role of glucocorticoid hormones signaling in the rat visceral adipose tissue and hypothalamus". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2014.
2. Ana Vasiljević: "The role of glucocorticoid hormones in regulation of energy metabolism and inflammation in the rat liver upon fructose-enriched diet". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2014.
3. Younis Elzaedi: "The role of extracellular heat shock proteins in post-traumatic stress disorder-related inflammation". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2014.
4. Jelena Đorđević: "The influence of chronic social isolation on antioxidative defense mechanisms in the brain and liver of male *Wistar* rats". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2013.
5. Jelena Nestorov: "Analysis of glucocorticoid receptor expression and function in post-traumatic stress disorder". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2011.
6. Danijela Vojnović Milutinović: "Analysis of glucocorticoid receptor function and expression in women with polycystic ovary syndrome". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2010.
7. Sanja Manitašević Jovanović: "Ecological and evolutionary aspects of heat shock proteins Hsp90 and Hsp70 expression in natural populations of *Iris pumila* L.". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2010.
8. Ivana Elaković: "Gender-related differences in the response of glucocorticoid system to chronic fluoxetine treatment and long-term isolation stress". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2009.
9. Nataša Veličković: "The effects of ionizing radiation on hypothalamo-pituitary-adrenocortical axis activity and corticosteroid receptors expression in the rat hippocampus". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2009.
10. Aleksandra Čvoro: "Proteins of the rat liver glucocorticoid receptor heterooligomeric complexes in the response to hyperthermic stress". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2000.
11. Stojko Vidović: "Interactions of rat liver glucocorticoid receptor with the ligand and Hsp70 under hyperthermic stress of different intensities". Ph.D. thesis, Faculty of Biology, University of Belgrade, 2000.
12. Jadranka Dunderski: "Modifications of rat liver glucocorticoid receptor upon cadmium intoxication and the role of metallothioneins in detoxification". Ph.D. thesis, Faculty of Biology, University of Belgrade, 1993.

### **M.Sc. theses:**

1. Tatjana Perišić: "Chronic inflammation associated with asthma affects function and expression of glucocorticoid receptor and heat shock proteins in human peripheral blood mononuclear cells". M.Sc. thesis, Faculty of Biology, University of Belgrade, 2007.
2. Ivana Elaković: "Antidepressant imipramine influences glucocorticoid receptor expression and activity in male and female rats in a tissue-dependent manner". M.Sc. thesis, Faculty of Biology, University of Belgrade, 2006.
3. Jelena Brkljačić: "Alterations of glucocorticoid receptor function during cellular response to stress induced by mercury intoxication". M.Sc. thesis, Faculty of Biology, University of Belgrade, 2004.
4. Danka Elez: "The influence of hyperthermic and chemical stress on redox state of the rat liver glucocorticoid receptor". M.Sc. thesis, Faculty of Biology, University of Belgrade, 1999.

5. Aleksandra Čvoro: "Heat shock proteins as modulators of glucocorticoid receptor function". M.Sc. thesis, Faculty of Biology, University of Belgrade, 1996.
6. Stojko Vidović: "The influence of hyperthermic stress on the role of glucocorticoid receptor on tyrosine aminotransferase activity". M.Sc. thesis, Faculty of Biology, University of Belgrade, 1995.
7. Jasmina Stanošević: "Interaction of rat liver glucocorticoid receptor with DNA: the influence of hyperthermic stress and the role of the hormone". M.Sc. thesis, Faculty of Biology, University of Belgrade, 1994.
8. Biljana Ristić: "Regulation of glucocorticoid receptor function in hyperthermic stress". M.Sc. thesis, Faculty of Biology, University of Belgrade, 1993.

### **SCIENTIFIC INTERESTS**

**Fields:** Molecular Endocrinology; Molecular Cell Biology; Biological Psychiatry; Nutritional Biochemistry; Biomedicine.

**Problems studied:** Molecular mechanisms of steroid (glucocorticoid) hormones action; Structure and function of steroid (glucocorticoid) hormone receptors; Heat shock proteins – structure, function and regulation of synthesis; The chaperoning role of heat shock proteins in protection of structure and regulation of function of glucocorticoid receptor in pathophysiological states and stress; The role of glucocorticoid signaling in pathogenesis of stress-related psychiatric disorders (e.g. major depression, post-traumatic stress disorder) and in development of metabolic disorders comprising metabolic syndrome.

### **PUBLICATIONS AND CITATIONS**

Author of 95 papers in peer-reviewed scientific journals, 13 invited lectures at scientific conferences, 3 chapters in scientific books, 3 review articles, 50 scientific conference presentations, 4 university and 5 high school handbooks.

Number of citations according to Google Scholar: 683; h-index=14; i10 index=25; (<http://scholar.google.com/citations?user=FfTqHoMAAAAJ&hl=en>).

Publication list is given below.

### **PROJECT LEADING**

1. **Principal Investigator in the Joint Research Project** SCOPES IZ73Z0\_152331: Interactions between stress and dietary fructose in the development of the metabolic syndrome: role of glucocorticoids, Swiss National Science Foundation, 2014-2017.
2. **Leader of the Project** #41009: Role of steroid hormones in neuroendocrine adaptation to stress and pathophysiology of metabolic syndrome - molecular mechanisms and clinical implications; funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia, 2011-2014.

3. **Principal Investigator in the Project** FP6-2002-INCO-WBC-1-509213: Psychobiology of posttraumatic stress disorder (PBPTSD); funded by the European Commission within the Framework 6 Program; realized by the international consortium SPIN (Serbia, Netherlands, UK, Italy, Croatia); coordinated by Professor Eric Vermetten (University Medical Center, Utrecht, The Netherlands), 2004-2008.
4. **Leader of the Project** #143003: The expression and function of glucocorticoid receptor and heat shock proteins in pathophysiological states and stress; funded by the Ministry of Science and Environmental Protection of the Republic of Serbia, 2006-2010.
5. **Leader of the Project** #1654: Modulation of glucocorticoid receptor function during cellular stress response; funded by the Ministry of Science, Technology and Development of the Republic of Serbia, 2002-2005.
6. **Leader of the sub-project:** Steroid hormone receptors: structure and function during cellular stress response; Project #03E20, funded by the Ministry of Science and Technology of the Republic of Serbia, 1996-2001.
7. **Leader of the sub-project:** Steroid hormone receptors: structure and regulation of function under physiological and stressful conditions; Project #0316, funded by the Ministry of Science and Technology of the Republic of Serbia, 1991-1995.

#### **AWARDS**

- 2014 - Golden certificate of achievement, Serbian Biological Society.
- 2004 - A2 Award, Ministry for Science and Environmental Protection of the Republic of Serbia.
- 2002 - Allan Munck Prize, Dartmouth Medical School, Department of Physiology, New Hampshire, USA.

