

# *Stoffwechsel. Histories of metabolism*

Workshop

Technische Universität Berlin

28.-29.11.2014

organized by Mathias Grote

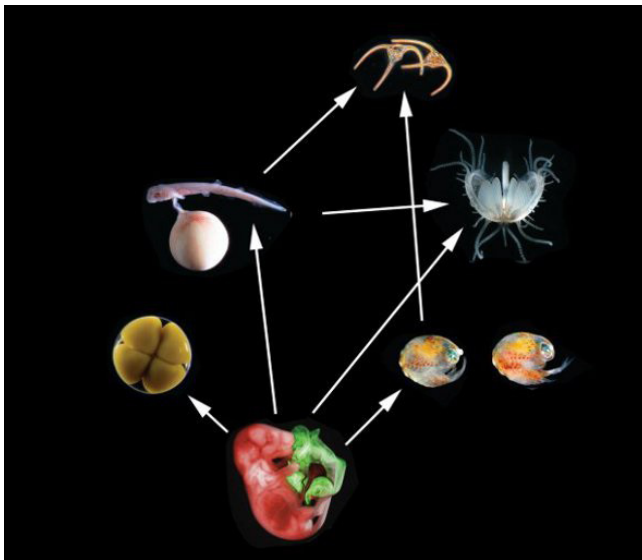


Pinar Yoldas: An Ecosystem of Excess, installation view  
Ernst Schering Foundation's Project Space, 2014

From entire landscapes serving the production of biofuels to traces of radioactive isotopes in organisms and foodwebs, or to factory-made genes, thinking of life in terms of metabolism permeates boundaries. At stake are the delineations of organisms and their environments, that of the natural and the synthetic, and not least, limits of and within science. In this workshop, we will explore the history of metabolic research in the 20th century life sciences more broadly construed, from e.g. fermentation technologies or catalytic chemistry to photosynthesis. Our aim will be to fathom what taking into account the 'metabolic dimensions of life' may imply for the history and philosophy of the life sciences.

If you are interested, please register:  
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Venue: R. H2051  
Straße des 17. Juni 135  
10623 Berlin



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**Friday, November 28<sup>th</sup>** Venue: R. H2051

- 14:00 Welcome – Mathias Grote/Friedrich Steinle
- 14:30 Introduction - Mathias Grote
- 15:00 Hannah Landecker (University of California at Los Angeles), *Cracked Ontologies: Before and after metabolism and genetics*
- 16:00 Refreshments
- 16:30 Heiko Stoff (Technische Universität Braunschweig), *Catalytic Causality. Alwin Mittasch's theory of metabolism*
- 17:30 Victoria Lee (Max-Planck-Institut für Wissenschaftsgeschichte, Berlin), *Metabolic Engineering: amino acid and nucleotide fermentation in postwar Japan*
- 19:00 Reception Geodätenstand TU Berlin  
Dinner

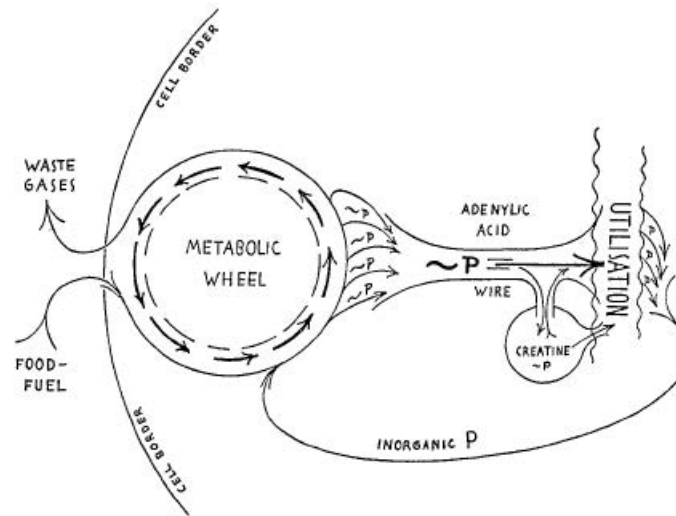


Fig. 1.—The metabolic dynamo generates ~P-current. This is brushed off by adenylic acid, which likewise functions as the wiring system, distributing the current. Creatine~P, when present, serves as P-accumulator.

F. Lipmann (1941), Metabolic energy generation and utilization of phosphate bond energy, *Advances in Enzymology*, 1, 99-162. Reproduced with permission.

**Saturday, November 29<sup>th</sup>**

- 09:00 Angela Creager (Princeton University), *Tracers and Temporalities in Metabolic Pathways*
- 10:00 María Jesús Santesmases (Consejo Superior de Investigaciones Científicas Madrid), *The cell wall: its composition and synthesis in the antibiotic era*
- 11:00 Refreshments
- 11:30 Kärin Nickelsen (Ludwig-Maximilians-Universität München), *Unity in metabolism – or not? Pitfalls and potential of analogical reasoning in 20th century photosynthesis research*
- 12:30 Hans-Jörg Rheinberger (Max-Planck-Institut für Wissenschaftsgeschichte, Berlin) *Comments*  
General Discussion
- 14:00 Lunch