The collaborative research group “Epigenetics of Aging” of Holger Bierhoff (http://triplexweb.bioinf.uni-jena.de) is located at the Center for Molecular Biomedicine (CMB) of the Friedrich Schiller University Jena and is also an associated research group of the Leibniz Institute on Aging - Fritz-Lipmann Institute (FLI). The group invites applications for a

**PhD Position (TVL13/2)**

to study "LncRNA-dependent epigenetic silencing of rRNA genes in response to metabolic stress". The position is within the Doctoral program "Molecular Signatures in Adaptive Stress Response" of the Research Training Group (RTG) 1715 (http://www.grk1715.uni-jena.de).

Our previous work has uncover the long noncoding RNA (IncRNA) PAPAS as a stress-dependent regulator of rRNA genes in human and mouse cells (Bierhoff et al., Mol Cell, 2014; Zhao et al., Cell Rep, 2016). Depending on the stress signal, PAPAS recruits different epigenetic modifiers to rRNA genes and induces repressive chromatin states via histone H4 trimethylation at lysine 20 (H4K20me3) or nucleosome remodeling. In the advertised PhD project, the PAPAS-dependent stress response will be further investigated by using pharmacological as well as CRISPR/Cas9-mediated manipulation of cells. A major goal will be to unravel regulation of PAPAS synthesis using proximity labeling of proteins and chromatin immunoprecipitation/mass spectrometry assays.

In addition to the training and supervision in the lab, the RTG 1715 offers a structured program including a joined lecture series, practical courses, annual meetings and international conferences (http://www.grk1715.uni-jena.de/Training.html).

The position is remunerated under state salary scheme TV-L 50% and limited for three years. Applicants have to hold an MSc or Diploma degree and should have a background in life science research and a fluent command of the English language. Practical experience in standard techniques of molecular and cell biology, in particular methods related to chromatin, transcription and RNA, is preferred. The ideal candidate has creativity and excellent organizational skills, and is highly motivated to solve problems and to work in a friendly team.

Applications will be accepted until the position is filled and should contain a motivation letter, curriculum vitae, academic transcripts and contact details of two referees.

Please send your application preferably as a single file by e-mail to: holger.bierhoff@uni-jena.de

Jena, May 4th 2018