



# Fish Health Section



The official link to the FHS website is: <https://units.fisheries.org/fhs/>

## FHS NEWS

### Call for Nominations

The Nominating and Balloting Committee is still soliciting nominations for Vice President, Secretary-Treasurer, the Nominating and Balloting Committee, Professional Standards Committee, Technical Standards Committee, and Policy/Position Development Committee.

Do you know someone who:

- 1) is a natural leader? (Vice President)
- 2) excels at maintaining financial accounts and budgets? (Secretary-Treasurer)
- 3) likes to contribute to policy decisions? (Position/Policy Development)
- 4) wants to be involved in the development of standard and reliable procedures for the detection of aquatic animal diseases? (Technical Standards)
- 5) appreciates helping others become more involved in the FHS? (Nominating and Balloting)
- 6) is keen to maintain a system that recognizes professional competence in the aquatic animal health field? (Professional Standards)

According to former AFS FHS Committee Members:

“Serving on the Technical Standards Committee has enabled me to better appreciate and understand the intricacies and ramifications of different diagnostic and inspection methods while connecting with fish health professionals from a wide range of agencies and backgrounds.”

“Serving on the N&B committee gave the opportunity to interact with other fish health professionals in meaningful way that I really appreciated.”

Nominees must be Fish Health Section members in good standing. Additionally, nominees for the Professional Standards Committee must be a Certified Aquatic Animal Health Inspector, a Certified Fish Pathologist, or a Doctor of Veterinary Medicine. The nomination period is currently open and the deadline has been extended to March 30.

Please send all nominations to Carolyn Richards, [richcaro@oregonstate.edu](mailto:richcaro@oregonstate.edu).

## Update from the QA/QC committee regarding the upcoming application period

The Quality Assurance committee of the FHS is announcing the application period for Tier 1 (prequalification) will be opening soon for 2018. Applications will be accepted anytime between January 1 and March 31, 2018. An updated application is available on the Fish Health Section website, along with further instructions.

The Tier 2 (recognition) program is still under development, and the committee is hoping to open the application period by mid-summer.

## STUDENTS AND EARLY CAREER MEMBERS

### PhD Opportunity – Zebrafish Health

**State University of New York College of Environmental Science and Forestry  
Syracuse, NY**

The zebrafish disease lab at the State University of New York College of Environmental Science and Forestry (ESF) (<http://www.esf.edu/>) is seeking PhD applicants to investigate controlling mycobacteriosis in zebrafish, in a position supported by a grant from the National Institutes of Health. The Whipps lab (<http://whippslab.weebly.com/>) studies the impacts and control of diseases in zebrafish, an important laboratory animal model. This position is ideal for candidate with experience in fish diseases, or candidates from other fields looking to use fish as models for disease.

Applicants should be self-motivated, able to work independently or in groups, and have a strong scientific curiosity. The successful applicant will; 1) Evaluate antibiotic treatment of fish, 2) test differences in infection susceptibility between zebrafish lines, and 3) develop (or help develop) diagnostic methods. The student will also develop their own question(s) to investigate. Previous experience with care of zebrafish, or other fish species, is ideal as the successful applicant will care for their own experimental fish, as well as contribute to routine care of all zebrafish.

**Required Qualifications:** B.Sc. in Biology, Microbiology, or related areas. Experience with PCR, microbiology, fish husbandry or related areas. Strong organization and communication skills. Evidence of productive scientific communication (e.g., conference presentations, peer reviewed papers).

**Preferred Qualifications:** A prior advanced degree (MS or DVM).

**Term of Position:** We are seeking an applicant to begin August 2018 and have support for 3 years (additional years may be supported through any combination of additional grant funding, graduate teaching assistantships, and other departmental support). Possibility of Summer start as technician.

**Application Deadline:** Although applications will be accepted until the position is filled, candidates should submit their application by **April 20, 2018** to assure optimal consideration. Send the following to Dr. Chris Whipps, [cwhipps@esf.edu](mailto:cwhipps@esf.edu) : CV, statement of research goals, copy of transcripts, copy of GRE scores. The email should contain the subject line "Zebrafish Health PhD". The successful applicant will subsequently need to apply to the graduate program at SUNY-ESF.

