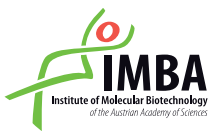


Microsymposium on small RNAs

Vienna BioCenter, June 18th - 20th 2018



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Ameres, Cochella, Brennecke, Nodine & Martinez Laboratories

13th MICROSYMPOSIUM_{on} SMALL RNAs

MONDAY, 18TH JUNE 2018

9.00 - 11.00 **Registration (coffee and snacks)**

11.00 **Welcome and Introduction**

Session 1: **Genome defense (Chair: Javier Martinez)**

11.15 - 11.45 **Kazufumi Mochizuki** (IGH, Université de Montpellier, France)

Small RNA-mediated trans-nuclear and trans-element communications in Tetrahymena DNA elimination

11.45 - 12.15 **Mariusz Nowacki** (Universität Bern, Switzerland)

RNA-mediated DNA elimination in ciliates

12.15 - 12.30 **Dirk Jürgensen** (Thermo Fisher Scientific)

miRNA: from profiling to biomarker discovery

12.30 - 13.00 **Kirsten Senti** (University of Veterinary Medicine Vienna, Austria)

Repeated adaptive niche partitioning by gypsy endogenous retroviruses in the Drosophila ovary ecosystem

13.00 - 14.00 Lunch & Poster setup

14.00 - 14.30 **Richard Davis** (University of Colorado, USA)

Programmed DNA Elimination in Nematodes

14.30 - 15.00 **Zhao Zhang** (Carnegie Institution, Baltimore, USA)

Why are piRNAs needed

15.00 - 15.30 **Pei-Hsuan Wu** (Zamore Lab, UMass Medical School, Worcester, USA)

An Evolutionarily Conserved piRNA-Producing Locus Required for Male Mouse Fertility

15.30 - 16.00 Coffee Break

PhD Workshop - Part 1

- 16.00 - 16.20 **Giorgia Barucci** (Cecere Lab, Institute Pasteur, Paris, France)
Histone mRNA silencing causes transgenerational sterility in piwi mutant
- 16.20 - 16.40 **Michael Schon** (Nodine Lab, GMI, Vienna BioCenter, Austria)
Bookend: precise tissue-specific transcript annotation through end-guided assembly
- 16.40 - 17.00 **Daniel van Leeuwen** (Mateescu Lab, ETH Zurich, Switzerland)
Deciphering the role of PACT and TRBP in mammalian RNA interference

Session 2: **Mechanism of RNA Silencing (Chair: Michael Nodine)**

- 17.00 - 17.30 **Xiuren Zhang** (Texas A&M University, College Station, Texas, USA)
SWI2/SNF2 ATPase CHR2 remodels pri-miRNAs to inhibit miRNA production
- 17.30 - 18.00 **Stefan Ameres** (IMBA, Vienna BioCenter, Austria)
Dissecting the intracellular kinetics of RNA Silencing

Dinner at the IMP Cafeteria and Poster session at IMBA/GMI Atrium

TUESDAY, 19TH JUNE 2018

Session 3: RNA structure/function (Chair: Clemens Plaschka)

9.00 - 9.30 **EMBO YIP Lecture: Yue Wan** (Genome Institute of Singapore, Singapore)

Genome-wide identification of RNA aptamers in prokaryotes and eukaryotes

9.30 - 10.00 **Sebastian Falk** (Conti Lab, MPI of Biochemistry, Munich, Germany)

Structure of the nuclear exosome captured on a maturing pre-ribosome

10.00 - 10.30 **Omer Ziv** (Miska Lab, Gurdon Institute, Cambridge, UK)

The structural plasticity of the Zika virus genome in living human cells

10.30 - 11.15 Coffee Break

PhD Workshop - Part 2

11.15 - 11.35 **Rebecca Halbach** (van Rij Lab, RIMLS, Nijmegen, Netherlands)

A highly conserved satellite repeat-derived piRNA regulates gene expression in early embryonic development in *Aedes aegypti*

11.35 - 11.55 **Tatsuki Kinoshita** (Siomi Lab, University of Tokyo, Japan)

