



73rd

Mosbacher Kolloquium

March 31 – April 2, 2022

„The World of RNAs –
Principles & Applications“

Scientific Board

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Johannes Gutenberg University, Mainz

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Lennart Randau



Gunter Meister



Mark Helm



Markus Landthaler



Cynthia Sharma

Dear Friends and Colleagues,

The traditional spring meetings of the German Society for Biochemistry and Molecular Biology (GBM) are held annually in the picturesque town of Mosbach to promote the exchange of scientific ideas, discuss emerging themes and to foster the education of young scientists. The scientific theme of the 73rd meeting is „The world of RNAs - principles and applications“.

RNA molecules are of fundamental importance for life on earth. They carry genetic information, perform catalytic tasks, guide protein activities and control regulatory networks. Novel genome-wide approaches enable us to monitor the full repertoire of expressed RNAs in cells and have revealed a wealth of non-coding RNAs and associated RNA binding proteins, which now await functional characterization. In addition, several RNAs or ribonucleoprotein complexes are of central importance for cellular functionality and have been linked to a variety of diseases. These versatile roles of RNAs are currently exploited in novel RNA-based strategies for therapies, vaccines and biotechnological applications.

The Mosbacher Kolloquium in 2022 aims to provide an overview about (i) the state-of the art research on the dynamic roles of non-coding RNAs and RNA modifications in prokaryotic and eukaryotic cells and (ii) the principles, prospects and challenges of RNA therapeutics. We will provide a platform for fruitful scientific exchange of ideas that helps inspiring young scientists in their future research endeavors.

We wish all of you a wonderful conference, lively exchange and fruitful contacts.

Lennart Randau
Gunter Meister
Mark Helm
Markus Landthaler
Cynthia Sharma



Congress center „Alte Mälzerei“



City hall and market place



Market place



„Alte Mälzerei“

16:00

Arrival and registration

Important!

Please allow extra time due to Corona Measures and control of vaccination/test certificates!

FFP2 masks are mandatory in all indoor areas at any time!

16:45 - 17:45

DFG-Funding Opportunities for Early Career Researchers

Christian Bamann (DFG)

This talk is aimed at Master and PhD Students as well as early Post-Docs in Life Sciences. It will provide an overview on the diversity of career options with a practical example of a Program Officer at the German Research Foundation (DFG). Elaborating on the funding opportunities of the DFG it will also provide young researchers an overview of how to kick-off a career in academia.

Tenne

18:00

Introductory lecture („Primer“)

with following panel discussion on current research on the dynamic roles of non-coding RNAs, RNA modifications and RNA therapeutics

20:00

Welcome reception /Get together

The steering committee of the German Society for Biochemistry and Molecular Biology (GBM) and the city of Mosbach invite you to a welcome reception in the lecture hall of the „Alte Mälzerei“ (no registration required)

Lectur hall

We thank the city of Mosbach for the kind hospitality.



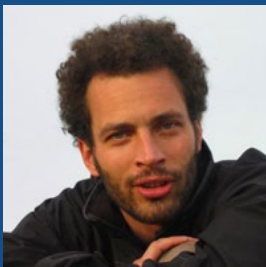
Rotem Sorek



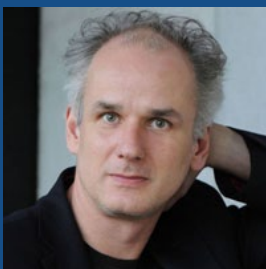
Sarah Woodson



Katharina Höfer



Julius Brennecke



Nikolaus Rajewsky



Leon Schulte

08:50

Welcome by the scientific organizers

Session 1 (09:00 - 12:00)

Mechanisms and functions of regulatory RNAs
(Chair: Cynthia Sharma)

09:00

Rotem Sorek /Rehovot [IL]
Interactions between phage and bacteria: the ncRNA angle

09:30

Sarah Woodson /Baltimore [USA]
How chaperones make small RNAs go round

10:00

Short talk:
Katharina Höfer /Marburg [DE]
RNAylation of proteins – a new post-translational protein modification mediated by NAD-RNAs and an ADP-ribosyltransferase

