



COLLEGE of AMERICAN
PATHOLOGISTS

Laboratory Medical Direction

Advanced Learning Series

MANUAL

This program manual is current as of October 1, 2018.
Information is subject to change.

Overview

Congratulations on your desire to find out more about the CAP's Laboratory Medical Direction Advanced Learning Series — or perhaps you have already decided to apply! This manual will address your questions regarding program eligibility, design, and requirements for obtaining your LMD Advanced Learning Series Certificate of Completion.

The CAP created the LMD Advanced Learning Series for pathologists with current or potential medical and operational responsibilities for one or more units of a laboratory. As a result of completing the LMD Advanced Learning Series program, qualified program participants will be able to:

- Use lab data and your medical knowledge to interpret operational trends and determine their implications.
- Identify the steps, tools, and monitors required to implement a quality management program.
- Apply a risk management process to identify risk factors and develop action plans to minimize the risk.
- Utilize communication strategies to clearly express ideas and positions, manage resistance, and create an open dialogue.
- Identify and use team building skills to enable effective and efficient laboratory operations.
- Discuss compliance scenarios and ways to stay in compliance.
- Execute the tasks necessary to obtain laboratory accreditation.

To participate in the LMD Advanced Learning Series, you must complete and submit an application and pay the registration fee. Participants will receive notification regarding the disposition of their application within two to four weeks of the date it was submitted.

Read on to learn how the LMD Advanced Learning Series provides you with the opportunity to learn the new skills and knowledge required to provide excellent patient care!

Note: CAP Advanced Learning Series are intended to be learning activities. Completion of this program alone does not necessarily indicate competence. The CAP does not endorse, guarantee, or warrant, and expressly disclaims, any and all liability for the job performance of physicians participating in the program.

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Program Purpose

The College of American Pathologists (CAP) is the leading organization of board-certified pathologists, serving patients, pathologists, and the public by fostering and advocating excellence in the practice of pathology and laboratory medicine. The CAP seeks to create new and enhanced roles for the pathologist over the next generation, as well as greater recognition for pathologists as physicians actively involved on the patient care team. The LMD Advanced Learning Series directly contributes to the College's vision of transforming the role of the pathologist as a leading health care provider in a practical, coordinated, and systematic manner.

The LMD Advanced Learning Series focuses on providing and equipping pathologists with practical skills, tools, and techniques that they can implement in their laboratories to ensure more effective and efficient laboratory operations and more effective patient care. Additional constituencies benefit from the program as well:

- **Laboratories and pathology departments/groups** – It is anticipated that some laboratories and pathology groups will directly purchase the program on behalf of an employed/contracted pathologist. Laboratories and pathology groups who do so will benefit from having increased confidence in the oversight and efficient operations of their laboratories.
- **Most importantly, the patients** – Likewise, the availability of one or more pathologists who have completed the program in the health care setting provides patients the assurance that their laboratory tests are processed with quality and accuracy.

Program Elements

The CAP designed the LMD Advanced Learning Series for pathologists with current or potential medical and operational responsibilities for one or more units of a laboratory. Participants who will most benefit from the program include pathologists who have a minimum of three years experience as a laboratory director or designated section head.

The LMD Advanced Learning Series elements are specified below.

CAP Advanced Learning Series Elements	Laboratory Medical Direction (LMD) Advanced Learning Series Elements
<p>1. Online Curriculum</p>	<p>The online curriculum consists of seven CME/SAM activities (18.0 CME/SAM hours). This curriculum should be completed prior to attending the LMD Workshop. All online activities will be available to participants at least one month prior to the workshop.</p> <p>Each online activity includes a post-test. Participants must receive a score of 70% or better to pass. Participants will have three attempts to pass the post-test.</p> <p>Please refer to the LMD Advanced Learning Series Core Curriculum section of this document for information about each activity.</p>
<p>2. Live Workshop</p>	<p>The LMD Workshop is a 1.5 day educational experience (12 CME/SAM hours) led by a team of expert faculty. The online activities are prerequisites to attending the workshop.</p> <p>Please refer to the LMD Workshop agenda for the workshop agenda*.</p>

*See Learning at www.cap.org for the current workshop schedule.

Participants who successfully complete the **LMD Advanced Learning Series** elements will receive a Certificate of Completion.

Core Curriculum

The LMD Advanced Learning Series core curriculum focuses on providing pathologists with practical skills, tools, and techniques that they can implement in their laboratories in order to ensure more effective and efficient laboratory operations and better patient care. The CAP's LMD Advanced Learning Series curriculum is organized and summarized below by two delivery modalities: online and faculty-led.

