

Curriculum vitae

Tanja Eichhorn, MSc PhD

Personal Data

Date of birth 27-06-1987, Waidhofen/Thaya, Austria

Contact University for Continuing Education Krems (Danube University Krems)

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Current Position

Since 2020 Principal Investigator of the FTI Project

Inflammation, Sepsis and Regeneration: Development of Efficient Diagnostic Methods and New Therapeutic Approaches in Inflammation and Sepsis

Department for Biomedical Research, Danube University Krems, Krems, Austria

Education

2017 Promotion (PhD), with distinction

Medical University of Vienna, Vienna, Austria

Oct 2012 – Dec 2017 PhD Thesis

Medical University of Vienna, Vienna, Austria and

Christian Doppler Laboratory for Innovative Therapy Approaches in Sepsis, Danube University Krems, Krems, Austria

2011 Graduation (MSc), with distinction

Medical and Pharmaceutical Biotechnology,

IMC Krems University of Applied Sciences, Krems, Austria

Sep 2009 – Jun 2011 Master Thesis

Department for Health Sciences and Biomedicine,

Center for Biomedical Technology,

Danube University Krems, Krems, Austria

2009 Graduation (BSc), with distinction

Medical and Pharmaceutical Biotechnology,

IMC Krems University of Applied Sciences, Krems, Austria

Sep 2006 – Jun 2009 Bachelor Thesis

Department for Health Sciences and Biomedicine,

Center for Biomedical Technology,

Danube University Krems, Krems, Austria

Academic and Professional Career

since 2018 Postdoc

Department for Health Sciences and Biomedicine, Danube University
Krems, Krems, Austria

Mar 2013 – Dec 2017 PhD Student

Christian Doppler Laboratory for Innovative Therapy Approaches in Sepsis
Department for Health Sciences and Biomedicine, Danube University
Krems, Krems, Austria

Mar 2012 – Feb 2013 Research Associate

Sep 2011 – Feb 2012 Department for Health Sciences and Biomedicine
Danube University Krems, Krems, Austria

Aug 2010 – Feb 2011 Master Student

Secondment within the Marie Curie Industry-Academia Partnerships and
Pathways on Monolithic Adsorbent Columns for Extracorporeal Medical
Devices and Bioseparations, MONACO-EXTRA project FP 7
Protista Biotechnology AB, Lund, Sweden and
Danube University Krems, Krems, Austria

Jul 2009 Trainee

Institute Inspections, Medical Devices and Hemovigilance
Austrian Agency for Health and Food Safety (AGES), PharmMed, Vienna,
Austria

Jul 2008 – Feb 2009 Bachelor Student

Department for Health Sciences and Biomedicine, Danube University
Krems, Krems, Austria

Research Interests

- Pathophysiology of sepsis, www.sepsisresearch.at
- Endothelial Activation
- Cell Culture Models
- Cytokine Modulation by Extracorporeal Therapies
- Extracellular Vesicles

Awards

- Poster Award, Winter School of the European Society for Artificial Organs (2018)
- Krems Cooperation Research Award, Biotec Area Krems (2017)
- Würdigungspreis, Federal Ministry of Science and Research (2011)

Memberships in Professional Societies

ESAO European Society for Artificial Organs, www.esao.org

ÖGMBT Austrian Association of Molecular Life Sciences and Biotechnology,
www.oegmbt.ac.at

ASEV Austrian Society for Extracellular Vesicles, www.asev.at

Peer-Reviewed Articles

Semak V, [Eichhorn T](#), Weiss R, Weber V (2022) Polyzwitterionic coating increases the blood compatibility of hydrophobic polystyrene-based adsorbents for therapeutic apheresis. *Biomacromolecules*, submitted.

Ebeyer-Masotta M, [Eichhorn T](#), Weiss R, Semak V, Lauková L, Fischer MB, Weber V (2022) Heparin-functionalized adsorbents eliminate central effectors of immunothrombosis, including platelet factor 4, high mobility group box 1 protein, and histones. *Int J Mol Sci*, 23:1823.

Pilecky M, Harm S, Bauer C, Zottl J, Emprechtinger R, [Eichhorn T](#), Schildböck C, Ecker M, Willheim M, Weber V, Hartmann J (2021) Performance of lateral flow assays for SARS-CoV-2 compared to RT-qPCR. *J Infect*, in press.

