FHS NEWS

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

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

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

Voting Reminder
AFS FHS elections are now open until May 7th. Please follow the link below to cast your ballots. Biosketches are available via links on the ballot! Thank you for supporting the Fish Health Section! https://www.surveymonkey.com/r/SYFJQ6P

Only current AFS FHS members are eligible to vote in elections. If you are unsure about your membership status, you may contact the FHS treasurer at afsfhs00@gmail.com.

This is also a reminder to renew your membership if you need to.

From the HROC
Current Chairs for the HROC:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Email Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devin Chappell</td>
<td>Co-chair, Year 2</td>
<td><a href="mailto:Devin.Chappell@fws.gov">Devin.Chappell@fws.gov</a></td>
</tr>
<tr>
<td>Kathleen Hartman</td>
<td>Co-chair, Year 2</td>
<td><a href="mailto:Kathleen.H.Hartman@usda.gov">Kathleen.H.Hartman@usda.gov</a></td>
</tr>
</tbody>
</table>

The AFS-FHS Blue Book (BB) revision process is now underway! As a part of this process, the BB Revision Steering Committee has asked the Handbook Revision and Oversight Committee (HROC/RO) to solicit written requests for changes to the AFS-FHS BB Section 2 (i.e., the inspection section).

We have attached to this email Appendix A1.2 of the BB, which guides the process of making requests for changes. However, we recognize that this special solicitation request for changes may cause some deviations. As Chairs of the HROC/RO, we will keep you up-to-date on how this will work. Our goal is to follow the guidance as best as possible.

To facilitate this request, it is asked that requests for changes to Section 2 of the BB be:

1. Submitted in written form
2. Recommendations are submitted as a stand-alone document (i.e., not in an email)
3. Indicate the specific change(s) being requested with identification to which section of the document
4. Recommendations for including new information/procedures be submitted with complete references and justification for changes
5. All requests to be considered as part of this special solicitation update must be made by no later than May 14, 2021. Requests submitted after this time will be held for the next cycle of review.
6. Any requests submitted that do not meet these criteria will be returned back to the submitter for modification – to be made by the deadline established above.

Please send these requests to bluebookrevisions2021@gmail.com.

From the TSC
Current TSC Members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Email Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathleen Hartman</td>
<td>Chair, 3rd year</td>
<td><a href="mailto:Kathleen.H.Hartman@usda.gov">Kathleen.H.Hartman@usda.gov</a></td>
</tr>
<tr>
<td>Nilima Renukdas</td>
<td>2nd year</td>
<td><a href="mailto:Nilima.Renukdas@agriculture.arkansas.gov">Nilima.Renukdas@agriculture.arkansas.gov</a></td>
</tr>
<tr>
<td>Stephen Reichley</td>
<td>1st year</td>
<td><a href="mailto:Stephen.Reichley@msstate.edu">Stephen.Reichley@msstate.edu</a></td>
</tr>
</tbody>
</table>

The TSC is eager to receive new contributions or updates to Section 1 – Diagnostic Procedures for Finfish and Shellfish pathogens. Please contact any committee member for the current template to be used for this section.

MEETINGS, WORKSHOPS AND COURSES

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

See attached pdf for more info.

27th Annual Aquaculture Drug Approval Coordination Workshop

Due to the ongoing COVID-19 pandemic and for the safety of everyone, the 27th Annual Aquaculture Drug Approval Coordination Workshop will be held VIRTUALLY, from July 27-29th, 2021. If you're interested in giving a presentation at the workshop, or if you have any specific aquaculture drug/drug approval process-related questions that you would like addressed during the workshop, please reach out to Julie Schroeter by May 28th, 2021. More details about the workshop, including registration information, will be available soon via the AADAP website and the AADAP Update. Please don't hesitate to reach out if you have any questions. Thank you.

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

**Aqua Key Account Manager**  
*Merck, Animal Health Aquaculture Business Unit*  
Canada


**Veterinarian Specialist (General) – Fish Medicine**  
*California Department of Fish and Wildlife*  
Sacramento, CA  
Application Deadline: 5/21/2021

The Veterinarian Specialist (General) position serves as a veterinary expert for fish and aquatic animal programs related to fish hatcheries, as part of a team that provides veterinary medical support to 22 CDFW fish hatcheries, statewide. The team is also responsible for investigating fish health issues in inland waters of the state.

