

**Wisconsin State Laboratory of Hygiene  
Board of Directors Meeting  
April 21, 2009  
1:00 p.m. – 4:00 p.m.  
2601 Agriculture Drive, Madison, Wisconsin**

**DATE:** April 14, 2009

**TO:** Chancellor Carolyn Martin\*, UW-Madison – Darrell Bazzell, Designated Representative  
Karen Timberlake\*, Secretary, DHS – Dr. Seth Foldy, Designated Representative  
Matthew Frank\*, Secretary, DNR – Jack Sullivan, Designated Representative  
Rod Nilsestuen\*, Secretary, DATCP – Susan Buroker, Designated Representative  
John Stanley, Member  
Robert Bagley, Member  
Michael Russell, Member  
David Taylor, Member, Chair  
Michael Ricker, Member  
Dr. Bernard Poeschel, Member  
David Webb, DNR Alternate  
Steve Sobek, DATCP Alternate  
Tom Sieger, DHS Alternate  
Sandy Breitborde, DHS Alternate  
Donna Halleran, UW Alternate

**FROM:** Dr. Charles D. Brokopp, Secretary  
Director, Wisconsin State Laboratory of Hygiene



**RE:** Wisconsin State Laboratory of Hygiene  
Board of Directors Meeting – AGENDA  
April 21, 2009  
1:00 p.m. – 4:00 p.m.  
MEETING LOCATION:  
Wisconsin State Laboratory of Hygiene  
2601 Agriculture Drive, Madison, Wisconsin

**C:** Ron Arneson DNR  
Dennis Rhodes (DOA)  
Emily Pope (LFB)  
\*Sent announcement only

Terry Burk  
John Chapin  
Sherry Gehl  
Dave Hassemer  
Jan Klawitter  
Dr. Daniel Kurtycz  
John Shalkham  
Dr. Peter Shult  
Dr. William Sonzogni  
Jim Sterk

**WISCONSIN STATE LABORATORY OF HYGIENE  
BOARD OF DIRECTORS**

**MEETING NOTICE**

**Tuesday, April 21, 2009**

**1:00 p.m. – 4:00 p.m.**

**MEETING LOCATION**

**Wisconsin State Laboratory of Hygiene  
2601 Agriculture Drive, Madison, Wisconsin**

**Notice is hereby given April 21, 2009**, at the Wisconsin State Laboratory of Hygiene, 2601 Agriculture Drive, Madison, Wisconsin.

**Notice is further given** that matters concerning Wisconsin State Laboratory of Hygiene issues, program responsibilities or operations specified in the Wisconsin Statutes, which arise after publication of this agenda may be added to the agenda and publicly noticed no less than two hours before the scheduled board meeting, if the board Chair determines that the matter is urgent.

**Notice is further given** that this meeting may be conducted partly or entirely by teleconference or videoconference.

**Notice is further given** that questions related to this notice, requests for special accommodation, or requests for a public appearance are addressed by the Wisconsin State Laboratory of Hygiene Administrative Offices by phone at (608) 262-3911 or in writing to Wisconsin State Laboratory of Hygiene, 465 Henry Mall, Madison, Wisconsin, 53706.

**ORDER OF BUSINESS:** See agenda contents page.

Respectfully submitted,



Charles D. Brokopp, Dr.P.H.  
Secretary to the Board, Wisconsin State Laboratory of Hygiene  
Director, Wisconsin State Laboratory of Hygiene  
April 14, 2009

Wisconsin State Laboratory of Hygiene  
Board of Directors Meeting  
April 21, 2009  
1:00 p.m. – 4:00 p.m.  
2601 Agriculture Drive, Madison, Wisconsin  
**AGENDA**

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Wisconsin State Laboratory of Hygiene  
Board of Directors Meeting  
April 21, 2009

**PROCEDURAL ITEMS**

**Item 1. APPROVAL OF MINUTES**

**Description of Item**

The draft minutes of the February 24, 2009 board meeting are submitted for approval.

**Suggested Board Action:**

Motion: Approve the draft minutes of the February 24, 2009 board meeting as submitted.

**Staff Recommendation and Comments:**

Approve draft minutes.

Note: Board members may access draft minutes from the Wisconsin State Laboratory of Hygiene (WSLH) secure Web site prior to the meeting. Once approved, minutes become part of the public record and are posted on the WSLH Web site: <http://www.slh.wisc.edu/board/meetings/index.php>.

**Procedural Note:**

Handouts provided to board members and alternates at the meeting will be referenced in the minutes but will not be incorporated into the draft minutes which are distributed for approval. Board members not in attendance will receive copies of the handouts.

The official approved minutes, which are kept by the board secretary, include the agenda and all handouts.

**PROCEDURAL ITEMS**

**Item 2. REORGANIZATION OF THE AGENDA**

**Description of the Item:**

Board members may suggest changes in the order in which the agenda items are discussed.

**Suggested Board Action:**

None.

**Staff Recommendation and Comments:**

None.

**PROCEDURAL ITEMS**

**Item 3. PUBLIC APPEARANCES**

**Description of the Item:**

Under the board's *Policies and Procedures*, non-members are invited to make presentations.

**Suggested Board Action:**

Follow WSLH *Policies and Procedures*.

**Staff Recommendation and Comments:**

Follow WSLH *Policies and Procedures*.

*Per Policies and Procedures of the Wisconsin State Laboratory of Hygiene Board of Directors:*

§6.12 *Speaking privileges.* When the board is in session, no persons other than laboratory staff designated by the Director shall be permitted to address the board except as hereinafter provided:

- (a) A committee report may be presented by a committee member who is not a member of the board.
- (b) A board or committee member, in the course of presenting a matter to the board, may request staff to assist in such a presentation.
- (c) If a board member directs a technical question for clarification of a specific issue to a person not authorized in this section, the Chair may permit such a person to respond.
- (d) The board may, by majority vote, or by decision of the Chair allow persons not otherwise authorized in this section to address the board if the situation warrants or the following criteria is followed:
  - (1) Written requests for public appearances on specific current agenda items shall be made to the board Secretary no later than two working days prior to the meetings. The request shall outline the reasons for the request including the subject matter to be discussed in as much detail as is feasible prior to the meeting of the board. Those requesting an appearance may, at or prior to the board meeting, provide board members copies of any written materials to be presented or a written statement of a position.
  - (2) Individual presentations will be limited to five minutes, unless otherwise authorized by the Chair.
  - (3) To schedule an appearance before the Wisconsin State Laboratory of Hygiene Board of Directors, contact the board Secretary, c/o Director, WSLH, 465 Henry Mall, Madison, Wisconsin, 53706. Telephone (608) 262-3911. The subject or subjects to be discussed must be identified.
  - (4) The Wisconsin State Laboratory of Hygiene "Guidelines for Citizen Participation in WSLH Board Meetings" are published on their Web site: [http:// www.slh.wisc.edu/index.shtml](http://www.slh.wisc.edu/index.shtml) and printed copies are available on request. (See Appendix 5) [Section §6.12 approved **5/27/03 board meeting.**]

## Appendix 5

### Guidelines for Citizen Participation at WSLH Board Meetings

The Wisconsin State Laboratory of Hygiene board provides opportunities for citizens to appear before the board to provide information to the board on items listed on the agenda. Such appearances shall be brief and concise. In order to accommodate this participation in the allotted time, the guidelines are as follows:

A. Items To Be Brought Before the Board:

1. The board Secretary and Chair will assign a specific time on the agenda to hear public comment when a request to speak has been received from a member of the public.
2. Individuals or organizations will be limited to a total of five (5) minutes to make a presentation to the board. Following the presentation, board members may ask clarifying questions.
3. An organization is limited to one (1) spokesperson on an issue.
4. On complex issues, individuals wishing to appear before the board are encouraged to submit written materials to the board Secretary in advance of the meeting so the board may be better informed on the subject in question. Such information should be submitted to the board Secretary for distribution to all board members no later than seven (7) working days before the board meeting.
5. No matters that are in current litigation may be brought before the board.

B. The board encourages individuals to confine their remarks to broad general policy issues rather than the day-to-day operations of the Wisconsin State Laboratory of Hygiene.

C. Citizens who have questions for board members should ask these questions prior to the board meeting, during any recess during the board proceedings, or after board adjournment.

D. Written requests to appear before the WSLH Board of Directors should be submitted no later than two (2) working days prior to a scheduled board meeting.

E. Submit written requests to:

Secretary, Wisconsin State Laboratory of Hygiene Board of Directors  
C/O WSLH Director  
465 Henry Mall  
Madison, WI 53706  
Telephone: (608) 262-3911  
Fax: (608) 262-3257  
E-mail: [cdb@slh.wisc.edu](mailto:cdb@slh.wisc.edu)

**PROCEDURAL ITEMS**

**Item 4. TRIBUTE TO DR. RONALD LAESSIG**

**A Quality Builder:  
In Memory of Ronald H. Laessig, Ph.D.**



**March 31st 2009**

*James O. Westgard, PhD*

It is with deep regret that I note the passing of Ron Laessig, who died unexpectedly but peacefully in his sleep on March 29, 2009. Ron was Emeritus Director of the Wisconsin State Laboratory of Hygiene and Emeritus Professor of Population Health Sciences (and he liked to say “sometimes clinical chemist”) at the University of Wisconsin Medical School, having retired about a year ago after over 40 years of service to the University and the State of Wisconsin.

The best description of Ron is a “quality builder.” And there were many dimensions to his building, from furniture to his home, from clinical chemist to Director of a large testing service, from proficiency testing to total quality management, from in-service training to statewide training seminars, from classroom instruction to national workshops, from committee member to President of NCCLS (now CLSI), from staff building to a new laboratory building that represents the state-of-the-art in environmental and toxicology testing in the US today.

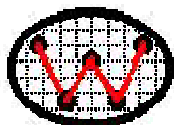
I met Ron in graduate school where we shared a research laboratory. Two memories stand out – coffee that would make your hair stand on end and a work schedule that began at 6:00 am and went until at least 12 midnight, 6 days a week. Having come from ND and grown up working on a farm, I always believed that I had a strong work ethic and could outwork almost everyone. But not Ron! I don’t think anyone had the dedication and commitment that he showed as a graduate student and throughout his career. And his accomplishments reflect that willingness to work hard at everything he did!

