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.

Teaching experience and reflections:

I have been continuously involved in teaching activities since my time as a PhD student, except to the 3 years where I did my Post Doc at the MRC center in Cambridge, thus I have almost 30 years of teaching experience. Initially, most activities included assisting in lab courses within biochemistry and molecular biology, but from 1998 and onwards the activities have covered all aspects from lecturing, theoretical exercises, and project supervision. A complete list of course and project activities can be found in table #1 below and a list of courses where I have been examinator are given in table #2 (not including censor duties).

In connection with my teaching, different strategies and methods of teaching has been chosen.
First, in the undergraduate courses in General Biochemistry and Introduction to Biotechnology (both at Aarhus University) the lectures, theoretical exercises and lab exercises followed closely the textbooks. The purpose was to provide basic knowledge to the students and a good point for later references.
Second, in the master courses in Directed Evolution, Innovation, Protein Biotechnology and Science and Technical Innovation and Entrepreneurship (all at Aarhus University), the students were given original literature to support the lectures. In the courses active student participation were expected, partly as individual presentations of original papers and partly as group exercises. The purpose was to build on the interest of the student, which lead them to choose the courses. The intent was to engage the student actively, thus building and strengthening the creativity of the student.
Third, in the Project in Lipid, Protein and Carbohydrate Biotechnology at Aarhus University, the main teaching objective has been to promote independence with the students, thus the projects were totally driven by the students, gathering literature, and finding solutions. The teacher's role here was guiding the students in the right direction. Importantly, the students were forced to work in a team, thus giving competencies in group-based work and decision making. Although I taught this project while being employed at Aarhus University, this followed closely the philosophy for Problem Based Learning.
While being employed at Aalborg University I have followed that same strategy as outlined about in bachelor courses (Biochemistry) and master courses (Protein Chemistry). At Aalborg University the Problem Based Learning is an integrated part of the DNA of the University, therefore I have been able improve my teaching in projects, based on participation in workshops and by learning from colleagues; I am responsible for third and eight semester projects within Biotechnology.
Fourth, in the tutoring of bachelor students, master students and PhD students in the laboratory, different levels of autonomy are expected. A list of PhD students I have supervised or co-supervised can be found in Table #3 and a list of master students where I have acted as main supervisor is found in Table #4. Bachelor projects are always planned, with a clear, realistic goal at the end. Whenever possible the bachelor student is attached to a more experienced student, to guide in the daily duties in the laboratory, however the main responsibility and guidance is performed by me. Master students are expected to be able to contribute in defining their own projects and also to be able to conduct most experiments in an independent manner. If the Master students provide novel creative ideas, these are encouraged, although not expected. For the PhD students, it is expected that they can contribute to the overall direction of the laboratory, and to perform independent planning of their experiments. Also, the PhD students should build an ability to communicate their results to a broader scientific community, as well as to colleagues. The former is ensured by their participation in international courses and conferences, while the latter is ensured by giving them responsibility for tutoring in the laboratory.
Since the spring 2022, I have been acting as career VIP at Aalborg University. In this capacity I will aim at providing students with competencies improving their employability.
Lastly, since 2018 I have taken part in the Sino-Danish University, where I have been responsible in teaching an introductory course in the master program in Life Science Engineering and Informatics. The concept is to create a joint master program between Danish Universities and University of Chinese Academy of Sciences, providing the students with a double degree. All teaching is meant to be conducted in Beijing, with both Danish and Chinese students. The last few years have been severely influenced by the pandemic, preventing me from physically being located in China.

Tabel #1
Courses

Name of course	Years	Type of teaching	Approx. no. of students	Course level
BSK2 (Protein purification and characterization)	1993, 1994, 1995	Lab course (preparation of lab manual and correction of reports)	30-40	Bachelor Course
BSK1 (DNA cloning and sequencing)	1993	Lab course (preparation of lab manual and correction of reports)	30-40	Bachelor Course
General Biochemistry A1	1993	Lab course		

