Real-Time PCR for the Clinical Microbiology Laboratory

October 26–27, 2006
Phillips Hall
Harold W. Siebens Medical Education Building
Mayo Clinic, Rochester, Minnesota

Presented by:
Mayo Medical Laboratories
GENERAL INFORMATION

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PROGRAM SCHEDULE

- Wednesday, October 25 .............................................................................................8
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REGISTRATION FORM

- *Real-Time PCR Registration Form*...........................................................................11
COURSE DESCRIPTION
Real-time PCR (polymerase chain reaction) has broad applications for clinical microbiology testing. This workshop familiarizes the participant with currently available rapid cycle real-time methods including the principles of rapid thermocycling and probe detection formats. Pre-analytic processing of patient specimens including isolation, concentration and preservation of nucleic acid, quality control, and quality assurance issues are addressed. Applications of this technology for the detection and quantitation of microorganisms and mutation screening for antimicrobial resistance are presented. Participants have a close-up experience with these applications. In addition, primer-probe design, assay optimization, assay performance verification, validation, and interpretation of results will be presented.

LEARNING OBJECTIVES
Upon completion of the conference participants should be able to:
- Define PCR optimization strategies and perform analyses and interpretation of data
- Review quality control procedures and regulatory requirements for rapid real-time PCR assays
- Examine implementation issues into the clinical laboratory, including process changes, work flow, cost-effectiveness, and reimbursement

DISCLAIMER
Attendance at this Mayo course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

INTENDED AUDIENCE
This course is designed for clinical microbiologists, laboratory directors, supervisors, medical technologists, public health microbiologists, pathologists, and infectious disease specialists.

CREDIT
Mayo Clinic College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Mayo Clinic College of Medicine designates this educational activity for a maximum of 11.25 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Mayo Reference Services is approved as a Continuing Education Accrediting Agency for Clinical Laboratory Science for State of California and State of Florida credit and the ASCLS P.A.C.E® program. The level of instruction for this program is intermediate. This program is approved for 11 contact hours.
DATE AND LOCATION

Real-Time PCR for the Clinical Microbiology Laboratory will be held October 26–27, 2006. Course headquarters are located in Phillips Hall on the first floor of the Siebens Medical Education Building, Mayo Clinic, 100 Second Avenue SW, Rochester, Minnesota. Meeting facilities are easily accessible by pedestrian skyway and subway, which connect Mayo Clinic to shops, restaurants, and hotels.

REGISTRATION

Complete the attached registration form and return by mail or fax. The registration fee of $500 includes tuition, comprehensive course syllabus, continental breakfasts, break refreshments, lunches, and conference dinner on Thursday. Although it is not our policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is advised. A letter of confirmation will be e-mailed upon receipt of payment and completed registration form. Please indicate your e-mail address on the registration form. Do not confirm hotel or travel arrangements until you receive written notification. Kindly present this confirmation letter when checking in at the meeting registration desk.

CANCELLATION POLICY

If you cancel your participation in this course, your registration fee, less a $75 administrative fee, is refunded when written notification is received by Mayo Medical Laboratories on or before October 12, 2006 (fax: 507-284-8016). No refunds will be made after October 12, 2006.

Mayo Medical Laboratories reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Mayo Medical Laboratories must cancel or postpone this course, Mayo Medical Laboratories will refund the registration fee, but is not responsible for any related costs, charges, or expenses to participants, including fees assessed by airline/travel/lodging agencies.

TRAVEL

Rochester, Minnesota, is a friendly city that greets thousands of visitors from around the world each year. The city is serviced by a modern international airport with multiple flights daily from Chicago, Detroit, and Minneapolis via American or Northwest Airlines. Access to and from the airport is available by taxi, shuttle service, or rental car. The airport is located approximately 10 miles from the Mayo Clinic campus.

For travel arrangements, you may contact Lori Munsen at Corporate Travel at 800-526-4540 or 507-287-7462; fax: 507-282-9020; or e-mail: lori@ctsrst.com. Identify yourself as attending this Mayo Medical Laboratories conference.

