Technology Applications and Limitations in the Diagnosis of Infectious Diseases

Ensuring proper utilization of existing and emerging diagnostic technologies will always be an essential duty for the practicing pathologist, as we are obligated to strive for optimal allocation of testing and the human resources necessary to support the activity. This is particularly important in the context of infectious diseases, since appropriate and timely interventions are imperative for patients, and also in the interests of preserving public health. Our series of speakers will update the audience on methods to optimally leverage resources in the diagnosis of infections across a wide continuum of environments, ranging from point of care methods in the field to cutting edge technology. This session will inform on field
diagnosis of infections in resource limited environments via gross and microscopic assessments, applications and limitations of telepathology and emerging molecular techniques, and we will also explore the role of interdisciplinary consultations in the diagnosis of infectious diseases.

**Learning Objectives**

Upon completion of this educational activity, the learner will be able to:

- Describe field methods to diagnose infectious diseases
- Identify advantages and disadvantages of whole slide scanning
- Identify advantages and disadvantages of molecular methods for the diagnosis of infections
- Leverage an interdisciplinary approach to enhance infectious disease diagnoses

**Moderator(s)**

- **Moderator**
  - Patricia Adem, MD
  - Westchester Medical Center

- **Moderator**
  - Danny Milner, Jr., MD, MSc
  - ASCP

**Presentations**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>8:30 AM</td>
<td><strong>Field Sample Collection, Biosafety Concern, and Utilization of Resources for Infectious Disease Pathology</strong></td>
<td>Wun-Ju Shieh, MD, MPH, PhD, CDC</td>
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<tr>
<td>9:15 AM</td>
<td><strong>Is Telepathology Useful for the Diagnosis of Infections?</strong></td>
<td>Ann Nelson, MD, InPaLa Consulting</td>
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<tr>
<td>10:30 AM</td>
<td><strong>The Promise and the Pitfalls in the Molecular Diagnosis of Infection</strong></td>
<td>Audrey Schuetz, MD, Mayo Clinic</td>
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<tr>
<td>11:15 AM</td>
<td><strong>Interdisciplinary Approach to Infectious Disease Diagnosis</strong></td>
<td>Jeannette Guarner, MD, Emory University</td>
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