

December 2004



PRESIDENT GARY OSWEILER

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The American Association of Veterinary Laboratory Diagnosticians

2005 Executive Board

President.....	Gary Osweiler
President-Elect.....	Donal O'Toole
Vice President.....	Barbara Powers
Immed. Past President.....	Willie Reed
Secretary/Treasurer.....	Alex Ardans
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South East.....	Ron Wilson
North Central.....	Dave Steffen
South Central.....	Richard Mock
North West.....	Bill Layton
South West.....	Carlos Reggiardo
Canada Provincial.....	Grant Maxie
Canada Federal, Ex-Officio.....	Shane Renwick
Ex-Officio, NVSL.....	Randall Levings

Table of Contents

President's Message.....	3
Executive Board Minutes.....	4-10
First House of Delegates Meeting Minutes.....	11-12
Second House of Delegates Meeting Minutes....	13
Awardees.....	14
Committee Reports.....	15-41
2005 Committee Chairs.....	42-43
Call for Papers with sample abstract.....	43-44
Diagnostic Pathology Slide Seminar.....	45
Bacteriology Case Presentations.....	45
Future Meetings.....	45
Trainee Travel Award Application.....	46
Exhibitor & Sponsor Thank You.....	47-48
Position Announcements.....	48-55
Bacteriology Discussion List.....	55
Addendum to Directory.....	55
Foundation Donation Form.....	56
Membership Application.....	57

AAVLD PRESIDENT'S MESSAGE

Having been chosen to serve AAVLD in the succession from executive board to president is a privilege that I greatly appreciate and I will do my best to maintain your trust. We have been fortunate to have a succession of visionary and committed leaders that have delivered important initiatives to build upon.

Our conference has concluded with another very busy agenda and scientific program providing 163 scientific and plenary presentations for continuing education of our diverse membership as well as the possibility of serving on some of the 44 standing or special committees or workgroups of AAVLD. This tremendous effort is the result of your talent, dedication and participation. Special mention and thanks to AAVLD and USAHA staff including Linda Ragland, Allison Reitz, Sharon Hein and Donna Dare for their professional work, long hours and prompt response to a variety of needs and issues; to Drs. David Benfield and James Evermann for organizing the AAVLD Plenary Session on TSEs and to the program committee for their editing and suggestions for organizing the scientific program. Both plenary sessions were very well attended and added substantially to our perspective on TSEs and to aspects of surveillance that will challenge us in the future.

We have grown substantially in responsibility and involvement at a national level. Just four years ago that involvement was formalized by completion of a Memorandum of Understanding with NVSL in our respective responsibilities for diagnostics and surveillance. As we entered the new millennium, that beginning provided a basis to support AAVLD current challenges in foreign animal disease readiness, new and emerging domestic disease issues and the threat of bioterrorism related to food animal production. This state - federal interaction provides opportunity and challenge—both of which are important to growth and excellence.

The foresight of our previous leaders brought the opportunity for an expanded and vital role for AAVLD in today's global disease challenges. Three major initiatives support our goals for the future. First, we have upgraded and expanded the accreditation process consistent with OIE and ISO guidelines to enhance quality of service and increase confidence and trust in our services at a national and international level. This renewal appears to be on target and the efforts of the accreditation committee, quality managers, laboratory directors and others is moving this forward. Our second initiative is continued recognition and increased support for the NAHLN; the recent decision by USDA to include many more laboratories in the NAHLN is a hopeful step toward the AAVLD goal of a nationwide network of state laboratories and federal partners supporting excellence in animal disease diagnosis and surveillance. With USAHA, our combined strengths present a more comprehensive animal health package to our federal partners, commodity groups and other animal health groups—public and private. At our 2004 meeting, a resolution jointly drafted by USAHA, AAVLD and AAVMC (American Association of Veterinary Medical Colleges) asked increased support to complete and maintain the NAHLN. Other agencies such as FERN (Food Emergency Response Network) and LRN (Laboratory Response Network) have recognized the role of AAVLD laboratories and our opportunities with those potential partners. Finally, our continued availability to and interaction with governmental agencies will be an important part of our future, and AAVLD will strive to increase our dialog with those groups through the Governmental Relations Committee and our already established interactions with USAHA and other groups.

State laboratories have made effective partnerships with USDA in response to challenges such as END, AI, VS and BSE. At this meeting updated recommendations from the AAVLD Strategic Planning Committee (David Zeman, Chair) and the Emergency Preparedness Workgroup (John Andrews, Chair) provide specific plans for improving our effectiveness and readiness. These reports will be available on the AAVLD web and I encourage you to read them and consider how they impact your state laboratories. The Executive Board in 2005 will continue to build on the three initiatives and these important reports to stay engaged with government and stakeholders to improve animal health response and surveillance.

As we enter the holiday season, we have much to appreciate. Our future holds challenge and promise. We will succeed by using our greatest resource – a committed and engaged membership working together to make it happen. I wish each of you a safe and fulfilling holiday and look forward to working with you this year.

Gary Osweiler, President
515-294-1950 osweiler@iastate.edu

AAVLD EXECUTIVE BOARD MEETING

Friday, October 22, 2004, 1 PM – 5 PM

Sheraton Greensboro Hotel Greensboro, NC

Present: Alex Ardans, Neil Dyer, Sharon Hietala, Bill Layton, Randall Levings, Mitzi Libal, Grant Maxie, Terry McElwain, Gary Osweiler, Donal O’Toole, Barb Powers, Willie Reed, Shane Renwick, Alfonso Torres, Ron Wilson. **Guests:** Pat Blanchard, Richard Mock, Jerry Saliki, Dave Steffen, Leon Thacker

1. The meeting was called to order by Willie Reed at 1:10 p.m.
2. **APPROVAL OF MINUTES:** A motion to accept the minutes of the July 24, 2004 Executive Board meeting was made (McElwain) and seconded (Torres), and carried unanimously.

Willie Reed announced Dr. Barb Powers as the new vice-president of AAVLD and Drs. Dave Steffen and Richard Mock as the newly elected Northcentral and Southcentral representatives respectively. These appointments will take effect January 1, 2005.

3. **TREASURER’S REPORT:** Alex Ardans presented the report of the Treasurer as follows:

Checking Account Balance on hand January 1, 2004	\$260,130.12	
Total Administrative Operating Receipts	\$160,553.23	
Total Administrative Operating Expenses	(\$195,424.32)	
ENDING BALANCE SEPTEMBER 30, 2004:		\$225,259.03
Certificates of Deposit as of SEPTEMBER 30, 2004		
CD#000418518 (Maturity Date: January 14, 2005)	\$15,746.35	
CD#000475591 (Maturity Date: December 24, 2004)	\$14,693.87	
TOTAL CERTIFICATES OF DEPOSIT		\$ 30,440.22
Mutual Fund, Edward D. Jones, as of SEPTEMBER 30, 2004		
Account #190876276 New Perspective Fund	\$89,947.94	
Account #165939129 Investment Co. of America	\$84,080.95	
TOTAL MUTUAL FUNDS		\$174,028.89
TOTAL ASSETS ON HAND – SEPTEMBER 30, 2004		\$429,728.14
FOUNDATION ASSETS		\$ 97,439.38

Dr. Ardans indicated that the July miscellaneous expenditure of \$6,700 was for the closing of the University of Missouri account. A complete account of the 2004 Annual Meeting will be presented at the February meeting.

A motion to accept the Treasurer’s Report was made (Powers), seconded (O’Toole), and carried unanimously.

Alex Ardans reported that at last year’s meeting there was discussion to develop strategies that might better manage the Association’s funds. The Association’s Missouri investment advisor developed an approach, which was presented to the Finance Committee Friday morning. It is recommended that the Association divide its assets into four categories: cash on hand, income (CD’s), growth & income, and growth. Alex Ardans stated that the Finance Committee recommended development of a plan to present at the February Executive Board meeting. There was consensus that this item be moved forward and put on the February agenda.

4. **PRESIDENT’S REPORT**

Willie Reed reported that he represented AAVLD at a September LRN meeting. AAVLD was also invited to attend a one-day AVMA meeting in Washington to discuss the future of Plum Island and Foreign Animal Disease laboratories. No firm conclusions pending additional discussion at another meeting scheduled for Tuesday, October 26, during the USAHA meeting. A U.S. strategy is needed regarding research, diagnostics and educational needs and where these should take place.

While the MOU calls with NVSL have continued most issues tend to be about the NAHLN, surveillance testing; e.g., BSE, etc., and it was questioned as to whether these calls (NAHLN, MOU, and Lab Directors) should continue. A suggestion was made to solicit AAVLD membership and committee chairs for MOU agenda items. Even with the frequent conference calls; e.g., BSE, NAHLN, MOU, it was suggested that MOU calls be continued and further evaluate the appropriate forum for discussion of issues.

5. COMMITTEE REPORTS

A. Accreditation

Leon Thacker reported that the Accreditation Committee met Friday, October 22 from 8 a.m.-12 noon. Progress updates of five laboratories were presented and approved. The Committee has four site visits remaining in 2004. Forty laboratories have submitted quality manuals. The Committee anticipates responses will be given to all the laboratories by January 2005.

There are plans to have an assessor training program at the February meeting for members of the Accreditation Committee and QA Committee. It is anticipated that a QA person will be accompanying all future site visits. Dr. Thacker requested consideration be given to providing financial support out of the Association's general fund to finance this upcoming training course as it is not just for Accreditation Committee members. A motion to have the Associations' general fund pay 50% of the training program expenses was made (Wilson), seconded (O'Toole) and passed unanimously.

B. Publications

- i. JVDI - Dr. Jerry Saliki reported that the transition from Missouri has gone very well. For the period January 1-October 15 a total of 120 manuscripts have been received. Eleven manuscripts have been published, 17 are pending, 18 have been returned for revisions, 22 rejected, and 42 are currently being reviewed. JVDI'S current acceptance rate is 56%. The length of time to publish in JVDI is ranging from 7-18 months due to 1) frequency of publication; and 2) the length of time reviewers keep manuscripts. A policy is being implemented to allow authors with minor revisions 30 days to return manuscript and those with major revisions 90 days. The article will be withdrawn if it is not received within this time limit. Dr. Saliki informed the Board that there was a delay in June due to an Oklahoma State computer problem.

Dr. Saliki proposed JVDI contract with a company, Manuscripts Central, for on-line manuscript submission and review with an initial cost of \$8,880 and \$6,280 yearly thereafter. Suggestions to offset this cost included increasing page charges, increase subscription rate, or increase membership dues. It was requested that an assessment of page charges be conducted comparing JVDI's to other journals and this information be brought to the February meeting. The Secretary/Treasurer was authorized to sign the agreement.

Dr. Saliki reported that faculty and staff at Oklahoma State University received a five percent cost of living increase effective October 1, 2004, and requested that the JVDI Editorial Assistant also be given the same increase. A motion to provide a five percent salary increase for the JVDI Editorial Assistant effective October 1, 2004 was made (Ardans), seconded, (McElwain), and passed unanimously.

- ii. Newsletter – Dr. Pat Blanchard indicated there was no news to report. Dr. Reed commended Dr. Blanchard for her continuing outstanding job with the Association's newsletter.
- iii. Manuscripts – Dr. Dave Steffen reported that there are some monographs being worked on and some reviews are coming forward. People have expressed an interest in monographs, but it might be easier to keep them current if posted on the web so the Web Editor has been asked to take the leadership on monographs. Some items have been accepted as review articles to be published in the journal and there is a desire to have regular review articles in JVDI.
- iv. Web Site Update – the Publications Committee thanked Bruce Janke for all the web reorganization. There are no suggestions for changes or charges.

C. Program Committee

Dr. Gary Osweiler reported that this year's program contains 163 total abstracts; 109 oral presentations, 10 plenary, and 44 posters. Total sponsorship was \$7,000 and the proceedings include an acknowledgement of sponsors. It was clarified that the Program Chair is responsible for contacting sponsors.

D. Canada Report – Dr. Shane Renwick's report included:

BSE - The Government of Canada is continuing with its strategic response to the North American BSE cases of 2003. On July 9, 2004 the federal government announced the introduction of new animal feed restrictions requiring the removal of bovine specified risk materials (SRM) from the animal feed chain. On September 10, it announced a strategy, including a direct investment of \$488 M, to assist Canada's cattle industry in repositioning itself to ensure its long-term viability. The

strategy was developed in close consultation with the provinces, territories, the Canadian Cattlemen's Association, and other industry groups. Besides support for goals of increasing Canada's national slaughter capacity, the strategy will increase scientific capacity, strengthen the regulatory framework, initiate a reimbursement program aimed at increasing access to animals targeted for BSE testing, and support tracking and tracing. Consideration will be given to a selective cull of older animals in order to support transition to greater slaughter capacity. Some animals from the cull would be suitable for inclusion in Canada's national BSE surveillance program.

Surveillance - On September 17, 2004 the Canadian Food Inspection Agency (CFIA) announced details of its sample collection strategy aimed at increasing the number of cattle targeted for BSE testing. The strategy includes communications to cattle producers and a financial reimbursement initiative. The CFIA has launched an education campaign, including a toll-free number, to encourage producers to report high-risk cattle.

The financial incentive is intended to offset producers' costs related to veterinary examination and carcass disposal when these activities result in the collection of an eligible brain sample. Deadstock collectors, renderers and veterinarians across Canada that are entering into agreements with the Agency are also eligible for reimbursement of additional costs related to the sampling, tracing and holding of carcasses being tested.

The incentive is contributing to meeting or exceeding the targets for BSE surveillance testing in the federal-provincial TSE Laboratory Diagnostic Network. Between January 1 and Oct 21, 2004, Canada has tested over 7600 cattle for BSE using rapid test technology (Prionics Check Western or Bio-Rad TeSeE), well within reach of the 2004 target of 8,000 tests. In following years, testing levels will increase to at least 30,000 cattle annually. Testing results are posted weekly on the Agency's Website (www.inspection.gc.ca), along with additional information about the surveillance program and Canada's other BSE measures.

Research : BSE/TSE Network of Centres of Excellence - Funding of \$5 million per year for seven years was announced in the Budget of February 2004 to support the creation of a Network of Centres of Excellence. Discussions are ongoing about selection of a university to head the Centre. Government diagnostic labs are expected to play a major role in the Network.

Announcements by the Province of Alberta - The University of Calgary and the Province of Alberta have announced the planned opening of Canada's fifth veterinary college in 2006. The curriculum, which has yet to be finalized, will be focused on Animal and Equine Health; Public, Eco-Health, Epidemiology (Zoological and Wildlife); Investigative Medicine: Genomics, Research, and Public Health.

Alberta Department of Agriculture announced in September a new \$14-million Level 3 Biocontainment Laboratory in Edmonton adjacent to the University of Alberta. The 2,600-sq.-m facility is part of the surveillance component of the province's recently announced six-point BSE recovery strategy. Initially, the primary focus of the lab will be to test for TSEs.

Avian Influenza - On August 18, 2004 the Minister of Agriculture lifted all remaining movement restrictions on birds, bird products and bird by-products in British Columbia's Fraser Valley. The removal of these restrictions brings an official end to the avian influenza response operation, which began on February 19, 2004.

There are several post-mortem meetings and exercises involving government and industry now underway in the aftermath of the AI crisis intended to provide forums for learning from the experiences of 2004 and improving Canada's ability to respond to future outbreaks. One such meeting is underway this week in the province of British Columbia and an exercise is planned for Ontario later this month.

Public Health Agency of Canada - On September 24, Prime Minister Paul Martin launched the new Public Health Agency of Canada and announced the appointment of the country's first Chief Public Health Officer (CPHO). Dr. David Butler-Jones, based in Winnipeg, will head the Agency. He is a former Chief Medical Officer of Health for the Province of Saskatchewan and was a member of the National Advisory Committee on SARS and Public Health chaired by Dr. David Naylor, University of Toronto. Given that it is the new headquarters, Winnipeg, the location of Canada's only Level 4 microbiology lab for human and animal health, will become the home of the International Centre for Infectious Diseases (ICID) and it is expected to be a world leader in research, training, commercialization and innovation in addressing the threat and impacts of infectious diseases, including zoonoses.

Canadian Animal Health Laboratorians Meeting 2005 (CAHLN) - Planning for the June, 2005 meeting is being led by colleagues from the University of Montreal (St-Hyacinthe) Veterinary School, Quebec Ministry of Agriculture Veterinary Diagnostic Labs (MAPAQ) and the Canadian Food Inspection Agency. The meeting will be held in conjunction with the Canadian Association of Veterinary Pathologists (CAVP) annual meeting.

E. Membership

Dr. Donal O'Toole expressed concern over the decline in membership (down 6%) and turnover. Approximately 800 members are being maintained with continual addition of new members. A New Members meeting is scheduled for 5:15 p.m., October 22, 2004 to introduce and orient new members to AAVLD. It was strongly suggested that new members be involved in committees.

F. Credentials

Dr. Donal O'Toole reported that the credentials for states/provinces have been checked.

G. Foundation

Dr. Barbara Powers reported that the Foundation meeting is scheduled for Friday evening, October 22. The agenda includes discussion on how to better focus the Foundation with the annual meeting and a mechanism to solicit sponsorship from those that do not sponsor the annual meeting.

H. NVSL Report – Dr. Randall Levings reported on the following:

NVSL Budget

- 2004 – 42M total (emergency & user fees). Full amount in House Ag appropriations bill.
- 2005 – Vet Diagnostic line item was increased (Plum/NAHLN) in President's budget- the House cut half of increase and the Senate committee cut the other half.
- Increase has been requested for 2006

Staffing

- Barbara Martin was named the new NAHLN Coordinator on August 9, 2004.
- Jere Dick has been selected as the new Assoc Deputy Admin for National Animal Health Policy and Programs (filling the position formerly held by Dr John Clifford).

Facilities – National Centers for Animal Health (NCAH)

- Completed, commissioned, and moved into Mycobacterium and Brucella laboratory building which consists of 2,020sqft of BSL-2, 2,575sqft BSL-3, 1,370sqft office/conference - 5,965sqft net, 14,588 sq. ft. gross.
- Completed digester/dehydrator building.
- Completed NCAH Building 21 (Phase I) and moved in – 14,865 sq. ft. BSL-2, 3,920 sq. ft. BSL-3, 4,344 sq. ft. office/conference, 1,120 sq. ft. non-lab – 24,249 sq. ft. net, 62,650 sq. ft. gross
- Completed design of BSL-3Ag building
- In Design phase on phase II of Combined Laboratory Facility s) – estimate completion in 2007. Approximately 63,000sqft BSL-2, ~39,400 sq. ft. BSL-3 – total 275,137 sq. ft. net, 515,803 sq. ft. gross

Safety/Security

- Developed and implemented an inventory, location, and tracking tool for select agents
- Responded to audit findings of Office of Inspector General and General Accounting Office and others related to safety and security for biological, chemical and radiologic agents of concern. Audit responses included:
 - Added Heating, Ventilation and Air conditioning for Diagnostic virology lab space to provide more functionality in case of an outbreak.
 - Biosecurity (freezer and other equipment) monitoring improvements. Moved into new, more biologically secure buildings.
 - Met all deadlines for reporting and received provisional registration for Select Agents.
- NVSL/CVB/NADC were selected as one of two sites to pilot R2ECP effort
- Discussions initiated with National lab at Winnipeg toward mutual continuity of operations plans agreement

Programs

- BSE and National Animal ID have been Veterinary Services top priorities since Spring/Summer
- Modernization Plan, NAHLN, and Combined Services (NADC, NVSL and CVB) were NVSL's top priorities during this time
- NVSL Pathobiology Laboratory activities:
 - Wrote SOP's then trained, inspected and proficiency tested BSE network labs.
 - Two main issues: 1) the five added labs have been delayed in start-up pending approval of a testing tool for a federal contract. Until the process is resolved, these labs cannot be proficiency tested; 2) The IT tool has been improved significantly, but all desired features have not been implemented. Tablet PC interface has been problematic. Until the database issues are resolved, USDA cannot review geographic dispersion of the sampling to date.
 - Inspected and approved scrapie genotyping labs
- Diagnostic Bacteriology lab at NVSL
 - Resolved production problems with brucella antigen, and inventory is increasing
 - Evaluated new test for Glanders
- Diagnostic Virology lab at NVSL has initiated EIA pilot project to evaluate switchover to ELISA by all EIA performing labs
- FADDL at Plum Island:
 - Developed/deployed nonviable positive controls for FMD, CSF PCR
 - Working on adaptation of the PCR methods to high-throughput
 - Continued work on validation of real-time PCR tests for FMD and CSF, including processing samples from FADDL repository, Afghanistan, Pirbright, Colombia, etc.
- Hosted seven foreign animal disease (FAD) schools and provided staffing for several additional training seminars. NVSL -Laboratory Response Network (LRN) activities:
- Approved to perform – Level B for *Bacillus anthracis* (anthrax), *Burkholderia mallei* (glanders), and *Burkholderia pseudomallei* (melioidosis). Level C for *Clostridium botulinum* (botulism), *Yersinia pestis* (plague), and *Francisella tularensis* (tularemia).
- Plans to apply in the next 6-8 months to add some foodborne bacterial agents, but will first work on obtaining level C approval on those approved only at level B.
- Design and contract in place for Phase II IITS which includes on-line reagent ordering. An upgraded/new LIMS is another project.
- Completed an action plan for customer service improvement at NVSL (Safeguarding Review recommendation)
- National Lab Systems Issue Group - topics: NAHLN, Test Validation, QA, and Customer Service. The issues groups were formed to address Safeguarding recommendations and develop action plans.

I. Nominations

Terry McElwain reported that the Travel, Pope, Lifetime Membership, and Graduate student awards will be presented on Sunday evening at the USAHA/AAVLD President's Reception. It was requested that Dr. Saliki select six favorite JVDI brief communications and six manuscripts from the 2004 calendar year for JVDI award consideration at the 2005 annual meeting.

J. Miscellaneous Reports

It was reported that the ACVP is encouraging interactions with AAVLD. Terry McElwain is currently the liaison with their Government Policy Committee. In response to an ACVP request for a liaison on their Lab Safety Disposal Committee, Tanya Graham from Brookings, SD has agreed to represent AAVLD.

Bio-safety guidelines – No recommendations to report as discussions are still on-going.

6. OLD BUSINESS

A. Network updates (NAHLN LRN, FERN)

NAHLN – Randall Levings reported that Barbara Martin has been named permanent coordinator. A memo from Drs. DeHaven & Cunningham redefining the NAHLN to include any laboratory doing contract testing for program diseases has been distributed. The memo outlines the steering committee membership and roles. The NAHLN as it is redefined now includes 43 labs in 37 states. There are 30 Exotic Newcastle Disease PCR testing labs and most are also Avian Influenza labs. The redefinition of the NAHLN will now require the added laboratories to complete the NAHLN qualification checklist. If not currently performing any of the 5 contract testing, but a laboratory is interested in becoming part of the NAHLN, an unfunded enrollment offer will be circulated soon. NAHLN funding through CSREES: The President's budget requested \$30 million, the House has approved \$18M, and the Senate committee approved \$15M but the full Senate has not voted. Dr. Cunningham has indicated that expansion of the NAHLN may not mean more labs, but the original 12 labs may be asked to do more testing.

LRN – Terry McElwain reported that no funds have been earmarked, however the language has been written for performance criteria and stipulated how funds would be spent. The CDC is currently looking to earmark 2005 funds. The APHL has developed a memorandum template and qualification checklist for membership. It was suggested to send a PDF to all directors, but check with author for approval prior to distribution.

FERN – Willie Reed commented that he is on the FERN steering committee and they are seeking veterinary laboratories for FERN membership, which will include proficiency testing, surveillance, methods development, training, and PCR training. FERN is moving towards on-line training and eLEXNET is the reporting tool.

B. Receptions/meals by outside groups during the AAVLD/USAHA Conference, and other USAHA program issues

J. Lee Alley, USAHA, requested the following issues be brought to the AAVLD Executive Board:

- a. Request that AAVLD require outside companies to work through the organizers and a surcharge included for their functions.** After discussion and clarification that outside functions are currently scheduled through the USAHA/AAVLD meeting organizer, it was recommend that nothing be changed.
- b. Request that exhibitors stay through the USAHA meeting.** AAVLD targets potential laboratory suppliers as exhibitors and USAHA members may not be an audience for them. The option would be presented to exhibitors in the future.
- c. Registration fee increase.** The registration fee was raised four years ago. It was felt that without knowing number of registrants, it is difficult to provide any feedback. It was decided to wait for a USAHA board proposal.

C. Level of meeting sponsorship

Meeting sponsorship will be discussed at the Foundation Meeting and will be brought forward at the February board meeting and guidelines will be developed to include all AAVLD fund raising including the Foundation.

D. Homeland Security Food & Agriculture Sub-Council

Willie Reed requested that AAVLD be made an affiliate member of this sub-council. Pat Blanchard will represent AAVLD if membership is approved. Board is currently waiting for a response from Audrey Adamson.

E. USDA National Animal Health Surveillance Program Steering Committee Update

The 2003 Epidemiology Committee resolution passed through USAHA supporting a national surveillance program and associated working group. It was noted that USDA had formed a National Surveillance Steering Committee related to prior safeguarding response plans. The Steering Committee includes three AAVLD representatives; Francois Elvinger, Sharon Hietala, and Alfonso Torres. Dr. Elvinger is the Steering Committee chair. A draft surveillance plan can be found on the CEAH web site and a brochure was distributed at the 2004 AAVLD/USAHA meeting. Dr. Brian McCluskey, National Surveillance Coordinator, also attended key 2004 AAVLD committee meetings to introduce the NSS.

The AVMA Committee for Disaster and Emergency Issues (CDEI) requested AAVLD input on new technologies and field assay validation. Following the presentation, the AVMA CDEI requested a letter from AAVLD on how AVMA could lend support to the AAVLD in respect to these issues. Sharon Hietala will work with Gary Osweiler to draft a response.

F. Online manuscript submission/review proposal – see JVDI report.

7. NEW BUSINESS

A. Policy on use of AAVLD mailing list (attachment 1)

Alex Ardans distributed a draft AAVLD mailing list policy for the Board's consideration. He stated that there have been an increasing number of requests to provide mailing lists of the organization's membership. The following changes were recommended:

Item 3 – Delete “or an electronic file for one-time use only.”
Add 3a – E-mail addresses are not provided.

