

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@state.or.us 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.

Dear AFS-FHS Members,

The U.S. Food and Drug Administration recently published a concept paper to obtain early input from the public on a potential framework for how animal drug sponsors could voluntarily make changes to the approved conditions of use for certain medically important antimicrobial drugs to establish a defined duration of use for those indications that currently lack a defined duration of use. FDA also published a notice in the Federal Register that invites the public to comment on specific questions regarding the concept paper. FDA is accepting public comments on the concept paper until April 12, 2021 (please note, comment period has been extended to June 11, 2021).

Additional information is available, including instructions for how to provide comments, at the following link: <https://www.fda.gov/animal-veterinary/cvm-updates/fda-seeks-public-comment-potential-approach-defining-durations-use-certain-medically-important>

All the best,

Tom

Thomas P. Loch, MS, PhD
Assistant Professor
Michigan State University - Aquatic Animal Health Laboratory
Dept. of Fisheries & Wildlife, College of Agriculture & Natural Resources
Dept. of Pathobiology & Diagnostic Investigation, College of Veterinary Medicine
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Email: lochthom@msu.edu

MEETINGS, WORKSHOPS AND COURSES

9th International Symposium on Aquatic Animal Health (ISAAH)

Santiago, Chile

September 4-8, 2022

See attached pdf for more info.

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

Research Microbiologist

USDA-ARS, Aquatic Animal Health Research Unit

Auburn, AL

Series/Grade: GS-0403-12

<https://www.usajobs.gov/GetJob/ViewDetails/590289000>

Closes 2/26/21

Research Parasitologist

USDA-ARS, Aquatic Animal Health Research Unit

Auburn, AL

Series/Grade: GS-0401-12

<https://www.usajobs.gov/GetJob/ViewDetails/590421000>

Closes 2/26/21

Phibro Aqua Sales Agent

Phibro Animal Health Corporation

Alabama, Mississippi, and Arkansas

See attached .pdf for info.

MS (or PhD) Student Opportunity – Zebrafish Health and Mycobacteriosis

The Whipps Fish and Wildlife Disease lab (<http://whippslab.weebly.com/>) at the State University of New York College of Environmental Science and Forestry (ESF) (<https://www.esf.edu/efb/>) is seeking MS applicants (or possibly suitable PhD applicants) to investigate mycobacteriosis in zebrafish. The project is part of ongoing research into controlling infectious diseases in this important laboratory model.

The successful applicant will carry out a studies on developing a natural exposure model for *Mycobacterium chelonae* in zebrafish and the role of fish age and diet on the prevalence and severity of infection. Potential PhD applicants would additionally develop their own research questions.

During the academic year, the applicant will be supported on a departmental teaching assistantship (20 hrs/week) and will be assigned to support courses based on background and interest. The

teaching assistantship also covers tuition. Summer support is through research aide position (40 hrs/week).

The successful applicant will develop a MS thesis from their field research, write reports to funders, and produce 1-2 scholarly peer reviewed papers (3-4 for PhD).

Required Qualifications: Bachelor's degree in Biology, Microbiology or related fields. Experience with fish husbandry (e.g., laboratory, hatchery, or hobbyist). Experience or strong interest in microbiology methods, DNA sequencing and sequence analysis. Strong organization and communication skills. Interest in undergraduate teaching. GPA and GRE scores competitive for acquiring departmental teaching assistantship.

Preferred Qualifications (preferred but not required): Background in Microbiology and Fish Health. Experience with zebrafish husbandry. Statistical analyses appropriate for characterizing and comparing differences in disease outcomes in experimental groups. Experience with PCR, bacterial culture and other diagnostic methods.

Term of Position: Seeking an applicant to begin in either the summer of 2021 or the Fall 2021 semester (late August start). Support for 2 years (MS) or 3 years (PhD), with extension possible. Summer support as technician. Academic year (Sept-Apr) support on departmental teaching assistantship.

Application Deadline: Although applications will be accepted until the position is filled, candidates should submit their application by **February 15, 2021** to assure optimal consideration. Send the following to cwhipps@esf.edu: CV, cover letter addressing requirements and fit for the position, and unofficial copies of transcripts and GRE scores. References will be solicited for top applicants. The email should contain the subject line "zebrafish health position".