#### **MEMBERSHIP IN SCIENTIFIC ASSOCIATIONS**

- 1980 - present Serbian Biological Society
- 1988 - present Society of Medical Biochemists of Serbia
- 2011 - present Serbian Biochemical Society
- 2015 - present Serbian Molecular Biology Society

#### **SERVICES**

- 2015 - President, Serbian Molecular Biology Society
- 2011 – present Member, Advisory Committee for Biomedicine, Ministry of Education, Science & Technological Development, Republic of Serbia
- 2005 - 2014 Member, Editorial Board of the *Archive of Biological Sciences Belgrade*
- 2004 - present Member, Editorial Board of the *Journal of Medical Biochemistry*
- 2002 - present Peer reviewer for *Psychoneuroendocrinology*, *European Journal of Pharmacology*, *Molecular and Cellular Biochemistry*, *American Journal of Physiology*, *Clinical Biochemistry*, *Archives of Biological Sciences*

- Belgrade, Journal of Medical Biochemistry, etc.*
- 2002 - present Peer review of 3 monographies by domestic authors
- 2002 - 2004 Member of the Committee for Scientific Degrees, Ministry of Science, Republic of Serbia
- 2001 - 2003 President, Scientific Council of the Institute for Biological Research "Siniša Stanković", University of Belgrade
- 2001 - 2006 President, Advisory Committee for Biology, Ministry of Science, Republic of Serbia
- 1998 - 2000 - President, Scientific Council of the Institute for Biological Research "Siniša Stanković", University of Belgrade
- 1998 - present Head, Department of Biochemistry, Institute for Biological Research "Siniša Stanković", University of Belgrade
- 1996 - 1998 - Member, University of Belgrade Council
- 1993 - 2007 - Member, Teaching and Scientific Board, Faculty of Biology, University of Belgrade

### LANGUAGES

English – fluent in reading, writing and speaking;  
French – good in reading, poor in writing and speaking;  
Serbian – native language.

### COMPUTER SKILLS

Advanced user of many software applications including Microsoft Office package, SPSS statistics, Adobe Acrobat Pro, Adobe Photoshop, Internet browsers, etc.

### LIST OF PUBLICATIONS

#### University Handbooks

1. **Gordana Matić**, Ana Djordjevic, Nataša Veličković & Goran Korićanac: *Molecular Mechanisms of Signal Transduction*. Velarta, Belgrade, 2012, ISBN 978-86-7138-178-6.
2. Dušanka Savić Pavićević & **Gordana Matić**: *Molecular biology 1*. NNK Internacional, Belgrade, 2011, ISBN 978-86-6157-001-8.
3. Nikola Tucić and **Gordana Matić**: *About Genes and People*. Center for Applied Psychology, Belgrade, 2002, ISBN 86-83797-03-1.
4. **Gordana Matić**: *Essentials of Molecular Biology*. Zavet, Belgrade, 1996, ISBN 86-7034-024-0.

#### Scientific Papers

1. Djordjevic, A., Bursać, B., Veličković, N., Vasiljević, A. & **Matić, G.**: The impact of different fructose overloads on plasticity and inflammation in the hippocampus of fructose-fed rat. *Nutr. Neurosci.*, 2015, 18: 66-75.

2. Nikolić, M., Macut, Đ., Djordjevic, A., Veličković, N., Bursać, B., BožićAntić, I., Bjekić Macut, J., **Matić, G.**, Vojnović Milutinović, D.: The role of enhanced glucocorticoid signaling in the regulation of lipid metabolism in the visceral adipose tissue of PCOS rat model induced by 5 $\alpha$ -dihydrotestosterone. *Molec. Cell Endocrinol.*, 2015, 399: 22-31.
3. Macut, Dj., Božić Antić, I., Nestorov, J., Topalović, V., Bjekić Macut, J., Panidis, D., Kastratović Kotlica, B., Papadakis, E., **Matić, G.** & Vojnović Milutinović, D.: The influence of combined oral contraceptives containing drospirenone on the hypothalamic-pituitary-adrenocortical axis activity and glucocorticoid receptor expression and function in women with polycystic ovary syndrome. *Hormones: Int. J. Endocrinol. Metab.*, 2015, DOI.10.14310/horm.2002.1526.
4. Glban, A., Vasiljević, A., Veličković, N., Nikolić-Kokić, A., Blagojević, D., **Matić, G.** & Nestorov, J.: The expression and activity of antioxidant enzymes in the liver of rats exposed to high-fructose diet in period from weaning to adulthood. *J. Sci. Food Agriculture*, 2015, DOI: 10.1002/jsfa.6953.
5. Tepavčević, S., Vojnović Milutinović, D., Macut, Dj., Stojiljković, M., Nikolić, M., Božić-Antić, Čulafić, T., Bjekić-Macut, J., **Matić, G.** & Korićanac, G.: Cardiac fatty acid uptake and metabolism in the rat model of polycystic ovary syndrome. *Endocrine*, 2015, DOI: 10.1007/s12020-015-0558-1.
6. Tepavčević, S., Vojnović Milutinović, D., Macut, Dj., Stanišić, J., Nikolić, M., Božić-Antić, I., Rodaljević, S., Bjekić-Macut, J., **Matić, G.** & Korićanac, G.: Cardiac nitric oxide synthases and Na<sup>+</sup>/K<sup>+</sup>-ATPase in the rat model of polycystic ovary syndrome induced by dihydrotestosterone. *Exp. Clin. Endocrinol. Diabetes*, 2015, 123: 303-307.
7. Knezevic, G., **Matic, G.**, Damjanović, S., Spiric, Z & Savic, D.: Posttraumatic and depressive symptoms in  $\beta$ -endorphin dynamics. *J. Affective Disorders*, 2015, 181:61-66.
8. Tepavčević, S., Vojnović Milutinović, D., Macut, Dj., Žakula, Z., Nikolić, M., Božić-Antić, I., Romić, S., Bjekić-Macut, J., **Matić, G.** & Korićanac, G.: Dihydrotestosterone deteriorates cardiac insulin signaling and glucose transport in the rat model of polycystic ovary syndrome. *J. Steroid Biochem. Molec. Biol.*, 2014, 141: 71-76.
9. **Matić, G.**, Vojnović Milutinović, D., Nestorov, J., Elaković, I., Manitašević Jovanović, S., Elzaedi, Y., Perišić, T., Dunderski, J., Damjanović, S., Knežević, G., Špirić, Ž., Vermetten, E. & Savić, D.: Mineralocorticoid receptor and heat shock protein expression levels in peripheral lymphocytes from war trauma exposed men with and without PTSD. *Psychiatry Research*, 2014, 215: 379-385.
10. Bursać, B., Vasiljević, A., Nestorović, N., Veličković, N., Vojnović Milutinović, D., **Matić, G.** & Djordjevic, A.: High-fructose diet leads to visceral adiposity and hypothalamic leptin resistance in male rats - do glucocorticoids play a role? *J. Nutr. Biochem.*, 2014, 25: 446-455.
11. Kovačević, S., Nestorov, J., **Matić, G.** & Elaković, I: Dietary fructose-related obesity and glucocorticoid receptor function in visceral adipose tissue of female rats. *Eur. J. Nutr.*, 2014, 53: 1409-1420.

