November 2002















PRESIDENT TERRY MCELWAIN

2003 Executive Board

PresidentTerry McElwain
President-ElectWillie Reed
Vice PresidentGary Osweiler
Immed. Past PresidentPat Blanchard
Secretary/TreasurerAlex Ardans
North EastAlfonso Torres
South EastRon Wilson
North CentralNeil Dyer
South CentralMelissa Libal
North WestDonal O'Toole
South WestBarbara Powers
Canada ProvincialGrant Maxie
Canada Federal, Ex-officioW.D.G. Yates
Ex-Officio, NVSLRandall Levings

Table of Contents

President's Message
Executive Board Minutes4-8
First House of Delegates Meeting Minutes8-9
Second House of Delegates Meeting Minutes10-12
AAVLD Foundation and Pope Awards13
Committee Reports14-38
Anthrax 2002 and 2001 Survey Results38
2003 Committee Chairs39
AAVLD Call For Papers40
Histology Slide Conference
Bacteriology Case Presentations
Trainee Travel Award Application41
Future Meetings
Exhibitors Thank You
Position Announcements
Food and Water Testing Survey Results47
Foundation Donor Form
AAVLD Membership Application49

AAVLD Newsletter Editor: Pat Blanchard (pcblanchard@ucdavis.edu) Secretary-Treasurers office support: Allison Jackson (ajackson@cahfs.ucdavis.edu)

AAVLD President's Message

It is nearly Thanksgiving and I am not sure where the time has gone since our 45th annual conference in St. Louis. I would like to express my thanks to the Program Committee for all their assistance in reviewing and editing abstracts, and in moderating scientific sessions. Thanks also to Emily Sanson, Allison Jackson, Sharon Hein, and Donna Dare for their excellent help in putting the conference together and making sure it runs smoothly. And to all scientific session speakers our annual meeting would not be possible without the presentations of AAVLD members, so thanks for your participation. Last, but certainly not least, a big thank you to Pat Blanchard for her help in attending to the many conference details about which she seems to have unlimited knowledge.

This year we once again had a joint AAVLD/USAHA plenary session focusing on a timely topic of interest to both groups, and a joint awards reception/dinner. Judging from the standing room only attendance, the joint plenary session was a resounding success. Feedback on the awards reception and dinner has been positive, so both these sessions will be continued in the future. I hope all of you that were able to attend the conference were pleased, not only with the plenary sessions, but with the scientific sessions as well. We welcome any comments you might have so that we can continue to improve our annual meeting.

I am honored and privileged to serve as your President over the next year. It is a year that holds many opportunities and challenges. I suppose every President of AAVLD has looked at the issues facing our specialty and had similar thoughts. But through the efforts of your Executive Committee over the past few years, our association has gained a national prominence that it has not enjoyed in the past. As the details of Homeland Security are clarified over the next few months, there is no doubt that the AAVLD will be involved. Clearly one of our goals is to expand the National Animal Health Laboratory Network, and we will be working hard to make sure that Department of Homeland Security and USDA endorse the importance of involving additional laboratories in the network. We must all recognize that along with increased national exposure come additional responsibilities, expectations, and scrutiny. All of the goals we have set for ourselves that are vital to quality diagnostics and to a coordinated national laboratory network now seem to have taken on an enhanced sense of urgency. Test validation and approved methods, uniform SOP's, diagnostic and reporting criteria, OIE/ISO 17025 accreditation standards, a secure and effective electronic communication system - all these issues and others must be addressed before a true national network can be implemented, and we need your assistance. This organization has an extraordinary history of responding to the needs of our nation in disease surveillance and control. So I ask for your help in making sure that we meet the needs of our stakeholders, the public and our nation.

Finally, I want to assure you that the AAVLD represents all animal disease diagnosticians and all laboratories – whether large or small, accredited or non-accredited. In my years serving on the Executive Board and several AAVLD committees, I have never had a reason to doubt this commitment. As your President, I will be unwavering in my representation of the entire organization. I ask for your trust that this will happen, and your united support in assisting me.

Please feel free to contact me if you have any questions, concerns, or suggestions. I like to use the old fashioned approach of communicating by phone, so don't be surprised if I respond to your email with a phone call!

I wish you all the best for a safe, happy and healthy holiday season!

Terry F. McElwain, President, AAVLD tfm@vetmed.wsu.edu 509-335-9696

AAVLD EXECUTIVE BOARD MINUTES

Friday, October 18, 2002, 1:00 - 5:00pm

Millennium Hotel - St. Louis, MO

Present: Alex Ardans, Terry McElwain, Barb Powers, Willie Reed, David Zeman, Neil Dyer, Pat Blanchard, Bev Byrum, Donal O'Toole, Randall Levings, Frederic Hoerr, Melissa Libal, Grant Maxie, Bill Yates, Alfonso Torres, Ron Wilson, Gary Osweiler. **Guests**: Leon Thacker, James Case, Barbara Martin.

- 1. The meeting was called to order at 1:10pm by Pat Blanchard.
- **2. APPROVAL OF MINUTES:** Minutes of the July 14, 2002 Executive Board Meeting were reviewed. A motion was made to approve the minutes (Dyer), seconded (Libal), and passed unanimously.
- **3. TREASURER'S REPORT:** Alex Ardans presented the report of the Treasurer as follows:

JANUARY 1, 2002 - JUNE 30, 2002

Checking Account Balance on Hand January 1, 2002: Total Administrative Operating Receipts Total Administrative Operating Expenses		\$197,609.71 (adjusted \$530.25 for voided check from 2001) \$239,831.79 (\$268,854.05)			
ENDING BALANCE SEPTEMBER 30, 2002:			\$168,587.45		
Certificates of Deposit as of SEPTE	MBER 30, 2002				
CD#000418518		\$15,299.99			
CD#00475591		\$14,404.31			
TOTAL, CERTIFICATES OF DEF	POSIT		\$29,704.30		
Mutual Fund, Edward D. Jones, as of SEPTEMBER 30, 2002					
Account #190876276	New Perspective Fund	\$58,596.37			
Account #165939129	Investment Co. of America	\$60,531.25			
TOTAL MUTUAL FUNDS			\$119,127.62		

TOTAL ASSETS ON HAND- SEPTEMBER 30, 2002

\$317,419.37

Alex Ardans reported that, although the association's mutual funds have lost a significant amount of money this last quarter, the Financial Advisory Committee recommended that the funds remain where they are for now. There was also discussion regarding what would be done with income from AAVLD workshops, and the possibility of setting aside workshop income to fund future workshops, was discussed. Currently, no budget is provided for the workshops, and Alex Ardans proposed that when a workshop is presented to the board that a budget be presented as well. It was also suggested that AAVLD discuss with the CL Davis Foundation the possibility of the foundation offering a scholarship to trainees to attend their workshop, and/or offering reduced workshop registration fees to students and residents in order to encourage the attendance of more trainees.

A motion to accept the Treasurer's report was made (Zeman), seconded (McElwain), and carried unanimously.

4. COMMITTEE REPORTS

A. Accreditation

Leon Thacker reported that the Accreditation Committee met earlier today from 8:00am-1:15pm. Laboratory progress reports were received from the required two laboratories, Connecticut and Oregon State, and an interim report was received from Kentucky. Pending site visits discussed included Arkansas, New York/Cornell, and Georgia, Tifton and Athens. A preliminary report was received on the North Dakota site visit and complete reports were received on Colorado, Iowa, and Pennsylvania.

The committee also addressed the need for moving forward on the incorporation of OIE standards into the AAVLD Essential Requirements for Accreditation. The Accreditation Committee will meet for one day on either side of the winter Executive Board meeting to work on incorporation of OIE standards into the AAVLD requirements for accreditation. Monte Reimers and the Quality Managers Committee have been working on a model QA Manual to assist accredited labs in meeting the OIE requirement of a QA Manual for the lab.

The White Paper will be presented to the House of Delegates at the first House of Delegates meeting on Saturday, October 19th, 2002. The White Paper will be available to the membership, and will be posted on the AAVLD web site.

B. JVDI

John Kreeger could not attend the meeting, however, he reported to Pat Blanchard that JVDI is on track in terms of manuscript numbers, similar to previous years. He anticipates 185-190 manuscripts for 2002. Hence, acceptance rates remain the same (roughly 55%). A higher number of submissions from South American countries are being received and several of these have been problematic in terms of page charge payments. So far requests from South American authors to have page charges waived have been denied and payment eventually is received after threatening to remove their manuscript from the issue in which it is scheduled to be printed.

C. Newsletter and Monographs and Web Site Updates:

Pat Blanchard indicated her desire to resign as Newsletter Editor at the end of 2002, and she is still seeking a replacement.

Gary Osweiler reported that requests have been received to advertise on the AAVLD web site. He proposed that a section be added to the web site that reads "New Products and Services" which would link to a listing of advertisements, each with a statement of new products or services offered and a link to the company's website. The exhibitors from the annual meeting will be contacted to see if they are interested in having an advertisement on the AAVLD web site. Another proposed addition to the web site is an informational section with brief updates on new governmental issues.

A discussion group is now available on the web site, where members can log in with questions and topics of interest. These discussions are not emailed to the members, and thus they must log in to the discussion group to participate. It was suggested that participation possibly be encouraged by planting topics of discussion and emailing the membership to let them know a discussion group is available.

Due to some lack of dissemination of information to the membership, the House of Delegates will be added to the email updates currently sent to the Lab Directors in order to better distribute the information. It was discussed whether or not minutes for the conference calls between the Lab Directors and Dr. Ron DeHaven, APHIS Deputy Administrator, would be provided for those that could not attend, and for the membership. These conference calls are primarily informational updates and no action items come out of the meetings. No minutes will be provided in the future.

D. Program Committee

Terry McElwain announced that the Scientific Sessions begin tomorrow, and programs are now available. AAVLD is paying for only one invited speaker. This year there were no sponsors for the scientific sessions since the balance from previous years was sufficient to fund the sessions. Sponsors from past years included Bayer, Pfizer, Cepheid, Ventana, WR² and VMRD.

E. Canada

1. FMD. Following discussions with industry, veterinary organizations (including AAVLD), and other stakeholders in Canada and the USA, foot-and-mouth disease (FMD) virus has been brought into the high security Canadian Food Inspection Agency (CFIA) laboratory in Winnipeg, the National Centre for Foreign Animal Disease (NCFAD). The CFIA has the mandate to protect Canadian agriculture from foreign animal disease, and this step will give scientists the opportunity to work with the agent in target species. The NCFAD is the diagnostic laboratory for FMD in Canada, and can now produce its own diagnostic reagents, test vaccines that might be used to help control an outbreak, develop and

validate diagnostic tests (including those that might be used "on farm" in an outbreak), and provide hands-on training for CFIA and other field veterinarians in the diagnosis of the disease.

2. New President of the Canadian Food Inspection Agency. Mr. Richard B. Fadden was recently named President of the CFIA, succeeding Mr. Ronald Doering who served a 5 year term. A lawyer by training, Mr. Fadden has served the Government of Canada in various capacities, including security and intelligence functions. In introductory messages to staff he emphasized the CFIA's science-based regulatory role in food safety, animal health, and plant health being key to the government's basic responsibility of ensuring the security and safety of its citizens.

F. Membership

Willie Reed reported that the association currently has 1274 members.

G. Credentials

Willie Reed reported that the House of Delegates has been set, however there were more problems contacting people than expected.

H. Foundation

Barbara Powers reported that the Foundation Committee will meet from 8:00-9:00pm tonight. The Pathology Committee decided to fund a Pathology Student Travel Award this year and the award winner will be announced at the General Session Sunday, October 20 from 7:00-8:00pm. The best student presentation and poster awards will also be presented Sunday. The Foundation Committee is considering implementing a new Student Travel Award for the annual meeting that will be available to students from any discipline.

Barbara Powers announced that the Foundation Committee is short a few members. The committee has only eight members, and it is supposed to have twelve.

I. NVSL

Randall Levings reported that NVSL has tested 40,000 AI samples, 10,000 West Nile Virus samples (mostly equine), and 20,000 BSE (exceeds the 12,500 required by Harvard study), 11,000 Scrapie and 15,000 CWD samples. No further anthrax environmental samples since July. Fifteen labs have now signed contracts for scrapie/CWD testing, and four additional labs have volunteered to be trained for CWD fee-for-service testing. Additional emergency funds were provided for AI, CWD and WNV testing.

Funding was received for FADDL at Plum Island. Unfortunately, due to increased security needs more of the funds will go to security rather than what they were originally planned for. Some of the funds received are targeted for the NAHLN. There is still no firm definition of how the Department of Homeland Security (DHS) is going to interact with Plum Island. The House version approved port and border functions from D of Ag and Plum Island physical assets and liabilities would move to Department of Homeland Security but the Plum Island personnel would remain with Department of Agriculture with access to facilities provided by DHS for training, diagnostics and research. The Senate has no approved version.

Alfonso Torres asked whether AAVLD should be taking a stand on the issue of Plum Island's possible move to the Department of Homeland Security. After discussion, it was decided that the Governmental Relations Committee should address this issue and develop a resolution to present at the second HOD meeting for consideration.

Update on the Master Plan: \$124M of the 430M needed has been appropriated. Both a BL2 and BL3ag facility are planned.

NVSL is developing business and disaster recovery and emergency response plans for when both a disease outbreak occurs and laboratory facilities are compromised. The NAHLN will possibly be used as a back up in such a situation. It is also pertinent to solidify NVSL's relationship with Canada for the use of their BL 4 facility.

J. Miscellaneous Reports

David Zeman reported that the Awards Committee needs additional help in reviewing graduate student presentations. In addition, there is a change in time of the presentation of awards from previous years, which needs to be announced at the scientific sessions and House of Delegates.

Pat Blanchard gave the Long Range Planning Committee recommendations. Please refer to the Long Range Planning Committee minutes (page 31) for the complete report.

6. OLD BUSINESS

A. National Animal Health Laboratory Network Update

Randall Levings reported that CDC is looking to expand its Laboratory Response Network to include some of agriculture labs that perform food testing. CDC also would like the nascent NAHLN to provide information on zoonotic select agent trends. Most important to CDC are unusual occurrences and trends among "overlap" select agents. NVSL is willing to do the compiling and sanitizing of raw data if the labs are agreeable. There is still the issue that no funds were provided to animal labs to interface with or provide reports to any agency on overlap agents. One suggested format was reporting yes/no was the agent identified, species and yes/no is it an unusual occurrence. Report frequency, confidentiality and specificity of location would need to be determined. It was also discussed that state veterinarians must be involved in the decisions since many laboratories are required to report through the state veterinarian's office. Terry McElwain proposed that a resolution be brought to the House of Delegates regarding funding and completion of a NAHLN. Refer to minutes of the second House of Delegates meeting, October 21, 2002, for the resolution (page 10).

A motion to accept the resolution was made (McElwain), seconded (Zeman), and passed unanimously.

B. Strategic Planning Action Items from July Meeting

Strategic Planning action items from the July meeting were reviewed. Action items that remain to be completed include garnering vocal support from USDA upper management for NAHLN; writing brief example(s) of a well-functioning VDL surveillance system or proposing a model of how VDL information can be used in DHHS surveillance system; pursuing voting membership in the HOD of AVMA and determining how many AAVLD members also belong to AVMA. It was discussed that AVMA requires ninety percent of the association's membership to be AVMA members for the association to have voting rights in the HOD. Currently, it does not appear that AAVLD will meet the ninety percent membership requirement. Options include encouraging AVMA to change their bylaws to lower the membership requirement or encouraging more AAVLD members to join AVMA, or ceasing to pursue voting membership in the AVMA HOD. Since AAVLD has ~15-20% overseas members and non-veterinarians, it is highly unlikely we will ever achieve 90%.

C. Master Plan Funding Support for 2003-2004 budget

Pat Blanchard reported that fifty eight million dollars was requested for 2003-2004. It was suggested that AAVLD work with USAHA to draft a letter to send to congressional members in an effort to gain support for this level of funding.

7. NEW BUSINESS

A. Response to Association of Public Health Laboratories Policy on Inclusion of labs in LRN

The public health official in each state will decide whether or not they would like to enlist the assistance of a veterinary diagnostic lab with food testing capabilities for surge capacity testing in the occurrence of a food borne outbreak. There is concern among the board regarding the LRN policy that non-LRN laboratories or LRN labs that are not also public health labs would be excluded from testing any food or environmental samples. This policy lumps veterinary laboratories with human hospital labs and fails to recognize veterinary laboratories already perform testing on environmental and food samples for various agents. Also AAVLD needs to make clear that the current 12-laboratory network was only funded to address 8 foreign animal diseases, not food or bioterrorism testing. AAVLD can inform APHL of which labs have food testing capabilities.

B. Annual Meeting Registration Fees

Alex Ardans and Pat Blanchard brought forth the issue of waiving annual meeting registration fees for those AAVLD members (generally administrative or bench personnel, often associate members of AAVLD) who are only attending the committee meetings of Administrative Management Personnel, Quality Managers, and/or Laboratory Safety. Some of these committee members have requested that their registration fee be waived or reduced. For now the policy will remain the same as in previous years and requests for fee waivers will be reviewed on an individual basis since it is very difficult to monitor this and ensure it is not overused.

C. Liaisons Roles and Responsibilities

The President currently appoints liaisons yearly, and this will continue to be the policy for liaison appointment. The officers agreed on a list of roles and responsibilities for liaisons at a conference call in August.

The SQA liaison for AAVLD, Belinda Lawler, has requested a link between the SQA and AAVLD websites. It was agreed that Belinda could place this link on the AAVLD web site. Gary Osweiler will follow up with her.

D. Organizational Membership in HL7

Jim Case proposed to the board that AAVLD pay \$300.00 for organizational membership in HL7. HL7 is an organization that is developing messaging standards for computer systems that allows them to communicate health information between nonsimilar systems. Currently Jim Case is the representative at HL7 for AVMA, and AVMA funds his trips to the three working group meetings and three harmonization meetings per year. There is a possibility that AVMA will be discontinuing their membership in HL7, but they have agreed to fund membership and Dr. Case's travel through 2003. One of the benefits of an organizational membership is that all of the members of the organization receive free use of HL7 standards without having to pay copyright fees.

A motion to pay \$300.00 for an organizational membership in HL7 was made (Blanchard), seconded (Powers) and passed with one in opposition (O'Toole).

E. Approved Methods Committee Recommendations

Barbara Martin reported that the Approved Methods Committee would like someone from AAVLD to attend the AOAC meeting on eCAM on October 31. The President will select an individual to attend.

Meeting was adjourned at 5:00 pm.

MINUTES OF THE AAVLD FIRST HOUSE OF DELEGATES MEETING

Millennium Hotel, St. Louis, MO, Saturday, October 19, 2002, 11:15-12:00, Missouri Ballroom

Call to Order: The meeting was called to order at 11:30 am by President Pat Blanchard.

Role Call: Secretary/Treasurer Alex Ardans called the role of delegates from the states and provinces. With 39 state and provincial representatives present, a quorum for business was declared.

Treasurer's Report: Alex Ardans presented the treasurer's report as follows:

Income was mainly generated from dues (\$83,850), exhibitors (\$21,575), annual meeting registration fees (\$72,145), and journal income (\$75,025), which include subscriptions, page charges, advertisements, and patrons. Major expenses included organization costs (\$47,777), personnel costs (\$18,780), meeting costs (\$48,757) and journal costs (\$122,537).

A motion to accept the treasurer's report was made (McElwain), seconded (Edwards) and passed unanimously.

President's Report: President Blanchard reported that monthly MOU meetings have been held between AAVLD officers and NVSL section chiefs and director. A plan was developed for the NAHLN. Since September 11, economic terrorism including attacks on agriculture has become a major concern, creating the need for an animal laboratory response network. Appreciation was expressed for the special efforts of Dave Zeman and Terry McElwain in developing

and promoting to key congressional members the NAHLN. Authorizing language for state diagnostic laboratories to serve as part of the federal effort was added to the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. Separate funding in May 2002 for a foreign animal disease national emergency response network has provided pilot funding for the NAHLN but funds to involve all 50 states is still needed. Two 2002 NRC reports and one report by the Royal Society of UK strongly support the same concepts we are focusing on in the NAHLN. The NAHLN is intended to cover issues like agricultural terrorism agent isolation and identification, foreign animal disease testing, surveillance and response, emerging disease recognition and surveillance, export and quality assurance standards meeting international expectations, etc. New initiatives this year that also support the NAHLN goals include formation of Quality Managers committee, Laboratory Emergency Management plan working group, and formal liaisons with Association of the Public Health Laboratories and National Animal Health Emergency Management Steering Committee. In addition, AAVLD and individual state labs have been contacted by FDA concerning terrorism acts involving food products and the ability and willingness of animal diagnostic laboratories to provide surge capacity. HOD members will be added to the Laboratory Directors email list in order to better inform members in each state of updates and new developments in AAVLD and governmental issues.

Standing Committee Reports:

- 1. Accreditation Committee Report: Leon Thacker presented the report. S ee page14. The White Paper was presented to the HOD. The paper recommends the incorporation of OIE standards into the AAVLD Essential Requirements for Accreditation. OIE is not an accrediting body, but it is a scientific informational organization that has developed standards for laboratories that perform testing for international trade. It is time for AAVLD to incorporate these international standards of accreditation. One error on page four of the White Paper was noted, and will be changed to read that \$300.00 will be charged per branch lab visited. The White Paper will be made available to all AAVLD members by posting on the member part of the website.
- 2. Financial Advisory Committee: Leon Thacker presented the report. See page 25.
- 3. Nominating Committee: It was announced that Gary Osweiler has been elected Vice-President for 2003. Ron Wilson has been elected as the South East representative and Alfonso Torres has been elected North East representative for 3 year terms both beginning 2003.
- 4. Awards Committee: Dave Zeman presented the committee's recommendations for life membership for a vote of the HOD. Those presented for life membership were Arthur Bickford, Konrad Eugster, Don Lein, Jim Pearson, and Stanley Snyder. A motion to accept the recommended Life Memberships was made (Hietala), seconded (Thacker) and passed unanimously.
- 5. Foundation Committee: Barb Powers presented the Foundation report. Please see page 26.
- 6. Program Committee: Terry McElwain reported that there were 108 abstract submissions this year. There are approximately one hundred final presentations and posters. The final plenary session will be a joint session with USAHA on OIE and CWD. The committee would like to encourage everyone to make an attempt to go see the exhibitors.
- 7. Publications Committee: Dave Steffen reported that the committee met yesterday. The journal is doing well with subscription rates as high as ever. Even with six issues of the journal now being published the acceptance rate has remained the same at 55%. The committee would like to encourage the submission of more literature reviews from graduate students.