ACCREDITATION

The College of American Pathologists (CAP) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Accreditation in Canada

All of the online activities in this program are Accredited Self Assessment Program (Section 3) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, approved by the Canadian Association of Pathologists - Association Canadienne des Pathologistes. The maximum number of CPD credits to be claimed is specific to each activity. Remember to visit MAINPORT to record your learning and outcomes.

TECHNICAL REQUIREMENTS FOR ONLINE ACTIVITIES

Most common operating systems are enabled to run CAP activities. The following systems support the activities:

- Operating System: Windows (Vista, Windows 7, Windows 8), Mac IOS
- Browser Version: Internet Explorer 10.x and newer, Firefox, Chrome, Safari
- Pop-up blockers must be turned off to complete CAP activities

ACCESSING ONLINE ACTIVITIES

Participants must establish a CAP web account in order to access and complete the online training and cognitive assessment. If you do not have an individual web account, go to cap.org, then select the Log In/Register button and complete and submit the requested information.

Core Curriculum, cont.

LMD ADVANCED LEARNING SERIES PREREQUISITE ONLINE ACTIVITIES

The following online activities are available at least one month prior to the Workshop. Descriptions for each online activity follow this listing. Clicking on an activity title navigates directly to the description.

- [Successful Laboratory Leadership: Taking Action and Getting Results \(3.0 CME/SAM\)](#)
- [Getting Your Message Across: Effective Communication Strategies \(3.5 CME/SAM\)](#)
- [Working Together for Success: Key Strategies for Building Teams \(2.0 CME/SAM\)](#)
- [Making Better Laboratory Services Decisions \(1.5 CME/SAM\)](#)
- [Driving Excellence: Tools and Strategies for Managing Quality \(3.0 CME/SAM\)](#)
- [Improving Patient Outcomes: Managing Risk and Reducing Errors \(2.5 CME/SAM\)](#)
- [Achieving Regulatory and Accreditation Compliance \(2.5 CME/SAM\)](#)

Successful Laboratory Leadership: Taking Action and Getting Results

Credits: 3.0 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 3.0 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Continuing Certification (CC) requirements for Self-Assessment Modules (SAM).

SAM: 15-question SAM

CC Categories: Interpersonal and Communication Skills, Professionalism, Medical Knowledge, Patient Care

This activity focuses on the many leadership roles and responsibilities of the laboratory medical director. Through situational scenarios, you will gain an understanding of how to broaden your sphere of influence for the benefit of patient care and laboratory needs, use change management techniques to support needed improvements, analyze a budget, build a business case, use strategic planning tools to make key decisions, delegate tasks, and avoid legal action related to staff behavior. Methods, tools, and related regulatory requirements are covered.

Activity Objectives

1. Recognize opportunities to become involved in key organizational groups to ensure that laboratory and patient care needs are represented.
2. Use change management principles and techniques to implement laboratory improvements.
3. Use data to analyze the laboratory's budget and create business cases to justify laboratory needs.
4. Interpret laboratory productivity and efficiency measurements.
5. Use strategic planning tools and methodologies to make key decisions.
6. Follow organizational and legal hiring, employment, and performance assessment policies.
7. Describe how to delegate tasks.

[Return to online activity listing.](#)

Core Curriculum, cont.

LMD ADVANCED LEARNING SERIES PREREQUISITE ONLINE ACTIVITIES, cont.

Getting Your Message Across: Effective Communication Strategies

Credits: 3.5 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 3.5 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Continuing Certification (CC) requirements for Self-Assessment Modules (SAM).

SAM: 15-question SAM

CC Categories: Interpersonal and Communication Skills, Medical Knowledge, Patient Care

This activity provides a solid introduction to the basics of interpersonal communication and communicating in a leadership role. It is broken into the following high-level topics: communication basics, speaking, listening, collaborating, and adapting. Best practices for communicating and providing feedback are provided. Techniques for communicating with credibility, building rapport, and dealing with difficult conversations are also discussed. Throughout the activity, many scenarios provide realistic practice for implementing key characteristics of effective communication. Communication models are reviewed, as well as how to apply advocacy and inquiry skills to improve two-way communication.

Activity Objectives

1. Identify the key communication roles played by the Laboratory Medical Director.
2. Listen actively to what others are saying to ensure complete understanding of the situation.
3. Use clear, direct language to establish credibility and state your point of view.
4. Apply communication strategies to effectively collaborate, influence and manage resistance from others.
5. Adapt your communication strategy to the needs of the audience and the situation.

