

November 28<sup>th</sup> and 29<sup>th</sup>, 2013

CNRS, Campus Gérard Mégie  
3 rue Michel-Ange, Paris 16<sup>e</sup>

## Colloquium **Evolution:** **Present and Future**

Thursday, November 28<sup>th</sup>, 2013

▶ 1:00 PM

**Reception - Coffee**

▶ 2:00 PM

**Introduction:** Laurent Kodjabachian, director of ITMO Cell biology, development and evolution; **Dominique Joly**, CNRS -Institute of ecology and environment; **Vincent Laudet**, Director of Institute of Functional Genomics of Lyon; **Thierry Grange**, director of ITMO Genetics, genomics and bioinformatics; **Thierry Galli**, deputy director of ITMO Cell biology, development and evolution

### SESSION 1: CELLULAR MECHANISMS OF DEVELOPMENT AND EVOLUTION

**Chairman: Laurent Kodjabachian**

▶ 2:10 PM

How rapid evolution did reshape the ancestral chordate genome in tunicates (oikopleura and other larvaceans), **Daniel Chourrout**, Bergen (Norway)

▶ 2:50 PM

Filamentous development in brown algae: alternative processes of multicellularity, **Bénédicte Charrier**, Roscoff

▶ 3:10 PM

Clues about the origin and evolution of metazoan embryo polarity from studies in the cnidarian *Clytia*, **Evelyn Houlston**, Villefranche-sur-Mer

▶ 3:30 PM

Robustness and evolution of *C. elegans* vulva development, **Marie-Anne Félix**, Paris

▶ 3:50 PM

What studies in planarians reveal about animal centrosome structure and function, **Juliette Azimzadeh**, Paris

▶ 4:10 PM

**Coffee break**

▶ 4:40 PM

Regulatory mechanisms of emergence and diversification of morphological patterns, **Benjamin Prud'homme**, Marseille

▶ 5:00 PM

Regenerating the body: old questions, new models, **Michalis Averof**, Lyon

### SESSION 2: EVOLUTION AND PATHOLOGY

**Chairman: Vincent Laudet**

▶ 5:20 PM

The Evolutionary Biology of Human Body Fatness, **Jonathan Wells**, London (UK)

▶ 6:00 PM

Preventive Evolutionary Medicine of Cancers, **Michael Hochberg**, Montpellier

▶ 6:20 PM

Population genetic tools to dissect immunity to infection in humans,



## Friday, November 29th, 2013

### SESSION 2: EVOLUTION AND PATHOLOGY (PART 2)

Chairman: Vincent Laudet

- ▶ 9:00 AM Evolutionary thinking in medicine, Michel Raymond, Montpellier
- ▶ 9:20 AM Biased gene conversion: the dark side of recombination, Laurent Duret, Lyon

### SESSION 3: ADAPTATION TO ENVIRONMENT

Chairman: Dominique Joly

- ▶ 9:40 AM Tracing the genetic basis of adaptations in the house mouse, Diethard Tautz, Ploen (Germany)
- ▶ 10:20 AM **Coffee break**
- ▶ 10:50 AM Genetic basis of adaptation: molecular evolution of mimicry in butterflies, Mathieu Joron, Paris
- ▶ 11:10 AM Metabolic evolution of a *Drosophila* fly adapted to its cactus host, Virginie Orgogozo, Paris
- ▶ 11:30 AM Development and evolution of the brain in the blind cavefish *Astyanax mexicanus*: drift and selection, Sylvie Rétaux, Paris
- ▶ 11:50 AM The dynamics of hybridization and speciation in forest trees, Rémy Petit, Bordeaux
- ▶ 12:10 PM Rapid adaptive changes in morphology and function in natural population, Anthony Herrel, Paris
- ▶ 12:30 PM **Lunch break**
- ▶ 2:00 PM Round Table on future challenges in Evolutionary Biology led by Michel Vervoort

### SESSION 4: NEW OUTLOOKS ON EVOLUTION

Chairman: Thierry Grange

- ▶ 2:40 PM What have we learned from 25 years of molecular phylogenies of the animal kingdom? Max Telford, London (UK)
- ▶ 3:20 PM Genetic and non genetic inheritance: a current paradigm shift, Etienne Danchin, Toulouse
- ▶ 3:40 PM Evolution and Biodiversity: the last refuge for basic research in Biology? Jean-Michel Claverie, Marseille
- ▶ 4:00 PM How horizontal transfer shapes the biochemistry, genetics and behavior of bacteria, Eduardo Rocha, Paris
- ▶ 4:20 PM A brief history of human evolution: are climates and geography the main driving forces? Jean-Jacques Jaeger, Poitiers
- ▶ 4:40 PM **End of colloquium**



**REGISTRATION (free but mandatory) on:**  
<http://evolution.sciencesconf.org>