

### HST's Advisory Research Board – Meeting #3/2024

11 September 2024

### Agenda

	Item	
10.00-10.15	1	Welcome /Kim Dremstrup
10.15-10.30	2	Presentation of the International Evaluation of the Doctoral School 2024 /Pascal Madeleine
10.30 - 11.40	3	Presentation and discussion of delegation instruction for research group heads /Kim Dremstrup
11.40-11.55	4	Digital Health at HST /Winnie Jensen
11.55-12.00	5	AOB and input from research group heads for future meetings /Kim Dremstrup and Winnie Jensen

### Participants

		Participates	Representative
Kim Dremstrup	Head of Dept.	Х	
Winnie Jensen	Vice-Head of Dept Research	X	
Susanne Lundis	Head of Team, Strategic Advisor – Research	X	
Henrik Bøggild	Public Health and Epidemiology (PHE)	Х	
Johannes J. Struijk	CardioTech (CT)	Х	
John Dirk Nieland	Molecular Pharmacology (MP)		Jacek Lichota
Lotte N. S. Andreasen Struijk	Neurorehabilitation Robotics and Engineering (NRE)	Х	
Lars Arendt-Nielsen	Translational Pain Neuroscience and Precision Medicine (TPNPM)		Kristian Kjær-Staal Petersen
Mette Nyegaard	Genomic Medicine (GM)		Palle Duun Rohde
Michael Skovdal Rathleff	Musculoskeletal Health (MH)		Jesper Bie Larsen
Thomas Kronborg Larsen	Medical Informatics and Image Analysis (MI)		Morten Hasselstrøm
Rogerio Pessoto Hirata	ExerciseTech (XT)	Х	
Sine Agergaard	Sport & Social Issues (SSI)	Х	
Stephen Edward Rees	R-Care (R-Care)	Х	
Strahinja Dosen	Neurorehabilitation Systems (NS)	Х	
Svend Birkelund	Medical Microbiology and Immunology (MMI)	Х	
Thomas Graven-Nielsen	Pain and Motor System Plasticity (PMSP)	Х	
Torben Moos	Neurobiology (NEB)		Ove Wiborg
Vladimir Zachar	Regnerative Medicine (RM)	Х	
Winnie Jensen	Neural Engineering and Neurophysiology (NEN)		Sabata Gervasio
Anne S. Dethlefsen	Fundraiser	Х	
Pascal Madeleine	Head of SUND Doctoral School	Х	
Lone S. Andersen, Minute Taker	Research Secretary	Х	



<b>Welcome</b> /Kim Dremstrup	
Key points/ decisions	<ul> <li>New research group leader for Medical Informatics and Image Analysis is Thomas Kronborg Larsen</li> <li>Two research groups, Integrative Neuroscience and Translational Biomarkers in Pain and Precision Medicine have merged. New name of group is Translational Pain Neuroscience and Precision Medicine (TPNPM); research group leader is Lars Arendt Nielsen</li> <li>AAU 50-year anniversary: Open house on 25 September in the afternoon for interested external parties (registration necessary)</li> <li>IT safety courses: All employees must take these mandatory online courses. Please ensure that everyone in your group is aware of this</li> <li>Registration of working hours as of 01 October 2024: Staff on hourly wage or self- organizing staff (i.e., scientific staff) will not have to register working hours</li> <li>Shortage of rooms: "Quiet offices" will be turned into ordinary office spaces within short. If you have empty office spaces in your group, please inform the HST Research Support Team</li> <li>Support from the faculty for large-scale applications: The funds should be used this year for, e.g., preparation of applications. See attachment</li> </ul>

Item	

Presentation of the international evaluation of the Doctoral School in March 2024
/Pascal Madeleine

Background	A short presentation of the results, main conclusions, and recommendations from the International Evaluation Committee
Key points	<ul> <li>Recommendations from the evaluation committee:</li> <li>Focus on the declining number of Ph.D. students at HST (Pascal mentions that the observed decline is due to the high number of Ph.D. students from DCM that was assigned to HST in the time where DCM initially was established)</li> <li>More focus on career development for Ph.D. students</li> <li>Ph.D. supervisor course for all supervisors</li> <li>Quality of Ph.D. studies</li> <li>Analysis of drop-out rate</li> <li>Preventing hierarchical dependence</li> <li>Two extra students in Ph.D. Committee</li> <li>General well-being and diversity</li> </ul>



<ul> <li>Focus points 2024 +:</li> <li>Named person (Prof. Emeritus) – "Don't Steal my Work"</li> <li>Career and Ph.D. day courses</li> <li>VIVE report on sexism</li> <li>EU application</li> </ul>
<ul> <li>Impact of Ph.D. studies at the Faculty of Medicine</li> <li>See Pascal's presentation, the full report from the evaluation committee, and slides about "Don't steal my work" in the attachment.</li> </ul>

Presentation of /Kim Dremstru	of and discussion of the scheme of delegation for research group heads
Background	<ul> <li>An updated version of the scheme of delegation is being prepared to replace the 2020 scheme. The new scheme includes three main points:         <ul> <li>Staff development interview (MUS):</li> <li>New scheme: The research group leader will conduct MUS with the members of the research group on professor, associate professor, and assistant professor level. MUS with Ph.D. students will also be held by the research group leader except if the research group leader is also the main supervisor</li> <li>Sickness absence:                 <ul> <li>The research group leader is responsible for contacting the employee after 5 days – and in case of long absence after 21 days - to clarify the situation</li> <li>Parental leave:</li> <li>The research group leader should take a meeting before, during, and after the parental leave to discuss any adjustment of the work to facilitate the return to work after the leave</li> </ul> </li> </ul> </li> </ul>
Key points/ decisions	<ul> <li>The following comments/input came up:</li> <li>Important that the research group leader is informed in case of sickness</li> <li>It is a challenge to remember the due dates for the meetings/contacts</li> <li>Need for automatic notifications about meetings/contacts in case of parental leave</li> <li>It is important that the research group leaders are well prepared for the meetings/contacts. If wrong statements are made, the employee may feel offended</li> <li>The task is meaningful, but also difficult. It should be considered if hours can be allocated</li> <li>It is a challenge if the MUS with a Ph.D. cannot be held by the research group leader if this person is also the main supervisor. For example, the discussion about career plans at the MUS may not be revealed to the research group leader</li> <li>Assistance for advice/meeting minutes in connection with contacts/meetings, can be obtained from the Adm. Dept. Head of Secretariat</li> <li>The research group leaders can obtain help for saving the summaries from MUS in WorkZone from the Research Support Team</li> </ul>



Digital Health /Winnie Jense	<b>@HST – Research</b> n	
Background	Formulation and implementation of HST's strategy as per SUND's overall vision on being leading in digital health within 2030. Presentation of the current status of the process.	
Key points/ decisions	<ul> <li>The following comments/input came up:</li> <li>Reach a common story – the definition of Digital Health should be linked up with the goal</li> <li>An "as is" analysis is important to highlight areas where we are already strong</li> <li>For many employees, the concept of Digital Health is still "fluffy"</li> <li>Many funding calls already mention Digital Health – important to direct the definition towards this</li> <li>Important to give examples of Digital Health in the definition</li> <li>Take a starting point in general definitions of Digital Health and give a specific description of HST</li> <li>Use the four grand challenges in the definition</li> <li>It is important to make a realistic story and describe that a certain part of HST works with Digital Health. The rest work in the pipeline leading to Digital Health</li> </ul>	
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Item 5	
AOB and input from research group heads for future meetings /Kim Dremstrup og Winnie Jensen	
Key points/ decisions	None

# FACULTY SUPPORT TO FUNDING APPLICATIONS

2024



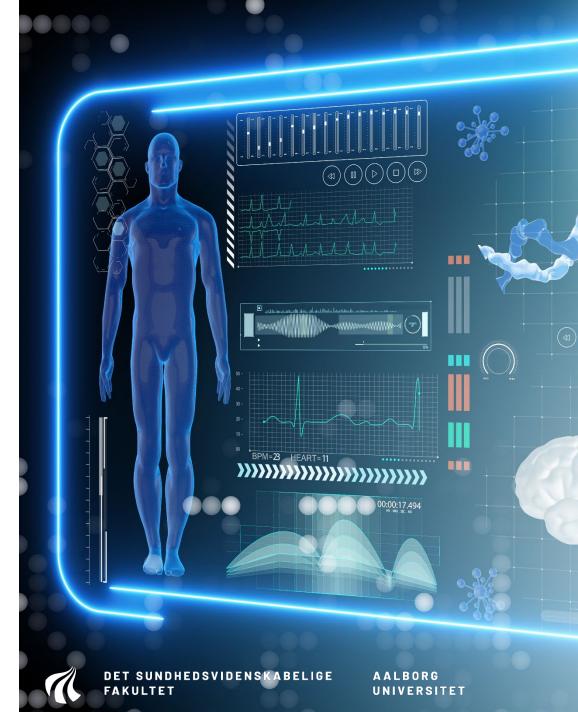
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# PURPOSE OF THE INITIATIVE

### To increase the number of successful:

- a) EU applications as partner or coordinator
- b) Large national consortium applications as coordinator (e.g. NNF, Lundbeck, Innovation Fund Denmark)
- c) Prestigious career grants (e.g. ERC, Sapere Aude, Lundbeck Fellow)



