



May 30, 2024

Harper Donahue IV
Executive Secretary
City Service Commission
Department of Employee Relations
City Hall, Room 706

Dear Executive Secretary Donahue:

Pursuant to Rule IX, Section 2, Temporary Appointment the department is requesting an extension of the temporary appointment of Dr. Erick Munson to the position of Public Health Assistant Laboratory Director. Dr. Munson's temporary appointment will expire on June 30, 2024. This is the fifth request for extension.

The Laboratory has experienced significant changes in leadership since 2020. Dr. Munson was originally appointed to fulfill the certification requirements of a high complexity laboratory under the Centers for Medicare and Medicaid Services (CMS), Clinical Laboratory Improvement Amendments (CLIA). The most recent Laboratory Director and Public Health Assistant Laboratory Director did not hold the necessary certification for the laboratory to continue functioning as a high complexity laboratory.

The Department has successfully hired the Public Health Laboratories Director who will obtain their CLIA designation by December 31, 2024. We are confident Dr. Payne will be successful in obtaining the CLIA designation timely, therefore, we are requesting an extension of Dr. Erik Munson's temporary appointment to December 31, 2024.

If you have any questions, please contact Lindsey O'Connor at (414) 286-6406.

Thank you for your consideration.

Sincerely,

DocuSigned by:

A handwritten signature in black ink that reads "Michael F. Totoraitis".

0481CF62C52F45F
Michael F. Totoraitis, PhD
Commissioner of Health



TEMPORARY APPOINTEE STATEMENT OF UNDERSTANDING

Rule IX, Section 2 of the Civil Service Rules allows a hiring authority to appoint a person to a position on a temporary basis. A temporary appointment may be appropriate when services are for a limited period, or during the leave of absence of an employee who plans to return to the service of the city. Therefore a temporary appointment is limited to a period of 90 days, unless an extension is authorized by the City Service Commission.

SECTION I. TO BE COMPLETED BY HIRING AUTHORITY – PLEASE TYPE OR PRINT LEGIBLY

APPLICANT NAME (last, first, middle)		DATE
MUNSON, ERIK		05/30/2024
POSITION TITLE	PAY RANGE	RATE OF PAY
Public Health Assistant Laboratories Director	1JX	\$3,862.80

SECTION II. TEMPORARY APPOINTEE STATEMENT OF UNDERSTANDING

I understand that if I am appointed to the position described above on a temporary basis, that I must meet the requirements for the position. I further understand that this temporary appointment may expire at any time and is limited to a period of 90 days, unless an extension at the request of the hiring authority is approved by the City of Milwaukee Civil Service Commission.

I understand that as a temporary appointee I am ineligible for paid holidays, sick leave, vacation or other benefits while serving on this temporary appointment, and that this temporary appointment shall not confer upon me any privilege of regular appointment. (Note: A current City of Milwaukee employee who accepts a temporary appointment to a different position retains his/her current benefits and civil service status).

I understand that if I wish to be considered for regular employment I must compete in a Civil Service examination for the position, and must pass the examination with a grade which shall place me among the top five scores on the eligible list in order to be eligible to interview for regular appointment to the position.

I understand that acceptance of a temporary appointment will not affect my rights to certification for permanent appointment to any position for which I am currently on an eligible list for.

In accordance with Civil Service Rule VIII, Section 10, concerning nepotism, I hereby certify that I am not related, either by blood or through marriage, to the appointing officer or to any member of the appointive board or body or to any direct superior or to any elective or appointive City official. (This includes relative of both whole and half blood, and extends to persons as closely related as first cousins when the relationship is by blood, or more closely related than first cousins when the relationship is through marriage, and includes the cases of husbands of sisters-in-law and wives of brothers-in-law).

A Rule IX, Section 2, temporary appointee who is on an eligible list may be considered for future regular appointment when the appointee ranks among the certifiable highest eligible on the list, or compete in a future examination.

DocuSigned by:

Dr. Erik Munson

D8E7486BF3F948D...

5/28/2024

Temporary Appointment Applicant Signature

Date Signed

David Payne

DocuSigned by:

David Payne

64E830400D7C408...

Witness Name (Print)

Witness Signature



Department of Employee Relations
 200 E. Wells Street, Room 706
 Milwaukee, WI 53202-3554



R. 07.08.19

NOTICE OF TEMPORARY APPOINTMENT

Rule IX, Section 2 of the Civil Service Rules allows a department to appoint a person to a position on a temporary basis. A temporary appointment may be appropriate when services are for a limited period, or during the leave of absence of an employee who plans to return to the service of the city. Therefore a temporary appointment is limited to a period of 90 days, unless an extension is authorized by the City Service Commission.

When making an employment offer for a temporary appointment, the appointing officer must submit this completed form to DER no later than the close of the pay period in which the temporary appointment has been made. All temporary appointees must meet the minimum requirements established for the position to which the individual is appointed.

SEND COMPLETED FORM AND SUPPORTING DOCUMENTATION TO DER, CITY HALL, ROOM 706 OR DERCERTIFICATION@MILWAUKEE.GOV

TEMPORARY APPOINTMENT / APPOINTEE DETAILS			
DEPARTMENT/DIVISION - LAB	LAST NAME MUNSON	FIRST NAME ERIK	INITIAL L
AUTHORIZED POSITION TITLE 1JX	PAY RANGE	F&P COMMITTEE APPROVAL DATE AUX	REQUISITION # NA
UNDERFILL TITLE (IF APPLICABLE)	PAY RANGE	WAS THE INDIVIDUAL HIRED FROM AN ELIGIBLE LIST? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, Referral #	
REASON FOR TEMPORARY APPOINTMENT <input type="checkbox"/> During Leave of Absence of an employee who is expected to return <input checked="" type="checkbox"/> To perform services of a temporary nature and for a limited period	EFFECTIVE DATE 06/30/2024	ANTICIPATED EXPIRATION DATE 12/31/2024	T.A. RATE OF PAY \$3862.80
ATTACH A COPY OF THE CURRENT JOB DESCRIPTION & A RESUME IN ADDITION TO COMPLETING THE INFORMATION BELOW			
PROVIDE AN EXPLANATION OF WHY THE TEMPORARY APPOINTMENT IS NEEDED: The lab has a need to continue to employ the Assistant Public Health Lab Director in order to remain certified. Currently, no other employee holds the CLIA certification. Dr. Payne who has been hired as the Public Health Lab Director will be CLIA designated by December 31, 2024.			
EXPLAIN HOW THE INDIVIDUAL WAS SELECTED FOR THE APPOINTMENT, INCLUDING THE SELECTION PROCESS USED AND IF NOT FROM AN ELIGIBLE LIST, HOW THE INDIVIDUAL WAS IDENTIFIED AS A POTENTIAL TEMPORARY APPOINTEE: As an Assistant Professor with Marquette University College of health and science and former technical director of Wheaton Franciscan Lab, Dr. Erik Munson has routinely collaborated with MHD Lab and is familiar with our staff and operations. Dr. Munson has extensive clinical lab director and CLIA related experience and is certified by the American board of Medical Microbiologists.			
PROVIDE INFORMATION TO DEMONSTRATE HOW THE INDIVIDUAL MEETS THE MINIMUM REQUIREMENTS:			
<u>TRAINING AND EDUCATION:</u> UW Med School, Dept. of Med Microbiology UW-Green Bay, Bachelor of Science - Biology, Human Biology - 1993	<u>WORK EXPERIENCE:</u> Assistant Professor, Marquette University College of Health Sciences Assistant Clinical Professor - UW-Milwaukee College of Health Sciences Technical Director, Wheaton Franciscan Lab	<u>OTHER REQUIREMENTS (i.e. LICENSES):</u> Diplomat, American Board of Medical Microbiology, 2014 Recertification 2017	
IS THIS INDIVIDUAL A CURRENT CITY OF MILWAUKEE EMPLOYEE? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	IF YES, CURRENT DEPARTMENT: HEALTH - LAB	CURRENT POSITION TITLE: PUB HEALTH DEPUTY LAB DIR	EMPLOYEE ID NUMBER: 032815
IS THE INDIVIDUAL BEING GIVEN THIS TEMPORARY APPOINTMENT RELATED BY BLOOD OR MARRIAGE TO THE APPOINTING OFFICER, ANY MEMBER OF THE APPOINTING BOARD OR BODY, DIRECT SUPERVISOR, OR TO ANY ELECTIVE OF APPOINTEE CITY OFFICIAL? (Refer to CSC Rule VIII, Section 10 regarding nepotism.) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – Explain Relationship			
THIS TEMPORARY APPOINTMENT IS MADE IN ACCORDANCE WITH RULE IX, SECTION 2 OF THE CITY SERVICE COMMISSION AND IS LIMITED TO A PERIOD OF 90 DAYS UNLESS AN EXTENSION IS APPROVED BY THE COMMISSION.			
REPORTING OFFICER Lindsey O'Connor	SIGNATURE 	TITLE Health HR Admin	DATE 5/28/2024
APPROVING OFFICER Michael F. Totoraitis	SIGNATURE 	TITLE Commissioner of Health	DATE 5/29/2024
THIS SECTION FOR DER REVIEW			
DER REVIEW COMPLETED BY:	SIGNATURE	TITLE	DATE

JOB DESCRIPTION

FOR DER USE ONLY

Vacancy No.

City Service
Commission:
Fire & Police
Commission:

Finance
Committee:
Common
Council:

Instructions: Complete all sections. Refer to the *Guidelines for Preparing Job Descriptions* for instructions on completing specific items.

1. Date Prepared/ Revised: August 13, 2020		2. Present Incumbent: New		Is incumbent underfilling position?	
3. Date Filled:		4. Previous Incumbent: None		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
5. Department: Health		Division: Laboratory		Section: Administration	
6. Work Location: ZMB, 2 nd Floor		Telephone: (414) 286-3526 Email: mhdlab@milwaukee.gov		Work Schedule: Hours: 8:00 am-4:45 pm (may vary) Days: Monday-Friday	
7. Represented by a Union? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		8. Bargaining Unit: If in District Council 48, which local?		9. FLSA Status (check one): <input checked="" type="checkbox"/> Exempt <input type="checkbox"/> Non-Exempt	
10.	Official Title: Assistant Laboratory Director			Pay Range	Job Code
				1JX	???
	Underfill Title (if applicable):				
Requested Title (if applicable):					EEO Code ???
Recommended Title (DER Use Only):			Approved by: Sanjib Bhattacharyya, PhD, Laboratory Director Date: August 13, 2020		

11. BASIC FUNCTION OF POSITION:

The Deputy Laboratories Director at the City of Milwaukee Health Department (MHD) works under the supervision of the Public Health Laboratories Director, to assist with administrative, strategic planning, operational supports and new program development for managing the laboratory. The person will be the technical lead for the laboratory technical oversight, engage in new assay development and manage microbiology, virology and molecular diagnostic laboratory testing.

12. DESCRIPTION OF JOB (Check if description applies to **Official Title** or **Underfill Title**):

A. ESSENTIAL FUNCTIONS/Duties and Responsibilities: (Refer to the "Guidelines for Preparing Job Descriptions" for instructions on determining Essential Functions.)

% of Time	ESSENTIAL FUNCTION
45%	<p>Deputy Laboratories Director Duties:</p> <ul style="list-style-type: none"> Manages testing services in areas of clinical (STI, TB, HIV), to maintain and improve public health laboratory (PHL) testing services to support MHD's medical branches including clinical laboratory testing programs Participate in departmental and community activities as needed to support the mission, goals and objectives of the PHL Coordinating the activities of the different sections of the PHL as well as external agencies Ensuring compliance with regulatory agencies' codes and requirements; and professional accrediting organizations' recommendations and guidelines Assist PHL Director in program planning and financial oversight; Monitor monthly revenue and expenditures (Grant and City tax levy funding) by laboratory sections Technical Advisor to the MHD programs, Laboratory Operations Manager and PHL systems partners Working with PHL Director and MHD managers to recruit, retain and develop professional staff Maintain memberships and working relationship with professional organizations, e.g. ASM, APHL, CLSI for improved laboratory management skills and leadership at the local, state and

The above statements are intended to summarize the nature and level of work and typical responsibilities and duties being performed by the incumbent(s) of this job. They are not intended to be an exhaustive list of all responsibilities, duties, and tasks required of the position.

% of Time	ESSENTIAL FUNCTION
	national levels <ul style="list-style-type: none"> • Fill in for the PHL Director responsibility in his absence
35%	<u>Section Chief Duties:</u> <ul style="list-style-type: none"> • Provide supervisory/managerial oversight for the Microbiology, Virology, and Molecular Science sections of the MHD laboratory including coordination of staff for testing, quality assurance, quality control and safety activities, training, continuing education, and personnel-related matters • Provide technological leadership in the evaluation, analysis and validation of test results of routine and emerging methods for microbial testing- sexually transmitted diseases, respiratory, bio-threat agents, and emerging infections of public health importance in clinical samples • Exploring and adopt new technologies, procedures including Real-time Polymerase Chain Reaction (PCR), digital-droplet PCR, nucleotide sequencing, or other future technologies in detection of microbial pathogens in clinical samples to enhance PHL surveillance and diagnostic capabilities • Explore possibilities for expanding laboratory operations in clinical, surveillance testing areas per state and federal guidelines • Develop policies, procedures and document laboratory standard operating procedures • Work closely with IT supports team to improve the PHL's efficiency in providing state-of-the-art laboratory services • Assure accurate and timely records, maintenance of procedure manuals, and necessary reports (annual, monthly, weekly, etc.) for respective areas of responsibility • Ensure all regulatory compliance obligations are met such as Clinical Laboratory Improvement Amendments (CLIA) regulations, CDC's Select Agent Program responsibilities and deliverables for Laboratory Response Network (LRN), for continuing education and proficiency testing programs • Assure smooth operations by providing day-to-day management of staff, prioritization of work, staff time approval, coordination of ordering supplies, maintenance of equipment and laboratory spaces, prompt and accurate processing of specimens and timely reporting of results

B. PERIPHERAL DUTIES:

% of Time	PERIPHERAL DUTY
20	<ul style="list-style-type: none"> • Assist molecular epidemiological studies of communicable disease, food and waterborne outbreaks • Address test-related issues, including result interpretation, sample collection and storage, recommendations to physicians, nurses for best laboratory testing practices and needs • Mentor students and interns in public health laboratory and research activities. • Pursue grant opportunities with internal and external community partners and collaborators • Liaising with external agencies including CDC, FBI, and local agencies such as hospitals/clinics, Police, Fire, Emergency Management, etc. to ensure that the PHL is prepared to responds to public health emergency • Participate in academic relationship including guest lecture, teaching affiliations in local colleges, research institutes, universities, including the UW- Milwaukee Zilber School of Public Health • Work with internal and external clients & collaborators for exploring revenue generation options for the City of Milwaukee

C. NAME AND TITLE OF IMMEDIATE SUPERVISOR:

David Payne, PhD, Laboratory Director

D. SUPERVISION RECEIVED: (Describe the extent to which work assignments and methods are outlined, reviewed, and approved by this position's supervisor.)

Minimal

The above statements are intended to summarize the nature and level of work and typical responsibilities and duties being performed by the incumbent(s) of this job. They are not intended to be an exhaustive list of all responsibilities, duties, and tasks required of the position.

