Dušanka Savić-Pavićević, PhD
Professor of Molecular Biology
Head of the Center for Human Molecular Genetics
Expert witness for DNA typing and forensic genetics

University of Belgrade-Faculty of Biology (UB-FB)
Center for Human Molecular Genetics
Department for Biochemistry and Molecular Biology
Studentski trg16, PO box 43
Belgrade 11000, Serbia
Tel/fax: +38111 2639 100, +381 63 312 285
E-mail address: duska@bio.bg.ac.rs
ORCID http://orcid.org/0000-0002-2079-4077
Web pages: https://www.bio.bg.ac.rs/osoblje/savic-pavicevic-dusanka
http://dnkanaliza.bio.bg.ac.rs

PERSONAL INFORMATION

Citizenship: Serbian
Date of Birth: January 19, 1972
Place of Birth: Kotor, Yugoslavia

EDUCATION

2004	PhD in Biology, UB-FB, Serbia, supervisor Prof. Stanka Romac
2000	MSc in Molecular Biology, UB-FB, Serbia, supervisor Prof. Stanka Romac
1998	BSin Molecular Biology and Physiology, UB-FB, Serbia

ACADEMIC AND PROFESSIONAL EXPERIENCE

2017	**Full Professor of Molecular Biology,** Dept Biochemistry and Molecular Biology, UB-FB
2010	Associate Professor, Dept Biochemistry and Molecular Biology, UB-FB
2005	Assistant Professor, Dept Biochemistry and Molecular Biology, UB-FB
2001	Teaching Assistant, Dept Biochemistry and Molecular Biology, UB-FB
2000	Assistant Trainee, Dept Biochemistry and Molecular Biology, UB-FB
2017-	**Head of the Center for Human Molecular Genetics, UB-FB**
2018-	Coordinator of PhD Program Molecular Biology, Module Molecular Biology of Eukaryotes, UB-FB
2011-	**Expert witness for DNA typing and forensic genetics** (Ministry of Justice, Republic of Serbia, Decision 740-05-03494/210-03)
2011-	Coordinator of Msc Program Molecular Biology and Physiology, Module Human Molecular Biology, UB-FB
2008-2017	Vice Head of the Center for Human Molecular Genetics, UB-FB

RESEARCH INTERESTS

Human Molecular Genetics, Medical Genetics, Biomedicine

Basic science research:

- **Trinucleotide repeat expansions:** Mechanisms of expansions of simple tandem repeats causing more than 40 neurological diseases by using human studies and cell models

- **Rare disorders with focus on inherited neuromuscular disorders** (myotonic dystrophy, spinal muscular atrophy and Duchenne muscular dystrophy)**:** Genotype-phenotype correlation of inherited neuromuscular disorders by studding causing mutations and identifying genetic and epigenetic modifiers in well-defined patient cohorts
- **Psychiatry disorders,** with particular interest on suicide attempt: Genetic variants, gene-gene interactions and gene-environment (childhood trauma and recent stressful life events) interactions
- **RNA editing:** Dynamics of RNA editing in mouse models under different environmental conditions
- **microRNAs**: Circulating microRNA as potential biomarkers for progression of inherited neuromuscular disorders
- **Prostate carcinoma**: screening of genetic variants identified by genome wide association studies and variants in certain miRNA genes and proteins involved in miRNA pathway in Serbian population.

Applied research (in close collaboration with clinicians)**:**
- Development of clinically relevant genetic tests for monogenic (rare) diseases.
- Development of models based on genetic and clinical parameters for predicting certain outcomes in diseases of interest.

Commercial services (http://dnkanaliza.bio.bg.ac.rs)
- DNA paternity testing for the Serbian courts and direct-to-customer.
- Genetic testing for ~40 rare diseases (mostly neuromuscular, neurodevelopmental and neurodegenerative) for clinics in Serbia, Montenegro and Republic of Srpska.

PROJECTS

2018-2022	COST Action CA17103; Delivery of Antisense RNA Therapeutics, Chair Dr Virginia Arechavala-Gomeza https://www.cost.eu/actions/CA17103#tabs|Name:overview
2018-2022	COST Action CA17130; Enhancing Psychiatric Genetic Counselling, Testing, and Training in Europe, Chair Dr Franziska Degenhardt https://www.cost.eu/actions/CA17130/#tabs|Name:overview
2011-2019	Analysis of structural and genomic changes as diagnostic and prognostic parameters of human diseases. Ministry of Sciences R Serbia no.173016, **Principal Investigator**
2016-2017	RNA editing of serotonin receptor 2C and expression of SNORD115 in mice models under alteredenvironmental conditions. Serbian-Slovenian Program, Ev. No 451-03-39/2016-09/15/01, **Principal Investigator**
2014-2017	COST Action BM1207, Networking towards clinical application of antisense-mediated exon skipping, Chair Prof. AnnemiekeAartsma-Rus https://exonskipping.eu
2014-2015	Pathogenic mechanism of expanded repeats in C9orf72 gene in amyotrophic lateral sclerosis and frontotemporal dementia. Serbian-Slovenian Program. Ev. No 451-03-3095/2014-09/44
2013-2014	Molecular and genomic markers of amyotrophic lateral sclerosis. Serbian-Italian Program
2005-2010	Molecular genetics of heritable neurodegenerative and psychiatric disorders. Ministry of Science R Serbia no.143013
2000-2005	Molecular genetics of trinucleotide expansions. Ministry of Science R Serbia no. 1521
2000-2005	Genetic basis of neurological disorders: genotype-phenotype correlations. Ministry of Science, R Serbia no.1988
1998-2000	Molecular diagnostics of heritable diseases in medicine. Ministry of Science, R Serbia, Strategic project no S.6.35.75.0126

