Thirty Fourth Annual Meeting

Microbiology: Resistance, Diagnostics, and Virology

Sheraton Portsmouth Harborside Hotel
Portsmouth, NH
April 6 & 7, 2020
Session Faculty & Presenters

Nahid Bhadelia, MD, MALD
Medical Director, Special Pathogens Unit
Infectious Disease Physician and Assistant Professor Boston Medical Center and National Emerging Infectious Diseases Laboratories at Boston University; Assistant Professor at the Institute of Human Security at the Tufts Fletcher School of Law and Diplomacy
Boston, MA

Andrew Berens, MBA, MLS(ASCP), SM
Assistant Supervisor, Microbiology
Boston Medical Center
Boston, MA

Shoolah Escott, MS, MT(ASCP)
Independent Contractor and Retired Biosafety Manager MA State Public Health Laboratory
Boston, MA

Kimberlee Musser, PhD
Clinical Director and Chief of Bacterial Disease
David Axelrod Institute Wadsworth Center
NYS Department of Health
Albany, NY

Isabella W. Martin, MD
Medical Director of Microbiology,
Assistant Professor of Pathology Dartmouth-Hitchcock Medical Center Geisel School of Medicine Dartmouth College
Lebanon, NH

Jessica Crothers, MD
Assistant Professor of Pathology and Microbiology University of Vermont
Medical Center
Burlington, VT

Sarah Buss, PhD, D (ABMM)
Director of Clinical Microbiology
Northern Light Health, Adjunct Professor of University of Maine, Diplomate of American Board of Medical Microbiology
Bangor, MA

Melissa A. Cumming, MS, CIC
Senior Epidemiologist, Hemovigilance Program Coordinator, and Statewide Antibiotic Resistance Coordinator Bureau of Infectious Disease and Laboratory Sciences Massachusetts Department of Public Health
Jamaica Plain, MA

April M. Bobenchik, PhD, D (ABMM)
Associate Director of Microbiology,
Lifespan Academic Medical Center
Director of Biorepository Core, COBRE Center for Antimicrobial Resistance and Therapeutic Discovery
Assistant Professor of Pathology and Laboratory Medicine,
Warren Alpert Medical School of Brown University, Providence, RI

Sanjay Kanjilal, MD, MPH
Instructor, Harvard Medical School
Assistant in Medicine, MGH
Associate Medical Director, Clinical Microbiology
Brigham & Women’s Hospital
Boston, MA

Jennifer A. Johnson, MD
Assistant Professor of Medicine at Harvard Medical School
Associate Physician and Medical Director of Antibiotic Stewardship Program at Brigham and Women’s Hospital, Division of Infectious Disease
Boston, MA

Michael Mina, MD, PhD
Assistant Professor of Epidemiology, Immunology, and Infectious diseases, Harvard School of Public Health. Associate Medical Director, Clinical Microbiology at Brigham and Women’s Hospital Boston, MA

Richard L. Hodinka, Ph.D., F(AAM)
Professor Emeritus, Department of Pathology & Laboratory Medicine Perelman School of Medicine at the University of Pennsylvania
Professor, Microbiology University of South Carolina School of Medicine
Greenville, SC

Elizabeth Nazarian, MT (ASCP)
Supervisor Bacteriology Laboratory - Lead AR Lab Network
David Axelrod Institute Wadsworth Center
NYS Department of Health
Albany, NY

Kelly Wroblewski MPH, MT (ASCP)
Director, Infectious Disease Programs
Association of Public Health Laboratories
Silver Spring, MD

2
Two of the largest Ebola Virus Disease outbreaks in human history have occurred in the last decade, highlighting the changing nature of emerging infectious diseases threats and the interconnected nature of our world. This lecture will discuss the main lessons learned from the West Africa Ebola Virus Disease epidemic and how these were applied to the current outbreak in Democratic Republic of Congo, and discuss new scientific discoveries and continued challenges facing both on the ground responders and those of us preparing at home.

During the West African Ebola epidemic, Dr. Nahid Bhadelia served as a clinician in several Ebola treatment units, working with World Health Organization and Partners in Health. She currently serves as the clinical lead for the Joint Mobile Emerging Disease Intervention Clinical Capability (JMEDICC) program which a joint US-Ugandan effort to create clinical research capacity to combat viral hemorrhagic fevers in Uganda at the border of Democratic Republic of Congo. Dr. Bhadelia serves on national and interagency groups focused on medical countermeasures, the intersection between public health preparedness, research and clinical care for emerging pathogens. Her research focuses on identification of safe and effective clinical interventions and infection control measures related to viral hemorrhagic fevers. Dr. Bhadelia has served as a subject matter expert to US Centers for Disease Control and Prevention, Department of Defense, Global Fund to Fight AIDS, Tuberculosis and Malaria, and World Bank.

