

The Jacques Loeb Centre For the History and Philosophy of the Life Sciences

Stairway to Biomolecular Simulations

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Biology is a fast growing field of science, where biological discoveries and developments are competing with geopolitics and finance for newspapers and internet pages headlines. The biological sciences provide basic knowledge and link it to applied research, which can be translated to commercial success and economic growth. Physical models of atomistic systems play an important role in understanding biology and chemistry, and are steadily drawing increasing attention from scientists in varied disciplines. In particular, biomolecular modeling and simulations are becoming useful methodologies that address biological fundamental questions, mainly dealing with protein's structure, dynamics, interactions, mechanism of action, folding, and computational drug modeling and design. Located at the exciting interface between theory and laboratory experiment, biomolecular modeling and simulations occupy an important position that helps to bridge the gap between theoreticians and experimental scholars. The overall objective of the seminar is to provide a broad philosophical sociohistorical perspective to biomolecular modeling and simulations. I will discuss the scientifichistorical as well as the scientific-sociological contexts of biomolecular modeling and simulations, and will offer my view on their emergence as a legitimate standalone scientific field.

June 24th (Monday)

Building 39 (Biology), Room 106 (de Picciotto conference room),

16:15 to 17:45.

Coffee & refreshments will be available at 16:00

<u>About the Seminars:</u> The Jacques Loeb Centre seminars provide an interdisciplinary forum, in which historians and philosophers of science, as well as scientists, present and discuss new research related to science with a special focus on the life sciences. Case studies and surveys examine the impact of political, socio-economic and personal factors on the conduct of science, the ethics of research, and the causes of progress and setbacks. **Faculty and students from all disciplines are invited!**

For further information, updates, and reminders please join our mailing list simply by sending a mail requesting to join or simply by clicking here.

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