MIRJANA D. PAVLOVIC, MD, PhD

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SUMMARY

MD, PhD lecturer & researcher with expertise in: Bioengineering (Stem-cell Research, Experimental Immunology, Cellular Biology, Biochemistry, Clinical Hematology and Oncology), with certifications in stem cell and cord blood cell cryopreservation and apheresis (PBMNC) collection

EDUCATION

Degree	Institution	
PhD	University of Belgrade Medical School	Bi (Metaboli
MSc	University of Belgrade Medical School	Clinical Experime
MD	University of Belgrade Medical School	

POSTGRADUATE TRAINING

Training	Institution	Specialty
Within Inst.	Stem Cell Transplant Inst. *(FL, USA)*	Stem cell collection (apheresis) and cryopreservation
Within Inst.	Penn University School of Medicine *(PA)*	Antitumor Therapy
Fellowship	Yale University School of Medicine *(CT)*	Antitumor Therapy
Fellowship	Hammersmith Royal Hospital *(UK)*	Immunocytochemistry (light and electron microscopy)
Fellowship	ETH *(Swiss)*	Mitochondrial Transport and energy production
Fellowship	Belgrade School of Medicine	Internship, national board exam / license

AWARDS/HONORS

- International Genetically Engineered Machine Competition (iGEM) Bronze medalist
  Giant Jamboree (Boston, Massachusetts) *November 2017*
- STEM Middle School Program Development
  Broward Grant Awards for Bioengineering program development (Florida, USA)
- Teaching Grant
  Nirma University (Ahmedabad, India)
- Fellowship for Immunochemistry specialization: Hammersmith Hospital
  Republic Fund of Serbia for Science
- Best young Biochemist in Yugoslavia: Fellowship for ETH, specialty in Mitochondrial Transport
  Federal European Biochemistry Society (FEBS)
- Fellowship for young talents/MS
  Republic Fund of Serbia for Science/Serbian Academy for Art and Science

CORE ACCOMPLISHMENTS

- **Published over 130 peer-reviewed journal papers**; authored, co-authored, and edited five bioengineering textbooks, presented over 60 scientific abstracts worldwide, and guest presenter at many international conferences (abstracts published).
- **Extensive laboratory expertise** in immunology, stem cell application/therapy, cellular biology and bioengineering including cord blood and adult (peripheral) blood stem cell isolation and banking, purification and functional characterization of lupus anti-DNA catalytic antibodies, magnetic beads, microfluidics, cell culture work, etc.
- **National and International University teaching experience** in: Biochemistry, Tumor Growth Factors, Diffuse Neuroendocrine System, Autoimmunity, Bioengineering (Introduction to Bioengineering, Stem Cells Engineering, Tissue Engineering at FAU), Engineering Chemistry, & Nature: Intersections between science, engineering and humanities.
- **Designed Bioengineering graduate and undergraduate coursework and facilities** for laboratory technical components: Introduction to Bioengineering Course (2010), Tissue Engineering Course (2010), Stem Cell Engineering Course (2012) Nature course (2013-upgraded and re-designed) and Bioengineering Wet Labs for young talents.
- **Patent filed**: M. Pavlovic, M. Cavallo, A. Kats, J. Hartmann: Compositions, Methods and Kits for Analyzing Hydrolytic Antibodies and for Detecting, Predicting and Treating Hydrolytic Antibody-Related Diseases. Aad-6818-186, Provisional Application #P0082930, FAU, Filed: February 2011.

CURRENT PROFESSIONAL MEMEBERSHIPS

- International Editorial/Review Board MD Medical Data Journal, *2009-Present*
- International Advisory Board Scripta Medica, *2010-Present*
- International Review Board for Vojnosanitetski Pregled, *2014-Present*
- BIOMED Society, *2010-Present*

COURSE DESIGN & TEACHING

Experiential Learning Approach with teaching experience at five International Universities involving 25 courses from the fields of:

- Autoimmunity
- Stem Cell topics
- Carcinogenesis
- Oncogenes and Growth Factors
- Bioengineering
- Tissue Engineering
- Stem Cell Engineering
- Chemistry for Engineers
- Diffuse neuroendocrine System
- Mitochondrial Transport & Biochemistry
- Nature: Intersections with Science
- Engineering and Humanity

All of the above courses were self-designed.

