



Curriculum Vitae

Personal information **Johanna Echternach**

Work experience

Current position:

Lab Manager

08/2024 – today

Paul-Ehrlich-Institut, Division of Haematology, Cell and Gene Therapy, Section for Product Testing Haematology, Cell and Gene Therapy, Langen, Germany

- Batch release of blood products made from plasma (OCABR)
- Deputy quality management representative and internal auditor
- Development, implementation and monitoring of methods according to ISO 17025

Research assistant

11/2020 – 08/2024

Paul-Ehrlich-Institut, Division of Allergology, Section for Allergens Product Testing, Langen, Germany

- Batch release
- Quality management representative and internal auditor
- Development, implementation and monitoring of methods according to ISO 17025

Quality assessor

11/2018 – 10/2020

Paul-Ehrlich-Institut, Division of Allergology, Section for Allergology Quality Assessment, Langen, Germany

- Examination and evaluation of quality aspects of the marketing authorisation or clinical study documents of allergen products
- scientific advices

Technical assistant

11/2017 – 04/2018

University of New South Wales, Faculty of Sciences, **School of Biotechnology and Biomolecular Sciences**, Sydney, Australia

Full-time technical support for the organisation of about 20 different groups in the shared laboratories and offices

Research assistant

03/2012 – 03/2014

Justus-Liebig-Universität Gießen, Gießen, Germany
Institute of **Food Chemistry and Food Biotechnology**

- Research topic: Natural flavour production with fungi using bio-technological and analytical methods including olfactometry
 - A patent was developed in cooperation with Symrise AG
- Supervision of three bachelor student groups in their food chemistry labs

Responsibility for the maintenance of the gas chromatographical systems (GC-FID, GS-MS, GC-MS-MS, GC-O) and training for students

Education and training

PhD

04/2014 – 02/2018

University of New South Wales, Sydney, Australia

Scholarship holder and Member of the Australian Research Council Training Centre for Advanced Technologies in

Food Manufacture, Faculty of Engineering, School of Chemical Engineering

- Thesis title "**Discovery and molecular characterisation of new macadamia allergens**"
 - Successful use of immunological, proteomic and chromatographic methods for the identification and purification of potential allergens
 - Presentation at five national and four international conferences (i.e. PACIFICHEM, Food Allergen Management Symposium)

Cooperation i.e. with the Biological Resource Centre, the Bioanalytical Mass Spectrometry Facility, the Recombinant Product Facility, Southern Cross Plant Science and the Children's Hospital at Westmead

Diplom-Lebensmittel-ingenieurin comparable to a Master's Degree (Dipl.-LM-Ing.)

10/2005 – 11/2011

Food Technology, Universität Hohenheim, Stuttgart, Germany,
Final grade 1.3

- Diplom thesis at the Institute of Food Science and Biotechnology, Chair of Biotechnology: „ Analysis of the fermentative production of polyunsaturated fatty acids by the fungi *Mortierella alpina* "

Fermentation in fluid and solid state bioreactors for the production of PUFA-oil for baby food

Additional information

Publications

Schlünder, S., **Echternach, J.**, Bartel, D., Mahler, V., Mühlebach, M.D. and Führer, F. (2025), Immunological In Vitro Assay for Allergoids. *Allergy*, 80: 2008-2017

Ickes C, Rani P, Tsenova K, **Rost J**, Führer F, Bartel D, Kamp C. (2024). Identification of therapeutic allergen products using the Chemometrics and Intelligent Laboratory Systems

Rost J, Langhein S, Bartel D, Bonertz A, Mahler V (2022). Good manufacturing practice- and good distribution practice-compliant refrigerated transport of allergen products: what is important? *Allergo Journal International* 31, 36–42

Rost J, Muralidharan S, Lee N A. (2020). A label-free shotgun proteomics analysis of macadamia nut. *Food Research International*

Maheshwari G, Ringseis R, Wen G, Gessner DK, **Rost J**, Fraatz MA, Zorn H, Eder K. (2020). Branched-Chain Fatty Acids as Modulators of Hepatic Peroxisome Proliferator-Activated Receptor Alpha by a Fungal Lipid Extract. *Biomolecules*. Aug 31;10(9):1259

Fraatz MA, Goldmann M, Geissler T, Gross E, Backes M, Hilmer J-M, Ley J, **Rost J**, Francke A, Zorn H (2017). Biotechnological production of branched aldehydes. *Journal of Agricultural and Food Chemistry* 66 (10), pp 2387–2392

Stressler T, Eisele T, **Rost J**, Kuhn A, Fischer L, (2013). Production of polyunsaturated fatty acids by *Mortierella alpina* using solid state fermentation. *Chemie Ingenieur Technik* 85(3)

Book chapters

Fraatz MA, Rost J, Zorn H (2014). Solvent-free screening techniques for the online analysis of odor-active compounds by MS/MS-O. In: Hofmann T, Krautwurst D, Schieberle P, Current topics in flavor chemistry & biology. Deutsche Forschungsgemeinschaft, Freising, pp 391-394

Projects

Patent: Fraatz M, Zorn H, **Rost J**; Goldmann M, Gross E, Ley J, Geissler K, Geissler T, Backes M, Hentschel F, Hilmer J-M (2017). Method for producing branched aldehydes. WO2015EP77992 20151128

Memberships

Other Relevant Information

Presentation: Rost J (2022). Batch-to-batch inconsistencies of particle size distribution of aluminum hydroxide adsorbates in therapy allergens, OMCL Annual Meeting 2022 in Straßburg. General Biological Session