



Tina Paradžik

Nationality: Croatian

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Date of birth: 25/05/1983

Gender: Female

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WORK EXPERIENCE

postdoc

Ruđer Bošković Institute, Laboratory for aquaculture biotechnology [05/2021 – Current]

City: Zagreb

- microbiologist on the project Bioprospecting of the Adriatic Sea- isolation and identification of microbial species, screening for bioactive molecules

postdoc

University of Torino [01/09/2019 – 08/06/2021]

City: Torino

Country: Italy

- work on the project: Exploiting synthetic lethal interactions to improve the therapeutic efficacy of proteasome inhibitors
- screening for synergistic interactions between proteasome inhibitors and library of drugs
- CRISPRa library preparation
- mechanism of synergy of proteasome inhibitors and TGFb pathway

postdoc

Ruđer Bošković Institute, Laboratory for mass spectrometry and functional proteomics [10/2013 – 01/2021]

City: Zagreb

Country: Croatia

- SSB proteins interactomes analyses
- bioinformatic analyses of eubacterial SSB proteins
- characterization of bacterial communities in different ecological niches

visiting scientist

University of Strathclyde [2011]

City: Glasgow

Country: United Kingdom

- fluorescence microscopy

PhD student

Ruđer Bošković Institute, Laboratory for molecular genetics [06/2007 – 09/2013]

City: Zagreb

Country: Croatia

- PhD thesis
- experimental studies of SSB proteins from *S. coelicolor*
- phylogenetic analysis of eubacterial SSB proteins
- posttranslational modifications in eubacterial SSB proteins

Diploma student

Tissue typing center [2006]

City: Zagreb

Country: Croatia

- analysis of microsatellite loci in patients with sarcoidosis

EDUCATION AND TRAINING

PhD in Molecular biosciences

J.J. Strossmayer University of Osijek, University of Dubrovnik and Ruđer Bošković Institute, Zagreb [2008 – 2013]

Bachelor of science- molecular biology

University of Zagreb, Faculty of science, Zagreb (Croatia) [2001 – 2006]

JOB-RELATED SKILLS

microbiology, molecular biology, biochemistry

- standard microbiology, cell culture, virus manipulation, flow cytometry
- cloning, DNA and RNA manipulation, qPCR, in vitro and in vivo mutagenesis
- protein-protein and protein-DNA interaction analyses (Bacterial-2-Hybrid, TAP technology, immunoprecipitation, EMSA, fluorimetry...)
- fluorescence and confocal microscopy
- automated liquid handling (robotics)
- phylogeny

PUBLICATIONS

Scientific papers

- Paradzik, Tina; Bandini, C., Mereu E., Labrador, Maria; Taiana, Elisa; Amodio, Nicola; Neri, Antonino; Piva, Roberto. The Landscape of Signaling Pathways and Proteasome Inhibitors Combinations in Multiple Myeloma. **Cancers** (2021), 13(6):1235. <https://doi.org/10.3390/cancers13061235>
- Bermanec, Vladimir; Paradžik, T.; Kazazić, Snježana P.; Venter, Chantelle; Hrenović, Jasna; Vujaklija, Dušica; Duran, Robert; Boev, Ivan; Boev, Blažo. Novel arsenic hyper-resistant bacteria from an extreme environment, Crven Dol mine, Allchar, North Macedonia. // **Journal of hazardous materials**, 402 (2021), 123902, 10 doi:10.1016/j.jhazmat.2020.123437 *shared 1st authorship
- Biđin, Siniša; Vujaklija, Ivan; Paradžik, Tina; Bielen, Ana; Vujaklija, Dušica. Leitmotif: protein motif scanning 2.0. // **Bioinformatics**, 36 (2020), 11; 3566-3567 doi:10.1093/bioinformatics/btaa133
- Vujaklija, Ivan; Bielen, Ana; Paradžik, Tina; Biđin, Siniša; Goldstein, Pavle; Vujaklija, Dušica. An effective approach for annotation of protein families with low sequence similarity and conserved motifs : identifying GDSL hydrolases across the plant kingdom. // **BMC bioinformatics**, 17 (2016), 91-1 doi: 10.1186/s12859-016-0919-7
- Paradžik, Tina *; Filić, Želimira; Vujaklija, Dušica. Variations in amino acid composition in bacterial single stranded DNA-binding proteins correlate with GC content. // **Periodicum biologorum**, 118 (2016), 4; 385-397 doi:10.18054/pb.v118i4.4847 *corresponding author
- Duran, Robert; Bielen, Ana; Paradžik, Tina; Gassie, Claire; Pustijanac, Emina; Cagnon, Christine; Hamer, Bojan; Vujaklija, Dušica. Exploring Actinobacteria assemblages in coastal marine sediments under contrasted human influences in the West Istria Sea, Croatia. // **Environmental science and pollution research international**, 22 (2015), 20; 15215-15229 doi:10.1007/s11356-015-4240-1
- Paradžik, Tina; Ivić, Nives; Filić, Želimira; Manjasetty, Babbu A.; Herron, Paul; Luić, Marija; Vujaklija, Dušica. Structure-function relationships of two paralogous single-stranded DNA-binding proteins from *Streptomyces coelicolor* : implication of SsbB in chromosome segregation during sporulation. // **Nucleic acids research**, 41 (2013), 6; 3659-3672 doi:10.1093/nar/gkt050

