# 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.

My teaching activities are based on the Problem Based Learning model at Aalborg University within the fields of biomedical engineering and medicine.
Undergraduate teaching in Biomedical Engineering is based on project supervision for semesters 3, 4, 7, 9, and 10, covering aspects of analog and digital system design, biological signals data acquisition and processing and human-machine interfacing for research and rehabilitation. Teaching in Clinical Science and Technology is based on project supervision for semesters 2 and 4 (master level) with focus on design principles of medical technology with applications in rehabilitation. Teaching in Medicine and Medicine with Industrial Specialization is based on courses in sensory-muscular systems of the human body, courses in CE marking regulatory on semester 3 and 5, and case facilitator on semester 2, 3, 5, and 6. Project supervision for semester 3 focuses on investigation of structures and mechanisms of neural and muscular systems. Teaching in Electrical Engineering is based on project supervision for semesters 2, 3, 4, and 8 on circuit and system analysis, signal processing with applications of robotics in rehabilitation medicine.
Postgraduate teaching includes Ph.D. Course Neuromodulation (@ Biomedical Engineering) and Ph.D. general course Advanced Time-Frequency representation course (@ Engineering). The topics include structure and mechanisms for neuromodulation as well as advanced signal processing of biological signals tailored to the students' needs. Supervision for University Pedagogy Programme (Adjunktpædagogikum - @ AAU Learning Lab) addresses to postdocs and assistant professors improving pedagogical competences for undertaking class teaching, supervision, the planning of teaching, and examinations on the university's study programmes. Co-supervisor for two Ph.D. students in Biomedical Engineering. Assisting examinations (censor) adds to teaching experience at the semesters and disciplines mentioned above. Language of instruction is both Danish and English

## 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.

Appointed, on behalf of Aalborg University, as member of the Education Committee for the newly established education Bachelor of Science in Prosthetics and Orthotics (Professionsbachelor i Protese og Ortoseteknologi) at VIA University College.

## 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

2014-2015: University pedagogics for assistant lecturers, AAU Learning Lab, Aalborg University

2015: English certification course, AAU Learning Lab, Aalborg University

2012: Problem based learning Workshop, AAU Learning Lab, Aalborg University

2011: PhD Course Supervision and Professional Communication, AAU Learning Lab, Aalborg University

## 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.

Postdocs supervision within the University Pedagogy Programme at AAU, Learning Lab
Ph.D. Students co-supervision at Doctoral School, Biomedical Engineering, AAU

## 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.

Type your answer here...Active participation in discussions for teaching methods for the curricula of the newly established education at VIA University College, as member of the education committee.

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

Not applicable.

## 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)

Learning is a process that never stops. Learning is present in most aspects of our life and it helps us identify the needs we have and the way to adapt and respond to such needs. As health science professionals we must consider the societal challenges and provide viable solutions addressing such challenges, as technology and medicine have proven to be among the core pillars of the modern society.
The problem-based learning and group-organized project work specific to Aalborg University provide a reliable frame for both students and teachers, assisting the learning process. Through regular courses and workshops, teachers have the possibility to contribute to the common effort on quality of education at the faculty level through discussions of own and/or shared experiences and reflections on facilitating learning. The experience that I gained proved to be valuable in my research field as well. Students are introduced already from the first semester through this frame to collaborative work for critical and independent thinking on identifying, understanding, and use of knowledge in a specific context / topic or solving a specific task, often exemplified and related to my own or SUND specific research. This experience builds up and integrates throughout the semesters of education at both bachelor and master level aiming to promote self-confidence in mastering knowledge and continuous learning that ensure the ability to address complex challenging professional tasks as individual or collaborator within a group of specialists of various interdisciplinary fields.

## 8. Any other information or comments.

Teaching and Research aim to contribute to FN’s goals on Good Wealth and Wellbeing, Quality Education