

Fish Health Section



FHS NEWS

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

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

FHS Listserv cleanup

We recently conducted a cleanup of the emails on the listserv based on bounce backs. If you know of someone who didn't receive this newsletter that would still like to receive it, please have them contact me at stacy.a.strickland@odfw.oregon.gov with a working email address to add back to the listserv. At this time we aren't requiring listserv contacts to be AFS-FHS members, so if you receive the newsletter and emails and aren't a member, you won't automatically get removed from the listserv during these kinds of cleanups.

President's Message

Please see attached .pdf for the latest message.

Summer Seminar Series

Don't forget to participate in the AFS-FHS Student Summer Seminar Series! Graduate students and post-docs do not get many chances to network or share their research. With the cancellation of the EFHW, AFS-FHS, WFDW and other scientific meetings these opportunities have become even more limited. This summer seminar series will provide an avenue for young scientists to get their names out there, but also give the rest of us a chance to stay connected. You can find the Seminar Schedule and archived presentations/abstracts here: [Seminar calendar and Zoom access information](#)

This is a low-stakes forum for students, post-docs and early career folks to introduce themselves to a mix of lab groups from across the country and show off the fruits of their labors. Please feel free to forward these announcements to your friends and encourage them to sign up for the listserv: [AFS-FHS Student Seminar Series Listserv](#)

Presentations will take place on Friday afternoons from 12-1 pm Central time.

MEETINGS, WORKSHOPS AND COURSES

9th International Symposium on Aquatic Animal Health (ISAAH)

Santiago, Chile

September 4-8, 2022

See attached pdf for more info.

27th Annual Aquaculture Drug Approval Coordination Workshop

Due to the ongoing COVID-19 pandemic and for the safety of everyone, the 27th Annual Aquaculture Drug Approval Coordination Workshop will be held VIRTUALLY, from July 27-29th, 2021. If you're interested in giving a presentation at the workshop, or if you have any specific aquaculture

drug/drug approval process-related questions that you would like addressed during the workshop, please reach out to **Julie Schroeter** by **May 28th, 2021**. More details about the workshop, including registration information, will be available soon via the **AADAP website** and the **AADAP Update**. Please don't hesitate to reach out if you have any questions. Thank you.

Calling all Aquaculture America 2021 attendees!

Are you interested in speaking in a special session at Aquaculture America 2021, to be held in San Antonio, Texas from August 11th-14th, 2021? Please see the link below to learn more about the National Aquaculture Association (NAA) special sessions that AADAP is co-hosting with the Aquatic Drug Approval Coalition (ADAC) and the Association of Fish and Wildlife Agencies-Drug Approval Working Group (AFWA-DAWG).

<https://www.fws.gov/fisheries/aadap/Expert-Presenters-Invited-Aquaculture-America-2021.html>

JOBS/GRADUATE ASSISTANTSHIPS

Microbiologist II

Maine Department of Inland Fisheries & Wildlife

Augusta, ME

Closes: June 4, 2021

Link: <https://mainebhr.recruiterbox.com/jobs/fk0uc12/>

This is a full-time non-supervisory position that is engaged in professional and scientific technical services work based out of the Department's Fish Health Laboratory. Responsibilities include sample collection, necropsy of captive and wild fish populations, tissue extraction and processing, and sample screening for the presence or absence of specific viruses, bacteria, and parasites of regulatory concern using a suite of specialized protocols and procedures. Work requires travel to sample collection sites throughout the State and the occasional need to work hours beyond or outside normal weekday laboratory hours.

Microbiologist II

Utah Fisheries Experiment Station

Logan, UT

Closes June 7, 2021

Link: <https://www.governmentjobs.com/careers/utah>

As a Microbiologist you will:

- be partially responsible for maintaining Utah's fish health laboratory
- assist in planning, scheduling and performing fish health inspections in accordance with Utah's Fish Health Policy
- perform animal dissection (necropsies) and prepare specimens for laboratory analysis
- collect tissues and oversee transport of biological samples for processing
- use various techniques to analyze and identify fish pathogens
- maintain quality control and report laboratory findings timely
- participate in meetings and continuing education pertaining to fisheries, fish health and laboratory techniques
- participate in fish health related research as needed
- maintain and develop SOP's

See attached .pdf for more information.