Dr. Bhadelia is an infectious diseases physician and the medical director of Special Pathogens Unit at Boston University School of Medicine, a medical unit designed to care for patients with highly communicable diseases. She is an Assistant Professor in the Section of Infectious Diseases. Dr. Bhadelia oversees the medical response program for Boston University’s maximum containment biosafety level 4 program at National Emerging Infectious Diseases Laboratories. She is also an Assistant Professor at the Institute of Human Security at the Tufts Fletcher School of Law and Diplomacy, where she teaches a course on human security and emerging infectious diseases. Dr. Bhadelia received her Doctorate of Medicine from Tufts University and completed her internal medicine residency and chief residency at Mount Sinai Hospital in New York. Her Infectious Diseases Fellowship was completed at Columbia Presbyterian Hospital.
Wine and Cheese Reception & Keynote address: Both are FREE
Please join us for a Reception, Hosted by the Vendors in the Exhibit Hall following Monday’s Workshops, from 4:30-5:00pm, and again from 6:00 to 7:00 pm. We will be serving Wine & Cheese, soft drinks and cold beer, and hot and cold hors d’oeuvres. The Keynote Address will be from 5:00 to 6:00 pm. No registration required for either.

At A Glance: Monday April 6

Workshops 1, 2, and 3 Run from 8am to 4:30pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-8a</td>
<td>Registration</td>
</tr>
<tr>
<td></td>
<td>Main Lobby</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>9a</td>
<td>Exhibits Open</td>
</tr>
<tr>
<td>9-10a</td>
<td>Coffee</td>
</tr>
<tr>
<td>12-12:45p</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:45-2p</td>
<td>Dessert and coffee with our Vendors</td>
</tr>
<tr>
<td></td>
<td>Exhibit Hall</td>
</tr>
<tr>
<td>2-4:30p</td>
<td>Workshops conclude</td>
</tr>
<tr>
<td>4:30-5p</td>
<td>Wine and cheese</td>
</tr>
<tr>
<td>5-6p</td>
<td>Keynote speaker</td>
</tr>
<tr>
<td>6-7p</td>
<td>Wine, cheese, hot hors d’oeuvres</td>
</tr>
<tr>
<td></td>
<td>Exhibit Hall</td>
</tr>
</tbody>
</table>
Course Description for Monday Workshops

Workshop 1 (8am to 12pm)

Topics in Antibiotic Resistance
April Bobenchik, PhD, Sarah Buss, PhD, Elizabeth Nazarian, MT, Kimberlee Musser, PhD, Melissa Cumming, MS (Moderated by Kelly Wroblewski)

This workshop will focus on topics in antibiotic resistance in the United States and will highlight how the collaborative work performed in clinical laboratories, public health laboratories and health departments is necessary to combat the spread of resistant pathogens. During the course of the day, details regarding antibiotic susceptibility testing will be discussed, as well as the testing required to detect carbapenem-resistant organisms, which includes pathogens that have been deemed “nightmare bacteria” by the Centers of Disease Control and Prevention (CDC). Along with information on laboratory methodology, this workshop will also highlight the current work performed in CDC’s AR Lab Network and health departments, along with information on how clinical laboratories can utilize those resources. At the conclusion of the day, participants will have the opportunity to have a Q&A session with the speakers, who represent experts from clinical laboratories, public health laboratories and state health departments.

Lecture 1: (60 minutes) AST Breakpoints - April Bobenchik

April will cover the antimicrobial susceptibility testing (AST) resources available from CLSI. An overview of how clinical breakpoints are set and how to most effectively use the M100 will be provided. Strategies for implementation of new breakpoints, antibiotics, and methods for detection of antibiotic resistance will also be covered. Finally, we will discuss the importance of staying up to date with current recommendations to ensure prompt and accurate detection of emerging antibiotic resistance. Level: Intermediate

Objectives:
• Discuss how laboratories can utilize CLSI and its resources to assist in AST.
• Describe how CLSI determines clinical breakpoints.
• Plug for the AR Lab Workgroup and the toolkit
• Identify strategies for optimal use of the M100 in the routine laboratory practice.
• Discuss how clinical laboratories can incorporate new antibiotics into their current AST methods.