Functional study of RNA helicase Armitage in *Drosophila* somatic piRNA pathway

11.55 - 12.15 **Loïc Talide** (Meignin Lab, Université de Strasbourg, France)

A model for the activation of antiviral RNA interference by the nucleic acid sensor Dicer-2

Session 4: Gene expression regulation (Chair: Andrea Pauli)

12.15 - 12.45 **Sebastian Marquardt** (Copenhagen Plant Science Centre, Denmark)

Gene Repression by the Act of Transcription

12.45 - 14.30 Lunch and Poster session

14.30 - 15.00 **Mihaela Zavolan** (Universität Basel, Switzerland)

Detection, quantification and regulatory analysis of 3' UTR isoforms

15.00 - 15.30 **Christine Mayr** (MSKCC, New York, USA)

Regulation of 3'UTR-mediated protein-protein interactions

15.30 - 16.00 Coffee Break

PhD Workshop - Part 3

16.00 - 16.20 **Maria Louisa Vigh** (Brodersen Lab, University of Copenhagen, Denmark)

Association time of AGO1 with its target as a trigger of secondary siRNA production

16.20 - 16.40 **Mostafa ElMaghraby** (Brennecke Lab, IMBA, Vienna BioCenter, Austria)

A locus-specific RNA export pathway facilitates piRNA production

16.40 - 17.00 **Marija Dargyte** (Sanford Lab, UCSC, Santa Cruz, USA)

Characterizing an upstream determinant of primary microRNA processing

Tour and dinner for academic speakers/Bar for PhD Workshop speakers

WEDNESDAY, 20TH JUNE 2018

Session 5: Development and Differentiation (Chair: Luisa Cochella)

9.00 - 9.30

Michael Nodine (GMI, Vienna BioCenter, Austria)

Small RNA functions during Arabidopsis embryogenesis

9.30 - 10.00

Benjamin Kleaveland (Bartel Lab, Whitehead Institute, MIT, Cambridge, USA)

A Network of Noncoding Regulatory RNAs Acts in the Mammalian Brain

10.00 - 10.30

Benjamin Roche (Martienssen Lab, CSHL, Cold Spring Harbor, USA)

RNA polymerase I regulation by RNA interference in cellular quiescence relies on a novel class of long non-coding RNAs

10.30 - 11.00

Coffee Break

11.00 - 11.30

Mridu Kapur (Ackerman Lab, UCSD, San Diego, USA)

Expression of an arginine tRNA gene modulates neuronal excitability

11.30 - 12.00

Eric Lai (MSKCC, New York, USA)

Save our boys: The role of RNAi in controlling intragenomic conflict

Session 6: Host-pathogen interactions (Chair: Peter Andersen)

12.00 - 12.30

Wenbo Ma (University of California, Riverside, USA)

Antimicrobial RNAi in plants against eukaryotic pathogens

12.30 - 13.00

Amy Buck (University of Edinburgh, UK)

Extracellular Argonautes and small RNAs in parasitic nematodes: at the host interface

13.00 - 14.30

Lunch & Poster session

Session 7: Mechanisms of silencing 2 (Chair: Stefan Ameres)

14.30 - 15.00

S. Chul Kwon (Kim Lab, Seoul National University, Korea)

Molecular basis for the single-nucleotide precision of primary microRNA processing

15.00 - 15.30

Hotaka Kobayashi (Tomari Lab, University of Tokyo, Japan)

Iruga ensures the quality of Argonaute by selective ubiquitination of its empty state

15.30 - 16.00

Ramesh Pillai (Université de Geneve, Switzerland)