A motion to accept the policy with these changes was made (O'Toole), seconded (Osweiler), and carried with one opposing.

B. AVMA Foreign Animal Disease Laboratory Steering Committee

Willie Reed will be attending a meeting Tuesday morning and will keep the Board apprised of the outcome.

C. American Association of Veterinary Medical Colleges Initiatives

Three AAVMC initiatives were distributed; 1) Homeland Security Appropriations Request – Animal Health Protection; 2) Veterinary Medical Education and Workforce Development Act of 2004; and 3) Supply and Demand for Veterinarians. AAVLD has been approached to support these initiatives. The initiatives have been reviewed by the Executive Committee, which is proposing to support these, however have AAVMC develop another white paper on the NAHLN or change the language on the homeland security initiative to better define their support. The Supply & Demand initiative is in draft stage, but would like to see the word diagnostician in this initiative. It was decided that AAVLD cannot support initiatives if a separate White Paper is not produced supporting the NAHLN.

D. USDA Initiative for Veterinary Immunological Reagents

It was reported that Peter Johnson, USDA Program Leader, has involved AAVLD in an initiative for reagent development. The Board will be updated as this issue materializes.

E. Next Meeting – Las Vegas, NV.

The next Executive Board Meeting will be the same time as the Western States meeting in February. Dates will be set after the Accreditation Committee has set the assessor training dates.

Meeting adjourned at 5:20 p.m.

MINUTES OF THE AAVLD FIRST HOUSE OF DELEGATES MEETING

Sheraton Greensboro, Greensboro, NC, Saturday, October 23, 2004, 11:15AM-12:00 PM, Guilford B

Call to Order: President Willie Reed called the meeting to order at 11:20 am.

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

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

The Association currently has \$225,259.03 in checking accounts, certificates of deposit worth \$30,440.22 and mutual funds worth \$174,028.89 for a total of \$429,728.14. Dr. Ardans encouraged everyone to visit the exhibitor booths

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

President's Report:

Dr. Willie Reed reported that 2004 has been another busy year for AAVLD and the organization is gaining increased national recognition. Dr. Reed expressed his gratitude to all of the members who have been engaged in association activities over the past year. At the end of 2003 the association conducted a national search and selected Dr. Saliki as JVDI editor. The quality of the journal continues to be high, along with submission volume. At the AAVLD Executive Board meeting in Greensboro the Board approved a proposal presented by Dr. Saliki for the implementation of an electronic manuscript submission and review system to reduce the time from submission to publication. The Board also approved guidelines for the use of the AAVLD mailing list. In addition, the Board voted to allow the Secretary/Treasurer to pursue the investment of association funds to provide additional association income. The Board will review the developed investment plan in February.

The organization has been involved with various laboratory networks throughout the country. AAVLD laboratories are included in the National Animal Health Laboratory Network (NAHLN), Food Emergency Response Network (FERN) and Laboratory Response Network (LRN). AAVLD's position on the NAHLN continues to be that the NAHLN should be expanded to include all 50 states or, at the very least, all AAVLD accredited laboratories. Developments include the appointment of a full-time NAHLN coordinator and a NAHLN Steering committee. AAVLD has a seat on the NAHLN Steering committee. The budget for 2004-2005 is still uncertain. The President's budget contained \$30M for the NAHLN. This amount was changed in both the Senate and the House. The Senate budget designated \$15M and the House budget designated \$18M for the NAHLN. Most likely some portion of that money will go to the plant category. AAVLD remains hopeful that there will be funds available to expand the network. The increased funds could mean the addition of more laboratories to the network or increasing capacity of current laboratories. Progress has been made in adding laboratories to the network, as recently there has been a redefinition of the NAHLN to include 43 laboratories in 37 states. AAVLD is optimistic that funding will be available from CDC for inclusion in LRN.

Dr. Reed expressed his thanks to Terry McElwain for his work as LRN liaison. The AAVLD Executive Board made the decision to send out the qualification check-list for joining LRN to all AAVLD laboratory directors. The FERN network has an open invitation to laboratories. Dr. Reed encouraged everyone to look into the FERN and consider membership. The FERN consists of 79 laboratories in 41 states and is responsible for detecting agents in food. If a laboratory is doing food testing there could be considerable benefit to joining FERN, including funding.

Each year the AAVLD Government Relations committee meets with the USAHA Government Relations committee in Washington DC. This year the meeting focused on strengthening relationships with ACVP and AVMA and AVMA has chosen to help lobby for NAHLN funding, which is a key initiative of AAVLD. In addition, MOU calls with NVSL continued and included discussions on BSE, AI, and proficiency testing.

Dr. Reed expressed his thanks to all of the committee chairs, members of committees, the Secretary/Treasurer and staff, Pat Blanchard, Newsletter Editor, Bruce Janke, Web Editor for all of their hard work over the past year. He also thanked Gary Osweiler and the program committee for an outstanding program.

Standing Committee Reports:

1. Program Committee Report: Dr. Gary Osweiler reported that this year's first plenary session dedicated to TSEs was suggested by the Virology committee and was well received. The second plenary session on surveillance issues includes broad worldview and

specific examples. Dr. Osweiler noted that the program is highly dependent on volunteers and that the program committee did an excellent job this year. He also expressed his thanks to the session moderators and to the Secretary/Treasurer's office. This year the program consisted of 163 presentations, 10 in the plenary sessions, 109 oral presentations, and 44 posters with 24 graduate student presentations including 14 oral presentations and 9 posters.

2. **Publication Committee Report:** Dr. Dave Steffen expressed his thanks to Drs. Reed, Osweiler and Saliki. He reported that the committee would like to encourage people to be more active with review articles. There is an initiative to try to update existing monographs, and the Bacteriology committee is looking at putting out a monograph on clostridial diseases. Additionally, there is an initiative to try to come up with a better review process for monographs. Monographs would be public as a web-based text. The AAVLD website has been much improved, and the Publication committee encourages everyone to visit the site. The committee is currently considering archiving listserv discussions. There is an opening for 4-year term publication committee member.
3. **Foundation Committee Report:** Barb Powers reported that the AAVLD Foundation currently has \$97,000 in assets. This past year the Foundation has sent out increased emails and calls for donations, which resulted in an increase in donations of over \$2,000. The Foundation would like to support vet student externships, and scholarships, however there are inadequate funds. The Foundation committee has decided to have a subcommittee meet with a professional fundraiser to consider fundraising avenues, which would not interfere with annual meeting fundraising efforts
4. **Strategic Planning Committee:** Willie Reed reported that he appointed the new Strategic Planning committee to replace the Long-range Planning committee. Dave Zeman, chair, reported that the committee met Thursday, October 21st, with eleven members present. Strategic plans from 2000, 2001 and 2002 were reviewed and major initiatives evaluated in the strategic plan which resulted in recommendations for the AAVLD Executive Board's consideration.
5. **Constitution and Bylaws Committee:** Dave Steffen presented a proposal for an amendment to the AAVLD By-laws as follows:

By-Laws

Article VIII

Committees

Section 6

Nominating Committee

OLD During even numbered years, the three (3) members of the committee shall be selected from Regions 2, 4 and 6 and during odd numbered years from regions 1, 3, and 5.

NEW During even numbered years the three (3) members of the committee shall be selected from regions 2, 4 and 6 and during odd numbered years from regions 1, 3, 5 and 7

RATIONALE Region 7 has been excluded from the Nominating Committee and the Executive Board on noting this discrepancy requested the change.

Region 7 (Canada) – Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Ontario, Prince Edward Island, Quebec, and Saskatchewan

Alex Ardans proposed that the amendment be changed to read “During even numbered years the three (3) members of the committee shall be selected from regions 2, 4 and 6 and during odd numbered years the four (4) members of the committee shall be selected from regions 1, 3, 5 and 7.”

The proposed By-laws change will be reviewed and voted on by the House of Delegates at the next meeting, October 25, 2004.

New Business:

1. Dr. Willie Reed announced that the incoming Vice President of AAVLD is Dr. Barbara Powers. The new North Central representative is Dr. Dave Steffen and the new South Central representative is Dr. Richard Mock.
2. Dr. Reed thanked Drs. Neil Dyer and Mitzi Libal, who are both rotating off the Executive Board, for their service. Dr. Reed also expressed his gratitude to Terry McElwain for his four years of service as AAVLD Vice President, President Elect, President and Immediate Past President.

The meeting was adjourned at 11:55 PM by Willie Reed.

MINUTES OF THE AAVLD SECOND HOUSE OF DELEGATES MEETING

Sheraton Greensboro, Greensboro, NC, Monday, October 25, 2004, 11:30 AM-12:30 PM, Guilford B

Call To Order: President Willie Reed 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 37 state and provincial representatives present, a quorum for business was declared.

Passing of Gavel: President Reed passed the gavel to President-elect Osweiler who presented President Reed with a plaque for distinguished service to AAVLD.

President's Report: President Osweiler expressed appreciation for the opportunity to serve as the AAVLD President. He reported that the Association currently has 44 committees, which is a tremendous resource and drives the Association. The vision and effort of our previous executive boards have opened many opportunities on which to build. Activities the Association is currently *emphasizing include* 1) upgrading to OIE-ISO standards, 2) the National Animal Health Laboratory Network (NAHLN) and its expansion to more laboratories, and 3) being engaged in discussions with state and federal government, commodity groups and allied industries. The Association's Governmental Relations effort has the opportunity and will continue to be involved more with current and emerging issues. He urged everyone to stay involved and get more involved in the committee system. He looks forward to another year and stressed the importance of everyone working together to make the AAVLD effort work for our clients and the public we serve.

Standing Committee Reports:

1. Accreditation Committee: Dr. Leon Thacker, chair, reported that the AAVLD Accreditation Committee met on the morning of October 22, 2004 in the Sheraton Greensboro, Four Seasons, Greensboro, NC, 8:00 am to noon. Fourteen of the 15 members of the committee were in attendance. Minutes of the July 24, 2004 meeting of the Committee held in Philadelphia, PA were approved as distributed. The financial report of the Committee was approved as presented by Dr. Alex Ardans. Progress updates of five laboratories were presented and approved. Site visit reports of two laboratories were received and reviewed. Accreditation status of the two laboratories was established by committee vote. Preliminary reports of two laboratories that were recently visited were given by site visit committee members, no vote on status of these laboratories was taken. Four laboratory site visits in 2004 were yet to be made. Quality Assurance manuals, timelines for incorporating items of the manuals and named Quality Assurance managers of the 40 AAVLD accredited laboratories were reviewed and discussed. To date all laboratories are within expected acceptable completion of the items required for incorporating the revised Minimum Essentials into their standard operations. The respective laboratories are commended for their accomplishments in these items. The committee discussed and agreed to arrange for and hold an assessor training session at the February, 2005 meeting of the Committee to be held in Las Vegas. In addition to the members of the Accreditation Committee, members of the AAVLD Quality Assurance Committee will be invited to attend the assessors training session. The next meeting of the Committee will be held in Las Vegas at the time of the Western States Veterinary Meeting.
2. Dr. Dave Steffen presented a revised Bylaw amendment for consideration.

Bylaws

Article VIII	Committees
Section 6	Nominating Committee

OLD The committee shall consist of the Immediate Past President, who will serve as Chair, and three (3) active members selected from three (3) regions of the Association. During even numbered years, the three (3) members of the committee shall be selected from Regions 2, 4 and 6 and during odd numbered years from regions 1, 3, and 5.

NEW The committee shall consist of the Immediate Past President, who will serve as Chair, and three (3) or four (4) active members of the Association selected from the respective regions on even and odd years. During even numbered years the three (3) members of the committee shall be selected from regions 2, 4 and 6 and during odd numbered years the four (4) members shall be selected from regions 1, 3, 5 and 7

RATIONALE Region 7 has been excluded from the Nominating Committee and the Executive Board on noting this discrepancy requested the change.

Region 7 (Canada) – Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Ontario, Prince Edward Island, Quebec, and Saskatchewan

A motion to approve the second reading of the proposed bylaw, article VIII, section 6 was made (McElwain), seconded (O'Toole) and approved unanimously.

The meeting was adjourned at 12:15 p.m. by President Osweiler.

AWARDEES



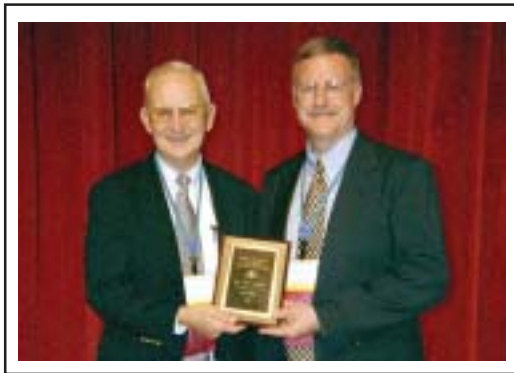
Dr. Bruce Akey (above right) was presented with AAVLD's highest honor, the **EP Pope Award**. Dr. Terry McElwain (above left), Awards Committee chair, presented Dr. Akey with the award at the joint AAVLD and USAHA President's Reception. The EP Pope Award is given to an AAVLD member who has made noteworthy contributions to the Association and to implementation and recognition of the specialty of veterinary diagnostic laboratory medicine.



The **AAVLD Foundation Best Graduate Student Poster**: Nicole Hines (above right), Iowa State University, for her poster on "Evaluation of the BACTEC(r) 960 MGIT(tm) System for Growth of *Mycobacterium bovis*", by N. Hines and J. Payeur.

The **AAVLD Foundation Best Graduate Student Oral Presentation**: Dr. Christy McKnight (above center with Awards chair, Dr. Terry McElwain), Michigan State University, for her presentation "Tongue Is An Excellent Sample for Parvoviral Diagnosis in Dogs and Cats" by C.A. McKnight, M. Kiupel, A. Wise, and R. Maes.

The **AAVLD Foundation** sponsored **Graduate Student Travel awardees** were Kathleen McIntosh (above left), University of Saskatchewan, and Alexandre P. Loretto, University of Guelph (not pictured). The **Pathology** committee funded **Graduate Student Travel awardee** was Julius A. Haruna, University of Prince Edward Island (not pictured).



Lifetime Memberships were awarded to Dr. Alex Ardans (pictured at left with Dr. Terry McElwain), Dr. John R. Cole, Jr., Dr. Donald Mattson and Dr. William Edwards for outstanding contributions to AAVLD and/or veterinary diagnostic medicine.

The **AAVLD Foundation Best JVDI Full Article** was awarded to Dr. Charles Hibler for the paper: Hibler, et al, Field validation and assessment of an enzyme-linked immunosorbent assay for detecting chronic wasting disease in mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virginianus*), and Rocky Mountain elk (*Cervus elaphus nelsoni*). 15:311-319, 2003. Co-author, Dr. Barbara Powers (pictured at right with Dr. Terry McElwain) accepted the award on his behalf.

The **AAVLD Foundation Best JVDI Brief Report** was awarded to Dr. Irene Schiller for the paper: Schiller, et al, Establishment of proliferative cell nuclear antigen gene as an internal reference gene for polymerase chain reaction of a wide range of archival and fresh mammalian tissues. 15:585-588, 2003.

COMMITTEE REPORTS

Accreditation Committee

Chair Leon Thacker.

The AAVLD Accreditation Committee met on the morning of October 22, 2004 in the Sheraton, Greensboro, NC from 8:00 am to 12:15pm. Fourteen of the 15 members of the committee were in attendance. Minutes of the July 24, 2004 meeting of the Committee held in Philadelphia, PA were approved as distributed. The financial report of the Committee were approved as presented by Dr. Alex Ardans.

Progress updates of five laboratories were presented and approved. Site visit reports of two laboratories were received and reviewed. Accreditation status of the two laboratories were established by committee vote. Preliminary reports of two laboratories that were recently visited were given by site visit committee members, no vote on status of these laboratories was taken. Four laboratory site visits in 2004 were yet to be made.

Quality Assurance manuals, timelines for incorporating items of the manuals and named Quality Assurance managers of the 40 AAVLD accredited laboratories were reviewed and discussed. To date all laboratories are within expected acceptable completion of the items required for incorporating the revised Minimum Essentials into their standard operations. The respective laboratories are commended for their accomplishments in these items.

The committee discussed and agreed to arrange for and hold an assessor training session at the February, 2005 meeting of the Committee to be held in Las Vegas. In addition to the members of the Accreditation Committee, members of the AAVLD Quality Assurance Committee will be invited to attend the assessors training session.

The next meeting of the Committee will be held in Las Vegas at the time of the Western States Veterinary Meeting.

Awards Committee

Chair Terry McElwain

The Awards Committee met during the annual meeting to discuss evaluation criteria and make the final selection for the AAVLD Foundation funded best graduate student oral and poster presentations. The best graduate student poster presentation went to Nichole Hines, Iowa State University, for her poster on "Evaluation of the BACTEC(r) 960 MGIT(tm) System for Growth of Mycobacterium bovis", by N. Hines and J. Payeur. The best graduate student oral presentation award went to Dr. Christy McKnight, Michigan State University, for her presentation "Tongue Is An Excellent Sample for Parvoviral Diagnosis in Dogs and Cats" by C.A. McKnight, M. Kiupel, A. Wise, and R. Maes.

During the year, the Awards Committee also provided names of potential lifetime membership awardees to the Executive Board for approval, and selected the Pope Memorial Awardee, who this year was Dr. Bruce Akey. The committee also selected the AAVLD Foundation funded best JVDI full manuscript by Charles Hibler, Kathi Wilson, Terry Spraker, Michael Miller, Robert Zink, Linda DeBuse, Elaine Andersen, Darrell Schweitzer, James Kennedy, Laurie Baeten, John Smeltzer, Mo Salman, Barbara Powers: Field validation and assessment of an enzyme-linked immunosorbent assay for detecting chronic wasting disease in mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virginianus*), and Rocky Mountain elk (*Cervus elaphus nelsoni*). 15:311-319, 2003. (Veterinary Diagnostic Laboratory and Animal Population Health Institute, Colorado State University and the Colorado Division of Wildlife. The AAVLD Foundation funded JVDI Best Brief Communication Award was given to Irene Schiller, Zen Huat Lu, Lloyd Vaughan, Roseline Weilenmann, Stephane Koundrioukoff, Andreas Pospischil: Establishment of proliferative cell nuclear antigen gene as an internal reference gene for polymerase chain reaction of a wide range of archival and fresh mammalian tissues. JVDI 15:585-588, 2003. (Institute of Veterinary Pathology and Institute of Veterinary Biochemistry and Molecular Biology, University of Zurich)

Finally, the Awards Committee selected graduate student travel awardees. This year three travel awards, two AAVLD Foundation funded general and one for pathology, were provided. The General awards went to Kathleen McIntosh, University of Saskatchewan, and Alexandre P. Loretti, University of Guelph. The Pathology Award went to Julius A. Haruna, University of Prince Edward Island.

Membership Committee

Co-Chairs for 2004: Donal O'Toole, Richard Mock, incoming new co-chair: Barb Powers (VP elect). The committee met October 23, 2004 in Greensboro, NC. There were 4 members and 1 guest present.

1. New members orientation

The first AAVLD new member orientation meeting was held on Friday, October 22 preceding the President's reception. There were 41 new AAVLD members present. During the meeting the Drs. O'Toole and Blanchard outlined the organization of AAVLD, the function

of the various committees and the AAVLD relationship with the USAHA. Thirty-nine attendees signed in and indicated a wide range of interest. The interests included: pathology-9, quality assurance-7, diagnostics-6, virology-5, microbiology-4, molecular biology-3, bacteriology-2, safety-2, toxicology-1, epidemiology-1, immunology-1. Allison Reitz from the secretary's office was present and answered questions about dues payment and directory publication. Based on the attendance and feedback received, the committee strongly recommends continuing a new members' orientation next year.

Action: 1. The membership co-chairs will repeat this in 2005, inviting the incoming president of USAHA (or designee) to participate.
2. An email notice will go out to new members of the time/date/place of the meeting within 2 weeks of the 2005 meeting.
3. A reminder slip of the time/date/place of the meeting will be included with the AAVLD registration packet.

2. Membership statistics

The membership statistics as of August 2004 were reviewed. There were 1,169 members which is a 6.3% decrease in membership from 2003. The change in the membership over the last four years was reviewed. The committee discussed ways of maintaining a more stable membership base, including extolling membership benefits and encouraging committee involvement. There was also discussion to again prepare a display describing the purpose of AAVLD that could be used at state and regional meetings. Dr. Mock explained that the current price structure for members and non-members registration fees makes it cheaper for non-members to become members. It is important to explain the benefits of continuing membership to such individuals.

Action:

1. Drs. O'Toole and Mock volunteered to write text for a display poster to use at national and regional meetings. This will be shown to the Executive Board to get its approval, and permission to cover the costs of printing copies. The posters will be kept in the AAVLD offices and made available to whoever can use them.
2. The AAVLD office will work with the list serve master (Jim Case) to see if it would be possible to get individuals automatically subscribed to the list-serv when they become members and their email is available.
3. Canadian diagnosticians' meeting: Dr. Shane Renwick said that the next annual meeting of Canadian diagnosticians will be June 4 – June 8 in Saint-Hyacinthe, Quebec. Dr. O'Toole offered to attend the meeting to promote the AAVLD.

3. Membership turnover survey

There was discussion on trying to determine the reasons for dropping membership through a survey included in renewal reminder notices. The committee will review any data generated from the reminder notice survey.

Action: 1. The survey will go out with the second reminder letter

4. Street Addresses of Accredited laboratories

It was requested that the street address of the Accredited Laboratories be included in the Membership Directory to assist in shipping diagnostic specimens.

Action: 1. Allison Reitz informed the committee that the street address could be added for Accredited Laboratories.

Publications Committee

Chair David Steffen. The committee met Friday October 22nd, 2004 from 8:00-9:50am. in Greensboro, NC.

- 1) Monographs
 - *Dr O'Toole expressed interest in web publication of a text on abortion diseases to update/replace that of Dr. Kirkbride which is outdated. He will seek co-authors. Copyright concerns and approaches for Web publishing were addressed.
 - *Clostridia monographs remain in progress.
 - *Dr. Steffen suggested a need for an editorial mechanism for monographs that is more structured to encourage submissions. This process would include JVDI editorial board input so manuscripts could be considered as review articles or monographs. This will be explored with the executive board and JVDI editorial board.
 - *Concerns were raised about library access to web based published monographs and search engine capabilities to connect with the data.
- 2) Newsletter, Dr. Blanchard, No new business.
- 3) JVDI
 - Dr. Saliki expressed appreciation for Dr. Kreeger's continued assistance in transition. The board reviewed several proposals for on-line manuscript review and processing. The system will speed review, increase submissions, reduce postage expense and time demands on staff following up reviews. There may be a slight increase in cost. Publications committee endorsed the adoption of the manuscript review proposal and forwarded that endorsement to the executive board.

JVDI ranks 20th for citations of 120 animal science and veterinary journals. Acceptance rate is around 60%. Time to decision and reasons for delays in publication were discussed. Editorial changes to reduce time to print were discussed.

- 4) Web Site
 - a. The website was improved and appreciation was relayed to the editor Dr. Janke by the committee. A recommendation was made to post an issue of JVDI on the web to be updated annually so nonmembers can see an advantage they will get through membership. The JVDI is on the secure site generally by the publication date.
 - b. Archiving list serves was requested. Copying the list into the secure site archive and a Google search engine was suggested to see if that is a low maintenance way to meet the need of users.
- 5) General
 - a. An opening for a committee slot exists interested persons should contact Dr. Steffen.

Animal Health Information Systems, Joint USAHA/AAVLD Committee

Co-Chairs: Dr. Bruce L. Akey,* Albany, NY and Dr. François Elvinger,* Blacksburg, VA presiding.

The Committee on Animal Health Information Systems met on Monday, October 25, 2004 from 12:30 to 5:30 p.m. There were 58 attendees signed in, including 15 committee members, although at times there were in excess of 80 people in the room. Twenty attendees requested to be added to the committee roles. Minutes of the meeting are as follows:

Dr. Akey welcomed the participants and laid out the agenda for the session.

Dr. Stanley Bruntz, USDA:APHIS:CEAH:National Surveillance Unit, Fort Collins, CO presented an annual update on the Animal Health Reporting System (NAHRS), now integrated with the newly created National Surveillance Unit at the Center for Epidemiology and Animal Health. In 2003, 40 States participated in the NAHRS, with 36 States reporting each of 12 months. As of September 2004, all but nine States were participating, with 5 of those slated to participate by the end of 2004. Recruitment of the last remaining non-participants is now directly supported by the APHIS administrator and the VS deputy administrator. Reporting is to be facilitated in the near future through a newly developed Web-based reporting tool, to be piloted in November 2004 and made available to all States by February 2005. Dr. Bruntz presented a set of changes to the NAHRS Unified Methods and Rules, proposed at the NAHRS Steering Committee meeting, September 13-14, 2004, in Fort Collins, CO. The proposed changes and their dispositions are presented in the report of the business section at the end of this report.

Dr. Francois Elvinger presented the outcome of the resolution submitted by this committee, the USAHA Foreign and Emerging Diseases Committee, and the AAVLD Epidemiology Committee at the 2003 Annual Meeting, on Strategic Planning and Development of a National Animal Health Surveillance System. The resolution requested from USDA:APHIS:VS to establish a working group which was to develop a strategic plan for animal disease surveillance. Veterinary Services, under the leadership of Dr. Valerie Ragan, Assistant Deputy Administrator, put in place a National Animal Health Surveillance System (NAHSS) Steering Committee which participated and oversaw the drafting of such a strategic plan by and with the National Surveillance Unit, led by Dr. Brian McCluskey. The draft of the plan has been reviewed by the Veterinary Services Management Team, and has been posted for general review on the NSU website at http://www.aphis.usda.gov/vs/ceah/ncahs/nsu/nahss_strategic_plan_draft.pdf .