# **ECONOMIC ISSUES**

- Amount limits for the faculty support:
  - Application for prestigious career grant: Max. DKK 75,000
  - Consortium application as coordinator: Max. DKK 75,000
  - EU application as participant: Max. DKK 15,000
  - Phase 2 of two-stage-application: Max. DKK 75,000
- Department co-financing: Min. 15% of the faculty amount, except phase 2 of two-stage-application: Min. 50% of the faculty amount
- Detailed budget: A detailed budget describing how the support will be spent must be submitted along with the application
  - NB: If "frikøb" is applied for, a teaching plan, approved by the Department Head, should be submitted along with the detailed budget
- Eligible costs:
  - Support from external consultants (e.g. finding partners, review of proposal)
  - Hours for project development/writing of application ("frikøb" of the applicant from teaching obligations can be replaced by e.g. postdoc, PhD student, Master student)
  - Travel costs related to the application

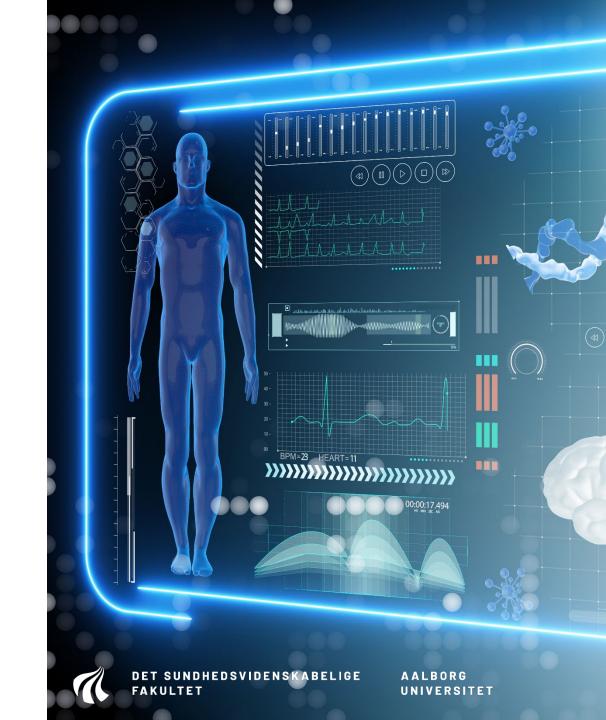


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# OBLIGATIONS OF THE APPLICANT

### **Applicants have the following obligations:**

- To get internal peer review of the application, typically from the applicant's research group leader (NB: This does not apply to full professors)
- To submit an application for the targeted call.
   Documentation must be forwarded to Lone
   Sarauw, <u>lsar@adm.aau.dk</u>



# HOW TO APPLY

• Application deadline: There will be two application rounds in 2024:

• April 15, 2024

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- August 15 October 1, 2024
- Applications should be sent to
  - Lone Sarauw, <u>lsar@adm.aau.dk</u>
- Application contains:
  - Application cf. the relevant template (career grant template or project support template)
  - Detailed budget
  - If "frikøb" is applied for, a teaching plan, approved by the Department Head, should be submitted along with the detailed budget
- NB Budget must be spent in 2024

### CAREER GRANT TEMPLATE

Researcher and department head:		
Targeted call and application deadline:		
Research challenge/mission/impact:		
Strategic perspectives and opportunities – for researcher, research group, department, and faculty:		
International opportunities and perspectives:		
Internal peer-review will be performed by:		
Total budget (detailed budget must be attached). If "frikøb" is applied for, a teaching plan must be approved by Dep. Head and attached.	Faculty amount: Department co-financing:	
Intended project starts/ends:		



### PROJECT SUPPORT TEMPLATE (COORDINATOR AND EU PARTICIPANT)

### **PROJECT TITLE:**

Main responsible researcher and department head:		
Short description of activities:		
Targeted external call and application deadline:		
Strategic perspectives and opportunities – for research group, department, faculty, and external partners:		
AAU partners:		
External partners/coordinator:		
Internal peer-review will be performed by:		
Total budget: Detailed budget must be attached. If "frikøb" is applied for, a teaching plan must be approved by Dep. Head and attached.	Faculty amount: Department co-financing:	
Intended project starts/ends:		



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# Status og dialog med SUND ph.d.-skolen ved HST

6 Juni 2024

Prof Pascal Madeleine, PhD, DSc Ph.d.-skoleleder



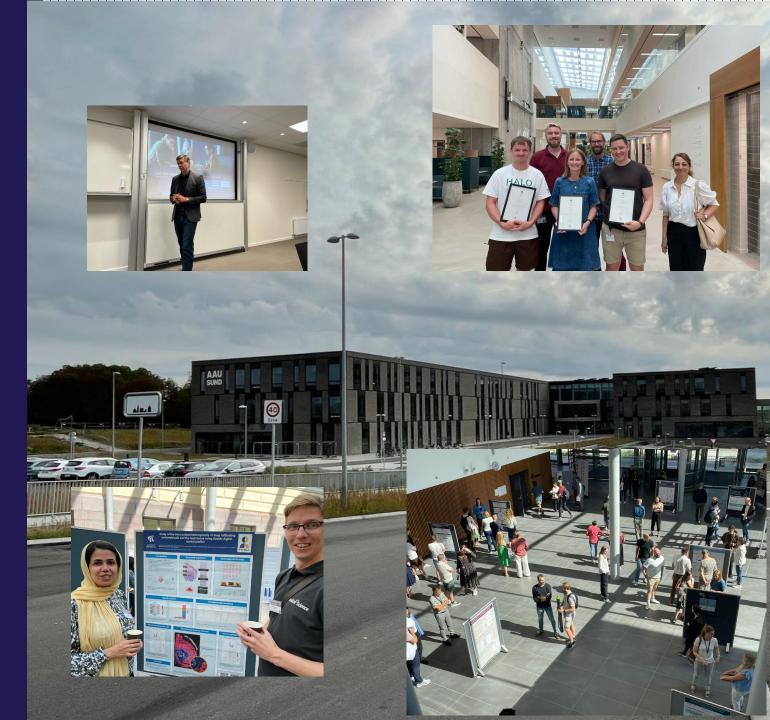
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# Status SUND Ph.d.

Præsentation af den Internationale Evaluering af Ph.d.-skolen

• Fokuspunkter for Ph.d.-skolen





## International evaluering af Ph.d.-skolen

### Komité

Prof Christian Godballe (Syddansk universitet, forperson)Prof Martha Enger (Bergen universitet)Prof Jos Vanrenterghem (KU Leuven)

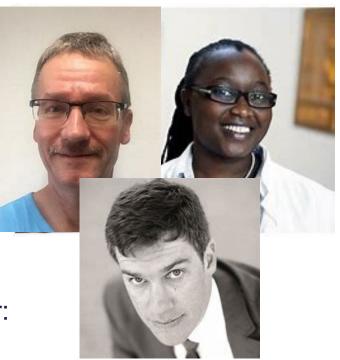
• Sidste rapport

Alle punkter fra den tidligere evaluering blev implementeret på nær:

Obligatorisk udlandsophold

Uafhængig forperson for ph.d. udvalg

International Evaluation – The Doctoral School in Medicine, Biomedical Science and Technology

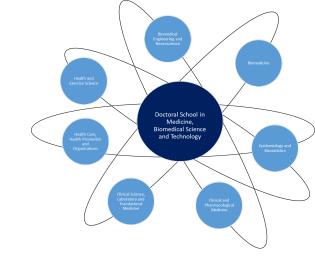




## International evaluering

Hovedkonklusioner

Vellykket besøg og fortrinligt program



- Velfungerende enhed under Dekanatet (med flair for det nationale og det internationale)
- Ros til ph.d.-administration og de etablerede 7 programmer
- Initiativrig Ph.d.-skole selvom alle nye tiltag ikke endnu har haft effekt (f. eks. karriere, mentor program)



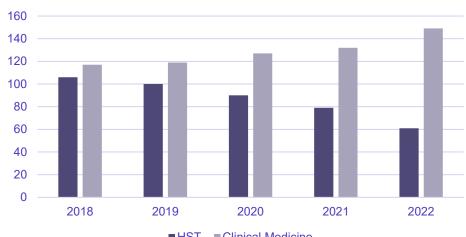


# Anbefalinger

### Antal Ph.d.-studerende på HST risiko for HST /ulige konkurrence ift. KI professorer

Institutnavn	2022	2023	31.08.2024
HST	10	25	12
Klinisk	46	49	26

Karriereudvikling for Ph.d.-studerende



### Population at the Departments

■HST ■Clinical Medicine

karriere i progress rapporter / VITAE framework / obligatorisk Ph.d. opstart møde

- Ph.d.-vejleder kursus og seminarer
  - for ALLE vejledere hver 5-10 år

inkl. soft skills, innovation som f. eks. Leadership in Academia





## Anbefalinger

### Kvaliteten af Ph.d.-studier

fortrolighed af progress rapporter, indskrivningen af kliniske ph.d.-studerende, kvantificerbare kriterier for eksterne samarbejder, undervisningskrav, patenter/opfindelser, øget fokus på god videnskabelig praksis

