



MEDICAL UNIVERSITY
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Master Thesis Position in Small RNA Biology

Transfer RNAs (tRNAs) are indispensable components of the protein translation machinery. Rather recently, stress-induced and nuclease-mediated tRNA fragmentation has been discovered as an evolutionarily conserved phenomenon resulting in tRNA-derived small RNAs (tsRNAs) with various functions. What is currently impossible is visualizing tsRNAs at the subcellular level, since tsRNAs are not easily distinguished from parental tRNAs by classical hybridization-based techniques.

This M.Sc. thesis project will test and validate a number of novel RNA hybridization approaches tailored to visualize specific tsRNAs both *in vitro* and *in situ* using both human cancer cells and *Drosophila* embryos.

The successful applicant is required to have basic molecular biology skills (preferably experience with tissue culture). The position will be paid with 440 €/month for the duration of up to one year.

Starting date: **September 2022**