



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 - please bookmark the new FHS website!** We still have not been able to take down the old FHS website which is outdated and inaccurate.

### AFS Fish Health Section Facebook Site

The FHS now has a Facebook Page (<https://facebook.com/FishHealthSectionAFS>). Please 'Like' and follow us! Social media is expanding in the scientific arena, and we hope to expand our use for promoting meetings, sharing information, etc. If you have any questions, please feel free to contact Ben LaFrentz ([benjamin.lafrentz@usda.gov](mailto:benjamin.lafrentz@usda.gov)).

### Volunteer Needed for AFS Special Committee on Standard Methods

Jesse Trushenski, past AFS President, recently contacted me concerning having a FHS member serve on a special committee through the parent society. Scott Bonar, current AFS President, has included the development and promotion of standard methods as part of his plan of work as AFS President. He has appointed Jesse as chair of a special committee to develop a process by which standard methods should be proposed, vetted, and approved by the Society.

Jesse indicated the following concerning the committee:

As for the goals of the committee, I would consider it to be an exploratory committee charged with identifying the pros and cons of establishing a formal process for proposing, vetting, and approving (or not) methods at the Society level. We will examine how other organizations go about this and propose a structure/process, i.e., how are methods proposed for consideration, who evaluates them and recommends approval/disapproval, and who ultimately makes the approval decision. There are plenty of organizations that do this sort of thing, and they all have a similar process. Our role is to identify what process might work for AFS and to determine what the consequences, positive or negative, of establishing a formal standardization procedure might be. I am trying to make sure we have the right people on the committee to provide all the necessary perspectives. For example, I can foresee some implications for publishing in AFS journals (i.e., does it become harder to publish in our journals if you use non-standard methods?), so I've asked for a representative from the

Publications Overview Committee. Given that the FHS already does this sort of this with the Blue Book, I think it would be helpful to have those views represented on the committee. So,

ideally, the name you provide me should be someone who's been involved with the Blue Book revisions and whatnot, though the QA/QC group would have valuable insights, too.

Jesse doesn't believe the committee work being particularly onerous, just a few conference calls and a bit of homework to evaluate how other organizations approach method validation and endorsement. The important part is that the AFS establishes a process that is fair, transparent, and rigorous. Further, the special committee won't be vetting any methods themselves, but rather defining who will be doing the vetting and how they will do so in the future.

I would greatly appreciate it if you would consider serving on this special committee. Also I would appreciate it if you have any suggestions for someone who would have the experience with the Blue Book and potential interest in serving. If you are interested or have any questions, please contact me at <mailto:benjamin.lafrentz@usda.gov>.

Ben LaFrentz

### **Recruiting and Student Involvement Committee**

A new student profile has been posted to the Student and Early Career members page. You can read more about Mary Belle Offutt at <https://afs-fhs-students.blogspot.com/2020/02/student-member-profile-mary-belle-offutt.html>. If you are an FHS member who would like to be featured, please email Amy Long ([long.amy.80@gmail.com](mailto:long.amy.80@gmail.com)).

### **2020 FHS Elections**

Give back to your Fish Health Section – become a committee member! Nominations are still being accepted through February 28th for the following positions:

Vice President  
Nominating and Balloting Committee (1 position)  
Professional Standards (1 position)  
Policy/Position Development (1 position)  
Technical Standards (2 positions)

Please consider being an active member of the Section by offering to serve if selected by your peers.

If you are interested in a more complete description of the individual offices and committees please refer to the AFS FHS procedures manual:

[https://1fjduf35czd41a05pgltrtej-wpengine.netdna-ssl.com/fhs/wp-content/uploads/sites/30/2019/09/FHS\\_Procedures\\_Manual\\_2019\\_revised\\_final.pdf](https://1fjduf35czd41a05pgltrtej-wpengine.netdna-ssl.com/fhs/wp-content/uploads/sites/30/2019/09/FHS_Procedures_Manual_2019_revised_final.pdf)

Submit nominations to the Nominating and Balloting Committee Chair, Derek Gibbs [gibbsgo@oregonstate.edu](mailto:gibbsgo@oregonstate.edu)

## **FHS QA/QC Applications**

The application period for the FHS Quality Assurance program for aquatic animal laboratories has opened for the calendar year 2020.

