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

FHS NEWS

2018 AFS FHS Election

Please vote! Attached are the biosketches of the nominees. Voting will take place from August 1-15 via SurveyMonkey.

Scientific Art Competition during the ISAAH!

See the attached flyer!

Submit your entries EITHER at the meeting when you pick up your registration packet, OR you may mail them in advance (need to be received by Monday August 27) to: David Groman, Atlantic Veterinary College, 550 University Ave., Charlottetown, PE, Canada C1A 4P3

There will be dedicated poster boards for the art competition and entries will be on display throughout the Symposium. There will be one prize of $50 for each category, decided by popular vote and announced during the Banquet on Wednesday, September 5.

STUDENTS AND EARLY CAREER MEMBERS

Student and Early professional event at ISAAH 2018
Charlottetown, PEI, Canada

The Student and Early Professional subcommittee is organizing an event for students and early professionals that will take place during the 8th International Symposium on Aquatic Animal Health (ISAAH 2018). The event is scheduled for Sunday, September 2\textsuperscript{nd}, and will run from 5:30 – 7 pm. It will be open to all students and early professionals. If you have suggestions for any activities for this event, please contact us at student.section.fhs@gmail.com.

Additionally, a room share document has been set up for students and early professionals interested in sharing a room to help defray the costs of the meeting.
MEETINGS, WORKSHOPS AND COURSES

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 webpag: [https://mdibl.org/course/health-and-colony-management-of-laboratory-fish-2018/](https://mdibl.org/course/health-and-colony-management-of-laboratory-fish-2018/)

8th International Symposium on Aquatic Animal Health
Charlottetown, Prince Edward Island, Canada
September 2-6, 2018
“Integrating Biotechnology in the Advancement of Aquatic Animal Health”

SEPTEMBER 2 - 7, 2018

Hosted by the Fish Health Section of the American Fisheries Society, in partnership with the Atlantic Veterinary College, and the Prince Edward Island BioAlliance, ISAAH 2018 is looking forward to hosting delegates from all over the world to participate in scientific presentations, workshops, industry panels, business meetings, keynote presentations, exciting networking and cultural events, and industry tours.

There is still time to register. And there is still time to sign up for ISAAH 2018 Social Events throughout the Conference and Field Tours on September 7th

Have you Booked your Accommodations?
Special ISAAH room rates are available at select hotels only until August 1st. Space is limited! All are within walking distance to the Convention Centre. BUT . . . rooms are filling up fast!

Sign up for ISAAH Social Events
Join us on September 3rd at Skmaqn–Port-la-Joye–Fort Amherst National Historic Site - one of PEI’s beautiful national parks overlooking the Charlottetown harbour. Delegates will be transported to and from the event grounds for an outdoor BBQ, entertainment, cultural displays and tours.

Check out the ISAAH 2018 program and keynote speakers here.

Important deadlines:
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!
Gill Health Symposium for Marine Fish
Zhongshan Park, Singapore
November 21-23, 2018

We are proud to announce the first international Gill Health Symposium for Marine Fish hosted by the Universities of Sydney, Auckland and Bergen. This 3-day symposium will focus on the function and form of fish gills in the face of a changing ocean environment with emphasis on ocean warming and acidification. The symposium will bring together scientists with expertise in a variety of disciplines such as marine biology, ecology, ecophysiology, environmental chemistry, aquaculture and fisheries.

The target audience for the symposium are scientists from university, government and private sectors and managers from aquaculture and fisheries industries.

Applications will be reviewed from 1 May 2018. Priority will be given to early and mid career researchers (<10 years from PhD award) and those residing in developing countries. Maximum capacity is 30 people.

The goal of the symposium is to create small teams of discipline experts to co-author topic reviews to be submitted as part of a special research topic in Frontiers of Marine Science.


Applications should include:
• short cv (4 pages max.)
• letter of support from your Department Head, Director or relevant supervisor
• statement addressing (1 page max.) current research program and career interests
• statement addressing (1 page max.) your willingness to contribute and support the goals of the Gill Health Symposium

For more information, please see the attached flyer and/or email: Associate Professor Joy Becker, joy.becker@sydney.edu.au

JOBS/GRADUATE ASSISTANTSHIPS

Fish Veterinarian
Pacific Seafood
Nespelem, Washington

Summary
Work in conjunction with site Operation Managers and Fish Health Team to manage, maintain and execute all aspects of the Fish Health Plan at our Aquaculture hatcheries and farm.

