

A new beginning

Dear PhilInBioMed members,

The new academic year has begun and a new year means new opportunities. For example the opportunity for a new job, a stay at another university or to attend one of a variety of PhilInBioMed themed conferences.

As always we would like to hear from you so write to us at contact@philinbiomed.org.

Cordially, your
PhilInBioMed Magazine team



It's not always easy to find the right career path, the PhilInBioMed networks tries to point out interesting opportunities (© John T)

A network of opportunities

The aim of the PhilInBioMed network is to further interdisciplinarity between Philosophy, Biology and Medicine. This includes promoting opportunities for people interested in working interdisciplinarily. Therefore, the PhilInBioMed network sees itself also as a [platform](#) for information on job openings, fellowships or other opportunities that might benefit its members, such as:

University of Utah, Salt Lake City: [Assistant Professor/Associate Professor](#): The University of Utah Department of Philosophy, in collaboration with the Office of Research Integrity and the Center for Clinical and Translational Science, seeks to hire a tenure-line professor at the rank of Assistant or Associate Professor to begin in Fall 2020.

[Presidential Scholars Program at Columbia University](#): The program appoints up to three postdoctoral scholars for a three-year term. Each scholar selects at least two senior mentors: one drawn from Columbia's neuroscience, psychology, or biology faculty, and the other(s) from faculty in the arts, humanities, or social sciences. The scholars' research is showcased yearly at an event open to the public.

[One year fellowships at the Center for Philosophy of Life Science](#) at the University of Pittsburgh. Through its visiting fellowprogram the Center for Philosophy of Science invites postdocs and more senior researchers to work on a project of their own choosing for one year. Each fellow will receive a stipend, an office in the center, as well as access to the centers many activities.

If you have a job opening or other opportunity you would like to share with the PhilInBioMed community, we will be happy to post it on our [website](#). Just write to contact@philinbiomed.org.

Upcoming

October 2019

3rd-5th Conference [The Definitions of Humanity](#),
Bordeaux, France

11th [What is an individual organism?](#), Krakow, Poland

14th-15th 2nd meeting of
[the PhilInBioMed international network](#),
Bordeaux, France

November 2019

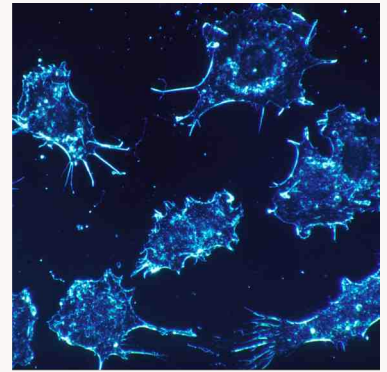
18th - 19th Conference
[Mind-Body](#), Bordeaux,
France

January 2020

20th -21st 2nd [Philosophy of Cancer Workshop](#),
Bordeaux, France

Call for abstracts: 2nd Philosophy of Cancer Workshop

Cancer is one of the main causes of death globally according to the World Health Organization. Only recently has cancer started to become an object of study for philosophers of biology and philosophers of medicine. In particular, the scientific explanation, definition, classification and prediction of cancer as a biological and medical phenomenon face many epistemological challenges.



After a successful first workshop in 2018, the call for abstracts is ongoing for the second edition. The organizing committee welcomes abstracts for 20 minutes' oral presentations on subjects that explore a problem with a conceptual, theoretical, methodological and/or philosophical approach and directly address questions relevant to cancer research. The deadline is October 7th 2019. For more information visit: www.philinbiomed.org/event/2nd-philosophy-of-cancer-biology-workshop/

2nd PhilInBioMed meeting approaching fast



The 2nd meeting of the PhilInBioMed international network is just around the corner (October 14th - 15th) and the panel of speakers promises for a very stimulating conference. Besides the two plenary speakers Eugene Koonin and Elliott Sober, there will be 10 invited speakers and 8 selected talks. Also this year, for the first time, a poster session will be held.

