

Curriculum vitae Dr.rer.nat Elvira Weber

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CURE^{3D} (Cardiovascular Tissue Engineering & Regenerative Medicine)
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Personal information

Birth	29.06.1979 in Düren, Germany
Citizenship	German

Research experience

2021-now	Head of the CURE ^{3D} research group Clinic for heart surgery Medical Faculty, Heinrich-Heine-University Düsseldorf <i>Cardiovascular Tissue Engineering & Regenerative Medicine</i>
2014-2019	Postdoctoral research scientist The University of Bonn, LIMES Institute, Unit of Biochemistry <i>Establishing a 3D immune cell containing adipose tissue organoids for in vitro analysis of lipid metabolism and immune functions</i>
2011-2014	Postdoctoral research scientist The University of Umeå, Molecular Infection Medicine Sweden (MIMS), Division of Virology, Department of Clinical Microbiology Guest scientist for 7 months at Helmholtz Centre for Infection Research, Braunschweig, Germany, Division of Innate Immunity and Infection <i>Pathogenicity of the neurotrophic BSL3 Tick-borne Encephalitis Virus (TBEV) and impact of the innate immune response against TBEV infections</i>
2005-2010	PhD student Department of Biology, Unit of Biochemistry, University of Konstanz <i>Identification of Interaction Partners and Characterisation of the Human Papillomavirus E6 Protein</i>
2004-2005	Diploma student Department of Biology, Unit of Immunology, University of Konstanz <i>Characterization of the Ubiquitin-like Protein FAT10 and its interaction with Nub1L</i>
2000-2003	Undergraduate research Department of Biology, Unit of Pharmacology, University of Konstanz <i>Ebselen and its improvement on lung transplantation</i>

Education

2010	PhD in Biology, University of Konstanz, Germany
2005	Diploma of Biology, University of Konstanz,

Teaching

- Biochemistry I (Practical course, Homework/Presentation/Seminar)
- Biochemistry II (Practical course, Seminar)
- Lab rotation Immunology, Cellular Lipid Biochemistry, Biochemistry
- Supervision of Bachelor and Master theses

Committee work, awards and training

- Former member of the WIS committee (Women in Science, LIMES institute, Bonn))
- Travel award of the International Cytokine and Interferon Society (ICIS)
- Leading teams in academia- multiple perspectives for greater awareness (Dr Matteo Garavoglia, Impuls plus, Bonn)
- Non-verbal communication, leading groups and group dynamics (Michael Grinder, TWINN Academy, Germany)
- Real-time quantitative PCR and Biostatistics (Tataa biocenter, Umea, Sweden)
- Occupational Health and Safety in Biomedical Research Facilities (Karolinska University Hospital, Sweden)
- Superresolution and 4D-Confocal Imaging (MIMS, Umea, Sweden)

Publications

1. Ventricular stabilization with a customized decellularized cardiac ECM-based scaffold after myocardial infarction alters gene expression in a rodent LAD-ligation model. Aubin, H., Rath, L., Vey, A., Schmidt, V., Barth, M., **Weber, E.**, Lichtenberg, A. & Akhyari, P. (2022). *Frontiers in Bioengineering and Biotechnology*, 23.
2. Generation of immune cells containing adipose organoids for in vitro analysis of immune metabolism. Taylor, J., Sellin, J., Kuerschner, L., Krähl, L., Majlesain, Y., Förster, I., Thiele, C., Weighardt, H., & **Weber, E.** (2020). *Scientific reports*, 10(1), 21104.
3. The envelope protein of tick-borne encephalitis virus influences neuron entry, pathogenicity, and vaccine protection. Lindqvist, R., Rosendal, E., **Weber, E.**, Asghar, N., Schreier, S., Lenman, A., Johansson, M., Dobler, G., Bestehorn, M., Kröger, A., & Överby, A. K. (2020). *Journal of Neuroinflammation*, 17(1), 284.
4. Type I Interferon response in the olfactory bulb, the site of tick-borne flavivirus accumulation, is primarily regulated by IPS-1. Kurhade, C., Zegenhagen, L., **Weber, E.**, Nair, S., Michaelsen-Preusse,

- K., Spanier, J., Gekara, N. O., Kröger, A., & Överby, A. K. (2016). *Journal of Neuroinflammation*, 13, 22.
5. Type I interferon protects mice from fatal neurotropic infection with Langkat virus by systemic and local antiviral responses. **Weber, E.**, Finsterbusch, K., Lindquist, R., Nair, S., Lienenklaus, S., Gekara, N. O., Janik, D., Weiss, S., Kalinke, U., Överby, A. K., & Kröger, A. (2014). *Journal of virology*, 88(21), 12202–12212
 6. Ebselen improves ischemia-reperfusion injury after rat lung transplantation Hamacher, J., Stammberger, U., **Weber, E.**, Lucas, R., & Wendel, A. (2009). *Lung*, 187(2), 98–103.
 7. A novel peptide motif binding to and blocking the intracellular activity of the human papillomavirus E6 oncoprotein Dymalla, S., Scheffner, M., **Weber, E.**, Sehr, P., Lohrey, C., Hoppe-Seyler, F., & Hoppe-Seyler, K. (2009). *Journal of molecular medicine* (Berlin, Germany), 87(3), 321–331.
 8. The UBA domains of NUB1L are required for binding but not for accelerated degradation of the ubiquitin-like modifier FAT10. Schmidtke, G., Kalveram, B., **Weber, E.**, Bochtler, P., Lukasiak, S., Hipp, M. S., & Groettrup, M. (2006). *The Journal of biological chemistry*, 281(29), 20045–20054.