



# Fish Health Section



The official link to the FHS website is: <http://www.afs-fhs.org/>

## FHS NEWS

### Blue Book Edit Announcement

Dear FHS Blue Book users,

It has been brought to our attention that there were errors in the listed PCR primers used for the confirmation of *Tetracapsula bryosalmonae*, the etiological agent for proliferative kidney disease (PKD), in Section 2 USFWS/AFS-FHS Standard Procedures for Aquatic Animal Health Inspections, Chapter 5.4 *Tetracapsula bryosalmonae* (Proliferative Kidney Disease) (2003). On page 7 there was an error with the reported forward primer. The original primers reported were:

Forward (5F): 5' CCTATTCATTGAGTAGAGA 3'  
Reverse (6R): 5' GGACCTTACTCGTTTCCGACC 3'

The correct forward primer has been updated in the chapter. The corrected primers are listed below:

Forward (PKX5f): 5' CCT ATT CAA TTG AGT AGG AGA 3'  
Reverse (PKX6r): 5' GGA CCT TAC TCG TTT CCG ACC 3'

In addition, the amplicon for the reported primers is 435 bp and not 501 bp as originally stated. Please note these changes and sorry for any confusion. As always, please feel free to contact the Technical Standards Committee if any updates or edits are needed.

Best Regards,

The Technical Standards Committee

### Fish Health Section Quality Assurance Program for Laboratories

The QA/QC committee has announced the Tier 1 application period for 2017 will open **January 1, 2017**, and all applications must be received by **March 31**.

Tier 1 is the "pre-qualification" stage for fish health laboratories, and includes identification of key laboratory personnel, laboratory safety and biosecurity, as well as standard operating procedures. Tier 2 - "recognition" is under development, and details should be available by the end of 2017.

More information and links to the application and supporting documents are available at the FHS Website at <http://www.afs-fhs.org/test2.php>

## **STUDENTS AND EARLY CAREER MEMBERS**

The Student and Young Professional session with Jeff Wolf is scheduled for Sunday, April 2<sup>nd</sup>. The time is still to be determined but it will likely be Sunday morning.

### **Publishing Piscatorial Papers: Dos and Don'ts**

Jeff Wolf, editor of Journal of Aquatic Animal Health

Modern aquatic animal studies are often complex and feature a diverse array of endpoints. Consequently, compiling the data and other relevant study information into a document suitable for publication can be challenging. This presentation will highlight various issues that have been observed in manuscripts submitted for journal review, and will provide recommendations for the effective communication of study results in order to maximize the odds of manuscript acceptance, and potentially minimize the number of required revisions that follow the initial editorial evaluation.

If you're interested in attending this workshop, please respond to this survey by March 11<sup>th</sup>, <https://www.surveymonkey.com/r/W6XVT7N>. **(If you're arriving on Sunday, please include your arrival time in the comments box)** Based on the response level, we will then determine if the session will occur and when.

Just a reminder that the room share document has been set up for students and early professionals interested in sharing a room to help defray the costs of the FHS meeting as well as the EFHW.

[https://docs.google.com/spreadsheets/d/1cpz88yuG0LYrsfR5AsyK\\_eCgjzDZd4F4YO9AasBpXmM/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1cpz88yuG0LYrsfR5AsyK_eCgjzDZd4F4YO9AasBpXmM/edit?usp=sharing)

## **MEETINGS, WORKSHOPS AND COURSES**

### **2017 Annual Meeting of the Fish Health Section**

**Michigan State University, East Lansing, MI**

**April 2-3, 2017**

We are now accepting registration and abstracts for the 2017 Annual Meeting of the Fish Health Section which will be held jointly with the Annual Meeting of the Great Lakes Fish Health Committee!

This meeting is being hosted by The Aquatic Animal Health Laboratory (AAHL) at Michigan State University on April 2nd and 3rd, and will be followed directly by the 42nd Eastern Fish Health Workshop on April 3rd to 7th.

