Dr Ivanka Jerić

Personal information

Born September 30, 1970, Zagreb, Croatia; maiden name Žigrović; married, one child (2003).

Education

2000 - PhD in chemistry/organic chemistry at the Faculty of Natural Sciences, University of Zagreb; Ruđer Bošković Institute

1997 - M. Sc in chemistry/organic chemistry at the Faculty of Natural Sciences, University of Zagreb; Ruđer Bošković Institute

1994 - B. Sc. degree in chemistry at the Faculty of Natural Sciences, University of Zagreb

Current position

2017 – Senior Scientist (equivalent to Full professor), Ruđer Bošković Institute, Division of Organic Chemistry and Biochemistry

2016 – Head of the Laboratory for Biomimetic Chemistry, Division of Organic Chemistry and Biochemistry, Ruđer Bošković Institute

Previous positions

2011-2017: Senior Research Associate, Ruđer Bošković Institute, Division of Organic Chemistry and Biochemistry. Work field: organic chemistry, synthesis and characterization of peptidomimetics

2002-2011: Research Associate, Ruđer Bošković Institute, Division of Organic Chemistry and Biochemistry. Work field: organic chemistry, synthesis and characterization of peptidomimetics

2000-2002: Senior Assistant - Scientific Novice, Ruđer Bošković Institute, Division of Organic Chemistry and Biochemistry. Work field: organic chemistry, synthesis and characterization of peptidomimetics

1997-2000: Assistant- Scientific Novice - Ruđer Bošković Institute, Division of Organic Chemistry and Biochemistry. Work field: organic chemistry, synthesis and characterization (NMR spectroscopy and mass spectrometry) of peptides and glycopeptides

1994-1997: Young Assistant- Scientific Novice - Ruđer Bošković Institute, Division of Organic Chemistry and Biochemistry. Work field: organic chemistry, synthesis and characterization of peptides and glycopeptides

Professional activities and duties

2018- – Assistant Director

2016-2018 – Assistant Director for structural projects

2012 – Coordinator of the RBI Steering committee for structural funds (2012): Dr Jerić coordinates the preparation of Institute's key infrastructural project "Open scientific infrastructural platforms for innovative applications in economy and society "(O-ZIP) to be financed by the European Regional Development Fund (ERDF).

2009 – 2011 Member of the RBI Committee for evaluation and reorganization: initiated by the RBI Director and aimed to help RBI transformation into scientifically more prominent and coherent institute.

2008 – 2013 Treasurer of the Croatian Chemical Society
2010. Coordinator of the Organizing Committee of RBI "Open days"

2007-2009 Organizer of the Division OCB seminars

Fellowships and awards

2015. RBI Special award for outstanding contribution and excellent results
2014. Golden Award for patent at the 12th International Innovation Exhibition
2012. RBI Annual Award for granted patent.
2010. RBI Annual Award for paper published in journal with high impact factor.
2001. Krka Prize Winner (International award given by pharmaceutical company Krka, Novo Mesto, Slovenia)
2001 University of Science and Technology, Department of Organic Chemistry and Biochemistry, Hong Kong, China
1995 Utrecht Institute for Pharmaceutical Sciences, Department for Medicinal Chemistry, Utrecht, The Netherlands

Supervision of doctoral and postdoctoral students

Currently supervising 2 PhD students (Ivana Colić and Ivona Banović).
Supervisor of **4 completed PhD thesis**:

2016-2020: Mladena Glavaš (Enediyne compounds in multicomponent reactions)

2011-2018: Lidija Brkljačić (Synthesis and evaluation of peptide-based hydrazines for derivatization of carbonyl compounds; development of HPLC-MS/MS method)
2012-2016 Josipa Suć (Synthesis of peptidomimetics comprising hydrazino derivatives of amino acids)
2005-2010 Matija Grdičak (Synthesis and reactivity of amino acid-derived enediynes)

Dr Jerić was supervisor of **9 B.Sc. Theses** in period 2004-2016.

