



University of Roma Tre
Department of Biology

Molecular Evolution in the Genomic Era

September 29th - October 1st

A Meeting sponsored by:

**University of Roma Tre
“Genome Biology and Evolution”
International Union of Biological
Sciences (IUBS)**

Organizing Committee

Paolo Ascenzi
Giorgio Bernardi
Fabio Polticelli
Roberta Melissano
Caterina Nuvoli

Scientific Committee

Giorgio Bernardi
Takashi Gojobori
William Martin
Fabio Polticelli

Registration is free. If you plan to attend the meeting please register sending an e-mail to the address gbernardi@uniroma3.it or polticel@uniroma3.it.

PROGRAM

September 29th

**4.00 pm
Opening Lecture**

**Chairman
Prof. Maurizio Brunori**

Prof. Werner Arber
“Molecular Darwinism in the microbial world”

**Aula Magna - University of Roma Tre
Via Ostiense, 159**

**All the other presentations will take place at
the Department of Biology,
University of Roma Tre, V.le G. Marconi 446**

September 30th

Takashi Gojobori (Mishima, Japan) Evolutionary Origin of Camera-type eye	9.00-9.30
Norihiro Okada (Tokyo, Japan) Speciation by Sensory Drive: its Generality in Cichlids of Lake Victoria	9.30-10.00
Manyuan Long (Chicago, USA) The Phenotypic Effects of New Genes and Evolution of Development	10.00-10.30
Coffee break	10.30-11.00
Duccio Cavalieri (Florence, Italy) Using next generation sequencing to understand the evolution of multicellularity in <i>S. cerevisiae</i>	11.00-11.30
James Mc Inerny (Maynooth, Ireland) The Public Goods Hypothesis for the Evolution of Life on Earth	11.30-12.00
Marta Wayne (Gainesville, USA) Separate not equal: sex, gene expression, and the discriminating genome	12.00-12.30
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William Martin (Duesseldorf, Germany) The impact of mitochondria on eukaryote genome evolution	15.00-15.30
John Archibald (Halifax, Canada) One Plus One Equals One: Endosymbiosis and Genome Mosaicism in Eukaryotic Microorganisms	15.30-16.00
Martin Embley (Newcastle, United Kingdom) Reductive evolution of mitochondrial homologues in parasitic protists	16.00-16.30
Coffee Break	16.30-17.00
Charlie Baer (Gainesville, USA) The mutational landscape of <i>Caenorhabditis</i>	17.00-17.30
Marilù Chiusano (Salerno, Italy) Intriguing issues on a reference plant species	17.30-17.45
Kamel Jabbari (Paris, France) Title to be announced	17.45-18.00
Fabio Polticelli (Rome, Italy) Molecular evolution of the polyamine oxidase family of proteins. A structural biologist perspective	18.00-18.30
Mauro Fasano (Milan, Italy) Sequence analysis of serum albumins reveals the molecular evolution of ligand recognition properties	18.30-19.00

October 1st

Giorgio Bernardi (Rome, Italy) The vertebrate genome: a view from above	9.00-9.30
Maria Costantini (Naples, Italy) Mapping structural variations on Venter's chromosomes: new insights into genetic diseases and genomic rearrangements	9.30-10.00
Miriam Di Filippo (Salerno, Italy) Chromatin accessibility during apoptotic DNA fragmentation	10.00-10.15
Paolo Cozzi (Milan, Italy) Segmenting the human genome	10.15-10.30
Coffee break	10.30-11.00
Thomas Bettecken (Muenchen, Germany) Nucleosome sequences in species and isochores	11.00-11.30
Marcello Buiatti (Florence, Italy) Context driven multilevel selection	11.30-12.00
Adam Eyre-Walker (Brighton, United Kingdom) Selection on Base Composition in Bacteria and Mitochondria	12.00-12.30
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Fernando Alvarez-Valin (Montevideo, Uruguay) Orphan orfogenic ORFs in the extremely compartmentalized genome of the African parasite <i>trypanosome vivax</i>	15.00-15.30
Wojciech Makalowski (Muenster, Germany) The evolution of U12-type intron containing genes	15.30-16.00
Izabela Makalowska (Poznan, Poland) Retrogenes and their evolutionary potential	16.00-16.30
Coffee break	16.30-17.00
Luisa Bernà (Florence, Italy) Fast evolving Tunicates, patterns and rates of amino acid evolution	17.00-17.15
Laura Gil Alberdi (Madrid, Spain) Evolution of nucleolar interactions between the genome and proteins of nuclear matrix	17.15-17.30
Vittorio Sgaramella (Trento, Italy) Somatic and germ-line genomic variation: sex as a filter	17.30-18.00