

## 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 examiner 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.

Table #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)	40	Bachelor Course		
Phage Display	1998	3 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 week)20Bachelor Course  
 Proteinbiotechnology (10 ECTS)2010, 2011, 2012, 2014, 2015, 2016, 2017Responsible teacher (7 weeks 4 lectures week and 4 theoretical exercises)12-22Candidate 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 Entrepreneurship 2012, 2013 Examiner / responsible for making exam questions Oral exam with two days preparation, graded  
 General Biochemistry 2009, 2010 Examiner / responsible for making the exam assignments 2 hours written exam  
 Biochemistry 2018, 2019, 2020, 2021, 2022 Responsible for making half of the exam set, examiner 4 hours written exam  
 Protein Chemistry 2018, 2019, 2020, 2021, 2022 Examiner, responsible for making exam set 4 hours written exam  
 3. semester Project exam 2018, 2019, 2020, 2021, 2022 Examiner Project exam  
 8. semester Project exam 2018, 2019, 2020, 2021 Examiner Project exam  
 Tabel #3 PhD Thesis Supervision  
 Name Title of Thesis University of Enrolment Year Role Current occupation  
 Svend Kjær Use of phage displayed repertoires in the study of eukaryotic elongation factor 1A Aarhus University 1998 Project Supervisor Science Technology Platform Deputy  
 The Francis Crick Institute, London, UK  
 Henrik Sølvsten Detection and Regulation of the Vitamin D Receptor Aarhus University (Faculty of Health) 1998 Co-Supervisor Consultant Dermatology, Aalborg, Denmark  
 Troels Wind Phage Display as a tool for elucidation of Ras biology Aarhus University 1999 Project Supervisor Lecturer, VIA University College, Aarhus, Denmark  
 Brian Stausbøl-Grøn Isolation and Characterisation of Recombinant Human Antibody Fragments From Phage Display Antibody Libraries Aarhus University (Faculty of Health) 1999 Co-Supervisor Consultant radiology, Aarhus, Denmark  
 Kristian Hobolt Jensen Application of phage display and understanding of the infection process Aarhus University 2000 Project Supervisor CEO and entrepreneur, Copenhagen, Denmark  
 Kim Bak Jensen Identification of Keratinocyte Specific Markers Using Phage Display Aarhus University 2002 Project Supervisor Professor and Deputy Director at Novo Nordisk Foundation Center for Stem Cell Medicine, renew, Copenhagen, Denmark  
 Charlotte Georgi Jakobsen Establishment of human and murine IgE and IgG combinatorial phage libraries Aarhus University 2003 Project Supervisor Research group leader at the Dept. of Internal Medicine III, University Clinic Carl Gustav Carus, TU Dresden  
 Martin Larsen Studies on immune presenting systems with potential of improving vaccines Aarhus University 2004 Project Supervisor Team Leader, Centre of Immunology and Microbial Infections, Sorbonne University, Inserm and CNRS, Paris, France  
 Potjamas Pansri Production of Antibody by phage display technology Suranaree University of Technology, Thailand 2008 Co-Supervisor Product Development Scientist at DNA Diagnostic, Aarhus, Denmark  
 Lu Sang Phage antibody Technology Applied to Identify New Molecular Targets on LM-332 Positive Malignant Cells Aarhus University 2008 Project Supervisor Senior Regulatory Affairs Specialist at Arla Foods Ingredients, Aarhus, Denmark  
 Louise Boisen Using phage display to investigate age-related changes in the proteome and their influence on angiogenesis Aarhus University 2009 Project Supervisor Principal 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 bloodstream Aarhus University 2010 Supervisor Principal Scientist at Symphogen, Copenhagen, Denmark  
 Ole Aalund Mandrup Phage Display Libraries, Selections and Screenings for the Identification of Internalizing Antibodies and Cellular Markers Aarhus University 2012 Supervisor Senior Researcher at Aarhus university, INANO interdisciplinary nanoscience center, Aarhus, Denmark  
 Theresa Meldgaard Discovery of Cell Specific Biomarkers in Breast Cancer using Recombinant Antibodies Aarhus University 2013

(2014 due to maternity leave Supervisor Self Employed,  
Meldgaard Horses,  
Aalborg, Denmark

Lotte Rasmussen Tracing vasculogenesis in tumours – with special emphasis on characterisation and involvement of endothelial outgrowth cells Aarhus University 2014 Co-supervisor Assistant Professor,  
Aarhus University,  
Aarhus, Denmark

Simon Asbjørn Larsen Identification and Analysis of Cell-specific Biomarkers of Breast Cancer Subpopulations by Recombinant antibody selection Aarhus University 2014 Supervisor Senior Consultant, Danish Technological Institute,  
Aarhus, Denmark