The venue will be the Kellogg Hotel & Conference Center at Michigan State in East Lansing Michigan, and the chief contact person will be Dr. Mohamed Faisal.

Attached to this email are three documents of importance to attendees:

"FHS Final Announcement" which contains specifics with regard to the meeting theme, registration, abstract submission, accommodations and local transport; and,

"FHS Instruction for Poster Presentations".

Onsite Registration will begin at 9 am on Sunday April 2nd, followed directly by the Fish Health Section Business Meeting. The first Formal Session will follow the FHS Business Meeting.

#### Important Deadlines:

Call for Abstracts: now open

Abstracts Due By: March 6, 2017

Registration due by (postmarked): March 10, 2017 (to avoid the late fee)

Hotel Reservation due by: March 3, 2017

### **42<sup>nd</sup> Annual Eastern Fish Health Workshop** **Michigan State University, East Lansing, MI** **April 3-7, 2017**

This week's news: Abstracts are due and hotel reservations should be made. If you haven't registered yet for the next Eastern Fish Health Workshop, you still can at the marginally higher registration cost. Please use the most current registration form attached to this email. Thank you.

We are proud to announce the 42<sup>nd</sup> Annual Eastern Fish Health Workshop at the Kellogg Hotel & Conference Center in East Lansing, MI. Registration begins at our annual reception on Monday, April 3 from 5:00 to 7:00 pm, and is followed by an evening of interesting, bewildering, and bemusing case reports. There will be three full-day sessions (April 4-6), followed by a full-day continuing education course on Friday, April 7. We encourage contributions for oral presentation of case reports and research investigations that are pertinent to animal health within marine and freshwater environments. There are no poster sessions.

For the first time, the EFHW will be held in Michigan, a state which fittingly boasts the longest freshwater coastline of any political subunit in the world and where a person is

always within 6 miles of a stream, lake, river, or natural waterbody. The Michigan State University Aquatic Animal Health Laboratory (MSU-AAHL) has been a longstanding supporter of the EFHW and is proud to host the annual meeting in Spartan Country. We have plans to offer tours of MSU's campus that will include the veterinary diagnostic and other related laboratories, as well as optional organized excursion(s) that showcase some of Michigan's delights. The banquet and Best Student Presentation award will be on Thursday night, when there is never a shortage of dancing- not to be missed.

We will continue to use the general email address ([TheEFHW@gmail.com](mailto:TheEFHW@gmail.com)) to correspond with folks; however, if you need to reach any one of us, please feel free to contact us directly.

**Call For General Session Titles And Abstracts:** To guarantee a place on the program, please return a tentative title for your abstract and presentation via email **as soon as possible**. Do this by completing the appropriate sections of the Word attachment titled "[42 efhw title form](#)." If you are presenting a diagnostic case, please indicate your tentative title that you would like included in our special session titled: "The Aquatic Detective."

Abstracts must be submitted by **1 March 2017**. Email abstracts to [TheEFHW@gmail.com](mailto:TheEFHW@gmail.com). Please follow the direction for preparation of abstracts and presentations (see attachment). Your attention to these guidelines is greatly appreciated. PowerPoint presentations are due **20 March 2017**.

**Best Student Paper Presentation:** The Eastern Fish Health Workshop will present \$200 and a plaque for the Best Student Presentation. Eligible individuals must be currently enrolled in an undergraduate or graduate research program and present his/her own research. The award will be presented at our Banquet and the recipient **must** be present. In order to be considered for this award, you must register by completing the appropriate section of the "[42 efhw title form](#)" attachment.

### **Registration**

A **\$200** registration fee (U.S. dollars) includes a reception on Monday evening with heavy hors d'oeuvres, workshop proceedings, refreshments at breaks, buffet breakfasts and luncheons on each of the three full days of the workshop (Tuesday, Wednesday, Thursday), and dinner at the Banquet on Thursday night. That's a steal for \$ 200!!! Make checks payable to the "Eastern Fish Health Workshop" and return payment with your registration form **postmarked by 21 February 2017**. The late registration fee of **\$35** (U.S. dollars) is charged **if postmarked after this date** (for a total registration fee of **\$235**, if late). The EFHW does not accept credit cards and there are no daily or discounted registrations. Please ensure that you mail your registration form and check to Dr. Roy Yanong.

