

## Teaching portfolio

**1. Teaching CV: A list of teaching and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD). Please state the teaching method used (e.g. lecture, class teaching, exercises, supervision, examination, coexamination, distance teaching, internet-based teaching and evaluation of teaching). Please also indicate the language of instruction.**

Lecturing and teaching

Ph.d.-level:

- 2016 and ongoing: Ph.d. course at Aalborg University (AAU): "Biostatistics I" and "Biostatistics II", co-organised with Carsten Dahl Mørch. 36 hours teaching on systematic reviews, statistical analysis plan and general feedback to students per semester.
- May 2015 and ongoing. Ph.d.-course at Copenhagen University: "Clinical Research in Health and Medical Sciences". Topics included lectures on "systematic reviews and meta-analyses" and "Proper reporting of the study: checklists". A total of 6 hours per year.
- November 2018. Lecture at Ph.d course "Translational Neurobiology course" at Aalborg University.
- 2023 and ongoing. Use of Patient-reported outcomes. Phd course at Aalborg University Hospital

Master level:

- 2023 and ongoing: Semester coordinator for the 4rd semester of Phys Msc. program
- 2019 and ongoing: Semester coordinator for the 3rd semester of Phys Msc. program
- 2019 and ongoing: Individualized treatment and Patient-reported Outcomes. Course organizer and lecturer. 5 ECTS module at Musc. Phys Msc. program
- 2019 and ongoing: Statistics and methods. 5 ECTS module at Musc. Phys Msc. program
- 2017: Managing knee pain. Msc. course (sports physiotherapy) at University of Queensland in Australia. A total of 3 hours of teaching.
- 2015-2021: Course on "Knee pain in primary care" for Msc level Medicine. A total of 36 hours every year.
- 2015 and ongoing: Master i smertevidenskab at AAU, Modul 1. Lecture "Adolescents and Pain". 6 timer per år
- 2015: Master i smertevidenskab at AAU, modul 7. Lecture "Det gode forskningsdesign - fra idé til udførelse". 9 timer.
- 2015+2016: Kandidatuddannelsen i fysioterapi på SDU på modulet "Analyser af bevægelse og muskelfunktion". Titel "Statisk og dynamisk vurdering foden og associationen til skader". i alt 9 timer.
- 2010-2015: Undervisning i basal matematik på suppleringsuddannelsen til Den Sundhedsfaglige Kandidat på Aarhus Universitet. 18 timer per semester, i alt 90 timer.
- 2014: Kandidatuddannelsen i fysioterapi på SDU på modulet "Muskel og seneskader". Titel "Undersøgelse og behandling af fasciitis plantaris/fasciopathy". Ialt 4.5 timer.

Bachelor level:

- 2012 and 2013: Undervisning og eksaminator på valgfaget "Statistik og epidemiologi" for fysioterapeuter, ergoterapeuter, radiografer og sygeplejersker som er et forberedelseskursus til kandidaten i folkesundhedsvidenskab. I alt 75 timer.
  - 2011-2014: Gruppevejleder i statistik for bachelorstuderende i fysioterapi ved University College Nordjylland. I alt 20 konfrontationstimer.
  - 2012-2014: Hovedansvarlig for valgfaget "Research In Physiotherapy". I alt 50 timers undervisning og vejledning.
  - 2011-2013: Statistikundervisning for bachelorstuderende i fysioterapi ved University College Nordjylland. I alt 48 timer.
  - 2011: Statistikundervisning for medicinstuderende. I alt 18 timer.
  - 2009: Undervisning af bachelorstuderende i datamanagement og Stata. I alt 30 timer.
  - 2008: Undervisning for fysioterapeutstuderende på 5. semester i faget "Ledskader" på 5 semester. I alt 60 timer.
- Community and general public education
- 2012-2014: Undervisning på skoler og gymnasier omkring emnet "Unge med knæsmærter". I alt ca. 100 konfrontationstimer.

- 2013-2016: Bestil en forsker (en del af forskningens døgn). Oplæg om unge med knæsmærter. I alt 6 konfrontationstimer.

