

PROGRAM

Joint Annual Meeting of the German Society for Matrix Biology & the Italian Society for the Study of Connective Tissues

September 27-29, 2023
Münster, Germany
<https://www.matrixbiologie.de/annual-meeting-2023/>



Confirmed speakers: Ralf Richter * Sara Wickström * Catherine Moali * Alessandra Balduini * Antonio Rossi * Elisabetta Ada Cavalcanti-Adam * Roberta Besio * Isotta Chimenti * Maurizio Mongiat * Ana Magalhães *

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Joint Meeting of the German Society for Matrix Biology and the Italian Society for the Study of Connective Tissues, Münster, Germany, 26.09.-29.09.2023

DGMB

<https://www.matrixbiologie.de/>

SISC

<http://www-3.unipv.it/sisc/first.php?lang=1&idpageCH=1>

Venue: Institute of Physiological Chemistry and Pathobiochemistry, Waldeyerstraße 15, 48149 Münster, Germany <https://maps.app.goo.gl/MFuUkuxbAYPDFGWn6>



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In 2023 the Joint Annual Meeting of the German Society for Matrix Biology and the Italian Society for the Connective Tissue will be held in Münster from September 26th-29th. Münster is a lively student city historically known for the signing of the Westphalian peace treaty of the 30 year war in 1648. Not far from the meeting venue you will find the beautiful Aasee lake and the historic city center with its typical architecture of the Westphalian Baroque period.

We are looking forward to an excellent conference program with leading international experts working to share and discuss latest advances in the fields of matrix biology.

Organizers

Martin Götte (DGMB) & Maurizio Onisto (SISC)

Local organising committee

Rita Dreier

Johannes Eble

Martin Götte

Kay Grobe

Sara Wickström

Young scientist meeting committee

Nancy Adriana Espinoza-Sanchez

Jessica Onyeisi

Arianna Parnigoni

Young Investigator Awards

Julia Marzi (DGMB) & Maurizio Onisto (SISC)

Abstract Committee

Roberta Besio, Rita Dreier, Johannes Eble, Julia Etich, Marco Franchi, Martin Götte, Kay Grobe, Antonio Lapedda Jr., Valentina Masola, Maurizio Mongiat, Michele Scuruchi, Lydia Sorokin, Manuela Viola, Seraphine Wegner, Sara Wickström

Hosts – Institute for Physiological Chemistry

Johannes Eble & Lydia Sorokin

We thank the following sponsors for supporting the meeting:

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PROGRAMME

Pre-Meeting for Junior Researchers

Venue: Institut für Physiologische Chemie und Pathobiochemie, WWU Münster,
Waldeyerstrasse 15, 48149 Münster

Organizers: Nancy Espinoza-Sanchez (Münster), Jessica Onyeisi (Münster), Arianna Parnigoni (Varese)

Tuesday, 26.09.2023

18:00 – 23:00 **Social Event** for pre-meeting registrants at Cavete, Kreuzstrasse 37/38,
48143 Münster, <https://cavete-muenster.de/>



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Wednesday, 27.09.2022

(Institut für Physiologische Chemie und Pathobiochemie, WWU Münster,
Waldeyerstrasse 15, 48149 Münster)

09:00 - 10:15 Junior Session I

09:00 - 09:15 Introduction

09:15 - 10:15 Poster pitches

09:15 - 09:30 Kristina Bubb: *Cartilage-specific respiratory chain inactivation alters extracellular matrix homeostasis through metabolic signaling.*

09:30 - 09:45 Julia Oto: *Syndecan-1 is a novel regulator of the inflammatory secretome of ovarian cancer cells.*

09:45 - 10:00 Carla Aresi: *Modelling ciliopathies in zebrafish: a morpholino approach.*

10:10 - 10:45 Nicola Greco: *The role of Heparanase in Epithelial to Mesenchymal Transition (EMT) in breast cancer.*

10:15 - 11:00 Coffee Break

11:00 - 12:15 Junior Session II

11:00 - 12:00 Interactive discussion

12:00 - 12:15 Concluding remarks

12:15 – 14:00 Lunch Break (for pre-meeting registrants only)