GRANT PROPOSAL HISTORY

- Tech Fee (Part I & Part II) For Bioengineering Teaching: Wet Lab set-up
  AWARDED: $85,504,38
  ROLE: Principal Investigator (P.I)
- Biowebspin; International project for sponsoring ideas. Biowebspin SA (550,000 (CHF), Rues des Remparts 10, CH-1950, Sion, Switzerland
  NOT AWARDED
  ROLE: Principal Investigator (P.I)
- Co-P.I with Dr. Esiobu on OWL_GEMS project

Bronze medalist among 300 countries

At FAU (2002-2015) at least 30 grant proposals all in the fields of:

- Anti-DNA autoantibodies
- Autism
- Stem cell therapy
- Diabetes
- Antitumor therapy
- Health care
- Obesity
- STEM development program for Middle Schools in Broward.

PROFESSIONAL ACCOMPLISHMENTS

- While at FAU, developed and perpetuated four courses:
  - Bioengineering: Introduction to Bioengineering
  - Tissue Engineering and Stem Cells
  - Tissue Engineering (Postgraduate Level
  - Introduction to Bioengineering (High school)
- Co-founder of Stem Cell Cryopreservation Laboratory (SFBMSCTI) Boynton Beach, FL
- Co-Founder of Neuroscience Research Institute, Inc. (NRI) Laboratory for studying Autism (West Palm Beach, FL)
- Founder of Tissue Culture Laboratory (Institute for Molecular Biology and Endocrinology-Vinca-Belgrade)

MANAGEMENT & LEADERSHIP ROLES

- Held various positions related to research & teaching:
  - Scientist
  - Associate
  - Coordinator
  - Physician
  - Visting/ Research Professor
  - Adjunct Professor
- Directed and supervised the work of university students (undergraduate & graduate) and technicians
- Advisor to 5 honor students in their thesis in Lupus; in addition to being an Advisor/Consultant/Committee member for at least 27 DIS, 17 MS and 5 PhD students at FAU.
- Supervised students & technicians involved in a significant number of granted projects in relevant research fields on an academic level.
- Supervised numerous TA and RA activities on teaching and research avenues.
- Collaborated on research projects with other research groups at national (FAU, Yale and University of Penn) and international level (France/Serbia/Israel).

REASEARCH INTERESTS

- Immunology-Autoimmunity & Autoimmune Diseases: fundamental studies and clinical application
- Anti-DNA Autoantibodies & Immunotherapy Structure
- Function & Pathogenicity of Lupus anti-DNA Autoantibodies
- Stem Cell Research-Clinical Application
- Stem Cell Therapy
- Blood Banking
- Autism: molecular & clinical aspects of Autism & Asperger's Syndrome
- Mitochondrial Respiration Transport
- Bioenergetics & Mitochondrial diseases
- Nutrition and Metabolism (metabolic diseases, direct & metabolic effects of alcohol)
- Diffuse Neuro-Endocrine System (DNES): morphological & functional aspects
- Carcinogenesis
- Cancer Stem Cells
- Antitumor therapy aspects
- Bioengineering: Tissue Engineering
- Bio-electro-magnetism & Bio-Photonics.