Noncoding RNAs in gene expression control

16.00

Awards and closing of the meeting

16.30

Light bites and socializing

13th Microsymposium Posters

1. Ahmad Mamoun and Shah Aftab Ali. *Department of Biotechnology, University of Malakand*. **The Premir27a Variant rs895819 May Contribute to Breast Cancer risk in Pakistani Cohort.**
2. Mamoun Ahram¹, Nihad Al-Othman² and Hana Hammad². ¹*School of Medicine and* ²*School of Science, The University of Jordan*. **Androgen regulation of microRNA expression in triple-negative breast cancer cells.**
3. Chiara Alberti, Jingkui Wang and Luisa Cochella. *Research Institute of Molecular Pathology (IMP), Vienna BioCenter*. **Dissecting the contribution of microRNAs to nervous system development and function.**
4. Sarah Allen. *Institute for Cell Biology, University of Bern*. **A zygotic small RNA feedback loop triggered by maternal small RNAs in *Paramecium* has implications for trans-generational epigenetic inheritance.**
5. Cynthia Claudia Amaya Ramirez^{1,2}, Petra Hubbe^{1,2}, Nicolas Mandel^{1,2} and Julien Béthune^{1,2}. ¹*CellNetworks Junior Research Group Posttranscriptional regulation of mRNA expression and localization and* ²*Biochemistry Center, Heidelberg University*. **Multiple modes of repression of mRNA function by the protein GIGYF2.**
6. Andrea Barghetti and Peter Brodersen. *University of Copenhagen*. **Depletion of membrane-bound ARGONAUTE1 in an *Arabidopsis* Ribonuclease T2 mutant.**
7. Julia Batki, Jakob Schnabl, Dominik Handler and Julius Brennecke. *Institute of Molecular Biotechnology of the Austrian Academy of Sciences (IMBA), Vienna BioCenter*. **A nuclear RNA export factor variant adapted for piRNA-guided co-transcriptional gene silencing.**
8. Pooja Bhat¹, Luis Enrique Cabrera Quio², Veronika A Herzog¹, Andrea Pauli² and Stefan L Ameres¹. ¹*Institute of Molecular Biotechnology (IMBA) and Institute for Molecular Pathology (IMP), Vienna BioCenter*. **Metabolic RNA sequencing unravels gene expression dynamics during maternal to zygotic transition in zebrafish.**
9. Matthew G. Blango, Abdulrahman Kelani, Thomas Krüger and Axel A. Brakhage. *Department of Molecular and Applied Microbiology, Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute*. **Characterization of the *Aspergillus fumigatus* RNAi machinery.**
10. Megha Sravani Bondada¹, Prof. Venugopal Nair¹, Yongxiu Yao¹ and Mike McGrew². ¹*The Pirbright Institute and* ²*University of Edinburgh*. **Understanding the role of miR-155 in Avian Leukosis Virus transformed B cell lymphomas by CRISPR-Cas9 mediated gene editing.**
11. Lynsey Carroll¹, Rasa Elmentaité², Fabiana Heredia³, Alisson Gontijo³, Delphine Fagegaltier⁴, Ann Hedley⁵, Rippei Hiyashi⁶ and Julia Cordero¹. ¹*WWCRC, University of Glasgow*, ²*University of Cambridge*, ³*Universidade NOVA de Lisboa*, ⁴*New York Genome Center*, ⁵*Beatson institute, Glasgow* and ⁶*Australian National University*. **A novel, non-germline role for the PIWI component, *Aubergine*, in Intestinal stem cell proliferation during regeneration of the *Drosophila* midgut.**
12. Claudia Martinho, Quentin Gouil, Quentin Badolle and David Baulcombe. *Department of Plant Sciences University of Cambridge*. **Small RNAs affect sulfurea paramutation in *Solanum Lycopersicum*.**
13. Showkat Ahmad Dar and Manoj Kumar. *IMTECH*. **Machine learning and analysis of chemically modified siRNAs to advance RNAi based therapeutics development.**
14. Emanuel A. Devers[‡], Christopher A. Brosnan[‡], Alexis Sarazin[‡], Daniele Albertini[‡], Peiqi Lim[‡], Gregory Schott[‡], Pauline E. Jullien[‡], Florian Brioude, Satu Lehesranta[§], Ykä Helariutta[¶] and Olivier Voinnet[‡]. [‡]*Swiss Federal Institute of Technology, Department of Biology*, [§]*Institute of Biotechnology, University of Helsinki* and [¶]*Sainsbury Laboratory, University of Cambridge*. **Direct evidence for non-selective and plasmodesmata-mediated cell-to-cell movement of transgene-, endogene- and virus-derived plant short interfering RNAs.**
15. Philipp Dexheimer and Luisa Cochella. *Research Institute of Molecular Pathology (IMP), Vienna BioCenter*. **Two miRNAs are sufficient for morphologically-normal embryogenesis of *C. elegans*.**
16. Zhengyi Zhang^{1,2,3}, Dongling Zou⁴, Jingnan Pi^{1,2,3}, Xiaoshuang Wang^{1,2,3}, Jiayue Xu^{1,2,3}, Shan Yu^{1,2,3}, Hualu Zhao^{1,2,3}, Fang Wang^{1,2,3}, Yanni Ma^{1,2,3} and Jia Yu^{1,2,3}. ¹*State Key Laboratory of Medical Molecular Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences (CAMS) & School of Basic Medicine, Peking Union Medical College (PUMC)*, ²*Key Laboratory of RNA and Hematopoietic Regulation, Chinese Academy of Medical Sciences (CAMS)*, ³*Department of Biochemistry, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences (CAMS) & School of Basic Medicine Peking Union Medical College (PUMC)* and ⁴*Chongqing University Cancer Hospital & Chongqing Cancer Institute & Chongqing Cancer Hospital*. **Targets mediated microRNA arm-imbalance promotes gastric cancer progression.**

