# 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 for Undergraduate Courses:

Anatomi, fysiologi og sundhed, 1st semester Sport Science

Neurofysiologi og motorik i dans og gymnastik, 2nd semester Sport Science

Neurofysiologi i teori og praksis, 3rd semester Sport Science

Human Motor Behaviour, 3rd semester Kinesiology, University of British Columbia, Canada

Videregående Arbejds- og Træningsfysiologi, 5th semester Sport Science, Aarhus University

### **Lecturing for Post-Graduate Courses:**

Idrættens forskellige målgrupper, 7th semester Sport Science

Pharmacological and Non-Pharmacological Treatment of Pain, 1st semester Master in Pain Science

Human Bionics, 8th semester Robotics

Translational Research Principles, 8th semester Medicine with Industrial Specialisation

Neuromuskulære tilpasninger til fysisk aktivitet og træning, 8th semester Sport Science

## Lecturing for Ph.D. Courses

Aalborg Symposium on the Advances in Neurophysiology and Neural Rehabilitation Engineering of Movement

Fundamentals of Electroencephalography (EEG): Data Acquisition and Interpretation

Advances in the Neural Control of Movements

Non-invasive Techniques for the Assessment of Plasticity in the Human Nervous System

Science of Tomorrow: New Technologies Advancing Neuroscience

## **Project Group Supervision:**

I have supervised 40+ post-graduate Sport Science groups, 6 post-graduate Medicine and Medicine with Industrial Specialisation groups, 3 post-graduate Biomedical Engineering and Informatics groups, and 1 post-graduate Musculoskeletal Physiotherapy group.

I have supervised 45+ undergraduate Sport Science groups and 40+ undergraduate Medicine and Medicine with Industrial Specialisation groups.

Examples of recently supervised projects:

Test-retest reliability and concurrent validity of FysioMeter C-station measuring lower-limb muscle strength asymmetry. Testing muscular asymmetries in the hamstrings muscles.

Predicting transcranial magnetic stimulation outcome from initial Fugl-Meyer and action research arm test.

The relationship between fear and movement behaviour for intermediate climbers in top rope and lead climbing.

The effect of ischemic conditioning on motor learning.

Assessing corticospinal excitability through transcranial magnetic stimulation after associative brain-computer interface training of the extensor carpi radialis longus muscle.

Neuromuscular function in healthy participants and subacute stroke patients following an associative BCI intervention assessed by HD-EMG.

Sensory feedback in soleus EMG activity during stair climbing.

Female sports participation and osteoarthritis: A systematic review.

The effects of complex and compound plyometric and heavy resistance training methods.

Investigating the benefits of full body high-intensity aerobic exercise on human motor skill learning.

High intensity exercise and motor skill retention: The role of segmented scheduling.

Assessing neuroplasticity with transcranial magnetic stimulation following step-perturbation training.

Risk markers for slip-induced falls in older community-dwelling adults.

The effect of experimentally induced pain on motor skill acquisition and corticospinal excitability.

# Ph.D. Supervision

I have been the co-supervisor for 4 Ph.D. students and have evaluated 11 Ph.D. theses.

#### **External and Internal Examinations:**

I have been a member of the Censorcorps for Sport Science since 2018 and have assessed 6 bachelor's theses, 17 Master's theses, and numerous courses.

I have been a member of the Censorcorps for Engineering educations since 2023 and have assessed courses in Biomechanics and the Neural Control of Human Movement.

I have also been an internal examiner for numerous undergraduate and post-graduate Sport Science courses as well as project groups on the Sport Science, Medicine, Medicine with Industrial Specialisation, Biomedical Engineering and Informatics, Clinical Science and Technology, and Robotics educations.

#### Case Facilitation:

Nervesystemet og bevægeapparatet, 3rd semester Medicine and Medicine with Industrial Specialisation Klinisk psykologi, 3rd semester Medicine and Medicine with Industrial Specialisation

### Languages of instruction:

**English and Danish** 

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.

# Course Development and Coordination:

Aalborg Symposium on the Advances in Neurophysiology and Neural Rehabilitation Engineering of Movement, Ph.D. course

Non-invasive Techniques for the Assessment of Plasticity in the Human Nervous System, Ph.D. course Neuromuskulære tilpasninger til fysisk aktivitet og træning, 8th semester Sport Science Translational Research Principles, 8th semester Medicine with Industrial Specialisation

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

University Pedagogy Course 2016-2017

## **Course Participation:**

Professional communication
Integrated course design for teaching and learning in a PBL context
Activating students in large classes
Active learning in lectures
Teaching and learning in higher education (university pedagogy): principles and processes
Enhancing feedback and facilitating student reflections in groups
Lecturing

Bringing principles of PBL into teaching and learning practices in projects and courses Conducting successful exams - Regulations and cases illustrating challenges and pitfalls

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.

Supervision of one Assistant Professor during the University Pedagogy Course for Associate Professors. Head of the Laboratory for Locomotion and Movement Neuroscience Participation in Teaching Days at AAU: 2014, 2016, 2017, 2018. Supervision of Ph.D. students, research assistants, and international guest researchers.

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.

Development of teaching material (slides, laboratory instructions, examination exercises, etc.) for my lectures and laboratory courses.

Frequent conversations and reflections with colleagues and students.

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

Nominated for Teacher of the Year 2021 by the Study Board for Public Health and Sport Science, Faculty of Medicine.

"Andrew has demonstrated that he is a skilled, curious and reflective teacher who is very interested in not only practicing university teaching but also in analyzing his teaching and supervision. Andrew is a well-prepared lecturer who incarnates

the subject matter and focuses on his students and their learning outcome. Andrew is a very competent teacher and supervisor for his students. He is skilful in asking challenging questions and guiding the response of the students."

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 grouporganised project work and problem-based learning)

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8. Any other information or comments.

None.