The application period for Tier 1 (prequalification) will be open until May 31, and Tier 2 (Recognition) will be open until June 30.

Currently twelve laboratories have completed the requirements for Tier 1 and the first application for Tier 2 is underway.

Additional details and support documents can be found on the Fish Health Section [website](#), or you can contact QA Committee chair Chris Wilson at 435-757-7493 or at <mailto:wetvet53@gmail.com>.

## **Additions to the Website in 2020**

In this new year we've made several additions to the section website. We added a page for students under the "About" tab. There you can find scholarship info, awards, and a link to the Student and Early Career Member site. We've also uploaded archived quarterly newsletters from 1972 - 2007. These contain a good dose of fish health comics, grey literature, and self-effacing humor. I recommend the article "Fish Health Section: The First Five Years (1973 to 1977) and a Little Before That" in 34(3) 2006. It covers the inception of this section, almost five decades ago!

If you'd like any changes or additions to the website, please email me at [americub@oregonstate.edu](mailto:americub@oregonstate.edu).

Cheers, Ben Americus

## **Call for Symposia at the American Fisheries Society 150th Annual Meeting in Columbus, OH**

The parent society is seeking additional proposals for symposia to be held at the 150th Annual Meeting of American Fisheries Society.

The American Fisheries Society will host its 150th Annual Meeting in Columbus, Ohio, during August 30 – September 3, 2020. This meeting will celebrate the past, present, and future of fisheries research and management, bringing together a diverse group of academics, researchers, private industry professionals, management agency personnel, and students.

If anyone is attending this meeting and interested in organizing a symposium, please visit the following website: <https://afsannualmeeting.fisheries.org/call-for-papers/>.

## **MEETINGS, WORKSHOPS AND COURSES**

## Fish Welfare Symposium

The Fish Health Section will be co-organizing a symposium, entitled “[Fish Welfare](#) (ID number: 9479)”, with the Fish Culture Section at the American Fisheries Society 150th Anniversary Meeting in Columbus, Ohio August 29 - September 03, 2020.

### Fish Welfare

Fish welfare is an aspect of fish husbandry that is often overlooked. Fish can sense and react to noxious stimuli, often displaying similar aversive responses to the ones we observe in mammals, including stress. Chronic and acute stress can cause anorexia, weaken the immune system, and induce other physiological abnormalities. Stressed fish may display abnormal behaviors or show abnormal swimming patterns. In the aquaculture of food fishes, pre-slaughter stress can cause changes in the texture and quality of fish fillets. In the ornamental fish industry and for fishes cultured and/or transported for stocking, shipping stress may be an important cause of mortality. Thus, fish welfare is not only a matter of ethical debates but a relevant issue for anyone that works with fish from fishermen and fish growers to researchers using fish as animal models. This symposium will aim to explore a variety of aspects of fish welfare, including: how welfare can be assessed, the use of naturally derived compounds to reduce shipping and handling stress, and the effects of fish welfare in the overall health of fish.

### Organizers:

Jose Reyes-Tomassini (<mailto:jreyes-tomassini@francis.edu>), Jeff Heindel, Michelle L. “Mick” Walsh and Benjamin R. LaFrentz

Please consider yourself cordially invited to submit an abstract to participate in our organized symposia. The deadline for abstract submission: Friday, March 20, 2020. Please reach out to the symposium organizers via email if you have any questions or to confirm that you plan to be a part of the session. In addition, please reach out if you have any suggestions on folks we should reach out to who you think would be great additions to the above symposia – particularly those speakers based in Ohio.