Coffee break (10:15 - 10:45)

10:45

Julius Brennecke /Wien [AT]
Tricking the rules of gene expression for the sake of genome defense

11:15

Nikolaus Rajewsky /Berlin [DE]
tba

11:45

Short talk:
Leon Schulte /Marburg [DE]
Nuclear lncRNA complexes rewire systemic immune gene expression during severe COVID-19

Lunch break (12:00 - 13:00)

12:00

GBM Young Investigators Panel Discussion:
„Challenges and opportunities in RNA Therapeutics“

(more information > > page 25)

Program

Thu., March 31



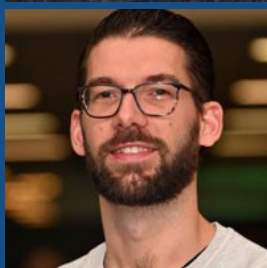
Irma Querques



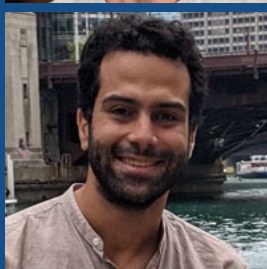
Dina Grohmann



Patrick Pausch



Daan Swarts



Mohamed El-Brolosy

12:00

Meet the LSR

(more information > > page 27)

12:00

Meet the Prof with Tom Tuschl

(more information > > page 23)

13:00

Poster session I (even numbers)

(more information > > page 29)

Session 2 (14:30 - 16:45)

RNA-guided ribonucleoproteins

(Chair: Lennart Randau)

14:30

Irma Querques /Zurich [CH]

Molecular mechanisms of RNA-guided genome editor nucleases and transposons

15:00

Dina Grohmann /Regensburg [DE]

Single-molecule FRET provides insights into the conformational landscape of human Ago2

15:30

Short talk:

Patrick Pausch /Vilnius [LT]

DNA interference states of the hypercompact CRISPR-CasΦ effector from huge bacteriophages

Coffee break (15:45 - 16:15)

16:15

Long abstract talk:

Daan Swarts /Wageningen [NL]

RNA-guided detection of invader DNA by short pAgo systems trigger cell death by NAD depletion

16:45

Bayer Pharmaceuticals PhD Award

(Laudatio: B. Schwappach-Pignataro)



Mohamed El-Brolosy /Cambridge [USA]

A novel role for mutant mRNA degradation in triggering transcriptional adaptation to mutations



Susan Gottesman

17:00

GBM General Meeting (17:00 - 19:00)
(for GBM members only)

19:15

Feodor Lynen Lecture
(Laudatio: C. Sharma)

Susan Gottesman /Bethesda [USA]

Multiple levels of regulation of bacterial sRNA signalling

The German Society for Biochemistry and Molecular Biology honors Susan Gottesman with the distinguished Feodor Lynen medal for her outstanding achievements in biochemistry.

After the prize lecture the GBM invites all participants to join the Lynen reception.



The Lynen Lecture is sponsored by



20:00

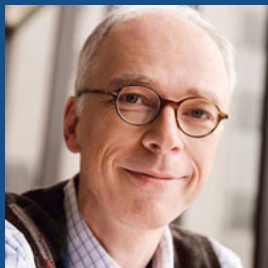
Lynen reception & poster session II
(even & odd numbers)

22:00

GBM networking event



Nina Papavasiliou



Tom Tuschl



Andres Jäschke



Jean-Yves Roignant



Ann Ehrenhofer-Murray

Junior GBM Session (09:00 - 10:00)
(Chairs: Nicola Bopp & Alexander Eing)

09:00 **Nina Papavasiliou /Heidelberg [DE]**
Adaptive evolution through RNA editing

09:30 **Thomas Tuschl /New York [USA]**
The role of RNA-binding-protein-guided mono-ubiquitination in mRNA surveillance

Coffee break (10:00 - 10:30)

