ANNUAL REPORT 2015
Women’s Health and Perinatology Research Group (Forskningsguppe Kvinnehelse og perinatologi), Department of Clinical Medicine, Faculty of Health Sciences, UiT – The Arctic University of Norway, Tromsø

INTRODUCTION
Women’s Health and Perinatology Research Group has been working actively in research and education since its establishment in 2009 with the aim of enhancing health and wellbeing of women and babies. We focus on clinical, basic and translational research as well as epidemiological studies related to obstetrics, maternal-fetal medicine, perinatal medicine and female incontinence.


Permanent staff
- Ganesh Acharya, leader and professor (100%), currently on sabbatical
- Pål Øian, acting leader from 01.07.2015, professor (20%)
- Purusotam Basnet, professor (20%)
- Åse Vårtun, technical staff (senioringeniør 100%)

Other staff
- Øystein Pedersen, clinical lecturer (50% until 31.07.15, 20% from 01.08.15)
- Kari Flo, associate professor (10%)
- Martha Hentemann, associate professor (20%)
- Ingard Nilsen, assistant professor (20%)
- Anne Beate Vereide, associate professor (20%). She is employed at the Department of Clinical Medicine - Obstetrics and Gynecology, but is associated with Gynecological Oncology Research group at the Department of Medical Biology.
- Francesco D’Antonio, associate professor (100%) from 07.09.2015
- Elise Sletten, clinical lecturer (50%) from 01.08.15

PhD candidates
- Christian Widnes (50% external funding, UNN)
- Elisabeth Ludvigsen (50% external funding, Helse-Nord)
- Mona Nystad (100% external funding until 01.05.16, Helse-Nord)
- Madhu Wagle (no funding)
- Stine Andreasen (external funding, Nordlandssykehuset, Bodø)
- Åse Vårtun (employed as technical staff at UiT)
- Tonje Lippert (50% external funding Sykehuset Asker og Bærum, Vestre Viken HF), maternity leave in 2015
- Siv Boon Mundal (100% supported by NTNU, Trondheim)
- Lotta Herling (in 2015 50% supported by UNN and 50% by Karolinska Institute, Stockholm)
Amar Bhide (no funding, employed at St. George´s Hospital, London)
Ane Sigrid Henriksen (100% external funding, Fysiofondet/HelseNord), maternity leave from 21.11.2015.

Postdoc. candidate
Stine Bernitz (100%, external funding, Sykehuset Østfold HF)

Local collaboration
Natasa Skalko-Basnet, Drug Transport and Delivery Research Group, IFA, UiT
Anne Husebakk, Bjørn Skogen and Heidi Tiller, Immunology Research Group, IMB, UiT
Kirsti Ytrehus, Cardiovascular Research Group, IMB, UiT
Tore Sørlie, Psychiatry Research Group, IKM, UiT
 Henrik Schirmer, Department of Heart Medicine, UNN
 Trond Flægstad, Per Ivar Kaaresen and Claus Klingenberg, Pediatric Research Group, UiT
 Tom Wilsgaard, ISM, UiT
 Gunnar Leivseth, IKM, UiT
 Ellisiv Mathiesen and Stein Harald Johnsen, Brain and Circulation Research Group
 Vinjar Fønnebø, NAFKAM, UiT
 Terkel Hanssen, IFA, UiT
 Balpreet Ahluwalia, Department of Physics, UiT
 Lotta Halvorsen, UNN
 Hilde Nerum, UNN
 Inigo Martinez, UiT

National collaboration
Vasilis Sitras, OUS, Oslo
Bjørn Backe, NTNU, Trondheim
Rolf Gunnar Jørstad, Norsk pasientskadeerstatning (The Norwegian System of Compensation to Patients)
Lars T Johansen, Statens helsetilsyn (The Norwegian Board of Health Supervision)
Signe Egenberg, Stavanger Universitetssykehus
Ann-Charlotte Iversen, Institutt for kreftforskning og molekylær medisin, Det medisinske fakultet, Norges teknisk naturvitenskapelige universitet (NTNU) Trondheim
Mona Stedenfeldt, St. Olav hospital and Nasjonalt Kompetansesenter for inkontinens og bekkenbunnsykdom (Norwegian National Advisory Unit on Incontinence and Pelvic Floor Health).
Ellen Blix, Høyskolen i Oslo & Akershus
Torbjørn Eggebø, NTNU og Nasjonalt senter for fostermedisin, St. Olav.
International Collaboration