17. Florian Dunker and Arne Weiberg. *Genetics, Faculty of Biology, University of Munich (LMU), Bio-center Martinsried*. **Cross-kindom RNAi is a common feature of distinct plant pathogens.**
18. Timothy J. Eisen^{1,2}, Stephen W. Eichhorn^{1,2}, Alexander O. Subtelny^{1,2}, Kathy S. Lin^{1,2}, Sumeet Gupta² and David P. Bartel^{1,2}. ¹*Howard Hughes Medical Institute and Whitehead Institute for Biomedical Research* and ²*Department of Biology, Massachusetts Institute of Technology*. **The dynamics of cytoplasmic mRNA metabolism.**
19. Ieva Eringyte, Akifumi Shibakawa, Charlotte Bevan and Claire Fletcher. Imperial Centre for Translational and Experimental Medicine, *Department of Surgery & Cancer, Imperial College London, Hammersmith Hospital*. **Systematic Identification of MicroRNA Drivers of Resistance to Novel Therapeutics in Advanced Prostate Cancer – Exploitation as Stratification Biomarkers and Drug Targets.**
20. Sebastian Falk¹, Jan M. Schuller¹, Lisa Fromm², Ed Hurt^{2*} and Elena Conti¹. ¹*Department of Structural Cell Biology, MPI for Biochemistry* and ²*Biochemistry Centre, University of Heidelberg*. **Structure of the nuclear exosome captured on a maturing pre-ribosome.**
21. Matthew A. Getz^{a,b,c}, David E. Weinberg^{a,b,c}, I. Anna Drinnenberg^{a,c}, Ryan J. Golden^d, Joshua T. Mendell^d, Gerald R. Fink^{a,b} and David P. Bartel^{a,b,c}. ^a*Whitehead Institute for Biomedical Research*, ^b*Department of Biology, Massachusetts Institute of Technology* and ^c*Howard Hughes Medical Institute* and ^d*HHMI and Department of Molecular Biology, University of Texas Southwestern Medical Center*. **XRN1 has Diverse Functions in Budding Yeast and Human Small RNA-mediated Gene Silencing Pathways.**
22. Franz Gruber¹, Ulrich Bodenhofer², Ognian Kalev¹ and Serge Weis¹. ¹ *Division of Neuropathology, Kepler Universitätsklinikum/Neuromed Campus* and ² *Institute for Bioinformatics, Johannes Kepler University*. **Implementation of RT-qPCR Methodology for microRNA Quantitation in Meningiomas of Different Histological Grade.**
23. Fangyue Guo and Peter Brodersen. *Department of Biology, University of Copenhagen*. *No title provided.*
24. Paula Gutiérrez-Pérez and Luisa Cochella. *Research Institute of Molecular Pathology (IMP), Vienna BioCenter*. **Exploring the functional conservation of a deeply conserved animal microRNA.**
25. Christopher Martin Hammell. *Cold Spring Harbor Laboratory*. **(Almost) Lost in Translation: conserved mechanisms of protein translational amplification and its roles in antagonizing microRNA-mediated gene regulation in development and disease.**
26. Taja Jeseničnik, Nataša Štajner and Jernej Jakše. *University in Ljubljana, Biotechnical Faculty*. **Identification and expression analysis of RNA silencing components in phytopathogenic fungi *Verticillium nonalfalfae*.**
27. Joep Joosten¹, Pascal Miesen¹, Bas Pennings¹, Pascal Jansen², Martijn Huynen³, Michiel Vermeulen² and Ronald van Rij¹. ¹*Department of Medical Microbiology, Radboud Institute for Molecular Life Sciences, Radboud University Medical Center*, ²*Department of Molecular Biology, Radboud Institute for Molecular Life Sciences, Radboud University Nijmegen* and ³*Department of Comparative Genomics, Radboud Institute for Molecular Life Sciences, Radboud University Nijmegen*. **The Tudor protein Veneno is essential for viral piRNA production in the vector mosquito *Aedes aegypti*.**
28. Joep Joosten¹, Ezgi Taşköprü¹, Pascal Jansen², Bas Pennings¹, Michiel Vermeulen² and Ronald van Rij¹. ¹*Department of Medical Microbiology, Radboud Institute for Molecular Life Sciences, Radboud University Medical Center* and ²*Department of Molecular Biology, Faculty of Science, Radboud Institute for Molecular Life Sciences, Radboud University Nijmegen*. **Mosquito PIWI proteins go nuclear.**
29. Arkadiusz Kajdasz¹, Hans AR Bluyssen² and Joanna Wesoly¹. ¹*Laboratory of High Throughput Technologies, Institute of Molecular Biology and Biotechnology, Faculty of Biology, Adam Mickiewicz University in Poznan* and ²*Department of Human Molecular Genetics, Institute of Molecular Biology and Biotechnology, Faculty of Biology, Adam Mickiewicz University in Poznan*. **Meta-analysis of the deregulated microRNAs in clear cell renal cell carcinoma.**
30. Shubhangini Kataruka¹, Matyas Flemr^{1*}, Jun Ma², Richard M. Schultz² and Petr Svoboda¹. ¹*Institute of Molecular Genetics, Academy of Sciences of the Czech Republic* and ²*Department of Biology, University of Pennsylvania*; ^{*}*Current address: Friedrich Miescher Institute*. **miRNA pathway in mouse female germline.**
31. Andriy Kazantsev and Zoya Ignatova. *Institute of Biochemistry and Molecular Biology, University of Hamburg*. **Molecular dynamics simulations of human Argonaute2 mutations.**