Our careers started out in a parallel fashion, beginning as clinical chemists in different labs of the University of Wisconsin, but we diverged as Ron acquired more and more management and leadership responsibilities at the State Lab and nationally, while I became more and more specialized in Quality Control. Yet things also converged at certain periods in time, such as when Ron mentored Sharon Ehrmeyer in her graduate program on External Quality Control, or proficiency testing, which paralleled some of my own studies in Internal Quality Control. Ron and Sharon maintained an ongoing collaboration and were spurred on by the laboratory regulatory environment. They co-authored the "Poor Man's Guide" which explained the regulations in a down-to-earth manner to help laboratories adapt to the "CLIA rules." With the advent of the Final CLIA rule in 2003, our interests again converged in opposition to CMS's proposed "equivalent QC" guidelines. And he enjoyed it when CMS admitted they "blew it," as Ron and Sharon discussed in an editorial in *Lab Medicine* in October 2005.

Ron always had fun in whatever he was doing! That was part of his formula for life. He liked to tell stories and I can testify that he was very good at it, since I was sometimes on the receiving end of those stories. My worst fear was to have him precede me on a program and have to adjust my presentation on the fly to respond to his statements, such as "...enjoy this because Jim is going to be as dry as cornflakes without milk" or "...Jim will tell you more about that" (and usually mentioned a topic I knew nothing about).

Ron and I shared a retirement party sponsored by the Chicago AACC section. It was wonderful to witness his daughter Betsy put him away with his own brand of humor. He knew Betsy got that from him and was proud that she could give it back. Ron treasured his family, his wife Joan, Betsy and her husband, and especially their three grandchildren. When I had lunch with him a couple of weeks ago, he took me to his home to show me his woodworking projects and particularly the parquet floor in his family room, where he had incorporated the initials of two of his grandchildren. He was describing his plan to take care of his latest grandson and how he would add his initials in the woodwork. That would perhaps be his only regret of work not completed because his other accomplishments are immense and beyond anything that might be expected of an individual.

Ron was a good friend to many of us and his "family" encompassed the entire State Laboratory of Hygiene and many professional colleagues beyond. Their expressions of appreciation were demonstrated by a retirement roast of songs and stories that reflected the good humor and sound values that Ron embodied. We all wanted Ron at our side when we went into battle because we knew we could count on him. Now we will count on his spirit to comfort us today and to guide us tomorrow. And we can honor his memory by building a better future for our families, for laboratory services, and for healthcare.



**BUSINESS MEETING**

**Item 5. CONTRACT REPORTS**

- A) Government Agencies – For Information and Discussion (8)
- B) Private Contracts (0)

**Description of the Item:**

Contracts listed under this agenda item are described in Section 3.04 and 3.06 of the Policy and Procedures document. Two different mechanisms apply for handling contracts:

- A) Agreements Requiring Director Approval being reported to the Board for Information only under §3.04 (8)**
- B) Contracts Requiring Board Approval under §3.06 (0)**

**Suggested Board Action:**

Discuss contracts.

**Staff Recommendations and Comments:**

There are no contracts requiring board approval.

**WISCONSIN STATE LABORATORY OF HYGIENE BOARD  
CONTRACT REPORT FOR APRIL 21, 2009**

As Required Under §3.0 of the Policies and Procedures (P&P) of the Wisconsin State Laboratory of Hygiene Board as Approved at its November 30, 2006 Meeting

**For Board Approval under Board Policy and Procedures §3.03 or §3.06 :**

**For Board Information under Board Policy and Procedures §3.05:**

<b>Contractor Name/ Agency</b>	<b>Contract Name</b>	<b>Revenue</b>	<b>Period of Performance</b>	<b>Scope of Work</b>	<b>Reference to Board P&amp;P</b>
Wisconsin Department of Natural Resources	Purchase Orders to DNR Basic Agreement	\$111,556.30	Expires June 30, 2009	Biomonitoring Lab Support, Lac Courte Oreilles Sediment Cores, and Tissue Grinding and Storage Facility	§3.04(a)
Wisconsin Department of Health Services	EPA Endocrine Disrupting Chemicals and Thyroid Outcomes Program	\$18,000	March 1, 2007- February 28, 2009	The WSLH will optimize the PBDE laboratory protocol and analysis. This increases the contract from \$120,000 to \$138,000.	§3.04(a)
Chelan County, Washington	Environmental Testing	< \$10,000	February 9, 2009- February 8, 2010	The county's public utility district would like us to do some testing for them.	§3.04(b)
Omaha Public Power District	Extension of Existing Contract	\$1,000	January 1, 2007- December 31, 2009	Omaha has extended the contract for air samples by another year and another \$1,000.	§3.04(b)
Waisman Center	MOU to Move the Biogenetics Laboratory to WSLH	n/a	Beginning April 1, 2009	This move was discussed at previous Board meetings, and the MOU has now been signed by all parties and activated.	§3.04(b)
Commonwealth of Puerto Rico	Service Contract	\$17,500	February 13, 2009- June 30, 2009	WSLH will continue to offer Puerto Rico industrial hygiene services.	§3.04(b)
Environmental Quality Management	Purchase Order with Environmental Quality Management	\$2,112	February 8, 2009- February 7, 2010	WOHL will be conducting tests on some expedited samples.	§3.04(e)
The Nature Conservancy	Fee for Service Arrangement	\$1,716	October 1, 2008- September 30, 2009	WSLH will do some sediment testing for the Nature Conservancy.	§3.04(e)

## REFERENCES

- §3.02 *Policy on contracts and agreements.* Sections 3.02-3.07 are created by the board in order to carry out its responsibilities under S. 36.25(11)(a), *Wis. Stats.*, to "...set fees, set priorities and make final approval of laboratory resources...", and its authority under S. 36.25(11)(f), *Wis. Stats.*, to "...impose a fee for each test conducted by the laboratory" Any test conducted for a local unit of government is exempt from the fee unless the test is outside the state public health care mission or is required under 42 USC 300f to 300j, as determined by the laboratory of hygiene board. The laboratory may charge state agencies through contractual arrangements for the actual services rendered."
- §3.03 *Basic agreements.* No later than the first meeting of the board in each fiscal year, the board shall approve a basic services agreement with the Department of Natural Resources and the Department of Health and Family Services respectively for that fiscal year. Absent an approved basic services agreement, the laboratory and agency shall proceed on a "continue to operate" basis.
- §3.04 *Director's contract authority.* Except as provided in §3.06, the Director may negotiate and enter into the following contracts:
- (a) All contracts for services with the Department of Natural Resources or the Department of Health and Family Services which are issued pursuant to the basic services agreement with that agency.
  - (b) All other contracts for services with state agencies or municipalities under S.36.25(11)(b) *Wis. Stats.*; with federal government agencies, governmental agencies in other states, and educational institutions provided that:
    1. The services are consistent with the Laboratory's mission as approved by the board, and
    2. The contracts do not exceed the board approved budget for the Laboratory by more than 10%.
  - (c) Any non-policy amendment or addition to the basic agreements under §3.03.
  - (d) All contracts for purchase of supplies, services, and permanent property that are within budget appropriations and the budget resource allocations approved by the board.
  - (e) All contracts with private entities and corporations, or other organizations and businesses that wish to contract with the WSLH for services, provided that:
    1. The price for service is at or above the fee in the current fee schedule, or
    2. Custom lab work, not listed in the fee schedule, is priced at or above full cost when using the new work volume.
    3. The Director determines a discount is necessary to carry out the WSLH's public, environmental or occupational health mission as reflected in the state statutes or core functions of state and public health laboratories, or
    4. The Director determines a discount will allow the WSLH to use current capacity or sustain its role within the University and
    5. The Director will ensure the discounted price will at least cover marginal costs and
    6. The WSLH Director will ensure that the long-range implications of a discounted price will not adversely affect the ability of the WSLH to attain the board's reserve requirements.
  - (f) Contracts that relate to normal administrative operations and for which the University of Wisconsin provides oversight. Examples include, but are not limited to: pre-qualifying orders intended to stipulate the WSLH's quality assurance program or business standards, Memoranda of Agreement for management of electronic access to WSLH data, HIPAA business associate agreements, and consulting agreements for limited term services from persons with specialized skills (strategic planners, *locum tenens*).
- §3.05 *Contract report to board.* A list including brief description of all contracts executed under §3.04(a), §3.04(b), §3.04(c) and §3.04(e) shall be reported to the board at its first meeting after said action. The description shall include name, period, and amount of the contract, as well as the name of the entity with which the lab is contracting. If upon review at that meeting, the board decides to set aside future contracts for certain programs or types of services and upon enactment of a specific motion detailing the constraints the board wishes to impose, the Director shall not authorize such future contracts until approval is granted for each on a case-by-case basis under §3.06.
- §3.06 *Board approval required.* The Director shall seek board approval for all of the following contracts prior to execution:
- a. Any contracts for services or purchases that are not covered by §3.03 or §3.04.
  - b. Any contract type identified by the board under §3.05 for separate consideration and approval.  
Any contract which the Director feels may present either public policy or private competition questions which should be resolved by the board.
  - c. Any contract which the Director feels may present either public policy or private competition questions which should be resolved by the Board.

**BUSINESS MEETING**

**Item 6. NEW TEST OFFERED TO THE PUBLIC**

- A) *Rhodococcus coprophilus* by qPCR
- B) *Rhodococcus coprophilus* by traditional PCR

**A) *Rhodococcus coprophilus* by qPCR**

**Description of Item:**

The Water Micro Unit has been offering a toolbox of microbial source tracking (MST) tests to the WI DNR for just over 2 years. The tests included in that toolbox and their specificities can be provided if needed. In Wisconsin, this MST toolbox has been used to determine if manure from farm fields are contaminating drinking water wells. In one instance, the MST toolbox was able to confirm that human sewage was entering a drinking water well. Concurrent dye tests indicated that the septic system at the site had not been installed properly.