INVITED TALKS

„Identifying modifiers of somatic instability and age at onset in myotonic dystrophy type 1 by modeling genetic data". Belgrade BioInformatics Conference 2018 (BelBi 2018) Belgrade, Serbia, June 18-22, 2018

"Genetics of psychiatric disorders", Clinical Seminar, Clinic for Psychiatry, Clinical Center of Serbia, Belgrade, Serbia, 2017 November 17

"The origin and historical route of myotonic dystrophy type 2 mutation across Europe",The First Congress of Molecular Biologists of Serbia (CoMBoS), Belgrade, Serbia, 2017 September 20-22

"Anatomy and physiology of the genome - what have we learned in the genomic era?", Cycle Project Genes and Genome, Serbian Academy of Sciences and Arts, Belgrade Serbia, 2016 November

"Potential of genetically designed therapies for neuromuscular disorders". 45th Annual General Meeting of European Alliance of Neuromuscular Disorders Associations (EAMDA), Belgrade, Serbia, 2015 September 25-27

"Unstable microsatellites as molecular genetic basis of neurological and psychiatric disorders", A Century of Molecular Genetics Technology, Serbian Academy of Sciences and Arts, Branch in Novi Sad, Belgrade Serbia, 2014 October

"Association and epistasis of miRNA137 and genes for A-to-I RNA editing in schizophrenia and bipolar disorder". VI Congress of Serbian Neuroscience Society, Belgrade, Serbia, 2013 November 14-16

"Genetic approaches in therapy of dystrophinopathies". Educational course: Therapeutic novelty in child neurology. IX/XV Congress of Serbian Neurologists with international participation. Belgrade, Serbia, 2013 November 14-16

"Molecular genetics of myotonic disorders in Serbian patients". Symposium of Clinical Neurophysiology with international participation; Belgrade, Serbia, 2012 November 2-3

"Molecular Genetics of unstable repeat expansion disorders". V Congress of Serbian Neuroscience Society, Kopaonik, Serbia, 2011 September 29-October 2

"Medical Genetics in Serbia". International Regional Conference on Medical Genetics. Serbia, Belgrade, 2009 March 6-7

"Primate Biological Materials – the Use of F2 Generation in Experiments – Contibution to the Discussion". 1st International SLASA Workshop on Laboratory Animal Science in Serbia, Serbia, Belgrade, 2006 July 15.

PROFESSIONAL ACTIVITIES

Reviewer (projects): one AFM-TELETHON project (section: Molecular Basis and Pathophysiology of Muscular Dystrophies; funding body: The French Muscular Dystrophy Association; duration: 2 years; total budget: 120000 EUR); two DAAD projects in Serbia-Germany program (funding body: DAAD, Germany and MESTD R Serbia, duration: 2 years, total budget: 2x20000 EUR).

Review Editor for Bioinformatics and Computational Biology, part of the journal(s) Frontiers in Genetics, Plant Science and Bioengineering and Biotechnology (2017–)

Reviewer (journals): Frontiers in Genetics (sections Genetic Disorders, Bioinformatics and Computational Biology), Neuropsychobiology, Journal of Affective Disorders, PlosGenetics, Progress in Neuropsychopharmacology & Biological Psychiatry, Scientific Reports, Pathology Research and Practice, Reproductive Biology, Environmental Research, Oncotarget, Archives of Biological Science, Slovenian Veterinary Research

Editorial Bord member–Archives of Biological Science (Belgrade)(2014–)

Member of OrganizingCommittee–IUBMB Advanced School: Nutrition, Metabolisam and Ageing; 2018 October 15-19; Petnica Science Center, Petnica, Srbija.

Member of Scientific and Organizing Committees– First Congress of Molecular Biologist of Serbia (CoMBoS), 2017,Sep 20-22, Belgrade, Serbia.

Member of Scientific Committee – Conference on Structure and Dynamics of the Sarcomere; 2016 May 4-6; Belgrade, Serbia.

Manager of Foundation "Stanka Romac"

Member of Program Commission for Biology and Environmental Protection, Petnica Science Center, Serbia

Organizer of Molecular Biology School – PCR in Biological and Biomedical Research, Petnica Science Center, Serbia, 2016 October 02-07; 2017 September 24-29, 2018 September 22-27, 2019 September 21-26.
Organizer of Advanced Molecular Biology School – quantitative PCR, Petnica Science Center, Serbia, 2019September 28 – October 02.
RNA Word in Eukaryotic Cell. Accredited seminar MOLECULAR BIOLOGY - easier way to functional knowledge; Institute for the Advancement of Education of Republic of Serbia (K890791-1; 2014/15), (892; 2015/16), (618; 2016/17 and 2017/18)

PROFESSIONAL SOCIETIES

Serbian Society for Molecular Biology (MolBios), Vice-President
Serbian Neuromuscular Disease Network (NMD SerbNet), Member of the Supervisory Board
Serbian Brain Council (Part of the European Brain Council), Member
Serbian Genetic Society, Section Medical Genetics, Member
European Society of Human Genetics (ESHG), Member
Serbian Neuroscience Society (SNS), Member
Federation of European Neurosciences (FENS), Member
Serbian Biological Society, Member