### **Lodging**

Individual accommodations start at \$108/night and must be made with the Kellogg Hotel & Conference Center in East Lansing, Michigan. You can make reservations online or by phone. Please call the hotel at [1-800-875-5090](tel:1-800-875-5090) and use either the code **1704FISHHE** or Block Name **Eastern Fish Health Conference**. You may also go online to [www.kelloggcenter.com](http://www.kelloggcenter.com), click Reservations in the link at the top, and fill in the dates, rooms, and number of people. Select "Click Here for Special Rates" and enter the Group Code: **1704FISHHE**. In order to secure reservations, please make reservations with the Kellogg Hotel before March 3, 2017.

The Kellogg Hotel is located on the Michigan State University campus in the heart of East Lansing. Lansing's Capital Region International Airport is only eight miles away. The hotel offers a shuttle to the Lansing Capital Region International Airport, but it must be reserved ahead of time. Attached to this email are instructions for reserving this shuttle. <https://kelloggcenter.com/>

The Detroit airport is located approximately 1.5 hours away and may offer more flights. A bus service between the Detroit airport and Downtown East Lansing is offered through [www.michiganflyer.com](http://www.michiganflyer.com). We are investigating discounts on car rentals and will provide more information on this in a later email.

#### **Important Deadlines:**

Call for Abstracts: now open  
Abstracts Due By: 1 March 2017  
Registration due by (postmarked): now  
PowerPoints due: 20 March 2017  
Hotel Reservation due by: 3 March 2017

Please use the following email address for submission of title forms, abstracts, PowerPoints, and any specific questions: [TheEFHW@gmail.com](mailto:TheEFHW@gmail.com). Please use snail mail (regular postal services) to send registration forms AND checks to Dr. Roy Yanong.

#### **CE Sessions Planned for Upcoming Fish Health Meetings**

The QA/QC committee of the FHS is pleased to announce two upcoming continuing education sessions on Quality Management System Training at the Fish Health Section Meeting (April 7<sup>th</sup>, 2017) and again at the Western Fish Disease Workshop (June 20, 2017).

These sessions will be taught by Dr. Kelly Burkhart, microbiologist and quality management trainer with the National Animal Health Laboratory Network (NAHLN). Topics to be covered include: document writing and control, record keeping, training, equipment, corrective action, root cause analysis and internal audits. The training will be RACE-approved for veterinarians requiring continuing education hours.

This training should be valuable for all aquatic animal health laboratories, and especially those who are participating in the QA/QC recognition program of the FHS. Quality Management Training like this will likely be a requirement of the upcoming Tier 2 process, but this training would be of benefit to those just starting Tier 1, or those labs just contemplating entering the process in the future.

And for those of you sending in those samples to the lab? Field pathologists, inspectors and technicians should not feel left out! This workshop will give you training on the documentation required for the samples that you send, and insight in to the care that should be taken in processing them to give you confidence in the results.

For more information on the April session, contact Mark Fast at [mfast@upei.ca](mailto:mfast@upei.ca).  
For more information on the June session, contact Marcia House at [mhouse@nwifc.org](mailto:mhouse@nwifc.org)

**International Conference on Advances in Fish Health (ICFISH)**  
**Universiti Putra Malaysia**  
**April 4-6, 2017**

The Universiti Putra Malaysia (UPM), in collaboration with Malaysian Fisheries Society (MFS) and Dept. of Fisheries Malaysia (DOF) will co-organise this conference. More information can be found at the conference website: <http://www.icfish.my/>.