(correction of reports)40Bachelor Course
Phage Display19983 x Lectures
(co-responsible lecture)10-15Candidate Course
PhD Seminar Series Department of Molecular and Structural Biology19991 x Lecture20-30PhD Course
FEBS Course on 2D-PAGE, Department of Medical Biochemistry 1999, 20002 x Lectures25-30PhD/Post Doc Course
Course K06 (Molecular evolution) Department of Life Sciences, Aalborg University20002 x Lectures20-25Candidate Course
Phage Display2000, 2001Responsible teacher (8x lectures, 4x4 hours lab course)10-15Candidate Course
Protein Biology Seminars, Carlsberg Laboratory20001 x Lecture20-25PhD Course
Immunekemi (10 ECTS)2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 20082 x Lectures20-30Candidate Course
Molekylær Biologi Intro2000, 2001Theoretical exercises (3 x 2 hours 7 weeks and 1 x 2 hours 3 weeks)15-25Bachelor Course
Biochemistry, Lund University20002 x Lectures20PhD/Post Doc course
General Biochemistry (5 ECTS)Spring 2003, 2004, 2007, 2008
Autumn 2003, 2004, 2005, 2006, 2007, 2008, 2010Lab course
(Responsible teacher from 2007)~150Bachelor Course
Seminar Series, Department of Human Genetics20031 x Lecture40PhD/Post Doc course
General Biochemistry (5 ECTS)Spring 2005, 2006, 2008Theoretical Exercises (2 x 2 hours 7 weeks)15-25Bachelor Course
Directed Evolution (5 ECTS)2005, 2006, 2007, 2008,2009Responsible teacher (2 x 2 hours 7 weeks)10-15Candidate Course
(Honors course)
Molecular Immunology,
Institute of Medical Microbiology and Immunology (3 ECTS)2007, 20091 x 2 Lectures20-30PhD course
Introduktion til Bioteknologi (5 ECTS)2008, 20095 x 2 Lectures and 5 x Theoretical Exercises20-25Bachelor Course
Bioteknologiske produkter og processer (5 ECTS)20081 x 2 Lectures20-25Bachelor Course
Innovation (5 ECTS)2009, 2010, 2011Responsible teacher25Candidate Course
Anvendt Molekylær biologi (10 ECTS)2009, 2010, 2011, 2012, 20131 Lecture25-30Bachelor Course
General Biochemistry (5 ECTS)Autumn 2008, 2009, 2010, 2011Responsible teacher (7 weeks, 4 lectures each week120Bachelor Course
Proteinbiotechnology (10 ECTS)2010, 2011, 2012, 2014, 2015, 2016, 2017Responsible teacher (7 weeks 4 lectures week and 4 theoretical exercises12-22Candidate Course
Introduktion til Bioteknologi (5 ECTS)2010, 2011, 2012Responsible teacher,
5 x 2 Lectures and 5 x Theoretical Exercises20-25Bachelor Course
Bioteknologiske produkter og processer (5 ECTS)2010, 2011, 2012Responsible teacher
6 company visits, 6 x 2 hours theoretical exercises20-25Bachelor Course
Scientific and Technical Innovation and Entrepreneurship (5 ECTS)2012, 2013Responsible teacher
2 x 2 hours lectures, 6 x 3 hours theoretical exercises45Master Course
Project in Lipid, Protein and Carbohydrate Biotechnology (15 ECTS)2012, 2013, 2014, 2015, 2016Responsible teacher
7 weeks lab course full time held twice a year in Q1 and Q35-12Master Course
Industriel Fermentation (5 ECTS)2013Responsible teacher
7 x 2 hours lectures, 7 x 2 hours theoretical exercises15Bachelor Course
Biochemistry2018, 2019, 2020, 2021, 2022Teacher 5x2 hours lecture, 5x2 hours assignments80-100Bachelor course
Protein Chemistry2018, 2019, 2020, 2021, 2022Responsible teacher 12 x 2 hours lectures, 12x2 hours assignments30-40Master Course
3 semester Project
Microbial biotechnology2018, 2019, 2020, 2021, 2022Responsible teacher, supervisor10-15 Bachelor
8 semester Project
Protein Science2018, 2019, 2020, 2021, 2022Responsible teacher,
supervisor10-15Master
Introduction to Omics2018,2019, 2020, 2021, 2022Responsible Danish Teacher16-25Master Program
(Sino-Danish University)

Tabel #2 Examinations

Name of Course/StudentYear of examinationDuty (Censor/examinator)Type of examination
Phage display2000, 2001Examinator Passed/non-passed based on participation
Directed evolution2005Examinator / responsible for making the exam assignmentsOral exam, graded
Directed evolution2006Examinator / responsible for making the exam assignments7 days take home exam, graded
Directed Evolution2007, 2008Examinator / responsible for making the exam assignments3 days take home exam, graded
General BiochemistryAutumn 2008, 2009, 2010, 2011Examinator / Responsible for making the exam assignments4 hours written exam, graded
Innovation2008, 2009 Examinator / responsible for making the exam assignments7 days take home exam, graded
Innovation2010, 2011Examinator / responsible for making exam assignmentsOral exam with two days preparation, graded
Introduction to Biotechnology2010, 2011, 2012Examinator / responsible for making exam assignments2 hours multiple

