

***Summary Report of WSLH  
Research, Teaching and Outreach  
Activities Related to Our  
UW-Madison Mission  
For the period of July 1, 2003 to June 30, 2004***

October 2004

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Dear Colleagues and Partners:

Welcome to the Fiscal Year 2004 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, 2003, through June 30, 2004.

We have been compiling these reports for several years now, and each year the list of activities and research grows. All of these accomplishments contribute to our commitment to the Wisconsin Idea and the University of Wisconsin's mission of "creating and disseminating" knowledge. With these efforts, we are preparing and training ourselves and future generations to meet the challenges facing public and environmental health.

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,



Ronald H. Laessig, Ph.D  
Director, Wisconsin State Laboratory of Hygiene  
Professor of Pathology and Laboratory Medicine  
Professor 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, 2003 to June 30, 2004*

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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:**

DPH = WI Division of Public Health

DNR = WI Department of Natural Resources

CDC = Centers for Disease Control and Prevention

USEPA = U.S. Environmental Protection Agency

UW = University of Wisconsin

USGS = U.S. Geological Survey

OSHA = Occupational Safety and Health Administration

USDA = U.S. Department of Agriculture

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Ambient and Workplace Air Program	NIOSH, OSHA, and MSHA	<ul style="list-style-type: none"> <li>• Reviewed NIOSH updated silica method for use in NMAM</li> <li>• Submitted WOHL metals method for use in next NMAM</li> </ul>	<ul style="list-style-type: none"> <li>• Technical expertise</li> <li>• Method development</li> <li>• Analytical capability</li> <li>• Program funding</li> </ul>
Bloodborne Pathogens Program – Counseling, Testing and Referral (CTR) Sites/WSLH Rapid HIV testing project	DPH	<ul style="list-style-type: none"> <li>• Initiated development of QA program for CTR sites utilizing rapid HIV tests</li> </ul>	<ul style="list-style-type: none"> <li>• Policy guidelines</li> <li>• Training of sites</li> </ul>
Cancer Control and Detection Program – On-site Training	Dane County Cytology Center	<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 – On-site Training	UW Hospital and Clinics	<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 and instructor</li> <li>• Time and support</li> </ul>
Cancer Control and Detection Program – Training samples	Dane County Cytology Center	<ul style="list-style-type: none"> <li>• Agreement reached which 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 – Rett Syndrome study	UW Department of Pediatrics, UW Waisman Center	<ul style="list-style-type: none"> <li>• Methods established</li> <li>• In process of applying for NIH grant</li> </ul>	<ul style="list-style-type: none"> <li>• Providing study subjects and clinical evaluation</li> </ul>
Cancer Control and Detection Program – Analysis of marker chromosome	Wayne State University, University of Cambridge, University of South Alabama, Hutzal Hospital	<ul style="list-style-type: none"> <li>• Original research completed</li> </ul>	<ul style="list-style-type: none"> <li>• Each partner provided certain cases with clinical profile</li> </ul>
Cancer Control and Detection Program – Stratatech	Lynn Allen-Hoffman and staff	<ul style="list-style-type: none"> <li>• Performed both cytogenetic analysis and fluorescent in situ hybridization (FISH) studies on six of their cell lines</li> <li>• This has identified key cytogenetic changes due to various manipulations.</li> </ul>	<ul style="list-style-type: none"> <li>• They have provided specimens which have been paid for</li> </ul>

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Cancer Control and Detection Program – WiCell	<ul style="list-style-type: none"> <li>• James Thomson and staff</li> </ul>	<ul style="list-style-type: none"> <li>• Provided cytogenetic and FISH analyses supporting their research and quality control</li> </ul>	<ul style="list-style-type: none"> <li>• Provided funding and research opportunity</li> </ul>
Cancer Control and Detection Program – UW Hospital and Medical School	<ul style="list-style-type: none"> <li>• Dr. Shariar Salamat</li> <li>• Dr. Bodie</li> </ul>	<ul style="list-style-type: none"> <li>• Studied a number of patients with brain tumors and developed a mechanism for identification of patients who have oligodendriogliomas which have a good response to therapy</li> </ul>	<ul style="list-style-type: none"> <li>• Funding and research opportunity</li> </ul>
Cancer Control and Detection Program – On-Site Training	<ul style="list-style-type: none"> <li>• Dr. Shaaban</li> <li>• Dr. Kalil</li> <li>• Drs. Maya, Stevenstice, and Raj of University of Georgia</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis of cell lines</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> </ul>
Cancer Control and Detection Program – On-Site Training	<ul style="list-style-type: none"> <li>• Drs. Breslin and Kennedy</li> </ul>	<ul style="list-style-type: none"> <li>• Topo2 amplification to measure therapy outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> </ul>
Cancer Control and Detection Program – On-Site Training	<ul style="list-style-type: none"> <li>• Dr. Blakely</li> </ul>	<ul style="list-style-type: none"> <li>• Validated X/Y cross sex bone marrow transplant outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Reference data</li> </ul>
Cancer Control and Detection Program – On-Site Training	<ul style="list-style-type: none"> <li>• Dr. Sanchez</li> </ul>	<ul style="list-style-type: none"> <li>• Urovision-bladder cancer</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Data</li> </ul>
Cancer Control and Detection Program – On-Site Training	<ul style="list-style-type: none"> <li>• Q-Biogene</li> </ul>	<ul style="list-style-type: none"> <li>• Probe validation</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Reference data</li> </ul>
Cancer Control and Detection Program – Tobacco Research Council	<ul style="list-style-type: none"> <li>• David Lawrence</li> </ul>	<ul style="list-style-type: none"> <li>• Extracted DNA to facilitate their research</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> </ul>
Clinical Metals Toxicity Program – Metals and EP proficiency value assignment	<ul style="list-style-type: none"> <li>• New York Department of Public Health</li> <li>• Pennsylvania Department of Public Health</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>

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
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>• Institution of manufacturing changes resulting in improved laboratory performance</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>
Clinical Metals Toxicity Program – Diagnostic metals analysis in animals	<ul style="list-style-type: none"> <li>• Wisconsin Veterinary Diagnostic Lab (UW)</li> </ul>	<ul style="list-style-type: none"> <li>• Provided setup and allowed VDL staff to use Toxicology instrumentation for blood selenium analysis, serum Zn, Cu, and Fe analysis.</li> </ul>	<ul style="list-style-type: none"> <li>• WSLH provided use of facilities and instrumentation until VDL instrumentation could be replaced</li> <li>• Duration – Feb. 2004.</li> </ul>
Clinical Metals Toxicity Program – Blood Lead Laboratory Reference System	<ul style="list-style-type: none"> <li>• CDC</li> </ul>	<ul style="list-style-type: none"> <li>• Characterized blood provided to partner for program</li> </ul>	<ul style="list-style-type: none"> <li>• Support for PT program administered by WSLH</li> </ul>
Clinical Metals Toxicity Program – Metals and EP proficiency value assignment	<ul style="list-style-type: none"> <li>• New York Department of Public Health</li> <li>• Pennsylvania Department of Public Health</li> </ul>	<ul style="list-style-type: none"> <li>• Accurate value assignment for &gt;100 laboratory evaluation specimens</li> </ul>	<ul style="list-style-type: none"> <li>• Reference data</li> <li>• Blood specimens</li> </ul>
Clinical Metals Toxicity Program – Blood Lead Laboratory Reference System	<ul style="list-style-type: none"> <li>• CDC</li> </ul>	<ul style="list-style-type: none"> <li>• Characterized blood provided to partner for program</li> </ul>	<ul style="list-style-type: none"> <li>• Support for PT program administered by WSLH</li> </ul>
Community Acquired Pathogens (CAP) Program – Surveillance	<ul style="list-style-type: none"> <li>• Wisconsin's 10 Virology Laboratories</li> <li>• Approximately 50 rapid influenza/RSV test sites</li> <li>• Clinicians</li> <li>• DPH</li> </ul>	<ul style="list-style-type: none"> <li>• Provided laboratory-based surveillance for viral diseases, including influenza &amp; avian influenza, SARS</li> <li>• Developed funding requests for 2004–05 influenza surveillance</li> </ul>	<ul style="list-style-type: none"> <li>• Labs</li> <li>• Rapid test sites, clinicians-data, and specimens/isolates</li> <li>• Conduit for information from WDPH and WSLH to colleagues</li> <li>• DPH-epidemiologic expertise, coordination of influenza surveillance and ELC funding</li> </ul>
Community Acquired Pathogens (CAP) Program – Research	<ul style="list-style-type: none"> <li>• UW researchers</li> <li>• Wisconsin clinicians (Childhood Origins of Asthma Project)</li> </ul>	<ul style="list-style-type: none"> <li>• Performed lab support for investigation of potential triggers for asthma in Wisconsin children</li> </ul>	<ul style="list-style-type: none"> <li>• UW-Researchers –specimens and clinical data</li> <li>• Wisconsin clinicians – access to patients</li> </ul>

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Community Acquired Pathogens (CAP) Program – Education/Training	<ul style="list-style-type: none"> <li>• Clinical laboratories</li> <li>• DPH</li> <li>• CDC</li> <li>• UW</li> </ul>	<ul style="list-style-type: none"> <li>• Teleconferences on upcoming influenza and RSV season and SARS, BT</li> <li>• Mailings to rapid test sites, annual virology laboratory conference, lab guidance for SARS and monkeypox</li> <li>• Provided 12 regional laboratory meetings on Emergency Response</li> <li>• Provided BT poster to labs; conducted lab training needs survey</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 (CAP) 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 pertussis and monkeypox outbreaks and SARS surveillance</li> <li>• Developed 2004–05 BT and HRSA funding proposals</li> <li>• Performed lab site visits</li> <li>• Distributed integrated lab response plan</li> <li>• Maintained lab messaging system</li> <li>• Developed shipper repository plan</li> <li>• Developed lab capability survey</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>
Drinking Water Quality and Ecosystem Quality Programs – Endocrine Disruptor Research	<ul style="list-style-type: none"> <li>• Water Environment Research Foundation (WERF)</li> <li>• Colo. School of Mines</li> </ul>	<ul style="list-style-type: none"> <li>• Endocrine disrupter research</li> </ul>	<ul style="list-style-type: none"> <li>• Joint research effort with funding provided by WERF</li> </ul>
Drinking Water Quality Program – Beach Health	<ul style="list-style-type: none"> <li>• Madison Health Department, USEPA and Wisconsin USGS</li> </ul>	<ul style="list-style-type: none"> <li>• Received funding (\$350,000 to study swimming-related illness and public notification of beach use health issues)</li> </ul>	<ul style="list-style-type: none"> <li>• EPA provides funding and oversight</li> <li>• USGS provides advanced sample collection and weather monitoring</li> <li>• Madison provides sample collection, routine testing and project management</li> </ul>

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Drinking Water Quality Program – Algal toxin removal study	• Greg Harrington and grad students in UW CEE department	• Received funding for Algal toxin removal study from EPA	• Report writing • Testing facilities • Personnel
Drinking Water Quality Program – H. pylori	• Georgia Southern University	• Validation and continued research of Helicobacter pylori method	• Funding • Technical expertise
Drinking Water Quality Program – Pathogen Removal Study	• Greg Harrington and grad students in UW CEE department	• Received funding from AWWARF for pathogen removal study	• Report writing • Testing facilities • Personnel
Drinking Water Quality and Ecosystem Quality Programs – Anatoxin-a antibody Development	• Irene Xagorarakis of UW Engineering • Deven McGlenn of Neoclone	• Received funding for Anatoxin-a antibody development from the UW System	• Report writing • Testing facilities • Personnel
Ecosystem Quality	• Wisconsin Wastewater Operators Association (WWOA)	• One workshop (Back to the Basics in the Lab) and one short training session (Chlorine Testing for Wastewater Compliance) were given at the Wisconsin Wastewater Operators Association (WWOA) in October 2003	• Information on training needs • Assisted on curriculum development for the workshop
Ecosystem Quality	• CSC Biology Studies Group	• Validate new methods for E. coli and enterococci	• Technical assistance • Laboratory supplies
Ecosystem Quality	• CDC • DNR • DHFS	• Seven workshops	• Funding
Ecosystem Quality Program – Factors Regulating the Interactions of Trace Metals and Aquatic Organisms in Watersheds of the Great Lakes	• UW EC & T Department – Martin Shafer and Dave Armstrong, Biomonitoring Team	• Determined relevant bioassays • Planned field work • Trained grad students	• Metals expertise • Project oversight

