



# FISH HEALTH NEWSLETTER

American Fisheries Society/Fish Health Section

Volume 30      Number 4      November 2002

## In this issue:

Outgoing President's Letter to the Fish Health Section.....	Page 1
President's Report.....	Page 2
Meetings and Workshops .....	Page 5
Meeting Summaries and Recognition of Award Winners.....	Page 10
Announcements.....	Page 11
Dr. Ken Wolf Obituary. ....	Page 13
FHS Executive Committee List.....	Page 14
<i>Mycobacterium montefiorensis</i> sp. nov., a novel pathogenic mycobacterium isolated from moray eels with granulomatous dermatitis and cellulitis.....	Page 16

## Outgoing President's Letter to FHS:

### Dear Fish Health Section Members,

As my year as President has come to a close I would like to thank all of you who have made yourselves available to work tirelessly on the projects that the Section tackled this year, and those who have shared their expertise and made my job easier.

Foremost among the projects that we undertook was the collaborative effort between the FHS and the USFWS to produce the "Standard Procedures for Aquatic Animal Health Inspections", which will be a component of the Bluebook. The committee chairs, people who served on the committees and those of you who gave input on the documents were critical to making this a successful process. I would particularly like to acknowledge Robert Bakal, Patricia Barbash, Joy Evered, Andy Goodwin, Linda Chittum and Chris Wilson - thanks so much for your efforts! At the annual meeting in New Orleans the acceptance of this document evolved into a decision to republish the Bluebook as a CD that will be updated yearly. This has again initiated a large effort to make this the best document possible in the short time available, and to do this we will need your help. We are aiming for release of the new Bluebook before the end of the year – look for more details soon! We will continue the collaborative process with the USFWS on a Quality Assurance document and will need help from those of you with expertise and interest in this area, so please volunteer.

The Fish Health Section was active in many other areas this year, including participation on national aquatic animal health issues and representation at meetings of related organizations. Scott LaPatra has continued to represent the Section at meetings of the USAHA and the AVMA, and he has done a great job of keeping us informed of issues of mutual interest. Jerry Heidel has been appointed as an official AVMA liaison to the FHS – welcome! We hope that this will encourage continued cooperation and collaboration between these two organizations.

Within AFS, the Section was asked to participate in organizing a symposium on “Propagated Organisms in and for Aquatic Resource Management”, providing us with an opportunity to collaborate with the Fish Culture Section on a topic of importance and interest. John Grizzle, our new Vice-President, will serve as the FHS representative on the planning committee.

Finally, I’d like to thank the officers and committee chairs who have fulfilled their obligations – Mike Kent, Ana Baya, Ted Meyers, Bev Dixon (who also must hold a record on number of committees served on at one time) and Ron Hedrick (JAAH editor). Your efforts have been appreciated. I’m sure that the take home lesson for anyone who has held the office of president is that the section is only as active as its members. There are numerous opportunities to participate – continuing education, Blue Book, information dispersal, input on issues etc – I encourage you to become involved.

Sincerely,  
Jerri Bartholomew

---

## **President’s Report:**

I thank you, the membership of the Fish Health Section, for your confidence in me by electing me to the position of President of the section. I also thank my predecessor, Jerri Bartholomew for her assistance in the transition and to all those who have been active in the various officer and committee roles. During the upcoming year, I will be working with Jerri to continue the effort she initiated to provide an e-mail information outlet on aquatic animal health information to interested members. There are several other items requiring continued attention. Through the hard work of a number of you the collaborative effort with the U. S. Fish and Wildlife Service has resulted in the completion of the “Inspection Chapter” of the Blue Book. The collaboration will continue, with efforts directed toward the development of a companion QA/QC document. Another goal I would like to see achieved during the upcoming year relates of continuing education. Now that re-certification requirements, including continuing education requirements, for Fish Pathologists and Fish Health Inspectors have been formalized there is a need to ensure that CE opportunities are available. Excellent CE workshops have been presented in association with the Western Fish Disease Workshops for a number of years and more recently have been presented in association with the

Eastern Fish Health Workshops. I believe that there is also an opportunity to provide web-based opportunities for our members and would like the Continuing Education Committee to investigate that opportunity.

