

## 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.**

Academic courses and lectures Since initiating my PhD at University of Copenhagen, I have conducted teaching at different academic levels. Below, these activities are listed based on level of responsibility. Course responsible •NMR & MS, 2021-, Department of Chemistry and Bioscience, Aalborg University, 5 ECTS, ~120 participants in English (and Danish), Lecturer & examiner (written exam), co-organizer (curriculum, lesson plan, assignments etc.), B.Sc./M.Sc. level Lecturer •NMR & MS, 2020, Department of Chemistry and Bioscience, Aalborg University, 5 ECTS, ~100 participants in English (and Danish), Lecturer & examiner (written exam), B.Sc./M.Sc. level Guest lecturer •Gas Chromatography: GC-MS and fatty acid analysis, 2020, Department of Chemistry, Aalborg University, Part of PBL project work, Lecturer, ~60 students in Danish, B.Sc. level •Accredited Environmental Analysis: Method Development and Quality Control, 2018, Department of Chemistry, Aalborg University, AQUALity (Horizon 2020) workshop, Lecturer, 1 ECTS, ~40 participants in English, PhD level. Instructor/Teaching Assistant •NMR & MS, 2019, Department of Chemistry and Bioscience, Aalborg University, 5 ECTS, ~80 participants in English (and Danish), Teaching assistant, B.Sc./M.Sc. level •Organic Chemistry for Bioscience, 2011-2013, Department of Life Sciences, University of Copenhagen, 7.5 ECTS, ~100 participants/year, in English (and Danish), Teaching Assistant (10 lectures/year) and Laboratory Instructor (10 laboratory practicals/year), B.Sc. level Student supervision During my postdoc employment at Aalborg University, I have been supervising and co-supervising students at different academic levels from 1st semester to Ph.D. level. At Aalborg University, students conduct a 15 ECTS Problem Based Learning (PBL) project each semester (1st to 8th semester), where 4-8 students work in groups. Since 2021, I have supervised at least one group each semester in addition to M.Sc. students (60 ECTS). For all students, I have been part of the examination committee. In addition, I have been laboratory supervisor/instructor for many students during specific aspects of their laboratory work. Furthermore, I also have experience as an industrial supervisor of both university and laboratory technician students, where my focus was on the scientific and laboratory aspects of their training within an industrial setting. Academic supervision Ph.D. Students: 1 as principal supervisor (2021-) & 1 as co-supervisor (2020-) M.Sc. Students: 3 as principal supervisor (2021-) & 2 as co-supervisor (2021-) B.Sc. Students: 5 as principal supervisor (2021-) Semester project supervision: 30+ as principal supervisor (2021-) Lab supervision/instruction of semester students: 100+ (2018-) Censor at project exam: 10+ students at different academic levels (2021-) Industrial supervision M.Sc. Students: 1 as industrial co-supervisor (2017-2018) Diploma students: 1 as industrial supervisor (2016) Laboratory Technicians: 5 as scientific, industrial supervisor (2015-2018) Research dissemination As a central part of research dissemination, peer activities are crucial for efficiently communicating scientific findings. Moreover, I find that peer activities are central in further education of the entire scientific community. As many students (M.Sc. and Ph.D. level) take part in