

**Fertility Clinic
Department of Obstetrics / Gynecology
Herlev – Gentofte Hospital
University of Copenhagen
Denmark**

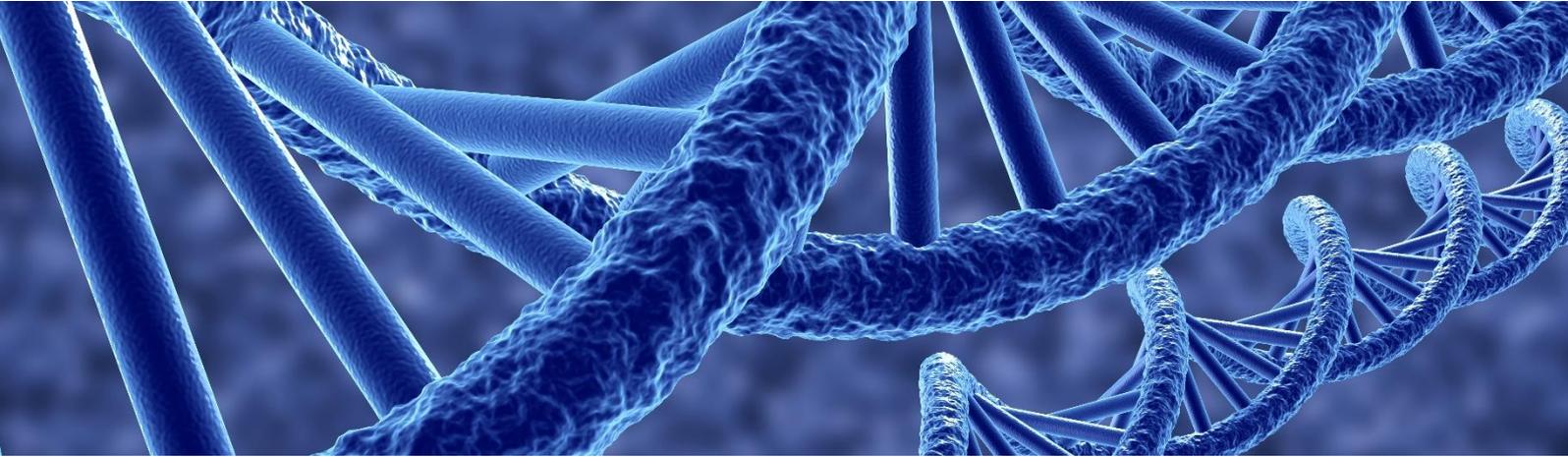
Synopsis

We are a university hospital based infertility center offering a comprehensive range of investigations and treatments in gynecological endocrinology and reproductive medicine. Our program provides high quality academic led clinical care in a multi-disciplinary environment including a team of doctors, embryologist, nurses, bioanalysts and administrative staff delivering consistently high success rates. We aim to provide a high quality service that places our patients and couples at the center of their management. The clinic is involved in a large portfolio of studies promoting a culture of evidence based practice and we support and encourage research and education involving all team members. We seek to translate our clinical findings into top-quality, state-of-the-art care for patients with reproductive disorders and incorporate this into the ReproUnion collaboration.

Clinical management

- Reproductive medicine and gynecological endocrinology including exogenous hormonal treatment
- Fertility clinic (IUI, IVF, ICSI, TESA, semen and oocyte donation, gamete and embryo cryopreservation, fertility awareness)
- Reproductive surgical procedures: hysteroscopic and laparoscopic treatment of fibroids and endometriosis
- PCOS clinic. Metabolic and thrombogenic effects of endogenous and exogenous sex steroids. Intervention trials according to PCOS phenotypes
- Obstetrics and antenatal care (more than 7000 deliveries per year)
- Gynecology. All kind of benign gynecology and selected gynecological oncology (cervical and endometrial cancer)





Laboratory skills

- IVF laboratory
- Time lapse microscopy
- Gamete/embryo freezing

Staff

- Clinical professor, head of reproductive medical unit (Skousby)
- Clinical professor, epidemiology and infertility (Kesmodel)
- Part time professor (Macklon)
- Head of laboratory unit (Grøndahl)
- Associate professor, infertility (Bungum)
- Associate professor, infertility and reproductive surgery (Nøhr)
- Expert trainee and consultant (Sopa)
- 4 PhD students
- The majority of the nurses and bioanalyst staff is ESHRE certified

Main research areas

- “Mapping” the follicular and endocrinological environment to explore the determinants for the “gate-keeping” in natural and stimulated cycles of the number and development of follicles as well as the inter-cyclic variation and endometrial receptivity
- Impact of aromatase inhibitor on supraphysiological estrogen and progesterone levels in stimulated cycles
- Reproductive epidemiology
- PGS
- Oocyte and Embryo morphokinetic, time lapse
- Folliculogenesis (expression array and next generation sequencing of oocytes and follicle cells)
- Female Meiosis (chromosome stability)
- Gene expression profiling of follicle cells (biomarker)
- MicroRNA in spent culture medium (biomarker)



- DNA methylation profiling in follicle cells
- GL-P1 intervention in women with PCOS. Impact on clinical expression and long term co-morbidity

Other specific areas

- Endometrial scratching and endometrial biopsy
- Weight loss prior to fertility treatment
- Multi center studies on embryo morpho kinetics in relation to female age and outcome (Fertility database)
- Age and ovarian reserve: DNA methylation age profile and telomere length
- Ovarian response and OHSS risk: Expression and DNA methylation profiling of follicle cells
- Chromosome stability and age
- HPV as risk factor for infertility and pregnancies

Type of conducted studies

Meta-analyses and systematic reviews, national registry-based cohort studies, clinical randomized controlled trials, observational studies, case-control studies

