

**Wisconsin State Laboratory of Hygiene  
Board of Directors Meeting  
November 4<sup>th</sup> 2014  
1:00 P.M – 4:00 P.M.  
2601 Agriculture Drive  
Madison, WI 53718**

**APPROVED MINUTES  
August 19<sup>th</sup>, 2014**

**MEMBERS PRESENT:** Barry Irmen (Chair), Dr. Robert Corliss (Vice-Chair), Susan Buroker, Jeffery Kindrai, Charles Warzecha (on behalf of Karen McKeown), Scott Hildebrand (on behalf of Darrell Bazzell), Dr. Ruth Etzel, James Morrison, Dr. Charles Brokopp

**WSLH STAFF PRESENT:** Dr. Peter Shult, Dr. David Warshauer, Dr. Patrick Gorski, John Shalkham, David Webb, Marie Ruetten, Steve Marshall, Steve Strebel, Kristine Hansbery, Cynda DeMontigny, Linda Johnson and Nathaniel Javid

**DNR STAFF PRESENT:** Steve Geis, Ron Arneson

**GUESTS PRESENT:** None

**Chair Barry Irmen called the meeting to order at 1:00 P.M.**

**Item 1. APPROVAL OF MINUTES**

Approve the minutes of the June 17, 2014 board meeting as submitted. Chair Barry Irmen made a motion to approve, seconded by Jeffery Kindrai. The motion passed on a unanimous vote.

**Item 2. REORGANIZATION OF AGENDA**

None.

### **Item 3. PUBLIC APPEARANCES**

There were no public appearances.

### **Item 4. BOARD MEMBERS' MATTERS**

Chair Barry Irmen asked new board members, Dr. Ruth Etzel and Mr. James Morrison to introduce themselves to the Board. Dr. Ruth Etzel introduced herself as a pediatrician and epidemiologist working at the University of Wisconsin Milwaukee's Zilber School of Public Health. Dr. Etzel's research focuses on child health, environmental health and biochemical epidemiology. James Morrison introduced himself as an industrial hygienist with 25 years of experience, currently working as the Occupational Health Officer at UW-Madison. Dr. Brokopp asked the Board members to introduce themselves to the new members.

Dr. Brokopp recognized Darryll Farmer for his retirement from the Board and presented him with a certificate in honor of his six years of service on the Board. Darryll thanked the Board for the certificate and mentioned the important role the WSLH has within the State of Wisconsin. Dr. Brokopp mentioned that Governor Walker has appointed Carrie Lewis, a chief official at the City of Milwaukee Water Works, to fill Darryll's seat. Ms. Lewis will be joining the Board at the next meeting in November.

### **Item 5. SCIENTIFIC PRESENTATIONS**

#### **1) "Our New Multi-collector ICP-MS Capabilities at the WSLH."**

- a) Dave Webb, WSLH
- b) Dr. Patrick Gorski, WSLH

Dr. Brokopp introduced Dave Webb and Dr. Patrick Gorski, WSLH, for their scientific presentation on two MC-ICPMS instruments the WSLH recently acquired that will allow for high-level testing of environmental and clinical samples. MC-ICPMS stands for multi-collector inductively coupled plasma mass spectrometry and is used for metals analysis and low level isotope analysis. ICP-MS instruments that are commonly used in an environmental laboratory only analyze individual metals in a single fraction of the sample. The MC-ICPMS, however, has several detectors that can be fine-tuned to measure specific mass-separated ions, or isotopes in multiple fractions of samples. MC detectors provide mass resolution capable of quantifying extremely low levels of analyte. Mr. Webb provided some background information on the chemistry behind the MC-ICPMS. For example, isotopes are variants of the same element that have a different number of neutrons. This variation gives each isotope a slightly different mass. The relative abundance of each isotope can be measured. Isotopes can be applied through tracers and fingerprinting. Tracing means that specific isotopes are added to the system to trace its movement. Fingerprinting involves mass fractionation of natural

or ambient isotopes that are quantified between systems to show the source of a metal. Mr. Webb provided a clinical example of an application of stable isotopes as tracers and environmental application through fingerprinting.

Dr. Patrick Gorski presented a picture of the two MC-ICPMS's manufactured by Neptune. There are only 50 instruments in the United States, two of which are at the WSLH. One instrument was funded by NIH for clinical, health and biomedical applications, and the other was purchased by USGS for environmental studies of mercury and clinical applications. Dr. Gorski noted eight current NIH funded projects for clinical MC-ICPMS and gave a current status update. Both instruments have been installed and running (USGS in February 2014 and NIH in May 2014). The USGS postdoc was hired in December 2013 along with USGS staff and students. The WSLH is in the process of hiring a project chemist for the NIH's instrument and is now working on method development. Initial data is being generated and the WSLH plans to have an open house to showcase results.

