

**FORSKNINGS- OG UNDERVISNINGSAKTIVITETER 2011  
FERTILITETSKLINIKKEN, REGIONSHOSPITALET SKIVE**

a) **Forskningsansvarlig.**

Overlæge Helle Olesen Elbæk  
78445709 helle.elbaek@viborg.rm.dk

Side 1

b) **Ph.d.-studerende.**

(Navn og titel på ph.d.-projekt - igangværende pr.  
31.12.2011. Indskrivningssted og samtlige vejledere med  
hovedvejleder nævnt først).

c) **Ph.d.-afhandlinger/disputatser.**

**Humaidan P**

Controlled ovarian stimulation in women undergoing assisted  
reproduction-the role of LH during the follicular and luteal  
phases.

Defence and obtainment of doctoral degree (DMSc) June 17<sup>th</sup>,  
2011 Faculty of Health Sciences, Aarhus University, Aarhus,  
Denmark

d) **Præsentation af afdelingens vigtigste forsknings-  
aktivitet.**

**Liste over igangværende forskningsprojekter.**

- Den endokrine effekt af enten r-LH eller lav dosis r-hCG  
tilskud til r-FSH stimulering hos normogonadotrope kvinder  
som gennemgår IVF/ICSI behandling efter en lang GnRH  
agonist nedreguleringsprotocol

Fertilitetsklinikken, Regionshospitalet Skive  
Fertilitetsklinikken, Odense Universitetshospital  
Forskerinitieret. Kontaktperson: Peter Humaidan.

- Analyse af LH receptor ekspresion i humane granulosa celler  
En prospektiv undersøgelse til analyse af LH/hCG  
receptor under 2 forskellige omstændigheder :  
dels den "naturlige"cyklus før den midtcykliske top, dels  
den stimulerede cyklus efter ægdhentning niveauet i  
humane murale granulosa celler og cumulus  
granulosa celler i forbindelse med ICSI behandling  
Fertilitetsklinikken , Sygehus Viborg (Skive), DK  
Reproduktions Biologisk Laboratorium, Rigshospitalet, D  
University of Louisville, USA  
Forskerinitieret. Kontaktperson: Betina Boel Poulsen.

**midt**  
regionmidtjylland

Side 2

-A prospective randomized study to compare the reproductive  
outcome after ICSI following embryo selection after either  
incubation with time-lapse assessment or standard incubation  
selection criteria(deltaget i preset studiet )  
Fertilitetsklinikken,Regionshospitalet Skive  
Fertilitetsklinikken, Regionshospitalet Brædstrup  
AVA clinic, Tampere, Finland  
Reproduktionscentrum, Uppsala University Hospital, Sweden  
UZ clinic;Brussel, Belgien  
Royale Hayat Hospital/UZ Brussel-Kuwait  
Medicinalindustriinitieret: Kontaktpersoner: Betina Boel  
Poulsen & Helle Olesen Elbæk

-Stresshåndtering og ufrivillig barnløshed hos par i IVF-  
behandling  
Et randomiseret kontrolleret intervensstudie i effekten af  
"Expressive Writing Intervention" på psykosocial belastning og  
behandlingsresultat hos par i In Vitro Fertilitetsbehandling for  
ufrivillig barnløshed  
Århus og Københavns Universitet, Skejby, Skive og Brædstrup  
Fertilitetsklinik  
Forskerinitieret. Kontaktperson: Birgit Alsbjerg.

-LH receptor expression in human cumulus granulosa cells  
according to mode of inducing ovulation.  
Skive, Laboratory of Reproductive Biology, section 5712,  
Rigshospitalet and the Microarray center Rigshospitalet.  
Forskerinitieret.Kontaktperson: Betina Boel Poulsen.

-A prospective randomised study to evaluate the effect of  
triggering ovulation with GnRH $\alpha$  and low dose hCG as  
compared to the use of conventional doses of hCG

Skive Odense and Holbæk Fertility Clinic, Laboratory of Reproductive Biology, section 5712, Rigshospitalet. Forskerinitieret. Kontaktperson: Peter Humaidan

-The effect of long acting FSH on ovarian respons of poor responder patients

Fertilitetsklinikken, Regionshospitalet Skive  
Polyzos NP, VUB, Brussels University  
Forskerinitieret. Kontaktperson: Helle Olesen Elbæk

- Har lavet en forbedring af stimuleret cyklus før transferering af optøede embryoner. Herunder opgørelse af resultaterne efter ændring af progesteron dosis. Der er fundet statistisk signifikans ved den nuværende behandling. Resultatet bliver publiceret i anerkendt tidsskrift.

