



# *Wisconsin State Laboratory of Hygiene Research, Teaching and Outreach Activities Related to Our UW-Madison Mission*

*For Fiscal Years 2010 - 2011: July 1, 2009 to June 30, 2011*



*Wisconsin State  
Laboratory of Hygiene*



**WISCONSIN**  
UNIVERSITY OF WISCONSIN-MADISON



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University of Wisconsin

Dear Colleagues and Partners:

Welcome to the Fiscal Year 2010 - 2011 edition of the Wisconsin State Laboratory of Hygiene's Research Annual Report, which documents the broad spectrum of our partnership, research, testing and outreach activities from July 1, 2009 through June 30, 2011.

Since 1903, Wisconsin residents have depended on the Wisconsin State Laboratory of Hygiene at the University of Wisconsin-Madison to help reach and maintain a high quality of life. As the state's public, environmental and occupational health laboratory, the WSLH plays a vital role in maintaining the health and safety of Wisconsin's citizens, protecting the environment and providing training to students and working professionals.

WSLH staff are committed to the Wisconsin Idea and the University of Wisconsin's mission of "creating and disseminating" knowledge. As Director of the WSLH, I'm proud to share our accomplishments with you.

Please look through this report and send us any comments about its contents. It is through cooperation and partnership with Wisconsin's public and environmental health community, its University and its citizens that we achieve our goal of being a world-class laboratory.

Sincerely,

A handwritten signature in black ink that reads 'Charles Brokopp'.

Charles D. Brokopp, DrPH  
Director, Wisconsin State Laboratory of Hygiene  
Professor, University of Wisconsin School of Medicine and Public Health,  
Department of Population Health Sciences



# Summary Report of WSLH Research, Teaching and Outreach Activities Related to Our UW-Madison Mission

*For the period of July 1, 2009 to June 30, 2011*

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## I. Partnerships with Non-WSLH Organizations

This section of the Research Annual Report focuses on partnerships that the WSLH participates in with other public and private sector organizations.

Partnerships are created for the purpose of meeting one of the core functions of a public health laboratory and leading to an outcome that can only be met through creation of the partnership. The following are the “Eleven Core Functions of State Public Health Laboratories,” as defined by the Association of Public Health Laboratories (1999):

1. Disease prevention, control and surveillance
2. Integrated data management
3. Reference and specialized testing
4. Environmental health and protection
5. Food safety
6. Laboratory improvement and regulation
7. Policy development
8. Emergency response
9. Public health related research
10. Training and education
11. Partnerships and communication

### Common terms used in this section:

APHL = Association of Public Health Laboratories  
ASTM = American Society for Testing and Materials (ASTM International)  
CDC = Centers for Disease Control and Prevention  
DATCP = Wisconsin Department of Agriculture, Trade and Consumer Protection  
DHS = Wisconsin Department of Health Services  
DNR = Wisconsin Department of Natural Resources  
DPH = Wisconsin Division of Public Health  
DWD = Wisconsin Department of Workforce Development  
ISO = International Standards Organization  
NIOSH = National Institute for Occupational Safety and Health  
OSHA = Occupational Safety and Health Administration  
USDA = U.S. Department of Agriculture  
USEPA = U.S. Environmental Protection Agency  
USGS = U.S. Geological Survey  
UW = University of Wisconsin  
WisCon = Wisconsin OSHA Consultation  
WOHL = Wisconsin Occupational Health Laboratory  
WSLH = Wisconsin State Laboratory of Hygiene

## Partnerships With Non-WSLH Organizations for FY 2010-2011 (July 1, 2009 – June 30, 2011)

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Breast Cancer Research Mammographic Density and Cadmium Exposure	<ul style="list-style-type: none"> <li>• UW - Carbone Cancer Center</li> <li>• FHCRC-Washington. Dr Polly Newcomb and Scott Adams</li> </ul>	<ul style="list-style-type: none"> <li>• ICPMS Sample Analysis</li> <li>• Peer-Reviewed Manuscript</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Calcium Absorption and Vitamin D Research	<ul style="list-style-type: none"> <li>• Dr. Karen Hansen, UW Medical School</li> </ul>	<ul style="list-style-type: none"> <li>• ICP-MS Sample analysis of Calcium stable isotopes</li> <li>• Several Peer-Reviewed Manuscripts</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Cancer Control and Detection Program	<ul style="list-style-type: none"> <li>• Dane County Cytology Center</li> </ul>	<ul style="list-style-type: none"> <li>• On-site training for students in the School of Cytotechnology</li> </ul>	<ul style="list-style-type: none"> <li>• Hands on training</li> <li>• Space for students</li> <li>• Instruction time and support</li> </ul>
Cancer Control and Detection Program	<ul style="list-style-type: none"> <li>• UW-Green Bay</li> <li>• UW-Platteville</li> <li>• Edgewood College (added FY 2010)</li> <li>• Marion University (added FY2011)</li> <li>• Winona State University (added FY2011)</li> </ul>	<ul style="list-style-type: none"> <li>• Students from these campuses completed their last year of coursework at the School of Cytotechnology Program and received their Bachelor degrees from their home institutions.</li> <li>• Expanded University relationships throughout the state with letter campaign.</li> <li>• Designed new school of cytotechnology brochure.</li> </ul>	<ul style="list-style-type: none"> <li>• School of Cytotechnology Program provided last 38 credit hours of coursework toward a bachelor's degree.</li> <li>• Both UW-Green Bay and UW-Platteville routinely work with the program to recruit students in the clinical laboratory discipline of cytotechnology.</li> <li>• New partnerships have been formed with Marion University and re-established with Winona State University.</li> </ul>
Cancer Control and Detection Program – Training samples	<ul style="list-style-type: none"> <li>• UW Health Cytology Laboratory</li> </ul>	<ul style="list-style-type: none"> <li>• Agreement allows the School of Cytotechnology to use sample materials for teaching</li> </ul>	<ul style="list-style-type: none"> <li>• Access to specimens</li> <li>• Ability to use samples as teaching materials</li> </ul>
Cancer Control and Detection Program	<ul style="list-style-type: none"> <li>• Bio-Pharmaceutical Technology Center Institute (BTCI)</li> </ul>	<ul style="list-style-type: none"> <li>• School of Cytotechnology Program students participate in a five day hands-on molecular training program with BTCI.</li> <li>• 15 students have been involved with this 5 day training in FY2010 and FY2011.</li> </ul>	<ul style="list-style-type: none"> <li>• BTCI provided the same five day molecular training course to School of Cytotechnology students as other UW-Madison CLS students.</li> <li>• All students report that this program is well worth it and helps them understand potential areas for jobs.</li> <li>• The School of Cytotechnology would like to bring this partnership to Genetics and CALS after the course is withdrawn in 2012 when the CLS program closes.</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Cancer Control and Detection Program	• Hologic, Third Wave Technologies	<ul style="list-style-type: none"> <li>Entered agreement to provide technical help for new laboratories.</li> <li>FY2011 was able to enter into new agreement to reduce HPV reagent costs for the under and uninsured patients in Wisconsin. This will help us spread our funding dollars over a greater number of patients.</li> </ul>	<ul style="list-style-type: none"> <li>Serve as technical field experts in HPV testing as new laboratories come on board with testing. Will provide additional HPV testing for validation and certification of testing methods with other laboratories.</li> <li>Serve as professional contact for cytology labs looking to bring on HPV testing in terms of communications and site visits.</li> </ul>
Cancer Control & Detection Program	Mercy Health System, Janesville, WI	On-site training for students in the School of Cytotechnology. First time acceptance into this partnership that included four full weeks of clinical training at a hospital laboratory site.	<ul style="list-style-type: none"> <li>Hands on training for two students in FY2010</li> <li>Hands on clinical opportunities in cytology including the attendance of Fine Needle Aspiration Procedures</li> <li>Allows for networking between students and partner.</li> </ul>
Cancer Control & Detection Program	Loyola University, Chicago, IL	On-site training for students in the School of Cytotechnology. Provides clinical training for up to two months at a large teaching laboratory site. One student per year has taken this opportunity in FY2010 and FY2011.	<ul style="list-style-type: none"> <li>Hands on training for two students in FY2010 and FY2011.</li> <li>Hands on clinical opportunities in cytology including the attendance of Fine Needle Aspiration Procedures</li> <li>Allows for networking between students and partner.</li> </ul>
Cancer Control & Detection Program	United Clinical Laboratories, Dubuque, IA	On-site training for students in the School of Cytotechnology. First time acceptance into this partnership that included four full weeks of clinical training at a private laboratory site.	<ul style="list-style-type: none"> <li>Hands on training for one student in FY2010</li> <li>Allows for networking between students and partner.</li> </ul>
Cancer Control & Detection Program	Elmhurst Memorial Hospital, Elmhurst, IL	On-site training for students in the School of Cytotechnology. Provides clinical training for up to 2 months at a large hospital laboratory site. Two students have taken this opportunity in FY 2010.	<ul style="list-style-type: none"> <li>Hands on training for two students in FY2010.</li> <li>Hands on clinical opportunities in cytology including the attendance of FNA procedures</li> <li>Allows for student-partner networking</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Cancer Control & Detection Program	Hologic	Students in the School of Cytotechnology go to Hologic for a one day training course in HPV testing using Invader technology	<ul style="list-style-type: none"> <li>• Hands on molecular testing using HPV reagents.</li> <li>• One of the first networking opportunities for the students with the industry.</li> </ul>
Carbon Cycling and Metal Deposition in Greenland Snow	<ul style="list-style-type: none"> <li>• Prof. Mike Bergin, Georgia Tech</li> </ul>	<ul style="list-style-type: none"> <li>• ICP-MS Sample analysis</li> <li>• Several Peer-Reviewed Manuscripts</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Chemical Emergency Response	<ul style="list-style-type: none"> <li>• HazMat teams</li> <li>• 54th Civil Support Team</li> <li>• Local health departments</li> <li>• Wisconsin governmental agencies and laboratories</li> <li>• Department of Military Affairs</li> <li>• U.S. Postal Inspection Service</li> <li>• WI Clinical Lab Network (hospital lab partners)</li> </ul>	<ul style="list-style-type: none"> <li>• Development (w/DPH) of an emergency response field air sampling kit for contaminant testing.</li> <li>• Developed (w/Regional HAZMAT teams) a set of 8 uniform sample collection protocols.</li> <li>• Completed specimen packaging &amp; shipment exercises with WI hospitals.</li> <li>• Maintained the 3/year proficiency testing program and reference lab support for regional HazMat and Civil Support Team</li> <li>• Expanded the field equipment loan program for local public health departments &amp; state agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Information and cooperation in responding to emergency response events</li> </ul>
Chemical Emergency Response	<ul style="list-style-type: none"> <li>• Food and Drug Administration (FDA)</li> <li>• DATCP</li> <li>• WEM</li> <li>• Other State public health, environmental, and/or food testing laboratories that do radiological testing</li> </ul>	<ul style="list-style-type: none"> <li>• WSLH actively participates as a member of the Food Emergency Response Network (FERN) for radiological testing</li> <li>• WSLH is a “surge capacity” laboratory for radiological testing in FERN</li> <li>• Successfully participated in functional exercises with FDA for radiological testing of food, and compiled data from exercise.</li> </ul>	<ul style="list-style-type: none"> <li>• Information</li> <li>• Test Methods</li> <li>• Proficiency testing samples</li> <li>• Surge capacity</li> </ul>



Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Chemical Emergency Response-ERLN/WLA	<ul style="list-style-type: none"> <li>• U.S. EPA</li> <li>• Potentially other environmental testing laboratories</li> </ul>	<ul style="list-style-type: none"> <li>• Accepted into the Environmental Response Laboratory Network (ERLN) and related Water Laboratory Alliance</li> <li>• Established a basic ordering agreement for services</li> <li>• Updated EPA Lab Compendium of available services and WSLH contact info.</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitation of surge testing in an emergency event</li> <li>• Connection of labs to share needed test services</li> <li>• Payment mechanism for emergency response testing.</li> </ul>
Chemical Emergency Response	Wisconsin Poison Center	<ul style="list-style-type: none"> <li>• Agreement to promote role of Poison Center to the larger emergency response community</li> <li>• Agreement to distribute WSLH clinical specimen collection protocols and other information to callers.</li> </ul>	<ul style="list-style-type: none"> <li>• Notification of unusual illness clusters</li> <li>• Dissemination of specimen collection need and collection procedures to clinicians</li> </ul>
Chemical Emergency Response-LRN-C Level 1 Laboratory	<ul style="list-style-type: none"> <li>• CDC</li> <li>• Other state LRN-C labs</li> </ul>	<ul style="list-style-type: none"> <li>• Training and validation of clinical test methods for threat agents</li> <li>• Integration of instrumentation and additional staff</li> <li>• Successful participation in multiple large volume surge exercises and proficiency challenges.</li> </ul> <p><b>Note:</b> This partnership began in 2006-07.</p>	<ul style="list-style-type: none"> <li>• Training</li> <li>• Analytical methods</li> <li>• Single-source standards and control materials</li> <li>• Funding support</li> <li>• Surge testing capability</li> </ul>
Clinical Metals Toxicity Program - Lead and Multi-element Program	<ul style="list-style-type: none"> <li>• CDC</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation program for laboratories testing several elements in whole blood</li> <li>• CDC program, jointly administered by WSLH and CDC</li> <li>• 97 participants, 36 international</li> </ul>	<ul style="list-style-type: none"> <li>• Data handling and generation of program data summaries</li> <li>• Fiscal resources for WSLH role</li> </ul>
Clinical Metals Toxicity Program - LeadCare analyzer performance evaluation	<ul style="list-style-type: none"> <li>• Environmental Science Associates Inc.</li> </ul>	<ul style="list-style-type: none"> <li>• Enrollment of new labs in evaluation program</li> <li>• Integration of new testing instrument into lab evaluation program</li> </ul>	<ul style="list-style-type: none"> <li>• Testing services</li> <li>• Lab supplies</li> <li>• Shared experiments</li> <li>• Data evaluation</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for	What do Partners Provide?
Clinical Metals Toxicity Program – Point-of-Care analyzer PT enrollment promotion	<ul style="list-style-type: none"> <li>• Environmental Science Associates Inc.</li> </ul>	<ul style="list-style-type: none"> <li>• Enrollment of 110 new labs in evaluation program</li> </ul>	<ul style="list-style-type: none"> <li>• Manufacturer-provided promotion of PT program to instrument purchasers</li> <li>• Testing resources</li> </ul>
Clinical Metals Toxicity Program – Metals proficiency value assignment	<ul style="list-style-type: none"> <li>• New York Department of Public Health</li> <li>• Pennsylvania Department of Public Health</li> <li>• Centre de Toxicologie du Québec</li> </ul>	<ul style="list-style-type: none"> <li>• Accurate value assignment for &gt;100 laboratory evaluation specimens</li> <li>• Investigation of analytical issues</li> </ul>	<ul style="list-style-type: none"> <li>• Reference data and blood specimens</li> <li>• Broader consensus on analytical issues</li> </ul>
Community Acquired Pathogens Program – Education and Training	<ul style="list-style-type: none"> <li>• Clinical laboratories</li> <li>• DPH</li> <li>• CDC</li> <li>• UW</li> <li>• National Laboratory Training Network</li> <li>• Wisconsin Clinical Laboratory Technical Advisory Group</li> </ul>	<ul style="list-style-type: none"> <li>• Teleconferences on upcoming influenza season, other agents</li> <li>• Mailings to rapid test sites, annual virology laboratory conference, lab guidance for H1N1 pandemic influenza</li> <li>• Provided regional meetings on Emergency Response</li> <li>• Provided proficiency testing exercises and shipping exercise to laboratories</li> <li>• Provided hands-on workshops for clinical laboratories</li> </ul>	<ul style="list-style-type: none"> <li>• Labs – venues, feedback</li> <li>• DPH, CDC – Expertise</li> <li>• UW – Facilities</li> </ul>
Community Acquired Pathogens Program – Emergency/Outbreak Response	<ul style="list-style-type: none"> <li>• Wisconsin Laboratory Response Network (WLRN) laboratories</li> <li>• LPHDs</li> <li>• DATCP-BLS</li> <li>• WVDL</li> <li>• DPH</li> <li>• CDC</li> </ul>	<ul style="list-style-type: none"> <li>• Continued response to BT events/concerns</li> <li>• Provided testing and laboratory support for outbreak response and surveillance</li> <li>• Performed lab site visits</li> <li>• Maintained lab messaging system</li> </ul>	<ul style="list-style-type: none"> <li>• Labs – Laboratory capacity and specimen collection/transport</li> <li>• LPHDs – Specimen collection/transport</li> <li>• DPH – Epidemiologic expertise and guidance</li> <li>• CDC – Technical expertise</li> </ul>
Community Acquired Pathogens Program – Surveillance	<ul style="list-style-type: none"> <li>• Wisconsin's 10 Virology Laboratories</li> <li>• Approximately 100 rapid influenza/RSV/Rota test sites</li> <li>• Clinicians</li> <li>• DPH</li> </ul>	<ul style="list-style-type: none"> <li>• Perform phenotypic and genotypic testing</li> </ul>	<ul style="list-style-type: none"> <li>• Labs, rapid test sites, clinicians-data, and specimens/isolates</li> <li>• Conduit for information from CDC, WDPH &amp; WSLH to colleagues</li> <li>• DPH-epidemiologic expertise, coordination of influenza surveillance and ELC funding</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Community Acquired Pathogens Program - Bangladesh influenza antiviral resistance project	<ul style="list-style-type: none"> <li>• CDC</li> <li>• APHL</li> </ul>	Performed virus culture and influenza virus titers on approximately 1,800 specimens collected in Bangladesh and sent to CDC	<ul style="list-style-type: none"> <li>• Financial support</li> <li>• Organization</li> <li>• Oversight</li> </ul>
Community Acquired Pathogens Program - Influenza Antiviral Resistance Detection	<ul style="list-style-type: none"> <li>• Wisconsin Division of Public Health</li> <li>• CDC</li> <li>• Wisconsin Virology Lab Network</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain pyrosequencing equipment and reagents</li> <li>• Perform antiviral resistance testing</li> </ul>	<ul style="list-style-type: none"> <li>• DPH and CDC provide influenza surveillance guidance</li> <li>• WVLN provides surveillance isolates</li> </ul>
Community Acquired Pathogens Program - Influenza-like Illness Incidence Surveillance Project (IISP)	<ul style="list-style-type: none"> <li>• Dr. Jon Temte - UW-Madison</li> <li>• WDPH</li> <li>• CDC</li> <li>• UW Family Medicine</li> </ul>	Collaborated with WDPH, CDC and UW Family Medicine to test nearly 300 clinical specimens from patients exhibiting ILI for influenza and other respiratory viruses by PCR.	<ul style="list-style-type: none"> <li>• Oversight</li> <li>• Financial Support</li> <li>• Data summary and publications</li> </ul>
Community Acquired Pathogens Program -Regional Influenza Antiviral Resistance Testing Network	<ul style="list-style-type: none"> <li>• CDC</li> <li>• APHL</li> <li>• State Public Health Labs</li> </ul>	Received 851 influenza surveillance specimens from 17 state public health laboratories to test and monitor for antiviral resistance to Oseltamivir.	<ul style="list-style-type: none"> <li>• Financial Support</li> <li>• Organization</li> <li>• Oversight</li> <li>• Source of Influenza specimens</li> </ul>
Community Acquired Pathogens Program - Rotavirus Surveillance Project	<ul style="list-style-type: none"> <li>• CDC</li> <li>• APHL</li> <li>• WCLN laboratories</li> </ul>	Enhanced laboratory-based surveillance to include rotavirus and collected nearly 200 specimens for confirmatory testing and genotyping at CDC to monitor for emerging strains.	<ul style="list-style-type: none"> <li>• Organization</li> <li>• Financial support</li> <li>• Rotavirus positive specimens</li> <li>• Genetic characterization and strain typing</li> </ul>
Copper Source Tracking using Stable Isotope Ratios of Copper	Department of Defense -SPAWAR	Demonstrated that DoD sources of copper from ships could be identified using copper isotope ratios.	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Cytogenetics	<ul style="list-style-type: none"> <li>• UW Pathology</li> <li>• Wisconsin Stillbirth Service Program</li> <li>• Waisman Center</li> </ul>	<ul style="list-style-type: none"> <li>• Implication of array CGH in evaluation of causes of stillbirth in Wisconsin</li> </ul>	<ul style="list-style-type: none"> <li>• Program funding</li> <li>• Archived collection of specimen material</li> <li>• Clinical information</li> </ul>
DWD, Workers Compensation Division	<ul style="list-style-type: none"> <li>• DWD</li> <li>• OSHA Madison</li> <li>• Insurance providers</li> <li>• DOA</li> <li>• Others, depending on topic</li> </ul>	<ul style="list-style-type: none"> <li>• Current topic is extended work shifts and fatigue</li> </ul>	<ul style="list-style-type: none"> <li>• Literature reviews</li> <li>• Existing company policies</li> <li>• Development of survey</li> <li>• Deployment of survey and lessons learned &amp; analysis</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Distribution System Water Quality Control (Water Research Foundation project)	Abigail Cantor & Andrew Jacques	Research to prevent bio-film buildup and pipe corrosion in municipal distribution systems.	<ul style="list-style-type: none"> <li>• A new in-line water monitoring device (patent pending)</li> <li>• An experimental method for rapid determination of an array of microorganisms.</li> </ul>
Drinking Water Quality Program	<ul style="list-style-type: none"> <li>• U.S. Environmental Protection Agency</li> </ul>	<ul style="list-style-type: none"> <li>• Information sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Testing</li> <li>• Knowledge</li> </ul>
Drinking Water Quality Program - <i>Cryptosporidium</i> speciation	<ul style="list-style-type: none"> <li>• George DiGiovanni, Texas A &amp; M</li> <li>• Greg Sturbaum, CH Diagnostics and Consulting</li> <li>• AWWARF</li> </ul>	<ul style="list-style-type: none"> <li>• Received funding for development of detection methods for differentiating human pathogenic <i>Cryptosporidium</i> from non-pathogenic species</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Report writing</li> <li>• Technical expertise</li> <li>• Personnel</li> </ul>
Drinking Water Quality Program - <i>Cryptosporidium</i> speciation - International Round Robin Validation	<ul style="list-style-type: none"> <li>• George DiGiovanni, Texas A &amp; M</li> <li>• Greg Sturbaum, CH Diagnostics and Consulting</li> <li>• UK Drinking Water Inspectorate</li> <li>• Scottish Water</li> <li>• ALS Laboratory Services, Australia</li> </ul>	<ul style="list-style-type: none"> <li>• Received funding for the round robin validation of a method for differentiating human pathogenic <i>Cryptosporidium</i> from non-pathogenic species</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Report writing</li> <li>• Technical expertise</li> <li>• Personnel</li> </ul>
Ecosystem Quality	<ul style="list-style-type: none"> <li>• CSC Biology Studies Group</li> </ul>	<ul style="list-style-type: none"> <li>• Validate new method for enterococci by qPCR Assay</li> </ul>	<ul style="list-style-type: none"> <li>• Technical assistance</li> <li>• Laboratory supplies</li> </ul>
Ecosystem Quality Program - Blue Green Algae Survey	<ul style="list-style-type: none"> <li>• DNR</li> <li>• DHFS</li> <li>• Waukesha County</li> <li>• Dane County</li> <li>• Dawn Karner</li> </ul>	<ul style="list-style-type: none"> <li>• 34 lakes and ponds surveyed for presence/absence for blue green algae species</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Sample collection</li> </ul>
Ecosystem Quality Program - Factors Regulating the Interactions of Trace Metals and Aquatic Organisms in Watersheds of the Great Lakes	<ul style="list-style-type: none"> <li>• UW EC &amp; T Department - Martin Shafer and Dave Armstrong, Biomonitoring Team</li> </ul>	<ul style="list-style-type: none"> <li>• Determined relevant bioassays</li> <li>• Planned field work</li> <li>• Trained grad students</li> </ul>	<ul style="list-style-type: none"> <li>• Metals expertise</li> <li>• Project oversight</li> </ul>
Ecosystem Quality - Particle size evaluation of water column samples	<ul style="list-style-type: none"> <li>• US Geological Survey</li> <li>• DNR Non-point Source staff</li> </ul>	<ul style="list-style-type: none"> <li>• Continued fine-tuning process to measure particle size distribution in water column samples using a combination of laser, Coulter Counter, sieving and micro-filtration</li> </ul>	<ul style="list-style-type: none"> <li>• USGS and DNR provide technical guidance and goals</li> <li>• WSLH provided the analytical expertise, approach and instrumentation to meet their goals</li> <li>• USGS and DNR also provided funding to support the R&amp;D work</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Emerging Contaminants in Eagle Serum	<ul style="list-style-type: none"> <li>National Park Service - Bill Route</li> </ul>	<ul style="list-style-type: none"> <li>Analyzed 32 samples for perfluorinated compounds and polybrominated diphenyl ethers, as well as PCB and DDT metabolites</li> </ul>	<ul style="list-style-type: none"> <li>Serum samples</li> </ul>
Engine Emission Research – Light Duty Diesels and Gas Vehicles	<ul style="list-style-type: none"> <li>California Air Resources Board</li> <li>University of Southern CA</li> <li>SCAQMD</li> </ul>	<ul style="list-style-type: none"> <li>ICPMS Analysis of Engine Emission Samples</li> <li>Toxicity (ROS/DTT) Analysis of Engine PM</li> <li>Several Peer-Reviewed Manuscripts</li> </ul>	<ul style="list-style-type: none"> <li>Funding</li> <li>Samples</li> <li>Research opportunities</li> </ul>
Food and Waterborne Diseases Program – DPDx: Online Diagnostic Assistance Program	<ul style="list-style-type: none"> <li>CDC – Division of Parasitic Diseases</li> <li>Division of Public Health (WDPH)</li> <li>Milwaukee City Health Dept (MCHD)</li> <li>Wisconsin Clinical Laboratory Network (WCLN)</li> </ul>	<ul style="list-style-type: none"> <li>WSLH and MCHD utilize microscope-mounted digital imaging equipment for telediagnosis purposes</li> <li>Continued to provide reference diagnostic testing for unusual and difficult clinical cases</li> </ul>	<ul style="list-style-type: none"> <li>CDC – Expertise, technical guidance and telediagnostic aid</li> <li>Wisconsin Clinical Labs – provide specimens and complete case histories to aid in diagnoses</li> <li>MCHD continues to provide a regional online diagnostic testing site in Milwaukee area</li> </ul>
Food and Waterborne Diseases Program – Food Testing	<ul style="list-style-type: none"> <li>DATCP Lab</li> <li>Division of Public Health</li> </ul>	<ul style="list-style-type: none"> <li>Food samples tested in support of outbreak investigations</li> <li>Surveillance isolates of Salmonella, Campylobacter, E. coli and Listeria of food origin submitted for subtyping</li> </ul>	<ul style="list-style-type: none"> <li>DATCAP – Food testing expertise</li> <li>DPH – Coordination, EPI investigations and information dissemination</li> </ul>
Food and Waterborne Diseases Program – Wisconsin Enteric Pathogens Program (WEPS)	<ul style="list-style-type: none"> <li>CDC</li> <li>WI Division of Public Health (WDPH)</li> <li>Wisconsin Clinical Laboratories (WCLN)</li> </ul>	<ul style="list-style-type: none"> <li>Isolates of enteric pathogens submitted for identification, serotyping, subtyping, and antimicrobial resistance surveillance</li> </ul>	<ul style="list-style-type: none"> <li>CDC – Funding, expertise and technical guidance</li> <li>WDPH- Funding and epidemiological support</li> <li>WCLN- provide clinical isolates for surveillance</li> </ul>
Forensic Toxicology Program- Improved Lab Service for Drug Impaired Driver Detection	<ul style="list-style-type: none"> <li>Wisconsin Department of Transportation- Bureau of Transportation Safety</li> </ul>	<ul style="list-style-type: none"> <li>Purchase of Liquid Chromatograph/Dual Tandem Mass Spectrophotometer.</li> <li>Developed and implemented blood THC testing method using purchased instrument system.</li> </ul>	<ul style="list-style-type: none"> <li>Funding</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Forensic Toxicology Program - Drug Recognition Expert Program	<ul style="list-style-type: none"> <li>• Wisconsin Department of Transportation- Bureau of Transportation Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Continued monitoring of DRE field performance</li> <li>• Recertification training for WI officers</li> <li>• Presentation at national DRE conference</li> <li>• Toxicology representative on the Technical Advisory Panel</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Program oversight</li> <li>• Training</li> </ul>
Forensic Toxicology Program – Law Enforcement/ Attorney Education	<ul style="list-style-type: none"> <li>• UW Law School Resource Center for Impaired Driving</li> </ul>	<ul style="list-style-type: none"> <li>• Six presentations on alcohol- and drugged-driving impairment at annual statewide conferences</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> </ul>
Forensic Toxicology Program Attorney Education	WIDJ: Traffic Safety Resource Prosecutor	Five presentations at Annual Prosecutor OWI Seminars in FY10-FY11	<ul style="list-style-type: none"> <li>• Funding</li> </ul>
Fragile X population screening	<ul style="list-style-type: none"> <li>• Dr. Don Bailey (RTI)</li> <li>• University of North Carolina</li> </ul>	<ul style="list-style-type: none"> <li>• Assay development and validation</li> </ul>	<ul style="list-style-type: none"> <li>• Lead collaboration of population screening study for Fragile X syndrome</li> </ul>
Gadolinium Research – MRI Contrast Agent	UW-Madison Medical School, Dr Djamil	<ul style="list-style-type: none"> <li>• ICPMS Analysis of Gd in mice and ROS toxicity</li> <li>• Peer-reviewed manuscript</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Genetics of Hearing loss	<ul style="list-style-type: none"> <li>• Waisman Center, UW-Madison -- Dr. Lawrence Shriberg</li> </ul>	<ul style="list-style-type: none"> <li>• Array studies of subjects with speech dyspraxia</li> </ul>	<ul style="list-style-type: none"> <li>• Social and clinical aspects of speech dyspraxia</li> </ul>
ICTR Core Laboratory	<ul style="list-style-type: none"> <li>• UW Institute for Clinical and Translational Research (ICTR)</li> </ul>	<ul style="list-style-type: none"> <li>• Established WSLH as a Core Lab for ICTR researchers.</li> </ul>	<ul style="list-style-type: none"> <li>• ICTR promotes WSLH and provides contact to researchers across WI who are interested in potential collaboration projects with WSLH.</li> </ul>
Intra-community variability of particulate matter related to asthma for California's Children's Health Study	Univ. of Southern California -- Ed Avol, PhD	<ul style="list-style-type: none"> <li>• Cleaning and pre-weighing of Polyurethane Foam (PUF) substrates for field sampling of atmospheric particulates.</li> <li>• Analysis of exposed PUF substrates for mass, trace elements, ions, EC/OC, and water soluble organic carbon.</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Iron Absorption in Primate Research	<ul style="list-style-type: none"> <li>• Dr. Gabriele Lubach, UW Primate Laboratory</li> </ul>	<ul style="list-style-type: none"> <li>• ICP-MS Sample analysis of Iron stable isotopes</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Lead Exposure Source Tracking using Lead Stable Isotope Ratios	Centers for Disease Control (CDC), Drs. Durant and Neri	ICP-MS Sample analysis of Lead stable isotopes	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Maternal and Child Health Program/Genetic Disorders Program	<ul style="list-style-type: none"> <li>• Waisman Center</li> <li>• UW Medical School</li> <li>• UW Grad School</li> </ul>	<ul style="list-style-type: none"> <li>• Student training</li> <li>• Research testing</li> <li>• Improved patient care</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Research opportunities</li> </ul>
Nano-Silver Research	<ul style="list-style-type: none"> <li>• WI DNR</li> <li>• WI DHS</li> </ul>	Evaluated levels and speciation of silver in treated commercial products	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Nanotechnology Safety and Health	<ul style="list-style-type: none"> <li>• UW Safety Department</li> <li>• LaFollette School of Public Affairs</li> <li>• UW School for Workers</li> <li>• Wisconsin Division of Public Health</li> <li>• UW Engineering school</li> <li>• WOHL</li> <li>• WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• <b>FY-10</b> -- Facilitate publication of journal article</li> <li>• <b>FY-11</b> -- Provide scientific and technical information to Legislative special committee</li> </ul>	<ul style="list-style-type: none"> <li>• Expertise</li> <li>• Access to real world nanotechnology applications</li> <li>• Industrial hygiene monitoring at a nano-materials lab at UW Engineering.</li> </ul>
National Children's Study – Newborn Blood Spots	<ul style="list-style-type: none"> <li>• Waisman Center – UW Madison</li> <li>• Waukesha Vanguard Study Site</li> </ul>	Developed new methods for measurement of trace elements and PFC and PBDE in filter paper spotted blood	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Neonatal blood spot analysis for trace metals	<ul style="list-style-type: none"> <li>• Univ. of MN, Julie Ross, PhD</li> </ul>	<ul style="list-style-type: none"> <li>• Developed method for extraction of trace metals from blood spots on filter paper</li> <li>• Peer-reviewed publication</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Newborn Screening Program	<ul style="list-style-type: none"> <li>• WI DHS</li> <li>• Clinical Consultants</li> </ul>	<ul style="list-style-type: none"> <li>• ~ 71,000 newborns screened for 47 congenital disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Policy development</li> <li>• Program oversight</li> <li>• Training</li> </ul>

Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
Newborn Screening Program – Severe Combined Immune Deficiency (SCID)	<ul style="list-style-type: none"> <li>• WSLH</li> <li>• Children’s Hospital of Wisconsin</li> <li>• Jeffrey Modell Foundation</li> <li>• CDC/Natl. Center for Environmental Health (NCEH)</li> <li>• National Institutes of Health</li> </ul>	<ul style="list-style-type: none"> <li>• Continued progress on development of SCID newborn screening.</li> <li>• WSLH providing technical assistance and training to 11 states and 4 countries as they incorporate SCID screening into their NBS programs.</li> <li>• With NIH funding, WSLH performed SCID screening for Louisiana as part of a pilot study looking at how states can implement SCID screening.</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Expertise</li> <li>• Research opportunities</li> <li>• Training</li> <li>• Policy Development</li> </ul>
Occupational Safety & Health and Census of Fatal Occupational Injuries - OSHA Data Collection	<ul style="list-style-type: none"> <li>• DWD/WC</li> <li>• DOL/BLS</li> <li>• DOL/OSHA</li> <li>• DHFS/Vital Records</li> </ul>	<ul style="list-style-type: none"> <li>• Publish yearly incident rates on occupational injuries/illnesses</li> <li>• Publish yearly numbers on occupational fatalities</li> <li>• Supply OSHA with data on specific employers for work-related injuries/illnesses from the OSHA 300 logs</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Program file access</li> <li>• Computer systems</li> <li>• System training when necessary</li> <li>• Computer support</li> <li>• Printing, mailings, forms and envelopes</li> <li>• Staff hands on training</li> <li>• National meetings &amp; conferences</li> <li>• Hard copies of Death Certificates</li> </ul>
Organic Chemistry – Industry Partnership	Gilson, Inc.	Collaborations on instrument applications and methods development	<ul style="list-style-type: none"> <li>• Access to instrumentation not available at the WSLH</li> </ul>
PAH residues for murder investigation	Juergen Waldick	Forensic analysis of particulate matter for air pollution tracers	<ul style="list-style-type: none"> <li>• Murder investigation</li> <li>• Testimony</li> </ul>
Pharmaceuticals and personal care product research	<ul style="list-style-type: none"> <li>• UW-Whitewater</li> <li>• Center for Great Lakes Research</li> <li>• UW-Carbene Cancer Center</li> </ul>	Analysis of pharmaceuticals and personal care products (includes hormones)	<ul style="list-style-type: none"> <li>• Research on environmental health and protection</li> <li>• Public health research</li> </ul>
Phenolic glycosides research	UW Russell Labs	Analysis of phenolic glycosides	<ul style="list-style-type: none"> <li>• Research</li> </ul>



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Platinum Speciation	<ul style="list-style-type: none"> <li>University of Southern California – Particulate Matter Center</li> </ul>	<ul style="list-style-type: none"> <li>ICP-MS Sample analysis</li> </ul>	<ul style="list-style-type: none"> <li>Funding</li> <li>Samples</li> <li>Research opportunities</li> </ul>
Platinum Speciation and Transformations in the Environment	EPA	<ul style="list-style-type: none"> <li>Determined levels and speciation of Pt in engine PM, road dusts, and atmospheric aerosols</li> <li>Developed methods for measurement of chloroplatinates</li> </ul>	<ul style="list-style-type: none"> <li>Funding</li> <li>Samples</li> <li>Research opportunities</li> </ul>
Proficiency Testing Program	China CDC, Office of Lab Management	<ul style="list-style-type: none"> <li>Met and instructed China CDC staff</li> <li>Developed MOU to define parameters needed to assist China CDC in creating a PT program for China labs.</li> </ul>	<ul style="list-style-type: none"> <li>PT samples</li> <li>Testing instructions, result forms and statistics</li> <li>Technical expertise</li> </ul>
Reactive oxygen species activity and atmospheric particulate matter composition	<ul style="list-style-type: none"> <li>Univ. of Southern California, Constantinos Sioutas, PhD.</li> </ul>	<ul style="list-style-type: none"> <li>Measured reactive oxygen species (ROS) activity and trace element composition of atmospheric samples.</li> </ul>	<ul style="list-style-type: none"> <li>Funding</li> <li>Samples</li> <li>Research opportunities</li> </ul>
Sexually Transmitted Disease Program – Corrections Intake Screening Project	<ul style="list-style-type: none"> <li>Division of Public Health (DPH)</li> <li>Department of Corrections (DOC)</li> </ul>	<ul style="list-style-type: none"> <li>Screened 3,376 incoming WI male inmates for chlamydia (CT) and gonorrhea (GC) using pooled testing, detecting 181 CT and 10 GC infections.</li> <li>Provided summary reports of results to DOC</li> </ul>	<ul style="list-style-type: none"> <li>DPH – Financial support, development of screening criteria</li> <li>DOC – adherence to screening criteria, clinical aspects and follow-up</li> </ul>
Sexually Transmitted Disease Program – Region V Infertility Prevention Project	<ul style="list-style-type: none"> <li>State Labs and Public health departments from WI and five other states in the region (IL, IN, MI, MN, OH)</li> <li>Health Care Education and Training (HCET)</li> <li>CDC</li> </ul>	<ul style="list-style-type: none"> <li>Provided combined chlamydia and gonorrhea testing data from all six states to region and CDC</li> <li>Provided summarized data back to the states</li> <li>Provided data and other information on laboratory testing to partners responsible for grant-writing and other related activities.</li> <li>Set objectives for 2011.</li> <li>Met twice annually in person with major partners, and several times</li> </ul>	<ul style="list-style-type: none"> <li>States, Labs – Data, collaboration, consensus on lab issues related to STD testing</li> <li>HCET – Administrative, coordinate partners' efforts</li> <li>CDC – Funding, program guidance</li> </ul>

		over the course of the past 12 months via conference calls with subcommittees to work together towards accomplishments listed above.	
Sexually Transmitted Disease Program – Wisconsin Infertility Prevention Project	<ul style="list-style-type: none"> <li>• Planned Parenthood of Wisconsin</li> <li>• Wisconsin Family Planning Clinics</li> <li>• DPH (STD, Maternal &amp; Child Health Programs)</li> <li>• UW Madison Health Services (informal)</li> <li>• Milwaukee Health Department Laboratory</li> </ul>	<ul style="list-style-type: none"> <li>• Performed 64,034 chlamydia (CT) and 35,600 gonorrhea (GC) tests on women and men at risk, detecting 5,729 CT and 877 GC infections</li> <li>• Expanded screening for GC in Milwaukee Family Planning clinics, due to high morbidity in that area.</li> <li>• Provided data and training to providers via teleconferences and the HCET-coordinated email Listserv.</li> </ul>	<ul style="list-style-type: none"> <li>• Provider Partners – Clinical aspects including specimen and data collection/ handling</li> <li>• DPH – Funding, guidance on development of screening criteria</li> </ul>
Southeast Regional Case-Control Study of Adult Brain Tumors	H. Lee Moffitt Cancer Center, Dr. Kathleen Egan	Analysis of trace elements in urine	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Tuberculosis Program – CDC Genotyping	<ul style="list-style-type: none"> <li>• CDC</li> <li>• DPH Tuberculosis Program</li> <li>• Regional Genotyping Lab at Michigan PHL</li> <li>• WMLN labs</li> </ul>	<ul style="list-style-type: none"> <li>• Continued submission of <i>M. tuberculosis</i> isolates for the national universal TB-genotyping program</li> </ul>	<ul style="list-style-type: none"> <li>• DPH epidemiologic expertise</li> <li>• 10-day turnaround time for genotyping results</li> </ul>
Tuberculosis Program – TB Elimination Cooperative Agreement	<ul style="list-style-type: none"> <li>• DPH-TB Control section</li> <li>• CDC Tuberculosis Program</li> </ul>	<ul style="list-style-type: none"> <li>• Continued rapid testing of all smear-positive respiratory specimens using a nucleic acid amplification (NAA) test</li> <li>• Broadened NAA testing algorithm to include more smear-negative respiratory specimens and non-respiratory specimens for high-risk patients</li> <li>• Maintained turn-around-time objectives to report TB lab results</li> </ul>	<ul style="list-style-type: none"> <li>• Financial support</li> <li>• TB case records data</li> <li>• DPH epidemiologic expertise</li> </ul>

