

## Undervisningsportfolio

**1. Undervisnings-CV: Oversigt over undervisnings- og vejledningsopgaver med angivelse af fagområder, omfang, undervisningsniveau (bachelor, kandidat, efter-/videreuddannelse, ph.d.). Type af undervisningsform angives, f.eks. forelæsning, holdundervisning, øvelse, vejledning, eksamination, censur, fjernundervisning, internetbaseret undervisning og evaluering af undervisning. Undervisningssprog angives.**

### **As course responsible**

- Genetics and Evolution, 2021, Dept. of Chemistry and Bioscience, Aalborg University. Bachelor level. Taught in Danish.
- Elementary Genetics, 2019, Dept. of Molecular Biology and Genetics, Aarhus University. Bachelor level. Taught in Danish.

### **As lecturer [i.e., lecturing a significant proportion of the course]**

- Disease Processes and Diagnostics - Personalised Medicine, 2022-2023, Department of Health Science and Technology, Aalborg University. Master level. Taught in English.
- Advanced Biochemistry and Genetics, 2023, Department of Health Science and Technology, Aalborg University. Bachelor level. Taught in Danish.
- Cell biology, Genetics and Immunology, 2020-2021, Dept. of Chemistry and Bioscience, Aalborg University. Master level. Taught in English.
- Elementary Genetics, 2019, Dept. of Animal Science, Aarhus University. Bachelor level. Taught in Danish.

### **As guest lecturer**

- Behavioural Biology, 2015-2018, Dept. of Bioscience, Aarhus University. Master level. Taught in English.
- Evolutionary Genetics: Adaptation and Conservation, 2015-2020, Dept. of Bioscience, Aarhus University. Master level. Taught in English.
- Conservation Genetics and Molecular Ecology, 2015-2020, Dept. of Bioscience, Aarhus University. Master level. Taught in English.
- Experimental Animal Models, 2015-2017, Dept. of Biomedicine, Aarhus University. Bachelor level. Taught in English.

### **As instructor for theoretical exercises**

- Elementary Genetics and Population Genetics, 2017, Dept. of Bioscience, Aarhus University. Bachelor level. Taught in Danish.
- Evolutionary Genetics: Adaptation and Conservation, 2013-2015, Dept. of Bioscience, Aarhus University. Master level. Taught in English.

### **As examiner/censor**

- Examiner for written exam in Cell biology, Genetics and Immunology, 2022, Dept. of Chemistry and Bioscience, Aalborg University
- Examiner for oral exam in Genetics and Evolution, 2021, Dept. of Chemistry and Bioscience, Aalborg University.
- Examiner for oral exam in Elementary Genetics, 2019, Dept. of Animal Science, Aarhus University.
- Examiner for written exam in Elementary Genetics, 2019, Dept. of Molecular Biology and Genetics, Aarhus University. Taught in Danish.
- Censor for oral exam in Evolution 2016, Dept. of Bioscience, Aarhus University.

### **Student supervision**

During my PhD-studies and subsequent postdoc positions I have been co-supervising students at different academic levels. All supervision has been performed in Danish; however, their theses have been written in English. For all bachelor and master students I have been a part of the examination committee (either for written or oral defence).

- Bachelor students: four (2017-2021)

- Master students: eight (2015-2020)

- Ph.D. students: four (2015-)

- Interns: one (2020)

At Aalborg University the students conduct every semester (15 ECTS) a Problem Based Learning (PBL) project with 3-7 students in each group. During the last couple of years, I have been co-supervising 0-2 project groups per semester.

**2. Administration og ledelse af uddannelse: Erfaring med uddannelsesledelse og –koordinering. Oversigt over studieadministrative opgaver, eksempelvis medlem af studienævn, studieleder, semesterkoordinator, fagkoordinator, akkreditering m.v. Erfaringer**

**med planlægning af uddannelsesafvikling. Erfaring med udvikling af uddannelser. Deltagelse i udvalg, kommissioner m.m. vedr. uddannelse.**

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**3. Formel pædagogisk uddannelse: Oversigt over gennemførte universitetspædagogiske kursusforløb, PBL-kurser, workshops, udviklingsprojekter, kollegial supervision o.l. Udtalelse fra universitetspædagogikum. Deltagelse i konferencer om pædagogik og didaktik. Dokumentation i form af kursusbeviser, udtalelser m.m. vedlægges.**

In 2021, I completed the University Pedagogy for Assistant Professors at Aalborg University.

