**Research on male reproductive health and toxicology**

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Epidemiological and experimental studies complement each other in research of male reproductive health. Most epidemiological studies are cross-sectional, retrospective case-control studies which may have a large sample size. These studies often suffer of inconsistent diagnostic criteria and recollection bias. Data may also be patchy, because it has not been collected systematically. Prospective cohort studies avoid many of these limitations but usually suffer of small sample size and high expenses. In birth cohort studies, the length of the study may also span the whole scientific career of the researcher yielding the most interesting results only at the end. In the era of epigenetic studies, transgenerational studies necessitate observations of multiple generations further lengthening the study time. Experimental reproductive toxicology includes both animal studies and *in vitro* and *ex vivo* studies. Protocols of reproductive toxicity testing are regulated by EU, United States Environmental Protection agency and inter-governmental organizations like OECD. Chemical industry is responsible for toxicity testing for approval of a new chemical to enter the market. Academic research goes beyond the regulatory testing and invents new methods that may not be ever applied in regulatory testing. We have used e.g., culture of rat or mouse seminiferous tubules at defined stages of the seminiferous epithelial cycle for testing genotoxicity of drugs and other chemicals. Staged tubules are isolated with transillumination-assisted microdissection, which allows strictly targeted analysis of specific events in spermatogenesis. Another important approach is the use of fetal testis cultures, either after *in vivo* or *in vitro* exposure. With the rapid technological advancement new possibilities open every day.