Conferences- selected abstracts

- Paradžik T.; Godinić Mikulčić V.; Kostelac A.; Vujaklija D. DNA binding properties and localization of paralogous SSB proteins from *Streptomyces coelicolor*. // FEMS2019: abstract book. Glasgow, UK, 2019.
- Paradžik T.; Filić Ž.; Vujaklija D. Bioinformatics analyses of IDL regions of eubacterial SSB proteins. // FEMS2019: abstract book Glasgow, UK, 2019.
- Paradžik T.; Šarić E.; Quinn G.; Roje M.; Jurin M.; Hunter I.; Herron P.; Vujaklija D. Comparative analysis of growth, development and OTC production of various *S. rimosus* producers. Programme book of 7th Congress of European Microbiologists. Valencia, Spain, 2017.
- Paradžik T.; Šarić E.; Mikoč A.; Maček B.; Herron P.; Hunter I.; Vujaklija D. The pattern of protein phosphorylation in various *Streptomyces rimosus* oxytetracycline producers' strains. Book of abstract of 2nd International Conference on Post- Translational Modifications in Bacteria. Lyon, France 2016.
- Paradžik T.; Hlevnjak A.; Kazazić S.; Filić Ž.; Zahradka D.; Vujaklija D. Tyrosine phosphorylation of the proteins essential for the bacterial growth: the case of SSB protein. Book of abstracts of Power of microbes in industry and environment. Krk, Croatia 2016.
- Paradžik T.; Filić Ž.; Paradžik. M.; Bielen A.; Vujaklija D. What will they do if there are two? Book of abstracts of 6th Croatian Congress of Microbiology with international participation. Zagreb, Croatia 2016.
- Paradžik T.; Filić Ž.; Ivić N.; Bielen A.; Manjasetty B.; Herron P.; Jakimowicz D.; Luic M.; Vujaklija D. Single stranded DNA binding protein has a key role in chromosome segregation during sporulation of *Streptomyces coelicolor*. Proceedings of 3rd Croatian microscopy congress with International Participation. Zadar, Croatia 2015.
- Paradžik T.; Filić Ž.; Ivić N.; Bielen A.; Manjasetty B.; Herron P.; Jakimowicz D.; Luić M.; Vujaklija D. Single stranded DNA binding protein has a key role in chromosome segregation during sporulation of *Streptomyces coelicolor*. // PROCEEDINGS of 3rd CROATIAN MICROSCOPY CONGRESS with International Participation, Zadar, 2015.
- Paradžik T.; Filić Ž.; Ivić N.; Bielen A.; Manjasetty B.; Herron P.; Jakimowicz D.; Luić M.; Vujaklija D. SsbB plays an important role in chromosome segregation during reproductive growth of *Streptomyces coelicolor*. // ISBA '17 Book of Abstract, Izmir, 2014.
- Šimunov T.; Razdorov G.; Castaldo G.; Vujaklija D. Interacting partners of *Streptomyces coelicolor* SSB protein. // Biology of Streptomycetes / Osnabrueck, Germany: Universitaet Osnabrueck, 2009.
- Šimunov T.; Kuzmanić A.; Vujaklija D. Tyrosine phosphorylation in *Streptomyces* and single stranded DNA binding protein / Book of Abstracts of Microbiological Congress "Power of microbes in industry and environment" Zadar, 2007.