Topics include germ line regeneration, phage therapy, supercorals and even sexual desire. To see the full program and abstracts visit the conference website: www.philinbiomed.org/event/second-international-meeting.

Interdisciplinary workshop on the mind-body problem



Remember the last time you bumped your toe against a wall causing excruciating pain or when your willpower drove you to run farther even though you were dead tired. These examples appeal to what philosophers have called the mind-body problem. Although the mind-body problem has its origins in philosophy, several medical and scientific fields, for example psychosomatic medicine and cognitive science, have addressed it.

On the 18th-19th of November 2019 Scientist Jan Pieter Koonin from the University of Bordeaux, is organizing a workshop in Bordeaux entitled: [The mind-body problem in philosophy, medicine and biology: Mind the gut microbiota, neuroimmune and neuroendocrine interactions](#). The aim of the workshop is to encourage philosophers, physicians and scientists to interact and to gently take everyone out of their comfort zone. In particular, the organizers would like 1) to encourage physicians and scientists to consider the implications of some of the positions relative to the mind-body problem, and 2) to invite philosophers to address other aspects of the mind-body problem than those most typically considered. Thematically the workshop will be focused on fields trying to relate mental states to changes in neuroendocrine and neuroimmune interactions as well as, more recently, to modifications of gut microbiota.

A symposium on Philosophy in Science at the EPSA meeting

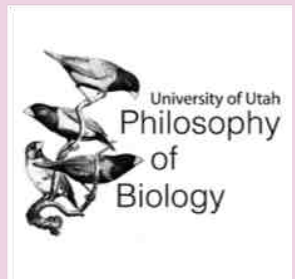
Ralph Adolphs, Lucie Laplane, Maël Lemoine, Tim Lewens and Thomas Pradeu have held a symposium on philosophy in science named "Can Philosophers Contribute to Science, and If So, How?" at the EPSA meeting, which was held from the 11th-14th of September in Geneva, Switzerland.

Maël Lemoine and Thomas Pradeu opened it with a presentation of the field of philosophy in biology and medicine. Then Lucie Laplane presented the PhiLabo project, which consists in using philosophical concepts to design experiments (and vice versa).

Tim Lewens presented the debates on niche construction in evolutionary biology. Ralph Adolphs, himself a neuroscientist, presented his collaboration on emotions with Daniel Andler, a philosopher of mind.

New Undergrad Major in Philosophy of Science in Utah

The University of Utah has just launched a new [undergraduate major in Philosophy of Science](#). The majors are expected to satisfy both a philosophy and a science requirement. The philosophy requirement is satisfied with courses in history & philosophy of science, applied ethics, logic, and history of philosophy. The science requirement may be satisfied either by taking at least three upper-division courses in a single scientific or social science discipline, or by majoring in a science or social science.



One of the goals is to train students in interdisciplinary reasoning. More than just asking students to take classes in lots of different disciplines, they are expected to be able to bring the skills and knowledge from one set of classes to another. The aim is to train them to be innovative and creative thinkers, and to bring these skills to the intersection of philosophy and science.