Main Meeting

Wednesday, 27.09.2023

(Main Lecture Hall, Institut für Physiologische Chemie und Pathobiochemie, WWU Münster, Waldeyerstrasse 15, 48149 Münster)

11:00 - 18:00 Registration

14:15 - 14:25 Welcome and Opening by Martin Götte (Münster) & Maurizio Onisto (Padova)

14:25-14:30 *Obituary – Ulrich auf dem Keller* (Johannes Eble, Münster)

Session I: MATRIX PROTEINS – NEW FUNCTIONS AND PLAYERS

Chairs: Johannes Eble (Münster, Germany) & Manuela Viola (Varese, Italy)

14:30 - 15:00 **Invited Lecture: Ana Magalhaes (Porto, Portugal)**

Syndecan-4 - a maestro of gastric cancer cell invasion and intercellular communication

15:00 – 15:15 *Secretomics reveals novel gelatinase substrates at the blood-brain barrier that are implicated in astroglial barrier function* (M. Burmeister)

15:15 – 15:30 *HAS2-AS1 is a new multi-faced regulator of triple-negative breast cancer cells metabolism* (A. Parnigoni)

15:30 – 15:45 *Functional Characterization of Dermokine in Epidermal Differentiation* (V. Canbay)

15:45 - 16:15 Coffee Break

Session II: MATRIX IN MUSCULOSKELETAL DISEASES

Chairs: Valentina Masola (Padova, Italy) & Frank Zaucke (Frankfurt, Germany)

16:15 - 16:45 **Invited Lecture: Antonio Rossi (Pavia, Italy)**

Skeletal dysplasias caused by defects in proteoglycan biosynthesis: current issues and future perspectives

16:45 - 17:15 **Invited Lecture: Roberta Besio (Pavia, Italy)**

TRIC-B mutations cause CaMKII inhibition and dysregulation of TGF-beta/SMAD signalling in osteogenesis imperfecta type XIV

17:15 – 17:30 *Impact of α -MSH on the inflammatory state of senescent human osteoarthritic chondrocytes* (N. Schäfer).

17:30 - 18:00 Coffee Break

18:00 - 19:00 **Keynote Lecture: Sara Wickström (Münster, Germany)**

Regulation of stem cell fate by extracellular matrix mechanics

19:00-22:00 **Welcome Reception and Poster Session I – odd poster numbers**

(Institut für Physiologische Chemie und Pathobiochemie, WWU Münster, Waldeyerstrasse 15, 48149 Münster)

Thursday, 28.09.2023

Session III: MATRIX IN IMMUNOLOGY AND INFLAMMATION

Chairs: Lydia Sorokin (Münster, Germany) & Antonella Forlino (Pavia, Italy)

08:45 - 09:15 **Invited Lecture: Catherine Moali (Lyon, France)**

Fibrillar procollagens as disease biomarkers and substrates of BMP-1/tolloid-like proteinases

09:15 – 09:30 *Changes in chondroitin sulfate as marker of neuroinflammation in the brain during experimental autoimmune encephalomyelitis* (R. Vieira da Silva)

09:30 – 9:45 *Hyaluronan oligosaccharides in part mediate LPS-induced inflammation in human chondrocytes by up-regulating JAGGED1-NOTCH pathway* (A. D'Ascola)

9:45 -10:00 *Basement membrane Laminin 411 Regulates Macrophages Dynamics and Adipocyte Progenitor Cells in White Adipose Tissue* (L.H. Correa)

10:05 - 10:15 Sponsor presentation CENiBRA (J. Schäfer)

10:15 – 10:45 Coffee Break

Session IV: MATRIX IN CANCER AND STEM CELLS

Chairs: Antonio Jr Lepedda (Sassari, Italy) & Sara Wickström (Münster, Germany)

10:45 - 11:15 **Invited lecture: Maurizio Mongiat (CRO Aviano-PN, Italy)**

Multimerin-2 as a biomarker for predicting Therapy Response

11:15 – 11:30 *Multimerin-2 represents a barrier to cancer cell dissemination* (E. Poletto)

11:30 – 11:45 *Heparan sulfate regulates the melanoma microenvironment and infiltration of immune cells into the tumor* (M. Zulal)