choice, graded
Biotechnological Products and Processes2010, 2011, 2012Exam together with Introduction to Biotechnology
Protein Biotechnology2010, 2011, 2012, 2014, 2015, 2016, 2017Examinator / responsible for making the exam assignments4 hours written exam, graded
Project in Lipid, Protein and Carbohydrate Biotechnology2012, 2013, 2014, 2015, 2016ExaminatorReport, graded
Scientific and Technical Innovation and Entrepreneurship2012, 2013Examinator / responsible for making exam questionsOral exam with two days preparation, graded
General Biochemistry2009, 2010Examinator / responsible for making the exam assignments2 hours written exam
Biochemistry2018, 2019, 2020, 2021, 2022Responsible for making half of the exam set, examinator4 hours written exam
Protein Chemistry2018, 2019, 2020, 2021, 2022Examinator, responsible for making exam set4 hours written exam
3. semester Project exam2018, 2019, 2020, 2021, 2022ExaminatorProject exam
8. semester Project exam2018, 2019, 2020, 2021ExaminatorProject exam

Tabel #3 PhD Thesis Supervision

NameTitle of ThesisUniversity of EnrolmentYearRoleCurrent occupanion
Svend KjærUse of phage displayed repertoires in the study of eukaryotic elongation factor 1AAarhus University1998Project SupervisorScience Technology Platform
Deputy
The Francis Crick Institute,
London, UK
Henrik SølvstenDetection and Regulation of the Vitamin D ReceptorAarhus University (Faculty of Health)1998Co-SupervisorConsultant Dermatology,
Aalborg, Denmark
Troels WindPhage Display as a tool for elucidation of Ras biologyAarhus University1999Project SupervisorLecturer, VIA University College,
Aarhus,
Denmark
Brian Stausbøl-GrønsolationandCharacterisation of Recombinant Human Antibody Fragments From Phage Display Antibody LibrariesAarhus University (Faculty of Health)1999Co-SupervisorConsultant radiology,
Aarhus,
Denmark
Kristian Hobolt JensenApplication of phage display and understanding of the infection processAarhus University2000Project SupervisorCEO and entrepreneur, Copenhagen,
Denmark
Kim Bak JensenIdentification of Keratinocyte Specific Markers Using Phage DisplayAarhus University2002Project SupervisorProfessor and Deputy Director at Novo Nordisk Foundation Center for Stem Cell Medicine, renew,
Copenhagen,
Denmark
Charlotte Georgi JakobsenEstablishment of human and murine IgE and IgG combinatorial phage librariesAarhus University2003Project SupervisorResearch group leader at the Dept. of Internal Medicine III, University Clinic Carl Gustav Carus, TU Dresden
Martin LarsenStudies on immune presenting systems with potential of improving vaccinesAarhus University2004Project SupervisorTeam Leader, Centre
of Immunology
and Microbial
Infections,
Sorbonne University, Inserm and CNRS,
Paris,
France
Potjamas PansriProduction of Antibody by phage display technologySuranaree University of Technology, Thailand2008Co-SupervisorProduct Development Scientist at DNA Diagnostic,
Aarhus,
Denmark
Lu SangPhage antibody Technology Applied to Identify New Molecular Targets on LM-332 Positive Malignant CellsAarhus University2008Project SupervisorSenior Regulatory Affaires Specialist at Arla Foods Ingredients,
Aarhus,
Denmark
Louise Boisen Using phage display to investigate age-related changes in the proteome and their influence on angiogenesisAarhus University2009Project SupervisorPrincipal Technical Adviser at The Danish Patent and Trademark Office.
Copenhagen,
Denmark
Morten Dræby Sørensen Selection of antibodies by phage display against rare circulating cells in the peripheral bloodstreamAarhus Univesity2010SupervisorPrincipal Scientist at Symphogen,
Copenhagen,

