Day 1, Tuesday, June 24

15:00 – 17:00 Registration

17:00 – 17:15 Opening

17:15 – 18:00 Keynote Lecture

Chair: **Krzysztof Sobczak**, Adam Mickiewicz University in Poznań, Poznań, Poland

L1 Ramesh Pillai, Department of Molecular Biology, University of Geneva, Switzerland

RNA modifications in control of mammalian gene expression

18:00 – 18:45 Keynote Lecture

Chair: **Gracjan Michlewski**, International Institute of Molecular and Cell Biology in Warsaw, Poland

L2 Sebastian Glatt, Małopolska Center of Biotechnology, Kraków, Poland

tRNAslational control of eukaryotic gene expression

From 19:00 Get together party

Day 2, Wednesday, June 25

08:00 - 09:00 Registration

09:00 - 9:45 Keynote Lecture

Chair: **Kinga Kamieniarz-Gdula**, Adam Mickiewicz University in Poznań, Poznań, Poland

L3 **Andrzej Dziembowski**, International Institute of Molecular and Cell Biology in Warsaw, Poland

Complex metabolic pathways of endogenous and therapeutic mRNAs *in vivo*

9:45 - 10:15 Coffee break

Morning Session

10:15 - 12:00 Session on **RNA and Disease**

Chair: **Magdalena Dziembowska**

T1 **Daria Niewiadomska**, Adam Mickiewicz University in Poznań, Poznań, Poland

The role of structural elements within mutant mRNA of FMR1 gene containing expanded CGG repeats on the regulation of non-canonical translation of toxic polyglycine protein

T2 **Maria Borja-Gonzalez**, University of Galway, Ireland

miR-199 regulates neuromuscular homeostasis during ageing

T3 **Boris Rogelj**, Jožef Stefan Institute, Ljubljana, Slovenia

C9orf72 mutation alters membrane protein expression in ALS and FTD

T4 **Tomasz Kuliński**, International Institute of Molecular and Cell Biology in Warsaw, Poland

Nuclear RNA decay gone wrong: how DIS3 mutations drive and then escape multiple myeloma

T5 Gracjan Michlewski, International Institute of Molecular and Cell Biology in Warsaw, Poland

5' terminal nucleotide determines the immunogenicity of IVT RNAs

T6 Sandra Fienko, University College London, London, UK

Molecular characterisation of RNA-rich ensembles in Huntington's disease

T7 Agnieszka Fiszer, Institute of Bioorganic Chemistry PAS, Poznań, Poland

HTT loss-of-function contributes to RNA deregulation in developing Huntington's disease neurons

T8 Paweł Sikorski, University of Warsaw, Poland

Effective recognition of double-stranded RNA does not require activation of cellular inflammation

12:00 - 13:00 Lunch

13:00 – 13:45 Keynote Lecture

Chair: **Mikołaj Olejniczak**, Adam Mickiewicz University in Poznań, Poznań, Poland

L4 Kai Papenfort, Friedrich Schiller University of Jena, Germany

From strings of nucleotides to collective behavior: Lessons from Vibrio cholerae and its phages

13:45 – 14:15 Coffee break

Afternoon Session I

14:15 -16:00 Session on **Regulatory RNA**

Chair: **Szymon Świeżewski**, Institute of Biochemistry and Biophysics PAS, Warsaw, Poland

T9 Oleg Dmytrenko, Helmholtz Institute for RNA-based Infection Research, Würzburg, Germany

RNA-triggered Cas12a3 cleaves tRNA tails to execute bacterial immunity

T10 **Paulina Jackowiak**, Institute of Bioorganic Chemistry PAS, Poznań, Poland

Knockdown of *Smed ELAC2* in *Schmidtea mediterranea* decreases 5' tiRNA-Gly-GCC levels and reveals its regulatory role in regeneration

T11 **Monika Jóźwiak**, Adam Mickiewicz University in Poznań, Poznań, Poland

The DEAD-box helicases DRH1, RH46 and RH40 remodel the secondary structure of miRNA precursors to regulate miRNA biogenesis in plants