32. Anzer Khan, Nagraj Sambrani, Barbora Novakova, Mary A. O'Connell and Liam P. Keegan. *CEIT-EC, Masaryk University*. **Deciphering effects of *Adar* on *Drosophila* metamorphosis.**
33. Kijun Kim^{1,2}, Seungchan Baek^{1,2} and V. Narry Kim^{1,2}. *Center for RNA Research, Institute for Basic Science and ²School of Biological Sciences, Seoul National University*. **The Atlas of DROSHA Cleavage Sites on Primary microRNAs.**
34. Benjamin Kleaveland^{1,2,3,4}, Charlie Y. Shi^{1,2,3}, Joanna Stefano^{1,2,3} and David P. Bartel^{1,2,3}. ¹*Howard Hughes Medical Institute*, ²*Whitehead Institute of Biomedical Research*, ³*Department of Biology, Massachusetts Institute of Technology* and ⁴*Department of Pathology, Massachusetts General Hospital*. **A Network of Noncoding Regulatory RNAs Acts in the Mammalian Brain.**
35. Hotaka Kobayashi¹, Keisuke Shoji^{1,2}, Lumi Negishi³ and Yukihide Tomari^{1,4}. ¹*Laboratory of RNA Function, IQB, UTokyo, Japan*, ²*Department of Agrobiological and Bioresources, UDAI*, ³*Central Laboratory, IQB, UTokyo* and ⁴*Department of Medical Genome Sciences, Graduate School of Frontier Sciences, UTokyo*. **Iruka ensures the quality of Argonaute by selective ubiquitination of its empty state.**
36. Kotov A.A.¹, Adashev V.E.¹, Bazylev S.S.¹, Godneeva B.K.¹, Aravin A.A.^{1,2} and Olenina L.V.¹. ¹*Institute of Molecular Genetics, Russian Academy of Sciences* and ²*California Institute of Technology, Division of Biology*. **Analysis of piRNAs from AT-chX loci in the testes of *Drosophila melanogaster*.**
37. Urban Kunej¹, Jernej Jakše¹, Maja Mikulič Petkovšek¹ and Nataša Štajner¹. ¹*University in Ljubljana, Biotechnical Faculty*. **Identification of defense responsive miRNAs and their targets in hop plants (*Humulus lupulus* L.) after infection with *Verticillium nonalfalfae* by NGS sequencing.**
38. S. Chul Kwon^{1,2}, S. Chan Baek^{1,2}, Yeon-Gil Choi^{1,2}, Jihye Yang^{1,2}, Young-suk Lee^{1,2}, Jae-Sung Woo^{1,3} and V. Narry Kim^{1,2}. ¹*Center for RNA Research, Institute for Basic Science*, ²*School of Biological Sciences, Seoul National University* and ³*Department of Life Sciences, Korea University*. **Molecular basis for the single-nucleotide precision of primary microRNA processing.**