In 2008, Dr. Long secured a Groundwater Council grant to develop and validate a molecular-based test for the target *Rhodococcus coprophilus*. This MST indicator is indicative of manure and fecal matter from grazing animals and domestic animals that eat or bed in hay. The molecular-based test utilizes polymerase chain reaction or PCR for detection of the indicator organism. The molecular test was used in parallel with the existing culture-based method starting in August 2008 through February 2009 on MST samples submitted by WI DNR during that time. It has proved to be a great improvement over the culture method, allowing us to provide results to the WI DNR staff within as little as 48 hours. This has provided a needed answer to families whose homes were served by these wells.

We would like to add the molecular *Rhodococcus coprophilus* test to the Water Micro Unit's fee schedule. We have had inquiries from out of state and water utilities for such testing. Also, WI DNR staff may direct homeowners to us to arrange testing directly depending on the situation.

**Test Name:** *Rhodococcus coprophilus* by qPCR

**Proposed Price Range:** \$200

**Suggested Board Action:**

Approve.

**Staff Recommendations and Comments:**

Approve testing.

**NOTICE TO WSLH BOARD OF POTENTIAL  
NEW TEST OFFERING TO THE PUBLIC FOR A FEE**  
This notification is being provided to you per Section 2 Part B of  
"Principles for Offering a New Test to the Public for a Fee"

**Name of Test:** *Rhodococcus coprophilus* by qPCR

**WSLH Contact Person:** Dr. William Sonzogni

**Date of Board Notification:** April 21, 2009

- 1. Has the DHFS, DNR, a local public health agency, or other agency with authority proclaimed that an emergency exists and therefore this testing must be provided at once?**  
No, but the results are used for the well compensation program through the DNR.
- 2. Has the DHFS, DNR, local public health agency or other agency with responsibility for the health and safety of the public or the environment asked that this test be provided to the public?**  
Yes, both DHS and DNR.
- 3. Is this test necessary to support a public health or environmental protection strategic priority?**  
Yes, identification of manure contamination.
- 4. Why did the WSLH develop the capability for this test?**  
We were asked to develop source tracking capabilities by DHS and DNR.
- 5. Why does the WSLH want to offer this test to the public?**  
Because in certain situations, DHS and DNR would like to refer well owners to us directly.
- 6. Is this test available elsewhere?**  
In New Zealand and South Africa.
- 7. Does an appropriate, voluntary partnership with the WSLH exist?**  
No, we do not.
- 8. Should a partnership be created to carry out the responsibilities associate with offering this test, promoting the test, collecting testing data, etc?**  
No, it doesn't appear necessary.
- 9. Cost-Price Data?**

What is the full cost of the test?	<b>\$176.09</b>
What is the direct cost of the test?	<b>\$129.48</b>
What price is proposed for the WSLH?	<b>\$200.00</b>

If the test is available elsewhere, what are the prices of other providers?
- 10. How was public input solicited? What are the results of public input?**  
Public input solicited via WSLH web site. Comments provided to WSLH Board.
- 11. Additional information.**  
The test development and validation was funded by a grant from the Groundwater Coordinating Council.

## **B) *Rhodococcus coprophilus* by traditional PCR**

### **Description of Item:**

The Water Micro Unit has been offering a toolbox of microbial source tracking (MST) tests to the WI DNR for just over 2 years. The tests included in that toolbox and their specificities can be provided if needed. In Wisconsin, this MST toolbox has been used to determine if manure from farm fields are contaminating drinking water wells. In one instance, the MST toolbox was able to confirm that human sewage was entering a drinking water well. Concurrent dye tests indicated that the septic system at the site had not been installed properly.

In 2008, Dr. Long secured a Groundwater Council grant to develop and validate a molecular-based test for the target *Rhodococcus coprophilus*. This MST indicator is indicative of manure and fecal matter from grazing animals and domestic animals that eat or bed in hay. The molecular-based test utilizes polymerase chain reaction or PCR for detection of the indicator organism. The molecular test was used in parallel with the existing culture-based method starting in August 2008 through February 2009 on MST samples submitted by WI DNR during that time. It has proved to be a great improvement over the culture method, allowing us to provide results to the WI DNR staff within as little as 48 hours. This has provided a needed answer to families whose homes were served by these wells.

We would like to add the molecular *Rhodococcus coprophilus* test to the Water Micro Unit's fee schedule. We have had inquiries from out of state and water utilities for such testing. Also, WI DNR staff may direct homeowners to us to arrange testing directly depending on the situation.

**Test Name:** *Rhodococcus coprophilus* by traditional PCR

**Proposed Price Range:**     **\$250**

### **Suggested Board Action:**

Approve.

### **Staff Recommendations and Comments:**

Approve testing.

**NOTICE TO WSLH BOARD OF POTENTIAL  
NEW TEST OFFERING TO THE PUBLIC FOR A FEE**  
This notification is being provided to you per Section 2 Part B of  
"Principles for Offering a New Test to the Public for a Fee"

**Name of Test:** *Rhodococcus coprophilus* by traditional PCR

**WSLH Contact Person:** Dr. William Sonzogni

**Date of Board Notification:** April 21, 2009

- 1. Has the DHFS, DNR, a local public health agency, or other agency with authority proclaimed that an emergency exists and therefore this testing must be provided at once?**  
No, but the results are used for the well compensation program through the DNR.
- 2. Has the DHFS, DNR, local public health agency or other agency with responsibility for the health and safety of the public or the environment asked that this test be provided to the public?**  
Yes, both DHS and DNR.
- 3. Is this test necessary to support a public health or environmental protection strategic priority?**  
Yes, identification of manure contamination.
- 4. Why did the WSLH develop the capability for this test?**  
We were asked to develop source tracking capabilities by DHS and DNR.
- 5. Why does the WSLH want to offer this test to the public?**  
Because in certain situations, DHS and DNR would like to refer well owners to us directly.
- 6. Is this test available elsewhere?**  
In New Zealand and South Africa.
- 12. Does an appropriate, voluntary partnership with the WSLH exist?**  
No, we do not.
- 13. Should a partnership be created to carry out the responsibilities associate with offering this test, promoting the test, collecting testing data, etc?**  
No, it doesn't appear necessary.
- 14. Cost-Price Data?**

What is the full cost of the test?	<b>\$242.17</b>
What is the direct cost of the test?	<b>\$178.06</b>
What price is proposed for the WSLH?	<b>\$250.00</b>

If the test is available elsewhere, what are the prices of other providers? The other providers are overseas, and it does not seem reasonable that WI residents would send samples there.
- 15. How was public input solicited? What are the results of public input?**  
Public input solicited via WSLH web site. Comments provided to WSLH Board.
- 16. Additional information.**  
The test development and validation was funded by a grant from the Groundwater Coordinating Council.

**BUSINESS MEETING**

**Item 7. PRELIMINARY FISCAL YEAR 2009 THIRD QUARTER FINANCIAL REPORT**

**Description of Item:**

Even though the close of the third quarter is very recent, it is important for the board to have a preliminary review of the FY09 third quarter and to have some data on the projected close of FY09. This is because of the board's authorization that the allowed FY08 deficit of \$1,600,000 be reduced in FY09 to \$600,000 and in FY10 for a balanced budget to be attained. Months ago, WSLH was looking at a significantly higher budget deficit for FY09 because of recession-related reductions in lab revenue and significant wage increases. The presentation will review fiscal actions taken during the last quarter to move WSLH back towards its target, the program implications and our current assessment that WSLH will end FY09 within the board's authorized deficit target.

**Suggested Board Actions:**

Discuss and advise.

**Staff Recommendations and Comments:**

The WSLH will continue to refine the FY09 year-end estimates and another update will be provided at the June board meeting.

**Suggested Board Action:**

Receive for information.

**Staff Recommendations and Comments:**

Receive for information.

**BUSINESS MEETING**

**Item 8. PRELIMINARY FISCAL YEAR 2010 BUDGET**

**Description of Item:**

WSLH budget authority rests with the board. Each year a preliminary budget is presented in the spring prior to the budget's authorization in the summer and the start of the state fiscal year. This year the preliminary budget estimate is particularly important because of the board's three-year plan to move to a balanced budget (zero deficit) in FY10. This is difficult because WSLH is starting from a deficit position in FY09, the nation is in a deep recession and state budgets are being reduced. In addition, the WSLH director has made a commitment to the board to not only meet that balanced budget; but to meet it without using any more of the reserve cash margin above the contingency limit set by the board.

In this presentation, a lab-wide bottom line estimate is made as to the balance point for FY10 that attains a zero deficit, the administrative actions needed to make that balanced budget, some of the program implications and what types of fiscal insurance policies need to be created to deal with any unanticipated further declines in revenue. At the June meeting a full budget will be presented to the board for approval.

**Suggested Board Actions:**

Discuss and advise.

**Staff Recommendations and Comments:**

The WSLH will continue to refine the SFY10 budget and bring a final version to the board for approval in June 2009.

**BUSINESS MEETING**

**Item 9. LOCAL PUBLIC HEALTH LABORATORY NETWORK**

**Description of Item:**

Jan Klawitter will describe the establishment of the network of local public health laboratories in Wisconsin during the past two years. Information on the member laboratories and the organizational home of these laboratories will be presented to the board. The Wisconsin Association of Local Health Departments and Boards (WALHDAB) approved the formation of a laboratory subcommittee within their organization.

The Local Public Health Laboratory Network will focus on providing laboratory testing for local public health programs. Workforce development and training of laboratory staff will also be addressed.

The network actually got its start in 2006 when a planning grant from the University of Wisconsin Partnership for a Healthy Future funded a forum for 13 local public health department laboratories to meet, assess capabilities and capacities, participate in training and build a partnership with the Wisconsin Division of Health, Department of Natural Resources, Department of Agriculture, Trade and Consumer Protection, and the WSLH. A 2-year \$13,350 grant from the Association of Public Health Laboratories (APHL) was received in 2008 and used to further develop the local laboratory network and provide training.

**Suggested Board Action:**

Receive for information.