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Tuberculosis Program – Wisconsin Mycobacteriology Laboratory Network (WMLN)	<ul style="list-style-type: none"> <li>• Wisconsin's 32 laboratories that perform some level of testing for mycobacteria</li> <li>• DPH - Tuberculosis Program</li> </ul>	<ul style="list-style-type: none"> <li>• Held a statewide conference</li> <li>• Provided forum for discussion of utility of new testing technology</li> <li>• Provided statewide lab based surveillance for all mycobacteria species and for TB drug susceptibility</li> <li>• Provided forum for discussion of new molecular methods for mycobacteriology</li> </ul>	<ul style="list-style-type: none"> <li>• Surveillance data</li> <li>• TB isolates for state TB Repository</li> <li>• Conduit for transfer of information from WDPH and WSLH to WI clinicians and infection control personnel</li> <li>• Assessment of mycobacteriology laboratory testing and reporting issues</li> <li>• DPH epidemiologic expertise</li> </ul>
Turfgrass Research	University of Connecticut	Analysis of Astroturf off-gassing compounds	• Research
US EPA Region V Drinking Water Emergency Response Network	<ul style="list-style-type: none"> <li>• US EPA Region V Laboratory</li> <li>• Public health laboratories from Illinois, Indiana, Michigan, Minnesota and Ohio</li> </ul>	<ul style="list-style-type: none"> <li>• Participated in finalizing EPA Region 5 Drinking Water Emergency Response Plan, which will be used in the National EPA Drinking Water Response Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to provide assistance in an emergency situation involving drinking water</li> </ul>
UW-Madison Influenza Working Group	<ul style="list-style-type: none"> <li>• UW clinicians, researchers and public health professionals doing work on influenza</li> </ul>	<ul style="list-style-type: none"> <li>• Working meetings to learn more about the various influenza-related work we all perform</li> <li>• If needed, implement UW-Madison campus response.</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperation in response</li> </ul>
Vanadium Speciation Research	<ul style="list-style-type: none"> <li>• Dr. Jorn Herner</li> <li>• California Air Resources Board</li> </ul>	<ul style="list-style-type: none"> <li>• Developing methods to isolate different oxidation states of Vanadium in trace metal samples.</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Samples</li> <li>• Research opportunities</li> </ul>
Vitamin D Research	WIMR/ICTR	Analysis of vitamin D and stress hormones in monkey hair	• Research
Wildlife Tissue Analyses for Emerging and Legacy Contaminants	<ul style="list-style-type: none"> <li>• UW-LaCrosse</li> <li>• UW Russell Labs</li> <li>• Prairie Island Indian Community</li> <li>• National Park Service</li> </ul>	Analysis of wildlife tissues for emerging and legacy contaminants	• Research

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WisCon -- Appleton Medical Center Bed Tower Expansion – Boldt Company	<ul style="list-style-type: none"> <li>• OSHA</li> <li>• WisCon</li> <li>• Boldt Co</li> <li>• On-site Contractors</li> </ul>	<ul style="list-style-type: none"> <li>• Formalized partnership</li> <li>• Provided on-site services to contractors including Industrial Hygiene monitoring</li> <li>• Provided Safety &amp; Health program assistance.</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides the framework for this partnership and staff to review data and provide two unannounced OSHA inspections annually</li> <li>• WisCon provides monthly site walk through, hazard correction, industrial hygiene monitoring, program assistance, training</li> <li>• Boldt as general contractor provides total site oversight, training, safety and health management</li> </ul>
WisCon -- Associated Building Contractors (ABC) of Wisconsin	<ul style="list-style-type: none"> <li>• Four OSHA area offices</li> <li>• Associated Building Contractors of Wisconsin</li> <li>• WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• Four companies are in the highest or platinum level of attainment for safety and health</li> <li>• A few more companies are at the lower levels</li> <li>• Provided training at two major ABC conferences (Appleton and Wisconsin Dells)</li> <li>• Taught sessions on four separate topics and a booth</li> <li>• Evaluated one more company for inclusion at Platinum level -- Faith Technologies.</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides formal framework for the partnership, CAS support and expertise</li> <li>• ABC-WI markets the program to its members</li> <li>• This is similar to the Milwaukee AGC partnership</li> <li>• WisCon provides on-site inspections, qualification inspections and industrial hygiene services as requested</li> </ul>
WisCon -- Associated General Contractors (AGC) - Milwaukee, Wis.	<ul style="list-style-type: none"> <li>• All four OSHA Area offices</li> <li>• Associated General Contractors of Milwaukee</li> <li>• WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• Two companies have signed on to the agreement at Five Star level, one at 3 STAR level</li> <li>• Higher level requires comprehensive qualifying inspection, provided by WisCon</li> <li>• All levels require exemplary safety and health program management, upgrading of sub-contractors</li> <li>• Overall goal is to decrease worker injuries and illnesses</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides the formal framework for this partnership which is modeled on a national AGC agreement</li> <li>• Participating companies sign on to using agreement</li> </ul>

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WisCon -- Association of Practitioners of Infection Control (APIC)	<ul style="list-style-type: none"> <li>• Four chapters of the Association of Practitioners of Infection Control in Wisconsin</li> <li>• WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• Provided OSHA update information to meetings of APIC chapters</li> </ul>	<ul style="list-style-type: none"> <li>• APIC provides current infection control information, also provides entry to the infection-control community statewide and a mechanism for dissemination of OSHA information to their members</li> <li>• WisCon provides updates on OSHA issues as it affects their institutions</li> </ul>
WisCon - Dairy Farm Initiative	<ul style="list-style-type: none"> <li>• OSHA Area Offices</li> <li>• WisCon</li> <li>• UW Extension</li> </ul>	<ul style="list-style-type: none"> <li>• Planning meetings</li> <li>• Initial Training presentations</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides the framework as part of a local emphasis program</li> <li>• OSHA compliance assistance staff, WisCon consultants and UW Extension staff provide training and outreach</li> <li>• WisCon staff provide onsite assistance in hazard identification and control</li> </ul>
WisCon -- DPH	<ul style="list-style-type: none"> <li>• WisCon</li> <li>• WI Division of Public Health</li> </ul>	<ul style="list-style-type: none"> <li>• WSLH provides the space and topic collaboration for the Prevention Center round table that meets quarterly</li> <li>• WisCon follows up on ABLES referrals</li> </ul>	<ul style="list-style-type: none"> <li>• DPH provides the occupational surveillance programs of ABLES, the occupational indicators, occupational asthma, and dermatitis</li> <li>• WisCon provides a field component for all of these programs where the issues of lead, occupational asthma, occupational dermatitis and other occupational diseases are addressed in our field studies</li> <li>• In training, adding these areas to our goals for our OSHA grant</li> <li>• WisCon provides 1 FTE for the NIOSH indicators grant to DPH</li> </ul>
WisCon -- Eau Claire Luther Midelfort Hospital Expansion - Boldt Company	<ul style="list-style-type: none"> <li>• OSHA</li> <li>• WisCon</li> <li>• Boldt Co</li> <li>• On-site Contractors</li> </ul>	<ul style="list-style-type: none"> <li>• Formalized partnership</li> <li>• Provided on-site services to contractors including Industrial Hygiene</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides the framework for this partnership and staff to review data and provide</li> </ul>

		<p>monitoring</p> <ul style="list-style-type: none"> <li>• Provided Safety &amp; Health program assistance.</li> </ul>	<p>two unannounced OSHA inspections annually</p> <ul style="list-style-type: none"> <li>• WisCon provides monthly site walk through, hazard correction, industrial hygiene monitoring, program assistance, training</li> <li>• Boldt as general contractor provides total site oversight, training, safety and health management</li> </ul>
WisCon -- Metropolitan Builders Alliance	<ul style="list-style-type: none"> <li>• Milwaukee &amp; Madison OSHA</li> <li>• Metropolitan Builders Assn.</li> <li>• WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• Formalized OSHA alliance agreement -- Ended January 2011</li> <li>• Discussions on provision of training</li> <li>• Dissemination of WisCon on-site information</li> <li>• OSHA ten hour class conducted December 2010</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration on training on OSHA safety &amp; health topics as well as encouraging on-site WisCon visits for members</li> <li>• OSHA ten-hour course planning</li> <li>• Information related to new DHS Pb renovation &amp; remodeling rules.</li> </ul>
WisCon -- Milwaukee Columbia Saint Mary's Hospital Expansion - CG Schmidt-Barton Malow	<ul style="list-style-type: none"> <li>• OSHA</li> <li>• WisCon</li> <li>• CG Schmidt-Barton Malow</li> <li>• On-site Contractors</li> </ul>	<ul style="list-style-type: none"> <li>• Formalized partnership</li> <li>• Provided on-site services to contractors including Industrial Hygiene monitoring</li> <li>• Provided Safety &amp; Health program assistance.</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides the framework for this partnership and staff to review data and provide two unannounced OSHA inspections annually</li> <li>• WisCon provides monthly site walk through, hazard correction, industrial hygiene monitoring, program assistance, training</li> <li>• CG Schmidt-Barton Malow as general contractor provides total site oversight, training, safety and health management</li> </ul>
WisCon -- OSHA Ergonomics Foundry Partnership	<ul style="list-style-type: none"> <li>• OSHA Appleton Area Office</li> <li>• OSHA Region V ergonomics coordinator</li> <li>• 11 foundries in the Fox River Valley</li> <li>• WisCon</li> <li>• Mercury Marine in FonduLac</li> </ul>	<ul style="list-style-type: none"> <li>• Development of best practices for difficult ergonomic issues facing the foundry group</li> <li>• Solutions/control technology developed at one foundry is transferred to all of the members of the group</li> <li>• Web site for project developed and deployed to members</li> </ul>	<ul style="list-style-type: none"> <li>• Appleton OSHA provides framework and expertise</li> <li>• OSHA region V provides expertise</li> <li>• The foundries, having broken down confidentiality barriers, develop and provide best practices</li> <li>• WisCon provides expertise and is the data repository for the project</li> </ul>
WisCon -- Safety Health Achievement Recognition Program (SHARP) (OSHA)	<ul style="list-style-type: none"> <li>• WisCon</li> <li>• Federal OSHA</li> <li>• SHARP companies</li> </ul>	<ul style="list-style-type: none"> <li>• 12 SHARP companies as of June 30, 2011</li> <li>• Most recent SHARP</li> </ul>	<ul style="list-style-type: none"> <li>• National OSHA consultation sets the parameters for qualification</li> </ul>

		<p>company during this period is Universal Electronics in Whitewater WI.</p> <ul style="list-style-type: none"> <li>• 6 Renewals conducted during this period</li> </ul>	<p>for SHARP including comprehensive safety &amp; health inspections, correction of all hazards found</p> <ul style="list-style-type: none"> <li>• None of the 58 attributes of a comprehensive safety &amp; health management system can be below a 2 on a rating scale of 0-3, injury &amp; illness rates below the national average for their industry</li> <li>• Program manager walk through inspection for recommendation for SHARP</li> <li>• Region V OSHA grants approval, presents a letter and certificate and removes the company from federal OSHA inspection lists</li> <li>• Consultation presents the flag to the company</li> </ul>
WisCon -- Wisconsin Builders Association Alliance	<ul style="list-style-type: none"> <li>• 4 WI OSHA Area Offices</li> <li>• Wisconsin Builders Association</li> <li>• WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• Formalized alliance agreement</li> <li>• Discussions on provision of training</li> <li>• Dissemination of WisCon on-site information</li> <li>• Articles written for newsletter on S&amp; H topics</li> <li>• WI Dells- "Residential Fall Protection " Training class February 2010</li> <li>• WI Builders Association Convention Lake - Booth February 2010 and February 2011</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration on training on OSHA safety &amp; health topics as well as encouraging on-site WisCon visits for members</li> </ul>
WisCon -- Wisconsin Committee on Safe Patient/Resident Handling	<ul style="list-style-type: none"> <li>• Various insurance companies</li> <li>• BQA</li> <li>• OSHA</li> <li>• WI Assisted Living Assoc.</li> <li>• WAHSA</li> <li>• DHFS</li> <li>• WisCon</li> <li>• Mortenson, Matzell &amp; Meldrum, Inc.</li> </ul>	<ul style="list-style-type: none"> <li>• During this period one statewide seminar was held on safe resident handling with nationally known instructors from the VA as well as Wisconsin OSHA and WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• Insurance companies provide data and access to their members</li> <li>• OSHA provides ergonomics expertise and staffing of group &amp; training</li> <li>• BQA provides understanding of the regulatory environment</li> <li>• Associations provide buy-in and access to their members</li> <li>• DHFS includes BQA and injury prevention and falls</li> <li>• WisCon provides ergonomics expertise and the provision of training and</li> </ul>

			on-site consultation to these employers
WisCon – Ryan Hilldale – Target Partnership	<ul style="list-style-type: none"> <li>• Madison OSHA Office</li> <li>• WisCon</li> <li>• Ryan Companies</li> <li>• USA</li> </ul> Building and Construction Trades of South Central Wisconsin	<ul style="list-style-type: none"> <li>• Formalized partnership</li> <li>• Provided on-site services to contractors including Industrial Hygiene monitoring</li> <li>• Provided Safety &amp; Health program assistance</li> <li>• Project started 6/2010 and finished 2/2011</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides the framework for this partnership and staff to review data and provide two unannounced OSHA inspections annually</li> <li>• WisCon provides monthly site walk through, hazard correction, industrial hygiene monitoring, program assistance, training</li> <li>• Ryan Companies as general contractor provide total site oversight, training, safety and health</li> </ul>
WisCon -- Wisconsin Safety Council.	<ul style="list-style-type: none"> <li>• All four OSHA Area Offices</li> <li>• Wisconsin Council of Safety (part of Wisconsin Manufacturers and Commerce)</li> <li>• WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• This is a formal OSHA training alliance</li> <li>• Various Training Courses on occupational safety and health topics were presented around the state by the partnership.</li> <li>• In addition WSLH OSHA program taught a full-day introduction to industrial hygiene course at the WCS annual Safety Congress</li> <li>• WisCon also taught a course at the Congress on interpretation of industrial hygiene sampling results.</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides the formal framework, staff to provide offsite training, usually a CAS or the Area Director</li> <li>• Consultation Programs provide staff to provide off site training</li> <li>• WCS markets the training sessions, arranges for site, meals, registration etc. and collects evaluations of the sessions</li> <li>• The composite data is returned to Alliance members</li> </ul>
WisCon -- Wisconsin Migrant Services Committee	<ul style="list-style-type: none"> <li>• DWD-Bureau of Job Service</li> <li>• DWD Bureau of Migrant &amp; Refugee Services</li> <li>• DPI-Title 1 Team</li> <li>• DHS-Division of Public Health</li> <li>• WisCon</li> <li>• UMOS</li> </ul>	<ul style="list-style-type: none"> <li>• Training on migrant worker safety &amp; health issues in Wisconsin</li> <li>• Dissemination of Spanish language materials for migrant worker safety</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration &amp; resources for migrant worker training</li> </ul>
WisCon -- Wisconsin Occupational Health Nurses Association, South Central Chapter (WOHNA-SC)	<ul style="list-style-type: none"> <li>• All four OSHA offices</li> <li>• WOHNA-SC</li> <li>• WisCon</li> </ul>	<ul style="list-style-type: none"> <li>• This is a training alliance</li> <li>• WisCon provided basic training on ergonomics at the annual conference, as well as staffed a booth.</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA provides the formal alliance framework as well as staff to speak</li> <li>• WOHNA-SC provides access to their membership, occupational health nursing expertise and organizational skills in sponsoring events</li> <li>• WisCon provides expertise and staff to speak on a variety of OSHA topics</li> </ul>



Program Partnership Name	Who are Partners / Collaborators?	Measurable Accomplishments for FY 2010 and/or 2011	What do Partners Provide?
WisCon -- Wisconsin Ready Mix Concrete Association (WRMCA)	<ul style="list-style-type: none"> <li>• All four OSHA offices</li> <li>• WisCon</li> <li>• WRMCA and their members</li> </ul>	<ul style="list-style-type: none"> <li>• WisCon provided training at their annual conference</li> <li>• WisCon Participates with their Occupational and Environmental Safety committee.</li> </ul>	<ul style="list-style-type: none"> <li>• OSHA has a special emphasis enforcement program in this area and also provides training assistance through the CAS and they have set the formal parameters of the Alliance and the expected products</li> <li>• WisCon provides on-site consultation to members of the association, training and expertise</li> <li>• WRMCA provides entry to its membership, training opportunities which they arrange and manage, practical expertise for the industry</li> </ul>
Wisconsin Emergency Response Environmental Laboratory Network	<ul style="list-style-type: none"> <li>• Most laboratories in the state doing environmental testing</li> </ul>	<ul style="list-style-type: none"> <li>• Communications network to enhance emergency preparedness</li> </ul>	<ul style="list-style-type: none"> <li>• Network has been established allowing communication on emergency response issues</li> </ul>
WI Local Public Health Laboratory Network (LabNet)	<ul style="list-style-type: none"> <li>• 17 local public health department laboratories</li> <li>• DPH</li> <li>• DNR</li> <li>• DATCP</li> <li>• APHL</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitated by the WSLH since 2006, LabNet became the laboratory section of the WI Association of Local Health Departments and Boards (WALHDAB) in summer 2009.</li> <li>• Completed strategic plan</li> <li>• Gave scientific presentation at WPHA/WALHDAB Annual Conference in May 2011</li> <li>• Poster presentation on network development and evolution at APHL Annual Meeting in June 2011.</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic planning</li> <li>• Meeting facilitation</li> <li>• Educational publication development</li> <li>• Peer support</li> </ul>

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### III. Other Publications

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Halvorson, M., C. Hedman, and T. Gibson. "Evaluation of several columns and solvents for gel permeation chromatography (GPC) clean-up of fish tissue prior to PCB analysis." *LCGC Magazine - Applications Notebook*, Feb. 2010.

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Long, S.C., V. D'Amato, and A. Bahe. *04-HHE-7: An Investigation into Biosolids Sampling and Handling Methods for USEPA-Approved Microbial Detection Techniques*. Water Environment Research Foundation, 2009.

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Long, S.C., and R.P. Wolkowski. "Anaerobic Digestion of Animal Manure to Produce Soil Amendments." *Wisconsin Crop Manager*, 2010.

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Rubert, K.F., IV, C.J. Hedman, and J.A. Pedersen. "Influence of MnO<sub>2</sub> on the transformation of oxy- and chlortetracycline in pond water." In *Veterinary Pharmaceuticals in the Environment*, ACS Symposium Series No. 1018; Coats, J.R., Henderson, K.L. (eds.), 2009: 45 - 65.

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#### **IV. Research Papers in Progress**

Accetta, D., M. Baker, C.D. Brokopp, J. Verbsky, and J. Routes. "Cause of death in neonates with inconclusive or abnormal T cell receptor excision circles (TREC) assays on newborn screening." Submitted in 2011 to *Journal of Clinical Immunology*.

Arndt, M.F., L.E. West, A. Bari, T.M. Semkow, C.A. Franklin, and J. Rathbone. "Data Analysis for the MENU2010 Exercise: A Radiological Capability and Capacity Inter-laboratory Comparison Exercise." Submission pending.

Conville, P., B. Brown-Elliott, R. Wallace, Jr., F. Witebsky, D. Koziol, G. Hall, S. Killian, C. Knapp, D. Warshauer, T. Van, N. Wengenack, S. Demi, and G. Woods. "Multisite Reproducibility Study of *Nocardia* MIC testing." Submitted in 2011 to *Journal of Clinical Microbiology*.

DeQuattro, Z.A., E.J. Peissig, D. Antkiewicz, E.J. Lundgren, C. Hedman, D.W. West, and T.P. Barry. "Effects of progesterone exposure on fathead minnow (*Pimephales promelas*) reproduction." Submitted in 2011 to *Environmental Toxicology and Chemistry*.

Gao, J., C. Hedman, C. Liu, T. Guo, and J. Pedersen. "Transformation of sulfamethazine by manganese oxide in aqueous solution." Submitted in 2011 to *Environmental Science and Technology*.

Ginsberg, G., B. Toal, N. Simcox, A. Bracker, B. Golembiewski, T. Kurland, and C. Hedman. "Human health risk assessment of synthetic turf fields based upon investigation of five fields in Connecticut. Submitted in 2011 to *Journal of Toxicology and Environmental Health, Part A: Current Issues*.

Long, S.C., J. Stietz, J. Olstadt, C. Hedman, and J. Plummer. "Characterization of Paper Mill Effluent Using Source Tracking Methods." Submitted in 2011 to *Journal of the American Water Works Association*.

Long, S.C. and J.R. Stietz "Development of a PCR-based Assay for *Rhodococcus coprophilus*, a Grazing-Animal Source Tracking Indicator for Source and Drinking Water." To be submitted to *Applied and Environmental Microbiology*.

Meeroff, D.E., F. Bloetscher, S.C. Long, and T. Bocca. "The Use of Multiple Tracers to Evaluate the Impact of Sewered and Non-sewered Development on Coastal Water Quality in a Rural Area of Florida." *Journal of Environmental Quality*. Under revision; Initial reviewer comments received April 2011.

Munson, E., D.T. Nardelli, B. K. Du Chateau, S. M. Callister and R.F. Schell. "Hamster and murine models of severe destructive Lyme arthritis." Submitted in 2011.

Olson, C.N., M.M. Galloway, G. Yu, C.J. Hedman, M.R. Lockett, T. Yoon, E.A. Stone, L.M. Smith, and F.N. Keutsch. "Hydroxycarboxylic acid-derived organosulfates: synthesis, stability and quantification in ambient aerosol." Submitted in 2011 to *Environmental Science and Technology*.

Simcox, N.J., A. Bracker, G. Ginsberg, B. Toal, B. Golembiewski, T. Kurland, and C. Hedman. "Synthetic turf field investigation in Connecticut." Submitted in 2011 to *Journal of Toxicology and Environmental Health, Part A: Current Issues*.

