FHS NEWS – February 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

Don’t forget to renew your AFS and FHS membership at https://fisheries.org/. Thank you to the members who have already renewed. Less than half of you receiving this newsletter have renewed so far this year.

President’s Message – see attached .pdf.

People of the Fish Health Section: Commemorating 50 years

Dear Fish Health Section members,

I am pleased to feature two more student members in this month’s feature. Next I want to feature two of our 24 members in the “young professional” category. [The first people nominated get featured first.]

Submitted by Gary Marty, FHS President (Gary.Marty@gov.bc.ca)

Hi everyone, my name is Cheyenne Smith. I am currently a PhD candidate at West Virginia University with Pat Mazik and work out of the Eastern Ecological Science Center Leetown Research Laboratory in West Virginia with Vicki Blazer, Chris Ottinger, and Heather Walsh on smallmouth bass immune research. I never pictured myself working with fish, but I ended up volunteering one summer with Vicki Blazer and her team at the Eastern Ecological Science Center. I discovered a passion for wild fish health and fieldwork. We investigated brown bullheads with melanomas from Lake Memphremagog in Vermont. I fell in love with all the various aspects of fish health research, especially the people plus conferences like the Fish Health Section. I have been a FHS member since I began graduate school for my Master’s in 2015 under the advice of Vicki Blazer. Because of the welcoming environment and enthusiastic support for students, the FHS remains one of my favorites! Over the next year, I’m looking forward to finishing my degree and advancing my career in fish health by continuing to attend FHS meetings to network, share my work with others, and learn about the latest research.
Hi everyone! My name is **Abby Armwood**. I am a veterinary anatomic pathologist and PhD candidate at the University of Georgia, studying Edwardsiella in teleosts. I joined FHS in 2020 to participate in the AFS-FHS summer seminar series, which was an exciting way to share research virtually. I am lucky to have had many influential mentors. **Dr. Mac Law** at North Carolina State University first introduced me to aquatic pathology. **Dr. Al Camus** has taught me everything he knows (most of it anyway – he knows a lot!) about fish pathology, fish disease, publishing research, and how to succeed in our field. **Dr. Matt Griffin** introduced me to catfish aquaculture and microbiology, feeding my interest in infectious diseases and indulging all my research curiosities. My early career highlight is discovering the first elasmobranch alloherpesvirus, which I and fellow AFS-FHS members Drs. **Al Camus**, **Justin Stilwell**, and others, identified from a tiger shark as a team. Being on a team of people with different strengths and interests is the most exciting part of fish research. In my future career in academia, I aim to train future fish pathologists, investigate infectious disease, and develop resources for teleost and elasmobranch histology and pathology.

**Policy/Position Development Committee Update**

**How to request the FHS to develop a policy or position**

The AFS-FHS Policy/Position Development Committee (PPDC) provides a mechanism for generating official policy/position statements by the AFS-FHS. Any member can bring a proposed issue, policy, or position statement forward to the PPDC for review. See the May 2020 FHS Newsletter for details (available on the FHS website). If you have an idea for a policy or position, don’t hesitate to contact PPDC Chair Anita Kelly (amk0105@auburn.edu) or any of the Committee members listed on the FHS website.

**FHS Member Contributions**

**New Publication**: The fish pathogen *Flavobacterium columnare* represents four distinct species: *Flavobacterium columnare*, *Flavobacterium covae* sp. nov., *Flavobacterium davisii* sp. nov. and *Flavobacterium oreochromis* sp. nov., and emended description of *Flavobacterium columnare* in Systematic and Applied Microbiology 45 (2022)

Authors: Benjamin R. LaFrentz, Stanislava Králová, Claire R. Burbick, Trevor L. Alexander, Conner W. Phillips, Matt J. Griffin, Geoffrey C. Waldbieser, Julio C. García, Fernanda de Alexandre Sebastião, Esteban Soto, Thomas P. Loch, Mark R. Liles, Kevin R. Snekvik

See attached .pdf for entire paper.

