
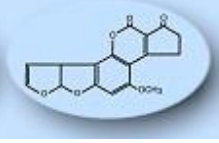

Fish Health Section


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

FHS NEWS

REMINDER!! - **please bookmark the new FHS website!** We still have not been able to take down the old FHS website which is outdated and inaccurate.

Quality Assurance Committee Announces Tier 2 Program. The Committee for Quality Assurance for the Fish Health Section (FHS) has announced the initiation of the Tier 2 QA Program. This program has been in development for over two years. By necessity, it is a major step upward from the Tier 1 program, is somewhat complex and will likely take a significant amount of time and effort to achieve.

This program is the second level of the quality assurance process and is entitled “Tier II – Recognition”. There are several goals for this next level, which raises the bar even further from Tier 1. Requirements include verification of the accomplishments asserted in Tier One, in areas such as training, safety and biosecurity as well as laboratory proficiency. Completion of Tier 2 will help prepare a laboratory for potential entry into a laboratory network or actual accreditation with an existing program. To accomplish these goals, laboratories will need to achieve an integrated quality management system.

Submission date for each calendar year will be **June 30.** The application will be reviewed and approved or denied within 6 months of completing and submitting all required materials

Applicants should thoroughly read through the application on the FHS website as well as the accompanying guideline document and appendices, which will be posted on the FHS website at https://units.fisheries.org/fhs/certification/fish-health-laboratory-qaqc-program/

MEETINGS, WORKSHOPS AND COURSES

2019 FHS Meeting and Western Fish Disease Workshop
June 17-20, 2019
Ogden, Utah, USA

There is still time for LATE registration. We will continue to welcome registrants up until the event!

The 2019 joint AFS Fish Health Section Annual Meeting and the 60th Western Fish Disease Workshop will be held at the Hampton Inn and Eccles Conference Center

located in Ogden, Utah. A welcoming social with light appetizers and cash bar will be held on the evening of Monday June 17th. The first day's general session will begin on Tuesday morning and will end with an afternoon poster session. The general session will continue through Wednesday afternoon and will end with the banquet that evening. A full day of Continuing Education designed around the complexity of flavobacteria and the importance of integrated fish health management will be held on Thursday June 20th.

- The first night's social and interesting case study session will be held at the Union Grill beginning at 5pm. The Grill is just a short walk from the conference center & hotel. The cash bar will be open and appetizers will be provided. Don't miss this fun opportunity to mingle with friends and kick the meeting week off right! If you are interested in sharing a peculiar case, please fill out a submission form (see below, title only needed for this session - no abstracts) by May 20th.
- Make sure to bring your hiking boots and/or your fishing gear! We are planning an organized hiking event for the evening Tuesday June 18th. And there are plenty of fishing opportunities nearby! Contact Wade Cavender (wadecavender@utah.gov) for some tips!
- Check out the tentative schedule, attached below!
- We plan on having a jobs board displayed during the meeting, if you have any positions to distribute bring them along or email them to (CathrynSmith@utah.gov).
- FYI – The CE session has officially been RACE approved for 6.5 credit hours.
- We are holding a student & young professional social on Tuesday June 18th. This is a great opportunity for networking and meeting some great people in our field!

We are going green this year! We will not be providing a hard copy of meeting booklets. Instead, a preloaded flash drive containing meeting materials and abstracts will be distributed to all registrants. A hard copy of scheduled presentations and poster titles will be provided upon arrival and an electronic PDF version of the booklet will be emailed to all registrants a week prior to the meeting.

Facebook: Check us out and like us on Facebook for quick updates!

- Make sure to take a look at and plan some fun recreational activities while visiting Ogden!

Meeting Registration:

Late Registration, after **May 20th**	$320
Continuing Education Session	$70
Additional Banquet Ticket	$45
Additional Shirt (one is included in general registration cost)	$20

Visit this link to register online using TicketBud

- If you are a retired professional interested in attending, please contact wadecavender@utah.gov for reduced cost opportunities!

Alternatively, you may fill out a registration form (see form below) and send it with a check, made out to AFS Fish Health Section, to Cathryn Smith, 1465 West 200 North, Logan UT 84321.

Continuing Education: A full day of Continuing Education (RACE approval and number of CE credits pending) will be held on Thursday June 20th. This session has been designed to provide a broad overview of flavobacteria and the overall benefits associated with implementing an integrated fish health management program for many fish pathogens. The program will begin with an overview of the genus Flavobacterium and will narrow its focus to cold water (*Flavobacterium psychrophilum*) and cool/warm water (*Flavobacterium columnare*) fish pathogens. The morning's session will end with a summary of the development and use of resistant fish strains to manage flavobacterial diseases. The afternoon session will then transition into case examples of integrated fish health management programs across the United States. The day will end with a discussion of bridging the gap between fish health professionals, hatchery employees, administrative personnel, research teams and other partners to build a better collaborative fish health program.

