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German Institute of Human Nutrition Potsdam-Rehbruecke (DIfE)

is a member of the Leibniz Association. The institute's mission is to conduct experimental and clinical research in the field of nutrition and health, with the aim of understanding the molecular basis of nutrition-dependent diseases, and of developing new strategies for treatment and prevention (Website: <https://www.dife.de/en/>).

We invite applications to join the Department of **Experimental Diabetology** for

1 Doctoral Student (m/f/d)

starting **as soon as possible**.

Background

The skeletal muscle is the major site of oxidative glucose and lipid metabolism, and dysregulation of either of these metabolic pathways can contribute to the development of metabolic diseases such as type 2 diabetes. The purpose of the PhD project is to gain further insights into epigenetic and molecular changes that occur in muscle tissue in response to non-invasive interventions in obese and diabetic subjects.

Tasks

The selected candidate will investigate micro-RNA, mRNA expression and DNA methylation patterns in muscle tissue of mice differing in their obesity and diabetes susceptibility. The candidate will evaluate which interventions (training, fasting) in obese mice induce similar improvements in the expression profile and the epigenome of skeletal muscle as observed after bariatric surgery in humans. Next, a major task will be to conduct functional assays in vitro and in vivo to further characterize the impact of selected epigenetic changes in the development of obesity and type 2 diabetes.

Skills and Requirements

- Excellent M.Sc. (or equivalent) in biology, biochemistry or related biomedical field
- Knowledge of standard biochemical and molecular biology methods
- High degree of motivation and ability to work in an interactive research environment
- Excellent English (spoken and in writing) and presentation abilities (MS Office)

The position is available for 3 years. Salaries are paid according to the German federal tariff agreements (remuneration group E 13 TV-L [65%]).

The institute offers a vibrant and interactive research environment, state-of-the-art equipment and qualified training and enrolment in a local PhD program.

Please send your documents (cover letter explaining your motivation, CV, copies of degrees/certificates and references) **as a single pdf-file** before **March 31st, 2022** via e-mail to jobs@dife.de.

For further information please do not hesitate to contact:

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