12. Vasiljević, A., Bursać, B., Djordjevic, A., Vojnović Milutinović, D., Nikolić, M., **Matić, G.** & Veličković, N.: Hepatic inflammation induced by high fructose diet coincides with an enhancement of glucocorticoid prereceptor metabolism. *Eur. J. Nutr.*, 2014, 53: 1409-1420.
13. Nestorov, J., Gliban, A.M., Mijušković, A., Nikolić-Kokić, A., Elaković, I., Veličković, N. & **Matić, G.**: Long-term fructose-enriched diet introduced immediately after weaning does not induce oxidative stress in the rat liver. *Nutr. Res.*, 2014, 34: 646-652.
14. Savic, D., Knezevic, G., Damjanovic, S., Antic, J., **Matic, G.**: GR gene BclI polymorphysm changes the path, but not the level, of dexamethasone-induced cortisol suppression. *J. Affective Disorders*, 2014, 168: 1-4.
15. Vojnović Milutinović, D., Macut, Đ., Božić Antić, I., Bjekić Macut, Đ., Nikolić, M., **Matić, G.** & Nestorov, J.: Hypoxanthine guanine phosphoribosyl transferase is the most stable reference gene for quantitative PCR in peripheral blood mononuclear cells from women with polycystic ovary syndrome. *J. Med. Biochem.*, 2014, 33: 356-363.
16. Vojnović Milutinović, D., Nestorov, J., Nikolić, M., Dinić, J., Djordjevic, A., Veličković, N., Elaković, I. & **Matić, G.**: Leptin and glucocorticoid signaling in the hypothalamus of female and male fructose-fed rat. *Arch.Biol.Sci. Belgrade*, 2014, 66: 829-839.
17. **Matić, G.**, Vojnović Milutinović, D., Nestorov, J., Elaković, I., Manitašević Jovanović, S., Perišić, T., Dunderski, J., Damjanović, S., Knežević, G., Špirić, Ž., Vermetten, E. & Savić, D.: Lymphocyte glucocorticoid receptor expression level and hormone binding properties differ between war trauma-exposed men with and without PTSD. *Progress Neuro-Psychopharmacol. Biol. Psychiatry*, 2013, 43: 238-245.
18. Korićanac, G., Djordjević, A., Žakula, Z., Vojnović Milutinović, D., Tepavčević, S., Veličković, N., Milosavljević, T., Stojilković, M., Romić, S. & **Matić, G.**: Gender modulates development of metabolic syndrome phenotype in fructose fed rats. *Arch. Biol. Sci. Belgrade*, 2013, 65: 455-464.
19. Bursać, B., Djordjevic, A., Vasiljević, A., Vojnović Milutinović, A., Veličković, N., Nestorović, N. & **Matić, G.**: Fructose consumption enhances glucocorticoid action in rat visceral adipose tissue. *J. Nutr. Biochem.*, 2013, 24: 1166-72.
20. Veličković, N., Djordjevic, A., Vasiljević, A., Bursać, B., Vojnović Milutinović, D. & **Matić, G.**: Tissue-specific regulation of inflammation by macrophage migration inhibitory factor and glucocorticoids in fructose-fed Wistar rats. *Brit. J. Nutrition*, 2013, 110: 456-465.
21. Nestorov, J., **Matić, G.**, Elaković, I. & Tanić, N.: Gene expression studies: How to obtain accurate and reliable data by quantitative real-time RT PCR. *J. Med. Biochem.*, 2013, 32: 325-338.
22. Vasiljević, A., Veličković, N., Bursać, B., Djordjevic, A., Vojnović Milutinović, D., Nestorović, N. & **Matić, G.**: Enhanced prereceptor glucocorticoid metabolism and lipogenesis impair insulin signaling in the liver of fructose-fed rat. *J. Nutr. Biochem.*, 2013, 24: 1790-1797.



23. Adzic, M., Lukic, I., Mitic, M., Djordjevic, J., Elaković, I., Djordjevic, A., Krstic-Demonacos, M., **Matić, G.** & Radojčić, M.: Gender-specific roles of phospho-glucocorticoid and estrogen receptors in prefrontal cortex mitochondrial processes in response to stress and fluoxetine. *Psychoneuroendocrinol.*, 2013, 38: 2914-2924.
24. Macut, Dj., Božić Antić, I., Nestorov, J., Topalović, V., Bjekić Macut, J., Panidis, D., Kastratović Kotlica, B., Papadakis, E., **Matić, G.** & Vojnović Milutinović, D.: The influence of combined oral contraceptives containing drospirenone on the hypothalamic-pituitary-adrenocortical axis activity and glucocorticoid receptor expression and function in women with polycystic ovary syndrome. *Hormones: Int. J. Endocrinol. Metab.*, 2013, in press.
25. Djordjevic, A., Djordjevic, J., Elaković, I., Adzic, M., **Matić, G.** & Radojčić, M.: Fluoxetine affects hippocampal plasticity, apoptosis and depressive-like behavior of chronically isolated rats. *Progr. Neuro-psychopharmacol. Biol. Psychiatry*, 2012, 36: 92-100.
26. Savić, D., Knežević, G., Damjanovic, S., Spiric, Z. & **Matic, G.**: The Role of Personality and Traumatic Events in Cortisol Levels – Where Does PTSD Fit In? *Psychoneuroendocrinol.*, 2012, 37: 937-947.
27. Djordjevic, A., Vojnović Milutinović, D., Tanić, N., Bursać, B., Vasiljević, A., Velickovic, N., Elaković, I. & **Matić, G.**: Identification of suitable reference genes for gene expression studies in liver and adipose tissue from fructose-fed rats. *Advanced Science Letters*, 2012, 5: 560-565.
28. Savic, D., Knezevic, G., Damjanovic, S., Spiric, Z., **Matic, G.**: Is there a biological difference between trauma-related depression and PTSD? DST says 'NO'. *Psychoneuroendocrinol.*, 2012, 37: 1516-1520.
29. Djordjevic, A., Djordjevic, J., Elaković, I., Adzic, M., **Matić, G.** & Radojčić, M.: Effects of fluoxetine on plasticity and apoptosis evoked by chronic social isolation in the rat prefrontal cortex. *Eur. J. Pharmacol.*, 2012, 693: 37-44.
30. Elaković, I., Nestorov, J., Kovačević, S. & **Matić, G.**: Selection of reference genes for normalization of real-time PCR data in visceral adipose tissue of female rats on a fructose-enriched diet. *Arch. Biol. Sci. Belgrade*, 2012, 64: 1247-1259.
31. Damjanovic, S. S., Antić, J. A., Ilić, B.B., Beleslin Cokic, B., Ivović, M., Ognjanovic, S. I., Isailovic, T. V., Popovic, B. M., Bozic, I. B., Tatic, S., **Matic, G.**, Todorovic, V. N. & Paunovic, I.: Glucocorticoid Receptor and Molecular Chaperones in the Pathogenesis of Adrenal Incidentalomas: Potential Role of Reduced Sensitivity to Glucocorticoids. *Molec. Medicine*, 2012, 18: 1456-1465.
32. Elaković, I., Djordjevic, A., Adzic, M., Djordjevic, J., Radojčić, M. & **Matić, G.**: Gender-specific response of brain corticosteroid receptors to stress and fluoxetine. *Brain Res.*, 2011, 1384: 61-68.
33. Djordjevic, J., Djordjevic, A., Adzic, M., Elaković, I., **Matić, G.** & Radojčić, M.: Fluoxetine affects antioxidant system and promotes apoptotic signaling in Wistar rat liver. *Eur. J. Pharmacol.*, 2011, 659: 61-66.