Smith, M. "HPV Positive/PAP Negative Diagnoses in Women Ages 30 and Older: Looking to Correlate Morphologic Cues to Determine QA/QC Modifications." Student presentation at the Wisconsin Society of Cytotechnology, April, 2011. Submitted and accepted for a poster presentation at the American Society for Cytopathology annual scientific meeting to be held in November 2011.

Stietz, J., E. Mahar, J. Pedersen, and S.C. Long. "Assessment of Transport of MST Microorganisms in Soil Columns." To be submitted to *Journal of Environmental Quality*.

Van, T., J. Miller, D. Warshauer, E. Reisdorf, D. Jernigan, R. Humes, and P. Shult. "Pooling Nasopharyngeal/Throat Swab Specimens to Increase Testing Capacity for Influenza Viruses by PCR." Submitted in 2011 to *Journal of Clinical Microbiology*.

Verbsky, J., M. Baker, W. Grossman, M. Hintermeyer, T. Dasu, B. Bonacci, S. Reddy, D. Margolis, J. Casper, M. Gries, P. Sondel, C. Seroogy, Brokopp, C.D., and J. Routes. "Newborn screening for severe combined immunodeficiency; the Wisconsin experience (2008-2011)." Submission pending.

## V. Papers Presented at Scientific Meetings

### FY 2010

Creswell, J., Babiarz, C., Shafer, M.M., and Armstrong, D. "Estimating Mercury-Binding Ligand Concentrations in Freshwater Wetland Porewaters Using the "Tin-Reducible" Titration Method." 2009 Fall Annual Meeting of the American Geophysical Union; San Francisco, CA.

Baker, M., Verbsky, J., Seroogy, C., Cogley, M., Mickle, D., Schauer, D., Hoffman, G., Kurtycz, D., Brokopp, C., and. Routes, J. "Newborn Screening for Severe Combined Immunodeficiency in Wisconsin." 2010 Newborn Screening and Genetic Testing Symposium, May 3 - 6, 2010; Orlando, FL.

Bewell, A., Jackson, C., Rice, G., Raca, G., and Laffin, J. "Array Comparative Genomic Hybridization Identifies New Candidate Genes for Idiopathic Mental Retardation." Poster presentation at American Cytogenetics Conference, May 2010; Niagara Falls, Ontario.

Dunnick, T. "HL7 Transforms – Square Pegs in Round Holes." 7<sup>th</sup> Annual Public Health Information Network (PHIN) Conference, September 1, 2009; Atlanta, GA.

Halvorson, M., Hedman, C., and Gibson, T. "Evaluation of several columns and solvents for gel permeation chromatography (GPC) clean-up of fish tissue prior to PCB analysis." 2010 AOAC Pacific Northwest Section Annual Meeting, June 2010; Tacoma, WA.

Harding, P. and Gullberg, R. "A Retrospective Comparison of Blood- and Breath- Alcohol Results in Wisconsin Impaired Drivers 2001-2007." American Academy of Forensic Sciences 62nd Annual Meeting, February 24, 2010; Seattle, WA.

Havens, S., Barry, T., Hedman, C., Hemming, J., Mieritz, M., Shafer, M.M., Schauer, J.J. "Preservation and analysis of endocrine disrupting compounds using hydrochloric acid and isotope dilution. National SETAC Meeting, November 2009; New Orleans, LA.

Hedman, C., Hemming, J., Mieritz, M., Havens, S., Shafer, M.M., and Geis, S. "Bioassay directed fractionation of CAFO run off samples." 2010 Society of Environmental Toxicology and Chemistry Annual Meeting, November 2009; New Orleans, LA.

Hemming, J., Barry, T., Havens, S., Hedman, C., Mieritz, M., Schauer, J. J. and Shafer, M.M. "Occurrence of Endocrine Active Compounds in Runoff from Dairy and Cattle Operations." American Water Resources Association - Wisconsin Section, March 3-4, 2010; Middleton, WI.

Hemming, J., Barry, T., Geis, S., Hedman, C., Prasch, A. Mieritz, M., Schauer, J.J. and Shafer, M.M. "Assessing Occurrence, Persistence and Biological Effects of Hormones Released from Livestock Manure." Society of Environmental Toxicology and Chemistry, November 16, 2009; New Orleans, LA.

Hemming, J. "Endocrine Disrupting Compounds in Water." Wisconsin Water Association, September 2009; Wisconsin Dells, WI.

Hoffman, R.M. "*Mycobacterium avium* Complex Organisms in Drinking Water: Challenges to Development of Accurate Detection Methods." Global Conference on Microbial Contaminants in Drinking Water, October 2009; Singapore.

Iyama-Kurtycz, C., Kiedrowski, L., Hsu, D., Edelman, F., Raca, G., Laffin, J., and Rice, G. "Four Developmentally Diverse Patients with Potocki-Lupski Syndrome." Poster presentation at 2010 American College of Medical Genetics Annual Clinical Genetics Meeting, March 2010; Albuquerque, NM.

Kurtycz, D. "The Asylum of ASC-US video microscopy tutorial." American Society of Cytopathology 57<sup>th</sup> Annual Scientific Meeting, November 2009; Denver, CO.

Lange, S., Shafer, M.M., Schauer, J.J., and Weber, R. "Novel Approaches for Online Measurement of Nitrate in Ambient Aerosols: Development and Comparison of a UV-Spectrophotometric and a Biosensor Method." 28<sup>th</sup> Annual Conference of the American Association of Aerosol Research, October 26-30, 2009.

Long, S.C., Plummer, J., Bloetscher, F., and Sham, C. "Microbial Contamination and Climate Change: Examples from recent floods." In Proceedings of the Water Quality Technology Conference, November 15-19, 2009; Seattle, WA.

Long, S.C. "An Integrated Approach to Microbial Source Tracking." 69th Annual Meeting of the North Central Branch of the American Society for Microbiology, October 9-10, 2009; La Crosse, WI.

Miller-Schulze, J.P., Overdier, J., Shafer, M.M., and Schauer, J.J. "An HPLC-ICP-MS Method for the Separation and Quantification of Chloroplatinates and Related Transformation Products in Environmental Samples." American Association for Aerosol Research Specialty Conference: Air Pollution & Health, March 2010; San Diego, CA.

Overdier, J., Shafer, M.M., Toner, B., Schauer, J.J., Herner, J., and Ayala, A. "Chemical Speciation of Vanadium in Aerosol Particulate Matter (PM)." 28<sup>th</sup> Annual Conference of the American Association of Aerosol Research, October 26-30, 2009.

Moen, T., Lemahieu, M., Pfister, J., and Haag, D. "Keeping Wisconsin Workers Safe and Healthy." Wisconsin Public Health Association Conference, July 8, 2009; Appleton, WI.

Rutter, A., Schauer, J.J. and Shafer, M.M. "Quantification of Gaseous Elemental Mercury Dry Deposition to Environmental Surfaces using Mercury Stable Isotopes in a Controlled Environment." Annual Meeting of the American Geophysical Union, Fall 2009; San Francisco, CA.

Shafer, M.M., Overdier, J., and Schauer, J.J. "Chemical Speciation of Platinum and Vanadium in Mobile Source Emissions and Urban Atmospheres." American Association for Aerosol Research Specialty Conference: Air Pollution & Health, March 2010; San Diego, CA.

Shafer, M.M., Perkins, D., Antkiewicz, D., Schauer, J.J., Ning, Z., and Sioutas, C. "Reactive Oxygen Species Activity and Chemical Speciation of Atmospheric Particulate Matter: A Comparison of Urban Environments." American Association for Aerosol Research Specialty Conference: Air Pollution & Health, March 2010; San Diego, CA.

Shafer, M.M. "High-Precision Isotope Ratio Analysis with Sector-based Single-Collector ICP-MS: Clinical Applications of Ca and Fe Stable Isotope Systems." Annual Meeting of the Association for Mass Spectrometry: Applications to the Clinical Lab (MSACL), February 6-10, 2010.

Shafer, M.M., Schauer, J.J., Solomon, P., et al. "Characteristics of Aerosol Particulate Matter in Kyrgyzstan: Advancing our Understanding of Regional Transport of Atmospheric Aerosol in Central Asia." American Association for Aerosol Research Specialty Conference: Air Pollution & Health, March 2010; San Diego, CA.

Shafer, M.M., Schauer, J.J., Solomon, P., Lantz, J., et al. "Fingerprints and Contributions of Aral Sea Region Soils to Coarse Particulate Matter in Central Asia: Preliminary Results from the Kyrgyz Republic." 28<sup>th</sup> Annual Conference of the American Association of Aerosol Research, October 26-30, 2009.

Shafer, M.M., Schauer, J.J., and Bergin, M. "Snow Core Records of Recent Deposition of Trace Metals to Central (Summit) Greenland." Fall Annual Meeting of the American Geophysical Union, Fall 2009; San Francisco, CA.

Smith, M. "HPV Prevalence and Persistence Using TWT Invader: A Two Year Review." American Society of Cytopathology 57<sup>th</sup> Annual Scientific Meeting, November 2009; Denver, CO.

Shelerud, J., Monson, T., Warshauer, D., and Ahrabi-Fard, S. "Two cases of *Haemophilus segnis*, one fatal, identified by the Wisconsin Emerging Infections Project." Poster presentation for the 110<sup>th</sup> General Meeting of the American Society for Microbiology, May 23-27, 2010; San Diego, CA.

Shult, P. "The Role of Public Health Laboratories and Clinical Diagnostics in Medical Countermeasure Preparedness." PHEMCE Annual Meeting, December 2, 2009; Washington, D.C.

Shult, P. "Pandemic Influenza Response Update: Role of Public Health Laboratories and Lessons Learned." Association of Public Health Laboratories Annual Meeting, June 6, 2010; Cincinnati, OH.

Shult, P. "The PHL Reference Center Concept." Association of Public Health Laboratories Annual Meeting; June 7, 2010, Cincinnati, OH.

Shult, P. "Overview of Vaccine-Preventable Diseases (VPD) Testing and Surveillance." Association of Public Health Laboratories Annual Meeting, June 7, 2010; Cincinnati, OH.

Stanton, N. "QA Working Group Overview and Update." CDC Lab Resource Network Level One Emergency Preparedness Laboratory Meeting, April 27-29 2010; Oakland CA.

Stoiber, T., Perkins, D., Antkiewicz, D., and Shafer, M.M. "Detecting Metal-Induced Reactive Oxygen Species in *Chlamydomonas reinhardtii*." 2009 Annual Meeting of the Society for Environmental Toxicology & Chemistry, November 20, 2009; New Orleans, LA.

Tans-Kersten, J. and Warshauer, D. "Adaptation of a Real-Time PCR Assay for Detection of *M. tuberculosis* Complex in Clinical Specimens to the Roche LightCycler." 7<sup>th</sup> National Conference on Laboratory Aspects of Tuberculosis, June 2010; Atlanta, GA.

Wedig, M. and Dunnick, T. "Tactics for Implementing An ELR Hub." Poster presentation for the 7<sup>th</sup> Annual Public Health Information Network (PHIN) Conference, August 31, 2009; Atlanta, GA.

Yazdanpanah, G., Comeau, A., Baker, M., Lee, F., and Vogt, R. "Calibration of Quantitative Real-time PCR Assays to Quantify T-cell Receptor Excision Circles in Dried Blood Spots." Newborn Screening and Genetic Testing Symposium, May 3 – 6, 2010; Orlando, FL.

## **FY 2011**

Accetta, D., Baker, M., Brokopp, C., Verbsky, J., and Routes J. "Cause of Death With an Abnormal or Inconclusive T-cell Receptor Excision Circle (TREC) Assay on Newborn Screening for Severe Combined Immune Deficiency (SCID)." Clinical Immunology Society 2011 Annual Meeting, May 19-22, 2011; Chicago, IL.

Antkiewicz, D., Perkins, D., and Shafer, M/M. "Chemical Speciation of Atmospheric Particulate Matter: Understanding Relationships between Specific Particulate Matter Components & Oxidative Stress." 2010 Annual Meeting of the Society for Environmental Toxicology & Chemistry, November 8-11, 2010; Portland, OR.

Baker, M. "Newborn Screening for Severe Combined Immunodeficiency (SCID): Implementation, Challenges and Successes." Conference hosted by Association of Public Health Laboratories, National Newborn Screening and Genetics Resource Center, Centers for Disease Control and Prevention and U.S. Health Resources and Services Administration, October 27, 2010.

Bowles, E., Monson, T., Reisdorf, E., and Tans-Kersten, J. "Emerging Laboratory Technologies – What Can They Do For You?" Wisconsin Public Health Association/Wisconsin Association of Local Health Departments and Boards Annual Conference, May 26, 2011; Appleton, WI: 35.

DeQuattro, Z.A., Evan, J.P., Antkiewicz, D., Lundgren, E.J., Hedman, C., West, D.W., Hemming, J.C., and Barry, T.P. "Effects of progesterone exposure on fathead minnow minnow (*Pimephales promelas*) reproduction." National SETAC Meeting, November 2010; Portland, OR.

Gullick, R., Sham, C., and Long, S.C. "Evaluating Utility Source Water Protection Programs Using AWWA Standard G-300." American Water Works Association Annual Conference, March 23, 2011; Atlantic City, NJ.

Halvorson, M., Gibson, T., Buelow, C., and Hedman, C. "Evaluation of several methods for post-extraction gel permeation chromatography (GPC) clean-up of fish tissue prior to PCB and PBDE analysis." 2010 Gulf Coast Conference, October 2010; Galveston Island, TX.

Harding, P. "Driving with Extremely High Blood Alcohol Concentrations." 24<sup>th</sup> Annual International Association for Chemical Testing Conference, April 17-21, 2011; St. Louis, MO.

Hemming, J.C., Bary, T., Havens, S.M., Hedman, C.J., Mieritz, M.G., Schauer, J.J., and Shafer, M.M. "Endocrine active compounds in runoff from dairy and cattle operations." Midwest Society of Environmental Toxicology and Chemistry Meeting, March 2011; St. Paul, MN.

Hemming, J., Barry, T., Havens, S., Hedman, C., Mieritz, M., Schauer, J.J. and Shafer, M.M. "Reservoirs of Endocrine Active Compounds from Dairy and Beef Operations." Society of Environmental Toxicology and Chemistry Annual Meeting, November 2010; Portland, OR.

Johnson, W. "Phenazepam in Wisconsin Drivers." 40<sup>th</sup> Annual Society of Forensic Toxicologists Meeting, October 21, 2010; Richmond, VA.

Johnson, W. "THC Testing, Trial Preparation and Testimony." 40<sup>th</sup> Annual Society of Forensic Toxicologists Meeting, October 18, 2010; Richmond, VA.

Klawitter, J., Johnson, C., and Sorsa, K. "Development and Evolution of a Statewide Local Public Health Laboratory Network." Poster presentation at Association of Public Health Laboratories Annual Meeting, June 5 - 8, 2011, Omaha, NE.

Kurtycz, D. "The Asylum of ASC-US video microscopy tutorial." American Society of Cytopathology 57<sup>th</sup> Annual Scientific Meeting, November 2010; Boston, MA.

Kurtycz, D. "Creating a Good Image: Electronic Image Enhancement with Photoshop®." American Society of Cytopathology 57<sup>th</sup> Annual Scientific Meeting, November 2010; Boston, MA.

Kurtycz, D. "The Atypical Squamous Cells of Undetermined Significance (ASC-US)." 2<sup>nd</sup> annual Y. Bedard Memorial Symposium, November 2010; Mt. Sinai Hospital, Toronto, Canada.

Kurtycz, D. "Keratinized Cells in the Pap Test." 2<sup>nd</sup> annual Y. Bedard Memorial Symposium, November 2010; Mt. Sinai Hospital, Toronto, Canada.

Kurtycz, D. "Virtual Microscopy and Whole Slide Imaging: Its Current Role in Cytology Education and Proficiency Testing Programs." 2<sup>nd</sup> annual Y. Bedard Memorial Symposium, November 2010; Mt. Sinai Hospital, Toronto, Canada.

Laffin, J. "Identification of Candidate Genes for Idiopathic Intellectual and Developmental Disabilities." Association of Genetic Technologists Annual Meeting, June 11, 2011; Minneapolis, MN.

Long, S.C. and J.D. Plummer. "Torque Teno Virus as an Indicator of Viral Pathogens in Source Waters." IWA World Water Congress & Exhibition, September 19-24, 2010; Montreal, Canada.

Long, S.C. and J.D. Plummer. "Occurrence of Torque Teno Virus, a Potential Viral Pathogen Indicator in Feces and Source Waters." In Proceedings of the Water Quality Technology Conference, November 14-18, 2010; Savannah, GA.

Long, S.C. and J.D. Plummer. "Impact of Floods and Extreme Weather Events on Microbial Water Quality." In Proceedings of the Water Quality Technology Conference, November 14-18, 2010; Savannah, GA.

Long, S.C. "Removal and Inactivation of Waterborne Pathogens and Other Microbes During Drinking Water Treatment and Distribution." Food Research Institute Symposium on Water Safety and Quality: Issues Affecting Food Safety, Food Quality and Public Health, November 10, 2010; Madison, WI.



Long, S.C. and J.D. Plummer. "Strategies to Assess and Protect Source Water Quality in Multi-Purpose Lakes/Reservoirs." 30th International Symposium of the North American Lake Management Society, November 3-5, 2010; Oklahoma City, OK.

Long, S.C., Sham, C., Ragain, L., and Breedlove, J. "Current Status and Needs for Promoting Source Water Protection – Results from a pilot survey of large water systems in North America." In Proceedings of the AWWA Annual Conference and Exposition, June 12-16, 2011; Washington, DC.

Miles, A. "Tizanidine Analysis and Interpretation in an DUID Case." AAFS Annual Meeting, February 24, 2011; Chicago, IL.

Miles, A. "Marijuana Pharmacology." 40<sup>th</sup> Annual Society of Forensic Toxicologists Meeting, October 18, 2010; Richmond, VA.

Miles, A. "Drug Recognition Expert: Piecing the Puzzle Together." 40<sup>th</sup> Annual Society of Forensic Toxicologists Meeting, October 19, 2010; Richmond, VA.

Pieters, R. "1,1-Difluoroethane Abuse and Driving Impairment." 40<sup>th</sup> Annual Society of Forensic Toxicologists Meeting, October 12, 2010; Richmond, VA.

Powell, J. "Retrospective Analysis of the Viral Etiologies of Acute Gastroenteritis in Wisconsin." Clinical Virology Symposium, May 8, 2011; Daytona Beach, FL.

Pritt, B., McFadden, J., Stromdahl, E., Neitzel, D., Hoang Jonson, D., Sloan, Ly., Gongping, L., Munderloh, U., Paskewitz, S., Kemperman, M., Grady, C., Boxrud, D., McElroy, K., McQuiston, J., Warshauer, D., Davis, J., Steward, C., et al. "Emergence of a Novel *Ehrlichia* sp. Agent Pathogenic for Humans in the Midwestern United States." Poster presentation at 6th International Meeting on Rickettsiae and Rickettsial Diseases, June 5-17, 2011; Heraklion, Greece.

Raca, G., Xu, X., Arthur, A., Johnson, E., Leverton, L., and Laffin, J. "Investigating Genetic Abnormalities Associated with Y Chromosome Loss in Hematological Malignancies by High Resolution Oligo Array CGH." Poster presentation at American Society of Human Genetics Annual Meeting, November 2010; Washington, D.C.

Reisdorf, E., Whyte, T., Warshauer, D., and Shult, P. "Evaluation of the Eragen Multicode<sup>®</sup>-PLx Respiratory Virus Panel Using Barcoded Magnetic Beads Designed to Detect Seventeen Respiratory Viruses." Poster presentation at Clinical Virology Symposium, May 2011; Daytona Beach, FL.

Roop, D., Charest, A., Plummer, J., Liu, Z., and Long, S.C. "Assessing Viral Pathogen Risk via Indicator Systems." In Proceedings of the AWWA Annual Conference and Exposition, June 12-16, 2011; Washington, DC.

Siebels, A. and Long, S.C.. "Foaming Phenomenon in Bench-Scale Anaerobic Digesters." 84th Annual Meeting of the Central States Water Environment Association, May 16-18, 2011; Brooklyn Park, MN.

Shafer, M.M., Schauer, J.J., Overdier, J., and Toner, B. "Chemical Speciation of Platinum and Vanadium in Mobile Source Emissions and Urban Atmospheres." 2010 Annual Meeting of the Society for Environmental Toxicology & Chemistry, November 8-11, 2011; Portland OR.

Shafer, M.M., Toner, B., and Schauer, J.J. "Speciation and Transformations of Platinum in Environmental Materials." International Conference on the Environmental Implications of Nanotechnology (ICEIN), May 9-11, 2011; Durham, NC.

Sham, C., Long, S.C., and Gullick, R. "AWWA G300 Standard: Steps to Protect Source Water." In Proceedings of the AWWA Annual Conference and Exposition, June 12-16, 2011; Washington, DC.