Lecture 2: (60 minutes) AR Testing in the Clinical Lab - Sarah Buss

Sarah will provide an overview of the antimicrobial resistance (AR) testing performed in the clinical laboratory, including methods, reporting considerations and utilizing additional resources. Level: Intermediate

Objectives:
• Describe the different methods of antimicrobial resistance testing that are commonly utilized in the clinical lab setting.
• FDA approved molecular testing.
• Describe the importance of reporting antimicrobial resistant pathogens and how to report the results.
• Discuss the resources smaller clinical laboratories may utilize to supplement the antimicrobial resistance testing performed in-house.
Lecture 3: (60 minutes) **Technical Talk on Carbapenem-resistant Organisms (CROs) Testing in Public Health - Elizabeth Nazarian**

This presentation will go over the different pathogens of public health concern that exhibit resistance to the carbapenem class of antibiotics, the test methods public health laboratories utilize to detect and characterize carbapenem-resistant organisms (CROs) and how this testing is used to prompt response. **Level: Intermediate**

**Objectives:**
- Gain an understanding of the different carbapenem-resistant bacterial pathogens (CRPA & CRAB) of public health concern.
- Describe the testing methods used to identify and characterize CROs.
- Discuss ways to report CROs to public health in order to prompt public health response.

Lecture 4: (45 minutes) **Overview of Antimicrobial Resistance in the United States - Kimberlee Musser**

Kimberlee will provide an overview of the antimicrobial resistance (AR) in the US along with a summary of the CDC’s new AR Threat Report, the efforts of the AR Lab Network to detect and respond to AR pathogens. The Northeast Regional AR Lab Network activities and collaboration with clinical, local and state partners will be described. **Level: Intermediate**

**Objectives:**
- Gain an understanding of levels of antimicrobial resistance in the US.
- Gain an understanding of national efforts of the AR Lab Network to combat antimicrobial resistance and partners- clinical, local and state health departments, federal partners, and epidemiologists.
- Gain an understanding of transmission control through colonization screening through the AR Lab Network.
- Discuss figures for 2017-2019.

Lecture 5: (60 minutes) **Epidemiology Perspectives on Antibiotic Resistance and Antibiotic Resistance Case Studies - Melissa A. Cumming**

Overview of the epidemiology of HAI/AR pathogens and the activities health departments undertake to detect and prevent the spread of outbreaks. **Level: Intermediate**

**Objectives:**
- Describe the appropriate response to the detection of antibiotic resistant pathogens in healthcare facilities
- Gain an understanding of the activities public health departments participate in to combat the spread of antibiotic resistance
- Discuss the epidemiological trends of antibiotic resistance observed in the United States.

Presentation of a real-world case study that demonstrates the collaborative effort needed by different entities to effectively respond to a resistant pathogen. **Level: Intermediate**

**Objectives:**
- Gain an understanding of the difference between colonized and clinical cases, and how to respond to both.
- Describe the role of each stakeholder in an outbreak response.
- Discuss the laboratory testing needed to identify outbreaks, including clinical and colonized patients.
Workshop 2 (8am to 4:30pm)

Evolution of Clinical Virology: From Virus Culture to Molecular Technology
Richard L. Hodinka, Ph.D.

This workshop will provide information on the ever-evolving landscape of diagnostic virology. Much has changed in regard to methods and diagnostic practices over the past three decades. There have been numerous advances in molecular technologies that have transformed our ability to provide rapid and accurate diagnostics in the settings of acute patient care, public health surveillance and in response to novel viruses. The emergence of point-of-care molecular tests is now a reality and may result in a paradigm shift towards decentralized testing as there is continual downsizing and automation of platforms. Improvements and right-sizing of next generation sequencing assays are making it more plausible to mainstream this technology into the clinical laboratory. Alternative diagnostic methods based on the assessment of the host response to infection is now coming of age and include host-pathogen transcriptomics, metabolomics and proteomics as tools to identify host-response biomarkers for the detection and prognosis of viral diseases. All of these come with specific opportunities and challenges that can be discussed. Level: Intermediate

Objectives:
- Discuss the evolution of clinical virology from virus culture to molecular methods
- Describe the role of each stakeholder in an outbreak response
- Recognize the pros and cons of using different molecular and non-molecular tests for diagnosis of viral diseases
- Identify the major applications of testing in clinical virology and the impact on individualized patient care, public health surveillance and the response to novel viruses
- Compare and contrast technological advances in molecular multiplex detection, newer specimen-to-result point-of-care molecular programs, and next generation sequencing and metagenomics
- Describe choice of tests and best practices for testing based on differences in testing centers (e.g., community vs. tertiary hospital, public health facilities, commercial reference laboratories).

