



# Fish Health Section



## FHS NEWS – September 2021

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

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

Fish Health Section Twitter feed: @AFSFishHealth

## People of the Fish Health Section: Commemorating 50 years

Dear Fish Health Section members,

As part of the celebration of our 50<sup>th</sup> year as a Section, during my year as President I want to highlight each month the stories of two Section members. For September 2021, I am pleased to present two of our 17 members that live in Canada. I had a chance to meet with both while I was at the Atlantic Veterinary college during the past two weeks, covering diagnostic fish pathology duties for past FHS-president Dave Groman.

Submitted by Gary Marty, FHS President.

Hello! My name is **Sonja Saksida**. After many years working on the west coast of Canada, I am currently working at the Atlantic Veterinary College in Charlottetown, PEI, Canada, teaching veterinary students and continuing to be involved in research.



I have been a member of the FHS for most of my career, joining in 1993/94. The FHS has been integral in me meeting other professionals interested in fish health. I see fish health management as being a collaborative and so throughout my career I reached and worked with a number of incredibly knowledgeable researchers and people. Dr **Michael Kent** was my co-supervisor for my MSc and later a collaborator on several projects into infectious diseases. His enthusiasm was infectious and he as always fun to be around at the FHS meetings on the west coast. One interesting project I worked on involved a collaboration with a British Columbia salmon enhancement facility (Quinsam Hatchery, with manager **David Ewart**) and a local indigenous fisheries group (A-Tlegay Fisheries society) which was trying to determine whether the low marine survival of coho salmon was somehow linked to low or poor food quality (zooplankton) at the time they enter the marine environment.

Hey, my name is **Mark Fast** and I first joined the FHS in the early 2000s. I have worked at the Atlantic Veterinary College in Charlottetown, PEI, Canada, since 2010. I am currently the chair of the



Department of Pathology and Microbiology.

Dr. **David Cone**, not the New York Mets/Yankees pitcher but an excellent fish parasitologist, got me interested in fish disease as an early training marine biologist during my undergraduate degree, and he also encouraged me to attend my first AFS meeting.

Dr. **Alistair Dove**, another fish parasitologist..., helped recruit me to the Marine Animal Disease Lab at Stony Brook University, NY, in 2007, for my first real job as an Assistant Professor. Dr. Dove convinced me to join the FHS CE committee in

2005-2006 and introduced me to the Aquavet program, from which I have met many of my aquatic

animal health colleagues over the years. Dr. Dove introduced me to the group at Georgia Aquarium and Dr. **Al Camus** at University of Georgia, initiating a project on *Branchellion torpedinis*, and its impacts on captive elasmobranchs we published back in 2012; friendships and collaboration initiated with that project continue to this day.

### Call for New Content

Do you have an 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](mailto: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

### New Rosters for Handbook Revision & Oversight Committee & Technical Standards Committee

#### 2021-2022 HROC

Name	HROC Position	Email
Kathleen Hartman	FHS-TSC, Co-Chair	<a href="mailto:Kathleen.h.hartman@usda.gov">Kathleen.h.hartman@usda.gov</a>
Stephen Reichley	FHS-TSC, Yr 2	<a href="mailto:stephen.reichley@msstate.edu">stephen.reichley@msstate.edu</a>
Nilima Renukdas	FHS-TSC, Yr 2	<a href="mailto:nilima.renukdas@agriculture.arkansas.gov">nilima.renukdas@agriculture.arkansas.gov</a>
Cori Samson	USFWS, Yr 1	<a href="mailto:corie_samson@fws.gov">corie_samson@fws.gov</a>
Ken Nichols	USFWS, Yr 1	<a href="mailto:Ken_Nichols@fws.gov">Ken_Nichols@fws.gov</a>
Huseyin Kucuktas	USFWS, Yr 1	<a href="mailto:huseyin_kucuktas@fws.gov">huseyin_kucuktas@fws.gov</a>
Gary Marty	AFS-FHS President, Ex-officio	<a href="mailto:Gary.Marty@gov.bc.ca">Gary.Marty@gov.bc.ca</a>
Joel Bader	USFWS NAAHC, Ex-officio	<a href="mailto:joel_bader@fws.gov">joel_bader@fws.gov</a>
Janet Whaley	NOAA FSNAAHC, Ex-officio	<a href="mailto:janet.whaley@noaa.gov">janet.whaley@noaa.gov</a>
Janet Warg	USDA APHIS VS, Ex-officio	<a href="mailto:janet.v.warg@usda.gov">janet.v.warg@usda.gov</a>