## **MEETINGS, WORKSHOPS AND COURSES**

### **43<sup>rd</sup> Annual Eastern Fish Health Workshop Chattanooga, Tennessee April 9 to 13, 2018**

Coming up soon the 43<sup>rd</sup> Annual Eastern Fish Health Workshop at the Chattanooga Marriott Downtown hotel in Chattanooga, Tennessee. Meeting registration begins at our annual reception on Monday, April 9 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 (April 10-12), followed by a full-day continuing education course on Friday, April 13. We encourage contributions for oral presentation of case reports and research investigations that sessions are pertinent to animal health within marine and freshwater environments. Important Deadlines:

Abstracts Due By: 28 February 2018

Registration Due By (postmarked): 28 February 2018 (to avoid the late fee)

PowerPoints Due: **27 March 2018**

Hotel Reservation Due By: 8 March 2018.

### **24th Annual Aquaculture Drug Approval Coordination Workshop and the 59<sup>th</sup> Western Fish Disease Workshop Bozeman, Montana June 19-22, 2018**



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papers**

The 24<sup>th</sup> Annual USFWS Aquaculture Drug Approval Coordination Workshop and the 59<sup>th</sup> Annual Western Fish Disease Workshop will be held together and jointly hosted the week of June 18<sup>th</sup> at the Best Western Gran Tree Inn in Bozeman, Montana.

Bozeman, Montana has grown to be one of the leading destinations for a western Rocky Mountain vacation, featuring attractions like museums, mountain ranges and wilderness areas, collegiate athletics, unique & historic district, and Yellowstone National Park.

**Workshop and CE Session:** The two day **Western Fish Disease Workshop** will cover all aspects of the health of wild and cultured fish and shellfish and will be preceded by a one day **Aquatic Animal Drug Approval Coordination Workshop** session on Tuesday, June 19<sup>th</sup>. Following the conclusion of the Western Fish Disease Workshop a continuing education session on **Bacterial Kidney Disease Management** will occur. Details for both the workshops and CE session are available at the meeting website at [https://www.fws.gov/fisheries/AADAP/aquaculture\\_workshop.html](https://www.fws.gov/fisheries/AADAP/aquaculture_workshop.html).

Now is the time to register for the meeting, sign up to give a paper or poster, and reserve your lodging. Be forewarned that June is a popular tourist time in Bozeman so we encourage you to book your lodging early.

**Call for Papers:** Oral and poster presentations are being solicited on all aspects of health of wild and cultured fish and shellfish including diseases, pathogens, vaccine development, test methods, health management, intriguing case histories, and submissions for the special session. Individuals interested in presenting a paper or poster at the workshop are requested to submit the following: (a) the title of their presentation, (b) whether it will be presented orally or as a poster, and (c) any equipment needs. **Titles should be submitted no later than May 1, 2018.** The planning committee will use this information to begin developing an agenda for the meeting. Formal abstracts will be required for each oral presentation and poster. **The deadline for receipt of abstracts is May 15, 2018.** Our web site has guidelines for formatting your abstract. If you have questions pertaining to oral or poster presentations for the AADAP workshop, please contact Molly Bowman (molly\_bowman@fws.gov). If you have questions (pertaining to oral or poster presentations for the WFDW workshop please contact Ken Staigmiller (kstaigmiller@mt.gov).

Please see the attached flyer for more information.

**Health and Colony Management of Laboratory Fish short course**  
**Salisbury Cove, Maine**  
**August 12-17, 2018**

The MDI Biological Laboratory is pleased to present the short course Health and Colony Management of Laboratory Fish in our state-of-the-art training laboratory, the Maine Center for Biomedical Innovation.

This one-week short course is intended to help colony managers, researchers, and veterinarians monitor and maintain the health of a colony of aquatic organisms. The course consists of lectures, laboratory exercises with a high faculty to student ratio, and discussions. 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.

This course is approved by the AAVSB RACE (American Association of Veterinary State Boards Registry of Approved Continuing Education) to offer a total of 35 CE (Continuing Education) Credits to veterinarians and veterinary technicians.

More information can be found in the attached course listing and online at the course webpage: <https://mdibl.org/course/health-and-colony-management-of-laboratory-fish-2018/>

**8<sup>th</sup> International Symposium on Aquatic Animal Health**  
**Charlottetown, Prince Edward Island, Canada**  
**September 2-6, 2018**



Organizers of the **8th International Symposium on Aquatic Animal Health** have opened conference registration and placed a call seeking abstract submissions for oral and poster presentations. Prominent fish health researchers have been recruited for topic specific forums and scientific sessions are filling up fast. Potential presenters are encouraged to submit abstracts promptly to ensure a place in the program. Moreover, the deadline for Student Travel Awards is fast approaching. Please encourage your students to apply to take advantage of this unique opportunity to participate in one of the preeminent International Aquatic Animal Health Symposiums.