Workshop 3 (8am to 4:30pm)

Clinical Microbiology Basics in 2020: How are Changing Diagnostic Technologies Impacting the Laboratory and Patient Care?
Isabella Martin, MD

The field of clinical microbiology is changing fast. This workshop aims to provide an engaging and interactive overview of current and evolving diagnostic methods highlighting the role of new technologies in the following disciplines within clinical microbiology: bacteriology, mycology, mycobacteriology. Level: Basic

Objectives:
- Describe the current state of laboratory diagnostics for fungi.
- Describe the current state of laboratory diagnostics for mycobacteria.
- Discuss how the new and evolving technologies of rapid diagnostics for sepsis, total laboratory automation and next generation sequencing are changing the approach to diagnostic workflows in select testing realms.
**At A Glance: Tuesday April 7**

**Workshops 1, 2, and 3 Run from 8am to 12pm**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-8a</td>
<td>Registration</td>
</tr>
<tr>
<td>8a-12p</td>
<td>Workshop 1: Gram Stains</td>
</tr>
<tr>
<td></td>
<td>Andrew Berens</td>
</tr>
<tr>
<td>8a-12p</td>
<td>Workshop 2: Risk Assessment and Safety Competencies</td>
</tr>
<tr>
<td></td>
<td>Shoolah Escott</td>
</tr>
<tr>
<td>8a-12p</td>
<td>Workshop 3: Issues of Public Health Concern – measles, vaccines, HIV</td>
</tr>
<tr>
<td></td>
<td>Michael Mina and Jennifer Johnson</td>
</tr>
<tr>
<td>9-10a</td>
<td>Coffee</td>
</tr>
<tr>
<td>12-12:45pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>12-2p</td>
<td>Dessert and coffee in Exhibit hall with our Vendors</td>
</tr>
<tr>
<td>12:30-1:30p</td>
<td>Poster judging</td>
</tr>
<tr>
<td>2-3p</td>
<td>Student Presentations</td>
</tr>
<tr>
<td>3-3:15p</td>
<td>Business meeting</td>
</tr>
<tr>
<td>3:15-5:15p</td>
<td>Interactive Case Studies:</td>
</tr>
<tr>
<td></td>
<td>Sanjat Kanjilal and Jessica Crothers</td>
</tr>
</tbody>
</table>

Visit us on Facebook at Northeast Association of Clinical Microbiology and Infectious Disease. Like us!
Course Description for *Tuesday Workshops*

**Workshop 1 (8am to 12pm)**

**The Gram Stain: A Microbiologist’s Best Friend… and Worst Enemy**  
*Andrew Berens, MBA, MLS(ASCP)*

New bench tech? Seasoned bench tech? Supervisor? It doesn’t matter! The Gram stain is arguably the most important test that is done in Clinical Microbiology Labs all over the world. One wrong Gram stain can have a huge effect on a patient’s treatment and care. Come learn why reporting correct Gram stain results is so essential and what we can do to ensure we are giving our patients the most accurate results possible. Many things can cause bacteria to stain incorrectly and inconsistently. We will thoroughly cover why this happens and how to best avoid that dreaded corrected report and negatively impact patient care. We will also cover anatomy and proper use of a microscope, as well as have an interactive session discussing difficult Gram stain decisions and troubleshooting. You never knew there was so much you didn’t realize about Gram stains. **Level: Intermediate**

**Objectives:**
- To cover the history and theory of the Gram stain.
- To cover different staining techniques and instruments.
- To discover why the Gram stain is so important to patient care and how to best maximize its use.
- To troubleshoot when the Gram stain doesn’t react as expected.
- How to use a microscope to assess Gram stains properly.