Ph.d. frafaldsanalyse

- Forebyggelse af hierarkisk afhængighed fortrolige rum for ph.d. studerende, konflikthåndteringsmekanismer
- Ph.d.-udvalg medlemmer 2 ekstra Ph.d.-studerende
- Generel velvære og diversitet





## Fokuspunkter 2024+

- Implementering af anbefalinger (int. eval)
- Kontakt til Ph.d.-studerende og vejledere 2 årlige møder med Ph.d.-skoleleder og Ph.d.administration, "Sådan skriver du din afhandling" møder, mm.
- Videreudvikling af Ph.d. programmer i samarbejde med de programansvarlige
- Kursus for ALLE Ph.d. vejledere
- Ph.d.-kurser (antal, placering)
- AI Gode Videnskabelige retningslinjer for Ph.d. studerende på AAU sendt d. 8 maj





## Fokuspunkter 2024+

- Named person (Prof Emmeritus) "Don't Steal my Work"
- Karrierekursus og PhD day kurser
- Ph.d. og postdoc pilotprojekter med Engineering
- VIVE rapport om sexisme
- EU ansøgning
- Impact af ph.d.-studier på de Sundhedsvidenskabelige Fakulteter



Geograph	ical Collaboration ©		13		<ol> <li>Metric guidance</li> </ol>	+ Add to Reporting $\;\;$ Export $\sim$
International, natio	onal and institutional collaboration by SUND_PHD.	_2019-2023_04-03-20	)24 in the selected year (	range.		
	Metric		Scholarly Output	Citations	Citations per Publication	Field-Weighted Citation Impact
	International collaboration	38.3%	662	10,209	15.4	1.58
	<ul> <li>Only national collaboration</li> </ul>	37.8%	654	5,719	8.7	1.09
	Only institutional collaboration	23.5%	407	2,768	6.8	0.84
	<ul> <li>Single authorship (no collaboration)</li> </ul>	0.3%	6	17	2.8	0.13

#### Academic-Corporate Collaboration

Metric guidance + Add to Reporting Export ~

Academic-corporate collaboration by SUND\_PHD\_2019-2023\_04-03-2024 in the selected year range.

Metric		Scholarly Output	Citations	Citations per Publication	Field-Weighted Citation Impact
Academic-corporate collaboration	10.3%	179	1,566	8.7	1.18
No academic-corporate collaboration	89.7%	1,550	17,147	11.1	1.22





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### REPORT

## International evaluation of the Doctoral School in Medicine, Biomedical Science and Technology, Faculty of Medicine, Aalborg University

**March 2024** 

### Content

Introduction
General comments 4
Recommendations in relation to current and possible future challenges for the Doctoral School
The career development options
General well-being especially "Don't Steal My Work" amongst PhD students – suggestions for improvements, comments on the current approach
The training of PhD supervisors – suggestions for improvements, comments on the current approach 7
Quality assurance of the PhD study in general and of the individual PhD project
The drop-out rate amongst PhD students – comments on the current situation and suggestions for improvements
Mentor activities - suggestions for improvements, comments on the current approach 10
Areas of interest outside the ones proposed in mandate 10
Concluding remarks
Suggestions/recommendations11
Decline in PhD students in the Department of HST: 11
Career development for PhD students:12
PhD supervisor training:
Quality assurance of the PhD study:12
PhD dropout rate:
Mentor activities:
Prevention of hierarchical dependence:12
PhD Board composition:
General well-being and inclusivity:12

### Introduction

According to the Danish University Law § 16.b. an international evaluation of the Danish doctoral schools must be performed every fifth year. The Doctoral School in Medicine, Biomedical Science and Technology, Faculty of Medicine, Aalborg University was for the first time evaluated in 2013, covering the years 2008 to 2012, second time in 2018, covering the period from 2013 to 2017. This international evaluation is the third of its kind.

As guide for the evaluation Aalborg University had prepared a set of expectations:

- *Recommendations from the committee in relation to the elements selected as focus points for the evaluation.*
- Recommendation in relation to current and possible future challenges for the Doctoral Schools.
- Assessment and recommendations in relation to the current state of the Doctoral Schools. These recommendations should in particular be focused on the quality of the following elements:
  - The career development options and the general well-being especially "Don't Steal My Work" amongst PhD students – suggestions for improvements, comments on the current approach.
  - The training of PhD supervisors suggestions for improvements, comments on the current approach.
  - Quality assurance of the PhD study in general and of the individual PhD project.
  - The drop-out rate amongst PhD students comments on the current situation and suggestions for improvements.
  - *Mentor activities suggestions for improvements, comments on the current approach.*
  - Recommendations in general and recommendations to the areas included in the report.

The members of the assessment panel as formally appointed 7 July 2023, and thus the authors of this report, were:

- Professor Martha Chekenya Enger, Vice Dean for Doctoral Education The Medical Faculty, University of Bergen, Norway
- Professor Jos Vanrenterghem, Department of Rehabilitation Sciences, KU Leuven, Leuven, Belgium
- Professor Christian Godballe, Department of Clinical Research, University of Southern Denmark, Head of Graduate School, Faculty of Health Sciences, University of Southern Denmark DK-5000 Odense C, Denmark

The evaluation is based on a self-evaluation report covering the period 01.01.18 – 31.12.22 that the committee received 01.12.23. On 31.10.23 the committee received the program for the site visit that would constitute additional qualitative information attained through interviews with PhD candidates (students), PhD supervisors, Heads of programs, administrative employees from AAU PhD, and the Doctoral School Director. The interviews took place on the 15<sup>th</sup> and 16<sup>th</sup> of February 2024. The self-evaluation report contained an extensive documentation of (i) the previous self-evaluation report 01.01.2013-31.12.2017, (ii) the current international evaluation report 2018-2022 including recommendations and traffic-light implementation of action points from the previous evaluation, key figures and demographics of PhD student population, (iii) guide to career dialogues and information about mentor-mentee relationships, and (iv) three appendices on overview of course evaluations from doctoral school of clinical medicine and biomedical science and technology 2018-2022. This provided the assessment committee with depth of

information to evaluate the development of the Doctoral School over time. The set of expectations and the list of focus areas provided by Aalborg University served as the underlying scaffold for the composition of this report.

#### General comments

The committee applauds the team for the well written, elaborate self-evaluation report that served as an excellent starting point for discussions with the relevant individuals. We also commend the team for the highly internationally relevant and timely mandate that encompassed issues to be considered within the duties and responsibilities of a doctoral school. The individuals we interviewed (PhD students, administration, supervisors, and PhD study director) independently welcomed and expressly valued the opportunity of a critical review of the Doctoral School in Medicine, Biomedical Science and Technology (the Doctoral School) and looked forward to the results of the constructive evaluation.

The consensus is that the Doctoral School is a well-functioning arm of the medical faculty, with 555 staff members, 2000 students, where 225 of these are PhD students enrolled from the two departments in the Faculty of Medicine; the Department of Clinical Medicine and the Department of Health Science and Technology (HST). There are seven PhD programs in the Doctoral School. The terminology *PhD programs* did cause some misunderstanding because, these are in fact only thematic subject areas for the courses, and not actual PhD programs as normally understood in an international context. In this report we have used the terminology from the self-assessment report.

Ten administrative personnel in one administrative unit have shared responsibilities across all the four Doctoral Schools, one for each faculty, at the University of Aalborg. During the interviews, the representatives did not consider this task daunting as it gives them opportunity for sharing common best practice standards and equal treatment for all students at the University of Aalborg. The administrative structures between the Faculty of Medicine, the Doctoral School and the two departments that have been implemented since the previous evaluation to increase visibility and activity (e.g. bi-annual supervisorstudent meetings with PhD Study Director & administration) are appropriate as active contact points for information exchange and discussion of rules and guidelines and are well attended. The general availability and approachability (verbal communication) of PhD Study Director, heads of PhD programs, and administrative staff is a clear asset to make all PhD students feel safe within an otherwise stressful duty of completing their PhD studies. Among other developments, all PhD students now have at least one cosupervisor and a mandatory course for all new internal supervisors (both co- and main supervisors), as well as several good initiatives in the field of career development have been initiated. These are commendable modifications. The Doctoral School is proficient in evaluating the quality and relevance of their PhD courses, and the declaration of whether the PhD work was fulfilled satisfactorily when the students submit their theses, according to the Danish PhD order, is a strength. This is a *type*-of quality assurance system that ensures continual evaluation of practice, but it would have been interesting to get a reflection of what is considered working well or where there is room for further development/improvement.

Another exciting new development since the last evaluation is that the medical faculty has recently moved into a new building that will be integrated *physically* with the hospital, to consolidate interdisciplinary collaboration. In the future, it is a strategic goal that this proximity will also result in complete *functional* integration of healthcare, scientific research, and administration. The faculty has a clear *missions-driven* vision of interdisciplinary collaboration with various societal sectors. It is a "boiling point" of activity from academic interactions with general practitioners, communal practice, and pre-hospital research housed within the building, where these sectors with competence in health make fruitful collaborations through synergistic interactions in open environments. Novo Nordic Aalborg have funded Academies for knowledge

exchange, particularly in their fields of interest within digital simulation. A joint professor in bioinformatics between Novo Nordic and the Department of HST is a concrete example of fruitful industry -academia collaboration. The Aalborg Innovate is a science and innovation hub, housed in modern facilities that foster innovation and entrepreneurship between industry and academia, reflecting the faculty's vision to stay hungry and motivated for innovation.

