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Acknowledgement

Many thanks for the invaluable support of the GBM study groups in designing the scientific program.

Dear Friends and Colleagues,

We warmly welcome you to the GBM Fall Conference 2022 in Düsseldorf.

Since many years the GBM Fall Conference "Molecular Basis of Life" promotes lively discussions at the crossroads of Biochemistry, Molecular Biology and Medicine. In this year it is especially important to meet and have a restart of personal meetings after the long break due to the Corona pandemic. The focus on biophysical chemistry and latest methodologies will give the Fall Conference 2022 a unique perspective on molecular processes and the consequences on the cellular level. We involved several study groups of GBM to plan the program and select speakers. Main Topics as Biophysical Chemistry, Biomembranes, Structural Biology Synthetic Biology, Molecular Cell Biology, Bioinformatics, Bioenergetics, Bioanalytics, RNA Biochemistry and Redoxbiology are covered.

Besides invited international and national top speakers, we selected contributed talks from the submitted abstracts. We structured the meeting program such to promote lively discussions during the sessions and throughout the meeting where non-speakers will also present posters on their latest experimental results, ideas, and theories.

We are pleased to have attracted numerous sponsors who support our conference in various ways and without whom our event would not have been possible in its current format. We would like to express our sincere gratitude to them. We welcome our exhibitors who present their innovative products and services and thank the sponsors who join us in awarding various young scientists' awards.

We look forward to the upcoming days with great opportunities for interdisciplinary and in-depth discussions, as well as the possibility to initiate new collaborations and joint projects.

We wish you all a wonderful conference!

Claus Seidel

Lutz Schmitt





08:45 - 09:00	Opening
09:00 - 09:40	Plenary Session 1 (Chair: J.R. Weir, Room 3D) Johannes Messinger /Uppsala [SE] Picturing biological water oxidation by snapshot crystallography
09:40 - 10:20	Tanja Kortemme /San Francisco [USA] The allosteric landscape of a fundamental molecular switch
10:20 - 10:50	Coffee Break
10:50 - 12:30	Parallel Sessions 1 - Details on page 8
	1A - Cell biology meets systems and synthetic biology 1B - Energy for life - principles and diversity of biological energy conversion
	1C - Structure-function-relationships regulating signaling events
12:30 - 14:20	Lunch Break & Industrial Sessions 1 - Details on page 10
	Becker & Hickl - BioEcho Life Sciences - Nikon - QIAGEN
14.20 15.00	Plenary Session 2 (Chair: I. Koch, Room 3D)
14:20 - 15:00	Christos Gatsogiannis /Münster [DE] Good things come to those who bait: docking and recycling at the peroxisomal membrane
15:00 - 15:40	Edda Klipp /Berlin[DE] Single cell transcription during yeast cell cycle
15:50 - 17:00	Parallel Sessions 2 - Details on page 12
	2A - Multiscale biochemistry of membranes and membrane proteins 2B - Computational biophysics and biology
from 17:00 on	Poster Session I (even numbers) & Get together at the posters with pretzels, wine & beer

Parallel Sessions 1



10 50 11 00

Roman Jerala /Ljubliana [SI] Coiled-coil modules for designed mole cular and cellular logic circuits

11:20 - 11:50

Aránzazu del Campo /Saarbrücken [DE] Living therapeutic devices: on-demand drug production and delivery in your body

11:50 - 12:20

Alena Khmelinskaia /Bonn [DE] Expanding the repertoire of de novo protein assemblies Energy for life - principles and diversity of biological energy conversion (1B) (Chair: V. Zickermann, Room 3C)

10:50 - 11:15

Ulrich Brandt /Nijmegen [NL] Mitochondrial complex I: evolution, assembly and mechanism

11:15 - 11:30 (short talk)

Anna Frank /Bochum [DE]

Rational design of biophotoelectrodes for in vitro biocatalysis

11:30 - 11:45 (short talk)

Wei-Chun Kao /Freiburg [DE]

Cryo-EM structure of the actinobacterial respiratory supercomplex: an efficient generator and potential drug target

11:45 - 12:00 (short talk)
Ingrid Span /Erlangen [DE]
Structural insights into the catalysis of
the [FeFe] hydrogenase from Desulfovibrio desulfuricans

12:00 - 12:15 (short talk)

Georg Reiser /Magdeburg [DE]

Recent uncovered protective strategies in neurons against lipotoxicity in brain, an organ with very high fat content, rapid ATP turnover and large oxygen consumption