Jesper Just Exploration of the Pericyte and Oxidative Stress by Recombinant Antibody Technology Aarhus University 2015 Supervisor Bioinformatician,  
MOMA,  
Aarhus University Hospital,  
Aarhus, Denmark

Niels Anton Friis Aarhus University 2014 Supervisor Business Developer and Scientist at Biotest Facility,  
Aarhus, Denmark

Simon Lykkemark A Novel Phage Display Selection Method for Pericyte Marker Discovery Aarhus University 2016 Supervisor IT-Consultant,  
Danske Bank,  
Aarhus, Denmark

Mathias Lindh Jørgensen Identification and Exploration of Biomarkers associated to circulating tumour cells by recombinant antibody technology Aarhus Universitet 2017 Supervisor Scientific Researcher hos GLX ANALYTIX,  
Copenhagen,  
Denmark

Emil Frank Holmquist Organic Reaction-Based Capture ELISA: Development of High-Throughput Screening Assays for Acetoacetate and Methylglyoxal Aarhus University 2016 Co-supervisor Quality Coordinator hos Novo Nordisk,  
Hjørring, Denmark

Rasmus Kold-Christensen ReactELISA for Methylglyoxal Monitoring Small Reactive Metabolites by ELISA Aarhus University 2019 Co-supervisor Research Scientist hos Novo Nordisk,  
Aarhus, Denmark

Oscar Mejias Gomez Ongoing Danish Technical University 2023 Co-Supervisor

Andreas Visbeck Madsen Ongoing Danish Technical University 2024 Co-Supervisor

Lee-Ann Marie Clegg Ongoing Aalborg University 2025 Co-Supervisor

Mie Mandal Mortensen Ongoing Aalborg University (commercial PhD) 2025 Supervisor

Irene Delgado Alonso Ongoing Aalborg University 2026 Supervisor

Malene Heilskov Veje Ongoing Aalborg University (Commercial PhD) 2026 Co-supervisor

Tabel #4 Master Thesis Supervision

Name	Title of Thesis	University of Enrolment	Year	Role
1 Peter Ravn	Phage Display Technology Applied in the Study of the Werner Protein	Aarhus University	1999	Project Supervisor
2 Jesper Pedersen	Directed Evolution of Thermostable Enzymes Using Phage Display	Aarhus University	2001	Supervisor
3 Lasse Pedersen	Design of Bacterial Display System Using the Autotransporter Protein YfaL from E. Coli	Aalborg University	2002	Co-Supervisor
4 Morten Dræby	Selection of Epsilon Haemoglobin Specific Antibodies for Applications in Non-invasive Prenatal Diagnosis	Aarhus University	2004	Supervisor
5 Regina Gonzalez-Dosal	Analysis of glycation on the proteasome during ageing using phage displayed antibodies	Aarhus University	2005	Supervisor
6 Simon Wittrup Nielsen	Using phage display searching for recombinant antibody inhibitors blocking the terminal part of the angiogenic pathways	Aarhus University	2007	Supervisor
7 Alan Cech Ravn	Inhibition of angiogenesis by scFv antibodies generated by phage display technology	Aarhus University	2007	Supervisor
8 Simona Serfaustini	Severe Acute Respiratory Disease	Aarhus University (Erasmus Student)	2007	Supervisor
9 Zoraide Granchi	Selection of antibody against proteasome subunits	Aarhus University (Erasmus Student)	2007	Supervisor
10 Brian Sørensen	Antibody fragments (scFv) selected against proteins of SARS-CoV using phage display	Aarhus University	2008	Supervisor
11 Niels Anton Friis	Selection of Antibodies recognising the extracellular matrix proteins Fibulin3 and Fibulin 5, and the cytokine Stem Cell Factor	Aarhus University	2009	Supervisor
12 Lena Lindtoft Rosenbæk	Open Sandwich Antibody Technology	Aarhus University	August 2009	Supervisor
13 Theresa Meldgaard	Antibodies with anti-angiogenic properties	Aarhus University	December 2009	Supervisor
14 Signe Rohde Andreasen	Selection of antibodies targeting endothelial progenitor			

cell biomarkers Aarhus University December 2009 Supervisor

15 Nanna Willumsen Anti-angiogenic antibodies Aarhus University April 2010 Supervisor

16 Jacob Krog Antibodies against IL21 Aarhus University November 2011 Main supervisor (experimental work conducted at Novo Nordisk, Beijing)

17 Kasper Krogh Antibodies against IL21 Aarhus University November 2011 Main supervisor (experimental work conducted at Novo Nordisk, Beijing)

