Research outputs:

Pichia pastoris yeast as a vehicle for oral vaccination of larval and adult teleosts
Research output: Research - peer-review › Journal article – Annual report year: 2019

DNA vaccination for finfish aquaculture
Research output: Research - peer-review › Journal article – Annual report year: 2019

Preface to the Special Issue 'Targeting Fish vaccination'
Research output: Research - peer-review › Comment/debate – Annual report year: 2019

Time-course study of the protection induced by an interferon-inducible DNA vaccine against viral haemorrhagic septicaemia in rainbow trout
Research output: Research - peer-review › Journal article – Annual report year: 2019

Virulence marker candidates in N-protein of viral haemorrhagic septicaemia virus (VHSV): virulence variability within VHSV Ib clones
Research output: Research - peer-review › Journal article – Annual report year: 2018

Intramuscular DNA Vaccination of Juvenile Carp against Spring Viremia of Carp Virus Induces Full Protection and Establishes a Virus-Specific B and T Cell Response
Research output: Research - peer-review › Journal article – Annual report year: 2017

Involvement of two microRNAs in the early immune response to DNA vaccination against a fish rhabdovirus
Research output: Research - peer-review › Journal article – Annual report year: 2015

High virulence differences among phylogenetically distinct isolates of the fish rhabdovirus viral hemorrhagic septicaemia virus are not explained by variability of the surface glycoprotein G or the non-virion protein Nv
Research output: Research - peer-review › Journal article – Annual report year: 2014

Rhabdovirus-induced microribonucleic acids in rainbow trout (Oncorhynchus mykiss Walbaum)
Research output: Research › Ph.D. thesis – Annual report year: 2014

Antiviral immunity in fish – functional analysis using DNA vaccination as a tool
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

DNA vaccination in fish promotes an early chemokine-related recruitment of B cells to the muscle
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2013
Do microRNAs induced by Viral Hemorrhagic Septicemia virus in rainbow trout (Oncorhynchus mykiss) possess anti-viral activity?
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Evaluation of the potential anti-viral activity of microRNAs in rainbow trout (Oncorhynchus mykiss)
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Evaluation of the potential roles of microribonucleic acids in the interaction of rainbow trout (Oncorhynchus mykiss) with Viral hemorrhagic septicemia virus
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Flavobacterium psychrophilum - Experimental challenge and immune response
Research output: Research › Ph.D. thesis – Annual report year: 2014

Inter-species transmission of viral hemorrhagic septicemia virus (VHSV) from turbot (Scophthalmus maximus) to rainbow trout (Onchorhynchus mykiss)
Research output: Research - peer-review › Journal article – Annual report year: 2013

MicroRNA expression in rainbow trout (Oncorhynchus mykiss) vaccinated with a DNA vaccine encoding the glycoprotein gene of Viral hemorrhagic septicemia virus
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Of Fish and Micrornas
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Rhabdovirus-Induced Fish-Specific Microribonucleic Acids in Rainbow Trout (Oncorhynchus Mykiss)
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Testing the ability of viral haemorrhagic septicaemia virus to evade the protective immune response induced in rainbow trout by DNA vaccination
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Use of DNA vaccination for determination of onset of adaptive immunity in rainbow trout fry
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Whole inactivated virus vaccine prototype protects against viral encephalopathy and retinopathy in European sea bass (D. labrax)
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Chemical modification of RNA-based medicine can be used to reduce its induction of the innate immune response
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

Determining Vaccination Frequency in Farmed Rainbow Trout Using Vibrio anguillarum O1 Specific Serum Antibody Measurements
Research output: Research - peer-review › Journal article – Annual report year: 2012

DNA vaccination of small rainbow trout fry against VHSV
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

Efficacy of a glycoprotein DNA vaccine against viral haemorrhagic septicaemia (VHS) in Pacific herring, Clupea pallasii Valenciennes
Research output: Research - peer-review › Journal article – Annual report year: 2012
Expression of micro-RNAs and immune-relevant genes in rainbow trout (Oncorhynchus mykiss Walbaum) upon vaccination with a Viral Haemorrhagic Septicemia Virus
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