TEACHING EXPERIENCE

Curriculum development and teaching of a wide range of molecular biology and molecular genetic classes at BSc, MSc and PhD courses:

2005-	Principles of Molecular Biology, Undergraduate studies, UB-FB (a part of the course)
2011-	Molecular Biology of Eukaryotes, Undergraduate studies, UB-FB
2012-	Molecular Biology of the Cell, Undergraduate studies, UB-FB (a part of the course)
2012-	Molecular genetics of Human Diseases, Master studies, Module Human Molecular Biology, UB-FB
2012-	Molecular Neurobiology, Master studies, Module Neurobiology, UB-FB (a part of the course)
2006-	Molecular Biology of Neuromuscular and Psychiatric Disorders, PhD studies, Program Molecular Biology, UB-FB (a part of the course)
2012-	Molecular Biology of Gene, PhD studies, Program Molecular Biology, UB-FB (invited lectures)
2018-	Genomics, PhD studies, Program Molecular Biology, Program Biology, UB-FBFB (a part of the course)

THESES ADVISED

Jelena Karanovic,**MSc**
Thesis title: Variants in RNA editing genes, serotonergic receptor 2C and tryptophan-hydroxilase 2 genes as risk factors for suicide attempt in psychiatric patients
PhD program: Molecular biology, Faculty of Biology, University of Belgrade, Serbia
Defended: May, 2017

Milos Brkusanin, MSc
Thesis title: Structure of the 5q13.2 segmental duplication as a modifier of the phenotype of spinal muscular atrophy and amyotrophic lateral sclerosis
PhD program: Molecular biology, Faculty of Biology, University of Belgrade, Serbia
Defended: December, 2018

Jovan Pesovic, MSc
Thesis title: Mitotic and meiotic instability of *DMPK* expansions with variant repeats as genetic modifiers of myotonic dystrophy type 1 phenotype
PhD program: Molecular biology, Faculty of Biology, University of Belgrade, Serbia
Defended: April, 2019

Lana Radenkovic, MSc
Research area: Psychiatrics genetics
PhD program: Molecular biology, Faculty of Biology, University of Belgrade, Serbia
Ongoing

I was also supervisor of 17 defended master theses, and Faculty supervisor for 15 defended PhD theses and 34 defended master thesis.

FACULTY OF BIOLOGY SERVICES

Faculty Council, Vice President (2015–2018), Member (2018–)
Committee for Quality Assurance, Member (2014-2015, 2016–)
Advisory Board for PhD Program Molecular Biology, Member (2006–)
Faculty Council Commission for Dean Election, President (2018)
Commission for Admission to Master Studies, Member (2012–2015)
Commission for Selection of the Best Scientific Publication of Young Researchers, Member (2014, 2015, 2016)

HONORS AND ADVISEE AWARDS

The Best Prospective Technological Innovations for the research project "*Clinical and forensic DNA tests*", the Serbian Chamber of Commerce and Industry and the Ministry of Science and Technological Development, Republic of Serbia, 2008

A1 award for scientific achievement in 2002-2003, Ministry of Science and Environmental Protection, Republic of Serbia

GenNeuro Team (S. Peric, M. Brkusanin, J. Pesovic and A. Kosac) "Circulating miRNAs as noninvasive biomarkers for neuromuscular diseases". Move for the Science Grant, 2018, Funded by Philip Moris, Serbia

Milos Brkusanin, National Fellowships for European Human Genetics Conference 2018, Milan, Italy, 2018 June 16-19

Jovan Pesovic, Young investigator grant for YSP (Young Scientist Program) and 24th IUBMB and 15th FAOBMB Congress, Seoul, Korea, 2018 June 2-8

Milos Brkusanin, Participation grant for 31st Course Clinical Genomics and NGS. Bertinoro, Italy, 20182 April 8 – May 4

Jovan Pesovic, Participation grant for ICGEB Workshop on "Next Generation Diagnostics". Skoplje, Macedonia, March 22-24

Jovan Pesovic, Participation grant for IDMC-11 Meeting 2017, San Francisco, USA, 2017 September05-09

Milos Brkusanin, ENCALS Travel Grant for ENCALS Meeting 2017, Ljubljana, Slovenia, 2017 May 18-20

Jovan Pesovic, STSM. COST Action BM1207 „MicroRNAs as potential serum biomarkers for neuromuscular disorders", Prof. Michela Alessandra Denti, Centro di BiologiaIntegrata – CIBIO, Via Sommarive, 9 - 38123 Povo, 2015

Jovan Pesovic,"Goran Ljubljijankic Foundation" prize for the best Master thesis in the field of Molecular Biology, 2014

Jovan Pesovic, The Best Poster in Symposium Genomics of Rare Diseases Serbordisinn & 2014 Golden Helix Symposium, Serbia, Belgrade, 2014, October 31-November 1

PUBLICATIONS

I have published papers in the high-impact genetic journals such as Nature Genetics, Human Mutation and Human Molecular Genetics.

