**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- **please bookmark the new FHS website!** We still have not been able to take down the old FHS website which is outdated and inaccurate.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 (<u>https://facebook.com/FishHealthSectionAFS</u>). 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 (<u>benjamin.lafrentz@usda.gov</u>).

#### 2020 Membership Renewal

Thank you for your membership in 2019. Renewal season has begun, and you should have received email notice by now. Thank you for supporting our section!

Please note a new member benefit: As of September, 2019 AFS members can enjoy free access to all AFS journals via our new mobile app, AFS Pubs (free in App store or Google Play).

### **MEETINGS, WORKSHOPS AND COURSES**

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 <u>Hilton Burlington Lake Champlain</u> 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 <u>announcement</u>, check the Meeting <u>Website</u> and like us on <u>Facebook</u>!

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 <u>https://mdibl.org/education/courses/</u> or email the Education Office at <u>education@mdibl.org</u>. See attached pdf for flyer.

#### **JOBS/GRADUATE ASSISTANTSHIPS**

Postdoctoral Fellow Institute of Marine Research Bergen, Norway Closes December 1, 2019 Link: https://www.jobbnorge.no/en/available-jobs/job/178082/fish-virology-and-immunology

Applicants are invited for a 4-year fixed term position as Postdoctoral Fellow in the Disease and Pathogen Transmission Research Group at the Institute of Marine Research in Bergen, Norway. The position is for a fixed-term period of four years and is affiliated to the research project VIRAq – Viral diseases in aquatic environments, financed by the Ministry of Trade, Industry and Fisheries.

The Disease and Pathogen Transmission Research Group at IMR focuses on pathogens in both wild and farmed fish. We study the consequences and ecological effects of disease outbreaks on individual fish and on fish populations. Our group works on fish and scallop diseases, salmon louse biology, and ecotoxicology. The methods we employ include molecular analysis, disease challenge models, field trials, and disease surveillance. The VIRAq project team has expertise in virology, fish immunology, pathology, molecular biology, and bioinformatics.

The candidate will be part of a research team working on a project studying the hostpathogen interactions of several viral pathogens prevalent in Norwegian aquaculture, including Salmonid alphavirus (SAV), and piscine myocarditis virus (PMCV). The successful candidate will be expected to drive the experimental work in our wellequipped laboratories, which will include running fish disease challenge trials, method development, and general laboratory work. The candidate is also expected to take a lead in the publication of results in international peer-reviewed journals.25% of the position will be dedicated to general responsabilities at IMR, such as advisory tasks and contributing to the analysis and publication of data from projects closely related to the VIRAq project.

#### **Research Associate – Fixed Term**

## Michigan State University, College of Veterinary Medicine East Lansing, MI

Link: https://careers.msu.edu/cw/en-us/job/502657

The Aquatic Animal Health Laboratory, of Dept. of Pathobiology and Diagnostic Investigation at Michigan State University, invites applications for a full-time postdoctoral position to study the pathobiology of co-infections in fish. The study of co-infections affecting fish offers fascinating novel opportunities to understand host-pathogen dynamics eliciting different pathological and immunological outcomes, rather than as classically assessed in highly controlled single infections. The selected scientist will join Dr. Gorgoglione's new laboratory at MSU, focusing on fish immunopathology, for characterising the host response toward multiple infections patterns. Candidates should have a positive attitude for interacting with students (either at undergraduate and postgraduate level) and collaborators. Written and oral skills, as demonstrated by prior publications/presentations, abilities to work independently on challenging and innovative research, good organizational and interpersonal skills will be considered. The position is suitable for international candidates. Applicants should have experience with in vivo and in vitro lab techniques, including:

- 1. Molecular biology techniques, such as DNA/RNA isolation, PCR techniques, immunoblotting
- 2. Bioinformatics and statistical analysis
- 3. Histopathology, immunohistochemistry, in situ hybridization
- 4. Pathogen and tissue culture techniques, basic virology methods
- 5. Fish necropsy, tissue samples collection and processing

#### Fish & Wildlife Scientist III – Fish Health Biologist Vermont Fish & Wildlife Randolph Center, VT Closes 12/22/19

Link: <u>https://careers.vermont.gov/job/Randolph-Center-Fish-&-Wildlife-Scientist-III-Fish-Health-Biologist-VT-05061/610248700/</u>

The Vermont Fish and Wildlife Department is seeking applications for a Fish Health Biologist (F&W Scientist III) to work in the Fish Health Laboratory located in a brand new, state of the art facility in Randolph Center, VT. This is an excellent opportunity for a motivated laboratory scientist to advance established methods in fish health testing, conduct research in the fields of fish health and microbiology and expand laboratory capabilities in the future to include disease monitoring of wildlife species. The laboratory is responsible for conducting annual fish health inspections on all state owned and private fish culture stations as well as investigating fish kills and studying fish disease agents in the natural environment.