Examination

Ph.d assessments

- 2023: Stephen Breda. Exercise Therapy for Patellar Tendinopathy Evaluated with Quantitative Imaging. Erasmus MC, Netherlands.
- 2022: Edel O'Hagen. Optimising first-line care for low back pain and new directions. Sydney University, Australia
- 2022: Henriette Jahre. Prevalence and risk factors for neck and musculoskeletal pain in adolescents and young adults. OsloMet University
- 2022: Søren Mose. Use of Healthcare Services for People with Pain. Aarhus University
- 2022: Maria Swennergren. Achilles tendon rupture: Tendon elongation, gait dynamics, and individualized treatment. Copenhagen University
- 2022: Heidi Tegner. A cognitive behavioural approach to lumbar spinal fusion for patients with chronic low back pain. Copenhagen University
- 2021: Jason Rogers. Clinical and imaging factors associated with chronic plantar heel pain. University of Tasmania
- 2020: Marleena Rossi. "Back Pain in Youth – Occurrence and Risk Factors". University of Jyväskylä, Finland

- 2018: Ph.d. opponent for Rikke Beyer. København Universitet "Achilles tendinopathy. The effect of loading on clinical outcome and intratendinous sliding at the fascicle level".
  - 2018: Ph.d. opponent for Cecilie Bartholdy. København Universitet. "Physical inactivity and current treatments of knee osteoarthritis".
  - 2017 Ph.d. opponent for Kristina Døssing, Syddansk Universitet. Ph.d. thesis entitled "Spinal pain in Danish school children. Epidemiology and manipulative therapy.
  - 2017. Ph.d. opponent for Dominique Claire Leibbrandt, Stellenbosch University, South Africa. Ph.d. thesis entitled "THE EFFECT OF A TARGETED FUNCTIONAL MOVEMENT RETRAINING INTERVENTION ON ANTERIOR KNEE PAIN AND ASSOCIATED BIOMECHANICAL MECHANISMS"
  - 2017: External reviewer for Ph.d.-proposal entitled "An exploration into the rate of change and mechanisms driving improvements in clinical status with loading programs in Mid-Portion Achilles tendinopathy" from The University of Notre Dame, Australia.
  - 2016: Ph.d. opponent for Christina Rexen, Syddansk Universitet. Ph.d. thesis entitled "Effects of extra school-based physical education on the development of physical fitness, injuries and the combined effect of extra physical education and injuries on physical fitness Development".
  - 2016: Examination of Ph.d. thesis at LaTrobe university, Australia. Lachlan Giles. Ph.d.-thesis entitled "The assessment and rehabilitation of quadriceps atrophy in patellofemoral pain".
- Internal censor at Msc-level
- 2017: Msc defense ST7/BME&I1 project exam gr 7405.
  - 2016: Msc defence by Henrik Riel (Clinical Science and technology) at Aalborg University "Does disease severity influence compliance to exercise in adolescents with patellofemoral pain? An ancillary analysis of a randomized controlled trial".
  - 2014: 1st semester project on Clinical Science and Technology. "Et bud på fremtidens genoptræning? -et systematisk review om accelerometerets betydning i hjemmetræning

#### Internal censor bachelor level

- 2016: Eksaminator for bachelorstuderende i medicin. Titel på bachelorprojekt "Plantar Fasciopathy: A Qualitative Study of Knowledge and Experiences among General Practitioners"
- 2014: Eksaminator for fysioterapeut-studerende I faget "Epidemiologi og statistik"

#### Supervision

##### Ph.d.-level

- 2023-2027: Ph.d.-hovedvejleder for Rikke Bækgaard Nielsen
- 2021-2024: Ph.d.-hovedvejleder for Kristian Lyng
- 2023-2025: Ph.d.-medvejleder for Lasse Frandsen
- 2021-2014: Ph.d.-hovedvejleder for Alison Chang
- 2020-2024: Ph.d.-hovedvejleder for Birgitte Hede Ebbesen
- 2019-2022: Phd.-medvejleder for Sabina Vistrup
- 2014-2017: Ph.d.-medvejleder for Ernest Esteve, Københavns Universitet.
- 2016-2022: Ph.d.-medvejleder for Negar Pourbardi, Klinisk Institut, Aalborg Universitet
- 2016-2019: Ph.d.-medvejleder for Rasmus Skov Husted, København Universitet
- 2017-2013: Ph.d.-hovedvejleder for Marianne Christensen, Klinisk Institut, Aalborg Universitet
- 2017-2020: Ph.d.-hovedvejleder for Henrik Riel, Klinisk Institut, Aalborg Universitet.
- 2018-2023: Ph.d.-hovedvejleder for Simon Kristoffer Johansen, Klinisk Institut, Aalborg Universitet.