1. Kotarac N, Dobrijevic Z, Matijasevic S, Savic-Pavicevic D, Brajuskovic G. Analysis of association of potentially functional genetic variants within genes encoding miR-34b/c, miR-378 and miR-143/145 with prostate cancer in Serbian population. **EXCLI J**. 2019;18:515-529. DOI: 10.17179/excli2019-1257
2. Peric S, Bozovic I, Nisic T, Banovic M, Vujnic M, Svabic T, Pesovic J, Brankovic M, Basta I, Jankovic M, Savic-Pavicevic D, Rakocevic-Stojanovic V. Body composition analysis in patients with myotonic dystrophy types 1 and 2. **Neurol Sci**. 2019, 40(5):1035-1040. DOI: 10.1007/s10072-019-03763-0
3. Pešović J, Perić S, Brkušanin M, Brajušković G, Rakočević-Stojanović V, Savić-Pavićević D. Repeat interruptions modify age at onset in myotonic dystrophy type 1 by stabilizing DMPK expansions in somatic cells. **Front Genet**.2018; 9:601. DOI: 10.3389/fgene.2018.00601
4. Brkušanin M, Jeftović Velkova I, Jovanović VM, Perić S, Pešović J, Brajušković G, Stević Z, Savić-Pavićević D. SMN1 copy number as a modifying factor of survival in Serbian patients with sporadic amyotrophic lateral sclerosis. **Srp Arh Celok Lek**. 2018;146(11-12):646-652. DOI: 10.2298/SARH180801069B
5. Vujnic M , Peric S, Calic Z, Benovic N, Nisic T, Pesovic J, Savic-PavicevicD, Rakocevic-Stojanovic V. Metabolic impairments in patients with myotonic dystrophy type 2. **Acta Myol.** 2018; 37(4):252-256. PMID: 30944903
6. Bozovic I, Peric S, Pesovic J, Bjelica B, Brkusanin M, Basta I, Bozic M, Sencanic I, Marjanovic A, Brankovic M, Savic-Pavicevic D, Rakocevic-Stojanovic V. Myotonic Dystrophy Type 2 - Data from the Serbian Registry. **J Neuromuscul Dis**. 2018;5(4):461-469. DOI: 10.3233/JND-180328
7. Kulikovskaja L, Sarajlija A, Savic-Pavicevic D, Dobricic V, Klein C, Westenberger A. WDR45 mutations may cause a MECP2 mutation-negative Rett syndrome phenotype. **Neurol Genet**. 2018;4(2):e227. DOI: 10.1212/NXG.0000000000000227
8. Pešović J, Perić S, Brkušanin M, Brajušković G, Rakočević-Stojanović V, Savić-Pavićević D. Molecular genetic and clinical characterization of myotonic dystrophy type 1 patients carrying variant repeats within DMPK expansions. **Neurogenetics**.2017;18(4):207-218. DOI:10.1007/s10048-017-0523-7
9. Rakocevic Stojanovic V, Peric S, Pesovic J, Sencanic I, Bozic M, Svikovic S, Brkusanin M, Savic-Pavicevic D. Genetic testing of individuals with presenile cataract identifies patients with myotonic dystrophy type 2. **Eur J Neurol**. 2017;24(11):e79-80. DOI: 10.1111/ene.13401
10. Peric S, Maksimovic R, Banko B, Durdic M, Bjelica B, Bozovic I, Balcik Y, Pesovic J, Savic-Pavicevic D, Rakocevic-Stojanovic V. Magnetic resonance imaging of leg muscles in patients with myotonic dystrophies. **J Neurol**. 2017;264(9):1899-1908. DOI: 10.1007/s00415-017-8574-0
11. Paunic T, Peric S, Parojcic A, Savic-Pavicevic D, Vujnic M, Pesovic J, Basta I, Lavrnic D, Rakocevic-Stojanovic V. Personality traits in patients with myotonic dystrophy type 2. **Acta Myol.** 2017;36(1):14-18. PMID: 28690389
12. Perić S, Nikodinović GlumacJ, TöpfA, Savić-Pavicević D, PhillipsL, JohnsonK, Cassop-ThompsonM, XuL, BertoliM, LekM, MacArthurD, BrkušaninM, Milenković S, Milić Rašić V, BankoB, Maksimović R, LochmüllerH, Rakočević Stojanović V&StraubV. Anovelrecessive*TTN*foundervariantisacommoncauseofdistalmyopathyintheSerbianpopulation. **Eur J Hum Genet.** 2017;25(5):572-81. DOI: 10.1038/ejhg.2017.16
13. Lohmann K, Masuho I, Patil DN, Baumann H, Hebert E, Steinrücke S, Trujillano D, Skamangas NK, Dobricic V, Hüning I, Gillessen-Kaesbach G, Westenberger A, Savic-Pavicevic D, Münchau A, Oprea G, Klein C, Rolfs A, Martemyanov KA. Novel *GNB1* mutations disrupt assembly and

function of G protein heterotrimers and cause global developmental delay in humans. **Hum Mol Genet.** 2017;26(6):1078-86.
DOI: 10.1093/hmg/ddx018