39. V. Labi^{1,2,3}, F. Klironomos⁴, S. Peng³, T. Chakraborty³, E. Derudder^{2,3}, M. Munschauer⁵, K. Schöler¹, A. Villunger¹, M. Landthaler⁵, N. Rajewsky⁴ and K. Rajewsky^{2,3}. ¹*Division of Developmental Immunology, Medical University Innsbruck*, ²*Immune Regulation and Cancer, Max Delbrück Center for Molecular Medicine*, ³*Immune Disease Institute, Harvard Medical School*, ⁴*Systems Biology of Gene Regulatory Elements, Max Delbrück Center for Molecular Medicine* and ⁵*RNA Biology and Posttranscriptional Regulation, Max Delbrück Center for Molecular Medicine*. **Vital role of microRNA seed matches in a single ubiquitously expressed pro-apoptotic gene.**
40. Laura Arribas-Hernández¹, Simon Bressendorff¹, Mathias H. Hansen¹, Christian Poulsen¹, Sara Simonini², Susanne Erdmann¹, Lena B. Johansson¹, Lars Østergaard² and Peter Brodersen¹. ¹*University of Copenhagen, Department of Biology* and ²*John Innes Centre, Department of Crop Genetics*. **An m⁶A-YTH module controls developmental timing and morphogenesis in Arabidopsis.**
41. Sabina Licholaj and Marek Sanak. *Division of Molecular Biology and Clinical Genetics, Jagiellonian University Medical College*. **IL-17A changes genes expression in endothelium in a miR-21 dependent pattern.**
42. Lihong Huang and Arne Weiberg. *Department of Genetics, Ludwig-Maximilian-University of Munich*. **The Role of *Botrytis cinerea* ArgonAUT proteins in plant-pathogen interaction.**
43. Kathy S. Lin^{1,3}, Sean E. McGeary^{2,3}, Charlie Y. Shi^{2,3}, Namita Bisaria^{2,3} and David P. Bartel^{1,2,3}. ¹*Computational and Systems Biology Department, MIT*, ²*Biology Department, MIT* and ³*Howard Hughes Medical Institute, Whitehead Institute for Biomedical Research*. **Using biochemical measurements of miRNA affinity to predict miRNA-mediated repression.**
44. Stefan Lutzmayer, Balaji Enugutti, Ranjith Papareddy, Subramanian Paulraj, Magdalena Mosiolek, Benjamin Haas and Michael D. Nodine. *Gregor Mendel Institute (GMI), Austrian Academy of Sciences, Vienna BioCenter (VBC)*. **Small interfering RNA dynamics and functions during early Arabidopsis embryogenesis.**
45. Weronika Majer¹, Jakub Winkler-Galicki¹, Natalia Pstrag¹, Hans AR Bluysen² and Joanna Wesoly¹. ¹*Laboratory of High Throughput Technologies, Institute of Molecular Biology and Biotechnology, Faculty of Biology, Adam Mickiewicz University in Poznan* and ²*Department of Human Molecular Genetics, Institute of Molecular Biology and Biotechnology, Faculty of Biology, Adam Mickiewicz University in Poznan*. **MiRNAs as biomarkers in diagnosis of clear cell renal cell carcinoma.**