34. Vojnović Milutinović, D., Macut, D., Božić, I., Brkljačić, J., Damjanović, S. and **Matić, G.:** Hypothalamic-pituitary-adrenocortical axis hypersensitivity and glucocorticoid receptor expression and function in women with polycystic ovary syndrome. *Exp. Clin. Endocrinol. Diabetes*, 2011, 119: 636-643.
35. Adzic, M., Djordjevic, J., Mitic, M., Simic, I., Rackov, G., Djordjevic, A., Elakovic, I., **Matic, G.** & Radojicic, M.: Fluoxetine decreases glutathione reductase in erythrocytes of chronically isolated Wistar rats. *Acta Chimica Slovenica*, 2011, 58: 785-791.
36. Manitašević Jovanović S., Tucić, B. & **Matić, G.:** Differential expression of heat shock proteins Hsp70 and Hsp90 in vegetative and reproductive tissues of *Iris pumila*. *Acta Physiologiae Plantarum*, 2011, 33: 233-240.
37. Brkljačić, J., Tanić, N., Vojnović Milutinović, D., Elaković, I., Manitašević Jovanović, S., Perišić, T., Dundjerski, J. & **Matić, G.:** Validation of endogenous controls for gene expression studies in peripheral lymphocytes from war veterans with and without PTSD. *BMC Molecular Biology*, 2010, 11: 26.
38. Elaković, I., Vasiljević, Đ., Adžić, M., Đorđević A., Đorđević J., Radojčić M. and **Matić, G.:** Sexually dimorphic functional alterations of rat hepatic glucocorticoid receptor in response to fluoxetine. *Eur. J. Pharmacol.*, 2010, 632: 79-85.
39. Macut, Dj., Vojnović Milutinović, D., Božić, I., **Matić, G.**, Brkljačić, J., Panidis, D., Petakov, M., Spanos, N., Bjekić, J., Stanojlović, O., Petrović Milinković, A., Radojčić, Z & Damjanović, S.: Age, body mass index and serum level of DHEA-S can predict glucocorticoid receptor function in women with polycystic ovary syndrome. *Endocrine*, 2010, 37: 129-134.
40. Elaković, I., Brkljačić, J. & **Matić, G.:** Gender-related differences in the effects of antidepressant imipramine on glucocorticoid receptor binding properties and association with heat shock proteins in the rat liver and kidney. *Eur. J. Pharmacol.* 2009, 608: 7-13.
41. Perišić, T., Srećković, M. & **Matić, G.:** Modulation of glucocorticoid receptor function and expression in childhood moderate asthma. *Respiration*, 2009, 77: 70-75.
42. Veličković, N., Đorđević, A., **Matić, G.** & Horvat, A.: Radiation-induced hyposuppression of the hypothalamic-pituitary-adrenal axis is associated with alterations of hippocampal corticosteroid receptors expression. *Radiat. Res.*, 2008, 169: 397-407.
43. Perišić, T., Srećković, M. & **Matić, G.:** Possible role of a hydrogen peroxide-mediated mechanism in glucocorticoid receptor functional alterations associated with moderate asthma. *Arch. Biol. Sci. Belgrade*, 2008, 60: 531-539.
44. Tucić, B., Manitašević, S., Vuleta, A. & **Matić, G.:** Linking Hsp90 to micro-environmental and stochastic variation in floral organs of *Iris pumila*. *Arch. Biol. Sci. Belgrade*, 2008, 60: 411-419.
45. Perišić, T., Srećković, M. & **Matić, G.:** An imbalance in antioxidant enzymes and stress proteins in childhood asthma. *Clin. Biochem.*, 2007, 40: 1168-1171.
46. Manitašević, S., Dundjerski, J., **Matić, G.** & Tucić, B.: Seasonal variation in heat shock proteins Hsp70 and Hsp90 expression in an exposed and a shaded habitat of *Iris pumila*. *Plant Cell Environment*, 2007, 30: 1-11.

47. Elaković, I., Brkljačić, J. & **Matić, G.:** Long-term imipramine treatment affects rat brain and pituitary corticosteroid receptors and heat shock proteins levels in a gender-specific manner. *J. Neural Transmission*, 2007, 114: 1069-1080.
48. Brkljačić, J., Perišić, T., Dundjerski, J. & **Matić, G.:** Interaction of rat renal glucocorticoid receptor with Hsp90 and Hsp70 upon stress provoked by mercury. *J. Appl. Toxicol.*, 2007, 27: 43-50.
49. Elaković, I., Perišić, T., Čanković-Kadijević, M. & **Matić, G.:** Correlation between glucocorticoid receptor binding parameters, blood pressure and body mass index in a healthy human population. *Cell Biochem. Funct.*, 2007, 25: 427-431.
50. Perišić, T., Srećković, M. & **Matić, G.:** Changes of antioxidant enzyme activity and heat shock protein content in lymphocytes of children with asthma. *Arch. Biol. Sci. Belgrade*, 2007, 59: 257-266.
51. Dundjerski, J., Brkljačić, J., Elaković, I., Manitašević, S & **Matić, G.:** Mercury influences rat liver tyrosine aminotransferase activity and induction by dexamethasone. *J. Appl. Toxicol.*, 2006, 26: 187-190.
52. Čvoro, A., Korać, A. & **Matić, G.:** Alteration of glucocorticoid receptor subcellular distribution by hyperthermic stress. *Arch. Biol. Sci.*, 2006, 58: 145-152.
53. Đukić, N., **Matić, G.** & Konjević, R.: Biochemical analysis of gliadins of wheat *Triticum durum*. *Kragujevac J. Sci.*, 2005, 27: 131-138.
54. Čvoro, A., Korać, A. & **Matić, G.:** Intracellular localization of constitutive and inducible heat shock protein 70 in rat liver after *in vivo* heat stress. *Molec. Cell. Biochem.*, 2004, 265: 27-35.
55. Brkljačić, J., Vojnović-Milutinović, D., Dundjerski, J. & **Matić, G.:** Mercury inhibits rat liver and kidney glucocorticoid receptor hormone binding activity. *Cell Biol. Toxicol.*, 2004, 20: 171-182.
56. Brkljačić, J., Vojnović-Milutinović, D., Dundjerski, J. & **Matić, G.:** Mercury stimulates rat liver glucocorticoid receptor association with Hsp90 and Hsp70. *J. Biochem. Molec. Toxicol.*, 2004, 18: 257-260.
57. Čvoro, A., Korać, A. & **Matić, G.:** Immunocytochemical study of the glucocorticoid receptor in the rat liver nuclei after hyperthermic stress. *Cell Biol. Int.*, 2003, 27: 403-407.
58. Dundjerski, J., Vidović, S. & **Matić, G.:** The influence of dexamethasone on Hsp70 level and association with glucocorticoid receptor in the liver of unstressed and heat-stressed rats. *Yugoslav. Med. Biochem.*, 2003, 22: 19-26.
59. Dundjerski, J., Predić, J., Čvoro, A. & **Matić, G.:** Rat liver tyrosine aminotransferase activity and induction by dexamethasone upon cadmium intoxication. *Arch. Biol. Sci.*, 2003, 55: 3-7.
60. Čvoro, A. & **Matić, G.:** Hyperthermic stress stimulates the association of both constitutive and inducible isoforms of 70 kDa heat shock protein with rat liver glucocorticoid receptor. *Int. J. Biochem. Cell Biol.*, 2002, 34: 279-285.
61. Živadinović, D., Vidović, S., **Matić, G.** & Andjus, R.K.: Hyperthermic stress affects the thermal modulation of glucocorticoid-receptor affinity. *J. Thermal. Biol.*, 2001, 26: 575-584.

