

Introduction

Hello **PiBM** network members!

With any luck, this newsletter will be finding you either directly on the one extra day we get this leap year, or at least right on its heels. Hopefully you are able to take advantage of that time and maybe finish a PiBM related publication, since, as you will see, these were a bit light this month. But, there is plenty to keep you interested - from exciting PhDs and postdocs to conferences all around Europe. The PiBM world is buzzing along as winter slowly comes to a close.

Enjoy!

PhDs & Postdocs

PhD and PostDoc positions in Bordeaux

The Conceptual Biology and Medicine Team (University of Bordeaux & CNRS, France) is opening several PhD and PostDoc positions. The aim of the team is to foster collaborations between philosophers, scientists and medical doctors in order to intervene in the biological and biomedical sciences by formulating concrete scientific proposals.

Requirements

This team is looking for candidates for three different projects. PhD candidates should hold a master's degree, and PostDoc candidates should hold a PhD in a relevant field as specified in the project descriptions below. ...

Successful candidates will be involved in designing an innovative framework to address important conceptual problems, in collaboration with an international team of philosophers and biologists. Knowledge of French is not required.

Deadline for all applications is April 1st, 2024.

Project 1 (PhD and/or PostDoc): Measuring Aging

How can we measure the progression of aging (if at all)? The candidate will be required to apply developments in measurement theory and philosophy of measurement to the problem of measuring aging that has recently emerged in the biology of aging. Indeed, measuring the progression of aging is necessary to determine whether medical interventions might have a protective effect against aging in general, rather than against specific age-related diseases. However, this is difficult to establish because there is no agreed construct of aging in biology (eliciting a problem of definition), because it is unclear what a "rate of aging" should be and whether there is indeed such a plasticity of aging, and because local measurements of the deterioration of organs or functions may or may not have something in common that should lead to a unified measurement of aging of the whole organism. The candidate may be a philosopher of biology or a biologist.

Project 2 (PhD and/or PostDoc): The Conditions of Cancer Across the Tree of Life

This project co-led by an evolutionary ecologist (Mathieu Giraudeau, La Rochelle), a geneticist (Bertrand Daignan-Fornier, Bordeaux) and a philosopher of biology (Thomas Pradeu, Bordeaux) proposes to go beyond the traditional anthropocentric and mammal-centric view of cancer by exploring both the phenomenon of cancer and cancer resistance mechanisms across many species, including plants and invertebrates. The exploration of species that make cancer and species that do not make cancer, especially among invertebrates, will allow us to identify the necessary conditions for developing cancer and, in turn, these conditions will serve as a basis for formulating novel experimental and therapeutic hypotheses. Both philosophers of biology and conceptually and theoretically-inclined biologists (especially if they have expertise in invertebrate biology, cancer biology, evolutionary biology, and/or evolutionary ecology) are welcome to apply.

Project 3 (PhD): What Is a Cell Type?

Recently, new insights into cellular plasticity and the development of new experimental and computational tools have challenged established ways of classifying cells into cell types, and the very meaning of "cell type" has suddenly become an urgent and controversial issue affecting many areas of biology. This project argues that recent debates about cell types raise fundamental philosophical questions about the role of classifications in biology, but also about the nature of biological functions and the very notion of multicellularity. The PhD student will work on a conceptual clarification of the notion of "cell type" based both on an awareness of the historical context and on direct collaboration with biologists and bioinformaticians. We are looking for a candidate with a background in philosophy and/or history of biology, or a biologist with a strong interest in philosophical problems. The position is part of the ANR project CELLTYPE under the direction of Fridolin Gross.

The team

Our team is part of ImmunoConcept (https://immunoconcept.cnrs.fr/), a research laboratory on the campus of the University of Bordeaux, with many collaborations with other scientists in various fields in Bordeaux and beyond. At the same time, we lead the international PhilInBioMed network (https://www.philinbiomed.org/), dedicated to the collaboration between philosophers and scientists. The network organizes numerous events, including an annual summer school (in Bordeaux) and workshops and conferences in different locations. PhD students and postdocs from Bordeaux will benefit from this unique network and will be supported to present their work at international conferences.