T12 **Halina Pietrykowska**, Adam Mickiewicz University in Poznań, Poznań, Poland

Tiny but mighty: Male-specific MpmiR11889 regulates proper sperm cell development and sexual reproduction efficiency in *Marchantia polymorpha*

T13 **Zbigniew Warkocki**, Institute of Bioorganic Chemistry PAS, Poznań, Poland

Cytoplasmic synthesis of LINE-1 complementary ssDNA via self-primed reverse transcription

T14 **Marta Sztachera**, Institute of Bioorganic Chemistry PAS, Poznań, Poland

Catch me if you can: Unveiling circRNA functions through capturing RNA-protein interactions.

T15 **Robert Pasieka**, Adam Mickiewicz University in Poznań, Poznań, Poland

Exploring the interactions between lnc-ARRDC4-1, lnc-ADCYAP1-2, and DHX36: A novel axis in the translational and cellular pathways control

T16 **Jacek Nowak**, Institute of Biochemistry and Biophysics PAS, Warsaw, Poland

Discovery of the role of the PIWI-interacting protein Gtsf1 in the selective degradation of small RNAs in *Paramecium*

16:00 – 16:30 Coffee break

Afternoon Session II

16:30 - 18:15 Session on **RNA Modification**

Chair: **Tomasz Turowski**, Institute of Biochemistry and Biophysics PAS, Warsaw, Poland

T17 **Monika Gaik**, Małopolska Center of Biotechnology, Kraków, Poland

Deciphering Human Dihydrouridine Synthases: Structural Insights and Therapeutic Potential

T18 **Marta Zimna**, Adam Mickiewicz University in Poznań, Poznań, Poland

Pseudouridine – a new layer in plant microRNA biology

T19 **Dawid Bielewicz**, Adam Mickiewicz University in Poznań, Poznań, Poland

Unbiased identification of novel non-YTH putative m^{6}A readers from *Arabidopsis thaliana*

T20 **Haider Ali**, Małopolska Center of Biotechnology, Kraków, Poland

The m^{6}A modification of HIV-1 RNA is linked with a ribonucleoprotein MATR3-ELAVL1 complex

T21 **Katarzyna Goljanek-Whysall**, University of Galway, Galway, Ireland

Oxidised microRNAs – novel mechanism of muscle wasting?

T22 **Elena Zemlyanskaya**, Institute of Experimental Botany CAS, Prague, Czech Republic

RNA modification t^{6}A in plant development

T23 **Piotr Gawroński**, Warsaw University of Life Sciences, Warsaw, Poland

tRNA Sequencing Reveals a Blend of Ancestral and Acquired Post-Transcriptional Modifications in Chloroplast tRNAs

T24 **Barbara Nawrot**, Centre of Molecular and Macromolecular Studies PAS, Łódź, Poland

Sulfur- and selenium-modified uridines in the epitranscriptome of tRNA

18:15 – 19:30 Dinner

19:30 – 22:00 **Poster Session I** - wine, beer and snacks

Posters with odd numbers will be presented and discussed

Day 3, Thursday, June 26

08:00 - 09:00 Registration

09:00 - 9:45 Keynote Lecture

Chair: **Andrzej Dziembowski**, International Institute of Molecular and Cell Biology in Warsaw, Poland

L5 Bertrand Seraphin, Institute of Genetics, Molecular and Cellular Biology, Illkirch, France

Eukaryotic CCR4-NOT complexes: 1001 ways of regulating mRNA deadenylation and decay

9:45 - 10:15 Coffee break

Morning Session

10:15 - 12:00 Session on **Translation**

Chair: **Barbara Nawrot,** Centre of Molecular and Macromolecular Studies PAS, Łódź, Poland

T25 Haaris Safdari, University of Hamburg, Germany

The translation inhibitors kasugamycin, edeine and GE81112 target distinct steps during 30S initiation complex formation

T26 Ivan Sorokin, University of Groningen, Netherlands

Near-native mammalian cell-free protein synthesis system enabling mRNA translation in polysomes

