

Einladung

zum Physiologischen Seminar

Prof. Dr. Martina Krüger

Institute of Cardiovascular Physiology
Heinrich Heine University

UKD Universitätsklinikum
Düsseldorf

<https://www.uniklinik-duesseldorf.de/patienten-besucher/klinikeninstitutezentren/institut-fuer-herz-und-kreislaufphysiologie/team-kontakt>



A Dynamic Molecular Spring: Titin in the Stressed Heart

Titin is a major determinant of myocardial passive stiffness and has long been linked to diastolic dysfunction and heart failure, particularly HFpEF. But titin is not merely a static structural protein: its mechanical properties can be modified within minutes, enabling rapid adaptation of the myocardium to changes in load and stress. The seminar will discuss how titin contributes to acute cardiac mechanoadaptation, including its potential role in the Frank–Starling mechanism and in limiting excessive mechanical strain. Findings from diabetes and myocardial infarction will illustrate how chronic and acute changes in titin phosphorylation and stiffness may contribute to diastolic dysfunction, but also to compensatory responses of the stressed heart. These observations broaden the classical view of titin from a passive spring to a dynamic regulator of cardiac function.

Datum: **12. November 2026**

Ort: **Hörsaal N**

Gebäude: **I01-01-1120**

Zeit: **16 Uhr c.t.**

Gäste sind herzlich willkommen!

Ansprechpartner:

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<https://www.mhh.de/molzellphys/mitarbeiter/bogdan-iorga>