- Juha Räsänen, Oregon Health and Science University, Portland, USA and University of Eastern Finland, Kuopio, Finland
- Tiina Erkinaro, Oulu University Hospital, Oulu, Finland
- Kersti Linask, Children's Research Institute, University of South Florida, USA
- Agata Wloch, Medical University of Silesia, Katowice, Poland
- Andres Salumets, University of Tartu, Estonia
- Magnus Westgren, Karolinska Institutet, Stockholm, Sweden
- Darshan Shankar, Institute of Trans-Disciplinary Health Sciences and Technology (ITD-HST) University, Bangalore, India
- Jim Zhang, Xinhua Hospital, Shanghai Jiatong University School of Medicine, Shanghai, China and National Institute of Health; Bethesda, USA.
- Jouko Pirhonen, Finland
- Mike Robson, National Maternity Hospital, Dublin, Ireland

EDUCATION

The number of medical students has been increasing over years but not compensated for by an increase in the staff. Teaching in obstetrics and gynecology is demanding especially since bed-side teaching must be given in a one-to-one basis (in the obstetric out-patient clinic, the gynecological out-patient clinic, the labor ward, gynecological and gyn-oncology units, and in the operation theater) rather than to groups of students.

For the last 6 months, 2.6 full positions have been involved in teaching medical students (FD 100%, ES 50%, PØ 20%, IN 20%, MH 20%, ABV 20%, KF 10% and ØP 20%).

Teaching in obstetrics and gynecology is given in the international semester (4th year of the medical study), with 30-40 international students, thus all teaching is in English. Teaching is also given to the 6th year medical students. In the international semester the teaching in clinical skills and simulations training (Sim-Mom) is condensed to two weeks at the skills lab. The main person responsible is our English colleague Helen Bintley.

The new study plan of 2015 implied that new case histories in both gynecology and obstetrics had to be produced, the latter in collaboration with the pediatric department. These productions were time-consuming processes, which also implied more teaching hours with the students.

The staff is also involved as supervisors and mentors for master students and in exam committees.
Research focus

- Fetal physiology and perinatal medicine
- Basic and translational research in perinatology using animal models
- Pregnancy and maternal mental health
- Reproductive and perinatal epidemiology
- Preeclampsia and its long-term consequences
- Placental biology including genomics and proteomics
- Reproductive endocrinology, preimplantation biology and clinical assisted reproduction technology
- Female incontinence and pelvic physiology

International projects

<table>
<thead>
<tr>
<th>Project leader</th>
<th>Collaborator</th>
<th>Research title</th>
<th>Funded by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juha Räsänen</td>
<td>Ganesh Acharya</td>
<td>Experimental studies on fetal cardio-vascular function in a sheep model</td>
<td>Sigrid Juselius Foundation and University Hospital of Oulu, Finland.</td>
</tr>
<tr>
<td>University of Oulu, Oulu, Finland.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinjar Fønnebø, NAFKAM, UiT</td>
<td>Purusotam Basnet</td>
<td>Sustainable integrated mother/child health care in rural India</td>
<td>Norwegian Ministry of Foreign Affairs, Embassy of Norway in India</td>
</tr>
</tbody>
</table>

Post-doctoral research projects

<table>
<thead>
<tr>
<th>Postdoc researchers</th>
<th>Collaborator</th>
<th>Research title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stine Bernitz</td>
<td>Pål Øian</td>
<td>Labour progression study (LAPS)</td>
</tr>
</tbody>
</table>