Research Veterinary Medical Officer
USDA-ARS, Aquatic Animal Health Research Unit
Auburn, AL
Series/Grade: GS 12-13
<https://www.usajobs.gov/GetJob/ViewDetails/591686800>
Closes 3/10/21

MS Student Opportunity – Parasitology/Aquatic Animal Health
Mississippi State University
Stoneville, MS

Beginning Spring 2021 or Summer 2021, the Aquatic Parasitology Lab in the Department of Comparative Biomedical Sciences at the Mississippi State University College of Veterinary Medicine is seeking a graduate student for a Masters level program. The selected student will join a collaborative, multidisciplinary research group focused on serving the Catfish Aquaculture Industry.

In the southeastern United States, catfish aquaculture is hindered by losses attributed to digenetic trematodes. In collaboration with researchers at the Thad Cochran National Warmwater Aquaculture Center (NWAC), this two- year project will focus on examining trematode infection dynamics within catfish production ponds and involve annual field sampling (collection of aquatic snails, fish), experimental infections, animal necropsy (bird and fish), and basic parasitology techniques. Morphological identification of trematode life stages encountered in these systems will be supplemented with molecular data to identify hosts involved in specific trematode life cycles and be used in the development of molecular diagnostic assays. Molecular characterization will encompass

basic molecular biology techniques (DNA extraction/isolation, PCR, and Sanger and Oxford Nanopore sequencing).

The student will receive graduate training at the Rosser lab at MSU CVM (in Starkville, MS) and the Griffin laboratory at NWAC (in Stoneville, MS). At the completion of the project the student will be versed in molecular techniques, traditional parasitology, animal husbandry, animal necropsy, general aquaculture principles and experimental design/analysis. Graduate coursework will include courses related to parasitology, aquaculture/aquatic animal health, statistical analysis, molecular biology, and CVM's graduate seminar series. The successful applicant will develop a MS thesis from their research, present their findings at scientific meetings and stakeholder workshops, and produce 1-2 peer reviewed manuscripts.

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

Retirement sale of lab equipment and cabinets. Send email to John Cvitanich at johndcvitanich@gmail.com or call 541-401-4927 to inquire about available items. See attached .pdf for examples of items/descriptions and photos.

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](#).

NEW FEATURE – EDITOR’S RANDOM PICS



Bull trout and the kokanee that choked it, Lake Billy Chinook, Madras, OR, April 2019.



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

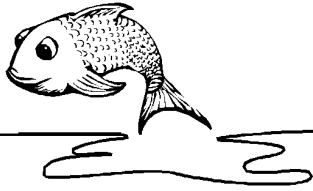
Matt Griffin, College of Veterinary Medicine, Mississippi State University, USA.

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



Fish Health

Diagnostic & Research Laboratory

2252 Main St.

Sweet Home, OR 97386 ~ USA

Phone: (541) 401-4927

Email: johndcvitanich@gmail.com

John Cvitanich – Equipment for Sale

Centrifuge - Beckman refrigerated Accuspin FR, table top, serial #1290

- AH-4 horizontal rotar with many test tube & bottle carriers
- AA-10 fixed angle rotar (10 places for 50 ml tubes)
- AA-24 fixed angle rotar (24 places for 15 ml tubes)
- has new brushes and drive belt (with spares) - paid \$10,600 in 1985

Spectrophotometer - Bausch & Lomb/Milton Roy, Spectronic 21 UVD

- serial #0702258 - paid \$3,208 in 1986

Inverted Microscope - Zeiss IM, serial #061351, with camera attachment tube

- with KPL 10x widefield oculars
- with 3 objectives: Phase 2, Planachromat 16x; Phase 1, F Achromat 10x; Phase 1, F-LD Achromat 32x
- paid \$7,422 in 1986