PROFESSIONAL EXPERIANCE

- **Florida Atlantic University**
  Boca Raton, FL *2016-Present*
  Department of Computer Sciences and Engineering:
  Visiting instructor in Bioengineering

- **Florida Atlantic University**
  Boca Raton, FL *2009-2016*
  Department of Computer Sciences and Engineering:
  Research and Adjunct Professor in Bioengineering

- **Nirma University**
  Ahmadabad, India *2009*
  Lecturer: Genetic and Autoimmune Diseases/Stem Cells

- **Biomed of FAU**
  Boca Raton, FL *2007-2008*
  Consultant Immunology Laboratory
  Research Assistant Professor in Immunology

- **Bone Marrow/Stem Cell Transplant Institute**
  Boynton Beach FL *2002-2008*
  Research Physician-Stem Cell Research and Laboratory Coordinator

- **Florida Atlantic University**
  Boca Raton, FL *2001-2007*
  Charles E. Schmidt College of Science:
  Research Associate, Immunology Laboratory

- **Neuroscience Research Institute, Inc.**
  West Palm Beach, FL *1998-2000*
  Executive Research Director, Autism

- **University of Pennsylvania School of Medicine**
  Philadelphia, PA *1993-1997*
  Postdoctoral Research Associate II

- **Yale University School of Medicine**
  New Haven, CT *1990-1993*
  Visiting Scholar, Postdoctoral Associate I

- **Institute for Nuclear Sciences – Vinca**
  Belgrade, Yugoslavia *1988-1990*
  Laboratory for Molecular Biology & Endocrinology:
  Senior Research Scientist/Associate Professor

- **Institute for Medical Research**
  Belgrade, Yugoslavia *1980-1988*
  Department of Nutrition:
  Research Scientist & Assistant Professor

- **Institute of Biochemistry**
  Novi Sad, Yugoslavia *1977-1980*
  Medical Faculty, Assistant Research Professor

- **Institute for Medical Research & Clinical Hematology**
  Belgrade, Yugoslavia *1973-1977*
  Research Fellow

REASEARCH & DEVELOPMENTS

- Profound contribution to the development of the concept of LUPUS disease:
- Co-inventor for a new fluorescent method for continuous measurement of hydrolytic activity of anti-DNA Antibodies (2005)
- Developed innovative microfluidic Agilent 2100 (lab-on chip) method for determination/measurement of hydrolytic activity of anti-DNA antibodies
- Co-creator of design for magnetic beads for extraction of lupus anti-DNA antibody producing cells and lupus anti-DNA antibodies (Patent #P0082930, February 2011, FAU (Pavlovic: et al.,) Isolated and purified anti-ssDNA autoantibody from sera of the patients with SLE via SA–oligo-(dT) magnetic beads Determined basic conditions for maintenance of binding and hydrolytic activities of isolated anti-DNA antibodies
- Established quantitative ELISA system for determination of anti-ssDNA and anti-dsDNA antibodies
- Founder of the concept and the model on the molecular association of Parvovirus B19 and Lupus disease published In LUPUS: Established the hypothesis and model for association of Parvovirus B19 and SLE at molecular level
- **STEM CELLS:**
  - Applied and modified the original method for cryopreservation of human peripheral blood and bone marrow stem cells and introduced and modified the original Rubinstein's method for cord blood cell cryopreservation for clinical purposes.
  - Modified the method for cord blood preservation for research studies
  - Completed several scientific stem cell research projects in collaboration with research experts in Europe
  - Modified the method for isolation of aortic macrophages
- **METABOLISM/NUTRITION**:
  - Evaluated the role of glutamine transport and metabolism in rat kidney mitochondria
  - Identified the role of fatty acids in uncoupling effects within Ehrlich Ascites Tumor Cells
  - Developed protocols for high-dietary fiber diets in treatment of diabetic patients
  - Developed rat model for studying direct & metabolic alcohol effects in combination with different protein diets
  - Modified a broad spectrum of histochemical, immune-histochemical and electron microscopy methods
  - Identified and purified the autocrine growth factors in mouse melanoma model systems important for targeted antitumor therapy
- **CANCEROGENESIS**:
  - Characterized kinetic properties of a particular carrier for anti-folate drug 5, 10-DDATHF in human leukemia cells important for tumor chemotherapy
  - Developed animal models for tumor glucose-metabolism modification studies related to radiation therapy
  - Introduced assays for apoptosis
- **AUTISM SPECTRUM DISEASE**
  - Computer Interaction research project to determine patterns of patients with ASD, evaluate the efficacy of the computer interface methodological approach and develop a strategy for autism disorder