**Staff Recommendations and Comments:**

Receive for information.

**BUSINESS MEETING**

**Item 10. SCIENTIFIC PRESENTATIONS**

- A) Removal of Organic Wastewater Contaminants in Septic Systems Using Advanced Treatment Technologies — Miel Barman, Co-Director, Office of Quality Assurance
- B) Updates on Applied Microbial Research at WSLH — Dr. Sharon Long, Associate Professor, College of Agriculture & Life Sciences
- C) Molecular techniques in Cytogenetics — Gordana Raca, MD, PhD, FACMG, Assistant Professor, Pathology and Laboratory Medicine, Director, UW Cytogenetic Services, WSLH

**Description of the Item:**

**A) Removal of Organic Wastewater Contaminants in Septic Systems Using Advanced Treatment Technologies** — The detection of pharmaceuticals and other organic wastewater contaminants (OWC) in ground water and surface water bodies has raised concerns about the possible ecological impacts of these compounds on non-target organisms. On-site wastewater treatment systems represent a potentially significant route of entry for organic contaminants to the environment. In this study, effluent samples were collected and analyzed for 13 target compounds from conventional septic systems and from systems using advanced treatment technologies. Six of the 13 compounds were detected in effluent from at least one septic system. The OWC concentrations were significantly lower in effluent after sand filtration or aerobic treatment as compared to effluent that had not undergone advanced treatment.

**B) Updates on Applied Microbial Research at WSLH** — The objective of this research program is to bring cutting edge testing to the Water Microbiology Unit of the Wisconsin State Laboratory of Hygiene. Development of a microbial source tracking (MST) toolbox, support of the state's preparedness program, and bringing biosolids microbial testing capabilities are focus areas of the Applied Microbiology Research program. Ongoing projects include further honing the MST toolbox by investigating the use of molecular methods to shorten analysis times. Projects that aim to solve engineering problems, for example biosolids foaming and water treatment for hospital preparedness, are also being actively investigated. This presentation will highlight recent accomplishments of the Applied Microbiology Research program.

**C) Molecular Techniques in Cytogenetics** — The presentation will review clinical and research applications of Fluorescence in Situ Hybridization (FISH) and array Comparative Genomic Hybridization (aCGH). Dr. Raca will explain basic principles of these two techniques and show examples how we use them in diagnostics and research. She will give a brief overview of the ongoing research projects which use aCGH to look for genetic causes of eye anomalies, non-syndromic mental retardation and speech disorders.

**Suggested Board Action:**

Receive for information and discuss.

**Staff Recommendations and Comments:**

Receive for information and discuss.

Wisconsin State Laboratory of Hygiene  
Board of Directors Meeting  
April 21, 2009

**ADMINISTRATIVE ITEMS**

**Item 11. DIRECTOR'S REPORT**

- A) 2009 Board Meeting Calendar
- B) Report of Outbreaks and Other Emergency Response Activities
- C) Report on Public Water System Testing
- D) Awards, Honors and Accomplishments
- E) Staff Publications and Presentations
- F) WSLH Building Update
- G) Federal Grants — Biomonitoring and SCID

**Description of Item:**

Items of interest are presented to the board.

**Suggested Board Action:**

Receive for information.

**Staff Recommendation and Comments:**

Receive for information.

**A) 2009 Board Meeting Calendar**

**WISCONSIN STATE LABORATORY OF HYGIENE  
BOARD OF DIRECTORS  
2009 MEETING CALENDAR**

<p align="center"><b>February 24, 2009</b> 1:00 p.m. – 4:00 p.m. <b>Wisconsin State Laboratory of Hygiene</b> 2601 Agriculture Drive, Madison, Wisconsin</p>	<p align="center"><b>April 21, 2009</b> 1:00 p.m. – 4:00 p.m. <b>Wisconsin State Laboratory of Hygiene</b> 2601 Agriculture Drive, Madison, Wisconsin</p>
<ul style="list-style-type: none"> <li>■ Board meeting</li> <li>■ Present second quarter fiscal report</li> <li>■ Approve 2009-2014 Strategic Plan</li> <li>■ Review meeting dates for the year</li> <li>■ State of the Wisconsin State Laboratory of Hygiene</li> <li>■ Review appointments and expiration dates</li> <li>■ Review records for “Oath of Office”</li> <li>■ Election at close of meeting</li> </ul>	<ul style="list-style-type: none"> <li>■ Board meeting</li> <li>■ Present third quarter FY09 fiscal report</li> <li>■ Submit preliminary FY10 budget to board (includes GPR allocation)</li> <li>■ Review board meeting dates (summer vacations)</li> </ul>
<p align="center"><b>June 16, 2009</b> 1:00 p.m. – 4:00 p.m. <b>Wisconsin State Laboratory of Hygiene</b> 2601 Agriculture Drive, Madison, Wisconsin</p>	<p align="center"><b>August 18, 2009</b> <b>Time and Place To Be Determined</b></p>
<ul style="list-style-type: none"> <li>■ Board meeting</li> <li>■ Approval of FY10 budget by board</li> <li>■ Approval of DNR/DHS Basic Agreements by board</li> <li>■ Discuss potential biennial budget DINS</li> </ul>	<ul style="list-style-type: none"> <li>■ Board meeting</li> <li>■ Present fourth quarter – year end fiscal report</li> <li>■ New fiscal year begins</li> <li>■ Announce FY2010 pricing process to board</li> <li>■ Present annual Strategic Plan update based on Performance Measures</li> <li>■ Biennial budget DINs presented for final approval</li> </ul>
<p align="center"><b>November 17, 2009</b> 1:00 p.m. – 4:00 p.m. <b>Wisconsin State Laboratory of Hygiene</b> 2601 Agriculture Drive, Madison, Wisconsin</p>	
<ul style="list-style-type: none"> <li>■ Board meeting.</li> <li>■ Present first quarter fiscal report</li> <li>■ Present fiscal year closeout budget</li> <li>■ Approval of new prices by board (effective January 1, 2010)</li> <li>■ Review Medicare prices and Federal Policies</li> <li>■ Annual Report published</li> <li>■ Present Annual Medicare Compliance Report</li> </ul>	

## B) Report of Outbreaks and Other Emergency Response Activities

### Report of Outbreaks and Other Emergency Response Activities January 26, 2009 – March 31, 2009

Approximate Date	Agent or Event Name	Description	Current Status
<b>OUTBREAKS and INCIDENTS</b>			
February 2009	Pertussis	Nine cases of pertussis reported in a school in Marathon County. The outbreak was contained and there was no spread beyond the original infected patients.	Closed
March 2009	Salmonella Carrau	In early March the WSLH identified cases of Salmonella Carrau, a somewhat rare serotype. PFGE patterns were posted to PulseNet and cases have now been identified in other states (WI has 4 cases as of 3/17/09). The source of the outbreak is currently unknown, and the epidemiological investigation is ongoing in Wisconsin and nationally.	Ongoing
March 2009	<i>N. meningitidis</i> (bacterial meningitis)	Three Appleton high school students were sickened by <i>N. meningitidis</i> and are now recovering. The three students were exposed to the bacteria at a non-school social function. No one else was infected.	Closed
February – March 2009	Norovirus	The WSLH has performed norovirus testing for at least 10 outbreak investigations at long-term care and treatment facilities since the last Board meeting. Testing is performed in support of WI DPH epidemiological investigations.	Ongoing
March 2009	Bacterial contamination in well water	Rock County Health Department requested water microbiology testing kits for homeowners due to flooding in the county.	Ongoing
<b>RECENT EVENTS and FINDINGS</b>			
January 2009	Dr. Pete Shult Contributes to New UW-Madison Vaccines Course	UW-Madison Medical Microbiology and Immunology (MMI) 677 – “Vaccines: Practical Issues for a Global Society” began Spring Semester 2009. The course goal is to introduce undergraduate and graduate students to vaccinology. Course lectures (audio and slides) will be made available on the WSLH web site for the public. Topics to be addressed include: Immunology of Vaccination <ul style="list-style-type: none"> <li>• Vaccine Development and Application of New Technologies</li> <li>• Role of Immunization in Public Health Programs for Infectious Disease Prevention</li> <li>• Economics of Vaccines</li> <li>• Political, Legal and Ethical Issues Relating to Immunization</li> <li>• Impact of Immunization in Animal Populations</li> </ul> For more information: <a href="http://www.slh.wisc.edu/comdis/vaccine_class.dot">http://www.slh.wisc.edu/comdis/vaccine_class.dot</a>	Ongoing
March 2009	Wisconsin Hospital Laboratories Honored for Emergency Preparedness Training	Reinforcing their commitment to their communities, 53 hospital and clinical laboratories around the state have qualified for the <i>Certificate of Achievement for Laboratory Training in Emergency Preparedness</i> from the Wisconsin Clinical Laboratory Network (WCLN) managed by the WSLH. The certificate program began in 2006. For more information: <a href="http://www.slh.wisc.edu/news/wcln_emer_prep_award_090323.dot">http://www.slh.wisc.edu/news/wcln_emer_prep_award_090323.dot</a>	Ongoing

Approximate Date	Agent or Event Name	Description	Current Status
<b>RECENT EVENTS and FINDINGS</b>			
March 2009	WSLH Scientists Contribute to Influenza and TB articles in <i>JAMA</i>	WSLH scientists contributed to two important infectious disease articles in the March 11, 2009 issue of <a href="#">JAMA</a> , the <i>Journal of the American Medical Association</i> — the increasing resistance of influenza A (H1N1) viruses to the popular antiviral drug Tamiflu, and the revising of TB testing guidelines in order to speed the response time for treating tuberculosis patients and protecting public health. For more information: <a href="http://www.slh.wisc.edu/news/jama_articles_090311.dot">http://www.slh.wisc.edu/news/jama_articles_090311.dot</a>	

