

THE MAGAZINE

- February 2020 -

Moving up

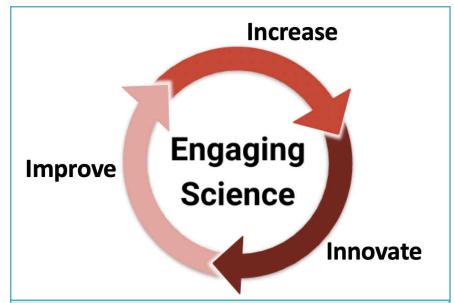
Dear PhillnBioMed members,

The field of Philosophy of Science seems to be gaining momentum. In this issue you will find three job offers, a new book series and a workshop teaching you to make your voice heard by the greater public.

Whether you agree that things are chaning or if you disagree, write to contact@philinbiomed.org.

Cordially, your

PhillnBioMedMagazine team



The Center for Public Engagement with Science directed by PhillnBioMed member Angela Potochnik aims at increasing engagement with science by inovating new forms and improving the quality of science engagement.

The why and how of Public Engagement

Working in an interdisciplinary field is challenging as you have to interact with two very different communities. Probably every scholar working at the frontier between science and philosophy has already confronted the dilemma of where to publish a certain article: too scientific for a philosophy journal and too philosophic for a scientific journal. Given these difficulties it is hard to see why one should add another factor to the equation: the public.

Public engagement is more than to educate the public on a certain topic, it includes mutual learning and often leads to new perspectives for both sides. To practice public engagement is not some philantropic act, where the researcher donates time and will get nothing in return. A growing body of work suggestes that scientists benefit from interacting with the public. Plus more and more funding bodies make public engagement a requirement to be eligible for funding.

Despite the benefits of public engagements, only few scholars participate in it. They fear it will take too much time in their already overflowing calenders. But solutions exist and even a small contribution can go a long way. On May 13th-15th the Center for Public Engagement with Science at the University of Cincinnati is hosting a workshop Public Engagement with Science.

The workshop aims to (1) develop connections between philosophy of science and other disciplines with expertise in public engagement and (2) identify and help develop distinctive roles for philosophers of science in the interdisciplinary project of engaging the public with science. Registration is free, but mandatory. More information can be found under: https://ucengagingscience.org/workshop/.

Upcoming

March

27th-28th The Problem of Cognitive Ontology, Pittsburgh, USA

April

7th L'environnement sculpte -t-il le gène ?, Bordeaux, France

May

5th-7th Final Conference of the ERC IDEM project, Bordeaux, France

13th-15th Public Engagement with Science workshop, Cincinnati, USA

25th-29th Summer School "Philosophy in Biology and Medicine", Carcans, France

June

8th-12TH Philosophy of Biology at the Mountains, Salt Lake City, USA

September

7th-11th EASPLS Summer School "Dealing with complexity in the life sciences", Klosterneuburg, Austria

The Problem of Cognitive Ontology

Functional brain imaging studies try to map patterns of activation to cognitive functions, and usually rely upon functional task de-composition based on hypotheses derived from intuition and cognitive psychology.



The tasks we postulate constitute a cognitive ontology. What is the epistemic status of these functional commitments? Do we have reason to believe they accurately track the fundamental building blocks of cognition? Can other areas of neuroscience help constrain our ontologies?

On March 27-28 the Center for Philosophy of Science in Cincinnati is organizing a workshop on The Problem of Cognitive Ontology - Implications for Scientific Knowledge. This interdisciplinary conference will focus upon these questions and their philosophical implications, and will explore possible methods for addressing these philosophical concerns, such as data-driven discovery methods for cognitive functions.

Does the environment sculpt the gene?



For centuries scholars have debated if and how the environment can influence or alter our hereditary traits. When genes were discovered it seemed as though the discussion was decided in favor of those who negated any environmental factors. But a number of researchers continued to look for an environmental impact on our genetic makeup.

On April 7th PhillnBioMed member Sophie Gerber is organizing a seminar, which takes a

look at some renowned historical researchers and how they treated the question "Does the environment sculpt the gene?". A short discription (in French) of the presentations can be found here.

Dealing with Complexity in the Life Sciences

The European Advanced School in the Philosophy of the Life Sciences (EASPLS) consortium will hold its sixth biennial summer school on "Dealing with Complexity in the Life

Sciences" at the Konrad Lorenz institute for Evolution and Cognition Research (KLI) in Klosterneuburg near Vienna. Young scholars (PhD students and early post-doctoral researchers) in the history, philosophy and social studies of the biological, biomedical, and environmental sciences are invited to apply. The registration fee is €350. The summer school will cover lunches and the opening dinner at the KLI. Participants will take care of their own accommodation and travel expenses. For updates and more details see: https://www.kli.ac.at/en/events/event_ calendar/view/550.