Unhinged

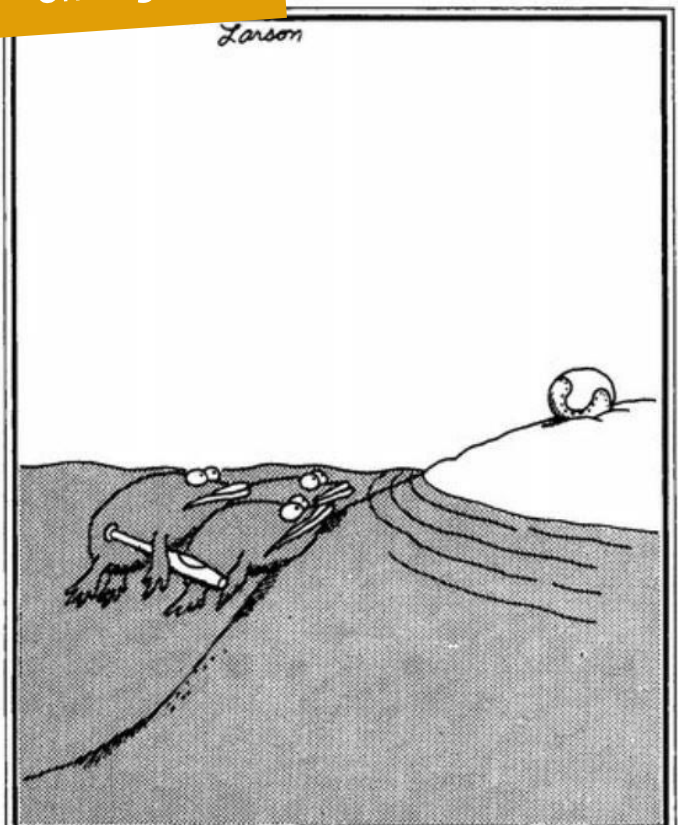
New Philosophy in Science course



The University of Bordeaux offers a new postgraduate training course [Philosophy in science: conceptual approaches applied to biological and medical research](#). The course aims to equip medical doctors, biologist and neuroscientists with the conceptual tools of philosophy of science.

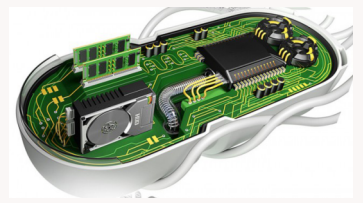
Philosophy is not conceived here as a reflection about science, but rather as a set of methods to improve research relevance and efficacy. At the end of the program, participants will submit a paper, written in collaboration with the philosopher who supervises them, to a scientific journal.

Inscriptions are open to everyone, but for the moment classes are held in French. In the future organizers plan to offer the course in English.



The cell as a self-organizing individual

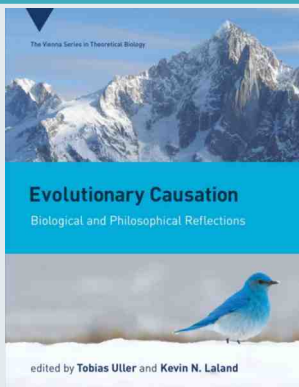
KLI senior fellow Daniel Nicholson has just published a paper titled '[Is the Cell Really a Machine?](#)' in the Journal of Theoretical Biology (vol. 477 [21 September 2019] pp. 108-126) that effectively illustrates how philosophical examinations can help advance theoretical debates in molecular and cell biology.



Nicholson draws on an impressively broad range of recent experimental findings to suggest that the conventional reductionistic and deterministic view of the cell promoted by the founders of molecular biology is increasingly giving way to an understanding of the cell that emphasizes the dynamic, self-organizing nature of its constitution, the fluidity and plasticity of its components, and the stochasticity and non-linearity of its underlying processes.

Nicholson shows how the cell manages to generate order out of chaos, he maintains that every cell (even genetically identical ones) needs to be construed as a unique individual, and he suggests that physics rather than engineering will ultimately prove most helpful in understanding cellular complexity. The paper has been recommended as being of "exceptional significance" by leading scientists in the online platform F1000Prime and it is currently the most downloaded paper in the Journal of Theoretical Biology.

New interdisciplinary book on Evolutionary Causation



Most scientific explanations are causal. This is certainly the case in evolutionary biology, which seeks to explain the diversity of life and the adaptive fit between organisms and their surroundings. The nature of causation in evolutionary biology, however, is contentious. How causation is understood shapes the structure of evolutionary theory, and historical and contemporary debates in evolutionary biology have revolved around the nature of causation.

