NEWSLETTER Pathology Research Unit

Nr. 1, February 2022

Editing: Kent Søe, <u>kent.soee@rsyd.dk</u>

OUH Odense Universitetshospital



News from the Research Unit

Dear Pathology colleagues

It has now been almost half a year since I took over the role as Head of Research in the department. Since then, it's been steep learning curve. There has been a lot to familiarize myself with (and there still is), but I think things are improving. As I am not a pathologist, but a full-time researcher it is important to familiarize myself with many things. This is necessary for me to be able to represent the department externally and especially to the management at OUH and the Department of Clinical Research.

Many of you will not know much about my academic background, therefore a little about me: 1989-92: Rødkilde Gymnasium, Vejle - 1992-98: Biology, Aarhus University - 1998-2002: PhD in Biochemistry, Institute for Molecular Biotechnology, Friedrich-Schiller Universität, Jena, Germany - 2002-06: Junior Group Leader, Department institute for Molecular Biotechnology & Lecturer, Friedrich-Schiller-Universität, Jena, Germany - 2006-18: Senior Researcher Assistant Professor Associate Professor, Vejle Hospital, IRS, SDU - after which I joined AKP at OUH and the Department of Clinical Research in 2019. I live in Vejle.

Although I am a basic researcher, I have been (and still am) responsible of many clinical trials over many years, involving hundreds of patients with e.g. breast and prostate cancer and osteoporosis. Of course, I also have insight into how a hospital works from the inside - including a pathology department (from my time in Vejle). BUT by no means do I have the full insight - not at all - but I would like to get it! Of course, it will take time.

To gain insight, I would like to "invite myself to visit". I'm thinking of the 10 different clinical specialties and the various functions that the medical laboratory technologists are responsible for. Therefore, in the near future, I will try to make appointments with several of you so that we can find a time when I can be a "fly on the wall" and follow you in your work for a while. If any of you are already thinking that you would like a visit from me, please contact me.



Kent Søe

Head of Research kent.soee@rsyd.dk

Purpose of the Newsletter

In the Research Committee, we have decided that it is a good idea to circulate a newsletter approximately every half year, which gives some information about what is happening in the department concerning research. We do this so that EVERYONE in the entire Department knows a little about how much research is going on in the department. It will also serve as an opportunity to share some of the successes of the researchers in the department. There is good reason to be proud of the work that the researchers in our department are doing. Just as we are evaluated on diagnostic quality and productivity, we are also evaluated on research. Research in the department is something we should be proud of and appreciate. There is a LOT to be proud of - and I try to communicate that through this newsletter.

Members of the Research Committee

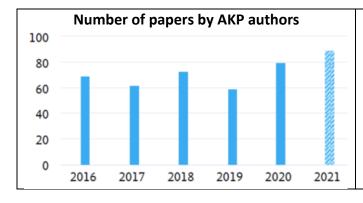
- Kent Søe (chairman)
- Tina Green
- Annelise Olsen
- Sönke Detlefsen
- Charlotte Nyvold
- Kirsten Madsen
- Michael Boe Møller

- Jeanette Krogh Petersen
- Christina Møller Andreasen
- Tanja Würtz Jørgensen
- Jesper Dupont
- Susanne Jeppesen
- Dusan Rasic
- Pernille Sveistrup Nielsen (alternate)

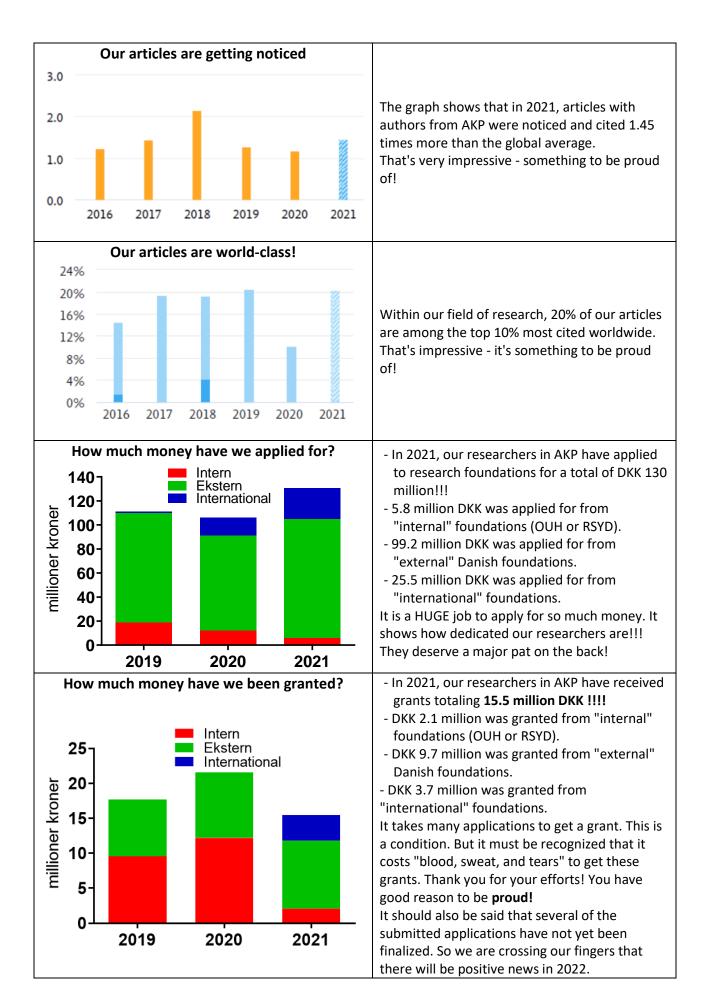
What have we been doing in the Research Committee since January 2021?