12:15 - 12:30 (short talk)

Jan Lambertz /Bochum [DE]
Isolation of three different Photosystem II complexes from Thermosynechococcus elongatus via Streptagged PsbO



Structure-function-relationships regulating signaling events (redox) (1C) (Chair: G. Poschmann & C. Berndt, R. 3D)

10:50 - 11:15

Kai Tittmann /Göttingen [DE] Lysine-cysteine redox switches in proteins

11:15 - 11:30 (short talk)

Michael Lammers / Greifswald [DE]

Post-translational lysine acetylation regulates the transcriptional regulator

RutR as shown by using a structural biological and synthetic biological approach

11:30 - 11:45 (short talk) **Kathrin Ulrich** /Göttingen [DE]

Redox-regulated chaperones in cell stress responses

11:45 - 12:00 (short talk) **Johannes Eble** /Münster [DE] A redox-dependent thiol-switch and a Ca2+ binding site within the hinge region hierarchically depend on each other in $\alpha 7\beta 1$ integrin regulation

12:00 - 12:15 (short talk)

Marie-T. Hopp /Bonn [DE]

Molecular basis of heme-driven pathway activation in hemolytic disorders

12:15 - 12:30 (short talk)

Bianca Axinte /Düsseldorf [DE]
Interplay of inositol pyrophosphate pathway and iron-sulfur cluster biogenesis

Industrial Sessions 1



12:30 - 13:00 (Room 3D BioEcho Life Science: Industrial Workshop

One-step purification of nucleic acids

– Shorten time to result and be more
sustainable with EchoLUTION

Nike Bahlmann

BioEcho Life Sciences GmbH /Köln [DE]

Workshop participants will get to see the unique and eco-friendly EchoLUTI-ON workflow, which allows nucleic acid extraction with efficient lysis followed by a single centrifugation step. The result is ready-to-use DNA/RNA that is free of inhibitors.

Note: Some companies may provide you with a coupon for a free lunch for attending the workshop/symposium.

12:50 - 13:35 (Room 3C)

Becker & Hickl
Industrial Symposium:
How to Employ Metabolic
Imaging for Cancer Research:
A Tutorial

Taravat Saeb Gilani

Becker & Hickl GmbH /Berlin [DE]

In contrast to pure intensity-based imaging, the usage of the timing information lifts fluorescence lifetime imaging (FLIM) on another level enabling functional imaging. The most salient example is metabolic imaging for tumor investigation introduced here.

Nikon 13

13:40 - 14:10 (Room 3C) Nikon Industrial Workshop:

Deep-learning assisted data processing and workflows using Nikon Imaging Software (NIS- Elements)

Christian Börnchen

Nikon Europe B.V. /Düsseldorf [DE]

13:05 -13:35 (Room 3D)

QIAGEN

Industrial Workshop:

Digital PCR - The fully automated solution for absolute PCR precision

Ruben Prange

QIAGEN GmbH /Hilden [DE]

The digital PCR is a very sensitive and precise quantitative PCR method that does not require external standards. We present you the background of digital PCR and give insight into potential applications, supported with practical data.

Deep learning methods help to recover contrast, to improve signal-to-noise ratio and manage challenging acquisition parameters or segmentation previously difficult or nearly impossible. NIS-Elements helps researchers understand in-vivo processes faster and accelerate their findings.

Parallel Sessions 2

Multiscale biochemistry of membranes and membrane proteins (2A)

(Chair: L. Schmitt, Room 3D

15:50 - 16:15

Uris Lianne Ros Quincoces /Köln [DE] Shedding light on the regulation and execution of necroptosis

16:15 - 16:30 (short talk) **Fabio Lolicato** /Heidelberg [DE]

Cholesterol promotes head group visibility and clustering of PI(4,5)P2 driving unconventional secretion of Fibroblast Growth Factor 2

16:30 - 16:45 (short talk)

Marta Gozzi /Leipzig [DE]

On the Road to Finding the Right Key:
Structural Characterisation of Three Active States of the Human Neuropeptide Y
Type 4 Receptor (hY4R) at the Molecular

16:45 - 17:00 (short talk)

Andreas Diepold /Marburg [DE]

The dynamic exchange of core components of the type III secretion system shapes its assembly and function



Computational biophysics and biology (2B)

(Chair: C. Hunte, Room 3C)