Denmark
Ole Aalund Mandrup Phage Display Libraries, Selections and Screenings for the Identification of Internalizing Antibodies and Cellular MarkersAarhus University2012SupervisorSenior Researcher at Aarhus univeristy, INANO interdisiplinary nanoscience center,
Aarhus,
Denmark
Theresa MeldgaardDiscovery of Cell Specific Biomarkers in Breast Cancer using Recombinant AntibodiesAarhus University2013
(2014 due to maternatiy leaveSupervisorSelf Employed,
Meldgaard Horses,
Aalborg, Denmark
Lotte RasmussenTracing vasculogenesis in tumours – with special emphasis on characterisation and involvement of endothelial outgrowth cellsAarhus University2014Co-supervisorAssistant Professor,
Aarhus University,
Aarhus, Denmark
Simon Asbjørn LarsenIdentification and Analysis of Cell-specific Biomarkers of Breast Cancer Subpopulations by Recombinant antibody selectionAarhus University2014SupervisorSenior Consultant, Danish Technological Institute,
Aarhus, Denmark
Jesper JustExploration of the Pericyte and Oxidative Stress by Recombinant Antibody TechnologyAarhus University2015SupervisorBioinformatician,
MOMA,
Aarhus University Hospital,
Aarhus, Denmark
Niels Anton FriisAarhus University2014SupervisorBusiness Developer and Scientist at Biotest Facility,
Aarhus, Denmark
Simon LykkemarkA Novel Phage Display Selection Method for Pericyte Marker DiscoveryAarhus University2016SupervisorIT-Consultant,
Danske Bank,
Aarhus, Denmark
Mathias Lindh JørgensenIdentification and Exploration of Biomarkers associated to circulating tumour cells by recombinant antibody technologyAarhus Universitet2017SupervisorScientific Researcher hos GLX ANALYTIX,
Copenhagen,
Denmark
Emil Frank HolmquistOrganic Reaction-Based Capture ELISA: Development of High-Throughput Screening Assays for Acetoacetate and MethylglyoxalAarhus University2016Co-supervisorQuality Coordinator hos Novo Nordisk,
Hjørring, Denmark
Rasmus Kold-ChristensenReactELISA for Methylglyoxal
Monitoring Small Reactive Metabolites by ELISAAarhus University2019Co-supervisorResearch Scientist hos Novo Nordisk,
Aarhus, Denmark
Oscar Mejias GomezOngoingDanish Technical University2023Co-Supervisor
Andreas Visbech MadsenOngoingDanish Technical University2024Co-Supervisor
Lee-Ann Marie CleggOngoingAalborg University2025Co-Supervisor
Mie Mandal MortensenOngoingAalborg University
(commercial PhD)2025Supervisor
Irene Delgado AlonsoOngoingAalborg University2026Supervisor
Malene Heilskov VejeOngoingAalborg University
(Commercial PhD)2026Co-supervisor

Tabel #4 Master Thesis Supervision

NameTitle of ThesisUniversity of EnrolmentYearRole
1Peter RavnPhage Display Technology Applied in the Study of the Werner ProteinAarhus University1999Project Supervisor
2Jesper PedersenDirected Evolution of Thermostable Enzymes Using Phage DisplayAarhus University2001Supervisor
3Lasse PedersenDesign of Bacterial Display System Using the Autotransporter Protein YfaL from E. ColiAalborg University2002Co-Supervisor
4Morten DræbySelection of Epsilon Haemoglobin Specific Antibodies for Applications in Non-invasive Prenatal DiagnosisAarhus University 2004Supervisor
5Regina Gonzalez-DosalAnalysis of glycation on the proteasome during ageing using phage displayed antibodiesAarhus University2005Supervisor
6Simon Wittrup Nielsen Using phage display searching for recombinant antibody inhibitors blocking the terminal part of the angiogenic pathwaysAarhus University2007Supervisor
7Alan Cech Ravn
Inhibition of angiogenesis by scFv antibodies generated by phage display technologyAarhus University2007Supervisor
8Simona SerfaustiniServere Acute Respiratory DiseaseAarhus University