PhD research projects

<table>
<thead>
<tr>
<th>PhD researcher</th>
<th>Main supervisors and co-supervisors</th>
<th>Project title</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Widnes</td>
<td>Ganesh Acharya (principal supervisor); Kari Flo and Anne Husebekk (co-supervisor), IMB</td>
<td>Maternal endothelial function and feto-maternal hemodynamics in normal and complicated pregnancies: An observational study</td>
<td>UNN</td>
</tr>
<tr>
<td>Mona Nystad</td>
<td>Ganesh Acharya (principal supervisor); Vasilis Sitras (co-supervisor) Oslo University Hospital</td>
<td>Investigation into some genetic aspects of preeclampsia: Role of Laeverin in the pathophysiology of preeclampsia and genome copy number variation in maternal an umbilical cord blood</td>
<td>Helse-Nord</td>
</tr>
<tr>
<td>Name</td>
<td>Supervisor(s)</td>
<td>Research Title</td>
<td>Institution</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Madhu Wagle</td>
<td>Ganesh Acharya (principal supervisor); Purusotam Basnet (co-supervisor)</td>
<td>Self reported oral health awareness and attitude towards dental care and risk of dental caries among pregnant woman in Norway</td>
<td>None</td>
</tr>
<tr>
<td>May Wenche Jøraholmen</td>
<td>Natasa Skalko-Basnet (principal supervisor) IFA, UiT; Ganesh Acharya and Purusotam Basnet (co-supervisors)</td>
<td>Improved therapy of genital infections: Role of nanomedicine (Defended thesis on 19.02.2016)</td>
<td>Norskkevinners sanitets forening</td>
</tr>
<tr>
<td>Stine Andreasen</td>
<td>Pål Øian (principal supervisor); Bjørn Backe (co-supervisor)</td>
<td>Claims for compensation after alleged birth injury in Norway</td>
<td>Nordlandssykehuset</td>
</tr>
<tr>
<td>Tonje Lippert</td>
<td>Pål Øian (principal supervisor)</td>
<td>Risk evaluation during labour and birth outcomes</td>
<td>Sykehuset Asker og Bærum</td>
</tr>
<tr>
<td>Signe Egenberg</td>
<td>E. Bru (principal supervisor) Pål Øian and Torbjørn Eggebø (co-supervisor)</td>
<td>Simulation training in obstetrics with focus on severe bleeding</td>
<td>Lærdalfondet</td>
</tr>
<tr>
<td>Ane S. Henriksen</td>
<td>Pål Øian (principal supervisor); Gro K Haugstad and Mona Stendenfeldt (co-supervisor)</td>
<td>Group based somatocognitive physiotherapy for women with chronic pelvic pain. A randomized controlled trial.</td>
<td>Fysiofondet/Helse Nord</td>
</tr>
<tr>
<td>Elisabeth Ludvigsen</td>
<td>Finn-Egil Skjeldestad (principal supervisor)</td>
<td>Fødselsrelatert urininkontinens og prolaps (FRURIPRO)</td>
<td>Helse-Nord</td>
</tr>
<tr>
<td>Siv Boon Mundal</td>
<td>Ann-Charlotte Iversen (principal supervisor), NTNU, Ganesh Acharya (co-supervisor)</td>
<td>Oxidative stress in placental decudia among preeclamtic women</td>
<td>NTNU</td>
</tr>
<tr>
<td>To be employed</td>
<td>Purusotam Basnet (principal supervisor); Ganesh Acharya and Balpreet Ahluwalia (co-supervisors)</td>
<td>Subcellular anatomy of preimplanted human embryo using Nanoscopy Tecnology. (a strategic grant approved by UiT and will start from 2016)</td>
<td>UiT</td>
</tr>
<tr>
<td>Rebecka Dalbye</td>
<td>Ellen Blix (principal supervisor) Pål Øian (co-supervisor)</td>
<td>Labor progression study. A cluster randomized study in 14 obstetric departments</td>
<td>Sykehuset Østfold</td>
</tr>
<tr>
<td>Lotta Herling</td>
<td>Magnus Westgren (principal supervisor)</td>
<td>Functional studies of human fetal heart with tissue Doppler</td>
<td>Karolinska Institutet</td>
</tr>
</tbody>
</table>
Ganesh Acharya (co-supervisor) Peter Lindgren (co-supervisor) Sven-Erik Sonesson (co-supervisor)

imaging

Elise Sletten (50%)
Anne Ørbo (principal supervisor); Anne Beate Vereide (co-supervisor)
Significance of intrauterine progestogen therapy in endometrial proliferative conditions
UiT