**abstract**

*Flavobacterium columnare* is the causative agent of columnaris disease in freshwater fish and four discrete genetic groups exist within the species, suggesting that the species designation requires revision. The present study determined the taxonomic status of the four genetic groups of *F. columnare* using polyphasic and phylogenomic approaches and included five representative isolates from each genetic group (including type strain ATCC 23463T; genetic group 1). 16S rRNA gene sequence analysis revealed genetic group 2 isolate AL-02-36T, genetic group 3 isolate 90-106T, and genetic group 4 isolate Costa Rica 04-02-TNT shared less than <98.8 % sequence identity to *F. columnare* ATCC 23463T. Phylogenetic analyses of 16S rRNA and gyrB genes using different methodologies demonstrated the four genetic groups formed well-supported and distinct clades within the genus *Flavobacterium*. The average nucleotide identity (ANI) and digital DNA-DNA hybridization (GGDC) values between *F. columnare* ATCC 23463T, genetic group 2 isolate AL-02-36T, genetic group 3 isolate 90-106T, and genetic group 4 isolate Costa Rica 04-02-TNT were less than 90.84% and 42.7%, respectively. Biochemical and physiological characteristics were similar among
the four genetic groups; however, quantitative differences in fatty acid profiles were detected and MALDI-TOF analyses demonstrated numerous distinguishing peaks unique to each genetic group. Chemotaxonomic, MALDI-TOF characterization and ANI/GGDC calculations afforded differentiation between the genetic groups, indicating each group is a discrete species. Herein, the names F. covae sp. nov. (AL-02-36T), F. davisii sp. nov. (90-106T), and F. oreochromis sp. nov. (Costa Rica 04-02-TNT) are proposed to represent genetic groups 2, 3, and 4, respectively.

Call for Content

Do you have a puzzling diagnostic case? Or do you have a new diagnostic finding that might interest others? How about newly published research? I am starting a new feature to highlight Fish Health Section Members’ current conundrums and accomplishments. Think about what you could submit and contact me at stacy.a.strickland@odfw.oregon.gov with your ideas. Limit to be around 1 page including graphs/pictures. Especially during these virtual meeting and conference times, let’s share our work and keep our peers up-to-date on what’s happening in the world of fish health!

Thanks in advance for your submissions!

Stacy Strickland, AFS-FHS Newsletter Editor

MEETINGS, WORKSHOPS AND COURSES

Salmon Disease Workshop
Oregon State University
Corvallis, OR
June 20 – July 1, 2022

Pre-registration:

This workshop is designed for professionals working in the fish health field and graduate students and will emphasize recent advances and developments in our understanding of salmonid diseases. Topics: detection and diagnosis, new and emerging pathogens, cell culture techniques, histopathology, current status of important salmonid pathogens, treatment practices, epidemiology.

The workshop is limited to 20 participants, but we are pre-advertising to determine if there will be sufficient interest to open registration. Cost $1500 or 5 graduate credits. If you are interested in attending, contact Jerri Bartholomew by March 15; jerri.bartholomew@oregonstate.edu

61st AFS FHS Western Fish Disease Workshop
May 16-18, 2022, with a day of CE on May 19
Hood River, Oregon
Best Western Hood River Inn and Conference Center

Save the date! Come to Oregon!

Registration and call for abstracts will come late winter. Keep an eye out on the website for more information. https://units.fisheries.org/fhs/wfdw/

9th International Symposium on Aquatic Animal Health (ISAAH)
Santiago, Chile
September 5-8, 2022
RE: Student Awards

The 9th International Symposium on Aquatic Animal Health (ISAAH9) will be held September 5 – 8, 2022, in Santiago, Chile. The ISAAH is a truly unique event, held every four-years, and hosted in conjunction with the American Fisheries Society Fish Health Section. The ISAAH9 website is now available and will be updated frequently with meeting details. Registration will open in early April.

We are currently soliciting applications for the AFS-FHS Sniezko Student Travel Award, which will award up to $1500 to AFS-FHS student members to attend ISAAH9. Students who wish to be considered must submit their abstracts by March 31st. If you are not already a member, click here to join AFS-FHS.

Similarly, students wanting to participate in “Best Student Paper” competitions should indicate their preference during abstract submission. Judging criteria for student awards are attached with this announcement.

Abstract submission for the general program is now open. We are still taking suggestions for special sessions. If you have a topic for consideration or would like to organize a session, please contact Matt Griffin (matt.griffin@msstate.edu) with the subject heading “ISAAH 2022 Special Sessions”.

Due to current COVID restrictions and social distancing requirements, posters will be presented virtually. Oral presentations will be given in person.

Follow this link to submit abstracts: ABSTRACT SUBMISSION FORM

The following topics have already been submitted for consideration:
WAVMA/AAFV (Continuing Education Opportunity) Parasite Life Cycles
Zebrafish/Lab Animal Models Modeling in Aquatic Animal Health
Genomic Applications in Fish Health Emerging Diseases
Immune modulation in Fish Health Management Myxozoa
Microbiomes: Applications in Fish Health Climate Change: Impacts on Fish Health
Polymicrobial Infections Toxic Algae
Food Security

We look forward to hearing from you and hope to see you in Santiago!

