PhilInBioMed

THE MAGAZINE

- March 2019 -

Winter is leaving

Dear PhilInBioMed members,

March is the month of spring (at least in the Northern Hemisphere) and new beginnings. In this issue of the PhilInBioMed Magazine you will read about a new programm at the University of Utah, a new section in eLife, and much more. Enjoy the read.

Cordially, your
PhilInBioMed Magazine team
contact@philinbiomed.org

Spending time afield and exchanging with the experts is benefical for all

The Graduate Term Afield - New Program fosters interdisciplinarity

The University of Utah has a deep commitment to work that spans across disciplines, engages people and communities outside of philosophy, and is empirically informed by expert work and experience from other fields. To that end, we introduced the Graduate Term Afield. This pilot program is a graduate training initiative designed to provide structure to support genuinely interdisciplinary graduate training, and encourage graduate student engagement with experts in adjacent and allied programs outside of philosophy.

The program is a call for proposals to spend a term embedded afield. This could be to work in a research lab (if you are a philosopher of science), or with a clinician (if you are a bioethicist), or with a non-profit or social scientist (if you are a political philosopher), etc. Graduate students are encouraged to be creative with their proposals, and required to explain how being embedded afield will enrich them as researchers and instructors of philosophy. We also encourage them to consider how their projects will help generate or maintain interdisciplinary research networks, and promote the value of philosophy across our local community. After all, we want to train our students to do that as well.

Selected students will spend their awarded term working on their projects as embedded RAs, for which they will receive their regular stipend in lieu of a TA assignment (if proposals include a cost-sharing component with the hosting program, funding could be at a higher level). This means it is a largely budget-neutral program (the primary cost will be some enrollment loss from a reduction in TAs).

We think this pilot program embodies the spirit of the PhilInBioMed network. If you have any questions on the program, please feel free to contact Matt Haber at the University of Utah.

Call for papers

Dear all,

In September 2018, we - Karim Baraghith and Gregor Greslehner – organized a workshop on biological individuality. A report can be found here: https://doi.org/10.1007/s10838-018-09441-7, available freely with this link: https://rdcu.be/bn7vr.

Related to the workshop, but not restricted to its participants, we want to edit a special issue in KRITERION – Journal of Philosophy, which is closely linked to the SOPhiA Conference for Young Analytic Philosophy, at which the original event took place as an affiliated workshop. If you are working on issues related to biological individuality, please consider sending an article to kbaraghith@gmail.com or gregor.greslehner@gmail.com. All received articles will undergo a process of blind review.

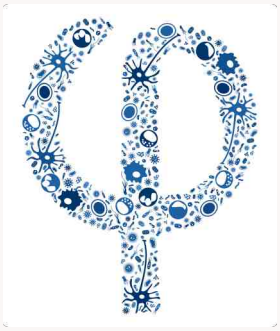
Scope for articles: 3500 – 8000 words
Deadline: July 31, 2019

Please feel free to contact us anytime.

All the best,
Gregor and Karim

Why science needs philosophy - article in PNAS

In a recent edition of PNAS features an article co-written by nine philosophers and scientists pleading for a closer collaboration between their respective fields. The article entitled "Why science needs philosophy" shows how philosophy can have an important and productive impact on science.



The authors give three examples taken from the fields of stem-cells, the microbiome, and cognitive sciences. Each bears on cutting-edge scientific research, and each has been explicitly acknowledged by practicing researchers as a useful contribution to science. From there the authors give practical advice on how to overcome the current disciplinary barriers.

This call for more interdisciplinarity seems to have been heard, as the article was highlighted in Nature's daily briefings. Hopefully it will encourage more fruitful collaborations between scientists and philosophers.

New "Philosophy of Biology" section in eLIFE

The importance of philosophy in the life sciences is becoming more and more obvious - to philosophers and scientists alike. One marker for the increased awareness is the new "Philosophy in Biology" section of eLIFE.

This rising peer-reviewed journal targets an audience in the biomedical and life science field. The fact that they now **welcome spontaneous submissions** from philosophers of biology is a major step towards more interdisciplinarity.

You can already find the articles of Lucie Laplane and Eric Solary, on the need for a classification of stem cells; and Kate MacCord and Jane Maienschein, on essential components of regeneration. Articles of other PhilInBioMed members will soon follow.