Shult, P. "The Benefits and Challenges Using Modeling for Surge Capacity-Wisconsin Perspective." APHL/CPHLN/InDRE North American Laboratory Summit on Influenza, August 10-11, 2010; Vancouver, British Columbia, Canada.

Shult, P. "Regional Reference Centers for Infectious Disease Testing in the Public Health Laboratory System -- Vaccine Preventable Diseases (VPDs): Showing the Way." APHL Annual Meeting, June 5, 2011; Omaha, NE.

Shult, P. "Right Size Influenza Virologic Surveillance." APHL Annual Meeting, June 5, 2011; Omaha, NE.

Shult, P. "Right Size Influenza Virologic Surveillance." CSTE Annual Meeting, June 13, 2011; Pittsburgh, PA.

Simcox, N., Bracker, A., Ginsberg, G., Toal, B., Golembiewski, B., and Hedman, C. "Artificial turf crumb rubber field investigation in Connecticut." AIHce 2011, May, 2011; Portland, OR.

Smith, M. "Lab 101." Wisconsin Family Planning and Reproductive Health Association Meeting, May 2011; Wisconsin Dells, WI.

Stanton, N. "Wisconsin Update: Preparedness Potpourri." CDC Lab Resource Network Level One Emergency Preparedness Laboratory Meeting, March 22-24 2011; Bandera, TX.

Stanton, N. "Proficiency Testing as a Quality Tool: Values and Limitations." Mass Spectrometry Applications for Clinical Laboratories, February 5-9, 2011; San Diego CA.

Stanton, N. "GCMS Method Modifications, Exercise Updates, and Fresh Blood." CDC Lab Resource Network Level One Emergency Preparedness Laboratory Meeting, October 26-28 2010; Albuquerque NM.

Stoiber, T. "Novel Toxicity Endpoints for Understanding Cu and Cd Stress in Freshwater Algae." Invited Seminar - U.S. Geological Survey, June 2011; Menlo Park, CA.

Stoiber, T. and Shafer, M.M. "Assessing Parameters for the Development of a Biotic Ligand Model for a Freshwater Alga." 2010 Annual Meeting of the Society for Environmental Toxicology & Chemistry, November 8-11, 2010; Portland, OR.

Tans-Kersten, J., Scarpita, A., Will, L., and Warshauer, D. "Costs and Challenges Associated with Management of a Drug-Resistant Tuberculosis Patient in Wisconsin." Poster presentation for the 2011 National TB Conference, June 15-17, 2011; Atlanta, GA.

Xu, X., Arthur, A., Johnson, E., Leverton, L., Laffin, J., and Raca, G. "Utility of High Resolution Oligo Array CGH in Clinical Testing for Hematological Malignancies." Poster presentation at American Society of Human Genetics Annual Meeting, November 2010; Washington, D.C.

Xu, X., Cowan, M., Chang, F., Johnson, E., Leverton, L., Raca, G., and Laffin, J. "Increased Detection of Genomic Abnormalities in Samples from Hematological Malignancies Using Combined SNP-CGH Platform." Poster presentation at American College of Medical Genetics Annual Meeting, March 2011; Vancouver, British Columbia.

Rice, G., Raca, G., Laffin, J., Jakielski, K., Iyama-Kurtycz, C. Hartley, S., and Shriberg, L. "Phenotypic Characterization of the FOXP2 Haploinsufficiency." Poster presentation at American College of Medical Genetics Annual Meeting, March 2011; Vancouver, British Columbia.

## **VI. Other Presentations**

*Note: Last number indicates number of people attending.*

### **FY 2010**

Arndt, M.F. "MENU2010: Gross Alpha Activity in Tang and Surface Contamination of Apples." FERN National Training Conference, June 2010; Minneapolis, MN.

Arndt, M.F. "MENU2010: Results Evaluation." FERN National Training Conference, June 2010; Minneapolis, MN.

Baker, M. Newborn Bloodspot Screening for Severe Congenital Immune Deficiency Conference hosted by the Jeffrey Modell Foundation in collaboration with the CDC Foundation, November 4, 2009.

Baker, M. Forum on Planning for Future of Neonatal Screening for Primary Immunodeficiency Diseases, November 12, 2009

Baker, M. 4<sup>th</sup> Annual CME Course of Primary Immunodeficiency Diseases for the General Practitioner: Notational Screening and Molecular Diagnosis of Primary Immunodeficiencies, Nov 13, 2009.

Baker, M. 2<sup>nd</sup> Asian-Pacific Symposium on Primary Immunodeficiency Disease, Feb 5, 2010.

Baker, M. CDC Workshop on TREC Assay for SCID, February 25, 2010.

Baker, M. "Newborn Screening for SCID: What We've Learned So Far." Region 4 Genetics Collaborative- Regional Meeting, April 15, 2010.

Barry, J. "Health Hazards in Construction." Associated Building Contractors Conference, March 3, 2010; Stevens Point, WI; 25.

Barry, J. "Lead in Construction." Associated Building Contractors Conference, February 9, 2010; Wisconsin Dells, WI; 40.

Burmeister, B. and Hill, B. "Proficiency Testing 101." Matritech Sales Meeting, January 20, 2010

Drewieck, K. "DUI and Alcohol Toxicology." SPET Trial Advocacy Training for New Prosecutors, September 9, 2009; Brookfield, WI; 25.

Gruetzmacher, G. "The ABCs of Chemical Hazard Communication." Luther Midlefort Construction Partnership, August 18, 2009; 10.

Gruetzmacher, G. "A Primer on the New System for Classifying Chemicals: OSHA's Proposed Changes to HazCom." Wisconsin Association of Occupational Health Nurses Conference, October 15, 2009; 50.

Gruetzmacher, G. "Ergonomics." Wisconsin Ready Mix Association Occupational and Environmental Safety Workshop, January 28, 2010; 40.

Gruetzmacher, G. "Respirator Selection: MUC and APF." Wisconsin Department of Health Services Safety Committee, February 3, 2010; 15.

Gruetzmacher, G. "The ABCs of Chemical Hazard Communication." Associated Building Contractors Conference, February 17, 2010; 35.

Gruetzmacher, G. "Changes to HazCom: Globally Harmonized System for the Classification of Chemical Hazards." Wisconsin Safety and Health Conference, April 27, 2010; 125.

Gruetzmacher, G. "Changes to HazCom: Globally Harmonized System for the Classification of Chemical Hazards." Milwaukee Safety Day, June 10, 2010; 25.

Harding, P. "A Retrospective Comparison of Intoximeter EC/IR and Blood Alcohol Results in Wisconsin Drivers 2001-2007." International Association for Chemical Testing 23rd Annual Meeting, April 18-22, 2010; Dallas, TX; 130.

Harding, P. "Alcohol Toxicology: Curves, Charts & Calculations." 11th Annual Wisconsin Prosecutor's Seminar on OWI, January 28-29, 2010; Elkhart Lake, WI; 45.

Harding, P. "Blood Alcohol: Analysis and Interpretation." 16th Annual Traffic & Impaired Driving Law Program, April 6-7, 2010; Appleton, WI; 35.

Harding, P. "Analysis of Defense Challenges to Breath- and Blood-Alcohol Testing." The Robert F. Borkenstein Course on Alcohol and Highway Safety: Testing, Research and Litigation, December 6-11, 2009; Bloomington, IN; 65.

Harding, P. "Analysis of Defense Challenges to Breath- and Blood-Alcohol Testing." The Robert F. Borkenstein Course on Alcohol and Highway Safety: Testing, Research and Litigation, April 26-30, 2010; Bloomington, IN; 55.

Harding, P. "The Wisconsin State Laboratory of Hygiene Approach to Retrograde Extrapolation and Analyst Training." International Association for Chemical Testing 23rd Annual Meeting, April 18-22, 2010; Dallas, TX; 110.

Hemming, J. "Combining Chemistry and Biology to Study Endocrine Disruptors in the Environment." UW-Whitewater Colloquium Series, February 19, 2010; 25.

Hemming, J. Invited speaker, Society of Environmental Journalists Bus Tour. October 8, 2009; 30.

Hill, B. "Proficiency Testing Trends and Method Performance." Clinical Laboratory Improvement Advisory Committee Meeting, September 3, 2009.

Johnson, W. "Forensic Interpretation of Blood THC Testing." Wisconsin State Patrol Accident Reconstruction Course, WSP Academy, March 30, 2010; Fort McCoy, WI; 25.

Johnson, W. "Drive for Sleep: Driving Impairment and Sleep Aids." The 15th Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving, August 9, 2009; Little Rock, AR; 600.

Kirk, C. and Shult, P. "Influenza Part I and Part II." ASCLS-WI State Convention, April 7, 2010; Stevens Point, WI; 75

Kurtycz, D. "Neuroendocrine (Small cell) Carcinoma of the uterine Cervix." Africa Calls 2009 teleconference series presented by the Annenberg Center, July 28, 2009; 19 medical centers in 11 African nations.

Laffin, J. "Introduction to Cytogenetics." American Society for Clinical Pathology teleconference, June 10, 2010.

Liddicoat, L. "Drugged Driving: Current Events." 16th Annual Traffic & Impaired Driving Law Program, April 6-7, 2010; Appleton, WI; 50.

Liddicoat, L. and Harding, P. "WSLH Alcohol and Drug Testing: Changes, Challenges and Backlogs." 11th Annual Wisconsin Prosecutor's Seminar on OWI, January 28-29, 2010; Elkhart Lake, WI; 115.

Long, S.C. and Degnan, A. "Strategies for Detecting Microbial Contamination in Food Processing Water." FRI 2010 Annual Spring Meeting, May 18-19, 2010.

Long, S.C. and Siebels, A. "Bench-scale Study of Anaerobic Digester Foaming." Central States Water Environment Association Anaerobic Digester Foaming Workshop, April 21, 2010; Madison, WI.

Long, S.C. "Testing Water Quality in Wisconsin." Madison Kiwanis Club, December 30, 2009.

Miles, A. "Imidazopyridines and Human Performance." Robert F. Borkenstein Course on the Effects of Drugs on Human Performance and Behavior, April 12-16, 2010; Bloomington, IN; 60.

Miles, A. "Hallucinogens and Dissociative Anesthetics." Robert F. Borkenstein Course on the Effects of Drugs on Human Performance and Behavior, April 12-16, 2010; Bloomington, IN; 60.

Miles, A. "Side Effects May Include: Nausea, Dizziness and a Better Understanding of Drug Impaired Driving." Midwest Association for Toxicology and Therapeutic Drug Monitoring, MATT 2010, April 30, 2010; Milwaukee, WI; 100.

Miles, A. "Drug Recognition Expert Recertification Training 2009." WI DOT DRE Training, August 13, 2009; Madison, WI; 6

Miles, A. "Rx Impaired Driving: Do Not Drive or Operate Heavy Machinery While Attending This Workshop." 35th Annual Governor's Conference on Highway Safety, August 20, 2009; Appleton, WI; 70.

Miles, A., Jenswold-Schipper, T., and Reilly, D. "Tackling the Drugged Driver Case." 11th Annual Wisconsin Prosecutor's Seminar on OWI, January 28-29, 2010; Elkhart Lake, WI; 55.

Miles, A. "2010 DRE Recertification." Annual DRE Recertification, April 7, 2010; Appleton, WI; 50.

Miles, A. "2010 DRE Recertification." Annual DRE Recertification, May 19, 2010, Green Bay, WI; 12.

Miles, A. "2010 DRE Recertification." Annual DRE Recertification, May 20, 2010; La Crosse, WI; 10.

Miles, A. "Drugs and Driving Impairment." Illinois Judicial Conference, May 14, 2010; Oak Brook, IL; 35.

Miles, A. "Danger! Curves Ahead: The Effects of Alcohol on Human Performance." Illinois Judicial Conference, May 14, 2010; Oak Brook, IL; 35.

Moen, T. "Wisconsin OSHA Consultation Program Update." OSHA Region V Conference, July 20, 2009; 75.

Moen, T. "H1N1 Flu Pandemic Preparedness." Jefferson County Area Safety Network, September 10, 2009.

Moen, T. "OSHA Update." Northeast Wisconsin Association of Practitioners in Infection Control Meeting, September 11, 2009.

Moen, T. and Gruetzmacher, G. "Nanotechnology in Wisconsin." Wisconsin Assembly Committee on Public Health and Public Safety, October 6, 2009.

Moen, T. "Occupational Exposures to Hazardous Chemicals in Laboratories." Madison Area Technical College, October 9, 2009.

Moen, T. "Chemical Hygiene Plans." Mutual Insurance, Risk and Loss Control Group, October 15, 2009.

Moen, T. "OSHA Overview for Wisconsin Health Care Association." Wisconsin Health Care Association Conference, April 14, 2010.

Powell, J. "Rabies Diagnosis and Specimen Submission." Agriculture 13 (DATCP), November 4, 2009; Wisconsin Dells, WI.

Powell, J. "Fluorescence Microscopy." National Laboratory Training Network, Laboratory Methods for Detecting Rabies, January 25, 2010; Atlanta, GA.

Powell, J. "Quality Assurance in the Rabies Laboratory." National Laboratory Training Network, Laboratory Methods for Detecting Rabies, January 26, 2010; Atlanta, GA.

Shalkham, J. and Smith, M. "Strengths Training." Wisconsin Society of Cytology, September 19, 2009; Wisconsin Dells, WI; 30

Shalkham, J. and Smith, M. "Leading with Your Strengths." American Society for Cytopathology, April 11, 2010; Austin, Texas; 60

Smith, M. and Shalkham, J. "Why Reality Doesn't Have to Bite: Tools for Keeping Your Professional Life Fresh." Wisconsin Society of Cytology Fall Conference, September 19, 2009; Wisconsin Dells, WI.

Smith, M. and Gill, G. "Laboratory Compliance for Fun and Profit." American Society of Cytopathology 57<sup>th</sup> Annual Scientific Meeting, November 2009; Denver, CO.

Smith, M. "Pap Test Collection Techniques." Wisconsin Family Planning and Reproductive Health Association meeting, January 2010; Wausau, WI.

Shult, P. "The History of Investigating Influenza at the WSLH: H1N1 and Influenza in Wisconsin." Population Health Sciences 50<sup>th</sup> Anniversary Symposium, August 27, 2009; Madison, WI; 75.

Shult, P. "2009 Influenza A (H1N1); Is the Pandemic All We Thought It Would Be?" Reedsburg Memorial Hospital Weekly Seminar, October 2, 2009; Reedsburg, WI; 36.

Shult, P. and Kirk, C. "2009 H1N1 Influenza: Yesterday, Today and Tomorrow." CLMA-WI Annual Meeting, October 15, 2009; Waupaca, WI; 35.

Shult, P. "2009 Influenza A (H1N1): Is the Pandemic All We Thought It Would Be?" UW-Madison Academic Staff Highlight Series, October 27, 2009; Madison, WI; 75.

Shult, P. "Emerging Infectious Diseases: An Update." ASCLS-Fox Valley Meeting, November 19, 2009; Appleton, WI; 25.

Shult, P. "2009 Influenza A (H1N1): Is the Pandemic All We Thought It Would Be?" UW-Madison School of Nursing Seminar, December 10, 2009; Madison, WI; 24.

Shult, P. "2009 Influenza A (H1N1); Is the Pandemic All We Thought It Would Be?" WAHMR 2010, February 12, 2010; Wisconsin Dells, WI; 35.

Shult, P. "Wisconsin State Laboratory of Hygiene: Update of Roles, Capabilities and Diagnostic Issues related to Chem-Bio Event Response." WAHMR 2011, February 24, 2010; Wisconsin Dells, WI; 35.

Shult, P. "The Laboratory Response Network for Bioterrorism; The WSLH's Role." Criminal Epidemiology Workshop for Bioterrorism, May 19, 2010; Milwaukee, WI; 65.

Shult, P. "Vaccines: Can you Imagine Public Health Without Them?" Wednesday Nite @ the Lab Series, UW-Madison, May 5, 2010; Madison, WI; 45.

Stanton N. "WSLH Role & Capabilities in Chemical Emergencies." Red Dragon preparedness exercise, June 14-15, 2010; Fort McCoy, WI; 100.

Tans-Kersten, J. "Improving Laboratory Services through a Systems Approach: the Wisconsin Mycobacteriology Laboratory Network." National Tuberculosis Controllers Association Annual Conference, June 2010; Atlanta, GA.

Warshauer, D. "Mycobacterium tuberculosis: Assessing your Laboratory." National Laboratory Training Network Teleconference, September 29, 2009.

Warshauer, D. "Mycobacterium tuberculosis: Assessing your Laboratory." 6<sup>th</sup> National Conference on Laboratory Aspects of Tuberculosis, June 22, 2010; 75.

Warshauer, D. "Validation and Verification--- or Verification and Validation of Molecular Assays." 6<sup>th</sup> National Conference on Laboratory Aspects of Tuberculosis, June 22, 2010; 150.

## **FY 2011**

Baker, M. Invited Scientists' Scholar Activities at Fudan University (Shanghai, China), Oct 15, 2010.

Baker, M. and Brokopp, C. "Newborn Screening for SCID and Other Severe T-cell Lymphopenias." UW-Madison Wednesday Nite @ the Lab, November 3, 2010.

Baker, M. 2011 American College Medical Genetics Annual Clinical Genetics Meeting Education Symposia: New Horizons in Clinical Genetic Testing, March 17, 2011.

Baker, M. Heartland Genetics and NBS Collaborative Regional Workshop on Implementation of Newborn Screening for SCID, April 7, 2011.

Baker, M. "Newborn Screening for Severe Combined Immune Deficiency (SCID)." Two-part webcast sponsored by Association of Public Health Laboratories Quality Assurance/Quality Control Subcommittee of the Newborn Screening and Genetics in Public Health Committee and the Newborn Screening Quality Assurance Program, CDC, May 18, 2011.

Barry, J. "Lead in Construction." Associated Building Contractors Conference, March 2, 2011; Appleton, WI; 40.

Eisenman, J. "Highway Construction Hazards." Hwy 41 Construction Subcontractors Meeting, January 14, 2011; 50.



Eisenman, J. "Employee Training Requirements in OSHA General Industry Standards." Sheboygan Area Safety Council, June 1, 2011; 100.

Gruetzmacher, G. "Lead Exposure: Installation of Lead Lined Drywall." OSHA Region V Conference, August 3, 2010; 90.

Gruetzmacher, G. "When is it OSHA Recordable?" January 3, 2011; 90.

Gruetzmacher, G. "Health Hazards in Construction: Confined Spaces, Noise and Chemical Hazard Communication." Wisconsin Ready Mix Occupational and Environmental Safety Workshop, January 13, 2011; 60.

Gruetzmacher, G. "Interpretation of Industrial Hygiene Sampling." OSHA Consultation Program Managers Conference, March 4, 2011; 20.

Gruetzmacher, G. "OSHA Standards." Wisconsin Auto Collision Technicians Association Conference, March 15, 2011; 15.

Harding, P. "Alcohol Curves, Charts and Calculations: Interpreting Alcohol Concentrations." 12<sup>th</sup> Annual Prosecutor's Seminar on OWI, November 11-12, 2010; Elkhart Lake, WI; 50.

Harding, P. "Alcohol Curves, Charts and Calculations: Interpreting Alcohol Concentrations." 17<sup>th</sup> Annual Traffic and Impaired Driving Law Program, April 5-6, 2011; Appleton, WI; 40.

Harding, P. "Alcohol Toxicology." Lethal Weapon DUI Homicide Course, August 23-27, 2010; Columbia, SC; 43.

Kurtycz, D. "Gynecologic Cytology 2010: The State of the Practice." UW School of Medicine and Public Health Department of Obstetrics and Gynecology Grand Rounds, May 2010; Madison, WI; 40.

Laffin, J. "Tell-tale Clues: Testing Chromosomes to Diagnose Diseases in Children." UW Wednesday Nite @ the Lab presentation, November 17, 2010.

Laffin, J. "Finding New Candidate Genes for Idiopathic Intellectual and Developmental Disabilities." UW School of Medicine and Public Health Department of Pediatrics general faculty meeting, March 2, 2011.

Liddicoat, L. "Drug Impaired Driving." 12<sup>th</sup> Annual Prosecutor's Seminar on OWI, November 11-12, 2010; Elkhart Lake, WI; 75.

Liddicoat, L. "Drug Impaired Driving Trends." 17<sup>th</sup> Annual Traffic and Impaired Driving Law Program, April 5-6, 2011; Appleton, WI; 60.

Long, S.C "Removal and Inactivation of Waterborne Pathogens and Other Microbes During Drinking Water Treatment and Distribution." Food Research Institute Symposium on Water Safety and Quality: Issues Affecting Food Safety, Food Quality and Public Health, November 10, 2010; Madison, WI.

Long, S.C. and Plummer, J. "Strategies to Assess and Protect Source Water Quality in Multi-Purpose Lakes/Reservoirs." 30th International Symposium of the North American Lake Management Society, November 3-5, 2010; Oklahoma City, OK.

Miles, A. "Caution: Side Effects May Include a Better Understanding of DUID Cases." Wisconsin Narcotics Officers Association (WNOA), March 4, 2011; Wisconsin Dells, WI; 50.

Miles, A. and Pieters, R. "The Reality Behind Fake Pot." 17<sup>th</sup> Annual Traffic and Impaired Driving Law Program, April 5-6, 2011; Appleton, WI; 110.