E. SUPERVISION EXERCISED:

Total number of employees for whom responsible, either directly or indirectly = 11.

Direct Supervision: List the number and titles of personnel directly supervised. Specify the kind and extent of supervision exercised by indicating one or more of the following:

a. Assign duties b. Outline methods c. Direct work in progress d. Check or inspect completed work		e. Sign or approve work f. Make hiring recommendations g. Prepare performance appraisals h. Take disciplinary action or effectively recommend such	
Number Supervised	Job Title	Extent of Supervision Exercised <i>(Select those that apply from list above, a - h)</i>	
1	Lead Microbiologist	a. – h.	
2	Senior Microbiologist	a. – h.	
6	Microbiologist	a. – h.	
1	Senior Virologist	a. – h.	
1	Virologist	a. – h.	

F. MINIMUM QUALIFICATIONS REQUIRED: (Indicate the MINIMUM qualifications required to enter the job.)

i. Education and Experience:

Ph.D. in Microbiology with extensive research and training experience in clinical and diagnostic microbiology. Minimum of two years of experience in a diagnostic microbiology laboratory with demonstrated experience in molecular biology, bacteriology, virology, analytical and biochemical testing and related advanced techniques. Conventional microbiological skills and training are required and foundation for this job. Skills and expertise for applied research, program development, testing, and evaluation processes both at the Biosafety Level 2 and 3 (BSL-2/3) are necessary. These skills should be obtained in an approved doctoral level microbiology program followed by working experiences in high containment laboratories. Experience in laboratory management, not limited to the basics of graduate level microbiology, biochemistry, microbial physiology, bacteriology, immunology, clinical bacteriology and advanced molecular laboratory works. Advanced technical skills are keys to this job. Good understanding of the public health microbiology and pathogen detection issues related to food, water, communicable and sexually transmitted diseases including quality control and laboratory safety are essential.

ii. Knowledge, Skills and Abilities:

Language Skills

Ability to read, analyze, interpret and communicate the most complex technical, administrative and educational documents. Ability to respond effectively to the sensitive inquiries or clients complaints. Ability to write speeches and articles using original or innovative techniques or style. Ability to make effective and persuasive speeches and presentations on controversial or complex topics to health management, public groups, and/or laboratory directors.

Mathematical Skills

Ability to apply advanced mathematical concepts such as exponents, logarithms, quadratic equations, and permutations. Ability to apply mathematical operations to such tasks as frequency distribution, determination of test reliability and validity, analysis of variance, correlation techniques, sampling theory, and factor analysis.

Reasoning Ability

Ability to apply principles of logical or scientific thinking to a wide range of intellectual and practical problems. Ability to deal with nonverbal symbolism (formulas, scientific equations, graphs, etc.) in its most difficult phases. Ability to deal with a variety of abstract and concrete variables.

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Computer Skills

Spreadsheet, word processing, internet, relevant database and analytical software.

Certificates, Licenses, Registrations

Valid driver's license must be maintained throughout employment

Other Skills and Abilities

Ability to build team and maintain good working relationships with a multi-cultural, multi-disciplinary staff, the public, and elected officials; Ability to maintain confidentiality.

Other Qualifications

Properly insured personal vehicle for use on the job is required. Fleet of City issued vehicles may be used for external meeting or travel outside of the City of Milwaukee. Occasional overnight travel may be required. Residency within the City of Milwaukee is not required.

At least two years working experience in laboratory managerial capacity beyond postdoctoral training, consisting of related experience demonstrating the ability to perform responsible managerial work, independent decision-making for diagnostic testing & result interpretation, program management, planning, allocation of resources, and the scheduling and assignment of work will be a plus

iii. Certifications, Licenses, Registrations:

Must be qualified for a high complexity Clinical Laboratory Director's certificate per CLIA guidelines at the joining.

iv. Other Requirements:

US Department of Justice (DOJ)-FBI background check is required for federal program engagement.

13. PHYSICAL AND ENVIRONMENTAL DEMANDS: TOOLS AND EQUIPMENT USED

The Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008 requires job descriptions to provide detailed information regarding the physical demands required to perform the essential functions of a job; the conditions under which the job is performed; and the tools and equipment the employee will be required to use on the job. Reasonable accommodations may be made to enable qualified individuals to perform the essential duties and responsibilities of the job for each of the categories listed below.

G. PHYSICAL ACTIVITY OF THE POSITION: (List the physical activities that are representative of those that must be met to successfully perform the essential functions of the job).

CHECK ALL THAT APPLY:

<input type="checkbox"/>	Climbing: Ascending or descending ladders, stairs, scaffolding, ramps, poles, and the like; using feet and legs and/or hands and arms. Body agility is emphasized. Check only if the amount and kind of climbing required exceeds that required for ordinary locomotion.
<input type="checkbox"/>	Balancing: Maintaining body equilibrium to prevent falling when walking, standing or crouching on narrow, slippery or erratically moving surfaces. Check only if the amount and kind of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
<input type="checkbox"/>	Stooping: Bending body downward and forward by bending spine at the waist. Check only if it occurs to a considerable degree and requires full use of the lower extremities and back muscles.
<input checked="" type="checkbox"/>	Kneeling: Bending legs at knee to come to a rest on knee or knees.
<input checked="" type="checkbox"/>	Crouching: Bending the body downward and forward by bending leg and spine.
<input type="checkbox"/>	Crawling: Moving about on hands and knees or hands and feet.
<input checked="" type="checkbox"/>	Reaching: Extending Hand(s) and arm(s) in any direction.
<input checked="" type="checkbox"/>	Standing: Particularly for sustained periods of time.
<input checked="" type="checkbox"/>	Walking: Moving about on foot to accomplish tasks, particularly for long distances.

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<input checked="" type="checkbox"/>	Pushing: Using upper extremities to exert force in order to draw, press against something with steady force in order to thrust forward, downward or outward.
<input checked="" type="checkbox"/>	Pulling: Using upper extremities to exert force in order to draw, drag, haul or tug objects in a sustained motion.
<input checked="" type="checkbox"/>	Lifting: Raising objects from a lower to a higher position or moving objects horizontally from position-to-position. Check only if it occurs to a considerable degree and requires substantial use of the upper extremities and back muscles.
<input checked="" type="checkbox"/>	Fingering: Picking, pinching, typing or otherwise working primarily with fingers rather than with the whole hand or arm, as in handling.
<input checked="" type="checkbox"/>	Grasping: Applying pressure to an object with fingers and palm.
<input checked="" type="checkbox"/>	Feeling: Perceiving attributes of objects such as size, shape, temperature or texture by touching with the skin, particularly that of the fingertips.
<input checked="" type="checkbox"/>	Talking: Expressing or exchanging ideas by means of the spoken word. Those activities which demand detailed or important instructions spoken to other workers accurately, loudly or quickly.
<input checked="" type="checkbox"/>	Hearing: Perceiving the nature of sounds with no less than a 40 db loss. Ability to receive oral communication and make fine discriminations in sound.
<input checked="" type="checkbox"/>	Repetitive Motions: Substantial movements (motions) of the wrist, hands, and/or fingers.
<input checked="" type="checkbox"/>	Driving: Minimum standards required by State Law (including license).

H. PHYSICAL REQUIREMENTS OF THE POSITION: (List the physical requirements that are essential functions of the job.)

CHECK ONE:

<input type="checkbox"/>	Sedentary Work: Exerting up to 10 pounds of force occasionally and/or negligible amount of force frequently or constantly to lift, carry, push, pull or otherwise move objects. Sedentary work involves sitting most of the time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met.
<input checked="" type="checkbox"/>	Light Work: Exerting up to 10 pounds of force occasionally and/or negligible amount of force constantly to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for sedentary work and the worker sits most of the time, the job is rated for Light Work.
<input type="checkbox"/>	Medium Work: Exerting up to 50 pounds of force occasionally and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.
<input type="checkbox"/>	Heavy Work: Exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.
<input type="checkbox"/>	Very Heavy Work: Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

I. VISUAL ACUITY REQUIREMENTS: (List the visual acuity requirements that are essential functions of the job.)

CHECK ONE:

<input checked="" type="checkbox"/>	Operators (Electronic Equipment), Inspection, Close Assembly, Clerical, Administrative: This is a minimum standard for use with those whose job requires work done at close visual range (i.e. preparing and analyzing data and figures, accounting, transcription, computer terminal, extensive reading, visual inspection involving small parts, operation of machines, using measurement devices, assembly or fabrication of parts).
<input type="checkbox"/>	Machine Operators, Mechanics, Skilled Tradespeople: This is a minimum standard for use with those whose work deals with machines where the seeing job is at or within arm's reach. This also includes mechanics and skilled tradespeople and those who do work of a non-repetitive nature such as carpenters, technicians, service people, plumbers, painters, mechanics, etc. (If the machine operator also inspects, check the "Operators" box.)
<input type="checkbox"/>	Mobile Equipment Operators: This is a minimum standard for use with those who operate cars, trucks, forklifts, cranes, and high lift equipment.
<input type="checkbox"/>	Other: This is a minimum standard based on the criteria of accuracy and neatness of work for janitors, sweepers, etc.

J. THE CONDITIONS THE WORKER WILL BE SUBJECT TO IN THIS POSITION:

List the environmental/working conditions to which the employee may be exposed while performing the essential functions of the job. Include scheduling considerations such as on-call for emergencies, rotating shift, etc. **Approximate Percentage of time performing field work:** 0 %

CHECK ALL THAT APPLY:

<input type="checkbox"/>	None: The worker is not substantially exposed to adverse environmental conditions (such as typical office or administrative work).
<input type="checkbox"/>	The worker is subject to inside environmental conditions: Protection from weather conditions but not necessarily from temperature changes (i.e. warehouses, covered loading docks, garages, etc.)

The above statements are intended to summarize the nature and level of work and typical responsibilities and duties being performed by the incumbent(s) of this job. They are not intended to be an exhaustive list of all responsibilities, duties, and tasks required of the position.

<input type="checkbox"/>	The worker is subject to outside environmental conditions: No effective protection from weather.
<input type="checkbox"/>	The worker is subject to extreme cold: Temperatures below 32 degrees for period of more than one hour.
<input type="checkbox"/>	The worker is subject to extreme heat: Temperatures above 100 degrees for periods of more than one hour.
<input type="checkbox"/>	The worker is subject to noise: There is sufficient noise to cause the worker to shout in order to be heard above the surrounding noise level.
<input type="checkbox"/>	The worker is subject to vibration: Exposure to oscillating movements of the extremities or whole body.
<input checked="" type="checkbox"/>	The worker is subject to hazards: Includes a variety of physical conditions, such as proximity to moving mechanical parts, electrical current, working on scaffolding and high places or exposure to chemicals.
<input checked="" type="checkbox"/>	The worker is subject to atmospheric conditions: One or more of the following conditions that affect the respiratory system or the skin: Fumes, odors, dust, mists, gases or poor ventilation.
<input type="checkbox"/>	The worker is subject to oil: There is air and/or skin exposure to oils and other cutting fluids.
<input checked="" type="checkbox"/>	The worker is required to wear a respirator.

K. MACHINE, TOOLS, EQUIPMENT, ELECTRONIC DEVICES, SOFTWARE, ETC. USED BY POSITION:

List equipment needed to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions.)

CHECK ALL THAT APPLY:

<input type="checkbox"/>	Camera and photographic equipment	<input checked="" type="checkbox"/>	Office Equipment (desk, chair, telephone, etc.)
<input type="checkbox"/>	Cleaning supplies	<input checked="" type="checkbox"/>	Office supplies (pens, staplers, pencils, etc.)
<input type="checkbox"/>	Commercial vehicle	<input type="checkbox"/>	Packing materials (boxes, shrink wrap, etc.)
<input checked="" type="checkbox"/>	Data processing equipment	<input checked="" type="checkbox"/>	PC equipment (monitor, keyboard, printer, etc.)
<input type="checkbox"/>	Handcart	<input checked="" type="checkbox"/>	PC software
<input type="checkbox"/>	Hand tools <i>(please list):</i>		
<input checked="" type="checkbox"/>	Office Machines <i>(check all that apply):</i>	<input checked="" type="checkbox"/>	Copier
		<input checked="" type="checkbox"/>	Facsimile
		<input checked="" type="checkbox"/>	Calculator
		<input type="checkbox"/>	Cash register
<input type="checkbox"/>	Other <i>(please list):</i>		

L. SUPPLEMENTARY INFORMATION: (Indicate any other information which further explains the importance, difficulty, or uniqueness of the position, such as its scope of responsibility related to finances, equipment, people, information, etc. Also indicate success factors such a personal characteristics that contribute to an individual's ability to perform well in the job, and any other special considerations.)

M. I believe that the statements made above in describing this job are complete and

a 

Lindsey O'Connor

Health HR Admin

6/3/2024

Signature of Department Head or Designated Representative

The above statements are intended to summarize the nature and level of work and typical responsibilities and duties being performed by the incumbent(s) of this job. They are not intended to be an exhaustive list of all responsibilities, duties, and tasks required of the position.