**C) Report on Public Water System Testing**

**Water Systems Tests by the Wisconsin State Laboratory of Hygiene**

January 1, 2009 — February 28, 2009	
Number of systems on a boil water notice	<b>18</b>
Number of water systems tested	<b>3384</b>
Percent of systems on a boil water notice	<b>0.53%</b>
Number of boil water notices for <u>municipal community water</u> systems.	<b>0</b>
Number of boil water notices for <u>other than a municipal community water</u> system	<b>0</b>
Number of boil water notices for <u>non-transient, non-community</u> water systems.	<b>2</b>
Number of boil water notices for <u>transient water systems</u> .	<b>16</b>

JANUARY 2009								
	# of Systems Tested by WSLH				# of Boil Water Notices			
	MC	OC	NN	TN	MC	OC	NN	TN
Adams	3	2	0	0	0	0	0	0
Ashland	3	0	2	0	0	0	0	0
Barron	3	4	4	1	0	0	0	0
Bayfield	5	1	2	0	0	0	0	0
Brown	14	0	5	0	0	0	0	0
Buffalo	3	1	1	2	0	0	0	0
Burnett	1	0	1	1	0	0	0	0
Calumet	8	0	0	1	0	0	0	0
Chippewa	3	2	2	2	0	0	0	0
Clark	8	1	2	1	0	0	0	0
Columbia	10	2	6	9	0	0	0	1
Crawford	8	0	0	0	0	0	0	0
Dane	33	9	5	9	0	0	0	1
Dodge	17	2	6	7	0	0	1	0
Door	3	1	2	75	0	0	0	0
Douglas	0	1	1	0	0	0	0	0
Dunn	2	1	0	0	0	0	0	0
Eau Claire	0	0	0	0	0	0	0	0
Florence	1	0	0	0	0	0	0	0
Fond Du Lac	9	1	10	1	0	0	0	0
Forest	4	0	0	0	0	0	0	0
Grant	19	2	2	4	0	0	0	0
Green	8	0	3	1	0	0	0	0
Green Lake	5	1	1	0	0	0	0	0
Iowa	12	1	3	2	0	0	0	0
Iron	5	0	0	0	0	0	0	0
Jackson	7	0	4	3	0	0	0	0
Jefferson	6	4	6	3	0	0	0	1
Juneau	10	1	1	3	0	0	0	0
Kenosha	1	16	11	0	0	0	0	0
Kewaunee	3	1	1	1	0	0	0	0
La Crosse	1	3	5	1	0	0	1	0
Lafayette	9	0	0	2	0	0	0	0
Langlade	2	0	0	4	0	0	0	1
Lincoln	3	1	0	0	0	0	0	0
Maritowoc	9	2	3	3	0	0	0	0
Marathon	3	2	7	0	0	0	0	0
Marinette	8	1	0	1	0	0	0	0
Marquette	1	2	4	2	0	0	0	0
Menominee	0	0	0	0	0	0	0	0
Milwaukee	5	2	5	0	0	0	0	0
Monroe	7	2	0	2	0	0	0	0
Oconto	5	3	3	2	0	0	0	0
Oneida	1	3	3	0	0	0	0	0
Outagamie	13	0	2	2	0	0	0	0
Ozaukee	5	11	7	3	0	0	0	0
Pepin	0	0	1	0	0	0	0	0
Pierce	2	1	3	1	0	0	0	0
Polk	5	0	1	1	0	0	0	1
Portage	4	1	5	0	0	0	0	0
Price	4	0	0	4	0	0	0	0
Racine	0	4	13	1	0	0	0	0
Richland	6	0	2	2	0	0	0	0
Rock	7	6	7	3	0	0	0	0
Rusk	4	1	1	0	0	0	0	0
Sauk	13	3	3	4	0	0	0	0
Sawyer	5	2	2	1	0	0	0	0
Shawano	8	1	1	1	0	0	0	0
Sheboygan	10	0	2	4	0	0	0	0
St. Croix	3	5	3	1	0	0	0	0
Taylor	4	0	1	0	0	0	0	0
Trempealeau	12	2	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0
Vernon	10	1	5	4	0	0	0	0
Vilas	3	6	2	2	0	0	0	0
Walworth	5	3	6	3	0	0	0	0
Washburn	3	1	1	0	0	0	0	0
Washington	4	9	5	2	0	0	0	0
Waukesha	4	8	26	3	0	0	0	0
Waupaca	8	0	5	3	0	0	0	0
Waushara	5	1	1	1	0	0	0	0
Winnebago	6	2	3	0	0	0	0	0
Wood	6	4	2	0	0	0	0	0

## Report on Public Water System Testing

MC is municipal community water system which means a water system which serves at least 15 service connections used by year round residents or regularly serves at least 25 year round resident and is owned by a county, city, village, town, town sanitary district, or utility district.

OC is other than municipal community water system which means a community water system that is not a municipal water system. Examples of other than municipal community water systems include but are not limited to those serving mobile home parks, apartments and condominiums.

NN is non-transient non-community water system which means a non-community water system that regularly serves at least 25 of the same persons over 6 months per year. Examples of non-transient non-community water systems include those serving schools, day care centers and factories.

TN is non-community transient water system which means a non-community water system that serves at least 25 people at least 60 days of the year. Examples of transient non-community water systems include those serving taverns, motels, restaurants, churches, campgrounds and parks.

FEBRUARY 2009

	# of systems tested by SLH				# of Boil Water Notices			
	MC	OC	NN	TN	MC	OC	NN	TN
Adams	3	0	0	0	0	0	0	0
Ashland	3	0	0	0	0	0	0	0
Barron	3	1	3	0	0	0	0	0
Bayfield	5	1	2	0	0	0	0	0
Brown	14	1	2	7	0	0	0	0
Buffalo	3	2	4	4	0	0	0	0
Burnett	1	0	0	4	0	0	0	0
Calumet	8	1	0	0	0	0	0	0
Chippewa	3	3	1	2	0	0	0	0
Clark	8	1	4	2	0	0	0	0
Columbia	9	1	2	4	0	0	0	0
Crawford	8	0	0	0	0	0	0	0
Dane	33	4	9	4	0	0	0	0
Dodge	17	2	12	6	0	0	0	0
Door	3	1	4	50	0	0	0	0
Douglas	0	1	1	1	0	0	0	0
Dunn	2	2	1	0	0	0	0	0
Eau Claire	0	2	0	0	0	0	0	0
Florence	1	0	0	2	0	0	0	0
Fond Du Lac	9	2	4	2	0	0	0	0
Forest	4	0	0	1	0	0	0	0
Grant	19	4	2	6	0	0	0	0
Green	8	1	1	1	0	0	0	0
Green Lake	5	1	5	1	0	0	0	0
Iowa	12	1	1	1	0	0	0	0
Iron	5	0	0	1	0	0	0	0
Jackson	7	0	2	6	0	0	0	0
Jefferson	6	5	1	3	0	0	0	0
Juneau	10	3	1	3	0	0	0	0
Kenosha	1	15	11	0	0	0	0	0
Kewaunee	3	0	2	2	0	0	0	0
La Crosse	1	5	6	1	0	0	0	0
Lafayette	9	0	0	1	0	0	0	0
Langlade	2	1	3	3	0	0	0	0
Lincoln	3	0	0	3	0	0	0	1
Manitowoc	9	2	4	3	0	0	0	0
Marathon	3	0	2	0	0	0	0	0
Marinette	7	1	1	3	0	0	0	0
Marquette	1	1	5	3	0	0	0	0
Menominee	0	0	0	0	0	0	0	0
Milwaukee	5	1	3	5	0	0	0	0
Monroe	7	2	0	3	0	0	0	0
Oconto	5	2	0	4	0	0	0	0
Oneida	1	4	2	1	0	0	0	0
Outagamie	13	0	1	0	0	0	0	0
Ozaukee	5	10	12	2	0	0	0	0
Pepin	0	1	1	0	0	0	0	0
Pierce	2	1	3	2	0	0	0	0
Polk	6	0	0	0	0	0	0	0
Portage	4	1	5	0	0	0	0	0
Price	4	0	0	2	0	0	0	0
Racine	1	1	9	4	0	0	0	0
Richland	6	0	2	1	0	0	0	0
Rock	7	5	5	5	0	0	0	0
Rusk	4	1	1	0	0	0	0	0
Sauk	13	2	3	2	0	0	0	0
Sawyer	5	0	1	6	0	0	0	0
Shawano	9	0	0	3	0	0	0	0
Sheboygan	10	1	3	2	0	0	0	0
St. Croix	3	4	4	0	0	0	0	0
Taylor	4	0	0	1	0	0	0	0
Trempealeau	11	1	1	1	0	0	0	0
Unknown	0	0	0	0	0	0	0	0
Vernon	10	1	0	0	0	0	0	0
Vilas	3	1	3	2	0	0	0	0
Walworth	5	2	3	22	0	0	0	0
Washburn	2	0	1	1	0	0	0	0
Washington	4	9	11	12	0	0	0	0
Waukesha	4	8	7	0	0	0	0	0
Waupaca	8	1	2	1	0	0	0	0
Waushara	5	2	0	2	0	0	0	0

**Report on Public Water System Testing**

MC is municipal community water system which means a water system which serves at least 15 service connections used by year round residents or regularly serves at least 25 year round resident and is owned by a county, city, village, town, town sanitary district, or utility district.

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NN is non-transient non-community water system which means a non-community water system that regularly serves at least 25 of the same persons over 6 months per year. Examples of non-transient non-community water systems include those serving schools, day care centers and factories.