Session 3 (10:30 - 12:00)
Epitranscriptomics
(Chair: Mark Helm)

10:30 **Andres Jäschke /Heidelberg [DE]**
Gene regulation meets redox biochemistry - NAD-capped RNA in pro- and eukaryotes

11:00 **Jean-Yves Roignant /Lausanne [CH]**
Loss of Pseudouridine synthase 7 alters codon specific translation efficiency in the Drosophila brain

11:30 **Ann Ehrenhofer-Murray /Berlin [DE]**
Queuosine and m5C modification of RNA: Nutritional control of eukaryotic translation

Lunch break (12:00 - 13:00)

12:00 **Meet the Industrial Scientist with Andreas Kuhn**
(more information >> page 23)

12:00 **Meet the Prof with Stefanie Dimmeler**
(more information >> page 23)



Chuan He



Michaela Frye



Frank Slack



Alexander Dalpke

12:00 **The path to industry - careers at QIAGEN**
(more information >> page 27)

13:00 **Poster session III** (odd numbers)
(more information >> page 29)

Session 3 (continued, 14:30 - 15:30)
Epitranscriptomics
(Chair: Mark Helm)

14:30 **Chuan He** /Chicago [USA]
RNA methylation in gene expression regulation

15:00 **Michaela Frye** /Heidelberg [DE]
Functions of RNA methylation in translation

Coffee break (15:30 - 16:00)

Session 4 (16:00 - 17:00)
RNA Therapeutics
(Chairs: Markus Landthaler & Gunter Meister)

16:00 **Frank Slack** /Harvard [USA]
Towards microRNA-based therapeutics in cancer

16:30 **Alexander Dalpke** /Dresden [DE]
Naturally occurring RNA modifications interfering with innate immune activation



Stefanie Dimmeler



Otto Warburg Medal

17:00

Otto Warburg Lecture & Medal (Laudatio: B. Schwappach-Pignataro)

Stefanie Dimmeler /Frankfurt [DE]
RNAs: versatile molecules with therapeutic potential

This year the GBM, Elsevier and Biochimica et Biophysica Acta (BBA) will honor Stefanie Dimmeler from the Goethe University in Frankfurt for her pioneering work in the field of cardiovascular disease 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 the outstanding achievements of Otto Heinrich Warburg. Elsevier and its flagship title Biochimica et Biophysica Acta (BBA) are exclusive sponsors of the Medal. To emphasize the importance of excellent scientific research and motivate young researchers to achieve outstanding results, the prize is endowed with 25.000 Euro.

sponsored by



Program

Sat., April 2



Jörg Vogel



Adrian Krainer



Muthiah Manoharan



Andreas Kuhn



Stefan Engelhardt

Session 4 (continued, 09:00 - 12:00)

RNA Therapeutics

(Chairs: Markus Landthaler & Gunter Meister)

09:00 **Jörg Vogel** /Würzburg [DE]
The promises and challenges of programmable RNA antibiotics

09:30 **Adrian Krainer** /Cold Spring Harborg [USA]
Antisense therapeutics for genetic diseases and oncology

10:00 **Muthiah Manoharan** /Cambridge [USA]
Making drugs out of siRNAs: From principles to patients around the world

Coffee break (10:30 - 11:00)

11:00 **Andreas Kuhn** /BioNTech, Mainz [DE]
mRNA-based therapeutics and vaccines - COVID-19 and beyond

11:30 **Stefan Engelhardt** /München [DE]
miRNA-based therapeutics

12:00 **Poster prizes & closing remarks**



Tom Tuschl



Stefanie Dimmeler



Andreas Kuhn

Meet the Prof

This year's guests of our Junior GBM are Stefanie Dimmeler and Tom Tuschl. The scientists will give insights into their lives as researchers and their personal careers. In addition, you can ask questions in an informal atmosphere that may help you with your personal orientation in research and career or that simply interest you.