The 2018 symposium marks the thirtieth anniversary of the ISAAH, which will be held September 2 – 6, 2018 in Prince Edward Island, Canada. The ISAAH meets every four years and typically attracts 300–400 fish health professionals from around the world. This will be only the second time the Conference has been hosted in Canada; the inaugural conference took place in Vancouver in 1988.

Delegates attending ISAAH 2018 will have the opportunity to join other aquatic health professionals from around the world for scientific workshops, business meetings, keynote and research presentations. The theme of this year's symposium is "Integrating Biotechnology in the Advancement of Aquatic Animal Health".

Early Bird registration rates are available now and there are limited spaces for registered delegates to attend the pre-conference scientific workshops. As such, participants are encouraged to sign up as soon as possible. Registration and conference information can be found here: <https://isaah2018.com/>

**Important deadlines:**

Student Travel Awards Application Deadline: March 31, 2018

Abstract Submission Deadline: May 31, 2018

Early Bird Registration Deadline: July 13, 2018

Accommodations Booking Deadline: August 3, 2018

Workshop Registration Deadline: August 3, 2018

Oral PowerPoint Submission Deadline: 1 Day Prior to Session

On behalf of Dave, Esteban and the rest of the organizing committee, we look forward to seeing you in PEI in September!

Matt

Program Committee Chair, Matt Griffin: [griffin@cvm.msstate.edu](mailto:griffin@cvm.msstate.edu)

Local Organizing Chair, Dave Groman: [groman@upei.ca](mailto:groman@upei.ca)

Fish Health Section President, Esteban Soto Martinez: [sotomartinez@ucdavis.edu](mailto:sotomartinez@ucdavis.edu)

## **JOBS/GRADUATE ASSISTANTSHIPS**

### **Associate/Assistant Professor (Aquatic Animal Health) Position**

**Department of Infectious Diseases and Public Health**

**College of Veterinary Medicine and Life Sciences**

**City University of Hong Kong**

The new College of Veterinary Medicine and Life Sciences at City University of Hong Kong in collaboration with Cornell University's College of Veterinary Medicine is assembling an outstanding group of international academics to undertake teaching and research within the Department of Infectious Diseases and Public Health. The Department is rapidly developing as an international research-oriented centre to support veterinary training and research in Hong Kong and the region. It is well positioned to provide a strong link between the preclinical veterinary sciences and applied (clinical) veterinary medicine. In another dimension it focuses on One Health, an area spanning the health of animals, humans and the environment. The Department plays a key role in teaching students in the Bachelor of Veterinary Medicine programme and also in the

MSc in Aquatic Production and Veterinary Health, amongst other related activities, such as enabling postgraduate research opportunities. Departmental staff members undertake teaching, research and diagnostic service across their areas of specialty.

### **Duties**

The innovative Bachelor of Veterinary Medicine curriculum at City U. includes a number of courses on Aquatic Animal Medicine and Aquaculture. The appointee is expected to contribute to the further development and implementation of the professional veterinary curriculum (Bachelor and Master's levels) in the area of aquatic animal health, foster excellence in veterinary education and research, teach and manage undergraduate and postgraduate courses, develop new research directions and maintain robust research programmes, carry out administrative work and other duties to facilitate the development of the Department and the College as a whole.

### **Requirements**

A PhD in the field of aquatic animal health, preferably with expertise in veterinary immunology or nutrition, and working experience with warm water species/in the Asian region. A degree in veterinary medicine registerable in Hong Kong is an important asset. Candidates should have demonstrable evidence of research success (including the ability to obtain research funding), strong interpersonal skills to work collaboratively as a member of an academic team, and be able to deliver courses in English. Knowledge of Mandarin and/or Cantonese would be an advantage.

### **Salary and Conditions of Service**

Remuneration package will be driven by market competitiveness and individual performance. Excellent fringe benefits include gratuity, leave, medical and dental schemes, and relocation assistance (where applicable). Initial appointment will be made on a fixed-term contract.

Further information on this position and the University is available at <http://www.cityu.edu.hk/hro/en/job/current/academic.asp?ref=uac-e269> and <http://www.cityu.edu.hk>, or from the Human Resources Office, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong [Email : [hrojob@cityu.edu.hk](mailto:hrojob@cityu.edu.hk); Fax : (852) 2788 1154 or (852) 3442 0311]. Also see the listing attached to this FHS Update email.