Dr. Brian McCluskey, USDA:APHIS:CEAH:National Surveillance Unit, Fort Collins, CO introduced the National Animal Health Surveillance System Strategic Plan and the National Surveillance Unit (NSU), located in Fort Collins, CO. The NSU was established in late 2003, and currently is in the process of hiring the necessary staff to fulfill its mission, laid out in part in the NAHSS Strategic Plan. The Strategic Plan is to provide the framework to set priorities and create a roadmap for the transformation of current and design of future surveillance activities into the NAHSS to support greater protection of animal populations from endemic, emerging and foreign animal diseases. Surveillance is to be comprehensive, coordinated, and integrated, and needs to mobilize and rely on partnerships with all federal, State, and industry stakeholders. The Strategic Plan defines 4 major goals, including 1. Early detection and global risk surveillance of foreign animal diseases and 2. of emerging diseases; 3. enhanced surveillance for current "program diseases;" and 4. monitoring and surveillance for diseases of major impact on production and marketing. Twelve objectives were defined and fitted as warranted to the 4 goals, with the addition of action items and target dates for those action items listed for all objectives. The NSU, which was recently regrouped with the National Animal Health Monitoring System (NAHMS) into the Center for National Animal Health Surveillance (CNAHS), is to assume the leadership role in design and implementation of the National Animal Health Surveillance System.

Dr. James Case, California Animal Health and Food Safety Laboratory System, University of California, Davis, presented the status and future developments of the National Animal Health Laboratory Network (NAHLN) Information Technology (IT) component. The key goals of the NAHLN are the expansion of detection and response measures and capabilities for pathogens that threaten animal agriculture. Therefore the NAHLN is to bolster laboratory capability for select agents, which requires sufficient and well trained

personnel, appropriate equipment and testing. Standard diagnostic approaches for identification of select agents have to be deployed, data sharing among animal health agencies has to be bolstered, a secure, two-way communications network and a national repository for animal health data needs to be created. This requires the bolstering of cooperation and communication amongst animal health officials, and with maintenance of the confidentiality of source data has to provide alerts at appropriate response level. Four major areas for development of the NAHLN IT infrastructure have been recognized, including the development of a laboratory results repository to capture standardized result data, a laboratory registry of capabilities and capacity, and a registry of validated methods to support NAHLN labs, which are all linked by secure communications. Of the 12 laboratories identified for the first phase of NAHLN, 5 laboratories (CA, CO, IA, NVSL, WA) have been selected for NAHLN IT pilot project to develop message profiles (HL7 standards), and terminology subsets for tests (LOINC), for species/breeds and results (SNOMED), and unique identifiers (NAIS, ISO). Secure communication processes were established using cURL and digital certificates. Future developments include the expansion of the IT infrastructure to all NAHLN laboratories, which now number 44 laboratories in 37 States. This will require the development and distribution of detailed system requirement specification, the production of a comprehensive messaging implementation guide for laboratories, continued enhancement of terminologies to support the NAHLN (secure communications and visualization), training and resources for new laboratories, expansion of coverage of important diseases as resources become available and cooperation with other entities. Obstacles to full development and implementation of the NAHLN are the limited funding to support all activities, the limited resources in health information standards, the limited personnel time to dedicate to NAHLN activities, which leads to the establishment of interim solutions that do not conform to NAHLN standards.

Dr. Wayne Cunningham, Colorado Department of Agriculture, Denver, CO, introduced the Tri-National Consortium National Animal Identification System Project. This project covers multiple species including cattle (beef and dairy), sheep and goats, horses, elk, and swine (premises only). The main questions addressed in multiple pilot projects are to determine if Radio-Frequency Identification (RFID) tags are practical as to their retention, readability and economic impact, and if a private company would be able to distribute the premises ID, and the animal ID and ID devices, to manage the associated database, and to maintain confidentiality in a consortium including several Indian Nations, the States of Colorado, Arizona and New Mexico, and the adjacent Mexican States of Sonora and Chihuahua. The pilot projects are capitalizing on already available resources, personnel (including ~ 60 brand inspectors) and marketing channels, as well as taking advantage of existing databases (i.e. brand database) and are to determine what and when to ID, which could be either at change of ownership, at shipping time, branding time or calving time (birth), or eventually at heifer *Brucella* vaccination time. The projects contain educational components at the local, State and regional level. The pilot projects are to establish if inter State and international traceability within defined guidelines can be assured.

Mr. Charles Anderson, Computer Aid, Inc., PA, provided the Committee with a succinct overview of the concept and uses of Data Warehouses and Data Marts. A Data Warehouse contains data from multiple databases or other sources and includes tools for selectively extracting and analyzing information. Because it pulls together information from multiple sources, queries and analysis can generate knowledge not attainable from any single source. Data Marts are considered a subset or smaller version of a Data Warehouse and generally are focused on one specific subject matter area. Perhaps the single most important process involved in the Data Warehouse is the Extract, Transform and Load (ETL) procedure which applies user defined rules for validating data and translating data from different sources into formats that are compatible and cross linked. A Data Warehouse can provide many types of functionality including data consolidation, multi-source analysis, trend analysis, disease surveillance and monitoring and data layers of Geographic Information Systems (GIS) viewing and analysis. In addition, it can serve as the nexus for harmonizing and formatting data to be passed on to other information systems such as the federal Generic Data Base (GDB) thus avoiding time-consuming double entry of data into multiple systems. Part of the implementation of a Data Warehouse includes the development of meta-data and history tables to track the source of information and any alterations to the data over time. Maintenance of Data Warehouse systems has become less onerous with the development of self-regulated database software capable of automatically conducting internal checks and corrections, reducing the cost of overall database administration. Successful development, implementation and use of a Data Warehouse depends on many factors including support from the highest administrative levels, defining realistic expectations, avoiding loading data just because it's available, choosing a financially stable vendor, not missing out on adding non-traditional data types (pictures, recordings etc) and, perhaps most importantly, choosing a project leader that is firmly grounded in the needs of the end-user.

Dr. Steve Weber, USDA:APHIS:CEAH: Center for Animal Disease Information Analysis, Ft. Collins, CO, gave an update on the activities of the Information Technology Issues Group (ITIG) which was organized as a result of the Veterinary Services Animal Health Safeguarding Review. Recommendations from this review concerning Information Technology (IT) have been grouped into issues areas including electronic commerce, updated technology identification and implementation, leadership in setting information technology standards, development of interfaces with other databases and systems, confidentiality of data, the increasingly important role of GIS in animal health programs and the identification of changes needed in the IT infrastructure of VS. Progress has been made on one of the key action areas - Confidentiality. As a result of the acceptance of the action plan recommended by the Issues Group, the Veterinary Services Management Team agreed to the formulation of a task force to identify issues related to the confidentiality, privacy and security of information that is requested and maintained by Veterinary Services. That task force met once

in 2004 and expects to develop specific recommendations during FY 2005. Action plans for all of the other issue areas will be completed and presented to the Veterinary Services Management Team in January 2005, for prioritization. Notable advances made by VS and its collaborators during FY 2005 that support the Safeguarding Review Recommendations include completion of a Veterinary Accreditation System, completion of the National Animal Health Laboratory Network pilot system, expansion of the use of the Interstate Certificate of Veterinary Inspection to 6 states and the implementation of the National Premises Allocator component of the National Animal Identification System.

During the business section of the agenda, the previously mentioned changes to the NAHRS Unified Methods and Rules, proposed and approved at the Steering Committee meeting from September 13-14, 2004 in Fort Collins, CO, were submitted for approval by the membership of the Animal Health Information Systems Committee. These changes were: 1. on Page 20, to add the definition for 'confirmed disease' to read as follows: "Disease confirmed by Chief, State animal health official utilizing NAHRS reporting criteria for the disease, which may include references to compatible clinical signs, the specified standard of laboratory testing, and any additional epidemiologic information; in the remainder of the UM&R, replace the word 'clinical' with the term 'confirmed disease' where indicated; 2. on Page 21, last paragraph, to remove the work 'only' in the sentence "The contents of the report will be distributed ~~only~~ to the Chief Animal Health Official of each participating State and select APHIS personnel." The sentence refers to the Annual Summary Report, with no reference to individual States or farms; for 3. B101 Bovine Anaplasmosis, to remove the complement fixation test as an approved test from the reporting criteria and to follow the OIE manual; for 4. B201 contagious equine metritis, to state in the reporting criteria that "This disease is a foreign animal disease for the United States of America ..." in order to be consistent with the wording in the reporting criteria of all other foreign animal diseases; for 5. B205, equine infectious anemia, to word the first sentence of the reporting criteria to read as follows: "Presumptive diagnosis may be based on serology using a USDA-approved test (SA-ELISA II, CELISA, Vira-CHEKTM ELISA or AGID) as outlined in the EIA Uniform Methods and Rules;" for 6. B206, equine influenza, to change the reporting criteria to read as follows: "Presumptive diagnosis may be based on compatible clinical signs plus serology (HI). Definitive diagnosis is based on demonstration of the agent (virus isolation);" for 7. B211, equine viral arteritis, to change the reporting criteria to read as follows: "Presumptive diagnosis may be based on compatible clinical signs plus serology (SN titer of 1:4 or greater) as outlined in the EVA Uniform Methods and Rules. Definitive diagnosis requires demonstration of the agent (virus isolation), an epidemiologic investigation by a State or Federal Veterinarian and the concurrence of the State Chief Animal Health Official and the Federal Area-Veterinarian-in-Charge." Motions for acceptance of these changes were submitted and seconded for each of the listed changes. Discussions followed on anticipated approval by State Veterinarians (change 2.), approval of the change on bovine anaplasmosis by the bovine commodity working group (change 3.), flexibility provided to the State Veterinarian for determination of presumptive or definitive diagnosis (changes 5. and 6), especially given the possibility of vaccine induced antibodies (change 6.). All proposed changes were unanimously approved by vote of the committee members. Prior to adjournment of the committee meeting, a resolution on Federal Funding for the National Animal Health Laboratory Network (NAHLN) was voted on and unanimously approved by the committee members.

Approved Methods Committee

Co-chairs: Barbara Martin and Jim Pearson. Committee met October 22, 2004 from 8:00-10:00am.
Nine committee members and 29 guests in attendance

World Organization for Animal Health (OIE) test validation and certification: Peter Wright reported on changes in the OIE test validation and certification process and the NVSL validation template. Until now, the OIE has considered animal disease testing mainly as it pertains to trade. Accordingly, it classifies animal disease diagnostic tests as prescribed or alternative tests. There are many other reasons for testing, including: serologic monitoring, demonstration of freedom from infection, estimation of prevalence of infection for risk assessment, etc. Therefore, test validation should be a process that will demonstrate fitness of that test for a particular use. The OIE has received requests from many Member Countries and also from commercial test manufacturers to provide clear guidelines and much broader recognition of diagnostic tests as fit for specific purposes, not only for trade.

To this end, the OIE in collaboration with the Joint Food and Agriculture Organization/ International Atomic Energy Agency (FAO/IAEA) Division of the IAEA has developed a framework whereby fitness for purpose is incorporated into test validation. Guidelines and a standard template are being established for the preparation of dossiers to be submitted to the OIE for test evaluation and certification. The OIE is presently establishing a Secretariat that will manage the evaluation process and a registry of those tests that have been successfully validated and certified. OIE Reference Laboratories will be intimately involved in the evaluation process and in the development of panels of reference materials that will facilitate uniform evaluation and comparison of test methods.

APHIS test validation: Tammy Beckham, National Veterinary Services Laboratories (NVSL), reported on the Animal Plant Health Inspection Service (APHIS) validation efforts. APHIS is currently working to complete field validation for classical swine fever (CSF) and the Tetracore® and Dupont® foot and mouth disease (FMD) real-time-PCR (RT-PCR) assays. Over 500 positive FMD samples

have been tested using the Tetracore® FMDV rRT-PCR assay. Testing of these samples with the Dupont® FMD assay is currently underway. Negative cohort/specificity testing for both CSF virus and FMD virus will begin within the next few months. Anticipated dossier review and finalization will occur in early March 2005 for CSF real-time RT-PCR and in early May 2005 for the Tetracore® FMD real-time RT-PCR assay. Field validation for the Vesicular Stomatitis rRT-PCR assay is approaching completion and negative cohort testing is scheduled to begin in November of 2004. The African swine fever virus RT-PCR assay has been developed and APHIS is currently reviewing the bench validation packet. rRT-PCR assays for Rinderpest, Contagious Bovine Pleuropneumonia, and Lumpy Skin Disease are currently being developed and bench validated. Two personnel from each of the twelve pilot National Animal Health Laboratory Network (NAHLN) laboratories were trained and proficiency tested in Oct/Nov of 2003 on the Tetracore rRT-PCR assays for CSF virus, FMD virus, and vesicular stomatitis virus. Future training for NAHLN laboratory personnel will include training on wet reagents for the Tetracore FMD and CSF rRT-PCR assays (early 2005) and on the 96 well extraction/PCR for FMD and CSF rRT-PCR assays (summer 2005).

Library of Analytical Methods: Patrick McCaskey, Executive Associate of the FSIS laboratories, reported on the Library of Analytical Methods, a component of eLEXNET (Electronic Laboratory Exchange Network). The Library of Analytical Methods will allow laboratories to:

- Access, submit, search, review, and print methods (both validated and non-validated) through the internet via eLEXNET
- Compare methods to determine which method is most appropriate for a particular need
- When appropriate, submit sensitive methods to a secure component of the Library that can only be viewed by users who are authorized to access these methods

The Library of Analytical Methods provides a search engine for retrieving methods associated with analytes, technologies and matrices. All types of methods, in most standard formats (Word, PDF, etc.), can be entered by individual laboratory representatives. Submitted methods are then displayed in read only files that can be printed for laboratory use. All methods can be retrieved by searching for source, organization, matrix, technology, analyte, or type of method. The Library of Analytical Methods was released in pilot phase in April 2004. Six laboratories/organizations participated in the pilot; they were: USDA FSIS Eastern Laboratory, USDA FSIS Western Laboratory, USDA APHIS National Veterinary Services Laboratory, FDA Northeast Regional Laboratory, FDA Southeast Regional Laboratory, and the Florida Department of Agriculture and Consumer Services -food Lab. As part of the pilot, a total of 21 methods have been entered in the repository. Eleven of these have been reviewed to ensure that the essential information fields were properly completed, but not for scientific validity. These have been released to the Library. Additional improvements are being made to improve user friendliness and accessibility. The Library should be available to laboratorians in 2005.

Proposed matrix for approved tests: Barb Martin led a discussion on the test matrix that had been prepared and circulated to the members of the committee. It was decided to develop a template to summarize the performance characteristics and the acceptable matrices for each test. The template will be provided to each of the AAVLD discipline committee chairs and they will provide feedback to the Approved Methods Committee. It will be the responsibility of the discipline committees to complete the template for assays in their respective disciplines. The co-chair of the Approved Methods Committee agreed to serve for one more year in order to complete this template.

Aquaculture Committee, Joint USAHA and AAVLD

Co-chairs: Drs. Scott LaPatra (USAHA) and Tom Baldwin (AAVLD). The committee met from 12:30-5:30pm, October 25, 2004

Opening comments - Scott LaPatra

Attendees were welcomed and asked to introduce themselves.

Update from the National Aquaculture Association - Betsy Hart

A short review of the NAA, a producer organization, was provided. The diverse nature of the membership was emphasized, including representation of all aquaculture species. The NAA provides a unified voice for aquaculture, helping to assure the vitality of the various aquaculture industries. Committees represent various components of aquaculture, and through their governing board, assure a united stand on issues. The NAA offers a strong informational web site. Current issues facing organized aquaculture were reviewed, including the National Animal Identification Program and environmental issues.

Update from the National Animal Identification Program - Valerie Ragan

NAIP is being developed for disease eradication, and is applicable to any disease and all livestock. The program is currently assessing applicability to aquaculture and how to best implement an effective program; i.e. the program will be tailored to the animals in question. An industry working group has been formed that is working with USDA on an acceptable plan for the use of the NAIP in the aquaculture arena.

Update from USDA-APHIS - John Clifford and Jill Rolland

USDA has found it important to work closely with the aquaculture industries in establishing programs and protocols related to aquatic animal diseases that could threaten the aquatic industry. The National Aquatic Animal Health Plan (NAAHP) is being developed, which is a guidance document, with three federal agencies involved: Commerce, Interior, and USDA. A partnership of these agencies with industry and professional representatives has been created to develop a transparent plan based upon consensus.

A presentation was provided summarizing the NAAHP as well as updates on the response to recent outbreaks of infectious salmon anemia (ISA), spring viremia of carp (SVC), and white spot disease of shrimp. EU-generated directives related to export of fish, fish products, and mollusks to the EU were reviewed.

The presentations generated lively audience discussion related to USDA interactions with and impact upon producer groups and aquaculture-related commerce.

Update from AVMA Aquatic Veterinary Medicine Committee - David Scarfe

The background and activities of the AVMA Aquatic Veterinary Medicine Committee (formerly known as the Aquaculture and Seafood Advisory Committee) were presented. The committee has addressed a wide variety of topics related to aquatic animal health, regulatory issues, and environmental concerns. These include national aquatic animal health programs, diagnostics, therapeutic agents, effluents, seafood safety, and promotion of the important role of veterinarians in the aquaculture industry.

The Whitney Laboratory for Marine Bioscience - Bob Kahrs

The Whitney Laboratory in St. Augustine, Florida, affiliated with the University of Florida, is developing a program in marine animal health that includes development of a Center for Marine Animal Health. Training and funding are available for graduate students and post-doctorates. Attendees were urged to contact the laboratory director for more information.

Update from the Fish Health Section/American Fisheries Society – Scott LaPatra

The FHS/AFS has continued its active involvement in fish health issues at all levels. The organization provides expertise to a variety of stakeholders, both public and private, in the aquaculture industries. The FHS provides professional certification, continuing education and regional and national meetings. They have recently developed a Standard Inspection Manual in collaboration with the US Fish and Wildlife Service that is reviewed annually and has been provided to the National Aquatic Animal Health Taskforce.

Forecasting Disease Emergence in the Aquaculture Industry - Victoria Bridges

A presentation from the Center for Emerging Issues summarized their overall activities related to analysis of emerging animal diseases, surveillance systems for emerging animal health events, and tracking and trending of health events. A current project is focused on forecasting disease in the aquaculture industry. The goal is to develop a “disease emergence profile” for the food fish industry. This includes describing characteristics of disease emergence factors through analysis of current situations and the forces for change. Predictive, decision-making tools are the anticipated result of this work.

Old Business

Last year’s resolutions, their fate, and USDA response were reviewed and discussed.

New Business

Stan Bruntz presented a request on behalf of the Committee on Animal Health Information Systems with respect to the National Animal Health Reporting System (NAHRS). This group is requesting appointment of a chair for the Aquaculture group. Motion: Jerry Heidel will assume the chair of the NAHRS Aquaculture Commodity Working Group and he will contact existing members to assess their willingness in continuing their membership; and in the absence of such willingness will fill the vacant positions with appropriate members. Motion carried.

Resolution #1: introduced by Jerry Heidel on behalf of Ralph Elston and the Pacific Coast Shellfish Growers Association.

The USAHA requests USDA-APHIS to promote listing of the paramyxean protozoan parasite *Marteiliodes chungmuensis*, known to infect oyster species including the Pacific oyster, *Crassostrea gigas*, and the Iwagake oyster, *Crassostrea nippona*, and possibly other bivalve species, as a Notifiable Disease in the Office Internationale Epizooties (OIE) International Aquatic Animal Health Code.

The motion in support of this resolution was defeated. The committee recommended that Dr. Elston directly contact Dr. Jill Rolland, USDA/APHIS, with a request for USDA/APHIS to consider listing of this parasitic disease; this would initiate a thorough review of the condition to determine if there is sufficient data to support this listing. Additionally, Dr. Elston should seek further producer support for diverse geographical areas of the United States.

Resolution #2: introduced by Don Hoenig.

The USAHA requests the United States Department of Agriculture Animal Plant Health Inspection Service (USDA/APHIS) to begin to work immediately to establish sufficient, annual funding for the long-term maintenance of the USDA/APHIS/Veterinary Services ISA program including indemnification for loss incurred by US salmonid growers in the implementation of the program.

The motion in support of this resolution was passed (Appendix 1).

Resolution #3: introduced by Scott LaPatra

The United States Animal Health Association (USAHA) requests that the United States Department of Agriculture (USDA), Animal Plant Health Inspection Service (APHIS), Veterinary Services (VS) to determine if the data needed to perform credible risk assessments exists and identify information gaps. Appropriate steps should be taken to fill in these gaps for the prevention of the introduction and the potential establishment of viruses of finfish (as identified in the National Aquatic Animal Health Plan) of economic significance into the US commercial farmed fish industry sectors.

The motion in support of this resolution was passed (Appendix 2).

Appendix 1

UNITED STATES ANIMAL HEALTH ASSOCIATION 2004

RESOLUTION NUMBER: 1

SOURCE: AQUACULTURE COMMITTEE

SUBJECT MATTER: ADEQUATE LONG-TERM FINANCIAL SUPPORT FOR THE USDA/APHIS/VETERINARY SERVICES /MAINE DEPARTMENT OF MARINE RESOURCES /MAINE AQUACULTURE ASSOCIATION INFECTIOUS SALMON ANEMIA PROGRAM, AND INDEMNIFICATION, IN THE NORTHEASTERN UNITED STATES

DATES: October 21-28, 2004

BACKGROUND INFORMATION:

Salmon aquaculture is a multi-million dollar agricultural industry in the United States. An October 2004 study¹ indicated that the farm gate value of Maine salmon aquaculture was about \$50 million. The Maine industry is rebuilding after an economically-devastating outbreak of Infectious Salmon Anemia (ISA), a disease caused by Infectious Salmon Anemia Virus (ISAV), in 2001-2002. In 2000, the reported farm gate value of Maine salmon farms was \$100 million annually. The current epizootic has caused losses totaling millions of dollars. ISA is recognized as a foreign animal disease and has been diagnosed on Maine salmonid fish farms again recently.

In November 2001, USAHA 2001 Resolution No. 04, called upon the United States Department of Agriculture/Animal Plant Health Inspection Service (USDA/APHIS) to, among other things, develop a USDA/APHIS ISA program which supports an ISA surveillance and monitoring plan component and an indemnity plan component. The final USDA/APHIS ISA program draft was approved on April 30, 2002. In December 2002, following the USDA's determination that Federal assistance was necessary to effectively control this disease, which posed a threat to animal health and the U.S. economy, \$8.3 million was released from the USDA Commodity Credit Corporation (CCC) to be used for indemnity payments, program activities such as: depopulation and disposal; clean up and disinfection; establishment of surveillance programs; epidemiology and diagnostic support; and training for producers and veterinarians.

The USDA/APHIS ISA protocol has been universally implemented on Maine salmonids farms, and until recently, no significant outbreak of ISA has occurred in U.S. waters although the pathogen was detected at several sites in the Cobscook Bay area in 2003 and early 2004. Among the likely reasons that ISAV loads in the marine environment have increased are disparities between U.S. and Canadian disease management protocols. While standardization of approach is being actively pursued on both sides of the international border, the situation in recent months has resulted in limited depopulation and disposal of pre-market fish from several Maine farms. An outbreak of ISA again appears imminent in Cobscook Bay.

Although some amount of indemnification is anticipated from the USDA for the most recent losses of young fish at Maine salmonid farms, the CCC funds are nearly exhausted. ISA is neither a simple nor transient phenomenon. The administrative and surveillance components of the ISA program have been funded by USDA for the near term but continuity of indemnity funding is also needed for the important purpose of encouraging farmers to swiftly eliminate infected stock before the appearance of clinical disease occurs and dramatically increases losses. USDA/APHIS must therefore act quickly to provide long-term financial support for surveillance, monitoring and indemnification to assist Maine salmonids growers in effectively implementing the ISA program standards.

RESOLUTION:

The United States Animal Health Association requests the United States Department of Agriculture/Animal Plant Health Inspection Service (USDA/APHIS) to begin to work immediately to establish sufficient, annual funding for the long-term maintenance of the USDA/APHIS/Veterinary Services ISA program including indemnification for losses incurred by U.S. salmonid growers in the implementation of the program.

Appendix 2

UNITED STATES ANIMAL HEALTH ASSOCIATION - 2004

RESOLUTION NUMBER: 2

SOURCE: AQUACULTURE COMMITTEE

SUBJECT MATTER: RISK ASSESSMENT IN AQUATIC ANIMAL HEALTH

DATES: OCTOBER 21-28, 2004

BACKGROUND INFORMATION:

The poorly understood aspects of the life-cycles and survival parameters of exotic finfish viruses make the application of risk assessment to even the most studied models difficult. In its general sense, risk analysis is a tool to help decision makers and there will always be a need for supportive actions in order to help solve the problems generated by the process itself. Aquatic animal health is no different in this respect and since the concept is a relatively new application, there have been reports of difficulties in carrying out existing risk analysis methods.

The stability of infectious agents in different media and under different physical and chemical environments has been extensively studied for some viruses and virtually ignored for others. Gaps in the knowledge are due in part to difficulties in reproducing life cycles and determining whether the agent is, in fact, inactive or otherwise unable to cause significant fish health problems. In addition, isolation of the agent under certain conditions can present significant challenges. Studies on the susceptibility of viruses to different physical or chemical parameters have often been conducted under artificial conditions and quantitative data on the rate of inactivation are lacking for many agents. To assess the potential risk for the introduction and establishment of an exotic finfish virus in an aquatic ecosystem, several factors associated with the agent must be determined. These factors include the lability of the agent to pH, cooling, freezing, heating, and the ability of the agent to survive freely in the environment.

RESOLUTION:

The United States Animal Health Association (USAHA) requests that the United States Department Agriculture (USDA), Animal Plant Health Inspection Service (APHIS), Veterinary Services (VS) to determine if these data needed to perform credible risk assessments exists and identify information gaps. Appropriate steps should be taken to fill in these gaps for the prevention of the introduction and the potential establishment of finfish viruses of economic significance into the US commercial farmed fish industry sectors.

Bacteriology Steering Committee

Co-chairs: Deepanker Tewari and Linda Schroeder-Tucker. The steering committee met from 8:00 to 9:30pm on October 23, 2004 in Greensboro, NC. The full committee and 10 members from subcommittee were in attendance. Ms L. Schroeder-Tucker couldn't be present and Dr Tewari presided.

Standardization of laboratory methods

Dr Tewari welcomed the group and opened the discussion on need for standardizing laboratory methods in the AAVLD bacteriology laboratories. The committee made following statement that due to existence of variability in culture and isolation methods among laboratories, laboratories should have written procedures for the tests that are conducted on-site. The committee plans to hold discussions with approved methods committee to set clear goals for developing and implementing uniform methods across AAVLD laboratories. The groups feeling was, wherever it is possible, Office International des Epizooties and or National Veterinary Services Laboratory protocols could be adopted and considered laboratory reference methods.