Ase Vårtun
Ganesh Acharya (principal supervisor), Kari Flo and Purusotam Basnet (co-supervisors)
Dynamic functional assessment of hemodynamics in human pregnancy
UiT

**Master level research projects**

<table>
<thead>
<tr>
<th>Master student</th>
<th>Supervisors</th>
<th>Research title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iren Yeeling Wu</td>
<td>Purusotam Basnet (principal supervisor); Natasa Skalko-Basnet (co-supervisor)</td>
<td>Can nanomedicine improve semen quality? The potential of liposomal curcumin</td>
</tr>
<tr>
<td>Kristoffer H. Fordal Erik P. Wåland</td>
<td>Purusotam Basnet (principal supervisor); Ganesh Acharya and Martha A Hentemann (co-supervisors)</td>
<td>Semen quality and oxidative stress</td>
</tr>
<tr>
<td>Marianne Johansen Lerbukt</td>
<td>Kari Flo</td>
<td>Induction of labor, duration of labor, and operative deliveries.</td>
</tr>
<tr>
<td>Caroline Nordbakken</td>
<td>Pål Øian, Claus Klingenberg</td>
<td>Subgaleal hematoma</td>
</tr>
<tr>
<td>Ida Stenmo</td>
<td>Pål Øian</td>
<td>Uterine rupture in pregnancy</td>
</tr>
<tr>
<td>Elise Marie Schneider</td>
<td>Pål Øian</td>
<td>Shoulder dystocia</td>
</tr>
</tbody>
</table>

**Other current research projects**

Ganesh Acharya:
His research activity mainly focuses on the investigation of fetal and maternal cardiovascular changes in physiological and pathological pregnancies. The focus is on the
translational aspect and we utilize experimental animal models as well as clinical material and epidemiological data in our research. Some of the ongoing projects are outlined below:

- **Experimental studies on maternal and fetal cardio-vascular function using animal models.**
  This is an ongoing collaboration with Prof Juha Rasanen, University of Eastern Finland, Kuopio, Oregon Health Sciences University, Portland, USA and University of Oulu, Finland for more than 12 years. Currently we are conducting experiments on fetal sheep to study fetal cardiovascular function and myocardial remodelling under different loading conditions using conventional echocardiography, myocardial tissue Doppler imaging, ultrasonic flow probes and pressure volume conductance catheters *in vivo*. We are also studying the differences in physiological and pathological cardiac remodelling in pregnancy and effect of a variety of interventions, such as increased maternal blood pressure, high-intensity exercise, aorta binding etc, on the maternal heart and feto-placental development using pregnant rats. We are also investigating the feasibility of applying new echocardiographic techniques such as colour tissue velocity imaging in diagnosing fetal hypoxemia/acidemia. We are testing the possibility of using certain pharmaceutical preparations to increase fetal left ventricular preload by improving fetal pulmonary blood flow, which may be useful in preventing/ameliorating cerebral hypoxemia in intrauterine growth restricted fetuses.

- **Genetic and molecular markers of feto-maternal diseases.**
  This is an ongoing project in collaboration with the Department of Medical Genetics, University Hospital of Northern Norway, Tromsø, and Prof Andres Salumets (Director of the Competence Centre for Reproductive Biology, University of Tartu, Estonia). We have been studying placental genomics and characteristics of human trophoblast (fresh as well as cultured) using advanced cytogenetic and molecular biology methods, such as array-CGH, PCR, microarrays, cell migration and invasion assays, immunohistochemistry, electron microscopy etc. We have studied gene expression in normal, preeclamptic and IUGR placentas. Recently we have identified some novel imprinted genes in placenta. We are also attempting to identify, characterize and clinically validate novel markers of preeclampsia. *Laeverin* is one of such markers we are currently validating.