Curriculum vitae
Erik L. Munson

PERSONAL

Current Affiliation

Marquette University
Department of Clinical Laboratory Science
P.O. Box 1881
Milwaukee, Wisconsin 53201-1881

Telephone: (414) 288-5848
Facsimile: (414) 288-7948
Electronic mail: erik.munson@marquette.edu

Home Address

W224 N2627 Ridgewood Lane
Waukesha, Wisconsin 53186
Telephone: (262) 547-0503

Date of Birth

4 November 1971
West Bend, Wisconsin

Citizenship

United States of America

Family

Marriage: Kimber Leigh (Fisher) Munson, Ph.D., 1999
Children: Matthew Lars, 2001; Sophie Eleanor, 2004

CERTIFICATION

Diplomate

American Board of Medical Microbiology, 2014
Recertification 2017

Certificate of Qualification

New York State Department of Health, 2019
CQ Code: MUNSE1

Certificate of Compliance, CL-04

State of Wisconsin Department of Health Services, 2018
CLIA Certificate number 52D2152949

College of American Pathologists

Proficiency Testing number 8563653

Registered Microbiologist

American Academy of Microbiology, National Registry of Microbiologists, 1994
American Society for Clinical Pathology Board of Registry, 2005

EDUCATION

Doctorate of Philosophy

University of Wisconsin Medical School
Department of Medical Microbiology and Immunology
1300 University Avenue
Madison, Wisconsin 53706

Bachelor of Science

University of Wisconsin--Green Bay
2420 Nicolet Drive
Green Bay, Wisconsin 54311-7070

Human Participant Protections Education for Research

Completed in 2004

Collaborative Institutional Training Initiative (CITI) Human Subjects Research

Completed in 2017
Stage two completed in 2020

PROFESSIONAL EXPERIENCE

Assistant Professor (2016-)

Marquette University College of Health Sciences; Milwaukee, Wisconsin

Clinical Assistant Professor (2003-2016)

University of Wisconsin--Milwaukee College of Health Sciences; Milwaukee, Wisconsin

Technical Director (2002-2016)

Wheaton Franciscan Laboratory; Milwaukee, Wisconsin

Clinical Microbiology Fellowship (2000-2002)

Clinical Microbiology Laboratories, University of Iowa College of Medicine Department of Pathology; Iowa City, Iowa

Clinical Microbiology Technician (1991-1994)

St. Joseph's Community Hospital of West Bend, Wisconsin

Clinical Laboratory Internship (1990)

St. Joseph's Community Hospital of West Bend, Wisconsin

RESEARCH EXPERIENCE

Post-doctoral Research (2000)

Wisconsin State Laboratory of Hygiene (Public Health Laboratory for the State of Wisconsin) and University of Wisconsin Medical School Department of Medical Microbiology and Immunology

Graduate Research (1994-1999)

Wisconsin State Laboratory of Hygiene (Public Health Laboratory for the State of Wisconsin) and University of Wisconsin Medical School Department of Medical Microbiology and Immunology

Undergraduate Research (1992)

University of Wisconsin--Green Bay Senior Honors Project

TEACHING EXPERIENCE

Medical Microbiology--Course CLLS 4127/7127; Marquette University College of Health Sciences

Four-credit lecture, discussion, and laboratory series offered by the Department of Clinical Laboratory Science; enrollment of approximately 15 students
(2016 to present)

Clinical Microbiology--Course CLLS 4188/7188; Marquette University College of Health Sciences

Six-credit lecture, discussion, laboratory, and practicum series offered by the Department of Clinical Laboratory Science; enrollment of approximately 15 students
(2016 to present)

Guided Study; Clinical Laboratory Science--Course CLLS 1100; Marquette University College of Health Sciences

One-credit summer discussion and laboratory review of microbiology concepts; enrollment of 3 students
(2019)

Molecular Diagnostics--Course 246-560; University of Wisconsin--Milwaukee College of Health Sciences

Two-credit lecture series offered by the Clinical Laboratory Science Program; enrollment of 23-52 students
(2006, 2009, 2011)

Introductory Microbiology; Covenant Healthcare System, Incorporated, Surgical Technologist Training Program

Microbiology lecture component of surgical technologist course offered as a joint venture between Covenant Healthcare and Aurora Health Care; enrollment of 26 students
(2003)

Microbiology Interest Rounds; Midwest Clinical Laboratories/Wheaton Franciscan Laboratory

(2002-2016)

Pathogenesis of Major Human Diseases--Course 69:270; University of Iowa College of Medicine

Discussion component of graduate-level course offered by the Department of Pathology; enrollment of seven students
(2002)

Clinical Bacteriology--Course 69:125; University of Iowa Department of Pathology

Laboratory component of course offered by the Clinical Laboratory Science Program; enrollment of ten students
(2001)

Medical Mycology--Course 69:125; University of Iowa Department of Pathology

Lecture and laboratory components of course offered by the Clinical Laboratory Science Program; enrollment of eight students
(2001)

Resident Ambulatory Care Session in Microbiology; University of Iowa Hospitals and Clinics

(2001-2002)

Resident Practicum in Microbiology; University of Iowa Department of Pathology

(2001-2002)

Case Conferences; University of Iowa Department of Pathology

(2000-2002)

Clinical Bacteriology--Course 628-531; University of Wisconsin Medical School

Laboratory component of a three-credit course offered by the Medical Technology Program; enrollment of twenty students
(1997)

Clinical and Public Health Microbiology--Course 620-603; University of Wisconsin Medical School

Five-credit advanced undergraduate and graduate course; enrollment of seventy students (1995-1999)

Medical Microbiology Laboratory--Course 620-302; University of Wisconsin Medical School

Three-credit undergraduate-level course; enrollment of thirty students (1994-1999)

Infection and Immunity--Course 620-701; University of Wisconsin Medical School

Laboratory portion of a four-credit medical student course; enrollment of twenty-four students (1994-2000)

Organic Chemistry Laboratory--Course 225-304; University of Wisconsin--Green Bay

Two-credit undergraduate-level course; enrollment of twenty-four students (1993)

ABSTRACTS

Stafford, I. A., J. J. Dunn, K. L. Muldrew, A. Berra, R. Kopkin, E. Johnson, C. Watters, I. Martin, and E. Munson. 2019. Trends in infection and antimicrobial resistance patterns of *Mycoplasma genitalium* collected from pregnant women in Houston, TX. 2019 Infectious Diseases Society for Obstetrics and Gynecology Annual Meeting. Big Sky, Montana.

Munson, E., K. Buehler, D. Ryan, A. Clifford, and B. Mustanski. 2019. Molecular screening for *Trichomonas vaginalis* and *Mycoplasma genitalium* in the RADAR longitudinal cohort study of young transgender women and young men who have sex with men. ASM Microbe 2019. San Francisco, California.

Munson, E., D. Ryan, A. Clifford, and B. Mustanski. 2019. Molecular screening for *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Trichomonas vaginalis*, and *Mycoplasma genitalium* in the RADAR longitudinal cohort study of young transgender women and young men who have sex with men. 2019 National LGBTQ Health Conference. Atlanta, Georgia.

Munson, E., D. Ryan, A. Clifford, and B. Mustanski. 2018. Molecular screening for *Trichomonas vaginalis* and *Mycoplasma genitalium* in the RADAR longitudinal cohort study of young transgender women and young men who have sex with men. Association for Molecular Pathology (AMP) 2018. San Antonio, Texas.

Beattie R, E. Bakke, **E. Munson**, and K. Hristova. 2018. Kewaunee County, Wisconsin: using a “one health” approach to investigate multidimensional aspects of antibiotic resistance. Society of Environmental Toxicology and Chemistry North America 39th Annual Meeting. Sacramento, California.

Bakke, E., R. Beattie, **E. Munson**, and K. Hristova. 2018. ESBL and multi-drug resistant *E. coli* are present in environmental and clinical settings in Kewaunee County, Wisconsin. ASM Microbe 2018. Atlanta, Georgia.

Block, T. K., K. L. Munson, D. Block, G. Land, N. Riederer, S. Rodriguez, R. Stone, A. Villalobos, and **E. Munson**. 2018. Outcome of electronic order set implementation relative to toxigenic *Clostridium difficile* PCR analysis and hospital-onset *Clostridium difficile* infection in a multi-hospital healthcare system. ASM Microbe 2018. Atlanta, Georgia. (resulted in publication)

Munson, E., D. Wenten, S. Jhansale, M. Schuknecht, N. Pantuso, M. Napierala, K. Munson, A. Steward, J. Gerritts, and D. Hamer. 2016. Transcription-mediated amplification-based screening of male STI clinic patients for *Mycoplasma genitalium*. ASM Microbe 2016. Boston, Massachusetts. (resulted in publication)

Bilbo, D., K. L. Munson, M. Napierala, and **E. Munson**. 2015. Adaptation of alternative nucleic acid extraction protocols to ProGastro™ SSCS assay. 115th General Meeting of the American Society for Microbiology. New Orleans, Louisiana. (resulted in publication)

Napierala, M., K. L. Munson, H. Bykowski, and **E. Munson**. 2015. Transcription-mediated amplification-based *Mycoplasma genitalium* screening of primary female urogenital specimens in a high-prevalence STI community. 115th General Meeting of the American Society for Microbiology. New Orleans, Louisiana. (resulted in publication)

Munson, K. L., M. Napierala, D. Bilbo, and **E. Munson**. 2015. Frozen master mix modification of ProGastro™ SSCS assay for detection of *Salmonella* spp., *Shigella* spp., *Campylobacter* spp., and shiga toxin-producing *Escherichia coli*. 115th General Meeting of the American Society for Microbiology. New Orleans, Louisiana.

Wenten, D., P. Phipps, R. Gremminger, M. Schuknecht, D. Hamer, K. L. Munson, M. Napierala, E. Kriefall, C. Duckert, and **E. Munson**. 2014. Transcription-mediated amplification-based *Ureaplasma urealyticum* screening of primary male urine specimens. 114th General Meeting of the American Society for Microbiology. Boston, Massachusetts.

Napierala, M., K. L. Munson, B. Wenninger, D. Bilbo, and **E. Munson**. 2014. Frozen master mix modification of Hologic/Prodesse ProFlu+™ for detection of influenza and respiratory syncytial viruses. 114th General Meeting of the American Society for Microbiology. Boston, Massachusetts. (resulted in publication)

Munson, E., B. Amrhein, J. Czarnecka, J. Griep, K. Munson, and M. Napierala. 2013. Transcription-mediated amplification-based high-risk human papillomavirus screening assays and genotyping assays potentiate fewer patient follow-up encounters. 113th General Meeting of the American Society for Microbiology. Denver, Colorado.

Harkins, A., E. Schroeder, K. Ross, C. Yauck, T. Bieganski, R. Amrhein, P. Patel, M. Napierala, and **E. Munson**. 2013. Pre-analytical considerations related to high-risk human papillomavirus detection via APTIMA HPV. 113th General Meeting of the American Society for Microbiology. Denver, Colorado. (resulted in publication)

Wenten, D., P. Phipps, R. Gremminger, M. Schuknecht, D. Hamer, V. Boyd, M. Napierala, and **E. Munson**. 2013. Transcription-mediated amplification-based *Mycoplasma genitalium* screening of primary male urine specimens. 113th General Meeting of the American Society for Microbiology. Denver, Colorado. (resulted in publication)

Munson, E., L. Kroeger, S. Balzer, J. Czarnecka, J. Griep, R. Amrhein, K. Munson, and M. Napierala. 2012. Comparison of commercial hybridization and automated transcription-mediated amplification modalities for detection of high-risk human papillomavirus nucleic acid. 112th General Meeting of the American Society for Microbiology. San Francisco, California. (resulted in publication)

Napierala, M., D. Block, G. Land, M. Luzinski, N. Riederer, S. Rodriguez, P. Skonieczny, and **E. Munson**. 2012. Impact of toxigenic *Clostridium difficile* PCR testing on the clinical microbiology laboratory and inpatient epidemiology. 112th General Meeting of the American Society for Microbiology. San Francisco, California. (resulted in publication)

Munson, E., D. Wenten, P. Phipps, R. Gremminger, M. Napierala, R. Olson, and D. Hamer. 2012. Transcription-mediated amplification-based screening of male STI clinic patients for *Trichomonas vaginalis*. 112th General Meeting of the American Society for Microbiology. San Francisco, California. (resulted in publication)

Schroeder, E., S. Balzer, L. Kroeger, J. Czarnecka, J. Griep, R. Amrhein, C. Yauck, K. C. Ross, and **E. Munson**. 2011. Clinical experience with Cervista™ HPV HR as a function of cytological classification: comparison with retrospective hybrid capture (Hc2) data. 59th Annual Scientific Meeting American Society for Cytopathology, Baltimore, Maryland. (resulted in publication)

Nelson, B. E., B. Amrhein, J. Czarnecka, J. Griep, and **E. Munson**. 2011. Glacial acetic acid interference with human papillomavirus testing using Cervista™ HPV HR. 2011 ASCLS Annual Meeting. Atlanta, Georgia. (resulted in publication)

Kramme, T., K. Munson, C. Miller, M. Napierala, R. Olson, and **E. Munson**. 2011. Live *Trichomonas vaginalis* ASR testing in a high-prevalence STI metropolitan area: female epidemiology. 111th General Meeting of the American Society for Microbiology. New Orleans, Louisiana. (resulted in publication)

Munson, E., M. Napierala, C. Miller, T. Kramme, K. Munson, and J. Burtch. 2011. Three-year history of *Trichomonas vaginalis* ASR testing in a subacute care patient population. 111th General Meeting of the American Society for Microbiology. New Orleans, Louisiana. (resulted in publication)

Miller, C., M. Napierala, K. Munson, T. Kramme, R. Olson, and **E. Munson**. 2011. Assessment of *Trichomonas vaginalis* screening practices in a subacute clinical setting following introduction of *T. vaginalis* ASR testing. 111th General Meeting of the American Society for Microbiology. New Orleans, Louisiana. (resulted in publication)

Munson, K., T. Kramme, M. Napierala, C. Miller, J. Burtch, and **E. Munson**. 2011. A three-year review of transcription-mediated amplification-based *Trichomonas vaginalis* male screening in a community of high STI prevalence. 111th General Meeting of the American Society for Microbiology. New Orleans, Louisiana. (resulted in publication)

Munson, E., A. Culver, and M. Napierala. 2010. Frozen master mix modification of BD GeneOhm™ Cdiff assay. 110th General Meeting of the American Society for Microbiology. San Diego, California. (resulted in publication)

Culver, A., M. Napierala, K. Munson, and **E. Munson**. 2010. Temporal characterization of carrot broth-enhanced real-time PCR as an alternative means for rapid detection of *Streptococcus agalactiae*. 110th General Meeting of the American Society for Microbiology. San Diego, California. (resulted in publication)

Bilbo, D., M. Paul, A. Culver, M. Napierala, P. Riska, and **E. Munson**. 2010. Modifications of a commercial *Clostridium difficile* PCR assay resulting in enhanced laboratory workflow efficiency. 110th General Meeting of the American Society for Microbiology. San Diego, California. (resulted in publication)

Munson, E., J. Griep, M. Dougrey, and B. K. Du Chateau. 2009. Evaluation of Invader®-based analyte-specific reagents (ASR) for detection of high-risk human papillomavirus (HPV) types from liquid-based cytology specimens. 109th General Meeting of the American Society for Microbiology. Philadelphia, Pennsylvania. (resulted in publication)

Munson, E., T. Kramme, and A. Culver. 2009. Frozen master mix modification of BD GeneOhm™ StaphSR assay. 109th General Meeting of the American Society for Microbiology. Philadelphia, Pennsylvania. (resulted in publication)

Block, T., and **E. Munson**. 2009. Cost-effective master mix modification of a commercial MRSA PCR assay. 19th Annual Scientific Meeting of the Society for Healthcare Epidemiology of America (SHEA). San Diego, California. (resulted in publication)

Miskulin D., **E. Munson**, and A. L. Harkins. 2008. Characterizing phospholipase D1 activity in *Candida albicans* isolates from different host sites. 2008 American Society for Clinical Laboratory Science Annual Meeting. Washington, D. C.

Munson, E., M. Napierala, R. Olson, T. Endes, and T. Block. 2008. Beneficiaries of *Trichomonas vaginalis* molecular analyte-specific reagent testing in a metropolitan setting of high sexually-transmitted disease prevalence. 108th General Meeting of the American Society for Microbiology. Boston, Massachusetts. (resulted in publication)

Block, T., A. Culver, K. Vaughan, and **E. Munson**. 2008. Broth-enhanced BD GeneOhm™ StrepB polymerase chain reaction for detection of *Streptococcus agalactiae* from primary clinical specimens. 108th General Meeting of the American Society for Microbiology. Boston, Massachusetts. (resulted in publication)

Napierala, M., J. Basile, T. Block, C. Miller, and **E. Munson**. 2008. Performance of *Trichomonas vaginalis* molecular analyte-specific reagent testing on primary clinical saline suspensions. 108th General Meeting of the American Society for Microbiology. Boston, Massachusetts. (resulted in publication)

Munson, E., T. Block, and J. Basile. 2007. Mechanisms to assess Gram stain proficiency of technologists at satellite laboratories. 107th General Meeting of the American Society for Microbiology. Toronto, Ontario. (resulted in publication)

Munson, E., T. Endes, K. Vaughan, and T. Block. 2007. Recovery of dimorphic fungi via conventional BacT/ALERT® microbial detection system media. 107th General Meeting of the American Society for Microbiology. Toronto, Ontario. (resulted in publication)

Munson, E., D. Murray, M. Pfaller, and P. L. Winokur. 2006. Conidiobolomycosis in an immunocompromised patient in the Midwest United States. 106th General Meeting of the American Society for Microbiology. Orlando, Florida.