M.S. Position in Fish Health

Auburn University

Auburn, AL

Closes: June 15, 2021

A Master of Science (M.S) position is available at Auburn University. The incoming student will be a Graduate Research Assistant in Dr. Tim Bruce's Fish Health Lab within the School of Fisheries, Aquaculture and Aquatic Sciences (SFAAS). Research in the Bruce lab focuses on host-pathogen interactions in cultured fish species, nutritional aspects of fish health, and fish vaccinology/therapeutants.

See attached .pdf for more information.

Zebrafish Related Job Announcements

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

RESOURCES/NEWS

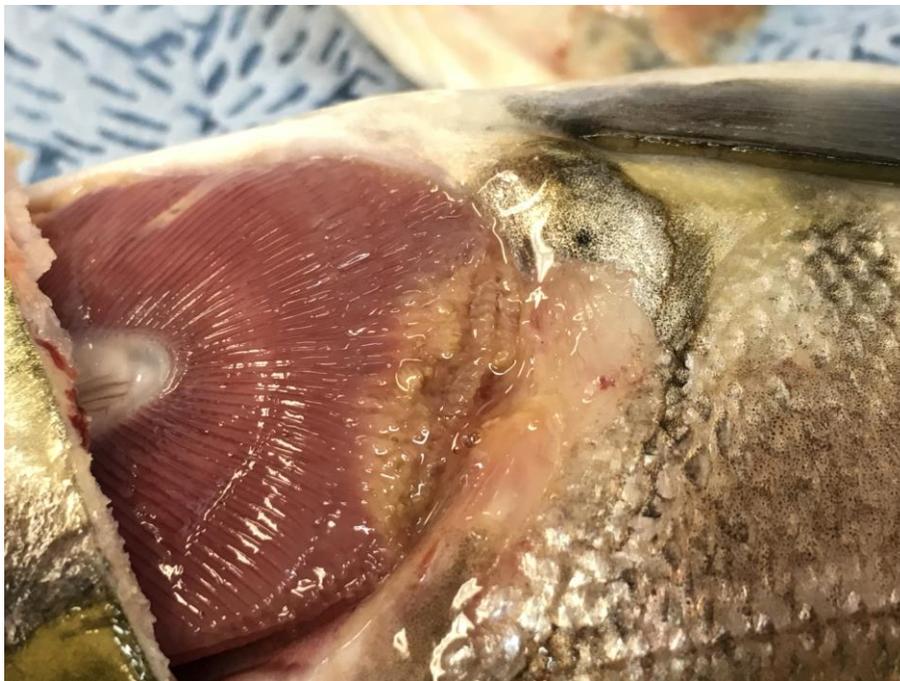
Aquatic Animal Drug Approval Partnership (AADAP) Updates are now available online:

https://www.fws.gov/fisheries/AADAP/aadap_update.html

AFS Job Board changes

Check out the new AFS [Career Center](#) with new and improved features for both job seekers and employers. Job hunters now benefit from improved search functions and email alerts. While employers can peruse candidate applications and submit jobs more quickly and easily through an online submission form with a credit card payment system. Individual AFS members can still advertise for assistants and internship positions at no charge. See the AFS member employer [pricing options](#).

EDITOR'S RANDOM PICS



Gill columnaris, sockeye adult, Deschutes River, OR, August 2017.



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE



Greetings, Fish Health Section members and colleagues worldwide!

We are pleased to announce the 9th International Symposium on Aquatic Animal Health (9th ISAAH) will be held 4 – 8 September 2022, in Santiago, Chile. The ISAAH is a truly unique event hosted by the Fish Health Section of the [American Fisheries Society](#) and held every four years. The ISAAH typically attracts 300–400 fish health professionals from around the world. This will be the first time ISAAH is hosted outside North America!

As a global forum for interdisciplinary collaboration and communication, ISAAH aspires to create an environment of fellowship, to learn and share the latest groundbreaking research, with a vision of building a better future for aquatic animal health professionals. The 9th ISAAH will bring together scientists from across the globe to open new avenues of research and help foster international collaborations.

