

CURRICULUM VITAE

Isabella ELLINGER

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Academic milestones and relevant positions

- From 2008 Associate Professor (100%), IPA, Medical University of Vienna, Austria
- 2003 – 2008 Associate Professor (50%), IPA, Medical University of Vienna, Austria
- From 2003 Group leader “Pathophysiology of the Placenta” at IPA, Medical University of Vienna, Austria
- 2002 Habilitation (*Venia docendi*) Cell, Medical University of Vienna, Austria
- 2000 – 2006 Maternity leave (2 children, born 2001 and 2003)
- 1997 – 2003 Research Associate (50%), at Dept. of Gen. & Exp. Pathol., University Vienna, Austria (now IPA)
- 1997 – 2000 Postdoctoral Fellow at Dept. of Gen. & Exp. Pathol., University of Vienna, Austria (now IPA)
- 1996 – 1997 Postdoctoral Fellow at Inst. of Biochemistry, University of Lausanne, Switzerland
- 1994 – 1995 Postdoctoral Fellow at Dept. of Gen. & Exp. Pathol., University of Vienna (now IPA)
- 1994 Dr. rer.nat. (PhD equivalent), Graduation with distinction, University of Natural Resources and Life Sciences, Vienna, Austria (BOKU)
- 1993 Visiting Scientist at Inst. of Biochemistry, University of Lausanne, Switzerland (1 month)
- 1993 Visiting Scientist at Dept. of Mol. Biology, University of Princeton, New Jersey, USA (1 month)
- 1991 – 1995 Research Associate (50%), at Dept. of Gen. & Exp. Pathology, University of Vienna (now IPA)
- 1991 Dipl. Ing. (MSc equivalent) in Food- and Biotechnology, BOKU
- 1984 – 1991 Diploma Studies of Food- and Biotechnology, BOKU

Main areas of research

I study functions of the human placenta, e.g., the uptake, transport or effects of maternal IgG, nutrients, Thai medicinal herbs or environmental pollutants, mainly in *in vitro* models and I am interested in aspects of placental immunology. I contribute my knowledge as a cell biologist in interdisciplinary collaborations with industry and scientific partners to advance the development of automated microscopy. Our teams have created large, annotated datasets for training deep learning (DL)-based algorithms, as well as developed DL-based and classical image processing algorithms for automatic detection, classification, or segmentation of biological entities. Finally, I provide expertise and support in the field of immunofluorescence microscopy and thus contribute to projects in various research areas (immunology, cancer research, pathophysiology).

Research grants and prizes

eRaDicate – Innovative ligands for nuclear receptors to eradicate cancer relapse, Horizon-MSCA-DN, associated partner of the non-academic beneficiary TissueGnostics GmbH (Vienna), senior supervisor of one DC and lead in work package 4 (teaching organization). 2024 – 2027

SSBB – Stop Spread Bad Bugs, Horizon-MSCA-DN, associated partner of the non-academic beneficiary TissueGnostics GmbH, supervisor of one DC, and co-supervisor of 2 DCs. 2023 – 2026 (one publication)

Deep learning for improved nuclei segmentation and knowledge transfer methods in microscopic images, Bridge Young Scientists/FFG, scientific coordinator and PI (€ 227,452); 2020 – 2022 (nine original articles, five conference papers, 1 guest editorial)

Iron metabolism of the healthy human term placenta, Life Science Call, Gesellschaft für Forschungsförderung Niederösterreich m.b.H. (GFF), € 300,000, Co-PI, 2018-2021 (one publication)

CaSR-Biomedicine, MSCA-ETN, associated partner of the non-academic beneficiary TissueGnostics GmbH, supervisor of one ESR. 2016 – 2019 (three original articles; three conference papers)

Mercury kinetics in the human placenta: making the bridge between genotype and phenotype, Life Science Call Gesellschaft für Forschungsförderung Niederösterreich m.b.H. (GFF), € 295,000, Co-PI, 2016-2019 (two publications)

Mercury kinetics in human placenta - Functional proof and localization of candidate proteins, Life Science Call Gesellschaft für Forschungsförderung Niederösterreich m.b.H. (GFF), € 275,000, Co-PI, 2012-2015 (three publications)

Validation of segmentation in automated quantitative immuno-histochemistry, Company-funded §27 project, € 5,000, Scientific coordinator and PI, 2013-2014

Melatonin and blood pressure control, WTZ Slovakia 2013-14/OEAD SK 06/2013, € 4,000, Co-PI, 2013-2014 (one publication)

Automated cell-recognition technology for science and diagnostics, Bridge Project/FFG, scientific coordinator and PI (€ 445,100); this project received a *Science2business Award* in 2011. 2008 – 2012 (two original articles; one conference paper, two book chapters)

Outreaching activities: Ellinger is member of the female researcher network WNWmed (The Women's Science Network Medicine) that developed the 'NOST' project in 2017 and has been running it ever since. NOST supports applicants with a foreign Medical Doctor degree at the Medical University of Vienna. WNWmed-NOST received the Sustainability Award 2020 in the category 'Administration and Management', by the Austrian Federal Ministry of Education, Science and Research, the Veronika-Fialka-Moser Diversity Award 2018 in the category 'Engagement' by Medical University of Vienna and two Prizes by the City of Vienna in 2020 and 2021. Ellinger is also a founding member of the WISIA (Women in Science – an Interdisciplinary Association) network of female researchers that was awarded the Sustainability Award 2018 in the category 'Structural Anchoring' by the Austrian Federal Ministries BMBWF and BMNT.

Member of International Federation of Placenta Associations (IFPA), European Placenta group (EPG), WNWmed (The Women's Science Network Medicine; vice president) and WISIA (Women in Science - an Interdisciplinary Association; founding member, board member)

Supervision of 2 Post-Docs, 4 PhD students, 17 Diploma/Master students, 20 Bachelor students, 14 visiting scientists/trainees/observers/research associates, 36 FFG-funded practical trainings for pupils (2024).

Reviewer for Foundation of Polish Science, Queensland University of Technology, Medical University of Graz WTZ/BMWF

Referee for American Journal of Reproductive Immunology, Biochemie, Cells, Gerontology, Heliyon, Journal of Clinical Medicine, Journal of Physiology and Pharmacology, Journal of Pineal Research, Molecular and Cellular Endocrinology, Placenta, Reproductive Toxicology, Wiener Medizinische Wochenschrift