manuscript submission and attend conferences, reviewing their work and presenting my own becomes a part of their research-based education. As such, I find all peer activities relevant when assessing my teaching experience and performance. In addition to my publication list featuring peer-reviewed manuscripts, active conference participation, peer-review activities, conference organization, and other outreach activities are listed. Only conference presentations where I was main author/speaker are listed. Peer-reviewed publications: 12 - 6 under review - 10+ in preparation Peer-review: 12 verified reviews (Publons) Oral conference presentations: 8 •18th Food Colloids Conference, 2022, Lund (Sweden), "A potent peptide emulsifier from potato storage proteins and its natural isoforms: Insight on structure/function relationship of amphipathic,  $\alpha$ -helical peptide emulsifiers, targeted release, and applicability." •2nd International Conference on Microbial Food and Feed Ingredients, 2021, Copenhagen (Denmark), "Microbial proteins: Moving from feed to food applications aided by proteomics and bioinformatics" •35th EFFoST International Conference 2021: Healthy Individuals, Resilient Communities, and Global Food Security, 2021, Lausanne (Switzerland), "Applying Quantitative Proteomics for Evaluation of Protein Quality, Nutritional Value, and Extraction Methods in Side-Streams of Industrial Carrageenan Production from the Red Seaweed *Eucheuma denticulatum* (Spinosum)" •10th Nordic Seaweed Conference: The next 10 years - from local to global, 2021, Grenaa (Denmark), "Quantitative proteomics and bioinformatics in seaweed food protein research: Evaluation of extraction methods, bioactive potential, and nutritional value" •PhD/Postdoc Seminar (Aalborg University), 2018, Slettestrand (Denmark), "Beyond the French Fry: Return of the Potato" •UNIK Synthetic Biology summer meeting (University of Copenhagen), 2012, Copenhagen (Denmark), "Peptide-Stabilized Fluorescent Silver Nanoclusters" •PhD NANO (University of Copenhagen), 2011, Copenhagen (Denmark), "Peptide-Stabilized Fluorescent Silver Nanoclusters: Proof of Concept" •7th annual biophysics PhD meeting (University of Copenhagen), 2011, Holbæk (Denmark), "Peptide-Stabilized Fluorescent Silver Nanoclusters: Experimental Outline and Preliminary Results" Conference poster presentations: 3 (as presenting author) •23rd American peptide symposium, 2013, Waikoloa (HI, USA), "Novel Peptide Ligands for Stabilization of Fluorescent, Silver Nanoclusters: On-resin Screening of a Peptide Library" •23rd American peptide symposium, 2013, Waikoloa (HI, USA), "Peptides as Ligands for Fluorescent, Silver Nanoclusters: Development of a Novel Platform for On-resin Screening" •UNIK Synthetic Biology summer meeting (University of Copenhagen), 2012, Copenhagen (Denmark), "Peptide-Stabilized Fluorescent Silver Nanoclusters" Conference organization •14th Danish Conference on Biotechnology and Molecular Biology: Therapeutic Proteins, 2019, Vejle (Denmark), ~100 participants, co-organizer and session chair. Other outreach activities •Promotion of BIO education for high school students, Aalborg University, 2019-, 200+ students, Presentation of research activities and educational possibilities at the Institute Industrial and corporate lectures •Food & Bio Cluster Denmark: Green Protein Network, 2021, online (Denmark), "PROVIDE and the