The Organizing Committee
Fernando Mardones, School of Veterinary Medicine, Pontifical Catholic University, Chile
Marilia Salgado Caxito, School of Veterinary Medicine, São Paulo State University, Brazil
Romina Ramos Ríos, School of Veterinary Medicine, Pontifical Catholic University, Chile
Francisca Córdova Bührle, School of Veterinary Medicine, Pontifical Catholic University, Chile
Natalia Zimin-Veselkoff, School of Veterinary Medicine, Pontifical Catholic University, Chile
Esteban Soto, School of Veterinary Medicine, UC Davis, USA
Matt Griffin, College of Veterinary Medicine, Mississippi State University, USA.

JOBS/GRADUATE ASSISTANTSHIPS

Natural Resources Biologist IV – Joseph Manning Hatchery Manager
Maryland Department of Natural Resources
Charles, MD
The main purpose of this position is to manage the entire Joseph Manning Hatchery complex, which is the largest fish production facility in Maryland. The Joseph Manning Fish Hatchery is located within Cedarville State Forest in Brandywine, Maryland. The hatchery complex is located on 180 acres of Fishing and Boating Service property and consists of 28 production ponds, a well-fed water supply reservoir, two production wells, an intensive culture and spawning facility, laboratory space, garage, workshop, pole building, warm water culture building, and office space. The facility produces over one dozen fish species (e.g., largemouth and smallmouth bass, walleye, American and hickory shad, striped bass, bluegill, golden shiners) to meet multiple resource management needs, including, but not limited to, species restoration and enhancement projects. In addition to conducting and directing all phases of fish hatchery production, duties include the development and refinement of new aquaculture practices and techniques, and related fish culture research projects. Program management duties include budget development and monitoring, management of capital and critical maintenance projects, management of the physical plant, including an operational management connection with coldwater and other warmwater fish production facilities within Maryland. The incumbent is also responsible for supervising biologists and technicians who assist in maintaining and operating the hatchery complex.

See attached .pdf for more information.

**Noreen Clough Memorial Scholarship for Females in Fisheries**

**Application deadline: May 1, 2022**

Criteria: All nominees should be a female student currently enrolled in a graduate program at a recognized institution in North America with an expected graduation date no earlier than December 2022. This does not specifically have to be a fisheries science program, but the student must demonstrate a commitment toward a career in fishery management and conservation. The student selected will best reflect Noreen’s passion and commitment to the profession and to the sport of fishing.

See attached .pdf for more information

**Paid Internship with US Fish and Wildlife Service**

The US Fish and Wildlife Service is partnering with MANRRS to provide students at (1) Oregon State University, (2) University of Idaho, and (3) Washington State University with an opportunity to step into a career with our agency!

The MANRRS internship program is a diversity-seeking, program for interested students from diverse backgrounds, including women and historically under-represented populations such as Black, Hispanic/Latino, Asian and Pacific Islander, and Native American.

This program is a pipeline into the U.S. Fish and Wildlife Service. Students joining this internship program may have the ability to be directly placed into a permanent job with the agency following their graduation. All majors are encouraged to apply!

**About the summer internship**

-Weekly stipend of $540. Housing is provided, and rent is reimbursed up to $1500/month at sites where no housing is available.
Projects are available in the Pacific Northwest and Pacific Islands (Hawaii).

Conservation projects range from biological field work to environmental policy, and community outreach.

See the list of available projects here:

https://drive.google.com/file/d/1eNoXJ6QJtlhMwhkaUAk10X-NY6z6W7uK/view?usp=sharing

**To be eligible, students must:**

1. Be an undergraduate -**AND**- not graduate before December 2023.
2. Be available for 12 weeks in Summer 2022
3. Join your campus MANRRS chapter. Learn more about MANRRS here --> MANRRS.org
4. Be a US Citizen, 18 years or older

To apply:

Eligible students should email their campus MANRRS advisors (contact info below) to be referred to the program hiring managers. Students will be evaluated for positions on a rolling basis, so you are encouraged to act on this opportunity ASAP.

In your email, please indicate (1) your major, (2) expected graduation date, and (3) your first, second and third project choice.

- Oregon State University students should contact Wanda Crannell at Wanda.Crannell@oregonstate.edu
- University of Idaho students should contact Chloe Wardropper at cwardropper@uidaho.edu
- Washington State University students should contact Colette Casavant at colette.casavant@wsu.edu

For more information:

If you have questions regarding the MANRRS internship, U.S. Fish and Wildlife Service or how these internships may lead to a permanent position, please contact Nicole Hams (nicole_hams@fws.gov) or Chelsea McKinney (chelsea_mckinney@fws.gov).