Select agent protocols

Committee last year had posted select agent culture and isolation protocols for viewing and comment on the AAVLD web site. The committee thus far has not received comments on these protocols. The committee plans to actively seek comments from its members and NVSL this year. Dissemination of these protocols through Bacti-Listserv is planned so that they are reviewed and finalized. The procedures are slightly different from American Society of Microbiology and Centers of Disease Control recommended laboratory procedures in that these protocols address culturing and detection of such agents from animal derived samples.

Salmonella isolation and standardization

A procedure standardization request expressed by National Pork Board was received by AAVLD Bacteriology committee last year. The board wanted to encourage standardization of Salmonella isolation protocols among laboratories so the procedures for estimating prevalence could be compared from one research project to another. The board's concern was that researchers use a variety of techniques for salmonella isolation and therefore comparisons of prevalence estimates between manuscripts could not be achieved. This was addressed by the committee by holding a teleconference in October. Following this a survey was conducted through AAVLD-Listserv. The decision has been made to define Dr Paula Cray's USDA Salmonella isolation protocol as a reference method, and to determine as closely as possible the detection sensitivity and specificity by using fecal samples of known status (positive or negative for Salmonella) from swine. This study will be conducted initially, and extended to compare other protocols (both culture

and non-culture) to the reference method and to assess inter-laboratory variation in conducting the various protocols in the following years. The proposal has been forwarded to the National Pork Board Salmonella committee members for approval and funding.

Workshop: Biological Terrorism Preparedness for Veterinary Bacteriology Laboratories

Dr Karen Post is congratulated on successfully arranging a symposium and workshop entitled: Biological Terrorism Preparedness for Veterinary Bacteriology Laboratories. The program was co-sponsored by National Laboratory Training Network. There were 73 attendees and 9 speakers. This was the first time that different arms responsible for homeland security (Centers for Disease Control, United States Department of Agriculture, and Food Emergency Response Network) got together under one umbrella for laboratory training. Highlights of the session included presentations reviewing packaging/shipping requirements for infectious agents, laboratory testing methods for the presumptive and definitive identification of the bacterial select agents, discussion on responsibilities of involved entities in homeland security, and future plans for the involvement of veterinary diagnostic laboratories.

Future plan

For the coming year, the committee decided on keeping the communications open through Listserv and working towards goal of improving quality by sharing laboratory protocols and procedures and streamlining the administration and reporting of the bacteriology survey conducted by Bacteriology and Mycology subcommittee.

Bacteriology and Mycology Subcommittee report

Co-chairs: Drs. Susan Sanchez and William Fales. The committee met from 8:00 am to 10:30am on October 22, 2004.

1. Internal Quality Assurance Survey (aka "Check Test"). There were a total of 54 participating labs this year. The committee thanked Linda Cox from NVSL for her help preparing and mailing all the check test isolates. The survey consisted of 5 case histories and associated unknown organisms. In general, participants did quite well in correctly identifying the unknown organisms and in providing QC information as appropriate. Emphasis should be placed on this as a training exercise not so much a pass/fail test. This is an excellent forum for participants to become familiar with isolates they will rarely see because the animal species is not common in the state or because they are specialty laboratories (i.e. Poultry). The question of how to help those laboratories that do not do well was formulated by the co-chair and contacting Dr. David Miller at NVSL to determine his willingness to offer training was suggested. Results from the antimicrobial susceptibility testing in the check test raised a discussion regarding reporting of appropriate antimicrobials and the responsibility of the laboratories to do so by using the appropriate panels and cascade suppression. It was agreed that 5 questions is a good number for the test. Some members asked why fungi were not part of the check test any more. NVSL has lost its expertise in fungi therefore they cannot provide this kind of sample for the check test. A change in how results of the check test are returned to the participants was discussed with the decision that results will be posted on the AAVLD website. Participating laboratories will receive an email letter regarding their participation. Those laboratories considered to have done poorly will be contacted directly and help will be offered to improve their performance. S. Sanchez will explore the possibility of on-line submission of check test results; this will ease the forwarding of the check tests results to those that provided the questions. Six individuals volunteered to provide case histories for next year's test: Doreene Hyatt, Susanne Hinkley, Brenda Love, Karen Post, Lindsay Oaks and D. Bemis.

2. Salmonella method standardization- B. Love. This was a request from the Pork Board to the committee to standardize *Salmonella* spp. isolation from pig herds for research and prevalence studies. Dr. Love asked for volunteers to form a subcommittee to study different protocol possibilities. Liz Wagstrom from the Pork Board (PB) commented on the importance of doing this work and hopes the PB will fund the study.

3. The bacteriology/mycology QC guidelines were briefly discussed. The AAVLD will adopt the OIE standards. This may be an item to discuss through the bacteriology list-serve.

4. List-serve: Many members were dropped from the list-serve (both bacteriology and AAVLD). Members were advised to contact Dr Jim Case at UC Davis directly to resolve the matter (jtcase@ucdavis.edu).

5. Bioterrorism workshop: The committee thanked Karen Post for organizing the Bioterrorism workshop on Thursday co-sponsored by the National Laboratory Training Network. Speakers included: Drs. B. Akey, L. A. Thomas, R. Levings, R. Kellogg, T. McEwain, H. Holmes, R. Meyer, L. Gjeltrema, and moderated by Dr. G. Songer. It was a well-received workshop, and very informative.

6. Select agent protocols: During last year's committee meeting, attendees were asked to submit comments on the protocols for identification of select agents that were compiled by subcommittee members. These documents have not been finalized yet. In the absence of other guidance documents the select agents protocols on the CDC website can be used.

7. Anaerobic subcommittee update - Glenn Songer: Updates on his latest findings regarding *C. perfringens* and *C. difficile* in several species. Dr. Songer emphasized that with *C. perfringens*, a fecal sample does not yield only the isolate that is the culprit in the disease but a mix of *C. perfringens* types but when you sample the small intestine, you usually find only one genetic type which is the responsible pathogen. *C. difficile* toxin presence and the intensity of the lesion present did not correlate. Dr. Songer was going to give a more extensive presentation during the Enteric Diseases Committee meeting.

8. There were no reports from the Mycology subcommittee.

Bill Fales finished his tenure as co-chair ('04) and a motion for volunteers to serve as co-chairs was opened. Dr. Sreekumari Rajeev volunteered as there were no additional volunteers, the group agreed that she will be the next co-chair ('07).

Antimicrobial Susceptibility Testing (AST) subcommittee report

Co-Chairs Dr C.C. Wu and Doreene Hyatt. The committee met from 1:00-2:00pm October 22, 2004 in Greensboro, NC

Number of attendees: 36

1. Update of new NCCLS documents and guidelines – presented by Dr. Wu included the following:

Recently Published Documents (Publication Dates)

M44-A, *Method for Antifungal Disk Diffusion Susceptibility Testing of Yeasts; Approved Guideline* (May 2004)

M31-S1, *Performance Standards for Antimicrobial Disk and Dilution Susceptibility Tests for Bacteria Isolated from Animals; Information Supplement* (May 2004)

M27-S1, *Quality Control MIC Limits for Broth Microdilution; Informational Supplement* (May 2004)

M22-A3, *Quality Control for Commercially Prepared Microbiological Culture Media; Approved Standard- Third Edition* (June 2004)

NCCLS name change. The proposed name, “Clinical and Laboratory Standards Institute”, upon membership approval will become effective January 1, 2005.

QC Range for Tilmicosin for *Enterococcus faecalis* (ATCC 29212) is revised to 8-32 microgm/ml

A ten-laboratory study to establish MIC QC ranges for broth microdilution testing of *Campylobacter* spp. was reported.

The M31 will be revised in 2005 to incorporate changes from the recently published corresponding tables. All VAST documents will be made consistent with M2, M7, and M11. Any suggestions or comments regarding the improvement or correction of M31 should be submitted to NCCLS or wuc@purdue.edu as soon as possible to be included in the 2005 edition.

The subcommittee working on campylobacter will review and address testing of *H. somni*, *P. multocida*, and *M. haemolytica* as well and ensure consistency between the fastidious VAST table and AST M45 fastidious or infrequently isolated organism document.

Generic Working Group will propose breakpoints for *E. coli* and *Salmonella* for ampicillin with various species (e.g., bovine, canine, equine, and porcine) in January, 2005. Currently, we are using the human breakpoints (8/16/32). Any lab accumulated field data with appropriate QC records are encouraged to contact Dr. Ching Ching Wu at wuc@purdue.edu

2. New Business:

New information coming from NCCLS has required reformulation of current susceptibility plates including Aquatic, campylobacter, anaerobic and fungal testing plates. Jenny Lorbach from Trek discussed the future design options.

Changes proposed included changes for bovine standard plate (drop apramycin and add danofloxacin [range 0.12-1.0]), avian plate (drop sarafloxacin and add florfenicol), companion/equine plate (lower ceftiofur range, drop spectinomycin and add marbofloxacin, drop lower sulfa well, and drop chloramphenicol and add cefpodoxime, drop cephalothin and add cephalixin).

Two of these were contentious and discussions centered on the dropping of chloramphenicol. Suggestions from the users were to drop sulfamethoxime but keep chloramphenicol. Additionally, concerns were lodged against dropping cephalothin which is a class drug for cephalosporin and replace it with cephalixin. Since the latter is used topically for dermatological infections, it may be better

to used one strip instead. Trek agreed to check into this further before the changes are finalized. Users are encouraged to provide input as soon as possible to Jenny Lorbach before this is finalized.

Committee members discussed the need to conduct an Antimicrobial Susceptibility Panel survey which includes listing of antimicrobials on each panel the lab is using (including use description). If the lab is using Trek custom panels, it is necessary to provide panel design (drugs and concentrations)

1. Not necessary to list the panels if you are using Trek standard panels, just let us know that is what you use. If you are using Trek standard panels with specific suppressions please give suppression rules

Please forward electronically the panel designs to Doreene Hyatt (drhyatt@colostate.edu) or Ching Ching Wu (wuc@purdue.edu) and we will collate results for next years meeting.

General consensus of the group was that there was interest in having this information collated and available to all members. Any interested members will forward the information to the chairs for presentation at next year's meeting.

Harmonization study for AST testing

Systematic analysis of AST variation (based on manuscript Peterson et al., 2003 Micro. Drug Resistance)
25 isolates of 4 organisms (*E. coli*, *Salmonella*, *Staph. aureus*, *Enterococcus*) with various resistance patterns

General consensus of the group was that most labs do not have funding to participate in a large-scale study (100 isolates). If funding were to become available, further discussion is welcome.

Emergency Preparedness Workgroup

Chair John Andrews.

The AAVLD Emergency Preparedness Workgroup met from 9:00-9:50 am on Friday, October 22, 2004 in Greensboro, NC.

Seven committee members and 23 guests were present and participated in the discussions, which centered on revisions to the document "Suggested Laboratory Guidelines for Animal Health Emergency Management", development of a short checklist for laboratories to use to assess their Emergency Management plan, and a review of the document "A New Paradigm – Local/State Response" as presented by Dr. Patricia Blanchard.

Changes to the "Suggested Laboratory Guidelines" were minor and were primarily made to bring the document into alignment with changes in the OIE classification of diseases. The revised and updated document will be presented to the AAVLD Executive Board for approval.

One of last year's directives was to convert the document into a checklist format that could be used by laboratories and their administrators and the State Veterinarian to assess the preparedness of a laboratory or laboratory system. This directive was addressed with the presentation of two versions of a "checklist". The shorter version was accepted with minor modifications. This document will be circulated to committee members for further input and will accompany the revised "Suggested Laboratory Guidelines" to the AAVLD Executive Board for approval.

Dr. Pat Blanchard presented a document entitled "A New Paradigm – Local/State Response" which outlined some additional and slightly different concepts regarding the rapid local response for animal disease emergencies. It may be necessary for many of these concepts to be incorporated into the "Suggested Laboratory Guidelines" in the near future.

The leadership and membership on the committee was discussed as was future activities and goals. Incoming AAVLD President, Dr. Gary Osweiler is a current member of the committee and was present at the meeting for input. The consensus was that there is a continued need for the workgroup and the workgroup will likely continue. Further review and updating of the "Suggested Laboratory Guidelines" will be on the agenda next year if the AAVLD leadership chooses to continue the workgroup.

Enteric Diseases Committee

Chair Chobi DebRoy. The committee met from 3:00- 5:00pm, October 22, 2004 in Greensboro, NC
Eleven members and 19 guests were in attendance.

A sign up sheet was circulated for any new members with an interest to serve in the Committee. There were three speakers.

Dr. H. L. Shivaprasad, Professor, California Animal Health and Food Safety Laboratory System, Fresno Branch, University of California, Davis, 2789 S. Orange Avenue, Fresno, California 93725.

Topic: “Attaching and Effacing *E. coli* in avian species.”

Escherichia coli can cause various syndromes in poultry including coli septicemia, coligranuloma, salpingitis, omphalitis, osteomyelitis, synovitis and cellulitis. However, the literature on *E. coli* as a cause of enteritis in poultry as well as in other species of birds is limited. Between 1989 and 2002, numerous cases of enteritis associated with attaching and effacing *E. coli* were diagnosed most often in turkeys, but also in chickens, pigeons, quail, partridges, pheasants, ducks, ostriches, parakeets, and finches. Most of these birds were young and had a history of diarrhea and increased mortality in the flock. Grossly, the intestines, including the ceca, were distended with watery frothy contents in most birds. *E. coli* was cultured from the intestine of many of these birds, and *eae* gene was demonstrated by PCR. All of the *E. coli* isolated were negative for heat labile and heat stable toxins, as well as shiga-like toxin and cytotoxic factors. Histopathology of the intestine revealed the attachment of Gram-negative bacilli to the tips of the villi, and transmission electron microscopy revealed intimate attachment of the bacteria to the enterocytes with effacement of the microvilli and formation of cup-like pedestals. Attaching and effacing *E. coli* should be considered as one of the causes of diarrhea and enteritis in avian species, especially in turkey poults.

Dr. J. Glenn Songer, Professor, Department of Veterinary Science and Microbiology, The University of Arizona, Tucson, AZ 85721 USA

Topic: Things You’d Already Know About Clostridial Enteric Disease, If You’d Been Paying Attention.

Clostridial enteric disease continues as a major problem in domestic animals. *Clostridium perfringens* type C disease affects neonates of many species, and is often related to failure to vaccinate or improper vaccine use. Diagnosis is straightforward, but requires bacteriologic culture and genotyping. Type A enteric disease occurs in many species, with consequences ranging from acute death to mild, near-subclinical symptoms which may affect productivity. Disease in calves occurs sporadically, but accounts for ~ 15% of enteritis in neonatal pigs. Changes in the poultry industry have contributed to re-emergence of necrotic enteritis, especially in broiler flocks. Results of recent work support our working hypothesis that specific strains of type A are gut pathogens in specific species, while others are adapted to a commensal lifestyle. *Clostridium difficile* remains a significant cause of neonatal enteritis in pigs, often manifesting as diarrhea and with lesions limited to the cecum and colon. The full range of syndromes has not been defined, in that affected piglets are not always diarrheic. Evidence suggests that pathogenesis is toxin mediated, although the specific roles of toxins A and B are not yet known. Competitive exclusion by nontoxigenic strains may provide a means of prevention.

Linda S. Mansfield, Professor, Department of Microbiology and Molecular Genetics; ²Department of Large Animal Clinical Science, National Food Safety and Toxicology Center, Michigan State University, East Lansing, MI-48824

Topic: The challenges of diagnosing multifactorial gastrointestinal disease

Medical professionals, scientists and funding agencies predict the need for better diagnostics based on understanding that microbiological specimens from patients do not always predict the clinically relevant pathogens. Specifically, several microorganisms may be identified in a patient specimen, but not all may be contributing to the symptoms/clinical signs and disease process. Attribution is the hardest aspect of diagnosis. Koch’s postulates rely on 4 criteria for attribution 1) Specific causative agent must be present in all cases of the disease, 2) Agent must be isolated from host & grown in pure culture, 3) When inoculated into susceptible host, must cause disease, and 4) Agent must be re-isolated from inoculated, diseased host. We now know that a multitude of other factors affect the ability of a microorganism to cause disease and must be taken into account when making a diagnosis. The size of the inoculum, presence or absence of disease producing genetically encoded virulence factors, quorum sensing with virulence determinants regulated at the genetic level in a cell density-dependent manner, presence of required substrates, synergism with other concomitant pathogens, antagonism, opportunism, the presence of harmful or helpful microorganisms in the microbiota of the gut, the ability to upregulate or downregulate host innate or adaptive immune responses are examples of factors determining the outcomes leading to disease or resistance. As we move to new diagnostics driven by bio- and agroterrorism, science-based interpretation remains important. Each putative pathogen must be considered individually with enhanced understanding of individual pathogenesis. Active areas for research will include understanding of pathogen-pathogen, and pathogen-commensal interactions, and the role of the microbiota in development of disease.

Dr. Glenn Songer, University of Arizona was nominated for Chairmanship of the Committee for next three years (2005-2007). The motion was seconded by Dr. Shri Singh.

Epidemiology Committee

Co-chairs: Mark Thurmond and François Elvinger.

The Epidemiology Committee met on Friday, October 22, 2004, from 10:00 a.m. to 12:00 noon. There were 42 attendees who signed in on the attendance sheet, of which 13 were committee members; 5 attendees requested membership on the committee. This report also includes the proceedings of a special session on validation on Saturday, October 23, 2004, from 8 to 9:30 p.m. at which 30 attendees signed in, of which 6 were committee members.

Following a general welcome to the meeting and introduction of all attendees, co-chair Elvinger presented the outcome of the resolution authored by members of this committee, and subsequently voted on by the Animal Health Information Systems Committee (joint USAHA/AAVLD), and passed by the House of Delegates in 2003, on Strategic Planning and Development of a National Animal Health Surveillance System (NAHSS; resolution was also passed by USAHA). The resolution requested that USDA:APHIS:VS establish a working group to establish a process and timetable for development of a strategic plan for national animal disease surveillance. Veterinary Services, under the leadership of Dr. Valerie Ragan, Assistant Deputy Administrator, put in place a National Animal Health Surveillance System (NAHSS) Steering Committee, which participated in, and has been overseeing the drafting of such a strategic plan by and with the National Surveillance Unit, led by Dr. Brian McCluskey. The draft of the plan has been reviewed by the Veterinary Services Management Team, and has been posted for general review at http://www.aphis.usda.gov/vs/ceah/ncahs/nsu/nahss_strategic_plan_draft.pdf. Committee members were encouraged to provide comments and suggestions to Dr. McCluskey.

As Dr. McCluskey could not attend the meeting himself, co-chair Elvinger introduced the National Animal Health Surveillance System Strategic Plan and the National Surveillance Unit (NSU), located in Fort Collins, CO. The NSU was established in late 2003, and currently is in the process of hiring necessary staff to fulfill its mission, as described in the NAHSS Strategic Plan. The Strategic Plan is to provide the framework to set priorities and to create a roadmap for the transformation and design of future surveillance activities into the NAHSS to support greater protection of animal populations from endemic, emerging, and foreign animal diseases. Surveillance is to be comprehensive, coordinated, and integrated, and needs to mobilize and rely on all federal, state, and industry stakeholders. The Strategic Plan defines 4 major goals, including 1) Early detection and global risk surveillance of foreign animal diseases; and 2) of emerging diseases; 3) enhanced surveillance for current “program diseases”; and 4) monitoring and surveillance for diseases of major impact on production and marketing. Twelve objectives, and associated action items and target dates have been defined and fitted as warranted to the 4 goals. The NSU, which was recently regrouped with the National Animal Health Monitoring System (NAHMS) into the Center for National Animal Health Surveillance (CNAHS), is to assume the leadership role in design and implementation of the National Animal Health Surveillance System.

Co-chair Thurmond presented a brief overview of the European Union (EU) Foot and Mouth Disease (FMD) Commission’s research meeting held October, 2004, in Crete and how some of the activities may offer a model for laboratory foreign animal disease preparation and for U.S. diagnostic surveillance globally. Key points were the presence of impressive inter-EU laboratory collaboration currently in place to prepare for FMD vaccination and sero-surveillance, the need for aggressive isolate retrieval and determination of new strains of FMD virus emerging globally, and the need for methods of global risk surveillance.

A new topic of interest for the Epidemiology Committee emerged from a request of Dr. Liz Wagstrom from the National Pork Board, who asked for support in the design of sampling strategies for diagnostic laboratories to determine presence, prevalence, or incidence of *Salmonella* spp. colonization in swine. Committee members and co-chairs proposed to assemble a work group to respond to the request, and to determine resources necessary and appropriate to answer future requests for support of design of sampling strategies for specimens to be submitted to AAVLD laboratories. The organization of a workshop on sampling strategies for the 2005 Annual AAVLD meeting was proposed.

Special Committee Session on Validation, Saturday, October 23, 2004, 8-10 PM

Co-chair Thurmond presented an overview of the historical activities and progress made in promoting and providing education on validation, as well as the progress made through the efforts of Dr. Barb Martin and an ad hoc committee to begin developing guidelines for validation of diagnostic tests. The current status of the ENDV RRT-PCR assay validation packet, which was provided by Dr. Randall Levings, was reviewed briefly by Dr. Thurmond. Discussion followed on four basic areas of validation of various assays: 1) the validation criteria, 2) the formal process by which validation is accomplished, 3) assessment of validation process and outcome, and 4) the process by which assays are approved for deployment.

Key points of the discussion were:

Validation criteria:

USDA validation criteria need to be compatible with OIE guidelines for validation. Resources need to be devoted to meet validation objectives, even though assays may need to be deployed before performance characteristics can be properly estimated. Some expressed concern that validation may be too onerous. It was noted that publication of assays in the scientific literature should not be a substitute for, or necessarily considered as evidence of, a proper assessment of an assay’s performance.

Formal validation process:

A plan to formalize the validation process is under development by USDA. A phased approach could be considered for validation, as appropriate and if necessary. Guidelines should be provided for submission of assays to the approval process.

Assessment of validation data, processes, and outcome:

Evaluation of validation processes, data, and outcomes should be transparent and involve outside, independent assessments. Assessment should address determination of whether minimal performance requirements of the assay have been met, including

sensitivity, specificity, repeatability, and confidence levels. AAVLD and member laboratories should be formally involved in the process by which validation data are reviewed and evaluated.

Process of approval of assays

Licensing requirements do not address performance criteria assessed through validation processes; consequently, assay licensing and assay approval requirements need to be distinguished and defined separately. AAVLD and member laboratories should be formally involved in the process by which assays are approved for deployment.

Action Items:

1. Create a working group to:
 - a. Address AAVLD and membership laboratory needs for design of diagnostic sampling strategies and systems.
 - b. Plan for a diagnostic sampling workshop for the 2005 AAVLD meeting.
2. The committee voted and approved the following recommendation:

The AAVLD and member laboratories should be formally involved in developing national assay validation criteria, assessing and evaluating validation data, and approving assays for deployment.

Twelve individuals indicated a desire to become committee members.

Food Safety Committee

Co-Chairs Hailue Kinde and Pat McDonough. The committee met from 6:30-8:30pm on October 21, 2004 with 20 persons attending. Eleven were committee members and the other nine were visitors. Seven of the nine visitors expressed a desire to be members.

Powerpoint presentation on The Food Emergency Response Network (FERN) by Dr. Patrick C. McCaskey, Executive Associate for Laboratory Services, USDA, FSIS. Athens, Georgia. The Mission of FERN is, as described by Dr. McCaskey is to:

- Integrate the nation's food-testing laboratories for the detection of threat agents in food at the local, state, and federal levels.
- Detection of biological, chemical, and radiological agents.

Dr. McCaskey outlined the Homeland Security Presidential Directive – HSPD-9: Defense of U.S. Agriculture and Food (1-30-04) The Directive states that DHS will ensure development of nationwide laboratory networks for food, veterinary, plant health, and water quality that integrate existing federal and state laboratory resources, are interconnected, and utilize standardized diagnostic protocols and procedures.

The Secretaries of Interior, Agriculture, Health and Human Services, and Administrator of EPA ... shall build on and expand current monitoring and surveillance to : Develop robust, comprehensive, and fully coordinated surveillance and monitoring systems, including international information, for animal disease, plant disease, wildlife disease, food, public health, and water quality that provides early detection and awareness of disease, pest, or poisonous agents.

Under this Directive the FERN objectives are:

- Prevention – federal/state surveillance sampling programs
- Preparedness – strengthening lab capabilities/capacities
- Response – surge capacity
- Recovery – provide assurance to the consumer

He also described the the organizational structure of FERN which consisted of the Steering Committee Members (several Federal and state agencies), The FERN National Program Office (FERN NPO) the Support Programs and the Regional Coordination centers.

FERN has developed a training plan which includes both web-based and face-to-face training on methods, BSL-3 level laboratories, tour of FERN, etc. Recently FERN provided real time PCR training for *B. anthracis* and *Salmonella*. FERN also provides proficiency testing. He also talked about Method Development/Validation/Approvals, and Electronic communication for data exchange. FERN is currently comprised of 82 laboratories (55 state, 4 veterinary diagnostic, 20 federal, 2 county and 1 city) representing 41 states that have satisfactorily completed FERN Laboratory Qualification Checklists. The future objectives of FERN are to expand the capabilities/capacities of the network laboratories, enhance communications, enhance food surveillance sampling, validate laboratory tests, conduct exercises, etc. Dr. McCaskey said the veterinary diagnostic laboratories have important roles in the event of food-related terrorism events since some labs are primary food testing labs for their states, have significant capability and capacity to handle animal tissues and experience with a variety of agents and expertise in toxicology. For complete presentation of Dr. McCaskey's see AAVLD website committee reports Food Safety.

Dr. Patrick L. McDonough presented The Role of Veterinary Diagnostic Laboratories in the Food Safety System. Dr. McDonough said **Food safety** involves looking at the entire food chain (continuum) and assessing areas in which we can *intervene and prevent contamination/ infection* of food production animals, poultry, seafood, and plants with zoonotic microbial pathogens (or chemical or

radio nucleotide). The continuum has the Farm-to-fork” or “Farm-to-table” concept, HACCP, pathogen load, Best Management Practices (BMP) and biosecurity of feed and water. Microbiological safety of foods is principally assured by:

- Education and training of food handlers and consumers
- Application of safe food production practices during production, processing, handling, distribution, storage, sale, preparation and use (retail level)
- Microbiological testing for the presence/absence of food-borne pathogens and toxins (all levels)
- Implementation of HACCP (or BMP’s...all levels)
- Control at the source (preharvest level)
- Production design and process control (harvest and processing levels).