Potatoes", ~50 participants •VBM Eurofins (internal cooperate course), 2017, Aabybro (Denmark), "Accreditation of environmental test methods: A step-by-step guide", ~15 participants •VBM Eurofins (internal cooperate course), 2016, Aabybro (Denmark), "QA/QC in environmental testing", ~20 participants

**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.**

NMR & MS, 2021-, Department of Chemistry and Bioscience, Aalborg University, 5 ECTS, ~120 participants in English (and Danish), Lecturer & examiner (written exam), co-organizer (curriculum, lesson plan, assignments etc.), B.Sc./M.Sc. level

**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**

Pedagogical course activities I completed the University Pedagogy (UP) Programme for Assistant Professors at Aalborg University in 2021. As part of the program, a range of compulsory and elective course modules were completed. Courses are listed below while a full list of UP Programme activities can be supplied Compulsory modules 1. Teaching at a PBL University. Jan 21st & Feb 11th 2021 2. Planning and Implementation of Group Instruction. Mar 4th & Mar 25th 2021 3. The Use of IT and Media for Learning and Teaching. Mar 26th & Jun 23rd 2021 4. The PBL Group - Collaboration, Process and Supervision. Mar 17th & Apr 14th 2021 5. Planning, Development and Quality Assurance of Studies. Apr 16th 2021 Elective modules 1. Enable your students' creativity during your teaching Sep 29th 2021 2. Working with institutions and companies in project work Oct 25th 2021 3. Assessment of teaching competences Nov 24th 2021 Additional pedagogical course/workshop activities •Workshop on PhD Supervision, 2017, Dr. Pia Bøgelund, Aalborg UNESCO Centre for Problem Based Learning in Engineering Science and Sustainability, AQUALITY (HORIZON2020) workshop, Torino (Italy). Pedagogical project activities As part of the UP, I was part of a departmental group of researchers working on digitalization of teaching. The project used the forced transformation to online platforms during the COVID-19 pandemic as a starting point and used the opportunity to experiment with various tools and pedagogical challenges associated with online teaching. The project culminated in a joint report with the title "Exploring approaches for blended learning". More specifically, we investigated how such tools may provide solutions to improve university teaching as well as the outlook for their implementation in traditional classroom 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. In the project, I personally experimented with particular focus on lecture format and structure, with the ambition of improving student learning in the short window of interaction I had with them in my Mass Spectrometry course. As part of a team of lecturers, I only had one dedicated lecture to teach a very complex and broad topic. When I initially was associated with the course, I used a more "conventional" lecture format, where the curriculum was delivered in 2x 45 minute lectures followed by written assignments. Based on feedback from this initial lecture before UP (2020), I used UP to make transfer of knowledge more efficient. This was done by deconstructing the curriculum and instead of delivering it in two 45 minute in-person lectures, it was converted into six shorter (15-20 minute) pre-recorded, topical lectures, covering the essential theoretical background. These were then used as supplement/replacement of textbook reading in student preparation, and followed by a short, in-person (online due to COVID lockdown) summary of main learning point including a number of multiple-choice questions (Socrative), testing if students had understood the main points through real-time formative assessment. This allowed for further elaboration if needed. More importantly, the summary session was followed by multiple examples of how the theory could be used in practice to solve real-world problems. The problems/examples were carefully selected to illustrate relevant cases for the students in relation to their study. As the students represent a range of different studies (biotechnology, chemistry, chemical engineering, and nanobiotechnology), the cases were developed in collaboration with representatives from the different studies. The lecture

structure/format also allowed for more time to do assignments, which was highly relevant as the exam was written with solving such problems as the key evaluation parameter. All in all, this fundamentally different lecture design was very well received by students, where >75% (based on a dedicated questionnaire) replied they had a high/very high learning outcome and prepared them for assignment to a high/very high degree. Around 60% of students replied that the formative assessment improved their learning outcome, and merely 14% would have preferred a tradition 2x 45 minute in-person lecture over the employed format. These evaluations clearly show that the experiment was successful, and that redesigning teaching is positive in this instance. When I take over more of the course from 2023, the additional lectures will also be deconstructed and redesigned using a similar template. If the format fits with other course teaching in the future, I intend to also apply it here. If not, I will develop new teaching methods and lecture formats, fitting the topic/curriculum in the specific case. The method is not as important as facilitating the learning and making students appreciate the grand scope and why the material is relevant for them. The full project report can be accessed through the following link: [Exploring approaches for blended learning C1 English Certification The UP Programme](#) included a C1 English Certification, obtained in first attempt. Assistant Professor assessment In 2022, I was assessed positively for Assistant Professor as the culmination of the UP programme. The diploma and full evaluation statement appended (Assistant\_Professor\_Assessment). Below, I have included a number of selected paragraphs from the evaluation: "Simon is an engaged teacher, he has a strong scientific and technical foundation and is driven by the desire to pass his knowledge on to the next generation. He is good at breaking down complex, very technical matter into smaller, understandable parts. Simon has a friendly and helpful personality and successfully motivates students to want to learn more and to yield the extra effort to improve the outcome of their projects." "It was observed that Simon combines a strong scientific focus with a clear emphasis on students learning. The use of Socratic was successfully implemented and together with the use of guiding questions and meta-communication, Simon managed to enhance the interactivity and keep the momentum of student engagement during the lecture. Simon meets the students in an open, respectful and interested manner, and by doing so he succeeds in scaffolding as well as motivating students' learning." "Simon has gathered a broad experience in different types of teaching. His teaching is always well prepared and delivered with a lot of consideration for improving the students' learning outcome. Simon is a committed teacher with a profound desire to pass on knowledge and to help students excel. He possesses the ability to motivate students and to pass on his extensive knowledge to the students. Based on the observations, discussions and the report, we can conclude that Simon has used the skills obtained as part of the pedagogical course fully satisfactory."

