EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

# Curriculum Vitae

## Personal information

Kathrin Zeller

## Work experience

12/2020 to present Senior lecturer, Lund University, Dept. of Immunotechnology, Sweden, research and education

06/2017 - 11/2020 Assistant prof., Lund University, Dept. of Immunotechnology, Sweden, research and education

05/2013 - 04/2017 (Postdoctoral) researcher at Lund University, Dept. of Immunotechnology, Sweden, research and education

05/2012 - 04/2013 Postdoctoral researcher at Uppsala University, Dept. of Medical biochemistry and microbiology, Sweden, research.

09/2004 - 05/2006 Research associate at EUREGIO Biotech Center/University of Applied Sciences Münster, Germany, research.

## Education and training

08/2020 Associate prof/reader in Immunotechnology, Lund University, Sweden

02/2008 - 04/2012 PhD in Medical Science, Uppsala University, Sweden

09/2002 - 08/2004 MSc in Biomedical Engineering, University of Applied Sciences Münster, Germany

09/1998 - 08/2002 Dipl-Ing. in Chemical Engineering, Univ. of Applied Sciences Fresenius, Germany

## Additional information

### Publications


de Ávila, R.I., Carreira Santos, S., Siino, V., Levander, F., Lindstedt, M., Zeller, K.S. A proteomics dataset capturing myeloid cell responses upon cellular exposure to fungicides, adjuvants and fungicide formulations. Data in Brief, Volume 46, 2023, doi: 10.1016/j.dib.2022.108878.

de Ávila, R.I., Carreira Santos, S., Siino, V., Levander, F., Lindstedt, M., Zeller, K.S. Adjuvants in fungicide formulations can be skin sensitizers and cause different types of cell stress responses. Toxicology Reports, Volume 9, 2022, p2030-2041, https://doi.org/10.1016/j.toxrep.2022.11.004.

Sjöstrand, S., Zeller, K.S., Evertsson, M., Jansson, T. Evaluation of cellular stress responses in magnetomotive ultrasound. Nanomedicine 2022, published online 31 Aug; https://doi.org/10.2217/nnm-2021-0455.

Uhlig, E., Elli, G., Nurminen, N., Oscarsson, E., Canaviri-Paz, P., Burri, S., Rohrstock, A-M., Rahman, M., Alsanius, B., Molin, G., Zeller, K. S., Håkansson, Å. Comparative immunomodulatory effects in mouse and in human dendritic cells of five bacterial strains selected for biocontrol of leafy green vegetables. Food Chem Toxicol. 2022 Jul;165:113064. doi: 10.1016/j.fct.2022.113064. Epub 2022 May 10. PMID: 35561874

Oscarsson, E.; Lindberg, T.; Zeller, K.S.; Lindstedt, M.; Agardh, D.; Håkansson, Å.; Östbring, K. Changes in Intestinal Permeability Ex Vivo and Immune Cell Activation by Three Commonly Used Emulsifiers. Molecules 2020, 25, 5943. doi:10.3390/molecules25245943.

Lindberg T., de Ávila, R I, Zeller, K.S., Levander, F., Eriksson, D., Chawade, A., Lindstedt, M. An integrated transcriptomic and proteomic approach to evaluate the human skin sensitization potential of glyphosate and its commercial agrochemical formulations. J Proteomics. 2020 Jan 30;217:103647. doi:10.1016/j.jprot.2020.103647.

Lindberg, T., Forreryd, A., Bergendorff, O., Lindstedt, M., Zeller, K.S. In vitro assessment of mechanistic events induced by structurally related sensitizing rubber chemicals. Toxicol In Vitro. 2019 May 10. pii: S0887-2333(19)30067-0. doi: 10.1016/j.tiv.2019.05.006. PubMed PMID: 31082492.

Olsson, O.P., Gustafsson, R., Salnikov, A.V., Göthe, M., Zeller, K.S., Friman, T., Baldetorp, B., Koopman, L.A., Weinreb, P.H., Violette, S.M., Kalamajski, S., Heldin, N.E., Rubin, K. Inhibition of integrin α(V)β(6) changes fibril thickness of stromal collagen in experimental carcinomas. Cell Commun Signal. 2018 Jul 2;16(1):36. doi: 10.1186/s12964-018-0249-7. PubMed PMID: 29966518; PubMed Central PMCID: PMC6027735.

Zeller K.S., Johansson H., Lund T.Ø., Kristensen N.N., Roggen E.L., Lindstedt M. An alternative biomarker-based approach for the prediction of proteins known to sensitize the respiratory tract. Toxicol In Vitro. 2018 Feb;46:155-162. doi: 10.1016/j.tiv.2017.09.029. Epub 2017 Oct 7. PubMed PMID: 29017774.