- **Oxidative stress in pathologic processes in the decidua and placenta of preeclamptic pregnancies.**
  A collaborative project between three Norwegain Universities, University of Tromsø, University of Bergen and NTNU, Trondheim. We are investigating genomic and proteomic markers and markers of oxidative stress in the decidua of normal and preeclamptic women.
• **Noninvasive assessment of cardiac function and systemic blood flow in human fetuses: An observational study.**
This project is conducted in collaboration with Karolinska University Hospital, and Royal Technical Institute (KTH), Huddinge, Stockholm. In this project we plan to establish longitudinal reference ranges for the parameters of heart function measured using tissue velocity imaging (this part of the study is performed in Tromsø), apply this technique to identify fetuses at risk of complication due to hypoxemia (IUGR, postdate pregnancy) and volume overload (anemia due to red cell alloimmunization, twin-twin transfusion syndrome), and develop automatic and easy way of measuring relevant parameters in collaboration with engineers at KTH.

• **Maternal hemodynamics, endothelial function and placental blood flow**
This is an ongoing large study evaluating maternal hemodynamics and endothelial function together with several biomarkers to identify women at risk of pregnancy complications. Placental and fetal blood flow is also simultaneously investigated. A biobank of blood samples and placental samples has been collected from approximately 700 participants.

• **Long-term cardiovascular health and wellbeing of women with a previous history of pre-eclampsia.**
In this project we utilize the data from a large longitudinal population based-survey of Tromsø municipality which has been ongoing for >40 years. Our main focus has been cardiovascular health of women with previous history of preeclampsia. The project is collaboration between our research group and the Institute of Community Medicine, University of Tromsø.

• **Longitudinal changes oral microbial milieu in normal pregnancy and pregnancy outcomes**
Oral health in pregnancy is a neglected area of research. In this study we are investigating whether proper advice on oral and dental hygiene given to pregnant women has any effect on oral microbial milieu in arandomised trial. In collaboration with the the Institute of Odontology in Tromsø and Competence Centre for Reproductive Biology, University of Tartu, Estonia we are investigating the longitudinal changes in oral microbiome during pregnancy and their associaiton with pregnancy outcomes.

• **New nano-drug delivery systems for the treatment of vaginal infections**
In collaboration with the “Drug-Delivery” Research group at the Department of Pharmacy, we are developing new liposome-based nanodrug formulations for local delivery of intimicrobials and antiinflammatory agents to the genital tract.

• **Sustainable integrated mother/child health care in rural India**
This project is a new initative to develop and implement a mixed-methods program
for Norway-India research and development cooperation, to optimize sustainable integrated primary health care for women and children based on available Indian Traditional Health Sciences facilities and services in collaboration with Western conventional medicine. The project is collaboration between the Institute of Trans-Disciplinary Health Sciences and Technology (ITD-HST University), Bangalore, India, Norwegian Government, Norwegian National Centre for Complementary Medicine (NAFKAM), University of Tromso, University of Oslo, and University Hospital of North Norway. Our role will be in developing a program for research and capacity building in selected “traditional midwifery and obstetric practices”, based on Ayurveda.

- **Nano-Bio-Sys** is a project funded by UiT Strategic Funding to Establish Centre for Advanced Nanoscopy to Decode Sub-cellular Biological Systems. It is collaboration between Faculty of Science and Technology: Department of Physics and Technology, Faculty of Health Sciences (IKM, IMB, IFA) and Faculty of Biosciences, Fisheries and Economics (Norwegian College of Fishery Science).

Pål Øian is involved in the following projects:

- **Obstetric anal sphincter tears**
  This is a project with national data from Finland and Norway. The project group: Jouko Pirhonen, Mika Gissler, Mona Stedenfeldt and Pål Øian.

- **Maternal death in Norway**
  This is a project on maternal death from the last 20 years and updated every year, also in collaboration with other Scandinavian countries. Project leader Siri Vangen, The National Hospital, Rikshospitalet, Oslo. Collaborator Pål Øian and The Norwegian Audit Group on maternal Death.