INVITED SPEAKER

INTERNATIONALLY:

- World Stem, Cell Summit, November, West Palm Beach, 2016 (3 poster presentations)
- International meeting on stem cells of the first category, Belgrade, Serbia:1. Cancer Stem Cell Therapy
  - 2. How to write the book, May 12-13, 2016
- International Meeting on Biophysics, Smolenice, Slovakia: Plenary Session: Stem Cells in Neuroscience, May 16-20, 2014
- Autoimmunity, 2014, March 16-20 Niece, France, Europe: Stem Cells in Acute Myocardial Infarction
- Serbian Diaspora Medical Conference (SDMC) May16-20, Belgrade, Serbia: Princess Katrine Karadjordjevic's Foundation: Stem cells News/Stem cell book promotion by Academician Professor Vladimir Kanjuh, 2013
- International Stem Cell Society Conference (STEMSO) 2013, Ft. Lauderdale, FL. February 2-6, 2013
- 8th World's Stem Cell Summit 2012, December 3-5, West Palm Beach, FL: Optimization of the stem cell source for intracoronary grafting post-acute myocardial infarction.
- 2012 STEM Summer Teacher's Academy: Developing Bioengineering Skills and Activities:
- Gene Therapy and Immunotherapy, Workshop. June 18-21, 2012
- DERMIKIND OPEN HOUSE (Dr. Natalia Hegedosh and Dr. Rajendra Gupta)
- How to bridge time: stem-cell application in aging. 2011
- NIRMA UNIVERSITY AND SCIENCE INSTITUTE, AHMEDABAD, INDIA:
- Hypoxia and Stem Cell Therapy for Myocardial Repair and Revascularization, Sept.24th, 2009
- CALIFORNIA PACIFIC MEDICAL CENTER-RESEARCH DEPARTMENT June 9th, 2000
  - Molecular Form and Kinetic Properties of the Phosphate Dependent Glutaminase (PDG)
  - And Transport of Glutamine in Mitochondria Isolated from Kidneys of Normal and Acidotic Rats
- UNIVERSITY OF NOVI SAD, DEPT. OF PEDIATRICS –YUGOSLAVIA, 1986
- Structure, Function and Pathology of Diffuse Neuroendocrine System: Electron Microscopy Study

LOCAL:

- From Pauling's Abzyme concept to the new era of hydrolytic anti-DNA autoantibodies: new horizons in the light of new data VGIT Workshop October 14, 2011
- Bio-Med: Immunology Journal Club Seminars: Anti-DNA antibodies: 2011

- What is the role of anti-DNA antibodies in Lupus?
- CENTER FOR COMPLEX SYSTEMS AND BRAIN SCIENCES Journal
- Discussion Club: NEUROBIOLOGY OF AUTISM SPECTRUM DISORDERS 2011
- The origin and theories of DNA 2011
- AUTISM: DIRECTIONS 201
- CENTER FOR COMPLEX SYSTEMS AND BRAIN SCIENCES
- -HBBL/Dr. Scott Kelso's Lab AUTISM DIRECTIONS (20 min within Dr. Shihong Huang's presentation on the PROJECT) 2011
- Dr. Nurgun Erdol's Classes:
  - Biosignal Processing: excitable tissues 201
- Dr. Grazyna Pajunen's Classes 2010
  - Stem-cell regenerative therapy
  - Regeneration, Degeneration and dedifferentiation
  - Biomagnetism
- Vice President of Research (By Invitation)
  - Hypoxia and Stem Cell Therapy for Myocardial Repair and Revascularization December 19, 2005
- BIOMED
  - Structure, Binding and Function of anti-DNA antibodies March 17, 2005