##### Master-level

- 2019 and ongoing: Hovedvejleder for ca. 10 specialestuderende per år.
- 2018: Hovedvejleder for Louise Sørensen. Specialestuderende på medicin.
- 2018: Hovedvejleder for Ditte Borricholt. Specialestuderende på medicin.
- 2017: Bi-vejleder for Signe Westmark og Line Rethmeier, specialestuderende på Medicin med Industriel specialisering.
- 2017: Bi-vejleder for Jesper Møller Rimestad, specialestuderende på Medicin med Industriel specialisering.
- 2016-2017. Faglig vejleder for specialestuderende, Christian Straszek, på kandidatuddannelsen i Fysioterapi på Syddansk Universitet.
- 2015-2016. Vejleder for specialestuderende på kandidatuddannelsen "Klinisk Videnskab og teknologi". "Does live feedback increase the exercise dose among 15 to 19 year old adolescents with patellofemoral pain? A randomized controlled superiority trial."
- 2014: Vejleder for 1 semesterstuderende på kandidatuddannelsen "Klinisk Videnskab og teknologi". Et bud på fremtidens genoptræning? -et systematisk review om accelerometerets betydning i hjemmetræning
- 2014: Vejleder for 2. semesterstuderende på kandidatuddannelsen "Klinisk Videnskab og Teknologi". "Differentiering af elastikøvelser ved anvendelse af sensortechnologi".
- 2012: Vejleder for 2. semesterstuderende på kandidatuddannelsen "Klinisk Videnskab og Teknologi". "Stræksensor til måling af mellemfodens bevægelser"
- 2012: Vejleder for 2. semesterstuderende på kandidatuddannelsen "Klinisk Videnskab og Teknologi". "Kvantificering af vævstivhed med elastografi"

##### Bachelor-level

- 2019 and ongoing: hovedvejleder for 2-6 bachelorstuderende på medicin per år.
- 2018: Hovedvejleder for bachelor I medicin, gruppe 6005 (i alt 4 studerende).

- 2016: Hovedvejleder for 6 semester bachelor i medicin (i alt 3 studerende). Plantar Fasciopathy: A Qualitative Study of Knowledge and Experiences among General Practitioners
  - 2014: Vejleder for bachelorprojekt i fysioterapi: "Time Under Tension and the quality of execution: The ability to reproduce a shoulder abduction strength exercise".
  - 2014: Vejleder for bachelorprojekt i fysioterapi: "Compliance hos unge patienter med patellofemorale smerter".
  - 2014: Vejleder for bachelorprojekt i fysioterapi: "Naviculare drop - undersøgelse af inter-tester reliabiliteten af en ny målemetode"
  - 2012: Vejleder for bachelorprojekt i fysioterapi: "Hvilke behandlingsmodaliteter anvender fysioterapeuter til patienter med medial tibial stress syndrom?"
  - 2011: Vejleder for bachelorprojekt i fysioterapi: "Brissement force – risikofaktorer og langtidsprognosen. Vinder af de studerendes pris 2012.
  - 2011: Vejleder for bachelorprojekt i fysioterapi: "Fysioterapeutisk bikefitting – er metoden solidt funderet i videnskabelig evidens?"
  - 2011: Vejleder for bachelorprojekt i fysioterapi: "Muskelaktiviteten i seratus anterior og trapezius 3 under træning af skulderstabilitet.
  - 2010: Vejleder for bachelorprojekt i fysioterapi: " Elektromyografisk undersøgelse af musculus vastus medialis – Kvantitativt studie af knæekstensionsøvelser ved anvendelse af Thera-Band® Resistive Bands.
  - 2010: Vejleder for bachelorprojekt i fysioterapi: "Iliotibial Band Syndrome – overensstemmelse mellem behandlingen i fysioterapeutisk praksis og anbefalingerne fra forskningslitteraturen".
  - 2009: Vejleder for bachelorprojekt i fysioterapi: " Patellofemoralt Smerte Syndrom – Kan man via baselineundersøgelser forudsige hvem der først størst smertereduktion ved træningsintervention?"
  - 2008: Vejleder for bachelorprojekt i fysioterapi: "Muskelaktiviteten i underbenet hos en gruppe med medial tibial stress syndrom sammenlignet med en rask matchet kontrol gruppe – et case control studie
- Type your answer here...

