europass



Sandra Sobocanec

Date of birth: 30/05/1975 | **Nationality:** Croatian | **Phone number:** (+385) 14561082 (Work) |

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https://www.irb.hr/eng/About-RBI/People/Sandra-Sobocanec |

Address: 10090, Zagreb, Croatia (Home)

WORK EXPERIENCE

SENIOR RESEARCH ASSOCIATE – RUĐER BOŠKOVIĆ INSTITUTE – 2013 – Current – ZAGREB, CROATIA

RESEARCH ASSOCIATE – RUĐER BOŠKOVIĆ INSTITUTE – 2008 – 2013 – ZAGREB, CROATIA

RESEARCH ASSISTANT – RUĐER BOŠKOVIĆ INSTITUTE – 1999 – 2008 – ZAGREB, CROATIA

EDUCATION AND TRAINING

2006 Zagreb, Croatia
PHD IN BIOLOGICAL SCIENCES Faculty of Science, University of Zagreb

Website https://www.pmf.unizg.hr/biol/en

2003 Zagreb, Croatia
MSC IN BIOLOGICAL SCIENCES Faculty of Science, University of Zagreb

Website https://www.pmf.unizg.hr/biol/en

1999 Zagreb, Croatia
GRADUATE IN BIOLOGICAL SCIENCES Faculty of Science, University of Zagreb

Website https://www.pmf.unizg.hr/biol/en

2013 Zagreb, Croatia
FELASA EQUIVALENT CAT. C LICENCE Faculty of Science, University of Zagreb

Website https://www.pmf.unizg.hr/biol/en

LANGUAGE SKILLS

Mother tongue(s): **CROATIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C1	C1	C1	C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

PROJECTS

01/01/2026 – CURRENT

Exploring the Potential of Novel Supplements for Elite Training Performance [P3-SUPREME]

PK.1.1.12.0135. - Principial Investigator
The project includes research and development activities focused on creating a next-generation pre-workout product designed to support focus, mental clarity, endurance, and recovery through a unique combination of scientifically supported ingredients. It is the first product in the region to be developed through primary scientific research, rather than relying only on secondary data. The project is carried out by Polleo Adria d.o.o. in collaboration with scientists from the Ruđer Bošković Institute. The project is co-financed by the European Union through the Competitiveness and Cohesion Programme 2021–2027.

Link https://polleosport.hr/p3-supreme-istrazivanje-novih-suplemenata

01/01/2026 – CURRENT

Exploring Sirtuin 3 as a modulator of sex differences in metabolic dysfunction-associated fatty liver disease (MAFLD) progression in obesity

Scientific and Technological Colaboration Austria - Croatia - Principal Investigator
This project examines how Sirt3 and sex shape liver mitochondrial function and lipid/glucose metabolism during Western-diet overload—and whether this interplay drives sex-biased progression of MAFLD.

14/12/2023 – CURRENT

Investigating sex-specific metabolic effect of Sirtuin 3 in obesity-related diseases - Obese Sirt

Croatian Science Foundation Project IP-2022-10-4806 - Principal Investigator
This project explores how Sirtuin 3 (Sirt3) and sex hormones collaborate to mitigate metabolic stress induced by a Western diet, focusing on the adipose tissue-liver crosstalk in the context of obesity-related diseases. Understanding these interactions is crucial given the global prevalence of obesity and its associated health challenges. The research utilizes advanced genetic, molecular, and imaging technologies, along with metabolomic analyses, incorporating preclinical cell cultures, mouse models, and clinical studies to decipher Sirt3's role in sex-specific susceptibility to metabolic complications linked to obesity.

Link https://irblambda.wixsite.com/lambda/metabolism

2020 – 2023

EU OPKK IRI 2 Project No. 01.2.1.02.0090

"ONE - Research and development of meals for the survival of the new generation"; Project Collaborator

Link https://bit.ly/3LRmNsW

2016 – 2018

EU OPKK IRI Project No. KK 01.2.1.01.0017.

„Cedevita Healthy OTG" - the development of the new, healthier and low-calorie instant vitamin drink"; Project Collaborator

Link https://bit.ly/3z6qsjF

2015 – 2019

Croatian Science Foundation Project (grant No. 4533)

„Sirtuin3 as a mediator of mitochondrial function in estrogen-dependent resistance to hyperoxia and high-fat diet"; Project Collaborator

Link https://bit.ly/3Ot8SLH

HONOURS AND AWARDS

2021

RBI Award for best scientific paper – Institute Ruđer Bošković

Annual award for best scientific publication in Antioxidants (2020)

2019
RBI Award for best scientific paper – Institute Ruđer Bošković

Annual award for best scientific publications in eLife (2018).

2019
RBI Award for best scientific paper – Institute Ruđer Bošković

Annual award for best scientific publications in Aging US (2018).

2017
RBI Award for best scientific paper – Institute Ruđer Bošković

Annual award for best scientific publication in Redox Biology (2016).