Lodging:

Hotel room deadline May 31, 2019

A block of rooms is being held at the Hampton Inn and Suites and are available for $154/night. Visit this link for room reservations. The hotel room deadline is **May 31, 2019**. **If all rooms are reserved prior to the May 31 deadline, please contact Wade Cavender (435-720-2784) to discuss other accommodations.**

If you are looking for a roommate for the conference, please feel free to post on our Facebook page and connect with others there!

Location: **Hampton Inn and Suites and Ogden Eccles Conference Center, Ogden, Utah**
The Hampton Inn is conveniently located next door to the Ogden Eccles Conference Center.
Address: 2401 Washington Blvd, Ogden UT 84401
Phone: 801-394-9400
Website: http://www.hamptoninnogden.com/
Rooms will be held under "Western Fish Disease Workshop"
Room block cut off date: May 31, 2019

Directions/Travel: Ogden, Utah is approximately one hour's drive away from the Salt Lake International Airport. The following recommendations for public transportation or the Express Shuttle offer two convenient travel options. Please view the "Visit Ogden" website https://www.visitogden.com/trip-planner/getting-here/) to view all other travel options.

Two easy and recommended options include:

Option #1: Public Transportation - This option requires a transfer between two train lines, the TRAX and the FrontRunner.

- The TRAX train operates from 5:38 am to 11:23 pm every week day (runs every 15 mins).
- TRAX tickets can be purchased ($2.50 one-way) at an automated ticket booth as you exit the airport at Terminal 1.
- Take the TRAX Green Line 704 (outside Terminal 1 at the SLC International Airport) and exit the train at North Temple Station (5th stop after boarding).
- Walk down the stairs to purchase tickets ($5.50 one-way) at the automated ticket booth and board the Northbound 750 FrontRunner (runs from 4:31 am to 11:31 pm every 30 mins).
- Exit the train at Ogden Station (6th stop after boarding).
- The Hampton Inn and Suites is located ~0.7 miles from Ogden Station.
- Travelers can take the short final walk or a quick Uber ride to the hotel. For more information and schedules, please visit the TRAX Green Line and FrontRunner websites.

Option #2: Express Shuttle - A reservation for a shuttle ($38.00 one-way) can be made in advance through the Express Shuttle website.

- The Express Shuttle offers door to door service that includes a pick-up from the Salt Lake Airport and drop-off at the Hampton Inn and Suites located in Ogden.
- Visit the Express Shuttle website (https://expressshuttleutah.com/) to conveniently book a round-trip prior to arriving at the Salt Lake Airport.
- When you arrive at the Salt Lake Airport, personnel at the Express Shuttle kiosk (located near the “Ground Transportation Desk”) will guide you to your final pick-up location.

We look forward to seeing all of you at the meeting in June. For additional information please contact: Wade Cavender (435-720-2784) or Cristi Swan (435-760-4300).

2019 Salmon Disease Workshop

July 8-19, 2019
Corvallis, Oregon

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 on a first come, first serve basis.

Topics:

- Current immunological and molecular techniques
- Sampling for pathogens in wild populations
- New and emerging fish pathogens
- Cell culture techniques, including maintenance of cultures and viral identification

- Histopathology associated with salmonid diseases
- Current status of important viral, bacterial, and parasitic pathogens
- Salmonid disease treatment practices in Pacific Northwest hatcheries
- Epidemiology

Information and links to registration are posted on this website:
http://microbiology.science.oregonstate.edu/salmon-disease-workshop

For more information see the attached flyer or contact Dr. Jerri Bartholomew at bartholj@science.oregonstate.edu

Health and Colony Management of Laboratory Fish

August 11-16, 2019
MDI Biological Laboratory
Bar Harbor, Maine

This is a short course for veterinarians, technicians, trainees, principal investigators, and core managers who utilize or plan to utilize fish models in laboratory research. The course is directed by Michael Kent, Ph.D., College of Veterinary Medicine, Oregon State University. Course faculty include: Rodman G. Getchell, Ph.D., Cornell College of Veterinary Medicine; Christian Lawrence, M.S., Children's Hospital Boston; and Jan Spitsbergen, DVM, Ph.D., DACVP, Department of Microbiology, Oregon State University.

The course is offered at the MDI Biological Laboratory, located in Bar Harbor, Maine on Mount Desert Island, the home of Acadia National Park. It is intended to help laboratory technicians, researchers, and veterinarians monitor and maintain the health of a colony of aquatic organisms, focusing on zebrafish. This course is appropriate for veterinarians and veterinary trainees, as well as technical staff, students, postdocs, and investigators.