## **RESOURCES/NEWS**

### **Aquatic Animal Drug Approval Partnership (AADAP) program Update: Feb. 2018**

**Jim Bowker Retires** - Jim Bowker, Research Program Manager and charter member of the Aquatic Animal Drug Approval Partnership (AADAP) program, has announced his retirement after more than 23 years of "living the dream" with FWS/AADAP in Bozeman, Montana. Jim retired on March 3, 2018, and it goes without saying that Jim's energy,

enthusiasm, and expertise will be sorely missed not only by AADAP, but also by the countless partner-groups with which Jim and AADAP have worked with over the years. In Jim's own words "I've been blessed to work in a program that has made a difference and stocked the fish medicine chest with U. S. Food and Drug Administration (USFDA)-approved medicines. The work we've done has helped fish culturists, fish health biologists involved in aquaculture, fisheries managers, and researchers to more effectively do their jobs. It's been a privilege to have met so many committed and conscientious people along my professional journey, many of whom I call friends." Please join with us in wishing Jim "All the Best" in the coming years.

**Research Team Infographic** - The AADAP staff has embraced various methods to disseminate information to a broad target audience. Infographics have become more common because they are brief, focus on a handful of salient points, and tend to be visually appealing. Working with the USFWS Fish and Aquatic Conservation Communications Branch, we created and are proud to unveil our [new AADAP Research Team Infographic](#).

## **Western Fisheries Science News: January 2018 - Issue 6.1**

### **Fish Health Highlights....**

#### **Researching Pacific Herring in Alaska's Prince William Sound**

On March 24, 1989, the *Exxon Valdez*—an oil tanker bound for Long Beach, California— struck Bligh Reef and spilled 10.8 million gallons of crude oil into Prince William Sound, Alaska. Timing of the spill coincided with the annual immigration of adult Pacific herring into the region, which were staging to spawn in areas that became inundated with oil. Herring spawned as eggs during the spill largely failed to recruit into the adult population, with 1993 representing the smallest recruitment event on record. Further, the spawning biomass underwent a massive decline (from 120,000 tons in 1989 to 30,000 tons in 1993), resulting in severe curtailment of commercial fishing. Unfortunately, the herring stock never recovered after this catastrophic event, with fewer than 10,000 tons returning in 2017.

Pacific herring play an important role in marine ecosystems of the North Pacific Ocean, providing an essential source of food for larger fish, seabirds, and marine mammals. Herring are also economically important, commercially fished for food and bait. Maintaining a healthy herring population is critical for ensuring a balanced marine ecosystem. Owing to the failure of this stock to rebound after more than 25 years, and the ecological importance of Pacific herring, the *Exxon Valdez* Oil Spill Trustee Council initiated an ambitious multidisciplinary effort to restore the injured herring resources. A team of scientists, including a representative from USGS (Western Fisheries Research Center's (WFRC's) Marrowstone Marine Field Station (MMFS), was charged with designing a 20-year Integrated Herring Restoration Plan (IHRP) to better understand



chemical, physical, and biological processes that control herring abundance and recruitment. The Plan extends across scientific disciplines and institutional boundaries to include scientific partners from numerous federal departments and agencies, universities, and non-profit institutions throughout the United States and Canada.

In response to the goals and objectives identified in the IHRP, a Herring Research and Monitoring Program (HRMP) was funded by the *Exxon Valdez* Oil Spill Trustee Council. A Herring Disease Program is a major component of this HRMP and is led by researchers at the WFRC's MMFS. Their research has been investigating the role of disease in herring populations, including the effect of oil from the spill on the immune system of herring and their subsequent resistance to endemic pathogens. Because of the unique facility attributes at the MMFS, scientists are able to safely and responsibly perform experiments related to disease to better understand population threats and declines.

See the newsletter for the rest of this story.

### **Publications...**

**Describes Isolation and Characterization of a Virus in Salmon:** Makhsous, N., N.L. Jensen, K.H. Haman, W.N. Batts, K.R. Jerome, J.R. Winton, and A.L. Greninger. 2017. Isolation and characterization of the fall Chinook aquareovirus. *Viol. J.* 14: 170. DOI: 10.1186/s12985-017-0839-9.

**Explores Virus in Northern Pike Fry:** Getchell, R.G., E.R. Cornwell, S. Bogdanowicz, J. Andrés, W.N. Batts, G. Kurath, R. Breyta, J.G. Choi, J.M. Farrell, and P.R. Bowser. 2017. Complete sequences of 4 viral hemorrhagic septicemia virus IVb isolates and their virulence in northern pike fry. *Dis. Aquat. Org.* 126(3): 211-227. DOI: 10.3354/dao03171

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