I would now like to focus my discussion on the recent 2002 Annual Meeting of the American Fisheries Society, where I had the opportunity to represent the Fish Health Section. The meeting, held in Baltimore during 18-23 August, was the largest in AFS history with over 1600 attendees and over 900 presentations in as many as 13 concurrent sessions. From a personal perspective, the highlight of the meeting was being present during the opening Plenary Session when our colleague, Dr. John Fryer received the AFS Award of Excellence. This is the highest personal award of the American Fisheries Society and is presented to recognize outstanding scientists in the fields of fisheries and aquatic biology. This was a well-deserved recognition of the distinguished career of Dr. Fryer.

There were also several issues that were addressed at the AFS Meeting which are of importance to the Fish Health Section. The most notable among them was that of AFS publications. During the meeting, there was an announcement and demonstration of a system for on-line manuscript submission and peer review. The AFS sees the use of the internet as providing a number of advantages for their journals. Primary among them are speed to publication and reduction of costs. The parent society also has the goal of having all issues of all AFS publications available on-line, including all 131 years of Transactions. Along this same publications topic were issues associated specifically with the Journal of Aquatic Animal Health and the North American Journal of Aquaculture. Some of you are aware of concerns raised by the parent society regarding the long-term future of these journals. The concern centers around whether the number of manuscripts submitted can sustain the journals. Within the Fish Health Section, the Co-Editors have been very proactive in making the Journal of Aquatic Animal Health a premier journal. In addition, the FHS Publications Advisory Committee has been discussing the various issues and a committee within the American Fisheries Society (Ad Hoc Committee on Improving NAJA and JAAH) will be considering various options for their long-term development.

There are some issues you, as individual Fish Health Section members, should weigh when you consider publication of your research results. One item that continually is raised is that of page charges. These are one source of funding for actual publication of a journal. Other sources include journal subscription charges and charges associated with reprints. Some individuals may raise the idea of advertisements as a source of funds. When you considers that approximately 1100 copies of each issue of the Journal of Aquatic Animal Health are printed, a commercial organization will not see the Journal as a good return on their advertising dollars. Therefore, under current modes of operation, some combination of page charges, journal subscription costs and reprint charges are the realistic sources of funds needed to bring a journal to publication. In the case of the Journal of Aquatic Animal Health, page charges exist, but costs of subscriptions and reprints have been modest. Other journals may operate in a different mode and have much higher subscribing and reprint charges. You, as a potential contributor of

manuscripts, must decide how you operate within this “playing field.” The impact of the upcoming use of the internet in support of AFS publications has yet to play out on issues associated with cost of journal production.

Another often-raised issue is the time between submission of a manuscript and eventual publication. Here the efforts of the Co-Editors, Associate Editors and the anonymous peer reviewers must be applauded. These editorial efforts are performed on a volunteer basis by people who have numerous other demands on their time. Yet, there have been reductions in the time required to bring a manuscript to publication. The use of the internet for submission and review of manuscripts is expected to bring a significant additional time savings to the publication process. Even though manuscripts will continue to be accepted in hard copy, I strongly encourage the use of the internet-based system when it becomes available. Not only will this provide for efficiency, but it also may identify areas within the new system needing improvement or modification.

A lesser-heard comment is “I don’t think I can get an appropriate review of my work.” In the peer review system, we hope that individuals will provide a constructive and fair review. At the same time, every reviewer may not be a specialist in the particular system or technique you may be reporting. The anonymous peer reviewers are recruited by the Associate Editors as individuals who are capable of providing a review and to provide it within a reasonable period of time. One option you do have is to suggest the names of potential reviewers to the Associate Editors. Speaking from past experience as an Associate Editor, it is sometimes very helpful to have names of particularly well qualified individuals provided for consideration as reviewers.

As individuals involved in the fish health sciences, one of our responsibilities is to discover new knowledge and provide that knowledge to others for the benefit of our field and for society at large. One of our opportunities is to do that through the Journal of Aquatic Animal Health. I strongly encourage you to consider this option. In summing up, I admit that I do not have the solutions to all of the issues associated with the Journal of Aquatic Animal Health. You may have ideas to contribute. Please do not hesitate to pass them on to me ([prb4@cornell.edu](mailto:prb4@cornell.edu)) or to Jim Winton ([jimwinton@usgs.gov](mailto:jimwinton@usgs.gov)), Chair of the Publications Oversight Committee.

Paul Bowser

---

## **Meetings and Workshops:**

### **Advanced Fish Medicine Course**

The University of Florida is offering an intensive six-day course, "Advanced Fish Medicine" that will provide instruction in the most recent and advanced procedures associated with clinical fish health management. The course will emphasize a "hands-on" approach to many of the latest techniques including anesthesia, hematology, nutritional therapy, imaging, histopathology and surgery. The primary goal is to encourage practitioners to increase their expertise in clinical fish medicine. The course is intended for the advanced student who has prior education in fish diagnostics and health management.