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MARCH 2009								
	# of Systems Tested by WSLH				# of Boil Water Notices			
	MC	OC	NN	TN	MC	OC	NN	TN
Adams	3	1	1	0	0	0	0	0
Ashland	3	0	0	1	0	0	0	0
Barron	3	3	2	0	0	0	0	0
Bayfield	5	1	1	0	0	0	0	0
Brown	14	0	3	6	0	0	0	0
Buffalo	3	1	2	0	0	0	0	0
Burnett	1	1	2	8	0	0	0	0
Calumet	8	1	3	4	0	0	0	0
Chippewa	3	2	5	1	0	0	0	0
Clark	8	3	0	4	0	0	0	0
Columbia	10	5	6	10	0	0	0	0
Crawford	7	1	0	3	0	0	0	0
Dane	33	12	11	27	0	0	0	1
Dodge	17	2	10	15	0	0	0	0
Door	3	2	3	111	0	0	0	1
Douglas	0	1	2	5	0	0	0	0
Dunn	2	0	1	3	0	0	0	0
Eau Claire	0	0	9	0	0	0	0	0
Florence	1	0	1	3	0	0	0	0
Fond Du Lac	9	9	3	7	0	0	0	0
Forest	3	0	1	1	0	0	0	0
Grant	19	4	2	9	0	0	0	0
Green	8	1	2	4	0	0	0	0
Green Lake	5	0	1	1	0	0	0	0
Iowa	12	3	4	3	0	0	0	0
Iron	5	0	0	2	0	0	0	0
Jackson	7	0	2	15	0	0	0	0
Jefferson	6	9	8	17	0	0	0	0
Juneau	10	5	1	3	0	0	0	1
Kenosha	1	15	4	5	0	0	0	0
Kewaunee	3	1	4	4	0	0	0	0
La Crosse	1	6	3	1	0	0	0	0
Lafayette	9	0	0	2	0	0	0	0
Langlade	2	0	1	4	0	0	0	0
Lincoln	3	0	1	3	0	0	0	1
Manitowoc	9	1	6	5	0	0	0	0
Marathon	3	1	7	1	0	0	0	1
Marinette	8	1	3	6	0	0	0	0
Marquette	1	2	3	6	0	0	0	0
Menominee	0	0	0	0	0	0	0	0
Milwaukee	5	4	1	3	0	0	0	0
Monroe	7	3	5	6	0	0	0	0
Oconto	5	4	3	7	0	0	0	0
Oneida	1	4	3	3	0	0	0	0
Outagamie	13	0	3	7	0	0	0	0
Ozaukee	5	9	24	73	0	0	0	1
Pepin	0	0	0	0	0	0	0	0
Pierce	2	2	3	4	0	0	0	0
Polk	6	0	0	1	0	0	0	0
Portage	3	4	0	0	0	0	0	0
Price	4	1	2	7	0	0	0	0
Racine	1	4	12	3	0	0	0	0
Richland	6	0	3	2	0	0	0	1
Rock	7	5	9	10	0	0	0	0
Rusk	4	2	0	0	0	0	0	0
Sauk	13	3	7	3	0	0	0	1
Sawyer	5	2	1	5	0	0	0	0
Shawano	9	0	2	8	0	0	0	0
Sheboygan	10	0	5	5	0	0	0	0
St. Croix	3	8	5	45	0	0	0	0
Taylor	4	0	0	1	0	0	0	0
Trempealeau	12	3	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0
Vernon	10	0	1	1	0	0	0	0
Vilas	3	3	2	0	0	0	0	0
Walworth	5	3	5	28	0	0	0	0
Washburn	2	0	1	5	0	0	0	0
Washington	4	7	4	23	0	0	0	1
Waukesha	5	9	10	19	0	0	0	1
Waupaca	8	1	3	10	0	0	0	0
Waushara	5	4	7	12	0	0	0	0

## Report on Public Water System Testing

MC is municipal community water system which means a water system which serves at least 15 service connections used by year round residents or regularly serves at least 25 year round resident and is owned by a county, city, village, town, town sanitary district, or utility district.

OC is other than municipal community water system which means a community water system that is not a municipal water system. Examples of other than municipal community water systems include but are not limited to those serving mobile home parks, apartments and condominiums.

NN is non-transient non-community water system which means a non-community water system that regularly serves at least 25 of the same persons over 6 months per year. Examples of non-transient non-community water systems include those serving schools, day care centers and factories.

TN is non-community transient water system which means a non-community water system that serves at least 25 people at least 60 days of the year. Examples of transient non-community water systems include those serving taverns, motels, restaurants, churches, campgrounds and parks.

#### **D) Awards, Honors and Accomplishments**

WSLH School of Cytotechnology student **Erin McCarthy** won an ASCP scholarship. Erin was not only in competition with other Cytotechnology students, but also medical technology/CLS students.

#### **E) Staff Publications and Presentations**



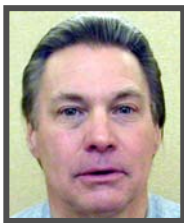
In March, **Dr. Charles Brokopp, Dr. Mei Baker, Gary Hoffman, Dr. Ron Laessig, Dr. Dan Kurtycz, Dr. J. Verbsky, Dr. William Grossman, and Dr. Jack Routes** co-authored and submitted an abstract titled "Universal Routine Newborn Screening for Severe Combined Immunodeficiency: Wisconsin First Year Experience" that was accepted as a platform presentation for the 2009 American College of Medical Genetics Annual Clinical Genetics meeting in Tampa.



**David Degenhardt and Al Spallato** will make a presentation at the regional meetings of the Wisconsin Water Association (WWA) taking place in April and May. The meetings will be held in Chetek, Cudahy, Watertown, Madison, and Wausau. During the presentation they will discuss the background, contents, and use of the Wisconsin Emergency Response Drinking Water Collection Kit. They will also provide a status of the Region 5 Emergency Laboratory Response Plan and the EPA Water Laboratory Alliance.



In March 2009, **James Powell** participated in a training workshop titled *Laboratory Methods for Detecting Rabies*, sponsored by the National Laboratory Training Network and the Viral and Rickettsial Disease Laboratory, California Department of Public Health. At the workshop, expert faculty from federal and state public health agencies used lectures and laboratory exercises to provide workshop participants with a comprehensive update in the laboratory aspects of rabies testing.



**Dr. Ronald Schell** co-authored with Dean T. Nardelli and Erik Munson a paper titled "Human Lyme Disease Vaccination: Past and Future" published in the April 2009 edition of *Future Microbiology*.



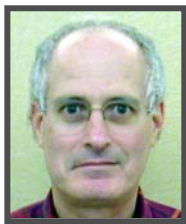
In February 2009, **Laura Liddicoat** made a presentation titled "A DUID Case Study: Prescription Drugs, Poor Driving, DRE Evaluation...and a Surprising Verdict", at the American Academy of Forensic Sciences meeting in Denver. In April 2009 she made a presentation titled "DRUGGED DRIVING: Prescription Drug Case Studies" at the 15<sup>th</sup> annual Traffic and Impaired Driving Law seminar. The seminar is an annual event for police officers and prosecutors, sponsored by the UW Law School's Resource Center on Impaired Driving.



**Steve Marshall** was co-author of an article titled “Infections With Oseltamivir-Resistant Influenza A(H1N1) Virus in the United States” published in the March 11, 2009 issue of JAMA, the **Journal of the American Medical Association**. The article details the increasing resistance nationwide of influenza A (H1N1) viruses to the antiviral drug oseltamivir (Tamiflu). Steve was also interviewed in March 2009 by Wisconsin Public Radio on the same subject.



In March 2009, **Patrick Harding** made a presentation titled “The Role of the Toxicology Lab in Vehicular Homicide Investigations” at the Vehicular Homicide Conference which took place in Brookfield. In April 2009, he made a presentation titled “Blood Alcohol: Analysis and Interpretation” at the 15th annual Traffic and Impaired Driving Law seminar sponsored by the UW Law School’s Resource Center on Impaired Driving.



**Dr. David Warshauer** was interviewed by MSNBC.com (at APHL’s request) in February for a story on whether there should be mandatory submission of salmonella isolates to state public health labs and mandatory PFGE testing of all salmonella isolates. He also contributed to an article titled “Updated Guidelines for the Use of Nucleic Acid Amplification Tests in the Diagnosis of Tuberculosis” published in the March 11, 2009 issue of JAMA, the **Journal of the American Medical Association**. The article outlines updated guidelines for the use of nucleic acid amplification (NAA) tests for the diagnosis of tuberculosis. The DNA-based NAA tests, which the WSLH has performed since 1996, are becoming more commonly used nationwide.

## Universal Routine Newborn Screening for Severe Combined Immunodeficiency: Wisconsin First Year Experience

M. Baker<sup>1,2</sup>, W. Grossman<sup>3</sup>, J. Verbsky<sup>3</sup>, G. Hoffman<sup>1</sup>, R. Laessig<sup>1</sup>, C. Brokopp<sup>1</sup>, D. Kurtycz<sup>1</sup>, J. Routes<sup>3</sup>

<sup>1</sup>State Laboratory of Hygiene, <sup>2</sup>Department of Pediatrics, University of Wisconsin, Madison, WI

<sup>3</sup>Department of Pediatrics, Medical College of Wisconsin, Milwaukee, WI

**Rationale:** Severe combined immunodeficiency (SCID) is a group of disorders caused by more than a dozen single gene defects. The gene mutations cause naïve T-cell development defect, and result in severe combined cellular and humoral immunodeficiency. Without early diagnosis and treatment, SCID infants die from severe infections within the first year of life. Successful hematopoietic stem cell transplantation within 3.5 months of birth, before serious infections occur, can prevent mortality and establish a functional immune system with 95% long-term survival.

**Objectives:** To develop a robust SCID screening laboratory protocol, establish a SCID screening algorithm, and demonstrate the feasibility of universal routine newborn screening (NBS) for SCID in an ongoing NBS program.

**Methods:** The screening method is based upon measurement of T-cell receptor excision circles (TRECs) by real-time qPCR using DNA extracted from 3.2 mm NBS dried blood spots. TRECs result from the productive rearrangement of the T-cell receptor, and are found in normal naïve T cells, which are consistently absent or low in all SCID patients. A pilot program to start NBS for SCID was implemented on January 1, 2008 in Wisconsin. There were three reporting categories on screening results and follow up recommendations: normal screening reports, no action taken; inconclusive screening reports (TREC number below the cut off level with unsatisfactory reference gene amplification), repeat sample requested; and abnormal screening reports, confirmatory test (flow cytometry) and consult with immunologists recommended for full term newborns (gestation  $\geq$  37 weeks), or tracking the subsequent NBS for premature newborns.