## **2) “New Testing Algorithm for HIV Infection Screening”**

### **a) Dr. David Warshauer, WSLH**

WSLH Communicable Disease Division Deputy Director, Dr. David Warshauer presented on a new testing algorithm for HIV infection screening. There are 1.1 million persons currently infected with HIV in the United States. 181,000 of those are unaware of their infection and 49,000 new cases are diagnosed each year. In the U.S., 15,529 deaths occurred in 2010 with 636,000 deaths overall. Over the last 15 years, there has been an average of 253 cases of HIV diagnosed each year in Wisconsin with the peak number of diagnoses having occurred in the late 1980s and early 1990s.

As of 2009, 83 million adults ages 18-64 have been tested. There are several markers used to detect HIV infection (HIV RNA plasma, HIV p24 Antigen, and HIV Antibody). RNA (plasma) is the first marker to be detected at an average of 11 days after infection. RNA testing, however, is relatively expensive compared to HIV antibody testing; therefore, RNA testing is not a viable option for screening. The HIV p24 antigen test can detect at about 17 days but drops off soon thereafter. Ultimately, HIV antibody is the most commonly used screening test. Early detection is critical because people are unknowingly transmitting infection.

Dr. Warshauer presented the 1989 HIV algorithm which includes an initial test and a confirmatory test to rule out a false positive. One problem of older tests (western blot or immunofluorescence assay) was a lack of sensitivity. Current HIV testing begins with an HIV-1/HIV-2 antigen/antibody combination assay. The assay will detect the antibody and p24 antigen. If the test is positive, a second test is used to differentiate between HIV-1 and HIV-2. There is only one FDA test approved to do this (BioRad's multi-spot). The advantages of the new 4<sup>th</sup> generation algorithm for HIV testing is that it's more sensitive, more specific and it eliminates the expensive, labor intensive and problematic

western blot test that has been used for nearly 30 years . The multi-spot HIV-1/HIV-2 is simple, rapid and less costly than the western blot test. The new algorithm allows for earlier detection of acute HIV infection.

## **Item 6. FISCAL YEAR 2014 YEAR-END CLOSEOUT REPORT**

### **1) Marie Ruetten, Wisconsin State Laboratory of Hygiene**

Marie Ruetten, Financial Manager, WSLH, presented the FY14 year-end closeout report. The WSLH ended up at a \$679,421 net gain over what was budgeted for the fiscal year. The actual net gain is \$1,760,554. Most of this is agency gain in revenue through contracts, which includes funding received for a new instrument in the Environmental Health Division. GPR and OWI funds both performed slightly better than budgeted. Total revenue is \$1,048,216 over what we budgeted. The WSLH is over in expenses by \$368,795. Supplies and services was \$2,181,537 over budget. This was due primarily to travel, maintenance repairs and leases, consultants, new building equipment, and a select agent payment. Building rent is under budget because we budgeted the new building for a full year and we do not have complete occupancy. Bad debt is \$28,108 over budget but we are working to get our accounts up to date, particularly with overdue receivables.

Compared to the previous year, our revenue increased in FY14 by \$1,295,819 compared to FY13. Funding received from NIH for a new instrument had a big impact on this. Our expenses also increased by \$1,347,551 in FY14 compared to FY13.

Our total current assets are up on June 30, 2014 compared to June 30, 2013; however, our current liabilities and operating contingency have increased giving us an available working capital of \$7,995,504 compared to \$8,479,587. Cash-unrestricted is at \$9,064,175 compared to \$8,597,506 as of June 30, 2013.

The WSLH has a total cash balance of \$10,799,001 as of June 30, 2014. Subtracting restricted cash (NBS surcharge and UW contingency), deferred revenue, and encumbered payables, the WSLH has a cash balance available for use of \$1,245,426.

## **Item 7. DNR/DHS Basic Agreements**

### **1) Dr. Charles Brokopp, Director, Wisconsin State Laboratory of Hygiene**

Dr. Brokopp provided the update to the Board on the DNR/DHS basic agreements. The basic agreements serve as an ongoing commitment to the DHS and DNR to provide resources to support their programmatic missions. This past June, the basic

agreements were not signed by either DHS or DNR and the Board approved a 60 day extension to allow the agencies more time to review their agreements. Dr. Brokopp asked Charles Warzecha for a status update from DHS. Mr. Warzecha responded that the DHS is not ready for signature and asked the Board to approve an additional 60 day extension for approval at the next Board meeting on November 4<sup>th</sup>. Jack Sullivan, DNR, commented that there should be enough time for review before signature at the November Board meeting. The Board decided to informally extend the current basic agreements until the November 4<sup>th</sup>, 2014 meeting.