Course Information: Advanced Fish Medicine is scheduled March 23 – 29, 2003. The course will start and end in Orlando, Florida with behind-the-scenes workshops at Walt Disney World® and Sea World® of Florida, respectively. Lectures and laboratory exercises will be conducted at the University of Florida College of Veterinary Medicine in Gainesville, Florida March 25-28, 2003. (Round-trip transportation between Orlando and Gainesville will be provided).

### **Course Application:**

Acceptance into Advanced Fish Medicine will be competitive and decisions will be based on the applicant's academic record and experience in fish medicine or aquaculture. A deposit of \$50.00 is required with submission of the application form. Application must be received by **November 1, 2002**. All fees will be refunded to applicants not accepted into the program. Following acceptance, \$900.00 registration fee must be received by January 17, 2003 to retain a seat in the course.

### **Continuing Education Units:**

A request for 20 continuing education units is pending approval by the Board of Veterinary Medicine, Florida Department of Business and Profession Regulation.

### **For more information:**

Contact Dr. Ruth Francis-Floyd, (352) 392-9617 ext. 229, Fax: (352) 392-3672, or email: [rff@mail.ifas.ufl.edu](mailto:rff@mail.ifas.ufl.edu)

Website: <http://www.conference.ifas.ufl.edu/fishmed>

## **3rd International Symposium on Fish Vaccinology**

**April 9 – 11, 2003 in Bergen, Norway**

We have the pleasure of inviting you to the 3rd IABs symposium on Fish Vaccinology in Bergen, Norway, April 2003. Much has happened in the area of fish immunology and vaccinology since the previous IABs symposium in Oslo 1996, and the aim of this symposium is therefore to present recent progress in fish vaccine development and future perspectives for immunoprophylaxis in aquaculture. The symposium will comprise oral and poster presentations on various aspects of the subject, from applied fish immunology to vaccination methods and programs.

Among the main topics that will be covered at the symposium:

- Immunology of cultured fish and crustaceans – recent progress
- New technologies for fish vaccine design – antigens and adjuvants
- DNA vaccination of fish
- Evaluation systems and assessment standards for fish vaccines
- The role of vaccination for disease control in aquaculture

Download the second announcement (PDF, 125kB):

[Second announcement](#)

The Conference is supported by:

[University of Bergen](#)

[Norwegian School of Veterinary Science](#)

[National Veterinary Institute](#)

[Institute for Marine Research](#)

[VESO](#)

# Propagated Fish in Resource Management

A Special Symposium of the American Fisheries Society

June 16-18, 2003 - Doubletree Riverside Hotel, Boise ID

---

## Final Call for Papers

---

**Title/Abstract submission Deadline: December 1, 2002**

**Submission Format: Send Title/Abstract to: [John Nickum](#)**

Name; Affiliation; e-mail; phone

Title; Author(s); Abstract (up to 300 words)

Submissions will be evaluated based on the title subject and abstract and a select few will be chosen to give podium presentations. Notification of selection will be sent by January 15, 2003.

### Types of Presentations to be considered:

#### **Suggested Talks (for publication in the Proceedings) - focus on 'big picture' issues:**

The need for propagated fish: sport, commercial, tribal, urban, conservation  
Risks versus benefits: systematic decision making  
Positive and negative impacts of stocking  
Natural production: limitations, webs and cycles  
Hatchery-produced fish: are they really different and wild fish?  
Native versus exotic species in pristine and altered ecosystems  
Economics and effectiveness of hatcheries versus habitat improvement  
Managing for pathogens in the hatchery and in the wild  
The ecology of fish diseases: cycles, control, dissemination  
Social perspectives and needs: angling, no-kill fisheries,  
Future enhancement options: marine fish, sterile releases  
Hatchery reform: natural rearing, captive broodstock, breeding for diversity  
Biological and habitat considerations in stocking program design  
Evaluation of propagation programs: in the hatchery and in the wild

**Suggested Posters (displays and synopses) - focus on specific programs or experiments:**

(In) appropriate uses of propagated fish: successes and failures

Guidelines and goals for stocking: species, numbers, timing, locations

Genetic gizmos for resource management: marking, gene banking, ploidy

Intensive propagation: captive broodstock, recirculation,

Restoring or enhancing endangered or lost populations

For further information, contact the Symposium Chairs:

