

Head: Univ.-Prof. Dr. Markus Hengstschläger
<http://www.meduniwien.ac.at/hp/medizinische-genetik/>

The Institute of Medical Genetics invites applications for a **PhD Position** in studying

Mercury toxicokinetics in human term placenta: functional proof of involved candidate proteins

The ubiquitous heavy metal mercury is a significant neurodevelopmental toxicant. It easily crosses the placenta and the blood-brain-barrier. Epidemiological studies indicate substantial inter-individual differences in placental mercury transfer. However, surprisingly little is known on the mechanisms and the genetic background underlying mercury toxicokinetics in placenta.

The position is available for 30 months. Applicants should be interested in studying placenta toxicokinetics and in establishing an appropriate human trophoblast cell culture model. Candidates should be experienced in cell culture and standard laboratory techniques such as immunoblotting. Further background for isolation and cultivation of primary cells, gene knockdown, and trace element analysis is a plus.

Deadline for application is 24.02.2012

Applications are kindly requested to submit curriculum vitae and references to Claudia Gundacker (claudia.gundacker@meduniwien.ac.at)

Literature:

Gundacker, C., Gencik, M., & Hengstschläger, M. (2010). The relevance of the individual genetic background for the toxicokinetics of two significant neurodevelopmental toxicants: Mercury and lead. *Mutation Research/Reviews in Mutation Research*, 705(2), 130-140.

Gundacker, C., Wittmann, K. J., Kukuckova, M., Komarnicki, G., Hikkel, I., & Gencik, M. (2009). Genetic background of lead and mercury metabolism in a group of medical students in Austria. *Environmental Research*, 109(6), 786-796.

Rosner, M., Siegel, N., Fuchs, C., Slabina, N., Dolznig, H., & Hengstschläger, M. (2010). Efficient siRNA-mediated prolonged gene silencing in human amniotic fluid stem cells. *Nature Protocols*, 5(6), 1081-1095.