The 9th ISAAH will be held at the [Extension Center](#) of the [Pontifical Catholic University \(PUC\)](#). Founded in 1888, the PUC is one of Chile's oldest universities and one of the most well-respected educational institutions in Latin America. Chile is a key player in global aquaculture and salmon farming as well as aquatic ecosystem resource management. [Chile](#) has many diverse habitats, from the Andes Mountains to the Pacific Ocean, from the desert in the extreme north to the Patagonia region in the south. Enjoying more than 5,000 km of coastline and an extensive network of aquatic ecosystems amidst numerous drainage basins, rivers and lakes, Chile is an appealing destination for aquatic animal health researchers.

[Santiago](#) is a bustling, vibrant city with diverse cultural roots, exquisite museums and top-tier restaurants, bars and cafes. We hope you will join us in Santiago for a truly inspiring event.

See you in Santiago!

The Organizing Committee

Matt Griffin, College of Veterinary Medicine, Mississippi State University, USA.

Fernando Mardones, School of Veterinary Medicine, Pontifical Catholic University, Chile.

Esteban Soto, School of Veterinary Medicine, University of California - Davis, USA.

Natalia Zimin-Veselkoff, School of Veterinary Medicine, Pontifical Catholic University, Chile.

9th International Symposium on Aquatic Animal Health
September 4 - 8, 2022
Santiago, Chile



STATE OF UTAH
invites applications for the position of:

Microbiologist

SALARY:	\$23.97 - \$27.92 Hourly
OPENING DATE:	05/24/21
CLOSING DATE:	06/07/21 11:59 PM
# OF OPENINGS:	1
BENEFITS:	This position is eligible for a full benefits package. See benefits tab below for details.
DRIVER LICENSE REQUIREMENTS:	Employees hired for this recruitment will be subject to the Driver Eligibility standards found at the following link: https://rules.utah.gov/publicat/code/r027/r027-007.htm#T3
LOCATION:	Fisheries Experiment Station, 1465 West 200 North, Logan, Utah
RECRUITER:	Karen Weir / kweir@utah.gov / 801-538-7425
SCHEDULE CODE:	B - Competitive Career Service - Employment in this position requires a probationary period.
JOB DESCRIPTION:	

Job Title: Microbiologist II

Job Description:

Are you seeking an exciting opportunity to provide laboratory services to Utah's fish health programs? If so, the Fisheries Experiment Station (FES) is seeking a Microbiologist to perform laboratory work and assist with annual fish health inspections and laboratory analysis for State hatcheries and managed waters.

Principal Duties:

As a Microbiologist you will:

- be partially responsible for maintaining Utah's fish health laboratory
- assist in planning, scheduling and performing fish health inspections in accordance with Utah's Fish Health Policy
- perform animal dissection (necropsies) and prepare specimens for laboratory analysis
- collect tissues and oversee transport of biological samples for processing
- use various techniques to analyze and identify fish pathogens
- maintain quality control and report laboratory findings timely
- participate in meetings and continuing education pertaining to fisheries, fish health and laboratory techniques

- participate in fish health related research as needed
- maintain and develop SOP's

The Ideal Candidate:

The ideal candidate for this position has:

- a Bachelor's degree in Natural Resources, Microbiology, Fisheries Biology, Wildlife, biological sciences or directly related field of study with general coursework in virology, microbiology, chemistry, bacteriology, parasitology and/or molecular biology
- laboratory experience
- ability to perform fieldwork and collect samples
- ability to obtain an Aquatic Animal Health Inspector Certification within 18 months of hire

Why You Should Join Our Team

This is an exciting opportunity to apply your education and laboratory skills as part of the team at FES. FES is responsible for fish health management and fish disease control, fisheries research, training and specialized fish culture. Additionally, the State of Utah offers great benefits and generous paid time off so you can spend more time with your family and have a positive work-life balance. Click [here](#) to view a summary of the benefits offered.

The Agency:

Click [here](#) for more information about the Division of Wildlife Resources.

