PhilInBioMed

THE MAGAZINE

- May 2019 -

It's all about you

Dear PhilInBioMed members,

The PhilInBioMed network is thriving, we constantly add new individual members and this month there is even a new institutional member. But for a network to truely be flourishing, it needs to be interactive.

Therefore, do not hesitate to share what is going on in your part of the world. Simply write to contact@philinbiomed.org.

Cordially, your

PhilInBioMed Magazine team

McMicken Hall home of the Philosophy Department at UC (© Steinsky)

New institutional PhilInBioMed member

We are very happy to announce that the Philosophy Department of the University of Cincinnati (UC) has joined the PhilInBioMed network. The University of Cincinnati (UC) is one of the US' top 20 public research institutions and the Department of Philosophy of UC is one of the most renowned centers for the study of philosophy of biology, philosophy of cognitive science, philosophy of mind, and general philosophy of science in the United States.

At UC the Philosophy Department has a long history of interdisciplinary training. For instance students can choose between two PhD tracks, one "traditional" track and one "Philosophy and the Life Sciences Track" (P&LS). The latter calls for one year of graduate work in an empirical science and culminates in an interdisciplinary dissertation.

The department is especially recognized for its strengths in philosophy of biology, neuroscience, and cognitive science. Students who have chosen the P&LS track have worked on projects such as the neural basis of desire, explanation in psychology, mechanisms in ecology, the structure of the synthesis of evolutionary and developmental biology, conservation biology, and philosophy of psychiatry.

Besides its dedication to interdisciplinary teaching the department also has a vibrant research community, which is accompanied by regular seminars and an annual colloquium.

With Cincinnati PhilInBioMed now has 10 institutional members (https://www.philinbiomed.org/network/).

The PhilInBioMed Committees

Only a few months ago the decision was taken to give PhilInBioMed a new organizational structure. A Steering Committee and a Scientific Committee were to be set up (see the January PhilInBioMed Magazine). Both Committees have now been formed.

While the Steering Committee is composed of members from the different founding institutions, the Scientific Committee is made up of Philosophers and Scientists who are not necessarily part of the PhilInBioMed network.

Many of the potential candidates for the Scientific Committee were in fact unfamiliar with the network. Yet once they learned about PhilInBioMeds goals and endeavours, a vast majority accepted immediately. Some of them even accepted to become members of the network itself.

A list of the members of both committees can be found under https://www.philinbiomed.org/organization.

From the TME to the TOE

IJC

For decades cancer research had focused exclusively on the tumor. Later the vision was broadend to the tumor microenvironment (TME). Today five researchers - both philosophers and scientists - call for a look beyond the tumor microenvironment. In the minireview they show the crucial importance of the tumor organismal environment (TOE).

Laplane et al., IJC, April 2019: https://doi.org/10.1002/ijc.32343.

A Discussion group for philosophy of medicine?

The number of academics interested in philosophy of medicine (excluding bioethics) is small and in many cases they/we do not have strong communities around them/us.

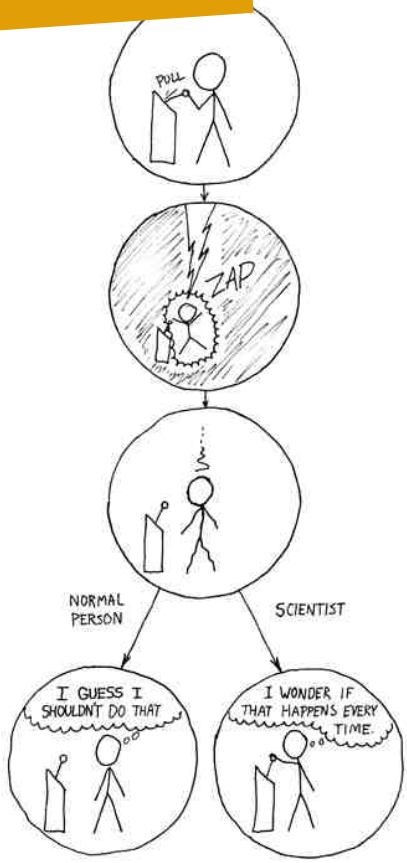
Email lists work well in spreading news but are not suitable for debates or discussion. An electronic discussion forum might enable deeper communication and exchange of ideas and materials. I know that people have mixed feelings about Facebook nowadays but a closed Facebook group would be relatively easy to maintain and moderate.

If you are interested in planning a Facebook group or other discussion forum for professionals working in philosophy of medicine, please contact me at pekka.louhiala(at)helsinki.fi.

Workshop fitness and niche construction

On the 6th and 7th of June will be held the "*Fitness and Niche Construction Workshop*" in Krakow, Poland. Keynote speaker will be Lynn Chiu. Find the full program on the PhilInBioMed website under News.