(Erasmus Student)2007Supervisor
9Zoraide Granchi
Selection of antibody against proteasome subunitsAarhus University (Erasmus Student)2007Supervisor
10Brian SørensenAntibody fragments (scFv) selected against proteins of SARS-CoV using phage displayAarhus University2008Supervisor
11Niels Anton FriisSelection of Antibodies recognising the extracellular matrix proteins Fibulin3 and Fibulin 5, and the cytokine Stem Cell FactorAarhus University2009Supervisor
12Lena Lindtoft RosenbækOpen Sandwich Antibody TechnologyAarhus UniversityAugust 2009Supervisor
13Theresa MeldgaardAntibodies with anti-angiogenic propertiesAarhus UniversityDecember 2009Supervisor
14Signe Rohde AndreasenSelection of antibodies targeting endothelial progenitor
cell biomarkersAarhus UniversityDecember 2009Supervisor
15Nanna WillumsenAnti-angiogenic antibodiesAarhus UniversityApril 2010Supervisor
16Jacob KrogAntibodies against IL21Aarhus UniversityNovember 2011Main supervisor (experimental work conducted at Novo Nordisk, Beijing)
17Kasper KroghAntibodies against IL21Aarhus UniversityNovember 2011Main supervisor (experimental work conducted at Novo Nordisk, Beijing)
18Christian Lundager GylstorffStructural Based Engineering of Calcium Independent SavinaseAarhus UniversityJanuary 2012Main supervisor (experimental work conducted at Novozymes, Bagsværd)
19Anders Filip MollerupEnzymatic modification of lignocellulose propertiesAarhus UniversityJanuary 2012Main supervisor
20Simon LykkemarkPhage-bead Directed Evolution SystemAarhus UniversityJanuary 2012Supervisor
21Claus OlesenIdentification and analysis of cell-specific biomarkers,
targeting cancer stem cell candidates in
breast cancer.Aarhus UniversityAugust 2012Supervisor
22Mathilde OlesenPilot Scale Optimisation of 5'-inosine monophosphate and 5'-guanosine monophosphate Content in Yeast ExtractAarhus UniversityAugust 2012Main Supervisor (experimental work conducted at De Danske Gærfabrikker, Grenå)
23Christian Holst FisherCharacterization of Mesoporous Silica Microparticles with entrapped Alpha-tocopherolAarhus UniversityAugust 2012Main Supervisor (experimental work conducted at Teknologisk Institut, Aarhus)
24Kathrine Kirkegaard KristiansenCharacterization of anti-Listerialactic acid bacteria isolated from dairy farms in JutlandAarhus UniversityAugust 2012Main Supervisor (experimental work conducted at Dupont, Aarhus)
25Pernielle Lyager AndersenEnzyme characterization and enzymatic processing of the red algae Gigartina skottsbergiiAarhus UniversitetAugust 2012Main Supervisor (experimental work conducted at Dupont, Aarhus)
26Lasse KjellerupIntracellular delivery of DARPin antibodiesAarhus UniversityFebruary 2013Main Supervisor (experimental work conducted at MedImmune, Cambridge, UK
27Mathias JørgensenExpression of antibody related fragments in Leishmania tarentolae T7-TR and Pseudomonas putida KT2440Aarhus UniversityMarch 2013Supervisor
28Dennis Vestergaard PedersenIntracellular delivery of supercharged antibodiesAarhus UniversityApril 2013Main Supervisor (experimental work conducted at MedImmune, UK
29Jakob James JensenSelection of Peptides Targeting S. Aureus Biofilm
Using Phage displayAarhus UniversityApril 2013Main Supervisor (experimental work conducted at Danish Technological Insitute, Aarhus, Denmark)
30Rune ClausenOptimizing purification of Cold-pressed rapeseed protein isolation by EBA columnAarhus UniversityJune 2013Main Supervisor (experimental work conducted at Danish Technological Institute, Aarhus, Denmark)
31Katja K MiltersenUHPLC measurements of paracetamol and its metabolites in paracetamol-poisoned patients during NAC-treatmentAarhus UniversityAugust 2013Main Supervisor (experimental work conducted at Department of Clinical Biochemistry, Aarhus University Hospital)
32Camilla de GierAnvendelse af aptamerer i
mikrobiologisk diagnostik -
Muligheder og begrænsningeAarhus UniversityAugust 2013Main Supervisor (experimental work conducted at Department of Clinical Immunology, Aarhus University Hospital)
33Marcus C. HansenProximity Ligation AssayAarhus UniversityAugust 2013Main Supervisor (experimental work conducted at Department of Clinical Heamatology, Aarhus University Hospital)
34Thomas Bjerring In Search of a lytic Archaeal Virus infecting the
Methanothermococcus thermolithotrophicusAarhus UniversityOctober 2013Main Supervisor
35Morten ChristensenEnsymatic Proteolysis of Hair: Comparison of Commercial Serine, Metallo, Aspartic and Cysteine Proteases Aarhus UniversityMarch 2014Main Supervisor (experimental work conducted at Dupont, Brarand, Denmark
36Nanna Rhein-KnudsenIdentification of enzymes related to red seaweed hydrolysisAarhus UniversityMarch 2014Main Supervisor (Experimental work conducted at Novozymes, Bangelore, India
37Karen Marie SørensenValidation and Characterisation of recombinant antibodies selected against breast cancer cell subpopulationsAarhus UniversitySeptember 2014Supervisor
38Anders Hauer MøllerIntracellular delivery of p53Aarhus UniversityAugust 2014Main Supervisor (experimental work conducted at Medimmune, Cambridge, UK)
39Anne RødgaardAntioxidants in nicotine chewing gumAarhus UniversitySeptember 2014Main Supervisor (experimental work conducted at Fertin, Vejle, Denmark)
40Line LilleøreIdentify pH-dependent hGH variants by phage displayAarhus UniversityAugust 2014Main Supervisor (experimental work conducted at Novo Nordisk, Beijing, China)
41Jonas HamannDevelopment of novel assay(s) for monitoring yeast vitality/viabilityAarhus UniversityAugust 2014Main