Food security: The United States agriculture and food systems are vulnerable to disease, pest, or poisonous agents that occur naturally, are unintentionally introduced, or are intentionally delivered by acts of terrorism. US agriculture and food systems are part of an extensive, open, interconnected, diverse, and complex structure providing potential targets for terrorist attack. We need to provide the best protection possible against an attack on the US’s agriculture and food system, which could have catastrophic health and economic effects.

Opportunities for Veterinary Diagnostic Laboratories: By combining the elements of Food Safety and Food Security and through networking and collaborative efforts the veterinary diagnostic laboratories can be major players in the food continuum in the areas of preharvest food safety, harvest/packing plant, post-harvest/retail areas. In the preharvest food safety area we can help through validation of Best Management Practices e.g. value of milk sock culture in herd surveillance for salmonellosis; assessing animal health status through spontaneous disease laboratory testing; support for biosecurity measures on farm; There are also new opportunities for AAVLD laboratories for networking and building collaborative efforts with our partners and stakeholders such as participation in NAHLN, LRN, FERN; Veterinary Sentinel Sites (antimicrobial resistance monitoring) for FDA-CDC-USDA NARMS; Veterinary PulseNet (PulseVet) – planned nationwide network and traceback to source. There are research based opportunities such as NIH sites for Foodborne and Water Diseases (FWD) Zoonoses Research Unit (national response network for national terrorism or other emergencies; coordinate efforts with FWD Microbiology Research Unit and Clinical Research Unit); support for herd/flock based (health) certification programs (e.g., NYSCHAP, NPIP, EQAP’s).

Dr. Hailu Kinde has provided a presentation and abstract on the Role of Veterinary Diagnostic Laboratory in the Food Safety System. His presentation was focused on large outbreaks in California involving food animals and how the California Animal Health and Food System played a major role either in early detection or traceback investigation of the causative agent or toxic substance. In his presentation he mentioned that the veterinary diagnostic laboratory is accustomed to a multi-discipline approach in defining diseases on a flock or herd basis. The laboratory staff is used to a high throughput during large disease outbreaks and it can easily accommodate situations that would facilitate sample processing and testing within a reasonable amount of time. The laboratory staff is adaptable to cross training and temporary relocation within a few days to another site in the face of a disease outbreak. The convenience of having a pathologist, microbiologist, an epidemiologist and toxicologist under one laboratory system will enhance the disease investigation effort and provides a rapid identification of the causative agent or toxic element for prompt reporting. One of the missions of CAHFSL is to provide laboratory support for the protection of the public from diseases common to humans and animals and ensure the safety of foods of animal origin. The laboratory serves as an “early warning system” to help protect the health of humans, livestock and poultry from animal diseases and deals with potential diseases or conditions at the farm level before they become a public health issue. These may include infectious agents or microbial toxins, naturally occurring toxic substances, or other chemical intoxications. The laboratory has been instrumental in the detection of food animal poisonings due to toxic substances such as phorate poisoning in dairy cattle, botulism, oleander and lead, all involving California dairy cattle, Blue-green algae toxicosis in heifers and selenium toxicity in pigs. As these cases appear, CAHFSL is responsible for notifying regulatory officials in a timely manner. Several recent examples in the area of food safety were presented to illustrate the roles and responsibilities of a veterinary diagnostic laboratory.

Approved Methods List Survey:

Dr. Kinde presented the result of the survey of the approved methods in Food Safety that are used currently in the AAV Laboratories. Only 2 laboratories responded to the survey and provided list of approved methods used in their respective laboratories. Members were encouraged to forward the methods they use in their laboratories. The members agreed to work in the future closely with the AAVLD Approved Methods Committee.

Future Objectives of the committee

The Committee agreed to develop a Mission Statement and seek approval from the Executive Committee.

AAVLD Foundation Committee

Chair Barb Powers. The committee met from 8:00-9:30pm on October 22, 2004 with fourteen in attendance.

Financial Report: Total assets = \$97,439.89 (\$63,556.97 in mutual funds and \$33,882.41 in checking account) as of September 30, 2004

Email and dues resulted in contributions of \$2,245 year-to-date. Need to increase individual and company donations to develop new programs such as veterinary student externships or graduate student scholarships. Do not wish to compromise sponsorships for the annual meeting (~\$7,000 per meeting). Propose to have Vice-President and President-Elect become ex-officio members of Foundation, so that different types of industry sponsorships can be coordinated.

Plan to have a development expert meet with a subgroup of AAVLD Foundation Committee at summer AAVLD meeting with AVMA to help design a master plan for private and corporate giving. Will ask for assistance from CVM fundraisers that usually met at the AVMA meeting. At the next annual AAVLD meeting, will meet with some corporate sponsors to assess their interest in the programs developed. Will consider a Foundation fund raising event, such as an auction of donated items during the President's reception at the next annual meeting.

Government Relations Committee

CoChairs: Drs. Bruce Akey and Willie Reed. The committee met from 3:30-5:30pm on October 23, 2004.

Eight Committee members met to discuss a variety of topic concerning the interface between the AAVLD and various federal agencies. Topics discussed included:

- **Department of Homeland Security (DHS)** – the AAVLD is currently seeking a designation of “Affiliate” status with the Food and Ag Sector Coordinating Council set up by DHS in order to formalize its relationship with the agency and industry. It may be advantageous to both DHS and AAVLD member labs for laboratory directors to seek security clearance. This will enable laboratory management to receive certain levels of information that may be germane to decisions on the triage of possible select agent samples as well as indicators of need to plan for changes in testing types or volume.
- **National Animal Health Network (NAHLN)** – Additional funding for the development of the NAHLN system is expected but the level of funding is still uncertain and funds will likely be split again between animal and plant labs. Priorities for expansion of the pilot NAHLN labs will likely focus on better geographic coverage as well as expansion of diagnostic capabilities within the NAHLN, toxicology is one likely priority diagnostic area. Depending on the level of funding received, expansion may only target capabilities within the existing pilot labs, not adding new laboratories. The best hope of achieving full funding of the NAHLN to encompass all states would be the establishment of a dedicated budget line item within USDA. This is at the discretion of USDA to establish such an item. Alternatively, DHS could also become a source of NAHLN funding. It was recommended that the sitting Vice President of the National Assembly of State Livestock Health Officials (NASLHO) be added to the NAHLN Steering Committee and that an update on the NAHLN be presented at each NASLHO meeting. The NASLHO is composed of the 50 State Veterinarians.
- **Laboratory Response Network (LRN)** – In order for additional Veterinary Diagnostic Laboratories to join the LRN (which is sponsored by the CDC) it would likely be necessary for CDC to earmark funding to assist in this effort. To join the LRN the Director of the State Public Health lab must request the laboratories entry. A draft of a letter that was used during the monkeypox outbreak to request such approval will be circulated to laboratory directors. It would also be beneficial for the AAVLD Executive Committee to visit CDC and enhance communications with them.
- **Agricultural Research Service (ARS)** – Discussions centered around the mechanism ARS uses to select outside collaborators and the percentage of the ARS budget that is directed towards extramural research projects. It was felt that the current ARS process for selecting extramural research partners relied heavily on personal contacts with ARS researchers and that instead the process should routinely follow open solicitation practices.
- **Plum Island Animal Disease Center (PIADC)** – There is concern over the competing priorities (ARS, APHIS and DHS) for use of the staff and facilities on the island. The CDC seems to be pushing for large animal space to be dedicated to zoonotic disease research projects. This raises the question of whether such zoonotic work should be carried out at PIADC at all or at a second, separate facility. It was reemphasized that the NAHLN labs are seen as the reserve or surge capacity for diagnostic services currently only available at the PIADC.
- **American Association of Veterinary Medical Colleges (AAVMC)** – The AAVMC has announced it's own initiative to acquire funding, possibly from DHS, to fund 3-4 regional BSL-3 equipped laboratories to support both research and diagnostics. This seems to be an unnecessary overlap with the NAHLN initiative and could dilute funding for the NAHLN. Representation from the NAHLN Steering Committee should contact the AAVMC and make them aware of this potential conflict and seek their support for the NAHLN. AAVMC also has put forth a proposal to support a manpower training and development program to create the staff that will be needed to both maintain and augment diagnostic laboratories in the future. The AAVLD should lend it's support to this initiative.

- **USAHA Government Relations Committee Annual Meeting** – The USAHA GRC meets annually in February in Washington, DC with representatives from all levels of the USDA as well as FDA and some members of Congress. The AAVLD Executive Committee and Chair of the AAVLD Government Relations Committee have been invited to join in this meeting for the last few years and the consensus is that it has been an extremely worthwhile meeting for AAVLD to have representation at. This is one of the best opportunities each year to engage in very direct talks with everyone from the level of the Secretary to the Administrator and Deputy Administrator level. Some discussion was held on whether a member of the AAVLD Strategic Planning Committee and perhaps at least one more member of the AAVLD Government Relations Committee should be added to the contingent. The President will be asked to consider this request and, if approved, to convey it to the USAHA for the 2005 meeting.

Informatics Committee and NAHLN IT Committees

Co-Chairs: Drs. Jim Case and Jay Kammerzell. The AAVLD Informatics Committee met from 1:00 to 4:45pm on October 22, 2004 with 17 members and 25 guests present.

Following introductions the status of LIMS within laboratories were briefly described. Most of the represented laboratories were either in the process of implementing a new LIMS system or were preparing requests for replacement. A few labs stated that their compelling reason for replacing their systems was to be able to support the NAHLN.

Hilary Jones and Kevin Razzaghi from Booz-Allen-Hamilton were introduced and they presented an overview of the NAHLN IT project from concept through pilot and to the current status. Discussion continued on the results of the pilot program, the experiences of the pilot labs in creation and validation of the HL7 messages used to communicate with the NAHLN repository and issues surrounding terminology needs.

There was extensive discussion on the System Requirements Specification for version 2.0 of the NAHLN, which described the more comprehensive NAHLN functions including the NAHLN results repository, the laboratory capability and capacity registry and the methods registry.

For information about the needs analysis and the V2 Software design specification, go to the NAHLN website— <http://www.nahln.us> click on member laboratories and login with user id and password of guest.

Jim Case and Mike Martin reviewed the specifics of the XML message structure that will be required for the NAHLN labs to transmit to the NAHLN repository. The fine points of automated messaging with an emphasis on maintaining both data integrity and data security were discussed. This was followed by a discussion on unique identifiers, with an emphasis on the ISO Object Identifier (OID) format. The newly designed identifier registry, developed by Randy Berghefer at Iowa State was communicated and potential NAHLN laboratories were encouraged to register at the site for the assignment of a root OID that they could use in their organizations.

Jim Case described some training resources for the NAHLN standards including the HL7 tri-annual working group meetings, the special HL7 training summits, the courses offered by the College of American Pathology for SNOMED and the LOINC training session being held in December.

Lastly, Hilary Jones distributed a technology readiness survey for each laboratory to fill out. The results of this survey will help to determine the readiness of each potential NAHLN participating laboratory to implement the NAHLN messaging and terminology standards. Dr. Case stated that all of the pilot laboratories would be happy to consult with new laboratories as they attempt to implement the NAHLN version 2 messaging structures. The estimated delivery date for the new software and implementation guides was 1st quarter, 2005

Laboratory Administrative Personnel and Management Committee

Chair Geraldine Jessup. There were 22 attendees over the two days of meetings.

Saturday, October 23, 2004 –

Committee chair Geraldine Jessup called the meeting to order at 1:00pm

Jay Ross from the California Animal Health & Food Safety Lab System gave a presentation on Modernizing a LIMS System in which he talked about the process they went through in their LIMS System replacement project. He covered the background and status of the CAHFS LIMS, the reasons to modernize, building the business case, point of origin, requirements gathering, requirements gap

analysis, cost and benefits collection, preparing your cost/benefit analysis, features of a modern LIMS, and benefits of a modern LIMS. The future CAHFS LIMS is a product called StarLIMS. They have acquired the system as a pilot for use in their BSE/TSE testing lab. It is a modern LIMS with a client/server environment and operates with any number of enterprise database systems on the back end.

Kim Ramm from the Diagnostic Center for Population and Animal Health at Michigan State University gave a presentation on Value Stream Mapping. Their laboratory is now in a new building and they will also be implementing a new computer system so they were going through a lot of changes. A consultant was hired to help evaluate their business processes and they decided to try Value Stream Mapping. Value stream is all the actions required to bring a product through the main flows essential to every product. It allows you to see the entire process, identifies waste and sources of waste, provides a common language, questions current decisions that happen by default, links material and information flow, and gives you a qualitative description of how your facility should operate. Applying Value Stream Mapping to your organization reduces the risk of making isolated improvements without improving total system efficiency and effectiveness or the total value stream's ability to provide client satisfaction. It also helps break down communication barriers and provides the basis for an implementation road map. Receiving was the first area of the laboratory they did value stream mapping on and they were successful in greatly reducing the number of process steps and were able to put more emphasis on accuracy and still got the samples processed quicker than before. They are now doing VSM for individual tests in the labs. They recommend doing areas together, i.e. ELISA tests, administration, inventory, etc. At DCPAH, a core group of people were trained for 2 days and core members now serve on each team.

Ralph Cobb from the Texas Veterinary Medical Diagnostic Laboratory gave a presentation on BSE program logistics. They just started doing BSE testing this year and had to identify lab space, buy equipment and hire technicians. They are notified the day the specimens are shipped by Fed Ex so they know what is coming in. They go to the Fed Ex office and pick up the samples and chain of custody is established. They have a separate receiving area for BSE samples. They scan the bar codes and duplicate bar codes are produced for the grinder vial and chain of custody log. The samples are logged into the TVMDL computer system and an ELISA test is run on the samples. Results need to be reported by the end of the day the sample is received. Results automatically go from the ELISA reader into the LIMS system and are e-mailed to USDA and the client. They are getting approximately 100 samples per day. The Washington and Colorado labs are running up to 400 samples per day. Ralph said they are using their LIMS system so they can get the report out and it is tied into the billing system. They use the submitter plant as the owner and the billing goes to USDA's account. After testing, the samples are retained a minimum of 5 working days under lock and key in case retesting is requested by USDA. After that time, the samples are incinerated. Jay said at Washington, if they can't identify obex, they don't test. He has been working on the BSE project a lot and was able to get the NVSL 10-4 form changed to something that better meets the needs of the program. He said eventually they don't even want to get the submission form because they don't need the form to run the test.

Emily Sanson from the California Animal Health & Food Safety Lab System gave a presentation on The Process of Attaining ISO Accreditation in their Equine Drug Testing Laboratory. International accreditation for this lab was a goal from the start. A QC officer was hired in 2001 to oversee the quality system and prepare the lab for accreditation. The application for accreditation was logged in March 2004 and the site visit was June 7-9, 2004. ISO requires you are accredited to certain methods and tests. They submitted all tests they do and were accredited for all. When preparing for Accreditation you need to define the scope, document your laboratory's policies and procedures, become familiar with appropriate accreditation requirements, perform a GAP analysis, perform internal audits and management reviews and submit the application for accreditation. There are 11 analysts in their Lab and the auditor was there for 3 days. To survive the site visit, you need to have all documentation readily available (SOPS, Quality manuals, etc.), prepare the analysts for the presence of the auditor, and take extensive notes during the process. The auditor will sit there and watch the technician perform the procedure. You have 30 days to respond to deficiencies and need to immediately define your action plan and do a Corrective Action Report for each deficiency. Lessons learned were to know the accreditation requirements and interpret them literally, consistency in training pays off, make sure to document everything, the implementing and documenting processes take time, and getting the certificate doesn't mean that you're done. Next Emily talked about the Diagnostic Lab Quality System. In 2003 AAVLD incorporated OIE standards into accreditation guidelines and will be required for AAVLD accreditation starting in 2007. They also wanted to develop a Quality System to maintain California Agriculture's favorable trade status with international partners, get credit for what they are doing well, and identify weaknesses and implement changes to correct them.

Sunday, October 24, 2004

Jay Ross from the California Animal Health & Food Safety Lab System demonstrated how they are using StarLIMS to process cases in their BSE Laboratory. The program is set up to track the sample from the time it is received, put on the ELISA plate and results transferred from the ELISA plate reader to the LIMS system and reported out.

Laboratory Updates:

Owen Schroeder, Breathitt Veterinary Center: They have been implementing their QA/QC program. They were accredited this year. They received an \$800,000.00 Biosecurity grant through their State Health Department to upgrade their Microbiology and Virology

laboratories to BSL-3. They are now having problems transporting samples to those labs and restricting students and visitors in the labs. He attended an excellent Biosecurity course by Dr. Ellis at CSU and Dr. Ellis is doing a risk assessment for them.

Ralph Cobb, Texas Veterinary Medical Diagnostic Lab: They have a new poultry Diagnostic Lab in their East Texas facility. There are 2 BSL-3 Labs at Texas. They had an Avian Influenza outbreak this year and got geared up for the BSE testing. They also had their AAVLD site visit 2-3 weeks ago.

Mary Finseth, North Dakota Veterinary Diagnostic Lab: Working on QA/QC program. A Quality Control manager was hired. Biosecurity changes have been made this year with card key access added to laboratories. Not as many West Nile cases have been received this year.

John Enck, Pennsylvania State: He was the State Veterinarian and just started as Lab Director on October 1. They have 3 sites. They have a new LIMS system to tie the Labs together. They have cooperative agreements with USDA for testing, but they aren't allowed to hire in Pennsylvania so they have had to hire a lot of temporary technicians.

Kim Ramm, Diagnostic Center for Population and Animal Health: At Michigan they are getting used to all being in one building. The TB testing is now being done by the State. Their Lab was testing 15,000-20,000 deer heads a year so they lost that revenue. They are still doing CWD testing.

Linda Hill, Diagnostic Center for Population and Animal Health: They are in the process of changing their LIMS system. They are also changing their disaster recovery plan since they are in one building now and before the server was in another building.

Jay Weidner, Washington Animal Disease Diagnostic Lab: He has been spending a lot of time working on the BSE project. QA/QC has also been consuming a lot of time. They had to do some BSL-3 conversions and security changes this year. British Columbia had an Avian Influenza outbreak this year that they were involved with.

Jeanine Staller, Pennsylvania Veterinary Laboratory: The Harrisburg Lab is awaiting for approval to start doing BSE testing in the next month or two. They are implementing a web based SOP system and want to start doing auditing. They got a new security system with card key access.

Joseph Kellum, Mississippi Veterinary Research & Diagnostic Laboratory: They are on schedule with their QA program implementation. It is a big project. Most of their SOPs need to be rewritten. They are building a new facility at one of their locations.

Grant Maxie, Animal Health Lab, University of Guelph: They started doing BSE testing. They are in the process of designing a new laboratory. They are putting out RFP for a new computer system. They want to update or replace VADDS. They have a 3-day full-scale simulation with the Avian Industry coming up. They plan to do this every year. You have to do it to make sure your system works.

Marci Pedersen, Nebraska Veterinary Diagnostic Lab: They are still under construction to over-haul their ventilation system and will be out of the building for 6 months. The Bacteriology and Virology Labs are on opposite ends of town and they have a courier to get the samples back and forth. Histology and Necropsy are the only labs in the building now. They have a site visit in April.

Bob Reese, Cornell Animal Health Diagnostic Lab: They are working on QA/QC. They are attempting to go live with a new computer system (UVIS) in April. BSE was a challenge to start up. They are working with the state to define a new lab that would bring all Labs under one roof.

They worked with the University and all supervisors had to go through mandatory training 1 day a week for 4 weeks. Faculty are required to go through 2 days of training. There has been a marked decrease in issues coming to him.

Linda Hendrickson, Purdue Animal Disease Diagnostic Lab: They are getting ready for their accreditation visit next month. The Veterinary School was also accredited this year. Since the hurricanes damaged the Veterinary School in Granada, the Purdue Vet School is housing the entire sophomore class and instructors. The Diagnostic Lab is also being used.

Jay Kammerzell, Colorado Veterinary Diagnostic Lab: They are continuously upgrading their LIMS system. Last year was a big West Nile year, but not too much this year. The USDA has been working with Japan trying to lift the export ban and they have been doing several tours in CSU's BSE Lab. They are going live with a web based SOP product and will implement it with their training. It will notify people when they need training and keep track of everyone's training. He has also been spending a lot of time on the NAHLN program. They are getting BSE working and then will bring other tests on.

Linda Brown, Kentucky Livestock Disease Diagnostic Lab: She is the new QA Manager and has been there 4 months. They began BSE surveillance in September. They have a new epidemiologist and a new toxicology section leader. They are under the College of Ag. at the University and their facility is outdated so they are looking at an enhancement plan. They have installed key card access system and are looking at a document control system (Sharepoint).

Brady James & Craig Carter, Texas Veterinary Medical Diagnostic Lab: They are installing a new server and are integrating 2 poultry labs into the system and will also do the drug lab in the future. They are poised and ready for HL7. They cross-referenced all in house dictionaries to Snomed.

Kathy Hill, California Animal Health Food Systems: They are in the mitigation and surveillance phase of the END outbreak from last year and are not having as much success as hoped for. Avian Influenza and END testing is being done at No Charge, but compliance is not as anticipated. They set up for scrapie testing, but are not doing much as there are more labs performing the testing now. Geraldine and a group were able to go and visit BSE labs in Europe and that really helped when they were setting up their BSE Lab. It was a big challenge to get set up quickly. They received a \$500,000.00 grant for John's ELISA testing in California and have tested 25,000 samples since May. There was a big rush in the beginning but it has slowed a lot. They received a small amount of funding from the Department of Health for West Nile testing which was pretty big this year. They have a Valley Lab project to take 3 older labs and convert to 2 new labs. They are having problems getting portions of one building converted to BSL-3. They have a very small space for doing BSE testing and are trying to lease a trailer to use. Everybody wants to do PCR testing. Luminex technologies has a method to do 100 assays on 1 sample. They are trying to find resources to pay for all the new PCR testing. Their faculty and supervisors have to do a training program that covers writing performance reviews, harassment, etc.

There was a short discussion on dangerous goods shipping. Cornell University was visited by the FAA. There were 9 violations at the University, most were because people's training had lapsed. The fines were up to \$30,000 per incident, but there were able to get them down to \$250.00 per incident. Both Cornell and Michigan have a single point of control for shipping infectious substances. Two people need to sign off – supervisor and shipper. Some places have four signatures - the person who wants to ship, their supervisor or chair, and the trained packer and their supervisor. New UN transfer regulations are coming January 1, 2005.

Geraldine confirmed committee membership which is as follows: Geraldine Jessup, Chair; Ralph Cobb, Linda Hendrickson, Katherine Hill, Jay Kammerzell, Grant Maxie, Mary Finseth, Barbara Pickard, Kim Ramm, Owen Schroeder, Steve Vollmer, Jay Weidner, Jeannine Staller, Marci Pederson, Bob Reese, Dr. John Enck, Joseph Kellum, Roy Thompson, and Linda Brown.

The meeting was adjourned at 10:15 a.m.

Submitted by Mary Finseth

Laboratory Director's Committee

Co-chairs Drs. Bev Byrum and Ron Lewis. The committee met Saturday October 23 5:30-8:00pm in Greensboro, NC. There were 50 attendees including Lab Directors and guests.

The following speakers provided timely updates of significant issues and disease programs:

Dr. John Clifford, Deputy Administrator, USDA/APHIS/Vs provided an update regarding the progress of the National BSE Surveillance Program. He mentioned that personnel from 7 state labs have been trained, passed proficiency tests and are conducting BSE testing. Five additional labs will provide testing as the program evolves. Testing was initiated June 2004, with a goal of testing 200,000 to 268,000 samples within a 12-18 month time period. Dr. Clifford indicated that over 90,000 samples had been tested to date with only 2 inconclusive results. Dr. Clifford thanked the Lab Directors for the excellent work and support being provided to this important program.

Dr. William C. Wagner, Professor, Ohio State University and CRSEES administrator updated the Lab Directors regarding the National Animal Health Laboratory Network. He indicated that the NAHLN has expanded to include labs conducting testing under contract with USDA-APHIS-NVSL. Labs eligible to join the NAHLN will be provided by e-mail a qualification checklist. This list must be completed by the Lab Director and signed by the State Veterinarian and USDA-Area Veterinarian-in-Charge. Funding for the NAHLN has been included in the federal fiscal 2005 budget, with the final numbers yet to be determined.

Mr. Dennis Senne, Virologist, USDA/APHIS/NVSL, provided an excellent presentation on the Molecular Characterization and Strain Variation of Highly Pathogenic Avian Influenza in North America. Mr. Senne described the new OIE avian influenza classification scheme called 'Notifiable Avian Influenza'. Three categories of notification for AI subtypes H5, H7 are 1) Highly pathogenic AI, IVPI of 1.25 or higher, 2) Highly pathogenic AI H5, H7 with compatible molecular sequence and 3) Low pathogenic H5, H7 strains. Mr. Senne anticipated these changes being adopted by the OIE in May 2005.

Dr. Ronald J. Lewis, Director, Animal Health Centre, British Columbia provided a description of the outbreak of Highly Pathogenic Avian Influenza in British Columbia. His presentation described how the outbreak evolved and included critical decisions which helped mitigate disease spread. His discussion included valuable “lessons learned” and recommendations beneficial to industry, regulatory agencies and labs in emergency preparedness and response.

Dr. Max Coats, Deputy Executive Director, Animal Health Programs provided a description of the Highly Pathogenic Avian Influenza in Texas. Dr. Coats mentioned the value of obtaining an early diagnosis and he discussed the cooperation of the Texas Animal Health Commission and the poultry industry in the maintaining the quarantine. Dr. Lelve Gayle, Executive Director of the Texas VMDL, discussed the initiation of a lab support network he developed in Texas as a result of this experience. This collaboration would provide lab surge capacity valuable for any future outbreak situations.

Dr. Jim Case, California Animal Health Lab & Food Safety Lab System provided an update on Progress Toward Standardization of Information Technology. Dr. Case described database system used by National Animal Health Laboratory Network labs. He mentioned the use of HL7 and SNOMED tools to provide a means for the original 12 Pilot NAHLN labs to enter data into the system. He suggested that expanding the NAHLN database to include additional labs could be followed using the same concepts.