In the subsequent sections, you will encounter considerations and arguments that bolster suggestions and recommendations within the designated focus areas. Furthermore, recommendations outside the purview of the mandate are also addressed.

In the last section of the report suggestions and recommendations from the assessment panel are presented briefly.

## Recommendations in relation to current and possible future challenges for the Doctoral School

The most important threat observed by the assessment committee is the rapid decline in numbers of PhD candidates within the Department of HST. The decline is seen together with a rapid incline of PhD candidates within the Department of Clinical Medicine in the period. The decline poses an existential threat of loss of an important subject area with great potential for innovation and preventative health measures for our aging societies. This is concretized by the fact that in 2022, two pre-commercialization innovation ideas from the department of HST ("Ro med Elbo" and "Join") advanced to the next proof of concept stage. Further reduction in PhD student critical mass will result in failure to advance the research and innovation frontier within the three PhD programs headed by researchers from the Department of HST. A combination of environmental factors external to the Doctoral School may be the cause for the decline, such as reduced enrollment of MSc students in the fields of biomedical science and technology, necessary reductions in staff, combined with increased teaching burden and limited time for- and quality of research for the remaining staff. Finally, this results in a cataclysmic decline in acquisition of competitive funding. Nonetheless, there may be important considerations for the management at the level of Doctoral School, Faculty and even University, to perform a risk/consequence analysis for the next 2, 5 and 10 years for this subject area in order to identify opportunities for slowing or reversing the negative trend. In particular, discrepancies between funding/recruitment opportunities for the staff in the Department of Clinical Medicine versus the HST staff are considered a threat to the PhD programs affiliated to HST. Areas for attention might be: (i) Re-evaluation of the PhD position incentive included in start packages for newly employed medical supervisors, (ii) draw clear agreement on project ownership and cooperation between the medical faculty and hospital regarding project ownership and where the research grant should be placed, based on size of scientific position at the respective institutions and where administrative resources are drawn, incl. research infrastructure to be used to support the research grant application and subsequent management, (iii) discrepancies in teaching duties should be addressed by cataloging teaching activities normalized by size of position for all scientific staff and examine other possibilities of more student peer-driven teaching and small group activities to alleviate teaching burden.

#### The career development options

The reality is that there are not enough academic positions for all the PhD students that graduate, and the doctoral school has a clear focus on increased awareness for the need for PhD candidates to consider broader career development as part of their PhD program. They have recently introduced a new PhD course on career development and performance appraisals that include career dialogues focused on academic careers, and a PhD career Hub for those interested in pursuing careers outside academia is also

available. Not all these measures were known to the PhD students we interviewed as some are quite newly implemented. In particular, the Vitae Researcher Development Framework and accompanying Lens on the RDF was provided in the self-evaluation paperwork. During interviews it was clear that students did not know of this tool, implying that it is either newly implemented or under consideration for acquisition. This is a reflective practice professional development framework that is potentially very expensive (if offered to everyone) as it requires both an institutional and personal license. It is extensive/demanding to form, interpret and implement, and requires tight follow-up of the career development reflections before, during and after evaluations. Vitae requires a mentor/" career coach" so when there is only one resource person (Kristian) to perform this follow-up how feasible is this in reality? It also requires a hugely active and loyal alumni pool, whom the program did not precisely demonstrate to have on hand. There are other tools available, and collaboration with other universities in the Nordic region could open for exchange of good ideas. Other initiatives such as the mentor program that was launched in November 2023 seem to not yet be visible to PhD students or supervisors (verbal communication) and may benefit from reconsidering whether and how to implement these. Should it be offered for all or for the few deemed to be high-flying research talents for focused development? The mentor is often paid with clearly defined number of laborintensive meetings between mentor and mentee. Are there large enough financial reserves for this? The mentor should also be closely connected to the subject discipline of the student.

Career development is a continuous process that requires attention from the beginning to the completion of a PhD program. It can be beneficial to incorporate it as early as the pre-assessment stage (before 11 month of trajectory) and subsequently make it a mandatory element in the progress reports to ensure that not only the subject-specific aspects are dealt with, but also career development reflections.

## General well-being especially "Don't Steal My Work" amongst PhD students – suggestions for improvements, comments on the current approach

Concerning the 'don't steal my work' concern, we believe that PhD students were confident about how intellectual property (IP) ownership is managed, yet their source of information was insufficiently explicitly known and hence relying on an instinctive feeling of how IP is managed. Considering the differences in ownership between those who are employed versus those who are not employed at the university, and considering the varying constellations within which data is being collected and managed, collaborators are involved, and PhD enrolments are managed, this would be deemed as a concern. It is suggested a signed alignment of expectation clarification of the roles, duties, and data ownership (IPR); publication authorship etc. pertaining the student, supervisor, and institution to be undertaken. It might be beneficial to have a meeting discussing the issues e.g. at the beginning of the PhD trajectory or at the 11-month evaluation to ensure the signed document is not just signed and filed away. This may include legal specifications of who owns data/results of MSc work, sub-objectives to the PhD project, or if a guest researcher collaborates on the work. For PhD students, what rights supervisors have to the project results in terms of presentation at meetings, incorporation of preliminary data in research grants etc. Perhaps even incorporate time limits for co-authorships?

The assessment committee is aware that IPR is part of the enrolment form. However, it is strongly suggested that time is reserved for a meeting including the PhD student and the whole supervisor team in which alignment of expectations including IPR is in focus. Other elements can be included in such a meeting such as plan for supervisor meetings, collaboration and communication, planning and evaluation of progress, needed skills, ECTS courses, teaching tasks, stay abroad, establishment of research network, handling of personal issues and career planning. See also the last part of this section.

It was clear that the faculty has a concerted focus on the general well-being of their students with several measures that are already put in place or are under implementation such as DISC profiles, PhD day (3<sup>rd</sup> time organized), scientific help desk, mentor program, and PhD coach. One exciting new initiative is the "Excellence and kindness in research training", that will likely cover pedagogic activities on topical issues, such as well-being, stress management, and imposter syndrome. It is a hope that this initiative will clarify the role of the supervisor as role model in interpersonal/relational supervision to greater ethics and research integrity. These efforts are captured by the PhD students, who in general report a strong feeling of being empowered, and that their working environment is caring and nurturing (verbal communication). A PhD coach with a psychologist background is available for consultations. Nonetheless, students who may lack confidence, minorities, or international students who may lack extensive social network and support in their numbers are particularly vulnerable. Excessively counting on students' understanding of 'implicit habits of how things are done in Aalborg/Denmark' may potentially restrict inclusivity. In verbal communication, there was referred to an International Staff Club. Although this is a good action point, other initiatives should be encouraged, e.g. including minority students in the various representation boards, introducing diversity ambassadors and generally, increasing visibility and celebration of equality, diversity and inclusivity in representative images that are portrayed in webpages and brochures from the doctoral school.

To address the issues 'don't steal my work' and 'general wellbeing' we would thus recommend (based on experiences in other institutions and their struggles), that the doctoral school could introduce a mandatory 'PhD startup meeting' between the supervisors and PhD candidates in which a standardized 'agreement' is drawn up to outline: (1) how interactions/communication between supervisors and PhD students will likely be organized, (2) which mechanisms are in place to diffuse potential escalations of disagreements, (3) what expectations there are with respect to each other's duties and responsibilities, (4) how IP ownership is managed. Another potential structural support mechanism could be the organization of courses focusing on soft skills (rather than the current predominant subject-specific courses), such as 'how to manage my supervisor' or 'conflict avoidance and resolution'.

## The training of PhD supervisors – suggestions for improvements, comments on the current approach

A mandatory two-day supervisor course was implemented for all internal supervisors (both co- and main supervisors) after the recommendation of the last evaluation. The lecturer is Mirjam Godskesen who has research experience in the field of PhD supervision. Mirjam works together with Bente Wichmann-Hansen, and they share a huge research-based knowledge in the field of PhD supervision. The assessment committee has not been introduced to the specific curriculum of the supervisor course but anticipates that it will cover themes such as roles and relationships in PhD supervision, aligning expectations with the PhD student, supporting the writing process, providing motivation through constructive feedback, identifying early warning signs and critical moments, and managing conflicts. If not, these themes are recommended. The course is only available for the newly employed supervisors, such that the older colleagues essentially conduct their supervision instinctively, without any research-based supervisor pedagogic calibration. During the interview rounds, it became apparent that they have formal teaching pedagogy, but not supervision pedagogy. The supervisor has a unique and important role as role model for scientific conduct and the institution has responsibility for ethics and researcher integrity into daily scientific practice. Teaching and implementing these tasks are implicitly delegated to the supervisor, whereby the culture of quality in the research environment may be continually perpetrated to the next generation of scientists. It is an imperative and our recommendation that the Doctoral School ensures that (i) all supervisors (old and new)

take the compulsory course, with tangible repercussions for those who do not, (ii) 1x/semester half-day or whole day seminars on topical issues pertaining to supervision or 1-2 breakfast/lunch supervisor gatherings over shorter discussion seminars/semester. As incentive, they may be awarded ECTS for attendance that they could include in their pedagogic "folder", for use in future salary appraisals in or application for career advancement to professor. The inspiration and the leading of such arrangements could be from the instructor of the already established supervisor courses, bringing continuity into the whole supervisor training.