**Essential Duties and Responsibilities**

Duties include but not limited to:

- Be a role model in projecting and applying The Pacific Group Diamond Philosophy (Productivity, Quality, Excellence and Teamwork) and promote teamwork at all times.
- Oversee the administration of antibiotics in large net pen facility and hatcheries with a herd management mentality.
- Be up to date on all USDA VFD regulations and policies needed for aquaculture farm management.
- Assist with research projects in conjunction with National Center for Cool & Cold Water Aquaculture (NCCCWA), Western Fisheries Research Center (WFRC) and others. Has to keep accurate records as results will be published.
- Assist in developing a database or other effective record keeping system.
- Assist with data collection and recording.
- Assist with vaccine research and perform bacterial culture when necessary.
- Categorize mortality to identify diseases based upon external clinical symptoms. This is imperative to develop vaccines that work.
- Possess basic microscopic skills to make and stain slides and identify bacterial and parasite agents.
- Collaborate with partners on research projects.
- Perform regular cleaning and standardization of all lab equipment and lab facilities.
- Maintain a presence in fish health related meetings by continuing to develop outside partnerships and contacts with groups and agencies.
- Assist in establishing a feed monitoring program and ensure that feeds meet established standards.
- Assist in establishing a flesh quality monitoring program.
- Become a point of contact for hatchery related fish health questions regarding treatments and questions that may arise.
- Manage good aquaculture practices as part of the effort to prevent aquaculture related fish disease.
- Be observant of problems that may contribute to fish mortality, of rough handling density, and feeding practices to avoid contribution to fish mortality.
- Assist in creating a biosecurity plan for the farm including a check-in and check-out procedures for guests visiting the farm, and once created adherence to the policy must be audited to effectively evaluate compliance.
- Track and monitor the health of eggs, fingerlings and adult steelhead with the Fish Health Plan.
- Observe fish behavior as an indicator of stressors and pre-empt disease outbreaks.
• Maintain precise records on fish production, and educate other team members on fish health biology.
• Play a key role in reviewing and improving fish husbandry and production with a key focus on survival of stocks. Reduce stresses present not only from biological elements but also environmental conditions.
• Perform other duties, as assigned.

See this link for more details: https://recruiting2.ultipro.com/PAC1001/JobBoard/3d1f315c-b302-5e3c-ab32-f9b155cb2fba/OpportunityDetail?opportunityId=16d0c4fd-8486-4cc2-ad8b-a6ba8a666d8

**Microbiologist**
Pacific Seafood
Nespelem, Washington

**Summary**

Under the direction of the veterinarian and the site operations manager, perform projects and assist in research related to fish health and mortality. Work closely with site management to identify and remedy the challenges to fish health that are present. Duties support the maintenance and operation of the disease laboratory.

**Essential Duties and Responsibilities**

Duties include but not limited to:

• Be a role model in projecting and applying The Pacific Group Diamond Philosophy (Productivity, Quality, Excellence and Teamwork) and promote teamwork at all times.
• Assist in developing an effective record keeping system.
• Collaborate in the team structure as well as work independently.
• Assist with vaccine research and perform bacterial culture.
• Appropriately categorize mortality to evaluate what is causing loss.
• Evaluate what percentage of pathogens contribute to the total loss.
• Identify diseases based upon external clinical symptoms.
• Track and monitor the health of steelhead fingerlings in accordance with the Fish Health Plan.
• Classify mortality, health sampling for disease identification, monitoring mortality levels, causes and factors affecting fish health.
• Observe fish behavior as an indicator of stressors and pre-empt disease outbreaks, including a degree of water quality e.g. O2 and TDG levels.
• Maintain a presence in fish health related meetings by continuing to develop outside partnerships and contacts with groups and agencies.
- Manage good aquaculture practices as part of the effort to prevent aquaculture related fish disease.
- Be the point of contact for hatchery related fish health questions regarding treatments and questions that may arise.
- Make and stain slides and identify bacterial and parasite agents.
- Regularly test for antimicrobial resistance.
- Assist in establishing a flesh quality monitoring program.
- Assist with various aspects of vaccine research by performing a variety of technical duties, including daily monitoring of challenge experiments, recording data, and performing microbiological analysis of infected tissue.
- Maintain, calibrate and modify complex/specialized equipment and automated systems used for test and evaluation procedures to achieve desired results.
- Maintain inventory of chemicals, prepares solutions and reagents for use in the laboratory, and safely disposes of chemical and biological waste material.
- Perform regular cleaning and standardization of all lab equipment.
- Assist in establishing a feed monitoring program.
- Ensure that feeds meet established standards.
- Be observant of problems that may contribute to fish mortality, of rough handling density, and feeding practices to avoid contribution to fish mortality.
- Assist in creating a biosecurity, and audit plan for the farm including a check-in and check-out procedures for farm visitors and effectively evaluate compliance.
- Keep precise records on fish production, and educate other team members on fish health biology.
- Perform other duties, as assigned.

