Undervisningsportfolio

1. Undervisnings-CV: Oversigt over undervisnings- og vejledningsopgaver med angivelse af fagområder, omfang, niveau (BA, kandidat, EVU, Ph.d) samt evt. censoropgaver.

Overall Teaching Activities My teaching activities include 1) lectures with 10-270 students both physically and online with ongoing assignments, 2) project supervision individually and in groups with laboratory and elements, and 3) facilitation of case-based learning. My teaching activities are in either Danish or English, and the academic level ranges from early bachelor to ph.d.-course and faculty courses. Problem-based learning (PBL) is a central element in all my teaching activities, and I have attended a number of PBL- and case-based workshops. **Overall Academic Field**My research focus and main teaching competences are within the innate immune system with a focus on the early development and role in inflammatory diseases. Methodologically, I analyze proteins using systems biology with a focus on mass spectrometry-driven proteomics. My competences enable me to cover 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. **Annual Teaching Activities***Projects*- Experimental/theoretical Bachelor Project main supervisor, various projects within the innate immune system. - Experimental project in the epidermal growth factor receptor and Cancer/cellular growth, Main supervisor, 15 ECTS Bachelor level PBL- group project, 2x6students *Facilitation of case modules*- Case facilitator Fundamentals in Medicine (20x 1.5h), Bachelor level Case groups ~15 Medicine students - Pharmacology Case facilitator (8x 1.5 h), Bachelor level Case groups ~15 Medicine students - Respiratory-, Cardiovascular-, and Urinary Organ Systems Case facilitator (20x 1.5 h), Bachelor level Case groups ~15 Medicine students - Endocrinology Case facilitator (20x 1.5 h), Bachelor level Case groups ~15 Medicine students - Digestion and the Digestive system Case facilitator (12x 1.5 h), Bachelor level Case groups ~15 Medicine students - The immune system Case facilitator (8x 1.5 h), Bachelor level Case groups ~15 Medicine students *Lectures/workshops*- Molecular pathology of inflammatory bowel disease, Lecture (1.5 h), Master level MedIS ~50 students - Metabolismen i den postprandiale og fastende tilstand, Lecture (1.5 h), Bachelor level Medicine/Medis ~250 students - Hormonel kontrol af blodsukkeret, Lecture (1.5 h), Bachelor level Medicine/MedIS ~250 students - The Eucaryotic Cell Lecture (1.5 h), Bachelor level Medicine/MedIS ~250 students - Enzymes Structure and functions, Lecture (1.5 h), Bachelor level Medicine/MedIS ~250 students - "Nucleic acids (DNA and RNA)" Lecture (1.5 h), Bachelor level Medicine/MedIS ~250 students - Protein transcription and translation, Lecture (1.5h), Bachelor level Medicine/Medis ~250 students - Pathology of the inflammatory bowel diseases, Lecture (1.5 h), Master level Medicine/MedIS ~250 students - Workshop in case facilitation for supervisors, Workshop (8 h), faculty and PhD-level. **Former Assignments**- 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 - How to use and interpret large datasets from emerging–omics based technologies Lecture, PhD level, PhD-students ~20 - Introduction to Mass Spectrometry" Lecture, Bachelor level Biotechnology engineering ~30 students - Hands-on analysis of proteins in complex mixtures Laboratory instructor, Bachelor level MedIS ~25 students - The Q Exactive mass spectrometer. How to use and maintain, Lecture, Postgrad level Harvard Medical School, USA - Protein simulation and high-res visualization in VMDand YASARA, Lecture and hands-on training, Master level - 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 ~30students, China

2. Studieadministration: Oversigt over studieadministrative opgaver, eksempelvis medlem af studienævn, studieleder, semesterkoordinator, fagkoordinator, akkreditering m.v.