15:50 - 16:15

Birgit Strodel /Düsseldorf [DE] Effects of in vivo conditions on protein aggregation: computational approaches

16:15 - 16:30 (short talk)

Till Rudack /Bochum [DE]

A scale-spanning integrative modeling strategy to study structure, dynamics, and function of complex molecular machines

16:30 - 16:45 (short talk)

Hans-Joachim Wieden /Winnipeg [CA]

Exploiting the intrinsic structural dynamics of biomolecules as design feature - from antimicrobials to novel biosensors

16:45 - 17:00 (short talk)

Mohsen Sadeghi /Berlin [DE]

Dynamic framework for large-scale modeling of biomembranes and flexible peripheral proteins



09:00 - 09:40	Plenary Session 3 (Chair: V. Haucke, Room 3D) Felix Randow /Cambridge [UK] How cells defend their cytosol against bacteria: LPS ubiquitylation and other tricks
09:40 - 10:25	Fritz Lipmann Lecture (Laudatio: C. Seidel, Room 3D): Monika Fuxreiter /Padova [IT] The fundamental nature of the droplet state of proteins
10:25 - 10:55	Coffee break
10:55 - 12:15	Parallel Sessions 3 - Details on page 16
	3A - Supramolecular chemistry on proteins 3B - Signal transduction and diseases 3C - New & Notable Session
12:15 - 13:45	Lunch Break & Industrial Sessions 2 - Details on page 18
	LUMICKS Technologies - PicoQuant
13:45 - 14:25	Plenary Session 4 (Chair: K. Winklhofer, Room 3D) Jörg Bewersdorf /New Haven [USA] All-optical Super-resolution Imaging of Molecules in Their Nanos cale Cellular Context
14:25 - 15:45	Young Scientists Awards - Details on Page 19
	Biomol PhD Award - Nikon Postdoc Award - PicoQuant Young Investigator Award
15:45 - 16:15	Coffee break
16:15 - 17:40	Parallel Sessions 4 - Details on page 20
	4A - Imaging molecules of life 4B - New technologies for molecules in Life Sciences (Analytics) 4C - (Bio)chemical Approaches to manipulate proteins
17:40 - 19:15	Poster Session II (odd numbers) with pretzels, wine & beer
19:30 - 23:00	Social Event in the foyer at the venue with fingerfood (Online registration in advance required)

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Parallel Sessions 3



Supramolecular chemistry on proteins (3A)

(Chair: P. Bayer, Room 3B)

10:55 - 11:20

Shirley Knauer /Essen [DE] Exploiting supramolecular chemistry to modulate protein function

11:20 - 11:35 (short talk)

Bianca Emma Kamba /Essen [DE] Catch Me if You Can - Entrapment of Methylated Arginine by Supramolecular Hosts

11:35 - 11:50 (short talk)

Ulla Gerling-Driessen /Düsseldorf [DE] Multi-TaG: Next generation bioorthogonal probes for multi-method targeted analysis of glycoproteins

11:50 - 12:05 (short talk) **Hajo Kries** /Jena [DE]

Engineering DNA-templated nonribosomal peptide synthetase



Signal transduction and diseases (3B)

(Chair: C. Monzel, Room 3C)

10:55 - 11:20

Margret Bülow /Bonn [DE] Organelle communication in neuron function and physiology

11:20 - 11:35 (short talk)

Antje Ebert /Göttingen [DE]

Altered cytoskeleton signaling in cardiac disease determines defective cellular cargo internalization

11:35 - 11:50 (short talk)

Jan Bröckel /Kassel [DE]

Direct Interaction of Smoothened and PKA Opens Up a New Window into Hedgehog Signaling

11:50 - 12:05 (short talk)

Linlin Lei /Bochum [DE]

A possible role of the ubiquitin kinase
PINK1 in protein quality control

New & Notable Session (3C)

(Chair: J. Lassak, Room 3D)

10:55 - 11:20

Andrea Thorn /Hamburg [DE] What 2000 macromolecular structures tell us about SARS-CoV-2

11:20 - 11:45

Daniel Huster /Leipzig [DE] Rhomboid-Catalyzed Intramembrane Proteolysis Requires Hydrophobic Matching with the Surrounding Lipid Bilayer

11:45 - 12:10

Oleg Sitsel /Dortmund [DE]
The unusual secretion mechanism of Tc toxins

Industrial Sessions 2

Young Scientists Awards



12:30 - 13:00 (Room 3C) **PicoQuant**

Fluorescence-based studies of molecules with Luminosa: from dynamic stuctural information via single-molecule FRET to studying molecular interactions in the cell

Evangelos Sisamakis

PicoQuant GmbH /Berlin [DE]

Luminosa, the new single photon counting confocal microscope from PicoQuant addresses the challenges of an expanding FRET community. Luminosa offers many advantages regarding reproducibility, accuracy, general "good practice rules" and easy-of-use.