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Ecosystem Quality Program – Bioavailability of Mercury in Precipitation, Dry Deposition, and Urban Runoff	<ul style="list-style-type: none"> <li>• UW EC &amp; T Dept – Chris Babiarz and Jamie Schauer, Biomonitoring Team</li> </ul>	<ul style="list-style-type: none"> <li>• Experimental design</li> </ul>	<ul style="list-style-type: none"> <li>• Mercury expertise</li> <li>• Project oversight</li> </ul>
Ecosystem Quality Program – Improved Measurement of Exposure to PM2.5	<ul style="list-style-type: none"> <li>• Univ of Colorado – Mike Hannigan and Jamie Schauer, Biomonitoring Team</li> </ul>	<ul style="list-style-type: none"> <li>• Experimental design</li> </ul>	<ul style="list-style-type: none"> <li>• Air pollution expertise</li> <li>• Samples</li> </ul>
Ecosystem Quality Program – Cylindrospermopsis 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>• 32 lakes surveyed for presence/absence for an invasive toxic algae species</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Sample collection</li> </ul>
Food and Waterborne Diseases Program – Food Testing	<ul style="list-style-type: none"> <li>• DATCAP Lab</li> <li>• Division of Public Health</li> </ul>	<ul style="list-style-type: none"> <li>• Number of specimens tests in support of outbreak investigations</li> </ul>	<ul style="list-style-type: none"> <li>• DATCAP – Testing expertise</li> <li>• DPH – Coordination, EPI investigations and information dissemination</li> </ul>
Food and Waterborne Diseases Program – Wisconsin Enteric Pathogens Program	<ul style="list-style-type: none"> <li>• CDC</li> <li>• Division of Public Health</li> <li>• Wisconsin Clinical Laboratories</li> </ul>	<ul style="list-style-type: none"> <li>• Number of enteric pathogens submitted for identification, serotyping, subtyping, and antimicrobial resistance testing.</li> </ul>	<ul style="list-style-type: none"> <li>• CDC – Funding, expertise and technical guidance</li> </ul>
Food and Waterborne Diseases Program – Veterinary Enteric Pathogens Program	<ul style="list-style-type: none"> <li>• CDC</li> <li>• Division of Public Health</li> <li>• Wisconsin Veterinary Diagnostics Laboratory</li> </ul>	<ul style="list-style-type: none"> <li>• Number of animal isolates of Salmonella, Campylobacter, and Listeria submitted</li> </ul>	<ul style="list-style-type: none"> <li>• CDC – Funding, expertise, technical guidance</li> <li>• DPH – Coordination, epi investigations, information dissemination</li> <li>• WVDL – Veterinary expertise, isolates, antimicrobial resistance data, epi data</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</li> <li>• Wisconsin Clinical Laboratories</li> </ul>	<ul style="list-style-type: none"> <li>• Milwaukee City Health Department (MCHD) purchased equipment for DPDx system</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 and technical guidance</li> <li>• WI Clinical Labs – Specimens, complete case histories to aid in diagnoses</li> <li>• MCHD will provide a regional online diagnostic testing site in Milw. area</li> </ul>

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Food and Waterborne Diseases Program – SHIELD Program: Shiga Toxin Epidemiology and Laboratory Detection Surveillance Program	<ul style="list-style-type: none"> <li>• CDC</li> <li>• Division of Public Health</li> <li>• Wisconsin Clinical Laboratories</li> </ul>	<ul style="list-style-type: none"> <li>• Detected 21 bacterial isolates (non-E. coli O157:H7) that produced shiga toxins 1 and/or 2</li> <li>• Presented teleconference on shiga toxin-producing E. coli to state clinical laboratories</li> </ul>	<ul style="list-style-type: none"> <li>• CDC – Expertise, technical guidance, PCR testing workshop and isolate serotyping</li> <li>• WI clinical labs – Specimens, complete case histories to aid in epi studies</li> <li>• DPH – coordination, epi investigations and information dissemination</li> </ul>
Forensic Toxicology Program: Alcohol Reporting	<ul style="list-style-type: none"> <li>• Wisconsin Department of Transportation</li> </ul>	<ul style="list-style-type: none"> <li>• Develop protocol for providing lab data directly to DOT to enable seamless processing of license suspension for alcohol/drug offenses</li> <li>• Funding obtained for developing alcohol result reporting using Cohort, eliminating use of typewritten reports</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Oversight</li> </ul>
Forensic Toxicology Program: ROSITA 2 Oral Fluid Drug Detection Research	<ul style="list-style-type: none"> <li>• J. Michael Walsh Group, contractor for federally funded research</li> </ul>	<ul style="list-style-type: none"> <li>• Recruited and trained 50 police officers to collect and submit research samples</li> <li>• Designed and provided collection kits and forms</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Oversight</li> <li>• Data analysis</li> <li>• Publication of findings</li> <li>• WSLH provides training, coordination, blood and urine drug analysis</li> </ul>
Forensic Toxicology Program – Drug Recognition Expert Program	<ul style="list-style-type: none"> <li>• WISDOT Bureau of Transportation Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Recertification training for 80 officers</li> <li>• Assisted with developing new data tracking procedures</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 three conferences</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> </ul>
Forensic Toxicology Program – Drug Recognition Expert Program	<ul style="list-style-type: none"> <li>• WISDOT Bureau of Transportation Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Training for 18 new Drug Recognition Expert (DRE) officers</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Program oversight</li> <li>• Training</li> </ul>

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Maternal and Child Health Program – Newborn Screening Program	<ul style="list-style-type: none"> <li>• Department of Health and Family Services</li> </ul>	<ul style="list-style-type: none"> <li>• 67,435 newborns screened for 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>
Maternal & Child Health Program – New Cystic Fibrosis test method evaluation	<ul style="list-style-type: none"> <li>• EraGen</li> </ul>	<ul style="list-style-type: none"> <li>• Method evaluation</li> </ul>	<ul style="list-style-type: none"> <li>• Technology</li> <li>• Funding</li> <li>• Staff (one position)</li> </ul>
Maternal and Child Health/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>
Maternal and Child Health Program	<ul style="list-style-type: none"> <li>• DPH</li> </ul>	<ul style="list-style-type: none"> <li>• Received funding to provide prenatal testing to uninsured women through several community health clinics in Wisconsin since 1998</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Data evaluation and follow-up</li> </ul>
Maternal and Child Health Program	<ul style="list-style-type: none"> <li>• Dr. Hermann - Milwaukee</li> </ul>	<ul style="list-style-type: none"> <li>• FISH on aberrations</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Research</li> </ul>
Maternal and Child Health Program	<ul style="list-style-type: none"> <li>• Dr. Martin - Rockford</li> </ul>	<ul style="list-style-type: none"> <li>• Autism/FISH</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Research</li> </ul>
Maternal and Child Health Program	<ul style="list-style-type: none"> <li>• Dr. Sowards, University of California</li> </ul>	<ul style="list-style-type: none"> <li>• Downs syndrome – other chromosomal aberrations</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Research</li> </ul>
Point/Non-point Source Pollution Program – E.coli Training	<ul style="list-style-type: none"> <li>• DHFS</li> <li>• CDC</li> <li>• DNR – Bioterrorism grant</li> </ul>	<ul style="list-style-type: none"> <li>• Seven Workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> </ul>
Point/Non-point Source Pollution Program	<ul style="list-style-type: none"> <li>• EPA /Dyn Corp</li> </ul>	<ul style="list-style-type: none"> <li>• Validation of E.coli and Enterococci Methods</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Technical assistance</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/APHL</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 analyzed data back to the states</li> <li>• Assisted states with new specimen transport regulations</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, APHL – Funding (CDC), program guidance</li> </ul>

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Sexually Transmitted Disease Program – WI 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</li> <li>• Milwaukee Health Department Laboratory</li> </ul>	<ul style="list-style-type: none"> <li>• Performed 49,708 Chlamydia and 23,880 Gonorrhea tests on women and men at risk, detecting 4,235 CT and 722 GC infections at WSLH</li> <li>• Updated selective screening criteria for CT and GC in ~70 family planning sites, reducing low-yield GC screening in rural sites</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>
Sexually Transmitted Disease Program – Corrections Intake Screening Project	<ul style="list-style-type: none"> <li>• Department of Public Health</li> <li>• Department of Corrections</li> </ul>	<ul style="list-style-type: none"> <li>• Screened 3,868 incoming WI inmates for Chlamydia and Gonorrhea using pooled testing, detecting 279 Chlamydia and 39 Gonorrhea infections as of 6/15/04</li> <li>• Enabled summary reporting of positive results from SLH 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 &amp; Training (HCET)</li> <li>• CDC/APHL</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> </ul>	<ul style="list-style-type: none"> <li>• States/Labs – Data, collaboration, consensus on lab issues related to STD testing</li> <li>• HCET – Administrative, coordination of partners’ efforts</li> <li>• CDC/APHL– Program guidance, funding</li> </ul>
Solid and Hazardous Waste Program – Chemical Terrorism Response	<ul style="list-style-type: none"> <li>• HazMat teams</li> <li>• 55th Civil Support Team</li> <li>• Local health departments</li> </ul>	<ul style="list-style-type: none"> <li>• Finalize the WSLH Response Plan with the Chemical Terrorism Coordinator to define the programs role in emergency response</li> </ul>	<ul style="list-style-type: none"> <li>• Information and cooperation in responding to emergency response events</li> </ul>
Solid and Hazardous Waste Program – FTIR Library	<ul style="list-style-type: none"> <li>• FDA Forensic Lab</li> </ul>	<ul style="list-style-type: none"> <li>• WSLH and the FDA laboratory have identical FTIR libraries</li> </ul>	<ul style="list-style-type: none"> <li>• Each laboratory provides electronic libraries and expertise related to FTIR analysis</li> </ul>

Program Partnership Name	Who are Partners/ Collaborators?	Measurable Accomplishments for FY 2004	What do Partners Provide?
Tuberculosis Program – CDC Genotyping	<ul style="list-style-type: none"> <li>• CDC</li> <li>• WDPH Tuberculosis Program</li> <li>• Regional Genotyping Lab at Michigan PHL</li> <li>• WMLN labs</li> </ul>	<ul style="list-style-type: none"> <li>• Implemented national universal TB-genotyping program, including establishing communication, submission, and testing and reporting protocols</li> </ul>	<ul style="list-style-type: none"> <li>• DPH epidemiologic expertise</li> <li>• TB isolates for testing</li> <li>• TB-Genotyping testing in-kind</li> <li>• 10-day turnaround time for genotyping results</li> </ul>
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>• WDPH- 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 serology test for TB infection</li> <li>• Provided statewide lab based surveillance for all mycobacteria species and for TB drug susceptibility</li> <li>• Provided forum for discussion of new universal TB-genotyping program</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>
Tuberculosis Program – TB Elimination Cooperative Agreement	<ul style="list-style-type: none"> <li>• WDPH-TB Control section</li> <li>• CDC Tuberculosis Program</li> </ul>	<ul style="list-style-type: none"> <li>• Continued universal completed DNA fingerprinting of all WI TB isolates from 2000-03 as part of “Elimination of TB in Low-Incidence States Study”</li> <li>• Used data to help develop algorithm for universal DNA fingerprinting of TB</li> <li>• Presented data at ASM and National TB Controllers meeting</li> <li>• Maintained turn-around-time objectives to report TB lab results</li> </ul>	<ul style="list-style-type: none"> <li>• CDC and WDPH – Organize study, analyze data, and provide funds</li> <li>• Milwaukee TB Clinic/Lab – Provides clinical data and collect, process, and forward specimens to WSLH</li> <li>• Financial support</li> <li>• TB case records data</li> <li>• DPH epidemiologic expertise</li> </ul>
Tuberculosis Program – Assessment of laboratory performance for detection of TB by nucleic acid amplification (NAA) testing	<ul style="list-style-type: none"> <li>• CDC</li> </ul>	<ul style="list-style-type: none"> <li>• Produced two events for the assessment of performance of labs and commercial kits which use NAA for the direct detection of TB in patient specimens</li> <li>• Produced a survey of lab practices for NAA for TB</li> <li>• Presented data at ASM and ICAAC</li> </ul>	<ul style="list-style-type: none"> <li>• Funding</li> <li>• Assists in the evaluation of results</li> <li>• Preparation of performance reports</li> <li>• Technical presentations</li> </ul>

## II. Publications in Peer-Reviewed Journals

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Burk, T., J. Loughrin, C. Powell, and J. Knight. "Occupational and Industrial Health at the Wisconsin State Laboratory of Hygiene." *Wisconsin Medical Journal*, 2003, Issue 6, pp. 71-75.