08/05/2026
Invited Lecture – Med Uni Graz

Sirt3 in Sex-Specific Regulation of Cellular Senescence and Metabolic Stress Responses

09/06/2025
Invited Lecture – EACR-affiliated Serbian, Croatian and Turkish societies SDIR, HDIR and MOKAD (SHM1RC)

From Tumor Suppression to Stress Response: The Diverse Roles of Sirtuin 3 in Cancer and Sex-Dependent DNA Damage Adaptation

27/09/2024
Invited Lecture – Serbian Society for Mitochondrial and Free Radical Physiology

Mitochondrial sirtuin 3 in ageing: Exploring cellular responses to etoposide-induced dna damage In male and female mouse embryonic fibroblasts

2018
Invited lecture – The COST Action

The COST Action CA 15133, Zagreb, Croatia

2016
Invited lecture – Croatian Society of Biochemistry and Molecular Biology

Congress of the Croatian Society of Biochemistry and Molecular Biology, Zadar, Croatia

PROFFESIONAL TRAINING

02/2016 – 03/2016
Max Planck Institute for Biology of Aging, Cologne, Germany

professional training in Bioinformatics - InnoMol Enhancement of the Innovation Potential in SEE through new Molecular
Solutions in Research and Development

01/2008 – 01/2008
University of Manchester, Great Britain

professional training in Biostatistics - Training School in the Experimental Design and Statistical Analysis of Biomedical Experiments

PUBLICATIONS

2018. - 2024.

- Ena Šimunić, Iva I Podgorski, Marija Pinterić, Marijana Popović Hadžija, robert Belužić, Mladen Paradžik, Lucija Dončević, Tihomir Balog, Marta Kaloper, Hansjorg Habisch, Tobias Madl, Aleksandra Korać, Sandra Sobočanec (2024) Mechanisms of Ageing and Development 111996
- Robert Belužić, Ena Šimunić, Iva I. Podgorski, Marija Pinterić, Marijana Popović Hadžija, Tihomir Balog, Sandra Sobočanec (2024) International Journal of Molecular Sciences 25, 3868.
- M Pinterić, I I Podgorski, M Popović Hadžija, I Tartaro Bujak, A Tadijan, T Balog, S Sobočanec (2021) International Journal of Molecular Sciences 22 (8), 4277.
- I I. Podgorski, M Pinterić, D Marčinko, M P Hadžija, V Filić, I Ciganek, D Pleše, T Balog, S Sobočanec (2020) Life Sciences 254:117812.
- M Pinteric, I I. Podgorski, M Popovic Hadžija, V Filic, M Paradžik, B L J Proust, A Dekanic, I Ciganek, D Pleše, D Marcinko, T Balog, S Sobocanec (2020) Antioxidants 9, 294; 1.
- M Pinterić, I I Podgorski, M Popović Hadžija, I Tartaro Bujak, A Dekanić, R Bagarić, V Farkaš, S Sobočanec, T Balog (2020) Antioxidants 9;2; 174.
- M Musa, M Perić, P Bou Dib, S Sobočanec, A Šarić, A Lovrić, M Rudan, A Nikolić, I Milosević, K Vlahoviček, N Raimundo, A Kriško (2018) Aging-US 10;9; 2407-2427.
- Pinterić, M; Podgorski, I I.; Sobočanec, S; Popović Hadžija, M; Paradžik, M; Dekanić, A; Marinović, M; Halasz, M; Belužić, R; Davidović, G et al. (2018) Free Radical Research, 52 6; 672, 684.
- M Rudan, P Bou Dib, M Musa, M Kanunnikau, S Sobočanec, D Rueda, T Warnecke, A Kriško (2018) eLife 7:e35330
- Perović, A; Sobočanec, S; Dabelić, S; Balog, T; Dumić, J (2018) Free radical research, 52 2; 188-197.
- Perić, M; Lovrić, A; Šarić, A; Musa, M; Bou Dib, P; Rudan, M; Nikolić, A; Sobočanec, S; Mikecin, AM; Dennerlein, S, Kriško A. (2017) Aging cell, 16, 5; 994-1005.
- Šarić, A; Crnolatac, I; Bouillaud, F; Sobocanec, S; Mikecin, AM; Mačak Šafranko, Ž; Deligeorgiev, T; Piantanida, I; Balog, T; Petit, P (2017) Methods and Applications in Fluorescence, 5 1; 015007-1
- M Perić, P Bou Dib, S Dennerlein, A Lovrić, M Musa,M Rudan, A Nikolić, A Šarić, S Sobočanec, Ž Mačak,N Raimundo, A Kriško (2016) Scientific Reports 6:No.28751.
- Sobočanec, S; Filić, V; Matovina, M; Majhen, D; Šafranko, Ž M; Popović Hadžija, M; Krsnik, Ž; Gudan Kurilj, A; Šarić, A; Abramić, M; Balog, T (2016) Redox Biology, 8, 149-159.

(for complete list see https://bit.ly/43wlw3W)

MANAGEMENT AND LEADERSHIP SKILLS

2019.

Ivana Kučar, bacc. Mol.Biol., graduate thesis - mentorship
2019. Dora Marčinko, bacc. Mol.Biol., graduate thesis - mentorship
2017. Grazia Davidović, bacc. Mol. Biol., graduate thesis - mentorship
2015. Antonija Perović, spec. med. Biochem, doctoral thesis - comentorship
2013. Anita Vidović, Faculty of Science, University of Zagreb, doctoral thesis - mentorship
2011. Željka M Šafranko, Faculty of Science, University of Zagreb, doctoral thesis - mentorship

COMMUNICATION AND INTERPERSONAL SKILLS

2009-present:

Elective course „Biotechnology and Drug Research", Department of Biotechnology, University of Rijeka
2009-2010: Doctoral study, course "Methods for measuring nitric oxide in biological systems", Faculty of Pharmacy and Biochemistry, University of Zagreb
2006: Postgraduate study, course „Neuroimmunology", Faculty of Science, University of Zagreb