Vincent Mudrak, Warm Springs Fish Technology Center, Route 1, Box 515, Warm Springs, GA 31830, 706-655-3382, E-mail [Vincent\\_Mudrak@fws.gov](mailto:Vincent_Mudrak@fws.gov)

Gary Carmichael, Doe Run Farms & Conservation, 700 Oelsen Road, Doe Run MO 63637, 573-760-0458, E-Mail [Carmichael\\_Gary@Yahoo.com](mailto:Carmichael_Gary@Yahoo.com)



**International Society for Developmental and  
Comparative Immunology (ISDCI)**

**9<sup>TH</sup> INTERNATIONAL CONGRESS**



**University of St Andrews  
Scotland**

**29<sup>th</sup> June - 4<sup>th</sup> July 2003**

**2<sup>nd</sup> ANNOUNCEMENT & CALL FOR  
ABSTRACTS**

**FURTHER INFO: <http://www.st-and.ac.uk/~seeb/ISDCI/home.htm>**

**Co-ordinator: Dr Val Smith**

**Conference Secretary: Mrs Jane Williamson**

**Gatty Marine Laboratory, School of Biology,  
University of St Andrews, Fife KY16 8LB**

**Enquiries: Dr Val Smith ([v.j.smith@st-and.ac.uk](mailto:v.j.smith@st-and.ac.uk)) or  
Mrs Jane Williamson ([jmcw@st-and.ac.uk](mailto:jmcw@st-and.ac.uk))**

**Other sites: ISDCI (<http://www.isdci.org>);  
University of St Andrews (<http://www.st-and.ac.uk>);  
St Andrews (<http://www.saint-andrews.co.uk>)**

Watch for upcoming information on the 2004 Meeting of the Fish Health Section to be hosted by Vickie Blazer in Leetown, WV!

---

## **Awards:**

### American Fisheries Society Annual Meeting

AFS 2002 Annual Meeting: More than 1,600 fisheries scientists and professionals met in Baltimore, Maryland, for the American Fisheries Society Annual Meeting. From all disciplines and geographies, attendees came to hear the current state of the art in fisheries science and management, to sample the great fare of the Chesapeake Bay, to enjoy the proximity to Washington, DC, and simply to meet each other, renew old acquaintances and friendships, and to hear that their Society is thriving with many new and exciting projects. The first phase of Fisheries Infobase was demonstrated at the Meeting as well as half a dozen new books that AFS has published in the past few months.

Congratulations to John Fryer who received the AFS Award of Excellence at the AFS National Meeting in Baltimore! This is the highest personal award of the American Fisheries Society and is presented to outstanding scientists in the fields of fisheries and aquatic biology.

### International Symposium on Aquatic Animal Health

#### Congratulations:

Dr. Ron Thune for receiving the S.F. Snieszko Distinguished Service Award

Dr. Drew Mitchel for receiving the FHS Special Achievement Award for his published review article. "Finfish health in the United States (1609-1969): historical perspective, pioneering researchers and fish health workers, and annotated bibliography"  
Aquaculture 196(2001) 347-438

S.F. Snieszko Student Travel Award Winners:  
Pareeya Udomkusonsri and Benjamin LaFrentz

## **Announcements:**

New Book Releases from AFS:

### **Catch and Release in Marine Recreational Fisheries**

**Jon A. Lucy and Anne L. Studholme, editors**

Catch and release fishing has a long history in freshwater recreational fisheries, as a management tool to reduce the impact of fishing on fish populations. Aside from regulatory requirements, freshwater anglers have long practiced catch and release fishing in the interests of promoting conservation-oriented angling. However, in comparison to freshwater, catch and release fishing in marine fisheries is proving more difficult to define relative to its full impact on anglers and use as a fishery management tool.

This symposium proceeding brings together information from researchers, fishery managers, coastal resource management and conservation organizations, and angling community leaders, addressing the issues that have arisen in relation to recreational fishing.

Includes sections on: Release Mortality and Circle Hooks, Stress Effects Related to Catch and Release, Conventional and Ultrasonic Tagging Studies, Angler Attitudes and Behavior, Management Issues

AFS Symposium 30

275 pp., hardcover, August 2002

Stock Number: 540.30

List price: \$50

AFS member price: \$35

ISBN 1-888569-30-1

### **Biological Indicators of Aquatic Ecosystem Stress**

**S. Marshall Adams, editor**

This book is a practical guide to the use of biocriteria for assessment of the effects of environmental stressors on aquatic ecosystems and organisms, especially fish. Written by scientists who are the best in their fields, this book provides helpful information for designing and applying bioindicators in the field to reliably assess the health of aquatic organisms and ecosystems. This volume may be used as a manual for scientists, students, and others, in a variety of disciplines and applications.