**Workshop 2 (8am to 12pm)**

**Safety Risk Assessments and Competencies - Key Components of the Safety Culture**  
*Shoolah Escott, MS, MT(ASCP)*

Attendees should have experience in performing safety risk assessments and a basic understanding of the safety competencies. The program will begin with a quick review of safety risk assessments and competencies. The attendees will work in pairs and then groups performing hands-on exercises. The exercises will use real life scenarios and the competency “tool” to produce a product that can serve as a reference when they return to their workplace. At the end of the exercise, attendees will review the “roadmap” which will describe how biosafety risk assessments and competencies are key parts of the biosafety program. **Level: Intermediate**

**Objectives:**
- Perform a biosafety risk assessment and select appropriate mitigation strategies.
- Identify the appropriate biosafety competencies.
- Incorporate the identified competencies into the SOP and the overall competency assessment program.

---

*Northeast Branch American Society for Microbiology*

*Thanks to Northeast Branch ASM for sponsoring 2020 Student Presentations!*
Lecture 1: Update on HIV in the Modern Era - Jennifer A. Johnson, MD

Over the past few decades advances in pharmaceuticals and medical care have facilitated the evolution of HIV infection from a uniformly fatal disease to a chronic manageable disease. During this program we will discuss the current epidemiology of HIV infection and the impact of epidemiologic factors on the test characteristics of currently utilized HIV diagnostic tests. We will also review the current treatment options for HIV, including novel treatments such as long-acting injectable agents, and the diagnostic options for antiretroviral resistance. We will discuss the impact of current treatment modalities on prognosis with HIV infection and the long-term complications of HIV infection as patients age with this chronic illness. Finally, we will review the vaccination strategies employed to prevent disease among patients with HIV, and all patients. **Level: Advanced**

**Objectives:**
- Review current HIV epidemiology and diagnostics for new infections.
- Review current treatment options for HIV, including novel treatments such as long-acting injectable agents.
- Review current prognosis and potential complications with HIV.
- Review vaccination strategies and guidelines for patients with HIV, and all patients.

Lecture 2: Why Measles is the Master Childhood Infection - Michael Mina, MD, PhD

Measles vaccines have been linked to extra benefits that greatly reduce childhood mortality. Whether the extra benefits result from non-specific vaccine effects that protect against other infectious diseases, or, alternatively, suggest that measles was considerably worse than was previously thought has remained an open question. This talk will describe exciting new findings that show that measles not only causes the acute infection for which it is so famous, but also that measles erases previously acquired immunological memory which causes children to become at increased risk for other infectious diseases for years. Overall, the evidence suggests that before vaccination, measles may have been implicated in as much as 50% of all childhood infectious disease deaths. Thus, measles elimination through vaccination had the extra benefits of greatly reducing overall childhood mortality. **Level: Intermediate**

**Objectives:**
- Understand the pathogenesis of measles virus.
- Understand the short and long-term consequences of measles infections on immune memory.

Lecture 3: Dispelling the Myths Around Vaccines – an interactive discussion about vaccines to answer YOUR questions - Michael Mina, MD, PhD

Recently, the US experienced the largest measles outbreak to occur in our country in decades. This outbreak, and others like it can be traced, in part, to pockets of unvaccinated individuals where vaccine rates have fallen below protective thresholds. Across the US, and the world, trust in vaccines is eroding, causing many children to go without vaccines, causing increasing numbers of outbreaks from vaccine preventable diseases. Hesitancy surrounding vaccines is largely a result of conflicting messages in the public conversation surrounding vaccine safety and efficacy. These conflicting messages are amplified through social media despite that many of the messages shared are patently false or result from misinformation campaigns. This session will provide participants opportunity to ask any questions (via anonymous pre-submission questions or during the session) surrounding vaccines to help clarify truth from misinformation and gain a better understanding of what underlies many of the messaging surrounding vaccines today. **Level: Intermediate**

**Objectives:**
- Understand the benefits of measles vaccines for the population.
- Learn about the popular myths surrounding vaccines and what to believe.
Interactive Case Studies (3:15pm to 5:15pm)

Case records of the Brigham & Women’s Hospital and UVM Microbiology Laboratories
Sanjat Kanjilal, MPH, MD and Jessica Crothers, MD

As we enter the second decade of the 21st century, the clinical microbiology lab sits at the center of a complex landscape shaped by rising antimicrobial resistance, improved public health surveillance, a growing immunocompromised population, a rapidly evolving market for diagnostics and stringent demands for cost-efficiency but also improved care delivery. We use four recent cases to highlight these forces and the implications for laboratory staff at every level. Level Intermediate. (Participants may choose to use Kahoot)

Objectives:
• Gain exposure to cutting edge clinical microbiology.
• Understand strengths and weaknesses of next-generation diagnostic assays.
• Understand the complexity of patient care in tertiary care settings.