Desuden pågår et pilot projekt med tillæg af hCG før og efter embryotransferering, der forventes afslutet om 2 år.

Forskerinitieret. Kontaktperson: Birgit Alsbjerg.

-Skive er medlem af en dansk tænketank indbefattende fertilitetsklinikkerne i Herlev, Skive og Odense i samarbejde med the Laboratory of Reproductive Biology, section 5712 Rigshospitalet med bl.a Professor Nick Macklon, Professor Claus Yding Andersen, Professor Svend O Schouby og Professor Peter Humaidan.

-Fremtidigt kan det anføres, at vi er påbegyndt klinisk forskning i human reproduktion med henblik på fremtidig klinisk forskning indenfor emnet reproduktion

Forskerinitieret. Kontaktperson: Helle Olesen Elbæk

e) **Videnskabelige og populærvideenskabelige publikationer offentliggjort i 2011.**

1. Bungum M, Bungum L, Lynch KF, Wedlund L, **Humaidan P**, Giwercman A.  
Sperm DNA damage measured by Sperm Chromatin Structure Assay (SCSA) and birth characteristics in children conceived by IVF and ICSI.  
Human Reproduction 2011;26:I278
2. Bungum M, Bungum L, Lynch KF, Wedlund L, **Humaidan P**, Giwercman A.  
Spermatozoa DNA damage measured by sperm chromatin structure assay (SCSA) and birth characteristics in children conceived by IVF and ICSI.  
Int.J.Androl 2011;
3. Fedder J, Erb K, **Humaidan P**, Maigaard S, Gabrielsen A, Pedersen B, Kaspersen MD, Loft A.

Prenatal diagnostics in TESA/PESA pregnancies in Denmark 1995-2007: A shift from invasive procedures to nuchal translucency examination.  
Systems Biology in Reproductive Medicine 2011;57(5):256-60.

4. **Humaidan P**, Kol S, Papanikolaou EG.  
GnRH agonist for triggering of final oocyte maturation: time for a change of practice?  
Hum.Reprod.Update 2011;17(4):510-24.
5. **Humaidan P**, Westergaard LG, Mikkelsen AL, Fukuda M, Yding AC.  
Levels of the epidermal growth factor-like peptide amphiregulin in follicular fluid reflect the mode of triggering ovulation: a comparison between gonadotrophin-releasing hormone agonist and urinary human chorionic gonadotrophin.  
Fertil.Steril. 2011;95(6):2034-8.
6. Kjotrod SB, Carlsen SM, Rasmussen PE, Holst-Larsen T, Mellembakken J, Thurin-Kjellberg A, HaapaniemiKouru K, Morin-Papunen L, **Humaidan P**, Sunde A, von During V.  
Use of metformin before and during assisted reproductive technology in non-obese young infertile women with polycystic ovary syndrome: a prospective, randomized, double-blind, multi-centre study.  
Human Reproduction 2011;26(8):2045-53.
7. **Humaidan P**, EG. Papanikolaou, D Kyrou, **B Alsbjerg**, NP Polyzos, P Devroey, Human M Fatemi

The luteal phase after GnRH-agonist triggering of ovulation: present and future perspectives.

Reproductive Biomedicine Online  
2011;doi:10.1016/j.rbmo.2011.11.001

8. Papanikolaou E, Pantos G, Grimbizis G, Bili E, Polyzos N, Karastefanou K, **Humaidan P**, Esteves S, Tarlatzis B.  
Recombinant HCG triggering compared with urinary-HCG in IVF cycles. Systematic review and meta-analysis.  
Human Reproduction 2011;26:i155
9. Papanikolaou EG, Polyzos NP, **Humaidan P**, Pados G, Bosch E, Tournaye H, Tarlatzis B.  
Aromatase inhibitors in stimulated IVF cycles.  
Reproductive Biology and Endocrinology 2011;9
10. Yding AC, Bungum L, Nyboe AA, **Humaidan P**.  
Preovulatory progesterone concentration associates significantly to follicle number and LH concentration but not to pregnancy rate.  
Reproductive BioMedicine Online 2011;23(2):187-95.
11. Castillo JC, Garcia-Velasco J, **Humaidan P**  
  
Empty follicle syndrome after GnRHa triggering versus hCG triggering in COS.