14. Karanović J, Ivković M, Jovanović VM, Šviković S, Pantović-Stefanović M, Brkušanin M, Damjanović A, Brajušković G, Savić-Pavićević D. Effect of childhood general traumas on suicide attempt depends on TPH2 and ADARB1 variants in psychiatric patients. **J Neural Transm.** 2017;124(5):621-9.
DOI: 10.1007/s00702-017-1677-z
15. Peric S, Rakocevic Stojanovic V, Mandic Stojmenovic G, Ilic V, Kovacevic M,Parojcic A, Pesovic J, Mijajlovic M, Savic-Pavicevic D, Meola G. Clusters ofcognitive impairment among different phenotypes of myotonic dystrophy type 1 and type 2. **Neurol Sci**.2017;38(3):415-423.
DOI: 10.1007/s10072-016-2778-4
16. Rakocevic-Stojanovic V, Peric S, Dujmovic I, Drulovic J, Pesovic J, Savic-Pavicevic D. Neuromyelitis Optica in a Patient from Family with both Myotonic Dystrophy Type 1 and 2. **J Neuromuscul Dis.** 2017; 4(1):89-92.
DOI:10.3233/JND-160192
17. Nikolić Z, Savić Pavićević D, Vučić N, Cerović S, Vukotić V, Brajušković G. Genetic variants in RNA-induced silencing complex genes and prostate cancer. **World J Urol.** 2017; 35:613-24.
DOI: 10.1007/s00345-016-1917-0
18. Vucic N, Nikolic Z, Vukotic V, Tomovic S, Vukovic I, Kanazir S, Savic-Pavicevic D, Brajuskovic G. NOS3 gene variants and male infertility: association of 4a/4b with oligoasthenozoospermia. **Andrologia**.2018;50(1).
DOI: 10.1111/and.12817
19. Rakocevic Stojanovic V, Peric S, Paunic T, Pesovic J, Vujnic M, Peric M, Nikolic A, Lavrnic D, Savic Pavicevic D. Quality of life in patients with myotonic dystrophy type 2. **J Neurol Sci.** 2016;365:158-61.
DOI: 10.1016/j.jns.2016.04.018
20. Rakocevic-Stojanovic V, Peric S, Savic-Pavicevic D, Pesovic J, Mesaros S, Lavrnic D, Jovanovic Z, Pavlovic A. Brain sonography insight into the midbrain in myotonic dystrophy type 2. **Muscle Nerve.** 2016;53(5):700-4.
DOI: 10.1002/mus.24927
21. Karanović J, Ivković M, Jovanović VM, Pantović M, Pavlović Janković N, Damjanović A, Brajušković G, Romac S, Savić Pavićević D. Tryptophan hydroxylase 1 variant rs1800532 is associated with suicide attempt in Serbian psychiatric patients but does not moderate the effect of recent stressful life events. **Suicide Life Threat Behav.**2016;46(6):664-8.
DOI: 10.1111/sltb.12246
22. Radovanović S, Perić S, Savić-Pavićević D, Dobričić V, Pešović J, Kostić V, Rakočević-Stojanović V. Comparison of temporal and stride characteristics in myotonic dystrophies type 1 and 2 during dual-task walking. **Gait & Posture.** 2016;44:194-9.
DOI: 10.1016/j.gaitpost.2015.12.020
23. Karanović J, Šviković S, Pantović M, Durica S, Brajušković G, Damjanović A, Jovanović V, Ivković M, Romac S, Savić Pavićević D. Joint effect of ADARB1 gene, HTR2C gene and stressful life events on suicide attempt risk in patients with major psychiatric disorders. **World J Biol Psychiatry.** 2015;16(4):261-71.
DOI: 10.3109/15622975.2014.1000374
24. Brkušanin M, Kosać A, Jovanović V, Pešović J, Brajušković G, Dimitrijević N,Todorović S, Romac S, Milić Rašić V, Savić-Pavićević D. Joint effect of the SMN2 and SERF1A genes on childhood-onset types of spinal muscular atrophy in Serbian patients. **J Hum Genet.** 2015;60(11):723-8.
DOI: 10.1038/jhg.2015.104
25. Peric S, Mandic-Stojmenovic G, Stefanova E, Savic Pavicevic D, Pesovic J, Ilic V, Dobricic V, Basta I, Lavrnic D, Rakocevic-Stojanovic V. Frontostriatal dysexecutive syndrome: a core cognitive feature of myotonic dystrophy type 2. **J Neurol.** 2015;262(1):142-8.
DOI: 10.1007/s00415-014-7545-y
26. Sarajlija A, Kisic-Tepavcevic D, Nikolic Z, Savic Pavicevic D, Obradovic S, Djuric M, Pekmezovic T. Epidemiology of Rett syndrome in Serbia: prevalence, incidence and survival. **Neuroepidemiology.** 2015;44(1): 1-5.
DOI: 10.1159/000369494
27. Nikolić ZZ, Savić Pavićević DL, Vučic NL, Romac SP, Brajušković GN. Association between a

Genetic Variant in the hsa-miR-146a Gene and Cancer Risk: An Updated Meta-Analysis. **Public Health Genomics.** 2015;18(5):283-98.
DOI: 10.1159/000438695

