Committee on Diagnostic Laboratory & Veterinary Workforce Development

Co-Chairs: Bob Frost, Lincoln, CA
          Bennie I. Osburn, Davis, CA

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The Committee met on Monday, October 16, 2006 from 7:00 – 9:45p.m. at the Minneapolis Hilton Hotel, Minneapolis, Minnesota. Co-chair Bennie Osburn called the meeting to order and welcomed the members and guests. Eighteen members and 10 guests were in attendance.

Barbara Martin, Director of the National Animal Health Laboratory Network (NAHLN), National Veterinary Services Laboratory (NVSL), Veterinary Services (VS) updated the Committee on the years NAHLN’s activities and accomplishments. The full text of her report is included in these Proceedings.

Paul Kitching, Director of the Canadian Food Inspection Agency’s Winnipeg Laboratory, provided an update on Canada’s new Provincial Laboratory Network. Dr. Kitching’s report is included in these Proceedings at the end of the Committee Report.

Terry Nipp, National Center of Foreign Animal and Zoonotic Disease, Texas A & M University reported on the Center’s progress over the last year and it’s future missions. This report is included in these Proceedings.

Pam Hullinger, Lawrence Livermore National Laboratory gave a review of the two high throughput demonstrations conducted at the University of California, Davis and Colorado State University this past spring and summer. Dr. Hullinger’s report is included in these Proceedings following the Committee Report.

The Association of American Veterinary Medical Colleges (AAVMC) updated the Committee on the status of the Veterinary Workforce Expansion Act (VWEA) legislation in the 109th Congress. The Committee was provided a list of the Congressional Sponsors of the Act. A copy of the AAVMC report is included at the end of the Committee Report.

The Committee in conjunction with the Committee on International Standards held a meeting with key laboratory personnel from Canada, Mexico and the United States, Tuesday, October 17, 2006, 7:00-9:00 p.m. The report of this Tri-National Laboratory meeting is included in these Proceedings at the end of the Committee Report.

The Committee approved four Resolutions. These resolutions addressed funding for the NAHLN, the Veterinary Workforce Expansion Act, support of funding for a demonstration project to implement the Proposed National Agriculture and Food Continuity of Business All Hazard Plan and Stakeholder input and advice on the proposed Department of Homeland Security’s, National Bio and Agro Defense Facility. These resolutions were forwarded to the Committee on Nominations and Resolutions.
NAHLN was established by USDA’s Homeland Security Office as part of a national strategy to coordinate and network the diagnostic testing capacities of the Federal veterinary diagnostic laboratory with the extensive infrastructure (facilities, professional expertise, and support) of State and university veterinary diagnostic laboratories. This network is enhancing the Nation’s early detection of, response to, and recovery from animal health emergencies, including bioterrorist events, newly emerging diseases, and foreign animal disease agents that threaten the Nation’s food supply and public health.

Laboratory Membership
In fiscal year 2002, 12 State and university veterinary diagnostic laboratories were selected by the Cooperative State Research Education and Extension Service and APHIS to enter into cooperative agreements funded by Homeland Security appropriations to formally initiate the network. APHIS has since established contracts with several State and university diagnostic laboratories to assist with testing and surveillance. These contracts incorporate 54 State/university laboratories, the Department of the Interior laboratory (DOI) in Madison, Wisconsin, the Food Safety and Inspection Services laboratory in Athens, Georgia, and the National Veterinary Services Laboratories (NVSL- Ames, IA and Plum Island, NY campuses) for a total of 58 labs in 45 States. The NAHLN member laboratories are trained and proficiency tested by USDA, APHIS, VS, NVSL on an annual or semi-annual basis. These laboratories are tested on standardized screening methods for the currently targeted diseases in the NAHLN [avian influenza (AI), exotic Newcastle disease (END), foot and mouth disease (FMD), classical swine fever (CSF), bovine spongiform encephalopathy (BSE), chronic wasting disease (CWD), and scrapie]. NAHLN laboratories are currently participating in USDA surveillance efforts by performing screening assays and forwarding any suspect or positive samples to the appropriate section of the NVSL (the national reference laboratory), for confirmatory testing.

