RNA-Binding Proteins in Disease

8th Biennial Meeting of the LARP Society

September 2nd - 4th, 2026
Herzogshof Regensburg
Germany

Universität Regensburg

Universitätsklinikum Regensburg

LARPSOC

FÖRDERNDE DER MOLEKULARBIOLOGIE REGENSBURG e. V.

Lilith Heise©

Welcome Letter

Dear colleagues,

We are pleased to invite you to the 8th Biennial Meeting of the LARP Society, jointly organized by the Department of Biochemistry at the University of Regensburg and the Department of Pediatric Hematology, Oncology, and Stem Cell Transplantation at the University Hospital of Regensburg. This meeting brings together students, researchers, clinicians, and experts in the field of RNA-binding proteins in disease and aims to share groundbreaking findings, discuss experimental and clinical research, and foster collaboration. On behalf of the organizing team, we look forward to welcoming you to Regensburg and sharing an enriching experience together.

Gunter Meister (University of Regensburg, Germany)

Gunhild Sommer (University Hospital Regensburg, Germany)

Tilman Heise (University Hospital Regensburg, Germany)

Mark Bayfield (York University, Canada)

Andrea Berman (University of Pittsburgh, United States)

Sarah Blagden (University of Oxford, United Kingdom)

Utz Fischer (University of Würzburg, Germany)

General Information

The information contained in this abstract book should be treated as personal communication and should be cited only with the expressed consent of the author.

Information for speakers:

We kindly ask the speakers to **provide their presentation in advance** to the support staff well before the session (latest in the break before the session). For time reasons, please do not use your own laptop. While this is possible, it leads to delays. All talks are deleted as soon as the meeting ends.

Information for poster presenters:

Posters should not be larger than an **A0 format** in portrait. Please mount your poster before the official start of the meeting. You can find the number of your poster in this abstract book. Powerstrips to mount the posters will be provided; the use of pins is not allowed.

No unauthorized photography in sessions: To encourage sharing of unpublished data at the LARP Meeting, taking of photographs and/or videos during scientific sessions (oral or poster), or of posters outside of session hours, is strictly prohibited. Violators of this policy may have their equipment confiscated and/or they may be asked to leave the conference and have their registration privileges revoked without reimbursement.

Use of social media:

The tag of the Meister Lab is @meisterlab.bsky.social. The organizers encourage attendees to tweet about the amazing science they experience at the meeting. However, please respect these few simple rules when using our tag or talking about the meeting on Bluesky and other social media:

1. Be polite and respectful of others in all of your messages.
2. Do not transmit photographs of slides or posters under any circumstances.
3. Do not transmit photographs of conference attendees without their clear consent.
4. Tweeters should respect requests of presenters who ask attendees to refrain from tweeting the content of their talks and posters.

Sponsors

DFG Deutsche Forschungsgemeinschaft

German Research Foundation

AHORN Apotheke

Ahorn Apotheke - Inh. Michaela Weigand
Sudetendeutsche Str. 1c
93057 Regensburg

REGENSBURGER UNIVERSITÄTS STIFTUNGEN

UNIVERSITÄTSSTIFTUNG HANS VIELBERTH

analytikjena
An Endress+Hauser Company

siTOOLs BIOTECH

Welcome to Regensburg

We are delighted to welcome you to Regensburg and to the **Herzogshof**, located in the heart of the city's historic Old Town. Here, more than 2,000 years of history meet a vibrant modern university and scientific community.

Founded by the Romans on the banks of the **Danube**, Regensburg was an important Roman military and trading settlement. The city stood close to the northern frontier of the Roman Empire and the **Raetian Limes**, the ancient Roman border that once marked the edge of the Empire. Today, the Limes is part of the UNESCO World Heritage Site *Frontiers of the Roman Empire*.

Much later, Regensburg became an important medieval trading and political center. Its remarkably well-preserved Old Town and Stadtamhof have been a **UNESCO World Heritage Site since 2006**. Medieval streets, historic buildings, hidden courtyards, cafés, restaurants, pubs, and bars are all within easy walking distance of the Herzogshof.

One of the city's most famous landmarks is the **Stone Bridge**, built between 1135 and 1146. According to a famous local legend, the master builder made a pact with the Devil to complete the bridge. In return, the Devil demanded the souls of the first living beings to cross it. The clever builder supposedly sent a rooster, a hen, and a dog across first – tricking the Devil and saving the people of Regensburg.