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### III. Other Publications

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Degnan, A.J. "The Wisconsin State Laboratory of Hygiene: A Facility Overview." *Journal of the Wisconsin Water Association*, April 2004.

Dobson, L. "Hydrogen Cyanide." *NIOSH Manual of Analytical Methods*, NMAM, 4th Edition Method; No. 6017.

Harding, P. "Interpretation of Alcohol Results." *American Prosecutors Research Institute Special Topics Series: Alcohol Toxicology for Prosecutors*, July 2003; pp. 5-28.

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#### IV. Research Papers in Progress

Davis, T, J. Standridge, and A. Degnan. "Bacteriological Analysis of INDOOR Water Parks in Wisconsin." Submitted in April 2004 to *Applied Environmental Microbiology*.

DeCoster, D., R. Vena, S. Callister, and R. Schell. "Comparison of the BACTEC TB-460 System, Flow Cytometric Susceptibility Assay, and Proportion Method for Susceptibility of Mycobacterium Tuberculosis to Anti-mycobacterial Agents." Accepted for publication in 2004.

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Degnan, A., J. Chen, and C. Reavis. "Epidemiology and Pathogenesis of *Helicobacter pylori* in a Selected Population of Southeast Georgia Farm Workers." Submitted April 2004 to *Journal Rural Health*.

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Drewes, J., J. Hemming, S. Ladenburger, J. Schauer, and W. Sonzogni. "An Assessment Of Endocrine Disrupting Activity Changes In Water Reclamation Systems Through The Use Of Bioassays And Chemical Measurements." To be submitted in 2004 to *Water Environment and Technology*.

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Karner, D., M. Shafer, J. Hemming, and W. Sonzogni. "Development of a Marine Algal Probe for Copper Speciation" To be submitted to *Environmental Toxicology & Chemistry*.

Karner, D., M. Shafer, J. Hemming, and W. Sonzogni "Role of Colloids in Regulating Copper Toxicity". To be submitted to *Environmental Science and Technology*.

Kurtycz, D. "Metastatic Primitive Neurectodermal Tumor Originating from Testicular Germ Cell Neoplasia Simultaneously Demonstrating t(1;22)(q24;q12) and I(12p) by Fluorescent in-situ Hybridization." Submitted in May 2004 to *Diagnostic Cytopathology*.

Kurtycz, D. "Strongyloidiasis: Diagnosis via ERCP Brushing." To be submitted in 2004.

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Kurtycz, D. "Manual Reprocessing of Residual Material from Liquid-Based Cytology." To be submitted in 2004.

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Tang, D., M. Shafer, D. Karner, and D. Armstrong. "Response of Non-Protein Thiols to Copper Stress and Extracellular Release of Glutathione in the Diatom Thalassiosira Weissflogii." Accepted for publication in *Limnology and Oceanography*.

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#### V. Papers Presented at Scientific Meetings

Arcari, C., J. Pfister, L. Amsterdam, M. Vaughn, J. Rombca, R. McDonald, and J. Davis. "Chlamydia Trachomatis and Neisseria Gonorrhoeae Infections Among Female and Male Wisconsin Family Planning Clinic Clients: Prevalence of Infection and Performance of Selective Screening Criteria." 15th Meeting of the International Society for Sexually Transmitted Diseases Research, July 27-30, 2003; Ottawa, Canada.

Borchardt, S., J. DeBusscher, P. Tallman, S. Manning, C. Marrs, T. Kurzynski, and B. Foxman. "Antibiotic Resistance among Invasive Group B Streptococcus." Poster presented at the Annual Conference on Antimicrobial Resistance sponsored by the National Foundation for Infectious Diseases, June 23-25, 2003; Bethesda, MD.

Davis, T. and A. Degnan. "Bacteriological Analysis of INDOOR Water Parks". National Environmental Health Association Annual Conference, May 8, 2004; Anchorage, AK.

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Gonzalez, I., N. Malakmadze, T. Oemig, I. Isiadinso, C. Johnsen, D. Rembert, P. Wand, and K. Ijaz. "Utility of Universal TB Genotyping in the Detection and Investigation of Multiyear Tuberculosis Transmission in a Low-Incidence State." International Union against Tuberculosis and Lung Disease Annual Conference, October 5-8, 2003; San Antonio, TX.

Gruetzmacher, G., E. Maly, and D. Schleis. "Increasing Industrial Hygiene Efficiency: Automatic Formatting and Reporting of Laboratory Data." American Industrial Hygiene Conference and Exposition, May 13, 2004; Atlanta, GA.

Hahm, J., J. Manchester-Neesvig, and W. Sonzogni. "2003 PBDE Levels in Lake Michigan Fish." 28th Annual Meeting of the Wisconsin Section of the American Water Resources Section, March 4-5, 2004; Wisconsin Rapids, WI.

Hahm, J., J. Manchester, and W. Sonzogni. "Comparison of PBDE Levels in Lake Michigan Forage Fish between 1995 and 2003." 26th Annual Midwest Environmental Chemistry Workshop, October 11-12, 2003; Iowa City, IA.

Hahm, J., J. Manchester, and W. Sonzogni. "Comparison of PBDE Levels in Lake Michigan Forage Fish between 1995 and 2003." 28th Annual Meeting of the Wisconsin Section of the American Water Resources Section, March 4-5, 2004; Wisconsin Rapids, WI.

Hemming, J. "Combining Bioassays and Chemical Analyses to Assess Removal of Endocrine Disruptors from Water Reclamation Facilities." Midwest Society of Environmental Toxicology and Chemistry Annual Meeting, November 2003.

Karner, D. "Bioavailability of Copper Probed with the Marine Alga *Thalassiosira weissflogii*." Midwest Society of Environmental Toxicology and Chemistry, March 2004; La Crosse, WI.

Key-Schwartz, R., P. Eller, L. Dobson, and L. Reichmann. "Standard Reference Materials for Crystalline Silica Analysis." ASTM Symposia on Silica Sampling and Analysis, April 22-23, 2004; Salt Lake City, UT.

Kirk, C. and C. Matzinger. "The Power of Prevention: The Roles of Laboratories in a Healthier Wisconsin." Poster exhibit presented at the first annual conference of Wisconsin Public Health Association and Wisconsin Association of Local Health Departments and Boards, May 18-19, 2004; Stevens Point, WI.

Kurzynski, T., D. Warshauer, J. Archer, P. Harrington, D. Croft, and C. Koschmann. "Investigation of an Outbreak of *Campylobacter jejuni* Infections Associated with Consumption of Unpasteurized Milk." Eighth Annual PulseNet Update Meeting, April 2004; San Diego, CA.

Laessig, R. and S. Ehrmeyer. "Successful Strategies for Managing Multiple Regulators." Association for Clinical Chemistry National Convention, July 2003; Philadelphia, PA.

Martin, L., J. Johnson, W. Wells, and L. Meisner. "Autism and Novel Duplication in 15q11-13 GABRB3 Region." American College Medical Genetics: Clinical Genetics Meeting, March 4-7, 2004; Kissimmee, FL.

McDonald, R., J. Pfister, and L. Amsterdam. "Costs and Benefits Associated with Universal Screening Studies as Tools to Assess Selective Screening Criteria for

Chlamydia." Poster, 2004 National STD Prevention Conference, March 8-11, 2004; Philadelphia, PA.

Meisner, L. "Breast Cancer Genetics: Inherited vs. Acquired Mutations and Environmental Interactions." Breast Cancer Symposium 2003 – Progress in the Management of Breast Cancer, Medical College of Wisconsin, Nov. 14, 2003; Milwaukee, WI.

Meisner, L. "Causes, Specificity, and Significance of Chromosome Changes in hES Cells/What Embryonic Stem Cells can Teach us About Cancer." University of Georgia Regenerative Bioscience Center Symposium – Stem Cells: The Foundation for Repairing the Aging Body, June 21, 2004; Athens, GA.

Nardelli, D., K. Luk, S. Callister, and R. Schell. "CD4+ CD25+ T cells Prevent Severe Destructive Arthritis in *Borrelia burgdorferi*-Vaccinated and Challenged Mice." American Society for Microbiology, May 24, 2004; New Orleans, LA.

Panella, J., M. Williams, C. Miller, J. Johnson, W. Wells, L. Meisner, and J. Yu. "Use of Telomere and Specific Locus FISH Probes to Detect Deletions Within Duplications." American Society Human Genetics 2003 Conference, Nov. 4-8, 2003; Los Angeles, CA.

Pfister, J., L. Povinelli, and D. Kurtycz. "Cervical cancer in Wisconsin: Increasing Incidence and Mortality Among Younger Women." 51st Annual Scientific Meeting of the American Society of Cytopathology, November 7-12, 2003; Orlando, FL.

Pfister, J., R. McDonald, C. Arcari, L. Amsterdam, and M. Vaughn. "Factors Responsible for Observed Changes in Chlamydia trachomatis Test Positivity." 2004 National STD Prevention Conference, March 8-11, 2004; Philadelphia, PA.

Plummer, C., R. Hoffman, G. Sturbaum, M. Marshall, C. Sterling, and D. Wolk. "Multiplex Real-time PCR for Encephalitozoon Spores Includes Monitor for PCR Inhibitors in Water Samples." American Society for Microbiology, 2004; New Orleans, LA.

Popp, D. "Preparation of Liquid Spiked Control Samples." ASTM Symposia on Silica Sampling and Analysis, April 22-23, 2004; Salt Lake City, UT.

Powell, J., E. Reisdorf, C. Kiesner, C. Kirk, and P. Shult. "Impact of Emerging/Re-Emerging Disease Threats and Outbreak Response on a Public Health Laboratory." Poster presented at the 20th Annual Clinical Virology Symposium, April 25-28, 2004; Clearwater Beach, FL.

Sonzogni, W. and D. Degenhardt. "Chemical Terrorism Preparedness and Environmental Resources – Dual Role for State Laboratories." 28th Annual Meeting of

the Wisconsin Section of the American Water Resources Section, March 4-5, 2004; Wisconsin Rapids, WI.

Sonzogni, W. and J. Standridge. "Construction of a State Laboratory Facility." American Water Works Association Water Quality Technology Conference, November 2-6, 2003; Philadelphia, PA.

Sotir, M., J. Davis, J. Archer, D. Hoang-Johnson, T. Kurzynski, T. Monson, M. Wegner, C. Koschmann, and L. Kelly. "Two Outbreaks and a Recall: Temporally-related E. coli O157:H7 Outbreaks Associated with Ground Beef Consumption, Wisconsin, July-September, 2002." Poster presented at 41st annual meeting of the Infectious Disease Society of America, October 2003; San Diego, CA.

