

WORKSHOPS

CURRENT TRENDS IN BIOMEDICINE

2018

un
i Universidad
Internacional
de Andalucía
A

GENOMIC PARASITES AND NONCODING RNA IN EVOLUTION AND DISEASE

Scope

Friend or foe in nature is often one and the same and the classification depends on the perspective of the observer. This concept is key to the proposed workshop which will discuss the beneficial and detrimental impact of genomic parasites to the human genome. On the one hand, viruses and transposable elements provide novel genetic material and challenge established gene expression patterns. Hence, transposition of DNA enables quick adaptation and is widely accepted to be a major driver of evolution, in fact essential for the development of complex organisms. On the other hand, mobile genetic elements are highly mutagenic and may interfere with essential developmental programmes and physiological processes. As a consequence, transposition is linked to cancer and other diseases. Importantly, in all the processes, beneficial or detrimental, a complex web of non-coding RNA constitutes the interface between the genomic parasites and the host. Tasks as diverse as transcriptional regulation, self/nonself-discrimination or genome defence and quality control are crucially depending on non-coding RNAs. Accordingly, they control development and homeostasis in the host and abnormalities of non-coding RNAs are associated with various diseases and premature ageing. The speakers, opinion makers in the field, will broadly cover different aspects of the 'love-hate' relationship between transposable genetic elements and the human genome. The line-up of inspirational speakers and their presentations will be highly educational and stipulate engaged discussions.

Format of the workshop

The workshop will bring together a maximum of 15 speakers and 35 participants, to form a group of around 50 people. The scientific programme will start in the morning of Monday, October 29th, and will end around noon on Wednesday, October 31st. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

Venue of the workshop

The workshop will be held in Baeza, at the "Sede Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.

Speakers

- **M. Mar Albà.** Evolutionary Genomics Group, Research Programme on Biomedical Informatics (GRIB), Hospital del Mar Research Institute (IMIM), Universitat Pompeu Fabra (UPF) / Catalan Institution for Research and Advanced Studies (ICREA). Barcelona, Spain.
- **Geoffrey J. Faulkner.** Mater Research Institute, University of Queensland. Brisbane, Australia.
- **Puri Fortes.** Center for Applied Medical Research, Department of Gene Therapy and Hepatology, Navarra Institute for Health Research (IdiSNA), University of Navarra. Pamplona, Spain.
- **Jordi Gómez.** Laboratory of RNA Archaeology, Instituto de Parasitología y Biomedicina "López Neyra", Consejo Superior de Investigaciones Científicas (CSIC). Granada, Spain.
- **Francis M. Jiggins.** Department of Genetics, University of Cambridge. Cambridge, UK.
- **Henrik Kaessmann.** Center for Molecular Biology of Heidelberg University (ZMBH), DKFZ-ZMBH Alliance. Heidelberg, Germany.
- **Eugene V. Koonin.** National Center for Biotechnology Information, National Library of Medicine, NIH. Bethesda, MD, USA.
- **Judith Korb.** Evolutionary Biology & Ecology, University of Freiburg. Freiburg, Germany.
- **Claudia Kutter.** Karolinska Institute/SciLifeLab. Stockholm, Sweden.
- **Anders H. Lund.** Biotech Research and Innovation Centre (BRIC), University of Copenhagen. Copenhagen, Denmark.
- **Rita Rebollo.** Université de Lyon, INSA-Lyon, INRA, UMR203 BF2i. Biologie Fonctionnelle Insectes et Interactions. Villeurbanne, France.
- **Caetano Reis e Sousa.** Immunobiology Laboratory, The Francis Crick Institute. London, UK.
- **Joan A. Steitz.** Department of Molecular Biophysics & Biochemistry; Howard Hughes Medical Institute, Yale University / Yale Cancer Center. New Haven, CT, USA.
- **Andreas Werner.** RNA Interest Group, Institute for Cell and Molecular Biosciences, Newcastle University. Newcastle upon Tyne, UK.
- **Guenther Witzany.** Telos - Philosophische Praxis. Buermoos, Austria.



Organized by:

Jordi Gómez
Granada, Spain.

Andreas Werner
Newcastle upon Tyne, UK.

Sponsor:



Baeza, Spain
29th-31st October 2018

Deadline:
7th September 2018

Universidad Internacional de Andalucía
Sede Antonio Machado
Palacio de Jabalquinto
Plaza de Santa Cruz, s/n. 23440 Baeza (Jaén), Spain
Tel: +34 953 74 27 75
Fax: +34 953 74 29 75
E-mail: baeza@unia.es

More information and application:
http://www.unia.es/biomedicine_workshops.biomed@unia.es