LUMXCKS

13:05 - 13:35 (Room 3C) LUMICKS

Industrial Workshop:

Towards Single Molecule Biology using Optical Tweezers and Fluorescence Microscopy

Roman Renger

LUMICKS Technologies / Amsterdam [NL]

Direct real-time observations of molecular interactions are required to validate current biological models. Our correlated optical tweezers and fluorescence microscopy instruments are easy-touse and they enable breakthrough discoveries in biology.

14:25 - 15:05 (Chair: C. Seidel, Room 3D) **Picoquant** Young Investigator Award: PICOQUANT



Johannes Broichhagen /Berlin [DE] Visualizing and Manipulating Cell Surface Proteins

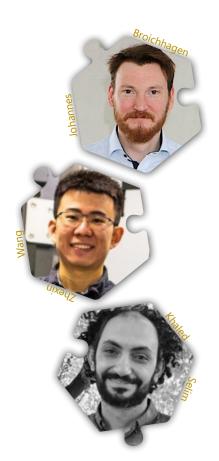
15:05 - 15:25 (Chair: C. Seidel, Room 3D) **Biomol** biomol PhD Award:

Zhexin Wang /Dortmund [DE] Structural insights into sarcomere organisation by cryo-electron tomography

15:25 - 15:45 (Chair: C. Seidel, Room 3D) Nikon PostDoc Award:



Khaled Selim /Tübingen [DE] Cross-talk between cAMP and cdi-AMP signaling via carbon sensor protein SbtB: Linking CO2 homeostasis with diurnal metabolic switch



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We thank for the kind support by PicoQuant, Biomol and Nikon.

Parallel Sessions 4



Imaging molecules of life (4A) (Chair: M. Bülow, Room 3D)

16:15 - 16:40

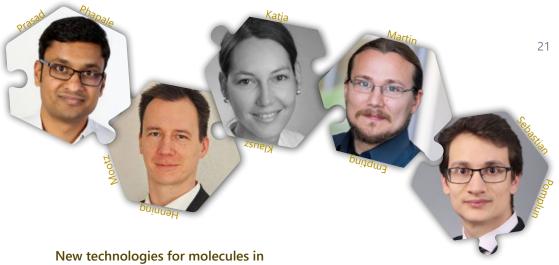
Cornelia Monzel /Düsseldorf [DE] Elucidating Receptor Oligomerization States in CD95 Signaling with Super-Resolution and Multiparametric Image Spectroscopy

16:40 - 16:55 (short talk) Max Halupczok /Bochum [DE] Arctic TREx – Combining Cryofixation with Ten-fold Robust Expansion Microscopy to Image Neural Cells

16:55 - 17:10 (short talk) Gavin Rice / Dortmund [DE] TomoTwin: Generalized 3D localization of macromolecules in cryo-electron tomograms

17:10 - 17:25 (short talk) Tejal Patwari /Bonn [DE] OptoRiboGenetics: Light-dependent Control of RNA function through PAL-RNA platform

17:25 - 17:40 (short talk) Sofia Elizarova /Göttingen [DE] A fluorescent nanosensor paint detects dopamine release at axonal varicosities with high spatiotemporal resolution



Life Sciences (Analytics) (4B)

(Chair: Y. Reinders, Room 3B)

16:15 - 16:40

mutations

Prasad Phapale / Dortmund [DE] Spatial metabolomics technology for life science and medicine

16:40 - 16:55 (short talk) Clara Correia-Melo /Berlin [DE] Cell-cell metabolite exchange creates a pro-survival metabolic environment that extends lifespan

16:55 - 17:10 (short talk) Stephan Riesenberg /Leipzig [DE] Highly efficient stem cell genome editing to study the genetic basis of modern humans and disease-relevant

17:10 - 17:25 (short talk) Ronay Cetin /Frankfurt [DE] Sequential genetic dependencies identified by time-resolved orthogonal gene editing

17:25 - 17:40 (short talk) Nicolaas van der Voort /Düsseldorf [DE] To unlock sensitive molecular switches in live cells using high throughput **FRFT**