Thursday, March 31, 12:00 - 13:00 (Room: Darre)
(Chair: Lena Klein)

Tom Tuschl (Rockefeller University, New York [USA])

Friday, April 1, 12:00 - 13:00 (Room: Darre)
(Chair: Alexander Röntgen)

Stefanie Dimmeler (Goethe University, Frankfurt [DE])

The number of participants is limited. A registration is required.

Meet the industrial Scientist

The Junior GBM succeeded in winning Andreas Kuhn from BioNTech for the „Meet the industrial Scientist“. Similar to the „Meet the Prof“ format, the scientist will talk about his work and career and answer your questions.

Friday, April 1, 12:00 - 13:00 (Room: Tenne)
(Chair: Lukas Rösner)

Andreas Kuhn (BioNTech, Mainz [DE])

The number of participants is limited. A registration is required.



Stefanie Dimmeler



Razvan Nutiu



Jörg Vogel

Panel Discussion: Challenges and opportunities in RNA Therapeutics

Organized by the GBM Young Investigators, this panel discussion will focus on drug development using or targeting RNA. After introduction of the guests, we will discuss their views on RNA therapeutics and where the field is headed. This will be followed by a joint discussion and Q&A session for the audience.

Thursday, March 31, 12:00 - 13:00 (Lecture hall)
(Chairs: Christina Weinberg and Julia Weigand)

Guests:

Stefanie Dimmeler (Goethe University, Frankfurt [DE])

Razvan Nutiu (Bayer Pharmaceuticals, Berlin)

Jörg Vogel (Helmholtz-Inst. for RNA-based Infection Research, Würzburg)



Carolin Schächterle



Tanja Heinloth



Ceyhun Tamer



Hannah Baumbach

Meet the LSR

The Life Science Research department of the Diagnostics Industry Association introduces itself and two members give an insight into the professional world of the LSR industry: Tanja Heinloth reports on her path to corporate communications at Promega GmbH and Ceyhun Tamer, regional sales manager at Miltenyi Biotec, explains why empathy and emotional intelligence are absolutely underestimated virtues. Come by and meet us.

Thursday, March 31, 12:00 - 13:00 (Room: Tenne)

Speakers:

Carolin Schächterle (VDGH e.V., Berlin)

Tanja Heinloth (Promega, Mannheim)

Ceyhun Tamer (Miltenyi Biotec, Bergisch-Gladbach)

The path to industry - careers at QIAGEN

Qiagen representatives will explain career opportunities for life scientists in the company (research, production, QA/QC, marketing, sales, HR) and give examples and application advice; there will also be plenty of time for Q&A.

Friday, April 1, 12:00 - 13:00 (Room: Malzboden)

The number of participants is limited, registration is required. Session in German language.

Chair:

Hannah Baumbach (QIAGEN, Hilden)

Session Times

Thursday, 13:00 - 14:30 (even numbers)

Thursday, 20:00 - 21:30 (all numbers)

Friday, 13:00 - 14:30 (odd numbers)

During the poster sessions the presenting authors are requested to stay near their posters. Posters should be presented throughout the whole meeting.

Poster Specifications

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 available for viewing purposes at the registration desk.

Poster Numbers

Please see the poster list on page 38 for poster numbers.

Poster Prizes

The best three posters will be awarded (with certificate and 300 € each).

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



March 30	14:00 - 16:30	(Room: Schallender)
	Sitzung: Arbeitskreis Studium Molekulare Biowissenschaften	
March 30	17:00 - 19:00	(Room: Malzboden)
	Sitzung: Sprecher der GBM-Studiengruppen	
March 31	12:30 - 14:00	(Room: Malzboden)
	Sitzung: GBM-Kontaktpersonen	
March 31	13:30 - 14:30	(Room: Schallender)
	Sitzung: Junior GBM Stadt- und Bundessprecher	
March 31	17:00 - 19:00	(Lecture hall)
	GBM-Mitgliederversammlung	
April 1	12:00 - 14:30	(Room: Schallender)
	Sitzung: Arbeitskreis „Biochemie in der Medizin“	
April 1	19:00 - 21:00	(Lecture hall)
	Vollversammlung: junior GBM	

Conference Office

Opening hours are

Wednesday: 16.00 - 19:45

Thursday: 08:00 - 17:00

Friday: 08:30 - 16:00

Saturday: 08:30 - 11:00

Phone: +49 6261 9292 78

Venue

The Kolloquium takes place in the „Alte Mälzerei“ in Mosbach/Baden (Germany)

Alte Mälzerei
Alte Bergsteige 7
74821 Mosbach/Baden

Internet

There will be a wireless LAN access point in the conference centre.

