

CONTENTS

- 2 SINCE LAST
- 3 NEWS FROM THE STUDENT REPRESENTATIVES
- 4 IVBM
- 5 NEW PUBLICATIONS
- 6 FUNDING
- 7 NEW FACES
- 8 THOSE WHO DEFENDED SINCE LAST & UPCOMING PHD DEFENCES
- 9 UPCOMING ACTIVITIES
- 10 IVP ADVISORY BOARD
- 11 IVP CONTACT INFO

Layout: Camilla Ebert

www.invivofarm.dk



Dear all,

Welcome to this Summer Newsletter from IVP! First and foremost, a very warm welcome aboard to our new program administrator, Camilla Ebert, who will be your primary contact point in all IVP matters! Camilla started May 1st and is quickly getting into things.

In the last account from the SUND PhD School, the IVP program hit an all-time high of 49 enrollees, which I think is a tremendous accomplishment for such a relatively small field. A warm welcome to our new members. Together with the advisory board, your student reps, have been planning the fall program, and we have discussed the number and type of meetings that we want. We have decided to cut a little bit in the number of meetings and focus each one on both a scholarly and a social part. We hope that you will support our effort, as the network you bring with you from IVP probably is the most valuable asset we offer. Based on the positive experience last year, we have decided to have a student-initiated workshop in September, so mark your calendars for September 7. Read more in this newsletter.

From the most recent meeting among the program leaders, I can report that we managed to convince the PhD School leadership that they should also support domestic relocation during the PhD! So far, only visits to foreign labs have been supported even though spending six months in e.g. Jutland may offer the same or more economic challenges as one in Lund, Sweden. Moreover, it is now also possible to apply more than once during the PhD, even though the total grant cannot exceed DKK 35,000. I welcome this increased flexibility. We also discussed the three-evaluation-form system. I have long argued the satisfactory/not-satisfactory evaluation is too simplistic and would like a 'partly satisfactory' check box as well. This was well received. The reason for my proposal is that checking the 'not satisfactory' box has very severe consequences for the PhD student and will only be done when problems have reached a level where little can actually be done. I strongly believe that if the PhD student and the supervisors are given the opportunity to express their possible concerns at an earlier stage in writing—where no immediate action is taken from the administration—this will help solving the issues before they get out of hand.

Finally, a small sigh. This year's PhD program evaluation by the newly graduated PhD was presented at our recent meeting. Unfortunately, only two of seven IVP graduates had bothered to reply to the questionnaire. Consequently, IVP did not get a separate evaluation but was only represented in the 'other programs' category as it requires at least five respondees for depersonalization purposes. This is extremely frustrating and I will therefore strongly encourage you all to PLEASE take the 10 minutes once you get there to tell us how we did...!

Happy summer and best wishes,





NEWS FROM THE STUDENT REPRESENTATIVES

Dear members of the IVP Graduate Programme,

We hope you all enjoyed the IVP Annual Meeting 2018 in March as much as we did. Although we work within different research areas, it is always interesting to learn how we all assess our research questions by means of in vivo experiments. Therefore, knowledge-sharing and networking between members in the Graduate Programme is encouraged and supported by various IVP events throughout the year. This year, we are arranging an In Vivo Pharmacology Workshop with some other PhD students in the IVP Graduate Programme. The workshop will take place at Frederiksberg Campus on 7 September and we hope to see as many of you as possible.

If any of you have ideas/suggestions to future activities, you are welcome to discuss it with us.

Since we will both hand in our thesis within the next 6-9 months, we are looking for two new candidates to join the IVP board. If you are interested, please contact Camilla Ebert and feel free to ask us questions about our role in the IVP board.

Finally, in case you are not a member already, please remember to join the IVP Graduate Programme group on <u>Facebook</u>.

Have a great summer!

