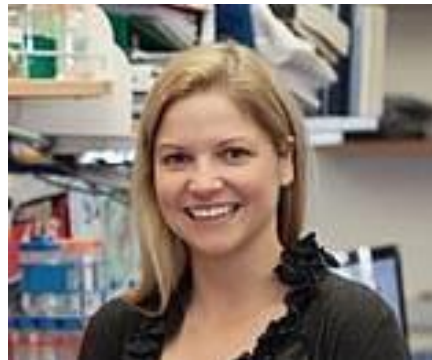


# RVZ Colloquium

Rudolf Virchow Center, D15,  
Josef-Schneider-Str. 2 / Room 01.002-004



## Prof. Margaret Stratton

University of Massachusetts (Amherst, USA)

13. December 2018, 17:00

She will talk about

### *“Understanding the molecular determinants of memory formation”*

*Ca<sup>2+</sup>-calmodulin dependent protein kinase II (CaMKII) is a crucial oligomeric enzyme in neuronal and cardiac signaling, fertilization and immunity. Work in the Stratton lab is focused on understanding the role of this fascinating enzyme in different tissues. We have used RNA sequencing to determine which transcripts are present and we are characterizing these different variants in terms of their activation profiles. To facilitate our studies in cells, we have developed a novel, substrate-based, genetically-encoded sensor for CaMKII activity, FRESCA (FRET-based Sensor for CaMKII Activity), which has allowed us to monitor CaMKII activity in live cells under various conditions. We hope that by gaining an understanding of CaMKII in vitro and in cells, we will be able to better understand medical conditions in which it is implicated, such as memory deficiencies and infertility.*

- Invited by Dr. Sonja Lorenz -

Everybody is welcome to attend.