Vás pozývajú na 63. prednášku v rámci Kuželových seminárov:

**Prof. Guenther Daum**  
*Institute of Biochemistry*  
*University of Technology, Graz, Austria*

**Lipid biogenesis in yeasts**

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**Phosphatidylethanolamine, a key yeast lipid**

19. apríla 2007 (ŠTVRTOK) o 16:00

**V PREZENTAČNOM CENTRE J.A. KOMENSKÉHO (u Amosa)**  
**PRÍRODOVEDECKÉJ FAKULTY UK (B1 – 313)**


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Pre prípadných záujemcov sa bude konať aj druhá prednáška s podobnou problematikou:

**Neutral lipid storage and mobilization in the yeast**

20. apríla 2007 (PIATOK) o 10:00

**V ZASADACEJ MIESTNOSTI VEDECEJ RADY (č. 154)**  
**FAKULTY CHEMICKEJ A POTRAVINÁRSKEJ TECHNOLÓGIE STU**
Phosphatidylethanolamine, a key lipid of the yeast

Phosphatidylethanolamine (PtdEtn) is a major phospholipid of organelle membranes from the yeast *Saccharomyces cerevisiae*. PtdEtn can be synthesized by three different pathways which are coordinated to guarantee efficient supply of this lipid to the different subcellular membranes. During the last few years we focused our research on the traffic routes of PtdEtn from its sites of synthesis to mitochondria, the endoplasmic reticulum, the plasma membrane and peroxisomes. Making use of molecular biological methods we also studied consequences of PtdEtn depletion for yeast physiology. These studies demonstrated that PtdEtn is involved in various cellular processes underlining the importance of this lipid in membrane biology.

Neutral lipid storage and mobilization in the yeast

Biosynthesis and degradation of the yeast neutral lipids, triacylglycerols (TAG) and steryl esters (STE), were investigated in some detail during the last few years. Our laboratory together with a number of other groups contributed to these studies by the identification of TAG synthases and the STE synthases, as well as TAG lipases and the STE hydrolases. Recently, our work has been focused on the individual contribution of the acyltransferases to the formation of neutral lipid depots in lipid particles. Moreover, the structure of lipid particles in general and especially in strains bearing defects in neutral lipid metabolism has gained our interest. Among these studies, topology of lipid particle components is under investigation.

Recent publications:


Athenstaedt, K. and Daum, G. Tgl4p and Tgl5p, two triacylglycerol lipases of the yeast *Saccharomyces cerevisiae* are localized to lipid particles. J. Biol. Chem. 280 (2005) 37301-37109