The Fish Culture Section is also organizing two other symposia listed below that may be of interest:

- 9380 - *Getting It Right: A Guide To Successful Supplementation For Recreation, Restoration, and Recovery*
- 9391 - *Marking, Tagging, and Tracking* (with the Fisheries Management, Marine Fisheries, and FITS Fisheries Information & Technology Section/American Fisheries Society sections as well as the AIFRB - American Institute of Fishery Research Biologists)

All symposia for the conference can be viewed here:

<https://afs.confex.com/afs/2020/webprogrampreliminary/SYMP.html?fbclid=IwAR30YFqABXM Rn5x1uKJoj8xQvmyyOyIEqMqAbkGdv9 -N2exS-u-vbpOiUQ>

Ben LaFrentz ([benjamin.lafrentz@usda.gov](mailto:benjamin.lafrentz@usda.gov))

## **CALL FOR PROPOSALS TO HOST THE 9th INTERNATIONAL SYMPOSIUM ON AQUATIC ANIMAL HEALTH SEPTEMBER 4 - 8, 2022**

The American Fisheries Society's Fish Health Section is soliciting proposals to host the 9th International Symposium on Aquatic Animal Health (ISAAH-9), September 4 - 8, 2022. This stimulating gathering of international aquatic animal health professionals occurs every four years, most recently in Charlottetown, Prince Edward Island (Canada) with over 500 attendees representing 34 countries. Past participating professional societies have included the American Association of Fish Veterinarians, the World Aquatic Veterinary Medical Association, the European Association of Fish Pathologists, the Japanese Society of Fish Pathology, and the International Association for Aquatic Animal Medicine, and sponsors have encompassed industry supporters, academic institutions, and government agencies.

Organizations and individuals interested in submitting a bid to host ISAAH-9 are welcome to contact Gary Marty at <mailto:Gary.Marty@gov.bc.ca> before June 1, 2020. For more details, please see attached announcement.

### **61st Western Fish Disease Workshop Hood River, Oregon June 15-18, 2020**

Best Western Plus Hood River Inn Conference Center  
<http://www.hoodriverinn.com/>  
1108 East Marina Way, Hood River, OR 97031  
TOLL FREE: 800-828-7873  
PHONE: 541-386-2200

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. Following the conclusion of the Western Fish Disease Workshop a continuing education session will occur, TBD. Details for both the workshops and CE session will be updated shortly.

Tentative schedule:

Monday June 15

Evening: Welcome, Registration, Clinical Conundrums

Tuesday June 16

Morning: General Session

Afternoon: General Session

Evening: Poster Session

Wednesday June 17

Morning: General Session

Afternoon: General Session

Evening: Banquet

Thursday June 18

Morning and Afternoon: CE Session

Travel: Flights into PDX Portland International Airport. Hood River is 1 hour East of PDX Airport and there are a variety of transportation options available.

Information can be found on the AFS Website at <https://units.fisheries.org/fhs/wfdw/>

## **AFS-FHS and Northeast Fish Health Committee Joint Meeting**

**June 22-26, 2020**

**Burlington, VT**

“Applying Research: Bridging the Gap Between Aquatic Animal Health Research and Inspections”

The 2020 Annual Meeting of the AFS Fish Health Section will be held jointly with the Northeast Fish Health Committee (NEFHC) for the first time on June 22-26, 2020 in Burlington, VT! The theme for the meeting is "Applying Research: Bridging the Gap Between Aquatic Animal Health Research and Inspections". The venue for the meeting is the [Hilton Burlington Lake Champlain](#) which has newly renovated guest rooms and meeting spaces. The Hilton is only one block from beautiful Lake Champlain and only three blocks from the Church Street Marketplace - Vermont's award-winning open-air mall featuring over 100 places to shop and dine.

The FHS looks forward to co-hosting this meeting with the NEFHC and provides a tremendous opportunity for learning more about fish health research and topics unique to the Northeast US and provides an opportunity to attract our Canadian colleagues to the meeting.

The meeting will begin on June 22-23 with the Northeast Fish Health Committee Meeting, a Continuing Education Course will be provided on June 23, and the FHS meeting will occur on June 24-26. We are planning at least two special sessions: (1) "Fish Health Research/Topics in the Northeast US, and (2) "Current Status of Fish Health Regulations and Testing Criteria for Aquatic Animal Movements in the Northeastern US & Canada". Additionally, a half to full day of Continuing Education is being planned for June 23rd and more details will be provided in the future.

For updates and more information please see the first [announcement](#), check the Meeting [Website](#) and like us on [Facebook](#)!