#### **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.**

See point 1

#### **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.**

Teaching Philosophy As a teacher in higher education, I see myself as more as a facilitator of learning rather than merely an organ to communicate knowledge to students. This means that rather than just delivering a fixed curriculum by lecturing what is in the reading material, my main responsibility is to make students understand and reflect on the key aspects of the learning goals. To achieve this, I strive to activate and include students in lectures, thereby making them more interactive and engaging rather than one-way communication. For this purpose, I employ various approaches during lectures. Examples hereof are open, plenary discussions of the subject matter. I have also included online quizzes (e.g. Socratic) during lectures with multiple purposes. Not only are they able to break the rhythm and activate/engage students (i.e. blended learning), but they also serve as a means to perform on-the-fly formative assessment of student learning and my ability to facilitate this. This also allows revisiting certain topics in the curriculum which may present a greater challenge for students. All of these efforts, in my opinion, improves the possibility for students to achieve the intended learning outcomes. As student attention span for deep learning is limited, the learning curve can also dramatically drop after approximately 20 minutes. To accommodate this, I try to make sure that there are no sessions superseding this amount of time without a change of format or break. This aspect is also included in my pre-recorded lectures, where I strive to make them no more than approximately 20 minutes. Pre-recorded lectures are also an excellent tool to diverge from a traditional lecturing format. By presenting the students with the core aspects of the subject matter in short and more digestible sessions in preparation, it allows me to use the 4 hours of the lecture differently. In my Mass Spectrometry course at AAU (which is evaluated in a written exam), being able to solve problems on paper is essential for students. By not spending 2x 45 minutes on the theoretical background, but having delivered this in advance, allows more time to solve problems. Not only does this prepare students for the exam to a higher extent, but also gives them a better grasp of how the background knowledge can be applied. The applied aspect and allowing students to reflect is essential in my opinion. If the students are not able to appreciate and reflect on the applicability and relevance of the material, they tend to be less engaged. As such, I put much effort into highlighting the applicability of the subject matter in a way, that uses actual challenges related to the students' own study direction and PBL project work. Teaching courses that cover many different studies, this task is challenging. Nevertheless, I find that it is beneficial for increasing student engagement. The examples are used as a point of departure into the subsequent problem solving in a manner that aligns well with the general PBL approach at AAU . Starting my lectures with an "appetizer" in form of an explicit problem, also allows to work with students towards mastering the competences required to solve such a problem. Although a quite basic "trick", I find this engages students, and having