T27 Khushboo Sharma, Charles University, Prague, Czech Republic

Deciphering Translational Regulation During the Cell Cycle Using Scarce Sample Polysome Profiling and Flow Cytometry

T28 Joanna Kufel, University of Warsaw, Poland

Non-canonical translation events in the yeast *Saccharomyces cerevisiae*

T29 **Marek Tchórzewski**, Maria Curie-Skłodowska University, Lublin, Poland

Ribosomal P-stalk: a harbinger-harmonizer of ribosome-factor interactions

T30 **Vladyslava Liudkovska**, IMol PAS, Warsaw, Poland

Translational Tuning of Sf1 Shapes the Splicing Landscape and Stem Cell Function

T31 **Katarzyna Knop**, Cancer Research UK – Scotland Institute, Glasgow, UK

Role of the RNA cap methylation in T-cell activation and differentiation

T32 **Witold Szaflarski**, Poznan University of Medical Sciences, Poznań, Poland

Mitoxantrone targets the nascent polypeptide exit tunnel to block translation, triggering the accumulation of 80S ribosome–rich stress granules

12:00 - 13:00 Lunch

13:00 – 13:45 Keynote Lecture

Chair: **Sebastian Glatt**, Małopolska Center of Biotechnology, Kraków

L6 **Elena Conti**, Max Planck Institute of Biochemistry, Martinsried, Germany

To degrade or not to degrade: molecular mechanisms of RNA homeostasis

13:45 - 14:15 Coffee break

Afternoon Session I

14:15 -16:00 Session on **RNA Structure** and **Viral RNAs**

Chair: **Elżbieta Kierzek**, Institute of Bioorganic Chemistry PAS, Poznań, Poland

T33 **Lukáš Pekárek**, Dresden University of Technology, Dresden, Germany

RNAs untangled: Shedding light onto complex structures of long RNAs

T34 **Palina Kot**, Justus Liebig University Giessen, Germany

Structural and Functional Insights into the Sub2-Yra1-Tho1 Complex in Nuclear mRNP Biogenesis

T35 **Mateusz Wilamowski**, Jagiellonian University, Kraków, Poland

Structural Insights into N4BP1 as an RNase within the mRNA Decapping Machinery

T36 **Angelika Andrzejewska-Romanowska**, Institute of Bioorganic Chemistry PAS, Poznań, Poland

Mapping the structural landscape of the RNA genome of the active Ty3 retrotransposon

T37 **Jakub Nowak**, Malopolska Centre of Biotechnology, Kraków, Poland

DyRNA Thermometry allows to monitor position specific structural changes in folded RNA

T38 **Tomasz Turowski**, Institute of Biochemistry and Biophysics PAS, Warsaw, Poland

Rate limiting steps in RNA synthesis during early SARS-CoV-2 infection

T39 **Ivan Trus**, International Institute of Molecular and Cell Biology in Warsaw, Poland

Unveiling Real-Time Innate Immune Responses with a Novel Fluorescent IFN-β Reporter Mouse

T40 **Martin Pospíšek**, Charles University, Prague, Czech Republic

Discovery of uncapped and 5'-polyadenylated mRNAs in poxviruses and yeast virus-like elements – comparison and similarities of both models.

16:00 - 16:30 Coffee break

Afternoon Session II

16:30 - 18:15 Session on **Computational RNA Biology**

Chair: **Marek Tchórzewski**, Maria Curie-Skłodowska University, Lublin, Poland

T41 Marcin Sajek, University of Colorado School of Medicine, Aurora, CO, USA

aa-tRNA-seq - nanopore based method for sequencing intact aminoacylated tRNAs

T42 Martyna Nowacka, Molecure SA, Warsaw, Poland

MoleRNA – discovering and designing small molecules targeting mRNA

T43 Yaarob Altalli, Adam Mickiewicz University in Poznań, Poznań, Poland

Epigenetic control of transcriptional landscape during keratinocyte differentiation