**Assistant Professor of Fish Pathology or Immunology**

*Department of Rangeland, Wildlife and Fisheries Management College of Agriculture and Life Sciences*

*Texas A&M University*

*College Station, TX*

Link: https://apply.interfolio.com/96875

**GENERAL DUTIES AND RESPONSIBILITIES:** The successful candidate will be expected to enhance a faculty addressing various aspects of aquaculture and fisheries management in the Department of Rangeland, Wildlife and Fisheries Management (RWFM). They also will be expected
to collaborate with and enhance existing faculty with expertise in the areas of fish nutrition, physiology, and fisheries management as it pertains to fish health and diseases. This position will be an integral component of the Department’s research and teaching programs in aquaculture and fisheries management. Included duties will be the development and leadership of an independent, extramurally-funded, internationally recognized applied research program with a focus on warm water finfish that directly addresses disease management or diagnostic issues facing aquaculture producers and private pond owners within Texas and the U.S. The appointee will be expected to teach courses related to their expertise in the recently established undergraduate curriculum. Courses (or a portion of the course) may include Fish Health and Diseases, Principles and Practices of Wildlife/Fisheries Management, and a summer Aquatic Field Experience course. Graduate courses in the candidate’s area of expertise that may include Fish Immunology, Pathology, or Health and Diseases. RWFM is an applied management focused department and as such the successful candidate is expected to work with aquaculture producers, private fisheries owners, pond management companies, as well as support state and federal agencies such as the Texas Parks and Wildlife Department.

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.
Noreen Clough (1944-2015)

In the 1970s, Noreen was a clerical worker at the U.S. Fish and Wildlife Service. She had a degree in English, got an additional degree in biology so she could move up at the Service, only to discover that the men didn’t want her moving up. “Not only did the guys not want a woman out doing field work with them, but their wives also didn’t want them in the field with a woman,” Clough said in a 2006 interview.

“The organization had been all male for a very long time, and biology was seen as a subject for men.” She was even denied a promotion once because, according to her boss, she didn’t need a promotion because she had a husband. “It was a continued uphill struggle,” said Clough.

Clough did not let small minds keep her down. Early in her career she led the Interagency Work Group that oversaw the Arctic National Wildlife Refuge oil and gas assessment program and was lead author on the report to Congress. She persevered and 20 years later, became Southeast Regional Director of the U.S. Fish and Wildlife Service, the first woman to serve is such a position. She was no longer managing the logbooks. She was managing 2,000 people and a budget of $82 million.

She later held a variety of leadership positions within the FWS in the Washington, DC headquarters, including Acting Deputy Director for External Affairs, Chief of Resource Management for the National Wildlife Refuge System and Deputy Assistant Director for Fisheries.

Clough was unflappable and persistent, no matter how much others pushed back. And she was dedicated, doing whatever it took to get something accomplished. That tenacity earned her several awards, including American Sportfishing Association Woman of the Year, the U.S. Department of the Interior Meritorious Service Award and the Coleman Outdoors Award.

Clough retired from the FWS and became B.A.S.S.’s national conservation director from 2004 to 2007 when the organization was owned by ESPN. She assisted the B.A.S.S. Nation’s state conservation directors, supporting them with their issues, advocating for them to state agencies or the U.S. Congress.

She represented B.A.S.S. and bass anglers on numerous national boards involved in fisheries policy including the Sport Fishing & Boating Partnership Council, the Theodore Roosevelt Conservation Partnership, the Association of Fish & Wildlife Agencies, the Berkley Conservation Institute, the American Sportfishing Association, and the National Fish Habitat Partnership.

Although she retired from B.A.S.S. in 2007, she came back less than 5 years later following the sale of the company to a group of private investors. She returned not for the money. She came back because being involved in securing access for anglers, in eradicating invasive species, in protecting habitat for bass was important to her.

Clough spent more than 36 years in natural resource conservation but often said, “My best years have been those at B.A.S.S. It’s been rewarding to see the B.A.S.S. Nation Conservation program grow and deliver amazing on-the-ground conservation and angler benefits.”

Throughout her life, Noreen was an avid angler. One of her favorite extracurricular activities was serving as a member of the Michigan State University Fly Gals team, in which she mentored graduate students in sportfishing and conservation advocacy. She not only enjoyed making a difference; she liked to show others they can make a difference, too.
She put a high value on lessons learned from recreational fishing from both a resource understanding and appreciation perspective, but also from a perspective of understanding anglers and how they think and react to resource and social issues. She saw this basis as being valuable to researchers, field managers and administrators when attempting to get resource user groups to respect and understand one another and be able to work toward a common goal for the resource in a constructive manner.