Old Business: There is no old business.

New Business:

1. Resolution regarding NAHLN. The resolution was presented by John Andrews (see Minutes of Second House of Delegates Meeting, page 10). A motion to accept the resolution was made (Lein), seconded (Reed), and, after discussion, passed unanimously. Don Lein announced that the resolution will be brought to USAHA to gain support, and to encourage USAHA adopt the resolution.

The meeting was adjourned at 12:15pm by Pat Blanchard.

AAVLD SECOND HOUSE OF DELEGATES MEETING

Millenium Hotel, St. Louis, Missouri, October 21, 2002

Call To Order: President Pat Blanchard called the meeting to order at 11:40 a.m.

Roll Call: Secretary/Treasurer Ardans called the roll of delegates from the states and provinces. With 34 state and provincial representatives present, a quorum for business was declared.

Passing of Gavel: President Blanchard passed the gavel to President-elect McElwain who presented President Blanchard with a plaque for distinguished service to AAVLD. Dr. McElwain expressed AAVLD's appreciation for President Blanchard's efforts in sheparding a number of issues, specifically the National Animal Health Laboratory Network (NAHLN), to a national forum.

President's Report: President McElwain reported that the NAHLN has provided everyone with a number of opportunities and challenges. He stressed the importance of everyone working together to make this effort work in the coming years.

Awards: Dr. David Zeman presented lifetime membership certificates to Art Bickford, Konrad Eugster, Don Lein, Jim Pearson, and Stan Snyder.

Standing Committee Reports

1. Membership Committee: Willie Reed presented report (page 32).

Old Business: There was no old business.

New Business:

- 1. Dr. John Andrews brought forward from the Executive Board a resolution regarding:
 United States animal disease diagnosis and surveillance would function most effectively as a shared responsibility of publicly funded state animal health laboratories, represented by the American Association of Veterinary Laboratory Diagnosticians (AAVLD), and federal animal health laboratories administered through the USDA Animal and Plant Health Inspection Service (APHIS). The following resolution (below) was approved.
 - Whereas, this partnership is essential for safeguarding the health and well being of our nation's livestock and poultry, aquatic species, companion animals, wildlife, zoo and exotic species, and for protecting the public health from diseases common to animals and humans; and
 - Whereas, a national strategy, melding the nation's federal, state, and local resources, would be capable of responding to any type of animal health emergency, including bioterrorist events, newly emerging diseases, and foreign animal disease agents that threaten the nation's food supply and public health; and
 - Whereas, multiple reviews and analyses, including the Animal Health Safeguarding Review and the National Research Council Report on "Countering Agricultural Bioterrorism", have strongly endorsed the importance of a national animal disease diagnostic network; and
 - Whereas, the USDA has recognized the importance of a national laboratory system through the funding and creation of a pilot National Animal Health Laboratory Network;

Be it resolved that:

- ➤ The United States Congress appropriate such funds as necessary, and as authorized through Section 335.a.6 of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, to complete the National Animal Health Laboratory Network by involving all 50 states and the federal laboratories;
- And that such funds be distributed to USDA for coordination of the network, and to AAVLD-accredited diagnostic laboratories in each state, or in states without an AAVLD accredited laboratory, to the primary state-funded animal disease diagnostic laboratory in that state.

- 2. A second resolution was brought forward by John Andrews from the Executive Board and Government Relations Committee. After brief discussion regarding wording, passage of the following resolution (as amended below) was moved (Glock), seconded (Blanchard), and approved.
 - Whereas, there is a need to maintain and enhance a strong collaboration and coordination in relation to the diagnosis, research and education on foreign and emerging animal diseases, between the publicly funded state and university animal health laboratories, represented by the American Association of Veterinary Laboratory Diagnosticians (AAVLD), and the federal animal health laboratories administered through the U. S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) and Agricultural Research Service (ARS); and
 - Whereas, the Plum Island Animal Disease Center (PIADC), currently under a joint administrative leadership between ARS and APHIS, has provided services to our nation for nearly half a century in diagnosis, research, and training on foreign and emerging animal diseases; and
 - Whereas, the USDA has recently created a pilot National Animal Health Laboratory Network (NAHLN)
 of publicly funded state and university animal health laboratories in which the scientific support of the
 PIADC is central and fundamental to its success; and
 - Whereas, the AAVLD are supportive of the President's proposal to enhance the protection of our nation's animal and public health through the creation of a Department of Homeland Security (DHS); and
 - Whereas, the House of Representatives has passed the bill H.R. 5005 known as the "Homeland Security Act of 2002" in which it is stated that (Sec. 308.a) "the Secretary of Agriculture shall transfer to the Secretary of Homeland Security the Plum Island Animal Disease Center of the Department of Agriculture, including the assets and liabilities of the Center." (meaning the transfer of facilities and equipment but not personnel); with the provision that (Sec 308.b) "Upon the transfer of the Plum Island Animal Disease Center, the Secretary of Homeland Security and the Secretary of Agriculture shall enter into an agreement to ensure Department of Agriculture access to the center for research, diagnostic, and other activities of the Department of Agriculture."; and
 - Whereas, the above language in H.R. 5005 does not provide the necessary assurances that the activities at the PIADC will continue to be focused on the research, diagnosis and surveillance for foreign and emerging animal diseases vital for the health and productivity of our nation's animal population; and
 - Whereas, the Department of Health and Human Services (HHS) laboratories, namely the Centers of Disease Control and Prevention (CDC) and the National Institutes of Health (NIH), will not be transferred to the proposed DHS, but instead there will be agreements that the DHS will support the activities of the CDC and the NIH in regard to public health threats through additional funding, buildings and personnel; and,
 - Whereas, the Senate is still debating the details of the transfer of many Federal units to the proposed new DHS, including PIADC;

Be it resolved that:

- The AAVLD recommends that the United States Senate support keeping PIADC under the administration by USDA and the Congress in general reconsider the transfer of PIADC to DHS, to ensure that its multifaceted functions which protect our nation against foreign and emerging animal diseases will continue to be coordinated with the newly created NAHLN and other related State and Federal activities; and that
- ➤ The proposed DHS view and treat the PIADC and other USDA laboratories involved in the surveillance, diagnosis, and response to any domestic, foreign or emerging animal diseases in a similar manner that the CDC and NIH will be treated in their relation to the proposed DHS.
- 3. A third resolution was brought forward by John Andrews from the Informatics Committee. A motion to accept the resolution was moved (Ardans), seconded (Glock). After further discussion the amended resolution (as shown below) was passed.
 - Whereas, the National Animal Health Network (NAHLN) is being developed to support improved animal disease surveillance on a national level, and

- Whereas, the ability to utilize national laboratory data requires the ability to consolidate information into a national data repository, and
- Whereas, the effective consolidation of data from multiple sources requires the use of a standardized set of terminology and rules of data exchange,
- Whereas, Health Level Seven (HL7), the Logical Observation Identifier Names and Codes (LOINC) standard, and the Systematized Nomenclature for Medicine (SNOMED) have been adopted by the public health community as the standards of choice for electronic communication of health data;

Be it resolved that:

The AAVLD recommends the following health information standards in the implementation of the electronic communications systems for the National Animal Health Laboratory Network (NAHLN): Health Level 7 (HL7) to support the messaging, Logical Observation Identifier Names and Codes (LOINC) to support laboratory observation and the Systematized Nomenclature of Medicine (SNOMED) for the resultant terminology.

It was suggested that AAVLD members be informed of these recommendations and what it means to laboratories.

Meeting adjourned at 12:15 p.m.



Dr. Terry McElwain (right), President of AAVLD, presents Dr. Pat Blanchard, outgoing President, with a plaque of appreciation for distinguished service rendered during her Presidency.

E.P. POPE AND AAVLD FOUNDATION AWARDS



E. P. POPE AWARD

Dr. Gavin Meerdink (left) of the University of Illinois was presented the AAVLD's most prestigious award, the EP Pope Award, by Dr. David Zeman, Awards committee chair, at the joint USAHA and AAVLD President's banquet and General Session. The EP Pope Award is given to an AAVLD member who has made noteworthy contributions to the Association and to implementation and recognition of the specialty of Veterinary Diagnostic Laboratory Medicine. Dr. Meerdink is a past president of AAVLD (1990), former Newsletter Editor and former chair and a very active member of numerous AAVLD committees during his many years of service.

Best JVDI Manuscript Award (Not Pictured)

Dr. Steven Bolin of Michigan State University was awarded the first annual AAVLD Foundation sponsored Best 2001 JVDI manuscript for his manuscript entitled *Post weaning multisystemic wasting syndrome induced after experimental inoculation of cesarean-derived-, colostrum-deprived piglets with type 2 porcine circovirus.*. authors were Steven R. Bolin, William C. Stoffregen, Gopi P. S. Nayar, Andre L. Hamel Vol. 13, #3, pages 185-194.



Best Graduate Student Poster and the Pathology Trainee Travel Awardee

Dr. David Zeman (left), Awards committee chair, presented Dr. Daniel Patrick of Michigan State University with the AAVLD Foundation's Best Graduate Student Poster award for his poster entitled "Malignant granulose-theca cell tumor in a 2-year-old Miniature Horse" authors DJ Patrick, M. Kuipel, VM Gerber, EA Carr. Dr. Patrick was also the 2002 recipient of the AAVLD Foundation-Pathology committee Pathology Trainee Annual Meeting Travel Award.

Best Graduate Student Presentation Award (Not Pictured)

Dr. Marie L. Gramer, University of Minnesota, was awarded the AAVLD Foundation sponsored Best Graduate Student Presentation award for her presentation "Detection of Influenza A virus in clinical samples by TaqMan reverse transcriptase polymerase chain reaction" authors ML Gramer, KS Faaberg, KD Rossow, JE Collins, SM Goyal and CE Mahlum

COMMITTEE REPORTS

ACCREDITATION COMMITTEE

Leon Thacker, chair. 8:15 am to 12:15pm, October 18, 2002.

There were 13 of 15 committee members present.

- 1. The Committee received required laboratory progress reports from two laboratories: Connecticut and Oregon State.
- 2. A report of an interim site visit to the Lexington, KY diagnostic lab was given by Drs. Byrum and Thacker.
- 3. Pending site visits for 2002 were cited and discussed:

Arkansas – scheduled for October 29-30

New York/Cornell – scheduled for November 20-22

Georgia, Tifton and Athens – to be scheduled after arrival of new department head

North Dakota – Visit completed September 26-27 (a preliminary report given)

- 4. Site Visit reports received:
 - a. Dr. Miller Report of the Colorado State Laboratories Committee made determination of accreditation status and discussed recommendations of the main Laboratory in Fort Collins and branch labs in Rocky Ford and Grand Junction.
 - b. Dr. Ardans Report of Iowa State Laboratory Committee made assignment of accreditation status and discussed recommendations of the Laboratory.
 - c. Dr. McElwain Report of the Pennsylvania Animal Disease Laboratory System Committee made determination of accreditation status and discussed recommendations of the three laboratories in the system.
- 5. The Committee discussed upcoming recommendations of procedures for incorporating the OIE Testing Laboratory Guidelines into the AAVLD Accreditation Minimum Standards. A meeting to further discuss and establish these procedures will be held in concert with the winter meeting of the Committee, likely to be held in Las Vegas in late February 2003.
- 6. The White Paper describing the changes for the incorporation of the OIE Guidelines into the AAVLD Accreditation process will be distributed and outlined from the platform at the first meeting of the House of Delegates 10/19/02.

ADMINISTRATIVE PERSONNELAND MANAGEMENT COMMITTEE

Linda Henrickson- chair, October 19–20, 2002

Members Present: 15, Guests Present: 8 Saturday, October 19 1:00 Field Room

Pauletta King chartered a bus for us and we traveled to Columbia, Missouri for a tour of the Missouri Veterinary Diagnostic Laboratory. The tour was very interesting and we thank Pauletta and the Diagnostic Lab for the opportunity to see their lab.

Sunday, October 20 - Lewis Room

Committee chairman Linda Hendrickson called the meeting to order at 8:00 a.m. Minutes of the previous meeting were distributed. Participants introduced themselves and gave updates on their labs.

Steve Vollmer from the Purdue Animal Disease Diagnostic Lab presented an overview of ISO17025 and OIE 615. He did a good job of condensing the information so we have a better idea of what it is and what we need to do to prepare our labs. It was stressed that even though it will take a lot of time and money, it will improve the services of all labs.

Dr. Grant Maxie, Director of the Guelph Animal Health Laboratory gave a presentation and slide tour of his lab. He also talked about their quality assurance program. They are ISO17025 certified for approximately 12 tests.

Dr. Paul Norris, Director of the Arkansas Diagnostic Laboratory gave a presentation and slide tour of his lab. They have gone through extensive remodeling and updating of lab facilities and equipment.

Discussion was held on security systems in place at the various diagnostic labs. Several labs have proximity card readers on lab doors and some hallways are also locked. Video surveillance cameras are used by some labs.

A brief discussion was held on incinerators, tissue digestors, and composting.

The following items will be among those discussed at next year's meeting:

SOPs; Workload tallies/tests; Personnel evaluations and their relation to pay increases; Annual reports

The meeting was adjourned at noon. Submitted by Mary Moen

ANIMALHEALTH INFORMATION SYSTEMS, JOINT USAHA/AAVLD

François Elvinger and Bruce L. Akey, co-chairs, October 20, 2002, 1:00-5:00pm

The Animal Health Information Systems Committee (AHISC) held its 5th annual meeting as a joint committee of USAHA and AAVLD. Attendance fluctuated between 25 and 40 people, with 32 participants (10 of 41 USAHA members, 5 of 15 AAVLD members; and 15 participants requesting membership) filling out the provided attendance sheets.

Dr. Elvinger (Virginia Tech) welcomed the participants and gave a brief synopsis of the past year's meeting and activities. The year 2001 USAHA resolution on Ames Master Plan was briefly reviewed. Oversight of design, implementation and expansion of the National Animal Health Reporting System (NAHRS) has constituted the principal activity of the committee between meetings as the AHISC chairs also chair the NAHRS steering committee. However, the shifting emphasis towards emergency preparedness and management in case of accidental or intentional introduction of catastrophic animal disease and the need for rapid, accurate and transparent animal health and disease information, will lead to expansion of the committee's activities.

Dr. Nora Wineland, NAHMS Program Leader at the USDA:APHIS:VS: Centers of Epidemiology and Animal Health, presented the annual report on the status of the National Animal Health Reporting System (NAHRS). Participation by States in the voluntary system increased slightly from 2001 to 2002. There are 35 States that have participated for 2002 (as of September 2002) and an additional 5 States that are preparing to report. The 35 participating States include half to more than three quarters of the national values of production for cattle (79%), swine (56%), sheep (83%), commercial poultry (60%), and commercial food fish (82%). States preparing to report will significantly add to poultry, food fish, swine and cattle. Data for NAHRS collected through and validated by the State Veterinarians' offices is used in the generation of the annual report to the OIE. Each year the NAHRS Steering Committee meets and discusses the current status and future plans for the system. The steering committee met in early October 2002 in Fort Collins, CO and discussed benefits to States of NAHRS participation, and the recommendation of the Animal Health Safeguarding Review (# 98) concerning NAHRS. Future plans include continued recruitment of additional States and supporting the efforts of participating States. The aquaculture work group has been asked to define reporting criteria and include OIE listed aquaculture diseases in the reporting system.

Dr. Valerie Ragan, Assistant Deputy Administrator for Veterinary Services and National Surveillance Coordinator presented concepts, objectives and needs for a National Surveillance System. One of the primary principles of the Animal Health Safeguarding Review was that the United States must have a comprehensive, coordinated, and integrated surveillance system. Such a system is the foundation for animal health, public health, food safety, and environmental health. APHIS must be able to detect foreign animal and emerging diseases; monitor disease trends and threats in the US and other countries; detect risk, evaluate control programs; and provide adequate animal health information. The appointment of a new Assistant Deputy Administrator for Veterinary Services, with the primary responsibility for overseeing the development and implementation of a national surveillance system is a significant step. Since that appointment, which became effective in August 2002, there have been considerable activities towards evaluating current initiatives, and creating the infrastructure that will allow for implementation of such a system.

Three key positions will support the basic infrastructure. These positions have been approved, with one already filled, and with descriptions being created for the other two positions. The positions are as follows: 1) FSIS liaison: This person is responsible for coordinating with and developing an ongoing working relationship with FSIS to assure that samples can be collected as needed, to facilitate data sharing, and to trouble shoot as necessary. This person will educate FSIS regarding APHIS' mission and solicit cooperation. This position was filled by Dr. Bob Sanders in September. The position is based at the FSIS training center in College Station, Texas. 2) NVSL surveillance staff position: This person will be responsible for dealing with all laboratory issues related to surveillance and safeguarding, including assisting with determining laboratory procedures needed for testing for new or emerging diseases, ensuring that testing and procedures meet international standards, determining laboratory, reagent, or funding needs for possible expansion of surveillance, and trouble shooting laboratory related problems. A description is currently being written for this position. 3) An analytical epidemiologist, based in Ft. Collins, CO, will be dedicated full time to surveillance. The scope of this position is still being developed, but will likely include developing mechanisms for capturing data, and conducting ongoing evaluation, watching for trends, and regular reporting. This person will play a large role in the development of a Veterinary Services Annual Report.

There are also other initiatives ongoing to develop additional infrastructure. These include: 1) The National Surveillance Steering committee will be expanded to include more industry representation. 2) The Safeguarding Surveillance Issue Group is developing action plans to specifically address each of the recommendations in the Safeguarding Review. This team includes members from International Services, who will be working to expand international disease risks and considerations. 3) A field implementation team is being developed to work towards actively implementing surveillance enhancements in the short term, and to make recommendations for additional enhancements. This team will consist of seasoned field epidemiologists, veterinary medical

officers, animal identification coordinators, and possibly others. 4) A surveillance technical working group is currently focusing primarily on analysis of certain surveillance methodologies.

During the initial development of a national animal health surveillance system, attention will be directed towards the following areas: Enhancement of surveillance for current program diseases; ability to rapidly detect emerging diseases and/or foreign animal diseases; surveillance for diseases affecting marketability or economics of industry; surveillance based on risk of disease; monitoring of animal health trends; ability to do focused surveillance as needed. The development, implementation and evolution of the National Surveillance System is a dynamic process. It is imperative that the infrastructure as well as partnerships and cooperation with others outside of APHIS be developed successfully to be effective. The surveillance system that is developed will need to be flexible, adaptable, and responsive. Regular updates on the progress of the Safeguarding Surveillance Issue Group and others will be posted monthly on the VS Safeguarding website. That address is www.aphis.usda.gov/vs/safeguarding.htm.

Dr. Mark Thurmond (UC Davis, CA) presented concepts for disease surveillance systems and evaluation of efficacy of such systems. Since the UK and Taiwan FMD epidemics, the anthrax incidents, and other terrorist events in the United States, the somber recognition has emerged for the urgent need to restructure local, regional, and national foreign animal disease (FAD) surveillance aimed at protecting animal health and agriculture from the new biowarfare threats. Toward that end, new real-time diagnostic tests are being developed for FADs, and the possibility of local or regional testing is being debated. In light of these new developments, a new structure and design for animal disease surveillance should be explored to address the new realities of agricultural terrorism, while taking advantage of the power of new real-time diagnostic technology. Dr. Thurmond outlined performance concepts, structure and function appropriate in a surveillance system for both regional and national applications. Generally, surveillance aims at purposefully and systematically seeking out as early as possible the target agent or disease, or identifying elevated risk of acquiring the disease, so that treatment, control, eradication, or prevention can be affected quickly and efficiently. Performance of the surveillance system will be measured by the accuracy (probability of detecting the agent and of detecting the absence of the agent), reliability (intra- and inter-laboratory error), speed, and cost-efficiency. The design of an enhanced surveillance system should address post facto 'realtime' surveillance, including reporting and response, for early detection of a FAD agent after it has entered the US, as well as preemptive surveillance aimed at detecting new threats and increased risks of acquiring an FAD at sites of highest risk. A strong national surveillance system should be structured to be probability driven so as to maximize both the overall sensitivity (Se) and specificity (Sp) necessary to minimize false positive and false negative results. For example, sampling and sample sizes should be calculated to target high-risk species, herd types, regions, or management environments with high probabilities of acquiring and / or disseminating the agent. Consequently, current knowledge of the infectious disease epidemiology for each agent and species should be incorporated into sampling strategies. Examples include transition state probabilities, breed susceptibilities, reproduction numbers (animal and her specific R_o), projected contact rates, and directed animal movements. Because accuracy of any surveillance system will greatly depend on performance of the designated assay, it will be critical that assays be rigorously validated to obtain estimates of high confidence for assay Se, Sp, and reliability for all conceivable sample types, species, and management environments. Functionally, the surveillance system will need to include routine quality control and assurance validation, and sensitivity analysis to evaluate new surveillance strategies to address changing risk or population dynamics. Overall utility and cost-efficiency of the system can be promoted by imbedding or 'piggy backing' other diagnostic testing or surveillance systems to most effectively utilize existing sampling frameworks or assays. For example, samples used routinely for food safety or indigenous diseases of importance to producers also could be utilized in a national surveillance system. Assays for an array of agents of diagnostic interest to practitioners and producers could be multiplexed or performed in panels that also include important surveillance needs, thereby maximizing information and utility per sample. In summary, creation of new surveillance systems will need to consider the necessary probabilistic structure and design to maximize the likelihood of early detection and reporting of an FAD or to evaluate the risk of the US acquiring an FAD from outside sources.