62. Elez, D., Dundjerski, J. & **Matić, G.:** Cadmium affects the redox state of rat liver glucocorticoid receptor. *Cell Biol. Toxicol.*, 2001, 17: 169-177.
63. Čvoro, A. & **Matić, G.:** Glucocorticoid receptor interaction with Hsp90 remains unaltered after whole body hyperthermia. *Stress*, 2000, 3: 257-260.
64. Elez, D., Vidović, S. & **Matić, G.:** The influence of hyperthermic stress on the redox state of glucocorticoid receptor. *Stress*, 2000, 3: 247-255.
65. Dundjerski, J., Kovač, T., Pavković, N., Čvoro, A. & **Matić, G.:** Glucocorticoid receptor-Hsp90 interaction in the liver cytosol of cadmium-intoxicated rats. *Cell Biol. Toxicol.*, 2000, 16: 375-383.
66. Dundjerski, J., Predić, J., Kovač, T., Pavković, N., Ivanišević, Lj., Čvoro, A. & **Matić, G.:** A possible role of metallothionein and heat shock proteins in the glucocorticoid receptor protection against cadmium intoxication. *Arch. Biol. Sci. Belgrade*, 2000, 52: 89-95.
67. Čvoro, A., Dundjerski, J., Trajković, D. & **Matić, G.:** The level and phosphorylation of Hsp70 in the rat liver cytosol after adrenalectomy and hyperthermia. *Cell Biol. Int.*, 1999, 23: 313-320.
68. Čvoro, A., Dundjerski, J., Trajković, D. & **Matić, G.:** Heat stress affects the glucocorticoid receptor interaction with heat shock protein Hsp70 in the rat liver. *Biochem. Molec. Biol. Int.*, 1998, 46: 63-70.
69. Čvoro, A., Dundjerski, J., Trajković, D. & **Matić, G.:** Association of the rat liver glucocorticoid receptor with Hsp90 and Hsp70 upon whole body hyperthermic stress. *J. Steroid Biochem. Molec. Biol.*, 1998, 67: 319-325.
70. Trajković, D., Čvoro, A., Damjanović, S., Dundjerski, J. & **Matić, G.:** Nesdonal induces Hsp70 and affects glucocorticoid receptor in the rat liver. *Arch. Biol. Sci.*, 1997, 49: 81-88.
71. Dundjerski, J. & **Matić, G.:** Metallothioneins: Small proteins serving numerous important functions. *Yugoslav. Med. Biochem.*, 1997, 16: 1-14.
72. Dundjerski, J., Butorović, B., Kipić, J., Trajković, D. & **Matić, G.:** Cadmium and dexamethasone affect glucocorticoid receptor level and degradation in the rat liver. *Arch. Biol. Sci.*, 1996, 48: 79-86.
73. Dundjerski, J., Butorović, B., Kipić, J., Trajković, D. & **Matić, G.:** Cadmium affects the activity of rat liver tyrosine aminotransferase and its induction by dexamethasone. *Arch. Toxicol.*, 1996, 70: 390-395.
74. Vidović, S., Čvoro, A., Dundjerski, J., Trajković, D. & **Matić, G.:** Hyperthermic stress affects glucocorticoid-receptor-mediated transcription in rat liver. *Cell Biol. Int.*, 1996, 20: 553-559.
75. **Matić, G.**, Kipić, J., Ristić, B., Dundjerski, J. & Trajković, D.: Hyperthermic stress modulates the functions of rat liver glucocorticoid receptor. *Cell Biol. Int.*, 1995, 19: 203-213.
76. Butorović, B., **Matić, G.**, Kipić, J., Dundjerski, J. & Trajković, D.: Synthesis and phosphorylation of hepatic proteins in rats exposed to hyperthermic shock. *Arch. Biol. Sci.*, 1994, 46: 65-72.

77. Dundjerski, J., Stanošević, J., Ristić, B., Trajković, D. & **Matić, G.**: *In vivo* effects of cadmium on rat liver glucocorticoid receptor functional properties. *Int. J. Biochem.*, 1992, 24: 1065-1072.
78. Hutchison, K. A., **Matić, G.**, Czar, M. J. & Pratt, W. B.: DNA-binding and non-DNA-binding forms of the transformed glucocorticoid receptor. *J. Steroid Biochem. Mol. Biol.*, 1992, 41: 715-718.
79. Hutchison, K. A., **Matić, G.**, Meshinchi, S., Bresnick, E.H. & Pratt, W.B.: Redox manipulation of DNA binding activity and BuGR epitope reactivity of the glucocorticoid receptor. *J. Biol. Chem.*, 1991, 266: 10505-10509.
80. Dundjerski, J., Ristić, B., Stanošević, J., Trajković, D. & **Matić, G.**: Cadmium-induced glucocorticoid receptor modification and metallothionein synthesis in rat liver. *Arch. Biol. Sci.*, 1991, 43: 15P-16P.
81. Šušća, M., **Matić, G.**, Petrović, J. & Trajković, D.: Stress-induced alterations in hepatic polysomal fraction and S<sub>6</sub> kinase activity of the rat. *Iugoslav. Physiol. Pharmacol. Acta*, 1990, 26: 419-427.
82. Meshinchi, S., **Matić, G.**, Hutchison, K. A. & Pratt, W. B.: Selective molybdate-directed covalent modification of sulfhydryl groups in the steroid-binding versus the DNA-binding domain of the glucocorticoid receptor. *J. Biol. Chem.*, 1990, 265: 11643-11649.
83. **Matić, G.**, Trajković, D., Damjanović, S. & Petrović, J.: Modifications of rat liver glucocorticoid receptor by insulin-induced hypoglycemia. *Biochim. Biophys. Acta*, 1990, 1051: 192-198.
84. **Matić, G.**, Trajković, D., Šušća, M., Damjanović, S. & Petrović, J.: *In vitro* evidence for modification of rat liver glucocorticoid receptor binding properties and transformation by hyperthermia. *J. Steroid Biochem.*, 1989, 32: 263-270.
85. **Matić, G.**, Trajković, D., Šušća, M., Damjanović, S. & Petrović, J.: Characterization of rat liver glucocorticoid receptor in insulin-induced hypoglycemic stress. *Iugoslav. Physiol. Pharmacol. Acta*, 1988, 24: 563-564.
86. Šoškić, V., Trajković, D., Petrović, J., **Matić, G.**, Damjanović, S. & Šušća, M.: The response of rat central dopaminergic system to nesdonal and hyperthermic shock. *Period. Biol.*, 1986, 88: 208-209.
87. **Matić, G.** & Trajković, D.: The effect of alkaline phosphatase on the activation of glucocorticoid-receptor complexes in rat liver cytosol. *Int. J. Biochem.*, 1986, 18: 841-845.
88. **Matić, G.**, Trajković, D. & Šoškić, V.: Early decrease in phosphorylation and kinase activity of rat liver soluble proteins induced by cortisol. *Iugoslav. Physiol. Pharmacol. Acta*, 1986, 22: 1-11.
89. **Matić, G.** & Trajković, D.: ATP-dependent alterations in rat hepatic glucocorticoid receptor binding properties and transformation. *Period. Biol.*, 1985, 87: 33-42.
90. Petrović, J., Trajković, D., Radojčić, M., **Matić, G.**, Milovanov, N. & Todorović, O.: Alpha<sub>1</sub>-antitrypsin genetic phenotypes in a group of children suffering from pulmonary diseases. *Respiration*, 1982, 43: 127-132.