## **2. Study/programme administration and management: Experience in programme management and coordination. A list of study administration tasks, e.g. study board membership, chair of study board, semester or course coordinator, accreditation tasks, etc. Experience in planning teaching activities. Experience in programme development. Participating in committees and commissions etc. on education issues.**

- 2023 and ongoing: Semester coordinator for the 4rd semester of Phys Msc. program
- 2019 and ongoing: Semester coordinator for the 3rd semester of Phys Msc. program
- 2019 and ongoing: Individualized treatment and Patient-reported Outcomes. Course organizer and lecturer. 5 ECTS module at Musc. Phys Msc. program
- 2019 and ongoing: Statistics and methods. 5 ECTS module at Musc. Phys Msc. program
- 2016 and ongoing: Ph.d. course at Aalborg University (AAU): "Biostatistics I" and "Biostatistics II", co-organised with Carsten Dahl Mørch. 36 hours teaching on systematic reviews, statistical analysis plan and general feedback to students per semester.
- 2016-2017: Co-drafting the curriculum and application for the new Master in musculoskeletal physiotherapy at Aalborg University. Main coordinator for the application was Thorvaldur Palsson.
- 2014-2017: Coordinator for +10 local symposia/teaching session on better management of musculoskeletal conditions. This was held with both national and international speaker/teachers.
- 2016: Coordinating "Managing Patellofemoral Pain" at LaTrobe University together with Christian Barton. This involved discussing the curriculum, contacting other teachers and making four screencasts beforehand to the attendees.
- 2012-2014: Koordinator for valgfaget "Research In Physiotherapy". I alt 50 timers undervisning, koordinering og vejledning.
- 2010-2014: Koordinator for journal club I Ortopædkirurgisk forskningsenhed 2010-2014. Mødefrekvens 1/måned.
- 2008/2009. Part of the feedback panel for the new physiotherapy program at Aarhus Physiotherapy school.

## **3. Formal pedagogical training: A list of completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc. Written assessment from the course in university pedagogy for assistant professors. Participation in conferences on pedagogy and didactics. Please enclose any documentation of the above, such as course certificates, references, etc**

- Adjunktpædagogikum. 2016-2017. Supervisors were Shellie Boudreau and Pia Britt Elberg.
- Basic Course in Pedagogy for University Teachers. Aalborg University, 9. and 16. October 2015 (2 ECTS).
- Basic Course in Problem Based Learning and Project. Aalborg University, 7. October 2015- 7. January 2016 (2 ECTS).
- Ph.d. Supervisor workshop 1 and 2 2016. 2 full days' course held by Mirjam Godskesen for AAU.
- Courses as part of the AP.
- Seminar 1, AP Teaching and learning in Higher Education (HE) (University pedagogy), 24.02.16
- Workshop 5: Bringing principles of PBL into teaching and learning practices in projects and courses
- Workshop 6, AP6 - Workshop on ICT and active learning

- Workshop 7. Flipped courses in Higher Education

Conference participation in relation to teaching

- Day of teaching within General Practice. Held at CAM-AAU in December 2018.

- Teaching conference for teachers within general practice in Denmark. Held at AAU on 7th of December 2016.

Type your answer here...

#### **4. Other qualifications: Conference contributions and attendance, contributions to debates, scientific articles on pedagogical issues etc. Peer supervision, editorials, mentoring experience or other types of competence development activities.**

Type your answer here...

#### **5. Pedagogical development and research: Development of new courses, teaching materials, teaching methods, examination types or other types of pedagogical development. Didactic and pedagogical research. Cooperation with external collaboration partners.**

I have developed a series of screencasts on treatment of knee pain as well as course material for Ph.d.-courses on systematic reviews.

I have been the author of two text-book chapters in Clinical Sports Medicine by Brukner and Khan (version 5) that have just been published. This is the most commonly used textbook (and teaching material) within sports medicine education and is part of the curriculum across the world. Furthermore, I have finished authoring Munksgaards two new books "Basisbog i sygdomslære" and "Klinisk Reumatologi" where I have co-authored the chapters on Orthopaedic surgery and degenerative joint disorders (90 pages). Both books are expected to be part of the curriculum at the bachelor degree in physiotherapy and was published in 2019.

