

Curriculum Vitae

Personal information **Jelena Spiric**

Work experience

10/2025-Present

Quality Assessor
Paul Ehrlich-Institut, Haematology, Cell and Gene Therapy Division
Germany

04/2025-10/2025

Quality Assessor
Paul Ehrlich-Institut, Allergology Division
Germany

03/2017-04/2025

Research Scientist
Paul Ehrlich-Institut, Allergology Division
Germany

08/2015 – 02/2017

Research Scientist, ORISE Fellow
FDA/ CBER/ OVRD/DBPAP/
USA

Education and training

2024-Present Master of Drug Regulatory Affairs, Rheinische Friedrich-Wilhelms-Universität Bonn, Germany

2012-2015 Doctor of Philosophy in Biochemistry, Chemistry and Pharmacy, Johann-Wolfgang-Goethe University, Frankfurt, Germany
Doctoral thesis: Proteomic tools for characterization of birch pollen allergen products

Skills: Electrophoresis (1D, 2D-PAGE), Chromatography: nano-UPLC, (ACQUITY™, Waters)
Protein purification using affinity, ion exchange, hydrophobic interaction and size exclusion chromatography, Mass Spectrometry: nanoUPLC-nanoESI- qTOF-MS (Synapt and Synapt G2, Waters) UPLC-ESI-Triple Quadrupole (Xevo TQ-S, Waters), Western Blot, Digestion assays, Data analysis

2009-2011 Master of Science in Food Science and Technology, University of Nebraska-Lincoln, Lincoln, NE, USA

Master thesis: Identification and characterization of putative allergens in walnut and pecan species
Skills: Electrophoresis (1D, 2D-PAGE), Chromatography, Mass Spectrometry, Western Blot, Digestion assays, Data analysis

2004-2006 Bachelor of Science in Biochemistry (Minors: Mathematics and Chemistry), University of Nebraska-Lincoln, Lincoln, NE, USA

2003-2004 Associate of Science in Chemistry, Colby Community College, Colby, KS, USA

Additional information

Publications

- "Mass Spectrometry Detects Api m 10 in Venom Immunotherapy Products With Suspected Absence of Api m 10" Paulus-Tremel, KE; Spiric, J; Junker, AC; Schwaben, L; Führer, F; Lidholm, J; Vieths, S; Reuter, A; Mahler, V J Investig Allergol Clin Immunol 2025; Vol. 35(5) doi: 10.18176/jiaci.1093
- "Quality Control of Allergen Products with Mass Spectrometry Part I: Positioning within the EU regulatory framework" Spiric, J; Schulenburg, T; Schuler, F; Bonertz, A; Lauer, I; Bartel, D; Vieths, S; Mahler, V; Reuter, R Allergy 2024;00:1–9. DOI: 10.1111/all.16080
- "Allergic Reaction to a Commercially Available Insect Snack Caused by House Cricket (*Acheta domestica*) Tropomyosin" Wangorsch*, A; Jamin, A; Spiric, J; Vieths, S; Scheurer, S; Mahler, V; Hofmann, SC; Mol. Nutr. Food Res. 2024, 2300420. DOI: 10.1002/mnfr.202300420
- "Identification and Characterization of IgE-Reactive Proteins and a New Allergen (Cic a 1.01) from Chickpea (*Cicer arietinum*)" Wangorsch, A; Kulkarni, A; Jamin, A; Spiric, J; Bräcker, J; Brockmeyer, J; Mahler, V; Blanca-López, N; Ferrer, M; Blanca, M; Torres, M. Mol. Nutr. Food Res. 2020, Vol. 64 (19). DOI: 10.1002/mnfr.202000560
- "Pea (*Pisum sativum*) allergy in children: Pis s 1 is an immunodominant major pea allergen and presents IgE binding sites with potential diagnostic value" Popp, J; Trendelenburg, V; Niggemann, B; Randow, S; Völker, E; Vogel, L; Reuter, A; Spiric, J; Schiller, D; Beyer, K; Holzhauser, T. Clin Exp Allergy 2020; Vol. 50 (5): 625-635. DOI: 10.1111/cea.13590
- "Report of a Case of IgE-Mediated Anaphylaxis to Fenugreek" Aurich, S; Spiric, J; Engin, A; Simon, JC; Mahler,

V; Treudler, R. J Investig Allergol Clin Immunol 2019; Vol. 29(1): 56-58.

