



## Wednesday, 6 April

7:30am **Welcome and Introduction**  
*Plenary Room*  
 Chaired by: Dr. Haifan Lin

7:35am **Session 1: Biogenesis of piRNAs**  
*Plenary Room*  
 Chaired by: Dr. Martine Simonelig

7:35am **A small RNA-based innate immune system guards the integrity of germ cell genomes**  
 » [Prof. Gregory J Hannon](#)

7:57am **Pachytene piRNPs**  
 » [Mr. Zissimos Mourelatos](#)

8:19am **Maternally inherited siRNAs initiate piRNA cluster formation**  
 » [Mr. Yicheng Luo](#), Prof. Alexei Aravin

8:31am **The conserved zinc-finger protein GTSF1 helps PIWI proteins achieve their full catalytic potential**  
 » [Prof. Phillip Zamore](#), Dr. Amena Arif, Ms. Shannon Bailey, Dr. Natsuko Izumi, Dr. Todd Anzelon, Dr. Deniz Ozata, Dr. Ildar Gainetdinov, Dr. Ian MacRae, Dr. Yukihide Tomari

8:53am **Molecular basis of nuage organization by Tejas and coordination for piRNA biogenesis in Drosophila**  
 » [Dr. Toshie Kai](#)

9:15am **Social Hour & Meet the Speakers**  
*Discussion Room*

9:50am **Session 1: Biogenesis of piRNAs**  
*Plenary Room*  
 Chaired by: Dr. Martine Simonelig

9:50am **Investigation of pachytene piRNA-guided slicing of an mRNA**  
 » Mr. Mark DOWLING, Dr. David HOMOLKA, Dr. Radha Raman PANDEY, [Dr. Ramesh PILLAI](#)

10:02am **Hierarchical length and sequence preferences establish a single major piRNA 3'-end**  
 » [Mr. Daniel Stoyko](#), Dr. Pavol Genzor, Dr. Astrid Haase

10:10am **Session 2: piRNA-guided transcriptional silencing and Epigenetic regulation**  
*Plenary Room*  
 Chaired by: Dr. Haru Siomi

10:10am **Transposable element biology: Expression and Integration in the host genome**  
 » Mrs. Charlotte Grimaud, Mr. Mohamed Mourdas, Mr. Alain Pelisson, Mr. Brunot Mugat, Mrs. Marion Varoqui, Mr. Francois Sabot, [Mrs. Severine Chambeyron](#)

10:36am **A sequence-specific DNA binder guides the chromatin reader protein Rhino to piRNA source loci**  
 » [Ms. Lisa Baumgartner](#), Dr. Dominik Handler, Mr. Sebastian Platzer, Dr. Julius Brennecke

10:48am **The role of PIWI proteins in stability and differentiation of planarian stem cells**  
 » [Dr. Josien van Wolfswinkel](#)

11am **the Retroviral - piRNA arms race in the Drosophila ovary**  
 » [Dr. Julius Brennecke](#), Dr. Dominik Handler, Mrs. Kirsten Andre Senti

11:25am **Social Hour & Meet the Speakers**  
*Discussion Room*



## Thursday, 7 April

- 7:30am **Session 3: piRNAs in genome defense**  
*Plenary Room*  
Chaired by: Prof. Phillip Zamore
- 7:30am **Maintenance of animal fertility by piRNAs in *C. elegans***  
» [Dr. Germano Cecere](#)
- 7:52am **Eukaryotic CRISPR: a piRNA-guided “innate immune” system in genome defence**  
» [Dr. Yang Yu](#)
- 8:14am **Staying on top of transposons: the catalytic properties of PIWI proteins explain their ability to target an ever-adapting threat.**  
» [Dr. Ildar Gainetdinov](#), Ms. Katharine Cecchini, Dr. Cansu Colpan, Ms. Ayca Bagci, Dr. Amena Arif, Dr. Pei-Hsuan Wu, Prof. Phillip Zamore
- 8:26am **A P-element invasion in experimental populations sheds light on the silencing of a newly invading transposon.**  
» [Dr. Robert Kofler](#), Mrs. Divya Selvaraju
- 8:38am **Heat Stress Disrupts piRNA Biogenesis Machinery.**  
» [Mr. Nicholas Rice](#), Ms. Samantha Ho, Dr. William Theurkauf
- 8:50am **How the length of *C. elegans* piRNAs is controlled.**  
» [Dr. Peter Sarkies](#)
- 9:12am **The germline response to retroviral invasion of the koala genome**  
» [Dr. William Theurkauf](#), Ms. Birgit Koppetsch, Ms. Milky Abajorga, Dr. Tianxiong Yu, Dr. Zhiping Weng
- 9:35am **Break**  
*Discussion Room*