We value our members, register to become a member during the Annual Meeting and qualify to win a $100 gift card.
NACMID thanks the following 2019 supporters. Without you, we would not be possible:

**Platinum Level**
Beckman Coulter Microscan
Meridian Bioscience, Inc.

**Gold Level**
BioMerieux/ Biofire Inc.
Vela Diagnostics

**Ruby Level**
Accelerate Diagnostics  Luminex  Zeptometrix
Hologic  Cepheid  Roche Diagnostics
Thermo Fisher Scientific

**Honorable Mention**
Abbott Rapid Diagnostics  Advanced Instruments
Allergan Pharmaceuticals  Astellas Pharma, Inc.
Becton Dickinson  Bruker Daltonics, Inc.  Copan
Curetis USA  DiaSorin Molecular  Streck  IMMY
GenMark Diagnostics  Quidel  Hardy Diagnostics
Healthcare Tech  Medical Chemical Corporation
Magnolia Medical Technologies  Microbiologics, Inc.
Merck & Co., Inc.  Nikon Instruments  Oxyrase Inc.
Roche Diagnostics  T2 Biosystems  Singulex, Inc.
Thermo Fisher Scientific  ViiV Healthcare
CALL FOR POSTERS

This Meeting Provides an Excellent Opportunity for Poster Presentations Of Your Latest Student Or Investigator Research If Your Organization has Posters, We Invite You to Display Them.

Please Contact:
Donna Piacitelli at dpiacitell@mmc.org or Roger Greenwell at rgreenwell@worcester.edu
WE WELCOME YOUR POSTER PRESENTATION

The organizing committee of NACMID’s 34th Annual Meeting is pleased to offer you the opportunity to share your work with fellow colleagues. Research may be previously unpublished or papers given at the national meeting. Please use the official Abstract Submission Form by typing or pasting a clean copy of your presentation abstract in the box below. The abstract will be reproduced as submitted. Please use regular font (no smaller than 10) for the content, and leave a blank line between the title and the content. Presenters must be registered for the meeting. Student posters will be judged and prizes awarded (awards announced at meeting). Additionally, 3-4 students will be selected to give 10-15 minute oral presentations on Tuesday, April 7th from 2pm-3pm. Check the box below to be considered for an oral presentation along with your poster. Students selected for oral presentations will be informed by Friday, March 20th.

Example:
The Strain From Spain.
Authors: D. Quixote and S. Ponza, University of Iberia
A multiple-drug resistant isolate of ……

Please exhibit posters: Monday 4/6/20 8am-7pm and Tuesday 4/7/20 8am-5pm (Posters judged Tuesday 12:30 to 1:30pm)

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation:</th>
<th>Address:</th>
<th>City:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Last)</td>
<td>(First)</td>
<td>Student:</td>
<td>Considered for Oral Presentation?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes [ ] No [ ]</td>
<td>Yes [ ] No [ ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phone:</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Day time)</td>
<td></td>
</tr>
</tbody>
</table>

Abstract Category Preference (e.g. Clinical, Biotechnical, Environmental, etc.) 34th Annual Meeting of NACMID Abstract Submission Form (please use a font ≥ 10 pt)
Northeast Association for Clinical Microbiology and Infectious Disease

We invite you to become involved! Join a Committee, Help out at our Annual Meeting; Become a Contributor!!

Complete and mail this form to NACMID c/o Maureen Collopy
15 Hamilton Street Dover, NH 03820

Name ________________________________________________________________

Home Address ________________________________________________________________________________

City ___________________ State _________  Zip ____________ Phone (       ) ___________________

Preferred mailing address (circle) work home

Hospital/ Business
____________________________________________________________________________

City __________________ State __________ Zip ____________ Phone (     ) _____________________

Email ________________________________________________________________________________

Areas of interest and/or professional expertise ____________________________________________

☐ I would like to know more about duties, functions and time commitments of the position(s) checked below.