a problem-based goal aligns perfectly with the PBL way of teaching. In my role as student supervisor, I always strive to more process-oriented than product-oriented. PBL project work at AAU is a learning process. Although the product does influence the final grade to some extent, it is not in any way the determining factor. The ability to understand, reflect on, and communicate the knowledge relevant for their project during the exam, has more weight, when I evaluate student performance. Consequently, I try to help students in being the masters of their own learning. Being able to find relevant material themselves and use this to understand a topic and convey their essential knowledge in a convincing way. To achieve this, I frequently employ PBL approaches such as the zone of proximal development and scaffolding. While I as supervisor set the overall framework for the project, I allow students to independently shape the specific scope and direction of the project. Allow them to generate their own ideas to solve a problem and help them develop these further by providing critical feedback. In my feedback to student ideas, I try not to be dismissive or provide a better way, but rather ask questions that allow students to reflect on their ideas, thereby reaching the necessary conclusions themselves. I fundamentally refuse to merely give students the answer. In some cases because I simply do not know or because the answer does not exist. Regardless, allowing students to come to such a conclusion or finding the correct answers themselves is an essential part of their learning process. I ask students to make experimental design and plans, find/develop protocols, and develop hypotheses themselves. Subsequently, I evaluate these based on relevance and possibilities, and we arrive at a final plan in collaboration. That being said, I also make sure to use my judgement of their academic level as well as an initial alignment of expectations to shape my supervisory approach. Some students, especially early in their studies, need more support and guidance to reach their goals, while others may need a more firm hand to ensure productivity and maintain focus. For the best students, particularly towards the end of their studies, I provide a lot of freedom to operate. My experience is that this not only facilitates progress, but also helps develop student independence and competences within project management. In that sense, I am flexible in my approach and adapt to the situation at hand. I allow students to make mistakes. Making mistakes is, in my opinion, not only an efficient way of learning but also results in higher degrees of reflection and development. In both lecturing and supervision activities, I encourage the students to be curious and critical. I encourage questions in any shape or form. I employ active listening and take my time to answer all students and use their academic level to shape the form and depth of my response. Addressing students at eye level is essential for facilitating efficient learning. This relates not only to the academic level of the individual student, but also their personality and origin. The student body is often heterogenous and using the same approach with all students is inefficient. Although not always possible to achieve during large group teaching, I use my initial judgment of student character and insight as a guide in my communication with students. Based on their feedback, I try to quickly adopt a suitable approach, if my initial judgement was not sufficient. A great way to accommodate this is by including a higher degree of small group learning. Not only does the reduction in group size make many students more comfortable to ask questions – even if they consider them “stupid” – but the improved level of peer interaction also facilitates learning to a higher extent. As such, I always encourage students to collaborate in small groups during e.g. assignment work in relation to lectures. I invest part of myself and my own research interests in my teaching. Having a background in nanobiotechnology and analytical chemistry, I am now using these competences to help solve sustainability challenges. In my research, these challenges are often related to aspects such as food and food ingredients, recycling, pollution, industrial protein processes, functional materials, and protein biomedical advancements. Although course teaching is less flexible given the study order, I still try to emphasize how understanding and applying advanced analytical methods can directly affect society and improve the world. In PBL project work, it becomes much more relevant to include my own interests. Using my insight and large network, I am able to shape projects that are societally relevant. Whenever possible, I also try to align student PBL projects with ongoing research projects. This makes the students projects mutually beneficial, as it allows me to invest research time in teaching while also making students feel more included in actual scientific research. These efforts have also resulted in peer-reviewed publications with semester students as co-authors, thereby providing them a head start in a potential future career within academia. Student Perception (selected feedback) Being still relatively new in teaching, particularly with explicit course and project responsibilities, I rely a lot on student feedback to further develop my lecturing and supervision competences. A significant amount of teaching development was done during UP. Other course instructors adapted similar, but also different, approaches in their lectures. The overall course evaluation align quite well with the evaluation of my specific lecture (see section 3.2), and a lot of positive feedback was received. Also specific and constructive criticism, that I can use to improve further. This tells me that both my teaching and my development of teaching methods are appreciated by students. In my opinion, this is the ultimate goal: Facilitating student learning by delivering quality teaching, communicated in a way that makes it digestible, understandable, and applicable for students. For my supervision activities, I have requested all students, for whom I was main supervisor, to evaluate my performance and the collaboration in general. From 18 students who completed their project exam under my supervision to date, I received feedback from nine. Although a response rate of 50% may introduce some bias in the average response, the students have indicated very high degree of satisfaction with my supervision. When asked to rate my supervision on a scale from 1 to 5, the average rating received was 4.7. When asked to describe me as a supervisor with one word, students used very positive adjectives such as “dedicated, committed, positive, focused, competent, fantastic, awesome, perfect”. Naturally, such praise is motivating for future teaching activities. But more importantly, students were also asked to exemplify what they were particularly happy or unhappy with. In particular, availability and level/speed of feedback were highlighted as positive. Furthermore, students were happy with my method as a more process-oriented supervisor, where I try to constantly employ PBL aspects such as active listening and the zone of proximal development in a way where the overall responsibility for both the project and the student learning are put on the students themselves. My objective is to, to the highest degree possible, function as a facilitator and guide in this process, while ensuring they keep focus on the project scope. On the more negative side, aspects such as the amount of feedback and the timing hereof were mentioned. Naturally, overwhelming feedback late in the process may stress students. Although this is a joint responsibility (if there is nothing to provide timely feedback on, feedback cannot be provided), it is something that I can use proactively in the future to improve the structure of students/supervisor collaboration further.

