

In this issue

From the Subprogram Leader.....1

STC/SAC Meetings1

Health Subprogram Website.....1

Announcements.....1

Summaries of Completed Projects....2

Progress Summaries of Active Projects...2

List of Active Projects.....4

Subprogram Contact Details.....5

From the Subprogram Leader

There continues to be some changes to the Subprogram Steering and Scientific Advisory Committees. With Pheroze Jungalwalla retiring, Steve Percival (Huon Aquaculture Company Pty Ltd) has replaced Pheroze as an industry representative on the Steering Committee (STC). In addition, Stephen Pyecroft has stepped down from the Scientific Advisory Committee (SAC) and there are three new members on SAC: Ian Anderson (Dept Agriculture & Fisheries, Queensland), Ellen Ariel (James Cook Uni.) and Cecile Dang (Dept Primary Industries & Regional Development, Western Australia) to replace Stephen and Kate Hutson who has relocated to New Zealand.

2019 FRDC Cairns Conference

Newsletter subscribers should be aware that the 5th FRDC Australasian Aquatic Animal Health & Biosecurity Scientific Conference will be held in Cairns, 8-12 July 2019. We are pleased to announce that there will be three conference keynote speakers:

- **Prof Hong Liu**, State Key Laboratory of Aquatic Animal Health, Shenzhen, Guangdong, PR China, Member of the OIE Aquatic Animals Commission
- **A/Prof Timothy Dempster**, Department of Biosciences, The University of Melbourne, Victoria, Australia
- **Prof KC Han-Ching Wang**, Department of Biotechnology & Bioindustry Sciences, National Cheng Kung University, Tainan, Taiwan

The conference program is currently under development and will be available in June. For further information about the conference, please contact the conference coordinator, Joanne Slater (joanne.slater@csiro.au).



Pullman Reef Hotel, Cairns – venue for the 2019 FRDC Australasian Aquatic Animal Health & Biosecurity Scientific Conference

STC/SAC Meetings

The AAHBS met in March. Items for discussion included:

- Review of R&D Expressions of Interest
- Review of R&D full applications
- Review of Aquatic Animal Health Training Scheme applications
- AAHBS committee membership
- 2019 Cairns Conference

Subprogram Website

Our website is located on the FRDC site and can be accessed directly under:

<http://www.frdc.com.au/en/Partners/National-Priorities-and-Subprograms/Aquatic-Health-and-Biosecurity>

There you can view this issue and all previous issues of *Health Highlights* - in addition to finding other information about the FRDC Aquatic Animal Health & Biosecurity Subprogram. For Final Reports see <http://www.frdc.com.au/Research/Final-reports>

Please contact FRDC if you have problems with this website.

Announcements

Newsletter submissions

The Aquatic Animal Health & Biosecurity Subprogram welcomes contributions to *Health Highlights* on all aquatic animal health & biosecurity R&D news and events – both within and outside the FRDC. We aim to assist with the widespread exchange of information by including any of the

following in each annual edition: project updates, milestone reports, final reports, research papers, project communication and extension outputs, info sheets, and letters to the editor. Announcements of conferences, workshops, meetings, job vacancies etc. are also welcome.

Mailing list

Health Highlights is distributed biannually to stakeholders via email as well as being posted on the FRDC website at:

<http://www.frdc.com.au/en/Partners/National-Priorities-and-Subprograms/Aquatic-Health-and-Biosecurity>

To change contact details or to ensure inclusion on the *Health Highlights* mailing list, please contact Joanne:

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Completed Project Summaries

No projects have been completed since the issue of *Health Highlights* November 2018.

Progress Summaries for Active Projects

Project No. 2014/002: Aquatic Animal Health Subprogram: Development of stable positive control material and development of internal controls for molecular tests for detection of important endemic and exotic pathogens (PI: Nick Moody)

Objectives

1. Produce quantified synthetic RNA positive control material for conventional and real-time RT-PCR assays, available on request.
2. Produce quantified plasmid DNA positive control material for conventional and real-time RT-PCR assays, available on request.
3. Optimised universal internal control based on plant viral RNA and DNA and/or species-specific genes for use in molecular assays developed and implemented.

4. Technology transferred and adopted by participating laboratories.

Progress: Draft final report is in preparation.

Project No. 2016/404: Aquatic Animal Health and Biosecurity Subprogram: Strategic planning, project management and adoption (PI: Mark Crane)

This project commenced 1 July 2016 and will continue until 31 August 2020.

Objectives

1. Manage a portfolio of R&D projects that are directly concerned with aquatic animal health & biosecurity and are not managed by other FRDC subprograms, FRABs or IPAs
2. In consultation with key stakeholders (industry, government and aquatic animal health providers) develop strategic directions for R&D
3. Facilitate the dissemination of outputs (information and results) from R&D projects to key stakeholders

Project No. 2015/001: Aquatic Animal Health and Biosecurity Subprogram: Bonamiasis in farmed Native Oysters (*Ostrea angasi*) (PI: Tracey Bradley)

Objectives

1. Obtain nucleic acid sequence and compare with other, described *Bonamia* sp. and determine their taxonomic relationship and ensure that available diagnostic tools are suitable.
2. Improve understanding of Bonamiasis infestations in Native Oysters including the determination, under controlled conditions, of the stressors that induce clinical disease in sub-clinically infected oysters.
3. Develop a biosecurity plan and farm management practices to manage the risk of infestation and the mitigation of clinical infection with *Bonamia* sp.

Progress: Draft final report is in review.