46. Veronica Barragán-Borrero¹, Daniel Van Leeuwen¹, Olivier Voinnet² and Bogdan Mateescu¹. ¹*Group RNA silencing and extracellular RNAs and* ²*RNA biology laboratory, Swiss Federal Institute of Technology Zurich. **Origin, biogenesis and bio-distribution of extracellular microRNAs in vivo.***
47. Stefan Oberlin¹, Alexis Sarazin¹, Arturo Marí-Ordóñez² and Olivier Voinnet¹. *Institute of Molecular Plant Sciences, ETH Zürich and* ²*Institute of Molecular Biotechnology (IMBA), Vienna BioCenter. **Transposon immunity through translational scanning.***
48. Deniz M Ozata^{1,2}, Haiwei Mou¹, Yu Tian Xiong³, Yasin Kaymaz³, Katharine Cecchini^{1,2}, Jeffrey A. Bailey³, Wen Xue¹, Alper Kucukural³, Zhiping Weng³ and Phillip D. Zamore^{1,2}. ¹*RNA Therapeutics Institute and* ²*Howard Hughes Medical Institute, University of Massachusetts Medical School. **The NFYA and TCFL5 Transcription Factors Collaborate with A-MYB in Mammalian piRNA Production.***
49. Ranjith Papareddy, Katalin Paldi and Michael D. Nodine. *Gregor Mendel Institute (GMI), Vienna BioCenter (VBC). **Small RNA regulation of DNA methylation dynamics during early embryogenesis in Arabidopsis.***
50. Lucie Pešková¹, Denisa Jurčíková¹, Kateřina Černá^{2,3}, Jan Oppelt², Marek Mráz^{2,3}, and Tomáš Bárta¹. ¹*Department of Histology and Embryology, Faculty of Medicine, Masaryk University,* ²*Central European Institute of Technology, Masaryk University and* ³*Department of Internal Medicine, Hematology and Oncology, University Hospital Brno and Faculty of Medicine, Masaryk University. **MicroRNA molecules in Oct4-induced cell plasticity.***
51. A. Piasecka, M. Sekrecki, M. Szcześniak and K. Sobczak. *Adam Mickiewicz University. **MEF2C contribution to microRNA regulation in skeletal muscle cells.***
52. Shannon Piehl, Kevin D. Allen and Adam R. Morris. *PerkinElmer. **Combined mRNA and microRNA NGS library preparation in a single-tube format without rRNA depletion or poly(A) selection.***
53. Natalia Pino¹, Sebastián Giusti², Belén Pardi², Mora Ogando², Sebastián Romano², Antonia Marin Burgin², Daniela Vogt-Weisenhorn¹, Wolfgang Wurst¹ and Damián Refojo². ¹*Institute of Developmental Genetics, Helmholtz Zentrum München and* ²*Instituto de Investigación en Biomedicina de Buenos Aires (IBioBA)-CONICET-Partner Institute of the Max Planck Society. **A circular RNA derived from a protein-coding gene regulates axonal arborization and synaptic transmission.***
54. Aleksandra Plotnikova, Divya Vashisht, Magdalena Mosiolek, Max Kellner, Michael Schon and Michael D. Nodine. *Gregor Mendel Institute of Molecular Plant Biology (GMI), Vienna BioCenter (VBC). **MicroRNA-mediated repression of transcription factors is required for embryo morphogenesis in Arabidopsis.***
55. Antoine Porquier, Carla Glassl, Panna Ágnes Hegedüs and Arne Weiberg. *Ludwig-Maximilians University (LMU) of Munich, Faculty of Biology, Genetics. **Retrotransposon small RNAs of a fungal plant pathogen are virulence factors by manipulating host gene expression.***
56. Roenick P. Olmo^{1,2}, Alvaro G. A. Ferreira¹, Tatiane C. Izidoro-Toledo¹, Eric R. G. R. Aguiar^{1,2}, Isaque J. S. de Faria^{1,2}, Kátia P. R. de Souza¹, Kátia P. Osório¹, Elisa G. de Andrade¹, Marcele N. Rocha³, Thiago Jiran¹, Siad C. G. Amadou¹, Juliana Armache¹, Simona Paro², Caroline D. de Oliveira³, Fabiano D. Carvalho³, Luciano A. Moreira³, Eric Marois², Jean-Luc Imler² and João T. Marques^{1,2}. ¹*Department of Biochemistry and Immunology, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais and* ²*Institut de Biologie Moléculaire et Cellulaire, M3i/UPR9022/CNRS and Mosquitos Vetores: Endossimbiontes e Interação Patógeno-Vetor, Instituto de Pesquisas René Rachou – Fiocruz. **An Aedes specific dsRNA binding protein is required for the control of Dengue virus by the mosquito siRNA pathway.***
57. Sharmila Rana, Gabriel N. Valbuena, Anke Nijhuis, Ed Curry, Charlotte L. Bevan and Hector C. Keun. *Department of Surgery and Cancer, Imperial College London. **MicroRNA isoform profile and their prognostic potential in primary prostate cancer.***
58. Benjamin Roche¹, Benoît Arcangioli² and Rob Martienssen^{1,3}. ¹*Cold Spring Harbor Laboratory,* ²*Genome Dynamics Unit, CNRS and* ³*Howard Hughes Medical Institute (HHMI). **RNA polymerase I regulation by RNA interference in cellular quiescence relies on a novel class of long non-coding RNAs.***
59. Michał Sekrecki and Krzysztof Sobczak. *Department of Gene Expression, Institute of Molecular Biology and Biotechnology, Adam Mickiewicz University. **The impact of alternative polyadenylation on miRNA-21 biogenesis.***