Continuous approvals of projects	The committee must approve projects that will
	affect our daily operations in one way or another.
Registration of research activities	All projects should be registered to provide an
	overview.
New setup and design of the research unit's	Student assistant Viktoria Bonne Kofod has been
website at SDU	hired. She will start in February 2022.
Journal Club/ Professional Forum	Dusan & Jesper are the organizers. This will be a
	forum for the younger researchers in AKP. It will
	provide the opportunity to meet across disciplines.
	The content and format of these meetings are very
	much up to the participants - Support!
Newsletter about the research in AKP	Kent is the coordinator - bi-annual, 1st edition
	February 22
Wednesday meetings	Kent, Sönke, and Tina are the organizers -
	presenting clinical cases and lectures on research
	in the broadest sense.
"Speed-dates" with Kirsten Kyvik & Kim Brixen	Info about the meetings where Kent will represent
	AKP approx. 4 times a year.
OUH/KI Research Strategy 2021-2025	OUH and the Department of Clinical Research have
	created a plan with 5 focus areas. All research
	units at OUH must comply with this plan. OUH og
	Klinisk Instituts forskningsstrategi 2021-2025
OUH/KI Research Strategy 2021-2025: Research for and with patients and relatives	This is the first focus area that we have seriously
	embarked on. During 2022, we want to involve
	patients and/or relatives in AKP research. We are
	discussing how. This will be done in consultation
	with the newly established "Centre for Research in
	Co-creation with Patients and Relatives" at OUH.

Facts & Numbers about our research activities



- In 2021, AKP researchers have published just under 90 articles. The number of articles is increasing. We can be proud of this!
- 31% of them represent research where AKP researchers have taken the greatest responsibility.
- 46% of them are done in collaboration with international researchers.



Sönke Detlefsens group

- Research grant from Jeppe Juhls Mindelegat (DKK 400,000) for sequencing of pancreatic cancer.
- Research grant from the Region of Southern Denmark (DKK 265,000) and Odense Pancreas Centre (DKK 151,000) for sequencing and expression profiling of circular RNA in pancreatic cancer.
- The group has participated in a European collaboration with the aim of developing a histological scoring method for alcoholic liver disease. The method is applied to diagnostic liver biopsies and has prognostic significance. The results are published in the Journal of Hepatology.
- The group is a co-organiser of the Second Scandinavian Baltic Pancreas Symposium, Hindsgavl Slot, Middelfart, 30.9.22 01.10.22.
- The group is active in the Odense Pancreas Center (OPAC), the Liver Research Centre FLASH, the Odense PIPAC Center (OPC), and the Odense Congenital Hyperinsulinism Center (CHI).
- The group has contributed to 20 articles during the period.

Medical Laboratory Technologists

- August 2021 International Federation of Biomedical Laboratory Science Conference, Copenhagen
 - Tanja Würtz Jørgensen was a member of the "Scientific Committee" and contributed to setting the program for the track "Practice, Development and Research in Biomedical Laboratory Science".
 - Tanja Würtz Jørgensen gave a lecture: "Let's get out there and do it! Qualitative research in the biomedical laboratory profession - an undiscovered world of possibilities".
 - Tanja Würtz J

 ørgensen gave a lecture: "#diagnosisincolor Invite patients into the diagnostic and beautiful world of histology".
 - o Malene Hykkelbjerg Nielsen gave a lecture: "Vascular structures in human cortical bone".
 - Stig Hansen gave a lecture: "Transformative leadership in a digital perspective".
 - Kirsten Schnor presented a poster: "False-negative IHC reactions in tissue possibly due to heat exposure from electrosurgery".
 - o Piruntha Sakthithasan and Daria Hjort presented posters: "Dissection by biomedical laboratory scientists and how to sample lymph nodes".
 - Jill Hørdum and Nadia Nielsen presented posters: "Automated paraffin block sectioning in histopathology - an implementation process".