- "Quality and potency profile of eight recombinant isoallergens, largely mimicking total Bet v 1 - specific IgE binding of birch pollen" Seutter von Loetzen, C; Reuter, A; Spiric, J; Schulenburg, T; Bellinghausen, I; Völker, E; Vogel, L; Rösch, P; Schiller, D. Clin Exp Allergy. 2019; 00: 1– 12.
- "Identification and molecular characterization of allergenic non-specific lipid-transfer protein from durum wheat (Triticum turgidum)" Safi, H; Wangorsch, A; Lidholm, J; Brini, F; Spiric, J; Rihs, HP; Vieths, S; Armentia, A; Farioli, L; Diaz-Perales, A; Pastorello, E; Scheurer, S. Clin Exp Allergy 2019; 49: 120– 129.
- "Inhibition of Hepatitis E Virus Spread by the Natural Compound Silvestrol" Glitscher, M; Himmelsbach, K; Woytinek, K; John, R; Reuter, A; Spiric, J; Schwaben, L; Grünweller, A; Hildt, E. Viruses 2018; 10, 301.
- "In vitro digestion and characterisation of 2S albumin and digestion - resistant peptides in pecan" Spiric, J; Koppelman, SJ; Knulst, A; Nordlee, JA; Taylor, SL; Baumert, JL. Int J Food Sci Technol 2018; 53: 1566-1578.
- "Model for Quality Control of Allergen Products with Mass Spectrometry" Spiric, J; Schulenburg, T; Schwaben, L; Engin, AM; Karas, M; Reuter, A. Journal of Proteome Research 2017; 16 (10), 3852-3862.
- "Accurate quantification of 5 German cockroach (GCr) allergens in complex extracts using multiple reaction monitoring mass spectrometry (MRM MS)" Mindaye, ST; Spiric, J; David, NA; Rabin, RL; Slater, JE. Clin Exp Allergy 2017; 47: 1661– 1670.
- "Mass spectrometry to complement standardization of house dust mite and other complex allergenic extracts" Spiric, J; Reuter, A.; Rabin, RL. Clinical & Experimental Allergy 2017; (47) 604 - 617.
- "Quality control of biomedical allergen products – Highly complex Iso-allergen pattern challenges standard MS database search and requires manual data analyses" Spiric, J; Engin, A; Karas, M; Reuter, A. PLoS One 2015; 10(11): p. e0142404.

Projects

Proteomics Core Facility – Central Method Development – Division of Allergology, Paul-Ehrlich-Institute, Langen, Germany

Research Activities:

Identification of unknown proteins with MS

Single allergen/protein quantification in allergen products with MSE and MRM

Measurement of quantitative protein profiles in biological samples with MSE

Identification of interaction partners and biomarkers with MS

Evaluation of the quality of biomedical medicinal products

Evaluation of mass spectrometric data in regulatory procedures

Laboratory of Immunobiochemistry DBPAP/OVRR/CBER/FDA, Silver Spring, MD, USA

Project: Mass spectrometry for rapid, quantitative, and definitive standardization of potency of house dust mite allergenic extracts

Memberships

PROFESSIONAL AFFILIATION/MEMBERSHIPS

2011 – Present European Academy of Allergy & Clinical Immunology (EAACI)

INVITED TALKS AND ORAL PRESENTATIONS

2023 "Mass Spectrometric Analysis of Allergen Therapeutics, Vaccines and Diagnostics - a Relationship between Antigen Content and Potency?" The 16th International Paul Ehrlich Seminar, September 2023, Langen, Germany.

2019 "Proteomic Analysis of Canine Leptospira Vaccines" The 19th Annual Congress of EUSAAT, October 2019, Linz, Austria.

2016 "Mass Spectrometry Update" Allergen Products Manufacturers' Association (APMA)/FDA Information Exchange, October 2016, Silver Spring, MD, USA.

2014 "Mass spectrometry for characterization and control of allergen extracts – birch pollen" The 14th International Paul Ehrlich Seminar, October 2014, Bad Nauheim, Germany.

AWARDS AND HONOURS

2015 Poster Prize, EAACI Congress, Barcelona, Spain

2014 Poster Prize, EAACI Congress, Copenhagen, Denmark

2013 Travel Grant, The 5th International Symposium on Molecular Allergology (ISMA), Vienna, Austria

2013 JMA Poster Prize, EAACI Congress, Milan, Italy

2011 JMA Poster Prize, EAACI Congress, Istanbul, Turkey

2011 Travel Grant, EAACI Congress, Istanbul, Turkey

2011 Will Forbes Travel Scholarship, University of Nebraska-Lincoln, Lincoln, NE, USA

2011 Dean's List, College of Agricultural Science and Natural Resources, University of Nebraska-Lincoln, Lincoln, NE, USA

2004 – 2006 Big 12 Honor Roll and UNL High Honors, University of Nebraska-Lincoln, Lincoln, NE, USA

Other Relevant Information