Microscope camera - Zeiss M35 with Zeiss MC63 exposure control panel

- paid > \$1,000 in 1983

Mercury lamp system - for Zeiss Standard 16 microscope; serial #48538

- with 50W HBO power supply - paid \$2,497 in 1996

Microscope dual observation tube with pointer - Zeiss; paid \$1,208 in 1990

4 ft. Biosafety Hood – Labconco, Purifier Class II, with stand, serial #401365

- In perfect condition, used less than 40 hrs - paid \$6,194 in 1996

4 ft. Laminar flow Biological Hood – Bellco Glass/NuAire, with stand

- paid \$2,242 in 1996

4 ft. Chemical Fume Hood - Labconco, with flame suppressor

- with Labconco Acid storage cabinet base
- with epoxy sink and worksurface; with faucets - paid \$7,322 in 1996

Analytical Balance – Mettler AG-245; serial #1113330289
- paid \$3,388 in 1995

Top Loading Balance – OHAUS Brainweigh B-1500; serial #11576
- dual range: 150g/1,500g -paid \$1,039 in 1983

pH Meter - Beckman ALTEX pHI 70; serial #0076557 -paid \$1,448 in 1083
- with arm/stand for electrodes
- with Beckman Accumet pencil/gel electrode and temperature probe

Water Bath - Precision Model 282; serial #6990400909
- ambient to 99.9°C - paid \$521 in 1999

Flammables Cabinet - Labconco, 36" x 35" x 22" with stainless steel countertop
38" x 25" and 7" backsplash - paid \$1,365 in 1996

Ultrafiltration stirred cells - Amicon, 10 and 200 ml cells
- with magnetic stirring table MT-2 and gas pressure regulator
- paid ~\$1,350 in 1986

Incubator - REVCO, 21.5 cu.ft. refrigerated, model RI-23-1060-ABA,
- serial #R10E-203206-RE - paid \$4,338 in 1995

Incubator - American Scientific Products, model IS-61, serial #117012
- ambient to 60°C - paid \$1,200 in 1985

Incubator - Precision/GCA corp, model 818, serial #26AS-9
- 10° - 50°C - paid \$2,685 in 1985
- dual timers for programming both temperature and interior lighting

Sterilizer - Market Forge, model STM-E, 220 v, serial #056725 **SOLD**
- Received as trade for services in ~1999; I never used it as it was 220 v

Deionizer - Barnstead/Thermolyne, NANOpure Bioresearch
- model D-4751, wall mount - serial #7479064653
- mounted on wall but never used - paid \$2741 in 1996

Deionizer - Barnstead/Thermolyne, ½ B-pure wall mount, model D4505
- serial #583960807335
- with Pura-Lite water purity indicator, model E-3450
- never used - paid \$294 in 1997

Fiberoptics Halogen Lamp - Schott KL-1500 - paid \$600 in 1985

Hand-held UV lamp - Blak-Ray, long wave UV-366 nm, model UVL-56

Chromatography columns and accessories - Pharmacia - paid \$2,171

Electrophoresis Equipment - BioRad - paid \$6,449 in 1987
- Bio-Phoresis horizontal electrophoresis cell - serial #134-BR-1782
- Mini-Protein II electrophoresis cell -serial #125-BR-5453
- Computer controlled electrophoresis power supply, model 3000-Xi

6-Place Stir plate - Variomag - serial #0101621 - paid \$1,248 in 1997

Magnetic stir plates - paid ~\$440
- Corning model PC-310
- Sybron/Thermolyne Nuova II, model S-18525

Magnetic Stir/Hot plate - paid ~\$250
- Corning model PC-320 - serial #03005964

Vortex Mixer - American Scientific Products -serial #002845

Commercial Blender - VITA-MIX, 2liter - paid \$405 in 1996

Rotary Auto-plater - Lab-Line model 1580 - serial #0576

Vacuum Pump - GAST - paid \$200 in 1986

8 ft bank of cabinets with 9 ft formica countertop with mahogany trim
- paid \$2,200 in 1997

12 ft formica countertop with mahogany trim and (3) 24" x 36" x 22" metal base cabinets -paid \$1,850 in 1997

