



# Fish Health Section



The official link to the FHS website is: <http://www.fisheries.org/units/fhs>

## LETTERS FROM THE PRESIDENT

### THE FHS AND THE FUTURE OF FISH HEALTH IN THE US

Andy Goodwin, FHS President

The USFWS, APHIS, and NOAA have for years been working on the National Aquatic Animal Health Plan (NAAHP). The NAAHP agreement between the agencies was signed several years ago, but little has been done thus far to implement its recommendations. That is about to change, and it will have a major influence on many of the Section's activities.

Last summer, the Secretary of Agriculture appointed the "Secretary's Advisory Committee on Animal Health" (SACAH). I serve as the aquaculture representative in that otherwise terrestrially-oriented group. The SACAH has now asked USDA to appoint a Sub-committee on Aquatic Animal Health (SAAH) to advise the SACAH on aquatic animal issues. The SAAH has been appointed and will meet for the first time in January 2012. The membership of the SAAH includes the three Federal co-competent authorities on aquatic animal health (USFWS, APHIS, NOAA), aquaculture industry, state agriculture and natural resource agencies, tribes, and experts. I am also on the SAAH. The committee will be tasked with assisting the Federal agencies on implementation of the NAAHP. It is clear that NAAHP implementation will include the development of a national aquatic animal health laboratory network and consideration of the appropriate roles for aquatic animal health professionals with different sorts of credentials. The lab network will establish appropriate inspection protocols and quality assurance for international, and perhaps interstate, movements. This will directly impact the future relevance of the Inspection Section of the FHS Blue Book. Any consideration of professional roles will affect the relevance of FHS professional certifications (pathologist and inspector). There is no doubt that other issues including the selection of reportable diseases, disease reporting requirements, and future disease-specific regulations will also be of great importance to FHS members. I'll keep you posted.

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**MEETINGS AND WORKSHOPS - FOR INFORMATION ON THESE AND OTHER  
UPCOMING MEETINGS GO TO THE WEBSITE:**

<http://www.fisheries.org/units/fhs/meeting.php>

**AQUAVET® I – see attached AQV1\_announcement**

**COURSE ANNOUNCEMENT**

May 27 to June 23, 2012

We are pleased to announce that AQUAVET® I – An Introduction to Aquatic Veterinary Medicine will be offered by AQUAVET® in 2012. The course is designed for veterinary students and veterinarians who have an interest in applying their veterinary training to aquatic animals. The course will be presented again this year at Roger Williams University in Bristol, Rhode Island. Bristol is a picture perfect New England town about 20 minutes from Newport. The course dates are May 27 to June 23, 2012 inclusive. Arrival and the start of classes is May 27th and departure is June 23rd. The fee for the 4-week course INCLUDES tuition and room and board. It is \$1,975 for full-time veterinary students and \$3,375 for veterinarians. Through the generosity of a program benefactor, a \$200 scholarship will be applied to partially offset the fee for all full-time veterinary students resulting in a net tuition of \$1,775 for the accepted full-time veterinary students this year.

In addition, we anticipate a limited number of summer research opportunities during an 8-week period following the course. Students selected as AQUAVET® Summer Research Fellows pay no tuition for the 8 weeks of the research program itself and will be reimbursed for room and board expenses. In addition, research students will receive a stipend of \$1500 for the research period. At least one Fellowship will be restricted to aquaculture related projects.

Detailed information about the course is available on our website. Applications for admission are due by January 14, 2012. The application is available on our website. You will receive an e-mail acknowledging receipt of your completed application.

Please visit our website at: [www.aquavet.info](http://www.aquavet.info)

**AQUAVET® II - see attached AQV2\_announcement**

**COURSE ANNOUNCEMENT**

May 27 to June 9, 2012

We are pleased to announce that an advanced course in Comparative Pathology of Aquatic Animals will be offered by AQUAVET® in 2012. The course will be oriented toward the pathology of vertebrates and invertebrates commonly used as laboratory animals, encountered in display aquaria, and of importance to aquaculture enterprises. Representative species for each category will serve to demonstrate features of commonly observed diseases. The course is designed for veterinary students and veterinarians who have participated in AQUAVET® I or have had comparable experiences in aquatic animal medicine and pathology. The course will be presented again this year at Roger Williams University in Bristol, Rhode Island. Bristol is a picture perfect New England town about 20 minutes from Newport. The course dates are May 27 to June 9, 2012 inclusive.