Includes chapters on: Biochemical Responses as Indicators of Aquatic Ecosystem Health; Genetic Responses as Population-Level Biomarkers of Stress in Aquatic Ecosystems; Reproductive Indicators of Environmental Stress in Fish; Integration of Population, Community, and Landscape Indicators for Assessing Effects of Stressors; Statistical Considerations in the Development, Evaluation, and Use of Biomarkers in Environmental Studies

656 pp., August 2002  
Stock Number: 550.37C / 550.37P  
List Price: \$89 hardcover / \$62 paper  
AFS member price: \$69 hardcover / \$48 paper

ISBN# hardcover: 1-888569-28-X  
ISBN# paper: 1-888569-43-3

**Fisheries in a Changing Climate**  
**Nature A. McGinn, editor**

Representing the culmination of a very successful multi-agency effort organized by AFS, Sea Grant and others, this book brings together papers from scientists from US and Canadian governmental agencies and universities to discuss fisheries and climate change. This comprehensive, state-of-the-art volume is a valuable resource for anyone with an interest in the topic, and will serve as a guide to those continuing to study the future of fisheries in a changing climate.

Highlights include: Cutting-edge research on the impacts of climate change and variability on marine and freshwater fisheries, Reviews of recent climate impact fisheries research, Stakeholders' Forum on Fisheries and Climate Change report, A comprehensive bibliography of recent journal articles on the influences of climate change and variability on fisheries.

AFS Symposium 32  
319 pp., paper, August 2002  
Stock #: 540.32  
List price: \$60  
AFS member price: \$42

ISBN# 1-888569-40-9

To order any of these books:  
Online: [www.fisheries.org/cgi-bin/hazel-cgi/hazel.cgi](http://www.fisheries.org/cgi-bin/hazel-cgi/hazel.cgi)  
Phone: (678) 366-1411, or Fax: (770) 442-9742  
Email: [afspubs@pbd.com](mailto:afspubs@pbd.com)

---

## Dr. Kenneth E. Wolf (1922 - 2002)

Dr. Kenneth Edward Wolf, 81, died on Thursday, October 31, 2002, in Winchester (Virginia) of complications associated with Parkinson's disease. Ken was born on October 22, 1922, in Chicago. He was the son of the late Frank A. and Margaret Zeigler Wolf. His wife Elizabeth "Betty" Catherine Johnstone Wolf, whom he married August 22, 1948, died on January 10, 2001.

Dr. Wolf was a 1939 graduate of Saint Rita High School in Chicago and following military service; he received his Bachelor's Degree in Zoology, and his Master's Degree and Doctorate in Fisheries and Wildlife from Utah State University. He served in the Civilian Conservation Corps in Jordan Valley (Oregon) and was discharged as a first lieutenant in 1946 from the United States Army, where he served in the American theater.

Dr. Wolf's research career began in 1954 at the United States Fish and Wildlife Service's National Fish Health Research Laboratory (formerly the Eastern Fish Disease Laboratory) in Leetown (West Virginia). He retired as a senior research scientist in 1986. During his 33-year career, his seminal work in fish diseases started with the development of the first continuously cultivated fish cell culture (the RTG-2 cell line), which enabled researchers to study fish viruses in vitro, and culminated with his discovery of a previously unrecognized life stage of the parasite *Myxobolus cerebralis*, which causes Whirling Disease in trout and salmon.

Dr. Wolf was instrumental in establishing the Leetown laboratory as an internationally renowned facility for teaching various aspects of fish disease. Dr. Wolf was colleague, mentor and friend to a countless number of individuals throughout the world. Ken published his comprehensive textbook on fish virus diseases in 1988, and wrote or co-authored more than 170 scientific manuscripts and book chapters. He received the United States Department of Interior's Meritorious Service Award in 1976 and its Distinguished Service Award in 1978. He received the American Fisheries Society S. F. Snieszko Distinguished Service Award in 1981, Trout Unlimited's Distinguished Service Award in 1995, and the American Institute of Fishery Research Biologist's Outstanding Achievement Award in 2001.

With sadness, family and friends mourn the passing of this man who was respected professionally by his colleagues for his many achievements and excellence in research. He was particularly known for his sincerity, kindness, humor, and perfection of hobbies, which included his great passion for growing orchids. We grieve his departure, but cherish his memory.