Unhinged



Upcoming

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

20th-21st 8th Philosophy of Medicine Roundtable, Paris, France

20th-21st Workshop Science & Values, Exeter, UK

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

July 2019

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

Deadline 2nd PhilInBioMed meeting

You still have two weeks to submit an abstract for the **2nd PhilInBioMed** meeting. The deadline for contributions is **May 30th 2019**.

You can find all the information on : https://www.philinbiomed.org/event/second-international-meeting/

New series: Focus on famous PhilInBioMed articles

Working in the field of philosophy in science sometimes can feel like a lone endeavor, and one aim of PhilInBioMed is to bring together philosophers and scientists who are interested in this interdisciplinary approach.

A second aim of the network is to show that the field is larger and more active than many might think.

In this series different authors present successful PhilInBioMed articles, where philosophers made a contribution to science or scientists advanced philosophical concepts.

If you would like to share your favorite PhilInBioMed article with the network, write to contact@philinbiomed.org.

"Verification, Validation, and Confirmation of Numerical Models in the Earth Sciences" by Maël Lemoine

Naomi Oreskes, Kristin Shrader-Frechette and Kenneth Belitz's "Verification, Validation, and Confirmation of Numerical Models in the Earth Sciences" (OSFB 1994) was published in *Science* in 1994. This paper with a philosophical title results from a collaboration between a scientist and historian of earth science, a philosopher, and a hydrogeologist.

According to Web of Science, it has been cited an impressive 1282 number of times as of 2017 in science journals alone, but only 39 times in philosophy journals. In comparison, Winsberg's "Simulated experiments: Methodology for a virtual world", published in 2003 in *Philosophy of Science*, is cited 17 times in science journals, but more than 300 times in philosophy journals (according to Google Scholar).

Some might say that OSFB 1994 fails to make an original contribution to philosophy of science. Instead, to a philosopher's eye, it reads like a vade mecum of basic concepts in general philosophy of science. However, it is not just paid lip service in the field. For instance, the most cited paper citing OSFB 1994, is "Predictive habitat distribution models in ecology", itself cited over 4,000 times. It does not only mention OFSB 1994, but follows its suggestion to call 'evaluation' (instead of validation) the analysis of the predictive success of models. Many others papers discuss this and other aspects of the analysis contained in OSFB 1994.

This outlines a field that is easily glossed over when one thinks of what philosophy of science consists in. This field, philosophy in science, is really hybrid: it is not just philosophy, read by scientists. Articles in philosophy in science sometimes constitute a contribution to questions in philosophy of science, but always to questions in science. Accordingly, they are sometimes widely known and celebrated in philosophy of science, sometimes ignored altogether in spite of their huge impact in science. Just as OSFB 1994 is.

Looking for volunteers for the Cooperation Chronicle

PhilInBioMed strives to bring scientists and philosophers together and many of our members are already part of an interdisciplinary corporation. Other members might struggle to find a cooperation partner or to make their cooperation work. This is why we would like to launch the new series *Cooperation Chronicle*.

The idea is that a scientist and a philosopher who are or have been working together, write about their experience. How did you come to collaborate? What worked well? What obstacles did you enounter? What did you learn from your collaborator? What could be done to improve collaborations between scientists and philosophers?...

If you and your collaborator would be willing to share your experience please write to contact@philinbiomed.org.

3 questions for Sara Green

Sara Green is assistant professor at the Section for History and Philosophy of Science, Department of Science Education, at University of Copenhagen. She has a background in philosophy and biology and a PhD in philosophy of science from Aarhus University. She is currently part of a research project called "Personalized Medicine in the Welfare State", MeInWe, at the Center for Medical Science and Technology Studies in Copenhagen.

1. What sparked your interest for philosophy of science?

I have been interested in philosophical questions for as long as I remember, but I had imagined a very different career. When I was 19, I got accepted into a program in sports science. A knee injury forced me to postpone the starting date with a year, and I decided to study philosophy while recovering from the injury. I happened to enjoy philosophy so much that I gave up plan A.

However, after two years I felt that many of the discussions in philosophy had become too distant from the societal or scientific issues that interested me. I therefore decided to study biology. A philosophy professor strongly advised against this and said that this combination would make it impossible to get a PhD stipend. Ironically, it was my interdisciplinary profile that opened the door to become a PhD fellow in a very interesting research project in Aarhus, with Hanne Andersen as PI.

2. What is your main research focus?

Much of my work so far has focused on modelling and explanation in systems biology, but I increasingly work also on philosophy of medicine. As part of a larger project on personalized medicine, I currently explore how notions of health, disease and the individual person are shaped through work on quantitative data. This gives me an opportunity to also engage with anthropologists and social scientists, as well as with practicing clinicians and bioinformaticians.

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

My interest in philosophy of medicine has recently been further stimulated through interactions with other members of the PhilInBioMed group on philosophy of cancer, which is a really exciting area. I'm particularly interested in how cancer biomarkers are identified for purposes of disease treatment and disease prevention. Moreover, I have just started on a project that investigates the translational potentials of patient-derived organoids or mouse avatars (xenografted from patient tumor cells).