EXAMPLE OF DUTIES:**TYPICAL QUALIFICATIONS:**

(includes knowledge, skills, and abilities required upon entry into position and trainable after entry into position)

- BS degree in Fisheries & Wildlife, Biology and/or Microbiology
- knowledge of fish anatomy and necropsy procedures
- knowledge of cell maintenance procedures, aseptic technique, cell culture methods and pathogen identification techniques
- knowledge of bacteriology, DFAT analysis, API methods, reagent and media preparation, antibiotic sensitivity testing
- knowledge of general parasitology methods, head defleshing, PTD, parasite identification techniques
- knowledge of Qiagen extraction methods, nucleic acid enumeration, PCR, qPCR and troubleshooting
- knowledge of general microbiological methods
- computer proficiency, experience using MS Word and Excel

SUPPLEMENTAL INFORMATION:

- Risks which require the use of special safety precautions and/or equipment, e.g., working around operating machines, working with contagious diseases or hazardous chemicals,

etc.

- Work requires physical exertion. May require the ability to stand; walk over rough surfaces; bend, crouch, stoop, stretch, reach, lift moderately heavy items (up to 50 lbs.) in a recurring manner and/or for long periods of time.
- Some travel and overnight trips are required; some work on weekends.

The State of Utah is an equal opportunity employer. Hiring is done without regard to race, color, religion, national origin, sex, sexual orientation, gender identity, age or disability. The State provides reasonable accommodations to the known disabilities of individuals in compliance with the Americans with Disabilities Act. For accommodation information or if you need special accommodations to complete the application process, please contact the Department of Human Resource Management at (801) 538-3025 or TTY (801) 538-3696.

APPLICATIONS MAY BE FILED ONLINE AT:
<https://www.governmentjobs.com/careers/utah>

Position #27424
MICROBIOLOGIST
KW

4315 S. 2700 W., Suite 2100
Salt Lake City, UT 84184

statejobs@utah.gov

Microbiologist Supplemental Questionnaire

- * 1. Your resume and work history must validate your answers on this application. If not, you may be disqualified or receive a lower overall score eliminating you from consideration. "See resume" is not an acceptable answer to any of the application questions.
 I acknowledge that I have read the statements above.
- * 2. The beginning wage for this position will be between \$23.97 and \$27.92 per hour for new employees. For existing state employees DHRM rules and agency/division policy will determine the starting salary.
Are you willing to accept a salary within this beginning range of \$23.97 and \$27.92 per hour (for non-state employees or seasonal state employees) or as determined by DHRM rule and DWR guidelines (for current state career service employees)?

Applicants selecting "No" will not be considered or interviewed.

- Yes
- No
- * 3. In this position, you will be required to lift and move items weighing up to 40 pounds, travel to perform fieldwork (including overnight trips), work flexible hours including weekends, work in all weather conditions, work in or around water and work around rocky or slippery conditions. Are you able to meet these job requirements?
 Yes
 No
- * 4. From the options below, select which applies to your education and/or experience.

Professional employment: 1 year is equal to 12 months of work experience even if that year requires multiple calendar years of work to accumulate.

- Bachelor's degree or higher in Natural Resources
- Bachelor's degree or higher in Microbiology
- Bachelor's degree or higher in Fisheries Biology
- Bachelor's degree or higher in Wildlife
- Bachelor's degree or higher in the biological sciences
- Bachelor's degree or higher in a directly related field of study
- Bachelor's degree in a unrelated field of study PLUS 5 years of directly related professional full time paid employment in a directly related natural resource or wildlife field
- None of the above

