

First European Advanced Seminar in the Philosophy of the Life Sciences

Causation and Disease in the Postgenomic Era

- Hosted by the Brocher Foundation, Geneva, Switzerland, September 6 - 11, 2010 -

– Call for Applications –

Participating Institutions

Brocher Foundation

ESRC Centre for Genomics in Society, University of Exeter (Exeter)

European School for Molecular Medicine (Milan)

Institut d'Histoire de la Médecine et de la Santé (Geneva)

Institut d'Histoire et de Philosophie des Sciences et des Techniques, Paris-1 Sorbonne (Paris)

Konrad Lorenz Institute for Evolution and Cognition Research (Altenberg)

Max-Planck-Institut für Wissenschaftsgeschichte (Berlin)

Directors of the Seminar

Didier Debaise (Berlin), Maria Kronfeldner (Bielefeld), Staffan Müller-Wille (Exeter)

Lecturers

Giovanni Boniolo (Milan), Werner Callebaut (Altenberg), John Dupré (Exeter), Michael Esfeld (Lausanne), Bernardino Fantini (Geneva), Lisa Gannett (Halifax), Jean-Paul Gaudillière (Paris), Jean Gayon (Paris), Annick Lesne (Paris), Sandra Mitchell (Pittsburgh), Guiseppe Testa (Milan), C. Kenneth Waters (Minneapolis)

We are inviting postgraduate, doctoral and early career postdoctoral researchers in the philosophy of life sciences to submit applications for participation in the First European Advanced Seminar in the Philosophy of the Life Sciences, to be held on the premises of the Brocher Foundation in Hermance (Geneva), **September 6–11, 2010**.

The seminar is organized like a professional workshop devoted to a broadly defined theme. There will be keynote lectures by invited speakers, presentations and commentaries by senior and junior participants, and ample room for interaction and discussion. We also offer the possibility for participants to publish papers presented in a special issue of the journal *History and Philosophy of the Life Sciences*. Publication will be subject to the normal peer review process of the journal. The seminar is part of a biennial series, organized by a European consortium of institutions in the philosophy of life sciences in cooperation with the Brocher Foundation. The series aims to acquaint early career researchers with recent innovative trends in the philosophy of the life sciences, to create a platform for developing new programs and projects on a European level, and to facilitate exchange of researchers among European institutions in the field. The First European Advanced Seminar in the Philosophy of the Life Sciences will be dedicated to the theme of causation and disease in the postgenomic era.

Early career researchers from a large spectrum of disciplines and interests, not necessarily directly linked to philosophy of the life-sciences, who would like to participate in the First European Advanced Seminar in the Philosophy of the Life Sciences should **send a curriculum vitae and a letter of application** describing their project and motivating their interest in the conference to the address below, preferably by e-mail. **The deadline for applications is February 22, 2010**. Decisions about participation and the programme of the seminar will be communicated by the end of March 2010.

Participants will have to contribute a conference fee of €400, which will cover accommodation and meals for the duration of the conference. The Brocher Foundation provides a limited number of fellowships to support junior participants. Those wishing to apply for these fellowships should do so in a separate letter.

Rationale for the Topic of the First Advanced Seminar

Philosophical investigations of the life sciences have traditionally been preoccupied by two sets of problems: problems of reduction, mostly studied with respect to classical and molecular genetics, and problems of evolutionary theory, with a focus on selection and adaptation. It is only recently that the field has widened. Philosophy of the life sciences now also deals with topics belonging to the biomedical sciences, e.g. microbiology, epidemiology, or the neurosciences.

A theme that has regained prominence due to this development is causation in complex systems. Systems biology aims to achieve a multi-level understanding of cells, tissues, organs, and organisms as complex dynamic systems, invoking downward causation and emergence, whereas synthetic biology tries to account for the complexity of function through modular engineering-based approaches and sees the control of biological circuits as intrinsic to this aim. Although very different in orientation, both approaches are consistent with a pluralist and non-reductionist understanding of biological causation, according to which entities of any kind and at any level of complexity can enter causal relationships, even if some entities, like genes for example, may provide privileged entry points for investigating biological phenomena. And despite (or because of) this pluralist and non-reductionist understanding of causation, there is a growing optimism in achieving a greater understanding of health and diseases and greater capacities for medical intervention. In the philosophy of the life sciences, these recent trends are reflected in developmental systems theory, in new pluralistic approaches that allow conceptualising complex, multi-level systems, and in the accounts of causation favoured by proponents of the New Mechanism.

The renewed concern for causation and mechanisms in complex systems is of great significance for the development of new analytical tools for the classification, diagnosis and therapy of diseases. Some of the research strategies that were driving biomedical research in the 'century of the gene' seem not to work any more in face of the socio-bio-medical complexity now revealed. As a consequence, not only the changes in the very concepts of health and disease, but also the changes in their classification, diagnosis and therapy call for a rapprochement of philosophy of biology and philosophy of medicine. Furthermore, the masses of data obtained from genomic research and epidemiology ask for new analytical tools to deal with these data in order to inform clinical practice. This has become a major challenge for biomedical science in recent years and asks for a new understanding of the nature of evidence in medicine. Finally, some of the data now produced revive old debates about identification of and discrimination against ethnic, racial or other sub-populations, a topic of special importance for understanding the mingling of science and society and that connects the biomedical sciences to anthropology, forcing us, in the end, to bridge the gulf separating the natural sciences from social sciences and humanities, towards a broadened concept of life and life sciences. Such a broadened perspective can provide novel lines of insight for a philosophy of the life sciences in ways that may prove relevant to the sciences as well as the philosophy of science in general.

Please send application materials to the following address, preferably by email:

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For further information see: <http://www.brocher.ch/pages/sympvenir.asp>