HONOURS AND AWARDS

Awards

- Annual reward from The Society of University teachers, scholars and other scientists Zagreb for the publication: Structure-function relationships of two paralogous single-stranded DNA-binding proteins from *Streptomyces coelicolor*: implication of SsbB in chromosome segregation during sporulation. Nucleic Acids Res., 2014

Scholarships

- FEMS short-term scholarship for visiting scientist, 2011
- FEBS Youth Travel Grant, 2010
- FEMS scholarship for young scientists, 2007

ORAL PRESENTATIONS

Conference presentations

- Paradžik T., Ivić N., Filić Ž., Herron P., Luić M., Vujaklija D. Structure-function relationship of two paralogous SSB proteins from *Streptomyces coelicolor*. Book of abstracts of 3rd congress of Croatian genetics with international participation, Croatia, 2012

Invited lectures

- Croatian microbiological society, title: Variation of number of paralogous *ssb* genes in Eubacteria, Croatia 2017.
- 10 years of postgraduate study molecular biosciences at the University of Osijek, title: Molecular and functional analysis of paralogous SSBs from *Streptomyces coelicolor*, Croatia, 2016.
- Croatian microbiological society, title: New understandings about SSB protein roles in bacterial cell, Croatia 2010.

ADDITIONAL EDUCATION

Summer schools and courses

- FEBS Advanced Lecture Course: «Analysis and Engineering of Biomolecular Systems». Spetses, Greece, September 2010
- 10th international Summer School on Biophysics: "Supramolecular structure and function". Rovinj, Croatia 2009.
- EMBO Young Scientist forum. Zagreb, Croatia 2009.
- John Innes/Rudjer Bošković Summer School in Applied Molecular Microbiology: «Microbial Secondary Metabolites: Genomes, Signals and Communities». Dubrovnik, Croatia, August 2008.

PROJECTS

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- 2019-2021- postdoc on the project "Exploiting synthetic lethal interactions to improve the therapeutic efficacy of proteasome inhibitors" (AIRC, Italy, PI R. Piva)
- 2018 to 2021 -associate on the project "Identifying interactome of paralogous SSB proteins in a multicellular prokaryote, *Streptomyces coelicolor*", Croatian science foundation (IP-2018-01-1754, PI D. Vujaklija)
- 2016 -2018 -researcher on the project "Comparative phosphoproteome analysis of *S. rimosus* oxytetracycline producers strains", UKF, PI D.Vujaklija
- ·2014 – 2018 -researcher/associate on the project "DNA recombination, repair and maintenance of genome integrity: new pathways", Croatian Science Foundation (IP-11-2013-2978, PI D. Zahradka)
- 2012-2014 , project: Metagenomic analysis of microbial communities in marine sediments (ADRI Foundation, PI D. Vujaklija)
- 2011-2012 Croatian-French bilateral project (COGITO): Exploring and exploiting the bacterial diversity in the West Istria Sea: focus on marine actinomycetes (MZOŠ. Kl. 910-08/10-01-00072, PI D. Vujaklija and R. Duran)
- 2011 assistant on the project "Fundamental molecular studies of *Streptomyces biology*" (MZOS - 098-0982913-2877, PI D. Vujaklija)

LANGUAGE SKILLS

Mother tongue(s):

Croatian

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION B2 SPOKEN INTERACTION C1

Italian

LISTENING B1 READING A2 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

DIGITAL SKILLS

Microsoft/Microsoft Office / AdobePhotoshop / BioEdit / Vector NTI / PhyML / GraphPad PRISM / SNAPgene Software / Fiji-ImageJ

NETWORKS AND MEMBERSHIPS

Memberships

- Croatian society for biochemistry and molecular biology
- Croatian microbiological society (secretary for the Bacteriology section)
- Croatian genetic society

References

- prof. Roberto Piva, University of Torino, Italy, roberto.piva@unito.it
- dr.sc. Dušica Vujaklija, Ruđer Bošković Institute, Croatia, vujaklij@irb.hr
- prof. Paul Herron, University of Strathclyde, UK, paul.herron@strath.ac.uk

COMMUNICATION AND INTERPERSONAL SKILLS

assistants' representative in Ruđer Bošković scientific council 2018

HOBBIES AND INTERESTS

phytoaromatherapist

2018-2019. School of complementary therapies Galbanum, Zagreb (Croatia)

- using essential oils and plant extracts with the aim of meeting the needs of health and well-being

DRIVING LICENCE

Driving Licence: A

Driving Licence: B