PUBLICATIONS

Journal Publications:

1. Sandhya, Sharma and M. **Pavlovic**: Synteny and its significance in evolution.

2. Drinkwater, M, **M. Pavlovic**: The Role of Iodine in Autism (In Process of Finalization for Submission)

3. Jordan, C, Chong. N., Ramee R Kang, K., **M. Pavlovic**: Fundamentals of Tissue Engineering: A mini review (In Process for Publication)

4. Jason Zeitler and Mirjana Pavlovic: Forensic Biomechanics –An In-depth Analysis of the Traffic Reconstruction Methods. Submitted to Forensic Science International

5. Rachel St. Clair, Michael Teti, **Mirjana Pavlovic**, William Hahn, Elan Barenholtz. Predicting Residues Involved in Anti-DNA Autoantibodies with Limited Neural Networks. **doi:** https://doi.org/10.1101/2020.08.06.240101

6. Bela Balint, Maria Vranes, Milena Todorovic, Zvezdana Lojpur; Dusan Vucetic; Elizabeta Ristanovic; **Mirjana Pavlovic**; Gordana Ostojic (2016) "Lifesaving-manner" by cell saver in an obstetric emergency - a developing country experience (Submitted to Transfusion and Apheresis Science)

7. Balint B, Ostojic G, **Pavlovic M**, Todorovic M: Improved cytoreductive potential of plateletapheresis in the treatment of thrombocythemia 2019: A single center study. Vojnosanitetski pregled. Military-medical and pharmaceutical review 76(00):42-42. DOI: 10.2298/VSP190219042B

8. Balint B, Balint-Todorovic M, Ostojic G, Vucetic D, Balint V, **Pavlovic M**: Apheretic cytoreduction-thrombocytodepletion – a critical review and our approaches/experience. ART, Vol 44,1-2, 2018, pp5-

9. Lagalante K, Todorovic-Balint M, **Pavlovic M**: Stem Cells used in dentistry-state of the art. ART, Vol 44, 1-2,2018, pp 23-

10. Rose R, Balint B, Todorovic-Balint M, **Pavlovic M**: The role of CRISPR/CAS9 technique in Bioengineering: ART ,44, 1-2, pp 45-

11. Rubin M, Balint V, Todorovic-Balint M, Radotic K**, Pavlovic M: F**unctional role of WUSCHEL in stem apical meristems.ART,44,1-2, pp 85-

12. Sandhya Sharma, Rachel Zhuang, Marisa Long, **Mirjana Pavlovic**, Yunqing Kang, Azhar Ilyas, Waseem Asghar: Circulating Tumor Cell Isolation, Culture, Downstream Molecular Analysis, and Clinical Relevance Ref. No.: JBA-D-17-00231. Biotechnology Advances

13. Balint B, Todorovic M, Ostojic G, Ljubenov M, Dusan Vucetic, Aleksandar Jevtic, Vanda Balint, **Mirjana Pavlovic**. Hematopoietic stem cells – from hemobiology to the extracorporeal manipulative viewpoints. Anest Reanim Transf. 2017; 43(1–2): 9–22.

14. Balint B, Stanojevic I, Todorovic M, Stamatovic D, **Pavlovic M,** Vojvodic D. Relative frequency of immature CD34+/CD90+ subset in peripheral blood following mobilization correlates narrowly and inversely with the absolute count of harvested stem cells in multiple myeloma patients. Vojnosanit Pregl 2017; 74(11): 1071–7.

15. Balint B, Todorovic M, Urosevic I, **Pavlovic M**. Stem cell transplant: from cell harvesting to cryopreservation. Med Pregl 2017; 70(Suppl 1): 41–45.