See this link for more details:
https://recruiting2.ultipro.com/PAC1001/JobBoard/3d1f315c-b302-5e3c-ab32-f9b155cb2fba/OpportunityDetail?opportunityId=0380d5ae-e3aa-4ee3-b4b4-795f6bf63b78

**Extension Specialist – Fish Health**  
**Auburn University**  
**School of Fisheries, Aquaculture and Aquatic Sciences**  
**Greensboro, Alabama**

The **School of Aquaculture, Fisheries and Aquatic Sciences (SFAAS)** at Auburn University invites applications for a position at our Alabama Fish Farming Center (AFFC) in Greensboro. It is a non-tenure-track, 12-month faculty position with the title Extension Specialist; however, responsibilities are 50% extension and 50% research. The position is supported by the Alabama Cooperative Extension System (ACES) and the Alabama Agricultural Experiment Station (AAES). The incumbent will be a member of the ACES Aquatic Resources Program Priority Team and must maintain a current AAES Hatch project.
Responsibilities: The primary extension responsibility will be disease diagnostic services for catfish farmers. The primary research responsibilities will be fish health questions of importance to the Alabama catfish industry. The successful candidate will interact with AFFC staff, members of the Southeastern Cooperative Fish Parasite and Disease Project (located in SFAAS), and other fish health and aquaculture specialists to develop a vibrant diagnostic program and relevant, extramurally funded, research program.

Qualifications: A PhD in an appropriate field or a DVM is required. Research experience with aquatic animals and two years of experience (staff, postdoctoral, or faculty) in diagnosis of fish diseases are also required. Experience in extension or outreach with fish farmers, a publication record in extension, and a publication record in aquatic animal research are desirable. The successful candidate must possess excellent interpersonal skills, communication skills, and organizational skills. They must also meet eligibility requirements for work in the United States at the time the appointment is scheduled to begin and continue working legally for the term of employment.

Application: Applicants must apply for the position electronically through: https://aufacultypositions.peopleadmin.com/postings/search and submit the following: 1) cover letter addressing the candidate’s experience pertinent to the responsibilities of the position, 2) Curriculum vitae, 3) Reprints of up to three research publications and 4) Reprints of up to three extension publications. When prompted during the on-line application process, please provide names, phone numbers and email addresses of three professional references. Only complete application materials will be considered. Active review of applications will begin October 1, 2018 and the search will continue until the position is filled. Questions about the position should be directed to:

Dr. Cova Arias
Search Committee Chair
School of Fisheries, Aquaculture and Aquatic Sciences
203 Swingle Hall
Auburn University
Email: ariascr@auburn.edu

Auburn University is an EEO/Vet/Disability Employer

RESOURCES/NEWS

Interesting Article

Welfare of aquatic animals: where things are, where they are going, and what it means for research, aquaculture, recreational angling, and commercial fishing.

A pdf file is also attached to this email.
Fish Health Highlights…

USGS Scientists Receive 2017 Best Paper in Journal of Aquatic Animal Health: A recent article by scientists from the WFRC titled "Optimization of a Plaque Neutralization Test (PNT) to Identify the Exposure History of Pacific Herring to Viral Hemorrhagic Septicemia Virus (VHSV)" was selected to receive the Robert L. Kendall Award for the Best Paper in the American Fisheries Society (AFS), Journal of Aquatic Animal Health for 2017. The winning articles for each of the AFS journals will be recognized this year at the annual AFS meeting in Atlantic City in August. For more information, contact Paul Hershberger, phershberger@usgs.gov, Nordland, WA.

See the attached newsletter for the rest of the news.

Read the whole newsletter online at: http://wfrc.usgs.gov/newsletter/

To subscribe (or unsubscribe) to the “Western Fisheries Science News” mailing list, please do so at http://wfrc.usgs.gov/newsletter/maillist.html