Expression of microRNAs and interferon-related genes in rainbow trout (Oncorhynchus mykiss Walbaum) infected with Viral hemorrhagic septicemia virus
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Improved Protection of Rainbow Trout Against Furunculosis by an Autologous Vaccine Under Experimental Conditions
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

Inter-Species Transmission of Viral Haemorrhagic Septicaemia Virus Between Turbot (Scophthalmus Maximus) and Rainbow Trout (Onchorhynchus Mykiss)
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

In vivo screening of modified siRNAs for non-specific antiviral effect in a small fish model: number and localization in the strands are important
Research output: Research - peer-review › Journal article – Annual report year: 2012

Oral transmission as a route of infection for viral haemorrhagic septicemia virus in rainbow trout, Oncorhynchus mykiss (Walbaum)
Research output: Research - peer-review › Journal article – Annual report year: 2012

Typing of viral hemorrhagic septicemia virus by monoclonal antibodies
Research output: Research - peer-review › Journal article – Annual report year: 2012

Assessment of the Epitope Specificity of Monoclonal Antibodies that can Discriminate between the Various Genotypes of VHSV
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Correlation of mRNA Profiles, miRNA Profiles, and Functional Immune Response in Rainbow Trout (Oncorhynchus Mykiss) During Infection With Viral Hemorrhagic Septicemia Virus (VHSV) and in Fish Vaccinated With an Anti-VHSV DNA Vaccine
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Correlation of mRNA Profiles, miRNA Profiles, and Functional Immune Response in Rainbow Trout (Oncorhynchus Mykiss) Infected With Viral Hemorrhagic Septicemia Virus (VHSV) and in Fish Vaccinated With a DNA Vaccine Against VHSV
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2011

Epizone: Interlaboratory Ring Trial to Compare Dna Transfection Efficiencies
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

General and family-specific gene expression responses to viral hemorrhagic septicaemia virus infection in rainbow trout (Oncorhynchus mykiss)
Research output: Research - peer-review › Journal article – Annual report year: 2011

Gene regulatory mechanisms in infected fish
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2011

Inhibition of Reporter Genes by Small Interfering RNAs in Cell Culture and Living Fish
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011
Inhibition of Reporter Genes by Small Interfering RNAs in Cell Culture and Living Fish
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2011

microRNA regulation in rainbow trout infected with a fish pathogenic rhabdovirus
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Rainbow trout surviving infections of viral haemorrhagic septicaemia virus (VHSV) show lasting antibodies to recombinant G protein fragments
Research output: Research - peer-review › Journal article – Annual report year: 2011

Recombinant hybrid infectious hematopoietic necrosis virus (IHNV) carrying viral haemorrhagic septicaemia virus (VHSV) G or NV genes show different virulence properties
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Search for genetic virulence markers in viral haemorrhagic septicaemia virus (VHSV) using a reverse genetics approach
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Small regulatory RNAs of the RNA interference (RNAi) pathway as a prophylactic treatment against fish pathogenic viruses
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2011

Species specific inhibition of viral replication using dicer substrate siRNAs (DsiRNAs) targeting the viral nucleoprotein of the fish pathogenic rhabdovirus viral hemorrhagic septicaemia virus (VHSV)
Research output: Research - peer-review › Journal article – Annual report year: 2011

Temperature influences the expression profiling of immune response genes in rainbow trout following DNA vaccination and VHS virus infection
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

The Protective Mechanisms Induced by a DNA Vaccine in Fish Depend on Temperature
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2011

Viral haemorrhagic septicaemia virus (VHSV) in rainbow trout: virulence variability within genotype Ib isolates
Research output: Research - peer-review › Poster – Annual report year: 2011

Cellular and molecular immune responses of the sea bass (Dicentrarchus labrax) experimentally infected with betanodavirus
Research output: Research - peer-review › Journal article – Annual report year: 2010

