

## PROGRAM AT A GLANCE

Sunday, September 2, 2018	
Time	Empiria
18:00–19:00	<p><b>OPENING CEREMONY</b> <b>KEYNOTE LECTURE</b> Chromosomes in space and time – from past to future challenges Thomas Cremer <i>Supported by COST EuroCellNet (CA15214) Action</i></p>
19:00–20:00	<p><b>WELCOME RECEPTION</b> Location: Foyer, City Conference Center</p>

Monday, September 3, 2018	
Time	Empiria
09:00–10:35	<p>Chromosome structure and nuclear architecture COST EuroCellNet (CA15214) Session <i>Chairs: Dean Jackson, Boris Vyskot</i></p>
10:35–11:15	<b>COFFEE BREAK</b>
11:15–12:30	<p>Specialized Chromosomes <i>Chairs: Tariq Ezaz, Rachel O'Neil</i></p>
12:30–13:45	<b>LUNCH BREAK / LUNCH WORKSHOPS</b>
13:45–15:15	<b>POSTER SESSION PART ONE</b>
15:15–16:05	<p><b>PLENARY LECTURE</b> Nuclear Genome Nanostructure Imaging at Single Molecule Resolution "59<sup>th</sup> Symposium of the Society for Histochemistry" Christoph Cremer</p>
16:05–16:35	<b>COFFEE BREAK</b>
16:35–17:55	<p>New Technologies in genome and cytogenetics research "59<sup>th</sup> Symposium of the Society of Histochemistry" <i>Chairs: Klara Weipoltshammer, Marco Biggiogera</i></p>
18:15–19:15	<p>Business Meeting: Society for Histochemistry (members only) Location: Cubex Centrum Praha</p>

Tuesday, September 4, 2018	
Time	Empiria
09:00–10:20	Mitosis and Meiosis COST EuroCellNet (CA15214) Session <i>Chairs: Martin Anger, Helen Tempest</i>
10:20–11:00	COFFEE BREAK
11:00–12:20	Applied chromosome biology in agriculture <i>Chairs: Jiří Rubeš, Jaroslav Doležel</i>
12:20–13:30	LUNCH BREAK / LUNCH WORKSHOPS
13:30–15:00	POSTER SESSION PART TWO
15:00–15:50	PLENARY LECTURE Chromatin dynamics in real-time and at nanoscale resolution Kerstin Bystricky <i>Supported by COST EuroCellNet (CA15214) Action</i>
15:50–16:20	COFFEE BREAK
16:20–17:40	Chromatine and chromosome dynamics COST EuroCellNet (CA15214) Session <i>Chairs: Pavel Hozák, Masahiko Harata</i>
19:00 -22:00	GALA DINNER Location: Francouzská Restaurant

Wednesday, September 5, 2018	
Time	Empiria
09:00–09:55	Chromatine and chromosome dynamics COST EuroCellNet (CA15214) Session <i>Chairs: Pavel Hozák, Masahiko Harata</i>
09:55–10:35	COFFEE BREAK
10:35–11:55	Population and evolutionary biology <i>Chairs: Darren K. Griffin, Cesar Martins</i>
11:55–12:25	Selection of the venue of the next ICC
12:25–13:35	LUNCH BREAK
13:35–14:25	PLENARY LECTURE Multiscale 4D genome organization in differentiation and development Giacomo Cavalli <i>Supported by COST EuroCellNet (CA15214) Action</i>
14:25–16:00	Genomics and genome organization COST EuroCellNet (CA15214) Session <i>Chairs: Kerstin Bystricky, Giacomo Cavalli</i>
16:00–16:20	CLOSING

## SCIENTIFIC PROGRAM

Sunday, September 2, 2018

**18:00–19:00** **OPENING CEREMONY**  
**KEYNOTE LECTURE**  
**Chromosomes in space and time – from past to future challenges**  
**Thomas Cremer**  
*Supported by COST EuroCellNet (CA15214) Action*