Tortorelli, J. "PCBs and PBDEs." Conference on Assessing and Addressing Environmental Health: At Home, School, Work and Play, November 2003; Madison, WI.

Warshauer, D. "Monkeypox Visits Wisconsin." American Society for Microbiology, May 23-27, 2004; New Orleans, LA.

Warshauer, D., L. Williams, P. Wand, L. Behrendt, S. Legois, and J. Ridderhof. "Stability of Mycobacterium tuberculosis Suspensions for Nucleic Acid Amplification Testing: Implications for Performance Evaluation." 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 14-17, 2003; Chicago, IL.

Warshauer, D., T. Kurzynski, J. Archer, P. Harrington, D. Croft, and C. Koschmann. "Investigation of an Outbreak of Campylobacter jejuni Infections Associated with Consumption of Unpasteurized Milk." 2004 Annual PulseNet Meeting, April 27-30, 2004; San Diego, CA.

Williams, L., S. Legois, D. Warshauer, P. Wand, and M. Logan. "Inhibition Testing among Participants in CDC's Model Performance Evaluation Program for Nucleic Acid Amplification." American Society for Microbiology, May 23-27, 2004; New Orleans, LA.

## **VI. Other Presentations**

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

Burk, T. "Progesterone Levels in Compounding Pharmacy Work." OSHA Consultation Project Managers Meeting, April 27, 2004; Salt Lake City, UT; 20.

Burk, T. "Progesterone Levels in Compounding Pharmacy Work." OSHA Consultation Project Managers Meeting, April 28, 2004; Salt Lake City, UT; 15.

Burk, T. "Progesterone Levels in Compounding Pharmacy Work." OSHA Consultation Project Managers Meeting, April 29, 2004; Salt Lake City, UT; 25.

Burmeister, B. "Evaluation of NELAC Fields of Proficiency Testing Acceptance Criteria." National Environmental Laboratory Accreditation Conference Ninth Interim Meeting, January 29, 2004; Dallas, TX.

Cochems, A. "Toxicology for DRE Officers." Drug Recognition Expert Re-certification Training, October 9-10, 2003; Tomah, WI; 12.

Cochems, A. "Toxicology for DRE Officers." Drug Recognition Expert Re-certification Training, October 30, 2003; Milwaukee, WI; 30.

Cochems, A. "Toxicology for DRE Officers." Drug Recognition Expert Re-certification Training, December 5, 2003; De Pere, WI; 17.

Collins, M. "Development of a Rapid Detection Method for Waterborne E. coli O157:H7." Annual Meeting of the Wisconsin Laboratory Association, September 2003; 70.

Degenhardt, D. "Chemical Emergency Planning and Preparedness." Wisconsin Chapter of the American Industrial Hygienist Association, September 9, 2003; Madison, WI; 40.

Degenhardt, D. "Chemical Emergency Planning and Preparedness." Wisconsin HazMat Response Conference, March 8, 2004; Wisconsin Dells, WI; 75.

Degenhardt, D. "Chemical Emergency Planning and Preparedness." Wisconsin Environmental Health Association, April 7, 2004; Middleton, WI; 150.

Degenhardt, D., and C. Matzinger. "The Laboratory Role in Chemical Terrorism Response." Audioconference, August 20, 2003.

Degnan, A. "Issues in Bio-Preparedness: Challenges and Opportunities." Center for Disease Control/National Environmental Health Emerging Leader Symposium, December 5, 2003; Atlanta, GA.

Fritsch, T. "The Lab and Environmental Toxins – Arsenic and Lead." Assessing and Addressing Environmental Health, November 17-18, 2003; Madison, WI; 30.

Garrison, B., P. Shult, and C. Matzinger. "Biosafety in the Clinical Microbiology Laboratory." Audioconference, September 17, 2003.

Gormley, C. and R. Laessig. "Practical Proficiency Testing and Quality Control." October 23, 2003, Baltimore, MD.

Harding, P. "Analysis of Defense Challenges to Breath and Blood-Alcohol Testing." The Robert F. Borkenstein Course on Alcohol and Highway Safety, December 7-12, 2003; Bloomington, IN; 47.

Harding, P. "Alcohol Curves and Other Defenses." 10th Annual Traffic and Impaired Driving Law Conference, April 13-14, 2004; Appleton, WI; 70.

Harding, P. "Panel Discussion: Current Issues." 17th Annual Conference of the International Association for Chemical Testing, April 28, 2004; Little Rock, AR; 120.

Harding, P. "Blood Alcohol Analysis." The Robert F. Borkenstein Course on Alcohol, Drugs and Highway Safety: Testing, Research and Litigation, May 10, 2004; Bloomington, IN; 67.

Harding, P. "Analysis of Defense Challenges to Breath- and Blood-Alcohol Testing." The Robert F. Borkenstein Course on Alcohol, Drugs and Highway Safety: Testing, Research and Litigation, May 13, 2004; Bloomington, IN; 67.

Harding, P. "Integration of Prosecutorial DRE and Toxicological Resources (Moderator)." Improving Integration of DRE, Investigative and Toxicological Evidence in DUID Prosecutions, May 23-25, 2004; Seattle, WA; 40.

Harding, P. "Alcohol Toxicology." Lethal Weapon: DUI Homicide Course, National District Attorneys Association, June 14-18, 2004; Columbia, SC; 49.

Haupt, T., M. Doering, and C. Matzinger. "West Nile Virus: Laboratory Update 2004." Audioconference, June 14, 2004.

Hemming, J. "Combining Bioassays and Chemical Analyses to Assess Removal of Endocrine Disruptors from Water Reclamation Facilities." Midwest Society of Environmental Toxicology and Chemistry, Annual Meeting, March 26, 2004; 12.

Hintzman, P. "Developing Cutting Edge Innovation for Public Health Practice: Wisconsin's Transformational Public Health System Framework." States of Change Conference, May 12, 2004; Denver, CO; 40.

Hoffman, G. "Cystic Fibrosis Screening: Wisconsin Summary." CDC Cystic Fibrosis Workshop, November 20; Atlanta, GA; 44.

Hoffman, G. "Cystic Fibrosis Screening Update." Meriter Hospital Grand Rounds, November 18, 2003; Madison, WI; 32.

Hoffman, G. "Implementation of Tandem Mass Spectrometry in a Newborn Screening Laboratory." Tandem Mass Spectrometry Training, January 29, 2004; 6; and May 20, 2004; 5.

Hoffman G. "Implementation of Tandem Mass Spectrometry in a Newborn Screening Laboratory." Tandem Mass Spectrometry Training, March 4, 2004; Dallas, TX; 6.

Hoffman, G. "Newborn Screening of CFTR Mutations Using Liquid Chip Chemistry." Newborn Screening and Genetic Symposium, May 5, 2004; Atlanta, GA; 325.

Hoffman, G. "Newborn Screening for Cystic Fibrosis: Update." Second Brazilian Congress for Neonatal Screening, September 26, 2003; Belo Horizonte, Brazil; 375.

Hoffman, G. "Present Advances in Screening Newborns for Congenital Disorders." Racine/Kenosha branch of WISCLS, November 12, 2003; 22.

Hoffman, G. "Quality Control and Assurance: Tandem Mass Spectrometry." CDC Webcast, January 21, 2004; Madison, WI; 120.

Hoffman, G. "Retesting Guidelines Update." Meriter Hospital Grand Rounds, October 21, 2003; Madison, WI; 26.

Hoffman, G. "Screening Low Birth Weight Babies for Hypothyroidism." Newborn Screening and Genetic Symposium, May 4, 2004; Atlanta, GA; 325.

Hoffman, G. "Strategies for Using Molecular Techniques in the Neonatal Screening for Cystic Fibrosis." Second Brazilian Congress for Neonatal Screening, September 27, 2003; Belo Horizonte, Brazil; 375.

Hoffman, G. "Tandem Mass Spectrometry Implementation: Wisconsin Experience." Missouri Newborn Screening Advisory Meeting, October 9, 2003; Jefferson City, MO; (18).

Hoffman, G. "Tandem Mass Spectrometry Implementation: Wisconsin Experience." Louisiana Newborn Screening Advisory Meeting, January 16, 2004; New Orleans, LA; 23.

Hoffman, G. "The Effect of Adding Multiple Allele Testing for Cystic Fibrosis." Newborn Screening and Genetic Symposium, May 3, 2004; Atlanta, GA; 325.

Janzen, V. and R. Laessig. "PT and Kodachrome Slides: Getting it Right." October 24, 2003, Baltimore, MD.

Kalscheur, D. "Alcohol: The Toxicology Perspective." WCMEA Annual January Conference, January 12-13, 2004; Wisconsin Rapids, WI; 70.

Kenedy-Parker, D. and L. Vingum. "A Day in the Life of a Self-Help Lake Sample." Poster presented at the Wisconsin Lakes Convention, April 2004; Stevens Point, WI; 350.

Kirk, C. "Influenza Update 2004." Kenosha County Board of Health Meeting, June 14, 2004; Kenosha, WI.

Kirk, C. "Role of the Wisconsin State Laboratory of Hygiene in Biological and Chemical Terrorism Response." Weapons of Mass Destruction Conference sponsored by the FBI, June 29, 2004; Eau Claire, WI.

Kirk, C. "The Laboratory Component of the Public Health Emergency Plan." Presentation to the Consortia Program Coordinator Meeting, May 20, 2004; Wisconsin Dells, WI.

Kirk, C. and C. Matzinger. "Wisconsin Health Alert Network Training for Laboratories." Webconference, January 21, 2004.

Kirk, C., T. Haupt, and C. Matzinger. "Updates for the 2003-04 Respiratory Season: Influenza, SARS and more..." Audioconference, October 15, 2003.

Knight, J. "Point Count and Gravimetric Analysis." Wisconsin Asbestos Seminar, November 10, 2003; Wisconsin Dells, WI; 150.

Kurtycz, D. Editor and Producer of American Society of Clinical Pathologists Town Hall Meeting CD-ROM Publication on "Diagnosis and Management of Human Papilloma Virus and Bioterrorism." ASCP Teleconference Committee, 2003; Chicago, IL.

Kurtycz, D. "Cervical Cancer Screening Updates." Second Annual Women's Health Conference, November 21, 2003; UW-Milwaukee School of Nursing, Milwaukee, WI.

Kurtycz, D. "Genito-Urinary and Lower Abdominal Injuries." 2003 Ski Patrol Refresher Series, October 25, 2003; Devil's Head Ski Lodge, Merrimac, WI.

Kurtycz, D. "Fluorescent In Situ Hybridization." Maine/New Hampshire State Society of American Medical Technologists/CLMA Meeting, October 15, 2003; Portland, ME.

Kurtycz, D. Editor and Producer of American Society of Clinical Pathology CD-ROM of "Laboratory Preparedness for Bioterrorism: From the Phebotomist to the Pathologist." ASCP, 2003; Chicago, IL.

Kurtycz, D., J. Harter, and N. Sanchez. "Cytology Potpourri: Pathologist's Night Out (PNO)." December 9, 2003; Citywide Series.

Kurzynski, T. "Pulsed Field Gel Electrophoresis: What is It, What it Means and How it Helps You." Bureau of Communicable Diseases Spring Seminars, April 2004; Northeastern Region, Green Bay, WI; 156.

Kurzynski, T. "Pulsed Field Gel Electrophoresis: What is It, What it Means and How it Helps You." Bureau of Communicable Diseases Spring Seminars, April 2004; Northern Region, Minocqua, WI; 85.

Kurzynski, T. "Pulsed Field Gel Electrophoresis: What is It, What it Means and How it Helps You." Bureau of Communicable Diseases Spring Seminars, April 2004; Western Region, Eau Claire, WI; 114.

Kurzynski, T. "Tracking Food Borne Outbreaks in Wisconsin Using PulseNet Fingerprints." Fourth Annual Biotechnology Curriculum Sharing Day, April 21, 2004; Madison Area Technical College, Madison, WI; 25.

