

INTERNATIONAL COLLOQUIUM

Symbioses, transdisciplinary prospects

June 8 - 9, 2023

Organized by SOCA Plateform of MetaGenoPolis Project. Confluence:
Sciences and Humanities Research Unit , Lyon Catholic University



Location:

Face to face and videoconference
Campus Saint-Paul | UCLy
Amphi F. Perroux - A152
10 place des Archives
69002 Lyon

INRAE

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UCLy
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CONFLUENCE
Sciences & Humanités

PRESENTATION

When Anton de Bary and Albert Franck studied the lichen at the end of the 19th century, they discovered a new way of living that consisted of the lasting association between two different species – a fungus and an algae – that form a coherent structural and physiological entity considered as new life form. The term symbiosis was already used in a political context during the Greek Antiquity and since the 16th century, there had been observations by naturalists describing the fact that different species could partner-up in life in diverse ways. But it was the lichen discovery that offered symbiosis a scientific status and symbiosis from thereon has been used to designate several forms of enduring associations between different species.

The now-known symbiotic relationship between humans and microbes located at the interfaces between the body and the outside world (mouth, digestive tract, skin...), had to wait until the end of the 20th century for the invention of the powerful sequencing tools to be able to reliably detect the presence of these life-partners. The revealed tremendous genetic and species diversity of these invisible living communities opens new fields in a large number of disciplines, such as ecology or medicine.

These different approaches to symbiosis show that the notion has become more complex and that it has become a research object in different disciplines. What conceptual, explanatory, heuristic or creative contributions does it carry? If we consider, on the one hand, the partners in the symbiotic relationship and the type of relationship they maintain and, on the other hand, the use that is made of the word symbiosis, we can propose that there is not a notion of symbiosis, but symbioses between living organisms or parts of living organisms and perhaps by metaphorical extension, symbioses between living and non-living organisms.

To understand the longevity of symbiosis, used from politics to biology, from architecture to astronomy, from microbiology to economics, we propose to hear the analyses of researchers who, starting from the discourse on symbiosis already existing or in the making in their discipline, will circulate between disciplines in order to discover new uses, to analyze analogies, extensions, metaphors or, on the contrary, possibly inappropriate uses. Speakers from a wide range of disciplines [Biological Sciences, Human and Social Sciences, History, Linguistics, Medicine, Philosophy] will discuss around three main axes:

Axis 1: Identity and future of symbiotic partners. What is the origin of symbiosis and what are the evolutions of the notion of symbiosis? What has changed for the partners?

Axis 2: Characterization of symbiotic relationships. What type of relationship can be considered as symbiotic within a certain field or discipline? Can we find analogies between symbiotic relationships in different disciplines?

Axis 3: Transdisciplinary prospects of the notion of symbiosis. Why this longevity and in which fields can it be a step forward concerning the relation between humanity and all other living beings and communities?

Program - June 8th:

9:00 - 9:15

Opening

Pr. Valérie Aubourg, Vice-Rector and Director of Confluence: Sciences and Humanities Research Unit (UCLy, France)

9:15 - 9:30

Introduction

Dr. Béatrice de Montera and **Professor Claire Brun** (UCLy, France)

Axis 1: Identity and evolution of symbiotic partners - Chairman: Dr. Juan Vidal

9:30 - 10:15

Symbiosis from the Ancien Régime (16th-18th centuries) to the present day: an epistemological and lexicological study

Dr. Moreno Campetella (UCLy, France)

10:15 - 11:00

Historical emergence of research on cooperation

Pr. Marc-André Sélosse (MNHN, Museum National d'Histoire Naturelle, France)

11:00 - 11:15

Break and coffee

11:15 - 12:00

Philosophy of symbiosis and its relevance in contemporary biology

Dr. Javier Suarez Diaz (Universidad de Barcelona, Spain)

12:00 - 12:30

Discussion

12:30 - 2:30

Lunch break

Axis 2: Symbiotic relationship - Chairman: Dr. Laurence Terzan

2:30 - 3h15

Heuristics of symbiotic relationship in Microbiology and Philosophy of Biology

Pr. Joël Doré (INRAE - Institut National de la Recherche en Agriculture, Alimentation et Environnement & Université Paris Saclay, France) and **Dr. Béatrice de Montera** (UCLy, France)

3h15 - 4h00

Autonomy, individuation, symbiosis

Dr. Matteo Mossio (CNRS – Centre national de la Recherche scientifique & Université de Paris 1 Panthéon-Sorbonne, France)

4h00 - 4h15

Break and coffee

4h15 - 5h00

Interactions/interpenetrations of the symbiotic players

Pr. Scott Gilbert (Swarthmore College, USA)

5h00 - 5h30

Discussion

5h30 - 5h45

Conclusion of the day

Pr. Claire Brun and **Dr. Béatrice de Montera**

Program - June 9th:

Axis 3: Transdisciplinary prospects - Chairman: Dr. Sylvie Allouche

- 9:00 - 9:45 *How the concept of symbiosis impacts the field of medicine*
Dr. Laurence Terzan (Université Paris Saclay & UCLy, France)
- 9:45 - 10:30 *Symbiosis as a worldview*
Pr. Hub Zwart (Erasmus Universiteit Rotterdam, Netherlands)
- 10:30 - 10:45 Break and coffee
- 10:45 - 11:15 *Comment*
Pr. Bernadette Bensaude-Vincent (Université Paris 1 Panthéon-Sorbonne, France)
- 11:15 - 12:00 *Round-table discussion* with the **Colloquium speakers**
- 12:00 - 12:15 *Conclusion and closure of the Colloquium*
Pr. Claire Brun and **Dr. Béatrice de Montera**

Admission: Free registration

Face to face and videoconference

[Registration link](#)

UR - Pole 5

Plateforme SOCA (UCLy) of ANR project MetaGenoPolis

10 place des Archives – 69002 LYON

Registration contact : symbioses.jun23@gmail.com

Special requests : cbouchot@uclly.fr & bdemontera@uclly.fr

Colloquium organized by

Confluence: Sciences and Humanities Research Unit (UCLy)

Language: French and English

Colloquium coordination: Béatrice de Montera and Claire Brun

Scientific committee: Sylvie Allouche, Claire Brun, Moreno Campetella,

Béatrice de Montera, Michel Raquet, Laurence Terzan, Juan Vidal

Organisation committee: Caroline Bouchot, Najate Dagron,

Lorraine Guitton

