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**Speakers**

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**Preliminary title**

*Structural and Molecular Biology of the DNA Damage Response*

**Purpose of the event and topics**

DNA is continuously exposed to insults from endogenous and exogenous sources, and, therefore, maintenance of genome integrity is essential to all organisms. There are multiple pathways that ensure that the information contained in DNA is not damaged or lost. When these errors skip the control mechanisms or when other DNA damage type is present, multiple macromolecular complexes detect it and start the signalling cascades that lead to repair by different pathways depending on the lesion. All these pathways safeguard our genome and when they are de-regulated or can’t work efficiently, damage to DNA is accumulated. This, together with the instability of the genome, can promote the development of cancer and other diseases. This meeting will bring together research leaders in the field with a focus on the structural basis and molecular mechanisms.

The goal of the meeting is to bring together experts on molecular mechanisms and structural basis of several aspects of the DNA damage response, from DNA repair to DNA damage signalling, DNA replication and Telomere Biology.

The following topics will be covered, with a focus on molecular mechanisms and structural biology:

* DNA Replication & Chromatin remodelling
* Damage Recognition & Signalling
* DNA repair

**Proposed dates**

Duration: 2.5 days from Monday to mid-Wednesday

The first thing to do is to fix the dates that suit us, and checking there is no conflict with other meetings. I have checked major meetings, GRCs etc., and they are later, typically in June, July, Sept and October

Start date, Monday 20th May 2019 at 9.30

End date. Wednesday 22nd May 2019 at 13.00

**Tentative Programme**

- Maximum 20 invited speakers from outside of CNIO

- 129, maximum number of participants (capacity of the Auditorium)

- Main talks, 30 min slot (20 +10 for questions)

- Leave time for Poster sessions (submitted abstracts)

- Selected some abstracts for short 15 min slots (10 + 5)

**Sessions:**

 **Session 1. Chromatin structure and remodelling.**

**Session 2. DNA damage signalling and repair.**

**Session 3. Macromolecular complexes in DNA / RNA processing.**

**Session 4. DNA double strand (DSB) repair.**

**Session 5. Replication and replication stress.**

**DAY 1. Monday May 20th 2019**

**9.15 - 9.30** Opening remarks

**9.30 - 12.30 Session 1. Chromatin structure and remodelling. Chairperson TBC**

9.30 - 10.00 – **Patrick Cramer, MPI, Germany.** Chromatin remodelling

10.00 - 10.30 – **Song Tan, Penn State University, USA**. Chromatin remodelling

10.30 - 10.45 – SELECTED ABSTRACT (short talk)

*Coffee break*

11.15 - 11.45– **Karl-Peter Hopfner, Gene Center, Germany**. Chromatin remodelling

11.45 - 12.15 – **Xiaodong Zhang, Imperial College London, UK**. Chromatin remodelling

12.15 - 12.30 - SELECTED ABSTRACT (short talk)

*12.30 - 14.00 Lunch break*

**14.00-17.45 Session 2. DNA damage signalling and repair. Chairperson TBC**

14.00 - 14.30 – **Titia Sixma, Nki, Netherlands**. DNA mismatch repair.

14.30 - 15.00 – **Daniel Durocher, University of Toronto, Canada.** DNA damage and signalling.

15.00 - 15.30 – **Nicolas Thoma, Friedrich Miescher Institute, Switzerland**. Complexes in DNA repair.

15.30 - 15.45 – SELECTED ABSTRACT (short talk)

*Coffee break*

16.30 - 17.00 – **Aidan Doherty, University of Sussex, UK.**

17.00 - 17.30 – **Juan Mendez, CNIO**, **Spain**.

17.30 - 17.45 – SELECTED ABSTRACT (short talk)

**17.45-20.00 Poster session, wine and food (Social Room)**

**- Dinner with invited speakers**

**DAY 2. Tuesday May 21st 2019**

**9.30-12.30 Session 3. Macromolecular complexes in DNA / RNA processing. Chairperson TBC**

9.30 - 10.00 – **Eva Nogales. Berkeley, USA**. Complexes in regulation of gene expression

10.00 - 10.30 – **Oscar Llorca. CNIO**. Chaperon complexes in DNA repair.

10.30 - 10.45 – SELECTED ABSTRACT (short talk)

 *10:45-11:15 Group Picture & coffee break*

11.15 - 11.45 - **Lori Passmore. LMB, UK**. Molecular machines that regulate mRNA polyA tails

11.45 - 12.15 - **Alessandro Vannini,** Institute of Cancer Research, ICR, UK. Pol III transcription

12.15 - 12.30 - SELECTED ABSTRACT (short talk)

*12.30- 14.00 Lunch break*

**14.00-17:45 Session 4. DNA double strand (DSB) repair. Chairperson TBC**

14.00 - 14.30 – **Wei Yang, National Institutes of Health, NIH, USA.** DNA double-strand repair

14.30 - 15.00 – **Laurence H. Pearl**, **University of Sussex, UK**. DNA double-strand repair

15.00 - 15.15 – SELECTED ABSTRACT (short talk)

*Coffee break*

16.00 - 16.30 – **Roger Williams, LMB-MRC, UK**. PIKK family of kinases

16.30 - 17.00 – **Stephen Jackson, Gurdon Institute, UK**. PIKK family of kinases

17.00 - 17.15 – SELECTED ABSTRACT (short talk)

**17.15 - 19.30 Poster session, wine and food (social Room)**

**DAY 3. Wednesday May 22nd 2019**

**9.30-12.30 Session 5. Replication and replication stress. Chairperson\*\*\***

9.30 - 10.00 – **Luca Pellegrini, Cambridge University, UK**. Replication.

10.00 - 10.30 – **Rafael Fernandez-Leiro, CNIO, Spain**. Replication.

10.30 - 10.45 – SELECTED ABSTRACT (short talk)

*Coffee break*

11.15 - 11.45 – **Alessandro Costa, The Francis Crick Institute**, UK. Replication.

11.45 - 12.15 – **James Berger, Johns Hopkins School of Medicine**, **USA**. Replication

*12.15 - 12.30 Closing remarks*