Laessig, R. 2004 CLMA/ASCP Conference, March 29, 2004; Atlanta, GA.

Laessig, R. "CDC Environmental Tracking Conference." March 24-26, 2004, Philadelphia, PA.

Laessig, R. "Now You are a Laboratory Director: Putting It All Together." October 25, 2003, Baltimore, MD.

Laessig, R. "Physician Office Laboratory Systems: Laboratory Information Systems (LIS)." October 23, 2003, Baltimore, MD.

Laessig, R. "Point of Care Leadership Forum." Sponsored by CAP, March 16, 2004; Chicago, IL.

Laessig, R. "QA, QC, PT: Connected but Different." October 24, 2003, Baltimore, MD.

Laessig, R. "Testing in Physician Office Laboratories: Past, Present and Future." October 22, 2003, Baltimore, MD.

Laessig, R. and S. Ehrmeyer. "Developing Successful Strategies for Meeting the Regulations (JCAHO, CAP, COLA, CLIA)." July 21, 2003, Philadelphia, PA; 60.

Laessig, R. and S. Ehrmeyer. "Developing a Top-Notch POCT Program." Ohio State POCT Coordinators Organization, August 2003, Dayton, OH.

Laessig, R. and S. Ehrmeyer. "Laboratory Wide Quality Assurance Plan." August 1, 2003; Chicago, IL; 22.

Laessig, R. and S. Ehrmeyer. "Walk the Walk and Talk the Talk: Be Inspection Ready." Pathology Today, ASCP Annual Meeting, September 2003; New Orleans, LA.

Leinweber, J. "Encryption for IT Staff." Lockdown 2003, July 17, 2003; Madison, WI; 25.

Leinweber, J. "Threat Analysis." BadgIRT Security, May 27, 2004; Madison, WI; 30.

Liddicoat, L. "Driving Under the Influence of Drugs: The WSLH Perspective." Annual Meeting of the North American Field Training Officer Association – Wisconsin Chapter, October 8, 2003; Wisconsin Dells, WI; 100.

Liddicoat, L. "Preparing for a DUID Trial." Improving Integration of DRE, Investigative and Toxicological Evidence in DUID Prosecutions, May 23-25, 2004; Seattle, WA; 40.

Liddicoat, L. "ROSITA Informational Presentation." Drug Recognition Expert Recertification Training, October 9-10, 2003; Tomah, WI; 12.

Liddicoat, L. "ROSITA Informational Presentation." Drug Recognition Expert Recertification Training, October 30, 2003; Milwaukee, WI; 30.

Liddicoat, L. "ROSITA Informational Presentation." Drug Recognition Expert Recertification Training, December 5, 2003; De Pere, WI; 17.

Liddicoat, L. "Spotlight on Drugged Driving." 17<sup>th</sup> Annual Conference of the International Association for Chemical Testing, April 27, 2004; Little Rock, AR; 60.

Liddicoat, L. "The Practical Ramifications of Act 97." Tenth Annual Traffic and Impaired Driving Law Program, April 13-14, 2004; Appleton, WI; 150.

Liddicoat, L. and A. Cochems. "DUID- Drug Testing Issues." Tenth Annual Traffic and Impaired Driving Law Program, April 13-14, 2004; Appleton, WI; 60.

Liddicoat, L. and P. Harding. "Alcohol and Drug Testing Issues – 2003." Fifth Annual Prosecutor's Seminar on OWI, November 13-14, 2003; Elkhart Lake, WI; 90.

Matzinger, C. "Badger Me With Rules." Northeast Technical Conference, November 6, 2003; Green Bay, WI.

McDonald, R. "Adjustments to Chlamydia and Gonorrhea SSC in Wisconsin, 2003: Implementation and Impact after Three Months in Use." Region V Infertility Prevention Project Advisory Committee Meeting, January 14, 2004; Chicago, IL; 40.

McDonald, R. "Chlamydia and Gonorrhea Screening in Wisconsin: Use of Selective Screening Criteria to Get the Most from Limited Resources." Symposium, 2004 National STD Prevention Conference, March 8-11, 2004; Philadelphia, PA; 50.

McDonald, R. "Selective Screening for Chlamydia and Gonorrhea in Wisconsin." Region V Infertility Prevention Project Advisory Committee Meeting, July 15, 2003; Madison, WI; 50.

McDonald, R. "Selective Screening for Chlamydia and Gonorrhea in Wisconsin." Wisconsin Family Planning and Reproductive Health Annual Meeting, September 24, 2003; Wausau, WI; 45.

McDonald, R. "STD Report Card: Screening for Chlamydia and Gonorrhea, Adjustments to Selective Screening Criteria in Wisconsin, 2003–2004." DPH Family Planning Providers Meeting, June 15, 2004; Wausau, WI; 40.

Miran, D. "E-mail as an Electronic Record." DoIT – ERM, July 23, 2003; Madison, WI; 20.

Pfister, J. and C. Matzinger. "Test Method Validation." Audioconference, December 17, 2003.

Powell J. "Fluorescence Microscopy for the Rabies DFA Test." Laboratory Methods for Detecting Rabies, National Laboratory Training Network, January 5-8, 2004; San Antonio, TX; 26.

Powell, J. "Fluorescence Microscopy for the Rabies DFA Test." Laboratory Methods for Detecting Rabies, National Laboratory Training Network, March 10-11, 2004; Richmond, CA; 34.

Powell, J. "Quality Assurance in the Rabies Laboratory." Laboratory Methods for Detecting Rabies, National Laboratory Training Network, January 5-8, 2004; San Antonio, TX; 26.

Powell, J. "Quality Assurance in the Rabies Laboratory." Laboratory Methods for Detecting Rabies, National Laboratory Training Network, March 10-11, 2004, Richmond, CA; 34.

Powell, J. "Rabies Diagnosis and Specimen Submission." Agriculture 13 Training, Department of Agriculture and Consumer Protection, October 7, 2004; Wisconsin Dells, WI; 43.

Reisdorf, E. "Looking for agents of viral gastroenteritis." WSLH teleconference, March 9, 2004; Wisconsin State Laboratory of Hygiene, Madison, WI.

Reisdorf, E. "Molecular Diagnostics: What's the status?" Wisconsin Virology Conference, June 24, 2004; University of Wisconsin–Madison Lowell Center, Madison, WI.

Reisdorf, E. "Norovirus in Wisconsin." National Environmental Health Association Region 4 Conference, October 1, 2003; Omaha, NE.

Schell, R. Division V, Clinical Immunology, American Society for Microbiology, May 25, 2004; New Orleans, LA.

Schell, R. Infectious Disease Society, November 2003; Milwaukee, WI.

Schell, R. Lyme Disease Group, December 2003; Milwaukee, WI.

Shalkham, J. "American College of Obstetrics and Gynecology Guidelines for Pap Smear Testing." HCET Network Presentation, October 22, 2003; 27.

Shalkham, J. "Breast FNA Cytology." Wisconsin Society of Cytology Meeting, April 3, 2004; Oshkosh, WI; 44.

Shalkham, J. "Effective Use of ThinPrep and HPV Testing." HCET Network Presentation, April 13, 2004; 28.

Shalkham, J. "Romanowsky Staining in Non-GYN and FNA Cytology." Dane County Cytology Center In-Service Training Program, October 28, 2003; 18.

Shalkham, J. "Romanowsky Staining in Non-GYN and FNA Cytology." Wisconsin Society of Cytology Meeting, April 3, 2004; Oshkosh, WI; 44.

Shult, P. "Emerging Infectious Diseases." Dade-Behring Users Group, September 19, 2003; Duluth, MN; 85.

Shult, P. "Emerging Infectious Diseases: Just When You Think You've seen It All." Northeast Technical College – "Contemporary Issues in the Clinical Laboratory", November 6, 2003; Green Bay, WI; 44.

Shult, P. "Emerging Infectious Diseases Update." WISCLS, April 21, 2004; Wausau, WI; 75.

Shult, P. "Laboratory Response to Bioterrorism." Eau Claire LHD, local hospital lab personnel and Regional HazMat members monthly meeting, November 14, 2003; Eau Claire, WI; 26.

Shult, P. "Laboratory Response to Bioterrorism Update." WAHMR meeting, March 5, 2004; Wisconsin Dells, WI; 60.

Shult, P. "SARS and Other Emerging Pathogens." 22nd Annual Laboratory Medicine in Review, October 17, 2003; Marshfield, WI; 127.

Shult, P. "The Role of Laboratory Networks in Emergency Response." TB Laboratory Network annual meeting, November 11, 2003; Madison, WI; 40.

Shult, P., C. Kirk, and C. Matzinger. "Influenza, RSV, and SARS: What Every Laboratory Should Know." National Audioconference sponsored by National Laboratory Training Network, December 16, 2003; 3,008.

Shult, P. and C. Kirk. "Bioterrorism Response Update for Clinical Laboratories, 2004." Wisconsin Clinical Laboratory Scientists Annual Meeting, April 22, 2004; Wausau, WI.

Shult, P. and C. Kirk. "Bioterrorism Response Preparedness: An Overview of Agents and Activities." Shared Health Services Meeting, April 19, 2004; Wisconsin Dells, WI.

Stanton, N. "Electronic Reporting: State Public Health Laboratory Perspective." CDC Partners Conference, April 18-20, 2004; San Diego, CA; 30.

Stanton, N. "Role of the Laboratory in Assessing Environmental Exposures." CME Conference Making the Connection: Human Health and Environmental Exposures, June 4, 2004; Madison, WI; 25.

Stanton, N. "The Lab and Environmental Toxins – Mercury and Radon." Assessing and Addressing Environmental Health, November 17-18, 2003; Madison, WI; 30.

Warshauer, D. "Monkeypox Visits Wisconsin." September 24, 2003, Brookfield, WI; 15.

Warshauer, D. "Monkeypox Visits Wisconsin." Northeastern Technical College Conference, November 6, 2003; Appleton, WI; 55.

Warshauer, D. "Pulsed-Field Gel Electrophoresis and Real-Time PCR at the Wisconsin State Laboratory of Hygiene." Wisconsin Division of Public Health Spring Seminar, April 26, 2004; Madison, WI; 105.

Warshauer, D. "Pulsed-Field Gel Electrophoresis and Real-Time PCR at the Wisconsin State Laboratory of Hygiene." Wisconsin Division of Public Health Spring Seminar, April 26, 2004; Oconomowoc, WI; 200.

Warshauer, D. "SARS-CoV Testing at the Wisconsin State Laboratory of Hygiene." Statewide Teleconference, Wisconsin Division of Public Health, October 9 - 10, 2003.

Warshauer, D. "West Nile Virus Update." Annual Meeting of the Wisconsin Blood Bank Association, September 11, 2003; Madison, WI; 120.

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

Bowman, G. and J. Olstadt. "Realtor's Guide to Drinking Water Quality." June 29, 2004; Madison, WI.

Degenhardt, D. and A. Spallato. Regional Meetings for the Wisconsin Laboratory Response Network (12 cities): Racine, Fennimore, Madison, West Bend, Waukesha, Eau Claire, La Crosse, Wausau, Hayward, Wisconsin Dells, Appleton, and Green Bay; 246.

Degnan, A., J. Olstadt, J. Standridge, and L. Peterson. "Detection of E. coli in Drinking, Recreational and Waste Waters." September 23, 2003, Plover, WI; September 30, 2003, Whitewater, WI; October 8, 2003, Eau Claire, WI; October 16, 2003, Fennimore, WI; and October 28, 2003, Green Bay, WI.

Degnan, A., J. Olstadt, J. Standridge, G. Bowman, and R. Mealy. "E.coli Detection for New Monitoring Requirements and the Basics of Chlorine Chemistry." Wisconsin Department of Natural Resources Clinic, May 11, 2004, Wausau, WI; 70; and April 29, 2004, Madison, WI; 100.