91. Trajković, D., **Matić, G.**, Radojčić, M. & Petrović, J.: Effects of trichlorophon and parathion on steroid hormones binding to cytosol receptors of different target tissues of rats. *Acta Biol. Med. Exptl.*, 1981, 6: 71-75.
92. Petrović, J., Trajković, D., Janić-Šibalić, V., **Matić, G.**, Radojčić, M., Milić, B., Spasić, M. & Saičić, Z.: The effect of trichlorophon on some biochemical parameters in blood of laboratory rats. *Acta Biol. Med. Exptl.*, 1981, 6: 55-59.
93. Petrović, J., Šoškić, V., Trajković, D., **Matić, G.** & Kidrič, M.: Purification of human blood platelet dopamine receptors by affinity chromatography. *Iugoslav. Physiol. Pharmacol. Acta*, 1981, 17: 51-59.
94. Trajković, D., Bogić, Lj. & **Blečić, G.**: The role of steroid hormones in the synthesis of serum proteins. *Arch. Biol. Sci.*, 1980, 32: 17-23.
95. Kanazir, D., Ribarac-Stepić, N., Trajković, D., **Blečić, G.**, Radojčić, M., Metlaš, R., Stefanović, D., Katan, M., Perišić, O., Popić, S. & Djordjević-Marković, R.: The structure and regulatory function(s) of cortisol receptor. 1: Extragenomic effects dependent on the cortisol receptor activation. *J. Steroid Biochem.*, 1979, 11: 389-400.

### Chapters in Books

1. Elaković, I., Djordjevic, A. & **Matić, G.**: Sexual dimorphism in corticosteroid signaling – underneath vulnerability to stress-related disorders and sensitivity to antidepressants. In: *Advances in Medicine and Biology*, vol. 46 (L.V. Berhardt, Ed.), Nova Publishers, Hauppauge, NY, USA, 2012, pp. 1-34.
2. **Matić, G.**: The role of heat shock proteins in modulation of glucocorticoid receptor functions by stress. In: *Molecular Mechanisms of Action of Steroid Hormone Receptors* (M. Krstić-Demonacos & C. Demonacos, Eds.), Research Signpost, Trivandrum, Kerala, India, 2002, pp. 39-54.
3. **Matić, G.**, Dundjerski, J. & Čvoro, A.: Mutually dependent functions of glucocorticoid receptor and heat shock proteins. In: *Current Topics in Steroid Research* (K. Fotherby, H. Gronemeyer et al., Eds.) Research Trends, Trivandrum, India, 1998, pp. 1-17.

### Review Articles

1. Dundjerski, J. & **Matić, G.**: Glucocorticoid receptor in health and disease. *J. Med. Biochem.* 28, 2009, 248-261.
2. **Matić, G.**: Clinical application of heat shock proteins. *Yugoslav Med. Biochem.*, 18, 1999, 133-139.
3. **Matić, G.**: A cross-talk between glucocorticoid receptor-mediated signal transduction pathway and heat shock response. A review. *Yugoslav Med. Biochem.*, 14, 1995, 89-102.

### Invited Lectures

1. Adzic, M., Djordjevic, A., Djordjevic, J., Elaković, I., Simic, I., Mitic, M., Rackov, G., **Matić, G.** & Radojic, M.: Fluoxetine decreases glutathione reductase in erythrocytes of chronically isolated Wistar rats. 10<sup>th</sup> International Conference on Fundamental and Applied Aspects of Physical Chemistry, Belgrade, Serbia, 2010, Proceedings vol. I, F-P-1, pp. 316-318.
2. **Matić, G.**: Glucocorticoid receptor in health and disease. 5<sup>th</sup> EFCC (European Federation of Clinical Chemistry and Laboratory Medicine) Symposium for Balkan Region, Belgrade, October 8–10, 2009.
3. **Matić, G.**: Glucocorticoid receptor in health and disease. V Congress of Internal Medicine for South-Eastern Europe, Belgrade, March 6-9, 2009.
4. **Matić, G.**: Functional status of the glucocorticoid receptor and the sensitivity of hypothalamic-pituitary-adrenocortical axis in posttraumatic stress disorder. IV Congress of Serbian Neuroscience Society, Kragujevac, 2008, Book of Abstracts, p. 324-325.
5. **Matić, G.**: Expression and functional properties of the glucocorticoid receptor in the lymphocytes from war veterans with posttraumatic stress disorder. XIII Congress of Serbian Psychiatric Association, Belgrade, 2008.
6. Dundjerski, J., Brkljačić, J. & **Matić, G.**: Tyrosine aminotransferase conditions of heavy metal intoxication. I Symposium of biologists of Srpska Republic, Banja Luka, 2005, Book of Abstracts, p. 38.
7. **Matić, G.**: Functional significance of the glucocorticoid receptor interaction with heat shock proteins. I Symposium of biologists of Srpska Republic, Banja Luka, 2005, Book of Abstracts, p. 7.
8. **Matić, G.**: Regulation of glucocorticoid receptor function during cellular stress response. Trends and Frontiers in Medicine, Belgrade, 2004. Medical Investigations 38, 2004, 53.
9. Butorović, B. & **Matić, G.**: Steroid hormone receptors – the importance for diagnostics, prognostics and therapy.. XI Congress of medical biochemists of Yugoslavia with international participation, Čigota-Zlatibor, 1998, in: The Application of Medical Biochemistry in Laboratory Medicine (N. Majkić-Singh, ed), Society of Medical Biochemists of Yugoslavia, Belgrade, 2000, pp. 51-64.
10. **Matić, G.**: Heat stress interferes with glucocorticoid receptor-mediated signal transduction pathway. Meeting of the Balkan Clinical Laboratory Federation, Budva, Yugoslavia, 1996. In: Advances in laboratory Medicine (N. Majkić-Singh, ed), Society of Medical Biochemists of Yugoslavia, Belgrade, 1996, p. 119-132.
11. **Matić, G.**, Dundjerski, J., Ristić, B., Stanošević, J. & Trajković, D.: The alterations of the glucocorticoid receptor induced by heat stress. Meeting of the Society of Medical Biochemists of Yugoslavia, Belgrade, 1995, Yugoslav Med. Biochem. 14 (1-2), 1995, 63-64.
12. **Matić, G.**, Stanošević, J., Ristić, B. & Trajković, D.: Stress-induced modifications of rat liver glucocorticoid receptor structural and functional properties. XV<sup>th</sup> International Congress of Biochemistry, Fellows Course, Jerusalem, Israel, 1991, abstr. p. 26.

13. Trajković, D., Ribarac-Stepić, N., **Blečić, G.**, & Kanazir, D.: Binding of cortisol and estradiol to isolated uterine and liver nuclei and activation of RNA polymerases. Proc. Int. Symp. Neuroendocrine Regulat. Mech., Serb. Acad. Sci. Arts., Belgrade, 1979, pp. 165-172.