SSID: GBM
Key: gbm-online

Covid-19

Please allow extra time due to the Corona measures and the checking of the vaccination/test certificates!

For the protection of all participants, we have set some minimum requirements for vaccination status which we emailed to you in advance of the conference. In addition, each participant must present a current Corona rapid test upon entry, in addition to proof of vaccination.

FFP2 masks are mandatory in all indoor areas at any time!

Lunch & Coffee Breaks

Coffee, tea and mineral water will be provided for free during the coffee breaks.

Lunch and Dinner is available at your own expense in the conference center or in one of the restaurants in the city of Mosbach.

Proceedings

Your name badge and the program booklet are available at the registration desk.

We kindly ask to wear your name badge as an entry ticket during the whole meeting.



1 Oberer Torturm



2 Haus Kickelhain



3 Altes Hospital



3a Scharfrichter-Haus



4 Palm'sches Haus



5 Rathaus



6 Salzhaus



7 Synagogenplatz



8 Altenzentrum Pfalzgrafenstift



9 Mosbacher Schloss



10 Kandel



11 Kiwwelschisserbrunnen



12 Stiftskirche



i Congress Centre „Alte Mälzerei“



ii Hotel „Zum Amtsstüble“



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We thank for the
kind support by:



P 01

Ade, Jens

A scalable method for identifying the protein interactomes of individual RNAs by quantitative mass spectrometry

O 01

Ahmad, Shazeb

Sensitive localization of viral RNA in cells by direct RNA padlock probing and in-situ sequencing

P 02

Atanasoai, Ionut

Large-scale identification of RBP-RNA interactions by RAPseq refines essentials of post-transcriptional gene regulation

P 03

Barendse, Patrick

Homologous recombination by prokaryotic Argonautes

R 01

Bauer, Michaela

Identification of RNA- based regulatory pathways affecting T cell – cancer cell communication

T 01

Baumeister, Hans

Establishment of an assay to assess the immunogenicity of a therapeutic antisense oligonucleotide in clinical samples

T 02

Becker, Phil

Targeted Delivery of Antisense Oligonucleotides for the Treatment of Erythropoietic Protoporphyrinemia by Splicing Modulation in a Mouse Model of Human EPP

R 02

Behrens, Andrew

Dynamics of human tRNA repertoires as a function of cell identity

O 02

Bobadilla Ugarte, Pilar

Function and mechanisms of long pAgos

R 03

Braun, Sigurd

The inner nuclear membrane protein Lem2 coordinates RNA degradation at the nuclear periphery

P 04

Breuer, Ruth

Introduction of a circular SRP RNA in the thermophilic archaeon *Sulfolobus acidocaldarius*

O 03

Cemel, Ibrahim Avi

Investigating the role of RNA in H2AX-mediated DNA damage repair

O 04

Chakraborty, Anirban

Correlating the conformational dynamics of the DEAD-box helicase eIF4A with translation efficiencies

T 03

Cornelissen, Nicolas

Enzymatic cascade for photocaging of the mRNA 5' cap

R 04

Demtröder, Tim

The influence of epidermal piRNAs on the immune defense in *Schmidtea mediterranea*

O 05

Devan, Senthil Kumar

A novel binding platform consisting of three Mademoiselle domains links the key RNA transporter to endosomes

P 05

Dhamotharan, Karthikeyan

Deciphering mRNA target specificity of the multi-domain RNA-binding protein IMP3

E 01

Eggers, Cristian

Wobble Uridine tRNA Modifications Are Essential For Correct Translation Dynamics And Ribosome Movement Along mRNA

