



International Conference on Holobionts, Paris (Natural History National Museum), April 19-21, 2017

It is becoming increasingly clear that the development, nutrition, physiology and health of most organisms are influenced by the complex microbial communities they host, hereby shaping their ecology and evolution. Biology is indeed undergoing a paradigm shift, where individual phenotypes are seen as a result of the combined expression of the host and associated microbe genomes, leading to the popularization of the holobiont concept (the host and its microbiota) and the hologenome (the collective genomes of a holobiont). Ecological and technical advances, especially in next generation sequencing technologies, have greatly contributed to this conceptual shift, thereby revealing the diversity and roles of the microbes hosted by diverse organisms, from people and plants, to sponges and insects. The scientific community has now recognized that the host organisms cannot be studied without taking resident microbiomes into account, making holobiont research imperative across numerous fields of the life and medical sciences.

The objective of the **International Conference on Holobionts, Paris 2017** is to, for the first time, bring scientists together who are interested in holobiont systems and their study. This conference will highlight major advances in defining the key roles of host-borne microbiota in the ecology and evolution of higher organisms and the potential implications for human health, food production and ecosystem functioning. In addition, the conference will offer a platform for debate related to the definition, assembly and evolution of holobionts. By bringing a range of holobiont researchers together, the **International Conference on Holobionts** seeks to help consolidate the field, facilitate exchange of knowledge across systems and approaches and stimulate further developments in this emerging discipline.

Scientific program

This conference will address the following topics:

1. Holobionts and evolution
2. Emerging approaches to holobiont research
3. Microbiota and host health
4. Mechanisms for holobiont assembly
5. Metabolic interactions between host and microbiota

For each topic, we encourage oral and poster communications on holobiont systems from different perspectives including theoretical, empirical, fundamental and applied researches.

Provisional list of invited speakers:

Joël Doré (INRA Jouy, France)

Ute Hentschel (Helmholtz Centre for Ocean Research, Kiel, Germany)



Thierry Heulin (CEA Cadarache, France), **confirmed**
Nancy Moran (University of Texas, Austin, Texas, USA), **confirmed**
Jeroen Raes (Vrije Universiteit, Brussel, Belgium), **confirmed**
Eugene Rosenberg (Tel Aviv University, Israel), **confirmed**
Paul Schulze-Lefert (Max Planck Institute Koln, Germany), **confirmed**
Kevin Theis (Wayne State University, Detroit, Michigan), **confirmed**

Practical aspects

This conference will last 2.5 days, from April 19th 2 p.m. to from April 21st 4 p.m. It will take place right in the center of Paris, in the heart of “Quartier Latin” in the prestigious Grand Amphithéâtre of the Natural History National Museum (<https://www.mnhn.fr/fr>). **Note that for space constraints, we won’t be able to take more than 300 registrations.** Registrations will open by November 15, 2016 and be closed by January 30, 2017. A dedicated website for registration and practical information is under construction at <https://symposium.inra.fr/holobiont-paris2017>.

Organizing institutions:

CNRS (Centre National de la Recherche Scientifique), INRA (Institut National de la Recherche Agronomique), MNHN (Muséum National d’Histoire Naturelle). This conference is a joint initiative of the Groupe de Recherche en Génomique Environnementale (GDR GE) and the INRA Métaprogramme Méta-omiques et écosystèmes microbiens (MEM).

Members of the Scientific Committee:

Bourguet-Kondracki Marie-Lise (CNRS, MNHN Paris), Bourtzis Kostas (FAO/IAEA, Vienna, Austria), Buée Marc (INRA Nancy, France), Faure Denis (CNRS Orsay, France), Heulin Thierry (CNRS Marseille, France), Joly Dominique (CNRS Paris, France), Kowalchuk George (Utrecht University, The Netherlands), Marchesi Julian (Imperial College, UK), Médigue Claudine (CNRS Genoscope Evry, France), Mougél Christophe (INRA Rennes, France), Selosse Marc-André (MNHN Paris), Simon Jean-Christophe (INRA Rennes, France), Vandenkoornhuyse Philippe, (University Rennes 1, France)