- * 5. If you selected "none of the above" for the previous question, type N/A in the space below. If you selected any of the other options, in the space below provide the following:
- 1) Degree type (Bachelor's, Master's, etc.)
 - 2) Degree major and any minors
 - 3) College or university from where you obtained your degree
 - 4) If you have an unrelated degree with at least 5 years of directly related experience, provide dates of employment, employer and a detailed description of your qualifying experience.
- * 6. As part of this application, you are required to attach your transcripts if you indicate you have a degree or some higher education. Please attach your transcripts in the section where you attach your resume.
- I acknowledge that I must attach my transcripts if I claim to have a degree or any post high school education.
- * 7. From the options below, select all that you have professional work experience.
- Parasitology
 Bacteriology
 Virology
 None of the above
- * 8. From the options below, select all that you have professional work experience.
- Pepsin Trypsin digest analysis for *Myxobolus cerebralis* identification
 Parasite identification methods
 Fish anatomy and necropsy procedures
 Blue Book structured fish health inspections
 Light microscopy
 Dichotomous key identification methods
 Cell culture
 Cell culture of fish cell lines
 DFAT analysis
 API methods
 Reagent preparation
 Bacterial media preparation
 Antibiotic sensitivity testing
 None of the above
- * 9. From the options below, select all that you have professional work experience.
- Polymerase chain reaction analysis (PCR)
 qPCR and rt-PCR analysis
 Qiagen extraction methods
 Nucleic acid enumeration
 None of the above
- * 10. Excluding academic experience, select the number of years of professional work experience you have performing laboratory methods and/or working in a fish health or veterinary laboratory.
Only include time worked in a professional setting.
- None
 Less than 1 completed year
 1 completed year
 2 completed years
 3 completed years
 4 completed years
 5 or more completed years
- * 11. In the space below, describe your experience performing laboratory methods and or working in a fish health or veterinary laboratory. If you have no experience, type N/A.

* 12. Please indicate how you heard about this specific job posting.

- State Jobs
- An External Job Posting Site (Indeed, LinkedIn, etc.)
- Social Media (Facebook, Twitter, etc.)
- Advertisement (Newspaper, Internet, Radio, etc.)
- Professional Network
- University Network (Career Center)
- Referred by a Friend or Colleague
- Contacted by a Recruiter
- Career Fair
- Internal communication from a State Agency that employs me - State employees only
- Other

* Required Question

M.S. Position in Fish Health



A Master of Science (M.S) position is available at Auburn University. The incoming student will be a Graduate Research Assistant in Dr. Tim Bruce's Fish Health Lab within the School of Fisheries, Aquaculture and Aquatic Sciences (SFAAS). Research in the Bruce lab focuses on host-pathogen interactions in cultured fish species, nutritional aspects of fish health, and fish vaccinology/therapeutics.

Responsibilities and tasks

This M.S. project will involve experimental laboratory studies (~50%) and *in vivo* pathogen challenge trials (~50%) Specifically, this M.S. thesis research will examine bacterial pathogens in cultured, warmwater fish species. Overall, the student will be expected to conduct an independent research project followed by the writing and defense of a detailed thesis.

Qualifications

The lab team is looking for a motivated candidate who has:

- Bachelor's degree in the Biological Sciences
- Knowledge of aquaculture, microbiology, or fish health
- Proven ability to carry out goal-oriented work and fluent with data management systems (i.e. Excel, Word, statistical analysis)
- Lab competences in molecular biology (e.g., nucleic acid extraction, ELISA, gene expression (RT/qPCR), protein assays) and/or microbiology (e.g., culture, identification (PCR), microbe-related assays) would be considered an asset
- Fish husbandry experience will be an asset
- Ability to work in a team laboratory setting, as well as independently

Approval and Enrollment

This M.S. graduate appointment is subject to academic approval, and the candidate will be enrolled in the M.S. program within the School of Fisheries, Aquaculture and Aquatic Sciences (SFAAS). For information about our program please see: <http://sfaas.auburn.edu/programs-of-study/graduate-studies/>

Salary and appointment terms

This project will be carried out at the E.W. Shell Fisheries Center, which is situated in Auburn, Alabama (<http://sfaas.auburn.edu/e-w-shell-fisheries-center/>). The salary (\$17,000 + fringe benefits) and appointment terms (2 yrs.) are consistent with the current rules for MSc degree students; typically, a tuition waiver is provided. The student will begin coursework and research in **August 2021 (Fall Semester)**.

Application

Please submit your application no later than **15 June 2021**. Applications must be e-mailed to tjb0089@auburn.edu as a **single .pdf file/packet** containing all materials to be given consideration. The .pdf packet must include:

- Cover letter motivating the application (background, interests, goals)
- Curriculum vitae
- Contact information (e-mail and phone numbers) for three references
- Unofficial transcripts and GRE scores (refer to: <https://www.ets.org/gre>)

Further information

For further information about the project and assistantship, please contact Dr. Bruce at tjb0089@auburn.edu. Information on Auburn University may be found here: <http://www.auburn.edu/main/welcome/index.php>