Miles, A. "Current Trends in Designer Drugs." Wisconsin DRE Recertification Program, June 20, 2011; Manitowoc, WI; 25.

Miles, A. "Presenting the Toxicology Evidence." Prosecuting the Drug Impaired Driver Course, October 23, 2010; West Yellowstone, MT; 60.

Miles, A. "Synthetic Cannabinoids." Prosecuting the Drug Impaired Driver Course, October 25, 2010; West Yellowstone, MT; 60.

Miles, A. "Drug Impaired Driving." 17<sup>th</sup> Annual Traffic and Impaired Driving Law Program, April 5-6, 2011; Appleton, WI; 120.

Moen, T. "Nanotechnology." Wisconsin State Legislature Special Committee on Nanotechnology, September 30, 2010.

Neuser, T. "Forensic Toxicology at the Wisconsin State Laboratory of Hygiene." Wisconsin Younger Chemists Committee Career Symposium, October 23, 2010; Madison, WI; 130.

Percy S. "Reducing Beryllium Exposure Risk: An ICP-MS Method to Determine Low-Level Beryllium in Occupational Samples." Fall 2010 Public Health Symposium, November 12, 2010; Madison, WI; 25.

Powell, J. "Rabies Diagnosis and Specimen Submission." Agriculture 13 (DATCP), November 3, 2010; Wisconsin Dells, WI.

Powell, J. "Rabies Proficiency Testing", March 30, 2010, USDA Wildlife Services 12<sup>th</sup> Annual Rabies Management Team Meeting, March 29, 2011; Nashville, TN.

Scharmer, S. "Lockout Tagout." Wisconsin Ready Mix Association Occupational and Environmental Safety Workshop, January 13, 2011; 60.

Scharmer, S. "What Safety Looks Like." Rock County Safety, April 12, 2011; 38.

Shalkham, J. "Quality Assurance for the Evolving Cytopathology Laboratory." American Society for Cytopathology Teleconference Series, August 24, 2010; 60 participant laboratories.

Shalkham, J. and Smith, M. "Strengths Training, Taking the Lead to Solve Problems." American Society for Cytopathology, April 17, 2011; San Francisco, CA; 60.

Shalkham, J. "Quality System Essentials and ISO 15189 – Impact on the Cytopathology Laboratory." American Society for Clinical Pathologists Teleconference Series, April 21, 2011; 52 participating laboratories.

Sham, C.H., Long, S.C., and Gullick, R. "American Water Works Association G-300 Standard (Source Water Protection): Steps to Protect Source Water Quality in Lakes and Reservoirs." 30th International Symposium of the North American Lake Management Society, November 3-5, 2010; Oklahoma City, OK.

Shult, P. and Bowles, E. "Panel Discussion on Wisconsin Clinical Laboratory Science Workforce Survey, 2010." Wisconsin Health Workforce Data Collaborative Meeting, January 31, 2011; 15.

Shult, P. "Influenza Update-2010." Sauk Prairie Memorial Hospital Weekly Seminar, October 5, 2010; Sauk Prairie, WI; 25.

Shult, P. "Vaccines: Can You Imagine Public Health Without Them?" ASCLS-Fox Valley Meeting, November 11, 2010; Appleton, WI; 25

Shult, P. "Vaccine Preventable Diseases: Why are They Still a Public Health Problem?" ASCLS State Convention, April 6, 2011; Waukesha, WI; 90.

Shult, P. "Response to Public Health Emergencies: The Role of the Laboratory." National Medical Laboratory Professionals Symposium, UW Hospital and Clinic; April 25, 2011; Madison, WI; 25.

Shult, P. "2009 H1N1 Influenza: Public Health and Laboratory Lessons Learned." Spring 2011 CLIA Midwest Consortium Meeting, May 10, 2011; Milwaukee, WI; 75.

Shult, P. "Re-emergence of Vaccine-Preventable Diseases (VPD)." 21<sup>st</sup> Annual WI Virology Conference, June 2, 2011; Madison, WI; 25.

Shult, P., Spallato, A., and Stanton, N. "Wisconsin State Laboratory of Hygiene Update of Roles, Capabilities and Diagnostic Issues related to Chem-Bio Event Response." Wisconsin Association of Hazardous Materials Responders Annual Meeting, February 24-25, 2011; Wisconsin Dells WI.

Strebel, S. "Wisconsin Occupational Health Laboratory Updates." OSHA Region V Family Meeting, July 20-22, 2010; 55

Strebel, S. "Wisconsin Occupational Health Laboratory Updates." OSHA Region V Family Meeting, August 2-4, 2010; 60

Tans-Kersten, J. "Diagnostic TB PCR at the Wisconsin State Laboratory of Hygiene." Wisconsin Mycobacteriology Laboratory Network Annual Conference, November 2010; Madison WI.

Tans-Kesten, J. "Susceptibility Testing and Updates from the Wisconsin State Laboratory of Hygiene." Wisconsin Mycobacteriology Laboratory Network Annual Conference, November 2010; Madison WI.

Warshauer, D. "Antibiotic Resistance and the Challenge to the Clinical Microbiology Laboratory. CLIA Midwest Consortia Meeting, May 11, 2011; 30.

Warshauer, D. Convener "Mycobacteriology in 2011" Symposium. 111<sup>th</sup> General Meeting of the American Society for Microbiology, May 21-24, 2011, New Orleans, LA; 250.

Warshauer, D. "Making PT Work for You." 7<sup>th</sup> National Conference on Laboratory Aspects of Tuberculosis, June 14, 2011; 150.

## **VII. Programs, Workshops and Courses Presented by the WSLH**

### **FY 2010**

Bowles, E., Kirk, C., Reisdorf, E., and Shult, P. "Molecular Diagnostics in Clinical Microbiology: A Statewide Conference for Wisconsin Laboratories." September 9, 2009; Wisconsin Dells, WI.

Costello, M., Fehrenbacher, L., Fritsche, T., Podzorski, R., Warshauer, D., and Wisniewski, T. "Challenges in Antimicrobial Susceptibility Testing – 2010." WCLN workshop, May 13, 2010; Wisconsin Dells, WI.

Kirk, C., Heffernan, R., and Haupt, T. "Wisconsin Influenza Update – 2009." WSLH audio conference, October 22, 2009.

Munson, E. "Antibiotics 101 for Laboratory Professionals – Part 1." WSLH audio conference, February 10, 2010.

Munson, E. "Antibiotics 101 for Laboratory Professionals – Part 2." WSLH audio conference, March 10, 2010.

Novicki, T. "Lyme Disease, Human Granulocytic Anaplasmosis and Babesiosis." WSLH audio conference, January 13, 2010.

Smith, M. "Cytology Update." Health Care Education and Training Network teleconference, November 2009; 30 sites.

Smith, M. "Cytology Update." Health Care Education and Training Network teleconference, April 2010; 30 sites.

Shult, P., Warshauer, D., Kirk, C., Bowles, E., Wedig, M., Tans-Kersten, J., and Monson, T. "On the Road Again." WCLN 2009 Regional Meetings -- September 16, 2009, New Berlin, WI; September 17, 2009, Kimberly, WI; September 23, 2009, Rice Lake, WI; September 24, 2009, Wisconsin Dells, WI.

Shult, P., Kirk, C., and Warshauer, D. "Laboratory Testing Plans and Recommendations for the Upcoming Influenza Season." WSLH audio conference, September 2, 2009.

Spiegel, C. "Laboratory Testing of Genital Tract Specimens." WSLH audio conference, November 11, 2009.

Tans-Kersten, J., and Warshauer, D. Wisconsin Mycobacteriology Laboratory Network Annual Conference, November 10, 2009.

Warshauer, D. and Munson, E. "Review of September 2009 Educational BT Proficiency Exercise Agent." WSLH audio conference, December 16, 2009.

Warshauer, D. "Antibiotics 102: Reading and Interpreting CLSI Antimicrobial Susceptibility Performance Documents." WSLH audio conference, April 14, 2010.

Warshauer, D. and Ledeboer, N. "Review of April 2010 Educational BT Proficiency Exercise Agent." WSLH audio conference, June 9, 2010.

## **FY 2011**

Bowles, E., Podzorski, R., Tans-Kersten, J., and Valley, A. "Gram Stain Fundamentals 2010 – A Wet Workshop for Clinical Laboratories." July 16, 2010; Pewaukee, WI; 21.

Bowles, E., Kirk, C., Monson, T., Reisdorf, E., and Warshauer, D. "WCLN 2010: The Laboratory Forecast." 2010 WCLN Regional Meetings -- September 9, 2010, Kimberly, WI; September 10, 2010, Brookfield, WI; September 14, 2010, Wisconsin Dells, WI; September 15, 2010, Rice Lake, WI; 165.

Bowles, E. and Warshauer, D. "2011 Molecular Diagnostics: Coming Soon To Your Laboratory." May 18, 2011; Wisconsin Dells, WI; 97.

Gallivan, M. and Warshauer, D. "Review of the May 2010 Antimicrobial Susceptibility Testing Educational Exercise." WSLH audio conference, August 11, 2010; 25 sites.

Monson, T. "Shiga Toxin-Producing *E. coli* in Wisconsin: Past, Present and Future." WSLH audio conference, November 3, 2010; 44 sites.

Munson, E. "Molecular Biology 101 for Laboratory Professionals – Part One." WSLH audio conference, January 19, 2011; 52 sites.

Munson, E. "Molecular Biology 101 for Laboratory Professionals – Part Two." WSLH audio conference, February 9, 2011; 54 sites.

Podzorski, R. "*Clostridium difficile* Infections: So Many Tests, Which One to Choose?" WSLH audio conference, March 9, 2011; 40 sites.

Reisdorf, E., Shult, P., and Wedig, M. "Influenza Update for Wisconsin Laboratories." WSLH audio conference, October 6, 2010; 137 sites.

Reisdorf, E. and Shult, P. "Update on Rotavirus and Other Viral Causes of Acute Gastroenteritis." WSLH audio conference, January 26, 2011; 38 sites.

Reisdorf, E., Shult, P., and Bowles, E. 21<sup>st</sup> Annual Wisconsin Virology Conference, June 6, 2011; UW-Madison; 38.

Smith, M. "Cytology Update." Health Care Education and Training Network teleconference, November 2010; 30 sites.

Smith, M. "Cytology Update." Health Care Education and Training Network teleconference, April 2011; 30 sites.

Spiegel, Carol. "Anaerobic Culture: When, What, How and How Far to Test." WSLH audio conference, April 13, 2011; 45 sites.

Strebel, S. "OTI Course 1510 - Analytical Laboratory Orientation for State Consultants." November 12, 2010; Madison, WI.

Tans-Kersten, J., Sparks, N., Kim, Y., Guaracao, A., Woolever, N., and Warshauer, D. "The Wisconsin Mycobacteriology Laboratory Network Annual Conference, November 9, 2010; Madison, WI; 65.

Warshauer, D. and Wisniewski T. "Review of September 2010 Educational BT Proficiency Exercise Agent." WSLH audio conference, December 15, 2010; 33 sites.

## **VIII. Programs, Workshops and Courses where WSLH was a Co-Sponsor**

### **FY 2010**

Brokopp, C. Ohio Newborn Screening Advisory Committee – SCID Screening, March 2010.

Gruetzmacher, G. "Interpretation of Industrial Hygiene Sampling." Wisconsin Safety and Health Conference, April 26, 2010; Wisconsin Dells, WI: 12.

Kirk, C. and Shult, P. "Influenza Update 2009." National Laboratory Training Network Teleconference, November 17, 2009; 75 sites.

Monson, T., Brokopp, C., and Warshauer, D. Midwest Regional PulseNet Symposium, May 2010.

Shult, P. and Temte, J. "The Utility of Rapid Influenza Diagnostic Tests (RIDTs) for Detection of 2009 Influenza A (H1N1) and Seasonal Influenza." National Laboratory Training Network Teleconference, November 10, 2009; 200 sites.

WisCon Staff. OSHA 10 Hour Construction Course (in Spanish). Latino Entrepreneurial Network, October 2009; 15.

WisCon Staff. OSHA 10 Hour General Industry Course, Four City Safety Council. November 10-11, 2009; Baraboo, WI; 30.

WisCon Staff. OSHA 10 Hour Construction Industry Course. February 24-25, 2010; Madison WI; 25.

WisCon Staff. OSHA 10 Hour Construction Industry Course (Teenage workers). March 2010; Racine WI; 30.

WisCon Staff. "Basic OSHA Requirements." Wisconsin Safety and Health Conference, April 26, 2010; Wisconsin Dells, WI; 20.

WisCon Staff. OSHA 10 Hour Construction Course, February 24-25, 2010; Madison WI; 25.

## **FY 2011**

Gruetzmacher, G. Consultation System Assessment Training Course. OSHA Training Institute, December 1-3, 2010; Pickerington, OH; 23.

Gruetzmacher, G. Consultation System Assessment Training Course. OSHA Training Institute, February 16-18, 2011; Hudson, MN; 19.

Gruetzmacher, G. "Exposure Assessment Using Whole Air Sampling." American Industrial Hygiene Conference, May 15, 2011; Portland OR; 30.

Gruetzmacher, G. Consultation System Assessment Training Course. OSHA Training Institute, June 28-30, 2011; Arlington Heights, IL; 20.

Shult, P. Multiple Lectures. National Laboratory Training Network / WSLH Public Health Virology Workshop, September 21-24, 2010; Chicago, IL; 36.

Shult, P. "2010 Influenza Update." National Laboratory Training Network teleconference, November 2, 2010; 75 sites.

Shult, P. "Wisconsin Unknown Substance Protocol -March 2011: History of the Protocol." WI Department of Health Services Webcast; April 15, 2011; Madison, WI; 75 sites.

Warshauer, D. "Nucleic Acid Amplification Testing for the Diagnosis of TB." National Laboratory Training Network teleconference, September 28, 2010.

WisCon Staff. OSHA 10 Hour Construction Course (in Spanish). Latino Entrepreneurial Network, November 22-23, 2010; 10.

WisCon Staff. OSHA 10 Hour Construction Course. Milwaukee Metro Builder Association, January 24-25, 2011; Milwaukee, WI; 25.

WisCon Staff. OSHA 10 Hour General Industry Course, April 2011; 25.

WisCon Staff. OSHA 10 Hour General Industry Course. Wisconsin Association of Safety Engineers and OSHA, June 8-9, 2011; Pewaukee, WI; 22.

**IX. University (any 4-year school) and Technical College Courses Taught or Lectures Presented or Fellowships/Rotations Provided**

*Note: Last number indicates number of people attending.*

**FY 2010**

Baker, M. Clinical Laboratory Science 525, "Expanded Newborn Screening by Tandem Mass Spectrometer." UW-Madison.

Baker, M. Clinical Laboratory Science 560, "Newborn Screening for Severe Combined Immunodeficiency." UW-Madison.

Baker, M. Mentor to Master's of Public Health (MPH) candidate, May 2010 – present; UW-Madison.

Baker, M. "Introduction to the Newborn Screening Laboratory." UW-Madison Genetic Counseling students – 5 student/year, 4 hours per student.

Baker, M. Population Health 913, "Rotation in WSLH Newborn Screening Laboratory." 2 – 4 students/year, 2 weeks per student; UW-Madison.

Brokopp, C. Master's in Biotechnology program, "Advanced Biotechnology and the Evolving Role of the WSLH." UW-Madison.

Brokopp, C. Nursing 401, "Ethical Considerations in Laboratory Screening." UW-Madison.

Brokopp, C. Faculty Advisor to Master's of Public Health (MPH) candidates, 2010: UW-Madison.

Burmeister, B. and Hill, B. Clinical Laboratory Science 102, "Proficiency Testing." September 18, 2009; UW-Madison.

Gruetzmacher, G. Safety 469/479, "Principles and Practices of Industrial Hygiene." Fall 2009; UW-Whitewater.

Gruetzmacher, G. Occupational Safety Course, "Industrial Hygiene." November 5, 2009; UW-Madison.

Gruetzmacher, G. Safety 469/479, "Principles and Practices of Industrial Hygiene." Spring 2010; UW-Whitewater.



Gruetzmacher, G. Ergonomics in the Workplace Course, "Ergonomics: Musculoskeletal Disorders." April 9, 2010; UW-Platteville.

Gruetzmacher, G. Industrial Hygiene Course, "Industrial Hygiene Sampling and Interpretation." April 22, 2010; UW-Eau Claire.

Laffin, J. Medical Genetics 562, "Human Cytogenetics." Spring 2010; UW-Madison.

Long, S.C. Soil Science 875- Lec 003/Civil Environmental Engineering 629-Lec 002, "Microbiology of Waterborne Pathogens and Indicator Organisms." Fall 2009; UW-Madison.

Long, S.C. Soil Science 324, "Soils and Environmental Quality." Fall 2009; UW-Madison.

Long, S.C. Soil Sciences 728 Graduate Seminar, "Uncovering the culprit: microbial source tracking of groundwater contamination." April 2010; UW-Madison; 20.

Long, S.C., Plummer, J., Bloetscher, F., and Sham, C. "Climate Change and Waterborne Disease." Presented as a seminar to the Environmental Science Program and the Plant and Soil Science Department, University of Massachusetts Amherst, March 22, 2010.

Long, S.C. Applied Research Seminar series, "Climate Change, Extreme Weather Events, and Waterborne Disease Outbreaks." March 12, 2010; UW-Whitewater.

Long, S.C. Environmental Engineering Seminar Series, "Water Security: Preparing for and Responding to Threats and Incidents." December 4, 2009; Worcester Polytechnic Institute, Worcester, MA.

Powell, J. Clinical Laboratory Science 536, "Respiratory Virus Overview." April 16, 2010, UW-Madison.

Powell, J. Zoonoses (091-115), "Rabies Information for the Veterinary / Animal Care Professional," April 23, 2010; Madison Area Technical College, Madison, WI.

Powell, J. Clinical Laboratory Science 536, "Herpesviruses." May 5, 2010; UW-Madison; 24.

Schell, R. Medical Microbiology and Immunology 682, "Research." Fall 2009; UW-Madison.

Schell, R. Medical Microbiology and Immunology 677, "Advances Infectious Diseases." Fall 2009; UW-Madison.

Schell, R. Medical Microbiology and Immunology 696, "Critical Thinking in Microbiology." Fall 2009; UW-Madison.

Schell, R. Medical Microbiology and Immunology 699, "Directed Study." Fall 2009; UW-Madison.

Schell, R. Medical Microbiology and Immunology 504, "Infectious Diseases." Fall 2009; UW-Madison.

Schell, R. Pathology and Biology 990, "Research." Fall 2009; UW-Madison.

Schell, R. Microbiology 990, "Research." Spring 2010; UW-Madison.

Schell, R. Medical Microbiology and Immunology 603, "Clinical and Public Health Microbiology." Spring 2010; UW-Madison.

Schell, R. Medical Microbiology and Immunology 699, "Directed Study." Spring 2010; UW-Madison.

Schell, R. Medical Microbiology and Immunology 677, "Flow Cytometry." Spring 2010; UW-Madison.

Schell, R. Medical Microbiology and Immunology 677, "Advances in Infectious Diseases." Spring 2010; UW-Madison.

Schell, R. Animal Health and Biomedical Sciences 990, "Research." Spring 2010; UW-Madison.

Schell, R. Microbiology 990, "Research." Summer 2010; UW-Madison.

Shalkham, J. Clinical Laboratory Science 404, "Laboratory Instrumentation." Spring 2010; UW-Madison; 24.

Shalkham, J. Clinical Laboratory Science 410, "Basic Cytology." Fall 2009; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 540, "Gynecologic Cytology." Fall 2009; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 510, "Advanced Laboratory Practice." Fall 2009; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 543, "Respiratory Cytopathology." Fall 2009; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 545, "Urinary Cytopathology." Fall 2009; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 546, "Gastrointestinal Tract Cytology." Spring 2010; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 544, "Breast Cytopathology." Spring 2010; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 549, "Thyroid Cytopathology." Spring 2010; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 551, "Advanced Clinical Practice." Spring 2010; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 573, "Applied Cytology I." Spring 2010; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 574, "Applied Cytology II." Spring 2010; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 625, "Laboratory Operations." Spring 2010; UW-Madison; 8.

Shalkham, J. Clinical Laboratory Science 630, "Seminars in Clinical Cytology." Spring 2010; UW-Madison; 8.

Shult, P. Microbiology 500, "Emerging Infectious Diseases." November 9, 2009; UW-La Crosse Clinical Microbiology Students tour; UW-Madison; 6.

Shult, P. Microbiology 500, "Emerging Infectious Diseases." November 12, 2010; UW-La Crosse Clinical Microbiology Students tour; UW-Madison; 6.

Shult, P. Medical Microbiology and Immunology 554, "Emerging Infectious Diseases and Bioterrorism." Fall 2009; UW-Madison; 36.

Shult, P. "The Threat of Emerging Diseases." March 2, 2010; Marquette University Public Health Course; Milwaukee, WI; 45.

Shult, P. Medical Microbiology and Immunology 555, "Vaccines: Practical Issues for a Global Society." Spring 2010; UW-Madison; 24

Shult, P. Clinical Laboratory Science 536, "Medical Virology." Spring 2010; UW-Madison; 24.

