

**Institution**

IPMB, Abteilung Chemie, AG Jäschke, Universität Heidelberg

**Datum**

3.11.2017

**Master thesis:**

Characterisation of a new post-translational protein modification in bacteria and eukaryotes

The master candidate will analyse a new post-translation protein modification recently identified by our lab. The project requires a strong background in molecular biology and biochemistry. Following techniques will be used to study the protein-modification *in vitro* and *in vivo*: Protein purification, radioactive labelling of proteins and RNA, analysis of protein modification by mass-spectrometry in collaboration with the ZMBH core facility.

**Kontakt**

Dr. Katharina Höfer

Email: hoefer(at)uni-heidelberg.de

Institut für Pharmazie und Molekulare Biotechnologie

Abteilung Chemie - AG Jäschke

Universität Heidelberg

Im Neuenheimer Feld 364

69120 Heidelberg

06221-546446

Interesting literature for the project:

Jäschke A, Höfer K, Nübel G, Frindert J: Cap-like structures in bacterial RNA and epitranscriptomic modification. *Curr Opin Microbiol.* 2016, 30:44-9.

Cahová H\*, Winz M-L\*, Höfer K\*, Nübel G, Jäschke A: NAD captureSeq indicates NAD as a bacterial cap for a subset of regulatory RNAs. *Nature.* 2015, 519(7543):374-7.

Höfer K\*, Li S\*, Abele F, Frindert J, Schlotthauer J, Grawenhoff J, Du J, Patel DJ, Jäschke A: Structure and function of the bacterial decapping enzyme NudC. *Nature Chemical Biology.* 2016, 12(9):730-4.