Giving too much freedom to operate was also indicated as a potential pitfall. Although the direction of the project is the choice and responsibility of the students to a very large degree, I should be careful not to open too many doors at once – or at least be sure to close some again before moving on. In-depth student feedback for my lecturing and supervision activities can be supplied upon request. Pedagogical development and research The activities related to the digital transformation of teaching during UP are currently being summarized for a case study publication in the Journal of Problem Based Learning in Higher Education. In the manuscript, we focus on implementation of digital tools, lecture format/design, and use of interactive and digital methods in practical/experimental laboratory work. My experience from UP has also intrigued me to experiment further in my teaching. Such experiments will be carefully planned, tested and evaluated. If relevant, my findings may be summarized for publication in pedagogical/PBL journals. The experiments will be defined based on the inspiration obtained through courses at CDUL/Learning Lab at AAU (see below). Following the initial digital transformation of my lecturing activities in my mass spectrometry course accomplished during UP, the rest of the team and I are currently transforming the course further using the Open edX platform. In collaboration, we are developing the course into a more coherent format where students are able to learn more in their own pace through self-studies, pre-recorded lectures, and online quizzes to assess their own learning. Moreover, the edX platform provides lecturers with detailed insight on learning progression for the individual student. This can be a valuable tool for activating students and “catching” struggling students to help them as needed. This is currently being tested for the first time and has thus not yet been evaluated fully. I believe this will improve learning outcome but also make teaching more efficient over the coming years, when the initial time investment starts to pay off. I expect to gather student feedback over a number of years on this teaching design and process these not only for self-assessment and -development, but also for publication in pedagogical/PBL journals.

**Development goals** To further develop my pedagogical and teaching competences, and to make my teaching activities more efficient, I have defined a number of goals that I wish to work towards. These goals are both short and long term in scope and are outlined and elaborated below.

- **Increase lecturing activities** My current teaching activities are heavily biased towards supervision. I would like to have a better balance between lecturing and supervision in the future. As the first step, I will take over a larger part of the mass spectrometry course at AAU (three additional lectures) starting from 2022. Nevertheless, I still would like to have additional lecturing activities. I am confident that more lecturing experience will also develop me as a lecturer and directly improve my pedagogical competences. Based on experience and research interest, I envision teaching within fields such as:
  - o Protein/peptide science (structure, function, characterization, chemistry, engineering)
  - o Analytical chemistry and biochemistry
  - o Food protein science
  - o Functional biomaterials
  - o Sustainable bioresources, biorefining, valorization, upcycling
- **Improve supervision efficiency** Although students are very happy with my supervision, I also tend to spend more time than allocated on this activity. I have a clear ambition to reduce time spent by improving efficiency. The main way I believe this can be achieved, is through experience. But in order to facilitate this even further, I also plan to focus supervision on semesters, where synergy can be achieved with other teaching and research activities. But to avoid bias in my supervision, by investing more resources in students working on projects related to my own research, I will also increase my affiliation with 4th semester biotechnology students, who I already teach in my mass spectrometry course. With a semester theme of “Analytical methods”, this also aligns perfectly with my competences. Furthermore, it allows me to more integration of course activities in project activities, ultimately demonstrating the applicability of course material in real life problems through a PBL context. In addition, I wish to improve supervision efficiency through course provided by e.g. UCPBL and Learning Lab at AAU. Such courses will improve my pedagogical competences working with both semester, M.Sc., and Ph.D. students.
- **Increase student activation by integrating digital and interactive methods** Building on the experience obtained through the UP programme, I wish to develop my teaching further by making it even more interactive and engaging for students. I plan to achieve this by attending courses provided by CDUL, UCPBL, and Learning Lab at AAU to be inspired by experts and peers. This is in line with current activities, where the instructor team for the NMR & MS course at BIO is currently transforming the course using the digital edX platform.
- **Co-establish a work group for food and agricultural science** across research areas at BIO As food and agricultural science is not a formal research area at BIO, I want to take part in establishing a work group across research areas for staff working in related fields. Not only do I expect this to provide scientific synergy, but I also expect this to pave the way for new, interdisciplinary PBL student projects and development of new courses within the BIO framework. I want to be an active part of this process.

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

References can be supplied upon demand

## **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)**

With more than 10 years of teaching experience within both academic (University of Copenhagen and Aalborg University) and industrial (VBM Eurofins) setting, I already consider myself a proficient teacher. I have delivered teaching through lectures, supervision, and hands-on instruction at all academic levels, for which I have received excellent student and peer feedback. Following positive experiences in my UP programme and through my Assistant Professor assessment, I will continue to develop my teaching methods, where I will focus a lot on improving teaching efficiency and increasing student engagement through more interactive teaching. Doing so, I am confident that I can become the kind of facilitating, engaging, encouraging, invested, and empowering teacher, that I want to be. A teacher, that students actively seek. Even more so than I am today.

## **8. Any other information or comments.**

Type your answer here...