Application and contact

Applications and any questions about the call should be directed at:

maël.lemoine@u-bordeaux.fr fridolin.gross@u-bordeaux.fr thomas.pradeu@u-bordeaux.fr

It is possible to apply for more than one position. Interested candidates should send a CV and a letter describing their motivation to work on one or more of the projects. The anticipated start date is October 1st, 2024.

The PhD positions run for 36 months, the PostDoc positions run for 36 months (project I) and 24 months (project 2). **Deadline for applications is April 1st, 2024.**

Two PhDs in Philosophy of Biology/Science, Based in Paris

Roberto Casatti (Institut Jean Nicod, Paris) wants to recruit philosophers of biology with knowledge of marine biology, within the Marie-Curie MEDiverSEAty Investigating human dimensions of Mediterranean Marine Biodiversity network.

He is looking for two PhD candidates (starting October 2024, 36 months), fully funded by the MEDiverSEAty EU Horizon Europe grant on two topics related to the representation of the sea and sea life in the Mediterranean context:

(I) <u>A broadly operationalizable notion of (marine) biodiversity</u>

(2) <u>Representation of Biodiversity in coastal and non-coastal populations</u>

(Please follow the above links to obtain more information about each profile and for applying.)

<u>The deadline is soon: March 5, 2024, 12:00am CET</u>. For more details, see: <u>https://</u> <u>philjobs.org/job/show/25870</u> And to learn more about the Jean Nicod Institute: <u>http://www.institutnicod.org/</u>

Two Postdoccs at Technical University of Munich

Sabina Leonelli is advertising **two postdoctoral research positions of 3 years**, to work with her at the **Technical University of Munich (TUM)** to develop the TUM Ethical Data Initiative – an exciting opportunity to work at the cutting edge of data studies (with interest especially in biomedicine and agriculture) as well as data science, computer engineering, AI developments across the globe. ...

The Initiative has also a marked interest in epistemic justice and supporting responsible data practices in the Global South. The positions are highly suitable for an HPS researcher, especially if interested in combining research with handson engagement with scientists and relevant stakeholders (NGOs, small enterprise, public bodies). They will be located at the TUM Think Tank and the Chair of History and Philosophy of Science and Technology, which Sabina will hold from September 2024 and will be part of the new STS Department. The Ethical Data Initiative will be set up jointly with the Exeter Centre for the Study of the Life Sciences (Egenis), so while these posts need to be based in Germany, there will be ample opportunity to visit and collaborate with the University of Exeter.

Formal advertisement and application requirements can be found here: <u>https://opensciencestudies.eu/vacancies/</u> (applications consists of the usual CV + cover letter + writing sample).

Deadline for applications is I April, with interviews and decisions following soon after; start date for the job is preferably around September, though it can be negotiated to be before or after. For information, email <u>s.leonelli@exeter.ac.uk</u>.

Conferences

PhilInBioMed Summer School Bordeaux

Taking place from June 3rd to June 7th 2024, this interdisciplinary summer school is organised in collaboration with the PhilinBioMed network and the French National Centre for Scientific Research (CNRS).

The summer school welcomes Master and doctoral students, as well as postdoctoral fellows from the fields of philosophy of science, life sciences and medicine. Participants will learn to use interdisciplinary methods to address conceptual issues in scientific research. ...

Conferences (cont.)