(Bio)chemical Approaches to manipulate proteins (4C)

(Chair: F. Hausch, Room 3C)

16:15 - 16:40

Henning Mootz / Münster [DE] Manipulating and Labeling of Proteins by Selectively Addressable Thiol Moieties

16:40 - 17:00

Katja Klausz /Kiel [DE] Bispecific NK Cell Engagers Activating NK Cells via NKp30 to Improve Tumor Cell Lysis and Pro-Inflammatory Cytokine Release

17:00 -17:20

Sebastian Pomplun /Leiden [NL] **Engineering Bioactive Dimeric** Transcription Factor Analogs via Flow Synthesis and Palladium Rebound Mediated Protein Cross-Coupling

17:20 - 17:40

Martin Empting /Saarbrücken [DE] Blocking bacterial pathogenicity by novel quorum sensing inhibitors for the treatment of chronic Pseudomonas aeruginosa infections



Plenary Session 5 (Chair: S. Korn, Room 3D)

09:00 - 09:40 Andrea Musacchio / Dortmund [DE]
The kinetochore: an intrinsically divisive molecular machine

09:40 - 10:20 Peter Rehling / Göttingen [DE]
Regulating mitochondrial protein biogenesis

10:20 - 10:45 Coffee break

10:45 - 12:35 Parallel Sessions 5 - Details on page 24

5A - Biomolecules and their assemblies: from structure and dynamics to function (Proteins and RNA)

5B - Biophysical chemistry and cell biology of interfaces and functional phase separation

12:35 - 13:20 Lunch break

13:20 - 14:00 Plenary Session 6 (Chair: B. Schwappach-Pignataro, Room 3D)

Dorothee Dormann / Mainz [DE]

Control of aberrant phase transitions in neurodegenerative diseases

14:00 - 14:55 Otto Warburg Medal

(Laudatio: C. Seidel, Welcome: J. D'Angelor (Elsevier/BBA), R. 3D):

Petra Schwille /Martinsried [DE] Life as a matter of function



The GBM, Elsevier and Biochimica et

Biophysica Acta (BBA) honor Petra Schwille from the Max Planck Institute of Biochemistry in Martinsried/Munich for her pioneering work in the field of reconstruction of cellular processes in simplified functional systems with the Otto Warburg Medal.

The highest award in Germany for biochemists and molecular biologists promotes outstanding scientific excellence and encourages groundbreaking achievements in the field of fundamental biochemical and molecular biological research.

Since 1963 the Otto Warburg Medal is intended to commemorate

Since 1963 the Otto Warburg Medal is intended to commemorate the outstanding achievements of Otto Heinrich Warburg.

14:55 - 15:00 Poster awards & Closing remarks

Parallel Sessions 5

Biomolecules and their assemblies: from structure and dynamics to function (Proteins and RNA) (5A)

Chair: S. Raunser, Room 3D

10:45 - 11:10

Manuel Etzkorn / Düsseldorf [DE] Exploring the Dynamic World of Membrane Systems and Biocatalysis

11:10 - 11:35

Ingrid Tessmer /Würzburg [DE] Interactions between DNA repair and transcription

11:35 - 11:50 (short talk)

Sandra Schlee /Regensburg [DE] Relation between loop motion and catalytic activity by the example of the $(\beta\alpha)8$ -barrel enzyme HisF

11:50 - 12:05 (short talk)

Nils-Alexander Lakomek /Düsseldorf [DE] Structural dynamics of the intrinsically disordered SNARE proteins at the membrane interface: Recent insights by a combined solution and solid-state NMR approach

12:05 - 12:20 (short talk) **Hauke Hillen** /Göttingen [DE]

Cutting RNA to power life: Molecular basis of RNA processing in human mito-

12:20 - 12:35 (short talk)

Julian Folz /Düsseldorf [DE]

FRET measurements resolving structures,
dynamics and transitions of various biomolecules



Biophysical chemistry and cell biology of interfaces and functional phase separation (5B)

(Chair: Ch. Herrmann, Room 3C)

10:45 - 11:10

Titus Franzmann /Dresden [DE] Molecular mechanisms of macromolecular assembly during cellular stress responses

11:10 - 11:35

Christoph Weber /Augsburg [DE] Interplay between phase separation and reversible aggregationTitle to be announced

11:35 - 11:50 (short talk)

Felix Müller-Planitz /Dresden [DE]

