



Einladung zum Vortrag von

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**„ Proteoglycans and human stem cell fate determination
and new genetic technologies to dissect complex
diseases ”**

Human neural stem cells (hNSCs) and mesenchymal stem cells (hMSCs) are now routinely used in cell culture models, however the processes and the mechanisms that regulate these cells are still largely unknown. hMSCs have neural lineage potential, with the lack of understanding of lineage regulation limiting the use of these cells in developing better models of human neurogenesis as well as our ability to identify how numerous neurological and brain disorders occur. The proteoglycans (PGs) are widely distributed in the body and the nervous system, primarily in the extracellular matrix. Multiple studies have identified a role for these proteins during normal development of the nervous system as well as in the maintenance of stem cell pools in the adult. What has yet to be elucidated is how these PGs contribute to the control of neural lineage regulation, proliferation and differentiation? How these processes are regulated will help to further unravel the structural complexity of the human brain, and the role of associated biological and other factors in neurogenesis. The Genomics Research Centre located at QUT's Institute of Health and Biomedical Innovation, performs next generation sequencing and high throughput genomics technologies to advance the identification of diagnostic markers of complex diseases, in particular neurological disorders and cancers. With advances in genomics and next generation sequencing, choosing the appropriate applications for specific projects is important to success.

Mittwoch, 19. Juli 2017, 16:30 Uhr
Carl Auer von Welsbach Hörsaal
Boltzmanngasse 1, 1090 Wien

Doris Marko
Institut für Lebensmittelchemie und Toxikologie