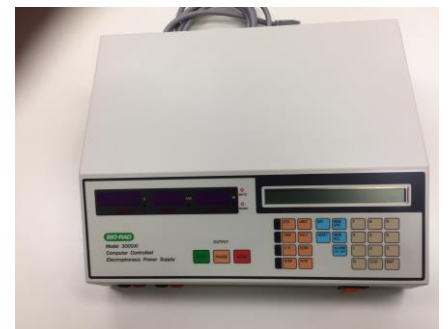
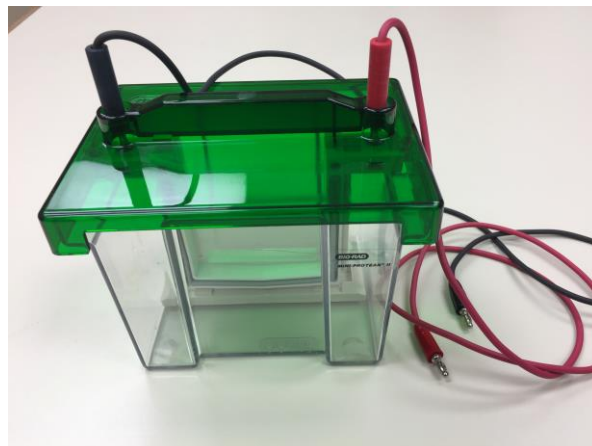
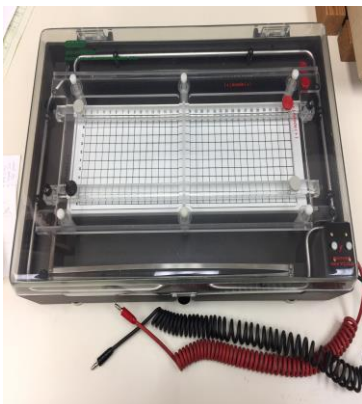
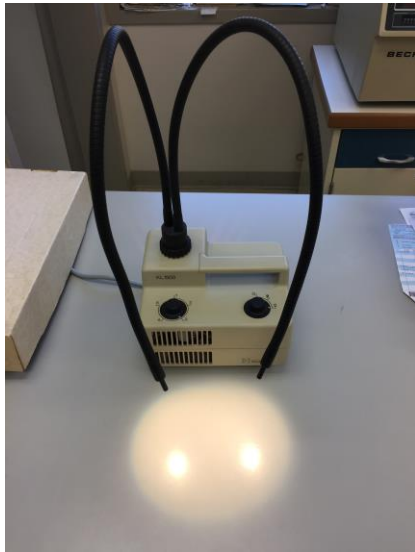
Safety Drench Shower – HAWS - paid \$318

Miscellaneous

- slide boxes, trays, mailers
- test tube racks, assorted
- hemacytometers (2)
- Petroff-Hausser counting chamber
- WBC differential counters
- tally counter
- agglutination slides
- teflon stir bars, assorted
- glassware, assorted
- stainless steel rectangular pipet and petri dish canisters
- ring stands with various clamps, holders
- dissecting instruments, assorted
- 20 liter Nalgene carboy with spigot











Re: Masters student position in parasitology/aquatic animal health

Beginning Spring 2021 or Summer 2021, the Aquatic Parasitology Lab in the Department of Comparative Biomedical Sciences at the Mississippi State University College of Veterinary Medicine is seeking a graduate student for a Masters level program. The selected student will join a collaborative, multidisciplinary research group focused on serving the Catfish Aquaculture Industry.

Application deadline: Open until filled

Start date: January 2021

Location: Mississippi State University College of Veterinary Medicine, Mississippi State, MS and the Thad Cochran National Warmwater Aquaculture Center, Stoneville, MS

Project details: In the southeastern United States, catfish aquaculture is hindered by losses attributed to digenetic trematodes. In collaboration with researchers at the Thad Cochran National Warmwater Aquaculture Center (NWAC), this two- year project will focus on examining trematode infection dynamics within catfish production ponds and involve annual field sampling (collection of aquatic snails, fish), experimental infections, animal necropsy (bird and fish), and basic parasitology techniques. Morphological identification of trematode life stages encountered in these systems will be supplemented with molecular data to identify hosts involved in specific trematode life cycles and be used in the development of molecular diagnostic assays. Molecular characterization will encompass basic molecular biology techniques (DNA extraction/isolation, PCR, and Sanger and Oxford Nanopore sequencing).