Unhinged

Upcoming

April 2019

5th Angela Potochnik: "Causal Patterns and How Our Theories Change", Bordeaux France

29th Deborah Gordon: "Diversity and Dynamics in Collective Behaviour", Bordeaux, France

May 2019

16th-21st Seminar: Uncovering the Logic of Regeneration across Complex Living Systems, MBL, Woods Hole

June 2019

2nd - July 15th Embryology: Concepts & Techniques in Modern Developmental Biology, MBL, Woods Hole

6th Workshop: "Fitness meets Niche Construction and Symbiosis", Krakow, Poland

24th-28th Summer school: Data & Health, Angers, France

July 2019

1th-5th Summer school: Microbiota, Symbiosis and Individuality: Conceptual and Philosophical Issues, Biarritz, France

How early life effects are passed on over generations

A recent article in Philosophical transactions of the Royal Society B takes a closer look at different mechanisms of inheritance to analyze how early life effects can influence the behaviour of generations to come. The authors, Etienne Danchin, Arnaud Pocheville, and Philippe Huneman, start with a brief description of the gene-centered vision of inheritance.

Subsequently they describe recently discovered molecular mechanisms of non-genetic inheritance. They cite examples of non-genetic transmission of acquired maternal behaviour, acquired fear, acquired sexual preferences, and environmentally triggered responses.

Finally the authors show how all the different visions of inheritance can be integrated into an inclusive theory of evolution where different mechanisms would enable adaptation to changing environments at different timescales. One surprising consequence of this integrative vision of inheritance is that early in life effects start much earlier than fertilization.

The full open access article is avaiblale here: https://doi.org/10.1098/rstb.2018.0113

This article is part of the theme issue 'Developing differences: early-life effects and evolutionary medicine'.

Open position as Senior Lecturer in Data Studies

The Department of Sociology, Philosophy and Anthropology (SPA) and the Institute for Data Science and Artificial Intelligence (IDSAI) of the University of Exeter are looking to appoint a new Senior Lecturer with a particular interest in Data Studies.

The post is affiliated to the IDSAI, a new pan-university Institute that focuses on developing innovative approaches to the use of data and artificial intelligence in modern society.

The successful applicant will hold a PhD in Philosophy, Sociology, History, Anthropology or Science and Technology Studies, and have an independent, internationally-recognised research programme in the study of data practices from a humanities and/or social science perspective.

Please view the full job description here: http://admin.exeter.ac.uk/personnel/jobs/P66811.pdf

The wonderful form of cosmic order - now on video

On March 5th Charles Pence from the Université catholique de Louvain, Belgium, came to Bordeaux to speak about "The Wonderful Form of Cosmic Order: Bringing Statistics to Evolution".

If you were unable to attend the event, you can now watch the talk on video. More videos of past PhilInBioMed seminars can be found on Thomas Pradeu's Youtube channel.

3 questions for Kate MacCord

Kate MacCord is a McDonnell Foundation Fellow at the Marine Biological Laboratory (MBL) in Woods Hole, MA. Additionally she is the Program Administrator for the James S. McDonnell Foundation-funded initiative at the MBL, which seeks to bring researchers from history and philosophy of science (HPS) together with scientists in order to transform discovery.

1. What sparked your interest for philosophy of science ?

When I was a physical anthropology major at the University of Pittsburgh, my advisor, Jeffrey Schwartz, always prompted me to look closely at people's arguments and analyze their assumptions. My dissertation work secured this interest for prodding assumptions when I worked with Jukka Jernvall's EvoDevo lab in Helsinki. But, I would say that my biggest influence to dig deeper into philosophy of science came from working with Lucie Laplane on her book *Cancer Stem Cells: Philosophy and Therapies*. Arguing with Lucie really provoked me to become both an historian and philosopher of science, and to recognize the true importance of using philosophy as an analytical tool for advancing science.

2. What is your main research focus ?

Do I have to choose only one? The main theme of my research is understanding epistemological and ontological assumptions that shape scientific research. This theme underlies three areas that I am currently exploring:

1. The intersection of development and evolution (especially in the late 19th century). My work during this time period focuses on research on tooth development and evolution conducted by embryologists and paleontologists.

2. Regeneration across the scales of living systems. This is the focus of the McDonnell Initiative at the Marine Biological Laboratory, which brings into collaboration historians, philosophers, and life scientists. Our current group leaders include: me, Duygu Özpolat (MBL), Jen Morgan (MBL), Kathryn Maxson Jones (Princeton/MBL), Andrew Inkpen (Brandon University), Fritz Davis (Purdue University), Lucie Laplane (Gustave Roussy), and Michel Vervoort (Institute Jacques Monod).

3. Germ line. Together with Duygu Özpolat (MBL), we're looking at questions of germ line continuity and identity, as well as the characteristics of germ line regeneration across a wide range of species.

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

I would love to bring my analyses of epistemological and ontological assumptions of research at the intersection of development and evolution into a current context. There are a lot of lessons embedded in how late-nineteenth century researchers understood how development and evolution are connected that could inform modern research and promote EvoDevo to take a more coherent theoretical turn.