2016-2017. Co-drafting the curriculum and application for the new Master in musculoskeletal physiotherapy at Aalborg University. Main coordinator for the application was Thorvaldur Pálsson.

#### **6. References on your teaching skills from superiors or colleagues. Teaching evaluations and any teaching awards received.**

Type your answer here...

#### **7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogical development, plans for following up on student feedback/evaluations, etc. Personal reflections on your own pedagogical practice, including objectives, methods and implementation. This should include an analysis and a reasoned description of your pedagogical activities in relation to your pedagogical understanding and student learning. Thoughts on the teaching method at Aalborg University (which is largely based on group-organised project work and problem-based learning)**

Basic philosophy

As an overall and overarching philosophy with my teaching is to inspire and motivate students. Through motivation I try to inspire students to search for more knowledge and skills outside what I can teach in the class room.

To accomplish this within my discipline of health science I try to mix different teaching methods (lectures, reflections, videos, assignments, and screencasts). I try to use different approaches and methods through the courses and supervision depending on the students and their curriculum. Generally, I am very focused on using ICT.

Originally, I started being interesting in the possibilities of ICT as, I, have been introduced to it, and found these methods highly motivating. This was my main motivation for starting using it. In addition, it follows along my own thoughts and aims of motivating and inspiring students.

Philosophy specific to my typical area of teaching

Most of my teaching is within the medical sciences (medical students and physiotherapists). For this particular group, I focus on making sure they have content knowledge and can apply the content knowledge when they see patients. As an example, it is not enough to know everything about specific tests for knee pain, if you do not know how to perform it when you are with a patient or interpret the results and use the results as part of your clinical reasoning. The way I have integrated this into my teaching is through the use of a "red thread" that most often a patient (or a problem). So whenever, knowledge content is presented, it is aimed at a patient and a discussion on how to apply this knowledge. A concrete example is the teaching that my pedagogical supervisor saw. Here "Anna with knee pain" was the center of the lecture, going from: how to diagnose, differential diagnose, treatments and prognosis. My aim by centering the talk around Anna, is that we discuss and apply the curriculum to a typical patient in the typical flow they would use in a clinical setting.

General reflections on courses at Ph.d-level

Timing of teaching

Teaching at Ph.d courses has given rise to some concerns and thoughts about how to best structure and plan the teaching. As I see it, there is often a mismatch between when the course is being offered and when the students need to apply their newly acquired content knowledge. In an optimal scenario, they would have the course at the exact time they need e.g. the tools to develop and write a full systematic review (on-demand teaching). These concerns arise from my own experience as student, but also feedback received from students after the end of courses.

To counteract this, I have tried to develop "help-packages" that can be used after the teaching has ended. First time I tried this as at a Ph.d-course at Copenhagen University where I taught in the topic of systematic reviews. I supplied the students with all my normal pre-course material and gave a lecture as I would normally do. After my lecture they had access to quick-help guide made of a small cook-book, including videos and a small assignment that they could pull out when they in e.g. 6 months needs to do a systematic review. The goal with this small "package" is that the students can then use this in the future when they need to do e.g. a systematic review. The feedback on this approach has been good and I will do this in the future as well.

After trying this for a number of different courses, receiving feedback from students and reflecting. I still believe the general idea about making help-packages have merit. However, I see it mainly functions well for methodological courses (e.g. research methodology and similar) and less well in courses on how to manage patient in a clinical setting. These help packages after good for brushing up content knowledge, but the important ingredient of discussions, hands-on and feedback to students are lacking, make it less optimal for teaching students how to apply their knowledge to a practical situation.

Making it relevant to them

Another question or concern in teaching at Ph.d.-courses is how we make the course specific to them. In Biostatistics 1 and 2, we have received comments that the material that we cover are too generic and not specific to their studies. As part of the reflections we made with Carsten Dahl Mørch, we decided to try to introduce that the students write their own statistical analysis plan (SAP) during the course and present it as part of the last session. We tried this in Biostatistics 1 in the spring of 2017 and the feedback from the students was generally very good and they liked that they had to work on their own SAP during the course. This has now been added to "Biostatistics II" as well and has been continually developed during the two years I have taught on the course.

## **8. Any other information or comments.**

Type your answer here...