

PhilInBioMed

# THE MAGAZINE

- December 2019 -

## Happy Holidays

Dear PhilInBioMed members,

The Holiday Season is upon us and traditionally that is a time of deadlines, stress, and too much food. But it is also a chance to take a look of what lies ahead and as detailed in this edition, 2020 promises to be an eventful year.

Wishing you a relaxed end of the year and a good start in into 2020!

Cordially, your  
[PhilInBioMedMagazine team](#)



The EASPLS summer school in 2020 stands under the motto *Dealing with the Complexity in Life Sciences*. The call for applications is currently open.

## Two calls for interdisciplinary summer schools in 2020

The surest way to have a durable impact on any scientific field; is to train the next generation of researchers. Initiating young scholars in philosophy, the life sciences and medicine to an interdisciplinary approach, is therefore one of the main aims of the PhilInBioMed network. **In 2020 two interdisciplinary summer schools** will be organized or co-organized by PhilInBioMed member institutions. For both summer schools calls for applications are currently open.

The first takes place from **May 25th-29th in Carcans** in the south of France and is organized by the **University of Bordeaux and Thomas Pradeu's ERC IDEM project**. Entitled **Philosophy in Biology and Medicine** this summer school will bring together 20 young scholars from the fields of philosophy of sciences, the life sciences and medicine. They learn to use interdisciplinary methods to address conceptual issues in scientific research. The aim is to equip the participants with methodological tools, which will benefit them throughout their career.

The second summer school is organized by the **European Advanced School in the Philosophy of the Life Sciences (EASPLS) consortium** and will take place from September **7th-11th in Klosterneuburg**, Austria. The EASPLS summer school is a biennial event that aims at fostering research, facilitating collaborations, and providing professional training for students in the field of the philosophy, history, and social studies of the life sciences, broadly conceived. It is already the sixth summer school organized by the EASPLS. This years' edition stands under the motto **Dealing with Complexity in the Life Sciences**. Like previous summer schools it is characterized by a unique format, mixing group work, roundtable discussions, inputs from senior researchers and poster presentation from participants.

## Philosophy of Biology at the Mountains 2020



**Philosophy of Biology at the Mountains** (POBAM) is a biennial forum for new work in the philosophy of biology. The 2020 Philosophy of Biology at the Mountains Workshop will be held from June 10<sup>th</sup>-12<sup>th</sup> at Salt Lake City, Utah, USA.

It showcases new work in the philosophy of biology. Submissions can be on any topic in the philosophy of biology or biology-oriented philosophy of science, though priority will be given to novel and innovative work. Interdisciplinary projects bridging philosophy and biology are highly encouraged.

For 2020, you may submit a proposal for either a full-length talk (30 minutes + 30 minutes Q&A) or a 5-minute lightning talk + poster. The latter option includes a poster display as well as a chance to pitch your project to other POBAM participants in a special "POBAM Poster Pitch" session, which will be held at the beginning of the workshop.

Abstract submissions may be up to 500 words and must be prepared for blind review. Please indicate in your submission whether you are applying for a full-length talk or a lightning talk + poster, and whether you wish to be considered for a lightning talk + poster if you are not accepted for a full-length talk.

All abstracts must be submitted through EasyChair ([easychair.org/cfp/POBAM2020](https://www.easychair.org/cfp/POBAM2020)). The **deadline for submission is January 31, 2020**.

Please visit the POBAM website ([sites.google.com/view/pobam2020](https://sites.google.com/view/pobam2020)) for additional info and updates.

## Upcoming

### January 2020

**20<sup>th</sup> -21<sup>st</sup> 2<sup>nd</sup> Philosophy of Cancer Biology Workshop**, Bordeaux, France

### February 2020

**17<sup>th</sup> Workshop on aging with Thomas Kirkwood**, Bordeaux, France

### May

**5<sup>th</sup>-7<sup>th</sup> Final Conference of the ERC IDEM project**, Bordeaux, France

**25<sup>th</sup>-29<sup>th</sup> Summer School "Philosophy in Biology and Medicine"**, Carcans, France

### June

**8<sup>th</sup>-12<sup>th</sup> Philosophy of Biology at the Mountains**, Salt Lake City, USA

### September

**7<sup>th</sup>-11<sup>th</sup> EASPLS Summer School "Dealing with complexity in the life sciences"**, Klosterneuburg, Austria

## Call for abstracts: ERC IDEM Final Conference

Recent research has shown that the microbiota can have a major impact on the physiology of the host, and potentially on its health and behavior. This final conference of the ERC-funded project "**Immunity, Development, and the Microbiota: Understanding the Continuous Construction of Biological Identity**" (P.I.: T. Pradeu) will gather biologists, medical doctors, and philosophers who investigate the nature of the host-microbiota crosstalk and its consequences for our understanding of biological individuality and identity.