### Conference presentations

1. Djordjevic, A., Bursać, B., Vojnović Milutinović, D., Nestorov, J., Nikolić, M., Nestorović, N., Vasiljević, A., Veličković, N., Elaković, I. & **Matić, G.**: The role of hypothalamic leptin signalling and glucocorticoids in fructose diet-induced visceral adiposity of rats. ESE Basic Endocrinology Course on "Neuroendocrinology" Amsterdam, Netherlands, 15-17 January 2014, pp 12.
2. **Matić, G.**, Veličkovic, N., Djordjevic, A., Vojnović Milutinović, D., Elaković, I., Nestorov, J., Bursać, B., Vasiljević, A., Nikolić, M. & Dundjerski, J.: Glucocorticoid signaling in the liver and adipose tissue of male and female fructose-fed rats. Metabolism, Diet and Disease conference, Washington DC, USA, BMC Proceedings, 6 (3), 2012, abstract P35, p. S22.
3. Savić, D., Vermetten, E., Knežević, G., **Matić, G.**, Špirić, Ž. & Damjanović, S.: HPA-axis behavior is correlated with personality. 9<sup>th</sup> World Congress of Biological Psychiatry, Paris, France, 2009, Book of Abstracts, p. 248.
4. **Matić, G.**, Brkljačić, J., Elaković, I., Manitašević Jovanović, S., Vojnović Milutinović, D., Perišić, T., Dundjerski, J., Savić, D., Knežević, G., Špirić, Ž. & Vermetten, E.: Lymphocyte glucocorticoid receptor expression and functional properties in Balkan war veterans with and without PTSD. 9<sup>th</sup> World Congress of Biological Psychiatry, Paris, France, 2009, Book of Abstracts, p. 244.
5. Brkljačić, J., Tanić N., Vojnović Milutinović, D., Elaković, I., Manitašević Jovanović, S., Perišić, T., Dundjerski, J. & **Matić, G.**: Glucocorticoid receptor mRNA level in war veterans with and without PTSD. 9<sup>th</sup> World Congress of Biological Psychiatry, Paris, France, 2009, Book of Abstracts, p. 245.
6. Elaković, I., Brkljačić, J. & **Matić, G.**: Gender differences in the effects of tricyclic antidepressant imipramine on corticosteroid system in the pituitary and brain. IV Congress of Serbian Neuroscience Society, Kragujevac, 2008, Abstracts, p. 360.
7. Manitašević, S., Vuleta, A., **Matić, G.**, Dundjerski, J. & Tucić, B.: Resource sharing among interconnected ramets enhances stress tolerance in *Iris pumila*. 3<sup>rd</sup> Cell Stress Society International Congress on Stress Responses in Biology and Medicine & 2<sup>nd</sup> World Conference of Stress, Budapest, Hungary, 2007, Book of Abstracts, p. 215.
8. Dundjerski, J., Brkljačić, J., Perišić, T. & **Matić, G.**: Influence of mercury on rat renal glucocorticoid receptor association with Hsp90 and Hsp70. 3<sup>rd</sup> Cell Stress Society International Congress on Stress Responses in Biology and Medicine & 2<sup>nd</sup> World Conference of Stress, Budapest, Hungary, 2007, Book of Abstracts, p. 253.
9. **Matić, G.**, Elaković, I. & Brkljačić, J.: Gender-related differences in response of rat brain corticosteroid receptors and heat shock proteins to antidepressant imipramine. 3<sup>rd</sup> Cell Stress Society International Congress on Stress Responses in Biology and Medicine & 2<sup>nd</sup> World Conference of Stress, Budapest, Hungary, 2007, Book of Abstracts, p. 384.



10. Macut, Dj., Vojnović Milutinović, D., Božić, I., Damjanović, S. & **Matić, G.:** Glucocorticoid receptor binding parameters in women with polycystic ovary syndrome. 5<sup>th</sup> Annual Meeting of Androgen Excess Society & 89<sup>th</sup> Annual Meeting of Endocrine Society, Toronto, Canada, 2007, Book of Abstracts, p.
11. Brkljačić, J., Vojnović Milutinović, D., Dundžerski, J. & **Matić, G.:** Association of rat liver glucocorticoid receptor with Hsp90 and Hsp70 upon mercury intoxication. 30<sup>th</sup> FEBS Congress and 9<sup>th</sup> IUBMB Conference – The Protein World, Budapest, Hungary, July 2005. *FEBS J.* 2005, 272 (Suppl. 1), p. 481.
12. Brkljačić, J., Vojnović-Milutinović, D., Dundžerski, J. & **Matić, G.:** Mercury reduces rat liver and kidney glucocorticoid receptor hormone binding activity. FEBS Special Meeting on Signal Transduction, Brussels, Belgium, 2003, *Eur. J. Biochem.* 270 (Suppl. 1), 2003, p.115.
13. Dundžerski, J., Predić, J., Čvoro, A. & **Matić, G.:** A possible mechanism protecting glucocorticoid receptor against cadmium intoxication. IV Yugoslav Symposium “Chemistry and Environment”, Zrenjanin, 2001, p. 265-267.
14. Elez, D., Dundžerski, J., Trajković, D. & **Matić, G.:** Cadmium binds to sulfhydryl groups of glucocorticoid receptor. IV Yugoslav Symposium “Chemistry and Environment”, Zrenjanin, 2001, p. 262-264.
15. Čvoro, A., Vidović, S., Dundžerski, J. & **Matić, G.:** Hsp70 level in the rat liver cytosol and nuclei after 41°C and 42°C whole body hyperthermia. International Symposium – Molecular Cell Biology of the Heat Stress Response, Frankfurt/Main, Germany, 1998, abstract P6.
16. **Matić, G.,** Čvoro, A., Dundžerski, J. & Trajković, D.: Hsp70 level and polymorphism in the rat liver after heat stress. 17th International Congress of Biochemistry and Molecular Biology, San Francisco, California, USA, abstr. *FASEB J.* 11, 1997, A902.
17. Čvoro, A., Dundžerski, J., Trajković, D. & **Matić, G.:** The glucocorticoid receptor heterocomplexes composition upon stress and adrenalectomy. 17th International Congress of Biochemistry and Molecular Biology, San Francisco, California, USA, abstr. *FASEB J.* 11, 1997, A915.
18. **Matić, G.,** Čvoro, A., Dundžerski, J. & Trajković, D.: Heat shock-dependent alterations in the assembly of the glucocorticoid receptor complexes. *Stress of Life: Stress and Adaptation from Molecules to Man*, Budapest, Hungary, 1997, p. 33.
19. Čvoro, A., Dundžerski, J., Trajković, D. & **Matić, G.:** Heat shock and glucocorticoid hormones influence rat liver Hsp70 concentration and phosphorylation. *Stress of Life: Stress and Adaptation from Molecules to Man*, Budapest, Hungary, 1997, p. 34.
20. **Matić, G.:** Heat stress interferes with glucocorticoid receptor-mediated signal transduction pathway. 4th Meeting of the Balkan Clinical Laboratory Federation, Budva, Yugoslavia, 1996, abstr. *Balkan J. Clin. Lab.*, 3, 1996, p. 29.
21. Korać, B., **Matić, G.,** Čvoro, A., Buzadžić, B., Saičić, Z. & Dundžerski, J.: Metallothionein response to heat shock in rat skin: effect of antioxidants pretreatment. *World Congress of Pharmacy '96*, Jerusalem, Israel, 1996, p. 155.