## **Health and Colony Management of Laboratory Fish**

**August 9-14, 2020**

**MDI Biological Laboratory**

**Bar Harbor, Maine**

Link: <https://mdibl.org/course/health-and-colony-management-of-laboratory-fish-2020/>

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, visit the MDI Biological Laboratory course page <https://mdibl.org/education/courses/> or email the Education Office at [education@mdibl.org](mailto:education@mdibl.org). See attached pdf for flyer.

## **JOBS/GRADUATE ASSISTANTSHIPS**

### **PhD Student**

#### **University of Prince Edward Island – Atlantic Veterinary College**

Closes 3/20/20

The Atlantic Veterinary College (AVC) at the University of Prince Edward Island (UPEI) is seeking a highly qualified applicant for a PhD student position in aquatic epidemiology to work on a funded research project. The successful individual will join a multi-disciplinary team of epidemiologists, data science modelers, statisticians, microbiologists and ecosystem health specialists, whose work focuses on holistic approaches to assist the Canadian and international aquaculture and fishery sector improve the productivity, sustainability and the health of aquatic food animal stocks. This particular PhD will focus on **identifying the epidemiological, genomic and ecological determinants of Epizootic shell disease in American lobsters in Canada.**

The PhD student will contribute to a major multi-institutional grant involving academic, and industry partners related to understanding the risk of Epizootic shell disease (ESD) in lobsters on the east coast of Canada. The American Lobster (*Homarus americanus*) is the most commercially significant Canadian seafood export and is likely to experience the emergence of ESD, a disease associated with increasing seawater temperatures. Changing climate is known to be associated with shifts in distributions of marine species and the infectious disease

affecting them. It becomes imperative, for adaptive fisheries management, to understand the interplay of microbiome, the ecosystem and the changing environment, on such shifts and their likely impacts on the health and demographics of fisheries.

For more details see attached announcement.

**Post-Doctoral Fellowship**  
**Mississippi State University**  
Stoneville, MS

The Thad Cochran National Warmwater Aquaculture Center, Mississippi State University invites applications for a post-doctoral fellow to work at Stoneville, MS. This is a 2-year, full-time job investigating the epidemiology of *Edwardsiella piscicida* -septicemia in hybrid catfish and other commercially important fish species in the Southern U.S. Initial appointment is for two years and renewal depends on performance and funding availability.

See attached pdf for details.

**Research Fish Biologist**  
**USDA Agricultural Research Service**  
Stoneville, MS  
Closes 3/10/20

Link: <https://www.usajobs.gov/GetJob/ViewDetails/560082600>

The incumbent's personal research includes independent and cooperative studies on aquaculture techniques needed to improve the production and efficiency of warmwater fish, with emphasis on pond water quality management and aquaculture engineering.

Responsibilities:

- Determining the effects of environmental conditions on warmwater aquaculture production efficiency
- Developing and testing culture systems, equipment, and cultural practices to improve warmwater aquaculture production efficiency on commercial farms.
- Developing technologies that improve the efficiency, profitability, and sustainability of fish farming in the United States.

**Professor of Fisheries and Aquaculture**  
**Vancouver Island University**

Nanaimo, B. C.  
Closes 4/3/20

Link:

[https://ca.indeed.com/viewjob?jk=c4484ad6850edac7&from=ja&from=mobRdr&alid=58f504d0e4b0aa5be24f41b4&tk=1e1f27lrs2gnv800&utm\\_campaign=job\\_alerts&utm\\_campaign=dt&utm\\_medium=email&utm\\_medium=redir&utm\\_source=jobseeker\\_emails&utm\\_source=%2Fm%2F&rgtk=1e1f27lrs2gnv800](https://ca.indeed.com/viewjob?jk=c4484ad6850edac7&from=ja&from=mobRdr&alid=58f504d0e4b0aa5be24f41b4&tk=1e1f27lrs2gnv800&utm_campaign=job_alerts&utm_campaign=dt&utm_medium=email&utm_medium=redir&utm_source=jobseeker_emails&utm_source=%2Fm%2F&rgtk=1e1f27lrs2gnv800)

The Department of Fisheries and Aquaculture will be launching a new B. Sc., Minor in Aquaculture in the next two years (pending final Ministry approval), adding to the departments current well subscribed offerings of a two-year technical diploma and a one year post degree diploma. To support these offerings, we are looking for a candidate to join our department on a full time, regular basis as a professor at VIU, a special purpose teaching university. This position will offer you a unique opportunity to have a significant and direct impact on the growth of a new program, its students, and the local community.