Current Activities
• A “Train the Trainer” program has been developed and implemented for FMD, CSF, AI, and END rapid assays. This program has increased the number of State/university laboratories approved to conduct the CSF and FMD assays from 14 to 31. The program was recently implemented for AI and END and has been used to increase the number approved to conduct AI and END testing from 44 to 50 State/university laboratories and DOI. Not only has the program increased the number of laboratory personnel prepared to respond to a national animal health emergency, but it has also provided the United States with a cadre of trainers available to teach others when needed. Successful implementation of this program is a significant step for the network and its mission of ensuring sufficient diagnostic capability and capacity to address an animal health emergency.
• Enhanced AI surveillance efforts for USDA, APHIS, Veterinary Services (VS) and USDA, APHIS, Wildlife Services (WS) are being conducted in NAHLN approved State/university and DOI laboratories. These labs will determine if evidence of AI virus is present and whether it is an H5 or H7 subtype. Because of the potential for H5 or H7 subtypes to mutate into highly pathogenic strains, those samples are forwarded to USDA, NVSL for confirmatory testing. NVSL then conducts additional screening tests and confirmatory tests with research assistance from USDA’s Southeast Poultry Research Laboratory as needed to confirm genetic identification of isolated strains of the virus. The NVSL Diagnostic Virology Laboratory in Ames is the only internationally recognized AI reference laboratory in the United States.
• NAHLN and AI Supplemental funds are being used to increase the overall diagnostic testing capability of member laboratories by supporting the development and distribution of high throughput equipment. This technology allows semi-automated processing of diagnostic samples and test methods to enhance the daily testing output of each laboratory. Currently, work is being performed to validate NAHLN methods using this type of technology.
• A surveillance plan for CSF was developed and phase one was implemented in January 2006 in states with a high risk for introduction of CSF, including Puerto Rico. Twelve State/university NAHLN laboratories have been testing samples and 18 other State/university NAHLN laboratories have assisted with sample collection and processing. The number of laboratories participating in surveillance testing is currently being increased to 18 in 2007; an additional 14 laboratories will assist
with sample collection and processing. Confirmatory testing is performed at the NVSL’s Foreign Animal Disease Diagnostic Laboratory at Plum Island, NY.

- USDA and DHS are working on a Diagnostic Roadmap to evaluate and prioritize gaps in available diagnostic technology for U.S. Agriculture and propose mechanisms to address and ultimately close them. A high-level strategic roadmap, applicable across a range of FAD threats was developed, in addition to roadmaps specific for several high-consequence FADs.

- Since June 2004, seven State/university NAHLN laboratories have participated in enhanced BSE surveillance testing. As of June 30, 2006, they have completed in excess of 797,000 tests. Confirmatory testing is performed at the NVSL’s Pathobiology Laboratory in Ames, IA. Surveillance for chronic wasting disease and scrapie is also occurring in 26 State/university NAHLN labs.

- International efforts:
  - USDA-APHIS is collaborating with the Canadian Food Inspection Agency (CFIA) laboratory at the Winnipeg National Centre for Foreign Animal Disease, (NCFAD) to produce, distribute, and use proficiency panels and reference materials in order to harmonize the diagnosis of major animal diseases between United States and Canada.
  - USDA-APHIS has developed international training programs for AI. Training includes epidemiology and diagnostics, and has been provided to laboratory personnel from 60 countries. Similar training programs have been developed and implemented in 7 countries for FMD and brucellosis.

- A critical aspect of the National Animal Health Laboratory Network (NAHLN) is the effort to standardize data, improve data quality, and maximize the efficiency of data transfer via the IT infrastructure and data repository. The NAHLN IT system is being integrated with numerous existing animal health and veterinary diagnostic data networks to allow seamless electronic transfer of information from the time diagnostic samples are collected in the field, to the addition of appropriate diagnostic test information from the NAHLN veterinary diagnostic laboratories, and finally to the daily reporting of relevant information from each submission to the NAHLN repository database. The IT system is used to enhance surveillance programs and recognize emerging issues and is designed to provide automated alerts on defined animal health events to authorized personnel who support disease prevention and response. The system allows NAHLN labs to securely transmit and store data using nationally recognized health information standards that improve data quality and data re-use in systems such as the Department of Homeland Security’s National Biosurveillance Integration System (NBIS). The NAHLN IT system has been piloted in five laboratories and is currently expanding to 30 additional labs. Training courses on IT messaging were provided to NAHLN laboratory personnel in January, February, and May of 2006.