#### **Pedagogical course activities**

Module 1: Teaching at a PBL university [21/1+11/2 2021]

Module 2: Planning and Implementation of Groups instruction [4/3+25/3 2021]

Module 3: The use of IT and Media for Learning and Teaching [11/3+23/6 2021]

Module 4: The PBL Group – Collaboration, Process and Supervision [2/3+8/4 2021]

Module 5: Planning, Development and Quality Assurance of Study Programmes [16/4 2021]

Elective module 1: Research Integration [16/9 2021]

Elective module 2: Supervising groups in conflicts [5/10 2021]

Elective module 3: Working with institutions and companies [25/10 2021]

#### **Pedagogical project report**

The aim of the pedagogical project was to investigate to what extent digital tools provide solutions that improve university teaching, and what is the outlook for incorporating these solutions in traditional auditorium teaching?

The conclusion from our work was as follows.

Although it is possible to fully convert lectures and theoretical classes to online formats with the use of digital tools, we find that these tools should instead be used to supplement in person teaching. In this study, we have encountered teaching challenges such as establishing and maintaining lecturer-student interaction, formatively assessing whether students understand the topic being taught, or directing the students' attention to central points. These are general challenges found in all types of teaching, but they are often inflated in the online universe. However, digital tools can also offer ways to address these challenges.

A main conclusion from this study is that most or all approaches that provide variation to the traditional 2x 45-minute lecture format are welcomed by students. Such approaches may include short discussions or exercises during the lecture. Here, digital platforms are particularly useful if the lecturer wish to gain insights into the students' thoughts, since the digital platforms can collect student responses for later evaluation.

The implementation of curricular content in videos or on interactive platforms that are instructive and accessible to students can be closely aligned with the core topics of a course and provides a visual and engaging entry for students to the topics.

Finally, we believe that digital tools offer good solutions for facilitating group work and sharing thoughts and notes. In relation to project and laboratory work, there is a potential to use digital platforms or tools to support the work, ensure a clear flow of information, and thus ease the workload for the instructor/supervisor.

The project report can be accessed here: <https://vbn.aau.dk/en/publications/university-pedagogy-report-exploring-approaches-for-blended-learn>

**4. Andre kvalifikationer: Bidrag til konferencer, debatindlæg, videnskabelige artikler om pædagogiske emner m.v. Kollegiasupervision, redaktørarbejde, erfaring som mentor og anden kompetenceudvikling.**

Brohus M, Duun Rohde P, Gregersen Echers S, Westphal K, Ern R, Jensen HH. Exploring Approaches for Blended Learning in Life Sciences. JPBLHE; Available from: <https://journals.aau.dk/index.php/pbl/article/view/7304>

**5. Pædagogisk udvikling og forskning: Udvikling af nye kurser, undervisningsmateriale, undervisnings- og eksamensformer eller andet udviklingsarbejde. Didaktisk og pædagogisk**

## **forskning. Samarbejde med eksterne samarbejdspartnere.**

The course Genetics and Evolution (2021, Dept. of Chemistry and Bioscience, Aalborg University) was a course that I was responsible for. The course was first held in 2021, thus all teaching material, slides, exercises, course homepage, exam form etc. had to be created.

In the spring semester 2022, a new course in Personalised Medicine (Department of Health Science and Technology, Aalborg University) will be held. Together with course coordinator Mette Nyegarrd, we are jointly developing this course together.

## **6. Udtalelser om undervisningskompetencer fra foresatte og kolleger. Undervisningsevalueringer og eventuelle udmærkelser for undervisningsvaretagelse.**

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**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. Refleksioner over eget pædagogiske arbejde, dets målsætninger, metoder og gennemførelse. I refleksionen analyseres og motiveres dine pædagogiske aktiviteter i forhold til din pædagogiske forståelse og de studerendes læring. Tanker om undervisningsformen på Aalborg Universitet, der har et stort indhold af gruppeorganiseret projektarbejde og problembaseret læring (PBL).**

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## **8. Andet.**

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