

Fish Health Section



FHS NEWS – September 2022

Fish Health Section website: <https://units.fisheries.org/fhs/>

Fish Health Section Facebook Site: <https://facebook.com/FishHealthSectionAFS>

Fish Health Section Twitter feed: @AFSFishHealth

Membership notice: Starting in March 2023, only paid FHS members will receive newsletters and communications from the section. We are giving you several months notice to get your AFS & FHS membership up to date. Please join us and don't miss out on the connection to your peers. We will also be transitioning to a new listserv service so emails will be coming from fhs@afsmembers.simplelists.com soon. Keep an eye on those spam/junk mailboxes!

MEETINGS, WORKSHOPS AND COURSES

Northwest Fish Culture Concepts 71st Annual Meeting December 6-8, 2022 Portland, Oregon

The NW Fish Culture Concepts Executive Committee and the Fish Culture Section of the American Fisheries Society invite you to attend the Northwest Fish Culture Concepts 71st Annual Meeting, December 6-8, 2022. This event will be held at the DoubleTree by Hilton - Portland, Oregon near Lloyd Center (same venue as 2018 meeting).

Northwest Fish Culture Concepts (NWFCC) is an excellent venue for presentation of technical fish culture applications and an excellent opportunity to visit with trade show vendors. Registration for participants and vendors is available online with payment by credit card and check accepted through this link: https://register.gtrnow.com/71st_Northwest_Fish_Culture_Concepts_Fresh-

Early conference registration fee is \$150 through November 4, 2022. After this date, the registration fee increases to \$175. Student/retired fee is \$50.

Trade show exhibitor fee is \$650/booth with opportunity for additional support for enhanced coffee breaks and socials.

A limited number of hotel rooms are blocked off for the NWFCC at the DoubleTree by Hilton - Portland, Oregon near Lloyd Center at or below current government per diem rates. Current rates start at \$139/room. Please reserve through this link:

<https://www.hilton.com/en/book/reservation/deeplink/?ctyhocn=RLLC-DT&groupCode=CDTNWF&arrivaldate=2022-12-05&departuredat=2022-12-09&cid=OM,WW,HILTONLINK,EN,DirectLink&fromId=HILTONLINKDIRECT>

A block of rooms, under "Group Name" of "NW Fish Culture Concepts", has been reserved for December 5, 2022 - December 9, 2022. The special room rate will be available until November 4th or until the group block is sold-out, whichever comes first.

JOBS/GRADUATE ASSISTANTSHIPS

Graduate Assistsanship (MS)

University of Idaho

Moscow, ID

We are seeking a graduate student to work on a new USDA-NIFA project to determine the efficacy of oral administration of probiotic (C6-6) in the management of Cold water disease (CWD), columnaris disease and their related co-infections, and immunomodulatory properties of C6-6, effect on pathogenic load following challenge, and determine microbiome composition.

We are open to candidates seeking MS degree, the position will be based in the Department of Fish and Wildlife Sciences at the University of Idaho. The candidate will be supervised by Drs. Ken Cain and Jie (Jessie) Ma and work together with other graduate students in the area of fish health/immunology.

See attached .pdf for more information.

Postdoctoral Fellow

University of Idaho

Moscow, ID

This Postdoc position will require direct work with State, Federal, Tribal, and/or Private Aquaculture facilities, and laboratory work in the area of fish health/immunology. The candidate will work on one or more projects related to the management and control of fish diseases with a primary focus on vaccine development and commercialization. This will include protocol development, experimental design, and participation in Field/Lab Safety and Efficacy trials. The ideal candidate will have completed Ph.D. studies in a relevant biological discipline with relevant Fish Health Lab experience and hands-on Aquaculture experience in Public or Private Hatcheries in the US. The individual must have excellent verbal, written, and technical skills. The successful applicant will be expected to produce research reports as required and publish research results in appropriate high-quality journals. It is expected that the candidate will work with the Fish Health team to develop grant proposals and pursue outside funding support for new and ongoing projects. This position is agency and industry-supported and offered as a one-year contract contingent upon further funding.

Work will support an ongoing project involving regulatory approval and commercialization of a *Flavobacterium psychrophilum* vaccine to protect fish against coldwater disease. This position requires aquaculture and fish health/disease experience. The candidate should have demonstrated field/hatchery experience, proficiency in all aspects of molecular and immunological methods, laboratory disease challenges, and techniques such as SDS-PAGE, Western blotting, 2-D PAGE, histology, ELISA, PCR, etc.

See attached .pdf for more information.

Research Associate (2)

Auburn University – College of Agriculture

Auburn, AL

Link: <https://www.auemployment.com/postings/31726>

Essential functions include, but are not limited to the following:

Conduct screening and diagnosis of fish pathogens on hatchery or wild fish; perform necropsies and collect samples to detect viral, bacterial, fungal, or parasitic fish pathogens; maintain bacterial agars and virological medias; isolate and plate bacteria and viruses; manage and maintain lab equipment and inventory; conduct research and write papers and submit for peer review and publication if appropriate; write case reports to deliver results to state, federal, or private producers; and perform other duties assigned by supervisor.

Travel may be required to hatcheries or field areas, meetings, site visits, and workshops throughout the year.

Contact Dr. Ash Bullard at sab0019@auburn.edu with questions.