Right beside the Stone Bridge is the **Historische Wurstkuchl**, a small historic sausage kitchen whose origins date back to the Middle Ages. Sausages have been grilled here for centuries and are traditionally served with sauerkraut and mustard – a simple but very traditional taste of Regensburg.

The impressive **St. Peter's Cathedral** is just a short walk from the Herzogshof and dominates the Old Town. After a day of scientific talks and discussions, the Danube, medieval streets, lively squares, cafés, traditional Bavarian restaurants, pubs, and bars offer plenty of opportunities to relax and enjoy the city.

We hope you enjoy the conference at the Herzogshof and find some time to discover Regensburg – a city where Roman history, the Danube, medieval heritage, science, and vibrant modern life come together.

Meeting Objectives and the LARP Society

RBPs play key roles in regulating RNA metabolism and thus gene expression. These processes include the entire RNA life cycle ranging from RNA synthesis, processing, modification, localization to degradation and reach into the regulation of protein synthesis at the ribosome. The expression, stability and post-translational modification of RBPs themselves are also subject to regulation and mutations affecting these processes are linked to disease as well. Emerging evidence indicate that the dysregulation of one or more of these RBP-mediated functions is associated with human diseases such as developmental, neurological, immunological and metabolic disorders as well as cancer. Connecting researchers from all these areas is the overarching idea of our planned scientific meeting in Regensburg.

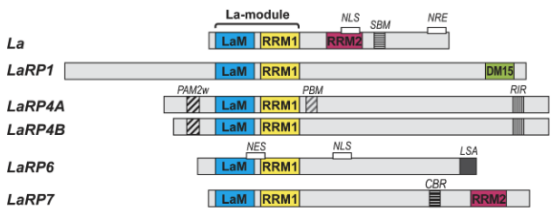

Figure 1: The LARP family. The La module is comprised of the La motif (LaM) and the RNA-Recognition Motif (RRM1), which is found in all five LARP subfamilies. The discovery of the genuine La protein occurred in the early 1980s, and it has since been categorized as LARP3.
Reference DOI: 10.1080/15476286.2019.1695712

This in-person scientific meeting is a continuation of highly successful biennial meetings of the LARP society. Therefore, the family of RBPs known as La-related proteins (LARPs) are in the center and form a crystallization core for broader RBPs and disease interest. LARPs are characterized by a common RNA-binding La module. In the early 1980s, the genuine Lupus autoantigen (La) protein was identified as an autoantigen in systemic lupus erythematosus and Sjögren's syndrome (SSB).

A comprehensive analysis of the La module containing RBP family was published in 2009, providing a curation of the entire LARP family including evolutionary history and characteristic domains (Figure 1). Besides their structural features and RNA binding domains, LARPs contain subfamily-specific motifs. The LARPs were divided into five subfamilies (LARP1, LARP3, LARP4, LARP6 and LARP7) belonging to an ancient eukaryotic family with 134 members, found in the genomes of all major eukaryotic lineages. Interestingly, a PubMed search for the term "La-related proteins" revealed a recent strong increase in publications underscoring the functional importance of LARPs in a broad range of cellular processes and disease as well as a great interest in the scientific community.

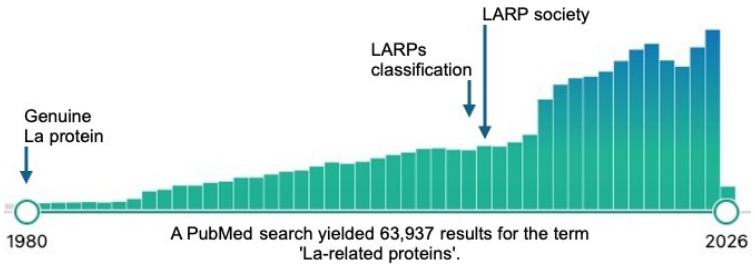

Figure 2: PubMed search results for the term 'La-related proteins' (LARPs).

In 2010, the charitable LARP Society was founded with the aim to promote research and provide a discussion forum around this fascinating area of discovery. This is fostered through a website (https://www.larpsociety.com/), quarterly virtual meetings and biennial scientific meetings. Over the past 10 years, biennial LARP Society meetings have been hosted at the National Institute of Health (Bethesda, United States, 2014), in Wiltshire (philanthropic supporter, United Kingdom, 2016), the University of Würzburg (Germany, 2018), York University (Toronto, Canada, 2022) and the University of Oxford (United Kingdom, 2024).