Note to travelers: Several cities in the United States are named Rochester. When you make airline reservations and check your baggage, be sure that your destination is Rochester, Minnesota (RST) and that your baggage has been properly tagged.

Travel arrangements are the responsibility of the registrant.
**LODGING ACCOMMODATIONS**

Guest rooms have been reserved for attendees and their guests with special course rates at each of the following Rochester hotels. In order to receive the special rate, reservations must be made before the room block is filled or before the expiration date of September 22, 2006, whichever comes first. Reservations are taken following this date based on space and rate availability. Please identify yourself as a participant of the *Real-Time PCR for the Clinical Microbiology Laboratory* conference when making your reservation.

**KAHLER GRAND HOTEL**
20 Second Avenue SW  
800-533-1655 or 507-282-2581  
$89 single/double

**ROCHESTER MARRIOTT HOTEL**
101 First Avenue SW  
877-623-7775 or 507-280-6000  
$129 single/double

The hotels listed above are connected by pedestrian skyway and subway to conference facilities, downtown shops, and restaurants. For additional accommodation options, you may also wish to visit the Rochester Convention and Visitors Bureau Web site (www.rochestercvb.org).

Lodging arrangements are the responsibility of the registrant.

**SOCIAL PROGRAMS**

Public tours of Mayo Clinic are provided each weekday beginning at 10:00 am, except holidays. The tours originate from Judd Auditorium, subway level of the Mayo Building, and last approximately 1.5 hours. The tour includes a 20-minute film on the history and operation of Mayo Clinic plus visits to points of interest in the Mayo, Plummer, and Hilton buildings. Please make advance reservations by calling 507-538-1091.

Mall of America, the largest fully enclosed retail and family entertainment complex in the United States, is an easy 90-minute drive or shuttle ride from Rochester, Minnesota. Along with 500 retail stores, restaurants, and nightclubs, the mall features The Park at MOA, the world’s largest indoor theme park, and Underwater Adventures Aquarium, a walk-through aquarium featuring 15,000 fish. Rochester Direct shuttle service will pick up at all local hotels, and departs approximately every two hours from 8:00 am to 8:30 pm. The cost is $34 per person same day round-trip. For reservations, call Rochester Direct at 800-280-9270. Check the shuttle schedule at their Web site: www.rochesterdirect.com.

**PARKING**

Parking is available in hotel, city, and Mayo patient/visitor ramps. The cost for parking is not included in the registration fee; therefore it is the responsibility of the attendee to provide payment. A map indicating the location of parking facilities will be e-mailed with the registrant confirmation letter.
CONFERENCE DINNER
Attendees and their guest are cordially invited to join the course faculty for the conference dinner on Thursday, October 26, 2006. This dinner welcomes you to Rochester, Minnesota, and the Mayo Clinic campus, officially opens the course, and offers you the perfect opportunity to make connections and network with colleagues. Preregistration is requested.

FACULTY
COURSE DIRECTORS
Franklin R. Cockerill III, MD
James R. Uhl, MS

MAYO FACULTY
Seanne P. Buckwalter, MS
Mark J. Espy, MS
Jon E. Rosenblatt, MD
Lynne M. Sloan, BS
Thomas F. Smith, PhD
Emily A. Vetter, MT

FACULTY DISCLOSURE
As a provider accredited by ACCME, Mayo Clinic College of Medicine (Mayo School of CME) must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course director(s), planning committee, faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of these relevant financial relationships will be published in course materials so those participants in the activity may formulate their own judgments regarding the presentation.
# WEDNESDAY, OCTOBER 25, 2006

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>5:00 PM</td>
<td>Pre-Conference Registration</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>Phillips Hall Foyer, First Floor</td>
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<tr>
<td></td>
<td>Harold W. Siebens Medical Education Building</td>
</tr>
</tbody>
</table>