Gonzalez, I., N. Malakmadze, T. Oemig, I. Isiadins, C. Johnsen, D. Rembert, P. Wand, and K. Ijaz. "Utility of Universal TB Genotyping in the Detection and Investigation of Multiyear Tuberculosis Transmission in a Low-Incidence State." International Union against Tuberculosis and Lung Disease Annual Conference, October 5-8, 2003; San Antonio, TX.

Johnson, J. "Fluorescent In Situ Hybridization." Lab sections. July 2003; UW-Madison, Madison, WI.

Kirk, C., P. Shult, E. Reisdorf, C. Kiesner, M. Wedig, and Virology Staff. Multiple Presentations. Wisconsin Virology Conference, June 24, 2004; Madison, WI; 35.

Kirk, C., P. Shult, and WSLH Staff. "Virology for the Public Health Laboratory." Weeklong workshop in collaboration with CDC and hosted by the WSLH for state PHL laboratorians, July 21-25, 2003; Madison, WI; 24.

Kurzynski, T. "Tracking Food-borne Outbreaks in Wisconsin Using PulseNet 'Fingerprints'." Wisconsin State Laboratory of Hygiene Audioconference Program, April 22, 2004; 38.

McDonald, R. "Nucleic Acid Amplification Tests for Chlamydia and Gonorrhea: Reaping the Benefits and Avoiding the Pitfalls." Teleconference, May 26, 2004.

Meisner, L. "Clinical Cytogenetics." Lab Sections. July 2003; UW-Madison, Madison, WI.

Pfister, J. "Core Functions of Public Health Laboratories: A Role for Private Laboratories". Mycobacteriology Network Meeting, November 11, 2003; Madison, WI.

Pfister, J. "Test Method Validation." WSLH Audioconference, December 17, 2003.  
Shult, P. "Laboratory Network Response to Bioterrorism." Wisconsin Annual Virology Conference, June 24, 2004; Madison, WI; 24

Shult, P., C. Kirk, D. Degenhardt, C. Matzinger, and A. Spallato. Multiple Presentations, Regional Meetings of the Wisconsin Laboratory Response Network (12 cities): Racine, Fennimore, Madison, West Bend, Waukesha, Eau Claire, La Crosse, Wausau, Hayward, Wisconsin Dells, Appleton, Green Bay; February 24, 2004 – May 12, 2004.

Shult, P., C. Matzinger, R. Laessig, C. Kirk, and D. Degenhardt. "Wisconsin Chemical Terrorism Preparedness: Building Partnerships for Response." November 13, 2003; UW-Stevens Point, Stevens Point, WI; 128.

Virology Laboratory Staff. Three-Day Virology Techniques training course for the Alabama State Public Health Laboratory, June 28-30, 2004; Wisconsin State Laboratory of Hygiene, Madison, WI.

Wand, P. and D. Warshauer. Wisconsin Mycobacteriology Laboratory Network Annual Meeting, November 11, 2003; Madison, WI.

Warshauer, D. and P. Shult. "Bioterrorism Response Update for the Clinical Laboratories." Statewide Teleconference, November 19, 2003.

Warshauer, D. and T. Monson. "Shiga Toxin-producing E. coli (STEC), O157 and Non-O157: Efforts in Wisconsin to Improve Detection." Statewide Teleconference, March 17, 2004.

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

Anderson, G., G. Bowman and R. Mealy. "Back to the Laboratory Basics." October 2004; Wisconsin Dells, WI.

Bowman, G., B. Burmeister, A. Degnan, J. Olstadt, and J. Standridge. "E. coli Detection in Waste and Surface Waters for New DNR Monitoring Requirements and The Nuts and Bolts of Chlorine Chemistry." WSLH/DNR, April 29, 2004; Madison, WI; and May 11, 2004; Wausau, WI.

Burmeister, B., D. Hassemer, and R. Laessig. "2004 30th Anniversary Dade Users' Seminar." WSLH/Dade Behring, April 15, 2004; Pewaukee, WI.

Bowman, G. and R. Mealy. "Chlorine Testing for Wastewater Compliance." October 2004; Wisconsin Dells, WI.

Degenhardt, D. "Wisconsin Chemical Terrorism Preparedness: Building Partnerships for Response." November 13, 2003; Stevens Point, WI; 110.

Gallagher, S. Annual Wisconsin – Illinois Ortho – Clinical Diagnostics Customers' Seminar, Oct. 21, 2003; Country Inn, Pewaukee, WI; 120.

Gallagher, S. "Contemporary Issues in the Clinical Laboratory." Eighth Annual Seminar at Northwestern Wisconsin Technical College (NWTC), Nov. 6, 2003; Green Bay, WI; 35.

Johnson, J. Workshop on Harvesting and Processing of Human Embryonic Stem Cells for Cytogenetic Studies. Regenerative Bioscience Center Stem Cell Symposium, University of Georgia, June 23, 2004; Athens, GA.

McDonald, R. "Updated Selective Screening Criteria for Chlamydia and Gonorrhea." WSLH Update Learning Link Audioconference, October 22, 2003.

McDonald, R. "Selective Screening for Chlamydia and Gonorrhea in Wisconsin – Adjustments to Selective Screening Criteria: Impact of the First Six Months." WSLH Update Learning Link Audioconference, April 13, 2004.

Olstadt, J. and A. Degnan. "E. Coli Detection in Waste and Surface Waters for New DNR Monitoring Requirements." April 29 and May 11, 2004; Madison and Wausau, WI.

Panella, J. Workshop on Human Cytogenetics presented in Jiming Jing's course on Plant Cytogenetics.

Shult, P. "Bioterrorism Training for First Responders." Three-day workshop for all of Hawaii's First Responders, October 20-23, 2003; Honolulu, HI; 105.

Shult, P., C. Kirk, and D. Warshauer. "Virology Methods for Public Health Laboratories." WSLH Virology Staff, Faculty from University of Iowa Hygienic Lab, California Public Health Lab, Ward Medical Lab of Ann Arbor, MI, and Centers for Disease Control and Prevention. NLTN-WSLH Virology workshop, July 21-25, 2003; Madison, WI; 20.

Shult, P., C. Kirk, E. Reisdorf and Virology Staff. Multiple presentations, Virology for Public Health Laboratories workshop co-sponsored with National Laboratory Training Network, July 21-25, 2003; Madison, WI; 20.

Warshauer, D. "Viral Gastroenteritis." Virology Workshop, July 24, 2003; Madison, WI.

Xagorarakis, I., R. Hoffman, D. Karner, W. Krick, and D. McGlenn. "Development of monoclonal antibodies to the cyanobacterial neurotoxin anatoxin-a." UW System Applied Research Grant Program, \$50,000, June 2004.

#### **IX. University Courses Taught or Lectures Presented**

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

Haase, B. Clinical Laboratory Science 536, UW-Madison, "Hepatitis A, B, C Viruses." April 7, 2004; 22.

Haase, B. Clinical Laboratory Science 536, UW-Madison, "Human Immunodeficiency Virus." March 31, 2004; 22.

Hoffman, G. Clinical Laboratory Science, UW-Madison, "Wisconsin Newborn Screening Program." November 10, 2003; 21.

Hoffman, G. UW-Madison Genetic Counselor Rotation, "Introduction to Newborn Screening." July 2003 – June 2004; WSLH; 4.

Hoffman, G. UW-Madison Pediatric Resident Rotation, "Introduction to Newborn Screening." July 2003 – June 2004; WSLH; 13.

Kirk, C. Third-Year Doctor of Pharmacy students, "Influenza & Rapid Test Kits: What You Should Know." April 30, 2004.

Kurtycz, D. Clinical Laboratory Science 536, Lectures on Mycology, Parasitology and Virology. Spring 2004.

Kurtycz, D. Pathology 703, Wound Healing, Neoplasia, Student Laboratory and Discussion. Spring 2004.

Kurtycz, D. Pathology 704, Neoplastic Diseases. Fall 2003.

Kurzynski, T. Public Health and Clinical Microbiology 603, UW-Madison, "Laboratory Diagnosis of *Corynebacterium diphtheriae* and *Bordetella pertussis* infections." January 2004; 38.

Kurzynski, T. Medical Microbiology and Immunology 460, UW-Madison, "Use of Pulsed Field Gel Electrophoresis as an Aide in Epidemiological Investigations of Foodborne Outbreaks of Enteric Bacterial Pathogens." June 24, 2004; 7.

Kurzynski, T. Public Health and Clinical Microbiology 603, UW-Madison, "Survey of Beta Lactam Antibiotics." February 2004; 38.

Kurzynski, T. Public Health and Clinical Microbiology 603, UW-Madison, "Survey of Non-Beta Lactam Antibiotics." March 2004; 38.

Laessig, R. CLS-525, "Proficiency Testing" lecture, September 2003.

Laessig, R., J. Westgard, S. Ehrmeyer, and T. Darcy. "CLIA Final Rules for Quality Systems." June 14, 2004; Madison, WI.

Pfister, J. Medical Microbiology 677, UW-Madison, Advanced Topics in Medical Microbiology: Bioterrorism, "Epidemiology of Bioterrorism." September 25, 2003.

Powell, C., and C. Hedman. Clinical Laboratory Science 536, "Bioaerosols", March 12, 2004; 30.

Schell, R. Clinical and Public Health Microbiology 603; 50.

Schell, R. Infection and Immunity (group discussion and labs).

Schell, R. Infectious Diseases 504 (three lectures).

Schell, R. Medical Microbiology 677; 6.

Schell, R. Medical Microbiology 696; 20.

Schell, R. Medical Microbiology 699; 20.

Schell, R. Parasitology (one lecture).

Schell, R. Wildlife Ecology (one lecture).

Schauer, J. CEE423 Air Pollution Control, Spring 2004; 18.

Schauer, J. CEE629 Aerosol and Air Pollution Lab, Fall 2003; 12.

Shalkham, J. Breast Cytology – CLS 544, UW-Madison, January 2004; 11.

Shalkham, J. Miscellaneous Cytology – CLS 549, UW-Madison, January – February 2004; 11.

Shalkham, J. Seminar in Laboratory Operations and Quality Control – CLS 625, UW-Madison, April 2004; 11.

Shalkham, J. The Female Reproductive System – CLS 540, UW-Madison, September-November 2003; 11.

Shalkham, J. The Gastrointestinal System – CLS 546, UW-Madison, February – March 2004; 11.

Shalkham, J. The Respiratory System – CLS 543, UW-Madison, November – December 2003; 11.

Shult, P. Clinical Laboratory Science 536, UW-Madison, “Medical Virology.” Spring 2004, 6 week module; 30.

Shult, P. Medical Microbiology and Immunology 554, UW-Madison, “Emerging Infectious Diseases and Bioterrorism.” Fall 2003 semester; 40.

Sonzogni, W. Civil and Environmental Engineering 501, “Water Analysis Intermediate.” Fall 2003; 20.

Stanton, N. Environmental Toxicology 308, UW-Madison, “Toxic Elements.” February 26, 2004; 100.

Stanton, N. Environmental Toxicology 308, UW-Madison, “Childhood Lead Poisoning: Why You Might Be Smarter Than Your Parents.” March 2, 2004; 100.

Tortorelli, J. and W. Sonzogni. Civil and Environmental Engineering 503, “Water Analysis Intermediate Laboratory.” Fall 2003; 20.

Warshauer, D. Clinical Laboratory Science 536, “The Dermatophytes.” February 27, 2004; 24.

Warshauer, D. Clinical Laboratory Science 536, Mycology Laboratory. February 20 – March 12, 2004; 24.

Warshauer, D. Clinical Laboratory Science 536, “Systemic Mycoses: Histoplasmosis and North American Blastomycosis.” March 5, 2004; 24.

Warshauer, D. Clinical Laboratory Science 536, “Systemic Mycoses: Coccidiomycosis and South American Blastomycosis.” March 10, 2004; 24.

Warshauer, D. Clinical Laboratory Science 536, “The Yeast.” March 3, 2004; 24.