**North American Comparative Immunology Workshop**  
**North Carolina State University, Raleigh, NC**  
**June 12-15, 2017**

Welcome to the annual North American Comparative Immunology Workshops. These meetings are designed to foster collaborations among established investigators, postdoctoral fellows and graduate students interested in immune function in a wide range of model and non-model organisms.

As a field, comparative immunology is undergoing a transformation propelled by the emergence of new and innovative genomic technologies and the recognition of a wider biological role for immunity. The study of organismal models with simple morphology or exceptional biology provides unique insight into immunobiology, medicine and evolution and the potential for novel therapeutics.

At NACI, we highlight research in the evolution of immune systems, development of immune cells, the immune dialogue between host, microbiota, and pathogens, as well as ecological aspects of disease. Students are strongly encouraged to present their research. The workshops provide a venue for exciting interactions to generate new ideas and collaborations.

We look forward to seeing you at our 2017 NACI Workshop in Raleigh, North Carolina! For more information, please visit the website: <http://naciworkshop.com/>.

**2017 Western Fish Disease Workshop**  
**Clearwater Resort, Suquamish, WA**  
**June 20-22, 2017**

The 58<sup>th</sup> Western Fish Disease Workshop is being co-hosted by the NWIFC and WDFW and will be held at the Suquamish Clearwater Resort on the Kitsap Peninsula in Washington on June 20-22, 2017. We are now encouraging interested individuals to register, reserve their lodging, and sign up to give an oral presentation or poster. For details on the workshop and the CE session which will be on Quality Management System Training, we encourage all to go to our website at <http://wfdw.nwifc.org>.

Please open the PDF entitled, "Western Fish Disease Workshop Announcement" for full information on this great meeting.

**Fourth Australasian Scientific Conference on Aquatic Animal Health & Biosecurity**

**The Pullman Reef Hotel, Cairns, Queensland, Australia**  
**July 10-14, 2017**

The Fourth FRDC Australasian Scientific Conference on Aquatic Animal Health & Biosecurity will be held in Cairns, Queensland, Australia – gateway to the Great Barrier Reef and Daintree rainforest. The conference provides a forum for presentation of research, diagnostic, epidemiology, management and policy issues encompassing all areas of aquatic animal health and bio-security.

For more information on this conference, please see the word document, "4th Australasian Scientific Conference on Aquatic Animal Health & Biosecurity 2017."

**2017 Salmon Disease Workshop – Pre-announcement**  
**Corvallis, Oregon**  
**July 24 – August 4, 2017**

This workshop is designed for professionals working in the fish health field and will emphasize recent advances and developments in our understanding of salmonid diseases. The workshop is limited to 20 participants.

For more information, if you wish to receive graduate credit and to register, please contact Dr. Jerri Bartholomew at [bartholj@science.oregonstate.edu](mailto:bartholj@science.oregonstate.edu)



Information and links to registration will be posted on this website in the near future:  
<http://microbiology.science.oregonstate.edu/salmon-disease-workshop>

**Health and Colony Management of Laboratory Fish**  
**MDI Biological Laboratory**  
**August 13–19, 2017**

Health and Colony Management of Laboratory Fish is a short course to help colony managers, researchers and veterinarians monitor and maintain the health of a colony of aquatic organisms. This course is broad and is appropriate for technical staff, students, postdocs, investigators, as well as veterinarians and veterinary trainees.

The course consists of lecture, laboratory exercises and discussions. With a high faculty to student ratio, during the course there are ample opportunities for students to discuss unusual and/or unsolved diagnostic case experiences from their home laboratories as problem-solving exercises.