Call for contributions: Renegotiating Disciplinary Fields in the Life Sciences

Recent and ongoing debates in biology and still more in the philosophy of biology reveal a widespread dissatisfaction with traditional explanatory frameworks. This is, for instance, the case of Neo-Darwinism, as it has been frequently advocated that evolutionary biology should replace the traditional gene-centered perspective with an organism-centered extended evolutionary synthesis.



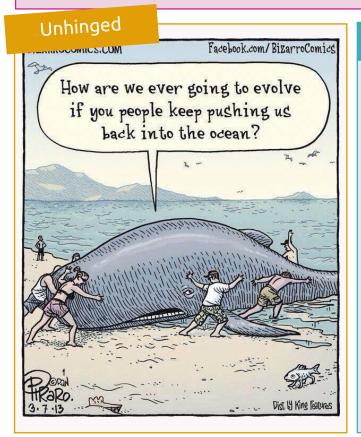
To some extent, growing awareness of these conceptual issues and the contrasting views defended in their regard can be construed as marks of healthy debates in the field; however, this is also arguably a symptom of the need to revisit traditional, unchallenged partitions between the specialist disciplines within the life sciences.

Contributions are invited to a special issue of Philosophies on "Renegotiating Disciplinary Fields in the Life Sciences". Philosophies is open access. No fee will be asked for papers accepted for publication in this special issue. For more information visit the journal's website or contact guest editor Alessandro Minelli (Padova) alessandro.minelli@unipd.it.

Two Postdoc position in Animal Sentience

PhillnBioMed member Jonathan Birch is recruiting two postdocs for his new ERC project Foundations of Animal Sentience (ASENT). The first position is in Comparative Psychology or Neuroscience and the second one in Animal Welfare Science and/or Animal Ethics. Both positions are open to PhD holders in Psychology, Cognitive Science, Neuroscience, Animal Welfare Science or Philosophy. Application **deadline is March 6**th.

ASENT aims to provide a clear conceptual framework for thinking about animal sentience. In addition to this foundational work, ASENT will also propose a series of experimental tests for sentience, using bees as a test case, and will provide an assessment of the links between sentience, welfare and the ethical status of animals.



Associate Professor position

A position for an Associated Professor (Philosophy of Medicine, Philosophy of Biology,

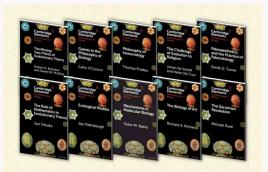


Philosophy of Science) has opend up at the University of Bordeaux, France.

Candidates will have developed an expertise in any topic of medical science (e.g. a disease, a method, a subfield) by applying conceptual tools from philosophy of science to specific problems in medicine.

The new professor will join a group of philosophers tightly collaborating with biologists and medical scientists. She or he will teach in English in an international Master program of "philosophy in science", to be created soon.

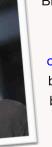
Cambridge University Press opens Elements to Philosophy of Biology



As part of its Elements Series, Cambridge University Press has started a new branch Elements in the Philosophy of Biology. The series provides concise and structured introductions to all of the central topics in the philosophy of biology. The Elements format is between a book and a journal, presenting peer-reviewed scholarly research organized into a focused series.

So far 10 books have been published in *Elements in the Philosophy of Biology* and three more are about to be published.

Topics range from "The Darwinian Evolution" and "Mechanisms in Molecular Biology" to "Ecological Models" and "Games in the Philosophy of Biology".



PhillnBioMed member Thomas Pradeu has signed the issue on Philosophy of Immunology. In it he shows that immunology is central to contemporary biology and medicine, with its most significant contribution to philosophy being the understanding of biological individuality. Immunology also offers answers to some of the most interesting philosophical questions. What is the definition of life? How are bodily systems delineated? The book is

available online under an open access licence and can be downloaded as PDF.

3 questions for Margaret McFall-Ngai

Margaret McFall-Ngai is the Director of the Pacific Biosciences Research Center and Professor at the Kewalo Marine Laboratory in Hawai'i, USA. Her research helped expand the microbiology field, primarily focused on pathogenicity and decomposition at the time, to include positive microbial associations. Today she is best known for her work on the interactions between the Hawaiian bobtail squid, *Euprymna scolopes* and bioluminescent bacteria, *Vibrio fischeri*. Margaret McFall-Ngai is member of the PhillnBioMed Scientific Committee.

1. What is your main research focus?

I have two research interests:

- Symbiotic associations between animals and bacteria: signaling between partners during symbiosis establishment and maintenance; the influence of bacteria on animal development; the evolution of animal-bacterial interactions
- The 'design' and developmental induction of tissues that interact with light: evolutionary tinkering
- 2. What place do conceptual questions take in your research?

The conceptual framework is fundamental to crafting the approach to our experimental work. As such, the conceptual questions underlying our research are foundational.

3. What are (conceptual) questions that you would like to explore in the future?

How will a recognition of the microbial world as critical for the health of all corners of the biosphere change biology? What fundamental axioms will be challenged/remain the same? What are the steps that biology might take to integrate macro- and microbiology?



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