60. Shahla Sadat Faterirezvani, Maghsoud Pazhouhandeh, Akbar Shirzad and Parviz Nezami. *Azərbaycan şahid Madani University*. **Knock down expression of the P0 protein from the PLRV genome by inducing the production of the hpRNA and siRNAs of this RNA silencing inhibitor and creating highly resistant strains of the virus.**
61. E Svobodova¹, R Malik¹, J Nejepska¹, H Fulkova¹, J Pasulka¹, F Horvat¹, K Vlahovicek² and P Svoboda¹. ¹*Institute of Molecular Genetics, AS CR* and ²*Division of Molecular Biology, Department of Biology, Faculty of Science, University of Zagreb*. **Roles for RNA interference in germline and soma of mice.**
62. Peter Taylor¹, Peter Sarkies² and Murray Selkirk¹. ¹*Department of Life Sciences, Imperial College London* and ²*MRC London Institute of Medical Sciences, Imperial College London*. **The role of small RNA in *Trichinella spiralis*-host communication.**
63. Luz Tincopa-Marca¹, Daniel Leite², Alistair McGregor², Matthew Ronshaugen¹ and Sam Griffiths-Jones¹. ¹*Faculty of Biology, Medicine and Health, The University of Manchester* and ²*Department of Biological and Medical Sciences, Oxford Brookes University*. **Transcriptome profiling of miRNAs and piRNAs during *Parasteatoda tepidariorum* embryogenesis.**
64. Trung Anh Trieu^{1,2}, Martina Billmeier¹, Archana Singh¹ and Tamas Dalmay¹. ¹*School of Biological Sciences, University of East Anglia* and ²*Hanoi National University of Education*. **Y RNA-derived small RNAs involved in regulation of gene expression in human breast cancer cells.**
65. Dragana Vukic¹, Leena Yadav², Sampath Kumar¹, Markku Varjosalo², Liam Keegan¹ and Mary O'Connell¹. *Masaryk University and Biotechnology, University of Helsinki*. **Investigating the ADAR interactome.**
66. Walczak A., Sekrecki M. and Sobczak K. *Adam Mickiewicz University in Poznan, Faculty of Biology, Institute of Molecular Biology and Biotechnology*. **Significant movement of the locus encoding *miR206/133b* cluster during muscle differentiation.**
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