

10th EVOLUTIONARY BIOLOGY MEETING AT MARSEILLES

September 20th,

08h00 - 09h45.....Registration, posters installation and "Welcome Coffee"
09h45 - 10h00.....Introduction

GENOME EVOLUTION
Chairman: Pierre Netter

10h00 - 10h25:

Evolution of SINEs and Host Genome
Nikita Vassetzky and Dmitri Kramerov

10h25 - 10h50:

A Model for the Analysis of Whole Genome Duplications: The Genome Sequence of *Paramecium Tetraurelia*
Olivier Jaillon, Jean-Marc Aury, Claire Jubin, et al.

10h50 - 11h20:

COFFEE BREAK - POSTERS SESSION

11h20 - 11h45:

Evolution of a Gene Family during Maize Domestication
Domenica Manicacci, Marilyne Debieu, Agnès Rousselet, et al.

11h45 - 12h10:

Alien Genes in Viruses: Biased Biological Roles and Variable Frequencies
Adam Monier, Jean-Michel Claverie and Hiroyuki Ogata

12h10 - 12h30:

FLASHES PRESENTATION: FP1, FP2, FP3, FP4

12h30 - 14h15:

LUNCH

GENOME EVOLUTION
Chairman: Frédéric Brunet

14h15 - 14h40

Mesoglein - A Mesogleal Protein of the Jellyfish *Aurelia Aurita* - Is an Early Metazoan Member of ZP-Domain-Containing Protein Family
T Shaposhnikova, I. Matveev and O. Podgornaya

14h40 - 15h05

Evolution of Y Chromosome Gene Functions
Jitka Zluvova, Michaela Markova and Bohuslav Janoušek, et al.

10th EVOLUTIONARY BIOLOGY MEETING AT MARSEILLES

15h05 - 15h30

Surprising Patterns of Intron Evolution in Eukaryotes
Scott William Roy and David Penny

15h30 - 15h50

FLASHES PRESENTATION: FP5, FP6, FP7, FP8

15h50 - 16h40

COFFEE BREAK-POSTERS SESSION

CONCEPTS IN EVOLUTION AND EVOLUTION AT ORGANISM LEVEL

Chairman: Sohan P. Modak

16h40 - 17h05

Effects of Genetic Exchange in Arbuscular Mycorrhizal Fungi on Plant Growth
Caroline Angelard, Daniel Croll, Alexander Koch, et al.

17H05 - 17H30

When Host Ecology Determines Parasite Reproductive Strategy: The Plastic Development of Polystomatids (Monogenea, Platyhelminthes)
Mathieu Badets and Olivier Verna

17h30 - 17h55

Deconstructing an Evolutionary Theory
Margherita Rainieri

17h55 - 18h20

Evolutionary Morphology of Radiolaria
M.S. Afanasieva

20h00

DINNER at VIEUX PORT

September 21st

CONCEPTS IN EVOLUTION AND EVOLUTION AT ORGANISM LEVEL

Chairman: Wolfgang Nitschke

09h00 - 09h25

Darwin's Dream: Multiparametric Molecular Phylogenetic Trees in 3D
Sohan P. Modak and Milner Kumar

09h25 - 09h50

Early Mechanisms of Sex Chromosome Evolution
Bohuslav Janoušek, Jitka Zlúvová, Martina Hrubá, et al.

09h50 - 10h20

FLASHES PRESENTATION: FP9, FP10, FP11, FP12, FP13, FP14

10th EVOLUTIONARY BIOLOGY MEETING AT MARSEILLES

10h20 - 11h05

COFFEE BREAK-POSTERS SESSION

11h05 - 11h30

Homeorhesis and Evolutionary Properties of Living Systems: From Ordinary Differential Equations to the Active-Particle Generalized Kinetics Theory
Eugen Mamontov

11h30 - 11h55

Testing the Hypothesis of a Microsatellite Life Cycle in Mammals
Emmanuel Buschiazzo and Neil Gemmell

11h55 - 12h20

Introduction to Evolution Morphology of Microorganisms Based on Radiolarian Biodiversity
V.S. Vishnevskaya

12h20 - 12h45

Molecular Evolution of Hypervariable Polymorphisms in Non-Coding Chloroplastic Sequences, and their Use in Plant Systematics
Jean-Christophe Pintaud, Bertha Ludeña, Germania Karolys, et al.

