

Teaching portfolio

1. Teaching CV: A list of any lecturing and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD) as well as any external examiner tasks.

Teaching Activities

My teaching activities include 1) lectures with 10-270 students, 2) project supervision individual and in groups with laboratory and elements, and 3) facilitation of case-based learning. As outlined below, I have experience with teaching students on all levels, from 1st semester to PhD level. PBL is a central element in all my teaching activities, and I have attended a number of PBL- and case-based workshops.

Academic Fields

My research field is immunology and life science, with a focus on analysis of proteins using mass spectrometry-based proteomics. My competences enable me to teach in a variety of subjects, including basic anatomy and histology, pharmacology, hands-on laboratory courses, molecular biology, protein analysis methods, advanced mathematics, statistics, and project design/management.

2018

- "Complement modulation properties of clinical isolates of *Klebsiella pneumoniae*" Main project supervisor (9 + 10th sem.) Medis master student, AAU- "Fundamentals in Medicine" Case facilitator (20x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU- "Pharmacology" Case facilitator (8x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU- "Respiratory-, Cardiovascular-, and Urinary Organ Systems" Case facilitator (20x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU
- "Protein quantification by Mass spectrometry using discovery-based comparative proteome mapping Lecture (3 h), Master class, University of Chinese Academy of Sciences (UCAS), Beijing, China
- "Advanced targeted MS" Lecture (3 h), Master class UCAS ~30 students, China
- "Electrospray ionization, ion transmission, ion mobility and mass analyzers" Lecture (3 h), Master class UCAS ~30 students, China
- "Hands-on ESI Data Acquisition, LC in LC-MS, Scan methods and hyphenated techniques" Lecture (3 h), Master class UCAS ~30 students, China
- "Metabolismen i den postprandiale og fastende tilstand" Lecture (1.5 h), Bachelor level Medicine/Medis ~250 students, AAU
- "Hormonel kontrol af blodsukkeret" Lecture (1.5 h), Bachelor level Medicine/Medis ~250 students, AAU
- "Endokrinologi" Case facilitator (20x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU
- "Ernæring og fordøjelsessystemet" Case facilitator (12x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU
- "Immunsystemet" Case facilitator (8x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU
- "Epidermal Growth Factor Receptor & Cancer: Control of Cellular growth" Main supervisor, Bachelor level PBL- group project, 2x6 students, AAU
- "Epidermal Growth Factor Receptor & Cancer: Control of Cellular growth" Co-supervisor, Bachelor level PBL- group project, 2x6 students, AAU
- "Respiratory-, Cardiovascular-, and Urinary Organ Systems" Oral examiner Case groups ~15 Medicine students, AAU
- "Respiratory-, Cardiovascular-, and Urinary Organ Systems" Oral censor Case groups ~15 Medicine students, AAU

2017

- "Respiratory-, Cardiovascular-, and Urinary Organ Systems" Oral examiner Case groups ~15 Medicine students, AAU
- "Respiratory-, Cardiovascular-, and Urinary Organ Systems" Oral censor Case groups ~15 Medicine students, AAU
- "Fundamentals in Medicine" Case facilitator (20x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU
- "Pharmacology" Case facilitator (8x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU
- "Respiratory-, Cardiovascular-, and Urinary Organ Systems" Case facilitator (20x 1.5 h), Bachelor level Case groups ~15 Medicine students, AAU
- "Epidermal Growth Factor Receptor & Cancer: Control of Cellular growth" Main supervisor, Bachelor level PBL- group project, 2x6 students, AAU
- "Epidermal Growth Factor Receptor & Cancer: Control of Cellular growth" Co-supervisor, Bachelor level PBL- group project, 2x6 students, AAU

2016

- "Analyzing Proteomics Data – From bottom-up Shotgun to Publication" Lecture, Postdoctoral level Harvard Medical School, USA
- "Hands-on Mass Spectrometry Training Course" Lecture, Postdoctoral level Harvard Medical School, USA

2015

- "Central Techniques in Omics" Lecture, Master level UCAS ~30 students, China

2014

- "How to use and interpret large datasets from emerging –omics based technologies" Lecture, PhD level, PhD-students ~20, AAU
- "Introduction to Mass Spectrometry" Lecture, Bachelor level Biotechnology engineering ~30 students, AAU
- "Hands-on analysis of proteins in complex mixtures" Laboratory instructor, Bachelor level Medis ~25 students, AAU

2013

- "The Q Exactive mass spectrometer. How to use and maintain" Lecture, Postgrad level Harvard Medical School, USA
- "Protein simulation and high-res visualization in VMD and YASARA" Lecture and hands-on training, Master level Biotechnology engineering ~30 students, AAU

2012

- "Protein simulation and high-res visualization in VMD and YASARA" Lecture and hands-on training, Master level Biotechnology engineering ~30 students, AAU

2011-2008

Executive and speaker for The Physics Show Aalborg University Postgrad to Bachelor level AAU

2. Study administration: A list of any study administration tasks, e.g. study board membership, head of studies or semester or course coordinator, accreditation, etc.