**X. Other Teaching or Lectures Presented that were Part of a "For-credit" Class**

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

Briggs, P. Pathology, "Research to Evaluate Amount of Artifact Present in Studies of Cytogenetic Deletions in Brain Tumors." January – June 2004.

Burmeister, B. MATC MLT practicum, "Proficiency Testing." January 2004.

Burmeister, B. MATC MLT practicum, "Thyroid Physiology, Diagnosis and Follow-up." January 2004.

Communicable Disease Division Staff. Madison Area Technical College MLT Practicum, "Communicable Disease Division Overview: Mycobacteriology laboratory, Virology laboratory." January 13, 2004; 12.

Communicable Disease Division Staff. UW-La Crosse Clinical Microbiology Practicum, "Communicable Disease Division Overview". July 7 - July 18, 2003; 1.

Communicable Disease Division Staff. UW-La Crosse Clinical Microbiology Practicum, "Communicable Disease Division Overview". April 19 - 30, 2004; 4.

Communicable Disease Division Staff. UW-Madison Pathology Resident Practicum, "Communicable Disease Division Overview". August 25-29, 2003; 1.

Communicable Disease Division Staff. UW-Madison Pathology Resident Practicum, "Communicable Disease Division Overview". February 16-19, 2004; 1.

Communicable Disease Division Staff. UW-Madison Pathology Resident Practicum, "Communicable Disease Division Overview". April 19 - 23, 2004; 1.

Dusso, T. Biology 152, "FISH Variability in Detection of Sex Chromosome Signals." May 2004.

Haase, B. Medical Microbiology and Immunology 460, UW-Madison, "Molecular Methods and Techniques in Public Health." July 14, 2003; 6.

Hemming, J. Civil and Environmental Engineering 909, "The use of Bioassays and Chemical Analysis to Study the Removal of Endocrine Active Compounds in Water Reclamation Processes." September 12, 2003; 25.

Hintzman, P. Clinical Laboratory Science Program Management Seminar 640, "Managing Laboratory Finances." April 2004; 25.

Kurtycz, D. School of Cytotechnology Lectures, 2003–04; 11.

Meisner, L. Two sections of Medical Technology class, UW-Madison. March 11 and April 1, 2004.

Meisner, L. Lecture on Cytogenetics and FISH presented to Genetics Counseling Class, UW-Madison. May 2004.

Neuser, T. Madison Area Technical College MLT Practicum, UW-Madison, "Forensic and Clinical Toxicology." January 15, 2004; 12.

Newborn Screening Staff. MATC Medical Technology Student Rotation. January 16, 2004; 12.

Newborn Screening Staff. UW-CLS Student Rotation. January 12 -16, 2004; 1.

Pfister, J. MLT Rotation Schedule, "Core Functions of Public Health Laboratories." January 13, 2004.

Powell, J. Zoonoses 091-115, "Rabies Information for the Veterinary/ Animal Care Professional." March 23, 2004; 70.

Schell, R. Undergraduate Training in Research Laboratories; 2.

Schell, R. Predoctoral trainees; One Ph.D. candidate, Five M.S. candidates.

Shalkham, J. CLS-404 – Introduction to Laboratory Procedures, UW-Madison, "Introduction to Light Microscopy I."; 28.

Shult, P. Role of the WSLH, "UW-Madison, Dept. of Population Health weekly seminar, September 24, 2003; Madison, WI; 15.

Shult, P. Marquette University, "Emerging Infectious Diseases Update." April 29, 2004; Milwaukee, WI; 45.

Tortorelli, J. Civil and Environmental Engineering 501, "Water Analysis-Gas Chromatography and Mass Spectrometry." November – December 2003; 25.

<p><b>XI. Other Teaching or Training We Provided NOT as Part of a "For-Credit" Class</b> <i>Note: Last number indicates the number of people attending.</i></p>
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Karner, D. Microscopic Identification of Cylindrospermopsis. Waukesha County Health Department, May 17, 2004; 2.

Kurtycz, D. UW Hospital and Clinics. "Make a Good Image: Electronic Image Enhancement with Adobe Photoshop®." June 18 and 25, 2004.

Kurtycz, D. UW Medical School Education Committee. "Desire2Learn." June 3, 2004.

McDonald, R. Teleconference for Options in Reproductive Care Clinicians and Staff, "How to Complete the Family Planning Requisition Form for WSLH to do Your Third Party Billing." June 11, 2004; 20.

Meisner, L. Laboratory rotations involving genetic counseling students. December 2003 – April 2004; 4.

Meisner, L. High school teachers Cytogenetics lecture and lab tour. June 28, 2004; 17.

Neuser, T. UW-Madison School of Pharmacy Brown Bag Seminar, "Toxicology at WSLH." March 30, 2004; 5.

Pfister, J. Wisconsin State Epidemiologist Group; Wisconsin Division of Public Health, "Public Health Laboratory Epidemiology." June 18, 2004.

Reisdorf, E., S. Warrack, J. LaFlash, T. Weiner, C. Kiesner, J. Powell, and J. Bench. Training in Public Health Virology. June 28-30, 2004; Madison, WI; 2.

Shult, P. CDC workshop at Georgia Public Health Lab, "Influenza Laboratory Diagnostics for the Public Health Laboratory" and "Rapid Testing in the PHL." May 3-5, 2004; Atlanta, GA; 24.

Shult, P. Presentation and facilitator at eight different Regional Forensic – Epidemiology Training Workshops held statewide, "Role of the Public Health Laboratory in Emergency Response." April – June, 2004; average attendance of 45 at each workshop.

Shult, P. St. Claire Hospital monthly continuing education seminar, "Influenza and SARS." September 25, 2003; Baraboo, WI; 28.

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

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

Degenhardt, D. and C. Kirk, P. Shult, and A. Spallato. Visited 64 hospital laboratories throughout Wisconsin; 90.

Schell, R., Gundersen/Lutheran Medical College, and S. Callister. Improve tuberculosis susceptibility testing.

Schell, R., Gundersen/Lutheran Medical College, and S. Callister. Received CLIA approval for borreliacidal assay for Lyme disease.

Schell, R., Gundersen/Lutheran Medical College, and S. Callister. Research to improve Lyme vaccine.

Schell, R., SUNY-Stonybrook, and R. Dathwyler. Development of OspC vaccine.

Schell, R., VA Hospital, and T. Warner. Adverse effects of Lyme vaccine.

### **XIII. Extramurally Funded Research**

American Water Works Association Research Foundation, "Effect of Pathogen Concentrations on Removal of Emerging Waterborne Pathogens." June 2004, \$150,000. Primary Investigators: G. Harrington, R. Hoffman and M. Borchardt.

Association of Public Health Laboratories, "Environmental Health Post-Doctoral Traineeship." 2003–04, \$40,000. Primary Investigators: William Sonzogni and Ronald Laessig.

Association of Public Health Laboratories, "Private-Public Partnerships." 2004–05, \$50,000. Primary Investigators: John Chapin and William Sonzogni.

Centers for Disease Control and Prevention, "Assessment of Laboratory Performance and Practices for Direct detection of Myconium tuberculosis (Mtb) in Patient Specimens Using FDA Approved Kits for the Amplification and Detection of Mtb Nucleic Acids." 2003–08, \$796,996. Primary Investigators: David Hassemer and David Warshauer.

Centers for Disease Control and Prevention, "Filter Paper Blood Lead Proficiency Testing Program." 2003–04, \$43,800. Primary Investigator: Noel Stanton.

Health Resources & Services Administration, USPHS, "Blood Lead and Erythrocyte Protoporphyrin Proficiency Testing Program." 2002–04, \$767,000. Primary Investigator: Noel Stanton.

National Institutes of Health, "The Pathogenesis of Childhood Asthma." 2003–04, \$1,711,123. Primary Investigator: Robert F. Lemanske, Jr., M.D.; Co-Investigators: Paul J. Bertics, Ph.D., Nancy J. Cox, Ph.D., James E. Gern, M.D., Nizar Jarjour, M.D., Michael Kosorok, Ph.D., Peter A. Shult, Ph.D.

The Walsh Group. "Evaluation of On-site Oral Fluid Drug Testing Devices." 2003-2005, \$69,376. Primary Investigator: Laura Liddicoat.

U. S. Environmental Protection Agency, "Toxicity and Estrogenic Activity of Polybrominated Diphenyl Ethers (PBDEs)." 2004, \$36,000. Primary Investigators: E. Harrahy and William Sonzogni.

U. S. Environmental Protection Agency, "Minority Youth in the Environment," employing minority high school students to give them exposure to science careers. \$10,000. Primary Investigators: Dawn Karner and Steve Geis.

Water Environment Research Foundation, "Removal of Endocrine Disruptors in Water Reclamation Processes." 2002-05, \$522,322. Primary Investigators: Jocelyn Hemming, Jamie Schauer, J. Drewes, and William Sonzogni.

Wisconsin Groundwater Coordination Council, "Factors Affecting the Gross Alpha Measurement in Groundwater." 2003-04, \$50,000. Primary Investigators: Michael Arndt, Lynn West, and William Sonzogni.

Wisconsin Groundwater Coordination Council, "Importance of Disinfection on the Arsenic Release from Wells." 2001-03, \$50,000. Primary Investigators: Alan Clary, George Bowman, Jonathan Standridge, Donna Johnson, and William Sonzogni.

Wisconsin Sea Grant Institute, "Polybrominated Diphenyl Ethers – A Global Contaminant of Concern in the Great Lakes." 2001-04, \$302,000. Primary Investigators: William Sonzogni, Jon Manchester-Neesvig and Julie Hahm.

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

Hassemer, D. Member of Centers for Disease Control Cholesterol Reference Method Laboratory Network, 1989 – 2004

Hintzman, P. UW Chancellor's HIPAA Task Force, November 2002 – present.

Kurtycz, D. Continuing Medical Education Committee.

Kurtycz, D. Second-year Medical Student Curriculum Committee.

Kurtycz, D. UWMF Council of Faculty Committee.

Laessig, R. Member, Population Health Sciences Executive Committee.

Laessig, R. Member, Search Committee for Chair of Population Health Sciences.

Meisner, L. Interviewer, Medical School Admissions Committee, September 2003 – January 2004.

Meisner, L. Population Health Sciences Admissions Committee, September 2003 – present.

Pfister, J. Served on HIPAA Research Task Force; University of Wisconsin-Madison, 2003 – present.

Schell, R. Lyme Task Force, 1991 - 2004.

Schell, R. Medical Microbiology and Bacteriology Departments, Student committees; 7 years; 8.

Schell, R. Medical School Animal Care and Use Committee, 1994 – present.

Sonzogni, W. Chair of the University Chemical Safety Committee, 1998 – present.

Sonzogni, W. Faculty Committees for Ph.D. and M.S. Dissertations.

Sonzogni, W. Member of the Civil and Environmental Engineering Department's Executive Committee, 1983 – present.

Sonzogni, W. Member of the Environmental Chemistry and Technology Program Executive Committee, 1983 – present.

Sonzogni, W. Member of the Water Resources Management Executive Committee, 1994 – present.

Sonzogni, W. UW-Madison Speakers Bureau, 1999 – present.

Sonzogni, W. Water Resources Management Admissions Committee, 1994 – present.

Warshauer, D. Serves on UW-Madison Biosecurity Task Force, 2004 – present.

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

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

Bowman, G. Vice Chairperson of Wisconsin Laboratory Certification Standards Review Council, 2000 – present.

Bowman, G. Member of Rule Advisory Committee for revision of Wisconsin's Laboratory Certification Program (NR149), 2001 – present.

Burk, T. OSHA Strategic Plan Health Outcomes Taskforce, 2003.

Burk, T. Wisconsin Section – American Industrial Hygiene Association, President-elect 2003.

Burk, T. Wisconsin Section – American Industrial Hygiene Association, President 2004.

Burmeister, B. Chairperson of the National Environmental Laboratory Accreditation Conference Fields of Proficiency Testing Subcommittee, 2002 – present.