- **Claims in Obstetrics and Gynecology – Norwegian Board of Health Supervision (Statens helsetilsyn)**
  Project leader Pål Øian collaborating with Lars T. Johansen, Geir Sverre Braut and Mike Robson.

- **Labor progression study**
  This is a cluster-randomized study in 14 Norwegian hospitals testing out two different partograms. In Norway and most other countries the Friedman’s partogram for labor progression has been used. Contemporary research by Zhang shows that the dilatation of the cervix can be substantially different, especially in the early stage of labor and a new partogram is developed. The type of partogram used is important for the diagnosis of labor dystocia.

  In this study 6582 women will be included after power calculations. The primary outcome is cesarean section. Secondary outcomes are indications for cesarean
section, the rate of oxytocin augmentation, total duration of augmentation, duration of labor (first and second stage), rate of dystocia, operative vaginal deliveries, bleeding > 500ml, Apgar score ≤7 at 5 minutes, metabolic acidosis, transfer to NICU and women’s experience with birth care. Project group: Stine Bernitz, Ellen Blix, Rebecka Dahlbye, Jim Zhang, Torbjørn Eggebø and Pål Øian. The Friedman and Zhang partograms.

- **Home birth in Norway, Sweden, Denmark and Iceland.**
  Project leader Ellen Blix collaborating with Pål Øian, Helena Lindgren, Olof Asta Olafsdottir, Hanne K Hegaard and Merete Kumle.

- **Normal birth in an epidemiological and clinical perspective**
  Project leader Ellen Blix. Collaborator Pål Øian

- **Mental health and labor**
  These projects are follow-up studies based on the PhD projects of Hilde Nerum and Lotta Halvorsen. Project group: Hilde Nerum, Lotta Halvorsen, Tore Sørlie, Bjørn Straume, Pål Øian og professor Ingegerd Hildingsson, Mitt-Sverige Universitet.

Purusotam Basnet is involved in the following projects:

- **Semen quality and oxidative stress**
  Semen quality has been found to be deteriorating trend at large. One of the causes has been pointed to the oxidative stress. A PhD project is developed to study semen quality among the healthy population and men needed infertility treatment in the Northern Norway and their root cause of deterioration together with oxidative stress. Project leader Purusotam Basnet is working with collaborators Martha A. Henemann, Ganesh Acharya and Natasa Skalko Basnet.

- **Spermatozoa motility and viability**
  Different supplements in the media to increase in vitro motility and viability of sperm cells have been screened. Project leader Purusotam Basnet is working with collaborators Martha A. Henemann, Natasa Skalko Basnet.

- **Oxidative stress in human embryo preimplantation stage**
  A preliminary method for the measurement of oxidative stress in the pre-implanted human embryo is under development. Purusotam Basnet is working

- **Subcellular anatomy of preimplanted human embryo using nanoscopy**
  This is a part of the project funded by UiT Strategic Grant for the establishment of Centre for Advanced Nanoscopy to Decode Sub-cellular Biological Systems. This
work package is approved by UiT for the PhD research with Principal supervisor Purusotam Basnet and co-supervisors Ganesh Acharya, and Balpreet Ahluwalia.

- **Norway-India Project**
  This is an international project between Norwegian partners (National Research Center in Complementary and Alternative Medicine, University of Tromsø, University Hospital North Norway, University of Oslo) together with Indian partners (Institute of Trans-Disciplinary Health Sciences and Technology (ITD-HST), Bangalore, India and other five institutions). The seed grant for the development of project was funded by the Royal Norwegian Embassy, New Delhi in 2014. A full project “Sustainable integrated mother/child health care in rural India” based on the baseline survey was prepared and applied to Norwegian Ministry of Foreign Affairs together with Norwegian Research Council and Bill and Melinda Gates Foundation. Purusotam Basnet is coordinator for Norwegian team (Vinjar Fønnebø, Ganesh Acharya, Natasa Skalko-Basnet, Berit Paulsen, Solveig Wiesener).

