**Regulatory effects of sex steroids or tubal function : implication of environmental estrogens**

**Original title / Originaltitel**
Endocrine Disruptors

**Summary / Zusammenfassung**
The oviduct plays a key role in promoting the fertilization process. Hence, the focus of our research is: to elucidate the cellular, biochemical and molecular mechanisms by which the endocrine system influences normal oviduct function; and to investigate how the dysfunction of the endocrine-oviduct system is associated with infertility.

Using epithelial cells and fibroblasts cultured from human and bovine oviducts we have investigated the effects of ovarian steroids on the synthesis of autocrine/paracrine factors, such as leukemia inhibitory factor, endothelin, nitric oxide, glycodelin etc. which play a critical role in regulating the rhythmic tubal contractility (critical for the passage of fertilized embryos) as well as act as regulators of cell growth (cell survival/apoptosis/proliferation). Moreover, we have investigated the role of these factors in mediating the growth effects of the ovarian hormones.

More importantly, because reproductive disorders are associated with exposure to environmental estrogens (EE) and EE are structurally similar to natural estrogens, the current extension of our research is to elucidate the effects EE on oviduct function and to delineate the potential cellular, biochemical and molecular mechanisms influenced by EE and which may potentially influence the fertilization process.

**Publications / Publikationen**


Rosselli M, Imthurn B, Macas E, et al. Endogenous nitric oxide modulates endothelin-1 induced

Keywords / Suchbegriffe
sex steroids, environmental estrogens, tubal function

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Other Links to external Webpages / Andere Links zu externen Webseiten
http://fertinet

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