28. Nikolić Z, Savić Pavićević D, Vučić N, Cidilko S, Filipović N, Cerović S,Vukotić V, Romac S, Brajušković G. Assessment of association between genetic variants in microRNA genes hsa-miR-499, hsa-miR-196a2 and hsa-miR-27a and prostate cancer risk in Serbian population. **Exp Mol Pathol.** 2015;99(1):145-50.
DOI: 10.1016/j.yexmp.2015.06.009
29. Nikolić ZZ, Pavićević DLj, Romac SP, Brajušković GN. Genetic Variants within Endothelial Nitric Oxide Synthase Gene and Prostate Cancer: A Meta-Analysis. **Clin Transl Sci.** 2015;8(1):23-31.
DOI: 10.1111/cts.12203
30. Milic Rasic V, Vojinovic D, Pesovic J, Mijalkovic G, Lukic V, Mladenovic J, Kosac A, Novakovic I, Maksimovic N, Romac S, Todorovic S, Savic Pavicevic D. Intellectual ability in the duchenne muscular dystrophy and dystrophin gene mutation location. **Balkan J Med Genet.** 2015;17(2):25-35.
DOI: 10.2478/bjmg-2014-0071
31. Peric M, Peric S, Rapajic N, Dobricic V, Savic-Pavicevic D, Nesic I, Radojicic S, Novakovic I, Lavrnic D, Rakocevic-Stojanovic V. Multidimensional aspects of pain in myotonic dystrophies. **Acta Myol.** 2015;34(2-3):126-32.
PMID: 27199540
32. Nikolić ZZ, Savić Pavićević DLj, Vukotić VD, Tomović SM, Cerović SJ, Filipović N, Romac SP, Brajušković GN. Association between genetic variant in hsa-miR-146a gene and prostate cancer progression: evidence from Serbian population. **Cancer Causes Control.** 2014;25(11):1571-5.
DOI: 10.1007/s10552-014-0452-9
33. Nikolić ZZ, Branković AS, Savić-Pavićević DL, Preković SM, Vukotić VD, Cerović SJ, Filipović NN, Tomović SM, Romac SP, Brajušković GN. Assessment of association between common variants at 17q12 and prostate cancer risk-evidence from Serbian population and meta-analysis. **Clin Transl Sci.** 2014;7(4):307-13.
DOI: 10.1111/cts.12130
34. Milić Rašić V, Rakočević Stojanović V, Novaković I, Milenković S, Savić Pavićević D, Radojković D, Mladenović J, Kosać A, Nikodinović Glumac J, Perić S, Brkušanin M, Pešović J, Nestorović A, Jasnić-Savović J, Kojić S. NMD SerbNet – integrativni pristup u dijanostici neuromišićnih bolesti u Srbiji. **Materia Medica.** 2014;30(4):1226-33.
35. Savić Pavićević D, Miladinović J, Brkušanin M, Šviković S, Djurica S, Brajušković G, Romac S. Molecular genetics and genetic testing in myotonic dystrophy type 1. **Biomed Res Int**. 2013;2013:391821.
DOI: 10.1155/2013/391821
36. Branković AS, Brajušković GN, Mirčetić JD, Nikolić ZZ, Kalaba PB, Vukotić VD, Tomović SM, Cerović SJ, Radojičić ZA, Savić-Pavićević DL, Romac SP. Common variants at 8q24 are associated with prostate cancer risk in Serbian population. **Pathol Oncol Res.** 2013;19(3):559-69.
DOI: 10.1007/s12253-013-9617-1
37. Branković A, Brajušković G, Nikolić Z, Vukotić V, Cerović S, Savić-Pavićević D, Romac S. Endothelial nitric oxide synthase gene polymorphisms and prostate cancer risk in Serbian population. **Int J Exp Pathol.** 2013;94(6):355-61.
DOI: 10.1111/iep.12045
38. Nikolic A, Rakocevic Stojanovic V, Romac S, Savic D, Basta I, Lavrnic D. The coexistence of myasthenia gravis and myotonic dystrophy type 2 in a single patient. **J Clin Neurol.** 2013;9(2):130-2.
DOI: 10.3988/jcn.2013.9.2.130
39. Nikolić ZZ, Brajušković GN, Pavićević DLj, Kojić AS, Vukotić VD, Tomović SM, Cerović SJ, Filipović V, Mišljenović D, Romac SP. Assessment of possible association between rs3787016 and prostate cancer risk in Serbian population. **Int JClin Exp Med.** 2013;6(1):57-66.
PMID: 23236559
40. Brajuskovic GN, Nikolic ZZ, Kojic AS, Savic-Pavicevic DLJ, Cerovic SJ, Tomovic SM, Filipovic NN, Vukotic VD, Romac SP. Assessment of Possible Association Between Rs378854 and Prostate Cancer Risk in the Serbian Population. **Arch Biol Sci.**2013;65(2):475-86.
41. Brajušković G, Savić Pavićević D, Romac S. 60th Anniversary of the DNA Secondary Structure