**Graduate Research Assistantship – Masters, Shellfish Aquaculture – Vibrio Control/Disinfection**  
**Delaware State University**

A Master's level assistantship is available starting in Spring 2020, and will be filled as soon as a suitable candidate is identified. This assistantship is being funded through the National Oceanic and Atmospheric Administration (NOAA) Educational Partnership Program (EPP) with Minority Serving Institution and comes with a \$21,000/year stipend plus tuition assistance. The selected candidate will also participate in a NOAA Experiential Research & Training Opportunities (NERTO), a 12-week internship at a cooperating NOAA lab during their graduate training.

**DESCRIPTION**

Shellfish farming is America's fastest-growing marine aquaculture sector. However, growers and regulators are experiencing more stringent post-harvest treatment requirements because of increased public health concerns about illness related to consuming raw shellfish. The most dangerous pathogens in domestic bivalve shellfish are *Vibrio parahaemolyticus* and *V. vulnificus*, and are an increasing concern both for human health and the sustainability of a rapidly expanding half-shell industry. DSU is working with a number of partners including the DE Sea Grant, DE Department of Natural Resources and Environmental Control, private shellfish growers, and commercial technology companies to develop practical, on-farm solutions. With the recent initiation of shellfish aquaculture in Delaware's Inland Bays and growing concerns over vibrios, the selected candidate will explore various vibrio control strategies, both pre- and post-harvest, for possible implementation in DE, the region and nationally.

**QUALIFICATIONS**

Minimum: Bachelor's degree in aquaculture, fisheries, animal husbandry, biology, microbiology or a related field with a cumulative GPA of 2.8 or higher, and GRE scores. Students with strong quantitative and writing skills are encouraged to apply. U.S. citizenship is required.

**APPLICATION**

Position is open until filled. To be considered, applicants must submit a personal statement that includes a description of their research interests and prior experiences, a CV, an unofficial copy of their undergraduate transcripts and GRE scores, and three letters of recommendation directly to Dennis McIntosh. A single PDF file containing the requested information in preferred.

Dr. Dennis McIntosh, Professor and Extension Specialist - Aquaculture  
Department of Agriculture & Natural Resources  
Delaware State University  
Phone: (302) 857-6456  
Email: <mailto:dmcintosh@desu.edu>

**Two Assistant Professorships in Virology**  
**Oregon State University**  
**Corvallis, OR**

Full consideration by 1/31/20, open until filled

Oregon State University invites applications for two 9-month, full-time (1.0 FTE), tenure-track positions in the Department of Microbiology.

1. Aquatic virology. Areas of interest include existing and emerging infections of aquatic animals and plants, viral evolution, aquatic viromes, and the role of phage in microbiome regulation and disease management. A particular emphasis is on challenges in sustainable aquaculture and conservation of aquatic resources. For additional information and to apply:

<https://jobs.oregonstate.edu/postings/86144>

2. Human virology. Areas of interest include, but are not limited to, molecular and cellular virology, host-pathogen interactions, antivirals and vaccines, the human virome, epidemiology, ecology, and evolution. For additional information and to apply:

<https://jobs.oregonstate.edu/postings/86139>

The successful candidates will be expected to establish a competitive research program in one of the indicated areas, teach undergraduate and graduate courses in microbiology, and participate in institutional and professional service. Collaborative and interdisciplinary research endeavors that could link to local initiatives in microbial pathogenesis, microbiome research, data science, and in case of the aquatic virology position also aquatic animal health and marine biology, are encouraged. OSU is an AA/EOE. Date for full consideration is 31 January 2020.