[Return to online activity listing.](#)

Core Curriculum, cont.

LMD ADVANCED LEARNING SERIES PREREQUISITE ONLINE ACTIVITIES, cont.

Working Together for Success: Key Strategies for Building Teams

Credits: 2.0 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 2.0 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Continuing Certification (CC) requirements for Self-Assessment Modules (SAM).

SAM: 10-question SAM

CC Categories: Interpersonal and Communication Skills, Medical Knowledge, Patient Care

A laboratory medical director has many opportunities to participate on teams and to lead teams. This activity provides the basics of team building with a focus on the role of the team leader. Through situational scenarios, you will be placed in the position of a newly hired laboratory medical director to provide advice on teaming challenges. Scenarios include distinguishing groups from teams, identifying team development stages, being an effective team leader, conducting efficient meetings, and using group decision-making techniques.

Activity Objectives

1. Identify how teamwork can be used to effectively achieve results.
2. Describe types of teams.
3. Understand various methods to effectively address interpersonal issues.
4. Understand the basics of good meeting management.

[Return to online activity listing.](#)

Core Curriculum, cont.

LMD ADVANCED LEARNING SERIES PREREQUISITE ONLINE ACTIVITIES, cont.

Making Better Laboratory Services Decisions

Credits: 1.5 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 1.5 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Continuing Certification (CC) requirements for Self-Assessment Modules (SAM).

SAM: Seven-question SAM

CC Categories: Medical Knowledge, Patient Care

In this activity, we work on the premise that the “test” is the fundamental operational unit of the laboratory and that test data provides critical information on how well the lab is performing and consequently on the quality of patient care provided. The careful analysis of this data and your medical knowledge are keys to making decisions about the scope and quality of laboratory services. Through situational scenarios, you will consider several aspects of laboratory services, including reporting results, choosing a reference lab, analyzing test utilization, responding to new test requests, and validating new tests.

Activity Objectives

1. Describe the process for receiving and processing test orders.
2. Identify when to use a reference laboratory and how to select the appropriate laboratory.
3. Discuss how test results are distributed and presented.
4. Interpret utilization trends and variations in test results and provide guidance on how to use the data.
5. Use relevant data to assess the value and appropriateness of new tests or instruments to improve patient care and enhance laboratory services.
6. Review method verification/validation data to determine if test methods meet clinical needs.

[Return to online activity listing.](#)

Core Curriculum, cont.

LMD ADVANCED LEARNING SERIES PREREQUISITE ONLINE ACTIVITIES, cont.

Driving Excellence: Tools and Strategies for Managing Quality

Credits: 3.0 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 3.0 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Continuing Certification (CC) requirements for Self-Assessment Modules (SAM).

SAM: 15-question SAM

CC Categories: Practice-Based Learning and Improvement, Medical Knowledge, Patient Care

Quality doesn't just happen in a laboratory. It depends on everyone's attention to it. This activity is designed to assist the laboratory medical director in the initiation of a quality management program that uses the right monitors and quality improvement tools to track laboratory performance and maintain quality standards through a series of interactive scenarios. The focus of this activity is on the laboratory medical director's role and responsibilities, and it is organized into four short self-study interactive modules. These modules provide an overview of quality management in the medical laboratory including how to build your quality plan around the 12 Quality System Essentials. In addition, you will learn techniques for the identification of errors that may occur during the testing process and suggestions for minimizing these errors.

Activity Objectives

1. Initiate a quality management program that includes use of appropriate monitors and quality improvement tools for tracking performance of both the quality program and individual continuous quality improvement projects.
2. Incorporate the Quality System Essentials (QSE) into a quality plan for the laboratory.
3. Identify key resources and literature to support quality improvement efforts in the laboratory.

[Return to online activity listing.](#)

Core Curriculum, cont.

LMD ADVANCED LEARNING SERIES PREREQUISITE ONLINE ACTIVITIES, cont.

Improving Patient Outcomes: Managing Risk and Reducing Errors

Credits: 2.5 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 2.5 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Continuing Certification (CC) requirements for Self-Assessment Modules (SAM).

SAM: 10-question SAM

CC Categories: Practice-Based Learning and Improvement, Medical Knowledge, Patient Care

This activity focuses on risk and compliance requirements. It provides laboratory medical directors with the information they need to identify risks, monitor the environment, and prevent potential errors in the laboratory. Key elements of compliance and how to adapt a compliance plan in accordance with the Office of Inspector General guidelines are also covered. Throughout the activity, interactive scenarios allow you to apply prospective and retrospective risk management tools.