I prefer to be contacted by: ☐ phone ☐ email

**COMMITTEES**

Continuing Education  Membership  Development  Program  Exhibits  Proctors  Finance  Publications  Funding  Registration  Future sites  Social Media  Internet  Speakers Bureau  Local Arrangements

**ELECTED POSITIONS**

President  President-elect  Secretary
NACMID

15 Hamilton Street
Dover NH 03820

NACMID Executive Board:

President  Cynthia Astolfi
President-elect  Beverley Orr
Treasurer  Maureen Collopy
Secretary  Rebecca Zaffini

Committee membership:

Continuing Education  Debra St George
Development  Shoolah Escott
Exhibits  Donna Piacitelli
          Howard Lam
          Andrew Berens
          Erik Baumann
          Tristan Hart-Bonville

Finance  Shoolah Escott
Funding  Cynthia Astolfi
Future Sites  Maureen Collopy
            Martha Wilson
Industry  Steve Cook
Internet  Diana Drouillard-O’Brien
Local Arrangements  Maureen Collopy
                     Martha Wilson
Membership  Kristen Palladino
Program  NACMID BOD
Proctors  Colleen Dolan
Publications  William Drenas
Registration  Kristen Palladino
             Rebecca Zaffini
Social Media  Ashley Gasinowski

NACMID - the Northeast Association for Clinical Microbiology and Infectious Disease is a non-profit organization dedicated to providing low-cost, high-quality continuing education to Clinical Microbiologists in the 6 New England States and New York.
IMPORTANT!!!

We are Conserving Paper!
Be Sure to Bring YOUR Copy of this Program to the Annual Meeting.

If you receive this in the postal mail, carry it along. If you receive it via email, please print and carry with you.

PLEASE REMEMBER

TO RENEW YOUR NACMID MEMBERSHIP THIS YEAR!

TAKE ADVANTAGE OF THE EDUCATIONAL BENEFITS THAT WE HAVE TO OFFER, AT RATES FAR LOWER THAN OTHER ORGANIZATIONS.

CONSIDER THE BENEFIT OF CONTINUING EDUCATION IN PROXIMITY TO YOUR HOME AND PLACE OF EMPLOYMENT!

See pages 16 - 20, and 23 for More Information. Join or Renew with your meeting registration.
CONSIDER AN INSTITUTION PASS
for $195.00

NACMID offers your institution the opportunity to purchase a pass for the

Workshops and General Sessions

This pass covers:

Workshops and General Sessions

All Breaks

AND

One lunch ticket for Monday and one lunch ticket for Tuesday

AND

ASCP CEU's

The institution pass allows two people from one institution to share a two day registration, one on Monday and the other on Tuesday, with all the benefits that one person receives when registering for two days. Please indicate on the registration form the name and day each person will be attending.

Registration materials (including name badges and attendance certificates) will be ready for each participant on the day of their arrival. We hope this will provide you with more flexibility in scheduling people to attend Our Annual Meeting.

See Registration Page On-Line, for other one-day options.
Northeast Association for Clinical Microbiology and Infectious Disease

NACMID
Northeast Association for Clinical Microbiology and Infectious Disease

NACMID was organized in the spring of 1983 and formally incorporated as a non-profit organization on July 1, 1983. The purpose of the association is to promote scientific knowledge of clinical microbiology and infectious diseases.

NACMID serves all of New England and New York and membership is open to anyone interested in clinical microbiology and infectious disease. Annually all states come together for a two day program featuring General Sessions of various topics.

Continuing changes in our field, including the work environment, government regulations, technology and newly emerging pathogens, make continuing education for all microbiologists a necessity. We are proud to provide high quality, low cost continuing education to laboratory professionals. We provide ASCP continuing education units (CEUs) to participants of all local and annual meetings.

Membership in NACMID is open to anyone interested in Clinical Microbiology or Infectious Disease. Annual membership is only $30.00.

In 2020 we are offering free membership to all new MT and MLT graduates.

Please join or renew your membership today with the enclosed membership application with the meeting registration form on page 23.