Munson, E., V. Boyd, J. Czarnecka, J. Griep, and N. Schaal. 2006. Evaluation of Gen-Probe APTIMA-based *Neisseria gonorrhoeae* and *Chlamydia trachomatis* confirmatory testing in a metropolitan setting. 106th General Meeting of the American Society for Microbiology. Orlando, Florida. (resulted in publication)

Munson, E., S. Beekmann, D. Diekema, and G. Doern. 2005. Antimicrobial regimen choices in clinically-significant bloodstream infection and impact on clinical outcome. 105th General Meeting of the American Society for Microbiology. Atlanta, Georgia.

Heard, S. O., **E. L. Munson**, and G. V. Doern. 2003. Exposure of bacteria to antimicrobial impregnated central venous catheters does not directly lead to the emergence of antimicrobial resistance. *Chest* 2003. Orlando, Florida. (resulted in publication)

Munson, E. L., M. C. Remington, S. M. Callister, and R. F. Schell. 2003. Characterization of interleukin-6 in anti-OspA borreliacidal antibody production *in vitro*. 103rd General Meeting of the American Society for Microbiology. Washington, D. C. (resulted in publication)

Munson, E. L., L. Bartell, M. Sem, B. K. Du Chateau, C. Tracht-Kader, and G. V. Doern. 2003. Biotype distribution of clinical isolates of *Haemophilus influenzae* and *Haemophilus parainfluenzae* and biotype discrepancy frequencies produced by three commercial assays. 103rd General Meeting of the American Society for Microbiology. Washington, D. C. (resulted in publication)

Munson, E. L., S. O. Heard, and G. V. Doern. 2002. Exposure of bacteria to antimicrobial impregnated-central venous catheters does not directly lead to the emergence of antimicrobial resistance. 102nd General Meeting of the American Society for Microbiology. Salt Lake City, Utah. (resulted in publication)

Munson, E. L., D. M. England, C. L. Croke, M. C. Remington, J. A. Christopherson, S. M. Callister, and R. F. Schell. 2002. Neutralization of interferon-gamma augments borreliacidal antibody production and severe destructive Lyme arthritis in C3H/HeJ mice. 102nd General Meeting of the American Society for Microbiology. Salt Lake City, Utah. (resulted in publication)

Munson, E., S. Richter, G. Doern, L. B. Reller, S. Mirrett, E. Peterson, R. Silberman, M. Weinstein, and D. Bruckner. 2002. Evaluation of the Phoenix™ automated microbiology system for fluoroquinolone susceptibility testing of Gram negative bacilli. 102nd General Meeting of the American Society for Microbiology. Salt Lake City, Utah.

Loeffelholz, M. J., and **E. L. Munson**. 2002. Reproducibility of positive herpes simplex virus PCR results from cerebrospinal fluid specimens: correlation with clinical findings. 18th Annual Clinical Virology Symposium and Annual Meeting for the Pan American Society for Clinical Virology. Clearwater, Florida.

Beekmann, S., D. Diekema, **E. Munson**, and G. Doern. 2002. Specificity and positive predictive value of the NNIS definition of laboratory-confirmed bloodstream infection with common skin contaminants. 12th Annual Scientific Meeting of the Society for Healthcare Epidemiology of America. Salt Lake City, Utah.

Munson, E. L., M. A. Pfaller, F. P. Koontz, and G. V. Doern. 2001. Comparison of porphyrin-based, growth factor-based, and biochemical-based testing methods for identification of *Haemophilus influenzae*. 101st General Meeting of the American Society for Microbiology. Orlando, Florida. (resulted in publication)

Munson, E. L., B. K. Du Chateau, J. R. Jensen, S. M. Callister, and R. F. Schell. 2001. Interferon-gamma inhibits production of borreliacidal antibody *in vitro*. 101st General Meeting of the American Society for Microbiology. Orlando, Florida. (resulted in publication)

Munson, E. L., B. K. Du Chateau, D. A. Jobe, S. M. Callister, and R. F. Schell. 2000. Production of OspA borreliacidal antibody *in vitro* and effects of interleukin-4. 100th General Meeting of the American Society for Microbiology. Los Angeles, California. (resulted in publication)

Croke, C. L., **E. L. Munson,** S. D. Lovrich, J. A. Christopherson, M. Remington, S. M. Callister, and R. F. Schell. 1999. OspA induces Lyme arthritis in hamsters. Proceedings of the XII International Scientific Conference of Lyme Disease and Other Spirochetal and Tick-Borne Disorders. New York City/New Jersey, USA. (resulted in publication)

Munson, E. L., R. F. Schell, and S. M. Callister. 1998. Production of borreliacidal activity *in vitro* and *in vivo* in C3H/HeJ mice. 98th General Meeting of the American Society for Microbiology. Atlanta, Georgia.

Du Chateau, B. K., R. F. Schell, **E. L. Munson,** and S. M. Callister. 1997. Macrophages and enriched populations of T lymphocytes interact synergistically for the induction of severe destructive Lyme arthritis: relationship to vaccination. Lyme Disease Foundation 10th Annual International Scientific Conference on Lyme Borreliosis and other Tick-borne Disorders. Washington, D. C. (resulted in publication)

Lim, L. C. L., N. J. Glowacki, **E. L. Munson,** and B. K. Du Chateau. 1996. Production of IFN-gamma and IL-4 by hamster lymphocytes involved in the development of severe destructive Lyme arthritis. 96th General Meeting of the American Society for Microbiology. New Orleans, Louisiana.

Munson, E. L., D. M. Panko, and J. G. Fink. 1996. 1994 Wisconsin lycoperdonosis. 96th General Meeting of the American Society for Microbiology. New Orleans, Louisiana. (resulted in publication)

Munson, E. L., B. K. Du Chateau, L. C. L. Lim, S. M. Callister, and R. F. Schell. 1996. Hamster model of Lyme borreliosis. Proceedings of the IX Annual International Conference on Lyme Borreliosis and Other Tick-Borne Disorders. Boston, Massachusetts. (resulted in publication)

BOOK CHAPTERS

Munson E. 2014. *Pasteurella* and similar organisms, p. 391-395. In P. M. Tille (ed.), Bailey & Scott's Diagnostic Microbiology, 13th ed. Elsevier Mosby, St. Louis, MO.

Munson, E. L. 2000. The effects of interleukin-4 and interferon-gamma on borreliacidal antibody production. Ph.D. Dissertation, University of Wisconsin Medical School.

Bernhardt, M., L. S. Almer, **E. L. Munson**, S. M. Callister, and R. F. Schell. 2000. Detection of bacteria in blood: centrifugation and filtration, p. 9-14. *In* M. Alexander, B. R. Bloom, D. A. Hopwood, R. Hull, B. H. Iglewski, A. I. Laskin, S. G. Oliver, M. Schaechter, W. C. Summers, J. Lederberg (ed.), *Encyclopedia of Microbiology*, 2nd ed., vol. 2. Academic Press, San Diego, CA.

INVITED CORRESPONDENCE

Munson, E. and K. C. Carroll. 2019. Whither extensive genomic-based microbial taxonomic revision (commentary)? *Clin. Chem.* **65**: 1343-1345.

Munson, E., and A. J. McAdam. 2019. The Photo Quiz: a look back and a look forward (editorial). *J. Clin. Microbiol.* **57**: e01078-19.

Paxton R, **E. Munson**, and K Barta. 2019. Update in the molecular diagnostics of sexually transmitted infections (review). *Physician Assist. Clin.* **4**: 501-518.

Munson, E., and K. C. Carroll. 2019. An update on the novel genera and species and revised taxonomic status of bacterial organisms described in 2016 and 2017 (minireview). *J. Clin. Microbiol.* **57**: e01181-18.

Munson, E. 2019. Biographical feature: Peter H. Gilligan, Ph.D., D(ABMM), F(AAM) (editorial). *J. Clin. Microbiol.* **57**: e01872-18.

Munson, E. 2018. Biographical feature: Richard B. (Tom) Thomson, Jr., Ph.D., D(ABMM), F(AAM) (editorial). *J. Clin. Microbiol.* **56**: e01888-17.

Munson, E. 2017. Molecular diagnostics update for the emerging (if not already widespread) sexually-transmitted infection agent *Mycoplasma genitalium*: just about ready for prime time (minireview). *J. Clin. Microbiol.* **55**: 2894-2902.

Munson, E. 2017. Biographical feature: Thomas F. Smith, Ph.D. (editorial). *J. Clin. Microbiol.* **55**: 1237-1243.

Munson, E., K. L. Munson, and R. F. Schell. 2017. Clinical laboratory assessments for *Mycoplasma genitalium* in a high-prevalence sexually-transmitted infection community reveal epidemiologic dichotomies with *Trichomonas vaginalis* (review). *Expert Rev. Anti Infect. Ther.* **15**: 133-145.

Munson, E., and K. C. Carroll. 2017. What's in a name? New bacterial species and changes to taxonomic status from 2012 through 2015 (minireview). *J. Clin. Microbiol.* **55**: 24-42.

Munson, E., M. Napierala, and K. L. Munson. 2016. Update on laboratory diagnosis and epidemiology of *Trichomonas vaginalis*: you can teach an "old" dog "new" trichs (review). *Clin. Microbiol. Newslett.* **38**: 159-168.

- Munson, E.** 2016. Biographical feature: Clyde Thornsberry, Ph.D. (editorial). *J. Clin. Microbiol.* **54**: 250-253.
- Munson, E.** 2015. Biographical feature: Henry D. Isenberg, Ph.D. (editorial). *J. Clin. Microbiol.* **53**: 370-372.
- Munson, E.** 2014. Point: new trichs for “old” dogs: prospects for expansion of *Trichomonas vaginalis* screening (point/counterpoint). *Clin. Chem.* **60**: 151-154.
- Munson, E., M. Napierala, and R. F. Schell.** 2013. Insights into trichomoniasis as a result of highly sensitive molecular diagnostics screening in a high-prevalence sexually transmitted infection community (review). *Expert Rev. Anti Infect. Ther.* **11**: 845-63.
- Munson, E. L., D. T. Nardelli, B. K. Du Chateau, S. M. Callister, and R. F. Schell.** 2012. Hamster and murine models of severe destructive Lyme arthritis (review). *Clin. Develop. Immunol.* doi:10.1155/2012/504215.
- Harkins, A. L., and **E. Munson.** 2011. Molecular diagnosis of sexually-transmitted *Chlamydia trachomatis* in the United States (review). *ISRN Obstet. Gynecol.* doi:10.5402/2011/279149.
- Nardelli, D. T., **E. L. Munson,** S. M. Callister, and R. F. Schell. 2009. Human Lyme disease vaccines: past and future concerns (review). *Future Microbiol.* **4**: 457-469.
- Munson, E.,** and M. A. Firmani. 2009. Molecular diagnosis of *Neisseria gonorrhoeae* infection in the United States (review). *Expert Opin. Med. Diagn.* **3**: 327-343.
- Munson, E. L.,** B. K. Du Chateau, D. A. Jobe, M. L. Padilla, S. D. Lovrich, J. R. Jensen, L. C. L. Lim, J. L. Schmitz, S. M. Callister, and R. F. Schell. 1996. Hamster model of Lyme borreliosis (review). *J. Spirochet. Tick-borne Dis.* **3**: 15-21.

PUBLICATIONS

- Schulte R. H., and **E. Munson.** 2019. *Staphylococcus aureus* resistance patterns in Wisconsin: 2018 Surveillance of Wisconsin Organisms for Trends in Antimicrobial Resistance and Epidemiology (SWOTARE) program report. *Clin. Med. Res.* **17**: 72-81.
- Bateman A. C., E. J. Bowles, **E. Munson,** R. P. Podzorski, E. T. Beck, R. Dern, A. K. Sterkel, D. M. Warshauer, and P. A. Schult. 2019. Strengthening public health in Wisconsin through the Wisconsin Clinical Laboratory Network. *Public Health Rep.* **134** (suppl. 2): 6S-10S.

- Munson, E.**, S. Rodriguez, N. Riederer, K. L. Munson, D. Block, G. Land, R. Stone, A. Villalobos, E. Dewey, and T. K. Block. 2019. Outcome of electronic order alert intervention relative to toxigenic *Clostridium difficile* PCR analysis and hospital-onset *C. difficile* infection in a multihospital health care system. *Am. J. Clin. Pathol.* **151**: 622-627.
- Munson, E.**, E. Hueppchen, and H. Zeman. 2018. Surveillance of Wisconsin Organisms for Trends in Antimicrobial Resistance and Epidemiology: introduction to the program and summary of 2016 geographic variation. *WMJ.* **117**: 116-121.
- Munson, E.**, M. D. Huband, M. Castanheira, K. A. Fedler, and R. K. Flamm. 2018. Determination of MIC and disk diffusion quality control guidelines for meropenem-vaborbactam, a novel carbapenem/boronic acid β -lactamase inhibitor combination. *Diagn. Microbiol. Infect. Dis.* **90**: 324-328.
- Munson, E.**, E. J. Bowles, R. Dern, E. Beck, R. P. Podzorski, A. C. Bateman, T. K. Block, J. L. Kropp, T. Radke, K. Siebers, B. Simmons, M. A. Smith, F. Spray-Larson, and D. M. Warshauer. 2018. Laboratory focus on improving the culture of biosafety: statewide risk assessment of clinical laboratories that process specimens for microbiologic analysis. *J. Clin. Microbiol.* **56**: e01569-17.
- Jones, D., R. H. Elshaboury, **E. Munson**, and T. J. Dilworth. 2018. A retrospective analysis of treatment and clinical outcomes among patients with methicillin-susceptible *Staphylococcus aureus* bloodstream isolates possessing detectable *mecA* by a commercial PCR assay compared to patients with methicillin-resistant *Staphylococcus aureus* bloodstream isolates. *Antimicrob. Agents Chemother.* **62**: e01396-17.
- Tran, C. D., J. Makuvaza, **E. Munson**, and B. Bennett. 2017. Biocompatible copper oxide nanoparticle composites from cellulose and chitosan: facile synthesis, unique structure, and antimicrobial activity. *ACS Appl. Mater. Interfaces* **9**: 42503-42515.
- Olson, R., K. L. Munson, M. Napierala, and **E. Munson**. 2017. Answer to November 2017 photo quiz. *J. Clin. Microbiol.* **55**: 3311-3312.
- Olson, R., K. L. Munson, M. Napierala, and **E. Munson**. 2017. Photo quiz: a 69-year-old immunosuppressed male with chest pain and shortness of breath. *J. Clin. Microbiol.* **55**: 3151-3152.
- Munson, E.**, H. Zeman, and E. Hueppchen. 2017. Surveillance of Wisconsin Organisms for Trends in Antimicrobial Resistance and Epidemiology (SWOTARE): epidemiologic correlates for 2016 surveillance isolates. *Gundersen Med. J.* **10**: 41-48.
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INVITED LECTURES AND PRESENTATIONS

Invited Inservice

Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. City of Milwaukee Public Health Laboratory. Milwaukee, Wisconsin; November 2019.

