

COLLOQUIA IN CELLULAR SIGNALLING

Venue: Medical University Vienna, Center for Physiology and Pharmacology,
Institute of Pharmacology, Waehringerstrasse 13a, 1090 Vienna, "**Leseraum**".

(Harald Sitte, Tel.: (01) 40160 31323, harald.sitte@meduniwien.ac.at)

Christoph Österreicher, Tel.: (01) 40160 31376, Christoph.oesterreicher@meduniwien.ac.at)

Friday **24.5.2013** **11:00 c.t.** **Florian Greten** (host: Ch. Österreicher)

Institute of Molecular Immunology,
Technical University Munich
Molekulare Gastroenterologische Onkologie
Arcisstr. 21
80333 München

"NF- κ B and Stat3 Signaling in the Initiation and Progression of Colon Cancer"

Florian Greten (Florian.Greten@lrz.tu-muenchen.de)

Abstract:

Over the last years we were able to obtain in vivo evidence highlighting the functional importance of both NF- κ B and Stat3 as central signaling nodes in inflammation-associated intestinal carcinogenesis. Using different genetic mouse models of sporadic colon cancer that allow functional analysis specifically of tumor initiation and tumor progression, we have now identified novel distinct regulatory functions of these two transcription factors during early and late stages of tumor development. Depending on the tumor stage NF- κ B and Stat3 in epithelial cells can affect stem cell expansion, immune cell activation as well as invasion. Thus, both NF- κ B and Stat3 mediate cell type and context dependent functions during the carcinogenic process.