Dr. Jim Case (UC Davis, CA) presented an overview and discussed the implementation of the National Animal health Laboratory Network (NAHLN). The overall goal is to contribute to the improvement of national disease surveillance capabilities. The concept was developed in discussion with NVSL that resulted in an MOU with AAVLD. Initial support is from CSREES and APHIS, USDA. The philosophy behind design and implementation of NAHLN is that animal disease surveillance functions are most effectively accomplished as a shared responsibility amongst all animal health agencies. This is true in the case of foreign animal disease incursion, for emerging diseases, or for endemic diseases. The critical nature of the current global animal health situation compels immediate action. The key goals of the NAHLN are to expand detection and response measures for pathogens that threaten animal agriculture and bolster laboratory capability for select agents with support for personnel, equipment, testing and training. The present focus is on 8 select agents of economic and trade importance (agents for foot and mouth disease, hog cholera, African swine fever, Rinderpest, contagious bovine pleuropneumonia, lumpy skin disease, highly pathogenic influenza, exotic Newcastle disease). Other agents of interest for potential future inclusion include agents of zoonotic importance like West Nile encephalitis virus, Rift Valley fever, Nipah encephalitis virus, Hendra encephalitis virus, other encephalitides, bovine spongiform encephalopathy.

The NAHLN is to support the deployment of standard diagnostic approaches for identification of select agents; bolster data sharing among animal health agencies through the creation of a secure, two-way communications network and the creation of a

national repository for animal health data; bolster cooperation and communication amongst animal health officials through maintenance of confidentiality of source data and providing alerts at appropriate response level. Presently a two-tiered funding structure is in place for the first two years, with tier 1 funded at \$2,000,000 (laboratories in CA, CO, GA,TX, WI) and tier 2 at \$750,000 (laboratories in WA, FL, NY, IA, AZ, NC, LA). These laboratories submitted work plans but funding had not yet been released. Each participating laboratory must document their work plan for each of the following areas: personnel, facilities, data record systems, diagnostic systems, quality assurance program, estimated budget and benefits of the NAHLN. Working groups have been constituted to establish the communications infrastructure. Comprehensive national laboratory surveillance, improved diagnostics through standardized methods, surge capacity to respond to animal health emergencies and the possibility for a quantitative assessment of the national animal health status will be benefits of the NAHLN, through use and coordination of the power and potential of the nation's diagnostic resources, brought together to address a growing threat.

Dr. Mark Engle, Director of Swine Health Programs of the National Pork Board presented the National Swine Surveillance System, originating from recommendation issued in the Swine Futures Project (SFP), a multi-year collaborative project between USDA: Veterinary Services, and Pork Producers. The final SFP report was published in 1999. Surveillance is defined in the SFP final report as "An ongoing process of collection, analysis, and interpretation of health related events occurring in a population followed by timely dissemination of results to those involved in the planning, implementation, and/or evaluation of prevention and control measures." Recommendations are to proceed with the development and implementation of a comprehensive surveillance plan for the prevention and control of diseases affecting the U.S. pork industry; establishing a system for the rapid detection of Emerging Animal Issues; and developing a collaborative process to respond to Emerging Animal Issues appropriately. Foreign animal diseases (FAD) need to be excluded or detected early such that an appropriate response for eradication can be rapidly initiated; emerging or reemerging diseases, or changes in presentation of known domestic pathogens need to be recognized early such that those agents can be controlled or eradicated; control and eradication of program diseases need to be completed. The US Swine industry had to cope with several emerging diseases in the recent past including porcine reproductive and respiratory syndrome (PRRS), post weaning multi-systemic wasting syndrome, porcine dermatitis and nephropathy syndrome, and infections with H3N2 influenza virus, hepatitis E virus, E. coli F18, Salmonella typhimurium DT 104 and erysipelas. Dr. Engle elaborated that the US swine industry could ill afford another "Mystery Swine Disease", like the PRRS epidemic that became clinically evident in the US swine population in the late 1980's. This disease with its consistent clinical signs and pathologic lesions across cases had a tremendous production level economic impact. The lack of treatment and control options left a feeling of helplessness among producers and animal health professionals. There was no coordinated effort to address an extremely serious disease condition, and rumor mill communications to share experiences were the only source of information. The causative agent was finally identified in 1992. Based on this experience the SFP was to evaluate if a surveillance system to provide rapid detection of emerging animal diseases could be developed, such that another "Mystery Swine Disease" or recurrent epidemics of domestic diseases can be avoided by implementing an "early warning system" that would trigger an appropriate response?

As a case in point Dr. Engle presented data on the re-emergence in the Midwest in summer 2001 of erysipelas, a well-known endemic swine disease (*Erysipelothrix rhusiopathiae*, first identified in 1885). Awareness of increased erysipelas incidence arose through rumors and anecdotal information from producers and veterinarians. Retrospective analysis of veterinary diagnostic laboratory and slaughterhouse condemnation data showed that pork producers could have been alerted much earlier to the presence of a potential problem if that data had been evaluated in real time for incidence increases over baseline. Early detection systems need to be established, slaughter and diagnostic laboratory based surveillance enhanced, and swine movement and other regional management practices based prediction systems need to be evaluated. Early detection systems for swine diseases will allow producers to implement prevention strategies and minimize losses through decreased condemnations and death losses, decreased treatment expenses and production losses and delayed shipments. To date the swine futures project initiatives have included slaughter-based surveillance through access to FSIS disposition data, laboratory-based surveillance, development of state-level Swine Health Advisory Councils (SHAC), a PMWS pilot project, implementation of more formal passive surveillance and practitioner based reporting. Effective surveillance systems will enhance pork safety and protect the image of the pork industry, assist suppliers in maintaining availability of health products and protect the competitive position of U.S. pork producers in the world market.

In follow-up discussions, Dr. Engle explained that the system very much relies on data and information already collected at either diagnostic laboratories or within FSIS, which limits the costs of implementation. However, case definitions have to be established to ensure appropriate collection and evaluation of data. The system is to capture and recognize foremost non-catastrophic but also catastrophic disease emergence or shifts and trends in incidence of endemic diseases and provide the basis for alerts and early intervention.

Dr. Beverly Schmitt, Chief of the Diagnostic Virology Laboratory at the NVSL presented the current efforts to design an electronic information management system at the NVSL. Many demands, internally at NVSL, as well as externally from within USDA and from different constituencies, are directed towards the work group in charge of designing such a system.

Dr. Steve Weber, Leader of the Center for Animal Disease Information and Analysis presented efforts of CEAH to integrate Laboratory Data into the USDA's Emergency Management Records System (EMRS). The EMRS system was used in the recent outbreak of low pathogenic avian influenza in Virginia and is now being used to provide support for the Newcastle disease outbreak in California. Areas have been identified where the EMRS can be improved. One such area is to reduce duplicate record keeping currently required for the submission of samples from State diagnostic laboratories to NVSL for verification, and the subsequent incorporation of test results into the EMRS database. A statement of work has been written to make the process electronic and more efficient. A further requirements analysis will be completed and the process to incorporate identified needs into the EMRS will begin in January of 2003.

Dr. Weber also presented aspects of Information Systems Implementation following recommendations from the National Animal Health Safeguarding Review. Several of the recommendations related directly to the critical need to enhance the role of information systems as they affect animal agriculture, especially animal disease surveillance, and one of the implementation teams is to identifying the needs within VS to address those information technology related recommendations.

Dr. Mark Schoenbaum, Analytical Epidemiologist in the Center for Animal Disease Information and Analysis, addressed issues from a Disease Spread Modeling Workshop of the North American Animal Health Committee – Emergency Management Working Group, held July 9-11, 2002 in Fort Collins, Colorado. The purpose of the workshop was to identify appropriate management decision support tools for planning FMD outbreak mitigation actions including vaccination, and to facilitate the interchange of disease spread and economic modeling methods and techniques among analysts actively engaged in these activities. Thirty-eight participants, including analysts, epidemiologists, economists, risk analysts and decision makers from Canada, Mexico and the U.S., as well as guest speakers from Australia and the Netherlands participated. Decision-maker questions were addressed, as what is the potential size and duration of an outbreak? What are the disease spread and economic impacts of alternative mitigation strategies? How many doses of FMD vaccine are needed for likely outbreak scenarios? What is the probability of successfully containing an FMD outbreak using a particular strategy, given the resources available? Five disease spread models were presented including Australia's state transition simulation model, the Netherland's FMD application of the InterSpread model, UC Davis's spatial-temporal stochastic model, and APHIS's state transition simulation model for FMD as well as TB. Further items for presentation and discussion included the integrated economic modeling and welfare analysis, and technical discussions of methods, attributes, outputs, data sources, and others. Discussions lead to consideration of enhancements of APHIS's state transition simulation model for FMD by including multiple species and production types, adding multiple diseases, integrating economic analysis, considering welfare and net trade impacts, adding direct spatial links, considering surveillance alternatives, comprehensive resource analysis and applying the model at regional test exercises, as well as testing the model with data from recent FMD outbreaks.

Two requests for action were brought before the committee. The committee voted on and approved two resolutions 1) on participation in the National Animal Health Reporting System (NAHRS), 2) on electronic tracking. To conclude it was recognized that the Animal Health Information Systems Committee's activities support all surveillance and monitoring systems that contribute to the protection of the health of the US livestock population from either accidental or intentional introduction of foreign or exotic disease agents. Information systems will be crucial for support in efforts of exclusion or control and eradication of all catastrophic, but also non-catastrophic disease agents.

APPROVED METHODS COMMITTEE

Co-chairs: Barbara Martin and Jim Pearson. October 17, 2002, 9 AM – 12 PM.

Sever committee members and 23 guests were in attendance.

- 1. Glossary of terms. The Glossary of Terms developed and approved by the Serology Sub-Committee on Minimum Standards was previously provided to committee members and is available on the AAVLD website. It is also a part of the new OIE Quality Standard and Guidelines booklet that was recently published. The importance of common definitions was discussed. The committee will review the terms and determine if additional terms should be added.
- 2. OIE methods approval. Jim Pearson discussed the Office International des Epizooties (OIE) perspective on diagnostic methods approval. The OIE has the objectives of prompt reporting of disease outbreaks and of safeguarding world trade by drafting health rules and recommendations for international trade in animals and animal products. Both objectives require valid diagnostic tests. The OIE accomplishes this goal by publishing standard test methods in the Manual of Standards for Diagnostic Tests and Vaccines and the Diagnostic Manual for Aquatic Animal Diseases. These Manuals are published every 3 or 4 years and are on the OIE web site, www.oie.int. The tests that have been identified are generally well-established, traditional procedures that can be used in almost any laboratory. The validation of many of these tests is often based on long-term acceptance by the scientific community. New methods can be proposed to the OIE by Member Countries, OIE Reference Laboratories or Members of the elected OIE Specialist Commissions. The new tests that have been identified as suitable for trade should meet the OIE Standard for test validation which includes five stages: 1) feasibility studies,

- 2) development and standardization, 3) characterization of assay performance, 4) validity of assay results: predictive values, and 5) maintenance and extension of validation criteria.
- 3. Overview of e-CAM and AOAC. Anita Mishra, AOAC, provided an overview of AOAC and discussed the electronic compilation of analytical methods (e-CAM). It is a repository for analytical and clinical methods that will allow instant access to methods, provide a mechanism for test validation, and provide a forum for discussions. Methods are placed in five fit-for-purpose categories. Reference/Regulatory Methods (RRM) are used when the particular method is specified by regulatory agencies or is recognized as the reference standard. Harmonized Collaboratively Validated (HCV) methods are validated by full collaborative study in eight to ten laboratories and comply with the requirements of the IUPAC/AOAC harmonized protocol for collaborative studies or other applicable standards. Multiple-Laboratory Validated (MLV) methods do not meet the requirements of the HCV category, but have undergone validation studies including the submission of valid data from two or more laboratories. Single-Laboratory Validated (SLV) methods are validated through single laboratory studies and are usually selected for use within a laboratory for exploratory or monitoring purposes. Developmental Non-Validated Methods (DNV) are those that are evolving and may not yet be optimized or have fully characterized performance characteristics. DNV methods are used when no other method is available. e-Cam will be a secure site that requires a user login and password to obtain the method data. Access to methods information will be available to paying subscribers of e-CAM, however, certain information deemed especially sensitive will require higher security clearance, for example, in the case of methods used to combat bioterrorist outbreaks. e-CAM will be managed and maintained by AOAC. USDA-FSIS and FDA have provided financial support for development. Additional information can be found at www.aoac.org.
- **4. e-CAM partnership opportunities with AOAC.** Barbara Martin and Sharon Hietala were invited to attend meetings with AOAC on October 31 and November 1, 2002 in Gaithersburg, MD to discus e-CAM and the concept of partnerships with federal, state and industrial organizations. The meetings will focus on the concept of e-CAM, describe what has been done to date, discuss what methods should be included and how methods can be accessed, and provide information on how to participate in the project.
- 5. USDA, APHIS, VS validation criteria. Barbara Martin discussed the development of standard criteria for diagnostic test validation. Rapid diagnostic tests are being developed by the Animal and Plant Health Inspection Service (APHIS), the Agricultural Research Service (ARS), and other groups for various animal diseases, including foot and mouth disease (FMD). Rapid detection technology can speed the identification of animal disease agents. APHIS and ARS are working together with other interested representatives to establish the acceptable test validation criteria. The criteria will include requirements for bench development in which the assay is initially developed and optimized; collaborative studies which determine the ruggedness of the assay or the capacity of the assay to be used in other laboratories without affecting the results; and field validation which documents testing clinical samples and verifies detection levels as well as provides sufficient data to estimate assay accuracy.

AQUACULTURE COMMITTEE, JOINT USAHA/AAVLD

Randy White and Scott LaPatra, co-chairs. October 20, 2002; 1:00 to 5:00pm;

New Business

- 1) Update on the National Aquatic Animal Health Plan Presented by Dr. Otis Miller. Information includes organizational structure of the Joint Subcommittee on National Aquatic Animal Health Task Force. Dr. Miller briefly reviewed the results of the first meeting of this group which took place on December 12-14, 2001, including the framework, stakeholders, mission statement, purpose and objectives. Second meeting took place in Tucson, AZ, on June 18-19, 2002 which dealt primarily with international importation and exportation. Next steps include assigning working groups to further address international importation issues.
- 2) Update from USDA-APHIS —Presented by Dr. Otis Miller. This included an overview of APHIS National Aquaculture Plan which includes the Animal Health Protection Act of 2002, US reported OIE notifiable diseases, Infectious Salmon Anemia Program, and Spring Viremia of Carp. Reportable Diseases of Aquaculture have included: (1) Infectious Salmon Anemia (ISA) in February, 2001, (2) Infectious Hematopoietic Necrosis Virus Disease (IHNV) in a federal broodstock hatchery in June, 2002, (3) Microcytosis in oysters in July, 2002, and (4) Spring Viremia of Carp, June, 2002 in farm-raised Koi in North Carolina and in August, 2002 in wild fish in Wisconsin. Proceedings will be available in February, 2003, from the APHIS International Symposium on Infectious Salmon Anemia. Dr. Miller stated that this will be an excellent resource for learning more about ISA, since there were 19 different speakers at this symposium all of who submitted manuscripts. Dr. Miller informed the committee about VS Memo 567.6 which discusses that the US is required to report notifiable diseases and APHIS, VS is the official contact point. APHIS, VS is required to report these diseases to OIE. Dr. Miller answered questions from the audience about each of these diseases. More information about these subjects can be found on the USDA-APHIS website which is http://www.aphis.usda.gov/vs/aqua/aquaphis.html.
- 3) Update from AVMA's Aquatic and Seafood Advisory Committee (ASAC) Presented by Dr. David Scarfe. Dr. Scarfe thanked USDA-APHIS for their role in aquaculture. Dr. Scarfe informed this committee that the AVMA represents 87% of all veterinarians in

the US. Issues which AVMA ASAC has been involved include: (1) National Aquatic Animal Health Plan, (2) Efficiency of implementing international health certificates for aquatic animals, (3) Veterinary accreditation review, (4) State regulations regarding aquatic animals (Florida, for example, has suspended their regulations and asked for Best Management Practices), (5) EPA's guidelines for aquaculture effluent management and regulation, (6) Environmental regulations in some states, (such as Maine, which must post the presence of a pathogen, the drug used to treat the pathogen as well as its metabolites), (7) Minor Use, Minor Species drug act is in the process of being sent through the US Congress (8) Judicious use of antibiotics in food fish, and (9) Medicated feeds for aquatic animals. Dr. Scarfe reminded the group that there is a list-serve called AquaVetMed which deals with veterinary and aquatic animal information. Dr. Scarfe is an advocate of coalition building to bring those professional individuals together who can solve the problems in the world of aquatic animals.

4) Update from Fish Health Section of the American Fisheries Society- Presented by Dr. Scott LaPatra. Dr. LaPatra gave a brief history of the AFS/ FHS and stated that veterinarians are now playing an important role in this organization and can join this group with an affiliate membership. He discussed the Fish Health Inspector and Fish Pathologist programs and stated that the requirements of these programs have been modified to accept veterinarians, since the training for veterinarians is acceptable for the academic requirements of these programs. Bluebook was updated in 1994 and the United States Fish and Wildlife Service in a joint effort with AFS/FHS has just come out with the *2002 Standard Procedures for Aquatic Animal Health Inspections*. AFS/FHS endorses and supports the National Aquatic Animal Health Plan, and they want to see aquatic animals protected from pathogens and the health of aquatic animals safeguarded.

5) Regional US report updates from committee attendees:

Dr. Skip Jack reported on gross lesions in catfish which are similar to 'Ich', but the lesion is caused by a fluke, called *Bulbophorus confuscious*. Intermediate hosts include ram's head snail and white pelicans. Other disease is visceral toxicosis in catfish which has central nervous system clinical signs and splenomegaly with intestinal and gastric intussusception. The cause of this disease is thought to be an algal toxin, but it has yet to be determined. This disease affects food fish to broodfish in the spring and fall.

Dr. Heidel commented on the Klamath River in Oregon. This river is used extensively for irrigation farming. The water flow was increased to save an endangered species of suckerfish in 2000. In 2001, the water flow of this river was decreased due to increased irrigation needs and salmon are dying in record numbers due to decreased water flow and ubiquitous pathogens.

Dr. LaPatra commented that IHNV has been a very important pathogen this year in salmon farming and wild fish stocks.

6) Suggestions for email discussions for the upcoming year- Presented by Dr. White. Dr. White informed this committee that we have had a request for the development of a list-serve for this group. He contacted Dr. Jim Case at UC-Davis and Dr. Case did not think that this group had enough members to warrant a list-serve and that group emailing would be the most useful tool for communication within this group.

7) Introduction of draft resolutions.

Dr. Scarfe presented USAHA resolution #1 which encourages USDA-APHIS to do the following: (1) validation and approval of diagnostic and identification tests, and test methods; (2) approval of standardized diagnostic reagents and reference materials; and, (3) quality assurance, quality control, and (4) approval of aquatic animal diagnostic laboratories. This resolution passed unanimously by this committee.

Dr. LaPatra presented USAHA resolution #2 which states that USAHA endorses the 2002 Standard Procedures for Aquatic Animal Health Inspections Manual and encourages USDA-APHIS to adopt this manual as part of the Aquatic Animal Health Task Force on Aquaculture. Discussion followed about this resolution. There was concern expressed about approving a resolution when the majority of the members have not read this document. Dr. Miller expressed concern about APHIS adopting this document, since APHIS regulatory personnel have not reviewed this document. It was suggested that this committee review this document and then consider this resolution next year. This resolution was tabled until next year's meeting.

8) **New items from the membership**. Dr. Scarfe asked for discussion about the **AAVLD laboratory accreditation** process for aquatic animals. Dr. Heidel replied that a sub-committee visited this issue at one time and that the AAVLD accreditation committee would not accredit laboratories based on a single species.

Old Business:

1) Review of last year's resolutions passed by this committee (progress reports of actions taken)- Presented by Dr. LaPatra. Dr. Miller informed this group that the latest responses from USDA/APHIS were not yet included in these responses.

Other Business:

Distribution of Handouts entitled: Proposed quality control limits for *Aermonas salmonicida* subsp. *Salmonicida* ATCC 33658 and *Escherichia coli* ATCC 25922

BACTERIOLOGY STEERING COMMITTEE

Carol Maddox and Mitzi Libal, co-chairs, October 20, 2002 8-10 PM

3 members and 5 guests in attendance

Select agent protocols and training: Progress toward our charge to develop acceptable consensus protocols for the detection and identification of select agents was discussed in the Bacteriology Subcommittee. A deadline for posting the protocols on the web for general AAVLD membership comments was set for January 1, 2003. These protocols are to be sent to Carol Maddox for standardization of format, etc. by December 15, 2002. In discussions with Dr. Bunn following the Bacteriology subcommittee meeting, he indicated that he was supportive of the idea of holding training sessions at NVSL for detection and identification of the select agents. He indicated that we should approach USDA for travel funds and workshop expenses to permit at least one possibly two microbiologists from interested AAVLD labs to attend.

Bacteriology Quality Assurance Survey will be offered again in 2003. NVSL has received approval for a blanket transport permit for the organisms that was an impediment to us conducting the test in 2002. There may be a significant transition as Pfizer has purchased Pharmacia, and we are not certain if the former Pharmacia Animal Health Group will be able to produce the organisms for the survey as offered last year. NVSL is prepared to resume this responsibility if their workload allows, as Dr. Miller is supportive of the QA survey.

The Steering Committee members in attendance and guests were pleased with the AAVLD resolution to request that the USDA designate funds to complete the National Animal Health Laboratory Network to facilitate a unified and competent response from all states should a diagnostic laboratory be confronted with a potential select agent or USDA listed high risk agent.

Lorraine Hoffman mentioned that the JVDI editorial board was encouraging the submission of review format articles. It was suggested that the product of our efforts to prepare the select agent protocols could lead to a collaborative review of the same. Other topics are also welcome.

There was discussion relative to possible topics for a workshop at the 2003 meeting. While none of us wished to believe it had been that long, it has been 10 years since the last anaerobe workshop. The California location is favorable for Michael Cox to conduct a workshop. It would also be a more convenient location for Spencer Jang to update us on his research on anaerobic pathogens and therapeutic agents. Karen White on the "E" test was also suggested as a possible presenter.