Invited Seminar

“Here, There, and Everywhere” Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. 2019 WCLN Regional Meetings [Wisconsin Clinical Laboratory Network]. Madison, Wisconsin; September 2019.

Invited Case Conference

“We Can Work It Out” 23-year-old female with unexpected “bowel movement”. 2019 WCLN Regional Meetings [Wisconsin Clinical Laboratory Network]. Madison, Wisconsin; September 2019.

Invited Seminar

“Here, There, and Everywhere” Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. 2019 WCLN Regional Meetings [Wisconsin Clinical Laboratory Network]. Kimberly, Wisconsin; September 2019.

Invited Case Conference

“We Can Work It Out” 53-year-old male with cellulitis, headache, and fever. 2019 WCLN Regional Meetings [Wisconsin Clinical Laboratory Network]. Rice Lake, Wisconsin; September 2019.

Invited Seminar

“Here, There, and Everywhere” Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. 2019 WCLN Regional Meetings [Wisconsin Clinical Laboratory Network]. Rice Lake, Wisconsin; September 2019.

Invited Seminar

Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. Fort HealthCare Medical Staff meeting. Fort Atkinson, Wisconsin; July 2019.

Invited Seminar

Molecular screening for *Trichomonas vaginalis* and *Mycoplasma genitalium* in the RADAR longitudinal cohort study of young transgender women and young men who have sex with men. ASM Microbe 2019. San Francisco, California; June 2019.

Symposium Convener

No cell wall--no problem: the importance of *Mycoplasma* spp. in clinical medicine. ASM Microbe 2019. San Francisco, California; June 2019.

Invited Seminar

Aptima *Mycoplasma genitalium* assay: addressing an emerging issue. ASM Microbe 2019 Industry & Science Event. San Francisco, California; June 2019.

Invited Seminar

Mycoplasma genitalium TMA: this could be déjà vu all over again. Association of Public Health Laboratories INNOVATE! Saint Louis, Missouri; June 2019.

Invited Panelist

M. genitalium Advisory Board Meeting. Denver, Colorado; April 2019.

Invited Moderator

Molecular diagnostics in the context of women’s health; introduction to syndromic panels and a cautionary tale. WCLN Conference 2019: Syndromic Multiplex Panels and Automation Today and Tomorrow (Where Does This Fit in Your Laboratory [A WCLN Workshop for Wisconsin Clinical Laboratory Professionals]. Wisconsin Dells, Wisconsin; April 2019.

Invited Webinar

Updates to CLSI M100. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; February 2019.

Invited Lecture

Medical mycology. Medical College of Wisconsin School of Pharmacy. Wauwatosa, Wisconsin; February 2019.

Invited Lecture

Antimicrobial susceptibility testing. Medical College of Wisconsin School of Pharmacy. Wauwatosa, Wisconsin; January 2019.

Invited Lecture

Clinical microbiology. Medical College of Wisconsin School of Pharmacy. Wauwatosa, Wisconsin; January 2019.

Invited Case Conference

23-year-old female with unexpected "bowel movement". 2018 Regional Meetings [Wisconsin Clinical Laboratory Network]. Rice Lake, Wisconsin; September 2018.

Invited Seminar

Things are heating up: an update on emerging sexually-transmitted infection agents. Annual Meeting of American Society for Clinical Laboratory Science. Chicago, Illinois; July 2018.

Invited Seminar

Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. Annual Meeting of American Society for Clinical Laboratory Science--Wisconsin. Milwaukee, Wisconsin; April 2018.

Invited Moderator

"Urine Cultures" Relevance and Best Practices. "Culture Relevance and Best Practices" for Urine, Wounds and Lower Respiratory Specimens [A WCLN Workshop for Wisconsin Clinical Laboratory Professionals]. Wisconsin Dells, Wisconsin; April 2018.

Invited Lecture

Introduction to infectious disease testing. Marquette University Physician Assistant Program. Milwaukee, Wisconsin; March 2018.

Invited Lecture

Sexually-transmitted infections (STI) at the national and (gasp) local level. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; February 2018.

Invited Webinar

Antibiotics 201 for laboratory professionals. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; January 2018.

Invited Seminar

Mycoplasma genitalium ASR: this could be déjà vu all over again. Association for Molecular Pathology Corporate Workshop Day. Salt Lake City, Utah; November 2017.

Invited Moderator

Strategies for *Clostridium difficile* testing. 2017 Regional Meetings [Wisconsin Clinical Laboratory Network]. Rice Lake and Kimberly, Wisconsin; September 2017.

Invited Seminar

Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. 2017 ARLABnetwork Midwest Regional Meeting. Madison, Wisconsin; August 2017.

Invited Seminar

Sexually-transmitted infections you may want to know about--plus laboratory diagnostic options. Marquette University Biomedical Summer Research Program. Milwaukee, Wisconsin; June 2017.

Invited Seminar

Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. Marquette University Clinical and Translational Rehabilitation Health Sciences Program. Milwaukee, Wisconsin; April 2017.

Invited Lecture

Introduction to infectious disease testing. Marquette University Physician Assistant Program. Milwaukee, Wisconsin; April 2017.

Invited Seminar

Caveats of the CLSI M100 and M45 documents. 2017--Challenges in Antimicrobial Susceptibility Testing Conference [A WCLN Workshop for Wisconsin Clinical Laboratory Professionals]. Wisconsin Dells, Wisconsin; April 2017.

Invited Seminar

Surveillance of Wisconsin organisms for trends in antimicrobial resistance and epidemiology. 2017--Challenges in Antimicrobial Susceptibility Testing Conference [A WCLN Workshop for Wisconsin Clinical Laboratory Professionals]. Wisconsin Dells, Wisconsin; April 2017.

Invited Seminar

Regional antimicrobial resistance patterns. University of Wisconsin--Madison Division of Pharmacy Professional Development 2017 Madison Clinical Conference. Madison, Wisconsin; April 2017.

Invited Panelist

Laboratory diagnosis of Zika virus infection. Marquette Presents: The Zika virus--Myths and Facts (Marquette University College of Health Sciences). Milwaukee, Wisconsin; February 2017.

Invited Seminar

Laboratory-based surveillance of sexually-transmitted infections and antibacterial susceptibility patterns. Marshfield Clinic Research Foundation Infectious Diseases Seminar. Marshfield, Wisconsin; November 2016.

Invited Case Conference

69-year-old immunosuppressed male with chest pain and shortness of breath. 2016 Regional Meetings [Wisconsin Clinical Laboratory Network]. Rice Lake and Kimberly, Wisconsin; September 2016.

Invited Case Conference

23-year-old traveler with acute respiratory distress syndrome. 2016 Regional Meetings [Wisconsin Clinical Laboratory Network]. Rice Lake, Wisconsin; September 2016.

Invited Webinar

Emerging laboratory diagnostic options for sexually-transmitted infections. Cardinal Health™ LABXCHANGE Webinar Series; August 2016.

Invited Seminar

Clinical diagnostic experience with a molecular assay for *Mycoplasma genitalium*. Clinical Virology Symposium Integrated Symposium. Daytona Beach, Florida; May 2016.

Invited Seminar

Clinical diagnostic experience with a molecular assay for *Mycoplasma genitalium*. European Congress of Clinical Microbiology and Infectious Diseases Integrated Symposium. Amsterdam, The Netherlands; April 2016.

Invited Seminar

Experiences with TMA-based *Mycoplasma genitalium* assay development. STI CTG II--*Mycoplasma genitalium* technical consultation. Washington, DC; April 2016.

Invited Audioconference

Emerging laboratory diagnostic options for sexually-transmitted infections. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; January 2016.

Invited Seminar

Antibiotics and obesity. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; December 2015.

Invited Case Conference

23-year-old traveler with acute respiratory distress syndrome. 2015 Regional Meetings [Wisconsin Clinical Laboratory Network]. Kimberly, Wisconsin; October 2015.

Invited Seminar

Emerging laboratory diagnostic options for sexually-transmitted infections. Wheaton Franciscan Healthcare--St. Francis Hospital Grand Rounds. Milwaukee, Wisconsin; October 2015.

Invited Seminar

Laboratory-based surveillance of sexually-transmitted infections and antibacterial susceptibility patterns. Marquette University College of Health Sciences. Milwaukee, Wisconsin; August 2015.

Invited Seminar

Update on *Clostridium difficile* infection. Association for Professionals in Infection Control and Epidemiology (APIC)--Southeastern Wisconsin chapter. Milwaukee, Wisconsin; August 2015.

Invited Seminar

Survey of Wisconsin antibacterial susceptibility patterns. Challenges in Antimicrobial Susceptibility Testing--2015 [A WCLN Workshop for Wisconsin Clinical Laboratory Professionals]. Wisconsin Dells, Wisconsin; April 2015.

Invited Lecture

Culture workup for soon-to-be laboratory professionals: part eight--eye, ear, nose. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; March 2015.

Invited Lecture

Culture workup for soon-to-be laboratory professionals: part seven--sterile fluids and tissue. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; March 2015.

Invited Lecture

Culture workup for soon-to-be laboratory professionals: part six--skin and soft tissue. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; March 2015.

Invited Lecture

Culture workup for soon-to-be laboratory professionals: part five--central nervous system. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; March 2015.

Invited Lecture

Culture workup for soon-to-be laboratory professionals: part four--blood cultures. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; March 2015.

Invited Lecture

Culture workup for soon-to-be laboratory professionals: part three--reproductive tract. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; March 2015.

Invited Lecture

Culture workup for soon-to-be laboratory professionals: part two--urinary tract. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; March 2015.

Invited Lecture

Culture workup for soon-to-be laboratory professionals: part one--introduction. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; March 2015.

Invited Lecture

Diagnostic mycology for soon-to-be laboratory professionals: part four--pathogenic molds. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; February 2015.

Invited Lecture

Diagnostic mycology for soon-to-be laboratory professionals: part three--opportunistic molds. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; February 2015.

Invited Lecture

Diagnostic mycology for soon-to-be laboratory professionals: part two--the yeasts. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; February 2015.

Invited Lecture

Diagnostic mycology for soon-to-be laboratory professionals: part one--the basics. Marquette University Department of Clinical Laboratory Science. Milwaukee, Wisconsin; 2015.

Invited In-service

Molecular detection of *Mycoplasma genitalium*. Wheaton Franciscan Medical Group. Metropolitan Milwaukee, Wisconsin; February 2015.

Invited Seminar

Mycoplasma genitalium TMA: this could be déjà vu all over again. *M. genitalium* Key Opinion Leader Meeting. San Diego, California; February 2015.

Invited Panelist

M. genitalium Key Opinion Leader Meeting. San Diego, California; February 2015.

Invited Seminar

Sexually-transmitted infections (STI) you may want to know about. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; December 2014.

Invited Seminar

Molecular assessment of *Mycoplasma genitalium* (co-presented with M. Napierala). Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; November 2014.

Invited In-service

Gastrointestinal illnesses and infection control. St. Monica's Senior Living. Racine, Wisconsin; October 2014.

Invited Case Conference

Unexpected etiology of sinusitis and erosive palatal infection in a diabetic patient. 2014 Regional Meetings [Wisconsin Clinical Laboratory Network]. Kimberly, Wisconsin; September 2014.

Invited Lecture

New Trichs for "old" dogs: epidemiologic and diagnostic updates on trichomoniasis. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC). Washington, DC; August 2014.

Invited Audioconference

Laboratory detection and reporting of *Streptococcus agalactiae*. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; June 2014.

Invited Seminar

New Trichs for "old" dogs: update on laboratory diagnosis of *Trichomonas vaginalis*. American Society for Clinical Laboratory Science Pennsylvania (ASCLS-PA) and Pennsylvania State Society of American Medical Technologists (PSSAMT) Spring Meeting. Plymouth Meeting, Pennsylvania; May 2014.

Invited Seminar

Past and emerging paradigms for human papillomavirus molecular screening. Annual Meeting of American Society for Clinical Laboratory Science--Wisconsin. Milwaukee, Wisconsin; April 2014.

Invited Audioconference

Overview of CLSI document M35-A2 for bench-level identification of clinically-significant microorganisms. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; February 2014.

Invited Webinar

Impact of molecular testing for toxigenic *Clostridium difficile*: clinical and laboratory outcomes. BD Diagnostics; January 2014.

Invited Seminar

Experiences from the land of corn and sows: beneficial “bad” bugs. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; November 2013.

Invited Seminar

New Trichs for “old” dogs: prospects for expansion of *Trichomonas vaginalis* screening. Association for Molecular Pathology Corporate Workshop Day. Phoenix, Arizona; November 2013.

Invited Seminar

Emerging technologies and the effect on public health. 2013 Regional Meetings [Wisconsin Clinical Laboratory Network]. Kimberly, Wisconsin; October 2013.

Invited Seminar

Laboratory detection methods for *Clostridium difficile* infections: past, present, and future. Association for Professionals in Infection Control and Epidemiology (APIC)--Southeastern Wisconsin chapter. Franklin, Wisconsin; September 2013.

Invited Lecture

Trichomonas vaginalis screening: it’s not just for women anymore. 113th General Meeting of the American Society for Microbiology. Denver, Colorado; May 2013.

Symposium Convener

What about us? STIs other than gonorrhea and chlamydia: what public health, your laboratory, your clinicians, and your patients need to know. 113th General Meeting of the American Society for Microbiology. Denver, Colorado; May 2013.

Invited Seminar

The pre-game show, sideline reporter, and post-game presser: a poor man’s guide to microbiology quality assurance. Providing Quality Laboratory Services [Wisconsin State Laboratory of Hygiene Symposium]. Wisconsin Dells, Wisconsin; May 2013.

Invited Panelist

Laboratory science career forum. City of Milwaukee Health Department Public Health Laboratory. Milwaukee, Wisconsin; April 2013.

Invited Seminar

Past and emerging paradigms for human papillomavirus molecular screening. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. West Allis, Wisconsin; December 2012.

Invited Seminar

Assays for molecular detection of human papillomavirus. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; November 2012.

Invited Seminar

Five-year laboratory experience with *Trichomonas vaginalis* transcription-mediated amplification. Hologic, Incorporated National Sales Meeting. Orlando, Florida; October 2012.

Invited Seminar

Assays for molecular detection of human papillomavirus. Wheaton Franciscan Healthcare System, Incorporated, Systemwide Laboratory Leadership. Franklin, Wisconsin; July 2012.

Symposium Convener

Immunological tools and biomarkers for infectious diseases. 112nd General Meeting of the American Society for Microbiology. San Francisco, California; June 2012.

Invited Seminar

Using CLSI M45-A2 for antimicrobial susceptibility testing of infrequently-isolated organisms. Challenges in Antimicrobial Susceptibility Testing--2012 [Wisconsin State Laboratory of Hygiene Symposium]. Wisconsin Dells, Wisconsin; May 2012.

Invited Seminar

Laboratory detection methods for *Clostridium difficile* infections: past, present, and future. BD Inform Education Series. Anaheim, California; April 2012.