Burmeister, B. Member of Board of Directors, National Environmental Laboratory Accreditation Conference, 2003 – present.

Degnan, A. Member of American Water Works Association Organisms in Water Committee.

Degnan, A. Member of American Water Works Microbial Contaminants Research Committee

Degnan, A. Member of American Water Works Virulence Factor Activity Relationship Symposium Subcommittee.

Degnan, A. Member of Wisconsin Department of Health and Family Services Committee to revise inspection code HS 172.

Degnan, A. Member of Wisconsin Water Association Planning Committee for 2004 Annual Meeting.

Degnan, A. Member of Wisconsin Water Association Public Relations Committee.

Degnan, A. Member of Wisconsin Water Association Research Committee.

Haase, B. Member of Wisconsin Division of Public Health – Wisconsin Department of Corrections – WSLH Joint Study Committee on STD and Hepatitis Testing within the WI Correctional System, 1999 – present.

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

Harding, P. Member of the National Safety Council's Committee on Alcohol and Other Drugs, 1986 – present.

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

Harding, P. Chairman of the National Safety Council's Committee on Alcohol and Other Drugs, 2001 – 04.

Hintzman, P. Advisor, Wisconsin State Health Plan Oversight Workgroup, January 2004 – present.

Hintzman, P. Co-chair, Technical Advisory Committee to Information Technology Focus Area E for Bioterrorism Preparedness and Response Grant, April 2002 – present.

Hintzman, P. Member, Medical College of Wisconsin Consortium on Public and Community Health Board, October 2002 – present.

Hintzman, P. Member, Wisconsin Department of Health and Family Services Public Health Advisory Committee, July 2002 – present.

Hintzman, P. Member, Wisconsin Public Health Association Public Affairs Committee, 2000 – present.

Hintzman, P. Project Director, Robert Wood Johnson Grant awarded for Wisconsin's participation in the National Public Health Statute Modernization Collaborative, 2000 – present.

Hoffman G. Member, American College of Medical Genetics external review committee for newborn screening, 2004.

Hoffman G. Member, Association of Public Health Laboratories (APHL) Newborn Screening QC/QA Advisory Committee, 2002 – present.

Hoffman G. Member, California Tandem Mass Spectrometry Advisory Committee, 2002 – present.

Hoffman G. Member, CDC QA/QC for Tandem Mass Spectrometry Webcast Committee, 2004.

Hoffman G. Member, Department of Public Health Newborn Screening Advisory Committees (Metabolic, Endocrine, CF-Molecular, Hemoglobinopathy, Education, Evaluation, Umbrella), 1991 – present.

Hoffman G. Member, Informatics Institute Infant Data Integration Committee, 2004.

Hoffman G. Member, National Newborn Screening and Genetics Resource Center – Newborn Screening Advisory Committee, 1999 – present.

Hoffman G. Member, National Newborn Screening and Genetics Resource Center – Newborn Screening Technical Review Team, 2001 – present.

Hoffman G. Member, Newborn Screening and Genetic Symposium Planning Committee, 2004.

Hoffman, R. Chair, American Water Works Association – Organisms in Water Committee, 2004 – present.

Hoffman, R. Project Advisory Committee, American Water Works Association Research Foundation. AWWARF 2565, “Rapid Screening of Pathogens in Water.” 1999 – present.

Hoffman, R. Project Advisory Committee, American Water Works Association Research Foundation. AWWARF 2899, “A Rapid Ammonia–Oxidizing Bacteria Measurement Method as an Early-Warning Indicator of Nitrification Episodes.” 2003 – present.

Hoffman, R. Work Group member, American Water Works Association, Contaminant Candidate List Workgroup, 2003–04.

Johnson, W. Member of the Society of Forensic Toxicologists Continuing Education Committee, 2003 – present.

Kalscheur, D. Member of Casepoint-Electronic Database for Coroners and Medical Examiners, 2002 – present.

Kirk, C. Member, APHL Subcommittee on Public Health – Clinical Laboratory Interactions, 2004.

Kirk, C. Member, Pandemic Influenza Response Preparedness Planning for Wisconsin, 2001 – present.

Kirk, C. National Committee for Clinical Laboratory Standards (NCCLS) Subcommittee for Viral Culture, 2000 – present.

Kirk, C. Representative, APHL-CDC SARS Laboratory Preparedness Planning Meeting, September 18-19, 2003.

Kirk, C. Representative, CDC Meeting, "Monkeypox Surveillance and Response 2003: Review and Recommendations for Smallpox Applications." Miami Beach, FL, September 22-24, 2003.

Klawitter, J. Co-Chair of Wisconsin Public Health Association Public Affairs Committee, 2003 – present.

Klawitter, J. Member of Wisconsin Public Health Association Board of Directors, 2003 – present.

Kluender, S. Member of Joint Task Group (JTG) for Section 9222 Membrane Filter Technique for Members of the Coliform Group for Standard Methods for the Examination of Water and Wastewater.

Kurtycz, D. Appointed to Editorial Board of Diagnostic Cytopathology, April 2003.

Kurtycz, D. ASCCP (American Society for Colposcopy and Cervical Pathology), Pathology Committee, 2004–06.

Kurtycz, D. ASCCP, Practice Committee, 2004–06.

Kurtycz, D. Health Care Financing Authority (HCFA) Pathologist Inspector in Cytology through the American Society of Cytotechnologists, March 2001 – present.

Kurtycz, D. Medical Director of Devil's Head Ski Patrol, Branch of National Ski Patrol, 1992 – present.

Kurtycz, D. Member of American Society of Clinical Pathologists (ASCP) Board of Registry, 1994 – present.

Kurtycz, D. Member of American Society for Coloscopy and Cervical Pathology, 1994 – present.

Kurtycz, D. Member of American Society of Cytology (ASC), Chair of ASC Website Editorial Committee; Member of Cytology Education Taskforce and Chair of Public Information Committee, 1996–2003. Nominated for ASC Executive Board.

Kurtycz, D. Member of ASCP Teleconference Committee.

Kurtycz, D. Member of College of American Pathologists (CAP), 1984 – present.

Kurtycz, D. Member of Papanicolaou Society of Cytopathology; New Technology Committee, 2001 – present; elected to Executive Board April 2003.

Kurtycz, D. Member of RISE (Resident In Service Exam) Committee, 2003 – present.

Kurtycz, D. Member of the Second Subcommittee on Standardization of the Papanicolaou Technique (for gynecologic preparations), National Committee for Clinical Laboratory (NCCL) Standards Document GP-15-A2.

Kurtycz, D. Member of the Subcommittee for Fine Needle Aspiration Technique GP-20-A2.

Kurtycz, D. Member of Wilderness Medical Society, 1999 – present.

Kurtycz, D. Member of Wisconsin Clinical Cancer Council, 2001 – present.

Kurtycz, D. Reviewer for *Archives of Pathology & Laboratory Medicine*, College of American Pathologists.

Kurtycz, D. Reviewer for *Diagnostic Cytopathology*. Wiley-Liss Publications.

Kurtycz, D. Reviewer for *Journal of Lower Genital Tract Disease*, Blackwell Science.

Laessig, R. Chair, WI Public Health Executive Committee, January 2001 – January 2004.

Laessig, R. Member, ASTHO Environmental Health Policy Committee, 2003 – present.

Laessig, R. Member and Chair, Environmental Health Executive Committee, APHL, 1999 – present.

Laessig, R. Member, NCEH/ASTDR Board of Scientific Counselors (CDC), November 2003 – present.

Laessig, R. Member, Public Health Institute Assessment Group, 2004.

Laessig, R. Member, State Health Plan Oversight Workgroup, 2003 – present.

Laessig, R. Member, WI Public Health Executive Committee, 1999 – present.

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

Liddicoat, L. Member of Casepoint – Electronic Database for Coroners and Medical Examiners, 2002 – present.

Liddicoat, L. Member of the National Safety Council's Committee on Alcohol and Other Drugs, 2003 – present.

Liddicoat, L. Member of the Wisconsin Bureau of Transportation Safety Drug Recognition Examiner (DRE) Oversight Committee, 2000 – present.

McDonald, R. Member of Board of Directors, Health Care Education and Training, January 13, 2004.

McDonald, R. Member of Region V Infertility Prevention Project Advisory Committee, 1996 – present; Laboratory Subcommittee Chair since 1997.

McDonald, R. Region V Representative on the National Chlamydia Laboratory Committee, 1999 – present.

Pfister, J. Member of Region V Infertility Prevention Program; Advisory Committee, Data Subcommittee, Laboratory Subcommittee, and Wisconsin State Alliance; Health Care Education and Training, Inc. and Centers for Disease Control and Prevention, 1994 – present.

Pfister, J. Served on the Bioterrorism Surveillance and Epidemiology Advisory Group; Wisconsin Division of Public Health, 2002 – present.

Pfister, J. Served on Global AIDS Laboratory Project; Botswana Team and Quality Assurance Team; Association of Public Health Laboratories and Centers for Disease Control and Prevention, 2000 – present.

Popp, D. Member of American Industrial Hygiene Association Technical Advisory Panel, 2003–04.

Powell, C. Member of American Industrial Hygiene Association Analytical board, October 2003 – present.

Powell, C. Member of American Industrial Hygiene Association EMLAP/EMPAT Task Force, October 2003 – present.

Powell, C. Member of American Industrial Hygiene Association Laboratory Quality Assurance Programs Proficiency Task Force, October 2003 – February 2004.

Powell, J. Served on the national Rabies Diagnostic Committee, 1999 – present.

Schell, R. Editor, *Journal of Spirochetel and Tick-borne Diseases*.

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

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

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

Schell, R. Editorial Board, *Journal of Spirochetel and Tick-borne Diseases*.

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

Schell, R. Grant Reviews, NIH (ad hoc).

Schell, R. Grant Reviews, VA System.

Schell, R. Journal Reviews, *Clinical and Diagnostic Laboratory Immunology*.

Schell, R. Journal Reviews, *Clinical Infectious Diseases*.

Schell, R. Journal Reviews, *Clinical Microbiology*.

Schell, R. Journal Reviews, *Leukocyte Biology*.

Shult, P. Member of APHL–CDC Working Committee for National Laboratory system, 2002 – present.

Shult, P. Member of Association of Public Health Laboratories Training and Education Committee, 2000 – present.

Shult, P. Member of CDC Emerging Infectious Diseases Fellowship Program Advisory Board, 2002 – present.

Shult, P. Member of National Center for Public Health Laboratory Leadership Advisory Board, 2002 – present.

Shult, P. Member of Pandemic Influenza response Preparedness Planning for Wisconsin, 2001 – present.

Shult, P. Member of Wisconsin Association of Hazardous Materials Responders (WAHMR) Advisory Board, 2004.

Shult, P. Member of Wisconsin Interagency Workgroup on Terrorism, 2004

Shult, P. Member of Wisconsin Public Health Preparedness and Planning Committee, 2002 – present.

Stanton, N. Member of the Centers for Disease Control & Prevention LRN-C Proficiency Testing Working Group, 2004–05.

Shalkham J. Member of American Society for Cytopathology, Scientific Programs Committee, 2002 – present.

Shalkham, J. Member of Educators CommAmerican Society of Clinical Pathologists, Educators Committee, 1996 – 2004; ASCP CytoSTAR Committee, 1996 – present.

Shalkham J. Treasurer, American Society for Cytotechnology Services, 1997 – present.

Sonzogni, W. Associate Editor of the *Journal of Great Lakes Research*, 1990 – present.

Sonzogni, W. Joint Task Group Member of Standard Methods for the Examination of Water and Wastewater, American Public Health Association, American Water Works Association and Water Environment Federation, 1985 – present.

Sonzogni, W. Member of the American Water Works Association Laboratory Committee, 2001 – present.

Sonzogni, W. Member of the American Water Works Association (Wisconsin Section) Research Committee, 1996 – present.

Sonzogni, W. Member of the Environmental Health Steering Committee, Wisconsin Division of Health, 2003 – present.

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