[Eichhorn T](#), Linsberger I, Lauková L, Tripisciano C, Fendl B, Weiss R, König F, Valicek G, Miestinger G, Hörmann C, Weber V (2021) Analysis of inflammatory mediator profiles in sepsis patients reveals that extracellular histones are strongly elevated in nonsurvivors. *Med Inflamm*, 2021:8395048.

Fendl B, Weiss R, [Eichhorn T](#), Linsberger I, Afonyushkin T, Puhm F, Binder CJ, Fischer MB, Weber V (2021) Extracellular vesicles are associated with C-reactive protein in sepsis. *Sci Rep*, 11(1):6996.

Fendl B, Weiss R, [Eichhorn T](#), Spittler A, Fischer MB, Weber V (2019) Storage of human whole blood, but not isolated monocytes, preserves the distribution of monocyte subsets. *Biochemical and Biophysical Research Communications* 517(4):709-714.

Fendl B, [Eichhorn T](#), Weiss R, Tripisciano C, Spittler A, Fischer MB, Weber V (2018) Differential interaction of platelet-derived extracellular vesicles with circulating immune cells: roles of TAM receptors, CD11b, and phosphatidylserine. *Frontiers in Immunology* 9:2797.

Gubensek J, Strobl K, Harm S, Weiss R, [Eichhorn T](#), Buturovic-Ponikvar J, Weber V, Hartmann J (2018) Influence of citrate concentration on the activation of blood cells in an in vitro dialysis setup. *PLoS One* 13(6):e0199204.

Weiss R, Gröger M, Rauscher S, Fendl B, [Eichhorn T](#), Fischer MB, Spittler A, Weber V (2018) Differential interaction of platelet-derived extracellular vesicles with leukocyte subsets in human whole blood. *Sci Rep* 8(1):6598.

[Eichhorn T](#), Hartmann J, Harm S, Linsberger I, König F, Valicek G, Miestinger G, Hörmann C, Weber V (2017) Clearance of selected cytokines with continuous veno-venous hemodialysis using Ultraflux EMiC2 versus Ultraflux AV1000S. *Blood Purif* 44:260-266.

Tripisciano C, Weiss R, [Eichhorn T](#), Spittler A, Heuser T, Fischer MB, Weber V (2017) Different potential of extracellular vesicles to support thrombin generation: Contributions of phosphatidylserine, tissue factor, and cellular origin. *Sci Rep* 7(1):6522.

[Eichhorn T](#), Fischer MB, Weber V (2017) Mechanisms of endothelial activation in sepsis and cell culture models to study the heterogeneous host response. *Int J Artif Organs* 40(1):9-14.

Weiss R and [Eichhorn T](#), Spittler A, Mičušík M, Fischer MB, Weber V (2017) Release and cellular origin of extracellular vesicles during circulation of whole blood over adsorbent polymers for lipid apheresis. *J Biomed Mater Res B* 105(3):636-646.

Eichhorn T, Rauscher S, Hammer C, Gröger M, Fischer MB, Weber V (2016) Polystyrene-divinylbenzene based adsorbents reduce endothelial activation and monocyte adhesion under septic conditions in a pore-size dependent manner. *Inflammation* 39(5):1737-1746.

Tripisciano C, Eichhorn T, Harm S, Weber V (2014) Adsorption of the Inflammatory Mediator High-Mobility Group Box 1 by Polymers with Different Charge and Porosity. *Biomed Research International* 238160.

Schildberger A, Rossmannith E, Eichhorn T, Strassl K, Weber V (2013) Monocytes, Peripheral Blood Mononuclear Cells, and THP-1 Cells Exhibit Different Cytokine Expression Patterns Following Stimulation with Lipopolysaccharide. *Mediators of Inflammation* 697972

Eichhorn T, Ivanov AE, Dainiak MB, Leistner A, Linsberger I, Jungvid H, Mikhalovsky SV, Weber V (2013) Macroporous composite cryogels with embedded polystyrene divinylbenzene microparticles for the adsorption of toxic metabolites from blood. *Journal of Chemistry* 348412