**Other members of the research group** are involved in these projects (not presented above):

- **Utvikling av ny målemetode og behandlingsmetode hos kvinner med urininkontinens**
  Project leader Gunnar Leivseth collaborating with Ingard Nilsen.

- **Platelets and placenta – the new hotspot in fetal-maternal crosstalk**
  Project leader Heidi Tiller.

- **Research on placental genomics**
  Collaboration with Prof. Andres Salumets University of Tartu - Reproductive Competence Center on Reproduction Medicine & Biology and Mona Nystad.

**PhD DEGREE AWARDS**


**PUBLICATIONS**

**Original Articles**

1. Songstad NT, Kaspersen KH, Hafstad A, Basnet P, Ytrehus, K, Acharya, G. Effects of high intensity interval training on pregnant rats, and the placenta, heart and liver of their


**Book chapters and reports**


6. Rapport Forskerforbundet på UNN HF: Research at UNN (Basnet P, Nystad M.)

**Presentations in congresses/conferences/meetings**


Participation in national and international conference/meeting/workshop
Lotta Herling

• Fourth International Conference on Fetal growth, 14-16 September, Barcelona, Spain.

• ISUOG (International Society of Ultrasound in Obstetrics and Gynecology) Conference, 11-14 Oktober, Montreal, Canada.

Purusotam Basnet
• Nordic IVF laboratory Society (NILS) Annual Meeting, Copenhagen, Denmark. Jan 8-10, 2015

• Project Design Meeting for India-Norway project funded by Royal Norwegian Embassy in NewDelhi and in collaboration with Institute of Trans-Disciplinary Health Sciences and Technology (ITD-HST) University, Bangalore, India, February 8-14, 2015

• Result Discussion Meeting for India-Norway project funded by Royal Norwegian Embassy in NewDelhi and in collaboration with Institute of Trans-Disciplinary Health Sciences and Technology (ITD-HST) University, Bangalore, India, September 5-15, 2015

• Workshop in Ultrasound and Pregnancy in Bisheshowr Prasada Koirala Institute of Health, Dharan, Nepal February 16-20, 2015

• IVF Clinic establishment project in Bisheshowr Prasada Koirala Institute of Health, Dharan, Nepal, February 16-20, 2015

Mona Nystad
• National prenatal group

• Nasjonalt genetikk møte i Bergen 11. November 2015

• Ledelse av workshop om fosterdiagnostikk på Nasjonalt genetikk møte i Bergen 11. November 2015

Communication to general public
• Pål Øian. Interviewed in Norwegian newspapers, radio and television, also in media abroad.

• Mona Nystad (2015) Popular article “Byen med de gode tankene» Forskerforum 1:41

• Mona Nystad: (2015) Facebook campaign («Hjernekraftverk i regi av Forskerforbundet»): »Pasientnær forskning kan redde mor og barn»


Referees
• Kai Flo. British Journal of Obstetrics and Gynaecology (BJOG).

• Ganesh Acharya, Purusotam Basnet and Pål Øian: Several international journals.

• Mona Nystad: Referee: Bioingeniøren

Opponents and examiners
• Mona Nystad Sensor utsatt skriftlig eksamen Molekylær genetikk for bioingeniører (BIOIN-104A) ved Norges arktiske universitet UiT 17.02.15

• Mona Nystad Sensor skriftlig eksamen Cellens biologi og genetikk (Nat431) Høgskolen på Nesna 21.05.15

• Mona Nystad Ekstern sensor Masteroppgave for integrert mastergrad i farmasi: Can nanomedicine improve the semen quality? The potentials of liposomal curcumin. Iren Yeeling Wu. 01.06.15

• Mona Nystad Sensor skriftlig eksamen Molekylær genetikk for bioingeniører (BIOIN-104A) ved Norges Arktiske universitet UiT 16.12.15

• Øystein Pedersen Intern sensor av 5. årsoppgaven (Klagesensur) til Martin Solvang Johnsen MK-10 «No lipid lowering effect of vitamin D supplements found on statin users”
Supervision of students (2. year medical students)
- Øystein Pedersen (supervisor)
- Markus Heiskanen «Problematikk ved screening, med utgangspunkt i screening av fenylketonuri i Finland»
- Nikolas Slotvik MK-13 «Amming og ernæring»
- Christian Bugge MK-13 «Ikerus hos nyfødte - undersøkelse og behandling på UNN»