#### 2021-2022 TSC

Name	TSC Position	Email
Kathleen Hartman	Chair, 3 <sup>rd</sup> Yr	<a href="mailto:Kathleen.H.Hartman@usda.gov">Kathleen.H.Hartman@usda.gov</a>
Stephen Reichley	Member, 2 <sup>nd</sup> Yr	<a href="mailto:stephen.reichley@msstate.edu">stephen.reichley@msstate.edu</a>
Amy Long	Member, 1 <sup>st</sup> Yr	<a href="mailto:Amy.Long@dfo-mpo.gc.ca">Amy.Long@dfo-mpo.gc.ca</a>

The TSC invites submissions, corrections, updates to Section 1 of the BB. Emails may be sent directly to Kathleen.

## **MEETINGS, WORKSHOPS AND COURSES**

### **9<sup>th</sup> International Symposium on Aquatic Animal Health (ISAAH)**

Santiago, Chile

September 4-8, 2022

See attached .pdf for more info.

## **JOBS/GRADUATE ASSISTANTSHIPS**

### **Fish Health Technician**

#### **Riverance Holdings**

Hagerman Valley, ID

Link: <https://recruiting.paylocity.com/recruiting/jobs/Details/639470/Riverance-Holdings-LLC/Fish-Health-Technician>

The Riverance group is seeking a Fish Health Technician to support its trout farming operations in Idaho's Hagerman Valley. Riverance Provisions and Riverance Farms—the group's farms and processing operations—are collectively the largest producer of Rainbow Trout and Steelhead in the Americas. Riverance Brood—the group's breeding operation—is a producer of premium Rainbow Trout genetics and the only domestic commercial supplier of Atlantic Salmon and Coho Salmon eggs. The Fish Health Technician will demonstrate a strong commitment to the principles of biosecurity, proactive fish health management, legal and judicious use of therapeutants, and standard diagnostic methods in the identification and resolution of environmental or infectious disease in trout and salmon. Responsibilities include monitoring on-farm conditions that may contribute to fish morbidity/mortality, coordination with Fish Pathologist for preliminary diagnosis of disease, collection and submission of samples for diagnostic testing, cooperating with farm staff regarding implementation of biosecurity and fish health improvement plans.

### **Diagnostic Fish Pathologist**

#### **University of Prince Edward Island – Atlantic Veterinary College**

Charlottetown, PE

Closes 9/30/21

The Diagnostic Services Laboratory, Atlantic Veterinary College (AVC), University of Prince Edward Island, invites applicants for a contract term position in fish pathology. This is a full-time, term contract position starting immediately for eleven and one-half months, with the possibility of extension. The successful candidate will be working with and collaborating with the current diagnostic fish pathologist. The primary responsibility will be to perform and report on necropsy and histopathology examinations of fin-fish and shellfish samples submitted to the AVC Diagnostic Service Laboratory. The clients of this service include researchers, provincial and private aquaculture veterinarians in the four Atlantic Provinces as well as researchers and / or aquatic laboratories nationally and internationally. The successful candidate will consult with diagnostic services bacteriology, virology, clinical pathology, toxicology and parasitology units.

See attached .pdf for more information.

### **Postdoc Research Fellowship in Immunology**

#### **USDA-ARS Fish Health Unit at the National Center for Cool and Cold Water Aquaculture (NCCCWA)**

Leetown, WV

Application Deadline:10/31/21

The mission of the NCCCWA is to enhance the nation's aquaculture production by developing improved germplasm and technologies that increase farm efficiency, product quality, and environmental sustainability. Research focuses primarily on rainbow trout and encompasses genetics, genomics, physiology, aquatic animal health, and aquaculture engineering.