J Assist Reprod Genet. 2012 Jan 12. (Epub ahead of print)PMID  
22237554

12. Humaidan P

Agonist trigger and low dose HCG  
Fertil Steril. 2011 Dec 9(Epub ahead of print)PMID:22154368

13. Papanikolaou EG, Humaidan P, Polyzos N, Kalantaridou S, Kol S,  
Benediva C, Tournaye H, Tarlatzis.

New algorithm for OHSS prevention.  
Reprod Biol Endocrinol, 2011 Nov 3;9:147 PMID 22054506

14. Humaidan P, Kol S, Engmann L, Benadiva C, Papanikolaou EG, And-

Ersen CY; Copenhagen GnRH Agonist Triggering Workshop Group.

Should Cochrane reviews be performed during the development of  
Hum Reprod. 2012 Jan;27(1):6-8.Epub 2011 Oct 24 PMID 22025229

15. Kol S, Humaidan P, Itskovitz-Eldor J

GnRH agonist ovulation trigger and hCG-based, progesterone-free lu-  
teal support: a proof of concept study

Hum Reprod. 2011 Oct;26(10):2874-7.Epub 2011 Jul 21 PMID  
21784738

16. Alviggi C, Clarizia R, Petterson K, Mollo A, Humaidan P, Strina I,  
Coppola M, Ranieri A, DÚva M, De Placido G

Suboptimal response to GnRHa long protocol is associated With com-  
Mon LH polymorphism.

Reprod Biomed Online. 2011 Feb;22 Suppl 1:S67-72 PMID 21575852

17. A.T.Mikkelsen, S.A. Madsen, P. Humaidan

Psychological aspects of male fertility treatment – A Scandinavian  
Perspective

Er aktuelt under review ved Journal of Advanced Nursing

Other publications

Peter Humaidan, Daniel Bodri, Evangelos Papanikolaou and Sha-  
har Kol

HCG is the best choice for ovulation triggering?

The Open Reproductive Journal, 2011.3

**Alsbjerg B and Humaidan P**

Nordic OHSS guideline 2011

**Undervisning. (U-kursus) P. Humaidan**

Side 6

OHSS incidence, pathology and treatment

*Faculty of Health Sciences, Horsens, Denmark. February 2011*

Principles and stimulation protocols for IVF/ICSI

*Faculty of Health Sciences, Horsens, Denmark. February 2011*

*Postgraduate doctors*

Critical assessment and interpretation of scientific papers

*Fertility Forum, Aug, 2011, Nyborg Strand, Denmark*

- f) **Videnskabelige kongresser. Angiv om du er invited/key note speaker, chairman eller har fået accepteret en oral præsentation eller poster.**

**P.Humaidan** har været invited speaker til flg. Konferencer og møder:

The OHSS free clinic – is it possible?

Skejby Hospital

*Århus University, Århus, Denmark, 2011, December 21<sup>st</sup>*

GnRH agonist triggering: For whom and how

Fertility Summit

Advancing science with a patient-focused vision

*Dublin, Ireland, 2011, December 2-3<sup>rd</sup>*

The management of poor and over responders

Advanced workshop on oocyte retrieval and embryo transfer

*Dubai, United Arab Emirates, 2011, November 23<sup>rd</sup>-26<sup>th</sup>*

The control and management of follicular stimulation cycles for IVF

Advanced workshop on oocyte retrieval and embryo transfer  
*Dubai, United Arab Emirates, 2011, November 23<sup>rd</sup>-26<sup>th</sup>*

An introduction to ART – past, present and future  
Advanced workshop on oocyte retrieval and embryo transfer  
*Dubai, United Arab Emirates, 2011, November 23<sup>rd</sup>-26<sup>th</sup>*

The OHSS free clinic  
SHAPE meeting, VUB, Brussels University  
*Brussels, Belgium, November 16<sup>th</sup>*