Bacteriology Case Review Session was held Saturday, October 20, 2002 from 3:30 – 6:30 PM. There were twelve interesting case presentations with a packed audience for the entire session. The seating of the room was occasionally exceeded. Interest and participation in this session lead by Mitzi Libal remains high. Karen Post will organize the program for 2003

Doreene Hyatt was interested in a presentation on bacteriology laboratory management. Others agreed though it was felt that this would be better suited to the Bacteriology Committee meeting time slot. The committee will discuss this further and identify possible speaker(s).

There was a request for nominations for the Bacteriology Subcommittee Co Chair as Mitzi Libal's term expires. Linda Schroeder-Tucker of NVSL volunteered and was unanimously voted to the Co-Chair position for 2003 – 2006.

BACTERIOLOGY AND MYCOLOGY SUBCOMMITTEE

Brenda Love and William Fales, co-chairs, October 18, 2002, 8:00am - Noon

The first item discussed was the Internal QA Survey. It did not come to fruition this past year, due to the USDA interstate transport permit requirement becoming enforced. It was decided that the people who had planned to contribute organisms the previous time will contribute organisms this time. Those people are: Carol Maddox, Mitzi Libal, Karen Post, Lorraine Hoffman, Doreene Hyatt, and Brenda Love. It is unclear at this time if Pharmacia (having just been acquired by Pfizer) will be able to prepare the isolates and distribute the test kits. Some discussion ensued of creating more of a sense of accountability for results of the survey. It was decided that consistently reporting a summary of the results (X labs out of Y identified this organism as this) would be a way for

submitting laboratories to compare their results to the other labs. A motion was made to have the members of the QA Survey subcommittee decide whatever accountability method was done; this motion passed.

Dr. Thomas Bunn of NVSL spoke about select agent registration and movement permits. CDC and USDA have established lists of organisms (with some overlap) that, if in a laboratory's possession, must be registered with above agencies. The establishment of these lists precluded updating the wording related to movement permits; that list is presently being worked on. Meanwhile, movement permits are required for all livestock and poultry pathogens to cross state lines. The permit can be worded to cover a generic list such as "cultures of organisms endemic in the US, excluding those on the Select Agent list". Although the permit is required for check tests, the fee is being waived for participating labs, and a "blanket permit" is being issued for all participating labs by NVSL.

Carol spoke next of a charge put forth by Pat Blanchard to the Bacteriology Steering Committee to arrive at "consensus SOP's" for isolation and identification of the bacterial agents on the Select Agent list. The goal is to use expertise within the group (since several of these organisms are endemic in the US and certain veterinary diagnostic labs isolate them on a routine, although not necessarily frequent, basis) to adapt CDC/OIE/NVSL protocols or protocols in place in those labs that see these organisms routinely to something that will be functional in all AAVLD-accredited veterinary diagnostic labs. Mitzi Libal is almost finished with the *Bacillus anthracis* protocol; work on the other agents is ongoing.

Thomas Bunn spoke of the National Laboratory Network concept and how it relates to emergency preparedness and the previous two topics. This concept was an attempt to get some of the federal funds that have become available as a result of bioterrorism events into the AAVLD-accredited veterinary diagnostic labs. While it worked (several labs received large amounts of money to update their infrastructure), it is unclear when/if additional funds will be available in the future for other labs to benefit. It also is unclear exactly how the funding already available will be used to help identify a putative bioterrorism event, should one of the agents be isolated.

Dr. Bill Fales spoke about the Anaerobe Society of the Americas meeting earlier this year in Salt Lake City. That organization is looking for additional members from the veterinary community. Discussion commenced on a variety of topics germane to anaerobic bacteriology, including equipment issues and availability, susceptibility testing of anaerobes, resources for identification of anaerobes (the Wadsworth Manual is still the best, and a new edition is out), and taxonomic changes. Bill mentioned that the journal The Anaerobe is available through membership in that organization.

Dr. Shin from Cornell gave a presentation on the Trek ESP II system for culture of *Mycobacterium avium subsp. Paratuberculosis* (MAP). Results of several thousand cultures indicate that this is a viable system to process many thousands of fecal cultures in a year. Comparison to typical HEY agar slant culture indicates that the ESP system detects a higher percentage of low-to-moderate shedders than does traditional culture. Dr. Shin's experience suggests that acid-fast staining on all negative bottles increases the sensitivity of the method considerably (they have an automated stainer that will do acid-fast stains), and that the MAP organism will continue to grow in the bottles in the presence of fungal contaminants, although not with other bacterial contaminants. The price of each culture, including overhead, equipment, space, labor, reagents, and PCR confirmation with IS900 specific primers is \$33.

Dr. Beth Henricson presented information on Kirby-Bauer zone size for several antimicrobials used against *Aeromonas salmonicida* subsp salmonicida and *E. coli*. This information is being submitted to the NCCLS committee on aquaculture to be incorporated into their guidelines.

ANTIMICROBIAL SUSCEPTIBILITY TESTING (AST) SUBCOMMITTEE

Deepanker Tewari and Ching Ching Wu, co-chairs. 1-3 pm, October 18th, 2002

The Co-chairs, Dr. Tewari and Wu welcomed the members. There were 37 attendees. Dr. Tewari updated attendees about the new information on antimicrobial susceptibility testing. The newly released NCCLS documents pertaining antimicrobial testing are as follows:

- -M-31-A2 provides guidelines on antimicrobial testing for veterinary bacterial isolates
- –M2-7 provides guidelines for disk diffusion testing for human isolates
- -M7-5 provides guidelines for broth dilution testing for human isolates
- -M 39-A provides guidelines on analysis and presentation of AST data

In addition, changes in the M31 A2 document were pointed out.

- 1. Four categories of drug groups (listed below) should be routinely tested and reported. Group D drugs should be selectively reported. The list of antimicrobials in each group are more comprehensive. Individual laboratories are encouraged to consult the NCCLS recommendations when making decisions on testing and reporting. The four groups are:
 - A-FDA approved veterinary interpretive criteria
 - B-FDA approved human interpretive criteria
 - C- No interpretive criteria were approved by FDA
 - D-AMDUCA use
- 2. New glossary of agents and the resistance mechanisms are included.
- 3. The new document also describes Campylobacter spp. testing using agar dilution method.
- 4. Information on Sarafloxacin and Apramycin withdrawal were discussed at the meeting. These changes opened up well spaces and will allow the addition of new antimicrobials if desired. However, the withdrawals are voluntary and it is legal to continue to test and report these drugs. The manufacturer for the sensitivity plates will be asked to evaluate the potentials of replacement.

Dr. Wu urged members to be actively involved in the evaluation of the new NCCLS M31A2 document. Any concerns and comments of M31 A2 should be submitted to wuc@purdue.edu . She will forward these to the editorial committee of M31A2 at NCCLS. The NCCLS VAST committee will address these comments and both comments and solutions are included in the next update of M31-A document.

Dr Ching Ching Wu provided an update on the pilot study of the National Monitoring Program on Antimicrobial Susceptibility for Veterinary pathogen. This is a project funded by AVMA, and endorsed by AAVLD and its member laboratories. A total of 26 AAVLD accredited laboratories participated during the past one and a half year. Selected veterinary pathogens (10 isolates for each organism per month) from 5 animal species were collected by each participating lab and submitted to Purdue University for testing. All isolates were tested against a panel of 14 antibiotics. The data has been compiled and a website that allows member access has been established but not released for use at this time due to lack of funds. The database can detect both increasing or decreasing MIC s and can analyze the changing trends nationally, regionally and site specifically. The group was impressed and excited about the program and it's outcome. However, it is not valid for predictions when we only have one-year of data. It was recommended by the members of this subcommittee that this program should continue and AAVLD should advise USDA/NARM to find a way to adopt this program financially. Only through steady funds can a program like this be sustained and successful. It will provide more meaningful and useful monitoring information for judicious use of antimicrobials in veterinary medicine.

Dr. Beth Henricson presented information on antimicrobial approved standards for ornamental fish. This will be the basis for NCCLS to derive new recommendations/documents for ornamental fish antimicrobial sensitivity testing. This project was done with the help of 10 participating laboratories including FDA. Please contact Dr. Henricson for this information.

Lastly, Ms. Jennifer Lorbach presented anaerobe susceptibility testing methodology using Trek sensititre system and broth microdilution technique. The committee members will be provided more information as details are obtained from Trek.

EMERGENCY MANAGEMENT PLANNING WORKGROUP

John Andrews, chair. October 18, 2002, 8:00-10:00am Report Pending

ENTERIC DISEASES COMMITTEE

Chobi DebRoy, chair. October 18, 2002, 3:00-5:00pm

Twenty three existing members were present and thirteen new members were added to the existing list for a total of 89 members. A sign up sheet was circulated for any new members with an interest to serve on the Committee.

Dr. Rodney Moxley, Veterinary Pathologist and Professor at the Department of Veterinary and Biomedical Sciences at the University of Nebraska-Lincoln presented a seminar on "E. coli O157 in feedlot cattle."

At the University of Nebraska-Lincoln (UNL), an interdisciplinary team of researchers has been conducting studies on *E. coli* O157:H7 intestinal colonization, epidemiology, and ecology of feedlot cattle, in order that pre-harvest food safety programs might be designed and implemented. A study conducted in five Midwestern U.S. feedlots demonstrated that the organism is ubiquitous in feedlot cattle. The feces of cattle from 29 pens of five feedlots were cultured once during June through September 1999. A point prevalence of 23% was detected (719 of 3,162 individual animal fecal samples were culture positive). The prevalence of *E. coli*

O157:H7 in cattle in muddy pen conditions was higher than that of cattle in pens of normal condition. A longitudinal study conducted in a UNL research feedlot demonstrated that pre-epidemic, epidemic, and post-epidemic periods of infection occur, based on detectable fecal shedding of the organism. Both the incidence and mean duration of shedding peaked during the epidemic period. The pen-level prevalence was affected by both the incidence and duration of shedding, and could be explained by time- and/or pendependent risk factors. Experimental studies in weanling and adult beef cattle housed individually in BL-2 isolation rooms and inoculated with 1 X 10° CFU of E. coli O157:H7 demonstrated that detectable fecal shedding of the organism occurred for 2-5 weeks post-inoculation (PI). On day 36 PI, an adult animal was given a second, 900-fold greater level of inoculation with the homologous strain, yet had reduced shedding after this inoculation compared to the first. Indirect ELISA showed that this animal and others studied had developed humoral immune responses to the proteins that mediate attaching-effacing (A/E) lesions following enteric infection with E. coli O157:H7; however, increases in circulating antibody titers to some of these proteins following infection were short-lived. These observations suggested that A/E lesion development plays a role in E. coli O157:H7 intestinal colonization of adult cattle; however, these lesions have not been seen in cattle older than 3 to 4 months old acutely infected with E. coli O157:H7. To determine whether adult bovine large intestinal epithelium is susceptible to the development of A/E lesions, colonic and rectal mucosal tissue explants from 18-month-old steers were prepared, inoculated in vitro with E. coli O157:H7, and examined. Epithelial cells of inoculated explants developed A/E lesions at the bacterial attachment sites, confirming their susceptibility to infection. Collectively, these studies suggest that vaccination against proteins important in colonization may be a useful intervention strategy for E. coli O157:H7. We are currently conducting a field trial with a vaccine prepared by collaborators at the Veterinary Infectious Disease Organization (VIDO) and the University of British Columbia.

Dr. William Laegreid, Head of the Animal Health Research Unit at the U.S. Meat Animal Research Center, USDA, ARS presented "Molecular Genotyping of *E coli* O157"

Determining the epidemiologic relatedness of enterohemorrhagic E. coli (EHEC) is critical to investigation of foodborne outbreaks in people, and in field studies of transmission within and between herds of cattle. Numerous typing methods have been published for EHEC O157. These include multilocus enzyme electrophoresis (MLEE), phage typing, plasmid profiling, random or arbitrarily primed polymerase chain reaction (RAP-PCR) and various forms of restriction fragment polymorphism analysis (RFLP), including pulse-field gel electrophoresis (PFGE). These suffer from a variety of problems including poor repeatability between laboratories, poor adaptability to automated analysis, lack of sufficient power to discriminate between unrelated isolates (false positive relatedness), and discrimination between truly related isolates (false negative relatedness). Furthermore, the molecular typing methods for EHEC described above are simply indirect ways of looking at sequence differences between isolates to establish epidemiologically relevant identity. Logically, sequencing the entire genome represents the ultimate molecular identification method, uniquely fingerprinting each isolate and provides a framework on which to evaluate the inversions, insertions, deletions and mutations which occur during microbial adaptation. In addition, sequencing is inexpensive, amenable to automation and sequence information is readily comparable between labs. However, as complete genomic sequencing is not yet practical for large numbers of isolates, we have undertaken sequencing of selected loci to discriminate between EHEC O157 isolates. Preliminary results of these sequencing efforts were discussed.

Dr. Roman Pogranichniy from Department of Veterinary Diagnostic and Production Animal Medicine presented an update on application of a new ELISA based method developed by Bioanalytical Inc. Syracuse, to detect Rotavirus group A.

EPIDEMIOLOGY COMMITTEE

Mark Thurmond, François Elvinger, co-chairs. October 18, 2002, 10:00 am to Noon

Nineteen participants including 7 of the 24 committee members were present. Following a brief introduction by co-chair Thurmond, the main activity of the last year was reviewed.

Following discussions and decisions in the 2001 Annual Meeting in Hershey, PA, the committee had organized a workshop entitled 'Validation of Veterinary Diagnostic Tests,' held on Thursday, October 17, from 1 to 6 pm in the Missouri Ballroom. Funds for the workshop to print a workbook, for refreshments and for other expenses were provided by 4 commercial sponsors: Cepheid, IDEXX, Synbiotics, and VMRD. Ninety-seven participants registered to listen to 12 speakers present thirteen papers. Titles of presentations were: Introduction. Validation and the Interpretation of Diagnostic Test Results. (Elvinger, VA Tech; Thurmond, UC Davis); Validation of Diagnostic Tests: the Serologic Assay (Thurmond, UC Davis); Precision: a Laboratory Perspective (Zimmerman, IA State University); No Gold-Standard Screening: How to Pull a Rabbit Out of a Hat (Johnson, UC Davis); Validation of Molecular Diagnostic (PCR) Procedures (Oberst, KS State University); Validation Approach for Molecular-based Assays (Hietala, UC Davis); Sampling Affects 'Sensitivity' (Johnson, UC Davis); Validation of Bacteriological Tests (McDonough, Cornell); Validation of Toxicology Test Methods (Ross, NVSL); Validation of Licensed Veterinary Diagnostic Test Kits (Henderson, NVSL); AOAC International and eCAM (Mishra, AOAC); Office International des Epizooties Validation Procedures (Pearson, former OIE); Approved Methods Committee (Martin, NVSL). Slides for all

presentations were included in the workbook available to all registrants. The workbook also contains relevant references on diagnostic test validation from the OIE, NVSL and others.

Issues of validation of veterinary diagnostic tests were further discussed. Guidelines are needed for validation of diagnostic tests that are developed in-house and generally designed as a supporting tool for limited in-house use. Participation in test validation on the scale proposed by AOAC International is difficult because of funding constraints and the potentially limited use of those in-house tests. It was proposed to establish a sub-committee within the Epidemiology committee to prepare a manuscript for submission to *JVDI* outlining procedures for diagnosticians in veterinary diagnostic laboratories to validate in-house tests such that those tests can be brought online within the budget constraints and in recognition of the dynamic nature of diagnostic test development. Another challenge in test validation is the management of collected data for validation, especially if more than one laboratory participates or for continued validation activities to enhance precision of estimates once tests are on line. It was proposed to request industry support for the creation of tools that facilitate data entry, management and evaluation for validation of tests.

Participation of laboratories in passive, targeted passive or active surveillance, as sentinel or in regulatory surveillance was discussed. The Epidemiology committee can contribute expertise in evaluation of the various surveillance schemes, determine the need for various levels of surveillance based on risk and health and economic impact of particular diseases or disease agents, and the contribution of such schemes to the maintenance and monitoring of health in the US national herd. How should sampling structure, collection methodologies, diagnostic procedures and data input, storage and manipulation be organized to maximize the benefit of veterinary diagnostic laboratory involvement in various surveillance schemes. Limits on use of diagnostic sample submissions for wider disease surveillance (piggybacking on diagnostic sample submission) because of legality, ownership and confidentiality constraints were discussed.

Veterinary diagnostic laboratories have the expertise for participation in foreign animal disease outbreak investigation and can use new technologies that allow decentralization of sample processing from the federal diagnostic laboratories in Plum Island, NY, or Ames, IA. The committee should investigate, design strategies and make recommendations on how veterinary diagnostic laboratories could and should contribute to animal health surveillance.

The last topic of discussion was the contribution of the Epidemiology discipline to the presentations at the Annual Meeting. Although the number of presentations in the Epidemiology specific section is limited, all presentations in the preceding Foreign Animal and Emerging Diseases session, and more than 20% of presentations in all other sections are Epidemiology oriented.

To conclude, the committee plans to expand its input on validation of test and surveillance issues during the year 2002/2003.

Committee membership will be notified and solicited for participation in either committee or publication subcommittee activities by email.

FINANCIALADVISORY COMMITTEE

Leon Thacker, chair. 7:30-8:00am, October 17, 2002

Three members of the Committee in addition to AAVLD Treasurer, Dr. Alex Ardans were in attendance. The holdings of the Association including Mutual Funds investments were reviewed and the decrease of value was noted. The 3.8% decrease over the past quarter was considered good in comparison to other possible investments.

Conclusions: The Association should leave present investments in the funds presently invested and there are no immediate needs for changing dues or other fees of the organization.

FOOD SAFETY COMMITTEE

Richard Oberst, chair. 6:30-8:20pm, October 17, 2002

With 16 persons present, the Committee was called to order by chairperson, Dr. Richard Oberst (Kansas State University Veterinary Diagnostic Laboratory).

A presentation by Dr. Lanny Pace illustrated efforts that some state diagnostic facilities have undertaken to do food safety diagnostics. Dr. Pace, the Director of the Mississippi Veterinary Research and Diagnostic Laboratory System (MVRDLS), discussed how that state's diagnostic system has been positioned to accomplish food safety testing. Dr. Pace described how Mississippi State University's College of Veterinary Medicine (MSU-CVM) has been reorganized and how facilities have been consolidated and new laboratories are being constructed to accomplish this focus. Specifically, he described how the MVRDLS is composed of an Aquatic

Research Diagnostic Lab at Stoneville, MS; a Poultry Research and Diagnostic Lab at Pearl, MS; the MSU-CVM diagnostic lab services at Starkville, MS; and the Mississippi Veterinary Research Diagnostic Lab ((MVRDL) at Jackson, MS.

Dr. Pace described how the MVRDL had been a stand alone state agency and how the other 3 labs were under the CVM, until 2002 when the state legislature merged the MVRDL into the university system. Several key components that fostered this consolidation was legislative changes to state laws in 2002 that previously prohibited the MSU-CVM diagnostic laboratory from performing food safety testing and changes in open record laws. Dr. Pace described how a strategy for developing the food safety system was completed, particularly on the need for team building with various state organizations (i.e., public health) and defining a "needs statement" or problem solving approach as it related to two important commodity groups (poultry and aquaculture) in Mississippi.

Dr. Patrick McCaskey and Anita Mishra-Szymanski from AOAC International described AOAC role in assisting in developing integrated food safety programs focused on accreditation, systems for effective transfer and exchange of data, and assistance in validating methods. Each described AOAC International role in developing the Internet based e-CAM system for rapidly validating and distributing analytical methods. Considerable discussion centered on how this system would work in assisting labs with improvements to diagnostic procedures and integrates a validation process. A prototype system will be demonstrated late in 2002, with initial trial subscriptions available in 2003. Committee members indicated that such a system would be of interest to their labs.

AAVLD FOUNDATION

Barbara Powers, chair. October 18, 2002, 8-10:00PM

Treasurer's Report: Foundation has \$73,727 total assets as of 9-30-02. Mutual funds: are \$45,159 and checking account is \$28,568.

Current Committee Make-Up: Barb Powers-Chair, Terry McElwain, Sharon Hietala, Leon Thacker, Pat Blanchard, Gavin Meerdink, Robert Eckrode, Paige Carmichael, Dave Zeman, Lenn Harrison, Lucky Pittman and Donal O'Toole.

Travel Awards: The Pathology Committee independently raised \$500 for a student travel award given to Dan Patrick to attend the annual AAVLD meeting. Discussion ensued on as to if Foundation would support travel awards for general trainees, specialty-specific or both. It was moved by Leon Thacker that – Foundation will provide two (2) travel awards annually at \$500 each for a diagnostic trainee to attend and present at AAVLD annual meeting. Motion seconded (Gavin Meerdink) and passed unanimously. It was further decided that the awards committee will draft criteria for this award, to be approved by Foundation, and that the awards committee will select the awardee.

Best JVDI Manuscript: The winner of the best JVDI manuscript award was finalized and the name provided to Dave Zeman, Awards committee chair. It was further decided that the awards committee will develop criteria for selection of the best JVDI manuscript, to be approved by the Foundation, and that the awards committee will select the awardee.

Best JVDI Short Communication: It was moved by Gavin Meerdink that Foundation will provide \$300 annually to the best JVDI short communication. The motion was seconded (Dave Zeman) and passed unanimously. The awards committee will develop criteria for selection of this award, to be approved by Foundation, and the awards committee will select the awardee.

Fundraising: It was proposed that the 2004 dues statement (to be sent in August 2003) have four select areas for AAVLD members to donate to Foundation. These are – Foundation general, JVDI best manuscripts, Best graduate student presentation and poster at AAVLD, and Diagnostic trainee travel award.

It was proposed that the Foundation chair send out a separate letter to all AAVLD members to solicit donations.

If was further suggested that Foundation obtain a history of AAVLD sponsors and exhibitors from the annual meeting and choose a few potential corporate sponsors for the annual awards given.