Ken is survived by his three sons; Mark Edward Wolf of Baltimore (Maryland), Gregory Frank Wolf of Preston (Maryland), and Anthony Kenneth Wolf of Toms Brook (Virginia); by his half sister Renee Emily Wolf of West Sedona (Arizona); and by his four grandchildren. At the request of the family, a memorial service will be held on Saturday, November 9, 2002, at the National Fish Health Research Laboratory in Leetown. In lieu of flowers, memorial donations may be made to the American Parkinson's Disease Association, Inc., 1250 Hylan Boulevard, Suite 4B, Staten Island, NY.

Rocco C. Cipriano

## FHS 2002-03

### Executive Committee:

	Phone (ext)	FAX	Email
<b>Voting</b>			
Paul Bowser- President	607-253-3365	253-3384	prb4@cornell.edu
Chris Wilson –President-elect	435-752-1066 (21)	752-6977	<a href="mailto:cwilson@sisna.com">cwilson@sisna.com</a>
John Grizzle – Vice-President	334-844-3474	844-3474	jgrizzle@acesag.auburn.edu
Jerri Bartholomew – Past President	541-737-1856	737-0496	bartholj@orst.edu
Ken Cain – Secretary/Treasurer	208-885-7608	885-9080	kcain@uidaho.edu
Pete Taylor –Chair Professional Standards <a href="mailto:Pete_Taylor@r1.fws.gov">Pete_Taylor@r1.fws.gov</a>	360-425-6072	636-1855	
Andrew Goodwin – Chair Technical Standards	870-543-8137	543-8162	agoodwin@uaex.edu
<b>Non-voting</b>			
Steve Kaattari - Journal Co-editor	804-642-7362	642-7097	kaattari@vims.edu
Vickie Blazer - Journal Co-editor	304-724-4434	724-4435	vicki_blazer@usgs.gov
Chris Wilson, Website editor	435-752-1066 (21)	752-6977	cwilson@sisna.com
Lora Petrie-Hanson, Newsletter Editor	(662) 325-1291		<a href="mailto:lora@cvm.msstate.edu">lora@cvm.msstate.edu</a>
<b>Standing Committees</b>			
<b>Archives (appointed)</b>			
Margaret Ewing - chair	405-744-9689	744-7074	<a href="mailto:msewing@okway.okstate.edu">msewing@okway.okstate.edu</a>
Drew Mitchell	501-673-4483	673-7710	dmitchell@spa.ars.usda.gov
<b>Awards (appointed)</b>			
Bev Dixon – chair	510-885-3422	885-4747	bdixon@csuhayward.edu
Vickie Blazer	304-724-4434	724-4435	vicki_blazer@usgs.gov
<b>Continuing Education</b>			
Craig Olson, Chair	360-438-1181 (343)	753-8659	colson@nwifc.wa.gov
Jan Gleckler	360-438-1181 (340)	753-8659	jgleckle@nwifc.wa.gov
Joy Evered	360-753-9406	753-9403	joy_evered@fws.gov
Paul Bowser	607-253-3365	253-3384	<a href="mailto:prb4@cornell.edu">prb4@cornell.edu</a>
Bob Durborow	502-597-6581	597-5933	<a href="mailto:bdurborow@gwmail.kysu.edu">bdurborow@gwmail.kysu.edu</a>
Al Dove	631-632-9251	632-8820	adove@notes.cc.sunysb.edu
<b>Nominating and Balloting Committee (elected)</b>			
Margaret Ewing, chair	405-744-9689	744-7074	<a href="mailto:msewing@okway.okstate.edu">msewing@okway.okstate.edu</a>
Beth MacConnell, 2 yrs	406-994-6824	994-4090	<a href="mailto:bmac@montana.edu">bmac@montana.edu</a>
Gael Kurath, 3 yr	206-526-6583	526-6654	Gael_Kurath@usgs.gov
Jerri Bartholomew – Past President	541-737-1856	737-0496	bartholj@orst.edu
<b>Professional Standards Committee (elected)</b>			
Pete Taylor, chair	360-425-6072	636-1855	<a href="mailto:Pete_Taylor@r1.fws.gov">Pete_Taylor@r1.fws.gov</a>
Joy Evered, 2 yrs	360-753-9046	753-9403	<a href="mailto:joy_evered@fws.gov">joy_evered@fws.gov</a>
Scott Foott, 3 yr	530-365-4271	365-7150	scott_foott@fws.gov
Patricia Barbash, Secretary to the chair	717-726 6611	726 7379	patricia_barbash@fws.gov
<b>Technical Standards Committee (elected)</b>			
Andrew Goodwin, chair (additional year as chair)	870-543-8137	543-8162	agoodwin@uaex.edu
Deborah Bouchard, 1 yr	207 737-2637	737-4504	<a href="mailto:microtech@wiscasset.net">microtech@wiscasset.net</a>
Sue Marquenski, 2 yr	608-266-2871	267-7857	<a href="mailto:marcqs@dnr.state.wi.us">marcqs@dnr.state.wi.us</a>
Diane Elliott, 3 yr			
<b>Program Committee</b>			
Chris Wilson 2003	435-752-1066 (21)	752-6977	<a href="mailto:cwilson@sisna.com">cwilson@sisna.com</a>
Ray Brunson – local chair	360-753-9046	753-9403	ray_Brunson@fws.gov
<b>Newsletter (appointed)</b>			
Lora Petrie-Hanson, Editor	(662) 325-1291		<a href="mailto:lora@cvm.msstate.edu">lora@cvm.msstate.edu</a>