Best regards, Lykke and Anna Katrina



I NA RICH BERNA A RECONALITA NA ASCRETI MATRICER (DE KOTANA MEETING (IVBM) IN HELSINKI JUNE 2ND TO JUNE 7TH 2018

By Katrine Dahl Bjørnholm

It was an early morning on the second day of summer that I left my bazooka shaped poster tube in the overhead compartment of the Finair flight destined for Helsinki and my very first conference. I guess it is a milestone in any PhD when you finally collected enough data to contribute with actual science and get the opportunity to present your work to the international researchers in your field. While the thought of my very first conference was indeed daunting, I took comfort in the fact that with more than a thousand experts within cardiovascular biology and medicine I would probably be able to hide an occasional ignorance.



The magnificent architecture of Finlandia Hall was the scene of the conference. To my surprise the opening ceremony featured an entire classical concert for cello and piano, demonstrating the talent of the world renowned Finnish composer Johan Sibelius.

In the slipstream of the soothing sound of the cellos strings the academic program set off and revealed the "hot potato" of the meeting: Angiopoietin and Tie2 signalling. This family of proteins and pathway is essential for postnatal angiogenesis and seems to affect a great number of diseases from glaucoma and cancer to atherosclerosis and angiopathies.

With presentations from early morning till late afternoon I must say I felt quite overwhelmed by the science. I soon got use to the feeling of ignorance and the Socrates quote "True knowledge exists in knowing that you nothing know" pretty well describes how I picked myself up after the first day.

Following this I shifted my focus and tried not to get stuck on details, but rather learn from the deductive strategies and the methods that the presenters put forth. I tried to let myself be entertained and inspired. To my surprise and pleasure most presenters focused on presenting unpublished data, which really spiced up the discussion. My poster presentation went well and my day peaked when I got to discuss my work with, Gary Owens, one of the leading scientists within vascular smooth muscle cell phenotypic switch, and the author of a great number of publications that are essential for my project.

After five days I found myself quite exhausted, but also intrigued and inspired and really happy that I went. I am happy to be back at my desk and in my lab to continue the work on my project. Next IVBM will take place in Soul, South Korea in 2020 and I truly hope I'll get the opportunity to repeat this experience, although I already worry about the horrible jet lag!



NEW PUBLICATIONS

A. Højlund et al., 'Biochemical and cognitive effects of docosahexaenoic acid differ in a developmental and SorLA dependent manner', Behavioural Brain Research, vol. 348, 2018, pp. 90-100. Link to article.

A-K. J. Gradel et al., 'Long-term diet-induced hypertension in rats is associated with reduced expression and function of small artery SKCa, IKCa, and Kir2.1

channels', Clinical Science, vol. 132, 2018, pp. 461-474. Link to article.

A-M. V. Schou-Pedersen and J.
Lykkesfeldt, 'Comparison of Three
Sample Preparation Procedures for the
Quantification of L-Arginine, Asymmetric
Dimethylarginine, and Symmetric
Dimethylarginine in Human Plasma Using
HPLC-FLD', Hindawi. Journal of Analytical
Methods in Chemistry, 2018. Link to
article.

A. Nasser et al., 'Heterozygous mutations in GTP-cyclohydrolase-1 reduce BH4 biosynthesis but not pain sensitivity', PAIN, vol. 159, 2018, pp. 1012-1024. Link to article.

A. Virtuoso et al., 'A cafeteria diet alters the decision making strategy and metabolic markers in Sprague-Dawley male rats', Applied Animal Behaviour Science, vol. 199, 2018, pp. 35-44. Link to article. D. M. Jensen et al., 'Vasomotor function in rat arteries after ex vivo and intragastric exposure to food-grade titanium dioxide and vegetable carbon particles', Particle and Fibre Toxicology, vol. 15 (1), no. 2, 2018. Link to article.

I. Rune et al., 'Long-term Western diet fed apolipoprotein E-deficient rats exhibit only modest early atherosclerotic characteristics', Scientific Reports, vol. 8, no. 5416, 2018. Link to article.