E 11

Eich, Hannah

The RNA modification m6A affects RNA binding and functions of SRSF7

E 02

Fiore, Elisabetta

Substrates and functionality beyond pseudouridylation of tRNA PUS enzymes in pathogenic Epsilonproteobacteria

T 04

Franco de Carvalho, Taís

Manipulating the activities of a gut microbiota model bacterium with antisense nucleic acids

R 05

Fröhlich, Kathrin

Sibling Team Work – Interplay of a family of regulatory RNAs with an RNA sponge in *Caulobacter crescentus*

R 06

Fuchs, Manuela

Characterization of an sRNA involved in the σ^B -mediated stress response in *C. difficile*

R 07

Fuks, Christin

Mechanistic insights into the regulation of the guanine-II riboswitch

O 06

Gerber, Janina Lara

The structure of the RTCB-Archease complex reveals the activation principle of the human tRNA ligase

R 08

Gerovac, Milan

Giant phages hijack post-transcriptional regulation and translation in the host

E 03

Gomes-Filho, José Vicente

Insights into the processivity of NAD-RNAs in *Sulfolobus acidocaldarius*

E 04

Gonzalez Jabalera, Pablo

Identification of FAD-capped RNAs: the FAD Capture-Seq

R 09

Gorbovytska, Vladyslava

Enhancer RNAs stimulate Pol II pause release by harnessing multivalent interactions to NELF

R 10

Grafl, Nadine

Synthetic Riboswitches for the Analysis of tRNA Processing by eukaryotic RNase P Enzymes

E 05

Griselin, Alice

Investigating NAD-capped RNAs in mammalian cells

O 07

Grünberger, Felix

Expanding the transcriptomic toolbox in prokaryotes by Nanopore sequencing of RNA and cDNA molecules

R 11

Guanzon, David

Thermo-modular small RNA in *Yersinia pseudotuberculosis*

O 08

Gutschner, Tony

Genetic interactions and re-wired signaling pathways in Dicer-deficient cancer cells

R 12

Hammann, Christian

Distinct mechanisms keep Skipper-1 under control

O 09

Hanelt, Tiana

β -propeller domains as novel RNA binding modules

O 10

Hauth, Franziskus

Description of a canavanine utilization operon in the novel bacterium *Pseudomonas canavanivorans*

P 06

Hengesbach, Martin

RNA-protein interactions shape the architecture of eukaryotic H/ACA RNPs

O 11

Hofacker, Daniel

Profiling Intracellular RNA-Protein Interactions by Proximity Biotinylation

O 12

Hüsters, Franziska

The interferon-inducible antiviral MxB GTPase promotes capsid disassembly and genome release of herpesviruses

O 13

Jagtap, Pravin Kumar Ankush

Molecular insights into the remodelling of roX lncRNA during *Drosophila* dosage compensation

O 14

Jeske, Mandy

ReLo: a simple colocalization assay to identify and characterize physical protein-protein interactions

O 15

Kagermeier, Theresa

Revealing how tRNA splicing defects cause pontocerebellar hypoplasia using brain organoids

O 16

Kandala, Divya

Characterisation and investigation of SMIM24 in cancer

O 17

Kilchert, Cornelia

The essential DEAD-box ATPase Dbp2 functions in nuclear RNA surveillance

O 18

Kläge, Dennis

Synthetic riboswitches designed for tetracycline-inducible gene expression in human cell culture

E 06

Kleemann, Leon

The role of tRNA position 37 modifications in translation and translation-associated diseases

P 07

Klein, Nathalie

Functional characterization of *Pseudomonas* *oleovorans* Type IV-A CRISPR-Cas activity in vitro

O 19

Köhler, Sandra

Structure-guided functional analysis of yeast tRNA ligase

R 14

König, Fabian

A 3'UTR-derived, processed small RNA modulates flagellar biogenesis by repression of the anti-sigma factor FlgM in *Campylobacter jejuni*