Experimental vaccination of small turbot against bacterial and viral pathogens
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Expression Profiling of Immune Response Genes in Rainbow Trout Following DNA Vaccination and VHS Virus Infection
Research output: Research - peer-review › Poster – Annual report year: 2010

Identification of Genetic Virulence Markers in VHS Virus
Research output: Communication › Poster – Annual report year: 2010

Immersion exposure of rainbow trout (Oncorhynchus mykiss) try to wildtype Flavobacterium psychrophilum induces no mortality, but protects against later intraperitoneal challenge
Research output: Research - peer-review › Journal article – Annual report year: 2010
In vivo screening of backbone modified siRNAs for their ability to induce interferon based off-target effects
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

N-Linked Glycans on the Viral Glycoprotein are not Required for Induction of Protective Immunity to VHSV when Delivered as a DNA Vaccine
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Protection Against Viral Haemorrhagic Septicemia Virus (VHSV) in Rainbow Trout Using a DNA Vaccine with MX1 Promotor Controlled Expression of the Viral G Protein
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Studies on herd-immunity and primary versus secondary infection of VHSV in challenge and vaccination trials with rainbow trout
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Temperature effects on vaccine induced immunity to viruses in fish
Research output: Research › Conference abstract for conference – Annual report year: 2010

Using small interfering RNAs (siRNAs) to combat a fish pathogenic virus
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Viral diseases of fish and a possible role for small regulatory RNAs in their antiviral defence
Research output: Communication › Conference abstract for conference – Annual report year: 2010

Adaptive versus innate immune mechanisms in trout responding to rhabdovirus antigens.
Research output: Research › Conference abstract for conference – Annual report year: 2009

Distinction of genotypes of viral haemorrhagic septicemia virus (VHSV) by monoclonal antibodies
Research output: Research › Conference abstract for conference – Annual report year: 2009

DNA Vaccines against Viral Diseases: Basic Immunological Aspects and Applied Perspectives
Research output: Research - peer-review › Conference article – Annual report year: 2009

Dual DNA vaccination of rainbow trout (Oncorhynchus mykiss) against two different rhabdoviruses, VHSV and IHNV, induces specific divalent protection
Research output: Research - peer-review › Journal article – Annual report year: 2009

Functional demonstration of adaptive immunity in zebrafish using DNA vaccination.
Research output: Research › Conference abstract for conference – Annual report year: 2009

Genetic and serological typing of European infectious haematopoietic necrosis virus (IHNV) isolates
Research output: Research - peer-review › Journal article – Annual report year: 2009

Interference of an ERM-vaccine with a VHS-DNA vaccine in rainbow trout
Research output: Research › Conference abstract for conference – Annual report year: 2009

In Vivo Screening of Chemically Modified RNA duplexes for their Ability to Induce Innate Immune Responses
Research output: Research - peer-review › Poster – Annual report year: 2009

IN VIVO SCREENING OF CHEMICAL MODIFICATIONS OF siRNAs FOR EFFECT ON THE INNATE IMMUNE RESPONSE IN FISH
Kan nye VHS udbrud i regnbueørred forebygges ved vaccination eller avl?

MicroRNA Expression during Viral Infection or Polyl:C Stimulation in a Fish Model

New tools to study RNA interference to fish viruses: Fish cell lines permanently expressing siRNAs targeting the viral polymerase of viral hemorrhagic septicemia virus

O-114: Distinction between genotypes of viral haemorrhagic septicaemia virus (VHSV) using monoclonal antibodies

New tools to study RNA interference to fish viruses: Fish cell lines permanently expressing siRNAs targeting the viral polymerase of viral hemorrhagic septicemia virus

Screening of Modified RNA duplexes

Studies on herd-immunity and primary versus secondary infection of VHSV in challenge and vaccination trials with rainbow trout

The protective mechanisms induced by a fish rhabdovirus DNA vaccine depend on temperature

Cell-mediated immune responses in rainbow trout after DNA immunization against the viral hemorrhagic septicemia virus

Egtvedsyge og frontforskning i fiskevacciner. Århusafdelingens indsats har været meget vigtig for forskningen i og bekæmpelsen af Egtvedsyge, en alvorlig sygdom hos dambrugsfisk i Europa og USA

Regnbueørredens redning

A High Throughput In Vivo Model for Testing Delivery and Antiviral Effects of siRNAs in Vertebrates

Cell-mediated cytotoxicity in rainbow trout, Oncorhynchus mykiss, infected with viral haemorrhagic septicaemia virus

Classification of viral haemorrhagic septicaemia virus (VHSV) and how do we define the disease VHS?