<https://mdibl.org/course/health-and-colony-management-of-laboratory-fish/>

**18<sup>th</sup> International Conference on Diseases of Fish and Shellfish**  
**Belfast, Northern Ireland**  
**September 4-8, 2017**

The 18<sup>th</sup> International Conference on Diseases of Fish and Shellfish in Belfast, Northern Ireland takes place from the 4<sup>th</sup> – 8<sup>th</sup> September. The Conference will include a full scientific programme including keynotes, oral presentations, poster sessions and workshop as well as a histopathology workshop that will take place on Sunday 3<sup>rd</sup> September. During your stay in Belfast you will experience a “Taste of Ireland” including a Civic Reception hosted by the Lord Mayor of Belfast and a gala dinner at the “World’s Leading Tourist Attraction” Titanic Belfast. We also invite you to participate in a study visit to the Fish Testing Station at Bushmills, located on the beautiful north coast of Ireland as well as a visit to the UNESCO site at the Giant’s Causeway or the Old Bushmills Distillery established in 1608.

We look forward to welcoming you to Belfast and Northern Ireland in September.

Please note Abstract submission is now open and will close on March 10<sup>th</sup> 2017. [Please click on the picture below to be directed the website.](#)





## **JOBS/GRADUATE ASSISTANTSHIPS**

### **Pathogen Surveillance and Discovery – AGREETT Faculty Position**

**University of Minnesota, College of Veterinary Medicine  
St. Paul, MN**

A new strategic university-wide emphasis on Global Systems Science, and university-wide investment into Agricultural Research, Education, Extension and Technology Transfer (AGREETT) program (<http://www.cfans.umn.edu/agreett>), has prompted the University of Minnesota, College of Veterinary Medicine (CVM) into hiring a cluster of at least six faculty members in the broad area of infectious disease across its three Departments. The Veterinary Population Medicine Department (VPM) invites applications for a tenured or tenure-track faculty position in **pathogen surveillance and discovery**, with emphasis on zoonotic/emerging infectious diseases. The appointment is expected to be at the rank of assistant, associate or professor positions. The final rank and terms of appointment will depend on the qualifications and experience of the selected candidate consistent with collegiate and University policies.

For full information on this position, please see the PDF entitled, “AGREETT Pathogen Surveillance Job Description”.

### **Associate Veterinarian and Microbiologist Positions**

**Pacific Seafood  
Nespelem, WA**

Pacific Seafood, located in Nespelem WA, is current seeking applicants for two positions: Associate Veterinarian and Microbiologist.

For more information on these positions, please see the documents entitled, “Associate Veterinarian REV122016” and “Microbiologist REV082016”.

### **Senior Fish Pathologist**

**Fish Health Laboratory of the Department of Fisheries  
South Perth, Western Australia**

The Department of Fisheries is seeking a Senior Fish Pathologist. The role of the Senior Fish Pathologist is to manage the development and delivery of a world class aquatic animal diagnostic pathology service and support the development and communication of scientific research. The position is also responsible for managing staff focused on the provision of diagnostic reports and advice to Departmental, Government and Industry stakeholders.

The full job description and application forms can be found at: [Senior Fish Pathologist](#) .

Although the application form lists Australia or New Zealand citizenship or permanent resident status as job qualifications, the State of Western Australia has authority to sponsor any successful applicant to achieve such status, upon hiring.

**Aquatic Animal Health Fellowship**  
**University of California, Davis**  
**Davis, CA**

This is a one-year program designed to train post-graduate veterinarians in the emerging field of aquatic animal health. Specifically, this program will train candidates to integrate expertise in aquatic animal medicine into the broader fields of animal, human, and ecosystem health, through experiences from aquaculture, fisheries, public aquaria, companion animal medicine, academia and research.

For more information on this fellowship, please open the PDF entitled, "Aquatic Animal Health Fellowship Recruitment (Jan 20 2017)".

**2 Graduate Student Assistantships in Aquatic Animal Health**  
**Auburn University, School of Fisheries**  
**Auburn, AL**

Auburn University is seeking applicants for two graduate student assistantships (PhD or MSc). The responsibilities include high research activity marked by scholarship in the field of specialization as well as committed and sustained contributions to the diagnosis of pathogens of inland, coastal, and marine fishes and invertebrates as part of the Southeast Cooperative Fish Parasite and Disease Project.

For more information, please visit this website:  
<https://fisheries.org/employment/jobs/graduate-research-assistant-phd-or-msc/>