- 9:45am **Session 4: piRNAs in the regulation of endogenous gene expression**  
*Plenary Room*  
Chaired by: Prof. Mofang Liu
- 9:45am **Regulation of energy metabolism by PIWI proteins and piRNAs in stem cells**  
» [Dr. Martine Simonelig](#)
- 10:07am **The long and the short of it: dissecting the differential functions of two isoforms of the Argonaute CSR-1**  
» [Ms. Amanda Charlesworth](#), Dr. Uri Seroussi, Dr. Nicolas Lehrbach, Mr. Mathias Renaud, Mr. Adam Sundby, Dr. Ruxandra Molnar, Mr. Robert Lao, Dr. Alexandra Willis, Ms. Jenna Woock, Mr. Matthew Aber, Ms. Annette Diao, Dr. Aaron Reinke, Dr. Gary Ruvkun, Dr. Julie M. Claycomb
- 10:19am **Beyond genome defense: an unexpected role for the piRNA pathway in development**  
» [Dr. katalin Fejes Toth](#), Ms. Riley Galton, Prof. Marianne Bronner
- 10:40am **Flash Talk & Poster Session**  
*Discussion Room*
- Trichoplusia ni Cell Lines as Models for Germline and Somatic piRNA Pathways**  
» [Mr. Zeyu Yao](#), Prof. Phillip Zamore
- Uncovering the mechanism of GTSF1-facilitated PIWI cleavage**  
» [Ms. Shannon Bailey](#), Dr. Amena Arif, Dr. Ildar Gainetdinov, Prof. Phillip Zamore
- Mapping the germ granule proteome in *C. elegans***  
» [Mr. Sebastián Fuentes](#), Mr. Adam Sundby, Dr. Julie M. Claycomb
- RNA processing factors are indispensable for female fertility in *Drosophila***  
» [Mr. Yongjin Lee](#), Prof. Phillip Zamore, Mrs. Cindy Tipping, Dr. Adriano Biasini



Continued from **Thursday, 7 April**

**Assessing the Function of Pachytene piRNA Loci in Mouse Spermatogenesis**

» [Ms. Katharine Cecchini](#), Dr. Ildar Gainetdinov, Dr. Pei-Hsuan Wu, Dr. Cansu Colpan, Prof. Phillip Zamore

**Dissecting the molecular mechanisms of miRNA-binding Argonautes in spermatogenesis**

» [Dr. Volker Nitschko](#), Dr. Uri Seroussi, Dr. Julie M. Claycomb

**The expression of genes associated with piRNAs biosynthesis and action is disturbed in renal cancer.**

» [Dr. Karolina Hanusek](#), Prof. Joanna Bogusławska, Mr. Jan Hanusek, Prof. Agnieszka Piekietko-Witkowska

**piRNA clusters in the germline and soma of aedine mosquitoes**

» [Ms. Rebecca Halbach](#), Dr. Maria Cristina Crava, Dr. Umberto Palatini, Dr. Mariangela Bonizzoni, Prof. Ronald van Rij

**Developing tools to understand piRNA precursor trafficking**

» [Ms. Ayca Bagci](#), Prof. Phillip Zamore

**Structure function analysis of the ZUC-processor**

» [Mr. Timothy O](#), [Ms. Adrianna Hernandez](#), Ms. Parthena Konstantinidou, Dr. Eugene Valkov, Dr. Astrid Haase

**Elucidating the role of Yb in Piwi4/tapiR1-mediated gene silencing**

» [Ms. Valerie Betting](#), Prof. Ronald van Rij

**Renal cancer cells stimulate migration of MSC cells via secretion of piR-004153.**

» [Prof. Joanna Bogusławska](#), Prof. Piotr Popławski, Mrs. Beata Rybicka, Dr. Anna Adamiok-Ostrowska, Dr. Weronika Zarychta-Wiśniewska, Dr. Anna Burdzińska, Prof. Leszek Pączek, Prof. Agnieszka Piekietko-Witkowska

**Spermatogenesis-specific and germline-constitutive small RNA pathways coordinately regulate sperm development and function in Caenorhabditis elegans**

» [Mr. Mathias Renaud](#), Ms. Amanda Charlesworth, Dr. Uri Seroussi, Dr. Ruxandra Molnar, Dr. Julie M. Claycomb