The diverse list of speakers includes: **Thomas Bosch, Nadine Cerf-Bensussan, Gérard Eberl, Ford Doolittle, John Dupré, Scott Gilbert, Paul Griffiths, Rob Knight, Margaret McFall-Ngai, Sarkis Mazmanian, Samir Okasha, Thomas Pradeu and Joan Roughgarden**. The conference is open to all. Applications for a talk at this conference are welcome from philosophers of science and conceptually-oriented scientists and medical doctors at any stage of their careers. For details on the application procedure please visit <http://erc-idem.cnrs.fr/events/final-conference>. **The deadline for the application is: February 7th, 2020.**

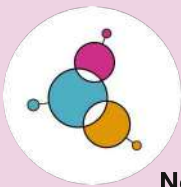
## Workshop on The Immunological Recognition of the Microbiota

On April 7-8, 2020, Gregor Greslehner and Thomas Pradeu are organizing an ERC IDEM workshop on "[The Immunological Recognition of the Microbiota - Approaching the Asymptote: 30 Years Later](#)" in Bordeaux. Invited speakers are: Thomas Bosch, Nadine Cerf-Bensussan, Hiutung Chu, Gérard Eberl, Andrew Inkpen, Rob Knight, François Leulier, and Maria Rescigno.

30 years ago, Charles Janeway, Jr. and others established a conceptual framework which dominates our understanding of immunological recognition up to this day: pattern recognition receptors would bind to molecular patterns that are typical for certain pathogens and microbes, triggering an immune response to destroy them.

Our current understanding of how the immune system works, in particular in light of its interactions with the microbiota, is much more complex. This workshop will bring together leading researchers from different disciplines to discuss microbiota-host interactions via the immune system and the notion of immunological recognition.

### Save the date: PiBM 3



Save the date! The third meeting of the PhilInBioMed network will take place on **November 16 and 17**

**2020** in Tempe, Arizona.

The timing allows participants from overseas to directly go on to the 2020 PSA meeting in Baltimore.

### Interdisciplinary Best Practicees

#### Idea #2 submitted by Thomas Pradeu

Give young people a chance to take a look outside their domain. Far too often students are "raised" in a mono-disciplinary environment. From colleagues to conferences they hardly come across researchers from other fields. Interdisciplinary summer schools or workshops are an excellent means to bring together young researchers from different domains. It gives students a chance to discover that their own experience can help advance research in a seemingly unrelated field.



### Unhinged



### Writing-up Fellowships at the KLI

The Konrad Lorenz Institute for Evolution and Cognition Research (KLI) in Klosterneuburg announces [5 Writing-Up Fellowships](#) for late-stage

PhD students working in inter- and transdisciplinary sustainability science with a focus on theoretical dimensions of sustainability research.

As KLI Residential Fellows the students can continue working on their own project, while enjoying all the regular activities at the KLI. Furthermore the fellows will receive a relocation allowance, a travel budget and access to the KLI facilities and library. **Deadline for the application is January 30th.** More information on the call can be found [here](#).



## What causes cancer?



Philosophers have explored the concept of causality for centuries. In a [recently published article](#)

Elena Rondeau, Nicolas Larmonier, Thomas Pradeu and Andreas Bikfalvi of the University of Bordeaux analyze how philosophic ideas about causality can help scientists to better understand how cancerous tumors grow and spread in the body.

The authors begin by outlining six characteristics of causality that are relevant to cancer (multicausality, causal variability, causal necessity and/or sufficiency, causal intricacy, sequence-dependent causality and spatially-situated causality). Subsequently they take a look at causality in tumor formation and causality in dissemination. In each case they emphasize the importance of feedback loops and interactions between tumor-cell-intrinsic and tumor-cell-extrinsic factors for explaining the formation and dissemination of tumors.

In conclusion they argue for greater awareness of the complexity of causality, as this will lead to a deeper understanding of the disease by philosophers, scientists and clinicians alike.

The article is part of the [Philosophy of Biology collection](#) of eLife.