Supervisor (experimental work conducted at Novozymes, North Carolina, US)
42Linda RasmussenEnzymatic Fingerprinting of Xanthan GumAarhus UniversityJuly 2014Main Supervisor (experimental work conducted at Dupont, Brabrand, Denmark
43Pi Camilla PoulsenProteomics Applications for Novel Target Discovery and Understanding of the Production of Antibodies
Aarhus UniversityMarch 2015Main Supervisor (experimental work conducted at Medimmune, Gaithersburg, US)
44Morten PetersenOptimization of Enzymatic Processing of Delignified Lignocellulosic BiomassAarhus UniversityJanuary 2015Main supervisor (experimental work conducted, Oslo University, Norway)
45Catja JensenHypoxia-regulated Gene Expression as an Endogenous Marker in Cancer of the OesophagusAarhus UniversityMarch 2015Main supervisor (experimental work conducted at Department of Experimental clinical oncology, Aarhus University hospital.
46Steffen NielsenHypoxia-regulated Gene Expression as an Endogenous Marker in Prostate AdenocarcinomaAarhus UniversityMarch 2015Main supervisor (experimental work conducted at Department of Experimental clinical oncology, Aarhus University hospital.
47Anne Schutterlau KnudsenBispecific Glial Cell Engager: A novel disease modifying immunotherapy for neurodegenerative disorders?Aarhus UniversityJune 2015Main Supervisor (experimental work conducted at Medimmune, Cambridge, UK)
48Nathalie Nielsen13C Dynamic Nuclear polarization for Quantification of Metabolic Flux in Endothelial Progenitor Cells Aarhus UniversitySeptember 2015Main Supervisor (experimental work conducted at the MR center, Skejby hospital
49Cecilie BayA Comparative Analysis of Milk Coagulation Properties Using Different Commercial Rennet Types.Aarhus UniversitySeptember 2015Main Supervisor (experimental work conducted at Arla, Aarhus
50Laura OvergaardValidation and Characterization of
Biomarkers Against Breast CancerAarhus UniversitySeptember 2015Main Supervisor
Helene PetersenAntimicrobial activity of a Bacillus pumilus fermentate: optimization, purification and characterizationAarhus UniversityJanuary 2016Main Supervisor (experimental work conducted at Dupont, Aarhus
51Casper VestergaardDetection of Blood Doping: Selection and Screening of Phage-Displayed Recombinant Antibodies against Unique Antigens Present on Stored Red Blood CellsAarhus UniversitySeptember 2015Main Supervisor
52Thomas Reiter SkovborgBlood Doping
– Selection and Screening of Single-Domain
Antibodies against Stored Red Blood CellsAarhus UniversitySeptember 2015Main Supervisor
53Carina MøllerFunctional characterisation of an Anti-Vimentin antibodyAarhus UniversityOctober 2015Main Supervisor
54Charlotte Høgsberg NielsenFunctional analysis of an antibody targeting the pericyte obtained by a novel recombinant antibody selection methodAarhus UniversityOctober 2015Main Supervisor
55Bhagat BanwaitMini Q-Bodies. A novel quench-based detection systemAarhus UniversityJune 2016Main Supervisor
56Mathilde Thysk RasmussenComprehensive evaluation of antibody frameworks for the construction of phage display libraries for use in phenotypic selectionsAarhus UniversityJune 2016Main Supervisor (experimental work conducted at Medimmune, Cambridge, UK)
57Mathias BjeragerExtensive evaluation of several phage libraries against two antigens in order to determine the best performing libraryAarhus UniversityJune 2016Main Supervisor (experimental work conducted at F-Star, Cambridge, UK)
58Misha de VriesGeneration of Fusion Proteins Targeted for Receptor-mediated Transcytosis Across the Blood-brain BarrierAarhus UniversityJune 2016Main Supervisor (experimental work conducted at Glycotope, Berlin, Germany)
59Peter GransgaardThermostability engineering of a scFv antibodyAarhus UniversityJune 2016Main Supervisor (experimental work conducted at Glycotope, Berlin, Germany)
60Hanne Bjørn HøibyStable probiotic powder for gastrointestinal transitAarhus UniversityJune 2016Main Supervisor (experimental work conducted at Teknologisk Institute, Aarhus, Denmark)
61Tahmina KohestaniFunctional characterization of the mutant epidermal growth factor receptor displaying the 806 epitopeAarhus University June 2016Main Supervisor (experimental work conducted at CSIRO, Melbourn, Australia)
62Anders Winther JensenRe-engineering of recombinant lysosomal enzymes in order to adress the enzyme replacement therapy/blood-brain barrier problematicAarhus UniversityJanuary 2017Main Supervisor (experimental work conducted at Glycotope, Berlin, Germany)
63Ali Reza RoshenasApplicative ultrasensitive proteomic analysis using pressure cycling technologyAarhus UniversityMarch 2017Main Supervisor (experimental work conducted at BGI,
Shenzhen, China)
64Kasper MikkelsenAarhus UniversityJune 2017Main Supervisor (experimental work conducted at Novo Nordisk, Måløv, Denmark
65Anne HeggeAarhus UniversityJune 2017Main Supervisor (experimental work conducted at Dupont, Brabrand, DK)
66Ditte NielsenAarhus UniversityJune 2017Main Supervisor (experimental work conducted at Dupont, Brabrand, DK)
67Anni Wachmann NielsenAarhus UniversityJune 2017Main Supervisor (experimental work conducted at DTI, Aarhus)
68Daniel Quintana BrigidoEukaryotic expression and functional characterization of recombinant antibodiesAarhus UniversityJune 2018Main Supervisor
69Charlotte Rønn KjærSammenligning af 3 immunologiske metoder til analysering af GAD65-Ab; en diagnostiske biomarkør ved type 1 diabetesAalborg UniversityJanuary 2019Main Supervisor (experimental work conducted at Aalborg University Hospital)
70Patricia RiedlovaNew molecular targets on colon cancer cellsAalborg UniversityJune 2019Main Supervisor
71Pernille Krogh WasehuusInvestigating the Cellular Effects of
Cannabinoids from Cannabis sativa L.Aalborg UniversityJune 2019Co-supervisor
72Anna Hustedová Metabolic labelling of mouse polyomavirus virus-like particles using UAAs and click chemistryAalborg