**Assistant/Associate Professor – Aquatic Animal Health**  
**Auburn University**

Link: <https://aufacultypositions.peopleadmin.com/postings/3861>

The School of Fisheries, Aquaculture and Aquatic Sciences (<http://www.sfaas.auburn.edu>) at Auburn University seeks a scientist in the field of aquatic animal health. The position is a tenure-track appointment (80% research, 20% teaching; nine months per year) and will be filled at the rank of assistant or associate professor. The successful candidate will build an externally funded research program, contribute to the instructional program, and participate as a collaborator in the Southeastern Cooperative Fish Disease Project. Salary and start-up funds are negotiable. The target start date is August 16, 2020.

**Zebrafish Related Job Announcements**

<https://wiki.zfin.org/display/jobs/Zebrafish-Related+Job+Announcements>

## RESOURCES/NEWS

### SHONA WHYTE NAMED JOURNAL OF AQUATIC ANIMAL HEALTH EDITOR

<https://fisheries.org/2020/01/shona-whyte-named-journal-of-aquatic-animal-health-editor/>



AFS publications is pleased to announce Shona Whyte will serve as editor for the Journal of Aquatic Animal Health. Whyte is a research scientist, and adjunct professor and graduate faculty within the Department of Pathology and Microbiology at the University of Prince Edward Island's Atlantic Veterinary

College. She has been employed by both academic institutions and industry, and since 1989 has had extensive professional experience in contract research in Canada as well as internationally. She is experienced in the development of disease models of animals including the design, execution and validation of preliminary and confirmatory laboratory studies for the pharmaceutical and bioactives industry. She has served as an associate editor for the Journal of Aquatic Animal Health since 2014, and has authored or coauthored over 40 peer-review publications. She holds a BS and PhD from Aberdeen University and a post-doctoral fellowship from Stirling University. She received her master of business administration in 2012 from the University of Prince Edward Island.

## Stacy A Strickland

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**From:** US Fish and Wildlife Service Fisheries <USFWSFisheries@public.govdelivery.com>  
**Sent:** Friday, February 21, 2020 1:02 PM  
**To:** stacy.a.strickland@state.or.us  
**Subject:** February 2020 AADAP Update



## U.S. Fish & Wildlife Service

### *Aquatic Animal Drug Approval Partnership, AADAP Update* A Branch of the Fish and Aquatic Conservation Program



The AADAP Update provides recent news and updates from the Aquatic Animal Drug Approval Partnership program and its partners. For questions or to offer feedback, email [Julie Schroeter](mailto:Julie.Schroeter). For more about the AADAP Program, please [visit our web page](#). (Photo/NPS)

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#### **Aquaculture America 2020 Recap:**

Part of the AADAP team attended the Aquaculture America 2020 conference from February 9th-12th, 2020, in Honolulu, Hawaii. We co-hosted a special session entitled "Aquaculture Drug Updates" with the AFWA Drug Approval Working Group (DAWG), and conducted numerous meetings with partners and sponsors regarding 15 different aquaculture drugs which are currently in various stages of the

drug approval process. It was a productive and informative meeting, and we're glad to have had the opportunity to attend!

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### 2020 AADAP Workshop:

The 26<sup>th</sup> Annual Drug Approval Coordination Workshop will be held in Bozeman, MT on July 27th-30th, 2020. More information including the workshop schedule, lodging, registration, and presentation details will be available soon.

We hope to see you at the workshop this summer!

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### Approved Aquaculture Drug Fact of the Month:

Did you know Formalin is approved for the control of external protozoa and monogenetic trematodes in finfish, as well as the control of fungi from the Saprolegniaceae family in finfish eggs? It's also approved for controlling protozoan parasites in Penaeid shrimp. For more information on dosing and limitations, please see AADAP's [Quick Desk Reference Guide to Approved Drugs for Use in Aquaculture](#). In addition, please check AADAP's [Resources Page](#) for recent drug approval updates.