Tobias Uller and Kevin Laland have now published the book [Evolutionary Causation: Biological and Philosophical Reflections](#) at MIT Press. The book brings together biologists and philosophers to offer a comprehensive, interdisciplinary treatment of evolutionary causation. The book is part of the [Vienna Series in Theoretical Biology](#) and will be the subject of a thread of [blog posts](#) written by Lynn Chiu.

Understanding multicellularity or the importance of the intracellular space



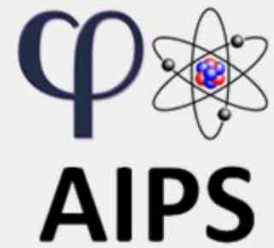
Multicellularity exists in all domains of life, spanning from microbial biofilms to plants and metazoans. Clearly multicellularity offers many advantages (increase in size, division of labor, increased complexity), but also comes with a number of challenges (control and coordination of cells, availability of nutrients and signaling molecules,...).

A number of publications have looked at the solutions found by living organisms to counter the problems of multicellularity. Practically all of those studies have taken a cell-center point of view in their analysis. A new publication in *frontiers in Physiology* takes a look at the intracellular space. The article [Understanding Multicellularity – The Functional Organization of the Intercellular Space](#) argues that seeing cells as the only actors in multicellularity has led to the omission of some fundamental features. In order to fully understand multicellular forms of life, the authors - Leonardo Bich, Thomas Pradeu and Jean-François Moreau - claim that the intercellular space has to be taken into account. By this they mean not only considering the space in which cells operate, and how they specify it, but also how the organization of space, in turn, has a direct influence on cell fate and behavior.

Two more PhillnBioMed members elected to AIPS



We are happy to announce that two members of PhillnBioMed, [Sabina Leonelli](#) and [Thomas Pradeu](#), have recently been elected to the [Académie Internationale de Philosophie des Sciences](#) (AIPS – International Academy for the Philosophy of the Sciences). They join another PhillnBioMed member, [Elliott Sober](#), who is already a member of the Academy.



The aim of the Academy is to reach a synthesis on the fundamental questions of the philosophy of the sciences in an interdisciplinary manner. Founded in 1947 by a Dominican Friar, Father Stanislas Dockx, a philosopher and theologian who was also a physicist and mathematician, the Academy has always counted among its members both philosophers in science and leading scientists interested in philosophical questions. Since 1961 the AIPS organizes an annual conference at different universities throughout the world.

3 questions for Samir Okasha

[Samir Okasha](#) is Professor of Philosophy of Science at the University of Bristol (UK) and a specialist of foundational and conceptual questions surrounding evolutionary theory. For his book [Evolution and the Levels of Selection](#) he won the [Lakatos Award](#) in 2009. In 2018 he was appointed a Fellow of the [British Academy](#). Samir Okasha is a member of the [PhillnBioMed Scientific Committee](#).

1. What sparked your interest for philosophy of science?

My undergraduate degree was in Philosophy and Economics, but for many years I was mainly interested in "pure" analytic philosophy - areas such as language, logic, epistemology, and mind. But gradually I gravitated towards the philosophy of science, mainly I think because I found analytic philosophy somewhat too abstract and craved something with a more empirical orientation. In some ways this was an odd choice, as I didn't have a strong background in natural science, so it meant doing a lot of self-study. But I don't regret it.

2. What is your main research focus?

Most of my research has been on the philosophy of biology, where I have focused on conceptual and foundational issues in evolutionary theory. My first major research project focused on the "levels of selection" question, and culminated in my 2006

book [Evolution and the Levels of Selection](#).

My second major project focused on the use of concepts

from rational choice theory

in evolutionary biology, and in particular on the notion of agency; this culminated in my 2018 book [Agents and Goals in Evolution](#). I have also worked on topics in the general philosophy of science from time to time, in particular induction and confirmation.

3. What are the topics you want to explore in the future?

It's hard to say. I tend to simply follow my interests, and see where they lead. The interface between philosophy of biology and philosophy of mind has always interested me. Of course there has been a lot of work at this interface, but I think there is plenty more to be done.