Arrival and the start of classes is May 27th and departure is June 9th. The fee for the 2-week course INCLUDES tuition and room and board. It is \$1,125 for full time veterinary students, and \$1,850 for veterinarians. In addition, we anticipate a limited number of summer research opportunities during an 8- week period following the course. Students selected as AQUAVET® Summer Research Fellows pay no tuition for the 8 weeks of the research program itself and will be reimbursed for room and board expenses. In addition, research students will receive a stipend of \$1500 for the research period. At least one Fellowship will be restricted to aquaculture related projects.

Detailed information about the course is available on our website. Applications for admission are due by January 14, 2012. The application is available on our website. You will receive an e-mail acknowledging receipt of your completed application. Please visit our website at: [www.aquavet.info](http://www.aquavet.info)

## JOBS

### **ASSISTANT PROFESSOR IN MARINE/AQUATIC MICROBIOLOGY**

**The Virginia Institute of Marine Science  
School of Marine Science/College of William & Mary**



The Virginia Institute of Marine Science (VIMS) has a three-part mission to conduct interdisciplinary research in coastal ocean and estuarine science, educate students and citizens, and provide advisory service to policy makers, industry, and the public. The School of Marine Science at VIMS is the graduate school in marine science for the College of William & Mary. Chartered in 1940, VIMS is currently among the largest marine research and education centers in the United States. VIMS employs 55 full-time faculty members, 242 staff, and enrolls approximately 100 graduate students in master's and doctoral programs. There are four academic departments at VIMS: Biological Sciences, Environmental and Aquatic Animal Health, Fisheries Science and Physical Sciences. Further information on the Virginia Institute of Marine Science and the School of Marine Science may be accessed through the web at: [www.vims.edu](http://www.vims.edu).

**Assistant Professor in Marine/Aquatic Microbiology:** We invite applications for a tenure-eligible Assistant Professor position in the School of Marine Science, Virginia Institute of Marine Science. The position will begin Summer of 2012.

**Qualifications:** The successful candidate will hold an earned doctorate (Ph.D.) at the time of appointment in Microbiology, Marine Science, or related discipline. Candidates must have a strong publication record commensurate with experience, and demonstrated potential to establish a successful research program and excellent graduate student teaching and mentoring. Individuals must possess experience in current molecular technologies, as well as classical

microbial analytical and culture techniques. Candidates with research interests in any area of aquatic/marine microbiology will be considered including those in the following fields:

- Environmental Microbiology
- Marine Microbial Genomics
- Pathogens of Aquatic Organisms
- Microbial Ecology
- Ecology of Human Pathogens in Aquatic Environments
- Marine Biogeochemistry
- Marine Microbial Natural Products

**Responsibilities:** The successful candidate will demonstrate outstanding capabilities and potential for leading an active research and publication program, advising and mentoring graduate students, teaching courses in their discipline, participating in institutional governance, and providing service to the Commonwealth of Virginia. Candidates eager to engage in cross-disciplinary research, teaching, and service will be especially welcomed.

**The Virginia Institute of Marine Science** encompasses disciplines in all areas of marine science including Physical Oceanography, Geological, Biological, Environmental, and Fisheries Sciences. This union facilitates a high level of interdisciplinary synergy needed to address today's complex environmental issues and challenges. The Institute's objectives are to conduct innovative research, communicate, instruct, and apply scientific knowledge of the environmental, biological, and physical processes in estuaries and oceans.

**Application materials** must include: 1) a cover letter explaining professional education, experience, and suitability for the position; 2) a full curriculum vitae; 3) research statement; 4) teaching statement; and 5) the names, addresses (including titles and institutions), email addresses, and telephone numbers of five references. All materials must be submitted electronically in PDF format.

Application materials should be addressed to the Chair of the Marine Microbiology Search Committee, and will be accepted through our On-Line Application System at <http://jobs.wm.edu>. For full consideration, application materials are due December 1, 2011; however, applications will be accepted until the positions are filled.