UniversityJune 2019Main Supervisor (experimental work conducted with Hana Spanielova, Univerzita Karlova, CZ.)
73Mie Mandal MortensenInvestigation of kinetic space of a model activable prodrug antibodyAalborg UniversityAugust 2019Main Supervisor (experimental part conducted at Novo Nordisk, Maaløv)
74Emilie KjærsgaardHitting YKL-40 with Recombinant Antibodies as a tool to Cure CancerAalborg UniversityJune 2020Main Supervisor
75Evelína Šťastnál Identification of Memory T Cells After Vaccination Against Dengue and Zika Virus InfectionsAalborg UniversityJune 2020Main Supervisor (experimental part conducted at Institute Pasteur, Paris with Claude Roth)
76Irene Delgado AlonsoSynthesis of bispecific antibodies to help cross the blood-brain barrier and target amyloid beta peptideAalborg UniversityJune 2020Main Supervisor
77Lærke AndersenUse of Recombinant Antibodies for Identification
of Breast Cancer BiomarkersAalborg UniversityJune 2020Main Supervisor
78Marta BałkotaIn utero transplantation of human neural
stem cells as a relevant model for
Alzheimer's diseaseAalborg UniversityJune 2020Main Supervisor (experimental part conducted at Institute Pasteur, Paris with Isabelle Cloëz-Tayarani
79Amalie Maarupgaard JørgensenCharacterisation of two bispecific
antibodies to help cross the blood-brain
barrier and target the amyloid beta
peptideAalborg UniversityJune 2021Main Supervisor
80Laura Marie SkauUsing Single Domain Antibodies for Targeting
Leishmania Histone Proteins and Employing
Proteomics in the Novel Investigation of
Leishmania RibosomesAalborg UniversityJune 2021Main Supervisor
81Signe Schram ZinckCharacterisation of Native and Recombinant Variants of the Alpha-Amylase from Lactobacillus AmylovorusAalborg UniversityJune 2021Main Supervisor (experimental part conducted at Novozymes, Copenhagen)
82Iben Engell PaulsenPhage display library from alpaca immunised with recombinant RBD of spike proteinAalborg UniversityDecember 2021Main Supervisor
83Ana-Maria BratovianuIncreasing the half-life of a novel biologic as a prospective cure for diabetes type IIAalborg UniversityJune 2022Main Supervisor
84Balázs DelényiIdentification of an antigen on circulating colon cancer cellsAalborg UniversityJune 2022Main Supervisor
85Caroline Roaldseth HebnesDesign and characterization of a bi-specific antibody targeting the transferrin receptor and amyloid betaAalborg UniversityJune 2022Main Supervisor
86Emilie AxelsenBetter together? Molecular engineering linking PETase and MHETase using COM-domainsAalborg UniversityJune 2022Main Supervisor
87Gudrún PalsdóttirOptimization of Fetal Cell Enrichment from Maternal Blood Samples By FACS - For use in Cell-based Non-invasive Prenatal
TestringAalborg UniversityJune 2022Main Supervisor (experimental part conducted at Arcedi A/S, Aarhus, Denmark)
88Guillem Martinez I MaciaPurification and analysis of a novel dendritic cell targeting anti-cancer vaccineAalborg UniversityJune 2022Main Supervisor, Project supervisor Ralf Agger, Biomedicine, AAU
89Pernille MaasboelEpitope Mapping of Anti-IL-4Ra Antibodies using a sIL-4Ra LibraryAalborg UniversityJune 2022Main Supervisor (experimental part conducted at LEO Pharma, Copenhagen, Denmark)
90Signe Libak Obel PedersenEngineering a improved biodegradation system using COM linked PETase and MHETase for depolymerisation of PETAalborg UniversityJune 2022Main Supervisor
91Kristina DzhordzhevAalborg UniversityJune 2023Main Supervisor
92Emil Alsholm HundebøllAalborg UniversityJune 2023Main Supervisor
93Verónica Feteira MonteroAalborg UniversityJune 2023Co-Supervisor
94Frederik Andersen LauAalborg UniversityJune 2023Main Supervisor
95Rikke Brønnum NielsenAalborg UniversityJune 2023Main Supervisor (experimental work conducted at Queen Mary University of London, UK)
96Ainhoa Aspillaga SanchezAalborg UniversityJune 2023Main Supervisor (experimental work conducted at Novo Nordisk)
97Aikaterini MargaritiAalborg UniversityJune 2023Main Supervisor (experimental work conducted at Novozymes)
98Rastislav PitekAalborg UniversityJune 2023Main Supervisor (experimental work conducted at Nordic Bioscience)
99Weronika Anna WeglewskaAalborg UniversityJune 2023Main Supervisor (experimental work conducted at the reNEW stem cell center at Copenhagen University)