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[Fish and Aquatic Conservation](#)  
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Fish Health Section  
American Fisheries Society



## CALL FOR PROPOSALS TO HOST THE 9<sup>th</sup> INTERNATIONAL SYMPOSIUM ON AQUATIC ANIMAL HEALTH SEPTEMBER 4 - 8, 2022

The American Fisheries Society's Fish Health Section is soliciting proposals to host the 9<sup>th</sup> International Symposium on Aquatic Animal Health (ISAAH-9), September 4 - 8, 2022. This stimulating gathering of international aquatic animal health professionals occurs every four years, most recently in Charlottetown, Prince Edward Island (Canada) with over **500** attendees representing 34 countries. Past participating professional societies have included the American Association of Fish Veterinarians, the World Aquatic Veterinary Medical Association, the European Association of Fish Pathologists, the Japanese Society of Fish Pathology, and the International Association for Aquatic Animal Medicine, and sponsors have encompassed industry supporters, academic institutions, and government agencies.

Organizations and individuals interested in submitting a bid to host ISAAH-9 are welcome to contact **Gary Marty** at [Gary.Marty@gov.bc.ca](mailto:Gary.Marty@gov.bc.ca) before **June 1, 2020**.

Suggested pre-conference and conference schedule:

- |          |            |  |
|----------|------------|--|
| Day 1:   | Morning:   | Fish Health Section Ex-com meeting<br>Pre-Conference Workshops                               |
|          | Afternoon: | Registration<br>Pre-Conference Workshops   |
|          | Evening:   | Registration and Ice Breaker   |
| Day 2-4: |            | Plenary speaker presentations, poster presentations, oral presentations, banquet and socials |
| Day 5:   |            | Post Conference Workshops and Field Trips  |

Target number of attendees: **300 - 500**

Preference will be given to proposals that can host at least **400** attendees, and those who can coordinate the required accommodation needs of the conference. Typically, **60%** of conference attendees stay within the conference venue. Guests of attendees can be anticipated for at least **5%** of the attendees.

**Please consider the following requirements for the conference.**

1. Conference facilities overview and capacity:

The conference facilities should be able to accommodate the following requirements.

- Lecture room or auditorium to seat up to 300 at a minimum
- At least **3** smaller presentation rooms to seat up to **100** people.
- Technology to accommodate presentations by computer, internet access, and audiovisual equipment.
- Space for a registration / information desk /poster sessions
- Exhibitor / vendor space
- High Speed wireless internet access for the duration of the conference is preferred

2. Residential accommodations overview and capacity:

Please include a full description of prospective accommodations for attendees.

3. Conference-provided meals, catering, and reception:

The food and meal needs for the conference include the following items.

- Four breakfast buffets
- Four lunch buffets
- One full dinner (banquet, bar)
- One full opening reception (hors d'oeuvres, bar)

4. Location details:

Please describe the location of the conference venue in relation to airports, train stations, and other transportation hubs, and the availability of parking.

5. Recommended conference-associated activities (e.g., tours, athletic runs):

Please briefly describe any activities that might be available for conference participants and or offsite events.

**PhD student – Epidemiological, genomic and ecological determinants of Epizootic shell disease in American lobsters in Canada**

Position Type	Graduate student position (PhD student)
Closing date	March 20, 2020
Date of Posting	February 25, 2020
Department	AVC – Health Management
Contract	Three years
Hours of Work	Full time student position
Term	Starting Fall 2020

The Atlantic Veterinary College (AVC) at the University of Prince Edward Island (UPEI) is seeking a highly qualified applicant for a PhD student position in aquatic epidemiology to work on a funded research project. The successful individual will join a multi-disciplinary team of epidemiologists, data science modelers, statisticians, microbiologists and ecosystem health specialists, whose work focuses on holistic approaches to assist the Canadian and international aquaculture and fishery sector improve the productivity, sustainability and the health of aquatic food animal stocks. This particular PhD will focus on **identifying the epidemiological, genomic and ecological determinants of Epizootic shell disease in American lobsters in Canada**.

The PhD student will contribute to a major multi-institutional grant involving academic, and industry partners related to understanding the risk of Epizootic shell disease (ESD) in lobsters on the east coast of Canada. The American Lobster (*Homarus americanus*) is the most commercially significant Canadian seafood export and is likely to experience the emergence of ESD, a disease associated with increasing seawater temperatures. Changing climate is known to be associated with shifts in distributions of marine species and the infectious disease affecting them. It becomes imperative, for adaptive fisheries management, to understand the interplay of microbiome, the ecosystem and the changing environment, on such shifts and their likely impacts on the health and demographics of fisheries.