Following the meeting, **Dr. Brian McCluskey**, USDA/CEAH presented a strategic plan for animal disease surveillance in the United States. The plan, the National Animal Health Surveillance System (NSS) has been developed by CEAH to provide a systems approach to monitoring emerging disease, domestic disease and foreign animal disease surveillance. A web site address was shared for Lab Directors desiring to obtain a copy of the plan: <http://www.aphis.usda.gov/vs/ceah/ncahs/nsu/index.htm>

Dr. Robert Sprowls shared a position statement from the Academy of Veterinary Consultants regarding their recommendation that the dairy and beef industries adopt measures to control and target eventual eradication of bovine diarrhea virus infection from North America.

Laboratory Safety and Biological Waste Disposal Committee

Chair: Larry Thompson. The committee met from 1:00- 4:30pm, October 24, 2003 in Greensboro, NC.

There were 38 members and guests in attendance. The Safety Committee continues its mission of fostering communication amongst member laboratories concerning on-going and emerging safety issues.

The first discussion focused on the 13th UN Model Regulations on the Transport of Dangerous Goods and the changes that will affect animal disease diagnostic laboratories. Infectious substances will be divided into Category A and Category B groups. A specific list of Category A organisms will be published with these organisms being the agents causing life threatening disease in animals or humans. Category B will be comprised of any infectious agent not in Category A. Category A infectious substances will require UN Part 620 packaging (equivalent to IATA 620 packaging) and a dangerous goods declaration. Category B infectious substances will require packaging similar to the current “Diagnostic Specimens” with the additional requirement that the primary or secondary container must be certified to withstand 95 kPa of pressure differential. This is equivalent to UN Part 650 packaging. Certain changes may be made in the current list of Category A agents, at the request of OIE, as reported by Dr. Jim Pearson. Most important of these would be the change in rabies virus listing to rabies (culture only) on the Category A list. This “culture only” designation would have a rabies suspect brain sent as a diagnostic specimen. Dr. Thompson will forward the list published by IATA to the committee and will update the committee on pending amendments. Although IATA regulations will be published soon and take effect on January 1, 2005 the US-DOT regulations will have a lag before implementation. Committee members are reminded that IATA changes only affect air travel while ground transportation regulations are covered by the US-DOT. The committee agreed that items sent by USPS should always be cleared by the USPS and Dr. Rick Nabors related his Texas experience and forwarded USPS contact names to confirm packaging requirements. A final item on the new regulations was that currently any sample from a healthy human or animal is exempted from the regulations. This exemption may be totally removed or may be changed to just healthy animals, as is needed for surveillance purposes.

The committee then had a short discussion of the CDC/USDA Select Agent registration. Most laboratories under CDC authority report fairly clear cut inspections and interpretations. Certain member laboratories report inconsistencies on the USDA side, probably related to changes in USDA personnel over a relatively short period of time.

The committee was updated on the status of the Best Management Practices for Chronic Wasting Disease and other non-zoonotic transmissible spongiform encephalopathies. This document was developed by the AAVLD Pathology Committee and the Lab Safety Committee last year. The document was accepted by the EPA. An update on the use of the Steris Corporation commercial product (LPH-environ) was given by the Wyoming and Colorado laboratories where it is used to decontaminate surfaces for prions. Section 36

18 exemptions have been granted to these states, but has lead to some confusion over the use of bleach and sodium hydroxide for the same purpose in these states. Currently the EPA seems to be mulling the situation over.

The final topic covered by the committee was a proposal to develop BMP for BSE in the diagnostic lab setting. After some discussion, the committee decided to place this as a major agenda item for the next meeting, with the committee chair agreeing to gather existing SOP's to avoid reinventing the wheel.

QA Committee

Chair: Dr. Monte Reimers. The committee met from 1:00pm-3:00pm on October 22, 2004 with 66 people in attendance. The meeting was chaired by Steve Vollmer of Purdue. Several attendees indicated an interest in becoming members of the committee. Updated committee rosters will be distributed to all members.

The primary topic of discussion was the creation of the quality system at each laboratory. Review of submitted quality manuals and implementation plans by the Accreditation Committee is forthcoming, and will be utilized by committee members and member laboratories to guide future quality system activities.

Attendees from USDA FSIS offered a compact disc containing their quality documentation. This CD will be provided to Steve Vollmer and made available to committee members who request it.

A major point of emphasis from the group was the desire for training. The AAVLD annual meeting has been recognized as a good time for this training, as so many who seek training are gathered. This desire has been voiced by numerous members through various means for some time, and has been communicated to AAVLD. Committee members with sufficient experience to do at least some of the training have repeatedly volunteered their services. The committee will continue to seek authorization for such training, as many of its members have been assigned QA responsibility despite limited experience or training.

Ongoing support of QA personnel at all member laboratories continues to be an important offering. Members of the committee as well as all AAVLD members are welcome to contact any member for information, consultation, sample documents, or other assistance.

Pathology Committee

Chair: Dr. Donal O'Toole. The Pathology Committee met from 12:00 – 2:00 pm on October 24, 2004 with 29 individuals attending. The following indicated they wished to be on the pathology committee: Donal O'Toole (chair, '05), David Steffen, Tim Baszler, Flint Taylor, Larry Stuart, Matti Kiupel, Floyd Wilson, HL Shivaprasad, Pam Parnell, Lanny Pace, Paige Carmicheal, Linda Brown, Mark Hall, Scott Fitzgerald, Rob Bildfell, Sheila Grimes, Bill Layton, Claire Andreasen, Michael Yaeger

1. Review of Saturday afternoon slide conference session and selection of replacement chair for 2005. Dr. Tanya Graham, SDSU
Dr. Graham reviewed this year's session. Twenty cases were presented, with two breaks, between 3:30 and 6:00 on October 2004. Presentations generally stayed within time. There was a discussion of whether to continue to send out slide boxes to institutions that do not have an employee presenting a case. Currently, 60 slide boxes go out. Costs are borne by institutions whose employees submit a case, which involves 60 slides/case submitted to the session chair. It was agreed that in future ONE slide box will go out to the institution of presenters, and ONE duplicate slide box will go to presenters IF they indicate this preference on their abstract. Remaining slide boxes will be advertised shortly before the annual meeting and brought to the meeting to be sold for \$50 each, with money going to the Pathology Travel Scholarship (checks to AAVLD Foundation). Dr. Carol Lichtensteiger (clichten@uiuc.edu) will serve as co-chair with Dr. Rob Bildfell (Rob.Bildfell@oregonstate.edu) for the 2005 meeting.

Action item: When **Dr. Bildfell** issues the call for cases in the 2005 meeting, he will ask presenters whether they want to get a personal set of slides, in addition to an institutional set. He will bring surplus sets to the AAVLD 2005 meeting to be sold to benefit the AAVLD Foundation (pathology travel scholarship).

2. Immunohistochemistry SOPs. Dr. Matti Kiupel MSU

Dr. Kiupel presented a two-page SOP document on standard operating procedures for immunohistochemistry. A longer document, *Guidelines for Standardization of Diagnostic Immunohistochemistry in Veterinary Laboratories*, was prepared by the AAVLD subcommittee on standardization of immunohistochemistry (edited by M Kiupel with contributions from T Baszler, L Bliven, B Broderson, B Chelack, S Czub, F Del Piero, S Dial, EJ Ehrhart, T Graham, L Manning, D Paulsen, J Ramos-Vara, and K West). This will be submitted for publication to JVDI.

Action items: 1. **Dr. Kiupel** will mail an amended version of the two-page SOP document for comments and approval to the AAVLD subcommittee on standardization, and to members of the Pathology Committee before the end of 2004.

2. **Dr. Kiupel and subcommittee** will submit Guidelines document for peer-review and publication to JVDI within the next year.

3. Clinical Pathology subcommittee update. Dr. Claire Andreasen ISU

Dr. Andreasen gave an oral report on preliminary plans for the clinical pathology subcommittee of the Pathology committee. This subcommittee was formed after a request by Dr. Willie Reed, AAVLD President, that a member of AAVLD chair a clinical pathology subcommittee in the Pathology committee to address development of quality assurance and quality control documents for clinical pathology units related to AAVLD-accredited laboratories. Subcommittee members are: Drs. Karyn Bird, Ken Latimer, and Melinda Wilkerson, and Claire Andreasen, Chair. The ASVCP has developed QA/QC documents that are posted at <http://www.asvcp.org/publications/qas-guidelinemenu.html>

She alerted the committee to a survey that will be undertaken by AAVLD to establish how many laboratories have in-house clinical pathology units, with a request for the name of a contact in each laboratory's clinical pathology service. The low membership in the AAVLD of clinical pathologists was discussed (currently, 6 list clinical pathology as their interest). This survey will be initially undertaken via emailing AAVLD laboratory directors. Dr. Andreasen also has contacted the ASVCP President about this current effort.

Action items: 1. **Dr. Andreasen** will formulate an initial survey to be reviewed by D. O'Toole via email. The clinical pathology laboratory contact person will be asked to review the ASVCP draft guidelines for QA/QC among AAVLD laboratories. A member of the AAVLD accreditation committee will be contacted, as well for input and review.

2. **D. O'Toole** will solicit clinical pathology presentations for a clinical pathology session in the AAVLD meeting in Hershey PA (November 2 – 8 2005) as a way to promote greater interaction between AAVLD diagnosticians and clinical pathologists. If the number of clinical pathology abstracts is small, they will be incorporated in a pathology session.

3. **Dr. Andreasen** will encourage dual membership of ASVCP and AAVLD via an announcement on the ASVCP listserv encouraging members to join, as well as information about #2 above when available.

4. Revision of "Laboratory Diagnosis of Livestock Abortion. Dr. D. O'Toole, UWy

Dr. O'Toole proposed that the Pathology committee identify individuals who would be willing to work on revising, updating and expanding this text, the 3rd edition of which was published in 1990. The AAVLD publications committee agreed that this could be done on-line, although the ownership of copyright of the 3rd edition material needs to be confirmed. Dr. Michael Yaeger (MYaeger@iastate.edu) agreed to serve as co-editor. Suggested co-editors were Mark Anderson and Behzad Yamini. Suggested names for individual species were Yaeger (pigs), Neil Williams or Klaus Buergelt (horses), and Behzad Yamini (dogs and cats). Dr. O'Toole will send an outline to Dr. Yaeger. The goal is to have a revised online document on the web by next year's meeting. Co-editors will encourage contributors of good chapters to submit them to J Vet Diagn Invest as review articles, since such articles increase the visibility and ISI rankings of the journal.

Action item: 1. **D. O'Toole** will submit a chapter outline to Dr. Yaeger, and solicit Mark Anderson and Dr. Yamini as co-editors.

2. **Dr. David Steffen** will find out whether we can use material from the current 3rd edition, since copyright is formally held by Iowa State University Press.

3. **Dr. Yaeger and co-editors** will identify chapters that show promise as current reviews of abortion/perinatal death/stillbirth and encourage their submission to J Vet Diagn Invest.

5. Improved training and recruitment of veterinary diagnostic pathologists. Dr. D. O'Toole, UWy

The Association of American Veterinary Medical Colleges is working with USAHA and AAVLD to increase the supply of veterinarians engaged in "public health practice" in the United States. There was to be a meeting on 25th October chaired by Dr. Bennie Osburn (head of AAVMC) and Mr. Bob Frost (past president of USAHA) to discuss a draft documents, the *Veterinary Medical Education and Workforce Development Act of 2004*. This request to Congress is for \$300 M in fiscal year 2005 and for unspecified funds in years 2006 – 2010. The critical shortage of diagnosticians in the fields of pathology, microbiology and toxicology, as well as diagnostic informatics and QA/QC personnel, was discussed.

Action item: If the AAVLD Executive Board agrees, the AAVLD will encourage the AAVMC and USAHA to earmark part of the congressional request for funds to increase training of veterinary diagnosticians, through fellowships in AAVLD-accredited laboratories, debt forgiveness for DVMs willing to pursue careers in diagnostic veterinary medicine, veterinary student travel scholarships to meetings such as AAVLD-USAHA, and externship programs in veterinary diagnostic laboratories.

Serology Committee

Co-Chair: Sandy Baldwin, The committee met from 4:00-6:00 pm Friday, October 22, 2004. There were 55 guests and 5 committee members in attendance.

1. Technical updates: Only one company presented technical data for a new commercial kit. Idexx gave a brief description on their blocking ELISA PRVgB antibody kit for review by the committee.

2. NVSL update: Beverly Schmitt presented a brief NVSL update on standardization of panels and reports for proficiency testing. NVSL is examining the feasibility of altering the distribution schedule of proficiency panels to the diagnostic laboratories.
3. Product updates: Only one commercial company gave a presentation on product developments. Idexx described their CWD and BSE ELISA kits, their avian pneumonitis antibody kit (European market), their light cycler PCR test for salmonella, their BVD antigen ELISA monoclonal ear notch arsenal, their BCV antigen capture ELISA, their Tecan adaption of the Johne's ELISA, their SIV antigen ELISA and their Johne's RT-PCR light cycler test.
4. Dr. David Miller presented data gathered by NVSL from the leptospirosis proficiency testing. Participants were reminded to use the USAHA leptospirosis guidelines and to dilute out to 1:102,400. Dr. Miller described the collection and packaging of the samples and how results were scored (5 points for correct identification, 0 for incorrect identification; 5 points for each correct titer, -1 point for each two-fold dilution away from the median titer. Ninety-five percent of the 42 (40 outside laboratories and 2 from NVSL) participating laboratories scored 95% or greater on identification and 50% were 99% or better. Forty five percent scored 95% or better on accuracy and 9.5% scored less than 90%. Finally, 71% scored 95% or better on both accuracy and identity. It was re-iterated the test is not for certification and that laboratories are not passed or failed. Rather, it is to be used for maintaining competency, evaluate testing capabilities, monitor internal laboratory procedures and to improve competence in diagnostics - export and import testing.
5. Dr. David Miller also presented the information gathered by testing cattle sera against three different *Leptospira hardjo* genotypes. Current genotype utilized is *Lepto hardjo - prajitno* and this genotype was tested along with *Leptospira hardjo - bovis A and bovis B*. Two thousand four hundred thirty one bovine sera from all regions of the United States were tested. Sixty percent of the samples were negative for all three genotypes. Nine hundred fifty six were positive for at least one of the three genotypes. Fifteen were non reactive to *H. prajitno*. Eleven of these fifteen were positive for *H. bovis A* only, two for *H. bovis B* only, and two were positive for both *H. bovis A and B*. Three hundred ninety four were positive for *H. prajitno* only and if either *H. bovis A or bovis B* were used in the MAT test 50% of the Hardjo positive cases would have been missed. The conclusion by Dr. Miller was that the data does not support the suggestion that *H. bovis A or bovis B* is better than *H. prajitno* for determining Hardjo antibody in cattle sera.
6. Dr. Peter Wright presented the current status of OIE guidelines for test validation and certification of diagnostic assays for infectious animal diseases. His summary: Until now, the OIE has considered animal diseases mainly as it pertains to trade. Accordingly, it classifies animal disease diagnostic tests as prescribed or alternative tests. There are many other reasons for testing, including: serologic monitoring, demonstration of freedom from infection, estimation of prevalence of infection for risk assessment, etc. Therefore, test validation should be a process that will demonstrate fitness of that test for a particular use. The OIE has received requests from many member countries and also from commercial test manufacturers to provide clear guidelines and much broader recognition of diagnostic tests as fit for specific purposes, not only for trade.

To this end, the OIE in collaboration with the Joint FAO/IAEA Division of the IAEA has developed a framework whereby fitness for purpose is incorporated into test validation. Guidelines and a standard template are being established for the preparation of dossiers to be submitted to the OIE for test validation and certification. The OIE is presently establishing a Secretariat that will manage the evaluation process and a registry of those tests that have been successfully validated and certified. OIE Reference Laboratories will be intimately involved in the evaluation process and in the development of panels of reference materials that will facilitate uniform evaluation and comparison of test methods.
7. Following the formal meeting, the five committee members present met and discussed the future direction that the Serology Committee will take. Several items were brought forth. First, via input to and from the Approved Methods Committee, provide validation packets to assist in the accreditation process of AAVLD laboratories. Second, Drs. Jerry Saliki and Sandy Baldwin will update the Unique Serology Manual for distribution to the diagnostic laboratories. Third, the committee will attempt to develop and publish timely reviews on serologic interpretations for AAVLD members. Fourth, key speakers will be sought to give relevant serologic presentations that will assist the AAVLD at-large members. Finally, in an attempt to increase the number of committee members, the sign-up sheet that was distributed during the meeting asked for AAVLD members that would be interested to become members to signify that interest. That list of potential new members will be examined and names presented to the AAVLD president for approval.

AAVLD Veterinary Analytical Toxicology & Mycotoxin and USAHA Environmental Residues Committee

Co-chair: Brent Hoff. The committee met on Saturday, October 23, 2004 from 3:30-6:30pm with 36 people in attendance.

Dr. Gavin Meerdink – USAHA representative gave a brief overview of origin and structure of committee.

Dr. Emmett Braselton addressed the group on the topic of ICP-AES in the Diagnostic Laboratory. He gave the history and the development of ICP-AES and explained the mechanics and function of the equipment. He explained how he was involved with early

development and working objectives as well as the application to “real life”, using 19 elements that are significant. It became very apparent that quality control became very important for the various methods. Biopsies needed an ultrasonic nebulizer, especially for copper. Using this method a sample from a small True-cut biopsy can be processed (5mg).

A multi-element profile has been developed and this helps establish validity. There are unexpected consequences, such as ethylene glycol, cholecalciferol (Ca:P). Cold vapor is used for Hg and ICP. A method using iodine can be used to measure GFR, but there is some interference with Phosphorous. There are many further new developments in the works.

Dr. Randall Lovell presented information on dioxin levels in animal feeds. He first gave a review of TEQs of 17 Dioxin/ furan congeners and 3 PCB congeners. A summary of “Follow-up Cattle Investigations to a Recent USDA Survey” was given. Also, “Follow-up Investigations to a Recent USDA Dioxin Survey” was presented.

Dr. Elisabeth Tor gave an outline on the development of various analysis and methodologies for algal toxins. Visual identification should be done on a fresh sample. There are several different methodologies and LC/MS is the most sensitive.

Mr. Andrew Moore’s presentation, entitled FT-IR/SEM – a useful tool in veterinary toxicology and forensic food science, included many screening procedures for veterinary toxicology. The presentation indicated how this instrumentation could be used to identify foreign material in foods and source material. This includes metals, drugs, crystals and plastics. The equipment is also used to confirm crystals and urolith composition in the Urolith Laboratory.

Dr. Mike Filagenzi gave a presentation entitled – Perchloride methodology (milk) (and regulations) by LC/MS/MS. Perchlorate disrupts thyroid hormone levels. Perchlorate is highly mobile in aqueous systems (stable compound). There are no federal standards. (EPA wants 1 ppb; NAS will set standards). To achieve detection limit and specificity, went to LC/MS. Difficult to find a negative milk sample .

A discussion on the levels of various mycotoxins around North America was conducted by Dr. Michelle Mostrom. Overall, not very high levels seen, with some exceptions in the central northwest.

Committee members:

Co-chair Brent Hoff 2006 Co-chair Catherine Barr 2007

One year term - Michelle Mostrom, Gene Niles, Wilson Rumbelha, Robert Poppenga

Two year term - Mike Murphy, Birgit Puschner, Nick Schrier, George Rottinhaus

Three year term – Dwayne Hamar, Frank Galey, Larry Thompson, Andreas Lehner

Liasons: AOAC - Frank Ross, FDA - Randall Lovell, ABVT – Bob Poppenga, AAVCT – Wilson Rumbelha

Virology Committee

Co-chairs: David Benfield and Jim Evermann. The committee met from 1-4 pm on 21 October 2004 with 53 individuals in attendance.

1. Update development of PCR assays for detection of PRRSV in semen and other tissues. An update on the development and validation of a commercial “real time” PCR assay for the detection of PRRSV in semen, serum and other tissues of boars was discussed. This test has been in development through a collaborative effort of Tetracore, Inc, the South Dakota Animal Disease Research and Diagnostic Laboratory, and the Animal Disease Diagnostic Laboratory at the University of Nebraska-Lincoln. Jane Christopher-Hennings (SD) presented “Quantification of PRRSV in boar semen, serum and tissues”. Most of the information presented has been published as Waslik et al; 2004:42:4435-3361. Highlights of her presentation included: 1) The commercial real time PCR offered by Tetracore, Inc is as sensitive as the nested RT-PCR, which has been the gold standard; 2) Semen and serum differ in viral load; 3) PRRSV can persist in lymphoid tissue of boars up to at least 96 dpi; 4) Peripheral gamma-interferon levels and neutralizing antibodies to PRRSV are detectable “late” in infection and do not correlate with the duration of virus detection in semen; 5) Mictotitration estimates of the quantity of infectious virus may underestimate the amount of infectious virus present in samples; 6) Copies/ml of viral RNA may overestimate the amount of virus present in samples; and 7) Biosecurity and eradication protocols in boar studs may require a highly sensitive test such as PCR to identify animals acutely or persistently infected with PRRSV.

Johnny Callahan, Tetracore, Inc provided an update of activities to develop, standardize and validate the VetAlert™T-PCR for PRRSV (“An update on the Vet Alert™T-PCR reagents for the detection of U.S. and Lelystad or European-like porcine PRRS viruses”). He indicated that a commercial test has been developed, validated and is now being commercially produced in a cGMP facility. New goals for this assay include development of a commercial quantitative standard (in vitro PRRSV RNA transcripts) to use in a quantitative assay and to develop a multiplex RT-PCR assay to detect North American and European isolates in the same test. Tetracore, Inc has also applied for USDA/APHIS/CVB license for the VetAlert assay.

2. Update from the National Veterinary Services Laboratory. Bev Schmitt, Chief Diagnostic Virology Laboratory, NVSL presented an update on activities: 1) BSE, U.S. first case, target is to screen 200,000 to 300,000 samples within 12-18 months, 7 laboratories are participating in this activity; 2) Implementation of training and proficiency testing for FMD, CSF and VS for laboratories in the NAHLN, Newcastle disease approved laboratories were rolled into NAHLN; 3) Master Plan for new laboratory facilities in progress; 4) Avian influenza outbreaks in DE/MD (LP H7N2), TX (HP H5N2; LP H7N3), WA surveillance for HP (H7N3), CT (LP H7N2). Increase in requested AGID reagents from NVSL; 5) Newcastle disease surveillance targeting backyard poultry and birds with 3,000 tested to date, goal is to test 30,000; 6) VSV outbreaks in TX, NM and CO. FADDL screened 233 samples, DVL 1,493 samples. Validated real time PCR assay for VSV; 7) Outbreak of spring viremia of carp/taura syndrome; 8) Developing BVDV proficiency panel; 9) EEE outbreak in Northeastern U.S.; 10) WNV cases decreased in horses this year except in AZ and CA; and 11) Evaluating EHV-1 PCR for brain tissue.

3. Equine influenza in racing greyhounds. Ed Dubovi gave a presentation entitled “Influenza virus infection in racing greyhounds with acute respiratory disease”. Kennel cough syndrome epidemic in greyhounds in 1992, 1999 and 2003 was observed in several states. Disease was clinically characterized by fever, protracted coughing, and death. This resulted in a nationwide quarantine on dog movements and suspension of racing, a financial hardship to the industry. An outbreak involving 22 dogs in January 2004 in Florida. Morbidity was 100% with 8 deaths. Postmortem examination revealed extensive hemorrhage in lungs and pleural cavities of six dogs. All 6 dogs had bronchopneumonia and influenza virus was isolated. IHC on lung was also positive for H3 protein. Genetic and other characterization of the virus indicated similarity to H3N8 equine influenza. This isolate was designated A/canine/Florida/43/04.

4. Companion animal diagnostics. Jim Evermann reported for the small animal diagnostics subcommittee. Companion animal virology services and diagnostic needs of small animal veterinarians are being influenced by changes in vaccination protocols from annual to every 3 to 4 years. There are also more specialized commercial laboratories offering serology and virological services that are not offered by veterinary diagnostic laboratories. Discussion focused on: 1) The need for immune assessment profiling, that uses IgG titers as a measure of protective immunity; 2) Specialty laboratories for PCR and the use of PCR to determine if virus persists when not causing disease; 3) Surveillance and emerging infections. Monitoring for newly emerging infections of animals is an important role of diagnostic laboratories. Examples include WNV, equine influenza, respiratory syncytial virus and coronavirus in dogs and canine distemper virus in cats.

5. Review of vesicular diseases. Tom McKenna, USDA-APHIS, Plum Island gave an overview of “Vesicular diseases: Disease overview and discussion of economic importance”. He discussed the similarities and differences between FMD, VS and SVD. There was also discussion on the impact these diseases could have on the U.S. export market of animal products. The economic impact would be substantial as agriculture is only 1/2 areas where US has a positive balance of trade. A recent suspected FMD outbreak in Kansas had significant impact on cattle futures, grain prices and stocks of several food and agriculture processors fell. Cost to the industry was estimated as \$50 million all due to a suspected case. Information on the economic costs to the United Kingdom from the last FMD outbreak was also presented. Important points to remember related to vesicular diseases: 1) All are clinically similar; 2) Many domestic disease present with similar clinical signs; 3) Vesicular diseases can be distinguished only by laboratory testing; 4) Introduction of these diseases in U.S. will have significant economic effects; and 5) Producers, private practitioners, government veterinarians are the first line of defense for identifying the introduction of these diseases.

6. Other committee business. Jim Evermann discussed the new Pioneers in Virology award to be introduced and awarded at the 2005 Virology Committee meeting. Members on the Virology Committee will be solicited to vote for the recipient. Jim Evermann and Dave Benfield will seek funds for the award.

The quality control and PRRSV PCR working subcommittees have completed their assignments and are dissolved. The BVDV diagnostics (Ed Dubovi, Fernando Osorio, Jim Evermann, Jerry Saliki, Judith Ridpath) companion animal diagnostics (Jim Evermann) and molecular diagnostic (Ming Deng, Roger Maes, Steve Kleiboeker, Johnny Callahan, Dave Benfield, Robert Eisner) subcommittees will continue for next year. A nominee for co-chair to replace Dave Benfield in October 2005 will be recommended to the President of AAVLD.