BA Thesis Supervision(10 or 20 ECTS)

More than 45 students have performed the bachelor project in my laboratories. The students have been a mixture of students studying Molecular Biology, Molecular Medicine and Biotechnology. In addition, I have been responsible for finding companies and academic groups which has been suitable of the students in Biotechnology at Aarhus University, regarding their Bachelor projects. In 2010, 2011 and 2012, 2013 and 2014 I was examiner on all the bachelor projects for our Biotechnology students at Aarhus University.

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.

-2022 – Career VIP, Department of Chemistry and Bioscience, Aalborg University.
-2018-2021 Head of Section for Biotechnology, responsible for the education in Biotechnology, Department of Chemistry and Bioscience, Aalborg University, Denmark.
-2012 – 2016 Member of PhD field committee for Engineering, Department of Engineering, Aarhus University, Denmark
-2010- 2012 Member of the educational committee at Department of Molecular biology and Genetics, Aarhus University, Denmark
-2008 – 2015 Degree Program Coordinator Biotechnology, Aarhus University, Denmark
-2003 – 2009 Involvement in the Graduate School of Industrial Related Biotechnology, Aarhus University, Denmark

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

Pedagogic action plan:

In January 2009 I took part in a three-day seminar for the scientific staff at the Department of Molecular Biology, Aarhus University. The seminar was concentrated on pedagogic training and was conducted by Torben K. Jensen, Centre for Learning and Education, Faculty of Social Sciences, Aarhus University.
In addition, I have taken part in a study group implementing immediate response systems in teaching at Aarhus University and participated in a number of the Hot Spot sessions organized at the Department of Engineering, Aarhus University.
At Aalborg University, as Head of Section for Biotechnology, I took part in many meetings and discussion with colleagues from the Department of Chemistry and Bioscience and other Departments on how to optimize PBL to be even better suited to the challenges faces by experimental departments. As teaching students is one of my main motivations for having entered an academic career, my action plans will be to engage in as many pedagogic activities as possible, and constantly improve. Especially I would like to be even better at utilizing electronic platforms in teaching, as the pandemic clearly have shown some of the benefits with this platform.

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.

Type your answer here...

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.

Type your answer here...

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

Type your answer here...

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)

Type your answer here...

8. Any other information or comments.

Type your answer here...