Invited Audioconference

Diagnostic mycology for laboratory professionals: part three--opportunistic molds. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; April 2012.

Invited Seminar

Molecular diagnostics for infectious diseases: past, present, and future. Wheaton Franciscan Healthcare--St. Joseph Department of Medicine, Grand Rounds. Milwaukee, Wisconsin; February 2012.

Invited Audioconference

Diagnostic mycology for laboratory professionals: part one--yeast. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; February 2012.

Invited Seminar

Laboratory detection of *Trichomonas vaginalis* (co-presented with M. Napierala). Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; November 2011.

Invited Seminar

Laboratory detection of *Trichomonas vaginalis*. Minnesota Interlaboratory Molecular Biology Association (MIMBA). St. Louis Park, Minnesota; October 2011.

Invited Seminar

Diagnostic microbiology potpourri. Association for Professionals in Infection Control and Epidemiology (APIC)--Southeastern Wisconsin chapter. Oconomowoc, Wisconsin; September 2011.

Invited Seminar

Molecular biology 101 for laboratory professionals: part four. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; June 2011.

Invited Seminar

So many choices: molecular applications overview. 2011 Molecular Diagnostics: Coming Soon to Your Laboratory [Wisconsin State Laboratory of Hygiene Symposium]. Wisconsin Dells, Wisconsin; May 2011.

Invited Seminar

Laboratory detection of *Streptococcus agalactiae* (group B *Streptococcus*). Annual Meeting of American Society for Clinical Laboratory Science--Wisconsin. Pewaukee, Wisconsin; April 2011.

Invited Seminar

Applied antibiotics 101. University of Wisconsin--Marinette. Marinette, Wisconsin; 2011-2013.

Invited Seminar

Molecular biology 101 for laboratory professionals: part three. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; March 2011.

Invited Audioconference

Molecular biology 101 for laboratory professionals: part two. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; February 2011.

Invited Audioconference

Molecular biology 101 for laboratory professionals: part one. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; January 2011.

Invited Seminar

Molecular biology 101 for laboratory professionals: part two. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; December 2010.

Invited Seminar

Modifications of *Clostridium difficile* PCR resulting in improved economy and workflow efficiency. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; November 2010.

Invited Seminar

Molecular biology 101 for laboratory professionals: part one. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; October 2010.

Invited Lecture

Real-time polymerase chain reaction...and clinical applications. Marquette University Clinical Laboratory Sciences Program. Milwaukee, Wisconsin; 2010-2013.

Invited In-service

Commercial molecular detection of sexually-transmitted agents. Wheaton Franciscan Laboratory serology department. Wauwatosa, Wisconsin; June 2010.

Invited In-service

Comparison of *Clostridium difficile* toxin enzyme immunoassay to commercial polymerase chain reaction. Wheaton Franciscan Laboratory. Wauwatosa, Wisconsin; June 2010.

Invited In-service

Syphilis serology. Wheaton Franciscan Healthcare--St. Joseph Women's Outpatient Center. Milwaukee, Wisconsin; May 2010.

Invited Seminar

Modifications of *Clostridium difficile* PCR resulting in improved economy and workflow efficiency. American Society of Clinical Laboratory Science--North Dakota Annual Spring Meeting. Fargo, North Dakota; April 2010.

Invited Seminar

Nucleic acid amplification testing for infectious agents. Wheaton Franciscan Healthcare System, Incorporated, Systemwide Laboratory Leadership. Franklin, Wisconsin; March 2010.

Invited Seminar

Laboratory detection of *Streptococcus agalactiae*. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; March 2010.

Invited Audioconference

Antibiotics 101 for laboratory professionals: part two. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; March 2010.

Invited Audioconference

Antibiotics 101 for laboratory professionals: part one. Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; February 2010.

Invited Audioconference

Review of September 2009 Educational Bioterrorism Proficiency Exercise Agent (co-presented with E. Bowles and D. Warshauer, Ph.D.). Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; December 2009.

Invited Seminar

Antibiotics 101 for laboratory professionals: part three. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; December 2009.

Invited In-service

Evaluation of alternative method for molecular detection of HPV. Wheaton Franciscan Healthcare--All Saints Women's Health Provider Meeting. Racine, Wisconsin; June 2009.

Symposium Convener

Role of the clinical immunology laboratory in management of immunodeficiency: full-circle relationship with our friends in clinical microbiology. 109th General Meeting of the American Society for Microbiology. Philadelphia, Pennsylvania; May 2009.

Invited Seminar

Commercial molecular detection of sexually-transmitted agents. Milwaukee Society of Clinical Laboratory Scientists. West Allis, Wisconsin; May 2009.

Invited Seminar

Evaluation of alternative method for molecular detection of HPV. Wheaton Franciscan Healthcare System, Incorporated, Systemwide Laboratory Leadership. Wauwatosa, Wisconsin; April 2009.

Invited Seminar

Evaluation of alternative method for molecular detection of HPV. Wheaton Franciscan Healthcare molecular biology department. Wauwatosa, Wisconsin; April 2009.

Invited Seminar

Antibiotics 101 for laboratory professionals: part two. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; January 2009.

Invited Lecture

Spirochetal diseases. Marquette University Clinical Laboratory Sciences Program. Milwaukee, Wisconsin; December 2008, October 2015.

Invited Seminar

You CAN teach an old tech new tricks: molecular detection of *Trichomonas vaginalis*. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; November 2008.

Invited Seminar

Antibiotics 101 for laboratory professionals: part one. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; November 2008.

Invited Lecture

Nucleic acid amplification testing (NAAT) for infectious agents. Marquette University Clinical Laboratory Sciences Program. Milwaukee, Wisconsin; 2008-2011.

Invited Lecture

Antimicrobial susceptibility testing. Marquette University Clinical Laboratory Sciences Program. Milwaukee, Wisconsin; September 2008, 2015.

Invited Lecture

Mechanisms of antimicrobial resistance. Marquette University Clinical Laboratory Sciences Program. Milwaukee, Wisconsin; September 2008, 2015.

Invited Lecture

Automated antimicrobial susceptibility testing systems: making a “quick” decision. Challenges in Antimicrobial Susceptibility Testing [Wisconsin State Laboratory of Hygiene Symposium]. Wisconsin Dells, Wisconsin; September 2008.

Invited Seminar

StrepB PCR modification: real-time detection of *Streptococcus agalactiae* from screened carrot broth culture. Wheaton Franciscan Healthcare System, Incorporated, Systemwide Laboratory Leadership. Wauwatosa, Wisconsin; September 2008.

Invited In-service

Blood culture. St. Francis Hospital support services technicians. Milwaukee, Wisconsin; September 2008.

Invited Seminar

Molecular methods for diagnosis of trichomoniasis. ConVerge™ Diagnostic Services. Peabody, Massachusetts; June 2008.

Invited Lecture

Molecular detection of sexually-transmitted agents in non-tertiary care facility laboratories. 108th General Meeting of the American Society for Microbiology. Boston, Massachusetts; June 2008.

Symposium Convener

Molecular diagnostics in non-tertiary care hospital laboratories: it's not just for big labs anymore. 108th General Meeting of the American Society for Microbiology. Boston, Massachusetts; June 2008.

Invited Lecture

Community-acquired pneumonia: microbiology perspective. St. Joseph Regional Medical Center Department of Internal Medicine. Milwaukee, Wisconsin; May 2008.

Invited Lecture

Antimicrobial susceptibility testing. University of Wisconsin--Milwaukee College of Health Sciences Clinical Laboratory Sciences Program. Milwaukee, Wisconsin; April 2008.

Invited Lecture

Molecular detection of sexually-transmitted agents. University of Wisconsin--Milwaukee College of Health Sciences Clinical Laboratory Science Program. Milwaukee, Wisconsin; April 2008.

Invited Seminar

You CAN teach an old tech new trichs: molecular detection of *Trichomonas vaginalis*. Annual Meeting of American Society for Clinical Laboratory Science--Wisconsin. Pewaukee, Wisconsin; April 2008.

Invited In-service

Gram stains: procedure review, technique, and smear evaluation. Elmbrook Memorial Hospital laboratory. Brookfield, Wisconsin; March 2008.

Invited In-service

Gram stains: procedure review, technique, and smear evaluation. St. Joseph Regional Medical Center laboratory. Milwaukee, Wisconsin; March 2008.

Invited Seminar

You can teach an old tech new trichs: molecular detection of *Trichomonas vaginalis* (co-presented with J. Basile and M. Napierala). Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; December 2007.

Invited Seminar

Mechanisms to assess Gram stain proficiency of technologists. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; November 2007.

Invited Lecture

Fluoroquinolone resistance in *Streptococcus pneumoniae*. Midwest Clinical Laboratories microbiology department. Wauwatosa, Wisconsin; July 2007.

Invited In-service

Trichomonas vaginalis molecular testing. Wheaton Franciscan Medical Group. Metropolitan Milwaukee, Wisconsin; June 2007.

Invited Seminar

Laboratory diagnosis of *Trichomonas vaginalis*. Wheaton Franciscan Healthcare System, Incorporated, Systemwide Laboratory Leadership. Wauwatosa, Wisconsin; June 2007.

Invited Audioconference

Review of spring 2007 Wisconsin Laboratory Response Network educational testing proficiency exercise (co-presented with D. Warshauer, Ph.D). Wisconsin State Laboratory of Hygiene. Madison, Wisconsin; May 2007.

Invited Lecture

Case presentation in molecular diagnostics: 38-year-old male with fatigue and edema. Midwest Clinical Laboratories. Wauwatosa, Wisconsin; April, May 2007.

Invited Lecture

28-year-old female with fever, rash, and joint tenderness. Midwest Clinical Laboratories. Wauwatosa, Wisconsin; April, May 2007.

Invited Lecture

Gastrointestinal illnesses (latest scoop on poop). Midwest Clinical Laboratories. Wauwatosa, Wisconsin; April 2007.

Invited Lecture

Laboratory diagnosis of hepatitis C (still a place for good ol' serology). Midwest Clinical Laboratories. Wauwatosa, Wisconsin; April 2007.

Invited Seminar

Mechanisms to assess Gram stain proficiency of technologists. Wheaton Franciscan Healthcare System, Incorporated, Systemwide Laboratory Leadership. Wauwatosa, Wisconsin; March 2007.

Invited Lecture

Missed opportunities for human immunodeficiency virus testing. Midwest Clinical Laboratories microbiology department. Wauwatosa, Wisconsin; March 2007.

Invited In-service

Gastrointestinal illnesses (norovirus, *Clostridium difficile*). St. Ann Rest Home. Milwaukee, Wisconsin; February 2007.

Invited Seminar

Creutzfeldt-Jakob disease and the clinical laboratory--part II. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; January 2007.

Invited Case Conference

Pulmonary blastomycosis; disseminated gonococcal infection in systemic lupus erythematosus patient. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; January 2007.

Invited Seminar

Creutzfeldt-Jakob disease and the clinical laboratory--part I. Wheaton Franciscan Healthcare System, Incorporated, Continuing Education Program. Brookfield, Wisconsin; November 2006.

Invited In-service

Collection and submission of urine for culture. Masonic Healthcare Center. Dousman, Wisconsin; October 2006.

Invited In-service

Correlation of urinalysis with urine culture. Community Care Organization Care for the Elderly. Milwaukee, Wisconsin; August 2006.

Invited Lecture

Detection of methicillin-resistant *Staphylococcus aureus* via cefoxitin disk screening. Midwest Clinical Laboratories microbiology department. Wauwatosa, Wisconsin; August 2006.

Invited In-service

Hand hygiene. Cameo Care Center. Milwaukee, Wisconsin; June 2006.

Invited In-service

Collection and submission of urine for culture. Cameo Care Center. Milwaukee, Wisconsin; June 2006.

Invited In-service

Hand hygiene. Wisconsin Lutheran Care Center. Milwaukee, Wisconsin; June 2006.

Invited In-service

Principles of microbiology specimen collection. Wisconsin Lutheran Care Center. Milwaukee, Wisconsin; June 2006.

Invited Seminar

Experiences from the land of corn and sows--beneficial "bad" bugs. II. Colonic distress and worms. Covenant Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; March 2006.

Invited In-service

Principles of microbiology specimen collection. The Wisconsin Heart Hospital. Wauwatosa, Wisconsin; February 2006.

Invited Seminar

Experiences from the land of corn and sows--beneficial "bad" bugs. I. Tumors and the "flesh-eating virus". Milwaukee Society of Clinical Laboratory Scientists. West Allis, Wisconsin; February 2006.

Invited Seminar

"A whooping amount of information on flu, pertussis, and strep disease". Covenant Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; January 2006.

Invited Seminar

Extended-spectrum beta-lactamases--microbiologist perspective. Association for Professionals in Infection Control and Epidemiology (APIC)--Southeastern Wisconsin chapter. Wauwatosa, Wisconsin; January 2006.

Invited Case Conference

Disseminated coccidioidomycosis; *Pneumocystis carinii* pneumonia. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; January 2006.

Invited Seminar

Hepatitis A, B, and C viruses. Midwest Clinical Laboratories chemistry and hematology departments. Wauwatosa, Wisconsin; January 2006.

Invited Seminar

Hepatitis A, B, and C viruses. Midwest Clinical Laboratories serology department. Wauwatosa, Wisconsin; December 2005.

Invited Practicum

Microbiology for sterile processing technicians. The Wisconsin Heart Hospital sterile processing department/surgical services. Wauwatosa, Wisconsin; November 2005

Invited Lecture

Influenza virus testing. Elmbrook Memorial Hospital Department of Medicine. Brookfield, Wisconsin; November 2005.

Invited Seminar

Automated microbial identification and antimicrobial susceptibility testing systems. Midwest Clinical Laboratories microbiology department. Wauwatosa, Wisconsin; October 2005.

Invited In-service

Collection and submission of urine for culture. Children's Medical Group Southwest. New Berlin, Wisconsin; July 2005.

Invited Seminar

Experiences from the land of corn and sows--beneficial "bad" bugs. I. Tumors and the "flesh-eating virus". Covenant Healthcare System, Incorporated, Continuing Education Program. Brookfield, Wisconsin; July 2005.

Invited Seminar

Gram stain proficiency quality assurance monitoring. Covenant Healthcare System, Incorporated, Systemwide Laboratory Leadership. Wauwatosa, Wisconsin; April 2005.

Invited In-service

Principles of microbiology specimen collection. Community Care Organization Care for the Elderly--Fond du Lac. Milwaukee, Wisconsin; March 2005.

Invited In-service

Principles of microbiology specimen collection. Community Care Organization Care for the Elderly--Layton. Milwaukee, Wisconsin; March 2005.

Invited In-service

Hand hygiene. Harbour Village Senior Living Community. Greendale, Wisconsin; March 2005.

Invited In-service

Principles of microbiology specimen collection. Harbour Village Senior Living Community. Greendale, Wisconsin; March 2005.

Invited In-service

Microbiology 201. Midwest Clinical Laboratories client service department. Wauwatosa, Wisconsin; February 2005.

Invited Seminar

35-year-old male with chest pain and symptoms of shock (co-presented with L. Lawnicki, M.D.). Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; February 2005.