We commend the introduction of an introductory course for new members of staff but would welcome that the Doctoral School further searches for engaging their supervisors in training activities. Critical supervisor skills/knowledge could for example be embedded in a short, certified course that needs to be taken every 5-10 years by all supervisors who wish to submit a PhD project. Also offering optional soft skills courses for supervisors such 'leadership in academia' or 'how to provide feedback to PhD students' may be considered, or else informing supervisors about the existence of such courses within the university.

### Quality assurance of the PhD study in general and of the individual PhD project

**Progression of PhD trajectory:** The doctoral school does not have a formalized quality assurance system that describes how they plan, perform/implement, evaluate /develop and communicate the various procedures in a systematic continuous cycle of quality development. They have half-year progression reports and a pre-defense at 11 months and we interpret this frequency to be stipulated by the PhD Order from the Ministry of Education. However, when the progress report is not anonymized (sent directly by the student to the supervisor for comment), there is a concern regarding confidentiality. Will the PhD student really share their concerns without fear for repercussions on the relationship with the supervisor? The interpretation of all required elements of the PhD appeared clear, and if in doubt it was evident that administrative staff is accessible and competent to help resolve the often highly individualized queries. The predefense secures necessary changes for the project to be carried through and the half-year reports may detect missing progression and possible conflicts. So, overall, the backbone of the current quality assurance of the PhD trajectory including pre-defense and half year progress reports seem sufficient. However, the assessment committee suggests more confidentiality in the statements from the PhD students in the half-year reports and inclusion of an external part in the assessment of new project proposals.

**Project proposals:** It appears there is no external quality assurance of the project descriptions except for those which have been assessed through international competitive grant evaluations. The quality of the projects is based on a judgement from the supervisor and the head of the actual PhD program. Assessment by an external part from another institution nationally or internationally may help maintaining the highest standard of proposals.

**PhD courses:** In the assessment period 2018, 2019, 2020, 2021 and 2022 the Doctoral School held 28, 27, 28, 37 and 24 courses, respectively. Several courses, particularly "Introduction to the PhD Study" and other generic ones, were repeated multiple times. The thoroughness of course evaluations reached nearly 100%, as PhD students were required to complete evaluation forms to obtain their course certificates. This practice has laid a strong foundation for effective evaluation. Overall, the average course evaluations have been highly positive, with scores typically ranging around 4 out of 5 possible points. In addition to the courses provided by the Doctoral School, PhD students can enroll in courses offered by other Danish universities or those provided by Nordic universities within the NorDoc organization. Furthermore, starting from January 1, 2023, four mandatory courses are required: "Introduction to the PhD Study", "Applying the Danish Code of Conduct for Research Integrity to Your Research", "Active Participation in the PhD Day", and a mandatory program-specific course. These options guarantee access to

high-quality courses.

In the doctoral School research ethics is part of the mandatory course "Applying the Danish Code of Conduct" while ethics and legal compliance is covered in the course entitled "Writing a data management plan", and finally ethics in medical research is part of the course "Bioethics" (information from Director of Doctoral School). The assessment committee underscores the significance of emphasizing ethics and integrity, encompassing crucial themes such as the utilization of artificial intelligence (AI), the pressure to rapidly publish in potentially dubious and non-peer-reviewed journals (commonly referred to as predator journals), plagiarism (including self-plagiarism), falsification, and manipulation of research data. Moreover, the assessment committee deems it essential to extend the focus of applied ethics in research to encompass broader issues such as sustainability, representation, and power dynamics in multidisciplinary collaborations.

Should these themes not be adequately covered within the existing mandatory course "Applying the Danish Code of Conduct," the assessment committee proposes the inclusion of these critical aspects into the course. Alternatively, the committee suggests the creation of a new compulsory course dedicated to these themes.

**Quality criteria for new PhD courses:** The interviews with program heads revealed that the quality criteria for new PhD courses involve evaluating (i) the necessity of the course based on feedback from PhD students and supervisors, (ii) the qualifications of the instructors, and (iii) the integration of a curriculum, coupled with an assessment of the course outcomes. The assessment committee agrees on these parameters.

**Stays at other research institutions and teaching:** According to the Danish PhD Order §7 the PhD student is required to: 1) Carry out independent research work under supervision (the PhD project). 2) Complete PhD courses or similar study elements totaling approx. 30 ECTS points. 3) Participate in active research enterprises etc. 4) Gain experience of teaching activities or other form of knowledge dissemination which is related to the student's PhD project. 5) Complete a PhD thesis on the basis of the PhD project. The Doctoral School employs quality assurance measures for the majority of the PhD requirements outlined in §7. However, when it comes to item 3, which pertains to participating in other research environments, there is no specified duration in terms of weeks. Nonetheless, incentives for attractive stays abroad have been implemented, such as funding for expenses, particularly if the stay extends beyond one month. Regarding item 4, which concerns teaching, there appears to be no stipulated minimum for the number of lectures or other knowledge dissemination activities. This absence of quantifiable criteria makes it challenging, if not impossible, to assess the quality of this aspect. The assessment committee suggests introducing some form of quantified minimum criterion for both item 3 and item 4, accompanied with a guideline on accepted exceptions to those criteria (e.g. family circumstances).

## The drop-out rate amongst PhD students – comments on the current situation and suggestions for improvements

The self-evaluation report suggested, based on number of deregistered students, a dropout rate of approximately 20%. After further discussion it became apparent that the true number is more likely 10% due to how awards and deregistrations are being administered in the system. Compared to the broader national and international context, this would be deemed unavoidable. Nonetheless, the committee shared a concern over a relatively high percentage of PhD candidates not being able to complete their studies within the foreseen 3 years, or even when two 6 month extensions are granted. Whilst for local PhD candidates this is perceived as 'the norm' and 'acceptable' and 'not a great threat against eventual

completion', this may put international students at a considerable disadvantage to complete a PhD within the current environment. That is, if the current environment is so demanding that timely completion is less than likely, then this will inadvertently discourage international students to come to Aalborg University (if other institutions have a stronger record of timely completions). As such, we would recommend that this is taken into account during the Doctoral School's continued efforts in keeping timely completions as the default option.

### Mentor activities - suggestions for improvements, comments on the current approach

The committee found it difficult to evaluate the existing added value of the mentor activities. This initiative was only recently introduced, and there was still insufficient awareness amongst PhD students and supervisors about its existence. The Doctoral School has not undertaken an alumnus questionnaire to determine where their graduates end up, e.g. hospital /health sector/ university or university college sector/ private research institutes. This is important to be able to evaluate the societal impact but also the relevance of their PhD courses. For a number of reasons, the Doctoral School's attempts to get this going are clearly justified, mainly (1) the notion of strengthening the connections with alumni, and (2) offering a peer supportive role to promote the PhD candidates' general well-being. On the one hand this seems like a win-win initiative. On the other hand, it is thought that the organizational/administrative efforts to setup and maintain the mentor activities may well override the benefits of the program. For example, mentor roles could be assigned to existing 3<sup>rd</sup> year students (logistically much easier), and alumni connections could be established/maintained via potentially less cumbersome initiatives. Overall, the assessment committee remains undecided on the potential added value of the mentor activities as they have been described, and feels that it is difficult to evaluate the current approach. It remains to be seen how the Doctoral School will further develop this.

### Areas of interest outside the ones proposed in mandate

Below are some general thoughts in no particular order of importance. The committee hopes that these observations and thoughts may help the Doctoral School in their continued pursuit to provide a productive environment for both PhD students and PhD supervisors to work in.

**Prevention of too heavy hierarchical dependence for progression towards PhD award**: Some of the procedures (assessment, progress reporting) have a high risk of being potentially too dependent on the supervisor and head of the PhD programme, such that if there is a concern by the candidate about the supervisor there is no mechanism for the PhD candidate to confidentially share their concerns without fear for repercussions on the relationship with the supervisor. Whilst the environment seems very positive and students clearly indicated to feel safe, this is still a concern for the few cases in which this may not be so evident. Equally, the risk of conflict situations increases when students or supervisors undergo increased levels of stress. On the one hand, figures on completion time indicate that timely completion is difficult, hence introducing high levels of stress with students (which was recognised even by students who clearly enjoyed their work). On the other hand, funding opportunities in previously successful staff in HST appear to be dwindling fast and combined with increased volumes of teaching this is likely causing increased levels of stress with (some of) those staff. Hence, any initiatives that introduce any mechanisms to (1) prevent conflict situations to arise and (2) raise awareness about conflict resolution mechanisms, would be deemed highly valuable to protect both PhD candidates and PhD supervisors against stress-induced destructive behaviours.