11:45 - 12:45 Lunch Break

12:45 - 14:15 **Poster Session II – even poster numbers**

Session V: NEW TECHNOLOGIES FOR MATRIX RESEARCH

Chairs: Kay Grobe (Münster, Germany) & Luisa Bracci (Siena, Italy)

14:15 - 14:45 **Invited Lecture: Ralf Richter (Leeds, UK)**

Probing how glycosaminoglycan binding regulates the transport and distribution of signalling proteins in the extracellular space

14:45 – 15:00 *Evolutionary changes of SARS-CoV-2 Spike interaction with heparin analyzed on a biomimetic surface* (J. Froese)

15:00 – 15:15 *A Novel Elastin-Based Bioink for Tissue Engineering Applications* (C.S. Salazar Silva)

15:15 - 15:45 Coffee Break

15:45 - 16:50 Young Investigator Award Session

Chairs: Julia Marzi (Tübingen, Germany) & Maurizio Mongiat (Aviano, Italy)

15:45 – 15:50 Introduction

15:50 – 16:05 Nancy Adriana Espinoza-Sanchez (DGMB candidate)

16:05 – 16:20 Lucrezia Camicia (SISC candidate)

16:20 – 16:35 Max Urbanczyk (DGMB candidate)

16:35 – 16:50 Federica Aliquò (SISC candidate)

16:50 - 17:00 Break

17:00 - 18:00 Business Meeting of the German Society for Matrix Biology

19:30 - 23:00 **Conference Dinner** – Schlossgarten Café-Restaurant, Schlossgarten 4,
48149 Münster; <https://www.schlossgarten.com/>



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Friday, 29.09.2023

Session VI: MATRIX IN FIBROSIS AND TISSUE REGENERATION

Chairs: Julia Etich (Cologne, Germany) & Maurizio Onisto (Padova, Italy)

09:00 - 09:30 **Invited Lecture: Isotta Chimenti (Rome, Italy)**

Novel insights into cardiac fibrosis risk in heated tobacco products smokers

09:30 - 09:45 *The pro-fibrotic agonist TGF- β increases mitochondrial respiration in human fibroblasts (A. Damerau)*

09:45 - 10:00 *Tracing fibrotic tissue remodeling and cellular infiltration by non-destructive imaging and advanced data analysis (J. Marzi)*

10:00 - 10:15 *Dextromethorphan targets collagen transport to elicit an anti-fibrotic response in in-vivo, ex-vivo and in-vitro models of pulmonary fibrosis (M.M. Khan)*

10:15 – 11:00 Coffee break

Session VII: MATRIX IN BIOTECHNOLOGY AND BIOENGINEERING

Chairs: Roberta Besio (Pavia, Italy) & Katja Schenke-Leyland (Tübingen, Germany)

11:00 - 11:30 **Invited Lecture: Alessandra Balduini (Pavia, Italy)**

Extracellular matrix environment and platelet production

11:30 – 11:45 *Marine sulfated polysaccharides for the biofabrication of small caliber synthetic vascular grafts (G. Obino)*

11:45 – 12:00 *ECM proteins nidogen-1 and decorin restore functionality of human islets of Langerhans in hypoxic conditions (A. Jeyagaran)*

12:00 – 12:15 *Role of cell surface glycosaminoglycans in the cellular uptake of citrate-coated iron oxide nanoparticles (L. Kampen)*

12:15 - 13:15 Lunch Break

Session VIII: CELL-MATRIX INTERACTIONS

Chairs: Rita Dreier (Münster, Germany) & Michele Scuruchi (Messina, Italy)

13:15 - 13:45 **Invited Lecture: Elisabetta Ada Cavalcanti-Adam (Heidelberg, Germany)**

Mechanical crosstalk between cell-matrix and cell-cell adhesions

13:45 - 14:00 *The basement membrane regulates tissue morphogenesis and mechanical stability in the cardiac valves (F. Gunawan)*

14:00 - 14:15 *Integrin alpha 10 finely regulates cartilage morphogenesis and maintenance (P. Alberton)*

14:15 Concluding remarks and end of conference