18 Christian Lundager Gylstorff Structural Based Engineering of Calcium Independent Savinase Aarhus University January 2012 Main supervisor (experimental work conducted at Novozymes, Bagsværd)

19 Anders Filip Møller Enzymatic modification of lignocellulose properties Aarhus University January 2012 Main supervisor

20 Simon Lykkemark Phage-bead Directed Evolution System Aarhus University January 2012 Supervisor

21 Claus Olesen Identification and analysis of cell-specific biomarkers, targeting cancer stem cell candidates in breast cancer Aarhus University August 2012 Supervisor

22 Mathilde Olesen Pilot Scale Optimisation of 5'-inosine monophosphate and 5'-guanosine monophosphate Content in Yeast Extract Aarhus University August 2012 Main Supervisor (experimental work conducted at De Danske Gærfabrikker, Grenå)

23 Christian Holst Fisher Characterization of Mesoporous Silica Microparticles with entrapped Alpha-tocopherol Aarhus University August 2012 Main Supervisor (experimental work conducted at Teknologisk Institut, Aarhus)

24 Kathrine Kirkegaard Kristiansen Characterization of anti-Listeria lactic acid bacteria isolated from dairy farms in Jutland Aarhus University August 2012 Main Supervisor (experimental work conducted at Dupont, Aarhus)

25 Pernielle Lyager Andersen Enzyme characterization and enzymatic processing of the red algae Gigartina skottsbergii Aarhus Universitet August 2012 Main Supervisor (experimental work conducted at Dupont, Aarhus)

26 Lasse Kjellerup Intracellular delivery of DARPins antibodies Aarhus University February 2013 Main Supervisor (experimental work conducted at MedImmune, Cambridge, UK)

27 Mathias Jørgensen Expression of antibody related fragments in Leishmania tarentolae T7-TR and Pseudomonas putida KT2440 Aarhus University March 2013 Supervisor

28 Dennis Vestergaard Pedersen Intracellular delivery of supercharged antibodies Aarhus University April 2013 Main Supervisor (experimental work conducted at MedImmune, UK)

29 Jakob James Jensen Selection of Peptides Targeting S. Aureus Biofilm Using Phage display Aarhus University April 2013 Main Supervisor (experimental work conducted at Danish Technological Institute, Aarhus, Denmark)

30 Rune Clausen Optimizing purification of Cold-pressed rapeseed protein isolation by EBA column Aarhus University June 2013 Main Supervisor (experimental work conducted at Danish Technological Institute, Aarhus, Denmark)

31 Katja K Miltersen UHPLC measurements of paracetamol and its metabolites in paracetamol-poisoned patients during NAC-treatment Aarhus University August 2013 Main Supervisor (experimental work conducted at Department of Clinical Biochemistry, Aarhus University Hospital)

32 Camilla de Gier Anvendelse af aptamerer i mikrobiologisk diagnostik - Muligheder og begrænsninger Aarhus University August 2013 Main Supervisor (experimental work conducted at Department of Clinical Immunology, Aarhus University Hospital)

33 Marcus C. Hansen Proximity Ligation Assay Aarhus University August 2013 Main Supervisor (experimental work conducted at Department of Clinical Hematology, Aarhus University Hospital)

34 Thomas Bjerring In Search of a lytic Archaeal Virus infecting the Methanothermococcus thermolithotrophicus Aarhus University October 2013 Main Supervisor

35 Morten Christensen Enzymatic Proteolysis of Hair: Comparison of Commercial Serine, Metallo, Aspartic and Cysteine Proteases Aarhus University March 2014 Main Supervisor (experimental work conducted at Dupont, Brarand, Denmark)

36 Nanna Rhein-Knudsen Identification of enzymes related to red seaweed hydrolysis Aarhus University March 2014 Main Supervisor (Experimental work conducted at Novozymes, Bangalore, India)

37 Karen Marie Sørensen Validation and Characterisation of recombinant antibodies selected against breast cancer cell subpopulations Aarhus University September 2014 Supervisor

38 Anders Hauer Møller Intracellular delivery of p53 Aarhus University August 2014 Main Supervisor (experimental work conducted at MedImmune, Cambridge, UK)

39 Anne Rødgaard Antioxidants in nicotine chewing gum Aarhus University September 2014 Main Supervisor (experimental work conducted at Fertin, Vejle, Denmark)

40 Line Lilleør Identify pH-dependent hGH variants by phage display Aarhus University August 2014 Main Supervisor (experimental work conducted at Novo Nordisk, Beijing, China)

41 Jonas Hamann Development of novel assay(s) for monitoring yeast vitality/viability Aarhus University August 2014 Main Supervisor (experimental work conducted at Novozymes, North Carolina, US)