## **Item 8. STRATEGIC PLAN 2009-2014 FINAL UPDATE**

### **1) Steve Marshall, Interim Deputy Director, Wisconsin State Laboratory of Hygiene**

Steve Marshall presented the update on our 2009-2014 strategic plan. The WSLH is in the final year of our strategic plan. This plan was developed six years ago before the WSLH had to deal with the harsh realities of retirements and the recession. The plan was developed with specific strategies underneath five goals: business process improvement, laboratory excellence, financial viability, workforce development, and informatics. A scoring system was developed to assess how well the lab met its goals with (4) being the highest attainment and (1) being the lowest attainment

Mr. Marshall reported the following results to the Board: with our business improvement goal, we reached a full score of (4) by implementing a process and partnerships for LIMS systems. For our laboratory excellence goal, we reached a score of (3.5) due to some delays with the BSL3 laboratories in the new building. We received a score of (2) for financial viability in strategic marketing, customer service, public sector funding and new lines of business for support of the WSLH mission. Workforce development received a score of (2.75) because we were unable to develop a workforce development team with other commitments although we did see success in organizational and leadership realignment. Informatics received a score of (3.5) with a new computer system (LIMS), a new external website, and effective electronic laboratory data transfers; however, we want to build e-business infrastructure and have more automated data transfer and web access.

Mr. Marshall discussed the next steps going forward for the strategic plan. The next strategic plan will be replaced with a strategic map. The strategic map will be more goal-oriented with a shorter period of three years instead of five. This will allow for more flexibility and the ability to manage our progress more effectively. The WSLH will be working in the upcoming weeks and months to finalize our next strategic map. The strategic map will be available for review by the Board in November 2014.

## **Item 9. CONTRACTS REPORT**

### **1) Dr. Charles Brokopp, Director, Wisconsin State Laboratory of Hygiene**

Dr. Brokopp presented the Contract's Report to the Board. Dr. Brokopp asked the Board to refer to the packet for more specific information on WSLH current contracts. Four ongoing contracts with the Occupational Safety and Health Administration (OSHA) support the WSLH's Occupational Health Division's laboratory, health and safety consultation and occupational health surveillance programs. Two contracts are with the Wisconsin Department of Workforce Development in which the DWD agreed to provide the state matching funds for the federal contracts. The remaining contracts are with the Wisconsin Department of Natural Resources (DNR).

## **Item 10. DIRECTOR'S REPORT**

### **1) Dr. Charles Brokopp, Director, Wisconsin State Laboratory of Hygiene**

Dr. Brokopp reviewed the FY15 meeting calendar with the Board. The next meeting will be on November 4<sup>th</sup>, 2014 at the Wisconsin State Laboratory of Hygiene. On page 67 of the Board packet, there is a listing of public or environmental health incidents of educational interest. Mumps and pertussis are still being reported within Wisconsin. The lab is involved in these outbreaks by working with local health departments, epidemiologists and staff at the Wisconsin Division of Public Health. The WSLH has also arranged to have testing for botulism performed by the Minnesota public health laboratory.

The Wisconsin Clinical Laboratory Network (WCLN) managed by the WSLH Communicable Disease Division has hosted three regional one-day, well-attended update meetings. The next series of meetings will begin in September. Dr. Brokopp encouraged Board members to attend these informational meetings.

Dr. Brokopp mentioned that the WSLH performed testing on 3,015 water systems during the month of July. Eighty-three of those received a boil water notice. Dr. Brokopp asked the Board to refer to page 72 of the packet for more information on the testing of water supplies presented by county and type of system.

Dr. Brokopp gave an update on WSLH forensic toxicology. The WSLH has made remarkable improvements in turn-around-time with samples and has prepared and sent forward a budget request for the 2015-2017 biennial UW budget. This request will be for funding to renew two project positions, one additional chemist position, and funding for an LCMS-MS instrument that performs state-of-the-art drug testing. The requested instrument will further improve efficiency and significantly cut-down the pre-analytical time for processing drug specimens. Darryll Farmer complimented the WSLH for the significant accomplishments forensic toxicology has made.

Dr. Brokopp mentioned that the Journal of the American Medical Association (JAMA) released a publication on SCID screening highlighting the addition of this screening in more than 20 states. Over 3,000,000 babies have been screened and 57 cases of SCID have been identified by the newborn screening labs that have added screening for SCID since 2008.

Dr. Brokopp gave an update on new hiring at the WSLH. The WSLH has filled 97 positions in the lab in the last 12 months. Of that 97, 45 were new hires from outside the organization and 28 were internal transfers. The WSLH also had four external transfers from other state agencies. Filling these positions has had an impact on reserve funds and there are two positions still in recruitment: IT Director and Environmental Health Division Director. In the last 12 months, the WSLH had 9 retirements.

**Chair Barry Irmen** made a motion to adjourn meeting at 4:00 P.M. **Charles Warzecha** seconded the motion. The motion passed unanimously and the meeting was adjourned.

Respectfully submitted by:

A handwritten signature in black ink that reads "Charles D. Brokopp, DrPH". The signature is written in a cursive, flowing style.

Charles D. Brokopp, DrPH  
Secretary, Wisconsin State Laboratory of Hygiene Board of Directors