Teaching in courses other than obstetrics and gynecology for medical students
- Mona Nystad: Forelesninger i Molekylær genetikk for bioingeniører (BIOIN-104A) ved Norges arktiske universitet UiT. Høsten 2015: Arv I (2 timer), Arv II (2 timer), Mutasjoner I (2 timer), Mutasjoner II (2 timer), Prober kan brukes til så mangt (2 timer), Gentesting (2 timer)
- Föreläsning Ultrasound in Obstetrics and Gynecology på KTH – Kungliga tekniska högskolan, Stockholm, 6 maj 2015. (2 timmar)

Representation to University Bodies
- Martha A. Hentemann: Medlem Eksamenskommisjon Med-2520 internasjonalt semester
- Ganesh Acharya: Delemneleder for Obstetrikk og gynekologi Med-2520 internasjonalt semester
- Ganesh Acharya: Mentor i det langsgående prosjektet PROFKOM.
- Ganesh Acharya: Mentor for førsteamanuensis Gunn Kristin Øberg, UiT.
- Øystein Pedersen: Mentor i det langsgående prosjektet PROFKOM.
- Åse Vårtun: Medlem i styringsgruppa TRAVERS.
- Pål Øian: Medlem eksamenskommisjon, Internasjonalt semester, UiT.
Representation outside of University bodies

- Ganesh Acharya: Board member Nordic Federation of Obstetrics and Gynecology (NFOG)
- Ganesh Acharya: Chief editor Acta Obstetetricia et Gynecologica Scandinavica
- Ganesh Acharya: Medlem i Helsedirektoratets bioreferansegruppe.
- Ganesh Acharya: Medlem i Nasjonal referansegruppe for avansert fostermedisin.
- Ganesh Acharya: Medlem fra USAM til Faggruppen for obstetrik og gynekologi under det nasjonale publisersingsutvalget i medisin.
- Pål Øian: Hovedredaktør for Veileder i fødselshjelp. Den norske legeforening/Norsk Gynekologisk forening.
- Pål Øian: Medlem av Norsk Gynekologisk forenings Kvalitetsutvalg.
- Pål Øian: Medlem i Norsk Gynekologisk forenings NPE utvalg.
- Pål Øian: Medlem i NGF gruppe for maternelle dødsfall i Norge.
- Ingard Nilsen: Medlem i Styringsgruppen for rekruttering og stabilisering av gynekologer i Helse Nord
- Mona Nystad: International breakpoint mapping consortium
- Mona Nystad: International Cytogenetics and Genomic Society (ICGS)
- Mona Nystad: European Cytogenetics Association (ECA)
- Mona Nystad: European Society of Human Genetics (ESHG)
- Mona Nystad: European Reference Network on Rare Chromosome Disorders
- Mona Nystad: Del av Nasjonal Prenatal gruppe med mandate til å sammenfatte nasjonal praksis innenfor prenatal diagnostikk og utrede fremtidige behov for ny teknologi i Norge. Gruppe nedsatt av Norsk Selskap for Human Genetikk (NSHG)
- Nils Thomas Songstad: Styremedlem Norsk Barnelegeforening.
• Nils Thomas Songstad: Nettredaktør www.barnelegeforeningen.no.

• Nils Thomas Songstad: Member of the national board of the clinical, prospective multicenter study “Early Prediction of Cerebral Palsy by computer-based video analysis of general movements”.

• Elise Sletten: Board member/secretary of the board NGF (Norsk Gynekologisk Forening)

• Elise Sletten: Board member FUGO (Forening for utdanningskandidater i gyneologi og obstetrikk)

• Åse Vårtun: International Society of Ultrasound in Obstetrics and Gynecology (ISUOG).

• Purusotam Basnet: Associate editor of The Journal of Reproductive Biotechnology and Fertility.