

## Fakultät für Physik

## Isotopenforschung und Kernphysik

EINLADUNG

zum

VERA-SEMINAR

von

## **Kirsty SPALDING**

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## Retrospective analysis of cell turnover in the human brain and body

It is quite remarkable how little is known about the age of cells in many regions of the adult human body. Are the cells we are born with the ones we die with? Or as organs/tissues age, do they maintain their developmental ability to make new cells? The stability or turnover of cells in different tissues is a fundamental feature that may influence the response of different organs to insults and the aging process. We have developed a strategy that enables one to retrospectively determine the birthdate of cells in the adult human body, and use this technique to assess cell turnover in the normal and pathological situation. One such tissue is fat. Understanding fat cell turnover has important implications for understanding the development of obesity. Does the development of obesity mainly involve the growth of pre-existing adipocytes, or does it also include an increase in the number of adipocytes? These results, as well as new findings in the brain, will be discussed.

Donnerstag, 15. Mai 2008, 16:30 Uhr

1090 Wien, Währinger Str. 17, "Kavalierstrakt", 1. Stock, Seminarraum von VERA

R. Golser W. Kutschera