Zebrafish Related Job Announcements

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

RESOURCES/NEWS

Aquatic Animal Drug Approval Partnership (AADAP) Updates are now available online (new link): <https://www.fws.gov/library/collections/aquatic-animal-drug-approval-partnership-update>

Editor's Random Pics

Courtesy of John Drennan, State Fish Pathologist with Colorado Parks & Wildlife

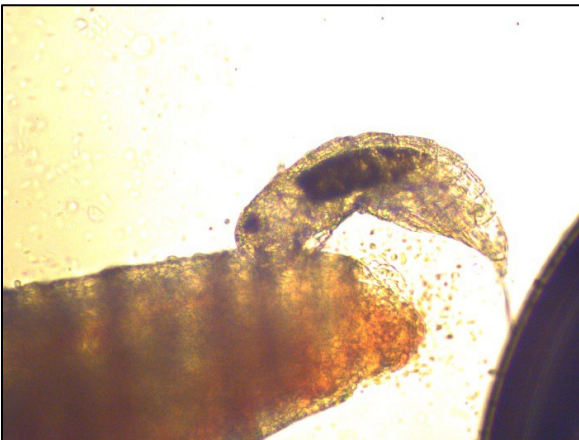
Adult “anchor worms” attached to suckers and rainbow trout at West Lake, Colorado (August 2021)



Gill tissue wet-mount showing *Lernaea* nauplius life-stage (200 times magnification)



Gill tissue wet-mount showing *Lernaea* copepodids grazing on gill tissue (100 times magnification)



Anglers at this lake were complaining that the fish appeared sick and dying. One week prior to examination of fish in the lake two sportsmen put out a YouTube video of their fishing experience. They were wondering what was on the fish, why the fish appeared unhealthy, and why they were not catching more fish. **What's Eating the West Lake Rainbows? | Vlog #25** <https://www.youtube.com/watch?v=AVQsEpQZ8sQ>

Postdoctoral Fellow (Fish Health): University of Idaho, USA

This Postdoc position will require direct work with State, Federal, Tribal, and/or Private Aquaculture facilities, and laboratory work in the area of fish health/immunology. The candidate will work on one or more projects related to the management and control of fish diseases with a primary focus on vaccine development and commercialization. This will include protocol development, experimental design, and participation in Field/Lab Safety and Efficacy trials. The ideal candidate will have completed Ph.D. studies in a relevant biological discipline with relevant Fish Health Lab experience and hands-on Aquaculture experience in Public or Private Hatcheries in the US. The individual must have excellent verbal, written, and technical skills. The successful applicant will be expected to produce research reports as required and publish research results in appropriate high-quality journals. It is expected that the candidate will work with the Fish Health team to develop grant proposals and pursue outside funding support for new and ongoing projects. This position is agency and industry-supported and offered as a one-year contract contingent upon further funding.

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RESPONSIBILITIES:

The candidate will spend the majority of his/her time conducting research aimed at licensing fish vaccines for use to prevent or control disease in aquaculture. This position requires experience in bacteriology, virology microbiology, molecular biology and immunology. The successful candidate will work closely with private and public sector partners and be expected to coordinate the production and testing of fish health products and coordinate field safety trials. The position will require both *in vivo* fish care and *in vitro* experimentation to evaluate vaccine preparations.

The candidate will be expected to present research results in a variety of settings including Regional, National, and International conferences. The candidate will also provide periodic presentations updating research progress to the industry and the public.

The candidate will be expected to assist in training of graduate and undergraduate students and staff on laboratory techniques.

This position will require some travel plus indirect and direct supervision of students in the laboratory.

MINIMUM QUALIFICATIONS:

Education: Ph.D. degree in Fish Health/Aquaculture, Microbiology, Molecular biology, or closely related field

Demonstrated oral and written communication skills

Demonstrated ability to work independently and with a group

Hands-on salmonid hatchery or aquaculture experience

ADDITIONAL DESIRABLE QUALIFICATIONS:

Experience with USDA licensing processes
Demonstrated publication record
Grant/proposal writing skills
Proven record of acquiring outside/external research funding
Previous postdoc experience

Closing date: Open until filled

For additional information please contact Ken Cain (see below).

If interested, please forward a copy of your current CV, a letter of interest, and a list of at least 3 references and their contact information to:

Ken Cain

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875 Perimeter Dr MS1136
Moscow, ID 83844-1136
p: 208-885-7608
f: 208-885-9080
c:208-669-1292
email: kcain@uidaho.edu

Graduate Assistantship (Fish Health) – University of Idaho

We are seeking a graduate student to work on a new USDA-NIFA project to determine the efficacy of oral administration of probiotic (C6-6) in the management of Cold water disease (CWD), columnaris disease and their related co-infections, and immunomodulatory properties of C6-6, effect on pathogenic load following challenge, and determine microbiome composition.

We are open to candidates seeking MS degree, the position will be based in the Department of Fish and Wildlife Sciences at the University of Idaho. The candidate will be supervised by Drs. Ken Cain and Jie (Jessie) Ma and work together with other graduate students in the area of fish health/immunology.

Minimum Qualifications: Bachelor's degree in Fish Health/Aquaculture, Microbiology, Molecular biology, or closely related field, a strong interest in Fish Health/Aquaculture research, a good work ethic, and solid communication and quantitative skills.

Additional Desirable Qualifications: Aquaculture experience, Lab competencies in molecular biology, knowledge of bioinformatics.

The salary, fringe benefits, and appointment terms (2 yrs.) are consistent with the current rules for M.S. degree students at University of Idaho (UI). Ideally, the student will begin coursework and research in January 2023 or Summer 2023. Review of applications will begin on October 10, 2022. Application materials should be e-mailed to kcain@uidaho.edu and jiema@uidaho.edu and include the following:

- 1, A cover letter motivating the application (background, interests, goals);
2. CV;
- 3, Names of 3 professional references;
4. Unofficial transcripts.

If selected for this position, the candidate would then need to formally apply through the UI Graduate School.

For additional information please contact Dr. Jessie (Jie) Ma (see below).

Jie (Jessie) Ma
Department of Fish and Wildlife Sciences, University of Idaho
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