# THURSDAY, OCTOBER 26, 2006

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>Registration and Continental Breakfast</td>
</tr>
<tr>
<td></td>
<td>Phillips Hall Foyer</td>
</tr>
<tr>
<td>7:30 AM</td>
<td>Orientation and Introduction</td>
</tr>
<tr>
<td></td>
<td>Franklin R. Cockerill III, MD</td>
</tr>
<tr>
<td>7:45 AM</td>
<td>Overview of Rapid Cycle Real-Time PCR Technology</td>
</tr>
<tr>
<td></td>
<td>Franklin R. Cockerill III, MD</td>
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<tr>
<td>8:45 AM</td>
<td>Specimen Processing</td>
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<td></td>
<td>Jon E. Rosenblatt, MD</td>
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<tr>
<td>9:15 AM</td>
<td>BREAK</td>
</tr>
<tr>
<td>9:45 AM</td>
<td>Nucleic Acid Extraction</td>
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<td></td>
<td>Mark J. Espy, MS</td>
</tr>
<tr>
<td>10:15 AM</td>
<td>Design of Real-Time Assays: Target Selection and Probe Design</td>
</tr>
<tr>
<td></td>
<td>James R. Uhl, MS</td>
</tr>
<tr>
<td>11:15 AM</td>
<td>Quality Control and Regulatory Requirements</td>
</tr>
<tr>
<td></td>
<td>Lynne M. Sloan, BS</td>
</tr>
<tr>
<td>12:15 PM</td>
<td>LUNCH</td>
</tr>
<tr>
<td></td>
<td>Rochester Marriott Hotel</td>
</tr>
<tr>
<td></td>
<td>Courtyard, Third Floor</td>
</tr>
<tr>
<td>1:15 PM</td>
<td>Applications for Viral Diagnostics</td>
</tr>
<tr>
<td></td>
<td>Thomas F. Smith, PhD</td>
</tr>
<tr>
<td>2:15 PM</td>
<td>BREAK</td>
</tr>
<tr>
<td>2:45 PM</td>
<td>Implementation of Viral Assays</td>
</tr>
<tr>
<td></td>
<td>Seanne P. Buckwalter, MS</td>
</tr>
<tr>
<td>3:30 PM</td>
<td>Laboratory Tours</td>
</tr>
<tr>
<td>6:30 PM</td>
<td>Conference Dinner</td>
</tr>
<tr>
<td></td>
<td>Kahler Hotel</td>
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<tr>
<td></td>
<td>Elizabethan Room, First Floor</td>
</tr>
</tbody>
</table>
FRIDAY, OCTOBER 27, 2006

7:00 AM  CONTINENTAL BREAKFAST
Phillips Hall Foyer

7:30 AM  Applications for Bacterial Diagnostics
Franklin R. Cockerill III, MD

8:30 AM  Implementation of Bacterial Assays
Emily A. Vetter, MT

9:00 AM  BREAK

9:30 AM  Extraction
  • General
  • Single assays
  • Multiplex assays
  • Quantitative
  • Weak positives/probit

11:30 AM  LUNCH
Rochester Marriott Hotel
Courtyard, Third Floor

12:30 PM  Assays
  • General
  • Single assays
  • Multiplex assays
  • Quantitative
  • Weak positives/probit

2:30 PM  Adjourn
### CONTACT INFORMATION

<table>
<thead>
<tr>
<th>Name (First Name, Middle Name or Initial, Last Name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
</tr>
<tr>
<td>Company/Institution</td>
</tr>
<tr>
<td>Work address</td>
</tr>
<tr>
<td>City</td>
</tr>
<tr>
<td>E-mail address (REQUIRED)</td>
</tr>
<tr>
<td>Telephone</td>
</tr>
</tbody>
</table>

### SPECIAL NEEDS

Please specify if you have special dietary needs and indicate specific need(s):

### REGISTRATION

**Thursday conference dinner.** No additional charge for participant and one guest

- [ ] I will attend  
- [ ] I will not attend  
- Guest: [ ] Yes  
- [ ] No

**Registration Fee:** $500  
**Total Payment Enclosed:**  
$ ______________________

### PAYMENT INFORMATION

- [ ] Check Enclosed (payable to Mayo Medical Laboratories)
- [ ] Credit Card:  
  - [ ] Visa  
  - [ ] MasterCard  
  - Card Number  
  - Exp Date (mm/yy)

Name of Cardholder (as it appears on the card)  
Signature of Cardholder (required)  
Date
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