The Kellner Isotope Lab has an open position for a

**Master student**

**Mass Spectrometry of RNA modifications / epitranscriptomics**

Our lab is central to the SFB 1309 - Chemical Biology of Epigenetic Modifications and we are located at the Campus Großhadern in the Department of Chemistry and Pharmacy at the LMU Munich. Since June 2016, we study the connection of RNA modifications and neurological disease. We use stable, non-radioactive, isotopes for absolute quantification of modified nucleosides using our 2018 installed triple quadrupole mass spectrometer.

In our lab, you will have the opportunity to apply our break-through concept NAIL-MS* in various biological contexts and decipher the dynamics of the epitranscriptome inside living cells. You will learn stable isotope labeling of RNA in common model organisms such as *E. coli, S. cerevisiae* or human/mouse cells and use it to answer important questions regarding RNA modification hierarchy and necessity under stress. For this purpose, you will learn instrumental analytics such as size exclusion chromatography (Ultra-)high performance liquid chromatography and mass spectrometry.

You bring:
- a Bachelor's degree in Pharmacy, Biochemistry, Biology or Chemistry
- qualification for starting your master thesis
- an interest in RNA Chemical Biology and Analysis
- good communication skills and a strong team spirit

Our lab offers:
- Training in bacterial/eukaryotic cell culture
- Experience in isolation and purification of nucleic acids
- Modern analysis of nucleic acid modifications
- Experience for absolute quantification of small compounds using isotope dilution mass spectrometry
- a supportive team

Please apply by sending a single pdf containing a cover letter stating your motivation, your CV, your study record/degrees and potential references to Stefanie Kellner stkech@cup.lmu.de.

* Nucleic Acid Isotope Labeling coupled Mass Spectrometry