16. **Pavlovic M**, Kats A: NMR application for precise detection and distinction of anti-DNA hydrolytic activities. MOJ Auto Dis. 2017, 2(1): 00012.DOI: 1

17. **Pavlovic M,** Chatterjee S, Kats A, Nelakanta P: Parvovirus B19 and Autoantibodies reactive with ssDNA in lupus disease: Bioinformatics analysis and hypothesis. Moj Autoimmune Diseases 107,2,1:00010-00016

18. Coarsey, C, N. Esiobu, A.M. Roth, Narayanan R, **M. Pavlovic,** H. Shafiee, W. Asghar: Strategies in Ebola Diagnostics at the Point of Care: Role of Nanotechnology and Microfluidics.2017, 43(3) · 2017 DOI: 10.1080/1040841X.2017.1313814

19. Kats, Anna**, M. Pavlovic,** et al.: Comparison and Analysis of Different Methods for Purification of Autoimmune Antibody Reactive with Single Stranded DNA: A Pilot Study. MOJ Proteomics & Biomics 2017, 5,3:00161

20. Jevtic A, Todorovic M, Ostojic G, Vasilijić S, **Pavlovic M**, Balint B. Autologous transfusions for elective surgery – from existing approaches to upcoming challenges. Vojnosanit Pregl Vojnosanit Pregl 2017; 74(7): 676–680.

21. Joseph Levy, Bela Balint and **Mirjana Pavlovic**: (2017) What are positive results of stem cell therapies? Anest. Reanim. Transf. 2017; 43(1–2): 23–36.

22. Ran, Chen, **M. Pavlovic,** et. al.: Two-Step Magnetic Beads Based Modified Purification Method for Anti-DNA Autoantibody Reactive with Single Stranded DNA: A Pilot Study. MOJ Auto Dis 1(1): 00004. DOI: 10.15406/mojad.2016.01.00004

23. Dejolie A, Balint B, Todorovic M and **Pavlovic M:** Donor-less Organ Transplantation: Achievements and Challenges Bilt Transfuziol 2016;62(1-2):9-15

24. Jevtic A, Todorovic M, Ostojic G, Vasilijić S, **Pavlovic M**, Balint B. Autologous transfusions for elective surgery – from existing approaches to upcoming challenges. Vojnosanit Pregl 2016; DOI: 10.2298/VSP151218255J.

25. Lufft, Z, A. Kotlarchyk, **M. Pavlovic**: DNA Methylation in Cancer Stem cells: A Review. Bilt Transfuziol 2015;60 (1-2):27-36

26. Todorovic, M, **M. Pavlovic,** et. al.: Enhanced International Prognostic Index (NCCN-IPI), Charlson Comorbidity Index and absolute lymphocyte count as predictors for survival of elderly patients with diffuse large B cell lymphoma treated by immunochemotherapy. Neoplasma 2015 ;62(6):988-955578651

27. Neelakanta PS, S. Chatterjee**, Pavlovic**: A cohesive analysis of DNA/RNA sequences via entropy, energetics and spectral-domain methods to assess genomic features across single viral diversity. IJBRA 11(4): 281-307 (2015)

28. Gojkov, D, M. Todorovic-Balint, V. Kanjuh; D. Vucetic, **M. Pavlovic,** B. Balint: Extended platelet concentrate storage/practice-A model based on the rationalized microbial monitoring vs. pathogen inactivation. Accepted to TRASCI, Feb.2015, pp 1-3; doi: 10.1016/j.transci.2015.03.012

29. Balint, B, Todorovic-Balint M, Ljubenov M, O. Tarabar, **M. Pavlovic,** V. Kanjuh: Apheretic "rescue-protocol" designed for treatment of CLL associated life-threatening hemolytic crisis. Transfus Apher Sci. 52(2):256-8. 2015.
30. Schriber, K, B. Balint, **M. Pavlovic,** Anestezija, Reanimacija, Transfuzija (ART) Vol. 41 br. 1-2: 31-47. 2015

31. Tarakmi, Jennifer, Shimon Knutsen, John Mayfield, Susaye Small, Waseem Ashgar, B. Bela, **M. Pavlovic: "**Cancer Stem Cell Markers: Classification and their Significance in Cancer Stem Cell." Anestezija, Reanimacija, Transfuzija (ART) 41 br. No. 1-2 2015: 21-30.