- NAHLN Methods Technical Working Group was established in July 2006 and consists of personnel from NAHLN laboratories, the National Veterinary Services Laboratories, DOI, and FSIS. The working group will provide input on various aspects of methods validation and approval of methods including the following:
  - Review of available methods and associated gaps
  - Identification of potential new technologies
  - Validation criteria
  - Dossier review
  - Assay approval process
  - Equivalency of modified methods or for adaptation to new platforms
  - Continual performance assessment of assays
  - Development of performance characteristic summary documents for NAHLN assays
  - Issues associated with transfer of existing and new technologies to laboratories

- NAHLN is a participating member of the Integrated Consortium of Laboratory Networks (ICLN) which is a multi-department and multi-agency effort led by DHS. The ICLN includes representation of public, animal, and plant health response networks (LRN, ELRN, FERN, NPDN, and NAHLN). This group is working towards identifying gaps in surveillance and diagnostic efforts of national importance and mechanisms for collaboration and sharing of information and resources between networks.
There are many levels of laboratory participation within the National Animal Health Laboratory Network (NAHLN). The term “core laboratories” was used to designate the original 12 laboratories that participated in the NAHLN. As participation in the network has expanded since 2002, a system to define laboratory designations was needed to reduce confusion among stakeholders. The laboratory designation system was created to reflect different levels of infrastructure support for emergency response preparation as well as funding for surveillance testing. Each level of laboratory participation is vital to the function and capacity of the NAHLN for early disease detection, surveillance, and surge-and-recovery testing in response to disease outbreaks. Additional infrastructure support is necessary to expand the number of participating laboratories. The goal is comprehensive coverage of the U.S. livestock industry. Four designations are used to describe participation in the NAHLN: Core Member Laboratories and Member Laboratories (receive infrastructure support), Contract Member Laboratories, and Adjunct Member Laboratories. The first three categories all participate in active surveillance (fee-for-testing) programs. Laboratories in all four categories have successfully completed the NAHLN approval checklist and quality-assurance requirements, and each laboratory has personnel trained and proficiency-tested to conduct the approved NAHLN diagnostic assays.

- **A Core Member Laboratory** receives significant infrastructure support and also conducts fee-for-service testing for the United States Department of Agriculture (USDA). This group of laboratories currently includes the original 12 laboratories. Their funding level enables them to be fully committed to the NAHLN mission and able to respond to domestic or foreign animal disease emergencies on a 24/7 basis.

- **A Member Laboratory** receives limited annual infrastructure support from USDA for specific purposes such as establishing IT connections or developing capacity for data-reporting. These laboratories also conduct fee-for-service testing. 16 laboratories currently in this group could move to the Core Member category as USDA funds become available to provide the significant annual infrastructure support needed to reach the Core Member category.

- **A Contract Member Laboratory** performs ONLY fee-for-service testing for control of specific animal diseases. These laboratories can move into either the Member or Core Member category as USDA funding levels enable infrastructure support.
- An Adjunct Member Laboratory is considered a member of the NAHLN because of its implementation of NAHLN protocols, but its primary mission is not domestic animal disease diagnostic work within the United States.
Canadian Animal Health Surveillance Network

Paul Kitching
Director of the National Centre for Foreign Animal Disease
Canadian Food Inspection Agency

The Canadian Animal Health Surveillance Network (CAHSN) program, led by Dr. Paul Kitching, CFIA’s Director of the National Centre for Foreign Animal Disease, and funded by the Department of National Defence’s CRTI program, has been established to improve the capacity of the federal and provincial network laboratory system to detect, in real time, emerging animal disease threats, particularly those that could have zoonotic potential, and provide a rapid response to minimize the human health and economic consequences to the country. This network of federal, provincial and university animal health diagnostic laboratories directly linked to the Canadian Public Health Laboratory Network (CPHLN), combines surveillance intelligence from many sources across the country.

Using software developed for the CPHLN to link the public health laboratories across Canada into a surveillance network, the federal, provincial and university animal health laboratories collaborate with the Canadian Network for Public Health Intelligence (CNPHI) to ensure rapid communication and identification of emerging animal disease problems.

The CAHSN also increases the surge capacity of federal and provincial laboratories to rapidly respond to major infectious animal disease outbreaks, such as foot-and-mouth disease, classical swine fever and avian influenza. It is establishing interoperability between laboratories by using common protocols and reagents, and providing a framework within which technical and scientific staff may be easily exchanged to participate in training and to share expertise.