YOU MAY NOW REGISTER ONLINE AT: www.nacmid.org
Title:     __ Mr. __ Miss __ Ms. __ Mrs. __ Dr.
Name:     ____________________________________________
          (first)                         (middle initial)          (last name)
Mailing address:  ___________________________________________
          ___________________________________________
          (city)                                 (state)          (zip)
Business address: (if different from above)
          ___________________________________________
          ___________________________________________
          ___________________________________________
          (city)                                 (state)          (zip)
Business Phone:_________________Home phone: ___________________
FAX:___________    Email: __________________________

___ Please check if we have your permission to email announcements.  
   We will NOT give out your email address without your permission; you 
   will ONLY receive NACMID updates.  
   ___ One year $30.00    
   ___ Five years $125.00 
   ___ Life-time membership $250.00

Please make your check payable to NACMID and mail to :  
   Maureen Collopy  
   15 Hamilton Street  
   Dover, NH 03820
Northeast Association for Clinical Microbiology and Infectious Disease

Hotel Information
The Sheraton Portsmouth Harborside Hotel
250 Market Street, Portsmouth, NH 03801

is pleased to be the host hotel for the Northeast Association for Clinical Microbiology and Infectious Disease Conference.

The overnight rates for the event are listed below. Guest room rates will be offered: two (2) days prior and two (2) days after the meeting dates subject to availability of guest rooms at the time of reservation.

Call the Sheraton Portsmouth WELL BEFORE March 23, 2020 at:
603-431-2300, or 866-627-7138.

To receive the GROUP RATE, you must mention NACMID at the time your reservation is requested.
To guarantee a room, your reservation must be placed no later than March 23, 2020.
Reservations placed after 5:00PM on the cut-off date will be accepted on a space available and rate available basis.

Double: $144.00
King: $144.00
Parking not included.

Rates apply based on the number of adults in each guest room.
All guest room rates are quoted exclusive of applicable state and local taxes which are currently 9%.

Check-in: 3:00 PM          Check-out 12:00 PM

Travel Directions:

The Sheraton Portsmouth Harborside Hotel 250
Market Street, Portsmouth, NH 03801

Whether North or South Take Exit 7 off Rte 95 in Portsmouth, NH
**REGISTRATION FORM**

Name: ______________________________________________________________________________

Mailing Address: ______________________________________________________________________

Employer/Affiliation: __________________________________________________________________

Telephone: (Home/Cell): ______________________________ (Work): _________________________

E-mail address:* ______________________________ (Required for Confirmations: sent by email only)

To receive future NACMID updates by email, please check here _____

**ONLINE REGISTRATION Available at:**

[www.nacmid.org](http://www.nacmid.org) or use the form below to register by snail mail:

**CIRCLE CHOICES:** Workshops: Monday April 6 and Symposia: Tuesday April 7, 2020 Includes all lectures, handouts, breaks, lunch, and ASCP CEU’s

Pre-registration is encouraged, as space is limited

<table>
<thead>
<tr>
<th></th>
<th>NACMID &amp; NEB-ASM</th>
<th>Non-Members</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Two Day Registration:</strong> Monday and Tuesday</td>
<td>$160</td>
<td>$210</td>
<td>$40</td>
</tr>
<tr>
<td><strong>One Day Registration:</strong> Monday April 6, 2020 (full day workshop)</td>
<td>$110</td>
<td>$145</td>
<td>$20</td>
</tr>
<tr>
<td></td>
<td>Tuesday April 7, 2020 (half-day workshop and symposia)</td>
<td>$110</td>
<td>$145</td>
</tr>
<tr>
<td></td>
<td>Tuesday April 7, 2020 (half-day workshop only; NO symposia)</td>
<td>$65</td>
<td>$85</td>
</tr>
</tbody>
</table>

**Institution Pass:** Please indicate above the names of each attendee

<table>
<thead>
<tr>
<th>Institution Pass</th>
<th>$195 (2day)</th>
<th>$110 (1day)</th>
</tr>
</thead>
</table>

**PARKING DAY GUESTS:** Self parking on site: $5.00 for the day and $5.00 for overnight. Purchase parking voucher from NACMID website. (Parking at FOUNDRY PLACE: $1.00/hour (3 blocks walk))

**NACMID Membership Application:** New ($30, 1 year)_____ Renewal: ($30, 1 year)_____ See following pages or above websites for more membership options and information

**TOTAL REGISTRATION FEE ENCLOSED:** $

*Please Register by March 26, 2020
An additional $10 fee will be charged for On-Site Registration.*

If registering as NACMID: Send this form and check payable to: NACMID to: Kristin Palladino, 21 Heritage Drive, Tewksbury, MA 01876

*For ADA requirements and special food arrangements, please contact Marty Wilson at least two weeks before the meeting: ashland254@comcast.net*
NACMID: THIRTY FOURTH ANNUAL MEETING

Sheraton Portsmouth Harborside Hotel
Portsmouth, NH
NOTES