Please call or email Mark Adkison, Statewide Fish Health Coordinator, for further information about this position. 916-952-5361 (Mobile), mark.adkison@wildlife.ca.gov

Official Job posting:  

**Zebrafish Related Job Announcements**  
[https://wiki.zfin.org/display/jobs/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)

**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.
Gyrodactylus sp. birthing from a kokanee skin scraping, Lake Billy Chinook, OR, April 2021.
A1.3 Process for Amending the Handbook

A. There may be occasions when new discoveries or editorial errors require immediate changes in the handbook. Suggestions for such changes are submitted to the co-chairs of the Revision and Oversight Committee, the President of the Fish Health Section of the AFS, or the USFWS National Fish Health Coordinator. If the Committee co-chairs find that the suggestion clearly indicates that a current Handbook protocol may not produce an accurate result, the co-chairs will convene a meeting of the full committee at the soonest possible date and determine if an immediate correction is warranted. If a change is warranted, the co-chairs will coordinate the revision of the text and have it approved by the full committee. The corrected text will be provided to the USFWS; notification of the change will be included in the FHS newsletter; FHS members holding a current Blue Book subscription will be notified of the change by mail; and the changed text will be provided on the FHS web site until release of the next edition of the Blue Book. If initial review of a suggested change is not deemed urgent by the co-chairs or the Revision and Oversight Committee, it will be deferred and included in the normal revision process detailed below.

B. Immediately following publication of a new version of the Handbook, the Revision and Oversight Committee shall, through the committee co-chairs, begin to solicit written requests for changes in the Handbook. Advertisement for changes should be sent to all USFWS Fish Health Center Project leaders, list-server, AFS-FHS website and the annual FHS meeting. Individuals should be encouraged to include any new information that may need to be considered when evaluating their comments and concerns. The committee will continue to accept requests the fall (November) quarterly meeting (approximately 8 months) prior to the scheduled publication of the next version of the Handbook.

C. To allow committee members time to review, written requests for changes in the document or for discussion of concerns should be submitted at least thirty (30) days prior to quarterly meetings of the Revision and Oversight Committee. The requests and comments shall be submitted to the committee co-chairs who will then distribute them to the other committee members for their consideration prior to the meeting.

D. Committee members shall search the appendix for related issues or position statements that have addressed these concerns or similar concerns. This shall be done to aid in determining the need to address a particular query due to changes in available information.

E. At quarterly meetings, the committee will hold discussions on each query to determine whether or not the issue merits further review.

1. If the committee calls for no further review, the committee shall write a position statement to be incorporated with the query and added to Appendix 3. Additionally, the person submitting the query shall also receive a copy of the position statement.

2. Should the committee decide the matter warrants further discussion a subcommittee shall be formed.
a. Subcommittees shall be formed with regard to the chapter under review (i.e. Bacteriology, Virology, and Parasitology), this will ensure consistency within any chapter. Subcommittees formed to deal with issues within Chapter 1, Chapter 2, Chapter 6, or Appendix 1 should focus on how changes will affect all sections of the handbook as these relate to all the other chapters.

b. A member of the Revision and Oversight Committee shall chair each subcommittee.

c. Each subcommittee will address all the queries regarding their chapter moved forward by the Revision and Oversight Committee.

d. The subcommittees shall be composed of 6 to 12 members.
   i. Members are drawn from both the USFWS and the AFS-FHS.
   ii. Equal representation is not required on subcommittees; however, there must be at least two representatives of each organization on each subcommittee.
   iii. The subcommittee chair will invite individuals to participate on the subcommittee.
   iv. The invitees shall be experts or have extensive experience in the discipline being discussed.
   v. The invitees shall represent a diverse area of the country and have a broad species interest, to ensure equal consideration of all potential culture situations.

F. The subcommittee chair shall assemble the subcommittee, provide them with the queries to be addressed and any other material needed and schedule a meeting within 30 days of the last quarterly meeting.

