Life of the Cell: Philosophy & History of Cell Research

Pre-workshop reading list

The list below suggests material you may find useful to read as preparation for the workshop. Speakers have indicated material of specific relevance to their talks, and there is also a list of general historical and scientific treatments of topics that are pertinent to the workshop. Apart from Bill Bechtel’s own papers, any philosophical discussion is embedded in scientific and historical papers rather than in explicitly philosophical work.

Many of the papers below are available online through most University’s subscription schemes or as open access (via PubMed Central or other repositories, such as personal websites). Enter the ‘PMID’ into PubMed (www.ncbi.nlm.nih.gov/sites/entrez) to find the abstract and a link to the online journal article. Anything you cannot access because it isn’t open access, or your University does not have a subscription, or because it has not been digitized, is available on request from the workshop organizers. Please email us to ask for copies. These will probably have to be posted, so allow some time before the workshop.

William Bechtel

All papers available at: http://mechanism.ucsd.edu/~bill/research.html

(in press). Generalization and discovery through conserved mechanisms: Cross-species research on circadian oscillators. Philosophy of Science.

(in press). The downs and ups of mechanistic research: Circadian rhythm research as an exemplar. Erkenntnis.


Thomas Cavalier Smith


Ohad Parnes

Papers available at:
http://www.zfl.gwz-berlin.de/mitarbeiter/mitarbeiter/_/81/?cHash=1b31cc9532


Andrew Reynolds


If you cannot access the classic version, try this paper:


John Bryant and Steve Hughes


General


American Naturalist (1939), Vol 73, Part 749, Nov-Dec
Symposium: The Cell Theory

Mayer, J. The Cell Theory. Its past, present and future (pp. 481-484)
http://www.jstor.org/stable/2457597

Woodruff, LL. Microscopy before the nineteenth century (pp. 485-516)
http://www.jstor.org/stable/2457598

Karling, J.S. Schleiden's Contribution to the Cell Theory (pp. 517-537)
http://www.jstor.org/stable/2457599

Conklin, E.G. Predecessors of Schleiden and Schwann (pp. 538-546)
http://www.jstor.org/stable/2457600

American Naturalist (1940), Vol 74, Part 750, Jan-Feb
Symposium: The Cell Theory II

Baitsell, G.A. A Modern Concept of the Cell as a Structural Unit (pp. 5-24)
http://www.jstor.org/stable/2457319

Schrader, F. The Present Status of Mitosis (pp. 25-33)
http://www.jstor.org/stable/2457320

Weiss, P. The Problem of Cell Individuality in Development (pp. 34-46)
www.jstor.org/stable/2457321

McClung, C.E. What of the Future? (pp. 47-53)
http://www.jstor.org/stable/2457322