[Cancer Res., **56**, 3474-3479 (1996)]

[Lab. of Radiochemistry]

Enhancement of N-nitrosodiethylamine-Initiated Hepatocarcinogenesis Caused by a Colchicine-induced Cell Cycle Disturbance in Partially Hepatectomized Rats.

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The effects of a colchicine-induced M-phase block of regeneration after partial hepatectomy on early-stage liver carcinogenesis were studied in rats. The obtained results raise the interesting possibility that a cell cycle disturbance in the early stage of liver carcinogenesis provides a persisting growth advantage for initiated cells, resulting in enhanced growth of foci and persistent nodules that evolve into hepatocellular carcinomas.

[Eur. J. Biochem., 236, 476-481 (1996)]

[Lab. of Cell Biology]

Dissociation of c-fos Induction and Mitogen-Activated-Protein Kinase Activation from the Hepatocyte-Growth-Factor-Induced Motility Response in Human Gastric Carcinoma Cells.

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In this study, we examined the motogenic and mitogenic responses of two human gastric carcinoma cell types, MKN7 and MKN74. Cell motility of both cell lines was markedly stimulated by HGF. In contrast, HGF stimulated cell growth of MKN74 cells, but did not stimulate growth of MKN7 cells. We therefore examined the involvement of c-fos induction and MAP kinase activation in mediating signals of HGF through the receptor for stimulation of proliferation and motility in two cell lines and found that they were not required for the motility response induced by HGF.

[FEBS Lett., 379, 157-160 (1996)]

[Lab. of Cell Biology]

Tumor Necrosis Factor (TNF) Stimulates the Production of Nerve Growth Factor in Fibroblasts via the 55-kDa Type I TNF Receptor.

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The role of the two types of TNF receptors, TNF-R1 and TNF-R2, in mediating the capacity of TNF to stimulate NGF production in fibroblasts has been investigated. Although Swiss3T3 cells express both the TNF-R1 and TNF-R2, an agonistic anti-TNF-R1 antibody, but not an agonistic anti-TNF-R2 antibody, increases the NGF mRNA level and stimulates the production of NGF protein in the cells. Simultaneous addition of the both antibodies does not increase the NGF production above that observed with the antibody, indicating that TNF-R1 alone mediates the TNF's activity to stimulate NGF production in fibroblasts.