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| **FoodEnTwin Winter School 2020****Proteomics: From sample preparation to practical aspects****February 5th-8th, 2020** **University of Belgrade – Faculty of Chemistry,****Centre of Excellence for Molecular Food Sciences (CoE-MFS)** **Studentski trg 16, Belgrade, Serbia****Program** |  |

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| **Day 1 - Wednesday, February 05, 2020** |
| 9:00-9:30 | **Opening of the Winter School of Proteomics** (dr Dragana Stanić- Vučinić and Vice Dean UBFC)- 1st floor, Lecture room-SZS |
| 9:30 – 12:30 | **Practical part:** Sample preparation for isoelectric focusing on IPG strips (dr Vesna Jovanović, dr Marija Peruško) - 1st floor, laboratories 402 and 403 |
| 12:30 - 14:00 | **Lunch** - Restaurant Teatroteka, Gospodar-Jevremova 19 street http://www.teatroteka.rs/ |
| 14:00 – 16:30 | **Theoretical part:** 1st floor, Lecture room-SZS • 14:00 - 14:45 Introduction – MS and proteomics (prof. Tanja Ćirković Veličković)• 14:45 – 15:30 Maldi TOF and ESI MS analyses (prof. Tanja Ćirković Veličković)• 15:30 – 16:00 Isoelectric focusing of high resolution (dr Jelena Radosavljević) |
| 16:00 – 16:30 | Coffee break |
| 16:30 – 18:00 | **Practical part:** Isoelectric focusing of high resolution (IPG) (Sara Trifunović)- 1st floor, Lab 403 |

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| **Day 2 - Thursday, February 06, 2020** |
| 9:00 – 12:30 | **Theoretical part:** 1st floor, Lecture room • 9:00-9:30 Sample preparation for MS (J. Radosavljević)• 9:30-10:00 nLC-MS/MS Orbitrap analysis of peptides (Tamara Vasović, Mass spectrometry Specialist at UBFC)• 10:00 – 10:30 Coffee break• 10:30 – 11:15 MS applications (dr Danijela Apostolović)**Practical part:**11:15 – 12:30 2D PAGE start-up (Sara Trifunović, Tamara Vasović) Lab 403 1st floor |
| 12:30 - 14:00 | **Lunch** - Restaurant Teatroteka http://www.teatroteka.rs/ |
| 14:00 - 17:00 | **Practical part:** 14:00 – 17:00 2D PAGE follow up and nanoLC Orbitrap LTQ XL (Sara Trifunović and Tamara Vasović) 2nd floor lab 516 |

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| **Day 3 - Friday, February 07, 2020** |
| 9:00 – 12:30 | **Theoretical part:** 1st floor, Lecture room • 9:00-9:45 MS applications (dr Andrijana Nešić)• 9:45-10:30 MS applications (dr Svetlana Murzina)• 10:30 – 11:00 Coffee break• 11:00 – 11:45 MS of intact proteins and peptides (dr Dragana Stanić-Vučinić)• 11:45 – 12:30 Artificial proteases based on metal complexes for proteomics application (prof. Tatjana Parac-Vogt) |
| 12:30 - 14:00 | **Lunch** - Restaurant Teatroteka http://www.teatroteka.rs/ |
| 14:00 - 17:00 | **Practical part:** • 14:00 – 17:00 2D PAGE follow up/in gel trypsin digestion (Maja Krstić-Ristivojević, Mirjana Radomirović) –2nd floor, room 516 |
| 20:00 | **Gala Dinner –** „Dva Jelena“ Skadarlija, Skadarska 32 street, http://www.dvajelena.rs/en |

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| **Day 4 - Saturday, February 08, 2020** |
| 9:30 – 12:30 | **Theoretical part/** **Bioinformatics** 1st floor, Lecture room • 9:30-10:15 MS applications “**Single cell peptidomics**” (dr Luka Mihajlović, Mass spectrometry and applicative solutions specialist at Analysis d.o.o.)• 10:15 – 10:45 Coffee break• 10:45 – 11:30 Data base search and protein identification (dr Katarina Smiljanić)• 11:30 – 12:15 DeNovo peptide search, Multiround protein search and unrestricted PTM search (dr Katarina Smiljanić)  |
| 12:30 - 14:00 | **Lunch** - Restaurant Teatroteka |
| 14:00 - 17:00 | **Bioinformatics: Theoretical and practical,** basement, Computational lab. 241 Protein identification with selected samples and PEAKS X platform (dr Katarina Smiljanić and Tamara Vasović) |
| 17:00 – 17:15 | **Closure of the school (D. Stanić-Vučinić)** |

**Lecturers**

**Tanja Ćirković Veličković, Professor** *(University of Belgrade-Faculty of Chemistry, Serbia),*

**Dragana Stanić-Vučinić, PhD, Research Advisor** *(University of Belgrade-Faculty of Chemistry, Serbia),*

**Tatjana Parac-Vogt, Professor** *(Katholieke Universiteit Leuven, Belgium),*

**Danijela Apostolović, PhD, Research Associate** *(Karolinska Institutet, Sweden),*

**Katarina Smiljanić, PhD, Senior Research Associate** *(University of Belgrade-Faculty of Chemistry, CoE- Serbia),*

**Svetlana Murzina, PhD, Research Associate***(Institute of Biology of the Karelian Research Centre of the Russian Academy of Sciences (IB KarRC RAS), Russian Federation),*

**Jelena Radosavljević, Assistant Professor** *(University of Belgrade-Faculty of Chemistry, Serbia),*

**Andrijana Nešić, PhD, Research Associate** *(University of Belgrade-Faculty of Chemistry, Serbia),*

**Luka Mihajlović, PhD *(****Analyisis doo., Belgrade),*

**Tamara Vasović, PhD student***(University of Belgrade-Faculty of Chemistry, Serbia)*

**Demonstrators**

**Vesna Jovanović**, **PhD** (University of Belgrade-Faculty of Chemistry, Serbia)

**Marija Peruško, PhD** (University of Belgrade-Faculty of Chemistry, Serbia)

**Maja Krstić-Ristivojević, PhD student** (University of Belgrade-Faculty of Chemistry, Serbia)

**Sara Trifunović, PhD student** (Mediterranean Institute for Life Sciences- MedILS, Split, Croatia),

**Tamara Vasović, PhD student** (University of Belgrade-Faculty of Chemistry, Serbia) and

**Mirjana Radomirović, PhD student** (University of Belgrade-Faculty of Chemistry, Serbia).