We would like to thank the LARP Society's PhD and Postdoc Representatives — Brittney Remnant, Alexander Colton, and Sathyen Prabhu — for initiating the LARP Society seminar series.

We hope this wonderful initiative continues in the future.

Thank you again for keeping the LARP Society vibrant.

Venue

The conference will take place at the Herzogshof, near Regensburg Cathedral in the city center. The Hotel Herzogshof is adjacent to the conference hall.

Boutique-Hotel am Dom

Herzogshof, Domplatz 3, 93047 Regensburg, Germany

mailto: rezeption@herzogshof.com

Phone: +49 (0)941 / 584 000

Herzogssaal – Conference room

Program

Short program:

Wednesday, September 2nd:

4:00 pm	-		Registration is open
6:00 pm	-	6:15 pm	Welcome from the organizers
6:15 pm	-	7:00 pm	**Keynote 1: Matthias Hentze**
7:00 pm	-	9:00 pm	Welcome reception

Thursday, September 3rd:

8:20 am	-	8:30 am	Announcements by the organizer
Session 1: RBPs and Translation			
8:30 am	-	9:00 am	**Keynote 2: Fátima Gebauer**
9:00 am	-	10:20 am	Presentations (Talks T01-T04)
10:20 am	-	10:50 am	Coffee break
Session 2: RBPs and Metabolism			
10:50 am	-	12:20 pm	Presentations (Talks T05-T08)
12:20 pm	-	1:45 pm	Lunch & ***Poster Session (A)*** - Start: 1:00 pm
Session 3: RBPs and Localization			
1:45 pm	-	2:15 pm	**Keynote 3: Michaela Müller-McNicoll**
2:15 pm	-	3:35 pm	Presentations (Talks T09-T12)
4:10 pm	-	6:30 pm	Social event
7:00 pm	-		Dinner

Friday, September 4th:

8:20 am	-	8:30 am	Announcements by the organizer
Session 4: RBPs and Processing			
8:30 am	-	9:00 am	**Keynote 4: Juan Valcárcel**
9:00 am	-	10:20 am	Presentations (Talks T13-T16)
10:20 am	-	10:50 am	Coffee break
10:50 am	-	11:20 am	**Keynote 5: Daniele Hasler**
Session 5: RBPs and mRNA Homeostasis			
11:20 am	-	12:40 pm	Presentations (Talks T17-T20)
12:40 pm	-	1:40 pm	Lunch & ***Poster Session (B)*** - Start: 1:10 pm
Session 6: RBPs, Structure and Modifications			
1:40 pm	-	3:20 pm	Presentations (Talks T21-T25)
3:20 pm	-	3:50 pm	Coffee break
Session 7: RBPs and Genetics			
3:50 pm	-	4:20 pm	**Keynote 6: Dierk Niessing**
4:20 pm	-	5:40 pm	Presentations (Talks T26-T29)
5:40 pm	-	6:00 pm	**LARP Society Executive Committee Meeting**
6:15 pm	-		Social event and dinner

Full Program:

Wednesday, September 2nd:

4:00 pm -	Registration is open at the Herzogshof hotel
6:00 pm - 6:15 pm	Welcome from the organizers (**Gunter Meister**)
6:15 pm - 7:00 pm	**Keynote 1**: K01) Discovery of a new class of RNA-binding proteins **Matthias Hentze** – European Molecular Biology Laboratory (EMBL), Heidelberg, Germany
7:00 pm - 9:00 pm	Welcome reception at the entrance to the Herzogshof hotel

Thursday, September 3rd:

8:20 am - 8:30 am	Announcements by the organizer (**Gunhild Sommer**)

***Session 1:* RBPs and Translation** – Chair: **Gunhild Sommer**

8:30 am - 9:00 am	**Keynote 2:** K02) RNA-binding proteins and translational control in cancer **Fátima Gebauer** – Center for Genomic Regulation, Barcelona, Spain
9:00 am - 9:20 am	T01) New insights into the role of Larp1 in the regulation of 5'TOP mRNA translation **Isotta Lorenzi** – University of Würzburg, Germany
9:20 am - 9:40 am	T02) Role of LARP RNA-binding proteins in cardiomyocyte local translation and cardiac growth **Alexandra Trouilloud** – Icahn School of Medicine, New York, United States
9:40 am - 10:00 am	T03) Dissecting the function and mRNA specificity of key eukaryotic translation factors by degron-mediated depletion and multiomics approaches **Markus Landthaler** – Max-Delbrück Center, Berlin, Germany
10:00 am - 10:20 am	T04) A CRISPRi screen identifies RBM8A as a positive regulator of SARS-CoV-2 frameshifting and viral replication **Makram Mghezzi-Habellah** – University of Regensburg, Germany
10:20 am - 10:50 am	Coffee break