The course consists of lectures, laboratory exercises with a high faculty to student ratio, and discussion. 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 now approved by the AAVSB RACE (American Association of Veterinary State Boards Registry of Approved Continuing Education) to offer a total of *33 CE* (Continuing Education) Credits to veterinarians and veterinary technicians. RACE approval is for the subject matter categories of both category 1 (Scientific) and 3 (Non-Scientific-Practice Management/Professional Development).

For more information see the course webpage: https://mdibl.org/course/health-and-colony-management-of-laboratory-fish-2019/, or the flyer attached to the email for this newsletter.

Or visit the MDI Biological Laboratory course page <https://mdibl.org/education/courses/> or email the Education Office at education@mdibl.org.

Workshop: Keepin' It Clean: Biosecurity & Biosafety for Biologists and Scientists

Joint Conference of The Wildlife Society and The American Fisheries Society
September 29 - October 3, 2019 (Half day during conference)
Reno, Nevada

The Fish Health Section of AFS and the Wildlife Diseases Working Group of TWS are jointly offering a workshop at this year's joint meeting in Reno, NV. Our workshop is titled "Keepin' It Clean: Biosecurity & Biosafety for Biologists and Scientists". The workshop description is attached to this newsletter. Its purpose is to provide training in the basic principles and practices of biosecurity and biosafety that biologists can use to protect their health, and fish and wildlife health, and reduce the risk of infectious disease transmission during the course of management and research activities.

The workshop organizers would like to invite members who are interested in, or have expertise in this topic to participate in the delivery of this workshop. We also want to solicit member input on a) any specific topics you think should be included, b) experiences you've had in biosecurity or biosafety that we might use as case studies/lessons learned for the workshop, and c) any best practices/protocols you would be willing to share that we could adapt and provide to attendees. If you would like to participate in delivering the workshop or share experiences or provide other input for the workshop, please get in touch with Nora Hickey (nhickey@nwifc.org) and Ben LaFrentz (benjamin.lafrentz@ars.usda.gov).

JOBS/GRADUATE ASSISTANTSHIPS

Postdoctoral Researcher

Louisiana State University
School of Veterinary Medicine
Department of Pathobiological Sciences
Baton Rouge, Louisiana

External applicant link: https://lsu.wd1.myworkdayjobs.com/LSU/job/LSU---Baton-Rouge/Postdoctoral-Researcher_R00033983

To conduct research on the important bacterial pathogen of the channel catfish, *Edwardsiella Ictaluri*.

40% - Conduct studies to evaluate the virulence and pathogenesis of intracellular bacterial pathogens of aquatic species, including the role of Type III, Type IV, and Type VI secretory systems.
35% - Conduct studies to evaluate the innate and humoral immune response of aquatic species to intracellular bacterial/viral pathogens.
15% - Data analysis/manuscript writing
5% - Animal Care
5% - Laboratory management. Other duties as assigned.

Minimum Qualifications:
Ph.D. in microbiology, immunology, cell biology or a closely related life sciences field.

Special Instructions:
An offer of employment is contingent on a satisfactory pre-employment background check.

Salary and rank are commensurate with qualifications and experience.

A copy of your transcript(s) may be attached to your application (if available). However, original transcripts are required prior to hire.

Please provide three professional references including name, title, phone number and e-mail address.

Posting Date:
May 9, 2019

Closing Date (Open Until Filled if No Date Specified):

Additional Position Information:

Background Check - An offer of employment is contingent on a satisfactory pre-employment background check.

Benefits - LSU offers outstanding benefits to eligible employees and their dependents including health, life, dental, and vision insurance; flexible spending accounts; retirement options; various leave options; paid holidays; wellness benefits; tuition exemption for qualified positions; training and development opportunities; employee discounts; and more!

Essential Position (Y/N):
No

EEO Statement:
LSU is committed to diversity and is an equal opportunity / equal access employer.

HCM Contact Information:
Questions or concerns can be directed to the LSU Human Resources Management Office at 225-578-8200 or emailed HR@lsu.edu

For more information see the flyer attached to the email for this newsletter.

Aquatic veterinary pathologist

CSIRO Aquaculture
Agriculture & Food Business Unit
Australia: Hobart, Tasmania; Brisbane, Queensland; or Bribe Island, Queensland

Link – Job Listing Detail

The Opportunity
Work in a high quality research environment on aquatic animal health team
Reduce the impact of disease to aquaculture species through multidisciplinary approaches.