**19:00–20:00** **WELCOME RECEPTION**

Monday, September 3, 2018

**09:00–10:35** **Chromosome structure and nuclear architecture**  
**COST EuroCellNet (CA15214) Session**  
*Chairs: Dean Jackson, Boris Vyskot*

**09:00–09:25** **Nuclear and chromosome context together define the gene-specific architecture that differentially controls heterogeneity of the immune response**  
Dean Jackson

**09:25–09:50** **Drive and drift of supernumerary B chromosomes**  
Andreas Houben

**09:50–10:05** **Rif1's odyssey around telomeres to control DNA replication**  
Stefano Mattarocci

**10:05–10:20** **The role of nuclear lipid islets in the organization of Pol II transcription complexes and the efficient Pol II-dependent transcription**  
Margarita Sobol

**10:20–10:35** **Linker histones and chromatin remodelling complexes maintain genome stability and control cellular aging**  
Milena Georgieva

**10:35–11:15** **COFFEE BREAK**

- 11:15–12:30 Specialized Chromosomes**  
*Chairs: Tariq Ezaz, Rachel O’Neil*
- 11:15–11:40 **Chromosomics and the Evolution of Reptile Sex Chromosomes**  
Tariq Ezaz
- 11:40–12:05 **Retroelements and the evolution of stable centromeres**  
Rachel O’Neil
- 12:05–12:30 **Fishing for B chromosome effects**  
Cesar Martins
- 12:30–13:45 LUNCH BREAK / LUNCH WORKSHOPS**
- 13:45–15:15 POSTER SESSION**
- 15:15–16:05 PLENARY LECTURE**  
**Nuclear Genome Nanostructure Imaging at Single Molecule Resolution**  
**“59<sup>th</sup> Symposium of the Society for Histochemistry”**  
Christoph Cremer
- 16:05–16:35 COFFEE BREAK**
- 16:35–17:55 New Technologies in genome and cytogenetics research**  
**“59<sup>th</sup> Symposium of the Society of Histochemistry”**  
*Chairs: Klara Weipoltshammer, Marco Biggiogera*
- 16:35–17:00 **Examining the role of nuclear lamina proteins in post-mitotic nuclear envelope formation using CRISPR/Cas9 and time-lapse video microscopy**  
Luc Snyers
- 17:00–17:25 **High resolution dissection of interphase chromatin. Is 5mC the main character in chromatin condensation?**  
Irene Masiello
- 17:25–17:40 **Measuring meiotic recombination by sequencing of single pollen nuclei**  
Steven Dreissig
- 17:40–17:55 **CRISPR/Cas9-mediated labelling of genomic sequences in living and fixed cells**  
Takayoshi Ishii
- 18:15–19:15 Business Meeting: Society for Histochemistry (members only)**  
Cubex Centrum Praha

## Tuesday, September 4, 2018

- 09:00–10:20** **Mitosis and Meiosis**  
**COST EuroCellNet (CA15214) Session**  
***Chairs: Martin Anger, Helen Tempest***
- 09:00–09:25 **Challenges of chromosome segregation during transition from meiosis into mitosis**  
Martin Anger
- 09:25–09:50 **Meiotic Nondisjunction: Insights into the Origin and Significance of Aneuploidy in Human Spermatozoa**  
Helen Tempest
- 09:50–10:05 **Total disturbance in chromosome synapsis and DSB repair do not arrest meiosis in triploid hybrid males of rock lizards**  
Victor Spangenberg
- 10:05–10:20 **The effect of particulate matter (PM10) in chromosomal segregation: Air pollution and its impact in the spindle assembly checkpoint and mitotic arrest.**  
Miguel Santibáñez-Andrade
- 10:20–11:00 COFFEE BREAK**
- 11:00–12:20** **Applied chromosome biology in agriculture**  
***Chairs: Jiří Rubeš, Jaroslav Doležel***
- 11:00–11:25 **Practical applications of cytogenetics in germplasm enhancement in beat**  
Adam Lukaszewski
- 11:25–11:50 **Chromosomal landmarks of porcine reciprocal translocations**  
Brendan Donaldson
- 11:50–12:05 **Development of cytogenetic and specific molecular markers for selection of high value Erianthus-derived sugarcane clones**  
Nathalie Piperidis
- 12:05–12:20 **Molecular cytogenetic screening for chromosomal abnormalities in agricultural species**  
Rebecca Jennings