Main current administration and management activities- Study board for medicine Substitute member. - Semester Coordinator 1st semester Medicine and MedIS Bachelor - Module Coordinator Foundations of Medicine, Medicine and MedIS Bachelor level - Subject coordinator Biochemistry, Medicine / MedIS educations - Subject coordinator Case facilitation, Medicine / MedIS educations - Part of workgroup updating the study curriculum for Medicine and MedIS. - Part of workgroup updating the semester descriptions. - Faculty and PhD-course in case facilitation for supervisors. - Organizer for a case facilitator collaboration platform within and between semesters, Medicine and MedIS bachelor **Former assignments**- Coordinator 2nd semester MedIS Mater - Profile Coordinator Translational Medicine MedIS Master - Chair for Digital PBL @ SUND Casework - Coordinator for Implementation of Digital Competences in the Medicine and MedIS Study Curriculum - Chair for Digital PBL @ SUND Casework - Coordinator 6th semester Medicine and MedIS - Revision of the study regulation for Medicine and MEDIS Master AAU - Study board for Medicine - Coordinator Clinical Excercises Medicine and MedIS, AAU - Module coordinator 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 - Organization of course Central Techniques in Omics, Lectures (9 h), Master class UCAS ~30 students, China - Design and planning of PBL-project with group work and laboratory elements. Bachelor level, - Coordinated interpretation of the learning goals of case facilitation among the case facilitators Bachelor level, AAU - Coordinator and presenter for Aalborg physics show.

3. Universitetspædagogiske kvalifikationsforløb: Oversigt over gennemførte universitetspædagogiske kursusforløb, PBL-kurser, workshops, udviklingsprojekter, kollegial supervision o.l.

- Course "Workshop for casefacilitators" 2x 3 hours, postdoctoral level, Learning Lab - Course “Development of problem-based cases in medical education” with Janine Henderson from Hull York Medical School, 3 h - Professional Postgraduate Teacher Training Program in project supervision and course teaching, with a focus on teaching large lectures with student interactions. Learning Lab, AAU - Course “Supervising groups in conflicts”, 3 h - Course “Certification Programme in English for AAU University instructors” - Course “The Danish code of research integrity”, 3 h, Aalborg University Library - Course “Copyright and Plaigism”, 3 h, Aalborg University Library - Course "Planning and Implementation of Group Instruction” 4 h, PBL academy - Course “Graphic facilitation training” partners from Bigger Picture, 3 h - Course “Flipped teaching with podcasts II” Computer Science, 3 h - Course “Planning Development and quality assurance of study programs” 3 h, Learning lab - Course “Conducting successful exams regulations and practicalities” Learning and philosophy - Course “Lecturing in English” 4 h, Culture and Global Studies - Course “Flipped teaching with podcasts I” Computer Science, 3 h - 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 - Course “Principle of Exemplarity in problem-based learning” 4 h, PBL academy - Course “Introduction to university pedagogy for assistant professors” 4 h, PBL academy - Course “Professional communication” with presentation techniques and group work, 8 h.

4. Anden form for kvalificering: Konferencedeltagelse, debatindlæg, oplæg m.v. i relation til uddannelse, "Undervisningens dag", o.l.

Please see English version.

5. Undervisningsudviklingsforløb og undervisningsmateriale: Oversigt over medvirken til udvikling af nye moduler, undervisningsmateriale, uddannelser, e-learning, samarbejde med eksterne samarbejdspartnere o.l.

- Designed and organized Workshop in case facilitation for supervisors, Workshop (8 h), faculty and PhD-level. - Annually develops material for case-based teaching. - Chair for Digital PBL @ SUND Casework - Coordinator for Implementation of Digital Competences in the Study Curriculum - Developed case-material for students and facilitators. - Developed online casebased teaching. - Designed oral exam (from scratch) for a module in the heart, kidneys, and lungs, Medicine and MedIS bachelor level

6. Nominering til og/eller modtagelse af undervisningspriser.

Nominated for Teacher of the Year on several occasions.

7. Evt. personlige refleksioner og initiativer: Personlige overvejelser knyttet til undervisning og vejledning, ønsker til og planer for pædagogisk videreudvikling, planer for opfølgning på undervisningsevalueringer m.v.

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.

8. Andet.

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....