Individualized controlled ovarian stimulation  
The Israeli Fertility Society  
*Tel Aviv, Israel, 2011, November 11<sup>th</sup>*

Basic endocrinology focus on LH/hCG and progesterone  
Nordic nurse meeting  
*Stockholm, Sweden, October 27<sup>th</sup>*

Luteal phase support in OI – do we need it?  
Ovulation induction meeting  
*Dubai, United Arab Emirates, 2011, September 30<sup>th</sup>*

The role of FSH in optimizing the outcome after OI  
Ovulation induction meeting  
*Dubai, United Arab Emirates, 2011, September 29<sup>th</sup>*

Individualized controlled ovarian stimulation  
*Dubai, United Arab Emirates 2011, September 28<sup>th</sup>*

The role of LH during controlled ovarian stimulation  
2<sup>nd</sup> International Educational Event  
Slovak Gynaecological-Obstetrical Society  
*Bratislava, Slovakia, 2011, September 16<sup>th</sup>*

OHSS prevention  
ESG 2011  
*Copenhagen, Denmark, September 9-10<sup>th</sup>*

LH supplementation in ART – does it make a difference?  
Precongress workshop  
The 8<sup>th</sup> Singapore international congress of obstetrics and gynecology  
*Singapore, 2011, August 24<sup>th</sup>*

Triggering of final oocyte maturation with hCG versus GnRH agonist  
and natural cycle  
Precongress workshop  
The 8<sup>th</sup> Singapore international congress of obstetrics and gynecology

*Singapore, 2011, August 24<sup>th</sup>*

Individualized controlled ovarian stimulation in ART  
ESHRE,  
*Stockholm, Sweden, 2011, July 3-6<sup>th</sup>*

Minimizing the risk of OHSS  
ESHRE  
*Stockholm, Sweden, 2011, July 3-6<sup>th</sup>*

Managing poor responder patients  
SSIF  
*Copenhagen, Denmark, 2011, May 27<sup>th</sup>*

COS – A tailored approach  
Individualization – a must to achieve the best outcomes and improve  
baby take home rates  
Meeting arranged by members of The Romanian Fertility Society  
*Copenhagen, Denmark, 2011, May 26<sup>th</sup>*

GnRHa trigger in normal responder patients – modified luteal support  
The Israeli Fertility Society  
*Tel Aviv, Israel, 2011, May 5<sup>th</sup>*

OHSS risk reduction – prevention  
The Jordanian Society for Fertility and Genetics  
*Amman, Jordan, 2011, April 20-22<sup>nd</sup>*

Does GnRHa trigger improve cycle outcomes?  
Transatlantic reproductive technologies network (TARTEN)  
*Istanbul, Turkey 2011, April 14-17<sup>th</sup>*

HCG mode of action versus GnRHa action for triggering of final oocyte  
maturation  
The Ovary and endometrium  
1<sup>st</sup> IVF Conference  
*Kuwait City, Kuwait 2011, March 31<sup>st</sup>*

How to solve the luteal phase in agonist triggered antagonist cycles  
The Ovary and endometrium  
1<sup>st</sup> IVF Conference  
*Kuwait City, Kuwait 2011, March 31<sup>st</sup>*

COS – A tailored approach  
*Dubai, United Arab Emirates, 2011, March 17<sup>th</sup>*

COS – A tailored approach  
*Muscat, Oman, 2011, March 16<sup>th</sup>*



COS – A tailored approach  
*Doha, Qatar, 2011, March 15<sup>th</sup>*

COS – A tailored approach  
*Kuwait city, Kuwait 2011, March 14<sup>th</sup>*

g)  
h) **Udvalgsarbejde og anden virksomhed/medlem af faglige og videnskabelige udvalg.**

i) **Videnskabelig bedømmelse. Peter Humaidan**

Human Reproduction

Fertility and Sterility

Reproductive Biomedicine Online

Acta Obstetrica et Gynecologica Scandinavica

Archives in Gynecology and Obstetrics

Gynecological Endocrinology

Womens Health

Asian Journal of Andrology

j) **Priser, legater og fondsdonationer.**  
(Projekt, forsøgsansvarlig, fond, donation).