Duties for this position involve professional biological work in the field of fish health. Work will be performed primarily in a laboratory setting and will include collection and processing of fish tissues for disease testing. This position will be responsible the operation and maintenance of the fish health laboratory including conducting all bacteriology, virology, parasitology and polymerase chain reaction assays in compliance with guidelines set by the Northeast Fish Health Committee, the American Fisheries Society / Fish Health Section (AFS/FHS), and the World Organization of Animal Health. Additional responsibilities involve occasional travel to field collection sites, assisting in public outreach efforts, report writing, budget preparation and administration of the program's budget, coordination of scheduling between programs of operation, supervision and training of seasonal employees and cross-training of Fish Culture Specialists to ensure smooth operations of the Fish Health Laboratory.

#### **Tenure Track Position - Veterinary Bacteriology**

Department of Pathology and Microbiology - Atlantic Veterinary College Link: <u>https://www.upei.ca/hr/competition/38a19</u>

The Department of Pathology and Microbiology at the Atlantic Veterinary College (AVC), University of Prince Edward Island (UPEI), invites applications for a full-time tenure track faculty position in Veterinary Bacteriology. Appointment will be made at the rank of Assistant or Associate Professor. UPEI is committed to teaching, service and research. The AVC has ~272 DVM students, over 60 graduate students, 70 full-time faculty, and a professional and technical team of 222 dedicated individuals. It has full accreditation by the AVMA/CVMA and delivers DVM, MVSc, MSc and PhD programs.

The successful candidate will have primary duties in the instruction of undergraduate and graduate courses in veterinary bacteriology and conduct independent and collaborative research in bacteriology. A more limited time allotment will go toward provision of professional service support in the AVC Diagnostic Services bacteriology laboratory. The diagnostic bacteriology laboratory at the AVC has state of the art equipment and is staffed with a Clinical Bacteriologist and 3 staff members. It provides high quality service to both the AVC Teaching Hospital and clients from the four Atlantic Canadian provinces. We are looking for a candidate who is interested in contributing to ongoing efforts to expand and develop expertise in bacteriology and mycology at the AVC and UPEI.

#### 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

Postdoctoral Scientist – FDE Elanco

Link: <u>https://elanco.wd5.myworkdayjobs.com/en-US/External\_Career/job/US---</u> Greenfield/Postdoctoral-Scientist-FDE\_R0000858?source=LinkedIn The Post-Doctoral Scientist is responsible for conducting basic and applied research as an individual contributor in the Elanco Research Labs and the Discovery Bacteriology/Microbiome group. The primary research project will involve isolation, characterization and engineering of microbial strains as part of larger initiative to develop next gen livestock health promoting and preventative immune-prophylactics. A strong foundation in general microbiology/bacteriology and microbial strain engineering will be required to proactively search for solutions in this discovery driven team. The ability to independently conceptualize and execute experiments, coupled with a "can do" attitude in a team spirit, is essential.

#### Responsibilities

The Post-Doctoral Scientist is responsible for conducting basic and applied research as an individual contributor in the Elanco Research Labs and the Discovery Bacteriology/Microbiome group. The primary research project will involve isolation, characterization and engineering of microbial strains as part of larger initiative to develop next gen livestock health promoting and preventative immune-prophylactics. A strong foundation in general microbiology/bacteriology and microbial strain engineering will be required to proactively search for solutions in this discovery driven team. The ability to independently conceptualize and execute experiments, coupled with a "can do" attitude in a team spirit, is essential.

#### **Basic Qualifications**

PhD degree in bacteriology, microbiology, molecular biology or related scientific discipline and/or M.D. or D.V.M.