Activity Objectives

1. Use risk management tools to conduct prospective and retrospective risk assessments and develop risk management strategies.
2. Establish and maintain a laboratory compliance program and compliance plan as specified by the Office of Inspector General.
3. Describe laboratory compliance regulations and their potential risk factors.
4. Describe the laboratory medical director's role in relation to disaster planning.

[Return to online activity listing.](#)

Core Curriculum, cont.

LMD ADVANCED LEARNING SERIES PREREQUISITE ONLINE ACTIVITIES, cont.

Achieving Regulatory and Accreditation Compliance

Credits: 2.5 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 2.5 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Continuing Certification (CC) requirements for Self-Assessment Modules (SAM).

SAM: 10-question SAM

CC Categories: Medical Knowledge, Patient Care

In this day-in-the-life activity, you will help mentor laboratory medical director Dr. Newbie through situational scenarios, as she faces the challenges of her first day on the job. In each situation, you will provide advice on how to proceed based on the Clinical Laboratory Improvement Amendments (CLIA) and the College of American Pathologists (CAP) Standards of Laboratory Accreditation covered. These include requirements for licensure, delegating tasks, proficiency testing, new instrument selection, clinical consultations, and workload requirements. At the end, you will be better prepared to perform (or delegate) the everyday tasks necessary for continuous compliance with federal regulations and accreditation requirements. Directors take a proactive role in monitoring and preventing problems before they occur.

Activity Objectives

1. Describe the impact of regulatory oversight on laboratory testing.
2. List the laboratory medical director responsibilities for ensuring that testing systems provide quality services in all aspects of test performance.
3. Explain the process for obtaining and maintaining a certificate of accreditation.

[Return to online activity listing.](#)

Core Curriculum, cont.

FACULTY-LED WORKSHOP

Length: 1.5 days

Credits: 12.0 CME/SAM, CE 

CME Category 1: The CAP designates this live educational activity for a **maximum of 12.0 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CC Categories: Interpersonal and Communication Skills; Practice-Based Learning and Improvement, Medical Knowledge, Patient Care

The workshop includes opportunities to practice skills and strategies needed by laboratory medical directors and to receive feedback from expert faculty. The following topics are included in the Workshop:

Applying Medical Knowledge – Discuss how to monitor and improve test utilization and review the elements of a business case.

Quality Management – Discuss quality program elements, quality indicators, and what inspectors are looking for in a quality management program.

Occurrence Management – Participate in a fact-finding simulation to resolve a customer issue.

Risk Management – Learn a process for assessing risk and developing risk management strategies for continuous improvement.

Communicating Effectively – Learn key communication strategies to help you communicate laboratory services and promote a team environment.

Compliance Issues – Discuss real-life compliance-related scenarios, their consequences, and how to regain and maintain compliance.

Regulatory and Accreditation – Review accreditation terms and regulations, and discuss common deficiencies and how to respond to them.

Activity Objectives

1. Use laboratory data and your medical knowledge to interpret operational trends and determine their implications.
2. Identify the steps, tools, and monitors required to maintain and improve quality in the laboratory.
3. Apply a risk management process to identify risk factors and develop action plans to minimize the risk.
4. Utilize communication strategies to clearly express ideas, manage resistance, and create an open dialogue.
5. Identify and use team building skills to enable effective and efficient laboratory operations.
6. Identify compliance issues and ways to stay in compliance.
7. Execute the tasks necessary to obtain laboratory accreditation.

Workshop Agenda

Participants should plan on staying for the entire workshop as completion of all CME is a requirement to obtain the Certificate of Completion.

Prior to attending the workshop, participants should complete all seven online activities. The workshop is 1.5 days in length. The agenda is provided below.