12h45 - 14h15

LUNCH

PHYLOGEOGRAPHY AND SYSTEMATICS

Chairman: Wolfgang Stephan

14h15 - 14h40

Patterns of Mitochondrial Variation within and between Populations of Scarabaeus (Pachysoma) Gariepinus (Scarabaeidae: Scarabaeinae)
Catherine L. Sole, Armando D. S. Bastos and Clarke H. Scholtz

14h40 - 15h05

Steps and Gradients in a Geographic Ring: Shifting Bioclimate Envelope Across Distinct Phenotypic and Phylogeographic Units of the *Ensatina* Species Complex
João Alexandrino, Leslie Rissler, Catherine Graham, et al.

15h05 - 15h30

Nucleotide Diversity and Population Structure in Two Closely Related Wild Tomato Species (*Solanum peruvianum* and *S. chilense*)
Uraiwan Arunyawat, Thomas Städler and Wolfgang Stephan

15h30 - 15h50

FLASHES PRESENTATION: FP15, FP16, FP17, FP18

15h50 - 16h30

COFFEE BREAK-POSTERS SESSION

16h30 - 16h45

FLASHES PRESENTATION: FP19, FP20, FP21

10th EVOLUTIONARY BIOLOGY MEETING AT MARSEILLES

16h45 - 17h10

The Non-Transcribed Spacer of the 5S rDNA Gene Exhibits Constrained Sequences Within and between Genera of the Triticeae

Bernard R. Baum and Douglas A Johnson

17h10 - 17h35

Evolution of *Mariner Like Elements* in Brachyura (Decapoda, Crustacea) and Comparison Between the Evolution of these Elements and the Phylogenetic Evolution of their Hosts

Q.T. Bui, N. Casse, V. Leignel, et al.

17h35 - 18h00

New Data about the Mode of Evolution of Short Tandem Repeats (Microsatellite) (*Ostreococcus Tauri* and other Genomes)

Anne Chenuil-Maurel

18h00 - 18h25

Radiation and Speciation of Endemic Dung Beetles (Helictopleurini) in Madagascar

Helena Koivulehto, Luisa Orsini and Ilkka Hanski

18h25

COCKTAIL

September 22nd

PHYLOGEOGRAPHY AND SYSTEMATICS

Chairman: Jean-Luc Scemama

09h00 - 09h25

Molecular Phylogenetics of Tetratheca (Elaeocarpaceae) - Systematic and Historical Biogeographical Implications

Hannah McPherson, Darren Crayn and Maurizio Rossetto

09h25 - 09h50

Hybridization between Arctic and Temperate Species of Hares during the Glaciations in the Iberian Peninsula

José Melo-Ferreira, Pierre Boursot and Paulo C. Alves

09h50 - 10h15

Data Set Incongruence and Insights from the Fossil Record: The Canid Phylogeny

Joaó Muñoz-Durán

10h15 - 11h05

COFFEE BREAK-POSTERS SESSION

11h05 - 11h30

Genotypic Comparison of some Indian Chicken Populations with East Lancing Reference Populations

N. Pirany and K. Kiani

10th EVOLUTIONARY BIOLOGY MEETING AT MARSEILLES

11h30 - 12h55

Variation at Neutral and MHC Regions Highlight the Conflict between Maximising Diversity and Retaining Evolutionary Lineages in a Critically Endangered Australian Marsupial

Steve Smith and Jane Hughes

12h55 - 12h20

Evolution and Classification of Radiolaria

M.S. Afanasieva and E.O. Amon

12h20 - 12h45

Genome Editing Competences of Viruses

Guenther Witzany

12h45 - 14h15

LUNCH

PROBABILISTIC MODELS AND STATISTICAL TOOLS FOR CONCEPTS IN EVOLUTION

Chairman: Etienne Pardoux

14h15 - 14h55

Population Genetics of Adaptation

Wolfgang Stephan

15h05 - 15h25

Living Object as a Complex Network of Conditions and its Evolution

Andrzej Gecow

15h30 - 15h50

Monte Carlo Simulation of Evolvability

Stanislaw Cebrat, Marta Zawierta and Marek Wofigiel

15h55 - 16h25

COFFEE BREAK-POSTERS SESSION

16h25 - 17h05

Evolutionary Modeling and Sequence Insertions and Deletions

Gerton Lunter

17h15 - 17h35

Mapping Sequences by Parts

Gilles Didier and Carito Vargas

17h40 - 18h00

Constructing Bacterial Genome Phylogenies from Maximal Unique Matches

Frédéric Guyon and Alain Guénoche

18h00

AWARDS

POSTERS WITH FAST PRESENTATION

GENOME EVOLUTION

FP1: Optional Extra N- and C-Terminal Domains in Animal α -amylases

Jean-Luc Da Lage and Frédérique Maczkowiak

FP2: Molecular Phylogeny of Tunicates Inferred from 18S rRNA Sequences Using Secondary Structure Models

Georgia Tsagkogeorga, Marie-Ka Tilak, Xavier Turon, et al.