Kent Søes group

- Kent received the "Excellence in Research Award" from the European Calcified Tissue Society
- Research grant from the National Institutes of Health (NIH), USA (DKK 3,700,000) for the project "The
 impact of age-related changes in osteoclast function on the skeleton".
 - o PostDoc Neha Sharma and lab technician Jacob B Olesen are employed on the project
- Co-applicant/partner on a research grant from the Novo Nordisk Foundation (DKK 25,000,000) for the project "Optimised long-term management of osteoporosis".
- Neha has received a grant from the A.P. Møller Foundation (DKK 90,000)
- Kent is a board member and Grant Awarding Manager in "COST Action CA18139 GEnomics of MusculoSkeletal traits TranslatiOnal Network (GEMSTONE)"
- Kent is a board member and treasurer of the Danish Bone Society
- The group has contributed to 6 articles in the period

Thomas L Andersens og Christina M Andreasens group

- Thomas is the President of the International Society of Bone Morphometry (ISBM) Society. Christina and Thomas are the main organizers of the ISBM International Conference, in July 2022, in Odense, Denmark.
- Thomas is the president of the annual Danish Bone Research Workshop. Christina is a member of the organizing committee. The Wokshop will be held for the 5th time with 90 participants in March 2022.
- The group's "sister laboratory" at Aarhus University has received an NIH grant (DKK 3,700,000) for the project "The role of senescence in multiple myeloma tumourigenesis". The project is carried out in close collaboration with the Department of Pathology and Haematology at OUH.
- Co-applicant/partner on a research grant from the Novo Nordisk Foundation (DKK 25,000,000) for the project "Optimised long-term management of osteoporosis". Thomas is the coordinator of the experimental studies.
- Research grants from the Region of Southern Denmark (DKK 380,000), Købmand Sven Hansen og Hustru In Hansen fond (DKK 60,000), DBio (DKK 27,900), OUH free research funds (DKK 536,000) and Aase & Ejnar Danielsen fonden (DKK 150,000).
- Has further developed the bone pathology of endocrine and nephrological patients together with the NEU column.
- The group has contributed to 13 articles in the period

Bjarne W Kristensens group

• On 04.02.22, Arnon M Knudsen defended his Ph.D. thesis entitled "Prognostic and therapeutic implications of migrating tumor cells in glioblastomas". Despite corona illness, he passed with flying colors! Well done! Congratulations from here.

Charlotte Nyvolds group

- Marcus H Hansen defended his Ph.D. thesis in November 2021 with the title: "Development of clinically applied next-generation bioinformatics Driven by the genomic heterogeneity of mantle cell lymphomas for evidence-based diagnostics, disease tracking, and follow-up". Congratulations from here.
- Simone V Hansen defended her Ph.D. thesis in January 2022 with the title: "Impact of Molecular Heterogeneity in B cell malignancies". Congratulations from here.
- Together with the hematopathologists at AKP, the group has contributed to 18 articles in the period

Researchers in AKP

• PhD-students in the Pathology Research Unit, SDU

- Arnon M Knudsen (vejl. Bjarne W Kristensen)
- o Trine Aaguist (vejl. Sönke Detlefsen)
- Jesper Ewald (vejl. Bjarne W Kristensen)
- o Gayaththri Vimalathas (vejl. Thomas S Larsen)
- Xenia G Borggaard (vejl. Thomas L Andersen)
- o Pernille van Dijk (vejl. Thomas L Andersen)
- o Bilal M El-Masri (vejl. Thomas L Andersen)
- Lisbeth Koch Thomsen (vejl. Thomas L Andersen)
- Mia D Sørensen (vejl. Bjarne W Kristensen)

PostDocs in the Pathology Research Unit, SDU

- Atul Anand (mentor Bjarne W Kristen)
- Neha Sharma (mentor Kent Søe)

• Scientists employed in the Pathology Research Unit, SDU

- Clinical Professor Sönke Detlefsen
- Clinical Professor Henrik D Schrøder
- o Associate Professor Kent Søe
- Associate professor Thomas L Andersen
- Assistant professor Christina M Andreasen

Researchers associated with the HemaPato Research Laboratory, Hematology Research Unit

- Professor Charlotte G Nyvold
- Molecular biologist Oriane Cédile
- Bioinformatician Marcus C Hansen
- o Molecular biologist Simone V Hansen
- PhD-student Sólja R Veyhe (vejl. Charlotte G Nyvold)
- PhD-student Mette B Levring (vejl. Niels Abildgaard)