**The College is an equal opportunity/affirmative action university. Applications by persons from under-represented groups are strongly encouraged.**

**RANK-OPEN FACULTY POSITION IN COMPARATIVE IMMUNOLOGY  
FLORIDA INTERNATIONAL UNIVERSITY**

The Department of Biological Sciences at Florida International University is seeking a Comparative Immunologist (open rank) to fill a tenure-track position. All candidates must have post-doctoral experience and strong publication and funding records. Senior candidates should have a demonstrated history of leadership and consistent extramural funding in the field of comparative immunology. The department has a broad range of faculty for potential collaborative interactions (<http://casgroup.fiu.edu/Biology/>). Teaching expectations include a general undergraduate course in immunobiology and graduate specialty courses. All application materials should be submitted electronically as PDF files to: Dr. Laurie Richardson, Chair, Comparative Immunology Search Committee, [Laurie.Richardson@fiu.edu](mailto:Laurie.Richardson@fiu.edu) and received by November 21, 2011. Each application should include a cover letter, curriculum vitae, and a summary of professional and teaching interests. In addition, applicants should arrange for three to four letters of reference to be e-mailed directly to the same e-mail address. Interested applicants are also required to submit their applications online via [www.fiujobs.org](http://www.fiujobs.org) reference position 34952. *FIU is a member of the State University System of Florida and is an Equal Opportunity, Equal Access Affirmative Action Employer.*

### **LOOKING FOR OPPORTUNITIES:**

(Note: I am happy to post from people looking for positions if they would like to provide a brief summary)

I am a recently graduated veterinarian and am looking for job opportunities anywhere from intern to post-doctoral work with a PhD tract. When corresponding with Dr. Densmore about my interests, she recommended that I contact you about possible opportunities.

A little about my background in aquatics: before vet. school, I interned at Mote Marine Laboratory's Whale, Dolphin and Sea Turtle Rehabilitation Hospital; this experience formed my interest in aquatic species conservation. During vet. school I pursued this interest in the classroom by taking both Aquavet 1 and 2 (focusing on fish anatomy, disease, and histopathology) as well as with externships at US Fish and Wildlife Services in Olympia, WA, and Shedd Aquarium in Chicago. Whether it was conducting health assessments for salmon fry at a hatchery or assisting in surgery on a parrot fish, I found personal and professional enjoyment in working with aquatic animals.

In the future I would like to be involved in multi-trophic aquaculture, environmental impacts of aquaculture, conservation and sustainability, and education.

I look forward to hearing from you about any and all possible positions.

Thanks,  
Dory Kirkbright  
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## RESOURCES

**FFN ARTICLE: HIGH PRESSURE MAKES OYSTERS SAFER TO EAT – see attached FFN\_4\_11\_Fish-Health-Notes.pdf.**

Thanks to Rod and Janice!

## NEWS

### **DEADLY SALMON VIRUS RAISES CONCERNS IN US, CANADA**

Seattle Post-Intelligencer / Washington POST

PHUONG LE, Associated Press

Updated 04:57 p.m., Tuesday, October 18, 2011

<http://www.seattlepi.com/news/article/Deadly-salmon-virus-raises-concerns-in-Wash-2224582.php>

[http://www.washingtonpost.com/business/industries/washington-state-scientists-worried-about-salmon-killing-virus-found-in-british-columbia/2011/10/18/gIQApfjPvL\\_story.html](http://www.washingtonpost.com/business/industries/washington-state-scientists-worried-about-salmon-killing-virus-found-in-british-columbia/2011/10/18/gIQApfjPvL_story.html)

SEATTLE (AP) — Scientists in Washington state are working to improve testing of a deadly, contagious marine virus as a precaution, after the virus was detected in wild salmon for the first time on the West Coast.

Researchers with Simon Fraser University in British Columbia and elsewhere announced Monday they had found the influenza-like virus in two juvenile sockeye salmon collected from the province's central coast. The virus, which doesn't affect humans, has caused losses at fish farms in Chile and other areas, and could have devastating impacts on wild salmon in the region and other species that depend on them, the researchers said.