There was also discussion on the need to determine how to archive various virus isolate collections that are being discarded due to retirement of many diagnostic virologists. Members of the committee are to provide ideas to the co-chairs as to how the committee might address this issue.

2005 COMMITTEE CHAIRS

Standing Committees	Chairs/Representatives	EMAIL
Accreditation	Leon Thacker- 2005	thackerl@purdue.edu
Awards	Willie Reed - 2005	reed@dcpah.msu.edu
Credentials	Barb Powers - 2005	bpowers@vth.colostate.edu
Editor and Editorial Board, JVDI	Jerry Saliki, editor	jsaliki@okstate.edu
Editor, Newsletter	Pat Blanchard - 2005	pcblanchard@ucdavis.edu
Membership	Barb Powers - 2005	bpowers@vth.colostate.edu
	Richard Mock, co-chair - 2006	rmock@tvmdl.tamu.edu
Nominating	Willie Reed - 2005	reed@dcpah.msu.edu
Program	Donal O'Toole - 2005	dot@uwyo.edu
Publications	David Steffen - 2006	dsteffen@unlnotes.unl.edu
Web Editor	Bruce Janke	bhjanke@iastate.edu
Special Committees and Liaisons/Representatives:		
AAVLD Representative to WAVLD	Gary Osweiler -2005	osweiler@iastate.edu
ACVP Liaison	Paige Carmichael -2005	kpc@vet.uga.edu
Assoc of Public Health Lab Liaison	Pat Blanchard -2005	pcblanchard@ucdavis.edu
Administrative Management Personnel Committee:	Geraldine Jessup -2006	gjessup@cahfs.ucdavis.edu
AAVLD Approved Methods Committee	Barbara Martin -2005	barbara.m.martin@aphis.usda.gov
	Jim Pearson -2005	jpearson34@aol.com
AAVLD/USAHA Animal Disease Information Sys:		
AAVLD Co-Chair	Francois Elvinger, co-chair -2005	elvinger@vt.edu
USAHA Co-Chair	Bruce Akey, co-chair -2005	bakey@agmkt.state.ny.us
AAVLD/USAHA Aquaculture Cte.		
AAVLD Co-Chair	Tom Baldwin, co-chair -2005	tjbald@cc.usu.edu
USAHA Co-Chair	Scott LaPatra, co-chair -2007	scottl@clearsprings.com
AVMA Liaison		
AVMA Informatics committee liaison		
Bacteriology Steering Committee		
Subcte on Antimicrobial Susceptibility Testing		
Subcte on Bacteriology and Mycology		
Constitution, Bylaws and Resolutions		
House of Delegates Parliamentarian		
HL7 Liaison		
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 Response Network and Food Emergency Response Network AAVLD representative:		
	Terry McElwain -2005	tfm@vetmed.wsu.edu
Laboratory Safety/ Waste Disposal Committee:	Larry Thompson -2006	ljthompson@tifton.uga.edu

National Animal Health Emergency Management Steering committee AAVLD representatives:

	Pat Blanchard -2005	pcblanchard@ucdavis.edu
	Francois Elvinger, co-chair -2005	elvinger@vt.edu
	Alfonso Torres (alternate)	at97@cornell.edu
NIAA Liaison	Alfonso Torres -2005	at97@cornell.edu
Pathology Committee	Donal O'Toole -2005	dot@uwyo.edu
Subcte Clinical Pathology	Claire Andreasen	candreas@iastate.edu
Subcte Immunohistochemistry	Matti Kiupel	kiupel@dcpah.msu.edu
Quality Assurance Committee	Monte Reimers -2005	mreimers@msu.edu
Serology Committee	Charles (Sandy) Baldwin -2006	alexand@tifton.uga.edu
	Jim England, co-chair -2006	jengland@uidaho.edu
Strategic Planning	David Zeman -2006	david_zeman@sdstate.edu
Society of Quality Assurance (SQA) Liaison	Monte Reimers -2005	mreimers@msu.edu
Veterinary Analytical Toxicology & Mycotoxin	Brent Hoff, co-chair -2006	bhoff@lsd.uoguelph.ca
	Catherine Barr, co-chair -2007	acbarr@tmvdl.tamu.edu
Virology Committee	David Benfield, co-chair -2005	benfield.2@osu.edu
	Jim Evermann, co-chair, 2006	jfe@vetmed.wsu.edu

CALL FOR PAPERS

**48th Annual AAVLD Meeting at
Hershey Lodge and Convention Center, Hershey, Pennsylvania
November 3-10, 2005**

Deadline for Abstracts: MAY 15, 2005

Papers and posters are 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, 2005.

FORMAT: Send as an e-mail attachment your 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' names below the title with their initials followed by last name. Place location of authors' names 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. For your convenience, an EXAMPLE ABSTRACT from 2003 immediately follows this announcement.

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

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

AAVLD Foundation Trainee (Graduate Student or Resident) Awards of \$500 are given for the best poster and the best presentation. Note: Graduate student/Resident presentations must be indicated as such on the abstract to qualify.

Submit abstracts to Program chair: Dr. Donal O'Toole via email at dot@uwyo.edu. For inquiries and questions contact Dr. O'Toole at phone: 307-742-6638.

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 and on the AAVLD WEB site www.aavld.org. Authors are encouraged to submit their manuscripts to the editor for processing prior to the meeting, if possible.

SAMPLE ABSTRACT

Effect of Exposure to Commercial Antifoams on the Viability of Three Continuous Cell Lines

J.R. Hermann*¹, R.B. Evans², S.J. Hoff³, and J. Zimmerman²

Antifoaming compounds are widely used under industrial or research conditions in which excessive foam is created, e.g., when liquid containing carbohydrates and/or proteins is aerated. The long-term focus of our research is the characterization of pathogenic viruses in aerosols. Virus half-life is a crucial variable in predicting the distance these agents could potentially travel. Half-life estimates of aerosolized infectious virus \times time are based on standard *in vitro* tissue culture methods (TCID₅₀). However, the possible direct effect of antifoaming compounds on the continuous cell lines used in the virus assays has not been described. Any detrimental effect of antifoaming compounds on cell viability would directly affect the accuracy of TCID₅₀ estimates. Therefore, the objective of this work was to assess the effect of commercially-available antifoams on the viability of continuous cell lines.

Six commercially-available antifoams were tested on 3 continuous cell lines using 2 exposure periods. Continuous cell lines tested were African Green monkey kidney (MARC-145), Madin-Darby canine kidney (MDCK), and pig kidney (PK-15). Antifoams tested were 204 (A26426), A Emulsion (A5758), B Emulsion (A5757), C Emulsion (A8011), O-30 (A8082), and SE-15 (A8582) (Sigma A26426, St. Louis, MO). Exposure periods tested were 2 hours or 24 hours. Antifoams were serially 10-fold diluted (10^{-1} to 10^{-4}) in MEM (Sigma Chemical Co., St. Louis, MO) supplemented with 10% fetal bovine serum (Sigma Chemical Co., St. Louis, MO), 50 $\frac{1}{4}$ g of gentamicin (Sigma)/ml, and 0.25 $\frac{1}{4}$ g of amphotericin B (Fungizone; Sigma)/ml (MEM growth medium). Then, 200 $\frac{1}{4}$ L of each antifoam dilution was added to 3 wells of a 96-well microtitration plate. Two exposure times were tested by incubating cells with antifoam dilutions at 37°C in a 5% CO₂ humidified incubator for either 2 or 24 h. Cells exposed for 2 h were rinsed twice, MEM growth media added to wells, and plates incubated for an additional 22 h. Each treatment was replicated 8 times.

The effect of exposure to antifoam on cell viability was determined using a neutral red cell viability assay. The neutral red assay is a method for estimating the percent of viable cells. The principle of the assay is that viable cells retain the dye, whereas damaged cells do not. The results for each well were read using a spectrophotometer. The percent cell population viability for each treatment was calculated as: (mean absorbance of treated wells / mean absorbance of control well) * 100

1. Antifoams were found to decrease cell viability in the 3 continuous cell lines tested following either 2 hr or 24 hr exposure periods.
2. Differences in the degree of cytotoxicity existed between antifoams, but the effect was consistent across cell lines for specific antifoams.
3. Increasing concentrations of antifoams decreased cell viability, but the effect was variable among antifoams.

We conclude that antifoams can exhibit detrimental effects on cells. Therefore, microbiologists using antifoams should assess the appropriateness of an antifoam and its concentration for their specific application.

¹Department of Veterinary Microbiology, Iowa State University, Ames, IA

²Department of Veterinary Diagnostic and Production Animal Medicine, Iowa State University, Ames, IA

³Department of Agricultural and Biosystems Engineering, Iowa State University, Ames, IA

*To be considered for graduate student award

SATURDAY DIAGNOSTIC PATHOLOGY SLIDE SEMINAR

Saturday, November 5, 2005, Hershey, Pennsylvania, 3:30- 6:00 pm.

Short, interesting, and educational cases are requested for the Saturday Diagnostic Pathology 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 cytology/HE slide: July 5, 2005

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

Dr. Rob Bildfell, Veterinary Diagnostic Laboratory, Oregon State University, PO Box 429, Corvallis, OR 97339-0429 (phone 541-737-6965), email: Rob.Bildfell@oregonstate.edu. Email a copy of abstract to Dr. Carol Lichtensteiger at clichten@uiuc.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 HE glass slides for histopathology cases. Cytology cases should consist of as many glass slides as are available, plus a series of high quality digital images that are representative of the case. These materials should be submitted to the moderator by September 1, 2005 to allow review of slides by AAVLD members before the meeting. Presenters are entitled to receive a complete set of conference slides at no cost.

DIAGNOSTIC BACTERIOLOGY CASE PRESENTATIONS

Saturday, November 5, 2005, Hershey, Pennsylvania, 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, 2005.

FUTURE MEETINGS

February 24-27, 2005: **Midwest Veterinary Conference** at the Greater Columbus Convention Center in Downtown Columbus, Ohio (For more info go to www.mvcinfo.org or email ohiovma@ohiovma.org)

April 2-6, 2005: Annual Meeting of the **American Society for Investigative Pathology** will be held in conjunction with **Experimental Biology 2005** at the San Diego convention center. Details available at meeting website (<http://www.asip.org/mtgs/EB05/welcome.htm>). Mini-symposia and poster sessions from abstracts submitted to ASIP topic categories and two full-day mini-conference on the pathobiology of neoplasia and new developments in inflammation integrating abstract-driven presentations and invited speakers.

April 4-6, 2005: **Marker Vaccines and Differential Diagnostic Tests in Disease Control and Eradication** at the Scheman Conference Center in Ames, Iowa, USA. Current technologies for marker vaccines and differential diagnostic tests, regulatory considerations for disease eradication. More details at <http://www.vetmed.iastate.edu/services/institutes/iicab/MarkerMtg.htm>

June 2005: **Canadian Animal Health Laboratorians Meeting 2005 (CAHLN)** - Planning by University of Montreal (St-Hyacinthe) Veterinary School, Quebec Ministry of Agriculture Veterinary Diagnostic Labs (MAPAQ) and the Canadian Food Inspection Agency. The meeting will be held in conjunction with the Canadian Association of Veterinary Pathologists (CAVP) annual meeting.

November 3-10, 2005: **AAVLD/USAHA Joint Annual Meeting** in Hershey PA

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 one to two page letter stating the candidate's role in the work to be presented and the significance of the work to veterinary diagnostic medicine, and 3) a one to two page biographical data sheet. The application materials must be emailed to: Dr. Willie Reed, reed@dcpah.msu.edu. Any questions contact Dr. Reed at 517-353-0635.

The deadline for receipt of all application materials is May 9th, 2005. 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: Monday, May 9th, 2005

Trainee Travel Award

To promote the attendance of trainees in all disciplines of diagnostic medicine, the AAVLD is offering competitive \$500 Travel Awards to offset travel expenses to the Annual AAVLD Meeting in Hershey, Pennsylvania.

Please specify your discipline (select one): Bacteriology ___ Epidemiology ___ Immunology ___

Molecular Diagnostics ___ Pathology ___ Toxicology ___ Virology ___

Other (write in) _____

Candidate name: _____

Position: _____ No. of years in position: _____

Department: _____

Institution: _____

Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____ E-mail: _____

Abstract Title (attach copy of abstract) : _____

Include letter stating trainee's contribution to the work to be presented and significance of work to veterinary diagnostic medicine

Include 1-2 page biographical datasheet

THANK YOU TO OUR 2004 MEETING EXHIBITORS

Exhibitors are vital to the financial and scientific success of our annual meeting by providing funding to offset the association costs 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.

Automated Technologies Inc.: 210 W. Hamilton Ave. #297, State College, PA 16801
(Ph: 814-237-3001; E-mail: jrakl@atiinternational.com; Web Site: www.atiinternational.com)

BD Diagnostic Systems: 7 Loveton Circle, Sparks, MD 21152
(Ph: 800-638-8663; Web Site: www.bd.com)

Biocor Animal Health/Pfizer-Omaha: 2720 N. 84th St., Omaha, NE 68134
(Ph: 402-210-6509; E-mail: tom.kellner@pfizer.com; Web Site: www.biocorah.com)

Bio-Rad Laboratories: 2000 Alfred Nobel Dr., Hercules, CA 94547
(Ph: 510-741-5655; E-mail: don_guidoux@bio-rad.com; Web Site: www.bio-rad.com)

Biovet, Inc.: 4375 Ave. Beavory, St. Hyacinthe, Quebec, CANADA J2S 6M2
(Ph: 450-771-7291 x 246; E-mail: augera@biovet-inc.com; Web Site: www.biovet.com)

Centaur, Inc.: P.O. Box 25667, Overland Park, KS 66225-5667
(Ph: 913-390-6184; E-mail: CentaurUnavet@aol.com)

Cepheid: 904 Caribbean Dr., Sunnyvale, CA 94089
(Ph: 408-400-8456; Web Site: www.cepheid.com)

Computer Aid Inc. (CAI): 470 Friendship Road #300, Harrisburg, PA 17111
(Ph: 717-651-3055; E-mail: eric_hesen@compaid.com; Web Site: www.compaid.com)

Crawford Industrial Group: 9101 Parkers Landing, Orlando, FL 32824
(Ph: 800-228-0884; E-mail: gamage@crawfordequipment.com; Web Site: www.animal-cremation.com)

Elsevier (W.B. Saunders/Mosby): 2009 Jasany Lane, Sanford, NC 27330
(Ph: 919-776-9293; E-mail: salporte@aol.com)

Global VetLink, LC: 2625 N. Loop Dr. #2130, Ames, IA 50010
(Ph: 515-296-0860; E-mail: amelita@globalvetlink.com; Web Site: www.globalvetlink.com)

IDEXX Laboratories, Inc.: One Idexx Dr., Westbrook, ME 04092
(Ph: 800-548-9997; E-mail: PASweb@idexx.com; Web Site: www.idexx.com)

Key Scientific Products: 1402 Chisholm Trail #D, Round Rock, TX 78681
(Ph: 800-843-1539; Web Site: www.keyscientific.com)

National Institute for Animal Agriculture (NIAA): 1910 Lyda Ave., Bowling Green, KY 42104
(Ph: 270-782-9798; Web Site: www.animalagriculture.org)

Prionics AG: P.O. Box 11473, Shorewood, WI 53211
(Ph: 414-324-3334; E-mail: miladin.kostovic@prionics.com)

Quality Systems Integrators: 148 Magnolia Dr., Chester Springs, PA 19425
(Ph: 610-458-0539; E-mail: turocy@qsi-inc.com; Web Site: www.qsi-inc.com)

The Ross Group: 8355 Cherokee Blvd. #100, Douglasville, GA 30134
(Ph: 770-942-5629; E-mail: jeff.fuson@rossgroupinc.com; Web Site: www.rossgroupinc.com)

Scientific Technologies Corporation: 4400 E. Broadway Blvd. #705, Tucson, AZ 85743
(Ph: 520-202-3333; E-mail: melissa-chambers@stchome.com; Web Site: stchome.com)

Synbiotics Corporation: 11011 Via Frontera, San Diego, CA 92127
(Ph: 858-451-3771; Web Site: www.synbiotics.com)

Tetracore, Inc.: 11 Firstfield Rd. #C, Gaithersburg, MD 20878
(Ph: 301-258-7553; E-mail: jcallahan@tetracore.com; Web Site: www.tetracore.com)

Trek Diagnostic Systems: 982 Keynote Circle #6, Cleveland, OH 44131
(Ph: 800-871-8909; E-mail: mmcgeady@trekds.com; Web Site: www.trekds.com)

Ventana Medical Systems: 1910 Innovation Park Dr., Tucson, AZ 85737
(Ph: 520-229-3867; Web Site: www.ventanamed.com)

Vetstar: 79 N. Franklin Turnpike, Suite 103, Ramsey, NJ 07446
(Ph: 201-934-7127; E-mail: sales@vetstar.com; Web Site: www.vetstar.com)

Viral Antigens, Inc.: 5171 Wilfong Rd., Memphis, TN 38134
(Ph: 901-382-8716; E-mail: rstudholme@viralantigens.com; Web Site: www.viralantigens.com)

VLIMS, Inc.: 1300 Rosemary Lane #4, Columbia, MO 65201
(E-mail: scott.fox@verizon.net)

VMRD, Inc.: 4641 Pullman-Albion Rd., Pullman, WA 99163
(Ph: 509-334-5815; E-mail: order@vmrd.com; Web Site: www.vmr.com)

Waste Reduction by Waste Reduction, Inc. (WR2): 2910-D Fortune Circle Dr. W., Indianapolis, IN 46241
(Ph: 317-484-2488; Web Site: www.wr2.net)

Whatman: 9 Bridewell Place, Clifton, NJ 07014
(Ph: 973-773-5800; Web Site: www.whatman.com)

For information on exhibiting at the 2005 AAVLD Annual Meeting in Hershey, PA please contact Donna Dare at Donna_Dare@hotmail.com or 573-447-4013.

POSITION ANNOUNCEMENTS

The following are extracts of the full position postings which can be found at www.aavld.org on the visitor site

Veterinary Pathologist: Tenure track Assistant, Associate or Full Professor in the Department of Veterinary Microbiology and Pathology (VMP), College of Veterinary Medicine, Washington State University with starting July 1, 2005 or earlier with joint appointment in the Washington Animal Disease Diagnostic Laboratory (WADDL) www.vetmed.wsu.edu. Research (~60%) responsibilities: development of hypothesis-based research complementary to current departmental programs. Education/Service (~40%): mentoring of graduate students and residents in research and diagnostic laboratories and training of 4th year veterinary students; service as senior pathologist in WADDL. D.V.M. (or equivalent) degree and a Ph.D degree. Diplomate status in the American or European College of Veterinary Pathologists (ACVP or ECVP) or eligibility and intention to become a diplomate required. Postdoctoral research and diagnostic laboratory experience desirable. **Closing date is December 31, 2004.** Submit a curriculum vitae, with names and addresses of three references, and a letter stating professional interest to: Dr. Terry McElwain, c/o Sue Zumwalt, Department of Veterinary Microbiology and Pathology, Bustad Hall, Washington State University, Pullman, Washington 99164-7040, (509) 335-6030.

Anatomic Pathologist: The College of Veterinary Medicine, Mississippi State University, is seeking applications for a tenure-track position as Assistant/Associate/Full Professor of Veterinary Pathology in the Department of Pathobiology and Population Medicine. Candidates must have a DVM degree or equivalent and residency certificate or PhD degree in veterinary pathology. ACVP board certification and previous experience in diagnostic pathology are additional desired qualifications. Responsibilities include teaching in the professional curriculum and pathology residency/graduate program, participation with necropsy and biopsy diagnostic service, and development of a collaborative or independent research program. The laboratory system is fully accredited by the AAVLD. Salary and rank will be commensurate with qualifications and experience. Applications will be accepted until the position is filled. Qualified applicants should a letter of application and CV to Dr. Lanny Pace, Executive Director, MVRDLS, College of Veterinary Medicine, P.O. Box 6100, Mississippi State University, MS 39762.

Anatomic Veterinary Pathologist: tenure-track in The Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University. Primary responsibility is to provide diagnostic pathology service, approximately 70% service, 30% teaching/research/scholarly activity. Service responsibilities include necropsy and biopsy service within the Diagnostic Laboratory, residency training, and instruction of senior veterinary students on diagnostic rotation. Information regarding the teaching/research/scholarly activity opportunities within the Department of Diagnostic Medicine/Pathobiology is available on our website (<http://www.vet.ksu.edu/depts/dmp/>). Requirements: DVM or equivalent degree and ACVP certification or eligibility. Either an MS or PhD degree is desirable. Submit a letter of application that includes a statement of career goals, curriculum vitae, and 3 letters of recommendation to Chair, Anatomic Pathologist Search Committee, c/o Brandy Nowakowski, Dept. of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, KS 66506. For additional information contact Dr. Gordon Andrews (Andrews@vet.ksu.edu, 785-532-4459). Review of applications **will begin on December 15**, and will continue until a suitable candidate is selected.

Anatomic Veterinary Pathologist: Tenure-track in he Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University. Primary responsibilities: (approximately 50%) is teaching in the second year veterinary curriculum. The other 50% is comprised of service/research/scholarly activity depending on the interests and training. Information regarding the research/service/scholarly activity opportunities within the Department of Diagnostic Medicine/Pathobiology is available on website (<http://www.vet.ksu.edu/depts/dmp/>). Requirements for the position include a DVM or equivalent degree and PhD. Preference to individuals with postdoctoral training and/or ACVP certification or eligibility. Interested individuals should submit a letter of application that includes a statement of career goals, a curriculum vitae, and 3 letters of recommendation to Chair, Anatomic Pathologist Search Committee, c/o Brandy Nowakowski, Dept. of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, KS 66506. For additional information, contact Dr. Derek Mosier (dmosier@vet.ksu.edu, 785-532-4410). Review of applications will **begin on December 15**, and continue until a suitable candidate is selected.

Anatomic Veterinary Pathologist: Tenure-eligible assistant to full professor in the Department of Veterinary Pathobiology, College of Veterinary Medicine at the University of Missouri-Columbia. Partial service commitment in the Veterinary Medical Diagnostic Laboratory. Candidate must have a DVM or equivalent, board certification or eligibility in anatomic pathology, and a commitment to the three-fold academic mission of service, research and teaching. Preference to candidates with a PhD and ACVP certification. Selection criteria are: experience and certification, communication skills, ability to interact with clients and collaborators, and demonstrated research capabilities. Application review will continue until a suitable candidate is found. Interested persons should send a *curriculum vitae*, summary of career aspirations and the names and addresses of 3 references to Dr. Gayle Johnson, Veterinary Medical Diagnostic Laboratory, University of Missouri, P.O. Box 6023, Columbia MO 65205. Nominations may also be submitted to Dr. Johnson by letter, by phone (573) 882-6811 or by E-mail (johnsongc@missouri.edu)

Veterinary Pathologist at the James Hogg CAPTURE Centre for Cardiovascular and Pulmonary Research on the St. Paul's Hospital campus of the University of British Columbia. Responsibilities: set direction and oversight for the overall operations of the animal facility, provide small animal and laboratory animal pathology services including interpretation of ancillary tests, establish core facility for pathologic phenotyping of animal models; provide leadership and direction to staff; ensure policies and research conform to the Canadian Council on Animal Care (CCAC). **Qualifications:** A veterinary degree (DVM) and training and experience in pathology. A minimum 5 years experience in laboratory animal pathology and knowledge of techniques used in laboratory animal model development is preferred; training and expertise in animal research. Knowledge of the CCAC policies and guidelines. Computer experience required. Please submit a letter of interest and CV to Ms. Kelly Ceron, Human Resources Manager, James Hogg Centre, #166-1081 Burrard Street, Vancouver, BC V6Z 1Y6, Email: kceron@mrl.ubc.ca

Veterinary Pathologist-Laboratory Manager: Salary: \$89,378 - \$108,659 annually. FILING DEADLINE: Open until further notice. Veterinary Pathologist reports to the County Veterinarian and is responsible for managing the activities of the veterinary laboratory, supervising staff, and independently performing a wide variety of gross pathology, histopathology and other diagnostic tests. REQUIREMENTS: A DVM or equivalent; AND, four (4) years of experience involving pathology, diagnosis, serology or bacteriology in a diagnostic laboratory, research or teaching setting. Current CA license to practice veterinary medicine. Employment applications can be accessed on-line from the Job/Current Recruitments section of the County of San Diego web site at <http://www.sdcounty.ca.gov>. All required documents must be submitted immediately with your application in order to determine your eligibility to compete. Coversheets with additional required documents may be faxed to the Department of Human Resources at (619) 685-2458. RECRUITMENT No. 04423009

Veterinary Pathologist at the Oklahoma Animal Disease Diagnostic Laboratory (OADDL), College of Veterinary Medicine, Oklahoma State University (OSU). Appointment is 75% diagnostic service and 25% teaching/scholarly activities. Possibility for tenure-track appointment at Assistant to Full Professor in the Department of Veterinary Pathobiology and/or may be eligible for appointment as pathology section head. A DVM or equivalent degree and advanced training in pathology are required. Board certification by American College of Veterinary Pathologists (ACVP) is preferred. Additional preference given to those persons holding MS and/or PhD degree. Principal responsibility will be diagnostic mammalian anatomic pathology. Reasonable expertise in avian pathology and diseases is desirable. Demonstrated experience in diagnostic pathology and good communication skills are required. Interested applicants should submit a letter of intent relating career goals, curriculum vitae and three references to Dr. Bill Johnson, Director and Chairman, Search Committee, OADDL, College of Veterinary Medicine, OSU, P. O. Box 7001, Stillwater, OK 74076-7001. **Application deadline is January 2, 2005**, or until filled.

Veterinary Pathologist: Assistant Professor, tenure-track in the Department of Pathobiology & Veterinary Science, University of Connecticut. A DVM, VMD or equivalent and a PhD degree are required. Board certification by the American College of Veterinary Pathologists is preferred, and eligibility is required. Responsibilities: establish/maintain a strong, extramurally funded research program, participate in the diagnostic pathology service and veterinary pathology residency program of the Connecticut Veterinary Medical Diagnostic Laboratory, and contribute to the departmental undergraduate and graduate teaching. Many opportunities exist for collaborative research within the department and university. Applicants should submit a curriculum vitae, statements of research interest and teaching philosophy, and arrange for three letters of recommendation to be sent to: Denise Irmscher, Search Committee Coordinator; Department of Pathobiology & Veterinary Science, Unit 3089, 61 N. Eagleville Rd. Storrs, CT 06269-3089. Applicants may view our website (<http://patho.uconn.edu/>) for additional information. Review of applications **will begin during December 2004** and continue until the position is filled.

