

## CURRICULUM VITAE

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### SUMMARY

Nine years of experience in pharmaceutical research in the field of anti-infectives on various compound classes and projects. Employed in PLIVA Research and development since 1999. For the purpose of increasing the knowledge and expertise in the field of bacteriology and molecular epidemiology I also did one year internship (2001-2002) in Hershey Medical Center, Penn State College of Medicine working with Prof. P.C. Appelbaum, the leading authority in the field of new anti-infective agents for infections caused by respiratory and anaerobic bacterial pathogens. Within PLIVA - Research Institute actively involved in research in microbiology, biochemistry and molecular biology for the purpose of developing new anti-infective agents. Since the beginning of 2006 worked as project leader in the GSK Research Centre Zagreb in the area of drug discovery of new antimalarial drugs. The project included the collaboration with US Army, Medicines for Malaria Venture and different parts of GSK organisation. Since 2009 employed at School of Medicine as scientific associate. Currently working as a team member of on-going projects: FP7 OSTEOGROW (involved in pre-clinical testing, toxicology evaluation and regulatory affairs for development of new device for bone regeneration) and NSF project Minute for IBD (involved in analysis of gut microbiota by next-generation sequencing). Total scientific output: 16 published CC papers (1 review article), 2 papers in national journals, Citations: 222, h-index 9 (Scopus). Corresponding author on 4 papers, 1st author on 7 papers; 2nd author on 2 papers; 1 patent; 3 invited lectures, 9 meeting communications.

### PROFESSIONAL EXPERIENCE:

**2009-** Research associate, Center for translational and clinical research, University of Zagreb School of medicine (UZSM).

**2006-2008** Project leader, project New antimalarial macrolides, performed in collaboration with Walter Reed Army Institute of Research, Washington D.C. and Medicines for Malaria Venture, Geneva, Switzerland

**2001-2002** Internship in the research laboratory of Dr. Peter C. Appelbaum Professor of Pathology and Director of Clinical Microbiology at The Milton S. Hershey Medical Center, Penn State College of Medicine (1 year), training in molecular epidemiology, molecular biology and clinical microbiology

**1999 -2006** Researcher microbiologist, PLIVA R&D, Zagreb. Actively involved in microbiology, biochemistry and molecular biology research for the purpose of developing new anti-infective and anti-inflammatory agents

**1998** Assistant, Laboratory for plan tissue culture, PMF SUZ and Laboratory for plant molecular biology, Ruđer Bošković Institute, Zagreb.

## EDUCATION

**1992-1997** Undergraduate studies, University of Zagreb, Faculty of Science (UZFS)

**1999-2006** Graduate school with major in molecular and cell biology, UZFS, Ph. D. thesis entitled "Influence of efflux and ribosomal mutations on *Haemophilus influenzae* sensitivity to macrolide antibiotics"

## SCHOLARSHIPS AND AWARDS

**1995** Plant tissue culture training (one month), Forest University, Sofia, Bulgaria

**1997** Practical course in Transformation Methods in Transgenic Plants (two weeks)

**2007** GSK - Silver Science Award

**2011** Award for scientific productivity – MEF SUZ

## TEACHING

**2011–2014** „Biologically active components in food“, MEF SUZ

**2014** „P4 in medicine“, MEF SUZ

## REFERENCES:

International peer-reviewed publications:

1. Mihaljević S, **Perić M**, Jelaska S. The sensitivity of embryogenic tissue of *Picea omorika* (Panč.) Purk. to antibiotics. *Plant Cell, Tissue and Organ Culture*, 2001; 67(3): 287-293, (IF 2,612; cit: 7; **Q1** 47/196 in Plant sciences)
2. Clark C, Bozdogan B, **Perić M**, Dewasse B, Jacobs MR, Appelbaum PC. In vitro selection of resistance in *Haemophilus influenzae* by amoxicillin-clavulanate, cefpodoxime, cefprozil, azithromycin, and clarithromycin. *Antimicrob Agents Chemother*. 2002 Sep;46(9):2956-62. (IF 4,215; cit: 25; **Q1** 27/254 in Pharmacology & Pharmacy)
3. **Perić M**, Lin G, Clark CL, Jacobs MR, Appelbaum PC. Antipneumococcal activity of AZD2563, a new oxazolidinone, compared with nine other agents. *J Antimicrob Chemother*, 2002; 50(1): 95-100. (IF 5,439; cit: 7; **Q1** 17/254 in Pharmacology & Pharmacy)
4. **Perić M**, Browne FA, Jacobs MR, Appelbaum PC. Activity of nine oral agents against gram-positive and gram-negative bacteria encountered in community-acquired infections: use of pharmacokinetic/pharmacodynamic breakpoints in the comparative assessment of beta-lactam and macrolide antimicrobial agents. *Clin Ther*, 2003; 25(1):169-77. (IF 2,586; cit: 19; **Q2** 105/254 in Pharmacology & Pharmacy)
5. **Perić M**, Bozdogan B, Jacobs MR, Appelbaum PC. Effects of an efflux mechanism and ribosomal mutations on macrolide susceptibility of *Haemophilus influenzae* clinical isolates. *Antimicrob Agents Chemother*, 2003; 47(3):1017-22 (IF 4,246; cit: 77; **Q1** 27/254 in Pharmacology & Pharmacy)
6. **Perić M**, Jacobs MR, Appelbaum PC. Antianaerobic activity of a novel fluoroquinolone, WCK 771, compared to those of nine other agents. *Antimicrob Agents Chemother*, 2004; 48(8):3188-92. (IF 4,216; cit: 9; **Q1** 27/254 in Pharmacology & Pharmacy)
7. **Perić M**, Bozdogan B, Galderisi C, Krissinger D, Rager T, Appelbaum PC. Inability of L22 ribosomal protein alteration to increase macrolide MICs in the absence of efflux mechanism in *Haemophilus influenzae* HMC-S. *J Antimicrob Chemother*, 2004; 54(2):393-400 (IF 3,611; cit: 17; **Q1** 17/254 in Pharmacology & Pharmacy)
8. Ceric H, Sindler-Kulyk M, Kovacevic M, **Perić M**, Zivkovic A. Azetidinone-isothiazolidinones: stereoselective synthesis and antibacterial evaluation of new monocyclic beta-lactams. *Bioorg Med Chem*. 2010; 1;18(9):3053-8. (IF 2,951; cit: 17; **Q2** 135/291 in Biochemistry & Molecular Biology)

9. Bukvić Krajačić M, **Perić M\***, Smith KS, Ivezić Schönfeld Z, Žiher D, Fajdetic A, Kujundžić N, Schönfeld W, Landek G, Padovan J, Jelić D, Ager A, Milhous WK, Ellis W, Spaventi R, Ohrt C. Synthesis, Structure-Activity Relationship, and Antimalarial Activity of Ureas and Thioureas of 15-Membered Azalides. *J Med Chem*, 2011; 54:3595-605. (IF 5,480; cit: 11; **Q1** 3/58 in Chemistry, Medicinal)
10. **Perić M\***, Fajdetic A, Rupčić R, Alihodžić S, Žiher D, Bukvić Krajačić M, Smith KS, Ivezić-Schönfeld Z, Padovan J, Landek G, Jelić D, Hutinec A, Mesić M, Ager A, Ellis W, Milhous W, Ohrt C, Spaventi R. Antimalarial Activity of 9a-N Substituted 15-Membered Azalides with Improved In Vitro and In Vivo Activity over Azithromycin. *J Med Chem*; 2012; 55:1389-401. (IF 5,480; cit: 9; **Q1** 3/58 in Chemistry, Medicinal)
11. Starcevic K, Pesic D, Toplak A, Landek G, Alihodzic S, Herreros E, Ferrer S, Spaventi R, **Peric M\***. Novel hybrid molecules based on 15-membered azalide as potential antimalarial agents. *Eur J Med Chem*, 2012, 49:365-78. (IF 3,432; cit: 11; **Q1** 13/58 in Chemistry, Medicinal)
12. Pesic D, Starcevic K, Toplak A, Jelic D, Herreros E, Alihodzic S, Spaventi R, **Peric M\***. Design, synthesis and in vitro activity of novel 2'-O-substituted-9-deoxy-9a-methyl-9a-aza-9a-homoerythromycin A derivatives. *J Med Chem*, 2012, 55(7):3216-27. (IF 5,480; cit: 6; **Q1** 3/58 in Chemistry, Medicinal)
13. Verbanac D, Jain SC, Jain N, Chand M, Čipčić Paljetak H, Matijašić M, **Perić M**, Štepanić V, Sasso L. An efficient and convenient microwave-assisted chemical synthesis of (thio)xanthenes with additional in vitro and in silico characterization. *Bioorganic Med Chem*, 2012, 20:3180-3185. (IF 2,978; cit: 6; **Q2** 135/291 in Biochemistry & Molecular Biology)
14. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, **Peric M**, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop*. 2014, 38(3):635-47. (IF 2,091; cit: 0; **Q2** 22/67 in Orthopedics)
15. **Peric M\***, Dumic-Cule I, Grcevic D, Matijasic M, Verbanac D, Paul R, Grgurevic L, Trkulja V, Bagi CM, Vukicevic S. The rational use of animal models in the evaluation of novel bone regenerative therapies. *Bone*, 2014 doi: 10.1016/j.bone.2014.07.010. (IF 4,461; cit: 0; **Q1** 26/123 in Endocrinology and Metabolism)

Croatian peer-reviewed publications:

16. Parish J, Perić M, Čipčić-Paljetak H, Matijašić M, Verbanac D. Translating the Mediterranean diet. *Period Biol*. 2011; Oct 113(3): 303-10. (IF 0,180; cit: 1 (0); **Q4** 81/83 in Biology)
17. Perić M, Čipčić Paljetak H, Matijašić M, Verbanac D. Debljina, mikrobiote i imunomodulacija. *Infectol Glasn*, 2011; 31(1): 49-58.