42 Linda Rasmussen Enzymatic Fingerprinting of Xanthan Gum Aarhus University July 2014 Main Supervisor (experimental work conducted at Dupont, Brarand, Denmark)

43 Pi Camilla Poulsen Proteomics Applications for Novel Target Discovery and Understanding of the Production of Antibodies Aarhus University March 2015 Main Supervisor (experimental work conducted at MedImmune, Gaithersburg, US)

44 Morten Petersen Optimization of Enzymatic Processing of Delignified Lignocellulosic Biomass Aarhus University January 2015 Main supervisor (experimental work conducted, Oslo University, Norway)

45 Catja Jensen Hypoxia-regulated Gene Expression as an Endogenous Marker in Cancer of the Oesophagus Aarhus University March 2015 Main 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 Nielsen<sup>13</sup>C 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, Melbourne, 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 WasehusInvestigating 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, Måløv)

74Emilie KjærsgaardHitting YKL-40 with Recombinant Antibodies as a tool to Cure CancerAalborg UniversityJune 2020Main Supervisor

75Evelina ŠtátnáIdentification 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

77 Lærke Andersen Use of Recombinant Antibodies for Identification of Breast Cancer Biomarkers Aalborg University June 2020 Main Supervisor

78 Marta Balkot In utero transplantation of human neural stem cells as a relevant model for Alzheimer's disease Aalborg University June 2020 Main Supervisor (experimental part conducted at Institute Pasteur, Paris with Isabelle Cloëz-Tayarani)

79 Amalie Maarupgaard Jørgensen Characterisation of two bispecific antibodies to help cross the blood-brain barrier and target the amyloid beta peptide Aalborg University June 2021 Main Supervisor

80 Laura Marie Skau Using Single Domain Antibodies for Targeting Leishmania Histone Proteins and Employing Proteomics in the Novel Investigation of Leishmania Ribosomes Aalborg University June 2021 Main Supervisor

81 Signe Schram Zinck Characterisation of Native and Recombinant Variants of the Alpha-Amylase from Lactobacillus Amylovorus Aalborg University June 2021 Main Supervisor (experimental part conducted at Novozymes, Copenhagen)

82 Iben Engell Paulsen Phage display library from alpaca immunised with recombinant RBD of spike protein Aalborg University December 2021 Main Supervisor

83 Ana-Maria Bratovianu Increasing the half-life of a novel biologic as a prospective cure for diabetes type II Aalborg University June 2022 Main Supervisor

84 Balázs Delényi Identification of an antigen on circulating colon cancer cells Aalborg University June 2022 Main Supervisor

85 Caroline Roaldseth Hebnæs Design and characterization of a bi-specific antibody targeting the transferrin receptor and amyloid beta Aalborg University June 2022 Main Supervisor

86 Emilie Axelsen Better together? Molecular engineering linking PETase and MHETase using COM-domains Aalborg University June 2022 Main Supervisor

87 Gudrún Palsdóttir Optimization of Fetal Cell Enrichment from Maternal Blood Samples By FACS - For use in Cell-based Non-invasive Prenatal Testing Aalborg University June 2022 Main Supervisor (experimental part conducted at Arcedi A/S, Aarhus, Denmark)

88 Guillem Martinez I Macia Purification and analysis of a novel dendritic cell targeting anti-cancer vaccine Aalborg University June 2022 Main Supervisor, Project supervisor Ralf Agger, Biomedicine, AAU

89 Pernille Maasboel Epitope Mapping of Anti-IL-4Ra Antibodies using a sIL-4Ra Library Aalborg University June 2022 Main Supervisor (experimental part conducted at LEO Pharma, Copenhagen, Denmark)

90 Signe Libak Obel Pedersen Engineering a improved biodegradation system using COM linked PETase and MHETase for depolymerisation of PETA Aalborg University June 2022 Main Supervisor

91 Kristina Dzhordzhev Aalborg University June 2023 Main Supervisor

92 Emil Alsholm Hundebøll Aalborg University June 2023 Main Supervisor

93 Verónica Feteira Montero Aalborg University June 2023 Co-Supervisor

94 Frederik Andersen Lau Aalborg University June 2023 Main Supervisor

95 Rikke Brønnum Nielsen Aalborg University June 2023 Main Supervisor (experimental work conducted at Queen Mary University of London, UK)

96 Ainhoa Aspillaga Sanchez Aalborg University June 2023 Main Supervisor (experimental work conducted at Novo Nordisk)

97 Aikaterini Margariti Aalborg University June 2023 Main Supervisor (experimental work conducted at Novozymes)

98 Rastislav Pitek Aalborg University June 2023 Main Supervisor (experimental work conducted at Nordic Bioscience)

99 Weronika Anna Weglewska Aalborg University June 2023 Main 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...