Antiviral activity of Small Interfering RNAs: Specificity testing using heterologous virus reveals interferon-related effects overlooked by conventional mismatch controls
Expression of the glycoprotein of viral haemorrhagic septicaemia virus (VHSV) on the surface of the fish cell line RTG-P1 induces type 1 interferon expression in neighbouring cells
Research output: Research - peer-review › Journal article – Annual report year: 2006

Genetic stability of the VHSV consensus sequence of G-gene in diagnostic samples from an acute outbreak
Research output: Research - peer-review › Journal article – Annual report year: 2006

Monitoring of the immune system in fish and shellfish
Research output: Research - peer-review › Journal article – Annual report year: 2006

DNA vaccines for aquacultured fish
Research output: Research - peer-review › Journal article – Annual report year: 2005

Genotyping of the fish rhabdovirus, viral haemorrhagic septicaemia virus, by restriction fragment length polymorphisms
Research output: Research - peer-review › Journal article – Annual report year: 2005

Kinetics of Mx expression in rainbow trout (Oncorhynchus mykiss) and Atlantic salmon (Salmo salar L.) parr in response to VHS-DNA vaccination
Research output: Research - peer-review › Journal article – Annual report year: 2005

Parallel phylogenetic analyses using the N, G or Nv gene from a fixed group of VHSV isolates reveal the same overall genetic typing
Research output: Research - peer-review › Journal article – Annual report year: 2005

Time course study of in situ expression of antigens following DNA-vaccination against VHS in rainbow trout (Oncorhynchus mykiss Walbaum) fry
Research output: Research - peer-review › Journal article – Annual report year: 2005

Evolution of the fish rhabdovirus viral haemorrhagic septicaemia virus
Research output: Research › Conference abstract for conference – Annual report year: 2004

Genotyping of viral haemorrhagic septicaemia virus from worldwide using the non-virion gene
Research output: Research › Conference abstract for conference – Annual report year: 2004

Use of plasmid DNA for induction of protective immunity
Research output: Research › Journal article – Annual report year: 2004

A DNA vaccine directed against a rainbow trout rhabdovirus induces early protection against a nodavirus challenge in turbot
Research output: Research - peer-review › Journal article – Annual report year: 2003

DNA vaccination against viral haemorrhagic septicaemia (VHS) in rainbow trout: size, dose, route of injection and duration of protection-early protection correlates with Mx expression
Research output: Research - peer-review › Journal article – Annual report year: 2003

Immunity induced shortly after DNA vaccination of rainbow trout against rhabdoviruses protects against heterologous virus but not against bacterial pathogens
Research output: Research - peer-review › Journal article – Annual report year: 2002

Immunity to viral haemorrhagic septicaemia (VHS) following DNA vaccination of rainbow trout at an early life-stage
Research output: Research - peer-review › Journal article – Annual report year: 2001
Neutralisation and binding of VHS virus by monovalent antibody fragments
Research output: Research - peer-review › Journal article – Annual report year: 2001

Protection of rainbow trout against infectious hematopoietic necrosis virus four days after specific or semi-specific DNA vaccination
Research output: Research - peer-review › Journal article – Annual report year: 2001

Rainbow trout offspring with different resistance to viral haemorrhagic septicaemia
Research output: Research - peer-review › Journal article – Annual report year: 2001

DNA vaccination of rainbow trout against viral hemorrhagic septicemia virus: A dose-response and time-course study
Research output: Research - peer-review › Journal article – Annual report year: 2000

Immunoprophylaxis in fish by injection of mouse antibody genes
Research output: Research - peer-review › Journal article – Annual report year: 2000