The CAHSN also links to the animal health laboratory network in the United States through the Canadian Food Inspection Agency’s National Centre for Foreign Animal Disease. This link will facilitate the exchange of information on the occurrence of foreign animal disease events that could potentially spread across the border, harmonize test procedures, share diagnostic reagents and proficiency panels and provide mutual diagnostic support.
THE FAZD CENTER

The National Center for Foreign Animal and Zoonotic Disease Defense (FAZD Center) has the capacity and flexibility to address the range of threats presented by deliberately (or accidentally) introduced foreign animal and zoonotic diseases. The FAZD Center harnesses the existing intellectual and research capacities of selected American universities, on both an immediate and sustained basis, to fill gaps in existing knowledge, thereby heightening protection of U.S. public health and animal agriculture. Activities are leveraged by close integration of university-based assets with those of National Laboratories and federal, state, and local agencies and programs.

Three themes

The FAZD Center generates a stream of products that are useful and usable by recognized users and stakeholders. These products are organized along three themes. Biological Systems products are aligned to satisfy DHS goals of detection, diagnosis, prevention and recovery. Informatics, Modeling, Analysis products are designed to better inform decision making at multiple levels of scale. Education and Outreach products provide the next generation of science power for homeland security and a more informed industry government relationship for animal agriculture.

Priorities set by DHS

The FAZD Center’s key strategy is the development and application of integrated transcending methods and capabilities that explicitly address DHS priorities. The FAZD Center provides an enduring institutional capacity to address DHS priorities, present and future, as well as a stream of ongoing meaningful products to address high priority needs in foreign animal and zoonotic disease defense.

EXAMPLES OF THE FAZD CENTER’S RESEARCH

Development of rapid regional and chute side tests for foot-and-mouth disease

New diagnostic tests for FMD have been validated for use in regional diagnostic laboratories and other new tests are being developed for use in the field allowing for definitive tests to be conducted in minutes rather than days and giving first responders the ability to distinguish infected from clean animals, providing new capacity to expedite clean up and avoid unnecessary slaughter of healthy animals. The FAZD Center:

- Validated new real time PCR diagnostic tests for FMD that can be used in regional labs to produce results in 45 minutes rather than three days as now required when samples are sent off shore.
- Is developing a new rapid hand held field test for FMD for use in emergency response to introduction of disease, using reagents that can be produced domestically in large quantities.
Risk analysis: feedlot industry in the High Plains of Texas

A combination of epidemiologic, economic, and environmental models is providing a more comprehensive and precise picture of the consequences of how disease is introduced and the impact of alternative emergency response strategies in intensive livestock operations, allowing operators and responders to minimize the cost of containment and increase the speed of recovery and return to normal trade relations.

Responding to the threat of highly pathogenic avian influenza

A source of potential transmission of avian influenza from poultry to people occurs in live bird markets where several ethnic groups come in close contact with live animals as they purchase birds for consumption. To respond to the growing threat associated with the importation of the H5N1 avian influenza virus in the U.S., FAZD Center studies have defined the potential for transmission of avian influenza virus in these live bird markets in the U. S. The FAZD Center also conducts surveillance of wild migratory birds in the Gulf Coast region of the Central Flyway for avian influenza. Results are identifying factors that affect the transmission of virus from live poultry to people and the dissemination of the disease between wild birds and poultry. In addition, new methods for rapid field detection of infected birds are being developed using the tools of modern biotechnology.

Postgraduate ‘Train the Trainers’ program to provide credible local expertise

Educational programs deliver improved biosecurity, surveillance, sample submission, testing and reporting compliance to County Extension Agents, Extension Specialists, selected veterinarians and industry leaders in print, online and through a series of regional meetings. The FAZD Center:

- Published a handbook, CD and web-based curriculum (overview, epidemiology, diseases, biosecurity, emergency management, media communications, teaching effectiveness and evaluation) for group and auto-tutorial training.
- Provided training to 350 Country Extension Agents and 28 Extension Livestock and Communications Specialists.
- Identified and recruited key participants to serve as trainers at regional outreach centers for community programming.

The FAZD Center enhances linkages between the academic community and related activities in the national laboratories and government institutions, resulting in products that meet the needs of a wide range of customers with an interest in biosecurity for the United States.