22. **Matić, G.**, Vidović, S., Čvoro, A., Dundjerski, J. & Trajković, D.: Tyrosine amino-transferase activity in liver of rats exposed to hyperthermic stress. 2nd International Conference of the Hungarian Biochemical Society, Szeged, Hungary, 1995, p. 63.
23. Čvoro, A., Dundjerski, J., Kipić, J., Trajković, D. & **Matić, G.**: The induction of HSP70 in the rat liver by whole body hyperthermia. 2nd International Conference of the Hungarian Biochemical Society, Szeged, Hungary, 1995, p.96.
24. Hutchison, K. A., **Matić, G.**, Meshinchi, S., Bresnick, E. & Pratt, W. B.: Studies on non-DNA-binding forms of the mouse glucocorticoid receptor. Xth International Symposium of The Journal of Steroid Biochemistry and Molecular Biology, Paris, France, 1991, p.46.
25. **Matić, G.**, Stanošević, J., Ristić, B. & Trajković, D.: Stress-induced modifications of rat liver glucocorticoid receptor structural and functional properties. XVth International Congress of Biochemistry, Jerusalem, Israel, 1991, p. 66.
26. Budec, M., Trajković, D., **Matić, G.** & Ćirić, O.: <sup>3</sup>H/Estradiol binding in hypothalamus of the rat chronically treated with ethanol. International Symposium: Brain Damage and Plasticity, Kotor, 1988.
27. **Matić, G.**, Trajković, D., Šuša, M., Damjanović, S. & Petrović, J.: *In vitro* studies on rat liver glucocorticoid receptor binding properties and transformation in hyperthermia. 14th International Congress of Biochemistry, Prague, 1988, p.110.
28. **Matić, G.**, Trajković, D., Šuša, M., Damjanović, S. & Petrović, J.: Characterization of rat liver glucocorticoid receptor in insulin-induced hypoglycemic stress. XIV Kongres Saveza fizioloških društava Jugoslavije, Satellite Symposium "Stress and Trauma", Beograd, 1988, p. 217.
29. Budec, M., **Matić, G.**, Trajković, D. & Ćirić, O.: Specific binding of estradiol in the rat uterus and adenohipophysis after chronic treatment with ethanol. IV Congress of Yugoslav endocrinologists, Herceg Novi, 1988, Abstracts, p. 210.
30. Damjanović, S., Trajković, D., **Matić, G.** & Petrović, J.: The influence of hypoglycemia on rat liver cytosol glucocorticoid receptor. IV Congress of Yugoslav endocrinologists, Herceg Novi, 1988, Abstracts, p. 14.
31. Damjanović, S., Trajković, D., **Matić, G.**, Šuša, M. & Petrović, J.: The effects of hyperthermia on glucocorticoid receptor properties. 18th FEBS Meeting, Ljubljana, 1987, p.137.
32. Damjanović, S., Trajković, D., Šuša, M., **Matić, G.** & Petrović, J.: Hyperthermia-induced proteins in rat liver cytosol. 18th FEBS Meeting, Ljubljana, 1987, p.194.
33. **Matić, G.** & Trajković, D.: Studies on the structure and function of rat liver glucocorticoid receptor on the purified preparation. VII Congress of Yugoslav biologists, Budva, 1986, Abstracts, p. 305.
34. Petrović, J., Šoškić, V., Trajković, D., **Matić, G.**, Damjanović, S. & Šuša, M.: Alterations of the rat central dopaminergic system induced by hypoglycemic shock. VII Congress of Yugoslav biologists, Budva, 1986, Abstracts, p. 313.

35. **Matić, G.**, Trajković, D., Damjanović, S., Šuša, M., Petrović, J. & Šoškić, V.: Binding affinity and capacity of the rat liver glucocorticoid receptor upon hypoglycemic and hyperthermic stress. IV Congress of the Federation of Biochemical Societies of Yugoslavia, Sarajevo, 1986, Abstracts, p. 21.
36. Šuša, M., Trajković, D., Petrović, J. & **Matić, G.**: Changes in the rat liver ribosome organization induced by stress. Promene u organizaciji ribozoma jetre pacova izazvane stresom. IV Congress of the Federation of Biochemical Societies of Yugoslavia, Sarajevo, 1986, Abstracts, p. 20.
37. Šoškić, V., Trajković, D., Petrović, J., **Matić, G.**, Damjanović, S. & Šuša, M.: The response of central dopaminergic system to Nesdonal and heat-shock. XVI Jugoslovenski Simpozijum biofizike, Kranjska gora, 1985, p. 58.
38. Trajković, D., **Matić, G.**, Šoškić, V. & Petrović, J.: Modulation of glucocorticoid receptor binding capacity and nuclear uptake by phosphorylation/dephosphorylation processes. 16th FEBS Meeting, Moscow, 1984, p. 424.
39. Šoškić, V., Trajković, D., Petrović, J., **Matić, G.** & Kidrič, M.: Interaction of some agonists and antagonists with dopamine receptors of the bovine *Nucleus caudatus*. Second Camerino Symposium - Recent Advances in Receptor Chemistry, Camerino, Italy, 1983, p.69.
40. Šoškić, V., Petrović, J., Trajković, D., **Matić, G.** & Kidrič, M.: Influence of some synthetic ergolines on D<sub>1</sub> receptor-bound adenylate cyclase in brain synaptosomes. Second Camerino Symposium - Recent Advances in Receptor Chemistry, Camerino, Italy, 1983, p. 76.
41. Trajković, D., Šoškić, V., Petrović, J. & **Matić, G.**: The effects of some dopamine agonists and antagonists on its binding to specific receptors in bovine *Nucleus caudatus*. XXV Meeting of the Serbian Chemists, Belgrade, 1983, The Journal of the Serbian Chemical Society, 48, 1983, C73.
42. Šoškić, V., Petrović, J., Trajković, D., Kidrič, M. & **Matić, G.**: The abundance of dopamine receptors in various synaptosomal fractions of bovine *Nucleus caudatus*. XXV Meeting of the Serbian Chemists, Belgrade, 1983, The Journal of the Serbian Chemical Society, 48, 1983, C73.
43. Dundjerski, Z., Trajković, D., Petrović, J., Radojčić, M. & **Matić, G.**: The influence of sinter on some ecological and biochemical processes in the soil Micromammalia. VIII Symposium on soil fauna in Yugoslavia, Piran 1982.
44. Trajković, D. & **Matić, G.**: Modification of rat liver glucocorticoid receptor by ATP, alkaline phosphatase and phosphatase inhibitors. FEBS Meeting on Cell Function and Differentiation, Athens, 1982, p.262.
45. **Blečić, G.**, Trajković, D. & Kanazir, D.: Early effects of cortisol on protein phosphorylation in rat liver cytosol. Second Int. Congress on Cell Biology, West Berlin, 1980, Eur. J. Cell Biol., 22, 1980, 71.
46. Trajković, D., **Blečić, G.** & Kanazir, D.: Modulation of glucocorticoid receptor binding capacity by ATP and phosphokinase and phosphatase inhibitors. Second Int. Congress on Cell Biology, West Berlin, 1980, Eur. J. Cell Biol., 22, 1980, 71.

47. **Blečić, G.**, Trajković, D. & Kanazir, D.: Early *in vivo* effects of cortisol on the activity of protein phosphokinases and phosphatases in the rat liver cytosol. II Congress of the Federation of Biochemical Societies of Yugoslavia, Belgrade, 1980, Abstracts, S110.
48. Trajković, D., **Blečić, G.** & Kanazir, D.: The role of the receptor protein phosphorylation/dephosphorylation in glucocorticoid hormones action. II Congress of the Federation of Biochemical Societies of Yugoslavia, Belgrade, 1980, Abstracts, S202.
49. Trajković, D., **Blečić, G.** & Kanazir, D.: Phosphorylation of proteins upon steroid hormones action. XI Int. Congress on Biochemistry, Toronto, 1979, p. 611.
50. Ribarac-Stepić, N., Trajković, D., **Blečić, G.**, Radojčić, M., Metlaš, R., Stefanović, D., Katan, M., Popić, S., Djordjević-Marković, R. & Kanazir, D.: The structure and regulatory function(s) of steroid receptor(s) - New ideas. Int. Symp. Frontiers Bioorg. Chem. Mol. Biol., Moscow-Tashkent, 1978, p. 31-34.