

CRBM external seminar Thursday Jan 26<sup>th</sup> 11:00 am, Salle Marcel Dorée

## Susanne Kramer

## University of Wurzburg, Germany

## <u>« Why being mainstream? An unusual mRNA</u> <u>decapping enzyme in trypanosomes.</u>



Dr. Susanne Kramer is an expert in gene expression regulation and specifically in RNA metabolism with a specialization in RNP granules. She has pioneered the development of imagingbased methods for mRNAs and tools for granule purification. She will present the talk on the decapping enzyme, ALPH1 that the lab identified in the trypanosome stress granules.

## Minibio:

Dr. Susanne Kramer (Ph.D.) is a Heisenberg Professor at the Biocenter - Cell and Developmental Biology, University of Wurzburg, Germany. Research within Dr. Kramer's laboratory focuses on two main themes, (1) Study of nuclear pores, mRNA export, and its control mechanisms and, (2) Study of the novel mRNA decapping enzyme ALPH1, with the focus on employing this enzyme as a drug target. Dr. Kramer's lab is specialized in employing imaging-based methods, such as smFISH, in which they have pioneered several variants that allow the detection of transcription and decay intermediates as well as the compactness of mRNAs. The lab has a strong background in RNA granules: the first purification of starvation stress granules was done in trypanosomes, using the peripheral cytoskeleton as a molecular sieve.

Dr. Kramer completed her Diploma in Biochemistry from the Free University of Berlin, Germany, and Glasgow University, UK. Next, Dr. Kramer completed her Ph.D. at Ludwig-Maximilians-University Munich where her doctoral thesis was focused on the characterization of a PKA-like kinase from *Trypanosoma brucei*. Dr. Kramer's postdoctoral research at the University of Cambridge, UK was focused on Post-transcriptional control of gene expression during development and in response to stresses. As a Junior Group leader, Dr Kramer investigated RNA granules and the regulation of gene expression in Trypanosomes. In 2014, she received Marcella Boveri Research Prize.