

Press release

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Basic information

Name: Tanni Borgbo Email: tanni.borgbo@gmail.com Phone: 20282399

Department of: Biomedicine

Main supervisor: Lise Lotte Hansen

Title of dissertation: Effects of common genetic variations of human gonadotropin receptors on the intrafollicular milieu in small antral follicles

Date for defence: 24/10-2017 at (time of day): 13.15 Place: Lille Anatomisk Auditorium (1231-424), Au, Aarhus

Press release (Danish)

Ph.D. forsvar omhandlende genetiske faktorerers påvirkning af den kvindelige fertilitet

Infertilitet og ufrivillig barnløshed er et voksende og alment forekommende problem, hvor hvert syvende par kæmper imod ufrivillig barnløshed. Det skønnes at assisteret reproduktiv teknologi (ART) er involveret i op til 2 – 3 % af alle fødsler i de industrialiserede verdensdele, men desværre er effektiviteten af ART behandlingsprotokollerne stadig lav.

Brug af genetiske biomarkører anses som en ny lovende fremgangsmåde til at udvikle individuelle fertilitetsbehandlinger, der forhåbentlig kan forbedre effekten af kontrolleret ovariel stimulering. Denne afhandling evaluerer hvorvidt udvalgte genetiske biomarkører påvirker den kvindelige reproduktion. Dette blev gjort ved at sammenholde genotyperne af de forskellige markører med observerede ændringer i den ovarielle steroidproduktion, samt de observerede ændringer i genudtrykket i små antrale follikler fra kvinder.

Resultaterne fra denne afhandling påviser, at effekterne af de genetiske variationer sker på forskellige trin i den ovarielle steroidproduktion, og påvirker funktionen af små antrale follikler fra kvinder.

Denne afhandling er en del af et Ph.D.-projekt fra Aarhus Universitet, Health.

Projektet er gennemført af Tanni Borgbo, der forsvare det d. 24/10-2017.

Forsvaret af Ph.D.-projektet er offentligt og finder sted den 24/10 kl 13.15 i Lille Anatomisk Auditorium, bygning 1231, lokale 424, Aarhus Universitet, Aarhus.

Titlen på projektet er "Effects of common genetic variations of human gonadotropin receptors on the intrafollicular milieu in small antral follicles".

For yderligere oplysninger, kontakt Ph.D.-studerende Tanni Borgbo, e-mail: tkbo@biomed.au.dk.

Bedømmelsesudvalg:

Chairman: Professor Uffe Birk Jensen

Department of Clinical Medicine, Klinisk genetisk afdeling, Aarhus University Hospital, Danmark

Professor Aleksander Giwercman

Reproduktionsmedicin, Lund Universitet, Malmø, Sverige

Professor Niels Tommerup

Department of Cellular and Molecular Medicine, University of Copenhagen, Denmark

Press release (English)

Ph.D. defence regarding the influence of genetic factors on the female reproduction.

Infertility and involuntary childlessness is a common and an increasing problem in developed countries, where one ne in seven couples struggle with involuntary childlessness. It is estimated that 2-3% of births are the result of assisted reproductive technology (ART), however the efficiencies of the treatment protocols are still low. Therefore, more effective treatment strategies are needed within the field of reproductive health.

Genetic biomarkers are considered a promising approach to individualize fertility treatment and improve the response rate of controlled ovarian stimulation.

The scope of the dissertation was to evaluate how a selection of genetic biomarkers influences the female reproduction, through evaluation of genotype specific changes in the ovarian steroid production and granulosa cell specific gene expression in human small antral follicles.

The findings of the dissertation indicate that the common genetic variations included in the dissertation, exert their effects at different stages of the ovarian steroidogenesis, and affects the function of human small antral follicles.

The project was carried out by Tanni Borgbo, who is defending her dissertation on 24/10-2017.

The defence is public and takes place on 24/10-2017 at 13.15 in Lille Anatomisk Auditorium (building 1231, room 424), Aarhus University, Aarhus.

The title of the project is "Effects of common genetic variations of human gonadotropin receptors on the intrafollicular milieu in small antral follicles".

For more information, please contact Ph.D. student Tanni Borgbo, email: tkbo@biomed.au.dk .

Assessment committee:

Chairman: Professor Uffe Birk Jensen

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Professor Aleksander Giwercman

Reproduktionsmedicin, Lund Universitet, Malmö, Sverige

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