



## Institute colloquium

# Novel mechanisms of neurogenesis and neural repair

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Host: Simon Hippenmeyer

We study the mechanisms of neurogenesis in order to implement them for neuronal repair. I will present unpublished work about the molecular function of Trnp1, a novel nuclear protein, with key roles in promoting neural stem cell self-renewal and neurogenesis (Stahl et al., Cell 2013). This shows unprecedented functions in regulating several nuclear processes by its N-terminal intrinsically disordered region which is highly conserved in mammals. I will then show that Trnp1 is also critical for direct neuronal reprogramming (Masserdotti et al., Cell Stem Cell 2015) and up-date on the recent breakthrough in direct glia-to-neuron conversion after brain injury (Gascon et al., 2016; unpublished data). I will then move on to discuss the integration of replaced neurons into the circuitry of the murine cerebral cortex (Falkner, Grade et al., Nature 2016), that normally does not integrate new neurons at adult stages and present unpublished data about the mechanisms regulating this integration. Taken together, our knowledge about basic mechanisms of neurogenesis allowed making great strides towards neuronal repair.

**Monday, May 20, 2019 04:00pm - 05:00pm**

Raiffeisen Lecture Hall, Central Building



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.