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## **Karl Popper and Modern Experimental Biology**

**Ute Deichmann**, Director

Jacques Loeb Centre for the History and Philosophy of the Life

Sciences

Tuesday, June 21<sup>st</sup> at 12:00 p.m.

National Institute for Biotechnology in the Negev Building (39), Room 106

(map)

(Coffee and refreshments served at 11:45 p.m.)

The critical testing of hypotheses against empirical evidence was at the center of the epistemology of Karl Popper. His work was criticized by scientists who pointed out that falsifiability does not accurately describe how scientists work. Interestingly, however, some of Popper's principles were anticipated by modern experimental biology and are adhered to until the present day. Only recently have these principles been disregarded and/or replaced by postmodernist ideas in some areas of biology and the philosophy of biology. Using cases of molecular biology, developmental genetics, and genomics, I will analyze the fruitfulness and limitations of a Popperian approach and discuss the consequences of its disregard.

The Jacques Loeb Centre seminars provide an interdisciplinary forum in which scientists and historians and philosophers of science present and discuss new science-related research 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!