32. Alhalabi B, Carry C, **M. Pavlovic,** Activity Analysis and Detection of Repetitive Motion in Autistic Patients. BIBE 2014: 430-437

33. **Pavlovic M**: AUTISM: BASICS. medici.com: 90-91.2015-2, 2015: 21-30.

34. Neelakanta, P., S. Chaterjee, **M. Pavlovic**: "A cohesive analysis of DNA/RNA sequences via entropy, energetics and spectral-domain methods to assess genomic features across single viral diversity" IJBRA 11(4):281 (2015) DOI: 10.1504/IJBRA.2015.070113

35. Bela Balint, Miodrag Vucic, Milena Todorovic, Ana Antic, Zoran Stanojkovic, Jelena Vucic, **Mirjana Pavlovic**, Dusan Vucetic: "Radically reduced ex vivo cell activation by using "in-line" filtered whole blood as a source of platelet concentrate." *Transfus* 12, no. 3 (2014): 440-2.

36. Balint B and **M. Pavlovic: "**Ibuprofen induced extensive toxic epidermal necrolysis-single center experience with multidisciplinary therapeutic approach." *Blood Transfus.* 12, no. 3 (Jul 2014): 438–439.

37. Balint, B., D. Gazivoda, M. Todorovic-Balint, Z. Lazic, **M. Pavlovic,** V., Kanjuh: ""Triple-way" approach for the treatment of dry socket: surgery and drugs plus fibrin sealant – as a biomatrix for "ultra-concentrated" platelets." *Transf Apher Sci* 51 (2014): 221–2.

38. **Pavlovic, M.**: "Very Small Embryonic Like Cells (VSELs): Pros and Cons: Review and perspectives in the light of critical data and controversies (2014) ART,41,1-2,2014, 39-48.

39. Mayfield, J., **M. Pavlovic: "**A Concept of Cancer Stem Cells: The Current Understanding and a Look Ahead." ART 41, no. 1-2 (2014):49-60.

40. Balint, B., D. Jovicic, M. Todorovic, V. Subota, M. Pavlovic, R. Goodrich: "Plasma constituent integrity in pre–storage vs. post–storage riboflavin and UV–light treatment – a comparative study." *Transf Apher Sci*; 49 (2013): 434–9.

41. **Pavlovic, M.,** B. Balint, M. Todorovic-Balint: "Stem Cell Concept: Entity or Function?" (editorial). *Bilt Transfuziol*, 59, no. 1-2 (2013): 5-8.

42. Balint, B, D. Jovicic-Gojkov, M. Todorovic-Balint, V. Subota, **M. Pavlovic**, R. Goodrich: "Plasma constituent integrity in pre-storage vs. post-storage riboflavin and UV-light treatment-A comparative study." *Transfus Apher Sci.* 2013 Jun 29. doi: S1473-0502(13)00200-0. 10.1016/j.transci.2013.05.035. [Epub ahead of print] PMID: 23820430 [PubMed-as supplied by publisher]

43. Cavallo, M.F., A.M. Kats, R. Chen, J.X. Hartmann, **M. Pavlovic**: "A novel method for real-time, continuous, fluorescence-based analysis of anti-DNA abzyme activity in Systemic Lupus." Special Issue, Systemic Lupus Erythematosus, Autoimmune Disease. 2012; 2012:814048. doi: 10.1155/2012/814048. Epub: Dec 5, 2012

44. Gerstel, I., A. Kats, **M. Pavlovic:** "A Review of the Applications of Microfluidics in Tissue Engineering Research." MD-Medical Data, 4, no. 3 (2012): 273-279.