Teaching activities

2010-: Organic chemistry. Postgraduate PhD Study in Organic Chemistry (University of Zagreb). Course (elective): Synthesis of peptides/proteins and their conjugates
2011-: Organic chemistry. International PhD Study in Medicinal Chemistry (organized by RBI, University of Rijeka and Fidelta Zagreb). Course (mandatory): Methods in peptide, carbohydrate and nucleoside synthesis. Course (elective): Synthesis of peptides/proteins and their conjugates

Organization of scientific meetings

2003, September 10–15: 13th European Symposium on Organic Chemistry (ESOC 2003), Cavtat, Croatia. Dr. Jerić was a member of the Organizing Committee. The symposium has brought together more than 400 participants; 13 plenary lectures, 23 invited lectures and 46 oral presentations, 251 poster presentations.
2014, April 7-9: The InnoMol Proteomics Workshop, Zagreb, Croatia. Dr. Jerić was Coordinator of the Organizing Committee. 3-Days workshop; 82 participants, 11 lectures and hands-on session.
2014, October 22-24: The InnoMol Bioimaging Workshop,. Zagreb, Croatia. Dr. Jerić was Coordinator of the Organizing Committee. 3-Days workshop; 120 participants, 9 lectures and hands-on session.

2015, April 26-29: 3rd Croatian Microscopy Congress, Zadar, Croatia. Dr. Jerić was Coordinator of the Organizing Committee. 4 Days conference; 94 participants, 32 lectures.
2015, June 1-3: The InnoMol Molecular Interactions Workshop, Zagreb, Croatia. Dr. Jerić was Coordinator of the Organizing Committee. 3-Days workshop; 87 participants, 8 lectures and hands-on session.
2015, November 16-18: The InnoMol Genomics & Bioinformatics Workshop, Zagreb, Croatia. Dr. Jerić was Coordinator of the Organizing Committee. 3-Days workshop; 93 participants, 11 lectures and hands-on session.
2016, May 11-12: New Platforms for Molecular Solutions in Research and Development. Dr. Jerić was Coordinator of the Organizing Committee. 2-Days workshop; 106 participants, 22 lectures
2016, April 24-28: The 'Game of Epigenomics' Conference, Dubrovnik, Croatia. Dr. Jerić was Coordinator of the Organizing Committee. 5-Days workshop; 98 participants, 34 lectures.
2017, June 25-28: Xth Joint Meeting of Medicinal Chemistry, Dubrovnik, Croatia. Dr. Jerić was member of the Organizing Committee.

Memberships

Member of the American Chemical Society: *scientific association (2018-)*
Member of the European Peptide Society: *scientific association (1998-)*
Member of the Croatian Chemical Society: *scientific association (1998-)*

Additional trainings

RER/0/031 Regional Workshop on Communication the Relevance of Research and Development for Stakeholders' Priorities, 29. 3.-1. 4. 2011. Vienna, Austria
Innovation and Entrepreneurship Workshop, 8. 3. 2012. Zagreb, Croatia (Presenter: Dr Lisa Cowey MBA PG Cert IP T3I Oxford UK)

Projects

2016-2017 CRO-AUT bilateral project: "Expanding the chemical space by glycomimetic structures" (PI)

2015-2019 HRZZ project: "The assembly of peptidomimetics by multicomponent reactions" (PI)

2013-2016 FP7- REGPOT-2012-2013-1 project: "Enhancement of the Innovation Potential in SEE through new Molecular Solutions in Research and Development", WP leader; (Coordinator Dr. Oliver Vugrek)

2013-2015 HRZZ project " Nonlinear sparse component analysis with applications in chemometrics and pathology", associate (PI Dr. Ivica Kopriva)

2007- MSES project "Chemical modifications of natural compounds", associate; (PI Dr. Lidija Varga Defterdarović (Dr. Štefica Horvat))

2002-2006, MSES project "Design and synthesis of biologically active peptides, glycopeptides and biomarkers", associate; (PI Dr. Štefica Horvat)