Invited In-service

Pharyngeal and nasopharyngeal and specimen collection. Covenant Medical Group Fine-Lando Clinic. Cudahy, Wisconsin; February 2005.

Invited In-service

Principles of microbiology specimen collection. Alexian Village of Milwaukee. Milwaukee, Wisconsin; January 2005.

Invited In-service

Hand hygiene. Alexian Village of Milwaukee. Milwaukee, Wisconsin; January 2005.

Invited In-service

Collection and submission of urine for culture. Luther Manor senior residence. Milwaukee, Wisconsin; November 2004.

Invited Lecture

Influenza virus testing. St. Joseph Regional Medical Center Infectious Disease Conference; Milwaukee, Wisconsin; November 2004.

Invited Seminar

(Blood culture times two)². Covenant Healthcare System, Incorporated, Continuing Education Program. Wauwatosa, Wisconsin; November 2004.

Invited Lectures

Spirochetal diseases. University of Wisconsin--Milwaukee College of Health Sciences Clinical Laboratory Science Program. Milwaukee, Wisconsin; April 2004-2008; 2010-2011.

Invited In-service

Hand hygiene. St. Ann Rest Home. Milwaukee, Wisconsin; March 2004-2006.

Invited In-service

Principles of microbiology specimen collection. St. Ann Rest Home. Milwaukee, Wisconsin; March 2004-2006.

Invited In-service

Principles of microbiology specimen collection. Cameo Care Center assisted-living residence. Milwaukee, Wisconsin; February 2004.

Invited Seminar

35-year-old male with chest pain and symptoms of shock (co-presented with L. Lawnicki, M.D.). Covenant Healthcare System, Incorporated, Continuing Education Program. Milwaukee, Wisconsin; February 2004.

Invited Seminar

(Blood culture times two)². Milwaukee Society of Clinical Laboratory Scientists. West Allis, Wisconsin; January 2004.

Invited Lecture

Influenza virus testing. St. Joseph Regional Medical Center Infectious Disease Conference; Milwaukee, Wisconsin; November 2003.

Invited In-service

Principles of microbiology specimen collection. Wisconsin Lutheran Care Center. Milwaukee, Wisconsin; November 2003.

Invited In-service

Principles of microbiology specimen collection. Cameo Care Center assisted-living residence. Milwaukee, Wisconsin; August 2003.

Invited Seminar

West Nile virus: the mosquitoes are coming. Covenant Healthcare System, Incorporated, Continuing Education Program. Brookfield, Wisconsin; May 2003.

Invited Seminar

West Nile virus: the mosquitoes are coming. University of Wisconsin--Marquette. Marinette, Wisconsin; April 2003.

Invited Seminar

West Nile virus. Milwaukee Society of Clinical Laboratory Scientists. West Allis, Wisconsin; March 2003.

Invited Seminar

Conundrums of Lyme disease vaccine development. Greater Milwaukee Area Microbiologists. Wauwatosa, Wisconsin; January 2003.

Invited Seminar

Conundrums of Lyme disease vaccine development. Covenant Healthcare System, Incorporated, Continuing Education Program. Brookfield, Wisconsin; November 2002.

Invited In-service

Neisseria gonorrhoeae/Chlamydia trachomatis amplification testing. St. Michael Hospital Department of Emergency Medicine. Milwaukee, Wisconsin; September 2002.

Invited In-service

Neisseria gonorrhoeae/Chlamydia trachomatis amplification testing. Elmbrook Memorial Hospital Department of Emergency Medicine. Brookfield, Wisconsin; September 2002.

Invited In-service

Principles of microbiology specimen collection. Luther Manor senior residence. Milwaukee, Wisconsin; August 2002.

Invited Speaker

Commencement address. University of Iowa Department of Pathology Clinical Laboratory Science Program. Iowa City, Iowa; May 2002.

Invited Seminar

(Blood culture times two)². University of Iowa Department of Pathology. Iowa City, Iowa; February 2002.

Invited Lecture

Gastrointestinal microbiology. University of Iowa Department of Pathology Residency Program. Iowa City, Iowa; November 2001.

Symposium Presenter

Laboratory diagnosis of fungal infections. Symposium on Fungal Infections and Antifungal Therapy. Iowa City, Iowa; November 2001.

Invited Seminar

Conundrums of Lyme disease vaccine development. University of Iowa Department of Pathology. Iowa City, Iowa; March 2001.

Invited Lecture

Leishmania spp. and *Trypanosoma* spp. University of Iowa Department of Pathology Residency Program. Iowa City, Iowa; January 2001.

Invited Seminar

Conundrums of Lyme disease vaccine development. University of Iowa Hygienic Laboratory. Iowa City, Iowa; November 2000.

Invited Lecture

Leptospira spp. and *Borrelia* spp. University of Iowa Department of Pathology Residency Program. Iowa City, Iowa; October 2000.

Invited Seminar

Effect of interferon-gamma on borreliacidal antibody production. University of Iowa Clinical Microbiology Laboratories. Iowa City, Iowa; July 1999.

Invited Lectures

Spirochetal bacteria. University of Wisconsin, Department of Medical Microbiology and Immunology. Madison, Wisconsin; November 1995-1999.

Invited Lecture

Pneumocystis carinii. University of Wisconsin, Department of Medical Microbiology and Immunology. Madison, Wisconsin; April 1995.

HONORS AND AWARDS

Outstanding Abstract

ASM Microbe 2019; San Francisco, CA

Associate Editor

Journal of Clinical Microbiology; 2013-
Biographical Feature editor 2018-
Photo Quiz editor 2019-

Editorial Board

Journal of Clinical Microbiology; 2010-2013

Ad hoc Reviewer

Journal of Bacteriology; 2006
European Journal of Clinical Microbiology & Infectious Diseases; 2004, 2006-2007
Journal of Clinical Microbiology; 2001, 2003, 2005, 2007-2009
Mycopathologia; 2009
BMC Research Notes; 2009, 2010
Journal of Clinical Laboratory Analysis; 2010
Letters in Drug Design & Discovery; 2010
Journal of Global Infectious Diseases; 2010-2011
Clinical Microbiology and Infection; 2010-2011; 2019
Indian Journal of Medical Research; 2011-2012
Biochimica et Biophysica Acta General Subjects; 2012
Medical Science Monitor; 2012
Open Journal of Clinical Diagnostics; 2012
World Journal of Pediatrics; 2012
International Research Journal of Medicine and Medical Sciences; 2013
Parasitology International; 2013
African Journal of Microbiology Research; 2013
Frontiers of Medicine; 2013
Critical Reviews in Microbiology; 2013
Diagnostic Microbiology and Infectious Diseases; 2013-2014, 2016, 2018-2019
Risk Management and Healthcare Policy; 2014
Sexually Transmitted Infections; 2014-2015
Parasitology Research; 2014
Folia Microbiologica; 2015
PeerJ; 2015
British Journal of Cancer; 2016
Current HIV Research; 2016
BMJ Open; 2016-2017
PLoS ONE; 2016
Journal of Antimicrobial Chemotherapy; 2016
Clinical Microbiology & Case Reports; 2016
JSM Microbiology; 2017
Expert Review of Molecular Diagnostics; 2017-2018
Health Science Reports; 2017
Journal of Medical Microbiology; 2017
Transactions of the Royal Society of Tropical Medicine & Hygiene; 2017-2018
Journal of Epidemiology and Preventive Medicine; 2018

Future Microbiology; 2018-2019
Biomedical and Environmental Sciences; 2018
Journal of Microbiological Methods; 2018-2019
GERMS; 2018
International Journal of STD & AIDS; 2019
Health Security; 2019
Frontiers in Cellular and Infection Microbiology; 2019
BMC Public Health; 2019-2020
Infectious Diseases in Obstetrics and Gynecology; 2019

Poster Presentation

Molecular screening for *Trichomonas vaginalis* and *Mycoplasma genitalium* in the RADAR longitudinal cohort study of young transgender women and young men who have sex with men. ASM Microbe 2019. San Francisco, California; June 2019.

Poster Presentation

Molecular screening for *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Trichomonas vaginalis*, and *Mycoplasma genitalium* in the RADAR longitudinal cohort study of young transgender women and young men who have sex with men. 2019 National LGBTQ Health Conference. Atlanta, Georgia; June 2019.

Poster Presentation

Molecular screening for *Trichomonas vaginalis* and *Mycoplasma genitalium* in the RADAR longitudinal cohort study of young transgender women and young men who have sex with men. Association for Molecular Pathology (AMP) 2018. San Antonio, Texas; November 2018.

Poster Presentation

Outcome of electronic order set implementation relative to toxigenic *Clostridium difficile* PCR analysis and hospital-onset *Clostridium difficile* infection in a multi-hospital healthcare system. ASM Microbe 2018. Atlanta, Georgia; June 2018.

Poster Presentation

Transcription-mediated amplification-based screening of male STI clinic patients for *Mycoplasma genitalium*. ASM Microbe 2016. Boston, Massachusetts; June 2016.

Poster Presentation

Adaptation of alternative nucleic acid extraction protocols to ProGastro™ SCS assay. 115th General Meeting of the American Society for Microbiology. New Orleans, Louisiana; June 2015.

Poster Presentation

Transcription-mediated amplification-based *Mycoplasma genitalium* screening of primary female urogenital specimens in a high-prevalence STI community. 115th General Meeting of the American Society for Microbiology. New Orleans, Louisiana; June 2015.

Poster Presentation

Frozen master mix modification of ProGastro™ SSCS assay for detection of *Salmonella* spp., *Shigella* spp., *Campylobacter* spp., and shiga toxin-producing *Escherichia coli*. 115th General Meeting of the American Society for Microbiology. New Orleans, Louisiana; June 2015.

Poster Presentation

Transcription-mediated amplification-based *Ureaplasma urealyticum* screening of primary male urine specimens. 114th General Meeting of the American Society for Microbiology. Boston, Massachusetts; May 2014.

Poster Presentation

Frozen master mix modification of Hologic/Prodesse ProFlu+™ for detection of influenza and respiratory syncytial viruses. 114th General Meeting of the American Society for Microbiology. Boston, Massachusetts; May 2014.

Poster Presentation

Transcription-mediated amplification-based high-risk human papillomavirus screening assays and genotyping assays potentiate fewer patient follow-up encounters. 113th General Meeting of the American Society for Microbiology. Denver, Colorado; May 2013.

Poster Presentation

Pre-analytical considerations related to high-risk human papillomavirus detection via APTIMA HPV. 113th General Meeting of the American Society for Microbiology. Denver, Colorado; May 2013.

Poster Presentation

Transcription-mediated amplification-based *Mycoplasma genitalium* screening of primary male urine specimens. 113th General Meeting of the American Society for Microbiology. Denver, Colorado; May 2013.

Poster Presentation

Comparison of commercial hybridization and automated transcription-mediated amplification modalities for detection of high-risk human papillomavirus nucleic acid. 112th General Meeting of the American Society for Microbiology. San Francisco, California; June 2012

Poster Presentation

Impact of toxigenic *Clostridium difficile* PCR testing on the clinical microbiology laboratory and inpatient epidemiology. 112th General Meeting of the American Society for Microbiology. San Francisco, California; June 2012

Poster Presentation

Transcription-mediated amplification-based screening of male STI clinic patients for *Trichomonas vaginalis*. 112th General Meeting of the American Society for Microbiology. San Francisco, California; June 2012

Poster Presentation

Live *Trichomonas vaginalis* ASR testing in a high-prevalence STI metropolitan area: female epidemiology. 111th General Meeting of the American Society for Microbiology. New Orleans, Louisiana; May 2011

Poster Presentation

Three-year history of *Trichomonas vaginalis* ASR testing in a subacute care patient population. 111th General Meeting of the American Society for Microbiology. New Orleans, Louisiana; May 2011

Poster Presentation

Assessment of *Trichomonas vaginalis* screening practices in a subacute clinical setting following introduction of *T. vaginalis* ASR testing. 111th General Meeting of the American Society for Microbiology. New Orleans, Louisiana; May 2011

Poster Presentation

A three-year review of transcription-mediated amplification-based *Trichomonas vaginalis* male screening in a community of high STI prevalence. 111th General Meeting of the American Society for Microbiology. New Orleans, Louisiana; May 2011

Poster Presentation

Temporal characterization of carrot broth-enhanced real-time PCR as an alternative means for rapid detection of *Streptococcus agalactiae*. 110th General Meeting of the American Society for Microbiology. San Diego, California; May 2010

Poster Presentation

Cost-effective frozen master mix modification of BD GeneOhm™ Cdiff assay. 110th General Meeting of the American Society for Microbiology. San Diego, California; May 2010

Poster Presentation

Modifications of a commercial *Clostridium difficile* PCR assay resulting in enhanced laboratory workflow efficiency. 110th General Meeting of the American Society for Microbiology. San Diego, California; May 2010

Poster Presentation

Frozen master mix modification of BD GeneOhm™ StaphSR assay. 109th General Meeting of the American Society for Microbiology. Philadelphia, Pennsylvania; May 2009

Poster Presentation

Evaluation of Invader[®]-based analyte-specific reagents (ASR) for detection of high-risk human papillomavirus (HPV) types from liquid-based cytology specimens. 109th General Meeting of the American Society for Microbiology. Philadelphia, Pennsylvania; May 2009

Poster Presentation

Beneficiaries of *Trichomonas vaginalis* molecular analyte-specific reagent testing in a metropolitan setting of high sexually-transmitted disease prevalence. 108th General Meeting of the American Society for Microbiology. Boston, Massachusetts; June 2008

Poster Presentation

Performance of *Trichomonas vaginalis* molecular analyte-specific reagent testing on primary clinical saline specimens. 108th General Meeting of the American Society for Microbiology. Boston, Massachusetts; June 2008

Poster Presentation

Broth-enhanced BD GeneOhm[™] StrepB polymerase chain reaction for detection of *Streptococcus agalactiae* from primary clinical specimens. 108th General Meeting of the American Society for Microbiology. Boston, Massachusetts; June 2008

Poster Presentation

Mechanisms to assess Gram stain proficiency of technologists at satellite laboratories. 107th General Meeting of the American Society for Microbiology. Toronto, Ontario; May 2007

Poster Presentation

Recovery of dimorphic fungi via conventional BacT/ALERT[®] microbial detection system media. 107th General Meeting of the American Society for Microbiology. Toronto, Ontario; May 2007

Poster Presentation

Conidiobolomycosis in an immunocompromised patient in the Midwest United States. 106th General Meeting of the American Society for Microbiology. Orlando, Florida; May 2006

Poster Presentation

Evaluation of Gen-Probe APTIMA-based *Neisseria gonorrhoeae* and *Chlamydia trachomatis* confirmatory testing in a metropolitan setting. 106th General Meeting of the American Society for Microbiology. Orlando, Florida; May 2006

Poster Presentation

Antimicrobial regimen choices in clinically-significant bloodstream infection and impact on clinical outcome. 105th General Meeting of the American Society for Microbiology. Atlanta, Georgia; June 2005

Poster Presentation

Biotype distribution of clinical isolates of *Haemophilus influenzae* and *Haemophilus parainfluenzae* and biotype discrepancy frequencies produced by three commercial assays. 103rd General Meeting of the American Society for Microbiology. Washington, D. C.; May 2003