The selected participant will conduct immunological research evaluating genetic lines of disease resistant and susceptible rainbow trout. This will include determining mechanisms of innate immunity and the impact of selective breeding on commensal microbiota and vaccine response. The project will also include identifying how reuse water affects immunological function and identifying precision interventions to enhance health during grow-out.

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](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**



Healthy juvenile cutthroat trout, Oak Springs Hatchery, Maupin, OR, March 2021.



POSTED August 20, 2021

UNIVERSITY OF PRINCE EDWARD ISLAND  
ATLANTIC VETERINARY COLLEGE  
DIAGNOSTIC SERVICES  
ELEVEN AND A HALF (11.5) MONTH TERM POSITION  
DIAGNOSTIC FISH PATHOLOGIST  
COMPETITION #31A21

The Diagnostic Services Laboratory, Atlantic Veterinary College (AVC), University of Prince Edward Island, invites applicants for a contract term position in fish pathology. This is a full-time, term contract position starting immediately for eleven and one-half months, with the possibility of extension. The successful candidate will be working with and collaborating with the current diagnostic fish pathologist. The primary responsibility will be to perform and report on necropsy and histopathology examinations of fin-fish and shellfish samples submitted to the AVC Diagnostic Service Laboratory. The clients of this service include researchers, provincial and private aquaculture veterinarians in the four Atlantic Provinces as well as researchers and / or aquatic laboratories nationally and internationally. The successful candidate will consult with diagnostic services bacteriology, virology, clinical pathology, toxicology and parasitology units.

**QUALIFICATIONS:** Applicants must have a DVM (or equivalent) degree and at least one year of experience in fish and shellfish pathology. Clinical aquaculture experience and ACVP board certification are assets, but board eligible individuals will be considered. Salary is commensurate with credentials and experience.

**Application Instructions:**

Please submit a letter of intent, curriculum vitae and the names and contact information (including e-mail addresses) of three referees to:

Ms. Liz Dobbin, Director  
Diagnostic Services Laboratory  
Atlantic Veterinary College, University of Prince Edward Island  
550 University Avenue, Charlottetown, PE  
Canada, C1A 4P3  
Phone: 902-566-0831  
E-mail: [edobbin@upei.ca](mailto:edobbin@upei.ca)

Salary is commensurate with credentials and experience. This appointment will be made at the Clinical Veterinary Professional (UPEIFA, BU2) level and is subject to budgetary approval.

The AVC is located on the campus of UPEI in Charlottetown, Prince Edward Island (PEI). Nestled on the east coast of Canada, PEI is one of the world's most beautiful islands, and is home to sandy beaches, championship golf courses, extensive bike and cross country ski trails and a vibrant arts community. Further details can be obtained at <http://www.upei.ca/~avc> and <http://www.gov.pe.ca>.

In accordance with Canadian immigration requirements, all qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. UPEI is committed to the principle of equity in employment.

**Applications will be received until September 30<sup>th</sup>, 2021, or until a suitable candidate is identified.**

**Opportunity Title:** USDA-ARS Postdoctoral Research Fellowship in Immunology

**Opportunity Reference Code:** USDA-ARS-2021-0181



**Organization** U.S. Department of Agriculture (USDA)

**Reference Code** USDA-ARS-2021-0181

**How to Apply** *Connect with ORISE...on the GO!* Download the new ORISE GO mobile app in the [Apple App Store](#) or [Google Play Store](#) to help you stay engaged, connected, and informed during your ORISE experience and beyond!

A complete application consists of:

- An application
- Transcripts – [Click here for detailed information about acceptable transcripts](#)
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations

All documents must be in English or include an official English translation.