Communications in international conferences:

1. M. Peric, C.L. Clark, G. Lin, M.R. Jacobs, P.C. Appelbaum. Antipneumococcal activity of AZD2563, a new oxazolidinone, compared with seven other agents. 41st ICAAC Abstracts, ASM, September and December 2001, Chicago, p.224
2. B. Bozdogan, C. Clark, M. Peric, P.C. Appelbaum. Combination of efflux and ribosomal mutations in *Haemophilus influenzae* mutants resistant to macrolides selected *in vitro*. 41st ICAAC Abstracts, ASM, September and December 2001, Chicago, p.102
3. M. Peric, B. Bozdogan, C. Clark, P.C. Appelbaum. Loss of efflux mechanism is the cause of macrolide hyper-susceptibility in the *H. influenzae* HMC 2001-1. 1st Croatian Congress on Molecular Sciences, June 9-13, 2002, Opatija, p.131
4. P.C. Appelbaum, M. Petel, S. Gupte, N. De Souza, H. Khorakiwala, M. Jacobs, M. Peric. Anti-anaerobic activity of two new quinolones, WCK 771A And WCK 919, compared with nine other agents. 42nd ICAAC Abstracts, ASM, September 27-30, 2002, San Diego, CA, p.187
5. B. Bozdogan, M. Peric, M.R. Jacobs, P.C. Appelbaum. Macrolide hyper-susceptibility is associated with the absence of efflux mechanism in clinical isolates of *H. influenzae*. 42nd ICAAC Abstracts, ASM, September 27-30, 2002, San Diego, CA, p.76

6. M. Peric, B. Bozdogan, M.R. Jacobs, P.C. Appelbaum. Mechanisms of macrolide resistance in clinical isolates of *Haemophilus influenzae* with higher macrolide MICs than baseline strains from Alexander Project (1997-2000). 42nd ICAAC Abstracts, ASM, September 27-30, 2002, San Diego, CA, p.76
7. Mario Matijašić, Hana Čipčić Paljetak, Mihaela Perić and Donatella Verbanac. Relevance of Quorum Sensing and Bacterial Biofilm Formation in Health and Disease; Central European Symposium on Antimicrobial Resistance, Zadar, Sep 23-26, 2009.
8. Perić M, Matijašić M, Čipčić Paljetak H, Verbanac D. *In vitro* study of host-microbe interaction: co-culture of *P. aeruginosa* and human cell lines. John Innes/Rudjer Bošković Summer School in Applied Molecular Microbiology "Microbial Metabolites: Signals to Drugs" August 21-29, 2010, Dubrovnik
9. Čipčić Paljetak H, Banjanac M, Ergović G, Perić M, Padovan J, Dominis-Kramarić M, Kelnerić Ž, Verbanac D, Holmes D, Eraković Haber V. Macrolones – novel class of macrolide antibiotics active against key resistant respiratory pathogens. Interscience Conference on Antimicrobial Agents and Chemotherapy - ICAAC2013. Denver, CO, SAD, Sep 10-13, 2013.

Invited presentations in international conferences:

1. Perić M. *H. influenzae*: naturally sensitive or resistant to macrolides?, lecture, VI. Croatian symposium on bacterial antibiotic resistance, March 3-4, 2003, Zagreb, Croatia

Invited presentations in national conferences:

1. Perić M, Čipčić Paljetak H, Matijašić M, Verbanac D. Debljina, mikrobiote i imunomodulacija. Terapeutici kao imunomodulatori u infektivnim bolestima, 2011, Zagreb, Hrvatska.
2. Perić M, Grgurevic L, Vukičević S. Toksikološko testiranje BMP6. 7. hrvatski kongres o osteoporozi, 2013, Opatija, Hrvatska.
3. Verbanac D, Matijašić M, Čipčić Paljetak H, **Perić M**, Stepanić V. Kako odrediti antioksidativni učinak sintetskih i prirodnih spojeva? inPharma Antioksidansi ; Knjiga sažetaka, Batinica, Branimir; Pollak, Lea; Krznarić, Željko; Vranešić Bender, Darija (ur.). Zagreb : Kreativna kancelarija d.o.o., 2013. 13-14
4. Verbanac D, **Perić M**, Čipčić Paljetak H, Matijašić M. (plenarno predavanje) Mikrobiota u zdravlju i bolesti; FARMEBS 2014; 24.5.2014.

Patents:

1. Alihodzic S; **Peric M**, Pesic D. 9-deoxo-9a-methyl-9a-aza-9a-homoerythromycin A derivatives and their use for the treatment of malaria. 2009, WO09016142.