These three above items will be presented to the Executive Board at the February meeting for discussion and approval.

GOVERNMENT RELATIONS COMMITTEE

David Zeman, acting chair in absence of Bruce Akey. October 19, 2002

Twelve people were in attendance.

• The committee discussed and supported the Executive Board resolution to "complete" the National Animal Health Lab Network (NAHLN) to include all 50 states and the federal laboratories. The pilot NAHLN is a strong step forward to meeting

- the prescribed needs and goals, however completion of the NAHLN is necessary to fully achieve the goals.
- The Public Health Lab response network and potential interactions with VDLs were discussed. It was summarized that open lines of communications should remain and this contact should remain on the liaison list (see below).
- How the new department of Homeland Security will ultimately interact with the USDA Federal Labs was discussed. A resolution was suggested that would support keeping all Plum Island operations under the USDA jurisdiction, rather than transferring to Homeland Security. Following the model of how CDC interacted with Homeland Security was suggested. The committee moved to have Dr. Torres prepare the resolution and submit appropriately.
- · CDC select agent registration issues were discussed.
- · The Animal Health Safeguarding review is available at NASDA.org. Many of the extensive recommendations are being studied or implemented, including the NAHLN concept.
- The AAVLD desires to be recognized as a leader in matters of veterinary diagnostics within the nation. Enhanced interactions with many independent and governmental organizations will be necessary to maintain this effort. Much compatible collaboration has already been established. The committee suggested that the AAVLD executive board consider maintaining or establish long-term collaborations or liaisons, by Presidential appointment with the following groups:

Department of Defense; Department of the Interior; USGS; USFWS; HHS; CDC; FDA; USDA; APHIS; Plum Island; NVSL; USAHA; OIE; WAVLD; Department of Homeland Security; AAVMC; AVMA; Department of Homeland Security

· It was suggested that most of these could likely be covered by finding AAVLD members that are already involved with these groups, and asking them to provide feedback on activities of the these organizations, relative to issues of mutual interest or concern.

INFORMATICS COMMITTEE

Jim Case, chair. October 18, 2002, 1-3pm

There were 51 committee members and guests present.

Committee chair Dr. Jim Case presented an overview of the technical issues that need to be considered during the development of the electronic communications component of the NAHLN. Topics included: background on the initiation of the NAHLN, the goals of the network, health information standards, the key areas of development that need to be addressed, the existing CDC network models for surveillance, additional considerations in conjunction with the network architecture and outstanding issues. The presentation was followed by open discussion on developing a consensus on the NAHLN technical approach and identification of high-level initial tasks.

The discussion identified that there was not a clear picture of what the information sharing objectives were, other than the sharing of data among participating laboratories and the eight initial agents of interest. Issues such as long term funding, changes in laboratory operations that would be necessary to support data sharing, confidentiality of data, data ownership and the adoption of standards were among the most apparent concerns.

Dr. Bill Wagner presented an overview on the selection of the current 12 participating laboratories that have received funding from the USDA for the initial stage of the project. He stated that it was recognized that the development of the network would require additional support and that a request for additional funding has been submitted for the 2003-04 fiscal year.

Dr. Case mentioned that in discussions with personnel from CDC, much of what they have done in the development of the National Electronic Disease Surveillance System (NEDSS) is available for use by the AAVLD for the NAHLN.

A proposal was made to adopt three information standards (HL7, LOINC and SNOMED) for use the data communications for the NAHLN. There was concern expressed by a minority of committee members that the committee had not performed investigation into other alternative standards. Dr. Case stated that for the past 5 years, these were the only standards that he was aware of that were actively being enhanced and maintained to support veterinary medicine information needs. He also mentioned that these are the standards that were endorsed by the AAVLD a number of years ago, are endorsed by the AVMA, CDC, FDA, AFDO and APHL. The widespread adoption of these standards by other health organizations would make it unwise for the AAVLD to go a different route, as it was expected that intercommunication would be a future goal.

A resolution recommending the use of these standards in NAHLN communication was approved by the committee with a vote of 19 for and 2 against. See HOD2 (page 11)

The committee decided that the next step would be to develop a set of questions to be sent to the directors of participating laboratories to determine their expectations and current data collection and communications capabilities. The result of this questionnaire would be used to refine a preliminary and ongoing budget for the development and maintenance of the network.

Dr. Case mentioned that an electronic discussion list has been established for the continued discussion about developments related to the communications portion of the NAHLN. Individuals interested in participating may subscribe to the list by sending an email message to LISTPROC@ucdavis.edu. In the body of the message type: subscribe DxLabNet yourname.

LABORATORY DIRECTORS

Gary Osweiler and Bev Byrum, co-chairs. October 19, 5:30-7:45

There were 60 persons in attendance.

The planned agenda included five speakers representing their respective organizations:

CSREES Dr. William C. Wagner, National Program Leader

USDA-APHIS Veterinary Services Dr. W.Ron DeHaven, Deputy Administrator APHIS

National Veterinary Services Laboratories Dr. Randall Levings, Director

AAVLD Quality Managers Committee Dr. Monte Reimers AVMA Governmental Relations Division Dr. Dean Goeldner

Prior to the program, Dr. Tom McKenna, Plum Island indicated FAD training would be offered and that additional openings for diagnosticians were available for week long course starting November 4. Sign-up sheet was circulated. Presentations were as follows:

CSREES - Dr. William. C. Wagner

The National Animal health Laboratory Network: Update and Perspective for AAVLD

- 1. NAHLN key features are: Provision for BL-3 capabilities (CDC compliance); Increased Foreign Animal Disease training for diagnosticians; Evidence of a credible QA/QC program in participating laboratories; Performance of selected Foreign Animal Disease testing in concert with NVSL; Informatics system and central repository database
- 2. The purpose of the pilot program with 12 laboratories was reviewed. Intent of CSREES and other federal agencies is that this would expand to a fully functional national system involving as many state laboratories as possible.
- 3. Dr. Andrews noted that the informatics area is very important, that it needs specific goals and will benefit from good input by Laboratory Directors.
- 4. Brief discussion and question and answer period followed.

USDA/APHIS Veterinary Services - Dr. Ron DeHaven, Deputy Administrator APHIS/Veterinary Services Programs and Activities

Dr. DeHaven provide a broad perspective and information on specific activities and programs.

- 1. Veterinary Services is looking hard at emergency response capability
- 2. Index cases in the NAHLN system will be diagnosed at NVSL or Plum Island
- 3. The Master Plan has \$124M obtained, ~\$306 M yet to come may be completed in stages. \$14 M will come from Homeland Security for new facilities to relocate from current malls in Ames, Iowa
- 4. CWD very big political and management issue. Capacity is needed for more and better testing. Testing by private laboratories is currently not allowed for program diseases. Veterinary Services is concentrating efforts on training and preparation of state/public laboratories. Estimates for this year are 225,000 samples currently and 200,000 hunter-kill samples. CWD surveillance goal is enough samples to declare prevalence in defined geographic areas. Annual farm deer identification and testing would aid in a certification program. Dr. Powers (Colorado VDL) indicated ELISA kits are being tested and will include 4 labs to get validation data.
- 5. Low pathogenic AI: Russia requires surveillance of flocks destined for Russia. Typing is required if high pathogenic types are identified.
- 6. Exotic Newcastle in Southern CA involves many game fowl, no commercial poultry. Mortality is 90% in some flocks. 21 flocks have been depopulated many now claimed as very "valuable"

NVSL Report: Dr. Randall Levings - Director

NVSL Activities and Interactions with States to Support Biosecurity and Response to Animal Diseases

- 1. Summarized many activities and accomplishments of NVSL and emphasized those related to AAVLD plans. An excellent summary was provided in Powerpoint format and is reproduced here.
- 2. Dr. Levings noted that free reagents for WNV are provided for samples at state laboratories
- 3. NVSL has an SOP for visitors to the lab. Perhaps state labs should include this also in conjunction with increased biosecurity plans.
- 4. NVSL was requested by Bacteriology subcte. and will plan on a bacteriology training course for BSL-3 agents.

NVSL Presentation:

Regulatory diseases:

Avian Influenza: Tested >40 K samples by VI & RRT-PCR from VA et al.; Supported Harrisonburg lab with personnel, reagents, liaison; Provided domestic labs reagents for 1.6 M tests; Tested 10.3 K LBM samples; Participated in field validation of RRT-PCR; Assisted in identification of LPAI in TX, PA

TSE: NVSL FY02 tests - BSE 20K, Scrapie 11K, CWD 15K; State Scrapie/CWD Contract labs – 10 on line, 5 more recently selected with Ave. > 10K contract tests / lab / year = 150K; at a reasonable-high throughput = 300-600K; Scrapie program – 30-175K tests/year in 03/04. Assisted in validation/testing of commercial tests for CWD and Scrapie

Sum of State CWD surveillance plans (14/23 high risk states, 12/27 low risk states submitted plans) = 135K; Supra-surveillance for CWD – 4 additional labs, plus added contract lab output committed to total of 200K.

Testing/Disease Highlights

- WNV: 9,800 NVSL FY02 tests and Provided reagents to state labs
- Anthrax: tested environmental samples
- FAD investigations: >400 in FY02
- Heartwater: Validated RT-PCR assay
- Bluetongue: 60 labs proficiency tested
- Spring Viremia of Carp: Supported approved lab

USDA-Ames Master Plan

- •Funding: 124 of 430 M funded to date (plus 14M for Supplemental Lab bldg); 0, 20 & 58 M proposed in 03 President's and 2 congresses subcommittee bills
- •Projects: BL3 Ag Large Animal Facility; Supplemental Laboratory; Infrastructure; BL2 Large Animal Facility; Combined Laboratory and Lab Animal Facility; Other facility additions/enhancements (Tb, security, etc.)

Security / Agent Movement

- Facilities with high Consequence Pathogens Targeted, also Personnel, Information, Facilities, Animals
 - -Procedures, Background checks, Pathogen Inventory, Chain of Custody
- Business Resumption, Disaster Recovery, Continuation of Operations (BR/DR/COOP) Plans
 - -Another version of surge capacity and alternative sites
- •Select Agent (Agric) list / guidance in process
- Movement permits required

National Animal Health Laboratory Network (NAHLN) - Related activity

- Secure communication, reporting, alert system
- NVSL IT and program personnel working with AAVLD informatics
- Bioterrorism agent reporting links in process, Security protocols sharable
- Standardized, rapid diagnostic techniques
- NVSL will lead on ARS->APHIS PCR validation. Completed AI RT-PCR validation
- Trained personnel, modern equipment
- Increase FAD training; Bacteriology committee suggests BSL3 agent training
- Provide equipment to state labs for TSE testing, etc.
- Quality standards, proficiency testing
- AOAC facilitation of method validation being explored
- Ongoing proficiency testing, 03 budget increase targeted to proficiency testing
- Facility upgrades
- Pilot NAHLN grants for increased BSL-3 space; and APHIS-ARS Master Plan in Ames
- Scenario testing
- LPAI in VA as real life field exercise and tabletops part of NAHEMS concept and practice

Quality Managers Committee update - Dr. Monte Reimers, Chair

Quality Assurance/Quality Control vision for AAVLD Laboratories: Some basic points on AAVLD QA/QC

- 1. QA vs QC: QA is strategic, done by those outside the lab; QC is logistic, done by those inside the lab
- 2. Don't be overwhelmed by details; QA is good business sense needs to become routine
- 3. Involves documenting "who did what when"; Principle is "If it's not written down, it didn't happen"
- 4. Should not be considered personal –it is lab performance oriented

- 5. Compared OIE vs ISO 17025 as basis for AAVLD QA/QC
 - -Principles are very similar, about the same amount of work to manage
 - -OIE is not and does not plan to be in the inspection/accreditation business
 - -ISO 17025 applies mostly to international business needs, e.g. export testing. No need to go to this level unless it benefits the international acceptance of important work.
 - -QA committee plans to put the ISO 17025 document on the AAVLD web site
 - -AAVLD white paper on Accreditation and QA systems will be put on the Web Site
- 6. Dr. Reimers updated Directors on QA Managers Committee
 - Distributed list of QA managers committee members; mission statement of committee is written and adopted; Society of quality assurance meeting involves mainly those who work with regulated industries; AAVLD labs need policy, training manuals, training experiences; Important to have commitment from management

AVMA Office of Governmental Affairs - Dr. Dean Goeldner DVM, Assistant Director

Navigating Inside the Beltway: How to Promote Your Program More Effectively in Washington

- 1. Dr. Goeldner provided an excellent overview of how ideas become transformed into laws and regulations. He stressed the importance of knowing the appropriate contacts and working within the existing protocol and structure to present our message and to provide ongoing support and follow-through for our requests.
- 2. An excellent outline was presented and is reproduced below for future reference.

Navigating Inside the Beltway: How to promote your agenda more effectively in Washington

What is your agenda? What parts need to be addressed by the federal government? How does Washington work? What Washington can do for you ...or to you

- Congress creates: Legislation for Authorization and Appropriations
- **Federal Agencies** create Regulations and Coordination/support among federal/state agencies So what really happens?
- Large bills often move "by the book"
- Smaller bills are sometimes attached to larger "must move" bills as amendments
- Uncontroversial bills may pass: By unanimous consent (Senate) or Under suspension of the rules (House)

The Budget: What goes up comes down....different

- Agencies submit budgets to Departments
- Departments submit budgets to OMB
- OMB adjusts budgets according to President's priorities
- Budgets returned to Departments and Agencies

Congress and the Appropriations Process

- Congress begins with the president's budget, then applies its own priorities
- Appropriators want to "bring home the bacon" for their state/district
- Appropriations subcommittees play a "zero sum" game

Key Points in Budget/Appropriations Process

- OMB controls funding levels in president's budget request
- Federal agencies cannot lobby Congress
- Legislators put state/district interests first

The Regulatory Process

- Federal agencies write regulations to implement the laws that Congress passes.
- Individuals and stakeholder groups usually have one or more opportunities to comment on proposed rules or guidance documents.

How do you influence the process?

- Be clear about what you want
- Work in coalitions
- Identify and meet with federal agency officials who have regulatory/budgetary authority over your issues
- Understand their positions and needs and if possible, get their concurrence/approval
- If money is involved, don't ignore OMB!

How do you influence the process?

Meet with key members of Congress/find a champion!

• Authorizers and appropriators; Chairs and ranking members; Members whose states/districts affected by your project; Use constituents within your group(s); Cultivate relationships with key staff

Effective Congressional Relations—laying the groundwork

•Get to know your own members BEFORE you have an issue

- Attend town meetings and fundraisers; Introduce yourself, more than once;
- Identify local and DC staff who will handle your issues

Meeting with Members of Congress

• Be prepared. Include one page summary with any material; Be on time, be patient and be brief; Bring solutions, not just problems; If possible, include constituents; Follow up. Write thank you letters

In the end, it's all about politics

- How does your agenda help this member of Congress?
- Know member's voting record and past positions
- Know the opposition, if any, and how to counter it
- Be prepared to compromise

AVMA can help! American Veterinary Medical Association, Governmental Relations Division. 1101 Vermont Avenue, NW, Suite 710. Washington, DC 20005. Phone: 800-321-1473; Fax: 202-842-4360. www.avma.org

LABORATORY SAFETY AND WASTE DISPOSAL

Larry Thompson and Beth Henricson, co-chairs. October 20, 2002, 1:00-5:00pm Report pending

LONG RANGE PLANNING COMMITTEE

October 17, 2002, 5:00-7:00pm

- 1. The committee brainstormed current and future anticipated needs that are not being met by the individual committees missions and structures. Further development and analysis of initial effort will continue via email and conference call during the year to determine gaps and make recommendations to the board.
- 2. Carol Tuszynski with CEAH presented the concept of Scenario planning and how APHIS has used it. The method has value for laboratories and organizations like AAVLD in their long range planning process. She suggests doing this every 3-4 years and track the different scenarios to see if one is starting to move forward. The main advantage is identifying areas an organization could become better prepared in and overall to think outside the box, improve flexibility and ability to respond to many different futures. She provided some resources on this technique:

Scenario Resources – Web Pages

- · Global Business Network www.gbn.org
- · NerveWire Management Consulting www.nervewire.com
- · www.shell.com/scenarios

Scenario Resources – Periodicals/Books

- · "British Airways case study" Long Range Planning, Vol. 29, No. 2, April 1996
- · The Art of the Long View Peter Schwartz, 1991
- · Learning from the Future Liam Fahey and Robert Randal, 1998
- Scenarios: The Arte of Strategic Conversation Kees Van Der Heijden, 1996
- · The Long Boom Peter Schwartz, Peter Leyden, Joel Hyatt, 1999
- 2025 Scenarios of U.S. and Global Society Reshaped by Science and Technology Joseph Coates, John Mahaffe, Andy Hines, 1997
- · Future for the Third Millennium Richard Slaughter, 1999

Committee recommendations from discussions:

- 1. Encourage laboratory directors to adopt the Quality Managers Committee proposed format for a quality manual in order to offer improved and standardized approach to quality assurance in all labs.
- 2. Executive Board should consider how the organization can better posture itself on a national level to champion the issues of a national animal health lab network positions and other national issues which impact diagnostic labs.
- 3. Improve communication among committee chairs in order to share progress and barriers on common issues and to effectively resolve and reduce mission overlap via 2-3 conference calls of committee chairs yearly
 - a. Request committee chairs to provide the President with feedback on how they can keep the membership better informed of their own committees activities.
- 4. Add House of Delegate members to the Lab Directors email distribution list with the HOD member responsible for keeping their states' members informed of key AAVLD updates and issues.

- 5. Suggest 2003 Program chair, Dr. Reed, consider a 30-minute presentation on scenario planning by Carol Tuszynski with CEAH in the scientific session
- 6. Suggest Accreditation Committee include site visit team member with microbiology expertise to adequately evaluate the labs qualifications in those areas

MEMBERSHIP COMMITTEE

Willie M. Reed and Richard Mock, co-chairs. October 19, 2002 5:00 to 6:00 p.m.

Six members and one guest were present. The following agenda items were discussed:

- 1. Membership statistics were reviewed as of June 30, 2002. There were 1274 active members—an all-time high. Of this number, 140 were new members and there were 167 graduate/resident/retired members.
 - As of October 2002, 432 individuals have renewed their membership for 2003. There are 10 new members thus far, with 71 members in the graduate/resident/retired membership category.
- 2. The committee's primary functions were reviewed:
- Interest eligible individuals in joining the association.
- Report on the status of the overall membership.
- Evaluate ways to recruit and retain individuals in veterinary diagnostic medicine.
- Monitor changes and interests in member disciplines.
- Determine organizational benefits and programs that enhance member participation.
- 3. New member welcome letters were sent to 140 new members in 2002, explaining the many benefits of AAVLD membership.
- 4. Notices were mailed to delinquent members early in 2002.
- 5. It was decided that data on dropped memberships should be obtained through a letter to non-renewing members, asking why they chose not to renew.
- 6. An orientation session for new members should be considered at the beginning of the annual meeting (in conjunction with the USAHA, if possible) and used to explore the background of new members and target potential members.
- 7. The committee once again discussed the problem of attracting new professionals to the specialty of diagnostic medicine. This remains a serious issue with many facets. The committee members view the initiatives being promoted by the AAVLD Foundation as instrumental in addressing this concern, particularly the two travel scholarships for graduate students. The committee commends the Pathology committee and Foundation for providing funding in support of the travel scholarships in 2002 and requests additional funds be sought to expand the number of offerings in future years.

PATHOLOGY COMMITTEE

Paige Carmichael, chair. October 20th, 2002, 12:00 – 1:55 pm.

22 Members present. The meeting was called to order and the first order of business was the election of a new pathology chair. The committee elected Dr. Donal O'Toole as the chair from 2003-2005.

Dr. Matti Kiupel reported on the C. L. Davis conference. Eighty participants were in attendance this year. The suggestions for next year's conference were

- 1) Diagnostic techniques (laser capture techniques)
- 2) Reproductive Disease/Perinatal Death Diagnostics
- 3) Case management workshops

There was a concern expressed of the timing of the C. L. Davis symposium. The Thursday before the symposium was thought to leave a "dead day" between the symposium and the rest of the meeting. There was also a concern expressed on the relatively low numbers of trainee participants at C.L. Davis. This was in part attributed to the "dead day" and in part the subject matter this year versus last year. A suggestion was made that the Program committee investigate the possibility of holding the symposium after the meeting (Monday) instead of before.

The Histopathology slide conference co-chairs reported on this year' conference. There were 21 cases and 16 presenters. There was (again) a request that more cases of the "unknown" or "emerging and new" type be presented rather that the clear-cut cases. A motion was made that the slide sets generated by the conference be sent to the presenters rather than the diagnostic labs. The motion was voted on and was passed. The committee then voted on whether to offer the remaining sets for sale to support the pathology trainee travel fund or to send them to the accredited diagnostic labs. The committee voted to send the slides sets to the accredited Diagnostic labs. Dr. O'Toole was asked to investigate with the Executive board the possibility of using funds generated by the sale of slide sets to fund the pathology trainee travel fund.

Dr. Tanya Lemire was elected as the new co-chair for the Histopathology Slide seminar.

The recipient of the 2002 Pathology Trainee Travel award (PTTA) was Dr. Dan Patrick from Michigan State University. The committee was told of the Foundation committee's decision to support two new travel awards for Diagnostic trainees of any discipline. The committee voted to continue funding the PTTA and to request that the Foundation committee add a line on the registration form for donations to this fund. There was discussion about the possibility of approaching pharmaceutical and other companies for the purpose of endowing this fund. The request for permission to do this will also be brought to the attention of the executive board.

QA/QC standardization and validation protocols for immunohistochemistry were discussed. The committee decided that the best approach to this would be to have a validated depository of reference tissues of known positives and negatives for a variety of agents and antigens that labs could use to validate their methods. The committee will continue to discuss the mechanisms for accumulating and accessing this repository. The committee designated Dr. Tanya Lemire as its representative to the Approved Methods committee. In the interest of time, QA/QC for second opinions was shelved for a future meeting.