Discovery. **Vojnosanit Pregl.** 2013;70(12):1165-70.
PMID: 24450265

42. Zimoń M, Baets J, Almeida-Souza L, De Vriendt E, Nikodinovic J, Parman Y, Battaloğlu E, Matur Z, Guergueltcheva V, Tournev I, Auer-Grumbach M, De Rijk P, Petersen BS, Müller T, Fransen E, Van Damme P, Löscher WN, Barišić N, Mitrovic Z, Previtali SC, Topaloğlu H, Bernert G, Beleza-Meireles A, Todorovic S, Savic-Pavicevic D, Ishpekova B, Lechner S, Peeters K, Ooms T, Hahn AF, Züchner S, Timmerman V, Van Dijck P, Rasic VM, Janecke AR, De Jonghe P, Jordanova A. Loss-of-function mutations in HINT1 cause axonal neuropathy with neuromyotonia. **Nat Genet.** 2012;44(10):1080-3.
DOI: 10.1038/ng.2406
43. Ivković M, Zamurović L, Jovanović A, Dobričić V, Damjanović A, Savić-Pavićević D, Romac S. Retinoic acid induced 1 gene and clinical subtypes of schizophrenia: an association study. **Psychiatry Res.** 2011;188(2):297-8.
DOI: 10.1016/j.psychres.2010.11.018
44. Kecmanović M, Dobričić V, Dimitrijević R, Keckarević D, Savić Pavićević D, Keckarević-Marković M, Ivković M, Romac S. Schizophrenia and apolipoprotein E gene polymorphisms in Serbian population. **Int J Neurosci.** 2010;120(7):502-6.
DOI: 10.3109/00207451003765956
45. Dimitrijević R, Čadež I, Keckarević-Marković M, Keckarević D, Kecmanović M, Dobričić V, Savić Pavićević D, Brajušković G, Romac S. Polymorphisms of the prion protein gene (PRNP) in a Serbian population**. Int J Neurosci.** 2010;120(7):496-501.
DOI: 10.3109/00207451003765907
46. Kecmanović M, Ristić AJ, Sokić D, Keckarević-Marković M, Vojvodić N, Ercegovac M, Janković S, Keckarević D, Savić Pavićević D, Romac S. Coexistence of Unverricht-Lundborg disease and congenital deafness: molecular resolution of a complex comorbidity. **Epilepsia.** 2009;50(6):1612-5.
DOI: 10.1111/j.1528-1167.2008.01937.x
47. Keckarević-Marković M, Milić-Rašić V, Mladenović J, Dačković J, Kecmanović M, Keckarević D, Savić Pavićević D, Romac S. Mutational analysis of GJB1, MPZ, PMP22, EGR2, and LITAF/SIMPLE in Serbian Charcot-Marie-Tooth patients. **J Peripher Nerv Sys.** 2009;4(2):125-36.
DOI: 10.1111/j.1529-8027.2009.00222.x
48. Šijačić-Nikolić M, Milovanović J, Bobinac M, Savić Pavićević D, Brajušković G, Diklić M. Variability Of The Chloroplast Dna Of Sessile Oak (*Quercus petraea* Agg. Ehrendorfer, 1967) in Serbia. **Arch Biol Sci.**2009;61(3):459-65.
49. Janković N, Kecmanović M, Dimitrijević R, Keckarević Marković M, Dobricić V, Keckarević D, Savić Pavicević D, Romac S. HD phenocopies - possible role of Saitohin gene. **Int J Neurosci.**2008;118(3):391-7.
DOI: 10.1080/00207450701593103
50. Stevanović M, Dobričić V, Keckarević D, Perović A, Savić-Pavicević D, Keckarević-Marković M, Jovanović A, Romac S. Human Y-specific STR haplotypes in population of Serbia and Montenegro. **Forensic Sci Int.**2007;171(2-3):216-21.
DOI: 10.1016/j.forsciint.2006.05.038
51. Šarić M, Zamurović Lj, Keckarević-Marković M, Keckarević D, Stevanović M, Savić Pavicević D, Jović J, Romac S. Frequency of the hemochromatosis gene mutations in the population of Serbia and Montenegro. **Clin Genet.** 2006;70(2):170-2.
DOI: 10.1111/j.1399-0004.2006.00655.x
52. Mladenović J, Pekmezović T, Todorović S, Rakočević-Stojanović V, Savić D, Romac S, Apostolski S. Survival and mortality of myotonic dystrophy type 1 (Steinert's disease) in the population of Belgrade. **Eur J Neurol.**2006;13(5):451-4.
DOI: 10.1111/j.1468-1331.2006.01261.x
53. Mladenović J, Pekmezović T, Todorović S, Rakočević-Stojanović V, Savić D, Romac S, Apostolski S. Epidemiology of myotonic dystrophy type 1 (Steinert disease) in Belgrade (Serbia). **Clin Neurol Neurosurg.** 2006;108(8):757-60.
DOI: 10.1016/j.clineuro.2006.04.004
54. Savić D, Keckarević D, Branković-Srećković V, Apostolski S, Todorović S, Romac S. Clinical case report atypical myopathy in a young girl with 91 CTG repeats in DM1 locus and a positive DM1 family history. **Int J Neurosci.**2006;116(12):1509-18. DOI: 10.1080/00207450600553182
55. Krndija D, Savić D, Mladenović J, Rakočević-Stojanović V, Apostolski S, Todorović S, Romac S.

Haplotype analysis of the DM1 locus in the Serbian population. **Acta Neurol Scand.** 2005;111(4):274-7.
DOI: 10.1111/j.1600-0404.2005.00402.x