Join CSIRO's internationally recognised Agriculture & Food Business Unit
The aquatic animal health team is a cornerstone of CSIRO's Aquaculture Program. Focused on the diagnosis, control and mitigation of diseases in Aquaculture, our multidisciplinary team works hand-in-hand with industry partners to provide targeted and relevant R&D. Working across a range of aquaculture species including finfish, crustaceans and shellfish our team aims to reduce the impact of disease through multidisciplinary approaches.

The role of the Aquatic veterinary pathologist will be to apply specialist knowledge in aquatic animal health, namely diagnostic pathology and disease investigations, to contribute to, initiate and lead client focussed research projects which aim to improve the health and welfare of aquaculture species. This will be done within national and international settings and will integrate with complimentary work in genetics, aquaculture nutrition, environmental management and socio-economics.

Your duties will include
Contribute to complex projects, providing scientific input to multidisciplinary teams across multiple sites, ensuring project delivery on time and to budget.

Develop and lead a pipeline of new research projects aligned to the Research Program's objectives, attract and secure external funding (Industry or Government).

Establish and maintain effective relationships with key stakeholders to build an effective network for collaboration, develop and progress challenging but realistic research plans, and identify pathways to help deliver science impact.

Negotiate, plan and develop the resources, infrastructure and capability required to undertake research experiments.

Maintain a reputation for excellent research contribution across the science community via the production of various media, including high quality scientific papers suitable for publication in quality journals and for presentation at national and international conferences.

Contribute to the effective functioning of the wider research program to facilitate the delivery of CSIRO's organisational objectives.

Location: Hobart, TAS, Brisbane, QLD or Bribe Island, QLD
Salary: $113K to $132K plus up to 15.4% Superannuation
Tenure: Indefinite
Reference: 61549

To be successful you will need
A degree in Veterinary Science (BVSc) and/or PhD focused on aquatic pathology, with previous experience working with aquatic animals including finfish, crustaceans, and/or shellfish within either a research or commercial environment.

Demonstrated experience in aquatic animal health including disease investigations and diagnostic pathology (including histopathology).

A commitment to research with a proven ability to undertake multidisciplinary investigations of disease processes.

A sound knowledge of current and emerging diseases affecting major aquaculture species in Australia and abroad.

Demonstrated record of scientific creativity and innovation with an ability to articulate clear goals and inspire others to achieve those goals (create the science vision).

Proven ability to establish and maintain effective networks with government, industry and research institutions, particularly within the aquaculture sector.

For details about who to contact and for more information please view Position Description

CSIRO's Commitment to Diversity
We're working hard to recruit diverse people and ensure all our people feel supported to do their best work and empowered to let their ideas flourish.

Flexible Working Arrangements
We work flexibly at CSIRO, offering a range of options for how, when and where you work. Talk to us about how this role could be flexible for you. Balance

About CSIRO
At CSIRO you can be part of helping to solve big, complex problems that make a real difference to our future. We spark off each other, learn from each other, trust each other and collaborate to achieve more than we could individually in a supportive, rewarding, inclusive and truly flexible environment.

Apply Online
To apply online, please provide a CV and cover letter that outlines how your experience meets the selection criteria for this position.

Applications Close
Friday 28th June, 2019

RESOURCES/NEWS

Western Fisheries Research Center (WFRC), Western Fisheries Science News, May 2019, Issue 7.5

WFRC scientists conduct research on aquatic animal health; restoration ecology; and drivers of ecosystem change at four different field stations throughout Washington and Oregon.

In this issue . . .

FEATURE STORY

Interactive Data Visualization Tool Allows Us to Explore Fish Use of Eelgrass Habitat in Puget Sound

To learn more about the tool or study, check out the website at https://webapps.usgs.gov/pugetsound/eelgrass

PUBLICATIONS

Kock, T.J., S.D. Evans, B.K. Ekstrom, and A.C. Hansen. 2019. Adult sockeye salmon (*Oncorhynchus nerka*) behavior and movement from Roza Dam to Cle Elum Dam, Washington, 2018: U.S. Geological Survey Open-File Report 2019-1053, 8 p. DOI: https://doi.org/10.3133/ofr20191053

Liedtke, T.L., D.J. Didricksen, L.K. Weiland, J.A. Ragala, and R. Lampman. 2019. Effectiveness of fish screens in protecting lamprey (*Entosphenus* and *Lampetra* spp.) Ammocoetes – Pilot testing of variable screen angle. U.S. Geological Survey Open-File Report 2019-1044. DOI: https://doi.org/10.3133/ofr20191044.

To subscribe (or unsubscribe) to the “Western Fisheries Science News” mailing list, please do so by contacting Debra Becker, mailto:dabecker@usgs.gov

Read online: https://www.usgs.gov/centers/wfrc/news