Smith, M. Clinical Laboratory Science 102, "Cytotechnology Program." October 2009; UW-Madison; 100.

Stanton, N. "Childhood Lead Poisoning." March 2 2010; UW-Madison; 100.

Warshauer, D. Clinical Laboratory Science 535, "Facultative gram-positive rods." September 24, 2009; UW-Madison; 24.

Warshauer, D. Medical Microbiology and Immunology 554, "Foodborne Disease: Role of Pulsed-field Gel Electrophoresis and PulseNet." October 6, 2009; UW-Madison; 12.

Warshauer, D. Clinical Laboratory Science 535, "Fastidious gram-negative rods." November 3, 2009; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 535, "Fastidious gram-negative rods (cont.)." November 5, 2009; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 535, "Mycobacterium, Nocardia, and Rhodococcus." November 12, 2009; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 535, "Mycobacterium, Nocardia, and Rhodococcus (cont.)." November 17, 2009; UW-Madison; 24.

Warshauer, D. Madison Area Technical College Clinical Laboratory Technician Program, "Mycobacteriology." January 19, 2010; 6

Warshauer, D. Population Health Sciences 801, "Laboratory Methods in Infectious Disease." February 9, 2010; UW-Madison; 18.

Warshauer, D. Clinical Laboratory Science 536, "Introduction to Medical Mycology." February 24, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Contaminants, Subcutaneous Mycoses, and Actinomyces." February 26, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "The Dermatophytes and Superficial Mycoses." March 3, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Infections due to Yeasts." March 5, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Systemic Mycoses Part 1." March 10, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Systemic Mycoses Part 2." March 12, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Mycology Laboratory." February 24-March 26, 2010; UW-Madison; 24.

## **FY 2011**

Baker, M. Clinical Laboratory Science 525, "Expanded Newborn Screening by Tandem Mass Spectrometer." UW-Madison.

Baker, M. Clinical Laboratory Science 560, "Newborn Screening for Severe Combined Immunodeficiency." UW-Madison.

Baker, M. "Introduction to the Newborn Screening Laboratory." UW-Madison Genetic Counseling students – 5 student/year, 4 hours per student.

Baker, M. Population Health 913, "Rotation in WSLH Newborn Screening Laboratory." 2 – 4 students/year, 2 weeks per student; UW-Madison.

Baker, M. Mentor to Master's of Public Health (MPH) candidate, UW-Madison; May 2010 – present.

Baker, M. and Brokopp, C. Mentor to Ronald H. Laessig Memorial Newborn Screening Fellow (fellowship sponsored by APHL, CDC and Jeffrey Modell Foundation). January 2011 – present.

Brokopp, C. "Preparedness and Mass Communication." November 2010; UW-Madison.

Brokopp, C. Faculty Advisor to Master's of Public Health (MPH) candidate, 2011: UW-Madison.

Burmeister, B. and Hill, B. Clinical Laboratory Science 102, "Proficiency Testing." November 12, 2010; UW-Madison.

Gehl, S. Clinical Laboratory Science Management Seminar 640, "Financial Management." Spring 2011; UW-Madison.

Gruetzmacher, G. Safety 469/479, "Principles and Practices of Industrial Hygiene." Fall 2010; UW-Whitewater.

Gruetzmacher, G. Safety 790, "Advanced Industrial Hygiene Workshop." Spring 2011; UW-Whitewater.

Gruetzmacher, G. Industrial Hygiene Course, "Industrial Hygiene Measurement and Interpretation." March 30, 2011; UW-Platteville.

Laffin, J. Medical Genetics 739. Fall 2010; UW-Madison.

Laffin, J. Nursing 461 – Public Health Nursing Clinical, "Topics in Medical Genetics." Fall 2010; Edgewood College, Madison, WI.

Laffin, J. "Clinical Laboratory Science 610, "Seminar in Clinical Cytogenetics and Molecular Diagnostics." Spring 2011; UW-Madison.

Laffin, J. Mentor to UW-Madison student completing independent study project in cancer array testing; Fall 2010.

Long, S.C. Soil Science 623, "Microbiology of Waterborne Pathogens and Indicator Organisms." Fall 2010; UW-Madison; 5.

Long, S.C. Civil and Environmental Engineering 790, Masters Research or Thesis. Ongoing; UW-Madison; 2.

Long, S.C. Soil Science 990, Graduate Research, Ongoing; UW-Madison; 1.

Long, S.C. Soil Sciences 606, "Source Tracking of pollutants: Principles and Applications." UW-Madison; 9.

Powell, J. Clinical Laboratory Science 536, "Respiratory Virus Overview." April 13, 2011; UW-Madison.

Powell, J. Zoonoses (091-115), "Rabies Information for the Veterinary / Animal Care Professional." April 22, 2011; Madison Area Technical College, Madison, WI.

Powell, J. Clinical Laboratory Science 536, "Herpesviruses." April 29, 2011; UW-Madison.

Reisdorf E. Clinical Laboratory Science 536, "Influenza." April 2011; UW-Madison; 28.

Reisdorf, E. Clinical Laboratory Science 536, "Gastroenteritis Viruses." April 2011; UW-Madison; 28.

Reisdorf, E. and Whyte, T. Clinical Laboratory Science 536, "Virology Laboratory." Spring 2011; UW-Madison; 28.

Schell, R. Medical Microbiology and Immunology 682, "Research." Fall 2010; UW-Madison.

Schell, R. Medical Microbiology and Immunology 677, "Advances Infectious Diseases." Fall 2010; UW-Madison.

Schell, R. Medical Microbiology and Immunology 696, "Critical Thinking in Microbiology." Fall 2010; UW-Madison.

Schell, R. Medical Microbiology and Immunology 699, "Directed Study." Fall 2010; UW-Madison.

Schell, R. Medical Microbiology and Immunology 504, "Infectious Diseases." Fall 2010; UW-Madison.

Schell, R. Pathology and Biology 990, "Research." Fall 2010; UW-Madison.

Schell, R. Microbiology 990, "Research." Spring 2011; UW-Madison.

Schell, R. Medical Microbiology and Immunology 603, "Clinical and Public Health Microbiology." Spring 2011; UW-Madison.

Schell, R. Medical Microbiology and Immunology 699, "Directed Study." Spring 2011; UW-Madison.

Schell, R. Medical Microbiology and Immunology 677, "Flow Cytometry." Spring 2011; UW-Madison.

Schell, R. Medical Microbiology and Immunology 677, "Advances in Infectious Diseases." Spring 2011; UW-Madison.

Schell, R. Animal Health and Biomedical Sciences 990, "Research." Spring 2011; UW-Madison.

Shalkham, J. Clinical Laboratory Science 404, "Laboratory Instrumentation." Spring 2011; UW-Madison; 24.

Shalkham, J. Clinical Laboratory Science 410, "Basic Cytology." Fall 2010; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 540, "Gynecologic Cytology." Fall 2010; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 510, "Advanced Laboratory Practice." Fall 2010; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 543, "Respiratory Cytopathology." Fall 2010; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 545, "Urinary Cytopathology." Fall 2010; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 546, "Gastrointestinal Tract Cytology." Spring 2011; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 544, "Breast Cytopathology." Spring 2011; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 549, "Thyroid Cytopathology." Spring 2011; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 551, "Advanced Clinical Practice." Spring 2011; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 573, "Applied Cytology I." Spring 2011; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 574, "Applied Cytology II." Spring 2011; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 625, "Laboratory Operations." Spring 2011; UW-Madison; 11.

Shalkham, J. Clinical Laboratory Science 630, "Seminars in Clinical Cytology." Spring 2011; UW-Madison; 11.

Shult, P. Medical Microbiology and Immunology 554, "Emerging Infectious Diseases and Bioterrorism." Fall 2010; UW-Madison; 36.

Shult, P. "The Threat of Emerging Diseases." March 1, 2011; Marquette University Public Health Course; Milwaukee, WI; 50.

Shult, P. Medical Microbiology and Immunology 555, "Vaccines: Practical Issues for a Global Society." Spring 2011; UW-Madison; 20.

Shult, P. Clinical Laboratory Science 536, "Medical Virology." Spring 2011; UW-Madison; 24.

Smith, M. Clinical Laboratory Science 102, "Cytotechnology Program." October 2010; UW-Madison; 100.

Stanton, N. Population Health Sciences/Environment Studies 471, "Childhood Lead Poisoning-Why you MAY be Smarter than your Parents." March 1, 2011; UW-Madison; 120

Tans-Kersten, J. and Warshauer, D. General Mycobacteriology Lecture and Lab, January 19, 2011; MATC; 8.

Tans-Kersten, J., Kim, Y., and Warshauer, D. Mycobacteriology Laboratory Workshop for CLS Students, November 16-18, 2010; UW-Madison; 20.

Warshauer, D. Clinical Laboratory Science 535, "Facultative gram-positive rods." September 23, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 535, "Fastidious gram-negative rods." November 2, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 535, "Fastidious gram-negative rods (cont.)." November 4, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 535, "Mycobacterium, Nocardia, and Rhodococcus." November 11, 2010; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 535, "Mycobacterium, Nocardia, and Rhodococcus (cont.)." November 16, 2010; UW-Madison; 24.

Warshauer, D. Population Health Sciences 801, "Laboratory Methods in Infectious Disease." February 2, 2011; UW-Madison; 18.

Warshauer, D. Madison Area Technical College Clinical Laboratory Technician Program, "Mycobacteriology." January 19, 2011; 6.

Warshauer, D. Clinical Laboratory Science 536, "Introduction to Medical Mycology." February 23, 2011; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Contaminants, Subcutaneous Mycoses, and Actinomyces." February 25, 2011; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "The Dermatophytes and Superficial Mycoses." March 2, 2011; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Infections due to Yeasts." March 4, 2011; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Systemic Mycoses Part 1." March 9, 2011; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Systemic Mycoses Part 2." March 11, 2011; UW-Madison; 24.

Warshauer, D. Clinical Laboratory Science 536, "Mycology Laboratory." February 23-March 25, 2011; UW-Madison; 24.

Whyte, T. UW Pathology Resident Rotation, "Introduction to General and Molecular Virology Methods." September 13, 2010; 3.

Whyte, T. Clinical Laboratory Science 536, "CNS Disease." May 4, 2011; UW-Madison; 24.

Whyte, T. UW Pathology Resident Rotation, "Introduction to General and Molecular Virology Methods." June 13, 2011; 2.



## **Fellowships**

Association of Public Health Laboratories (APHL) -- Emerging Infectious Disease Fellow, 2009-2011.

Association of Public Health Laboratories (APHL) -- Environmental Health Fellowship, 2009 – 2011.

American Board of Medical Genetics (ABMG) in conjunction with UW Department of Pediatrics -- Cytogenetics Fellowship, 2009 – 2011.

American Board of Medical Genetics (ABMG) in conjunction with UW Department of Pediatrics -- Biochemical Genetics Fellowship, 2009 – 2011.

Association of Public Health Laboratories (APHL), Jeffrey Modell Foundation, Centers for Disease Control and Prevention (CDC) – Ronald H. Laessig Memorial Newborn Screening Fellowship, 2010 – 2012.

## **X. Other Teaching or Training We Provided NOT as Part of a “For credit” Class**

*Note: Last number indicates number of people attending.*

### **FY 2010**

Shult, P. “The Public Health Laboratory.” Medical Microbiology & Immunology Club, UW-Madison; February 3, 2010; 15.

Smith, M. and Ye, C. Three-day training and refresher coursework for working cytotechnologist; February 2010; Madison, WI; 1.

Smith, M. and Ye, C. Four-week training and refresher coursework for working cytotechnologist; June 2010; Madison, WI; 1.

Spallato, A. “Emergency Response Drinking Water Collection Kit and Reservoir Sampler.” July 21, 2009; Green Bay, WI; 21.

Spallato, A. “Chemical Hazard Assessment Training – DHS/WSLH Equipment Loan Program.” September 15, 2009; Tomahawk, WI; 25.

Spallato, A. “Chemical Hazard Assessment Training – DHS/WSLH Equipment Loan Program.” September 16, 2009; Eau Claire, WI; 35.

Spallato, A. “Chemical Hazard Assessment Training – DHS/WSLH Equipment Loan Program.” September 30, 2009; West Allis, WI; 40.

Spallato, A. “DHS/WSLH Equipment Loan Program” May 4, 2010; Stevens Point, WI; 50.

Spallato, A. and Stanton N. "Emergency Response Sample Collection Resources for Regional Hazmat Teams." March 26, 2010; La Crosse, WI; 30.

## **FY 2011**

Hoffman R.M., DiGiovanni, G., Sturbaum, G., Barrella, K., and Truesdale, J. "Water Research Foundation Project 4284, Genotyping *Cryptosporidium* from Slides." November 14, 2010; Savannah, GA; 25.

Hoffman R.M., DiGiovanni, G., Sturbaum, G., Barrella, K., and Truesdale, J. "Technology Transfer Workshop, Genotyping *Cryptosporidium* from Slides." April 12-14, 2011; Cincinnati, OH; 25.

Laffin, J., Morrison-Delap, S., Miller, C., Zhang, F., and Xu, X. UW Science Expeditions, "Genetics & You: How Much Do You Know About Your DNA?" April 2011; Madison, WI; 100.

Leinweber, J. Lockdown 2010, "What's New in Cryptography." July 15, 2010; Madison WI; 70

Leinweber, J. Techpartners, "A Crash Course in IPv6." July 22, 2010; Madison WI; 120.

Leinweber, J. UW E-Business consortium, "IPv4 exhaustion and the IPv6 Transition." October 27, 2010; Madison WI; 24.

Leinweber, J. Madison Linux Users Group, "Surviving the IPocalypse: IPv6, Linux, and You." December 11, 2010; Fitchburg WI; 27.

Leinweber, J. Wisconsin Association of Computer Crime Investigators (west), "IPv6 and the future of network forensics." March 29, 2011; Fitchburg WI; 15.

Leinweber, J. Wisconsin Association of Computer Crime Investigators (east), "IPv6 and the future of network forensics." May 5, 2011; Jefferson WI; 12.

Shult, P. "Vaccines: Can You Imagine Public Health Without Them?" March 30, 2011; UW-Washington County Science Club; 25.

Smith, M. and Shalkham, J. "Public Health Laboratory Careers." January 2011; UW-Madison Career Fair; 200.

Smith, M. and Ye, C. WI Institutes for Discovery Open House, "Microscopy: Taking a Guided Tour Through a Specimen." December 2010; Madison, WI; 200.

Smith, M. and Ye, C. UW Science Expeditions, "Microscopy: Taking a Guided Tour Through a Specimen." April 2011; Madison, WI; 100.

Smith, M. and Ye, C. National Science Olympiad, "Microscopy: Taking a Guided Tour Through a Specimen." May 2011; Madison, WI; 150.

Smith, M. La Follette High School Job Shadow Program; Student entered Edgewood College as a cytotechnology major. Fall 2010.

Smith, M. and Wade, N. Edgewood College Job Shadow Program, Spring 2011.

Spallato, A. "Emergency Response Sample Collection Resources for Regional Hazmat Teams." April 4, 2011; Appleton, WI; 24.

Whyte, T. North Carolina State Public Health Laboratory Training, "Introduction to ABI 7500 Fast DX real-time PCR." June 29, 2011; Madison, WI; 3.

#### **XI. Any Other Research or Outreach NOT Included Elsewhere**

*Note: Last number indicates number of people attending.*

##### **FY 2010**

Gruetzmacher, G. "OSHA and WisCon." Wisconsin Ready Mix Workshop, February 9, 2010; La Crosse, WI; 60.

Gruetzmacher, G. and Scharmer, S. "OSHA and WisCon." Wisconsin Ready Mix Association Workshop, February 24, 2010; Madison, WI; 50.

West, L. "Radiochemistry Sampling and Reporting Requirements." CLEAR – Wisconsin Water Association's Coalition for Learning and Education Assistance Regionally, Fall 2009; 4 locations.

##### **FY 2011**

Hill, B. "Proficiency Testing In-Service." China CDC Staff, September 8-9, 2010; WSLH/UW-Madison.

Hill, B. and Burmeister, B. "Proficiency Testing In-Service." Botswana Ministry of Health Staff, October 2010; WSLH/UW-Madison.

Olstadt, J. Charm Sciences Inc. "Validation of Fast Phage (Charm Sciences, Inc.), for Detection of Somatic and Male-Specific Colphages." Wisconsin State Lab of Hygiene (one of five participating laboratories).

Olstadt, J. Computer Sciences Corporation (CSC)/USEPA. "Detection of Enterococci in fresh water by qPCR." Wisconsin State Lab of Hygiene (participating laboratory).

## **XII. Extramurally Funded Research**

Association of Public Health Laboratories, "WI Local Public Health Lab Network." 2008-2010, \$8,375. Primary Investigator: Brokopp, C. Grant coordinator: Klawitter, J.

Association of Public Health Laboratories (APHL), "Antiviral resistance Screening Surveillance." October 2009 – June 2010, \$280,000. Primary Investigator: P. Shult.

Association of Public Health Laboratories (APHL), "Pooling Influenza Testing Study." July 2009 – March 2010, \$187,377. Primary Investigator: Shult, P.

Association of Public Health Laboratories (APHL), "Multicenter Evaluation of the CDC Influenza RT-PCR Panel." February 2010 – June 2010, \$120,000. Primary Investigator: Shult, P.

Association of Public Health Laboratories (APHL), "Innovations in Quality Public Health Laboratory Practice – A Method for Creating LIMS Specifications Based upon the APHL LIMS Requirements." November 2010 – July 2011, \$20,000. Primary Investigator: Peterson, G.

Association of Public Health Laboratories (APHL), "TB Nucleic Acid Amplification Testing (NAAT) Improvement and Expansion." January 2011 – June 2011, \$35,000. Primary Investigator: Shult, P.

Association of Public Health Laboratories (APHL), "Innovations in Quality Public Health Laboratory Practice – Building on a laboratory-based surveillance system to monitor rotaviruses in the community: A model for state public health laboratories." November 2010 – July 2011, \$20,000. Primary Investigator: Shult, P.

Centers for Disease Control and Prevention (CDC), "WI State Public Health Lab Capacity for SCID Screening." September 2008 – September 2011. \$1,439,068. Co-Primary Investigators: Brokopp, C. and Baker, M.

Centers for Disease Control and Prevention (CDC), "Prevalence of the Fragile X Pre-mutation." October 2009 – September 2011. \$392,086. Primary Investigator: Baker, M.

Electric Power Research Institute (EPRI), "Atmospheric Reduction of Hg(II) by Heterogeneous Reactions with Coal Fly Ash." July 2010 – May 2012, \$192,566. Primary Investigator: Schauer, J. Co-Primary Investigator: Shafer, M.M.

Environmental Protection Agency (EPA)-STAR Program, "Platinum-Containing Nanomaterials: Sources, Speciation, and Transformation in the Environment." February 2009 – January 2012, \$399,406. Primary Investigator: Shafer, M.M.

Environmental Protection Agency (EPA)-STAR Program, "Sensitivity of Atmospheric Mercury Processes to Climate Change." February 2007 – February 2011, \$899,731. Primary Investigator: Schauer, J. Co-Primary Investigator: Shafer, M.M.

Environmental Protection Agency (EPA)-STAR Program, "Assessing Occurrence, Persistence and Biological Effects of Hormones Released from Livestock Waste." 2007-2011, \$699,953. Primary Investigator: Hemming, J.

Food and Drug Administration (FDA), "Food Safety and Security Monitoring Project." 2010-2015, \$1,250,000. Primary Investigator: Arndt, M.F.

HATCH Program, "Evaluation of Surrogates for Monitoring Biosolids Digestion Processes." October 2009 - September 2011, \$64,433. Primary Investigator: Long, S.C.

Health Resources and Services Administration (HRSA), "Development of Newborn Screening Assay for Congenital CMV Infection." July 2010 - June 2012. \$150,000. Primary Investigator: Baker, M.

Health Resources and Services Administration (HRSA), "Multicenter Validation of Algorithms to Improve Communication of Positive Newborn Screening Results to the Medical Home." June 2008 - May 2012. \$93,039. Collaborator: Baker, M.

International Platinum Group Metals Association, "Speciation of Platinum in Control Devices and the Air." January 2011 - February 2012, \$476,621. Primary Investigator: Schauer, J.J. Co-Primary Investigator: Shafer, M.M.

Komen Foundation, Department of Defense, "Total Xenoestrogen Body Burden in Relation to Mammographic Density, A Marker of Breast Cancer Risk 2008-2010." \$70,000. Co-Primary Investigator: Hemming, J.

Madison Metropolitan Sewage District, "Biosolids Research 2009-2010." January 2009 - August 2010, \$119,541. Primary Investigator: Long, S.C.

Madison Metropolitan Sewerage District, "Biosolids Research 2011: Support of Foaming and Class A projects." January 2011 - December 2011, \$64,967. Primary Investigator: Long, S.C.

National Institutes of Health (NIH) - American College of Medical Genetics (ACMG), "Screening Louisiana Newborns for SCID." \$60,000. Primary Investigator: Brokopp, C.

National Institutes of Health (NIH) - National Children's Study, "Integration of Automated and Real Time Reactive Oxygen Species Assays into the NCS." April 2011 - March 2012, \$93,000. Co Primary-Investigator: Shafer, M.M.