Chromatin remodeling in condensed and phase separated chromatin

11:50 - 12:05 (short talk) **Dmitry Shvarev** /Osnabrück [DE]

Structure of the lysosomal membrane fusion machinery

12:05 - 12:20 (short talk)

Wolfgang Hoyer /Düsseldorf [DE]

Metastable amyloid-β oligomers – Kinetics, mechanisms, interactions

12:20 - 12:35 (short talk)

Peter Hemmerich /Jena [DE]

Mechanism of SUMO-mediated phase separation at PML nuclear bodies

Please visit the booths of the exhibitors

Becker & Hickl GmbH (Booth 10)

BioEcho Life Sciences GmbH (Booth 9)

Biomol GmbH (Booth 8)

Biotrend Chemikalien GmbH (Booth 7)

LUMICKS Technologies B.V. (Booth 6)

MACHEREY-NAGEL GmbH & Co. (Booth 2)

New England Biolabs GmbH (Booth 12)

Nikon Deutschland/Nikon Europe (Booth 14)

PicoQuant GmbH (Booth 4)

Proteintech Germany GmbH (Booth 11)

QIAGEN GmbH (Booth 3)

SARSTEDT AG & Co. KG (Booth 1)

Seegene Germany GmbH (Booth 13)

Zymo Research Europe GmbH (Booth 5)

Booth plan on page 29! An overview of all sponsors and supporters can be found on page 30 f.



WHAT WE DO ALL DAY:

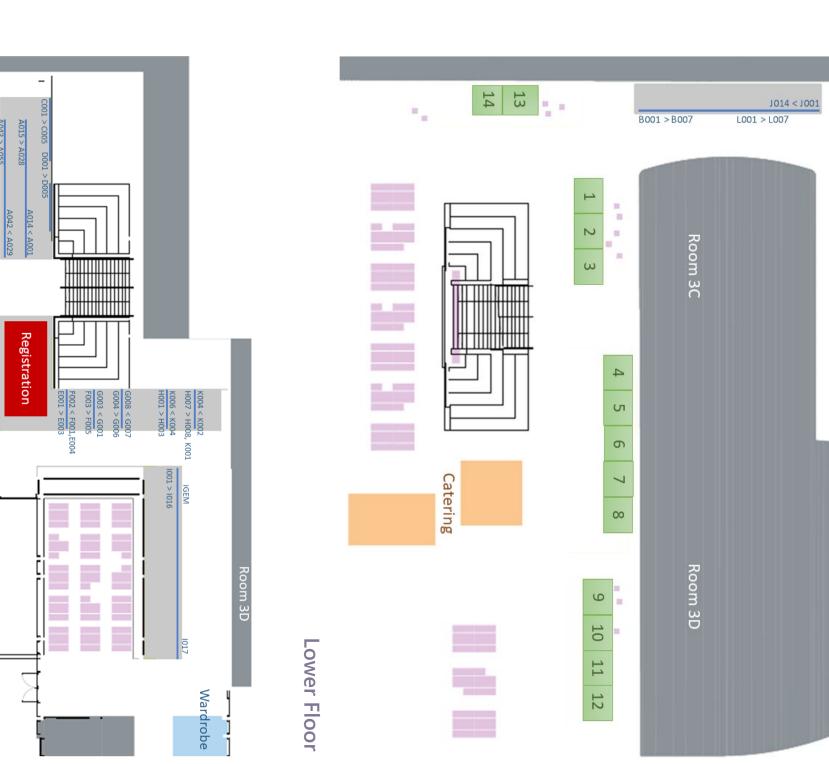
MAKE A DIFFERENCE.

We are a vibrant science and technology company driving human progress. Our actions make a positive difference every day.









Main Entrance

Ground Floor

Many thanks to our supporters









Special thanks to the iGEM supporters

Special thanks goes to New England Biolabs and Pico-Quant for supporting the early career researchers of the participating iGEM teams.