45. Moorhouse, R., T. Manville, **M. Pavlovic**: "The role of Context in the Visual Identification of Objects." MD-Medical Data 4, no. 2 (2012): 191-198

46. Stanojkovic, Z., B. Balint, A. Antic, M. Todorovic, **M. Pavlovic**: "Clinical efficacy of riboflavin and ultraviolet light inactivated fresh frozen plasma evaluated with INR-quantification." *Trans. Afer. Sci.* 47, no 1 (2012): 33–37.

47. Koltarchyk, A., T. Koshgaftaar, **M. Pavlovic,** H. Zhuang, A. Pandya: "Identification of MicroRNA Biomarkers for Cancer by Combining Multiple Feature Selection Techniques." *J Comp Meth Sci Eng (JCMSE)* 11, no. 5 (2011): 283-298.

48. Balint, B., D. Stamatovic, M. Todorovic, M. Elez, D. Vojvodic, **M. Pavlovic,** M.l. Cucuz-Jokic: "Autologous Transplant in Aplastic Anemia: A case report. Quantity of CD34+/CD 90+ subsets as the predictor of clinical outcome." *Trans. Afer. Sci.* 45, no. 2 (2011): 137-41.

49. Balint, B., **M. Pavlovic,** M. Todorovic: "Recent Strategies versus Challenges in Stem-Cell –Based Grafting: From Innovative Research to Clinical Practice." *Bilt Transfuziol* 57, no. 1-2 (2011): 9-25.

50. **Pavlovic, M.,** M. Cavallo, A. Kats, A. Kotlarchyk, H. Zhuang and Y. Shoenfeld: "From Pauling's Abzyme Concept to the New era of Hydrolytic Anti-DNA autoatnibodies: A link to the rational vaccine design?" (special Issue) *IJBRA* 7, no. 3 (2011): 220-238.

51. Morales, G., H. Zhuang, **M. Pavlovic**: "Modeling N-Node Myelinated Neuron Axon with System Identification Approach." *MD Medical Data* 3, no. 2 (2011): 19-126.

52. Neelakanta, P., **M. Pavlovic,** H. Zhuang: "It is imperative that therapeutic options in modern medical science emphasis on strategies. Introduction." *International Journal of Bioinformatics Research and Applications IJBRA)* 7, no. 3 (01/2011): 217-9.

53. *Neelakanta, P.S., S. Chatterjee,* **M. Pavlovic,** *A. Pandya, D. de Groff****: "****Fuzzy splicing in precursor-mRNA* sequences: prediction of aberrant splice-junctions in viral DNA context*." J. Biomed. Sci. Eng.* 4 (2011): 270-279.

54. **Pavlovic M.,** A. Kats, M. Cavallo, R. Chen, Y. Shoenfeld and J.X. Hartmann: "Epiphenomenal and pathogenic Anti-DNA antibodies: Structure, Binding, Function, and Pathogenicity." *Autoimmune Diseases, SAGE-Hindawi Access to ResearchAutoimmune Diseases*, Article ID 462841, 18 pages, doi:10.4061/2010/462841

55. Danesh, A. A., E. Cocchiola, & **M. Pavlovic**: "Clinical Update: Hearing Loss and Advancements in Cochlear Hair Cell Regeneration." *Med. Data Review* 2, no. 1 (2010): 25-28.

56. **Pavlovic, M.,** A. Kats, M. Cavallo, Y. Shoenfeld: "Clinical and molecular evidence for association of SLE with parvovirus B19." *LUPUS* 19, no. 7 (2010): 783-792.

57. Balint, B., **M. Pavlovic,** et. al.: "The use of simplified ex vivo immunoadsorption and 'multi-manner' apheresis in ABO/H-mismatched kidney transplant setting phase II clinical study. *Transf. Apher. Science* 43, no. 2 (2010): 141-8.

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