2018

- Module coordinator (apprentice) 1.1, Medicine and MEDIS Bachelor level, AAU
- Revision of the study regulation for Medicine and MEDIS Master AAU
- Development of problem-based cases in medical education, Postdoctoral level, AAU
- Design and planning of PBL-project with group work and laboratory elements. Bachelor level, AAU
- Coordinated interpretation of the learning goals of case facilitation amongst the case facilitators, Bachelor level, AAU
- Planning of course Central Techniques in Omics, Lectures (9 h), Master class UCAS ~30 students, China

2017

- Design and planning of PBL-project with group work and laboratory elements. Bachelor level, AAU
- Coordinated interpretation of the learning goals of case facilitation among the case facilitators Bachelor level, AAU

2011 to 2008

- Coordinator and one of the presenters for Aalborg physics show.

3. University pedagogy qualifications: A list of any completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc.

2018

- Attended course "Workshop for casefacilitators" 2x 3 hours, postdoctoral level, Learning Lab, AAU
- Attended course "Supervising groups in conflicts", 3 h, AAU
- Attended course "Certification Programme in English for AAU University instructors", AAU
- Attended course "The Danish code of research integrity", 3 h, Aalborg University Library, AAU
- Attended course "Copyright and Plagism", 3 h, Aalborg University Library, AAU
- Attended course "Planning and Implementation of Group Instruction" 4 h, PBL academy, AAU
- Attended course "Development of problem-based cases in medical education" with Janine Henderson from Hull York Medical School, 3 h, AAU
- Attended Aalborg University Teaching Day – Highlights: Keynote lecture by Prof. Manu Kapur "Beware Unproductive Success, Learn from Productive Failure" and "Graphic facilitation training" partners from Bigger Picture
- Attended course "Flipped teaching with podcasts II" Computer Science, 3 h, AAU
- Attended course "Planning Development and quality assurance of study programmes" 3 h, Learning lab, AAU
- Attended course "Conducting successful exams regulations and practicalities" Learning and philosophy, AAU
- Attended course "Lecturing in English" 4 h, Culture and Global Studies, AAU
- Attended course "Flipped teaching with podcasts I" Computer Science, 3 h AAU
- Attended course "Teaching at a PBL University" 4 h, PBL academy, AAU
- Collegial guidance on lecturing, case-facilitation, and project supervision on at least eight occasions, by PBL academy and Professor Svend Birkelund, in addition to other colleagues.
- English C1 certified.

2017

- Attended course "Principle of Exemplarity in problem-based learning" 4 h, PBL academy, AAU
- Attended course "Introduction to university pedagogy for assistant professors" 4 h, PBL academy, AAU
- Collegial guidance on lecturing, case-facilitation, and project supervision on at least four occasions, by PBL academy and

Professor Svend Birkelund, in addition to other colleagues.

2012

- Completed the AAU PhD-course "Professional communication" with presentation techniques and group work.

4. Other qualifications: Conference attendance, editorials, presentations, etc. relating to education, 'University Teaching Day', etc.

I have presented my research at the following public events

2015–23/4 "Forskningens døgn" 2015 (Aalborg Hospital and Hjørring hospital, Denmark) –

2015–29/4 Open ResearcherDay 2015 (Fredericia, Denmark)

2014–20/10 Odense Patient data Explorative Network (OPEN) Inflammatory Bowel Disease seminar (Odense, Denmark) – Etablering af molekylærbiologiske undersøgelser på tarmbiopsier.

2013–25/4 Open ResearcherDay 2013 (Fredericia, Denmark) – Analysis of Intestinal Biopsy-samples from Patients with Chronic Joint- and Intestinal Inflammation.

Additionally, I have held the following oral presentation at conferences:

2015-14/12 Targeted Proteomics International Symposium (TPWIS) Mumbai, India

2015-27/09 14th Human Proteome Organization HUPO (Vancouver, Canada) – Neutrophil Extracellular Traps in Ulcerative Colitis - A Proteome Analysis of Intestinal Biopsies.

2015-27/8 Danish Bioinformatics Conference ELIXIR, (Odense) - The pig protein atlas and an optimized porcine proteome database for clinical studies.

2014–4/9 Danish Society for Gastroenterology and Hepatology Network meeting (Middelfart, Denmark) – Inflammatory Diseases – An Analysis of the Underlying Biological Triggers.

2013–3/12 Danish Proteomics Society DAPSOC (Odense, Denmark) – Synovial Fluid Proteome Analysis and the Origin of Synovial Proteins.

2013–2/4 Children's Hospital Boston, Harvard Medical School (Boston, USA) – Citrullinated Proteins: Disease Relevance and issues in Mass Spectrometry Identification.

5. Teaching activity development and teaching materials: A list of any contributions to the development of new modules, teaching materials, study programmes, e-learning, collaboration with external business partners, etc.

- Developed case-material for students and facilitators.
- Prepared oral exams for case-facilitation.
- Developed podcast for flipped classroom approach.
- Prepared lecturers from the bottom up.
- Designed experimental PBL-projects for bachelor and master students.

6. Teaching awards you may have received or been nominated for.

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogic development, plans for following up on feedback/evaluations from students, etc.

Throughout my bachelor, master, PhD, and postdoc studies at Aalborg University, I have always been a strong supporter of the problem based learning (PBL) model with project work. I utilize the obtained skills directly today in my research and in my many national and international collaborations utilized the constructive synergy in teamwork and collaborative efforts. In my opinion, it is critical that the students become a part of the research groups and take part. In this way, the research groups can utilize the student work optimally, while the students learn the most and try to become a part of an active research environment. Additionally, it is my convention that the PBL model is an essential part of becoming an independent scholar. Type your answer here...your answer here...

8. Any other information or comments.

I have always been happy to help students and colleagues in the lab or in the office when they casually drop by with questions regarding projects or assignments....