



UNIVERSITÄT GREIFSWALD
Wissen lockt. Seit 1456



Das **Institut für Biochemie** lädt gemeinsam mit dem Ortsverband
der **Gesellschaft Deutscher Chemiker** zu einem

K o l l o q u i u m d e r G D C h

Großer Hörsaal des Instituts für Biochemie
Felix-Hausdorff-Str. 4, Greifswald

Montag, 21. Oktober 2019, 16 Uhr c.t.

Prof. Dr. Jörg Hartig

Universität Konstanz, Fachbereich Chemie

spricht zum Thema:

RNA switches for controlling gene expression in eukaryotic model organisms

Abstract:

In recent years we have developed an array of RNA-based switches that are composed of fusions of aptamers and ribozymes, resulting in ligand-dependent ribozymes also called aptazymes. When inserted into untranslated regions of mRNAs, aptazymes can be utilized as versatile switches of gene expression. They possess several advantages compared to classical transcription factor-based systems for conditional control of gene expression: They need only little coding space and prevent common disadvantages of typical protein-based strategies. I will present novel results regarding the implementation of aptazymes in order to control gene expression in the model organism *C. elegans* that so far lacked convenient means for conditional gene expression control. Moreover, novel approaches of utilizing aptamers as genetic switches for eukaryotic expression regulation apart from controlling self-cleaving ribozyme activity will be presented.

Einladende
Prof. Dr. Sabine Müller

PD Dr. Heike Kahlert
Vorsitzende des Ortsverbandes der GDCh