L. J. A. Kogelman et al., 'Transcriptomic Profiling of Trigeminal Nucleus Caudalis and Spinal Cord Dorsal Horn', Brain Research, Vol. 1692, 2018, pp. 23-33. Link to article.

M.K.E. Ougaard et al., 'Murine Nephrotoxic Nephritis as a Model of Chronic Kidney Disease', Hindawi International Journal of Nephrology, Vol. 18, 2018. Link to article.

S. N. Hansen et al., 'Long-term Westernized diet leads to region-specific changes in brain signaling mechanisms', Neuroscience Letters, vol. 676, 2018, pp. 85-91. Link to article.

S. N. Hansen et al., 'Early Life Vitamin C Deficiency Does Not Alter Morphology of Hippocampal CA1 Pyramidal Neurons or Markers of Synaptic Plasticity in a Guinea Pig Model', Nutrients, vol. 10, 2018. Link to article.

V. F. H. Jensen et al., 'Insulin-dosing affects plasma levels of biochemical parameters in a time-dependent manner in Sprague-Dawley rats, SJLAS, Vol. 44, 2018, pp. 1-14. Link to article.

V. F. H. Jensen et al., 'Proximal Neuropathy and Associated Skeletal Muscle Changes Resembling Denervation Atrophy in Hind Limbs of Chronic Hypoglycaemic Rats, Basic & Clinical Pharmacology & Toxicology, vol. 122, 2018, pp. 165-75. Link to article.

V. F. H. Jensen et al., 'Effect of maternal hypoglycaemia during gestation on materno-foetal nutrient transfer and embryo-foetal development: Evidence from experimental studies focused primarily on the rat', Reproductive toxicology (Elmsford, NY), vol. 77, 2018, pp. 1-24. Link to article.

V. S. Jensen et al., 'Dietary fat stimulates development of NAFLD more potently than dietary fructose in Sprague-Dawley rats', Diabetology and Metabolic Syndrome, vol. 10, no. 4, 2018. Link to article.



REMEMBER TO NOTIFY US OF YOUR NEW PUBLICATIONS

JOIN THE IVP GRADUATE PROGRAMME ON FACEBOOK



CLICK ON THE LOGO TO LEARN MORE

FUNDING...

SUNDs PhD school provide funding for courses offered from external providers. Up to two courses pr. PhD student. Read the conditions.

sunds the stay should be all in all 4 weeks, which means that the stay can be split into two short stays as long as they comply to 4 weeks in total. Read more.

The IVP graduate programme provides funding for conferences and seminars under the condition that you have been accepted to present a poster or oral presentation. Members that are part of an industrial project are not eligible for funding. Read more.



NEW FACES...

Susanne Søndergaard Kappel from Neonatal Clinic, Rigshospitalet. Title of project: Change in Gastric Residuals and Bowel Habbits in preterm Infants and Piglets. Main supervisor: Professor Per Torp Sangild. Project initiated: 1 February 2018. Gabi Overgaard Øvlisen from Dept. of Veterinary and Animal Sciences, Section of Experimental Animal Models. Title of project: Establishment of a haemophilia A model with increased tolerance by use of mice with deficiencies in adaptive immunity. Main supervisor: Professor Søren Skov. Project initiated: 15 May 2018.

IMAGE NOT AVAILABLE

Laura Jul Andreasen from Dept. of Veterinary and Animal Sciences, Section of Experimental Animal Models. Title of project: Causes of diabetic peripheral neuropathy in rodent models of type 1 and type 2 diabetes. Main supervisor: Professor Jens Lykkesfeldt. Project initiated: 1 April 2018.



Josephine Skat-Rørdam from Dept. of Veterinary and Animal Sciences, Section of Experimental Animal Models. Title of project: Progression and reversibility of NASH with hepatic fibrosis in vivo. Main supervisor: Assoc. Prof. Pernille Tveden-Nyborg. Project initiated: 1 july 2018.





