

**DFG**



Universität  
Münster

Dynamic  
Interfaces  
CRC 1348

Cellular

MAY 27 - 29  
**2026**  
IN MÜNSTER

**PROGRAM**

**CRC 1348 MEETING**

**MECHANOCHEMICAL SIGNALS  
AT CELLULAR INTERFACES**



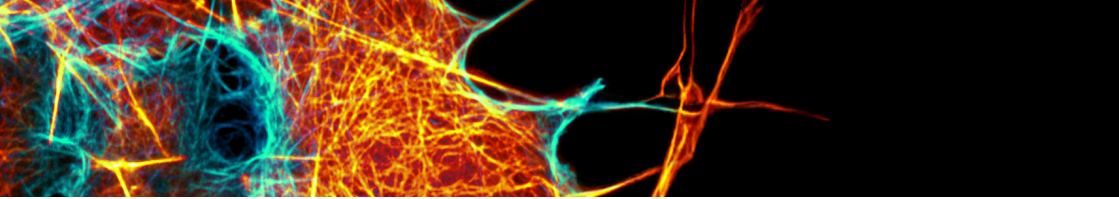
## DAY 1: MAY 27, 2026

### Session 1

- 13:00 – 13:10 Welcome
- 13:10 – 13:40 Stephan Grill:  
Mechanics at the nuclear periphery
- 13:40 – 14:10 Nicoletta Petridou:  
Tissue phase transitions in development: More than just mechanics
- 14:10 – 14:40 Jakub Sedzinski:  
Mechanics of basal body patterning during multiciliated cell development
- 14:40 – 14:50 Short Talk 1: Diana Khoromskaia  
Modelling spatio-temporal control of mitotic furrowing
- 14:50 – 15:00 Short Talk 2: Karthik Subramaniam Kalyankumar  
Unraveling the Structural and Mechanistic Basis of  $\alpha$ -Latrotoxin Action at the Synapse
- 15:00 – 15:30 Coffee break

### Session 2

- 15:30 – 16:00 Matthieu Piel:  
Water movements in and out of the nucleus
- 16:00 – 16:30 Simone Reber:  
Intracellular density homeostasis
- 16:30 – 17:00 Jop Kind:  
High throughput multiplexed epigenetic profiling in single cells with MABID
- 17:00 – 17:10 Short talk 3: Nelly Drobjazko  
Biomechanical control of cell fate transitions
- 17:10 – 17:20 Short talk 4: Shashank Jaitly  
Immune Tolerance at the Embryo–Maternal Interface
- 17:20 – 19:30 Posters and Pizza



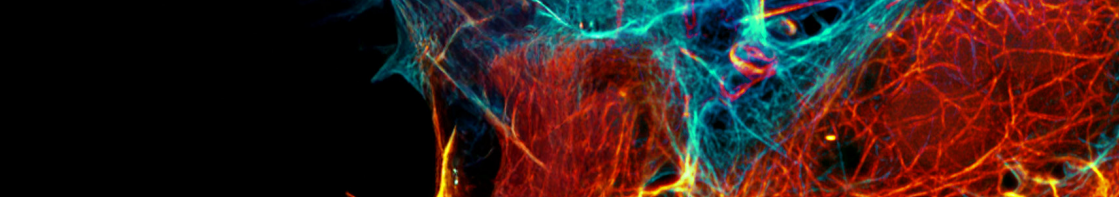
## DAY 2: MAY 28, 2026

### Session 3

- 09:00 – 09:30 Elisabeth Fischer-Friedrich:  
Regulation of plasma membrane tension through hydrostatic pressure and actin protrusion forces
- 09:30 – 10:00 Timo Betz:  
Dystrophin as a homeostatic tension regulator in reconstituted muscle tissue
- 10:00 – 10:30 Rashmi Priya:  
Living machines: how to build a functional heart
- 10:30 – 11:00 Edouard Hannezo:  
Emergent mechanism of mechano-sensing and shape sensing
- 11:00 – 11:10 Short Talk 5: Mauricio Rocha-Martins  
From chaos to order: how developing tissues regrow and self-reorganize to repair damage
- 11:10 – 11:40 Coffee break (30 min)

### Session 4

- 11:40 – 12:10 Herve Turlier:  
Inverse design of mechanochemical tissue patterning
- 12:10 – 12:40 Brian Stramer:  
Dynamic regulation of extracellular matrix stability during development
- 12:40 – 13:10 Anna Erzberger:  
Information processing and feedback at cellular interfaces
- 13:10 – 13:20 Short Talk 6: Maik Bischoff  
Coiling a Duct – How Cell Motion Shapes Chiral Organ Architecture
- 13:20 – 15:30 Posters and lunch



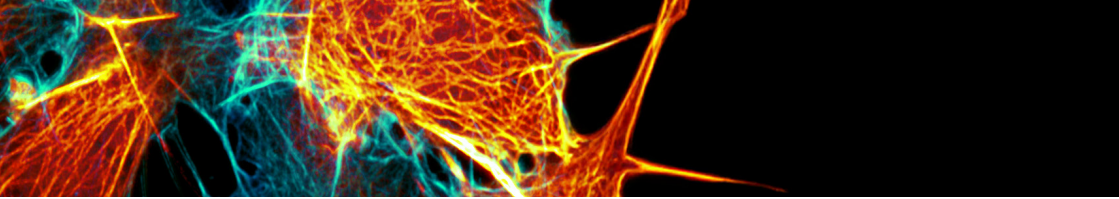
## Session 5

- 15:30 – 16:00 Morgan Delarue:  
Cell biosynthesis under mechanical pressure
- 16:00 – 16:30 Frank Schnorrer:  
Muscle building: the making of a fly steak
- 16:30 – 17:00 Yohanns Bellaïche:  
Scaling of tissue flow with animal size
- 17:00 – 17:10 Short talk 7: Dorothee Bornhorst:  
Not Just ‘Lining the Pipes’: Endothelial Regulation of Organ Homeostasis

## DAY 3: MAY 29, 2026

### Session 6

- 09:00 – 09:30 Laura Capolupo:  
Villus driven coordination of intestinal crypt morphogenesis
- 09:30 – 10:00 Katja Röper:  
Mechanisms and mechanics of tube morphogenesis
- 10:00 – 10:30 Saskia Suijkerbuijk:  
Spatiotemporal regulation of cell competition in intestinal cancer
- 10:30 – 10:40 Short Talk 8: Stefanie Grosswendt  
Uncovering ligand–receptor dialogues between individual cells
- 10:40 – 10:50 Short Talk 9: Gitanjali  
Elucidating the role of YY1 in type R vessel specialisation and function in long bone
- 10:50 – 11:20 Coffee break



## Session 7

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|---------------|---|
| 11:20 – 11:50 | Diana Pinheiro:<br>Linking fate and form during vertebrate gastrulation                               |
| 11:50 – 12:20 | Katarina Wolf:<br>Impact of lamin-A/C expression modulation on cancer invasion and metastasis in vivo |
| 12:20 – 12:50 | Erik Sahai:<br>Signalling and spatial patterns at tumour-stroma interfaces                            |
| 12:50 – 13:00 | Conclusion  |