Noreen passed away in January 2015 after a brief battle with pancreatic cancer, but her legacy of determination and success is an inspiration to women in natural resources conservation. In 2016 the Southern Division of the American Fisheries Society and the Black Bass Conservation Committee established the Noreen Clough Memorial Scholarship for Females in Fisheries to honor that legacy.

**Scholarship Application Information - Application Deadline is May 1, 2022**

**Criteria:** All nominees should be a female student currently enrolled in a graduate program at a recognized institution in North America with an expected graduation date no earlier than December 2022. This does not specifically have to be a fisheries science program, but the student must demonstrate a commitment toward a career in fishery management and conservation. The student selected will best reflect Noreen’s passion and commitment to the profession and to the sport of fishing.

**To Apply:** Prepare an original essay, no longer than 500 words, which describes why you believe you are deserving of this scholarship and how being a recreational angler is relevant to becoming a more diverse and insightful professional. Applicants may want to include career aspirations, personal interests or other relevant factors in the essay.

Additionally, please attach a current resume which includes:

- Full name
- Complete mailing address
- Email address
- Best telephone number
- School name and location
- Degree sought
- Expected graduation date
- Summary of your education
- Summary of work history
- Other relevant experience/qualifications/references

Applicants will be scored on the following:

- Importance of fishing in their personal life
- Quality of the essay
- Graduate study relevancy to sport fishing, either directly or indirectly
- Career goals
- Publications
- Presentations
- Involvement in professional societies

Email the essay and resume, scanned together as a single PDF file to Gene Gilliland at ggilliland@bassmaster.com.
NATURAL RESOURCES BIOLOGIST IV
Joseph Manning Hatchery Manager
Recruitment #22-001001-0001

DEPARTMENT  DNR - Fisheries Service
DATE OPENED  2/15/2022 11:59:00 PM
FILING DEADLINE  3/1/2022 11:59:00 PM
SALARY  $51,481.00 - $84,061.00/year
EMPLOYMENT TYPE  Full-Time
HR ANALYST  Caroline Asher
WORK LOCATION  Charles

Introduction

This is a position specific recruitment for the Maryland Department of Natural Resources, Fishing and Boating Unit. This recruitment will be used to fill current vacancies for the position and may be used to fill future vacancies in the same classification/function. Future vacancies may also be filled via other recruitments. The resulting eligible list will be maintained for one year.

GRADE

17

LOCATION OF POSITION

Route 4, Box 106E, Brandywine, MD 20613 (Charles County)

Main Purpose Of Job

The main purpose of this position is to manage the entire Joseph Manning Hatchery complex, which is the largest fish production facility in Maryland. The Joseph Manning Fish Hatchery is located within Cedarville State Forest in Brandywine, Maryland. The hatchery complex is located on 180 acres of Fishing and Boating Service property and consists of 28 production ponds, a well-
fed water supply reservoir, two production wells, an intensive culture and spawning facility, laboratory space, garage, workshop, pole building, warm water culture building, and office space. The facility produces over one dozen fish species (e.g., largemouth and smallmouth bass, walleye, American and hickory shad, striped bass, bluegill, golden shiners) to meet multiple resource management needs, including, but not limited to, species restoration and enhancement projects. In addition to conducting and directing all phases of fish hatchery production, duties include the development and refinement of new aquaculture practices and techniques, and related fish culture research projects. Program management duties include budget development and monitoring, management of capital and critical maintenance projects, management of the physical plant, including an operational management connection with coldwater and other warmwater fish production facilities within Maryland. The incumbent is also responsible for supervising biologists and technicians who assist in maintaining and operating the hatchery complex.

**MINIMUM QUALIFICATIONS**

**Experience**: Four years of professional experience conducting research and analysis in the fields of biology, biochemistry, environmental science, natural science, natural resources management, botany, marine biology, marine ecology, physical oceanography, ichthyology, fisheries management, wildlife management or zoology and five years of experience in performing professional biological work in the field of natural resources management.

**Notes**:  
1. Candidates may substitute the possession of a Bachelor’s degree in biology, environmental aquaculture, natural science, natural resources management, botany, marine biology, marine ecology or physical oceanography, ichthyology, fisheries management, wildlife management, zoology, or a natural resources management related field of study from an accredited college or university and five years of experience in performing professional biological work in the field of natural resources management for the required experience.