Welcome to everyone!

THOSE WHO DEFENDED SINCE LAST

Rikke Stagaard defended her thesis on 19 January 2018. The title: The in vivo effect of inhibiting fibrinolysis in a nonmucosal bleeding model of haemophilia A.

Sarah Louise Tangsgaard Christensen defended her thesis on 2 February 2018. The title: Development of a Behavioural Animal Model of Migraine.

Pernille Kihl defended her thesis on 16 February 2018. The title: Impact of Gut Microbiota Perturbations on Immune Functions. Effects of gut conditions on immune activation and response.

Stine Norman Hansen defended her thesis on 19 April 2018. The title: The neurobiological changes induced by vitamin C deficiency. A focus on hippocampal morphology, synaptic plasticity and neurotransmission.

Jing Sun defended her thesis on 4 May 2018. The title: Human milk fortification for preterm neonates - Gut and brain effects of human milk fortification in preterm pigs.

Camilla Kristine Appel defended her thesis on 4 May 2018. The title: Novel pharmacological targets in cancerinduced bone pain.

Nina Buus Sørensen defended her thesis on 25 May 2018. The title: Subretinal Surgery. Functional and Histological Consequences of Entry Into the Subretinal Space.

Camilla Schumacher-Petersen defended her thesis on 1 June 2018. The title: Hepatic changes and estimation of visceral adipose tissue in a diet-induced obese minipeg model.



Congratulations to everyone!

UPCOMING PHD DEFENCES...

Anne Charlotte Teilmann submitted her thesis on 22 May 2018. Date of defense will be announced as soon as possible.

Ditte Marie Jensen submitted her thesis on 29 May 2018. Date of defense will be announced as soon as possible.

Maria Josefine Ubbe Reimann will defend her thesis on 8 August 2018.



IVP Workshop 7 September 2018



Programme will be announced soon

IVP Christmas Party December 2018



More information will follow this autumn





IVP ADVISORY BOARD



Jens Lykkesfeldt





Pernille Tveden-Nyborg



Michael Didriksen



Janne Koch



Dorthe Lundsgaard



Lykke Boysen



Anna Katrina Olsen

IVP CONTACT INFO

If you have issues to be discussed, things to be clarified, suggestions for the board of the PhD programme, please contact your representatives in advance of next meeting (October 2018).

Head of PhD Program

Professor Jens Lykkesfeldt Dept. Veterinary and Animal Sciences Faculty of Health and Medical Sciences University of Copenhagen

Phone: +45 35 33 31 63 Email: jopl@sund.ku.dk

Program Administration

Camilla Elisabeth Søg<mark>aard Ebert</mark>
Dept. Veterinary and Animal Sciences
Faculty of Health and Medical Sciences
University of Copenhagen

Phone: +45 35 32 66 41

Email: camilla.ebert@sund.ku.dk

IVP Advisory Board

Anne-Marie Heegaard, KU-SUND (Panum)
Pernille Tveden-Nyborg, KU-SUND (Frb. Campus)
Michael Didriksen, Lundbeck
Janne Koch, Leo Pharma
Dorthe Lundsgaard, Novo Nordisk
Anna Katrina Olsen, Stud. rep. KU-SUND (Frb. Campus)
Lykke Boysen, Stud. Rep. KU-SUND (Frb. Campus)

Further information:

For further information, questions or contributions to the newsletter please contact Camilla Elisabeth Søgaard Ebert, camilla.ebert@sund.ku.dk

Contact

The Graduate Programme for In Vivo Pharmacology & Experimental Animals Secretariat

Camilla Elisabeth Søgaard Ebert

Thorvaldsensvej 57, Ground Floor, DK-1871 Frederiksberg C

Phone: +45 35 32 66 41

E-mail: camilla.ebert@sund.ku.dk READ MORE ON: www.invivofarm.dk

