



---

## Foetal Programming - from Epidemiology to Epigenetics

Lecture by Berthold Hocher

Monday 8, July 2013, 2 p.m.  
Room B004/005

---

## Invitation

Many lines of evidence, including epidemiologic data and extensive clinical and experimental studies, indicate that early life events play a powerful role in influencing later susceptibility to cardio-renal and also mental diseases. First evidence for this concept came from epidemiological study about 25 years ago. Animal studies later identified the underlying molecular pathways. Currently, we assume that environmental factors in early life affect the epigenome of the growing foetus, thus causing life-long adaptation of gene expression patterns. Depending on the initial stimuli (biological, socioeconomic, psychological, nutritional), this process may result in adverse later outcomes for human health and development.

### Notes

An epigenome consists of a record of the chemical changes to the DNA and the proteins of an organism that package and order the DNA into structural units; these changes can be passed down to an organism's offspring. The epigenome plays an important role in the regulation of gene expression, development, tissue differentiation, and suppression of a DNA sequence. Unlike the underlying genome which is largely static within an individual, the epigenome can be dynamically altered by the conditions of physical, social, economic and nutritional environments.

Prof. Dr. med. **Berthold Hocher** studied medicine and obtained his PhD degree in biochemistry at Free University of Berlin. He was a consultant nephrologist and associated professor of internal medicine at the University Hospital Bern, Switzerland. Currently, he is a professor at Potsdam University (experimental nutritional medicine). His research focuses on fetal programming of cardio-vascular diseases, exploration of novel targets for the treatment of diabetic complications.

(<http://www.uni-potsdam.de/eem/index/prof-hocher.html>)

---

### Social Science Research Center Berlin

Reichpietschufer 50  
D-10785 Berlin

Telefon 030/25491-0  
Telefax 030/25491684

*To register, please reply by July 5, 2013, to Sonia Mira: [sonia.mira@wzb.eu](mailto:sonia.mira@wzb.eu)*

*The WZB provides child care during the lecture. If you are interested, please respond by July 1, 2013, indicating the number of children and their age.*