## Call for Collaborators

Thomas Boyer-Kassem, Associate Professor of

Philosophy of Science at the University of Poitiers, France, is currently developing some experimental research on the effects of (mindfulness) meditation, in decision theory and/or in medical contexts. Anyone interested in this topic should feel free to contact him at: [thomas.boyer.kassem@univ-poitiers.fr](mailto:thomas.boyer.kassem@univ-poitiers.fr).



## New book by Samir Okasha: Philosophy of Biology A Very Short Introduction

Last November '[Philosophy of Biology: A Very Short Introduction](#)' has been published by Samir Okasha. Professor of Philosophy of Science at the University of Bristol, Okasha has taught since 2000. Covering some of science's most divisive topics, such as philosophical issues in genetics and evolution, Okasha's book also encompasses more traditional philosophical questions, such as free will, essentialism, and nature vs nurture.

The book uses concrete biological examples to illustrate philosophical ideas, which will be especially helpful for students to understand the philosophical foundations in their field.



## On discrimination in health insurance



In many countries, private health insurance companies are allowed to vary their premiums based on some information on individuals. This practice is intuitively justified by the idea that people should pay the premium corresponding to their own known risk. However, one may consider this as a form of discrimination or wrongful differential treatment.

Thomas Boyer Kassem from the University of Poitiers and Sébastien Duchêne, from the University of Montpellier, publish a new paper entitled [On discrimination in health insurance](#) in *Social Choice and Welfare* (<https://doi.org/10.1007/s00355-019-01227-0>). There they assess whether profiling is ethically permissible in health insurance. They go beyond the existing literature in considering a wide range of parameters, be they genetic, non-genetic, or even non-medical such as age or place of living. Analyzing several ethical concerns, and tackling the difficult question of responsibility, they argue that profiling is generally unjust in health insurance.

## New look for the KLI website



The [website of the Konrad-Lorenz-Institut \(KLI\)](#) has gotten a complete makeover. The new design features a mosaic-style front page, with large images of the KLI premises and events. News about ongoing calls, events and activities are now visible on the front page. The visitor can either scroll down the page for more information on people and projects or he or she can navigate directly to the desired page via a drop down menu. In other words the new websites invites to explore the multiple facettes of the KLI.

## 3 questions for Ann-Sophie Barwich

[Ann-Sophie Barwich](#) is an Assistant Professor at Indiana University Bloomington, where she divides her time between the Department of History & Philosophy of Science and the Cognitive Science Program. She is intrigued by how the brain responds to the most ephemeral chemical signals and catapults them into consciousness as smells. In July 2020 she will publish her book "[What the Nose Tells the Mind](#)" at Harvard University Press.



### 1. What sparked your interest for philosophy of science?

Science has been one of the most significant forces in modern times. It reshaped the world, it transformed society, but it also changed what Philosophy is, including its reach and explanatory authority. Yet its practice is inherently philosophical itself. I suppose, what intrigued me was the opportunity to participate in and even influence an ongoing and expanding endeavor.

### 2. What is your main research focus?

In my work on the sense of smell, I can combine my two central interests. On the one hand, I analyze the conceptual foundations of neuroscience and theories of perception. What is the information for, and how does the brain use it? Olfaction invites us to revisit a lot of fundamental assumptions about cognition and the brain, which often turn out to be more an intellectual artifact of our intellectual traditions than genuine understanding. The affective and highly contextual nature of smell is an excellent case to consider how our knowledge of the senses may differ if vision was not taken as the paradigmatic system for sensory modeling in this context. On the other hand, I am interested in scientific methodology. The reason why smell had long been neglected in experimental research was the difficulties involved in its methodological realization as a proper object of

scientific study. How do you measure a smell?

How do you standardize and compare, materialize or visualize its perception? If you don't have a good definition of what odor is, how can you link it back to its neural correlates? There are a lot of fundamental questions in the science of smell that are essentially philosophical.

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

Several! But I may mention two here. A lot of the theoretical hypotheses that developed throughout my research on smell, including its link to cognition, can and should be studied experimentally. So I am in the process of combining philosophical with experimental methods by starting my own lab, using EEG. A philosopher with hands, so to speak. Furthermore, this led me to another question, a question that has started to haunt me. While we talk a lot about interdisciplinarity, it seems that it's become a buzzword that often covers up for the fact that we may need to rethink the value of Philosophy (of Science) today. Does Philosophy of Science need to change in its disciplinary understanding as well as training? Science has been changing rapidly. How much of the current philosophical debate on science really deals with questions pertaining to science rather than its own professionalization and discourse?