Cordially thanks to the sponsors





































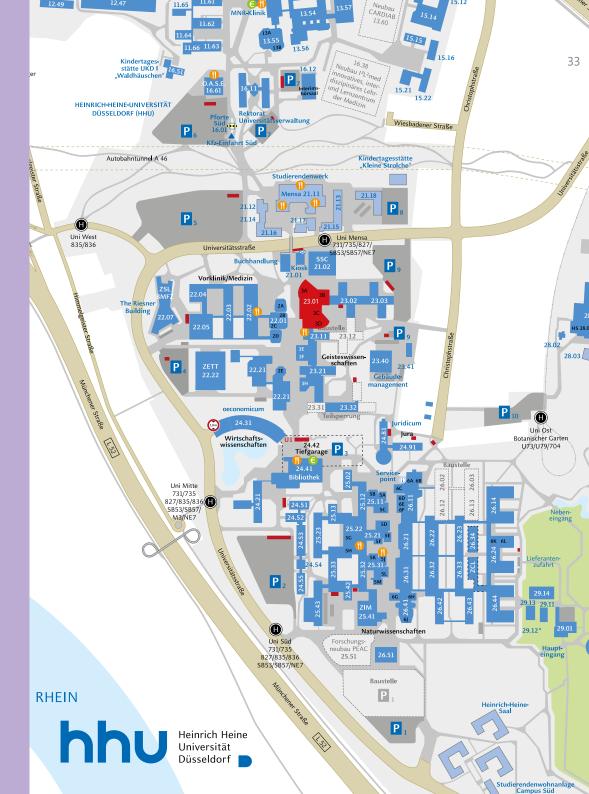


Venue

Heinrich-Heine-University Düsseldorf Building 23.01, Lecture Hall 3D Universitätsstraße 1 40225 Düsseldorf Germany

More information on how to get to the meeting location you will find online at the meeting website

molecular-basis-of-life.org



Fees

An on-site registration is possible.

Members*	
Academia/ from Industry	400 €
PhD student	220 €
Bachelor/Master student	105 €
Retiree	105 €
Non-Members*	
Academia/ from Industry	450 €
PhD student	230 €
Bachelor/Master student	115 €
Retiree	115 €

^{*} member of the GBM, DECHEMA, DGZ, GDCh, VAAM, Bunsen Society (With a proof of your membership)

Opening Hours

Registration	
Wed., Sept. 14	07:30 - 17:00
Thurs., Sept.15	08:30 - 17:00
Wed., Sept.16	08:30 - 15:00

Phone

Please come to registration desk if you have any questions. In urgent cases you can reach the organizers by phone +49 69 6605670.

Session Times

Poster Session 1: even poster numbers Wed., Sept 14, from 17:00 on

Poster Session 2: odd poster numbers Thur., Sept 15, 17:40 - 19:15

Poster Specs

The posters should be presented in portrait format (DIN A0 resp. ~120 x 85 cm).

Poster Abstracts

All poster abstracts are available as pdf-file for download on the meeting homepage.

A printed abstract booklet is not available.

Please find the poster numbers on page 38 ff.

Poster Prizes

The best three posters will each receive a poster prize of 250 euros and a certificate.

The winners will be announced at the end of the meeting. To receive the price, personal attendance is required.

All attendees of the conference can participate in the election of the best posters. Please note the information on this that you will receive with your conference documents.

Speakers Information

Please come to your lecture hall as soon as possible and not later than 15 min before your session starts. All presentations shall be based on PowerPoint-Versions and compatible with Windows-Systems. Other computers or converters are not available. All presenters must therefore bring their presentation in the adequate version on flash drive (USB drive). Technical staff will assist you in the lecture hall.

Food & Beverages

Coffee, Tea, Water will be provided during the coffee breaks.

During the lunch break you have the possibility to buy something nearby at your own expense.

On Wednesday and Thursday during the poster session, wine, beer, soft drinks and pretzels will be available. On Thursday evening there will be drinks and finger food in the foyer. For participation you have to book the social event in advance via the registration portal and pay a small fee (10 Euro students, 15 Euro all others). Spontaneous registration on site is not possible!

Book of Abstracts

Please scan the OR code to download the abstracts.



Internet

Covid 19

There is currently no obligation to wear a mask in public areas inside all buildings. However, masks may of course continue to be worn for precautionary reasons and/or out of consideration for others.

The risk of infection increases when a large number of people are present in a room. In conference rooms of the university, the minimum distance of 1.5 m between persons must be observed.

For detailed information on the hygiene measures at the Heinrich Heine University please visit https://corona.hhu.de

Name Badge

Please wear your name badge throughout the meeting. It is your ticket for the conference, the lectures and the exhibition.

Industrial Exhibition

The industry exhibition is located in the foyer. Opening hours are

Wednesday, Sept. 14 09:00 - 19:15 Thursday, Sept.15 09:00 - 19:15 Friday, Sept.16 09:00 - 15:00 HHU offers eduroam. We provide also a guest account.