**Publications Advisory Committee**

Jim Winton, Chair	206-526-6587	526-6654	<a href="mailto:jim_winton@usgs.gov">jim_winton@usgs.gov</a>
Beth MacConnell	406-587-9265	582-0242	<a href="mailto:bmac@montana.edu">bmac@montana.edu</a>
Margaret Ewing	405-744-9689	744-7074	<a href="mailto:msewing@okway.okstate.edu">msewing@okway.okstate.edu</a>
Laura Brown	902-426-3241	426-9413	<a href="mailto:laura.brown@nrc.ca">laura.brown@nrc.ca</a>
Ex-Officio Members			
Steve Kaattari - Journal Co-editor	804-642-7362	642-7097	<a href="mailto:kaattari@vims.edu">kaattari@vims.edu</a>
Vickie Blazer – Journal Co-editor	304-724-4434	724-4435	<a href="mailto:vicki_blazer@usgs.gov">vicki_blazer@usgs.gov</a>
Lora Petrie-Hanson, Editor	(662) 325-1291		<a href="mailto:lora@cvm.msstate.edu">lora@cvm.msstate.edu</a>

**Ad Hoc Committees****Inspection Protocols**

Chris Wilson	435-752-1066 (21)	752-6977	<a href="mailto:cwilson@sisna.com">cwilson@sisna.com</a>
Jerri Bartholomew	541-737-1856	737-0496	<a href="mailto:bartholj@orst.edu">bartholj@orst.edu</a>
Andrew Goodwin	870-543-8137	543-8162	<a href="mailto:agoodwin@uaex.edu">agoodwin@uaex.edu</a>

**External Relations**

Scott LaPatra	208-542-3456	543-4146	<a href="mailto:scottl@clearsprings.com">scottl@clearsprings.com</a>
Jerry Heidel			
Vickie Blazer	304-724-4434	724-4435	<a href="mailto:vicki_blazer@usgs.gov">vicki_blazer@usgs.gov</a>

**QA/QC**

Patricia Barbash - chair	570-726 6611	726 7379	<a href="mailto:patricia_barbash@fws.gov">patricia_barbash@fws.gov</a>
Hui-Min Hsu	608-262-5432	262-5005	<a href="mailto:Hui-Min.Hsu@WVDL.wisc.edu">Hui-Min.Hsu@WVDL.wisc.edu</a>

# ***Mycobacterium montefiorensis* sp. nov., a novel pathogenic mycobacterium isolated from moray eels with granulomatous dermatitis and cellulitis**

Submitted by

LAWRENCE H. HERBST<sup>1,2</sup>, MICHAEL H. LEVI<sup>1</sup>, LOUIS M. WEISS<sup>1,3</sup>

*Department of Pathology,<sup>1</sup> Institute for Animal Studies,<sup>2</sup> and Department of Medicine,<sup>3</sup> Montefiore Medical Center and the Albert Einstein College of Medicine, Bronx, New York 10461*