56. Rakočević-Stojanović V, Savić D, Pavlović S, Lavrnić D, Stević Z, Basta I, Romac S, Apostolski S. Intergenerational changes of CTG repeat depending on the sex of the transmitting parent in myotonic dystrophy type 1. **Eur J Neurol.** 2005;12(3):236-7.
DOI: 10.1111/j.1468-1331.2004.01075.x
57. Keckarević D, Savić D, Keckarević M, Stevanović M, Tarasjev A, Čuljković B, Đarmati A, Vukosavic S, Romac S. Population data on 14 STR loci from population of Serbia and Montenegro (new and renewed data). **Forensic Sci Int.** 2005;151(2-3):315-6.
DOI: 10.1016/j.forsciint.2005.01.009
58. Keckarević M, Savić D, Romac S. JP-3 gene polymorphism in a healthy population of Serbia and Montenegro. **J Genet.** 2005;84(1):69-71.
DOI: 10.1007/BF02715892
59. Keckarević M, Savić D, Svetel M, Kostić V, Vukosavić S, Romac S. Yugoslav HD phenocopies analyzed on the presence of mutations in PrP, ferritin, and Jp-3 genes. **Int J Neurosci.** 2005;115(2):299-301.
DOI: 10.1080/00207450590519571
60. Alendar A, Čuljković B, Savić D, Đarmati A, Keckarević M, Ristić A, Dragašević N, Kostić V, Romac S. Spinocerebellar ataxia type 17 in the Yugoslav population. **Acta Neurol Scand.** 2004;109(3):185-7.
DOI: 10.1034/j.1600-0404.2003.00196.x
61. Čuljković B, Savić D, Stojković O, Romac S. Poly(A) tailing of ancient DNA: a method for reproducible microsatellite genotyping. **Anal Biochem.** 2003;318(1):124-31.
DOI: 10.1016/S0003-2697(03)00160-X
62. Svetel M, Đarmati A, Dragašević N, Savić D, Čuljkovic B, Romac S, Kostić VS. SCA2 and SCA3 mutations in young-onset dopa-responsive parkinsonism. **Eur J Neurol.** 2003;10(5):597.
DOI: 10.1046/j.1468- 1331.2003.00671.x
63. Rakočević-Stojanović V, Savić D, Romac S, Apostolski S. Genetic study of somatic mosaicism in a patient with myotonic dystrophy type 1: case report. **Acta Myol.** 2003;22(3):104-5.
PMID: 15088500
64. Rakočević-Stojanović V, Savić D, Pavlović S, Lavrnić D, Romac S, Apostolski S. Correlation between cardiac involvement and CTG repeat amplification in myotonic dystrophy type 1. **Acta Myol.** 2003;22(1):26-7.
65. Savić D, Rakočvić-Stojanović V, Keckarević D, Čuljković B, Stojković O, Mladenović J, Todorović S, Apostolski S, Romac S. 250 CTG repeats in DMPK is a threshold for correlation of expansion size and age at onset of juvenile-adult DM1. **Hum Mutat.** 2002;19(2):131-9.
DOI: 10.1002/humu.10027
66. Topisirović I, Dragašević N, Savić D, Ristić A, Keckarević M, Keckarević D, Čuljković B, Petrović I, Romac S, Kostić VS. Genetic and clinical analysis of spinocerebellar ataxia type 8 repeat expansion in Yugoslavia. **Clin Genet.** 2002;62(4):321-4.
DOI: 10.1034/j.1399-0004.2002.620412.x
67. Čuljković B, Stojković O, Vukosavić S, Savić D, Rakočević V, Apostolski S, Romac S. CTG repeat polymorphism in DMPK gene in healthy Yugoslav population. **Acta Neurol Scand.** 2002;105(1):55-8.
DOI: 10.1034/j.1600-0404.2002.00006.x
68. Rakočević-Stojanović V, Pavlović S, Lavrinić D, Trikić R, Savić D, Romac S, Dožić S, Apostolski S. Peripheral neuropathy in patients with myotonic dystrophy. **Acta Myol.** 2002;21:36-7.
Keckarević M, Savić D, Čuljković B, Zamurović N, Major T, Keckarević D, Todorović S, Romac S. Duchenne's and Becker's muscular dystrophy: analysis of phenotype-genotype correlation in 28 patients. **Srp Arh Celok Le*k.*** 2002;130(5-6):154-8**.**
DOI: 10.2298/sarh0206154k
69. Savić D, Topisirović I, Keckarević M, Keckarević D, Major T, Čuljković B, Stojković O, Rakočević-Stojanović V, Mladenović J, Todorović S, Apostolski S, Romac S. Is the 31 CAG repeat allele of the spinocerebellar ataxia 1 (SCA1) gene locus non-specifically associated with trinucleotide expansion diseases? **Psychiatr Genet.** 2001;11(4):201-5.
DOI: 10.1097/00041444-200112000-00004
70. Romac S, Čuljković B, Vukosavić S, Stojković O, Savić D, Keckarević D, Zamurović N, Major T,

Keckarević M, Topisirović I. Dynamic mutations as a cause of hereditary neurological and psychiatric diseases. **Yugoslav Med Biochem** (**J Med Biochem**). 2001;20(1):1-7.
71. Keckarević D, Čuljković B, Savić D, Stojković O, Kostić V, Vukosavić S, Romac S. The status of SCA1, MJD/SCA3, FRDA, DRPLA and MD triplet containing genes in patients with Huntington disease and healthy controls. **J Neurogenet.** 2000;14(4):257-63. DOI: 10.3109/01677060009084502
72. Čuljković B, Stojković O, Savić D, Zamurović N, Nešić M, Major T, Keckarević D, Romac S, Zamurović B, Vukosavić S. Comparison of the number of triplets in SCA1, MJD/SCA3, HD, SBMA, DRPLA, MD, FRAXA and FRDA genes in schizophrenic patients and a healthy population. **AmJMedGenetBNeuropsychiatrGenet.** 2000;96(6):884-7. DOI: 10.1002/1096-8628(20001204)96:6<884::AID-AJMG41>3.0.CO;2-M

Book chapters

73. Nikolić Z, Savić Pavićević D, Brajušković G. Genetic Association Studies on Prostate Cancer. In: Mohan R, editor. Prostate Cancer - Leading-edge Diagnostic Procedures and Treatments. Rijeka: In Tech; 2016. p. 145-77. ISBN 978-953-51-2644-7.
74. Savić Pavićević D, Ivković M, Karanović J, Brajušković G, Romac S. Retinoic acid inducible-1 gene (RAI1) and clinical subtypes of schizophrenia. New York: NOVA Science Publisher; 2012. 28 p. ISBN 978-1-61942-471-5.

Student's Book

75. Savić Pavićević D, Matić G. Molecular Biology 1. Beograd: NNK internacional; 2011. ISBN 978-86-6157-001-8. (in Serbian)