Poster Presentation

Characterization of interleukin-6 in anti-OspA borreliacidal antibody production *in vitro*. 103rd General Meeting of the American Society for Microbiology. Washington, D. C.; May 2003

Poster Presentation

Evaluation of the Phoenix™ automated microbiology system for fluoroquinolone susceptibility testing of Gram negative bacilli. 102nd General Meeting of the American Society for Microbiology. Salt Lake City, Utah; May 2002

Poster Presentation

Neutralization of interferon-gamma augments borreliacidal antibody production and severe destructive Lyme arthritis in C3H/HeJ mice. 102nd General Meeting of the American Society for Microbiology. Salt Lake City, Utah; May 2002

Poster Presentation

Exposure of bacteria to antimicrobial impregnated-central venous catheters does not directly lead to the emergence of antimicrobial resistance. 102nd General Meeting of the American Society for Microbiology. Salt Lake City, Utah; May 2002

Poster Presentation

Comparison of porphyrin-based, growth factor-based, and biochemical-based testing methods for identification of *Haemophilus influenzae*. 101st General Meeting of the American Society for Microbiology. Orlando, Florida; May 2001

Poster Presentation

Interferon-gamma inhibits production of borreliacidal antibody *in vitro*. 101st General Meeting of the American Society for Microbiology. Orlando, Florida; May 2001

Poster Presentation

Production of borreliacidal activity *in vitro* and *in vivo* in C3H/HeJ mice. 98th General Meeting of the American Society for Microbiology. Atlanta, Georgia; May 1998

Poster Presentation

1994 Wisconsin lycopercidiosis. 96th General Meeting of the American Society for Microbiology. New Orleans, Louisiana; May 1996

Travel Grant

Awarded by Hologic, Incorporated of San Diego, California to attend ASM Microbe 2019

Travel Grant

Awarded by Hologic, Incorporated of San Diego, California to attend ASM Microbe 2016

Travel Grant

Awarded by Hologic, Incorporated of San Diego, California to attend the 115th General Meeting of the American Society for Microbiology; 2015

Travel Grant

Awarded by Hologic, Incorporated of San Diego, California to attend the 114th General Meeting of the American Society for Microbiology; 2014

Travel Grant

Awarded by Gen-Probe, Incorporated of San Diego, California to attend the 113rd General Meeting of the American Society for Microbiology; 2013

Travel Grant

Awarded by Gen-Probe, Incorporated of San Diego, California to attend the 112nd General Meeting of the American Society for Microbiology; 2012

Travel Grant

Awarded by Gen-Probe, Incorporated of San Diego, California to attend the 111th General Meeting of the American Society for Microbiology; 2011

Travel Grant

Awarded by BD GeneOhm™ of San Diego, California to attend the 109th General Meeting of the American Society for Microbiology; 2009

Travel Grant

Awarded by St. Joseph's Community Hospital of West Bend, Wisconsin to attend the 96th General Meeting of the American Society for Microbiology; 1996

University Leadership Award

University of Wisconsin--Green Bay; 1993

Dean's List

University of Wisconsin--Green Bay; 1989-1993

PROFESSIONAL AFFILIATIONS

Marquette University Council for Corporate Engagement

Member since 2019

Association for Molecular Pathology

Member since 2018

American Society for Clinical Laboratory Science
Member since 2018

Wisconsin Antibiotic Stewardship Steering Committee
Antimicrobial Use and Resistance Module Subcommittee
Member since 2017

Milwaukee Laboratory Advisory Committee
Member since 2011

Wisconsin Clinical Laboratory Network Technical Advisory Group
Member since 2010

STD Specialties Clinic (Milwaukee, WI) Partnership Collaboration
Member 2012-2016

Wheaton Franciscan Healthcare (Franklin, WI) Infection Control Committee
Member 2008-2016

Technologist in Microbiology
American Society for Clinical Pathology Board of Registry; since 2005
M(ASCP) 4361

Elmbrook Memorial Hospital (Brookfield, WI) Root Cause Analysis Committee
Member 2006

University of Wisconsin--Milwaukee Thesis Committee Member
Nader Mahdi; 2005-2006

The Wisconsin Heart Hospital (Wauwatosa, WI) Infection Control Committee
Member 2004-2016

College of American Pathologists Inspector
Participation in twenty-four inspections since 2003
Inspector #1073068

St. Francis Hospital (Milwaukee, WI) Root Cause Analysis Committee
Member 2003, 2007

Infectious Disease Society of Milwaukee
Member 2002-2006
President 2003-2005

St. Francis Hospital (Milwaukee, WI) Infection Control Committee
Member 2002-2016

St. Michael Hospital (Milwaukee, WI) Infection Control Committee
Member 2002-2006

St. Joseph Regional Medical Center (Milwaukee, WI) Infection Control and Prevention Committee
Member 2002-2016

Elmbrook Memorial Hospital (Brookfield, WI) Infection Control Committee
Member 2002-2016

Greater Milwaukee Area Microbiologists
Member 2002-2016

American Society for Microbiology
Member since 1996
Chair-elect, Division V (Clinical and Diagnostic Immunology), 2007-2008
Chair, Division V (Clinical and Diagnostic Immunology), 2008-2009
Advisor, Division V (Clinical and Diagnostic Immunology), 2009-2010

GRANTS AND AWARDS

Regular Research Grant--\$6,000
Marquette University Committee on Research, Milwaukee, WI; 2019
Principal investigator

APTIMA CV/TV and BV Assay Validation Set Procurement--\$82,160
Hologic, Incorporated, Marlborough, MA; 2019
Principal investigator

Mycoplasma genitalium Validation Set Procurement--\$52,900
Hologic, Incorporated, Marlborough, MA; 2019
Principal investigator

APTIMA CV/TV and BV Assay Validation Set Procurement--\$54,000
Hologic, Incorporated, Marlborough, MA; 2019
Principal investigator

CTSI Mentored Clinical and Translational Research Training Program (KL2) & Pilot Collaborative Clinical and Translational Research Grants Program--\$50,000
Clinical and Translational Science Institute of Southeast Wisconsin; 2019
Co-principal investigator

Mycoplasma genitalium Validation Set Procurement--\$51,000
Hologic, Incorporated, Marlborough, MA; 2019
Principal investigator

Explorer Challenge--\$25,000
Marquette University Innovation Council, Milwaukee, WI; 2018
Principal investigator

ELC Project K2: HAI Coordinated Prevention and Stewardship--\$75,000
Wisconsin Department of Health Services, Division of Public Health, Madison, WI; 2018
Principal investigator

Summer Faculty Fellowship--\$5,500
Marquette University Committee on Research, Milwaukee, WI; 2017

Regular Research Grant--\$6,000
Marquette University Committee on Research, Milwaukee, WI; 2017
Principal investigator

EXTRAMURAL FUNDING

2019 SENTRY USA Surveillance Study--\$2,240
JMI Laboratories, North Liberty, IA; 2019

2018 SENTRY USA Surveillance Study--\$1,920
JMI Laboratories, North Liberty, IA; 2018

17-ACH-06 CLSI M23 QC study--\$3,000
JMI Laboratories, North Liberty, IA; 2018

17-ETS-06 CLSI M23 QC study--\$3,000
JMI Laboratories, North Liberty, IA; 2018

16-ALL-06 CLSI M23 QC study--\$2,250
JMI Laboratories, North Liberty, IA; 2017

2016 SENTRY USA Surveillance Study--\$8,100
JMI Laboratories, North Liberty, IA; 2016

15-GSK-02 M23 QC study--\$3,600
JMI Laboratories, North Liberty, IA; 2016

Novartis compound X MIC QC study--\$1,500
JMI Laboratories, North Liberty, IA; 2016

Meropenem-vaborbactam MIC QC study--\$1,500
JMI Laboratories, North Liberty, IA; 2016

Pexiganan MIC QC study--\$1,500
JMI Laboratories, North Liberty, IA; 2016

Debio 1452 Disk QC study--\$2,000
JMI Laboratories, North Liberty, IA; 2016

Meropenem/RPX7009 Disk QC study--\$1,500
JMI Laboratories, North Liberty, IA; 2016

Cefepime/tazobactam and Debio 1452 Disk QC study--\$2,000
JMI Laboratories, North Liberty, IA; 2015

Amikacin/fosfomycin MIC QC study--\$1,500
JMI Laboratories, North Liberty, IA; 2015

S-649266 MIC QC study--\$1,500
JMI Laboratories, North Liberty, IA; 2015

2014-2015 Sentinel Laboratory Surveillance Program--\$550
Surveillance Data Incorporated, Plymouth Meeting, PA; 2015

2015 SENTRY USA Surveillance Study--\$8,100
JMI Laboratories, North Liberty, IA; 2015

2014-2015 Sentinel Laboratory Surveillance Program--\$550
Surveillance Data Incorporated, Plymouth Meeting, PA; 2015

Meropenem/RPX7009 Disk QC study--\$1,600
JMI Laboratories, North Liberty, IA; 2014

2013-2014 Sentinel Laboratory Surveillance Program--\$550
Surveillance Data Incorporated, Plymouth Meeting, PA; 2014

WCK4282 MIC QC study--\$1,200
JMI Laboratories, North Liberty, IA; 2014

2014 SENTRY USA Surveillance Study--\$8,112
JMI Laboratories, North Liberty, IA; 2014

MIC Quality Control study for amikacin and fosfomycin--\$1,000
JMI Laboratories, North Liberty, IA; 2014

Centers for Disease Control and Prevention influenza surveillance--\$430
Wisconsin State Laboratory of Hygiene, Madison, WI; 2014

MIC Quality Control study for compound S-649266--\$1,000
JMI Laboratories, North Liberty, IA; 2014

Agar Dilution Quality Control study for solithromycin and delafloxacin--\$1,100
JMI Laboratories, North Liberty, IA; 2014

2013-2014 Sentinel Laboratory Surveillance Program--\$550
Surveillance Data Incorporated, Plymouth Meeting, PA; 2014

MIC Quality Control study for meropenem/RPX7009 fixed 8--\$1,500
JMI Laboratories, North Liberty, IA; 2014

MIC Quality Control study for meropenem/RPX7009--\$1,500
JMI Laboratories, North Liberty, IA; 2013

Disk Diffusion Quality Control study for compound GSK2140944--\$1,300
JMI Laboratories, North Liberty, IA; 2013

Expanded SENTRY USA Surveillance Program--\$7,800
JMI Laboratories, North Liberty, IA; 2013

2012-2013 Sentinel Laboratory Surveillance Program--\$250
Surveillance Data Incorporated, Plymouth Meeting, PA; 2013

Expanded SENTRY USA Surveillance Program--\$7,800
JMI Laboratories, North Liberty, IA; 2012

MIC Quality Control study for compound GSK2696266--\$1,400
JMI Laboratories, North Liberty, IA; 2012

2011-2012 Sentinel Laboratory Surveillance Program--\$500
IMS, Plymouth Meeting, PA; 2012

MIC Quality Control study for compound RPX2003/PRX7009--\$1,500
JMI Laboratories, North Liberty, IA; 2012

2011-2012 Sentinel Laboratory Surveillance Program--\$250
Surveillance Data Incorporated, Plymouth Meeting, PA; 2012

Study No. 101252 ARMOR 2011--\$1,640
Eurofins Medinet, Chantilly, VA; 2011

SENTRY Surveillance Program--\$5,000
JMI Laboratories, North Liberty, IA; 2011

Disk Diffusion Quality Control study for GSK2251052 Compound--\$1,400
JMI Laboratories, North Liberty, IA; 2011

MIC Quality Control study for compound GSK2140944--\$1,000
JMI Laboratories, North Liberty, IA; 2011

2010-2011 Sentinel Laboratory Surveillance Program--\$250
Surveillance Data Incorporated, Plymouth Meeting, PA; 2011

MIC Quality Control study for compound POL7080--\$1,000
JMI Laboratories, North Liberty, IA; 2011

2010-2011 Sentinel Laboratory Surveillance Program--\$250
Surveillance Data Incorporated, Plymouth Meeting, PA; 2011

USA Surveillance Program--\$2,000
JMI Laboratories, North Liberty, IA; 2010

LEADER linezolid surveillance program--\$2,500
JMI Laboratories, North Liberty, IA; 2010

MIC Quality Control study for compound AFN-1252--\$800
JMI Laboratories, North Liberty, IA; 2010

MIC Quality Control study for compound GSK2251052--\$1,100
JMI Laboratories, North Liberty, IA; 2010

Disk Diffusion Quality Control study for GSK1322322 Compound--\$1,500
JMI Laboratories, North Liberty, IA; 2010

Trichomonas vaginalis Wet Mount Collaborative--\$4,000
Gen-Probe Prodesse, Waukesha, WI; 2010

Disk Diffusion Quality Control study for JNJ463 Compound--\$1,500
JMI Laboratories, North Liberty, IA; 2010

Disk Diffusion Quality Control study for Nabriva Compounds--\$1,500
JMI Laboratories, North Liberty, IA; 2010

2009-2010 Sentinel Laboratory Influenza and RSV Surveillance Programs--\$750
Surveillance Data Incorporated, Plymouth Meeting, PA; 2010

MIC Quality Control study for compound XYZ--\$1,200
JMI Laboratories, North Liberty, IA; 2009

Ceftaroline surveillance study--\$2,500
JMI Laboratories, North Liberty, IA; 2009

Disk Diffusion Quality Control study for Razupenem--\$1,000
JMI Laboratories, North Liberty, IA; 2009

LEADER linezolid surveillance program--\$2,500
JMI Laboratories, North Liberty, IA; 2009

MIC Quality Control study for GSK1322322--\$1,000
JMI Laboratories, North Liberty, IA; 2009

Disk Diffusion Quality Control study for Nabriva Compounds--\$1,500
JMI Laboratories, North Liberty, IA; 2009

2008-2009 Sentinel Laboratory Influenza and RSV Surveillance Programs--\$1,000
Surveillance Data Incorporated, Plymouth Meeting, PA; 2009

MIC QC study for ACHN490 and OPT-80--\$1,500
JMI Laboratories, North Liberty, IA; 2009

PZ-601 Quality Control study--\$1,000
JMI Laboratories, North Liberty, IA; 2009

Telavancin/ulifloxacin Quality Control study--\$1,200
JMI Laboratories, North Liberty, IA; 2009

2007-2008 Sentinel Laboratory Influenza and RSV Surveillance Programs--\$1,000
Surveillance Data Incorporated, Plymouth Meeting, PA; 2008

Shionogi ceftibuten Quality Control study--\$800
JMI Laboratories, North Liberty, IA; 2008

LEADER linezolid surveillance program--\$2,200
JMI Laboratories, North Liberty, IA; 2008

2006-2007 Sentinel Laboratory Influenza and RSV Surveillance Programs--\$1,500
Surveillance Data Incorporated, Plymouth Meeting, PA; 2007

LEADER linezolid surveillance program--\$2,000
JMI Laboratories, North Liberty, IA; 2007

2005-2006 Sentinel Laboratory Influenza and RSV Surveillance Programs--\$400
Surveillance Data Incorporated, Plymouth Meeting, PA; 2006

LEADER linezolid surveillance program--\$2,000
JMI Laboratories, North Liberty, IA; 2006