The student will receive graduate training at the Rosser lab at MSU CVM (in Starkville, MS) and the Griffin laboratory at NWAC (in Stoneville, MS). At the completion of the project the student will be versed in molecular techniques, traditional parasitology, animal husbandry, animal necropsy, general aquaculture principles and experimental design/analysis. Graduate coursework will include courses related to parasitology, aquaculture/aquatic animal health, statistical analysis, molecular biology, and CVM's graduate seminar series. The successful applicant will develop a MS thesis from their research, present their findings at scientific meetings and stakeholder workshops, and produce 1-2 peer reviewed manuscripts.

Annual stipend: \$19,000/year for two years

Required qualifications: Bachelor's degree in Microbiology, Biological Sciences, Biochemistry, Environmental Biology, Wildlife Biology, or other closely related fields.

Desired qualifications: Students with prior benchtop molecular biology lab experience are encouraged to apply. The candidate should be highly motivated, with an aptitude for field as well as laboratory work. Students should have the capacity to work both independently and as part of a team in a fast-paced environment where fluid prioritization is the norm. Candidates should possess an interest in parasitology, have strong written and verbal communication skills, and be adaptable to living both on and off campus. The project will require extensive field sampling in less than ideal (hot, humid, insects, snakes, etc.) conditions; the candidate should have a strong constitution.

Interested students should send the following as a .pdf document with the subject heading "MS Student – Trematode Project" to graham.rosser@msstate.edu

- Cover letter
- Resume/curriculum vitae
- Unofficial copy of undergraduate transcript

For additional information contact:

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graham.rosser@msstate.edu

or

Matt J. Griffin, PhD

Research Professor
Aquatic Research and Diagnostic Laboratory
Thad Cochran National Warmwater Aquaculture Center
Department of Pathobiology and Population Medicine
College of Veterinary Medicine
Mississippi State University
Stoneville, MS 38776
Cell: (662) 617-5213
Office: (662) 686-3580
matt.griffin@msstate.edu



Phibro Aqua Sales Agent

Territory: Alabama, Mississippi, and Arkansas

Primary Sector: Catfish

Phibro Animal Health Corporation (PAHC) is looking for an independent, driven, and experienced candidate to represent the Aqua business in the U.S. Southeast. While primarily focused on driving sales of Phibro Aqua products in the region, the ideal candidate would also gather information about the territory to communicate to management, set future strategy, and inspire future innovation.

JOB DESCRIPTION

The Phibro Aqua sales agent will act as a commercial representative of PAHC in Alabama, Mississippi, and Arkansas. The primary product focus will be Terramycin® 200 for Fish, but other products in Phibro's portfolio will be available if opportunity arises.

The sales agent will develop the sales of Phibro products in Alabama, Mississippi, and Arkansas, traveling as necessary to interface with farmers, veterinarians, feed mills and other personnel to develop the business on behalf of PAHC.

In addition, this candidate will maintain a list of contacts and customers, provide call reports of activities, and help develop regional strategies and future product innovation as needed.

QUALIFICATIONS

The ideal candidate for this position would be:

- Comfortable with and accustomed to working independently, able to see and act on opportunities, organize business-building initiatives, and deliver value to customers
- Based in the target territory, and willing and able to travel within the region regularly
- Experienced in the catfish sector, with detailed knowledge of the industry and its players a core aspect of the position

Experience in a sales function is preferred but not required.

COMMISSION AND EXPENSES

This position is an independent contractor position and pays a set daily allowance. In addition to the daily rate, a volume-based commission will also be awarded for all new business developed in the region.

PAHC will reimburse for all reasonable documented travel expenses incurred in connection with sales activity.

Interested parties should contact Mark Pierson at Mark.Pierson@pahc.com or +1 857-212-9631.

HEALTHY ANIMALS. HEALTHY FOOD. HEALTHY WORLD.®