P 08

Koopal, Bel

Short pAgo systems interfere with invading nucleic acids

O 20

Kooshapour, Hoda

Integrative target prediction for bacterial sRNAs

P 09

Korn, Sophie

Binding preferences of the SARS-CoV-2 nucleocapsid for genomic RNA elements

O 21

Krammer, Tobias

Spatial single-bacteria gene expression profiling using fluorescence in situ hybridization and expansion microscopy

T 05

Kremer, Anastasia

siRNA delivery to immune cells ex vivo - a potential for cell therapy reprogramming

O 22

Kuck, Meret

MED12 binds and activates Cyclin-dependent kinase 3

E 07

Kück, Nadine A.

MePMe-seq: Enrichment and Identification of Methyltransferase Target Sites in RNA

O 23

Kuru-Schors, Merve

Creating a cellular toolbox to investigate the role of miRNAs in cancer

O 24

Kwon, Seomun

Messengers outer space: mRNA effectors in extracellular vesicles of the corn smut pathogen *Ustilago maydis*

O 25

Lamm-Schmidt, Vanessa

Grad-seq in *Clostridioides difficile* identifies KhpB as global RNA-binding protein and regulator of toxin production

E 08

Larivera, Simone

An unbiased analysis of YTHDF2 protein functions

P 10

Latifi, Ngadhnjim

Targeted A-to-I and C-to-U RNA Editing using SNAP-fused effectors

- T 06
Lence, Tina
Targeted elimination of a human pathogen
Clostridioides difficile using antisense oligonucleotide-based therapeutics
- E 09
Liaqat, Anam
Deoxyribozymes as tool for analysis of RNA modifications
- R 15
Linck-Paulus, Lisa
A new Argonaute 2 splice variant influences microRNA function and melanoma cell viability
- O 26
Marx, Andreas
Discovery of the first human 5'-3' RNA ligase
- O 27
Meindl, Andreas
Comprehensive analysis of translation by ultra-rapid ribosome profiling from minute amounts of biological material
- P 11
Meißgeier, Tina
The splicing factor PHF5A influences melanoma cell growth and viability
- P 12
Michel, Henri
Single-molecule FRET measurements of the RISC loading complex reveal a hAgo2 conformation favourable for miRNA duplex loading
- E 10
Möhler, Marvin
Direct Biotinylation in NAD captureSeq 2.0 – One Step into the Future

- R 16
Molthof, Carolin
Functional characterization of the novel long non-coding RNA P4 in epidermal tissue homeostasis
- R 17
Morgenstern, Eva
Functional characterization of lncRNA LINC00941 as regulator of human epidermal homeostasis
- O 28
Müller-McNicoll, Michaela
Exploring the translation of Split-ORFs as cancer neo-antigens
- E 12
Naarmann-de Vries, Isabel S.
Deep assessment of human disease-associated ribosomal RNA modifications using Nanopore direct RNA sequencing
- R 18
Narayan, Manasa
Functional characterization of a pair of KH domain RNA-binding proteins in *Campylobacter jejuni*
- P 13
Neumeier, Julia
Analysis of miRNA-mediated gene silencing
- R 19
Ntogka, Andriana
MicroRNA-dependent regulation of organismal proteostasis, longevity and stress resistance in *Caenorhabditis elegans*
- O 29
Nunes, Ivanéia
The role of ribonuclease 6 on bacterial RNA processing for Toll Like Receptor 8 stimulation

R 20

Oberstrass, Lasse

Specifying the Rules for Target Recognition and Regulation by Roquin Proteins

O 30

Pawusch, Sarah

Role of inhibitory 2'O-ribose methylation on RNA processing and TLR-mediated immune stimulation

R 21

Pekarek, Lukas

Structural and molecular basis for Cardiovirus 2A protein as a viral gene expression switch

R 22

Ponath, Falk

The oxygen-induced small RNA FoxI provides the non-coding arm of the Sigma E response of the cancer-associated *Fusobacterium nucleatum*