Project No. 2015/003: Aquatic Animal Health and Biosecurity Subprogram: Development of standard methods for the production of marine molluscan cell cultures (PI: Andrew Read)

Objectives

1. Describe standard methods for the development and storage of marine molluscan cell cultures.
2. Production and characterisation of molluscan cell cultures.
3. Examination of resultant cell cultures for the ability to sustain growth of endemic molluscan viruses and protozoa.
4. Examination of resultant cell cultures for the ability to sustain growth of exotic molluscan viruses and protozoa.

Progress: Draft final report is in review.

Project No. 2018/144: Aquatic Animal Health and Biosecurity Subprogram: Aquatic Animal Technical Forum and Training Workshops (PI: Nette Williams)

Objectives

1. Source workshop venues, in various States and Territories, that have aquatic animal health capability or services and can accommodate the group size.
2. Organise all aspects of conducting the workshops including, advertising through *Health Highlights* subscription and peer referrals, guest presenter, presentation program, field trips and practical sessions, accommodation and catering.
3. Encourage new and emerging science and production staff to attend the AAHTF and to gain experience in making presentations.
4. Continue to up-date the contact list and email distribution list/group for continued information exchange.
5. Reports and financial acquittals prepared according to milestone schedule.

Progress:

The first training workshop scheduled for this project took place at the Department of Primary Industries, Parks, Water and Environment's Animal Health Laboratory and Centre of Excellence in Aquatic Animal Health & Vaccines, Launceston, Tasmania, 6-8 March 2019. There were 22 participants from Commonwealth and State laboratories, universities, regulatory agencies and industry (from ACT, NSW, QLD, SA, TAS, VIC, WA and New Zealand).

Milestone Progress Report is in preparation.

Summary of Active Projects

Project No.	Project Title	Principal Investigator
2014/002	AAHS: Development of stable positive control material and development of internal controls for molecular tests for detection of important endemic and exotic pathogens (<i>Associated species</i> : multi-species)	Dr Nick Moody CSIRO AAHL Fish Diseases Laboratory Phone: 03 5227 5749 Email: nick.moody@csiro.au
2015/001	AAHS: Bonamiasis in farmed native oysters (<i>Ostrea angasi</i>) (<i>Associated species</i> : <i>Ostrea angasi</i>)	Dr Tracey Bradley Dept Economic Development, Jobs, Transport and Resources - Victoria Phone: 03 9217 4171 Email: tracey.bradley@ecodev.vic.gov.au
2015/003	AAHS: Development of standard methods for the production of marine molluscan cell cultures (<i>Associated species</i> : multi-species)	Dr Andrew Read Elizabeth Macarthur Agriculture Institute Phone: 02 4640 6332 Email: andrew.j.read@dpi.nsw.gov.au
2015/005	AAHS: Determining the susceptibility of Australian <i>Penaeus monodon</i> and <i>P. merguensis</i> to newly identified enzootic (YHV7) and exotic (YHV8 and YHV10) Yellow head virus (YHV) genotypes (<i>Associated species</i> : <i>Penaeus monodon</i> , <i>P. merguensis</i>)	Dr Nick Moody CSIRO AAHL Fish Diseases Laboratory Phone: 03 5227 5749 Email: nick.moody@csiro.au
2016/404	AAHBS: Strategic planning, project management and adoption (<i>Associated species</i> : multi-species)	Dr Mark Crane CSIRO AAHL Fish Diseases Laboratory Phone: 03 5227 5118 Email: mark.crane@csiro.au
2016/009	AAHBS: <i>Perkinsus olseni</i> in abalone - development of fit-for-purpose tools to support its management (<i>Associated species</i> : <i>Haliotis</i> spp.)	Dr Cecile Dang Department of Fisheries – WA Phone: 08 9363 4825 Email: Cecile.Dang@agric.wa.gov.au
2016/011	AAHBS: Disinfection measures to support biosecurity for ISKNV at aquaculture facilities (<i>Associated species</i> : multi-species)	Dr Joy Becker University of Sydney Phone: 02 9036 7731 Email: joy.becker@sydney.edu.au
2016/013	AAHBS: Comparative pathogenicity of exotic AHPND and the presumptive bacterial hepatopancreatitis detected in farmed <i>Penaeus monodon</i> in Queensland (<i>Associated species</i> : <i>Penaeus monodon</i> and <i>P. merguensis</i>)	Dr Nick Moody CSIRO AAHL Fish Diseases Laboratory Phone: 03 5227 5749 Email: nick.moody@csiro.au
2017/117	AAHBS: Identification of differentially expressed innate immune genes in the New Zealand paua (<i>Haliotis iris</i>) and the Australian hybrid abalone (<i>H. laevigata</i> X <i>H. rubra</i>) upon immersion challenge with the abalone herpesvirus-1 (HaHV) (<i>Associated species</i> : <i>Haliotis</i> spp.)	Dr Serge Corbeil CSIRO AAHL Fish Diseases Laboratory Phone: 03 5227 5254 Email: s.corbeil@csiro.au
2017/190	AAHBS: Assessment of gamma irradiation as a feasible method for treating prawns to inactivate White Spot Syndrome Virus (<i>Associated species</i> : <i>Penaeus</i> spp.)	Dr Stephen Wesche Biosecurity Queensland Phone: 07 3087 8086 Email: stephen.wesche@daf.qld.gov.au
2018/144	AAHBS: Aquatic Animal Technical Forum and Training Workshops (<i>Associated species</i> : multi-species)	Nette Williams CSIRO AAHL Fish Diseases Laboratory Phone: 03 5227 5442 Email: lynette.williams@csiro.au

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