National Institutes of Health (NIH) - National Children's Study, "Analysis of Environmental Chemicals in Dried Blood Spots." April 2011 - March 2012, \$89,000. Co Primary-Investigator: Shafer, M.M.

National Institutes of Health (NIH) - National Children's Study, "Methodologies for Analyzing Environmental Exposures and Candidate Genes in Congenital Vertebral Malformations (CVM)." April 2011 - March 2012, \$106,000. Co Primary-Investigator: Shafer, M.M.

National Institutes of Health (NIH) - National Institute of Neurological Disorders and Stroke (NINDS), "Epidemiology of SBCAD Deficiency in Hmong-Americans." March 2006 – February 2011. \$1,253,914. Collaborator: Baker, M.

National Institutes of Health (NIH)/Public Health Service (PHS)/Department of Health and Human Services (DHHS), "Treatment of Vitamin D Insufficiency." September 2009 – August 2014, \$1,146,989. Collaborator: Shafer, M.M.

National Science Foundation ARRA Funding, "TT Virus: A Potential Indicator of Human Enteric Viruses in Source and Drinking Waters." July 2009 - June 2012, \$255,677. Primary Investigator: Long, S.C. with Jeanine D. Plummer, Worcester Polytechnic Institute.

National Oceanic and Atmospheric Administration (NOAA) - Sea Grant, "Factors Regulating the Interaction of Trace Metals and Aquatic Organisms in Watersheds of the Great Lakes." February 2008 – January 2011, \$333,076. Primary Investigator: Shafer, M.M.

UK Drinking Water Inspectorate, Scottish Water, ALS/Ecwise. "Cryptosporidium Genotyping and International Round Robin." December 2009 – November 2011, \$100,000. Primary Investigators: DiGiovanni, G., Hoffman, R.M., and Sturbaum, G.

UW School of Medicine and Public Health Department of Pediatrics Research and Development Award, "Candidate Gene Identification in Non-Syndromic Intellectual and Developmental Disabilities." Primary Investigator: Laffin, J.

Water Research Foundation, "Assessment of Torque Teno Virus as a Candidate Viral Pathogen Indicator in Drinking Waters." August 2009 - July 2012, \$63,726. Subcontract from Worcester Polytechnic Institute: Long, S.C.

Wisconsin Department of Natural Resources, "Assessing the Potential of Hormones from Agricultural Waste to Contaminate Groundwater ." 2008-2011. \$50,000. Principal Investigator: Hemming, J.

Wisconsin Department of Natural Resources and the Wisconsin Groundwater Coordinating Council, "Validation of a qPCR Assay for *E. coli* in Drinking and Recreational Waters." July 2011 - June 2013, \$110,000. Primary Investigator: Long, S.C.

Wisconsin Groundwater Research Program, "Predicting Mercury Methylation: Testing the Neutral Sulfide Speciation Model in a Groundwater-Dominated Wetland." July 2009 – June 2011, \$40,269. Primary Investigator: Shafer, M.M.

### **XIII. Committees, Work Groups, Boards – Within University of Wisconsin-Madison**

Brokopp, C. Member, Mentoring Committee for Dr. Gordana Raca, UW Department of Pathology and Laboratory Medicine.

Brokopp, C. Member, Mentoring Committee for Dr. Mei Baker, UW Department of Pediatrics.

Brokopp, C. Member, Master's of Public Health (MPH) Program Community Advisory Committee.

Brokopp, C. Member, Search and Screen Committee for Master's of Public Health (MPH) Program Director.

Brokopp, C. Member, Academic Steering Committee for Department of Population Health Sciences.

Brokopp, C. Member, Executive Committee for Department of Population Health Sciences.

Brokopp, C. Member, Screening Committee for Chair of Department of Pathology and Laboratory Medicine.

Brokopp, C. Member, Department of Population Health Sciences 50<sup>th</sup> Anniversary Symposium Planning Committee.

Gruetzmacher, G. Member, UW ad hoc nano-technology safety work group, 2006-2010.

Hurley, J. Co-Chair, Water Resources Working Group, Wisconsin Initiative on Climate Change Impacts, 2009-present.

Hurley, J., Evaluation Panel Member, Ira and Ineva Reilly Baldwin Wisconsin Idea Endowment, 2008-present.

Kurtycz, D. UW Medical Foundation Council of Faculty, 2004 – present.

Kurtycz, D. UW School of Medicine and Public Health Continuing Medical Education Committee, 1999 – present.

Leinweber, J. Member, UW-Madison Information Security Team, 2008-present.

Leinweber, J. Member, UW E-business Consortium, 2009-present.

Leinweber, J. Participant, CISO security policy retreat, 2011.

Leinweber, J. Member, iTransit policy stakeholders team, 2011

Long, S.C. Member, Committee on Women in the University, 2009 - present.

Long, S.C. Member, University of Wisconsin Engineers Without Borders, Domestic Projects Group, 2010-present.

Long, S.C. Member, Selection Committee for Outstanding Woman of Color for UW System and UW-Madison, 2009 and 2010.

Long, S.C. Participant, Women in STEM dinner and conversation program, Fall 2010.

Long, S.C. Participant, SOAR Diversity recruiting, Summer 2011.

Moen, T. Judge, Evans Moot Court Competition, UW Law School, 2007-2010.

Moen, T. Member, UW ad hoc nano-technology safety work group, 2006-2010.

Olson, J. Member, UW-Executive Education Project Management Advisory Board, 2006-present.

Schell, R. Member, UWSMPH Animal Care Committee, 1995 – present, Vice Chair (2009 - 2010).

Schell, R. Member, Oversight Animal Care Committee.

Shult, P. Member, UW-Madison Campus Health Issues Planning Committee, 2005-present.

Shult, P. Member, UW Task Force on Biosecurity, 2004–present.

Shult, P. Member, UW Institutional Biosafety Committee, 2008-present.

Smith, M. Member, CALS/Genetics – CLS Cytotechnology Program Workgroup.

Warshauer, D. Member, UW-Madison Biosecurity Task Force, 2004-present.

Warshauer, D. Member, UW-Madison Clinical Laboratory Science Program Advisory Task Force, 2003-present.

#### **XIV. Committees, Work Groups, Boards – Outside University of Wisconsin-Madison**

Arndt, M.F. Member, Lead Exercise Coordinators and Planning Team for MENU 2010: A Radiological Capability and Capacity Inter-Laboratory Comparison Exercise, May 2009-present.

Baker, M. Member, Newborn Screening Translational Research Network (NBSTRN) SCID workgroup, 2010–present.

Baker, M. Member, Laboratory Standards and Procedures Subcommittee for Secretary’s Advisory Committee on Heritable Disorders in Newborns and Children, 2011–present.



Baker, M. Member, APHL/CDC Newborn Screening Molecular Network Steering Committee, 2011–present.

Baker, M. Member, Wisconsin Newborn Screening Advisory Group Immunodeficiency Committee, 2008–present.

Baker, M. Member, Wisconsin Newborn Screening Advisory Group Umbrella Committee, 2010–present.

Baker, M. Member, Wisconsin Newborn Screening Advisory Group Metabolic Committee, 2010–present.

Baker, M. Member, Wisconsin Newborn Screening Advisory Group Cystic Fibrosis Committee, 2010–present.

Barry, J. Member, National American Foundry Society 10Q Industrial Hygiene Committee, 1995–present.

Brokopp, C. Team Leader, College of American Pathologists (CAP) Laboratory Inspection Team, July 2010.

Brokopp, C. Member, WI Medical Society's Council on Health Care Quality and Population Health.

Brokopp, C. Member, NIH S-10 Grant Review Panel – Flow Cytometry

Brokopp, C. Member, Wisconsin Newborn Screening Advisory Group Umbrella Committee.

Brokopp, C. Member, WI Department of Health Services Newborn Screening Task Force.

Brokopp, C. Member, Healthy Wisconsin 2020 Strategic Leadership Team.

Brokopp, C. Member, Healthy Wisconsin 2020 Emergency Preparedness Strategic Team.

Brokopp, C. Member, Scientific Oversight Committee for SCID Project at Children's Hospital of Wisconsin.

Brokopp, C. President-Elect and Board Member, Association of Public Health Laboratories.

Brokopp, C. Board Liaison, Association of Public Health Laboratories Informatics Committee.

Brokopp, C. Board Liaison, Association of Public Health Laboratories Newborn Screening and Genetic Testing Committee

Brokopp, C. Participant, Association of Public Health Laboratories Hill Day, 2010 - 2011.

Fritsch, T. Member, Wisconsin Lead Poisoning Elimination Oversight Committee, Targeting High Risk Populations, 2009–present.

Gehl, S. Treasurer, Wisconsin Public Health Association, 2010–present.

Gruetzmacher, G. Member, American Industrial Hygiene Association Ergonomics Committee, 1995 – present, Past Chair (June 2009 - June 2010).

Gruetzmacher, G. Member, American Industrial Hygiene Association, Non-ionizing Radiation Committee, 1994-present.

Gruetzmacher, G. Corresponding Member, American Industrial Hygiene Association Occupational Epidemiology Committee, 2004–present.

Gruetzmacher, G. Corresponding Member, ANSI/ AIHA Z88 Respiratory Protection Standard Committee, 2009–present.

Gruetzmacher, G. Member, American Society of Safety Engineers – Wisconsin Chapter Safety Day Planning Group, 2007–present.

Gruetzmacher, G. Member, System Assessment Workshop Course Development Working Group, Colorado State University, 2009-2010.

Gruetzmacher, G. Member, Wisconsin Legislature Special Committee on Nanotechnology, 2010 - 2011.

Gruetzmacher, G. Board Member, Wisconsin Safety Council, 2006-present.

Gruetzmacher, G. Member, Wisconsin Safety Conference Planning Committee, 1990–present.

Gruetzmacher, G. Member, Wisconsin Safety Council, Safety Professionals Subcommittee, 1990–present.

Gruetzmacher, G. Member, Wisconsin Ready Mix Association Safety Workshop Planning Group, 2004–present.

Gruetzmacher, G. Member, Southeast Wisconsin Incident Management Team, 2010–present.

Harding, P. Member, International Association for Chemical Testing Board of Directors, 2000-present.

Harding, P. Board Member, National Safety Council's Committee on Alcohol and Other Drugs Executive Board, 1995-present, Member 1986-present.

Hill, B. Member, Clinical Laboratory Improvement Advisory Committee Proficiency Testing Workgroup, 2010-present.

Hoffman, R.M. Trustee, American Water Works Association - Water Quality Technology Division, 2010–present.

Hoffman, R.M. Chair, American Water Works Association – Algae Manual Development. Algae: Source to Treatment. 2007-2010.

Hoffman, R.M. Meeting chair, AWWA International Symposium on Waterborne Pathogens, Manhattan Beach, CA, May 2010.

Hoffman, R.M. Planning committee member, Global Conference on Microbial Contaminants in Drinking Water, Singapore, October 2009.

Hoffman, R.M. Planning committee member, AWWA Water Quality Technology Conference, Phoenix, AZ, 2011-present.

Hoffman, R.M. Technical advisory workgroup, AWWA Contaminant Candidate List Committee, 2003-present.

Hoffman, R.M. Project advisory committee member, Water Research Foundation, multiple projects. 2007 - present.

Hoffman, R.M. Member, Standard Methods Committee, 2006-present.

Hurley, J. Member, EPA Science Advisory Board, Mercury Review Panel for Draft National Scale Mercury Risk Assessment.

Hurley, J. Member, United Nations Industrial Development Organization, Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection, Mercury in the Marine Environment, 2007-present.

Hurley, J. Peer Review Coordinator, National Competitive Research Grants Program, National Institutes for Water Resources, 2001-present.

Kalscheur, D. Member, Education Committee for the Wisconsin Coroners and Medical Examiners Association, September 2005-present.

Klawitter, J. Co-Chair, Wisconsin Public Health Association Marketing and Communications Committee, July 2009-present.

Klawitter, J. Member, Wisconsin Public Health Association Nominating Committee, January 2011 - present.

Klawitter, J. Member, Wisconsin Public Health Association Public Affairs Committee, 2003-present.

Krick W. Member, CDC LRN-C liquid chromatography/tandem mass spec SOP working group, August 2010-present.

Kurtycz, D. Member, American Board of Pathology Cytopathology Test Development and Advisory Committee, 2006-present.

Kurtycz, D. Member, College of American Pathologists Cytopathology Committee, 2011-present.

Kurtycz, D. Member, American Society for Colposcopy and Cervical Pathology Cervix and Pathology Committees, 2006-present.

Kurtycz, D. Papanicolaou Society of Cytopathology – Member, Executive Board, 2010 – present; Chair, Website Development Committee, 2009 – present; Co-Chair, NCI Bethesda Website Atlas, 2009–present.

Laffin, J. Member, American Society of Human Genetics Geneticist-Educator Network of Alliances Project (GENA) and Genetics Education and Outreach Network (GEON) workgroup for evaluation of high school biology state standards in Iowa and Wisconsin, 2009–present.

Laffin, J. Member, Cancer Cytogenetics Microarray Consortium: Clinical trial and QA/QC Committee, 2009–present.

Laffin, J. Member, Clinical and Laboratory Standards Institute Subcommittee on Molecular Diagnostic Methods for Genetic Diseases (MM01), 2009–present.

Laffin, J. Observer, Clinical and Laboratory Standards Institute Subcommittee on Quality Management for Molecular Genetics Testing (MM20), 2009–present.

Laffin, J. Reviewer, *Cancer Genetics* (Elsevier), 2011.

Liddicoat, L. Member, AAFS/SOFT Driving Under the Influence of Drugs (DUID) Committee, 2001-present.

Liddicoat, L. Secretary & Executive Board Member, National Safety Council's Committee on Alcohol and Other Drugs, 2010-present, member 2002-present.

Liddicoat, L. Member, SWGTOX (Scientific Working Group on Forensic Toxicology), Standards, Practice, Protocols and Accreditation, 2010–present.

Long, S.C. Vice Chair, AWWA Source Water Protection Committee, Water Science & Research Division and Water Resources Sustainability Division, 2007 - 2010.

Long, S.C. Chair, AWWA Source Water Protection Committee, Water Science & Research Division and Water Resources Sustainability Division, June 2010-June 2013.

Long, S.C. Member, Central States Water Environment Association Digester Foaming Working Group, November 2010-present.

Long, S.C. Member, Wisconsin Water Association Research Committee, 2009-present.

Long, S.C. Member, Water Research Foundation Project Advisory Committee, Early Detection of Potential Taste and Odor Episodes in Waters, 2008-present.

Long, S.C. Member, Yahara CLEAN Beach Bacteria Advisory Committee, 2008-present.

Long, S.C. Member, Madison Metropolitan Sewerage District EMS External Team, 2007–present.

Long, S.C. Member, Madison Water Quality Technical Advisory Group, 2006-present.

Marshall, S. Participant, Association of Public Health Laboratories Hill Day, 2010.

Miles, A. Member, International Association of Chiefs of Police (IACP) Drug Recognition Expert (DRE) Technical Advisory Panel (TAP), 2011.

Miles, A. Member, AAFS/SOFT Driving Under the Influence of Drugs (DUID) Committee, 2006-present.

Miles, A. Member, Wisconsin Bureau of Transportation Safety Drug Recognition Examiner (DRE) Oversight Committee, 2002-present.

Moen, T. Member, OSHA Consultation Competencies Training Plan Committee, 2009.

Percy S. Member, CDC LRN-C inductively-coupled plasma mass spec SOP working group, August 2010-present.

Popp, D. Chair, American Industrial Hygiene Association Proficiency Assessment Testing (PAT) Board, 2010-present.

Powell, C. Chair, American Industrial Hygiene Association Laboratory Accreditation Program, LLC Analytical Accreditation Board, 2011.

Powell, C. Chair, American Industrial Hygiene Association Laboratory Accreditation Program, LLC EMLAP Task Force, 2003-present.

Powell, C. Member, American Industrial Hygiene Association Laboratory Accreditation Program, LLC Policy Task Force, 2003-present.

Powell, C. Member, American Industrial Hygiene Association Biosafety and Environmental Microbiology Committee, 2007-present.

Powell, C. Member, ASTM Committee D22.08 Indoor Air Quality Committee and Subcommittee on Mold Sampling and Analysis, 2005-present.

Powell, J., Member, U.S. Public Health Service Rabies Diagnostic Committee, 1999 - present.

Powell, J. Consultant, APHL Compendium of Animal Rabies Prevention and Control Committee, 2008-present.

Reisdorf, E. Member, APHL Laboratory Response Network - Operational Workgroup, 2007-present.

Roach, M. Member, CDC LRN-C gas chromatography/mass spec SOP working group, August 2010-present.

Scharmer, S. Safety Committee Member, Precast/Prestressed Concrete Institute.

Schell, R. Editorial Board Member, *Regional Immunology*.

Schell, R. Editorial Board Member, *Clinical Immunology Reviews*.

Schell, R. Editorial Board Member, *Clinical and Diagnostic Laboratory Immunology*.

Schell, R. Editorial Board Member, *Clinical Immunology*.

Schell, R. Editorial Board Member, *Journal of Microbiological Methods*.

Schell, R. Editor, Journal of Spirochetal and Tick-borne Diseases, 2002 – present.

Shafer, M.M., Member, EPA National Center for Environmental Research Peer-Review Science Panel for Nanotechnology, June 2010.

Shalkham, J. Member, Finance Committee of the American Society for Cytopathology, 2006-present.

Shalkham, J. Treasurer, American Society for Cytopathology Services, 2007-present.

Shalkham, J. Awards Committee, American Society for Cytopathology, 2008-present.

Shult, P. Member, APHL/CDC Working Group on Influenza Testing Algorithm for Public Health Laboratories, 2006-present.

Shult, P. Member, APHL Infectious Disease Committee, 2005-present.

Shult, P. Member, CDC Influenza Surveillance Steering Committee, 2006-present.

Shult, P. Member, Governance Board, Wisconsin Association of Hazardous Materials Responders, 2004-present.

Shult, P. Member, Public Health Preparedness Committee, WI Division of Public Health, 2002-present.

Shult, P. Member, Wisconsin Clinical Laboratory Technical Advisory Group, 2004 –present.

Shult, P. Member, Wisconsin Interagency Working Group, 2003-present.

Shult, P. Member, CDC/ APHL Vaccine-Preventable Diseases working group, 2009-present.

Shult, P. Member, CDC/Joint Commission Technical Advisory Panel, 2007-present.

Smith, M. Chair, American Society for Cytotechnology (ASCT) Education Committee, 2009-present.

Smith, M. Member and Interim Secretary, Coordinating Council on the Clinical Laboratory Workforce (CCCLW), 2009-present (Member) and 2011 (Interim Secretary).

Smith, M. Member, American Society for Cytopathology (ASC) Teleconference Committee, 2010 – 2011.

Smith, M. Member, American Society for Clinical Pathologists (ASCP) Scholarship Committee, 2010-present.

Stanton, N. Member, CDC's LRN-C Quality Assurance Working Group, 2004-present.

Stanton, N. Member, INSPQ (Quebec) Multi-Element External Quality Assessment Scheme Advisory Group, 2005-present.

Stanton, N. Advisor, Clinical and Laboratory Standards Institute, Subcommittee on Analytical Procedures for the Determination of Lead in Blood and Urine, June 2009-present.

Stanton, N. Member, APHL/NIH Pooled Specimen Work Group, February 2011-present.

Stanton N. Member, Laboratory Methods Workgroup (LMWG) to the CDC Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP), December 2009-present.

Strebel S. Secretary, American Industrial Hygiene Association-Wisconsin Section, 2009-present.

Tans-Kersten, J., CDC Cooperative Agreement Laboratory Funding Formula Work Group, June 2011-present.

Warshauer, D. Member, Association of Public Health Laboratories Tuberculosis Steering Committee, January 2005 –present.

Warshauer, D. Member, Association of Public Health Laboratories Infectious Disease Committee, July 2008-present.

Warshauer, D. Member, CDC and American Thoracic Society Work Group for the updating of guidelines for the diagnostic standards and classification of tuberculosis in adults and children, May 2007-present.

West, L. Member, Lead Exercise Coordinators and Planning Team for MENU 2010: A Radiological Capability and Capacity Inter-Laboratory Comparison Exercise, May 2009-present.

## **XV. Awards and Honors**

Brokopp, Selected to participate in Wisconsin Idea Tour, May 2011.

Burk, T. American Industrial Hygiene Association-Wisconsin Section Byron A. Berg Award, 2011

Gruetzmacher, G. American Industrial Hygiene Association Fellow Award, 2011.

Hoffman, R.M. American Water Works Association, Golden Spigot Award, 2009.

Hoffman, R.M. WI Water Association, WWA Research Award, 2009.

Hoffman, R.M. Classified Employee Recognition Award, 2010.

Long S.C. 2010 AWWA Water Resources Sustainability Division Best Paper Award for: Plummer, J.D., and S.C. Long. 2009. Identifying Sources of Surface Water Pollution: A toolbox approach. *J. Am. Water Works Assoc.* 101(9):75-88.





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**Occupational Health Division**  
2601 Agriculture Drive  
Madison, WI 53718  
(800) 446-0403