**Teaching assignments:** In the Danish PhD Order, there is no specified minimum number of teaching hours. However, it is stipulated that the PhD student must "gain experience in teaching activities or other forms of knowledge dissemination." This is a loosely formulated requirement, making it challenging to establish reliable quality assurance. Therefore, as mentioned in the earlier section on quality assurance, some form of quantification is recommended. For those employed by the university, the university reserves the right to request 840 hours of teaching during a three-year enrolment period. It is important to note that this regulation is overseen by the department where the PhD student is employed, not the Doctoral School.

**PhD Board:** The PhD Board currently comprises six members, with only two being PhD students and the remaining four being staff members. The assessment committee has raised concerns that this composition might influence board decisions. However, during an interview with one of the PhD students serving on the board, it was mentioned that the predominance of staff members posed no issues. On the contrary, the abundance of experience within the board was seen as an asset when staff representation was higher. Additionally, the two PhD students could rely on the insights and arguments provided by the more experienced staff members.

The interviewed PhD student expressed satisfaction with having a voice in the PhD Board. Voting situations were described as infrequent, and in such cases, the PhD students would typically defer to the decisions made by the more experienced staff members. The assessment committee has deliberated on whether it is advisable to recommend an equal number of PhD students and staff members on the PhD Board but has not reached a consensus. Therefore, the recommendation in this regard is for the Doctoral School and other stakeholders to discuss whether there is a need for any changes in the composition of the PhD Board.

### Concluding remarks

The Assessment Committee has focused on the areas described in the mandate underlying the process. Comments have also been provided on other matters. Aalborg University (AAU), and particularly the Doctoral School in Medicine, Biomedical Science and Technology (Doctoral School), have done excellent groundwork and ensured optimal conditions for interviews during the stay at AAU.

Based on the conducted self-evaluation, interviews, and a review of the university's website, the Assessment Committee's perception is that the Doctoral School is exceptionally well-functioning. It complies with the regulations for Danish PhD schools and is of international standard. Both PhD students and staff express overall satisfaction with the school. The administrative unit operates effectively, and its size is well proportioned to the tasks at hand, and the structure with seven PhD programs seems to have had the desired effect, strengthening affiliations to both programs and the PhD school.

Several new initiatives regarding career guidance, well-being, and visibility of the Doctoral School have recently been introduced. These initiatives appear very promising, although not all have reached users at the current time, especially those related to career development and the mentorship program involving alumni. On the other hand, PhD Day and Q&A sessions between PhD students, supervisors, administration, and the PhD Study Director have been implemented and are functioning well.

In the final section of the report the Assessment Committee has listed some suggestions/recommendations that may serve as inspiration for the further development of the school.

#### Suggestions/recommendations

Decline in PhD students in the Department of HST:

- Perform a risk/consequence analysis for the next 2, 5, and 10 years to identify opportunities for slowing or reversing the negative trend.
- Re-evaluate the PhD position incentive in start packages for medical supervisors.
- Establish clear agreements on project ownership and cooperation between the medical faculty and hospital.

### Career development for PhD students:

- Incorporate career development already in the pre-assessment stage.
- Make career development a mandatory element in progress reports.
- Increase awareness of existing career development initiatives and tools, such as the Vitae Researcher Development Framework.
- Consider the implementation of a mandatory 'PhD startup meeting' for clear expectations and agreements between PhD students and supervisor group.

#### PhD supervisor training:

- Mandate a two-day supervisor course for <u>all supervisors</u>, including experienced ones.
- Conduct regular seminars on topical issues related to supervision.
- Encourage ongoing supervisor training through short, certified courses every 5-10 years.
- Consider optional soft skills courses for supervisors, such as 'leadership in academia' or 'providing feedback to PhD students.'

#### Quality assurance of the PhD study:

- Enhance confidentiality in half-year progress reports.
- Include an external part in the assessment of new project proposals.
- Quantify criteria for stays at other research institutions.
- Quantify teaching requirements for quality assurance.
- Ensure clarity regarding teaching hours and expectations for knowledge dissemination.
- Conduct alignment of expectation discussion, incl. IPR
- Increase emphasizes on ethics and integrity in compulsory course.

#### PhD dropout rate:

- Strive to keep timely completion as the default option.
- Consider the impact of demanding environments on timely completion, particularly for international students.

#### Mentor activities:

- Evaluate the added value of mentor activities and consider potential alternatives.
- Explore less cumbersome initiatives to maintain alumni connections.

#### Prevention of hierarchical dependence:

- Establish mechanisms for PhD candidates to confidentially share concerns about supervisors without fear of repercussions.
- Introduce conflict resolution mechanisms and raise awareness to prevent conflict situations.

#### PhD Board composition:

• Discuss the composition of the PhD Board to determine if changes are necessary for a balanced representation.

#### General well-being and inclusivity:

- Enhance inclusivity for students lacking confidence, minorities, or international students.
- Consider initiatives like diversity ambassadors and increased visibility of diversity and inclusivity in promotional materials.



### Surveyundersøgelse af medforfatter-praksis ved Ph.d.-Skolen Det Sundhedsvidenskabelige Fakultetet, Aalborg Universitet

Udarbejdet af ph.d.-studerende Brian Duborg Ebbesen og Ninna Rysholt Poulsen Ph.D. Committee, Doctoral School in Medicine, Biomedical Science and Technology Faculty of Medicine Aalborg University



### #Dontstealmywork

I begyndelsen af 2022 igangsatte Maria Toft i samarbejde med foreningen 'PhD Association Network of Denmark' kampagnen #Dontstealmywork. Kampagnens to hovedformål var at 1) blotlægge hierarkisk forskningstyveri, således at der kan tales om det, og 2) se på, hvilke forskningsvilkår der gør, at så mange oplever det. I alt fremlagde de 120 vidnesbyrd fra forskere fra hele landet på tværs af fag og universiteter. Vidnesbyrdene fortalte om forskellige typer af uansvarlig forskningspraksis, rangerende fra tyveri af originale idéer til tvivlsomme forfatterskabspraksisser<sup>1</sup>. Kampagnen nåede bredt ud i medierne, og den forhenværende Uddannelses- og Forskningsminister lovede at gennemføre en undersøgelse af forskningstyveri på alle landets universiteter.

Siden er der kommet flere undersøgelser på området. I 2023, kom der en artikel fra Videnskab.dk med titlen "Forskere: Hver tredje ph.d.-studerende bryder bevist reglerne for publicering"<sup>2</sup>. Artiklen henviser til et nyt dansk studie af Goddiksen et al. fra 2023, som har fået svar fra 1.336 ph.d.-studerende i Europa. Studiet viser at 3 ud af 10 ph.d.-studerende har givet et medforfatterskab væk, fordi de føler, det er forventet af dem, eller fordi en forsker med højere anciennitet har beordret dem til det<sup>3</sup>. Disse resultater bekræfter eksisterende resultater<sup>1,4</sup> baseret på lignende undersøgelser.

Det er et brud på internationale retningslinjer og officielle danske standarder, og ifølge Goddiksen et al. er det særligt slemt inden for medicin, samt de naturvidenskabelige og tekniske videnskaber<sup>3</sup>.

Vi besluttede derfor i ph.d. udvalget at lave en tilsvarende undersøgelse for at belyse omfanget på AAU.



# Metoder

Til dataindsamlingen blev der udarbejdet et spørgeskema baseret på Vancouverreglerne med udgangspunkt i validerede spørgsmål fra eksisterende undersøgelser samt egenudviklede spørgsmål tilpasset konteksten omkring Aalborg Universitet.

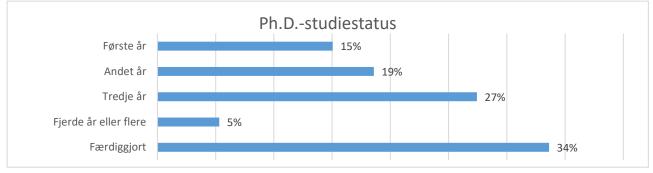
Spørgeskemaet blev udsendt til i alt 446 nuværende og tidligere ph.d.-studerende (se vedlagt Bilag 1: Spørgeskema).

# Resultater

## Demografi

I alt besvarede 113 personer spørgeskemaet fordelt på Institut for Medicin og Sundhedsteknologi (HST, 34%) og Klinisk Institut (KI 66%), hvilket gav en besvarelsesprocent på 25.3%. Kvinder udgjorde 53% af respondenterne, mænd 42% (4% foretrak ikke at svare). Herudover havde 79 % af respondenterne publiceret artikler i forbindelse med deres ph.d.

#### Respondenternes studiestatus ses nedenfor i figur 1.

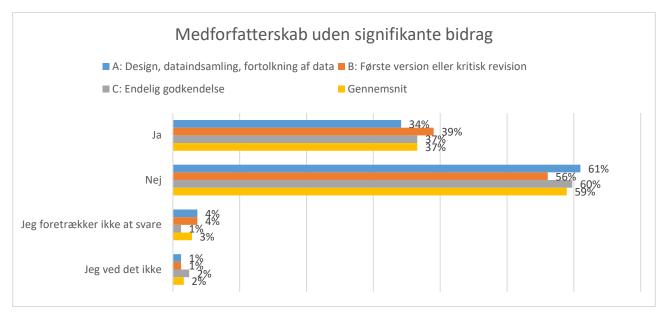


*Figur 1: Statusfordeling. To tredjedele udgøres af igangværende Ph.d.-studerende.* 

# Medforfatterskab uden signifikante bidrag

**Figur 2** viser jævnfør Vancouverretningslinjerne, at 37% af respondenterne har meldt, at de har set andre opnå medforfatterskab uden signifikante bidrag til arbejdet.