T44 Michał Krzysztoń, Institute of Biochemistry and Biophysics PAS, Warsaw, Poland

Transcriptional activity during seed imbibition is conserved, robust and required for germination

T45 Monika Kwiatkowska, Institute of Bioorganic Chemistry PAS, Poznań, Poland

From Unknown to Unveiled: Revealing the Hidden Landscape of Zebrafish lncRNAs with CapTrap-CLS

T46 Marcin Tabaka, Institute of Physical Chemistry PAS, Warsaw, Poland

Inference of developmental processes and gene expression programs from single-cell multimodal data

T47 Natalia Ryczek, Adam Mickiewicz University, Poznań, Poland

Role of ELAVL1 in RNA:RNA duplex-mediated expression regulation of head-to-head overlapping protein-coding genes *INO80E* and *HIRIP3*

T48 Luiza Zuvanov, Free University of Berlin, Germany

FAM32A-mediated 3'-splice site selection controls germline and embryo development in *C. elegans*

18:15 – 19:30 Dinner

19:15 – 22:00 **Poster Session II** - wine, beer and snacks

Posters with even numbers will be presented and discussed

Day 4, Friday, June 27

09:00 - 9:45 Keynote Lecture

Chair: **Magda Konarska**, IMol PAS, Warsaw, Poland

L7 Dominique Gagliardi, University of Strasbourg, France

Processes shaping poly(A) tails in Arabidopsis

9:45 - 10:15 Coffee break

Morning Session

10:15 - 11:30 Session I on **Transcription and mRNA Processing**

Chair: **Magdalena Masłoń**, Małopolska Center of Biotechnology, Kraków, Poland

T49 Michał Rażew, European Molecular Biology Laboratory, Grenoble, France

Structural basis of the Integrator complex assembly and association with transcription factors

T50 Magda Kopczyńska, Adam Mickiewicz University, Poznań, Poland

SETD2 methyltransferase activity aids gene definition by promoting correct transcription initiation and termination

T51 Jan Mikołajczyk, Institute of Biochemistry and Biophysics PAS, Warsaw, Poland

Comprehensive mapping of active transcription by human RNA polymerase III reveals a rate-limiting role for transcription termination

T52 Bogdan Cichocki, IMol PAS, Warsaw, Poland

The by-product of spliceosomal first-step catalysis protonates adjacent catalytic triplex residues, promoting transition to the second step

T53 Ankita Kumari, IMol PAS, Warsaw, Poland

Implications of spliceosome control during the malignant hematopoietic activation

T54 Mateusz Dróżdż, Free University of Berlin, Germany

Immediate early splicing after T cell activation is controlled by temporal phosphorylation of hnRNPC2

11:30 - 12:00 Coffee break

Afternoon Session

12:00 – 13:15 Session II on **Transcription and mRNA Processing**

Chair: **Zbigniew Warkocki**, Institute of Bioorganic Chemistry PAS, Poznań, Poland

T56 Maciej Śmiałek, University of Basel, Switzerland

CFIm-Complex-Driven Alternative Polyadenylation Controls mRNA Length, Stability, Localization and Protein output in colon and other cancers

T57 Natalia Gumińska, International Institute of Molecular and Cell Biology in Warsaw, Poland

Tracking poly(A) tail diversity with Ninetails: mixed tails from cells to mRNA therapies

T58 Mateusz Bajczyk, Adam Mickiewicz University in Poznań, Poznań, Poland

The role of PCF11-similar proteins in alternative polyadenylation and flower development in *Arabidopsis thaliana*

T59 Agnieszka Czarnocka-Cieciura, International Institute of Molecular and Cell Biology in Warsaw, Poland

Decoding mRNA Fate: Poly(A) Tail Dynamics and the Role of Puf Proteins in Deadenylation-Mediated Regulation of Gene Expression in *S. cerevisiae*

T60 Veena Halale Manjunath, Institute of Biochemistry and Biophysics PAS, Warsaw, Poland

Hidden Message – Nuclear mRNA storage in seeds

13:30 - 13:45 Closing remarks