Current course leaders:

> Serge Ahmed (neuroscience): University of Bordeaux – CNRS, France

> Carl Craver (philosophy of biology, philosophy of neuroscience): Washington University, USA

 Fridolin Gross (philosophy of biology, philosophy of computational biology): University of Bordeaux, France

> Matt Haber (philosophy of biology, philosophy of evolutionary biology): University of Utah, USA

> Hannah Kaminski (medicine, immunology): University of Bordeaux, France

 Jan Pieter Konsman (neuroscience, philosophy of neuroscience): University of Bordeaux – CNRS, France

› Maël Lemoine (philosophy of medicine, philosophy of aging): University of Bordeaux, France

> Søren Paludan (immunology): Aarhus University, Denmark

 Thomas Pradeu (philosophy of biology, philosophy of immunology): University of Bordeaux – CNRS, France

› Jonathan Sholl (philosophy of medicine, philosophy of nutrition): University of Bordeaux, France

Marie Vasse (evolutionary biology and ecology): MIVEGEC, CNRS Montpellier, France

Course leaders will be present to highlight practical examples of interdisciplinary partnerships from their career, and to advise and interact with participants throughout the week. The program will also include different formats such as group work, 'speed dating', and individual discussions, designed to further interactions between participants and course leaders.

Please note that the <u>application deadline is March 31st, 2024</u>. Registration fees are 500 \in for Master and doctoral students and 700 \in for post-doctoral fellows. A limited number of grants will be available upon demand.

Candidates will be selected during April 1-15 and notified soon thereafter.

Apply here: <u>https://bss-philinbiomed.u-bordeaux.fr/en/</u>

Conferences (cont.)

Fifth PhilInBioMed Meeting in Bielefeld (Germany)

The fifth Philosophy in Biology and Medicine (PhilInBioMed) Network Meeting will take place in-person in Bielefeld, Germany, on **Sep 30-Oct 2**, **2024**, at Bielefeld University's Institute for Advanced Study, <u>the ZiF</u>.

The program committee welcomes abstracts for contributed talks (20+10 min Q&A) by scientists and/or philosophers, on work which combines biological or medical science with a conceptual, theoretical, and/or philosophical approach.

Each abstract must clearly address these three questions:

- I. What is the scientific problem that your talk raises?
- 2. What kind of philosophical tools does your talk use to address that scientific problem?
- 3. What proposal does your talk make as a response to that scientific problem?

Scientific relevance will be an essential criterion. Talks that result from collaboration among philosophers and scientists are particularly welcome. We welcome submissions from individuals identifying with historically underrepresented groups within philosophy of science and medicine.

Abstracts should be 500 words max, and the <u>deadline for submission of</u> <u>abstracts is 5 April 2024</u>.

Authors must remove all identifying information from their title and abstract.

Please submit your abstract using the following link: <u>https://forms.gle/</u> <u>pZ4kZyd5gyC1KZ8d7</u>

The program committee aims to inform the authors of the outcome of their submission by mid-May 2024.

Too complex to understand? Bridging neuroscience and philosophy to build new tools to study the brain

The Austrian Neuroscience Association is organizing this event on **June 24th**, **3**.00 pm to **7**.00 pm (in Vienna). **Registration starts April 15**.

In this symposium, we aim at discussing the current knowledge on whole-brain activity (in healthy and disease states) and its foundation in experimental and computational neuroscience. Confronting these models with philosophical concepts of causality and inquiries on the explanatory power of different forms of prediction, will allow a better understanding of the strength and potential limitations of today's concepts of the brain. Moreover, organisms need to integrate their internal state and information by environmental stimuli by means of their nervous system thus neuroscientist exploring brain activity need to consider this complex interaction with due sensitivity. However, a better understanding of the environmental contribution requires a proper consideration how to conceptualize "environment" to operationalize its influence on the brain. Thus, a second discussion will confront neuroscientific approaches to integrate internal states and external stimuli (in health and disease) with reflections on the relevance of different concepts of environment and its relevance for the evolution of brain processes.

For more details and the current program, please visit: <u>https://austrian-neuroscience.at/event-5513268</u>

Workshop on "The Fitness Concept in Evolutionary Biology: philosophical and scientific aspects." University of Bristol, March 27th-28th 2024

Fitness is one of the most fundamental concepts in evolutionary biology, as it is intimately connected with evolution by natural selection. Despite this, the fitness concept is rather elusive, as a number of authors have noted, seemingly lacking a fully general, precise definition. Indeed, it is unclear whether it is right to speak of a *single* fitness concept at all. ...