#### **Fisheries and Aquaculture Extension Educator**

#### Minnesota Sea Grant Duluth, MN Link: http://www.seagrant.umn.edu/news/2019/09/17

#### **Position Summary**

The extension educator will be responsible for providing outreach and applied research on fisheries and aquaculture for the Minnesota Sea Grant Program. Preferred candidates will have experience and knowledge in fisheries and aquaculture. The educator will develop, conduct, and evaluate extension programming relevant to Sea Grant's mission and strategic plan. The educator will work closely with other Minnesota Sea Grant staff, University of Minnesota extension educators, and Sea Grant extension educators across the Great Lakes and nation who are involved in related issues. The educator will also work with appropriate state, federal and tribal agencies along with the commercial fishing and aquaculture industries. Supervision will come from Minnesota Sea Grant Associate Director for Outreach and the Minnesota Sea Grant Director.

#### Fish Health Technician Clear Springs Foods, Inc.

Link: https://clearsprings.applicantpro.com/jobs/

This is a full-time position located at a Clear Springs Foods, Inc. farm location. This person must have the demonstrated ability to supervise and lead while at the same time function as a member of the team. The successful applicant should possess exceptional communication skills and business acumen, be experienced in fish husbandry, and have good math, recordkeeping, and computer skills. An understanding of the principles of production-based health practices and quality assurance is beneficial. Clear Springs Foods, Inc. is an employee owned company that is fully vertically integrated, controlling all aspects of its food business from inception to market.

## **RESOURCES/NEWS**

## S.F. Snieszko Distinguished Service Award Nomination Announcement

As we approach the end of 2019, we would like to solicit nominations for the 2020 <u>S.F.</u> <u>Snieszko Distinguished Service Award</u> (SDSA). As you know, the SDSA is the highest award presented by the Fish Health Section. It is presented for the purpose of honoring individuals for outstanding accomplishments in the field of aquatic animal health. This is a career award and while it may be given to more than one individual in a year, it is not necessarily awarded every year.

If you wish to nominate an individual for the SDSA please send nomination packages to the Awards Committee Chair (Luke Iwanowicz, <u>liwanowicz@usgs.gov</u>) by February 1, 2020. Awards recipient(s) will be honored at the <u>Annual Fish Health Section Meeting</u> in Burlington, VT this coming June.

Nomination packages must include:

- 1. Six letters of recommendation from fish health professionals that support the nominee's dedication to research, teaching and/or service to the field of aquatic animal health.
- 2. The nominee's curriculum vitae.
- 3. A general letter of recommendation by the primary nominator.

Additional guidance can be found on page 20 of the FHS procedures manual

Please feel free to contact members of the Awards Committee with questions.

Awards Committee

Luke Iwanowicz, Chair Cindy Stine Joel Bader Nicole Nietisbach (<u>liwanowicz@usgs.gov</u>; 304.724.4550) (<u>cstine@wesleyan.edu</u>) (<u>joel\_bader@fws.gov</u>) (<u>nicole.nietlisbach@wisconsin.gov</u>)



## COURSE DIRECTOR

Michael L. Kent, Ph.D. Oregon State University, College of Veterinary Science

## COURSE FACULTY

Rodman G. Getchell, Ph.D. Cornell University, College of Veterinary Medicine

**Christian Lawrence, M.S.** Boston Children's Hospital

Jan Spitsbergen, DVM, Ph.D., DACVP

Oregon State University, Department of Microbiology

## COURSE TOPICS

**Fish Disease** 

Pathogenesis, diagnostics, necropsy methods, treatment and control

**General Fish Biology** Anatomy, form and function

**General training** Anatomy, histology, and necropsy techniques

#### **Core Management**

Zebrafish biology, breeding, nutrition, water quality, system design, and biosecurity

# Health and Colony Management of Laboratory Fish

# August 9-14, 2020

For principal investigators, technicians, trainees, core managers, veterinarians, and veterinary technicians who utilize or plan to utilize fish models in laboratory research.

- Learn how to maintain the health of a colony of aquatic organisms
- Learn through lectures, discussions, and laboratory exercises
- Discuss unusual and/or unsolved diagnostic case experiences from your 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 **33 CE** (Continuing Education) Credits to veterinarians and veterinary technicians.

For more information, visit:

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







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For the full listing of all courses and conferences and to register for courses or our education newsletter: mdibl.org/education • 207.288.9800x102 • education@mdibl.org