**Endogenous viral element-derived piRNAs in Lepidoptera: insights from Spodoptera genus**

» Mr. Javier Lopez Rius, Mr. Luis Hernandez Pelegrin, Mr. Adria Mengual, Dr. Mariangela Bonizzoni, Dr. Salvador Herrero, [Dr. Cristina Crava](#)

**Selection of piRNA precursors in the Drosophila ovarian soma - exploiting a retrotransposon weak spot**

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**A new 'bona-fide piRNA-sequencing' method reveals longer piRNAs in flies**

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**A novel hypomorphic mutation of Mili with defective spermatogenesis in mouse**

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» [Dr. Caridad Miro Pina](#), Ms. Olivia Charmant, Dr. Takayuki Kawaguchi, Dr. Daniel Holoch, Ms. Audrey Michaud, Dr. Isadora Cohen, Ms. Adeline Humbert, Dr. Yan Jaszczyszyn, Dr. Guillaume Chevreux, Ms. Laurence Del Maestro, Dr. Slimane Ait-si-ali, Dr. Olivier Arnaiz, Dr. Raphael Margueron, Dr. Sandra Duharcourt

**PETISCO links piRNA biogenesis to histone mRNA homeostasis in C. elegans**

» [Ms. Joana Pereirinha](#), Dr. Ricardo Cordeiro Rodrigues, Ms. Ann-Sophie Seistrup, Dr. Rene Ketting

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**Functional tagging of endogenous proteins, knockout, and rapid selection of cell pools.**

» [Dr. Qingcai Meng](#), Mr. Daniel Stoyko, Ms. Celine Marlin Andrews, Ms. Parthena Konstantinidou, Dr. Pavol Genzor, Mr. Timothy o, Ms. Alexandra Elchert, Mr. Leif Benner, Mr. Sushil Sobti, Mr. Esther Y. Katz, Dr. Astrid Haase

**Solving the maze of PiwiL1 overexpression in cervical cancer cells**

» [Ms. Midhunaraj Kunnummal](#), Ms. Mary Angelin, Mr. Sivakumar Krishnankutty Chandrika, Ms. Pooja Sherly Raveendran, Mr. Joby Issac, Dr. Ani V Das

**Novel function of PIWI6 in transcriptional silencing of LTR-retrotransposons in *Aedes albopictus***

» [Ms. Ezgi Taskopru](#), Mr. Gijs Overheul, Dr. Finny Varghese, Ms. Rebecca Halbach, Dr. Jieqiong Qu, Dr. Pascal Miesen, Prof. Ronald van Rij

**Aberrant piRNA pathway genes outside of germline.**

» [Dr. Pavol Genzor](#), Dr. Aishe Angeletti Sarshad, Dr. Daniel Benhalevy, Mr. Seth Cordts, Ms. Neha Bokil, Dr. Markus Hafner, Dr. Astrid Haase

**Mitochondria-Nucleus communication via piRNAs in embryonic gonadal cells**

» [Mr. Odei Barreñada](#), Dr. Eduardo Larriba, Mr. Daniel Fernandez, Dr. Miguel A. Briño-Enriquez, Dr. Jesus del Mazo

**Mammalian piRNAs preferentially display stop codons at their 5' ends**

» [Dr. Susanne Bornelöv](#), Dr. Benjamin Czech, Prof. Gregory J Hannon

**Friday, 8 April**

**7:30am Session 5: PIWI proteins and piRNAs in germline development/Transgenerational inheritance**

*Plenary Room*

Chaired by: Dr. Julie M. Claycomb

**7:30am piRNA pathway: a one-way ticket to transposon biology (high price but missing destination)**

» [Dr. Zhao Zhang](#)

**7:52am Using synthetic piRNAs to understand how endogenous genes are protected from transgenerational silencing in *C. elegans*.**

» [Prof. Christian Frøkjær-Jensen](#)

**8:04am The Role of PIWIL1 PIWI-Ins mutations in Human Male Infertility**

» [Prof. Mofang Liu](#)

**8:26am De novo piRNA biogenesis is essential for target silencing in the absence of maternal piRNA deposition during *Drosophila* spermatogenesis.**

» [Prof. Yukiko Yamashita](#)

**8:45am Session 6: Small RNAs in genome rearrangements**

*Plenary Room*

Chaired by: Dr. William Theurkauf

**8:45am Control of programmed DNA elimination in the ciliate *Paramecium***

» Mrs. Coralie Zangarelli, Dr. Olivier Arnaiz, Mr. Michaël Bourge, Mr. Kevin Gorrichon, Dr. Yan Jaszczyszyn, Mrs. Nathalie Mathy, Mr. Loïc Escoriza, [Ms. Mireille Bétermier](#), Mrs. Vinciane Régnier