Collaborators and cooperators

The FAZD Center

Core Partners  Texas A&M, UC Davis, USC, UTMB
Associate Partners University of Minnesota, University of Maryland, University of Wisconsin, Madison

National Laboratories
- Lawrence Livermore: Biodefense Knowledge Center and bioinformatics research
- Los Alamos: Threat assessment for agriculture
- Sandia: Bioinformatics on threat agents
- Pacific Northwest: Functional genomics, consequence modeling

U.S. Department of Agriculture
- Agricultural Research Service: Footand-mouth disease
- Centers for Epidemiology and Animal Health: Integrated models
Economic Research Service: Impact of transportation on spread of disease

End-users
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The FAZD Center | 1500 Research Parkway | Suite 100A | College Station, TX 77845 | 979.845.2855 | fazd.tamu.edu | n-clarke@tamu.edu
High Throughput Multiplexed Detection Assays
Pam Hullinger
Lawrence Livermore National Laboratory

Since the last USAHA meeting, Lawrence Livermore National Laboratory (LLNL) has made significant progress on multiple agricultural security related projects and programs. The Agricultural Assays Program and Agricultural Domestic Demonstration and Application Program (AgDDAP) successfully developed a prototype multiplexed nucleic acid detection assay (version 1.0). Over a two week period in November and December, 2005, thirteen NAHLN laboratories and FADDL at PIADC were fully equipped and then received three days of training in how to conduct the assay. An interlaboratory comparison was conducted in these 14 laboratories during January of 2006. There was a 92% success rate in the laboratories being able to successfully conduct the assay demonstrating the effectiveness of the training and the high level of technical proficiency in these laboratories. In May and July of this year there were two demonstrations of this assay in a high-throughput sample "surge" format at 2 NAHLN laboratories (California Animal Health and Food Safety Laboratory in Davis and the Colorado State University Veterinary Diagnostic Laboratory in Ft. Collins). During these demonstrations 1000 samples were received, analyzed and had results reported in a 10 hour day utilizing 2 technicians. The success to date is largely attributed to the high level of collaboration and in kind support of the USDA, APHIS and the participating national animal health laboratories.

Currently LLNL is in the process of providing the analytical assay performance data to USDA, APHIS and will be working with the recently formed NAHLN technical methods work group to determine if the assay performance is suitable for a period of follow on testing with in the NAHLN laboratories to allow for the collection of diagnostic performance data for the domestic disease signatures and diagnostic specificity data for the foreign animal disease components of the assay. LLNL in also in the process of capturing the foreign animal signature diagnostic sensitivity data in partnership with FADDL at Plum Island, the Canadian Food Inspection Agency laboratory in Winnipeg, the Institute of Animal Health at Pirbright and the Australian Animal Health Laboratory.

Finally, working with the Canadian Food Inspection Agency in Winnipeg we developed a multiplexed DIVA (differentiation of naturally-infected from vaccinated animals) assay and have begin to collect performance data for this assay in collaboration with Winnipeg and Institute of Animal Health at Pirbright. A prototype, multiplexed FMD serotyping assay, for detection and differentiation of 7 major FMD serotypes has also been developed.
October 2\textsuperscript{nd}, 2006

To: Dr. Lawrence Heider  
From: Brian Smith  
cc: Dr. Andrew Maccabe

\textbf{Status of VWEA, 109\textsuperscript{th} Congress, 2\textsuperscript{nd} Session}

Seven new Senators were added as cosponsors to the Veterinary Workforce Expansion Act (VWEA) in July and August. The new senators are Dianne Feinstein (CA), Chuck Hagel (NE), Herb Kohl (WI), Mel Martinez (FL), Robert Menendez (FL), Barack Obama (IL), and Olympia Snowe (ME). There are 56 Cosponsors for the House Bill and 32 Cosponsors for the Senate version.

Dean Lance Perryman met with Sen. Allard in Colorado on August 23 to discuss our strategy for passing VWEA; they were joined by Sen. John Melcher, Dr. Mike Chaddock and Dr. Andy Maccabe from the AAVMC staff, and Dr. Richard Swanson of Longmont, CO, former president of AVMA. Sen. Allard said that both Sen. Enzi (WY), the Health, Education, Labor and Pensions (HELP) committee chairman, and Sen. Burr (NC), the subcommittee chairman, are supportive of VWEA and have agreed to help get it passed.

Until recently, our strategy was to attach VWEA to a larger bioterrorism bill. We were working primarily with the staff on the Bioterrorism and Public Health Preparedness subcommittee, and these staffers were well aware of our issues. It is now apparent that the bioterrorism bill will not go forward in the remainder of this session. Therefore, we have shifted our focus to work with the parent committee, which has jurisdiction over VWEA. The HELP committee staffers are not as familiar with our issues, and they have raised a number of concerns. We provided them with all of our background materials, and we are making great progress, but we haven't convinced them of a few issues yet. Sen. Allard's staff has asked us for additional information to strengthen our responses to the two questions above.