**Results:** During 1-1-08 to 11-30-08, from 64,620 newborns, we issued 12 abnormal reports (0.019%) in full term newborns, and 18 abnormal reports (0.028%) in premature infants. Of the 30 abnormalities; 12 infants had normal results on a follow-up NBS; results on 2 are pending; 3 expired; 5 had normal flow cytometry results; 8 had abnormal flow cytometry results including 4 primary immunodeficiency cases (1 DiGeorge Syndrome, 1 leukocyte migration defect, 2 idiopathic T-cell lymphopenias), and 4 non-primary immunodeficiency cases (1 chylothrix, 1 Down Syndrome with sepsis at birth, 1 meconium aspiration and chylous peritoneum, 1 gastroschisis)

**Conclusions:** We optimized the method of measuring TRECs by real-time qPCR to screen for SCID, which is amenable to NBS throughput. We established screening protocols for testing, reporting and follow-up. Our first year's experience indicates that screening all newborns for SCID is feasible with minimal screening positives. Quantitating the number of TRECs on newborn dry blood spots identifies infants with primary immunodeficiency.

## WSLH Poster Submissions for March 30, 2009 Population Health Symposium

Significance of Multinucleated and/or Multilobulated Cells in Pap Smears: A Review of 375 Cases of Morphology and Follow Up.

**Traci A. Arts**, BS SCT(ASCP) IAC ; **Michele A. Smith**, BS SCT(ASCP) ; **Daniel F. Kurtycz**, MD  
University of Wisconsin State Laboratory of Hygiene

**INTRODUCTION:** Pap smears containing multinucleated and/or multilobulated cells (MMC) have been discussed in the literature for decades with differing diagnostic significance dependent upon the authors. A retrospective outcome study was generated to look at this interesting anomaly.

**MATERIALS AND METHODS:** The Wisconsin State Laboratory of Hygiene (WSLH) collected 375 routine cases with 13-months of follow-up cytologic, histologic, and HPV testing. All cases were analyzed using retrospective follow-up review by searching the laboratory information system.

**RESULTS:** All cases contained one or more multinucleated and/or multilobulated nuclei in squamous cells from both conventional (CP) (58.9%) and liquid based (LBC) (41.1%) pap smears. Patient demographics included under- and un-insured women whose ages range 15 to 60 (average age 24.43, median age 23.29). Cytology diagnoses ranged from Negative (NILM), Atypical Squamous Cells of Undetermined Significance (ASCUS), ASCUS cannot rule out High Grade Lesion (ASC-H), Low Grade Squamous Intraepithelial Lesion (LSIL), and High Grade Squamous Intraepithelial Lesion (HSIL). Each case of MMC was analyzed for both prior and subsequent histologic, colposcopic, cytologic, and HPV results. Cytologic information was the most prevalent follow-up method for ASCUS diagnoses (239/375 cases). Approximately 20% of all ASC-H and LSIL cases had persistent HPV related follow-up. We received colposcopic and histology follow-up for 83 of the 375 cases (22.13%). Less than one-third (31.2%) of the MMC cases showed subsequent abnormality and was most often ASCUS. Possible reasons for the decrease in overall abnormal rates include successful treatment as well as self clearing abnormal cells.

**CONCLUSION:** Our study supports previous findings indicating that MMCs may predict a subsequent histologic or cytologic abnormality. The curiosity of apparent incomplete nuclear replication needs further explanation. Whether these are virally derived is unclear. We plan to continue this study with a larger population, additional 13-month follow-up and a more sensitive HPV methodology.

HPV Results: First Year of Testing Using TWT Invader Methodology

**Daniel F. Kurtycz, MD ; Michele A. Smith**, BS SCT(ASCP) ; **John E. Shalkham**, MA SCT(ASCP) ;  
**Patricia A. Miller**, BS CT(ASCP), University of Wisconsin State Laboratory of Hygiene, Madison, WI

**INTRODUCTION:** In 2006, the Wisconsin State Laboratory of Hygiene (WSLH) re-evaluated HPV testing methodology in an effort to continue to provide high quality and cost effective testing. The WSLH validated Third Wave Technologies (TWT) Invader® against the then current Inform® method (Ventana) as well as PCR sequencing, and Digene's 14C2®, and found TWT comparable to PCR and Digene using kappa statistics. Clinical testing using TWT started in February 2007, and the first year of results have been analyzed.

**MATERIALS AND METHODS:** A total of 1660 cases were tested using Hologic/Cytoc ThinPrep Pap Test (TPPT) and the Invader r® kit to detect fourteen high risk HPV types. Selected HPV testing was based on both direct clinician request and reflex testing after a cytologic result of ASCUS. HPV tests were performed following WSLH standard operating procedures. Results were reviewed and released by either a board certified cytopathologist or cytology supervisor/manager and reported as positive, negative, or unsatisfactory.

**RESULTS:** Of the 1660 HPV tests, 898 (54.10%) detected high risk HPV DNA, 749 (45.12%) were negative, and 13 (0.78%) were unsatisfactory/insufficient. Biopsy and/or colposcopy follow-up results became available for 368 patients (348 HPV positive, 19 HPV negative, (unsatisfactory)). Nineteen HPV negative cases had follow-up biopsy and/or colposcopy. Nearly half (9/19) of these were diagnosed as negative. Another nine of the HPV negative cases had CIN I(8) and VIN I (1) biopsy/colposcopy diagnoses. One of 19 HPV negative cases was diagnosed as CIN III on biopsy. Of the HPV positive

results, 41.30% (15/348) had negative or benign diagnoses on biopsy/colposcopy. However, approximately 20% had follow-up biopsy diagnoses of CIN II or greater (CIN II 45/348 or 12.23%, CIN III 24/348 or 6.52%).

CONCLUSION: Our experience with the TWT Invader® HPV has been reasonable with results comparable to that of other sensitive HPV testing methodologies.

#### Screening HPV Tests for Women Ages 30 and Older: One Size May Not Fit All

**Michele Smith** BS SCT(ASCP), **Jamie Larson** BS CT(ASCP), **Chanthou Vong** BS CT(ASCP), **Paul Nichols** BS CT(ASCP), **Gaydly Beaubrun** MS, **Daniel F. I. Kurtycz** MD

INTRODUCTION: The Wisconsin State Laboratory of Hygiene (WSLH) provides cervical screening to under- and un-insured women. The American Society for Colposcopy and Cervical Pathology (ASCCP) updated management guidelines in 2006 that included baseline FIPV testing for women ages 30 and over. During 2007, the WSLH performed 1660 HPV tests using Third Wave Technologies (TWT) Invader® methodology. Results of the high risk HPV tests were 898 (54.10%) positive; 745 (45.12%) negative; and 13 (0.78%) unsatisfactory. For women ages 30 and over, 536 HPV tests were performed with 161/536 (30.04%) positive; 373/536 (69.59%) negative; and 2/536 (0.37%) unsatisfactory.

MATERIALS AND METHODS: HPV test result data was obtained from the laboratory information system (LIS) Data was soiled based on patient age, current HPV result, current Pap smear result, and previous cytologic and histologic findings. Retrospective analysis of data was performed.

RESULTS: In 2007, 536 HPV tests were ordered for women aged > 30. Of these, 161 (30.04%) had HPV positive test results; 373 (69.59%) were HPV negative; and 2 (0,37%) unsatisfactory. Test orders were placed into three categories: reflex, follow-up, and screening Reflex orders followed established guidelines for IIPV testing alter a diagnosed of Atypical Squamous Cells of Undetermined Significance (ASCUS). The follow-up category included patients with abnormal cervical history and concurrent pap smear diagnosis of Unsatisfactory; Negative for Intraepithelial lesion or Malignancy (NILM); ASCUS, rule out HSIL; Low Grade Squamous Intraepithelial Lesion; and High Grade Squamous Intraepithelial Lesion (FISIL.). The "screening" category included patients with a pap diagnosis of NILM, hat no abnormal history.

CONCLUSION; FTPV screening tests for women ages 30 and over may not be the most cost effective method of determining the risk of developing cervical cancer. Past and current sexual history along with pap smear results may be more effective triage methods.

#### Identification of Mutations in the Influenza A Genome Associated With Adamantane and Neuraminidase Inhibitor Resistance Directly From Clinical Specimens

**E. Reisdorf<sup>1</sup>, S. Marshall<sup>1</sup>, T. Van<sup>1</sup>, T. Whyte<sup>1</sup>, L. Gubareva<sup>2</sup>, V. Deyde<sup>2</sup>, P. Shult<sup>1</sup>, D.**

**Warshauer<sup>1</sup>**, <sup>1</sup>Wisconsin State Laboratory of Hygiene, University of Wisconsin-Madison, Madison, WI  
<sup>2</sup>Centers for Disease Control, Influenza Branch, Atlanta, GA

OBJECTIVE: To evaluate the ability of pyrosequencing performed directly on clinical specimens (CS) to detect specific point mutations in the influenza A genome known to confer resistance to the antivirals adamantane (amantadine and rimantadine) and oseltamiver (Tamiflu), a neuraminidase inhibitor.

METHODS: Respiratory virus surveillance specimens from 2006 to 2008 positive for influenza A by RT-PCR were tested for antiviral resistance. RT-PCR was performed to amplify products encompassing the region of the M2 and NA genes known to confer resistance to adamantanes and oseltamivir, respectively. pyrosequencing of the PCR products were performed to identify a change at the S31N in the M2 gene, and at the H274Y in the NA gene. A "Passed" or "Check" pyrosequencing quality rating were determined acceptable, and a "Failed" rating was unacceptable,

RESULTS: 207 CS positive for influenza A from the 2006-2008 influenza seasons were tested for the S31N mutation by pyrosequencing, Of those, 17 (8.2%) were determined unacceptable. 43 CS from the 2007-2008 influenza season positive for influenza A(H1N1) were tested for the H274Y mutation in the NA gene. Of those, 4 (11.7%) were acceptable. Of the 33 M1 and 7 A/H3 CS tested during the 2007-2008 respiratory virus season, 1 A/H1 (3.0%) and 7 (100%) A/F13 were resistant to adamantanes. Of the 46 A/H1 tested for neuraminidase resistance, 8 (17.4%) were resistant.