1996-2002, MSES project "Development of receptor-selective analogs of bioactive peptides", associate (PI Dr. Štefica Horvat)

1994-1996 MSES project "Synthesis and properties of bioactive glycoconjugates", associate; (PI Dr. Štefica Horvat)

MSES = Ministry of Science, Education and Sports
HRZZ = Croatian Science Foundation

Invited talks

2019: “How to mimic Nature” Summer School of Science, Požega, Croatia

2017: “Multicomponent approach to natural product-like compounds” *XXV. Croatian Meeting of Chemists and Chemical Engineers.* Poreč, Croatia

2016: “Tailoring peptidomimetics for different functions” *22. Slovenian chemical days*, Ljubljana, Slovenia

2016: „Functional Peptidomimetics: From Catalysis to Interactions with Biomolecules“ Shanghai Institute of Organic Chemistry, Shanghai, China

2009: “Application of HPLC-MS in biotechnology research” *1st International Symposium of Biotech Students,* Zagreb, Croatia

2007: “Enediyne peptidomimetics” *XX. Croatian Meeting of Chemists and Chemical Engineers.* Zagreb, Croatia

2001: “Glycopeptide mimetics as "puzzles" in understanding the biological phenomena” *XXXI.* Krka Prize*. XI. International symposium.* Novo mesto, Slovenia

Selected publication (in last 10 years)

1. J. Suć Sajko, V. Ljoljić Bilić, I. Kosalec, **I. Jerić***, Multicomponent approach to a library of N-substituted γ-lactams. *ACS Comb. Sci.* **21** (2019) 28-34.
2. K. Vlahoviček-Kahlina, J. Suć Sajko**, I. Jerić***, C-Linked Glycomimetic Libraries Accessed by the Passerini Reaction. *Int. J. Mol. Sci.* **2019**, *20*, 6236.
3. K. Vlahoviček-Kahlina, M. Vazdar, A. Jakas, V. Smrečki, **I. Jerić***, Synthesis of glycomimetics by diastereoselective Passerini reaction. *J. Org. Chem*. **83** (2018) 13146-13156.
4. M. Glavaš, M. Gredičak, **I. Jerić***, Enediyne-comprising amino aldehydes in the Passerini reaction*. ACS Comb. Sci.* **20** (2018) 151-155.
5. J. Suć, D. Barić, **I. Jerić** (2016) Multicomponent synthesis of hydrazino depsipeptides. *RSC Adv*. **6** 99664**-**99675
6. J. Suć, L.-M. Tumir, Lj. Glavaš-Obrovac, M. Jukić, I. Piantanida, **I. Jerić** (2016) Impact of α-hydrazino acids embedded in short fluorescent peptides on peptide interaction with DNA and RNA. *Org. Biomol. Chem.* **14** 4865**-**4874

7. M. Grdičak, N. Bregović, D. Carić, **I. Jerić** (2012) Amino acid-based tweezers: the role of turn-like conformation in the binding of copper(II). *J. Inorg. Biochem.* **116** 45-52.
8. M. Grdičak, M. Abramić, **I. Jerić** (2012) Cyclic enediyne-amino acid chimeras as new Aminopeptidase N inhibitors. *Amino Acids* **43** 2087-2100.
9. A. Radman, M. Grdičak, I. Kopriva, **I. Jerić** (2011) Predicting antitumor activity of peptides by consensus of regression models trained on a small data sample. *Int. J. Mol. Sci.* **12** 8415-8430.
10. M. Grdičak, I. Matanović, B. Zimmermann, **I. Jerić** (2010) Bergman cyclization of acyclic amino acid-derived enediynes leads to the formation of 2,3-dihydro-benzo[*f*]isoindoles. *J. Org. Chem.* **75** 6219-6228

Patent:

Kopriva, **I. Jerić** Method of and system for blind extraction of more pure components than mixtures in 1D and 2D NMR spectroscopy and mass spectrometry by means of combined sparse component analysis and detection of single component points (US 8,165,373 B2).