The final topic on the agenda was the discussion of necropsy room guidelines for Transmissible Spongiform Encephalopathies (TSEs). The committee examined the British Guidelines provided to them by Dr. Larry Thompson, chair of the Safety committee. The consensus was that the pathology committee should come up with guidelines that were more pertinent to the situation in the United States. It was recommended that these guidelines be based on what is known in science and that we should formulate them with the best interests of health of all personnel that will be handling these tissues in mind. A subcommittee was formed that would interface with the Safety committee for the formulation of these guidelines. This subcommittee will consist of Drs. Elizabeth Howerth, Elizabeth Williams, Tanya Lemire, Dave Steffen, Donal O'Toole, Matti Kiupel, Mark Hall and Art Davis.

PUBLICATIONS COMMITTEE

David Steffen, chair. October 18th 8:00-9:00 am

5 members were in attendance

JVDI: John Kreeger provided a brief written report on JVDI. The journal averages 16-18 manuscripts per issue. Acceptance rate increased only briefly during the transition from 4 to 6 issues per year and now runs at 55%. The average time from submission to notification is 55 days. Time from submission to print averages 8-10 months. The publications committee accepted a unanimous recommendation by the editorial board to suspend the publication of the receipt date. The editorial board wishes to recruit good review articles and will accept non-invited reviews. The JVDI ranked #12 of 174 Veterinary Journals. The journal is shipped to 2,100 members, 200 plus institutional subscribers.

Newsletter: The newsletter still seeks an editor to work with or replace Pat Blanchard. A recommendation was made to use the administrative office E-mail to distribute announcements rather than the newsletter editor as the source of the notification by broadcast E-mail tends to get a lot of requests for web access and other assistance. It was suggested to add a list of contacts to a prominent location on the web page to direct inquiries to appropriate individuals.

Web site: Additional updates are ongoing and members are encouraged to visit the site.

A discussion forum format is set up at the site and the list serve was suggested as a way to invite or initiate forums that could then be moved to the web where the format provides for better tracking and indexing of past discussions. Members are encouraged to consider using the discussion groups and inviting those on the list serve to go to the site for the discussion.

A link for USDA NVSL news and updates will be added and a suggestion was made to post relevant materials or links to Federal Register announcements that may be of importance to AAVLD member labs.

Add a news release area for news from the executive board, the President or member labs.

It was suggested that committee reports be posted on the web for committees having scientific sessions that may be of value to others who have conflicts and cannot attend. Perhaps powerpoint slide text or abstracts could be shared when presenters feel it is appropriate and informative without the accompanying discussion. A letter to committee chairs will be sent to offer this opportunity for information exchange.

A links page to vendors and sources of reagents was suggested as a valuable resource for lab that might be developed.

A need for a defined advertising policy was discussed and Dr. Osweiler agreed to address the executive board with a request for policy direction.

OAMANAGERS COMMITTEE

Monte Reimers, chair. October 18, 2002, 8:00-11:00am

Below is a brief summary of discussions, and proposals to AAVLD regarding the committee as a QA communication, information and support resource for all member laboratories.

- 1. The quality manual template was discussed and will be offered to interested member laboratories. Clarification of content by Accreditation and Executive Board is sought, as well as an established mechanism for communication with these committees.
- 2. The following Mission Statement for the committee was proposed:
 - "The mission of the Quality Assurance Committee of the American Association of Veterinary Laboratory Diagnosticians (AAVLD) is to be the central resource for quality assurance information, communication and support within AAVLD."
- 3. To achieve this mission, QA Committee members will:
 - a) generate quality system elements for use by member laboratories;
 - b) facilitate communication with AAVLD Accreditation and Executive Board regarding QA issues;
 - c) facilitate communication with all member laboratories regarding QA issues;
 - d) remain vigilant for, and communicate to AAVLD, changes in QA standards of agencies or organizations impacting AAVLD QA interests; and
 - e) provide assistance to member laboratories in identifying QA needs and implementing member laboratories' unique quality systems.
- 4. Proposed actions to improve communication with QA personnel in member laboratories include:
 - a) providing a QA link on the AAVLD website;
 - b) providing a QA reference list of publications and links;
 - c) establishing list serve communication among QA personnel; and
 - d) offering QA committee member support to QA personnel in all member laboratories
- 5. Proposed training sessions for QA personnel and laboratory directors, as resources allow. These might be provided in conjunction with the AAVLD annual or regional meetings or Society of Quality Assurance (SQA) regional meetings.

SEROLOGY COMMITTEE

Peter Wright, chair. October 18, 2002, 4:00-6:00 pm.

6 Committee members and 48 guests in attendance

1) The role of the Serology Committee is evolving and adapting to the recent initiatives taken by the AAVLD with respect to quality standards, validation and harmonization of test methods, and networking of diagnostic laboratories.

The Committee foresees a role in the development of guidelines and education with respect to:

- a) methods standardization and validation, as well as, proficiency testing,
- b) application and interpretation of serological tests for specific program applications,
- c) harmonization of test methods and results between laboratories,
- d) networking of laboratories for specific program applications, and
- e) development of testing strategies for disease control and outbreak situations.

More so than ever before, the various discipline committees will need to work cooperatively towards an integrated approach to disease diagnosis and control. So too will the discipline committees need to work cooperatively with other committees such as Approved Methods and Emergency Preparedness.

To this end, the Serology Committee will review its current membership and ensure that relevant expertise is available and that these experts are willing to meet these new challenges.

- 2) The following companies; IDEXX, Biocor and Diachemix Corp. gave brief updates on the current developments.
- Andre Fuchs of IDEXX presented information of their antibody detection ELISA kits for PRRS and *Salmonella* in swine. He also noted future products in the pipeline for detection of antibody to influenza virus H3N2, a competitive ELISA PRV antibody and a kit for PRV gI detection in meat juices. Also mentioned were an antigen detection ELISA for BVD and an *M.paratuberculosis* SNAP test for antibody detection. In their poultry line, he mentioned a PCR testing service for IBV subtyping and a Chicken Anemia Virus vaccination monitoring utility. He also introduced a new joint venture with Roche Diagnostics for PCR testing and an upgrade to the Johne's software that involves the calculation of likelihood ratios.
- Ed Corrigan of Diachemix spoke of their line of fluorescence polarization assays and that they had brought 8-10 new kits online last year and that they have another 20 or so kits in development. These include kits for *Brucella melitensis* and *B. ovis*, as well as, *Mycobacterium .bovis*.

Tom Kellner of Biocor presented information of their kits for antibody and gamma interferon detection in tuberculosis, as well as, the introduction of a Johne's ELISA for sheep and goats.

- 3) The Glossary of Terms developed and approved by the Serology Sub-committee on Minimum Standards, available on the AAVLD website, may also now be found as part of the new OIE Quality Standard and Guidelines booklet that has just been published.
- 4) As part of evolving into its new role, the Committee Chair Peter Wright presented some thoughts on the 'Role of the Serology Laboratory Past, Present and Future'. In addition to the traditional lab-based program applications such as import/export, disease control, survey and surveillance, the serology laboratory should also consider its role in the prevention, preparedness, response and recovery from a major disease incursion, especially a foreign animal disease that was intentionally introduced at multiple sites across the continent. Questions posed included:
 - a) what types of tests are best suited for the response and recovery phases of a major outbreak lab-based, rapid, portable, penside?
 - b) where should we be investing in technology development?
 - c) how would we ensure sufficient quantities of kits or reagents?
 - d) what would be the testing strategy for antibody, antigen and/or nucleic acid detection?
 - e) who would conduct, interpret and report these tests federal, state, laboratory, field personnel?
 - f) how would quality and proficiency be assured protocols, reagents, training?
 - g) how would the data be managed, secured, communicated, assimilated, and decisions taken?

Discussion was opened with participation encouraged from the floor. Representatives from APHIS and ARS described initiatives such as the NAHLN pilot and collaborations with respect to the development of rapid tests. Traditional roles and responsibilities with respect to foreign animal diseases were discussed with respect to legal authority. New roles for state laboratories in the network concept were discussed. With regards to the types of tests and who would perform and interpret results, the general consensus was that whichever tests were chosen, trained laboratory personnel in a controlled environment should perform them. Test performance characteristics and formats should be appropriate for the particular phase of response and recovery. It was acknowledged that different tests and testing strategies would need to be adopted in advance. Training and proficiency programs need to be established. The supply of kits and reagents (licensed or not) may require partnership with commercial companies with the capacity to produce quality products in high volume on an emergency basis. Data communication would ideally be real time, secure and maintain data integrity. Of course funding was always an issue.

The ensuing discussions provided food for thought and any further comments regarding the role of serology and/or the Committee would be welcome and should be directed to any of the committee members present at the meeting.

AAVLD VETERINARY ANALYTICAL TOXICOLOGY AND MYCOTOXINS and USAHA ENVIRONMENTAL RESIDUES COMMITTEE

George Rottinghaus, chair of VAT&M, October 19, 2002

36 in attendance including 9 AAVLD committee members and liaisons.

Dr. Walter Hyde demonstrated the FDA-CVM Toxicology Agent Database developed by Iowa State University. It is an informational resource to Veterinary Diagnostic and Toxicology Service Laboratories on the analytical toxicology capabilities at Veterinary Diagnostic Laboratories. The database has interfaces for search and retrieval of information, with a primary index of "toxicant." Information about the agent that can be input into the database includes description with aliases, matrix, lab, turn-around-time, detection limit, cost, point-of-contact ("expert"). Anyone wishing to view the database should contact Dr. Gary Osweiler at osweiler@iastate.edu.

Dr. Lenn Harrison updated the group on the Mare Reproductive Loss Syndrome (MRLS) that occurred in Kentucky. MRLS reoccurred in 2002 on April 26, last year (2001) it appeared on April 27. The syndrome is associated with the presence of the tent caterpillar. Nitrate from fertilizer and 4 other etiologies suggested last year have been essentially ruled out. Research has shown mares exposed to tent caterpillars and/or caterpillar frass caused 7 of 9 mares to abort; none of the controls aborted. Late-term abortions occurred in 6 treated mares 68 hrs after receiving tent caterpillars feeding on cherry trees with no loss in controls. These experimental cases did not involve *Streptococcus* or *Actinobacillus* infections, as have natural cases, which may have something to due with differences in the environment. Attempts to find a laboratory animal model for MRLS has been unsuccessful thus far. It has been recommended

cherry trees be removed from horse farms or sprayed with Bt or Seven. Research continues looking for cyano compounds that may be involved in MRLS.

Dr. Merl Raisbeck presented results of the selenium interlaboratory collaborative study conducted by nineteen laboratories throughout the US. Matrices included blood, liver, forage, and hair. Methods used included hydride generation using AAS or ICP, ICP/MS, graphite furnace AAS, GC / ECD and fluorescence. Significant improvement in laboratory result conformity was found over results of a similar study done approximately ten years ago. The difference between methods was significant, especially on samples with low concentration. The committee decided that there was room for improvement and decided to repeat this study within the next few years. Contact Dr. Raisbeck for specific information or willingness to participate in the upcoming study.

Informal reports by representatives from various states indicated aflatoxin and fumonisin concentrations in corn rival those found in 1989, with Texas and Illinois reporting the highest concentrations. North Dakota reported finding trichothecenes and zearalenone in timothy hay from Canada. Many states reported they had very little information on mycotoxin contamination in their states because individual elevators and coops did on-site testing. Meeting attendees reported producer contacts that suggested financial ruin from high aflatoxin concentrations, which resulted in conditions of no sale. For this reason the committee invited a noted researcher in the area of aflatoxin control to speak about prevention of aflatoxin toxicosis.

Dr. Tim Phillips, Texas A&M, is a noted long time investigator on the effects and control of aflatoxin and discovered the aflatoxin binding capacities of NovaSil[®]. His lecture and discussion was sponsored by Trouw Nutrition USA, Highland, IL. Aflatoxin was once considered a storage problem, however, it is also formed in the field. Drought and insect damage enhance mold growth and the development of aflatoxin. Problems associated with aflatoxin occur worldwide in virtually all animal species as well as humans. A common problem is the aflatoxin M, residue in milk when the total dairy cattle feed concentrations exceed approximately 40 ppb. Solutions to aflatoxin contamination include prevention of damage to grain, proper storage of grain, chemical degradation (decontamination), dietary chemoprotection, and detoxification with adsorbent clays. In years of high aflatoxin contamination, we in the livestock health profession are bombarded with questions regarding effective methods for the use or sale of contaminated grains. Claims regarding the efficacy of various agents (e.g., clays or bentonites, etc.) reverberate through the agriculture community. NovaSil®, a feed additive approved for improvement of feed flow, has been found to bind aflatoxin in feeds in the presence of moisture. This agent provides no effect or benefit for any other known mycotoxin problem. It has been shown to be effective down to 0.25% in the diet, but lower concentrations are hard to incorporate homogeneously. Protection provided (by the prevention of intestinal toxin absorption) in the ruminant is less pronounced than in the monogastric animal, but it is routinely used for dairy cattle to reduce AFM, contamination in milk. Adsorption of nutrients by NoviSil® has not been observed. It was emphasized that quality control during production is very critical for these adsorbents. For additional information visit Dr. Phillips Website at www.cvm.tamu.edu/tphillips.

Members of the steering committee are elected for three-year terms. The four new members elected this year include: Dr. Catherine Barr, TX VMDL, College Station, TX. Dr. Gene Niles, Centralia Animal Disease Lab, Dept of Ag, Centralia, IL. Dr. Michelle Mostrum, NDSU VDL, Fargo, ND. Dr. Wilson Rumbeiha, MSU AHDL, East Lansing, MI. Dr. Brent Hoff (Animal Health Laboratory, University of Guelph) was elected co-chair of the committee and will assume the chair after next year.

Two years remaining on the terms of: John Reagor, Dan McGinnis, Frank Galey, and Larry Thompson One year remaining on the terms of: Mike Murphy, Birgit Puschner, and George Rottinghaus (Chair)

Liaison: AOAC, Frank Ross FDA – Randall Lovell ABVT – Bob Poppenga AAVCT – Catherine Barr

VIROLOGY COMMITTEE

David A. Benfield and Fernando A. Osorio, co-chairs. October 19, 2002 1:00 to 4:00 PM.

Attendance: Estimated maximum 70. Sixty individuals signed the sheet.

Opening remarks: D. Benfield welcomed all to the meeting and introduced the co-chairs. He stated the purpose of the meeting and presented some brief remarks on how recent bioterrorism events have impacted veterinary virologists. He especially requested that virologists be both scientifically and politically active in assisting the government in producing proper regulatory guidelines related to infectious agents and access to these organisms.

PRRSV PCR detection in semen subcommittee: Subcommittee members are D. Benfield (chair), J. Christopher-Hennings, K. Rossow, K-J Yoon, L. Sperati and R. Pogranichni). Three presentations related to the detection of PRRSV by PCR in semen were presented. "Optimization and utilization of PCR for the detection of PRRSV in the boar" was presented by Dr. Jane Christopher-Hennings, Animal Disease Research and Diagnostic Laboratory, South Dakota State University. Dr. Hennings discussed past and published

data related to experimental and natural infections in boars. In general, boars tend to shed virus in semen for an average of about 35 days post inoculation (range 4 to 92 days). The reverse-transcriptase polymerase chain reaction (RT-PCR) uses an ORF 7 primer to detect viral nucleic acid in semen. The test sensitivity is approximately 10 TCID₅₀ and this correlates very well with the most sensitive infectivity test: swine bioassay. The nested RT-PCR is much more sensitive than the outer RT-PCR. Dr. Hennings also indicated that early in infection, PRRSV is present in both semen and serum, later in semen and then predominantly sporadic shedding in semen with persistence in various lymphoid organs. Overall, semen is a better diagnostic sample than serum, as this sample is usually available with frequency in boar studs and PRRSV nucleic acid is more consistently detected in semen for a longer period of time than in serum.

"Application of TaqMan in Veterinary Diagnostics" was presented by Dr. Kurt Rossow, Department of Diagnostic Investigation, College of Veterinary Medicine, University of Minnesota. Dr. Rossow summarized the basic reasons for using PCR tests in clinical diagnostic medicine. Critical parameters in test development include: sensitivity, specificity, field sample validation, number of samples needed to test to achieve constant results, sample stability (how to ship, store), verify what is amplified by sequencing of PCR products and the need to constantly monitor the system. He also commented that practitioners have many misconceptions and myths related to PCR. These include that the test is too sensitive; there is a need to see antigen in lesions for it to be meaningful and that PCR detects infection often when no disease is observed. Specifically, he shared Minnesota's experience with the TaqMan PCR system using the ORF 6 primer to detect North American and European isolates of PRRSV. The sensitivity of this assay is 10 TCID_{so}/ ml and the test is designed to detect both U.S. and European isolates. In regards to sample handling, Dr. Rossow recommends: refrigeration for serum or semen samples; serum separator tubes are permissible; let lab pool the samples; PRRSV viral nucleic acid detectable in serum and semen stored at 4 C for at least 7 days. Every positive serum sample is tested twice. False positive rate of TaqMan for PRRSV is 0.1%. The average amount of PRRSV in semen detected by TaqMan PCR is 100 to 300 TCID_{s0}/ml. Highest titer in semen was 4,666 TCID_{so}/ml. Overall, TaqMan is suitable for diagnosis of PRRSV. Advantages include improved sensitivity over conventional methods of viral detection, rapid turn around time and interpretation same as for any other positive/negative diagnostic assay. Semen sampling is more advantageous than serum for detection of PRRSV; testing of semen provided added means of protection for boar studs and purchasers of semen; use PCR routinely to monitor negative boar studs; 1-2 ml of raw semen appropriate sample and PRRSV RNA is stable in semen long enough to allow repeat testing of positive sample.

"Efforts to commercialize real time PCR for PRRSV" was presented by Johnny Callahan from Tetracore, Inc (Gaithersburg, MD). These studies were done in collaboration with South Dakota State University (J. Christopher-Hennings and Eric Nelson), the University of Nebraska (Fernando Osorio, Judi Galeota) and PIC USA (Montserrat Torremorell). This idea originated from discussion of diagnosticians with representatives of Tetracore at the 2001 AAVLD Virology Committee meeting. Goals of Tetracore are to: 1) Develop a real-time PCR for PRRSV to detect the North American and European isolates in semen; 2) Achieve a sensitivity similar to the RT-PCR assay used at South Dakota State University; 3) Test specificity of 100%, with no false positives; 4) Test available in multiple platforms used for PCR amplification (cycler platform specific) with platform specific reaction vessels; 5) Test reagents vitrified; and 6) Test used targeted for diagnostic laboratories, semen suppliers and research laboratories. Currently, Tetracore has met the sensitivity and specificity of the RT-PCR for both North American and European isolates of PRRSV. Plan further experiments to improve sensitivity for low-titer samples and to determine specificity of test using other arteriviruses and common viruses that infect swine. Phase II of the project is scheduled to begin in January 2003 and will include an experimental animal study using the boar model developed at South Dakota State University. This will involve additional sensitivity and specificity studies detecting PRRSV RNA in semen, serum and tissues. These studies will also establish the negative predictive value of the test and specificity of assay for negative samples. Additional studies on reagent shelf life and kit format are also planned. Assay format of commercial kit will include single tube; rapid assay completed in less than 2 hours; dried reagents; a reagent shelf life of at least one year; results that can be transmitted via Internet; and a kit that generates less waste than standard RT-PCR method. Estimate a 6-9 month timeline for release.

NVSL Report. Dr. Bev Schmitt presented the annual report from NVSL virology "NVSL highlights – Master plan". Major activity in past year in designing new facilities for animals and laboratories at NVSL. Contractor selected for the BSL 3AG animal facility with construction to start next year. The National Animal Health Laboratory Network was established with 12 laboratories. The principal goal of this network is to provide surge capacity to NVSL in event of a national emergency and to assist in disease surveillance. Currently, NVSL is targeting which diagnostic tests will be used at these laboratories through several ongoing discussions with the 12 labs. New regulations are being drafted and implemented by the federal government related to shipment of pathogens to and from federal facilities. Shipment of pathogens to NVSL will require an NVSL issued permit and NVSL will be drafting a document related to shipping specimens. Reminded us of the select agent registration requirement by HHS and USDA. Dr. Schmitt then reviewed some of the diagnostic activities at NVSL for the past year. Outbreak of low pathogenic A1 strain of avian influenza (H7N2) in Virginia. Using the human RAPID kit for influenza detection due to volume of samples (40,000 total). Recent outbreak of Newcastle disease in fighting game birds in California. Increased testing of species for West Nile virus (WNV) and antibodies to this virus. Surprising swift movement of WNV across United States this past summer and fall. NVSL tested 7,000 equine samples from July 2002 to present

using the IGM capture ELISA for antibodies and a multiplex PCR for eastern equine encephalitis (EEE)/WNV). Results of PCR indicated 216 samples were positive for WNV and 7 for EEE.

BVDV Diagnostic Subcommittee. Subcommittee members include: E. Dubovi (chair), J. Evermann, F. Osorio, J. Ridpath, J. Saliki and D. Weinstock. Ed Dubovi presented a summary of discussions related to BVDV diagnostics. Diagnostic tests currently being evaluated are virus isolation, microplate virus isolation, antigen-capture ELISA, RT-PCR, immunohistochemistry and viral neutralization. The subcommittee will put together specific examples of how these tests can best be done. Virus isolation is the "old gold standard" and is influenced by the volume and fluid capacity of plastic vessels used for indicator cells. Bovine turbinate and bovine testicular cells are more sensitive than fetal bovine kidney and Madin-Darby bovine kidney cell lines. BVDV will propagate to titers of 10⁸ in turbinate and testicular cells compared to 10⁶ for kidney cells. Overall, turbinate cells appear to be the most sensitive. Diagnostic laboratories can offer a quality test for BVDV but practitioners need to be educated on how to best use the test results from the laboratory. Dr. Dubovi indicated that the quality of BVDV diagnostic tests is not the cause of failure to control BVDV.