Three monoclonal antibodies to the VHS virus glycoprotein: comparison of reactivity in relation to differences in immunoglobulin variable domain gene sequences
Research output: Research - peer-review › Journal article – Annual report year: 2000

Immunity to rhabdoviruses in rainbow trout: the antibody response
Research output: Research - peer-review › Journal article – Annual report year: 1999

Immunity to VHS virus in rainbow trout
Research output: Research - peer-review › Journal article – Annual report year: 1999

Isolation of viral haemorrhagic septicaemia virus (VHSV) from wild marine fish species in the Baltic Sea, Kattegat, Skagerrak and the North Sea
Research output: Research - peer-review › Journal article – Annual report year: 1999

Production of neutralizing antisera against viral hemorrhagic septicemia (VHS) virus by intravenous injections of rabbits
Research output: Research - peer-review › Journal article – Annual report year: 1999

Recombinant vaccines: experimental and applied aspects
Research output: Research - peer-review › Journal article – Annual report year: 1999

Rhabdovirusinfektioner
Research output: Research › Book chapter – Annual report year: 1999

Characterization of intramolecular disulfide bonds and secondary modifications of the glycoprotein from viral hemorrhagic septicemia virus, a fish rhabdovirus
Research output: Research - peer-review › Journal article – Annual report year: 1998

Mapping of linear antibody epitopes of the glycoprotein of VHSV, a salmonid rhabdovirus
Research output: Research - peer-review › Journal article – Annual report year: 1998

Protective immunity to VHS in rainbow trout (Oncorhynchus mykiss, Walbaum) following DNA vaccination
Research output: Research - peer-review › Journal article – Annual report year: 1998

Isolation of VHSV from the marine environment
Research output: Research › Conference abstract for conference – Annual report year: 1997
Antibody response to VHS virus glycoprotein in rainbow trout
Research output: Research › Conference abstract for conference – Annual report year: 1990

Neutralization of Egtved virus pathogenicity to cell cultures and fish by monoclonal antibodies to the viral G protein
Research output: Research › Peer-review › Journal article – Annual report year: 1990

Immunization of rainbow trout with affinity purified Egtved virus proteins, preliminary results.
Research output: Research › Conference abstract for conference – Annual report year: 1989

Monoclonal antibodies against Egtved virus glycoprotein: Application in development of a subunit vaccine
Research output: Research › Poster – Annual report year: 1989

Monoclonal antibodies against Egtved virus structural proteins: Application in diagnosis and vaccine development
Research output: Research › Conference abstract for conference – Annual report year: 1989

Monoclonal antibodies used in the development of a genetically engineered vaccine against a fish virus
Research output: Research › Conference abstract for conference – Annual report year: 1989

Production and Characterization of Monoclonal Antibodies to Four Egtved Virus Structural Proteins
Research output: Research » Peer-review » Journal article – Annual report year: 1988

Detection of Egtved virus and rainbow trout antibody to Egtved virus by enzyme-linked immunosorbent assay (ELISA).
Research output: Research › Conference abstract for conference – Annual report year: 1987

Passive protection of rainbow trout (Salmo gairdneri) against Egtved virus with monoclonal antibodies.
Research output: Research › Conference abstract for conference – Annual report year: 1987

Projects:

Vaccination of Seabass against a lethal viral disease and characterization of protective immunity
Project: PhD

Piscine orthoreovirus in salmonids: geographic distribution, molecular characterization, pathogenesis under experimental conditions
Project: PhD

Delivery of small interfering RNAs (siRNAs) for treatment of viral disease in fish aquaculture
Project: PhD

Flavobacterium psychrophilum, forebyggnelse og immunforsvar
Project: PhD

Expression of rhabdovirus-induced fish-specific microribonucleic acids in rainbow trout (Oncorhynchus mykiss)
Project: PhD

Non-coding RNA mediated gene regulation during influenza infection
Project: PhD

Danish Fish Immunology Research Network
Project: Research
Improved vaccination strategies in marine aquaculture
Project: Research