2. Candidates may substitute graduate education beyond a Bachelor's degree from an accredited college or university in a natural resources related field of study as described above at the rate of 15 graduate credit hours for one year of experience for up to two years of the required experience.

3. Candidates may substitute U.S. Armed Forces military service experience as a commissioned officer in the natural resources management and biological sciences classifications or natural resources management and biological sciences specialty codes in the wildlife biology field of work on a year-for-year basis for the required experience.

**DESIRED OR PREFERRED QUALIFICATIONS**

- Advanced degree (Masters or Doctoral Degree) in aquaculture and/or fisheries science and management or relevant work experience in aquaculture and/or fisheries science and management.
- Two years of experience with developing and managing a program or project budget
Two years of supervisory experience

LICENSES, REGISTRATIONS AND CERTIFICATIONS

Employees in this classification may be assigned duties which require the operation of a motor vehicle. Employees assigned such duties will be required to possess a motor vehicle operator's license valid in the State of Maryland.

SELECTION PROCESS

Please make sure you provide sufficient information on your application to show that you meet the qualifications for this recruitment. All information concerning your qualifications must be submitted by the closing date. We will not consider information submitted after this date. Successful candidates may be ranked as Best Qualified, Better Qualified, or Qualified and placed on the employment (eligible) list for at least one year.

For education obtained outside the U.S., a copy of the equivalent American education as determined by a foreign credential evaluation service must be provided prior to hire.

EXAMINATION PROCESS

Your application is part of the examination process. The examination will consist of a rating of your education, training, and experience related to the requirements of this position. The rating will be based on the information provided on your application. Therefore, it is important you provide all the experience and education related to this position completely and accurately.

BENEFITS

STATE OF MARYLAND BENEFITS

FURTHER INSTRUCTIONS

The online application is STRONGLY preferred. If you are unable to apply online, you may submit a paper application and supplemental questionnaire to: Department of Natural Resources, Human Resources, 580 Taylor Avenue, C-3 Annapolis, MD 21401.

The Human Resources unit is not responsible for applications sent to any other address.

Faxed or e-mailed applications will not be accepted. Resumes will not be accepted in lieu of completing the application.
If you are having difficulty with your user account or have general questions about the online application system, please contact the MD Department of Budget and Management, Recruitment and Examination Division at Application.Help@maryland.gov or call 410-767-4850.

Inquiries regarding this recruitment can be directed to Chris Langley at christopher.langley@maryland.gov.

TTY Users: call via Maryland Relay.

Candidates with disabilities and bilingual candidates are encouraged to apply. We thank our Veterans for their service to our country, and encourage them to apply. As an equal opportunity employer, Maryland is committed to recruiting, retaining and promoting employees who are reflective of the State’s diversity.

45 Calvert Street, Annapolis, MD 21401
300-301 West Preston Street, Baltimore, MD 21201
Toll Free (800) 705-3493
POSITION: The Department of Rangeland, Wildlife, and Fisheries Management, in the College of Agriculture and Life Science at Texas A&M University in College Station, Texas invites applications for an Assistant Professor position with an emphasis in fish pathology or immunology. This is a 9-month tenure-track academic appointment with (60%) research, (30%) teaching, (10%) services with an anticipated start date of no earlier than 1 August 2022.

GENERAL DUTIES AND RESPONSIBILITIES: The successful candidate will be expected to enhance a faculty addressing various aspects of aquaculture and fisheries management in the Department of Rangeland, Wildlife and Fisheries Management (RWFM). They also will be expected to collaborate with and enhance existing faculty with expertise in the areas of fish nutrition, physiology, and fisheries management as it pertains to fish health and diseases. This position will be an integral component of the Department’s research and teaching programs in aquaculture and fisheries management. Included duties will be the development and leadership of an independent, extramurally-funded, internationally recognized applied research program with a focus on warm water finfish that directly addresses disease management or diagnostic issues facing aquaculture producers and private pond owners within Texas and the U.S. The appointee will be expected to teach courses related to their expertise in the recently established undergraduate curriculum. Courses (or a portion of the course) may include Fish Health and Diseases, Principles and Practices of Wildlife/Fisheries Management, and a summer Aquatic Field Experience course. Graduate courses in the candidate’s area of expertise that may include Fish Immunology, Pathology, or Health and Diseases. RWFM is an applied management focused department and as such the successful candidate is expected to work with aquaculture producers, private fisheries owners, pond management companies, as well as support state and federal agencies such as the Texas Parks and Wildlife Department.