"This is potentially very big. It's of big concern to us," said John Kerwin, who supervises the fish health unit at the Washington state Department of Fish and Wildlife. Even though the virus was detected in salmon collected hundreds of miles away, at Rivers Inlet in British Columbia, the virus could pose a threat because "fish don't have any boundaries in the ocean ... and salmon species stray," he said.

The state tested about 56,000 hatchery and wild fish last year and hasn't found signs of the virus — infectious salmon anemia, Kerwin said. But Monday's news sent Kerwin scrambling on Tuesday to work with other agencies to find ways to beef up current testing methods. If the virus is ever detected in Washington, the state would follow containment plans that could include killing fish, he said.

"It's a disease emergency," said James Winton, who directs the fish health section of the U.S. Geological Survey's Western Fisheries Research Center in Seattle.

Officials on both side of the border should increase surveillance and research to understand how broadly the virus is distributed, in what species, how fish are infected, among other questions, he said. "We don't have enough information on what this strain will do today and what it will do in the future," he said.

"We're concerned. Should it be introduced, it might be able to adapt to Pacific salmon," added Winton, who is not connected to the British Columbia study.

The virus was found in two of 48 juvenile sockeye salmon collected as part of a long-term study of sockeye salmon led by Simon Fraser University professor Rick Routledge. "It is certainly possible that this disease may be benign for Pacific salmon, but I still don't rest easy because it was initially benign for Atlantic salmon and it mutated," he said Tuesday.

Researchers said Fred Kibenge of the Atlantic Veterinary College at the University of Prince Edward Island, confirmed the presence of the virus in two fish and noted it was a European strain of the virus.

Routledge and biologist and wild-salmon activist Alexandra Morton suggested Monday that the source of the virus is Atlantic salmon farms in British Columbia, which has imported millions of salmon eggs since 1986.

The Canadian Food Inspection Agency was informed of the suspect case over the weekend and will run its own tests and analysis at a federal laboratory in New Brunswick, said Dr. Cornelius Kiley, a veterinarian with the agency. It may be weeks before that's complete, he said Tuesday.

"It's very important to ensure that the test was carried out properly and done under the proper condition," Kiley said. "If you can repeat it, then your level of confidence will increase."

Morton on Monday called for the removal of Atlantic salmon from British Columbia salmon farms. And the Washington-based Wild Fish Conservancy on Tuesday called for a halt to more net pen salmon aquaculture on the West Coast. It also wanted widespread testing of wild and hatchery salmon and a halt to fish farms in British Columbia until those results are known.

But Kiley said, "We have no indication at this time that there's any involvement with the aquaculture industry."

In Washington state, Kerwin said one company raises Atlantic salmon in western Washington and has not detected the virus.

John Kaufman, a fish biologist with the Oregon Department of Fish and Wildlife, said he wasn't as concerned, partly because the virus seems to affect Atlantic salmon the most and Oregon does not raise Atlantic salmon off its coast.

AND A PLETHORA OF OTHER ARTICLES:

<http://www.nytimes.com/2011/10/18/science/18salmon.html>

[http://seattletimes.nwsourc.com/html/nationworld/2016533103\\_salmon18.html](http://seattletimes.nwsourc.com/html/nationworld/2016533103_salmon18.html)

<http://www.theglobeandmail.com/news/opinions/letters-to-the-editor/oct-19-letters-to-the-editor/article2205597/singlepage/#articlecontent>

<http://www2.canada.com/nanaimodailynews/news/upfront/story.html?id=cd279c76-e2bc-45eb-bc65-53ba418f411a>

<http://www.timescolonist.com/opinion/Fast+action+needed+salmon+disease/5572619/story.html>

<http://www2.canada.com/courierislander/news/story.html?id=a1e6d859-9397-4597-b65e-ee549689de07>

<http://www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=18&id=46860&l=e&special=&ndb=1%20target=>

<http://www.thecanadian.org/k2/item/1064-catastrophic-isa-disease-found-on-bc-coast>

<http://www.myfoxspokane.com/news/kcpq-lethal-virus-seen-as-threat-pacific-salmon-20111018%2c0%2c7661958.story>