User name: gbm2022 Password: yq5xm9f;

Please see the registration desk for further information on Wi-Fi.

Conference Photos

Photographs will be taken by the organizer during the conference.

If you do not agree to your photos being taken and published, please let us know at the registration desk. Photography and Copyright: Taking pictures and recording of any kind in the lecture halls and poster exhibition without the prior written consent of the presenter are prohibited.

Wardrobe

Wednesday, Sept. 14	07:30 - 19:30
Thursday, Sept.15	08:00 - 19:30
Friday, Sept.16	08:00 - 15:30

There is no surveillance of the wardrobe outside of these times! Please do not leave valuables (laptop, phone, wallet, etc.) in your jacket or

No liability will be taken for valuables!

The posters are sorted by the topic (category) and the last name of the presenting author.

The list contains the following information:

Poster board number (Poster ID) Name of the presenting author Title of the Poster

Poster plan on page 28

A list sorted by poster board number you will find in the book of abstracts.



Biomolecules and their assemblies: ³⁹ from structure and dynamics to function (A)

A 004 (33)

Adio, Sarah

Altered tRNA dynamics during translocation on slippery mRNA visualized by 3D-smFRET as determinant of spontaneous ribosome frameshifting

A 021 (86)

Anlauf, Manuel

Towards understanding the substrate translocation of a type 1 secretion system

A 030 (135)

Bareesel, Shannon

Structure and condensate formation of the axonal transmembrane protein PLPPR3

A 047 (238)

Belyy, Alexander

Actin as the target and activator of bacterial toxins: a structural perspective

A 031 (136)

Bilsing, Florestan

Towards the in vitro reconstitution of the hemolysin A type 1 secretion system

A 053 (281)

Bourque, Cole

High-resolution structural analysis of the Dam1 complex and associated proteins

A 025 (113)

Faesen, Alex

Learning from reconstitution: metamorphosis of HORMA domain proteins ATG13 and ATG101 at the basis of human autophagy initiation and lipid transfer

A 011 (53)

Feijs, Karla

ADP-ribose is a novel RNA cap which prevents RNA degradation and translation

A 020 (80)

Feldberg, Anna-Lena Studying dynamic conformational changes in multi-domain nonribosomal peptide synthetases (NRPSs) using **FRET**

A 019 (79)

Gjorgjeviki, Daniela

Inhibition of a bacterial global gene regulator by a phage protein via forced hyper-oligomerization

A 018 (76)

Graß, Lena

Architecture and functional dynamics of a large, virulence-associated DNA helicase from enterohaemorrhagic Escherichia coli

A 034 (162)

Hachani, Eymen

The hemolysin A type I secretion system of Escherichia coli

A 039 (188)

Herrera, Maria Georgina

Biophysical characterization of the N-terminal domain of TDP-43

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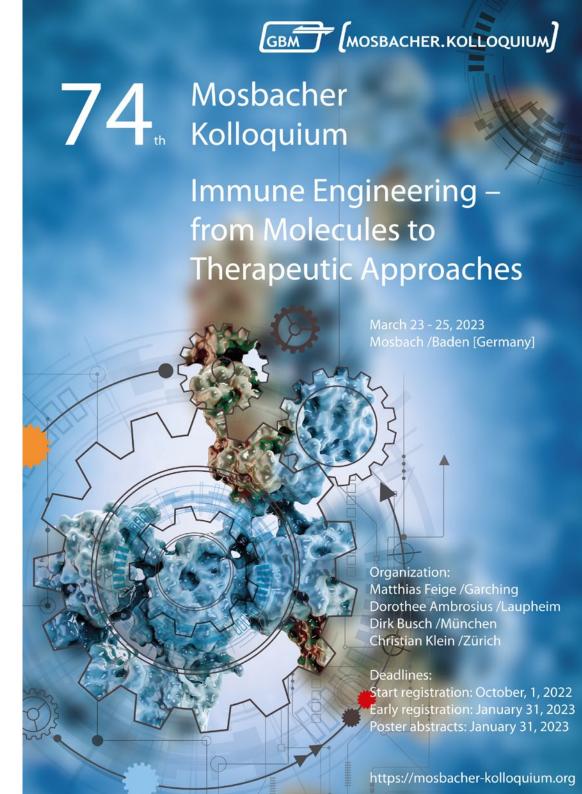
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