REQUIREMENTS: Ph.D. in Aquaculture, Fisheries Science, Veterinary Medicine, or related field is required. A Doctorate of Veterinary Medicine (DVM) with aquatic animal health coursework or experience preferred, but not required. Postdoctoral or clinical veterinary experience is preferred. Evidence of outstanding research and publishing capacities is required, along with the potential to establish and maintain strong teaching and graduate education programs.

RESOURCES: Texas A&M University (TAMU) is a public, land-grant institution with many high-quality academic units conducting research in areas of natural resource conservation and management. The successful candidate will be offered a competitive salary, startup package and laboratory space and/or field equipment, as well as access to research facilities at the Aquacultural Research and Teaching Facility (ARTF) associated with the Department of Rangeland, Wildlife and Fisheries Management, Texas A&M AgriLife Research, and the College of Agriculture and Life Sciences. The candidate will have opportunities to collaborate with a broad range of TAMU System researchers around the state including the Aquatic Diagnostics Laboratory within RWFM, the Texas A&M Veterinary Medical Diagnostic Laboratory, and the Texas A&M College of Veterinary Medicine and Biomedical Sciences.
APPLICATION PROCESS: Applications will only be accepted through Interfolio apply.interfolio.com/96875. Applicants must submit: (1) a cover letter of interest, (2) detailed curriculum vitae, (3) a two-page statement of teaching and research plans, and 4) contact information for three professional references who can provide a critical evaluation of the applicant’s qualifications for the position. Review of applications will begin January 1, 2022, and continue until the position is filled.

For questions, email inquiries to the attention of Dr. Del Gatlin, Search Committee Chair, Department of Ecology and Conservation Biology, Texas A&M University, College Station, TX 77843, via Ms. Theresa Nemec e-mail: tnemec@tamu.edu.

Texas A&M University is committed to enriching the learning and working environment for all visitors, students, faculty, and staff by promoting a culture that embraces inclusion, diversity, equity, and accountability. Diverse perspectives, talents, and identities are vital to accomplishing our mission and living our core values.

Texas A&M University is an Equal Opportunity/Affirmative Action/Veterans/Disability Employer committed to diversity. Texas A&M University is aware that attracting and retaining exceptional faculty often depends on meeting the needs of two careers and having policies that contribute to work-life balance. For more information, visit https://employees.tamu.edu/ocrm/eeo or http://dof.tamu.edu/Faculty-Resources/Faculty-WorkLife
RE: Student Awards

The 9th International Symposium on Aquatic Animal Health (ISAAH9) will be held September 5 – 8, 2022, in Santiago, Chile. The ISAAH is a truly unique event, held every four-years, and hosted in conjunction with the American Fisheries Society Fish Health Section. The ISAAH9 website is now available and will be updated frequently with meeting details. Registration will open in early April.

We are currently soliciting applications for the AFS-FHS Sniezko Student Travel Award, which will award up to $1500 to AFS-FHS student members to attend ISAAH9. Students who wish to be considered must submit their abstracts by March 31st. If you are not already a member, click here to join AFS-FHS.

Similarly, students wanting to participate in “Best Student Paper” competitions should indicate their preference during abstract submission. Judging criteria for student awards are attached with this announcement.

Abstract submission for the general program is now open. We are still taking suggestions for special sessions. If you have a topic for consideration or would like to organize a session, please contact Matt Griffin (matt.griffin@msstate.edu) with the subject heading “ISAAH 2022 Special Sessions”.

Due to current COVID restrictions and social distancing requirements, posters will be presented virtually. Oral presentations will be given in person.

Follow this link to submit abstracts: ABSTRACT SUBMISSION FORM

The following topics have already been submitted for consideration:

- WAVMA/AAFV (Continuing Education Opportunity)
- Parasite Life Cycles
- Zebrafish/Lab Animal Models
- Modeling in Aquatic Animal Health
- Genomic Applications in Fish Health
- Emerging Diseases
- Immune modulation in Fish Health Management
- Myxozoa
- Microbiomes: Applications in Fish Health
- Climate Change: Impacts on Fish Health
- Polymicrobial Infections
- Toxic Algae
- Food Security

We look forward to hearing from you and hope to see you in Santiago!

The Organizing Committee

Fernando Mardones, School of Veterinary Medicine, Pontifical Catholic University, Chile
Marilia Salgado Caxito, School of Veterinary Medicine, São Paulo State University, Brazil
Romina Ramos Ríos, School of Veterinary Medicine, Pontifical Catholic University, Chile
Francisca Córdova Bührle, School of Veterinary Medicine, Pontifical Catholic University, Chile
Natalia Zimin-Veselkoff, School of Veterinary Medicine, Pontifical Catholic University, Chile
Esteban Soto, School of Veterinary Medicine, UC Davis, USA
Matt Griffin, College of Veterinary Medicine, Mississippi State University, USA.
Snieszko Student Travel Award Announcement

The American Fisheries Society – Fish Health Section is soliciting applications for the Snieszko Student Travel Awards, which will award up to $1500 to AFS-FHS member students to be used towards attending the next International Symposium on Aquatic Animal Health to be held in Santiago, Chile, from September 4-8, 2022.