**12:20–13:30 LUNCH BREAK / LUNCH WORKSHOPS**

**13:30–15:00 POSTER SESSION**

**15:00–15:50 PLENARY LECTURE**

**Chromatin dynamics in real-time and at nanoscale resolution**

**Kerstin Bystricky**

*Supported by COST EuroCellNet (CA15214) Action*

**15:50–16:20 COFFEE BREAK**

**16:20–17:40 Chromatine and chromosome dynamics**

**COST EuroCellNet (CA15214) Session**

*Chairs: Pavel Hozák, Masahiko Harata*

**16:20–16:45 Cross-talk of histone and actin families affect chromosome dynamics in mitotic and interphase cells**

Masahiko Harata

**16:45–17:10 Nuclear actin in gene expression and genome organization**

Maria Kristina Vartiainen

**17:10–17:25 Ribosomal DNA and transcription-dependent histone pattern**

Klara Weipoltshammer

**17:25–17:40 Rearrangement of lamin and topo II complexes on chromatin under stress conditions**

Ryszard Rzepecki

**19:00–22:00 GALA DINNER**

## Wednesday, September 5, 2018

**09:00–09:55 Chromatine and chromosome dynamics  
COST EuroCellNet (CA15214) Session  
Chairs: Pavel Hozák, Masahiko Harata**

**09:00–09:25 Using the force to regulate gene expression: Myosin motors stabilise transcription factories**  
Chris Toseland

**09:25–09:40 The role of TPR in chromatin organization and transcriptional regulation in differentiating C2C12 cells**  
Jana Uhlířová

**09:40–09:55 Evolution of telomeres and telomerase components: lessons from the plant kingdom**  
Petr Fajkus

**09:55–10:35 COFFEE BREAK**

**10:35–11:55 Population and evolutionary biology  
Chairs: Darren K. Griffin, Cesar Martins**

**10:35–11:00 Animal chromosome evolution: Karyome to genome to phenome**  
Darren K. Griffin

**11:00–11:25 Chromosomal evolution and hybrids in crop plants**  
Pat Heslop-Harrison

**11:25–11:40 Post-polyploid diploidization and diversification through dysploid changes**  
Terezie Mandáková

**11:40–11:55 Testing the Integrative Breakage Model: A multidisciplinary approach for the study of genome plasticity**  
Covadonga Vara

**11:55–12:25 Selection of the venue of the next ICC**

**12:25–13:35 LUNCH BREAK**

- 13:35–14:25 PLENARY LECTURE**  
**Multiscale 4D genome organization in differentiation and development**  
**Giacomo Cavalli**  
*Supported by COST EuroCellNet (CA15214) Action*
- 14:25–16:00 Genomics and genome organization**  
**COST EuroCellNet (CA15214) Session**  
***Chairs: Kerstin Bystricky, Giacomo Cavalli***
- 14:25–14:50 **Untangling spatial genome organization: detailed insights from single-cell DamID**  
Jop Kind
- 14:50–15:15 **Dynamics of the 53BP1 protein accumulated info DNA repair foci or locally micro-irradiated chromatin**  
Eva Bártová
- 15:15–15:30 **Decoding the complex genome organization of Drosophila S2 cells**  
Guilherme Dias  
**Best poster award winner at the 21<sup>st</sup> ICC**
- 15:30–15:45 **Exploring chromatin dynamics during mouse spermatogenesis**  
Aurora Ruiz-Herrera
- 15:45–16:00 **Replication of DNA repeats in time and space**  
Alžběta Němečková
- 16:00–16:20 CLOSING**