Conferences (cont.)

There is a large literature in evolutionary biology dealing with how fitness should be defined in different circumstances, and a parallel literature on fitness in philosophy of biology. However these two literatures are less well integrated than they should be. The aim of this workshop is to further the integration.

Invited Speakers:

Alan Grafen (Oxford) John McNamara (Bristol), Grant Ramsey (Leuven), Hanna Kokko (Helsinki), Andy Gardner (St Andrews), Emily Rayfield (Bristol), Ellen Clarke (Leeds), Mauricio Suarez (Madrid), Samir Okasha (Bristol), Marshall Abrams (Birmingham, Alabama), Hannah Rubin (Notre Dame), Sean Rice (Texas Tech).

Further details found here: https://representingevolution.xyz/news-and-events

European Advanced School in the Philosophy of the Life Sciences, Vienna

The seventh edition of the biennial European Advanced School in the Philosophy of the Life Sciences (EASPLS) will take place at the Konrad Lorenz Institute for Evolution and Cognition Research (KLI), in Klosterneuburg, Austria, from September 9th to September 12th 2024. The school is primarily aimed at young scholars working in the history, philosophy and social studies of the biological, biomedical, and environmental sciences. The topic of this edition is "Explanation and Evidence in Biology and Medicine".

The deadline for application is March 30, 2024.

Some grants to support students' travel and housing might be available upon request.

More information about the summer school and how to apply can be found at: https://www.kli.ac.at/en/events/event_calendar/view/679

You have been quiet this month!

Recent/Upcoming PiBM events

The Sixth Philosophy of Cancer Biology Workshop, Bordeaux, France, from March 4th to 6th

Cancer is one of the main causes of death globally according to the World Health Organization. The biological complexity and heterogeneity of this disease (or group of diseases) make it very difficult to apprehend, control, and cure. We strongly believe that more theoretical and conceptual efforts can benefit cancer research. To this aim we have initiated a series of international workshops whose aim is to gather philosophers, scientists, and medical doctors to discuss theoretical and conceptual challenges that are central to cancer research.

This edition will mostly focus on two topics: (I) the role of the microbiota in cancer development and dissemination, a question that attracts increasing attention but remains challenging to address, (2) metastasis, which is considered as a major challenge for cancer treatment and a leading cause of cancer death, and for which innovative conceptual and theoretical frameworks are needed.

Invited speakers: Ilaria Elia (KU Leuven, Belgium), Andrew Ewald (Johns Hopkins, Baltimore, USA), Peter Friedl (Radboud University Nijmegen, Netherland), Lucie Laplane (IHPST & Gustave Roussy, Paris, France), Cristina Lo Celso (Imperial College London, UK), Carlo Maley (Arizona State University, USA), Guillaume Montagnac (Gustave Roussy, France), Julie Pannequin (Institut de Génomique Fonctionnelle, Montpellier, France), Maria Rescigno (Humanitas University, Italia), Gregory Sepich-Poore (UCSD, USA), Eric Solary (Gustave Roussy, Paris, France), Orsolya Vincze (ImmunoConcEpT, CNRS Bordeaux & La Rochelle University, France).

Recent/Upcoming PiBM events (cont.)

While registration will likely be closed when this newsletter is published, more information and the program can be found here:

https://www.philinbiomed.org/event/sixth-philosophy-of-cancer-biologyworkshop/

Upcoming talk in PiBM Seminar Series

On April 3, Tim Lewens (HPS Cambridge) will give a talk in Bordeaux (title TBA). Tim is Professor of Philosophy of Science at the University of Cambridge. He works on the philosophy of biology, biomedical ethics, and general philosophy of science. He is the author of several books, the most recent being *Why We Disagree about Human Nature* (edited with Beth Hannon, OUP 2018).

Looking Ahead...

Great as always to see the PiBM world keeping busy and let's hope the turn to spring sees that world blooming as always. Thanks once again for all the submissions and see you next month!