Session 2:* *RBPs and Metabolism – Chair: **Sarah Blagden**

10:50 am - 11:20 am	T05) RNA-binding protein LARP6 coordinates hepatic stellate cell activation and liver fibrosis **David Brenner** – Sanford Burnham Prebys, La Jolla, United States
11:20 am - 11:40 am	T06) Post-transcriptional coordination of glycolysis, respiration and redox homeostasis by LARP1 sustains tumour metabolic capacity **James Chettle** – University of Oxford, United Kingdom
11:40 am - 12:00 pm	T07) IGF2BP2 couples MET–mTOR signaling to metabolic and immune reprogramming in pancreatic cancer **Nadine Bley** – University of Halle-Wittenberg, Germany
12:00 pm - 12:20 pm	T08) De novo and biallelic LARP1 variants are associated with a neurodevelopmental disorder and metabolic dysfunction **Alexander Colton** – University of Oxford, United Kingdom
12:20 pm - 1:45 pm	Lunch & ***Poster Session (A)*** - Start at 1:00 pm

Session 3:* *RBPs and Localization – Chair: **Nina Ripin**

1:45pm - 2:15 pm	**Keynote 3:** K03) Decoding the functions of SR proteins - a family affair **Michaela Müller-McNicoll** – University of Frankfurt & Max Planck Institute of Biophysics, Frankfurt, Germany
2:15 pm - 2:35 pm	T09) Unconventional, surface La as a therapeutic target for skeletal disease. **Jarred Whitlock** – University of Virginia, Charlottesville, United States
2:35 pm - 2:55 pm	T10) Localization-dependent activation of the DEAD-box ATPase Vasa by eLOTUS domains **Mandy Jeske** – University of Heidelberg, Germany
2:55 pm - 3:15 pm	T11) RBProximity-CLIP enables subcellular mapping of RNA–binding protein interactions at nucleotide resolution **Aishe Sarshad** – University of Gothenburg, Swede
3:15 pm - 3:35 pm	T12) Editor, EMBO Journal **Cornelius Schneider** – European Molecular Biology Organization (EMBO), Heidelberg, Germany
4:10 pm - 6:30 pm	Social event
7:00 pm -	Dinner

Friday, September 4th:

8:20 am - 8:30 am Announcements by the organizer (**Tilman Heise**)

***Session 4:* RBPs and Processing** – Chair: **Tilman Heise**

8:30 am - 9:00 am **Keynote 4:**
K04) Networks of alternative splicing regulation in cancer
Juan Valcárcel – Center for Genomic Regulation, Barcelona, Spain

9:00 am - 9:20 am T13) The variant La protein Mlp1 binds mature snRNAs to influence U4/U6 di-snRNP assembly and splicing in Tetrahymena thermophila
Brittney Remnant – York University, Toronto, Canada

9:20 am - 9:40 am T14) RNA-binding proteins shape TGF-β responses through distinct post-transcriptional mechanisms
Tony Gutschner – University of Halle-Wittenberg, Germany

9:40 am - 10:00 am T15) Regulation of DIS3L2 mediated Y and Vault RNA degradation
Julian Eichlinger – University of Regensburg, Germany

10:00 am - 10:20 am T16) The function of the fission yeast LARP1 ortholog Slr1p in the regulation of mRNA translation and decay
Joudi Kanaan – York University, Toronto, Canada

10:20 am - 10:50 am Coffee break

10:50 am - 11:20 am **Keynote 5:** (Chair: **Gunter Meister**)
K05) Following RNA from Mechanism to Medicine
Daniele Hasler, BioNTech SE, Mainz, Germany

***Session 5:* RBPs and mRNA Homeostasis** – Chair**: Mark Bayfield**

11:20 am - 11:40 am T17) Phosphorylation of the RNA-binding protein La preserves mitochondrial functionality in cancerous cells
Gunhild Sommer – University of Regensburg, Germany

11:40 am - 12:00 pm T18) tRNA chaperoning of macromolecular protein assemblies
Utz Fischer – University of Würzburg, Germany

12:00 pm - 12:20 pm T19) Cell cycle-informed studies of hnRNPC reveal transcriptome vulnerabilities of rapidly dividing cells
Daniel Benhalevy – Tel Aviv University, Israel