Mycobacterial diseases of fish are well described and usually manifest as a chronic wasting disease with granulomas of spleen, kidney and liver. Hemorrhagic lesions of skin and musculature are also common. Typically mycobacterium isolates from fish have been rapidly growing species such as *M. marinum*, *M. fortuitum*, *M. chelonae*, and *M. poriferae*. For example, a recent report describes a granulomatous ulcerative skin disease in striped bass (*Morone saxatilis*) caused by an organism similar to *M. marinum* and *M. ulcerans* [1]. We recently reported the isolation of a novel mycobacterium from moray eels with a granulomatous skin disease [2]. The disease has occurred sporadically and persistently within captive exhibit populations of moray eels including Green moray (*Gymnothorax funebris*) and Spotted moray (*G. moringa*). Granulomatous lesions occur anywhere on the body surface including the nares and oral cavity, extending within the dermis and subcutaneous fascia and fat, but typically do not extend deep to the dense fascia covering the axial musculature. This organism was isolated following extensive incubation at 25 C of cultures from diseased eel tissue and was first recognized as a mycobacterium by *16S* ribosomal gene DNA sequencing [2]. Transmission experiments with this isolate, confirmed the pathogenicity of this bacterium for green moray eels and its etiologic role in this disease.

The mycobacterium isolated from moray eels was found to be most closely related to, but distinct from *M. triplex*, a recently described opportunistic pathogen of humans [3,4] within the *M. simiae* - *M. avium* complex. Subsequent, analysis of the Heat Shock Protein (*hsp65*) genes and the rRNA spacer region (ITS), as well as conventional phenotypic characteristics, including



fatty acid and mycolic acid analyses demonstrated that this organism is different from its closest genetic match, *M.triplex*, and warrants a designation as a separate taxon. We have named this new organism, *Mycobacterium montefiorensis* in honor of the institution, Montefiore Medical Center, Bronx, New York where it was isolated. A culture of *Mycobacterium montefiorensis* was deposited in the American Type Culture Collection (ATCC BAA-256) and the Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Braunschweig, Germany (DSMZ 44602). A paper describing the full characterization of this species and clarifying its taxonomic position within the genus *Mycobacterium* has been submitted [5].

1. **Rhodes, M.W., Kator, H., Kotob, S., van Berkum, P., Kaattari, I., Vogelbein, W., Floyd, M.M., Butler, W.R., Quinn, F.D., Ottinger, C., and E. Shotts.** 2001. A unique *Mycobacterium* sp. isolated from an Epizootic **striped** bass (*Morone saxatilis*). *Emerg.Infect.Dis.* 7: 896-899.
  2. **Herbst, L.H., Costa, S.F., Weiss, L.M., Johnson, L.K., Bartell, J., Davis, R., Walsh, M. and M. Levi.** 2001. Granulomatous skin lesions in moray eels caused by a novel *Mycobacterium* related to *Mycobacterium triplex*. *Infect Immun* 69:4639-4646.
  3. **Floyd, M.M., Guthertz, L.S., Silcox, V.A., Duffey, P.S., Jang, Y., Desmond, E.P., Crawford, J.T. and W. R. Butler.** 1996. Characterization of SAV organism and proposal of *Mycobacterium triplex* sp. nov. *J Clin Microbiol* 34:2963-2967.
  4. **Hazra, R., Floyd, M.M., Sloutsky, A. and R. N. Husson, R.N.** 2001. Novel mycobacterium related to *Mycobacterium triplex* as a cause of cervical lymphadenitis. *J Clin Microbiol* 39:1227-1230.
  5. **Levi, M. H., Bartell, J.B., Gandolfo, L., Smole, S.C., Costa, S.F., Weiss, L.M., Johnson, L.K., Osterhout, G., and Herbst, L.H.** (submitted). Characterization of *Mycobacterium montefiorensis* sp. nov., a novel pathogenic mycobacterium from moray eels related to *Mycobacterium triplex*.
-

## **Fish Health Newsletter – Editorial Policy**

The *Fish Health Newsletter* is a quarterly electronic publication of the Fish Health Section of the American Fisheries Society and is available for downloading in Adobe pdf file format. Submissions on any topic of interest to fish health specialists and preliminary case reports are encouraged with the understanding the material is not peer- reviewed. Abstracts submitted to the *Journal of Aquatic Animal Health* are also encouraged. Submissions must be formatted in Microsoft Word, WordPerfect, or Rich Text Format, and can be sent by electronic mail or via 3.5” floppy disk to the editor’s address below. **Graphics files should be sent separately in jpeg format.**

### **Editor**

Lora Petrie-Hanson ([lora@cvm.msstate.edu](mailto:lora@cvm.msstate.edu))  
College of Veterinary Medicine  
P.O. Box 6100  
Mississippi State University, MS 39762