The second part of Dr. Dubovi's presentation was sharing data on WNV serology from the New York State Animal Disease Health Laboratory. Compared the "gold standard" plaque reduction neutralization test (PRNT) to a microtiter serum neutralization (MTSN) assay. Results indicated 100% correspondence between positive and negative samples; higher neutralization endpoints with the MTSN; and the MTSN was not useful for detection of St. Louis encephalitis virus. Horses develop high antibody titers (512 to 38192) and 90% of clinically ill horses are IgM positive. Among other species: 23/197 canines positive (titer range 512 to 38185); 1/27 felines (titer 80); 3/11 bovines (3 128); one camelid test positive at a titer of 4096; 1/20 reptiles tested had a titer of 640 and no ovine samples (0/26) were positive for WNV antibodies.

Virology quality assurance and quality control guidelines for accreditation of veterinary diagnostic laboratories. This subcommittee includes J. England (chair), G. Erickson, R. Mock, R. Maes, F. Osorio and K-J Yoon. Fernando Osorio presented the contents of a first draft of QA/QC guidelines prepared by this committee. A copy of the report was handed out to all audience participants. Veterinary virologists are asked to review the guidelines and respond to Dr. Osorio with suggestions/comments/corrections.

Future assignments. PRRSV PCR subcommittee will prepare RT-PCR and TaqMan PCR protocols for detection of virus in semen and distribute to diagnostic laboratories. BVDV subcommittee will continue assignment to review protocols related to detection of virus and antibodies and recommend standard procedures. Attendees and AAVLD members at large are to provide the QA/QC committee with suggestions for the draft report on accreditation criteria (Copies can be requested to Dr. Osorio: fosorio@unl.edu). Committee members consider topics to be addressed at next year's meeting.

Osorio will conact the committee members for election of a co-chair for a new term, (Dr Benfield position)

August 2002 AAVLD Anthrax Survey Results

There were 40 respondents from 36 of the 40 states surveyed and one Canadian province.

Seventeen of 40 laboratories performed anthrax testing on samples other than animals during the Fall 2001- Winter 2002.

This testing was performed by the following number of laboratories on each sample type: Environmentals-16 Food-3; Other-2 labs The source of requests to perform this testing was as follows (note some labs had requests from more than one agency):

Local/county law enforcement: 10 labs
University: 4 labs

Federal or state law enforcement: 2 labs
Federal agency but not law enforcement: 1 labs

Fourteen of 40 laboratories perform definitive anthrax testing as defined by CDC (DFA, gamma phage, Real time PCR).

Eight of 39 laboratories stated they had a BL3 testing area in which to perform the work An additional 6 laboratories had facilities under construction or renovation and one will have access to facilities in the future. Fourteen did not have BL3 facilities, access or plans to construct them at present.

Compiled by Pat Blanchard, immediate Past President of AAVLD. Address questions to pcblanchard@ucdavis.edu

July 2001 Survey of Vet Diagnostic Laboratories on bioterrorism agents

compiled by Dr. Bruce Akey

31 states responded.

Percent of the 31 laboratories that had diagnosed the following agents in 1-year, in 5 years and that had diagnostic capability to do so.

Agent	% diagnosed in 1-yr	% diagnosed in 5-yrs	% with capability
Bacillus anthracis	19%	35%	97%
Francisella tularensis	48%	74%	100%
Yersinia pestis	16%	26%	90%
Clostridium botulinum	39%	48%	61%

AAVLD 2003 COMMITTEES

Standing Committees Accreditation Awards Credentials Editor and Editorial Board, JVDI

Editor, Newsletter Membership

Nominating Program **Publications** Web Editor

AAVLD Representative to WAVLD Assoc of Public Health Labs-Liaison

AAVLD/USAHA Animal Disease Information Sys:

Chairs **EMAIL** thackerl@purdue.edu

Leon Thacker- 2003 Pat Blanchard 2003 Gary Osweiler - 2003 John Kreeger, editor Pat Blanchard - 2003 Gary Osweiler - 2003

Richard Mock co-chair 2003

Pat Blanchard 2003 Willie Reed, chair - 2003 David Steffen - 2003 Gary Osweiler - 2003

rmock@tvmdl.tamu.edu pcblanchard@ucdavis.edu reed@ahdlms.cvm.msu.edu dsteffen@unlnotes.unl.edu osweiler@iastate.edu

pcblanchard@ucdavis.edu

pcblanchard@ucdavis.edu

osweiler@iastate.edu

osweiler@iastate.edu

tfm@vetmed.wsu.edu

kreegerj@missouri.edu

Special Committees

Administrative Management Personnel Committee: AAVLD Approved Methods Committee

Terry McElwain – 2003 Pat Blanchard 2003 Linda Henrickson –2003 Barbara Martin-2004

pcblanchard@ucdavis.edu yankovil@purdue.edu

barbara.m.martin@aphis.usda.gov

AAVLD/USAHA Aquaculture Cte.

AVMA Liaison

Bacteriology Steering Committee

Subcte on Antimicrobial Susceptibility Testing

Subcte on Bacteriology and Mycology

Constitution, Bylaws and Resolutions House of Delegates Parlimentarian

Emergency Management Planning Workgroup

Enteric Diseases Committee Epidemiology Committee

Financial Advisory Committee Food Safety Committee Foundation Committee Government Relations Informatics Committee

Laboratory Directors Committee

Laboratory Safety/ Waste Disposal Committee:

Long Range Planning Committee

Pathology Committee

Quality Managers Committee

Serology Committee

Veterinary Analytical Toxicology & Mycotoxin:

Virology Committee

USAHA Co-Chair Bruce Akey co-chair -05 Randy White co-chair- 03 (AAVLD) Scott LaPatra, co-chair 03 (USAHA)

Don Lein - 2003

AAVLD Co-Chair Francois Elvinger co-chair-05

Carol Maddox, co-chair 2004 Linda Schroeder-Tucker, co-'05 Deepanker Tewari co-chair-'03 Ching Ching Wu, co-chair-2004 Brenda Love co-chair - 2003 William Fales co-chair- 2004 Dave Steffen, chair-2005 John Andrews - 2003 John Andrews -2003 Chobi DebRoy-2004

Mark Thurmond, co-chair-2003 François Elvinger, co-chair-2004

Leon Thacker - 2003 Richard Oberst - 2004 Barbara Powers-2004 Bruce Akey chair - 2003 James Case - 2003

Gary Osweiler-co-chair 2003 Beverly Byrum-co-chair 2004 Larry Thompson co- 2003 Beth Henricson - 2004 Pat Blanchard-2003 Donal O'Toole - 2005 Monte Reimers - 2004 Peter Wright - 2003 George Rottinghaus -2003

Brent Hoff co-chair-2005 Fernando Osorio co-chair - 2003

co-chair 2005 pending

elvinger@vt.edu bakey@vdacs.state.va.us whiter@purdue.edu scottl@clearsprings.com dhl10@cornell.edu maddox@uiuc.edu

linda.c.schroeder-tucker@usda.gov

dtewari@state.pa.us wuc@purdue.edu bcl10@psu.edu falesw@missouri.edu dsteffen1@unl.edu jandrews@cvm.uiuc.edu jandrews@cvm.uiuc.edu chobi@psu.edu

mcthurmond@ucdavis.edu

elvinger@vt.edu thackerl@purdue.edu oberst@vet.ksu.edu

bpowers@vth.colostate.edu bakey@vdacs.state.va.us jtcase@ucdavis.edu osweiler@iastate.edu byrum@odant.agri.state.oh.us

ljthompson@tifton.cpes.peachnet.edu

bhenricson@vdacs.state.va.us pcblanchard@ucdavis.edu

DOT@uwyo.edu mreimers@msu.edu pwright@inspection.gc.ca rottinhausg@missouri.edu bhoff@lsd.uoguelph.ca fosorio@unl.edu

CALL FOR PAPERS

46th Annual AAVLD Meeting, October 9-16, 2003

Deadline for Abstracts: MAY 15, 2003

Papers and posters are being solicited on laboratory procedures, techniques, and research that apply to the activities of veterinary laboratory diagnosticians. Papers and posters from all diagnostic laboratory disciplines and animal species are needed for a well-balanced program. Investigative case reports are appropriate and encouraged. Presentations are limited to 15 minutes. The AAVLD Program Committee will review abstracts. Corresponding authors will be notified of acceptance by July 15, 2003.

FORMAT: Send as an e-mail attachment or a hard copy and disk with the abstract (in Word 6.0 or older or Word Perfect 6.1 or older). All abstracts should be one page or less. Format the body of the abstract with one-inch margins using Times New Roman 11-point font. Center and bold the title. Center authors below the title with initials followed by last name. Place location of authors one line below the body of the abstract text. Abstracts should be accurate and complete. Statements such as "results to be discussed" are not acceptable. Previous meeting proceedings should be examined for style.

When submitting your abstract, please provide all of the following information:

- [1] whether you plan to use an LCD computer presentation;
- [2] whether the submission is to be considered for the graduate student competition;
- [3] whether you desire an oral presentation, poster, or either;
- [4] what disciplinary session you prefer (microbiology, toxicology, pathology, epidemiology, avian/aquatic); and
- [5] the name, address, phone, fax, and e-mail address of the corresponding author.

AAVLD Foundation Graduate Student Awards of \$500 each are given for best poster and best presentation. Note: Graduate student presentations must be indicated on the abstract to qualify.

Submit abstracts to: Dr. Willie M. Reed, Diagnostic Center for Population and Animal Health, Michigan State University, B645 West Fee Hall, East Lansing, MI 48824-1315; Phone 517-353-0635, Fax 509-335-7424, e-mail reed@dcpah.msu.edu.

Publication of Proceedings: Manuscripts are encouraged for all papers and posters selected for presentation at the annual meeting. Those accepted by the editor after scientific peer review will be published as refereed journal articles in the *Journal of Veterinary Diagnostic Investigation*. Guidelines for format and style of manuscripts can be found in the journal. Authors are encouraged to submit their manuscripts to the editor for processing prior to the meeting, if possible.

SATURDAY HISTOPATHOLOGY SLIDE SEMINAR

October 11, 2003, San Diego, CA, 3:30-6:00 pm.

Short, interesting, and educational cases are requested for the Saturday Histopathology Slide Seminar. We particularly welcome submission of challenging, cautionary or emerging disease entities where feedback is sought. Presentations are 5 minutes in length, with another 3 minutes for discussion. A copy of abstracts will be available at the seminar, and posted on the AAVLD website. Abstracts should be no more than one page long, single-spaced in 11 pt Times New Roman font

DUE DATE for submission of abstracts and HE slide: July 5, 2003

Please mail the typed abstract and one HE slide of the lesion to:

Dr. Sheila Grimes, Ohio Department of Agriculture, 8995 E. Main St., Reynoldsburg, OH 43068-3399, grimes@odant.agri.state.oh.us phone: 614-728-6300 and email copy of abstract to: Dr. Tanya Lemire, South Dakota State University, ADRDL, Box 2175, North Campus Drive. Brookings, SD 57007-1396. ph 605-688-5643, emailto:Tanya_Lemire@sdstate.edu

If multiple authors are on the abstract, please identify which individual will make the presentation. Authors will be **notified** of whether the presentation **is accepted by August 1**. Presenters of accepted abstracts must supply a set of 60 glass slides to the moderator by September 1, 2003 to allow review of slides by AAVLD members before the meeting. Please note: the session this year has an afternoon time slot.

DIAGNOSTIC BACTERIOLOGY CASE PRESENTATIONS

October 11, 2003, San Diego, CA, 3:30-6:00 pm

Come and join an interesting and informative discussion group. We need your case presentations in order to make this gathering a success. All presentations are informal – yours will be welcome! Send **title of presentation** to Dr. Karen Post at karen.post@ncmail.net or phone 919-733-3986 or fax 919-733-0454 by **September 1, 2003**.

AAVLD TRAINEE TRAVEL AWARD

The American Association of Veterinary Laboratory Diagnosticians is soliciting applications for Trainee Travel Awards. These \$500 awards are open to applicants from all training programs in diagnostic medicine to help defray the cost of travel and lodging to the Annual AAVLD meeting. The successful applicant must be primary author of a platform or poster presentation in the scientific session of AAVLD and must submit:

- 1) copy of the abstract to be submitted; 2) a letter stating why the applicant is interested in attending the meeting,
- 3) a 1 page biographical data sheet; and 4) two letters of support from AAVLD members.

The application materials must be mailed or faxed to: Dr. Pat Blanchard, California Animal Health and Food Safety Laboratory System, 18830 Road 112, Tulare, CA 93274 or FAX: 559-686-4231

The deadline for receipt of all application materials is May 5th, 2003. The letters of support should be sent with the application and not sent separately. Email applications WILL NOT be accepted. The interest statement (maximum of one page) MUST NOT have the candidate's name or affiliation on it except for a signature and date at the bottom of the page. Applicants who do not submit complete applications before the deadline or whose applications do not adhere to the above guidelines will not be considered.

AMERICAN ASSOCIATION OF VETERINARY LABORATORY DIAGNOSTICIANS TRAINEE TRAVEL AWARD

		Deadline for	Applications	s: Monday, M	Iay 5th, 2003	
Trainee Travel						
				_	*	fering competitive \$500
	to offset travel ex	*		_	C	
					Immunology	
Diagnostics	_ Pathology	Toxicology _	_ Virology_	Other (wri	te in)	
Candidate name	:					
					of years in position:	
Institution:						
Address:						
City, State, Zip:						
Phone:	Fax:_		E-ma	ail:		
Abstract Title (a	attach copy of abs	tract) :				
Recommendation Name						
Position:				Me	ember AAVLD?	
Recommendation Name						
Position:				Me	ember AAVLD?	

Statement of Interest

(see instructions. Use separate page from above with signature and date at bottom)

FUTURE MEETINGS

December 7-11, 2002: American College of Veterinary Pathologists (ACVP) 53rd Annual Meeting and the 37th Annual Meeting of the American Society for Veterinary Clinical Pathology (ASVCP). Fairmont Hotel, New Orleans, Louisiana. For more information contact ACVP ph: (608) 833-8725 ext.145; Email: sphelps@reesgroupinc.com; or http://www.acvp.org

January 9-10, 2003. NCCLS Subcommittee on Veterinary Antimicrobial Susceptibility Testing will be held at the Hyatt Regency Westshore Hotel, Tampa, Florida. For further meeting information contact the NCCLS Exec Offices at 610-688-0100.

February 17-20, 2003, **Western Veterinary Conference**, **75th Diamond Jubilee** at the Mandalay Bay Convention Center, Las Vegas, Nevada (www.mandalaybay.com). For more information see web site at: http://www.westernveterinary.com/.

April 6-10, 2003, **NIAA Annual Meeting 2003** at the Westin, Cincinnati, Ohio, (513) 852-2723. For further information see the website at: http://animalagriculture.org/annual meeting/Annual Meeting.asp

April 9, 2003. International Society of Veterinary Dermatopathology annual meeting in conjunction with the meeting of the American Academy of Veterinary Dermatology and American College of Veterinary Dermatology (April 9th - 12th) in Monterey, California. Abstract deadline for the Brief Communication session is December 15th, 2002. Information regarding membership and goals of the ISVD, and program details, can be obtained at the website http://www.vetcutis.freeserve.co.uk Meeting registration information can be obtained from Emily Walder (ejwalder@gte.net)

April 26-30, 2003, **4th International Conference on the Molecular Biology and Pathogenesis of the Clostridia** in Woods Hole, MA. Information, including a preliminary program, can be accessed at www.ouhsc.edu/cp2003/. Note that there will be an animal disease session and a workshop.

May 6-22, 2003, **OIE Veterinary Biologics Training Program**, ISU, College of Veterinary Medicine, Ames, Iowa, USA. Web site: http://www.vm.iastate.edu/services/institutes/iicab/vbtp03.html

June 4-6, 2003. Containment Level 3 Facilities: Design and Operation in Ottawa, Ontario. Contact Andréanne Bonhomme, Tel (613) 957-1779, Fax (613) 941-0596, andreanne_bonhomme@hc-sc.gc.ca and/or Elizabeth Rohonczy, Tel (613) 225-2342 ext 3702, Fax (613) 228-6129, RohonczyL@inspection.gc.ca. Hotel Reservations: COURTYARD Marriot Ottawa, (613)-241-1000, Code: "OLS". Objective: participants will be familiar with the design and operational concepts associated with the Canadian Level 3 laboratories. Lectures, delivered by experts in the biosafety field, as well as small group exercises will be used to outline the process from inception to certification. • Discussion of the Canadian containment standards, both Health and Agricultural will also be covered.

June 22-26, 2003, 11th International Symposium of the **World Association of Veterinary Laboratory Diagnosticians and OIE Seminar on Biotechnology** at the Sofitel Central Plaza, Bangkok, Thailand. For more information see the website http://www.tavld.or.th/symposium/ or email Dr. Kunavongkrit at annop.k@chula.ac.th or Dr. Prachak at prachak@mail.car.chula.ac.th Reduced rate preregistration deadline January 31, 2003.

July 17-18, 2003, **Diseases at the Interface Between Domestic Livestock and Wildlife Species**, Scheman Conference Center, Ames, Iowa, USA. Web site: www.nadc.ars.usda.gov/events

September 18-21, 2003, 4th International Conference on Emerging Zoonoses, Scheman Conference Center, Ames, Iowa, USA. Web site: www.zoonoses2003.com

October 9-16, 2003, American Association of Veterinary Laboratory Diagnosticians (46th annual) and United States Animal Health Association (107th annual) meeting at the Town and Country Hotel in San Diego, CA.

For those interested in learning more about laboratory quality and networking with QA professionals, visit the web site of the **Society of Quality Assurance (SQA) at** www.sqa.org. You do not have to be a member of SQA to log onto the site. This web site lists information about regional chapters and specialty subsections, **upcoming meetings**, links to government sites regarding quality. AAVLD members can partake of free/inexpensive networking and training at regional chapter meetings.

THANK YOU TO OUR 2002 MEETING EXHIBITORS

Exhibitors are vital to the financial and scientific success of our annual meeting by providing funding to offset costs, food and beverages for the exhibit hall and most of all providing attendees the latest information on their upcoming and current product lines. Their support over the years has allowed the meeting to grow and kept the registration fees relatively low. We wish to express our heartfelt appreciation to all these companies for their continued support. The following information with web site links and brief descriptions on the 2002 exhibitors can now be found at: http://www.aavld.org/MainMenu2/vis_frame.html (under Veterinary Products on our web page)

- Allied Monitor, Inc. P. O. Box 71, 201 Golden Dr., Fayette, MO 65248. Ph: 660-248-2823; Fax: 660-248-1334; E-Mail: allied@coin.org; Web Site: http://www.alliedmonitor.com/
- Automated Technologies Inc. 1663 S. Atherton St., Suite 3, State College, PA 16801. Ph: 814-237-3001; Fax: 814-237-3236; E-Mail: jrakl@atiinternational.com; Web Site: http://www.atiinternational.com/
- BD Diagnostic Systems 7 Loveton Circle, Sparks, MD 21152. Ph: 800-638-8663; Fax: 410-316-4906; Web Site: http://www.bd.com/
- Biocor Animal Health 2720 N. 84th St., Omaha, NE 68134. Ph: 402-393-7440; Fax: 402-393-3455; E-Mail: tkellner@biocorah.com; Web Site: http://www.biocorah.com/
- Centaur, Inc. P. O. Box 25667, Overland Park, KS 66225-5667. Ph: 913-390-6184; Fax: 913-390-5907
- Cepheid 904 Caribbean Dr., Sunnyvale, CA 94089. Ph: 408-400-8417; Fax: 408-734-1260; E-Mail: hamilton@cepheid.com; Web Site: http://www.cepheid.com/
- Global VetLink, L.C. 2625 N. Loop Dr. #2130, Ames, IA 50010. Ph: 515-296-0860; Fax: 509-691-8647; Web Site: http://www.globalvetlink.com/
- IDEXX Laboratories, Inc. One Idexx Dr., Westbrook, ME 04092. Ph: 207-856-8045; Fax: 207-856-8399; E-Mail: erica-archer@idexx.com; Web Site: http://www.idexx.com/
- National Institute for Animal Agriculture (NIAA) 1910 Lyda Ave., Bowling Green, KY 42104. Ph: 270-782-9798; Fax: 270-782-0188; E-Mail: plogsdon@animalagriculture.org; Web Site: http://www.animalagriculture.org/
- Neogen Corporation 628 Winchester Rd., Lexington, KY 40505. Ph: 800-477-8201; Fax: 859-255-5532; E-Mail: estanley@neogen.com; Web Site: http://www.neogen.com/
- Ross Group, Inc. 1435 Research Park Dr., Dayton, OH 45432-2842. Ph: 937-427-3069; Fax: 937-427-1488;
 - E-Mail: david.schroeder@rossgroupinc.com; Web Site: http://www.rossgroup.com/
- Saunders-Mosby 3127 Old Glenview Rd., Wilmette, IL 60091 Ph: 847-920-1380; Fax: 847-920-1380
- Synbiotics Corporation 11011 Via Frontera, San Diego, CA 92127. Ph: 858-451-3771; Fax: 858-451-5719; E-Mail: cathy@synbiotics.com; Web Site: http://www.synbiotics.com/
- Syracuse Bioanalytical, Inc. 23 Corporate Circle, East Syracuse, NY 13057. Ph: 315-463-2003; Fax: 315-463-2004; E-Mail: syrbio@aol.com; Web Site: http://www.vetdiagnostics.com/
- Trek Diagnostic Systems, Inc. 25760 First St., Westlake, OH 44145. Ph: 440-808-0000 x 205; Fax: 440-808-0400;
 - E-Mail: jlorbach@trekds.com; Web Site: http://www.trekds.com/
- Wentana Medical Systems, Inc. 1910 Innovation Park Dr., Tucson, AZ 85737. Ph: 800-227-2155 x 3867; Fax: 520-229-4203; E-Mail: thaikara@ventanamed.com; Web Site: http://www.ventanamed.com/
- Wiral Antigens, Inc. 5171 Wilfong Rd., Memphis, TN 38134. Ph: 901-382-8716; Fax: 901-382-0027; E-Mail: vai@viralantigens.com; Web Site: http://www.viralantigens.com/
- VMRD, Inc. 4641 Pullman-Albion Rd., Pullman, WA 99163
 Ph: 509-334-5815; Fax: 509-332-5356; E-Mail: vmrd@vmrd.com; Web Site: http://www.vmrd.com/
- Waste Reduction by Waste Reduction, Inc. (WR2) 5725 W. Minnesota St., Indianapolis, IN 46241 Ph: 317-484-4200 x 110; Fax: 317-484-4201; E-Mail: lwilson@wr2.net; Web Site: http://www.wr2.net/

POSITION ANNOUNCEMENTS

Department Head/Associate Professor of the Department of Pathobiology and Population Medicine at the College of Veterinary Medicine, Mississippi State University. The successful candidate is expected to have demonstrated a strong commitment to and provide leadership for and participate in service, teaching, and research activities of the department. Qualifications include a DVM degree, and advanced degree emphasizing pathology, microbiology, epidemiology, public health and/or production medicine. Board certification in one of the disciplines represented in the department is highly desired. Candidates must have good interpersonal and communication skills. The Department Head reports directly to the Dean of the College of Veterinary Medicine and must maintain a synergistic working relationship with the Executive Director of the Mississippi Veterinary Research and Diagnostic Laboratory System. Salary and rank are commensurate with qualifications. Applications will be **accepted until the position is filled**. Applicants should provide a letter of application (describing interest and professional goals), transcripts, curriculum vitae, and names of three references to: Dr. Phillip Nelson, Associate Dean, College of Veterinary Medicine, P.O. Box 6100, Mississippi State, MS 39762.