1. At least 2/3 of the subcommittee must be present to make official decisions. At least a 2/3 of the (10) members present for a vote are required to make a significant change to the handbook. A significant change is defined as a functional change in how a procedure is performed or how the committee functions. Example of a change that could be made without 2/3 vote include correcting formatting or typos.

2. The subcommittees shall determine again if the query needs to be addressed.
   a. If it is determined by the subcommittee that the issue does not warrant action:
      i. The subcommittee shall write a position statement explaining why this decision was made and it will be submitted to the Revision and Oversight Committee for inclusion in Appendix 3.
      ii. The submitter of the query will also be provided a copy of the position from the subcommittee.
   b. If the subcommittee finds the query needs to be addressed they shall:
i. Determine the most appropriate changes to be made to the document.

ii. Submit line-by-line recommendation in a position statement, which is delivered to the Revision and Oversight Committee within ninety (90) days of the subcommittee’s first meeting (February).

G. At the next quarterly meeting, the Revision and Oversight Committee shall have thirty (30) days (February) to review these changes and determine if they fit with the other parts of the handbook and are in-line with the purpose and intent of the handbook.

3. If the committee accepts them:
   
e. The Revision and Oversight Committee co-chairs make the changes to the handbook.
   
f. The changes as well as the subcommittee position statement are added to Appendix 3.
   
g. The individual submitting the query shall receive a copy of the position statement and notice of the subsequent changes to the handbook.

2. If the Revision and Oversight Committee rejects the suggested changes, they shall supply a written position statement for these actions to the subcommittee chair, who in turn shall provide it to the subcommittee members.

H. The subcommittee shall have an additional sixty (60) days (April) to:

1. Resubmit their changes by submitting a new position statement to the Revision and Oversight Committee through the subcommittee chair.

2. Drop the changes and issue a new position statement for inclusion in Appendix 3.

I. The revision and oversight committee shall have thirty (30) days (May) to re-review these changes.

1. If the new submittal is accepted by the Revision and Oversight Committee, they shall:
   
h. Write a position statement.
   
i. Make the changes to the handbook.
   
j. Add the changes as well as all position statements to Appendix 3.
   
k. Supply the query submitter a copy of both the position statement and the subsequent changes to the handbook.

2. If the submission is once again rejected, the Revision and Oversight Committee shall:
A1.3 Process for Amending the Handbook - 4

a. Provide a position statement, which shall be included in Appendix 3 and a copy provided to the individual that made the request.

b. The request will then be considered closed and will only be reconsidered if re-submitted in the future.

J. Position statements may be written by any member of the subcommittee or Revision and Oversight Committee and signed off on by all committee members before being added to Appendix 3. It is essential that all opinions, including those dissenting from the decision, be included in the position statement.

K. The Revision and Oversight Committee shall have thirty (30) days (June) to incorporate all accepted changes, add appropriate information to Appendix 2, add the position statements to Appendix 3, and release the new version of the document.
Figure 1. Flow chart of procedures to handle requests to change the handbook.

1. Written requests or concerns submitted to R&O Committee co-chairs (A1.3C)
2. Co-chairs distribute query to full R&O Committee 30 days prior to quarterly meeting (A1.3C&D)
3. Subcommittee formed and supplied with query and other materials (A1.3E2a)
4. R&O Committee discusses changes and decides if issue needs further review (A1.3E)
5. No action on position statement (A1.3E1)
6. Subcommittee determines changes and supplies position statement to R&O Committee (A1.3F2b)
7. Subcommittee discusses changes and decides if issue needs further review (A1.3F2)
8. No action on position statement (A1.3F2a)
9. R&O Committee accepts changes and writes position statement (A1.3G1)
10. R&O Committee reviews changes and position statement (A1.3G)
11. R&O Committee rejects changes, writes position statement and sends back to subcommittee (A1.3G1)
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.
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 ponter** - 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 pH 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  
- Received as trade for services in ~1999; I never used it as it was 220 v  
- SOLD

**Deionizer** - Barnstead/Thermolyne, NANOpure Bioresearch  
- model D-4751, wall mount  
- 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