\textbf{QUESTION #1: The compelling case for veterinary medical education:} The HELP committee said they have not authorized any new construction programs for health professions education since the 1960's and 70's. They are concerned that if VWEA is authorized, then the other health professions will besiege them with similar requests. They are more familiar with the nursing shortage, and wonder why veterinary medicine
should be funded first. They want to know if the colleges have done everything they can to maximize capacity (night school was mentioned), and if "bricks and mortar" is the best way to alleviate the shortage.

**QUESTION #2: Ensuring that students will go into public health:** Because VWEA authorizes a competitive grants program, it will be up to the colleges to demonstrate how they will ensure that their increased capacity would generate more veterinarians in public health practice. One way to do this is to leverage non-federal funds for scholarships and loan repayments, and then impose strict penalties for students who fail to go into these careers (this model is part of the health professions scholarship program administered by HRSA in HHS).

We will continue to get as many cosponsors as we can during the remainder of this session of Congress. Sen. Allard is prepared to reintroduce VWEA in the 110th Congress, and every cosponsor we get now should be a cosponsor in the future.
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The following Members of Congress have sponsored the Veterinary Workforce Expansion Act.
Trinational Animal Health Laboratory Meeting

A meeting between key laboratory representatives from the North American countries was held at the Minneapolis Hilton Hotel, in Directors row 4 Room, on Tuesday, October 17, 2006, from 7:00 – 9:00 P.M. Dr. Rick Willer, chair of the Committee on International Standards, welcomed 12 attendees to the meeting. They were from:

Commisión para la Prevención de la Aftosa (CPA) Laboratory in Mexico – Igor Romero, Montserrat Arroyo
Centro Nacional de Servicios de Constatación en Salud Animal (CENAPA) Laboratory in Mexico – Hugo Fragoso
United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services - John Clifford (Deputy Administrator) Jere L. Dick, José R. Diez, Beth Lautner, Randall L. Levings, Barb Martin and Tom McKenna
Canadian Food Inspection Agency, National Centre for Foreign Animal Diseases - Paul Kitching
United States Animal Health Association (USAHA) – Bob Frost, Rick Willer

The topics proposed for discussion revolved around further collaboration on the establishment of a tri-national animal health diagnostic network. This topic had been discussed in the previous two Annual Meetings of the USAHA Committee on Diagnostic Laboratories and Veterinary Workforce Development. Topics covered during this meeting included participant perspectives on the merits of establishing a North American network, how the network would operate, identification of diseases of common interest, harmonization of tests, exchange of personnel, reagents and biological reference materials, training and future meetings.

During the roundtable discussion, a number of issues and action items were identified. They include:

- Each country needed to identify a point person for future planning (Canada-Kitching; Lautner-U.S.; Fragoso-Mexico);
- Canada is willing to put money into a three country agreement;
- An MOU signed by the Chief Veterinary Officers should be prepared;
- The activities could be accomplished under the umbrella of the U.S., Mexico and Canada “Security and Prosperity” agreement signed by the Presidents and Prime Minister;
- An initial step could be the harmonization of diagnostics;
- Funding will be needed to build/enhance infrastructure and expand cooperative activities;
- Sharing of expertise and training would be an important component;
- Diseases of possible collaboration could be listed. It was suggested that the countries could concentrate on 1 or 2 diseases initially;
- Adhering to international standards was an important consideration;
- If would be helpful to have an inventory of current activities because there is some collaborative work already in progress (i.e. Joan Arnoldi is working on a tri-national tuberculin comparison project);
- In the event of a Foreign Animal Disease (FAD) outbreak, the three nations individually do not have adequate lab capacity for a response or to recover from the outbreak (surveillance);
- Kitching thought there were some items that could be done quickly-exchange agents and exchange people to gain level of trust at the bench level as opposed to the distrust that is often seen at the political level;
- The priority for the three nations should be surveillance to preserve trade, early detection of an FAD, and follow-up testing to recover trade in the event of an FAD outbreak;
- The best techniques should be utilized from all three countries;
- The federal reference laboratories from each country should be the connecting points for the three countries’ lab networks;
- A follow-up meeting was suggested, possibly in early 2007 in Mexico or Canada with a suggested topic of early detection of TB and brucellosis;
• Prior to the early 2007 meeting, Kitching, Lautner and Fragoso would develop and share a draft reference document with proposed goals and objectives that would be signed by the three CVO’s;
• It was agreed that the U.S. would prepare the first draft of the reference document and Clifford asked Lautner for a turnaround of one month (November 17, 2006)