FP3: Co-Evolution of Genomic Intron Number and 5' Splice Sites: Implications for the Evolution of Alternative Splicing

Manuel Irimia, David Penny, Scott W. Roy

FP4: BioSide, a Biologist Dedicated Environment for Bioinformatics Programs

X. Bailly, S. Bigaret, P. Tanguy, et al.

FP5: Amount of Non-Coding Sequences Depends on Mutation Rate

Carole Knibbe, Antoine Coulon, Olivier Mazet, et al.

FP6: C.A.S.S.I.O.P.E Clever Agent System for Synteny Inheritance and Other Phenomena in Evolution

Virginie Lopez Rascol, Philippe Gouret, Simona Grusea, et al.

FP7: The Rieske Protein; a Case Study on the Pitfalls of Multiple Sequence Alignments and Phylogenetic Reconstruction

Wolfgang Nitschke, Evelyne Lebrun, Myriam Brugna, et al.

FP8: Multigene Family of Beta-1,4-endoglucanases from the Root-Knot Nematode Meloidogyne Incognita and Evolutionary Scheme for Phytonematode Family 5 Glycosyl Hydrolases

Marie-Noëlle Rosso, Terence N. Ledger, Stéphanie Jaubert, et al.

FP9: Evolutionary Study of the Large GH13 Family: Towards Improved Functional Annotation of the α -amylase-Related Proteins

Mark Stam, Pedro Coutinho, Etienne Danchin, et al.

FP10: Using Phylogeny to Understand Evolution of the Tropinone-Reductase Like Gene Family in Brassicaceae

Aura Navarro-Quezada, Theresia Eichner and Karl J. Schmid

CONCEPTS IN EVOLUTION AND EVOLUTION AT ORGANISM LEVEL

FP12: Birth Order as the Forgotten Factor in Cooperative Games

Alexandre Courtiol, Charlotte Faurie and Michel Raymond

10th EVOLUTIONARY BIOLOGY MEETING AT MARSEILLES

FP13: Tracking the Connection between Evolutionary and Functional Shifts Using the Fungal Lipase/Feruloyl Esterase Family

Anthony Levasseur, Philippe Gouret, Laurence Lesage-Meessen, et al.

FP14: Tracing Performance Trade Offs across Human Life Span

Ioannis D. Papadimitriou, Christos Papadopoulos and Alberto Minetti

PHYLOGEOGRAPHY AND SYSTEMATICS

FP15: Evolution of Parasitism Genes in the Heteroderidae Plant Parasitic Nematodes Family

A. Blanchard, O. Plantard, P. Castagnone, et al.

FP16: Wolbachia Diversity and Adaptative Specialization in an African Parasitoid Cotesia Sesamiae Cameron (Hymenoptera: Braconidae)

Antoine Branca, Stephane Dupas, Fabrice Vavre, et al.

FP17: Evolution and Chemical Ecology of an African Stem Borer, Busseola Fusca (Lepidoptera: Noctuidae)

Anne-Emmanuelle Felix, Brigitte Frérot and Jean-François Silvain

FP18: Multigene Phylogenetic Analysis of Lower Metazoans

A.V. Konstantinova and M.A. Nikitin

FP19: Adaptation to Altitude in Melanargia Galathea (Lepidoptera, Nymphalidae)

Gabriel Nève

FP20: Chronic Bee Paralysis Virus: Sequencing and Phylogenetic Analysis

Violaine Olivier, Philippe Blanchard and Magali Ribière

FP21: Annotation, Comparative and Evolutionary Analysis of Fungal Carbohydrate Active EnZymes (CAZymes). Evolutionary and Compartive Fungal CAZomics

Etienne G.J. Danchin, Corinne Rancurel, Pedro Coutinho, et al.