**9:10am A SUMO E3 ligase is involved in target-directed small RNA degradation during DNA elimination in *Tetrahymena***

» Mr. S SHEHZADA, [Dr. K MOCHIZUKI](#)



Continued from Friday, 8 April

9:22am **Germline piRNAs counteract retrotransposon invasions from surrounding somatic cells in *Drosophila melanogaster* ovaries**

» Ms. Marianne Yoth, Mrs. Nathalie Gueguen, Mr. Abdou Akkouche, Mrs. Silke Jensen, [Mrs. Emilie brasset](#)

9:35am **Social Hour & Meet the Speakers**

*Discussion Room*

10am **Session 7: PIWI proteins and piRNAs in germline development**

*Plenary Room*

Chaired by: Dr. Astrid Haase

10am **Untangling germline small RNA pathways in *C. elegans***

» [Dr. Julie M. Claycomb](#), Dr. Uri Seroussi, Mr. Mathias Renaud, Ms. Amanda Charlesworth, Mr. Adam Sundby, Dr. Ruxandra Molnar

10:22am **Genetic control of a sex-specific piRNA program**

» [Mr. Peiwei Chen](#), Prof. Alexei Aravin

10:34am **piRNAs are essential for female fertility in golden hamsters**

» [Dr. Ligang Wu](#)

10:55am **Flash Talks & Poster Session**

*Discussion Room*

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## Saturday, 9 April

- 7:30am **Session 8: PIWI proteins and piRNAs in development**  
*Plenary Room*  
Chaired by: Dr. Toshie Kai
- 7:30am **piRNA-directed transposon DNA methylation**  
» [Prof. Donal O'Carroll](#)
- 7:52am **Transposon control in mammalian germline cells and early embryos**  
» [Mr. Haruhiko Siomi](#)
- 8:14am **The Evolution of Pachytene piRNA Genes in Mammals**  
» [Dr. Tianxiong Yu](#), Dr. Zhiping Weng
- 8:26am **The role of piRNAs in planarian stem cells and their potential role in immune defence**  
» [Dr. Claus Kuhn](#), Dr. Andreas Pittroff, Mr. Tim Demtröder
- 8:38am **Rules that govern piRNA complexity as key to effective defense**  
» Dr. Pavol Genzor, Ms. Parthena Konstantinidou, Mr. Daniel Stoyko, Dr. Amirhossein Manzourolajdad, Ms. Celine Marlin Andrews, Ms. Alexandra Elchert, Prof. Constantinos Stathopoulos, [Dr. Astrid Haase](#)
- 9am **Social Hour & Meet the Speakers**  
*Discussion Room*
- 9:30am **Session 8: PIWI proteins and piRNAs in development**  
*Plenary Room*  
Chaired by: Dr. Haifan Lln
- 9:30am **piRNA biogenesis in C. elegans**  
» [Dr. Rene Ketting](#), Ms. Nadezda Podvalnaya, Ms. Joana Pereirinha, Dr. Sebastian Falk

- 9:50am **Session 9: PIWI and piRNAs in somatic tissues and cancer**  
*Plenary Room*  
Chaired by: Dr. Haifan Lln
- 9:50am **Protein translation regulation of neuronal activity**  
» [Prof. Yishi Jin](#)
- 10:14am **Piwi reduction in the aged niche eliminates germline stem cells via Toll-Gsk3 signaling**  
» [Prof. Hweijian Hsu](#)
- 10:26am **Genomics of piRNAs and small RNAs in mosquito and man: harbingers of persistent viruses and transposon activation**  
» [Dr. Nelson Lau](#), Dr. Gargi Dayama, Dr. Zheng Zhu, Ms. Shruti Gupta, Ms. Adeline Williams, Dr. Kenneth Olson, Dr. Noah Rose, Dr. Lindy McBride, Dr. Sarah Wheeler, Dr. Andrea Gloria-Soria, Dr. Douglas Brackney, Dr. Adam Labadorf, Dr. Richard Myers
- 10:38am **Dr. Jekyll and Mr. Hyde: the Role of Piwi proteins in the Digestive System**  
» [Dr. Haifan Lln](#)
- 11am **Business Session and Concluding Remarks**  
*Plenary Room*  
Chaired by: Dr. Haifan Lln