Figur 2 Fordeling af kategorier jf. Vancouverretningslinjerne. Fordelingen viser andelen af respondenter, der har oplevet at se medforfatterskab i deres Ph.d.-projekt fordelt på forskellige typer af bidragskategorier: "Blå" svarer til A i Vancouverreglerne, "Orange" til B og "Grå" til C.

Resultaterne viser, at gennemsnittet ligger tæt op ad resultaterne for hver kategori. Yderligere viser data, at for hhv. 50%, 53%, 42% af respondenterne, der har besvaret disse spørgsmål, er der tale om to eller flere artikler.

I **figur 3** kan det ses at lidt over en tredjedel af respondenterne har givet tilladelse til medforfatterskab uden signifikante bidrag i deres Ph.d.-projekt.



Figur 3: Aktivt givet medforfatterskab: Samlet opgørelse over, hvor mange respondenter, der har givet medforfatterskab uden signifikante bidrag.

Grundene herfor spænder vidt, men de primært rapporterede grunde er:

- Jeg ønsker at bevare et godt forhold til personen (57%)
- Den bestemmende person (person in power) bad mig om det (46%)
- Alle andre i mit felt gør det (36%)
- For at få adgang til data (18%)



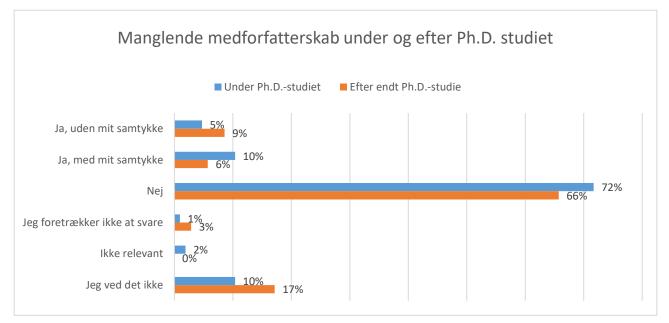
I samme ombæring mener 49% af respondenterne i større eller mindre grad, at det er normalt, at forskere indenfor deres forskningsfelt tillader forskningsledere, vejledere, eller andre at blive medforfatter uden signifikante bidrag til en artikel.

Adspurgt om, hvorvidt det er okay at inkludere medforfattere af grunde ikke beskrevet i Vancouverretningslinjerne, mener 70%, at det ikke er ok. Temaerne her inkluderer; 'dårlig videnskabelig praksis', 'Ingen ydelse, ingen nydelse' 'Uetisk', 'det underminerer H-indexet' og 'det forstærker uligheden mellem yngre forskere og ældre magtfulde forskere og den deraf følgende fordeling af fondsmidler fra staten'.

Modsat mener 5%, at det er ok med nogle af de følgende grunde: 'At imødekomme universitets krav til publicering', ' der er nogle gange ikke andre muligheder for at give kredit', 'At hjælpe unge forskere med at skaffe funding' og 'Samarbejde mellem forskningsgrupper'.

## Manglende medforfatterskab

Både under og efter Ph.d.-studierne har respondenterne oplevet, at de ikke er blevet givet medforfatterskab på trods af at have bidraget til artiklen eller andet publiceret arbejde. **Figur 4** viser at 15% både under og efter deres Ph.d.-studier har oplevet ikke at blive krediteret for deres arbejde med eller uden samtykke.

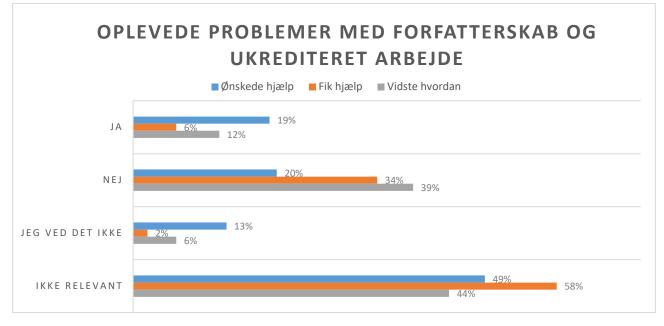


Figur 4: Manglende medforfatterskab. Størstedelen oplever, at de bliver krediteret, men en del oplever stadig ikke at blive krediteret.

#### Erfaring med problemer om medforfatterskab

I forbindelse med problemer med forfatterskab, rapporterer respondenterne i **figur 5**, at næsten en femtedel ønskede hjælp til at håndtere situationen, mens kun 6% oplevede at få hjælp, og 39 % *ikke vidste*, hvor eller hvordan de kunne få hjælp.





*Figur 5: Problemer ifm. forfatterskab. En stor andel af respondenterne oplevede at have brug for hjælp uden at få det.* 

I tillæg hertil mente 24% af respondenterne, at det i nogen eller højere grad har været svært at tale med nogen, der kunne hjælpe, mens 3% fandt det umuligt.

#### Yderligere tanker fra respondenterne

Slutteligt havde respondenterne mulighed for at kommentere eller komme med yderligere tanker om emnet. Kommentarerne baserer sig på problemet inden for forskningsverdenen og på den hjælp, der er mulig at få fra universitet:

Herunder fremhæves citater fra undersøgelsen:

"Nogle gange sker studehandler hvor nogen kommer med på en publikation til gengæld for at de sætter navn på nogle ansøgninger eller på anden vis bidrager med funding."

"Academia is a field that is strongly driven by politics and money (funding). And in order to play this game and please everyone involved, it is common practice to include authors that have made minor contributions. In my experience this is very common practice in most research fields. And as a PhD student you don't have a chance to fight against it because we don't have the leverage and are very depend on the system. Don't blame the player, blame the game."

"It would be cool if I knew exactly who to contact with sensitive concerns in general. Not that I need it right now, but answering the questionnaire I realized that I would not know any "unpartial" people to talk to."

"I, myself, have not experienced such a thing. But it would be great if you inform the PhD students, what should they do and to whom refer in this situation, or how should do they react."



# Konklusion

Baseret på de indhentede respondentsvar i spørgeskemaundersøgelsen #Dontstealmywork, kunne det tyde på, at der væsentlige udfordringer med tvivlsomme forfatterskabspraksisser på AAU. Vi fik desværre ikke en høj responsrate, men undersøgelsen viser dog problemer med både afgivne medforfatterskaber til bl.a. personer med højere anciennitet samt udeladte medforfatterskaber til de nuværende eller tidligere ph.d.-studerende.

De Ph.d.-studerende oplever i mange tilfælde, at der bliver givet medforfatterskab, uden at de er stand til at gøre noget ved det, men også at de selv har afgivet et medforfatterskab grundet pres ovenfra eller grundet 'almindelig praksis', på trods af at et stort flertal mener, at det er uetisk og dårlig videnskabelig praksis at gøre sådan.

De personer der har oplevet udfordringer i forbindelse med forfatterskaber svarer, at det har været svært at få hjælp, og selv hvis respondenterne har fået hjælp, så har det været svært at tale om emnet.

Ud fra kommentarerne tyder det på, at det der forgår i forhold til bl.a. forfatterskaber er meget almindelig praksis inden for forskningsverdenen og undersøgelsen bekræfter de fund der allerede er rapporteret af både nationale og internationale forskere.

## Perspektiver

I januar 2023 sagde Maria Toft, som gik forrest i kampen for #Dontstellmywork op og forlod Københavns Universitet, hvor hun var ph.d.-studerende. Hun har ligget i krig med to seniorforskere om, hvem der skulle have æren for og retten til at udgive forskningsartikler i et projekt, de arbejdede sammen om. Desuden har hun en oplevelse af at have været udsat for trusler og sexisme, uden at universitetet har grebet hende. Hun beskriver at "Jeg kan ikke arbejde et sted, der behandler mig på den måde". Det er derfor vigtigt at AAU har retningslinjer og et sted at hente hjælp, når dette forekommer.

Lise Degn og Jesper Wiborg Schneider, hhv. lektor og professor, Århus BSS, beskriver i Altinget.dk 19 sept. 2022, at meget tyder på, at uredelighed og tvivlsom forskningspraksis skal modvirkes lokalt, og selvom vilkårene skal være til stede, også nationalt, er det i høj grad forskerne selv, som skal tage ansvar, støttet af deres institutioner.



## Kilder

1: Science report.dk. Tilgængelig her: <u>https://sciencereport.dk/forskningstyveri/vidnesbyrd/</u>, Tilgået 22. november 2023

2: Hoffmann, Thomas. Forskere: Hver tredje ph.d.-studerende bryder bevidst regler for publicering, (2023). Center for Faglig Formidling, videnskab.dk. Tilgængelig her: <u>https://videnskab.dk/kultur-samfund/forskere-hver-tredje-ph-d-studerende-bryder-bevidst-regler-for-publicering-tit-under-tvang/</u>, tilgået 22. november 2023

3: Helgesson et al. Misuse of co-authorship in Medical PhD Theses in Scandinavia: A Questionnaire Survey, (2022). Journal of Academic Ethics, https://doi.org/10.1007/s10805-022-09465-1

4: Goddiksen et al. "The person in power told me to" - European PhD students' perspectives on guest authorship and good authorship practice, (2023). PLOS ONE, https://doi.org/10.1371/journal.pone.0280018



## Bilag 1: Spørgeskema

Dear PhD student and colleague,

We would like to thank you for participating in this project by completing the questionnaire. Your participation is essential to help us better understand the difficulties in relation to authorship and publications.