PROBABILISTIC MODELS AND STATISTICAL TOOLS FOR CONCEPTS IN EVOLUTION

FP11: Statistical Test for Conserved Genomic Regions

Simona Grusea

POSTERS

September 20th, 21st and 22nd

GENOME EVOLUTION

The HSP70 and HSC70 in Invertebrates/Vertebrates: Structural Comparisons and Evolution
M. Cibois, B. Moreau, B. Chénais, et al

Towards the Understanding of the Nk2 Class Genes Diversification in Metazoa: A New Model, Oscarella lobularis (Porifera, Demospongiae, Homoscleromorpha)
Eve Gazave, Pascal Lapébie, Emmanuelle Renard-Deniel, et al.

Evolution of Galectin Family in Mammals: A Story of Duplications, Gene Conversions and Positive Selection

Isabelle Gonçalves, Denis Houzelstein and Pierre Netter

The wnt Pathway in a Sponge Oscarella lobularis (Homoscleromorpha): Putative Function in the Metazoan Ancestor

Pascal Lapébie, Eve Gazave, Emmanuelle Renard-Deniel, et al.

Protogene: Turning Amino Acid Alignments into Bona-fide CDS Nucleotide Alignments

Sébastien Moretti, Fabrice Armougom, Vladimir Saudek, et al

Exploring Cytochrome P450 Diversity in a Cnidarian-Algal Symbiosis Using EST Analysis

C. Sabourault, E. Deleury, G. Garello, et al.

Cis-regulatory Element Evolution of Hox PG2 Genes in Teleosts

Jean-Luc Scemama and Edmund J. Stellwag

Phylogenomic Quantification of Gene Duplication in Animal Evolution

Romain Studer, Simon Penel and Marc Robinson-Rechavi

CONCEPTS IN EVOLUTION AND EVOLUTION AT ORGANISM LEVEL

Functional and Evolutionary Analysis of Alternatively Spliced Genes Suggests an Early Eukaryote Origin of Alternative Splicing

Manuel Irimia, Jakob L. Rukov, David Penny, et al.

Conceptual Bases for Quantifying the Role of the Environment on Genomes Evolution: The Participation of Positive Selection and Neutral Evolution

Anthony Levasseur, Ludovic Orlando, Xavier Bailly, et al.

A New Pipeline in Figenix to Detect Positive Selection

Sébastien Petit

10th EVOLUTIONARY BIOLOGY MEETING AT MARSEILLES

The Use Evolutionary Biology Concepts for Genome Annotation / A Call for an Evolutionary Biology Based Ontology

Pierre Pontarotti, Etienne G.J. Danchin, Anthony Levasseur, et al.

Development of Vitelline Cells in *Saccocolium Obesum* (Haploporidae: Trematoda)

Majid Sampour

Ultrastructure of Spermatozoa of the Trypanorhynch Cestodes: New and Supplementary Characters for Analysis of Cestode Evolution

Zdzislaw Swiderski and Jordi Miquel

PHYLOGEOGRAPHY AND SYSTEMATICS

The Phylogeography of Coereba Flaveola Revisited: Islands as a Source of Mainland Colonization?

Eva Bellemain, Eldredge Bermingham and Robert Ricklefs

A Molecular Phylogeny of Afrotropical Stem Borers (Lepidoptera : Noctuidae)

Cécile Campagne, Jean-François Silvain, Pascal Moyal

A Satellite DNA Library in Parthenogenetic Root-knot Nematodes, *Meloidogyne* spp.: Conserved Domains in Monomers as the Result of Evolutionary Constraints?

Philippe Castagnone-Sereno, Nevenka Mestrovic and Miroslav Plohl

The Mitochondrial Genomes of Two Chaetognaths: Comparisons and Phylogenetical Remarks

Roxane Barthélémy, Eric Faure and Jean-Paul Casanova

Scaling Properties of Intraspecific and Interspecific Phylogenies in the Tree of Life

E. Alejandro Herrada, Victor M. Eguiluz, Emilio Hernandez-Garcia, et al.

Planktonic Foraminifer Evolution at the Albian-Cenomanian and Cenomanian-Turonian Boundaries

Ludmila Kopaevich

Diversity of the Genus *Sargassum* in New-Caledonia

Lydiane Mattio

Conservation of Saproxy Beetles

Lena Melnikova

Comparison of Different Phylogenetical Analysis Methods in Egyptian Populations

Morgane Odabachian, Eric Bouzaïd, Alain Stevanovitch, et al.

Genomic Diversity of Ecuadorian Monkeys (Platyrrhini)

Bertha Ludeña, Juan Carlos Escobar and Jean-Christophe Pintaud