

Curriculum vitae

Personal information:

- Name: Andela Horvat (b. Runje)
- Title: PhD
- Address: Laboratory for protein dynamics
Division of Molecular Medicine
Ruđer Bošković Institute
Bijenička cesta 54, 10000 Zagreb
Croatia
- Phone: 00385-1- 4560997
00385-97-7203111
- Fax: 00385-1-4561010
- e-mail: arunje@irb.hr
- Date and place of birth: 30th June 1983, Sinj, Croatia

Education:

- **2008-2015**, University Postgraduate Interdisciplinary **Doctoral Study** of Molecular biosciences, Josip Juraj Strossmayer University of Osijek, University of Dubrovnik and Ruđer Bošković Institute, Croatia

22nd May **2015**, Defense of **PhD Thesis** entitled „The effect of $\Delta Np73\alpha$ on the cell cycle control after DNA damage in human cells“ in the scientific area of Biomedicine and healthcare, scientific field of Basic medical sciences under the supervision of Neda Slade, PhD, senior scientist (Ruđer Bošković Institute, Croatia) and Vjekoslav Dulić, PhD, staff scientist CNRS (Institute for Molecular Genetics in Montpellier, IGMM, France).

- **2001–2007**, **B.Sc. in Molecular Biology**, Faculty of Natural Sciences and Mathematics, University of Zagreb, Croatia (excellent grades, among 10% best students in the generation)

24th May **2007**, Defense of **Undergraduate Thesis** entitled „**Differences in stability of tumor suppressor p53 protein isoforms**“ under the supervision of Neda Slade, PhD, in the Laboratory of Molecular Oncology, Division of Molecular Medicine, Ruđer Bošković Institute.

- **1997–2001**, II High School in Split, Croatia (excellent grades)

Work experience:

- **2019-** , **Research Associate** in the Laboratory for Protein Dynamics, Division of Molecular Medicine, Ruđer Bošković Institute
- **2018–2019, Postdoctoral fellow**/senior research assistant in the Laboratory for Protein Dynamics, Division of Molecular Medicine, Ruđer Bošković Institute
- **2016–2018, Postdoctoral fellow** at Vanderbilt University Medical Center (VUMC, Nashville, TN, USA) in the Department of Surgery and Cancer Biology in the Laboratory of Alexander Zaika, PhD, in the area of *Helicobacter pylori* infection related gastric tumorigenesis
- **2007–2015, PhD student**/research assistant under the supervision of Neda Slade, PhD, in the Laboratory of Molecular Oncology, Division of Molecular Medicine, Ruđer Bošković Institute

Teaching:

- **2022-** , **Assistant Professor/Lecturer** on the University Postgraduate Interdisciplinary Doctoral Study of Molecular Biosciences, University of Osijek, Croatia
- **2011, 2012, 2015 and 2018, Teaching assistant** in the courses „Methods in molecular biology and medicine“ and „Cell cycle control, genome integrity maintenance and cancerogenesis“ on the University Postgraduate Interdisciplinary Doctoral Study of Molecular Biosciences, University of Osijek, Croatia

Professional training:

- December **2014**, AKH (Vienna General Hospital) Vienna (Austria), Laboratory for molecular oncology, under the supervision of Professor Robert Zeillinger, PhD
- September – December **2008**, Institute of Molecular Genetics in Montpellier (France) financed by the Scholarship of the French Government, under the supervision of Vjekoslav Dulić, PhD
- December **2007**, July **2008** and June **2009**, Institute of Molecular Genetics in Montpellier (France), Croatian-French Programme «Cogito» under the supervision of Vjekoslav Dulić, PhD
- January **2006** - March **2007**, undergraduate thesis work, Laboratory of Molecular Oncology (Division of Molecular Medicine, Ruđer Bošković Institute) under the supervision of Neda Slade, PhD, in the area of tumor suppressor protein p53 isoforms
- July – September **2005**, student training, Faculty of Science and Pharmacy, University of Navarra, Pamplona (Spain)
- April – June **2005**, Department of Physics, Faculty of Medicine, Zagreb under the supervision of Professor Jasminka Brnjas-Kraljević, PhD
- March **2004** – January **2005**, student training, Gene Regulation Laboratory (Division of Molecular Biology, Ruder Boskovic Institute) under the supervision of Mary Sopta, PhD, in the area of molecular genetics of yeast *Saccharomyces cerevisiae*

List of Publications:

1. Radić Martina, Vlašić Ignacija, Jazvinščak Jembrek Maja, **Horvat Andela**, Tadijan Ana, Sabol Maja, Dužević Marko, Herak Bosnar Maja, Slade Neda. Characterization of Vemurafenib-Resistant Melanoma Cell Lines Reveals Novel Hallmarks of Targeted Therapy Resistance. *International Journal of Molecular Sciences*. (2022) 23(17):9910.
2. Lossaint G erald*, **Horvat Andela***, Gire V eronique, Ba ević Katarina, Mrouj Karim, Charrier-Savournin Fabienne, Georget Virginie, Fisher Dan, Dulić Vjekoslav. Reciprocal regulation of p21 and Chk1 controls the cyclin D1-RB pathway to mediate senescence onset after G2 arrest. *Journal of Cell Science*. (2022) 135(8):jcs259114. *equal contribution
3. **Horvat Andela***, Tadijan Ana*, Vlašić Ignacija*, Slade Neda. p53/p73 Protein Network in Colorectal Cancer and Other Human Malignancies. *Cancers*. (2021) 13(12):2885. *equal contribution
4. Hanžić Nikolina*, **Horvat Andela***, Bibić Juraj, Unfried Klaus, Jurkin Tanja, Dražić Goran, Marijanović Inga, Slade Neda, Gotić Marijan. Syntheses of gold nanoparticles and their impact on the cell cycle in breast cancer cells subjected to megavoltage X-ray irradiation. *Materials Science and Engineering C: Materials for Biological Applications*. (2018) 91:486-495. *equal contribution
5. **Horvat Andela**, Noto Jennifer M, Ramatchandirin Balamurugan, Zaika Elena, Palrasu Manikandan, Wei Jinxiong, Schneider Barbara G, El-Rifai Wael, Peek Jr Richard M, Zaika Alexander I. Helicobacter pylori pathogen regulates p14ARF tumor suppressor and autophagy in gastric epithelial cells. *Oncogene*. (2018) 37(37):5054-5065.
6. Bhardwaj Vikas, Gokulan Ravindran C, **Horvat Andela**, Yermalitskaya Liudmila, Korolkova Olga, Washington Kay M, El-Rifai Wael, Dikalov Sergey I, Zaika Alexander I. Activation of NADPH oxidases leads to DNA damage in esophageal cells. *Scientific Reports*. (2017) 7(1):9956.
7. **Horvat Andela**, Zaika Alexander I. How does bacterial pathogen Helicobacter pylori control responses to cellular stress? *Future Microbiology*. (2017) 12:105-108.
8. Bhardwaj Vikas, **Horvat Andela**, Korolkova Olga, Washington Mary K, El-Rifai Wael, Dikalov Sergey I, Zaika Alexander I. Prevention of DNA damage in Barrett's esophageal cells exposed to acidic bile salts. *Carcinogenesis*. (2016) 37(12):1161-1169.
9. Zorić Arijana, **Horvat Andela**, Slade Neda. Differential effects of diverse p53 isoforms on TAp73 transcriptional activity and apoptosis. *Carcinogenesis* (2013) 34: 522-529.
10. Zorić Arijana, **Horvat Andela**, Balija Melita, Slade Neda. The Arg72Pro Polymorphism of TP53 in Croatian Population. *Croatica Chemica Acta*. (2012) 85: 239-243.
11. Slade Neda, **Horvat Andela**. Targeting p73 – A Potential Approach in Cancer Treatment. *Current Pharmaceutical Design*. (2011) 17: 591-602.
12. Zorić Arijana, **Horvat Andela**, Slade Neda. Obitelj gena p53 – uloga u razvoju organizma i tumorigenezi. *Medicina Fluminensis*. (2010) 46: 135-143. (in Croatian)
13. Slade Neda, Zorić Arijana, **Horvat Andela**. The p53/p63/p73 family of proteins – the focus on isoforms and mutants in cancer. *Periodicum biologorum*. (2010) 112: 425-432.

Participation in conferences and workshops:

- 2015, “2nd International p53 isoforms workshop”, Aix-en-Provence, France, poster
- 2015, “Radiation Biology and Cancer”, Essen, Germany, poster
- 2014, HDIR-3 “From Bench to Clinic”, Zagreb, Croatia, poster
- 2014, The Innomol Bioimaging Workshop, Zagreb, Croatia
- 2014, “Power of Viral Vectors in Gene Therapy and Basic Science” Summer School Primošten, Croatia, poster
- 2014, The Innomol Proteomics Workshop, Zagreb, Croatia
- 2012, HDIR-2 “From Bench to Clinic”, Zagreb, Croatia, oral presentation
- 2012, FEBS3+ Meeting “From molecules to life and back”, Opatija, Croatia, poster
- 2011, The 5th p63/p73 workshop, Lyon, France, poster
- 2008, “Cellular Signaling and Molecular Medicine”, Cavtat, Croatia, poster

Professional Memberships:

- European Association for Cáncer Research (EACR)
- Croatian Association for Cáncer Research (HDIR)
- Croatian Society of Biochemistry and Molecular Biology (HDBMB)
- Croatian Microbiological Society (HMD)

Fellowships and awards:

- 2018, Annual Director's Prize for best scientific papers
- 2015, EACR Meeting bursary for participation in the conference “Radiation Biology and Cancer” (Essen, Germany)
- 2014, EACR Poster Prize for best poster at HDIR-3 “From Bench to Clinic” Meeting (Zagreb, Croatia)
- 2014, FEMS Young Scientist Meeting Grant for participation in “Power of Viral Vectors in Gene Therapy and Basic Science” Summer School (Primošten, Croatia)
- 2008, Scholarship of the French Government
- 2001, 1st place in the State Competition in Biology
- 1999, 2nd place in the State Competition in Geography
- 1999, 2nd place in the State Competition in Latin
- 1997, 1st place in the State Competition in Geography
- 1998 – 2007, Scholarship for best pupils and students of the town of Kaštela

Specific knowledges and skills:

Languages:

- English - fluent
- Spanish - fluent
- Italian - basic
- German - basic

Computer skills:

- Microsoft Windows, MS Office (Word, Excell, Powerpoint, Outlook)
- Adobe Photoshop, ImageJ, Corel Draw
- FlowJo, ImageLab

Driving licence: category B