**CONCLUSION:** Previous studies (ASH abstract C71, 2007) indicated that direct pyrosequencing of CS with high virus titer was comparable to testing from cell culture isolates. The results of this study confirm that pyrosequencing for resistance mutations from CS are applicable for the majority of CS positive for influenza A. Antiviral resistance mutation can be detected directly from CS in one day compared to up to seven days from cell culture isolates. With emergence of antiviral resistance, this rapid testing has both clinical and public health implications for determining appropriate and timely antiviral treatment, especially in outbreak settings or with emergence of novel influenza strains.

#### Array Comparative Genomic Hybridization Detects Genomic Imbalances in Samples From Stillborn Infants

**Jill Northup and Kate Thompson**

Current testing methodologies fail to explain late pregnancy loss (stillbirth) in up to 60% of cases, resulting in inaccurate recurrence risk assessment and limited clinical management in subsequent pregnancies. Array comparative genomic hybridization (aCGH) has been successfully applied to samples from *early* pregnancy loss, but it has very rarely been used in evaluation of stillbirth. We hypothesized that aCGH could establish etiologic diagnosis in a much higher proportion of stillborn infants than could classic cytogenetics, by detecting both gross and submicroscopic deletions and duplications, and by not requiring viable tissue for growth in vitro. We analyzed 15 frozen tissue samples from stillborn with multiple congenital anomalies, obtained through the Wisconsin Stillbirth Service Program (WiSSP). For all 15 samples results of classic cytogenetic analysis were either normal or unobtainable. Samples were tested in a blinded fashion using commercially available 1Mb SAC Arrays (PerkinElmer), aCGH detected two abnormalities, Osoy 21 and an unbalanced translocation between chromosomes 3 and 10. With the detection rate of more than 13%, our preliminary results support the clinical value of aCGH testing in stillbirth. The information about each of the two detected abnormalities would have been helpful in counseling of the parents, had it been available at the time of pregnancy loss. aCGH analysis should be considered instead of or in addition to karyotyping for routine diagnostic evaluation of late intrauterine death. aCGH could also be a valuable research tool to 1) examine the etiologic role of submicroscopic deletions and duplications in intrauterine death, 2) identify critical regions and candidate genes for specific developmental anomalies present in tested stillborn, and 3) identify candidate chromosomal regions that are critically involved in survival through late gestation.

#### X Chromosome Duplication Associated with Mental Retardation in a Multigenerational Family- Role of Increased Dosage of XLMR Genes

**Jill Northup and Kate Thompson**

Development and implementation of high density chromosome specific arrays demonstrated the important role of copy number changes on X chromosome in etiology of mental retardation (MR). We describe a family with multiple members affected with MR due to interstitial duplication at Xp22. The proband was a premature male infant with multiple congenital anomalies including duplicated ureter and bilateral cataracts, and failure to thrive. Cytogenetic analysis revealed a 46,Y,ins()();(p22.13;) karyotype, with a small extra band of unknown origin near the distal short arm of the X chromosome. The same Xp rearrangement was present in the child's mother and the maternal grandmother, who both had learning difficulties and behavioral problems. Array CGH (aCGH) testing found that the additional material on Xp detected by cytogenetic analysis represents a duplication of the segment between bands Xp22.11 and Xp22.13. The duplicated region is approximately 6 Mb in size and involves at least 40 known genes. The CDKL5 gene, implicated in X-linked MR and atypical Rett syndrome, maps within the duplicated segment, as well as the Nance-Horan syndrome gene NHS, which could be responsible for bilateral cataracts in the proband. Affected females in this family have different severities of MR. Most likely unequal X inactivation, as well as interaction of other non-duplicated genes important for cerebral function have modified the effect of the duplicated X chromosome genes in these individuals. This case illustrates that not only loss of gene function but also increased gene dosage of X-linked MR genes leads to cognitive impairment. It also shows how precise delineation of chromosome rearrangements by array CGH and identification of genes within duplicated segments facilitates genotype-phenotype correlation.

A Large Non-Rural Point Source Outbreak of Blastomycosis Occurring Near a Yard Waste Material Collection Site. **John R. Pfister**, M.S., John R. Archer, M.S., Shelly Hersil, B.S., C.H.E.S., Tammi Boers, R.S., Kurt D. Reed, M.D., M.GIS, Jennifer K. Meece, Ph.D., Jennifer L. Anderson, B.S., Joshua W. Burgess, Ph.D., Thomas D. Sullivan, Ph.D., Bruce S. Klein, M.D., L. Joseph Wheat, M.D., Jeffrey P. Davis, M.D.

**BACKGROUND:** Blastomycosis is a potentially fatal infection caused by the fungus *Blastomyces dermatitidis* (Bd). During the past nine weeks of 2006, 21 laboratory confirmed cases of blastomycosis were reported among residents of an endemic area in north-central Wisconsin, a striking occurrence compared with previous years.

**METHODS:** We compared features among 21 outbreak case patients with those among 46 historic case patients and 64 age- and gender-matched control subjects from the same area. Site inspections were conducted, meteorologic data were evaluated, outbreak and non-outbreak Bd isolates were compared genetically, and detection of Bd in environmental samples was attempted.

**RESULTS:** We noted an unusual risk profile for a blastomycosis outbreak. The equivalent gender ratio and young median age among outbreak case patients were consistent with common source rather than unrelated exposures. Risk factors not usually associated with Bd were identified: residence within the city limits, limited time spent outdoors, and no history of travel. Thirteen of 14 outbreak-associated clinical isolates clustered in the same genetic group. Inspections near the cluster center suggested a yard waste material collection site as the probable exposure source. Bd nucleic acid was detected in one of 19 environmental samples although the organism did not grow in culture. Environmental and meteorologic conditions and material management practices were identified that may have facilitated growth and dispersal of conidia near this residential area.

**CONCLUSIONS:** Results of investigating this large non-rural outbreak of blastomycosis suggest bioaerosol hazards may exist near yard waste material collection and composting facilities in Bd endemic areas.

The Wisconsin Laboratory Network and Laboratory-Based Surveillance in Wisconsin.

**Julie Tans-Kersten and David Warshauer**

**BACKGROUND:** In 1998, Wisconsin health care and laboratory professionals from public and private sectors formed a task group to assess the status of tuberculosis (TB) laboratory testing in Wisconsin. A major recommendation of the task group was to develop a state-wide TB laboratory network to assure consistent, high quality testing in Wisconsin laboratories that perform TB testing. The Wisconsin State Laboratory of Hygiene (WSLH) took the leadership role in establishing this network. The Wisconsin Mycobacteriology Laboratory Network [WMLN] is comprised of the WSLH and 32 other laboratories (31 private labs and 1 city public health lab) that perform some level of TB testing.

**LABORATORY-BASED SURVEILLANCE METHODS:** In Wisconsin, seven laboratories (including WSLH) have the capability to identify AFB-positive cultures. Three laboratories perform first-line drug susceptibility testing on *M. tuberculosis* complex isolates. The majority of laboratories send isolates to the WSLH or other reference laboratories for identification and drug susceptibility testing. Wlv11.N participants send isolate data to the WSLH on a monthly basis. These data are combined with WSLH isolate and susceptibility test data to produce surveillance reports.

**RESULTS:** This study summarizes five years of compiled WMLN surveillance reports including over 7600 mycobacterial isolates, 363 MTBC isolates, and MTBC drug susceptibility test results.

**CONCLUSIONS:** The WMLN serves as a conduit of information for state-wide mycobacterial surveillance. Through the network, information on mycobacteria isolation trends, TB incidence, and MTBC drug resistance is shared with participating laboratories and the State TB Control Program.

Worker's Compensation 2005 Indemnity Claims by Body Part

**Matthew Lemahieu**

Wisconsin has some of the highest occupational injury and illness rates in the country; each year over 10,000 Wisconsin workers suffer permanent partial disabilities, and over one billion dollars are

dispersed for medical care and workers compensation claims. The "Worker's Compensation 2005 Indemnity Claims by Body Part" data visualization poster will show viewers a snapshot of work-related injuries in 2005 disseminated by body and their outcomes at the workplace. The poster represents an example of a collaborative effort between two agencies, the Wisconsin Worker's Compensation Division and the Wisconsin State Lab of Hygiene. The poster is a Multivariate display of work-related injury and illness claim information (payments for lost income, based on weekly wages, known as indemnity cost, number of claims and the average indemnity cost per claim). Viewers will be able to identify what injuries are the most frequent, what injuries caused the most indemnity, and identify the number of claims by body part for the previous six years.

The poster was drawn up by **Matthew Lemahieu**, DPHIS - Program & Policy Analyst in assistance with **John Pfister**, Associate Scientist, Microbiologist/Epidemiologist and **David Schleis**, IS Programmer Analyst. December 3, 2007. Source data: Wisconsin Worker's Compensation Division.

**F) WSLH Building Update**

The Director will provide an update on efforts to obtain suitable laboratory space for the next 10-15 years. Recent actions taken by the Wisconsin Building Commission and DOA have moved the construction of some laboratory space near Agriculture Drive forward. The proposed new lab would be co-located with DATCP laboratories.

An agreement with the UW School of Medicine and Public Health is still being negotiated for possible space in the third tower at the Wisconsin Institute for Research on the UW campus.

### **G) Federal Grants**

Two grant applications to CDC are being submitted this week. A Biomonitoring grant involves collaboration among the state public health laboratories in Iowa, Minnesota and Wisconsin. The respective state health departments and environmental public health tracking programs are also contributing to this effort. The aim of the Biomonitoring project is to assess whether specific chemicals get into the body when people are exposed. Using today's sensitive chemical technologies, it is possible to detect extremely low levels of toxic metals, pesticides, and other chemical in biological fluids and tissues. Each of the collaborating states will identify one or more groups of chemicals to be included in their portion of the biomonitoring proposal.

The second federal grant request is for continuation funding of the SCID project. The requested funding (\$498,000) will support the ongoing screening of all Wisconsin newborns for SCID and the further development of automated methods that can be applied by newborn screening programs in other states.