A few studies have explored the authorship and publication process in relation to the work of students (Helgesson et al. (2022), Goddiksen et al. (2023), Hoffmann (2023). To ensure validity, some of the questions in this questionnaire are based on questions from these studies: questions 7, 8, and 9 from Helgesson et al. (2022), and questions 10 and 15 from Goddiksen et al. (2023). They conclude from several European countries, including Denmark, that there are several challenges, particularly for the PhD students.

This survey focuses on the potential challenges that students might encounter in the authorship and publication process. We want to investigate whether this is also a problem at Aalborg University.

The questionnaire should take no longer than 5-10 minutes to complete. Thank you for your time.

On behalf of

The PhD Committee,

Faculty of Medicine,

Aalborg University

Helgesson et al., Misuse of co-authorship in Medical PhD Theses in Scandinavia: A Questionnaire Survey, (2022). Journal of Academic Ethics, https://doi.org/10.1007/s10805-022-09465-1 Goddiksen et al., "The person in power told me to" - European PhD students' perspectives on guest authorship and good authorship practice, (2023). PLOS ONE, https://doi.org/10.1371/journal.pone.0280018 Hoffmann, Thomas, Forskere: Hver tredje ph.d.-studerende bryder bevidst regler for publicering, (2023). Center for Faglig Formidling, videnskab.dk

Initially we would like you to fill in some basic demographic data about yourself:

# Age

- (1) >25
- (2) 25-29
- (3) **O** 30-34



- (4) 35-39
- (5) 40-44
- (6) **O** 45+

Gender

(1) O Female
(2) O Male
(3) O Non-binary
(99) O I prefer not to answer

Are you a Danish citizen?

(1)	O Yes
(2)	O No

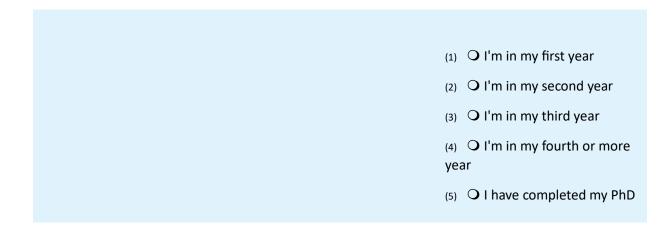
At which of the following departments are you enrolled or have been enrolled?

(1) O The Department of Health Science and Technology

(2) **O** The Department of Clinical Medicine

How far along are you in your PhD?





Have you published or sent any articles for publication in relation to your PhD?

(1) **O** Yes (2) **O** No

The next questions will focus on your experience and knowledge of situations that PhD students might encounter in relation to authorships and publications.

The questions will be based on the Vancouver guidelines in relation to publication processes in your PhD study at Aalborg University. The Vancouver guidelines are drawn up by the International Committee of Medical Journal Editors (ICMJE) and the ICMJE recommends that authorship be based on the following four criteria:Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND

Drafting the work or revising it critically for important intellectual content; AND

Final approval of the version to be published; AND

Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

According to you, has anyone been listed as co-author in any of the papers in your thesis?



Without having made a substantial contribution to any of the		(1) <b>O</b> Yes, in one article
		(2) <b>O</b> Yes, in two articles
	following: conception or design of the work; or the acquisition, analysis, or interpretation of data for the work?	(3) <b>O</b> Yes, in three articles
		(4) <b>O</b> Yes, in four articles
		(5) <b>O</b> Yes, in five or more articles
		(6) O No
		(7) O I prefer not to answer
		(8) O I don't know
		(1) <b>O</b> Yes, in one article
	Without having drafted the first version of the paper or revised it	(2) <b>O</b> Yes, in two articles
	critically for important intellectual content?	(3) <b>O</b> Yes, in three articles
		(4) <b>O</b> Yes, in four articles
		(5) <b>O</b> Yes, in five or more articles
		(6) O No
		(7) O I prefer not to answer
		(8) O I don't know
		(1) <b>O</b> Yes, in one article
Without having given a final approval of the version to be published?	Without having given a final approval of the version to be	(2) <b>O</b> Yes, in two articles
	published?	(3) O Yes, in three articles
		(4) <b>O</b> Yes, in four articles
		(5) <b>O</b> Yes, in five or more
		articles
		(6) <b>O</b> No



- (7)  $\mathbf{O}$  I prefer not to answer
- (8) O I don't know

During your PhD, have you allowed research group leaders, supervisors, or others to become co-authors of your articles, even though they did not make a significant contribution to the them?



Which of the following best describes your reason for doing so?

(1) The person in power told me to
(2) I feared I would not be awarded my degree if I didn't
(3) Everyone else in my field does it
(4) To help the person's career process

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(5)  Friends and/or family encouraged it directly or indirectly
(6) I believed they deserved it
(7) I wanted to maintain a good relationship with the person
(8) To get published in high- impact journals
(9) <b>D</b> To be able to get access to data
(10) 🖵 Other reasons
(11) 🛛 I prefer not to answer
(12) <b>D</b> None of the above. Please state the reason here:

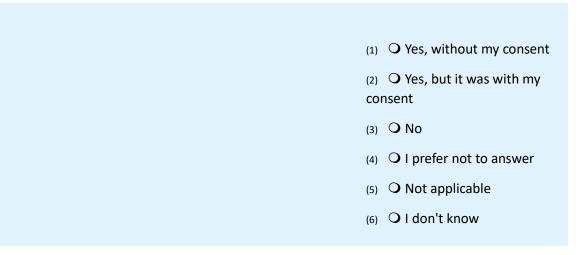
The next questions will focus on your experience and knowledge about situations that PhD students might encounter in relation to authorships and publications.

Before your PhD study, have you experienced that group leaders, supervisors, or others in power becomes co-authors of papers, even though they did not make a significant contribution to them?

- (1) **O** Yes, many times
- (2) **O** Yes a few times
- (3) **O** Yes, once
- (4) **O** No
- (5)  $\mathbf{O}$  I prefer not to answer
- (6) O Not applicable
- (7) **O I don't know**



During your PhD study, have you experienced that your work has been used or applied to e.g., publications, funding applications, or other research activities without crediting you?



After your PhD study, have you experienced your work being used or applied to e.g., publications, funding applications, or other research activities without crediting you?



To what extent do you agree with the following statement:

It is common for researchers in my field to allow research group leaders, supervisors, or others to become co-authors of papers, even though they did not make a significant contribution to them.





Do you think it is okay to include co-authors for reasons not included in the Vancouver guidelines to a publication?

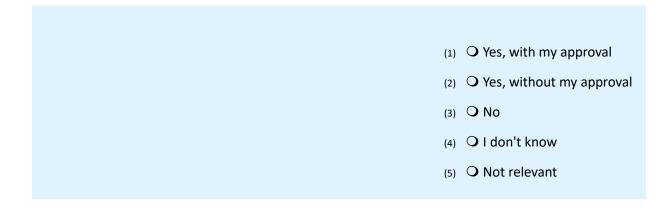
(1) Yes
(2) No
(3) I prefer not to answer
(4) I don't know

# What could those reasons include?

Why do you think it is not okay?



Have you experienced being added as a co-author of papers, funding applications, or other publications without significant contributions?



If you have experienced problems with authorships or uncredited work

Did you want help to handle the situation?	<ol> <li>Yes</li> <li>No</li> <li>I don't know</li> <li>Not relevant</li> </ol>
Did you get help?	<ol> <li>Yes</li> <li>No</li> <li>I don't know</li> <li>Not relevant</li> </ol>



	(1) O Yes
Did you know where to get help?	(2) <b>O</b> No
	(3) O I don't know
	(4) <b>O</b> Not relevant

If you have experienced any problems in relation to authorships or uncredited work, have you been able to talk to anyone about this, that could help you?



If you have experienced any problems in relation to authorships or uncredited work, has it been difficult to talk to anyone who could help you?

(1) O It has not been a problem at all
 (2) O It has been slightly difficult
 (3) O It has been very difficult
 (4) O It has been impossible
 (5) O Not applicable

Is there anything you would like to share or add to this subject?



As mentioned earlier, we are trying to investigate the extent of potential challenges with authorship guidelines and the processes of authorship and publications at Aalborg University.

Can we contact you if we have further questions or need of information? (Your e-mail and response will be handled with confidentiality by the PhD committee)

(1) **O** Yes (Please fill in your contact email):

(2) **O** No

You have now completed the questionnaire. We thank you for taking your time to fill in the questionnaire.

To finish the questionnaire press 'Finish' in the bottom of this page. You can print the answers from your questionnaire by pressing the printing icon in the end of this text.

Thank you again for your participation!