Zeller, K.S., Forreryd, A., Lindberg, T., Chawade, A., Lindstedt, M. The GARD platform for potency assessment of skin sensitizing chemicals. ALTEX. 2017;34(4):539-559. doi: 10.14573/altex.1701101. Epub 2017 Apr 12. PubMed PMID: 29156079.

Johansson, H., Gradin, R., Forreryd, A., Agemark, M., Zeller, K.S., Johansson, A., Larne, O., van Vliet, E., Borrebaeck, C., Lindstedt, M. Blinded evaluation of the Genomic Allergen Rapid Detection assay. ALTEX 2017. doi: 10.14573/altex.1701121

Lindstedt M., Zeller K.S., Johansson H., Borrebaeck C. (2017) GARD: Genomic Allergen Rapid Detection. In: Eskes

C., van Vliet E., Maibach H. (eds) Alternatives for Dermal Toxicity Testing. Springer, Cham. DOI https://doi.org/10.1007/978-3-319-50353-0_27; Print ISBN 978-3-319-50351-6

Forreryd, A., Zeller, K.S., Lindberg, T., Johansson, H., Lindstedt, M. From genome-wide arrays to tailor-made biomarker readout – progress towards routine analysis of skin sensitizing chemicals with GARD. Toxicology in Vitro. 2016; doi:10.1016/j.tiv.2016.09.013

Zeller, K.S., Johansson, J. Common and diverging integrin signals downstream of adhesion and mechanical stimuli and their interplay with reactive oxygen species. Biophysical Reviews and Letters 09(02), 159-171, 2014.

Zeller, K.S., Riaz, A., Sarve, H., Li, J., Tengholm, A., Johansson, S. The role of mechanical force and ROS in integrin-dependent signals. PLoS ONE 8(5): e64897, 2013. doi: 10.1371/journal.pone. 0064897.

Riaz, A., Zeller, K.S., Johansson, S. Receptor-specific mechanisms regulate phosphorylation of AKT at Ser473: Role of RICTOR in β1 integrin-mediated cell survival. PLoS ONE 7(2): e32081, 2012. doi: 10.1371/journal.pone.0032081.

Zeller, K.S., Idevall-Hagren, O., Stefansson, A., Velling, T., Jackson, S.P., Downward, J., Tengholm, A., and Johansson, S. PI3-kinase p110α mediates β1 integrin-induced Akt activation and membrane protrusion during cell attachment and initial spreading. Cellular Signalling 22, 1838-1848, 2010. doi: 10.1016/ j.cellsig.2010.07.011.

## Projects

Selected grants (as main applicant)

200 000 SEK by The Crafoord Foundation, In vitro immunotoxicity testing of the forever chemicals PFAS, 2023.

200 000 SEK by Gyllenstiernska Krapperupstiftelsen, New approaches to evaluate immunotoxicity of "forever" chemical PFAS, 2023.

90 000 SEK by Magnus Bergvall Stiftelse, New approaches to evaluate PFAS effects on the human immune system, 2023.

1 380 000 SEK by AFA insurance, Contact allergy caused by accelerator-free protective gloves in health care - identification and better understanding of skin sensitizing chemicals. 2023-2025.

2 999 670 SEK by Research Council Formas, Mechanisms of “cocktail effects” in skin sensitization – investigation of rubber chemical mixtures. 2020-2023.

## Memberships

*Selected conference contributions*

de Ávila, R.I., Merényi, G., Ljungberg Silic, L., Carreira-Santos, S., Siino, V., Levander, F., Bergendorff, O., Zeller, K.S. A human dendritic cell model to understand and predict cocktail effects in skin sensitization, Danish 3R center symposium 2023, poster.

de Ávila, R.I., Ljungberg Silic, L., Carreira Santos, S., Siino, V., Levander, F., Merenyi, G., Bergendorff, O., Zeller, K.S. *In vitro* assessments of a novel sensitizer in accelerator-free gloves. European Society of Contact Dermatitis Congress 2022, Amsterdam (NL), talk selected from abstracts.

de Ávila, R.I., Carreira Santos, S., Siino, V., Levander, F., Eriksson, D., Chawade, A., Lindstedt, M., Zeller, K.S. Unravelling cocktail effects of complex chemical mixtures using integrated -omics: a case study with agricultural fungicides. European Societies of Toxicology Congress, 2021 (virtual), poster.

Zeller, K.S., Werner, F., Lindberg, T., de Ávila, R.I., Levander, F., Eriksson, D., Chawade, A., Lindstedt, M. Identification of molecular pathways affected by glyphosate and products thereof in a dendritic cell model. European Societies of Toxicology Congress, Helsinki (FI) 2019, poster presentation.

## Other Relevant Information