Pathologist, Large Animal Anatomic Pathology (Assistant/Associate Professor) in the Department of Pathobiology, University of Pennsylvania, School of Veterinary Medicine. Position is in the Clinician Educator track at its New Bolton Center campus. The individual will have primary responsibility in diagnostic pathology, including necropsy and surgical pathology, and teaching pathology residents and veterinary students. There will be an opportunity for the investigation of spontaneous diseases of large animals and collaboration with other diagnostic specialists. Applicants should have a DVM/VMD or equivalent degree and be board-certified by the American College of Veterinary Pathologists. Salary is commensurate with the applicants training and experience. Interested applicants should send a letter of application, curriculum vitae and the name of 3 references to: Dr. Michael Goldschmidt, Head, Laboratory of Pathology and Toxicology, Department of Pathobiology, School of Veterinary Medicine, Philadelphia, PA 19104-6051; phone 215-898-8977, fax 215-898-0719, email goldsch@mail.vet.upenn.edu. Additional information on the department may be found at http://www.vet.upenn.edu/FacultyAndDepts/Pathobiology/

Assistant Professor of Veterinary Pathology for an anatomic pathologist in the Department of Pathology, College of Veterinary Medicine at The University of Georgia. The position could be tenure-track or clinical-track (non-tenure track). The DVM or equivalent degree and board certification or eligibility in the American College of Veterinary Pathologists are required. A PhD degree or equivalent training in research is required for the tenure-track position. The incumbent will participate in teaching veterinary students, residents, and graduate students in anatomic pathology and share diagnostic pathology service duty. Development of a sustained independent or collaborative research program is expected in the tenure-track position. There is ample opportunity to interact with clinical and basic scientists. Applications received before October 30, 2002 are assured full consideration but the position is open until filled. The position is available January 1, 2003. Interested individuals should submit (1) a letter stating career goals; (2) a current curriculum vitae; (3) the names and addresses of four professional references to: Dr. Barry G. Harmon, Professor and Head, Department of Pathology, College of Veterinary Medicine, The University of Georgia, Athens, Georgia 30602-7388; Phone: 706-542-5831

Veterinary Pathologist, non-tenure track, at the Texas Veterinary Medical Diagnostic Laboratory (TVMDL), an AAVLD-accredited full-service laboratory, will become available in January 2003. Primary responsibility will be to provide necropsy and histopathologic evaluations. The ability to interact, consult and communicate orally and in writing with practicing veterinarians is essential. The successful applicant will assist in maintaining and developing quality assurance of procedures, including immunohistochemistry. Qualifications include a DVM degree and ACVP certification/eligibility or an advanced degree in veterinary pathology. (Temporary employment at 80% is available for individuals desiring time for ACVP certification.) Salary is negotiable depending on the experience, training, and accomplishments of the candidate. Submit a letter of application, recent curriculum vitae and the names and addresses of three references to: Dr. Greg Hall, PO Drawer 3040, College Station, TX 77841-3040.

Veterinary Diagnostic Pathologist at the C. E. Kord Animal Disease Laboratory in Nashville, Tennessee, a full-service AAVLD accredited laboratory. Candidates should possess a DVM or equivalent degree and have completed formal training (residency or graduate program) in anatomic pathology. Responsibilities include necropsy and microscopic examinations with coordination of ancillary laboratory testing. Strong communication skills are required. The ideal candidate will have obtained board certification in anatomic pathology and have experience in diagnostic veterinary medicine. The salary range has been restructured to be competitive with other state/university laboratories and will be commensurate with experience and qualifications. Interested individuals should send a letter of application including a statement of goals, a curriculum vita, and names, addresses and phone numbers of three references to Dr. Ron Wilson, C. E. Kord Animal Disease Laboratory, P.O. Box 40627, Melrose Station, Nashville, Tennessee 37204. Phone #(615) 837-5125, (e-mail ron.wilson@state.tn.us).

Staff Veterinary Pathologist Position in the Department of Pathology of The Animal Medical Center. Primary responsibilities include participation in necropsy services, surgical pathology services, intern and resident teaching, and research activities. Applicants

should be experienced in companion animal diagnostic pathology. Resources for clinical research are abundant. Applicants must possess a DVM or equivalent degree. Certification by the American College of Veterinary Pathologists is preferred, although board eligible candidates will be considered. Salary is competitive and commensurate with qualifications and experience. The Animal Medical Center also offers an attractive benefits package. Applicants should submit a letter stating career interests and objectives, curriculum vitae, and the names and addresses of three references to Dr. Keith Baer, Chairman, Department of Pathology, The Animal Medical Center, 510 E. 62nd Street, New York, New York 10021. Tel.: 212-329-8672, Fax: 212-832-9288, e-mail: keith.baer@amcny.org

Fellowship in Veterinary Pathology at the Zoological Society of San Diego in the Department of Pathology, Center for Reproduction of Endangered Species. Qualifications include a D.V.M. or equivalent degree and completion of a minimum of two years of anatomic pathology residency training. The Fellow will work under the supervision of Board Certified pathologists, providing anatomic and clinical pathology support. There will be opportunities to pursue research interests and/or prepare for the certification exam. The anticipated start date will be in summer of 2003, but is negotiable. This is a 12-month program, with an optional extension for an additional 12 months by mutual agreement. Annual salary is \$40,000 and includes an excellent benefits package. APPLICATION DEADLINE: February 14, 2003. TO APPLY: Send CV, three professional references, and statement of career goals and availability to: the Human Resources Department, P.O. Box 120551, San Diego, CA 92112-0551. www.sandiegozoo.org. Address questions to Bruce Rideout at brideout@sandiegozoo.org, phone (619) 231-1515, ext. 4535.

Veterinary Pathology Residency and Graduate Training in Biodefense and Emerging Diseases in the Department of Veterinary Biosciences at The Ohio State University (OSU) and the Ohio Department of Agriculture Animal Disease Diagnostic Lab (ADDL) for students whose career goals include residency training in veterinary pathology or clinical pathology leading to graduate training to obtain MS or PhD degree. Trainees will acquire a background in molecular biology, pathology, infectious disease, and research design methodology. The training program is coordinated through an established graduate program in the Department of Veterinary Biosciences and the Ohio Department of Agriculture ADDL. The ADDL has ongoing collaborative programs with OSU and USDA APHIS. Trainees will interact with ADDL scientists, USDA/APHIS Foreign Animal Disease specialists and OSU's faculty to identify the range of research needs in the area of emerging diseases and agents of bioterrorism. Stipends begin at \$24,500, and successful applicants will receive a \$2000 bonus to apply toward the cost of educational supplies. Tuition is provided (\$8,184/resident or \$21,612/non-resident per year), and the university will pay \$360 of the cost of student health insurance per year. A DVM from an AVMA-accredited institution and a GRE score are required. Review of applications will begin January 1, 2003 and continue until suitable applicants are selected. Interested individuals should submit a Graduate School application to the Admissions Office of The Ohio State University (http://gradadmissions.osu.edu). A curriculum vitae, statement of career goals, and three letters of reference should be submitted to Dr. Michael Oglesbee, Graduate Studies Committee Chair, Department of Veterinary Biosciences, Ohio State University, 1900 Coffey Road, Columbus, OH 43210-1092. For more information, contact Dr. Oglesbee at (614)292-9672, Oglesbee. 1@osu.edu or visit the department website, www.vet.ohio-state.edu.

Residency/Graduate Study In Anatomic Veterinary Pathology (one or more openings) in the Department of Veterinary Pathobiology and Veterinary Diagnostic Laboratory, College of Veterinary Medicine, University of Illinois available July 2003 for veterinarians interested in applied and/or graduate study in anatomic pathology. The positions will remain open until a suitable candidate is identified. Successful candidates will have the option of an applied program in anatomic pathology leading to eligibility for the certifying examination of the American College of Veterinary Pathologists or a biphasic program of 1) applied training in anatomic or clinical pathology, and 2) study in experimental pathology or a related field leading to the PhD degree. The diagnostic laboratory is a full service AAVLD accredited laboratory. Beginning stipends range from \$23,000 to \$26,000 depending upon experience and are generally provided for three years with both options. Tuition and most University fees are waived, and partial health and hospitalization coverage is included. For further information and/or application forms, contact: Department of Veterinary Pathobiology, University of Illinois, 2001 South Lincoln Avenue, Urbana, Il 61802; telephone 217/333-2449.

Residency in Veterinary Anatomic Pathology in the Department of Pathology of The Animal Medical Center for a three-year residency program, to begin July 2003, designed to prepare the trainee for certification by the American College of Veterinary Pathologists. Residents participate in necropsy and biopsy services, research projects, hospital and departmental conferences, lectures, and seminars. Opportunities also exist for training in laboratory animal pathology, comparative pathology, or collaborative research in the biomedical community. Applicants must possess a DVM or equivalent degree from an accredited institution. Previous pathology and/ or clinical veterinary experience are desirable, but not mandatory. **Deadline for application is Jan 1, 2003**. Applicants should send curriculum vitae, a letter stating career goals and interests, complete transcripts, and three letters of recommendation to Dr. Keith Baer, Chairman, Department of Pathology, The Animal Medical Center, 510 E. 62nd Street, New York, New York 10021. Telephone: 212-329-8672, Fax: 212-832-9288, email: keith.baer@amcny.org.

Clinical/Molecular Toxicologist, faculty position in clinical toxicology in the Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University. This position requires a commitment to research, teaching, and service in the area of diagnostic and clinical toxicology. The incumbent is expected to develop an extramurally funded research program. Applicants interested in toxicogenomics are particularly encouraged to apply. Incumbent will be responsible for the diagnostic toxicology services of the New York State Animal Health Diagnostic Laboratory (AHDL), will represent the AHDL and the Veterinary College on toxicological issues at local, state, and federal levels and expected to establish collaborations to address problems of regional concern. Interaction with veterinarians and livestock producers and participation in clinical and didactic teaching are required. Specific requirements for this position include DVM (or equivalent), MD, and/or PhD (or equivalent) with postgraduate training and experience in veterinary toxicology. Board certification/eligibility in toxicology is desired. The rank and academic status of appointment and salary will be commensurate with qualification and experience of the candidate. Applications will be reviewed until the position is filled. Applicants are asked to submit their curriculum vitae, letter of intent concerning research interests and career goals, and the names and addresses of 3 professional references to: Dr. Hussni Mohammed, Search Committee Chair, c/o Cathy Andersen, Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, S3 110 Schurman Hall, Cornell University Ithaca, NY 14853, www.vet.cornell.edu/public/popmed/jobs/endo.html

Veterinary Toxicology Residency (3-year program) at the California Animal Health and Food Safety Laboratory System, School of Veterinary Medicine, University of California, Davis, **beginning August 1, 2003**. The program provides trainee with broad base in toxicology through diagnostic casework, course work, seminars, and research. The goal of the program is to produce well-trained, board eligible toxicologists. Selection of residents will be based on academic performance, experience, career goals, and letters of recommendation. The current salary for the first year of the residency program is \$34,752. Continuation of the program is contingent upon mutual satisfaction of both the resident and CAHFS. Opportunity to pursue a MS or PhD degree is negotiable upon demonstrated performance. This will require a separate acceptance by the Graduate Division. A DVM or equivalent degree, and excellent communication skills are required. A minimum of 1 year of practice experience is desirable. Interested individuals must request a special application form and prepare to submit (1) a letter of intent stating interests and career goals, (2) a curriculum vitae, (3) transcripts from veterinary schools, and (4) three letters of recommendation to: Sharon Hein, Resident Affairs Coordinator, California Animal Health & Food Safety Laboratory System, P.O. Box 1770, University of California, Davis, CA 95617-1770, (530) 752-8709, e-mail: slhein@ucdavis.edu. Materials are due by December 31, 2002.

Virologist at the Florida Department of Agriculture and Consumer Services, Division of Animal Industry, Bureau of Diagnostic Laboratories, invites applications for the anticipated vacancy of a full-time position as a Diagnostic Veterinarian Manager (Position 01043 - Virologist), at the Kissimmee Animal Diagnostic Laboratory; a full service, all species, AAVLD - accredited facility. Annual salary range is \$24,313.00 to \$97,252.00. The Virologist serves as Chief of the Virology Section and is responsible for the examination of tissues for viral agents and supervises viral serology tests, which requires experience, training and a broad knowledge of viral infectious diseases. Additionally, the virologist will develop new or improved techniques for the diagnosis of viral diseases and interact with veterinarians and animal owners. Minimum qualifications include eligibility for licensure as a veterinarian by the State of Florida in accordance with Florida Statute 474, and completion of at least a Master's Degree in Microbiology (applicants with either board certification and /or a PhD in Microbiology are preferred but not required). This position requires possession of a valid driver's license. Applicants must submit a completed State of Florida Employment Application (available online at www.myflorida.com) by **December 6, 2002** to Dr. John E. Crews, (407) 846-5200 ext 226, at PO Box 458006, Kissimmee, FL34745-8006.

Endocrinologist, tenure-track position, in Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University. A well-trained basic/clinical scientist to fill a predominantly research appointment with additional responsibilities for diagnostic endocrinology in the New York State Animal Health Diagnostic Laboratory (AHDL) will be expected to develop a extramurally funded research program in the broad area of modern endocrinology. The applicant must dedicate a portion of his/her appointment to a University-based diagnostic laboratory environment, and have an interest in applied aspects of veterinary endocrinology in several species. Incumbent will participate in clinical and didactic teaching, and interact with clinical faculty. Applicants must possess a doctoral degree in a biological field (PhD, DVM, MD or equivalent) and postdoctoral training. The level of academic appointment and salary will be commensurate with experience. Applications will be reviewed until the position is filled. Applicants are asked to submit curriculum vitae, letter of intent concerning career goals, and the names and addresses of 3 professional references to: Dr. Hollis Erb, Search Committee Chair, c/o Cathy Andersen, Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, S3 110 Schurman Hall, Cornell University Ithaca, NY 14853, www.vet.cornell.edu/public/popmed/jobs/endo.html

Post Doctoral Research Associate Positions, one in **Molecular Genetics** (development of Real Time PCR assays) and one in **Informatics** (mapping of current medical terminology to standardized nomenclature, 18 month tenures, starting on 1/1/03. Salary: 40-50K. Contact: K. Eugster (979-845-3414 or email at: keugster@tamu.edu) for further information.

Post-doctoral Research Fellow (PhD or DVM/PhD) in Molecular Diagnostics at the Zoological Society of San Diego to join the Molecular Diagnostics Laboratory in the Pathology Department at the Center for Reproduction of Endangered Species in San Diego. The laboratory is dedicated to molecular research and projects center on discovery and characterization of etiologies and mechanisms of emerging and ongoing infectious and genetic diseases in diverse animal species. This is an exempt position with a competitive salary, an appointment for at least 2 years, and is available as early as January, 2003. A strong background and extensive experience in molecular biology is essential. Experience in molecular research of disease is desirable. The **closing date** for receiving applications is **December, 3, 2002**. Interested candidates should send a curriculum vitae with cover letter and the names of at least three references to: Human Resources, Zoological Society of San Diego, CRES, P.O. Box 120-551, San Diego, California, 92112, USA. Questions can be addressed to Bruce Rideout at brideout@sandiegozoo.org, (619) 231-1515, ext. 4535

Supervisory Research Microbiologist/Veterinary Medical Officer at National Animal Disease Center (NADC), Virus & Prion Diseases of Livestock, Ames, Iowa. Salary from \$76,271 to \$116,633 per annum (GS 14/15). Announcement Number: ARS-X2W-2479. Position is open until filled with second cutoff date is November 23, 2002; third is December 23, 2002, fourth is January 23, 2003. U. S. Citizenship required. The mission of the research unit is to conduct basic and applied research on diagnosis, transmission, prevention, control and treatment of viral diseases and transmissible spongiform encephalopathies of food producing animals and wildlife. The incumbent plans, conducts, reports on personal research, guides research programs and supervises scientists within the laboratory, evaluates and recommends or implements changes in programs; formulates and proposes budget and manages facilities and resources. Requires knowledge of microbiology; molecular biology, epidemiology, veterinary medicine and demonstrated research leadership and management skills. For specific questions regarding the research program or this vacancy, call: Dr. Keith Murray, 515-663-7201 or Kmurray@nadc.ars.usda.gov. For full job posting and application procedure see web site at http://www.afm.ars.usda.gov/divisions/hrd/vacancy/resjobs/X2W-2479.HTM. For application procedure only contact Janae Lentz, 515-663-7277.

Food and Water Microbiologic and Chemical Testing Survey Results

This survey was conducted in September 2002 via an email sent to Laboratory Directors. The survey was done in response to inquiries at a national (FDA) and individual states regarding the willingness and ability for veterinary diagnostic laboratories to assist in testing of food or water products for pathogens and chemicals in the event of a catastrophic outbreak of human disease traced to either source. This survey had a generally low response rate compared to other surveys so it may not accurately reflect the capability and interest among veterinary diagnostic laboratories.

There were 18 respondents from 15 of the 45 states surveyed. The questions and summary of responses are as follows:

1. Indicate your involvement in food safety (at harvest or post-harvest) testing of the following products for:

# of labs stating YES:	Biologic agents (bacteria, etc)	Chemical agents	Routine testing	Investigations
Meat and Poultry	13	7	10	5
Milk and Milk products	7	5	4	4
Other non-animal related	d foods 7	5	5	6
Water (for consumption)	6	5	5	5
Water (rivers, etc)	2	2	1	1

2. Are you interested or willing to be part of a national emergency food product emergency testing network for:

Biologic agents (non-bioterrorism) YES-15 Bioterrorism agents YES-14 Chemical agents: YES-9 NO-6

Many veterinary laboratories test grains and other other non-animal source feeds as well as water consumed by animals for toxins, chemicals, fungi or bacteria related to outbreaks of animal disease or toxicoses but only rarely are non-animal related foods tested for human illness investigations. Therefore, a number of responses for water and non-animal related food testing may reflect this purpose since it was not specified for human consumption. However, this does provide information on the numbers of respondents that have experience dealing with this type of sample for both microbiologic and toxicology testing. Natural waterways (river, etc) are most often tested to monitor for environmental contaminants that might affect domestic and wild mammals and birds or aquatic animals rather than for human safety issues. However, the techniques used would also apply for human safety.

Compiled by Pat Blanchard, immediate Past President of AAVLD Any questions or inquires email pcblanchard@ucdavis.edu

AAVLD FOUNDATION DONATION FORM

If you would like to become a Foundation donor fill out the form below and send with check or money order or VISA/MC information to: AAVLD Foundation, PO Box 1770, Davis, CA 95617 (donations are tax deductible)

Please accept this donation of \$ as an expres Veterinary Diagnostic Medicine for unrestricted use.	sion of support in promoting
Please send me additional information on charitable gift or	deferred gift annuity.
Please direct the funds from this gift to the following area(s):
AAVLD Meeting Trainee Travel Award	\$
JVDI Best Manuscript award	\$
Graduate Student Best Poster and Presentation Awar	rds \$
Veterinary Student Externship in a Diagnostic Labora	story \$
Other (specify)	\$
Your name:	
Address:	
City, State, Zip:	
Phone Number:	
Credit card payment (there is a \$2.00 service fee on each credit card tran	saction):
M/C VISA Card#: I	Expiration date:
Signature:	
This gift is in honor of:	



THE AMERICAN ASSOCIATION OF VETERINARY LABORATORY DIAGNOSTICIANS

MEMBERSHIP APPLICATION 2003

Please send payments to: AAVLD, PO Box 1770, Davis, CA 95617 USA

-or-

fax: 530-752-5680

PAYMENTS FOR THE 2003 CALENDAR YEAR ARE DUE BY DECEMBER 1, 2002. Payments received after this date will not be guaranteed all 6 issues of JVDI or inclusion in the membership directory.

	directory.
Please complete all of the following	ng fields. Thanks!
NAME:	
ADDRESS:	
CITY: STATE: ZIP:	
COUNTRY:	
PHONE: FAX:	
EMAIL:	
INTEREST:	DEGREES:
NEW MEMBER: RETURNING Full Membership (\$75.00) Retired Membership (\$25.00) Graduate Student Membership	Resident Membership (\$25.00) *Associate Membership (\$25.00) (\$25.00)
	duced registration fees to the annual meeting, access to the sletter and a membership directory. *Associate Membership does
Payments can be made with US funds by check, M	laster Card, Visa, or international money order.
	1 (a \$2.00 service fee will be added to credit card transactions):
Card No.	Uisa L M/C
Expiration Date S	Signature

Foundation Donation: \$ USD

The AAVLD Foundation is a non-profit foundation which aims to raise funds for the advancement of veterinary diagnostics through scholarship programs, guest lectures, seminars, awards and research programs. Contributions to the Foundation are tax-exempt (501(c)(3)), and can be added to your membership dues.