The DFG funded multi-centre Collaborative Research Consortium CRC/TRR 205 offers the following position within its 2<sup>nd</sup> funding period:

# PhD Student (f/m/x) – life science

Starting September 1st, 2021 - initially limited to 3 years

## Our project

Bacterial sepsis is a serious threat to homeostasis and is the most common cause of mortality in non-coronary intensive care units (ICUs). The uncompromised function of the adrenal gland, the major source of life-saving endocrine hormones (glucocorticoids and catecholamines) is associated with the reduced development of septic shock and increased survival of ICU patients.

In our group, we are investigating the role of immune-neuroendocrine interactions in sepsis-induced activation and dysfunction of the hypothalamic-pituitary-adrenal (HPA) axis using different transgenic mouse models with deletion of key immune regulator proteins. The current project aims at investigating the mechanisms and contribution of recently characterized new forms of regulated necrosis, including ferroptosis, necroptosis and pyroptosis, in sepsis-driven adrenal gland dysfunction. In particular, we will use *in vitro*, genetic and pharmacologic approaches to assess the contribution of each of those pathways to intra-adrenal inflammation during sepsis as well as in clinical material obtained from intensive care departments.

### What we offer

- unparalleled platform of cutting-edge model systems (mice, pigs)
- comprehensive tissue, plasma, and clinical cohorts among the largest in the world
- Young Scientist and Clinician Scientist Programme with workshops, mentoring and peer group exchange
- Lab-rotation between the involved institutes
- Position according to the TV-L conditions (E13, 65%)

### What we expect

- Basic background and interest in immunology
- Will to work with small animals (mice)
- Master's degree (or Diploma) in relevant area
- Team working skills, interdisciplinary cooperation
- High degree of personal commitment and interest in an academic career
- Excellent communication skills, both in verbal and written English

# Responsible Pls:

Prof. Dr. Andreas Linkermann

Dr. Waldemar Kanczkowski

The TRR205 is committed to increase the proportion of women in all areas and positions in which women are underrepresented. Qualified female applicants are therefore particularly encouraged to apply.

Among candidates with equal aptitude and qualification, a person with disabilities will be given preference.

Become part of a multidisciplinary and international team:

We are looking forward to your application (CV, publications, references, motivation letter)— preferably per email to

Waldemar.kanczkowski@ ukdd.de

Andreas.linkermann@ukdd.de











# **Relevant Publications**

Tonnus W, ... Bornstein SR, Linkermann A. Nat Rev Endocrinol. 2021 PMID: 34135504

Chen LS, ..., Bornstein SR, Kanczkowski W. Front Endocrinol

2020, PMID: 32038494

Belavgeni A, Bornstein SR ... Kanczkowski W ... Linkermann A.

Proc Natl Acad Sci U S A. 2019, PMID: 31611400

Bornstein SR Nat Rev Endocrinol . 2019, PMID: 31395963

Kanczkowski W, ...Bornstein SR Proc Natl Acad Sci U S A.

PMID: 23959899