Laboratory Medical Direction Workshop Agenda	
DAY 1	
7:00–7:30 AM	Check In and Continental Breakfast
7:30 AM–Noon	Welcome! Faculty and Participant Introductions Module 1: Introduction to LMD Responsibilities Module 2: Applying Medical Knowledge Module 3: Quality Management Module 4: Occurrence Management
Noon–1:00 PM	Group Lunch
1:00–5:00 PM	Module 4: Occurrence Management (cont.) Module 5: Risk Management Module 6: Communicating Effectively Day 1 Closing: Day 2 Agenda and Homework Assignment
5:00–5:30 PM OPTIONAL	Complete Homework Assignment in Classroom
5:30–6:30 PM	Networking Reception

DAY 2	
7:00–7:30 AM	Check In and Continental Breakfast
7:30 AM–Noon	Day 2 Opening Team Development Activity Module 7: Compliance and Break Module 8: Regulatory and Accreditation Workshop Closing and Evaluation
Noon–1:00 PM	Group Lunch
1:00 PM	Depart

Additional Participation Information

ENROLLMENT

- Participants interested in earning the LMD Advanced Practical Pathology Program (AP³) Certificate of Recognition should enroll in the full AP³ program which includes the cognitive and practical assessments. For eligibility requirements, please review the LMD AP³ Program Manual on the CAP Learning site. Pathologists meeting the AP³ eligibility requirements may take the LMD online curriculum as open enrollment and enter the AP³ program at a later date.

PROGRAM COMPLETION

LMD Advanced Learning Series participants need to complete the seven online activities and workshop within one year of the workshop date; otherwise a new application and enrollment fee are required.

NOTIFICATION OF REQUIREMENTS COMPLETION

Upon successful completion of all components of the LMD Advanced Learning Series, the CAP will issue a Certificate of Completion for the program. The participant will receive the certificate four to six weeks after completion.

Program Registration

HOW TO ACCESS THE REGISTRATION FORM

The LMD Advanced Learning Series registration form is located on the **LMD ADVANCED LEARNING SERIES** page accessed from [Learning](#) on www.cap.org. You will need to answer “Yes” to at least one of the eligibility requirements. If you do not meet the eligibility requirements but you are interested in this program, please contact AP3@cap.org.

HOW TO REGISTER

To start the LMD Advanced Learning Series enrollment process, submit your completed LMD Advanced Learning Series registration form along with your payment via email at AP3@cap.org, fax at 847-832-8006, or mail to:

College of American Pathologists
CAP Learning, LMD Advanced Learning Series
325 Waukegan Road
Northfield, IL 60093

Participants selecting LMD AP³ registration will receive priority registration for the LMD Workshop. Registrations will be processed on a first-come, first-served basis.

REGISTRATION FEES

LMD Advanced Learning Series*: CAP Member

Fee includes all online activities and the 1.5-day Workshop. The current fee for the LMD Advanced Learning Series is located on the registration form.

* Fees exclude travel expenses (airfare, lodging, some meals, etc). Sales tax will be assessed if applicable.

ADVANCED LEARNING SERIES PROGRAM COMPLETION

LMD Advanced Learning Series participants need to successfully complete* the seven online activities within one year following completion of the workshop; otherwise, a new registration form and enrollment fee is required.

*Successful completion requires a passing score of 70% or better on each online activity's post-test. There is no post-test for the workshop.

Program Registration, cont.

CANCELLATION POLICY

Please contact the CAP should you decide to cancel your registration in the program. The CAP will refund your registration fee, less a \$100 processing fee, if you cancel prior to beginning the curriculum. After that, the CAP will consider refunds on a case-by-case basis. No refunds will be issued for online activity cancellations received after the coursework is initiated.

Should you need to cancel your workshop registration, please contact the CAP as soon as possible. The CAP will apply your payment to a future LMD Advanced Learning Series workshop, provided you cancel within two weeks prior to the workshop.

The CAP reserves the right to cancel any Advanced Learning Series CME workshop without prior notice for insufficient preregistration or for any other reason. The CAP is not responsible for airline or hotel cancellation penalties or any other losses incurred as a result of cancellation.

WITHDRAWAL AND REFUND POLICY FOR ADVANCED LEARNING SERIES PARTICIPATION

Participants may withdraw from CAP Advanced Learning Series at any time. To withdraw, please submit a written request to the CAP Council on Education.

The CAP will manage participant requests for a program fee refund on a case-by-case basis. You must submit your refund request in writing separately from your request to withdraw from CAP Advanced Learning Series. The CAP will refund your registration fee, less a \$100 processing fee, if the request to withdraw occurs prior to you beginning the CAP Advanced Learning Series curriculum.

QUESTIONS?

Please contact:

College of American Pathologists
CAP Learning, Advanced Learning Series
325 Waukegan Road
Northfield, IL 60093
Tel: 800-323-4040 option 1
Fax: 847-832-8006
Email: AP3@cap.org

Find additional information on this and other Advanced Learning Series programs in **Learning** at www.cap.org.