**Application Deadline** 10/31/2021 3:00:00 PM Eastern Time Zone

**Description** \*Applications are reviewed on a rolling-basis and this posting could close before the deadline.

**ARS Office/Lab and Location:** A postdoctoral research opportunity is currently available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), National Center for Cool and Cold Water Aquaculture (NCCCWA), Fish Health Unit located in Leetown, West Virginia. The mission of the NCCCWA is to enhance the nation's aquaculture production by developing improved germplasm and technologies that increase farm efficiency, product quality, and environmental sustainability. Research focuses primarily on rainbow trout and encompasses genetics, genomics, physiology, aquatic animal health, and aquaculture engineering.

The Agricultural Research Service (ARS) is the U.S. Department of Agriculture's chief scientific in-house research agency with a mission to find solutions to agricultural problems that affect Americans every day from field to table. ARS will deliver cutting-edge, scientific tools and innovative solutions for American farmers, producers, industry, and communities to support the nourishment and well-being of all people; sustain our nation's agroecosystems and natural resources; and ensure the economic competitiveness and excellence of our agriculture. The vision the agency is to provide global leadership in agricultural discoveries through scientific excellence.

**Research Project:** The selected participant will conduct immunological research evaluating genetic lines of disease resistant and susceptible rainbow trout. This will include determining mechanisms of innate immunity and the impact of selective breeding on commensal microbiota and vaccine response. The project will also include identifying how reuse water affects immunological function and identifying precision interventions to enhance health during grow-out.

**Learning Objectives:** The participant will gain useful experience designing and conducting experiments in collaboration with a team of immunologists, microbiologists, and veterinarians. The participant will be trained in an array of methodologies and technologies to fulfil the objectives of the project including molecular immunology, single cell sequencing, computational biology, machine learning, microbial genomics, and metagenomics. The fellow will have an opportunity to present their data in published manuscripts and at national and international meetings.

**Mentor(s):** The mentor for this opportunity is Greg Wiens ([greg.wiens@usda.gov](mailto:greg.wiens@usda.gov)). If you have questions about the nature of the research please contact the mentor(s).

**Anticipated Appointment Start Date:** Fall 2021. Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment will initially be for one year, but may be renewed upon recommendation of ARS and is contingent on the availability of funds.

**Level of Participation:** The appointment is full-time.

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience.

**Opportunity Title:** USDA-ARS Postdoctoral Research Fellowship in Immunology

**Opportunity Reference Code:** USDA-ARS-2021-0181

**Citizenship Requirements:** This opportunity is available to U.S. citizens only.

**ORISE Information:** This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and ARS. Participants do not become employees of USDA, ARS, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

**Questions:** Please visit our [Program Website](#). After reading, if you have additional questions about the application process please email [USDA-ARS@orau.org](mailto:USDA-ARS@orau.org) and include the reference code for this opportunity.

## Qualifications

The qualified candidate should have received a doctoral degree in one of the relevant fields or are currently pursuing the degree and will reach completion by the start date of the appointment. Degree must have been received within five years of the appointment start date.

Knowledge, skills, and experience in one or more of the following areas is preferred: fish health, immunology, computational biology, genomics, and metagenomics.

This is an equal opportunity program open to all qualified individuals without regard to race, color, age, sex, religion, national origin, mental or physical disability, genetic information, sexual orientation, or covered veteran's status.

## Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (3 )
  - **Engineering** (5 )
  - **Environmental and Marine Sciences** (10 )
  - **Life Health and Medical Sciences** (29 )
  - **Mathematics and Statistics** (1 )
  - **Nanotechnology** (1 )
  - **Other Physical Sciences** (1 )
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).



PONTIFICIA  
UNIVERSIDAD  
CATÓLICA  
DE CHILE



Greetings, Fish Health Section members and colleagues worldwide!

We are pleased to announce the 9<sup>th</sup> International Symposium on Aquatic Animal Health (9<sup>th</sup> 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 9<sup>th</sup> ISAAH will bring together scientists from across the globe to open new avenues of research and help foster international collaborations.

The 9<sup>th</sup> 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