

# SFB 924-/BZR – Kolloquium

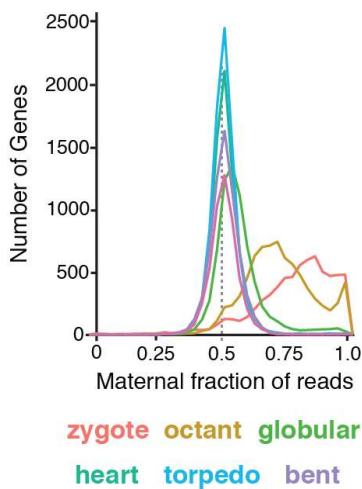
Donnerstag, 05. Dezember 2019

14:00 Uhr, H53



**Prof. Dr. Stewart Gillmor**  
CINVESTAV-IPN (Irapuato, Mexiko)

## “Maternal genome dominance in early *Arabidopsis* embryogenesis”



In animals, it is well accepted that mRNAs and proteins from the egg direct the first steps of embryogenesis. By contrast, research in plants over the last 20 years has alternately supported and discounted maternal regulation of early embryogenesis. In my seminar, I will present recent genetic and genomic experiments from my laboratory concerning parent-of-origin regulation of early embryogenesis in *Arabidopsis thaliana*. Our data support a model where the maternal genome exerts a predominant role on early embryogenesis not only through inheritance of egg transcripts (as in animals), but also from preferential transcription of maternal alleles in the zygote and early embryo. This hypothesis is attractive because it is consistent with genetic evidence from *Arabidopsis* showing that maternal effects predominate in early embryogenesis, as well as molecular and genomic experiments in various plant species that have found that the onset of zygotic transcription occurs within hours after fertilization.

Host: Prof. Dr. Thomas Dresselhaus