P 14

Potocnik, Ana

Short pAgos systems can be repurposed for nucleic acid detection

O 31

Prezza, Gianluca

High-throughput RNA-based approaches to explore the interaction between *Bacteroides thetaiotaomicron* and its host

O 32

Rauch, Philipp

Deciphering mechanisms, function, and dynamics of RNA-protein interactions on multiple scales

O 33

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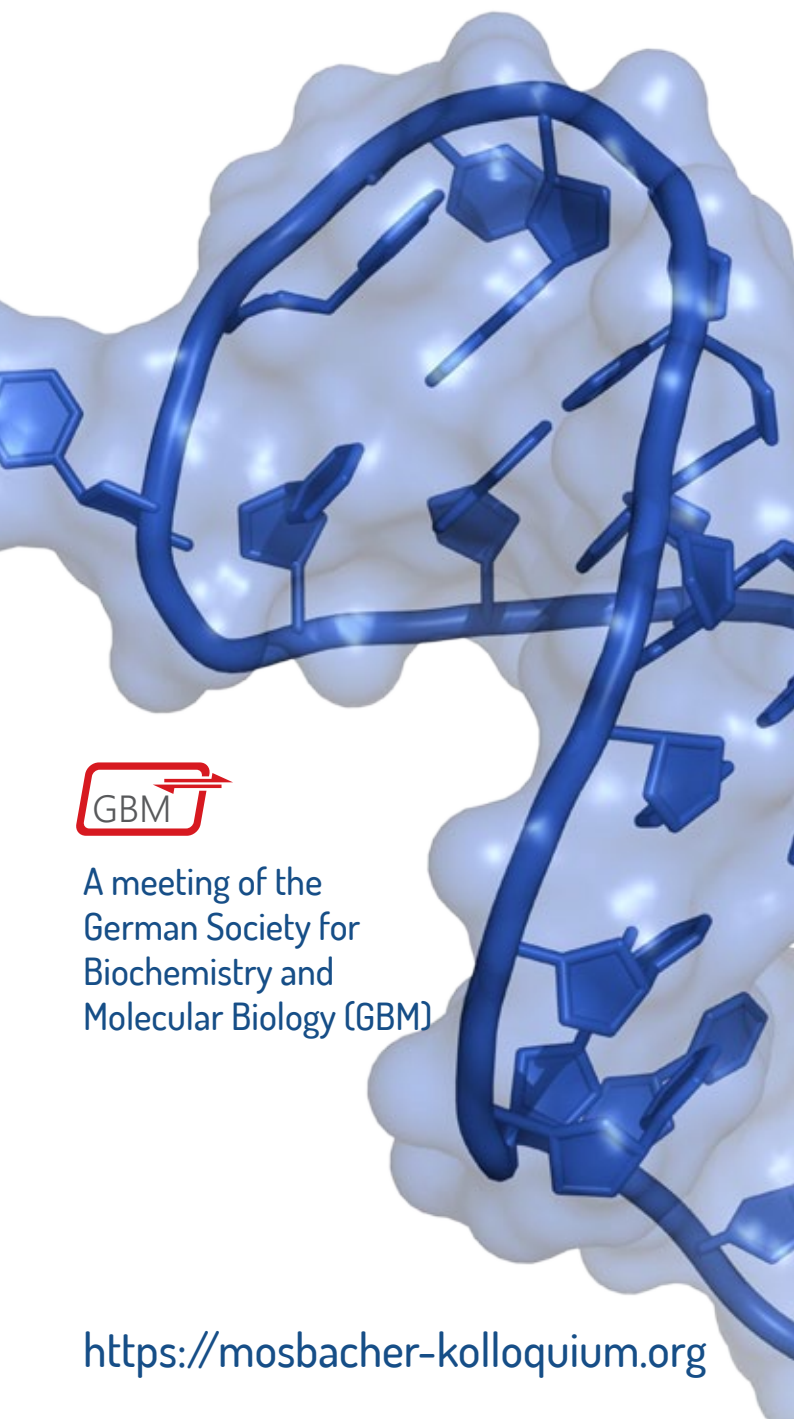
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