To apply, students must be FHS members. To join, follow this link.

Students must submit:
1. Letter of application and statement of any special financial circumstances (i.e. not supported by a stipend, etc.)
2. Curriculum vitae
3. Three letters of recommendation
4. Itemized budget on how money is to be spent, i.e. travel, meals, lodging and registration
5. Copy of abstract of paper to be presented

Applications will be judged on:
1. Quality of abstract
2. Significance of the research
3. Academic achievement
4. Professional achievement
5. Financial need

Email application material to the Awards Committee Chair (Nicole Nietlisbach, nicole.nietlisbach@wisconsin.gov).

Feel free to contact members of the Awards Committee with questions.

Awards Committee
Nicole Nietlisbach, Chair (nicole.nietlisbach@wisconsin.gov)
Isaac Standish (sirisaac_standish@fws.gov)
Luke Iwanowicz (liwanowicz@usgs.gov)
Best Student Presentation and Paper Awards

**The American Fisheries Society – Fish Health Section** invites students to compete for the best student presentation and poster awards at the International Symposium on Aquatic Animal Health in Santiago, Chile September 4-8, 2022. Awardees may win up to $400 for best oral presentation and $200 for best poster.

To compete, students must simply state their interest in competing for the award when submitting their abstract. Students do NOT have to be members of the FHS to compete.

**Oral Presentations** will be judged on the following criteria:

*Introduction:* Provides broad conceptual framework and overview of previous work, and the hypothesis and/or objectives are clearly stated

*Methods:* Originality, appropriate use of methods/statistics, and effort required (short vs. long study)

*Results and Discussion:* Significance of contribution, conclusions well supported, relevance of findings to the field, placed in border context, and originality of the work

*Presentation Style and Delivery:*
- Ability to speak clearly
- Organization of presentation
- Quality of presentation: meaningful and clearly labeled graphics/images
- Quality of delivery: Minimal use of jargon, not reading slides, maintain
- eye contact with audience
- Time management: met time limits, allowed time for questions
- Effect on audience: generated engagement, excitement vs. silence
Poster Presentations will be judged on:

**Abstract:** Quality of the summary and quality of the writing

**Introduction:** Provides broad conceptual framework and overview of previous work, and the hypothesis and/or objectives are clearly stated

**Methods:** Originality, appropriate use of methods/statistics, and effort required (short vs. long study)

**Results and Discussion:** Significance of contribution, conclusions well supported, relevance of findings to the field, placed in border context, and originality of the work

**Poster Style and Presentation:**
- Adherence to poster layout criteria
- Emphasis on images/graphic elements over text
- Visual appearance
- Organization of poster
- Quality of presentation graphics/images (meaningful, clearly labeled, etc.)
- Effect on audience: Generated much attention

Feel free to contact members of the Awards Committee with questions.

**Awards Committee**
Nicole Nietlisbach, Chair (nicole.nietlisbach@wisconsin.gov)
Isaac Standish (sirisaac_standish@fws.gov)
Luke Iwanowicz (liwanowicz@usgs.gov)
### Sponsorship and Exhibition opportunities for ISAAH 2022 (US Dollars)

<table>
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<th>Sponsorship tier (slots available)</th>
<th>Platinum (2)</th>
<th>Gold (4)</th>
<th>Silver (4)</th>
<th>Bronze (6)</th>
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#### Sponsor benefits

- **Sponsor one thematic workshop**
- **Fixed position of sponsor logotype on Conference website, including hyperlink**
- **Rotational logotype on the Conference website**
- **Printing of logotypes on Conference banners**
- **Sponsor Welcome reception/Gala dinner**
- **Logotype on USB-drives**
- **Full color advertisement in book of abstracts**
- **Logotype in the book of abstracts (position)**
- **Complimentary registrations**
- **Registrations for Gala dinner**
- **Inclusion of company brochure (2, A4 sheets) in official conference bag**
- **VIP lunch table for all days**
- **Description of activities in media releases, including social media**
- **News publication/announcement of sponsor support**
- **Inclusion of sponsor logo in conference communication emails**
- **Discount rate (20%) from full standard registration for company personnel**

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