12:20 pm - 12:40 pm T20) Mapping the ubiquitin code of translation: Ubiquitin selective ribosome profiling reveals the blueprint of co-translational quality control
Maximilian Seidel – European Molecular Biology Laboratory (EMBL), Heidelberg & Max Planck Institute of Biophysics, Frankfurt, Germany

12:40 pm - 1:40 pm Lunch & ***Poster Session (B):*** Start at 1:10 pm

Session 6: ***RBPs, Structure, and Modifications*** – Chair: **Andrea Berman**

1:40 pm - 2:00 pm T21) An intrinsically disordered region mediates RNA-binding selectivity and cellular activities of LARP6
Sasi Conte – King's College London, United Kingdom

2:00 pm - 2:20 pm T22) Structural and molecular basis of RNA target recognition by the La-related protein LARP4B
Giancarlo Abis – King's College London, United Kingdom

2:20 pm - 2:40 pm T23) A putative long-range RNA recognition motif emerges from the LARP1 Interdomain Interaction
Sanjana Parimi – University of Pittsburgh, United States

2:40 pm - 3:00 pm T24) Decoding of TOP messenger RNA 2`-O-methylation status for mRNA stability and localization to synapses
Matthias Soller – University of Manchester, United Kingdom

3:00 pm - 3:20 pm T25) Shifting the balance: the human La protein influences levels of post-transcriptional modifications deposited onto transfer RNAs
Connor Loupelle – York University, Toronto, Canada

3:20 pm - 3:50 pm Coffee break

Session 7: ***RBPs and Genetics*** – Chair: **Utz Fischer**

3:50 pm - 4:20 pm **Keynote 6:**
K06) Loss of the RNA-binding protein PURA results in impaired neuronal homeostasis
Dierk Niessing – Ulm University & Helmholtz Munich, Germany

4:20 pm - 4:40 pm T26) RNA-binding proteins in neurodevelopment
Davor Lessel – University of Regensburg, Germany

4:40 pm - 5:00 pm T27) The lncRNA Schlafenlnc links PURA-associated RNA regulation to macrophage inflammation in cardiac disease
Anne Dueck – Technical University Munich, Germany

5:00 pm - 5:20 pm T28) Expanding Argonaute syndromes: variant-specific alterations in RISC assembly and effector interactions
Fabiola Biasella – University of Regensburg, Germany

5:20 pm - 5:40 pm	T29) Genetic variants in ZFP36L1 regulatory elements govern T cell fate and autoimmune disease susceptibility **Georg Petkau** – Babraham Institute, Cambridge, United Kingdom
5:40 pm - 6:00 pm	**LARP Society Executive Committee Meeting**
6:15 pm -	Social event and dinner

Poster Sessions:

Please display your poster for the entire meeting to maximize opportunities for discussion of your findings. All poster presenters will be available for discussion at the posters during the poster sessions. Poster sessions are scheduled for each second half of the lunch breaks.

There will be two opportunities to present the poster:

Session (A): Thursday, September 3rd, start 1:00 pm - 1:40 pm

Session (B): Friday, September 4th, start 1:10 pm - 1:40 pm

Posters:

P01) siRNA-mediated targeting of nuclear transcripts reveals AGO2-dependent nuclear RNA interference
Michelle Fong – University of Gothenburg, Sweden

P02) Cytoplasmic relocalization of AGO2 restores MYCN gene silencing in neuroblastoma
Hang Huynh – University of Gothenburg, Sweden

P03) Neuropsychiatric disorder-like phenotype in U2AF2 overexpressing mice
Avetik Arsen Khachatryan Boyajyan – Centro de Biología Molecular Severo Ochoa, Spain

P04) Argonaute syndrome links global miRNA dysfunction to mitotic dysregulation
Ivana Lessel – University of Regensburg, Germany

P05) Exploring RNA dynamics during Gag-Pol translation in HIV-1
Benjamin Riocreux-Verney – University of Regensburg, Germany

P06) Exploring the druggability of the RNA binding proteins LaRP4A & LaRP4B in cancer
Amelie Ziehme – King's College London, United Kingdom

P07) The role of LARP1 in regulating macrophage metabolism and polarisation in the tumour immune microenvironment
Chenwan Jin – University of Oxford, United Kingdom

P08) Diverging functions of the LARP4 RNA-binding proteins in regulating interferon signalling
Maike Henschel – King's College London, United Kingdom