Diagnostic Pathologist: Clemson University invites applications for a non-tenure-track faculty appointment as Lecturer within the Veterinary Diagnostic Center, located in Columbia, South Carolina. The successful candidate will join a team of professionals including veterinary pathologists, microbiologists, and a toxicologist including an exceptionally qualified technical staff in a full service, AAVLD-accredited laboratory. The position is currently 100% service with ample opportunity to pursue research. Minimum educational requirements and specifics of the position may be found at www.clemson.edu/LPH through the link to Job Openings under the Administration heading. Questions may also be directed to Dr. Pamela Parnell, Laboratory Director by phone (803) 788-2260 ext 245, or by mail or e-mail to pprnl@clemson.edu. Review of applications **will begin November 19, 2004** and continue until the position is filled.

Diagnostic Pathologist: Tenure-track, assistant professor in the College of Veterinary Medicine at Iowa State University, Department of Veterinary Diagnostic and Production Animal Medicine. Proposed start date of June 1, 2005. Appointment will be in the Veterinary Diagnostic Laboratory. Responsibilities are professional service (70%), research (25%) and instructional program (5%). Responsibilities include casework, implementation of new assays, quality control/quality assurance, and interpretation of results; multidisciplinary research, and training professional students, graduate students and residents. Required: DVM or equivalent degree and specialty training in veterinary pathology. Preferred: PhD, board qualified in pathology and diagnostic laboratory experience. **Application**

deadline: Dec 31, 2004. Submit a letter including professional goals, curriculum vitae, and the names and addresses of three references to Search Committee Chair, Dr. Lorraine Hoffman, Veterinary Diagnostic and Production Animal Medicine, College of Veterinary Medicine, Iowa State University, 1710 Vet Med Building, Ames, Iowa 50011-1250. Phone 515-294-1100, e-mail lhoffman@iastate.edu. Please include an e-mail if available.

Diagnostic Pathologists: Two tenure track positions at Assistant/Associate level in the Athens Veterinary Diagnostic Laboratory (ADL) of the University of Georgia College of Veterinary Medicine. Qualifications include a DVM (or equivalent) degree, a PhD degree and ACVP certification or eligibility. Responsibilities: diagnostic pathology service including but not limited to performing necropsies and biopsy service. Collaborative research is encouraged. The ability to communicate (orally and in writing) with practicing veterinarians and clients is essential. **Application deadline is January 1st, 2005.** The position is available March 1st, 2005; starting date is negotiable. Submit a letter of application, a recent curriculum vitae, and the names and addresses of four references to: Dr. Doris Miller, Director and Professor, Athens Veterinary Diagnostic Laboratory, College of Veterinary Medicine, University of Georgia, Athens, Georgia 30602-7383

Anatomic Veterinary Pathologist: In the Department of Pathology of The Animal Medical Center. Primary responsibilities: necropsy and surgical pathology service, intern and resident teaching, and research activities. Applicants should be experienced in companion animal diagnostic pathology. Resources for clinical research are abundant and the biomedical community of the New York metropolitan area. 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 is 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

Diagnostic Anatomic Pathologist: Tenure-track, Assistant/Associate Professor in the Livestock Disease Diagnostic Center, College of Agriculture, University of Kentucky. Requirements: DVM/VMD degree and residency training in veterinary pathology. ACVP board certification and PhD degree in veterinary pathology are desirable. Responsibilities: Provide accurate diagnostic pathology service and effective communication with clients through timely diagnostic reports and oral correspondence. Salary and rank are commensurate with qualifications and experience. Applications will be accepted until the position is filled. Review of applications **will begin February 1, 2005.** Curriculum vitae and names and addresses of 3 references should be sent to Dr. Carney Jackson, Search Committee Chair, Livestock Disease Diagnostic Center, University of Kentucky, PO Box 14125, Lexington, KY 40512-4125; e-mail: cjackson@uky.edu

Clinical Pathologist: (tenure track) Assistant/Associate Professor. School of Veterinary Medicine, University of California, Davis. DVM or equivalent with advanced training in Clinical Pathology. Board certification or training sufficient to qualify for examination in Clinical Pathology. ACVP board certification in Clinical Pathology preferred. PhD or equivalent postdoctoral research training required at appointment. PhD preferred. Clinical experience and competence in Clinical Pathology. Demonstrated aptitude/experience in teaching. Documented research record or potential for independent research. Must possess excellent interpersonal and communication skills and ability to work with others. To receive fullest consideration, applications must be **received by February 15, 2005;** position opened until filled. Expanded position description at <http://www.vetmed.ucdavis.edu/pmi/> Submit letter of intent outlining special interest in the position, overall qualifications, experience, and career goals; CV; and names and addresses of three professional references to Dennis W. Wilson, Chairman, Department of Pathology, Microbiology and Immunology, School of Veterinary Medicine, University of California, Davis, Davis, CA 95616, Attn: Donna Roggenkamp.

Clinical Pathologist: The College of Veterinary Medicine, Mississippi State University, is seeking applications for a tenure-track position as Assistant/Associate Professor of Veterinary Clinical Pathology in the Department of Pathobiology and Population Medicine. Candidates must have a DVM degree or equivalent and residency certificate or PhD degree in veterinary clinical pathology. ACVP board certification in clinical pathology and previous experience in diagnostic clinical pathology are additional desired qualifications. Responsibilities include teaching in the professional curriculum and pathology residency/graduate program, participation in the clinical pathology service, and development of a collaborative or independent research program. Salary and rank will be commensurate with qualifications and experience. The laboratory system is fully accredited by the AAVLD. Applications will be accepted until the position is filled. Qualified applicants should submit a letter of application and CV to Dr. Lanny Pace, Executive Director, MVRDLS, College of Veterinary Medicine, P.O. Box 6100, Mississippi State University, MS 39762.

Veterinary Clinical Pathologist: Tenure track, Assistant to Full Professor level in the Clinical Pathology Section of the Department of Veterinary Pathobiology (www.cvm.uiuc.edu/vp) and the Veterinary Diagnostic Laboratory (www.cvm.uiuc.edu/vdl), College of Veterinary Medicine, University of Illinois at Urbana-Champaign (www.cvm.uiuc.edu). Start date: June 1, 2005 or as soon as possible

thereafter. Requirements: a DVM or equivalent degree, PhD, and ACVP certification or commitment to achieving certification, advanced training and experience in diagnostic medicine. Duties: research (~50%), teaching (~30%), and diagnostic service (~20%). For full consideration, **postmark by February 1, 2005**. Applicants may be interviewed earlier but no decision will be made until after that date. Submit a letter of interest describing professional goals, a curriculum vitae with names, addresses, telephone numbers and e-mail addresses of at least three professional references to: Dr. Anne Barger, Search Committee Chair, College of Veterinary Medicine, University of Illinois, 1008 Hazelwood Dr., Urbana, IL 61802, (217) 244-4106. Informal inquiries are also welcome by e-mail, abarger@uiuc.edu or phone.

Veterinarian Virologist: Assistant/Associate level in the Department of Veterinary Sciences, University of Wyoming. The position is an integral mix of professional service (~50%), teaching (~25%) and research (~25%). The exact split is negotiable. We seek an enthusiastic DVM, PhD virologist or exceptional PhD candidate with a combination of training and experience applicable to diagnostic veterinary virology. Board certification would be a plus. Primary responsibilities are to provide diagnostic services to veterinarians and other clients of the Wyoming State Veterinary Laboratory (WSVL). WSVL has a caseload of food animals, primarily beef cattle, companion animals, and wildlife. Other responsibilities are to teach a 3-credit, upper division medical virology course and to participate in other Departmental teaching activities. Development of collaborative and/or independently funded research in a field pertinent to the Department's focus areas is expected. Interested individuals should contact Dr. Donald L. Montgomery, (307) 742-6638, montgome@uwyo.edu <<mailto:montgome@uwyo.edu>>.

Veterinary Medical Officers- Development of molecular biology and serologic tests/reagents: The USDA, APHIS, Foreign Animal Disease Diagnostic Laboratory, Reagent and Vaccine Services Section on Plum Island, NY is seeking two permanent full time Veterinary Medical Officers. One at GS-11/12/13, salary of \$52,650.00 to 97,553 per year plus benefits. Another at GS-9/11/12, salary of \$43,515 to \$82,031 per year plus benefits. Candidates must be U.S. citizens. A degree of Doctor of Veterinary Medicine (DVM) and a degree of PhD are required for the first position and a degree of DVM is required for the second position. Responsibilities include development of molecular biological and/or serological tests/reagents for diagnosis of foreign animal diseases. Please contact USDA/APHIS/FADDL/RVSS, P. O. Box 848, Greenport, NY 11944 or call (631) 323-3206/3013. We will provide application instructions.

Veterinary Parasitologist: Tenure-track. Assistant/Associate level in the Department of Diagnostic Medicine / Pathobiology in the College of Veterinary Medicine at Kansas State University. Responsibilities are primarily teaching and coordinating the 2nd year Veterinary Parasitology course and the 3rd year Zoonosis and Preventative Medicine course. Supervise the Diagnostic Parasitology Laboratory and develop either an independent or collaborative research program. Requirements: a MS or PhD and DVM/VMD or equivalent with demonstrated teaching and diagnostic experience. Submit a letter of application describing your interest in the position, curriculum vitae and the names, addresses, telephone numbers and e-mail addresses of at least three references to: Dr. Michael W. Dryden, 1800 Denison Ave, Coles Hall, College of Veterinary Medicine, Kansas State University, Manhattan, Kansas 66506. Telephone: 785-532-4613 E-mail: Dryden@vet.ksu.edu. Screening of the applications **will begin December 15, 2004**, and continue until the position is filled.

Assistant Professor Research Positions at the Food Animal Health Research Program in the Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University located at Wooster, Ohio (<http://www.oardc.ohio-state.edu/fahrp/index.html>). **Position #1: Infectious Diseases and/or Veterinary Pathology.** Responsibilities: develop extramurally funded, independent research program, on infectious diseases of food producing animals. Emphasis on pathology is desired but not required. Participation in teaching and graduate training programs. A DVM, or equivalent degree, and/or PhD degrees are required. Comprehensive training in infectious diseases including knowledge of current molecular techniques. Advanced training in pathology is desirable. **Position #2: Food Safety and/or Zoonotic Diseases.** Responsibilities: develop an extramurally funded, independent research program, on preharvest food safety and/or zoonotic infectious agents of food producing animals. Participation in graduate training and teaching is required. A DVM, or equivalent degree, and/or PhD degrees are required. Comprehensive training in infectious diseases including knowledge of current molecular techniques used to investigate food borne or zoonotic pathogens. Excellent communication skills are required. **For both**, certification or eligibility for certification by the American College of Veterinary Pathologists or by a specialty board approved by the American Veterinary Medical Association is expected for candidates with the DVM degree. Research activities at the Food Animal Health Research Program are focused on infectious enteric, respiratory, and immunosuppressive diseases of livestock and poultry and food safety. Applications should include a curriculum vitae, statement of career goals, summary of current research activities, and the names (with complete mailing address) of at least four individuals from whom letters of references may be solicited. Applications **will be accepted until January 14, 2005** or until the position is filled. Address all correspondence to: Dr. Daral J. Jackwood, Search Committee Chair, Food Animal Health Research Program, The Ohio State University/OARDC, 1680 Madison Ave., Wooster, Ohio 44691.

Head, Diagnostic Bacteriology at the Texas Veterinary Medical Diagnostic Laboratory (TVMDL), College Station, Texas. Responsible for leadership and supervision of diagnostic bacteriology services, client consultation in the College Station laboratory and support

to colleagues in Amarillo, Center and Gonzales laboratories. Qualifications: DVM or equivalent degree, an advanced degree (MS or PhD) in veterinary microbiology, certification by the American College of Veterinary Microbiology (ACVM) or progress toward ACVM certification and a minimum of two years experience in a diagnostic bacteriology laboratory. Excellent communication skills and ability to work with others. Applications will be accepted until the position is filled and reviewed as received. Applicants should include a current curriculum vitae, letter of intent, contact information and three references to: Dr. Lelve G. Gayle, Executive Director, Texas Veterinary Medical Diagnostic Laboratory, P. O. Drawer 3040, College Station, Texas 77841, Email: l-gayle@tvmidl.tamu.edu Telephone: 979-845-9000, Fax: 979-845-1794

MICROBIOLOGY/CELL BIOLOGY RESEARCH ASSISTANT/ASSOCIATE at Trinity BioSystems, a pre-clinical stage biopharmaceutical company. Position will perform studies in protein biochemistry with a variety of instruments and approaches and carry out cell biology and microbiology assays. Requirements: B.S. or equivalent degree in biology and 1-3 years of research laboratory experience in the area molecular biology, protein biochemistry, cell biology, microbiology, histology, or/and immunology. Proficiency in a broad range of technical skills such as cell culture, cell transfection, ELISA, SDS-PAGE, Western blotting, PCR, immunoprecipitation, light/fluorescent microscopy, ECIS, etc. Ability to design, carry-out, analyze and report on experiments. Contact info: Please submit your CV and cover letter by mail, fax or email to: Trinity Biosystems, Inc. Human Resources, 1455 Adams Dr., Suite 1317, Menlo Park, CA 94025, Fax: 650-566-0793

Equine Pharmacologist: Assistant/Associate/Full Professor of Clinical Diagnostic Veterinary Pharmacology, in the California Animal Health and Food Safety Laboratory System (CAHFS) and School of Veterinary Medicine, University of California, Davis. DVM or PhD with graduate training in pharmacology required. Certification or eligibility by the American College of Veterinary Clinical Pharmacology/ Veterinary Internal Medicine or appropriate board preferred. Experience in clinical pharmacology desirable. Aptitude in pharmacokinetics, pharmacodynamics and detection of drugs in horses preferred. Responsibilities: interact with equine racing industry; research and develop methods for new and unique substances, drug pharmacokinetics, pharmacodynamics and significance; limited teaching. **Deadline: December 15, 2004** but position open until filled. Submit 1) a letter of intent outlining special interest in the position, overall related qualifications and experience and career goals; 2) curriculum vitae; and 3) the names and addresses of three professional references to: Dr. Alex Ardans, Director, California Animal Health and Food Safety Laboratory System, School of Veterinary Medicine, University of California, Davis, CA 95616.

Veterinary Toxicologist: Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan has an immediate faculty position available for a tenure-track toxicologist with diagnostic/clinical, instructional, and research responsibilities. DVM or equivalent degree and PhD in toxicology required. Board certification in toxicology preferred. Responsibilities: diagnostic and clinical toxicology and toxicology instruction for veterinary and graduate students; develop research program of investigations into chemical effects on public and animal health and environmental quality. Salary and rank are dependent on qualifications and experience. Applications will be considered until the position is filled. Letter of application including statement of career interests and goals, a current curriculum vitae, and contact information for 4 references from the past 5 professional years should be sent to Dr F W Oehme, Comparative Toxicology Laboratories, Department of Diagnostic Medicine/Pathobiology, M213 Mosier Hall, 1800 Denison Avenue, Kansas State University, Manhattan, KS 66506-5705 (oehme@vet.ksu.edu; tel 785/532-4334; fax 785/532-4481).

Epidemiologist/Biostatistician: The Department of Pathobiology & Veterinary Science, University of Connecticut is seeking applications to fill a tenure-track faculty position. The successful applicant will be expected to provide instruction in epidemiology to graduate students and to develop an independent, externally-funded research program. Teaching responsibilities will include a graduate level epidemiology course. It is expected that the incumbent will provide consultation on study design and statistical support for graduate students and college faculty. The successful candidate must have a DVM/VMD/MD or equivalent and PhD or a PhD in Epidemiology/Biostatistics. Board certification in preventive medicine is desirable. Applicants should submit current curriculum vitae, statement of research interest and teaching philosophy, and arrange for three letters of recommendation to be sent to: Robin Jordan-Heath, Faculty Search Committee Coordinator, Department of Pathobiology & Veterinary Science, University of Connecticut, 61 North Eagleville Road, Storrs, CT 06269-3089. Information about the department may be obtained at <http://www.patho.uconn.edu>.

Assistant/Associate Professor, Analytical Epidemiology: The College of Veterinary Medicine and Biomedical Sciences, Texas A&M University is seeking highly qualified applicants for two new 12-month, fully budgeted, tenure-track faculty positions within the College's Biodefense and Emerging Infectious Diseases Signature Program (<http://www.cvm.tamu.edu/facultyrec/Programs/Biodef.htm>). The successful candidates will hold an advanced degree (PhD or equivalent preferred). A degree in veterinary medicine is also desirable. The candidates will be expected to develop a sustainable research program in one of several priority areas consistent with the signature program. Prior postdoctoral research and teaching experience are assets. The positions will comprise approximately 70% research and 30% teaching/academic service. **Initial review of applicants will begin December 1, 2004.** The search will remain open until positions are filled. For more information, contact Dr. Michael Ward (mward@cvm.tamu.edu).

EPIDEMIOLOGIST/PUBLIC HEALTH VETERINARIAN in the Pennsylvania Department of Health. This position, located at Harrisburg, is responsible for statewide administrative and scientific work for the Pennsylvania Department of Health in the field of veterinary public health epidemiology and veterinary preventive medicine. Salary: \$79,042 to \$96,353 plus benefits. Requirements: a D.V.M., and a master's degree with a major in epidemiology; or a Dr.Ph., Ph.D. in epidemiology. Two years of professional experience in disease outbreak investigations, designing and conducting epidemiological studies, or designing and managing a disease surveillance system; or completion of a 2-year or longer post-doc or residency with emphasis in epidemiology, or comparable program. Applicants will be required to complete a Civil Service application and supplement. For application materials or more detailed information, please contact Victor Romain, Pennsylvania Department of Health, Bureau of Human Resources, Room 613, Health and Welfare Building, Harrisburg, Pennsylvania 17120. 717-783-0296.

Fellowship in Veterinary Pathology: 12-month program with option for extension for another 12-months located at the Zoological Society of San Diego in the Department of Pathology. 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 four Board Certified pathologists, providing anatomic and clinical pathology support for the combined collections of the San Diego Zoo and San Diego Wild Animal Park. There will be opportunities for research and/or preparation for the certification exam in veterinary pathology. Annual salary is \$40,000 and includes an excellent benefits package. Open until filled, with review of applicants beginning **January 3, 2005**. Send CV, three professional references, and statement of career goals and availability to: the Human Resources Department, Attn: Pathology Fellow position, P.O. Box 120551, San Diego, CA 92112-0551. www.sandiegozoo.org

Post Doctoral Scholar/Residency in Veterinary Pathology: The University of Kentucky Livestock Disease Diagnostic Center (LDDC) invites applicants for a 3-year residency in Veterinary Anatomic Pathology. The program is designed to prepare candidates for a successful career in Veterinary Pathology and certification by the American College of Veterinary Pathologists. The LDDC is a full service accredited laboratory that accepts farm, companion, wildlife and exotic species. Training involves exposure to the extensive case material available through the necropsy and surgical pathology services and is augmented by slide seminars and rotations through the specialty sections. The beginning salary level is \$30,000 and includes health insurance benefits. DVM degree and good academic credentials are required. Interested candidates should contact Dr David Bolin, College of Agriculture, University of Kentucky, Lexington, KY by phone (859) 253-0571 or email dbolin@uky.edu.

Combined Diagnostic Microbiology Residency and PhD Training at the Department of Veterinary Microbiology and Pathology at Washington State University. Emphasis on integrated approach toward PhD/residency training. The PhD program emphasizes individual initiative and responsibility within the context of a student/mentor relationship with contemporary research training in immunology, diagnosis and control of emerging diseases, pathogenesis and host defense mechanisms of infectious diseases. Faculty are well funded from extramural sources. Completion of the combined program qualifies graduate students to sit for ACVM board certification and prepares them for scientific careers as independent investigators. Stipends start at \$30,500. Applicants must be US citizens or permanent residents. Inquiries are accepted at any time. Applications should include veterinary college transcripts, curriculum vitae, a statement of professional goals and names of 3 references. Send applications to Dr. Lindsay Oaks, Department of Veterinary Microbiology and Pathology, Washington State University, PO Box 647040, Pullman, WA 99164-7040; phone (509) 335-6044.

Residency in Veterinary Anatomic Pathology in the Department of Pathobiology and Veterinary Science, University of Connecticut. Applicants should have a DVM, VMD or equivalent and strong interest in the pathology of domestic and non-domestic animals. This is a 3-year position as a member of the resident corps of the Department's training program, leading to eligibility for certification examination by the American College of Veterinary Pathologists. Primary responsibilities will include participation in the autopsy and biopsy services of the Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL). The CVMDL receives case material from local practitioners and institutional veterinarians, as well as from aquariums, zoological collections and marine laboratories nationwide, and boasts a broad range of species including domestic animal, non-mammalian, exotic, wildlife and aquatic species. For further information contact H. J. Van Kruiningen, Department Head, Pathobiology and Veterinary Science, 61 North Eagleville Road, Storrs, CT 06269-3089 or email herbert.vankruiningen@uconn.edu

Residency in Veterinary Clinical Pathology in the Department of Diagnostic Medicine/Pathobiology. Starting date near October 1, 2005. A 3-year in-depth clinical pathology training program designed to meet requirements to sit for the certification examination of the American College of Veterinary Pathologists (<http://www.acvp.org/exam/train.php>). Beginning stipend is \$25,000 with \$1,000 increases in the second and third years; residents are eligible for faculty/staff benefits. Candidates must have a DVM or equivalent; at least one year of post-DVM clinical experience and graduates of AVMA-accredited veterinary colleges are preferred. Submit curriculum vitae, statement of professional goals, veterinary school transcript & class ranking, and a list of three references (name, address, phone number, e-mail address) to Dr. S.L. Stockham, Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506; e-mail: stockham@vet.k-state.edu, fax: 785-532-4039. Additional information at (<http://www.vet.ksu.edu/depts/dmp/teach/residency.htm>). Deadline for applications is **December 31, 2004**, but applications will be accepted until position is filled.

Residency/Graduate Training in Veterinary Clinical Pathology at the Veterinary Medical Diagnostic Laboratory in with the Department of Veterinary Pathobiology, University of Missouri. Designed to fulfill requirements for board certification by the American College of Veterinary Pathologists. Training emphasizes interpretative skills in clinical pathology, participation in seminars and involvement in teaching. DVM or equivalent degree is required, also strong academic record, evidence of interest in pathology and ability to communicate effectively. Training is usually accomplished in 3 years. Following the residency, opportunities to pursue a PhD degree exist. The position is available July 1, 2005 and is benefit eligible. Applications will be reviewed as received until the position is filled. Inquiries or applications (to include a letter of intent stating goals and interests, *curriculum vitae* and names of three references) should be addressed to Charles E. Wiedmeyer DVM, PhD, UMC Veterinary Medical Diagnostic Laboratory, P.O. Box 6023, Columbia, MO 65205; phone 573-882-0052; FAX 573-884-7544; e-mail: wiedmeyerc@missouri.edu.

BACTERIOLOGY DISCUSSION LIST

The members of the Bacteriology/Mycology Subcommittee have established a discussion list named AAVLD-BACTI. The purpose of this list is to accommodate and foster discussion of any topic that is of particular interest to bacteriology aficionados. Some topics that will undoubtedly be discussed on this list include the issues of OIE standards/consensus protocols for various agents and other administrative points of discussion, but any topic of discussion—from availability of reagents and supplies to the role of an isolate in a disease condition—is encouraged. Membership of this list will be limited to AAVLD members.

To subscribe to this list, send a message to LISTPROC@UCDavis.edu. In the body of the message type”

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ADDENDUM TO DIRECTORY

Brown, Thomas Paul, DVM, MS, PhD, DACVP, DACPV
Wyeth Research
1 Burt Road
Andover, MA 01810 USA
Ph.: 978-247-1976
Fax: 978-247-1389
E-mail: tpbrown@wyeth.com
Interest: Pathology

Craig, Elizabeth T., BA, BS, MT
4832 Tyreanna Road
Lynchburg, VA 24504 USA
Ph.: 434-947-2577
E-mail: msteele@vdacs.state.va.us
Interest: Microbiology, QA/QC

Garhart, Christine A., DVM, PhD
35 Greendale Dr.
St. Louis, MO 63121 USA
Ph.: 314-516-5956
Fax: 314-516-6708
E-mail: cag12@po.cwru.edu
Interest: Pathology, Immunology

Gibson, Isobel, DVM, DVSc, DACVP
New Zealand Veterinary Pathology
PO Box 944
Hamilton, WA NEW ZEALAND
Ph.: 647-839-1470
Fax: 647-839-1471
E-mail: isobel@nzvp.co.nz
Interest: Histopathology

Kuroki, Keiichi, DVM, PhD
Kansas State University
Department of Pathobiology
1800 Denison Ave.
Manhattan, KS 66506 USA
Ph.: 785-532-4823
Fax: 785-532-4481
E-mail: kkuroki@vet.k-state.edu
Interest: Pathology

Long, Maureen T., DVM, PhD
Dept. LACS
University of Florida
2015 SW 16th Ave.
Gainesville, FL 32610-0136 USA
Ph.: 352-392-4700 x4026
Fax: 352-392-8289
Interest: Infectious Diseases

McCaw, Monte B., DVM, PhD
NCSUCVM
4700 Hillsborough St.
Raleigh, NC 27587 USA
Ph.: 919-513-6294
Fax: 919-513-6383
E-mail: monte_mccaw@ncsu.edu
Interest: Swine, Viral Disease, Immunology

Slavic, Durda, DVM, MSc
Department of Pathobiology
University of Guelph
PO Box 3612
Guelph, Ontario N1H 6R8 CANADA
Ph.: 519-824-4120
Fax: 519-821-8072
E-mail: dslavic@lsd.uoguelph.ca
Interest: Bacteriology

Thomson, John U., DVM, MS, BS
3602 Farnham Drive
Ames, IA 50010 USA
Ph.: 515-294-1250
E-mail: thomson@iastate.edu
Interest: Epidemiology, Administration

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