This PhD student assignment is expected to start in September 2020 and run for three years (the term may be extended depending on participation in the project, available funding and project requirements). A competitive stipend will be offered on a per annum basis for the duration of the assignment. Questions about the position should be forwarded to Dr. Krishna Thakur through emailing Dr. Vince Repaci ([vrepaci@upei.ca](mailto:vrepaci@upei.ca)).

The selected candidate must have:

- A Master’s degree in the biological or veterinary sciences, (the exceptional and the well-motivated candidate with an undergraduate degree may be accepted, but such a candidate would need to register as a Master’s student at the beginning of their programme)
- Interest and background in statistical and epidemiological methods
- Proficiency in at least one scientific programming language (e.g. R, Python) is beneficial but not required
- Experience with aquatic animal diseases is desirable
- Experience of working in a multidisciplinary group with demonstrated abilities to communicate with individuals from diverse backgrounds is expected
- Must be self-motivated and able to work both independently, and as an effective partner within the team

Please submit electronically a cover letter, a resume, and reference list, copy of transcripts, and IELTS or TOEFL score (if applicable), to be received no later than the closing date to Dr. Vince Repaci ([vrepaci@upei.ca](mailto:vrepaci@upei.ca)).

In accordance with Canadian immigration requirements, all qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. The University of Prince Edward Island is committed to gender equity in employment.

**Closing date for application is March 20, 2020 or until a suitable candidate is identified.**



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Phone (662) 686-3242  
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### **Post-doctoral Fellowship Announcement**

**Job Description:** The Thad Cochran National Warmwater Aquaculture Center, Mississippi State University invites applications for a post-doctoral fellow to work at Stoneville, MS. This is a 2-year, full-time job investigating the epidemiology of *Edwardsiella piscicida* -septicemia in hybrid catfish and other commercially important fish species in the Southern U.S. Initial appointment is for two years and renewal depends on performance and funding availability.

**Responsibilities:** The selected candidate will work on disease surveillance of *E. piscicida* in the Southeastern U.S., phenotypic, serological, molecular and pathological characterization of *E. piscicida* and *E. ictaluri*, evaluation of the cross-protective efficiency of a live, attenuated *E. ictaluri* vaccine and exploration of the economic impacts of Edwardsiellosis in channel and hybrid catfish production. Research involves both laboratory and field work. Duties include conducting experiments to achieve goals mentioned above, data collection, analysis, traveling to meet with collaborators to collect data/samples, processing samples for molecular analyses, preparation of reports, presentations, manuscripts, and grant proposals. The fellow will coordinate research trials with collaborators, use bioinformatics pipelines to analyze omics-data generated on bacterial isolates, maintain laboratory records on experimental protocols and research findings, and provide assistance on other projects suggested by the PI.

**Minimum Qualifications:** Recent PhD in microbiology, molecular biology, biology, immunology or a related field with relevance to fish diseases. Candidate should have knowledge and hands-on research expertise in microbiology, molecular biology, and immunology techniques as well as experience in generation, analysis and management of omics-data. Candidate should have experience in fish handling and infection trials. Strong organizational, analytical, writing skills and ability to implement research strategies to efficiently achieve project goals are necessary.

**Preferred Qualifications:** Research experience in microbiology, molecular biology or immunology and evidence of scientific productivity (conference presentations, publications, grants received etc.). Experience in bioinformatics, animal cell culture, and aquatic vaccine research will be considered a plus. Strong foundation in nucleic acid and protein-based assays, bacterial infection trials, and knowledge in statistical analyses in the context of biological systems are desired. The individual must have a valid driver's license.

**Salary:** Commensurate with experience and includes benefits.

**To Apply:** Please send CV, cover letter describing interest in the position, and two letters of recommendation to Dr. Suja Aarattuthodiyil ([bsa122@msstate.edu](mailto:bsa122@msstate.edu)). Applications will be considered till a suitable candidate is identified. MSU is an equal opportunity employer.