

LUNG CLINICAL CERTIFICATE



POCUS™

Point-of-Care Ultrasound
Certification Academy



The purpose of the POCUS Certification Academy™ is to honor professionals who aim to **improve** their practice and patient experiences by using POCUS. Through our programs, we uphold this purpose and hope to **inspire** healthcare professionals, educators, organizations, and industry leaders to join us in **building a better future**. Ultimately, the POCUS Certification Academy™ seeks to **empower** healthcare professionals to provide the best possible care.

We believe that the future of ultrasound is portable and mobile, enabling faster care which leads to efficient, effective and better patient experiences.

Are you ready to lead the future?

**JOIN
OUR
COMMUNITY**





WHAT IS POINT-OF-CARE ULTRASOUND (POCUS)?

POCUS refers to the simultaneous acquisition and interpretation of ultrasound images at the patient's point of need by a healthcare professional to immediately inform diagnosis or treatment, or to aid in the completion of procedures.

WHY IS POCUS IMPORTANT FOR YOU?

- Portable, allowing for real-time imaging and on-the-spot interpretation.
- Less expensive than other imaging modalities.
- Highly accurate in experienced hands.
- No use of ionizing radiation.
- Potentially improved patient experience and satisfaction

WHAT MAKES OUR PROGRAMS UNIQUE?

- Non-profit organization that cares about improving global health.
- Self-paced, on demand, and available online anytime to best fit your schedule.
- Based on real clinical scenarios with engaging and modern educational methods.
- Focused on assessment of the core competencies that matter most.
- Community-driven content developed with experts in the field from multiple specialties and backgrounds.
- Credibility guaranteed by strategic collaboration and support from ARDMS® & APCA™.
- Unique access to exclusive resources and communities of practice for program participants.
- Focused on ongoing learning and development.
- Immediate results and recognition when you earn your certificate.
- Digital badges to help promote your accomplishment.
- A percentage of your fee contributes to scholarship funds.



[The POCUS Program] is a good way to assess your knowledge and makes me proud to be a part of this community.”

HOW CAN POCUS BE USED IN LUNG PRACTICE?

Point-of-Care Ultrasound can be used for evaluation of the Lung. Some POCUS-appropriate diagnosis may include:

- Pneumothorax
- Focal Interstitial or Partial Alveolar Syndrome
- Pleural Effusion, Simple
- Consolidation with Dynamic Air Bronchogram
- Pleural Effusion, Complex
- Consolidation without Dynamic Air Bronchogram
- Diffuse Interstitial and/or Partial Alveolar Syndrome Without Pleural Abnormalities or Spared Areas

WHO SHOULD PARTICIPATE?

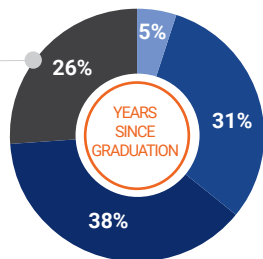
The Lung Clinical Certificate is appropriate for physicians and advanced practice providers (e.g., physician assistants, nurse practitioners) who use POCUS for clinical evaluation. This may include practitioners in the following specialties:

- Critical Care
- Internal Medicine
- Emergency Medicine
- Radiology/General Imaging
- Family Medicine
- Pulmonology

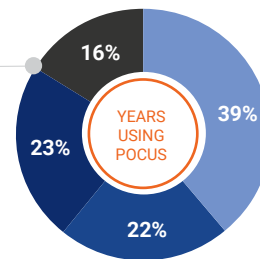
SNAPSHOT OF PARTICIPANTS' PROFILE

AREA OF SPECIALTY

- Cardiology
- Emergency Medicine
- Family Medicine
- Internal Medicine
- Radiology
- Obstetrics & Gynecology
- Anesthesiology
- Critical Care
- Other (Intensivists, Hospitalist, Pediatrics, Orthopedics, Gastroenterology, Neurology, Physical Medicine & Rehabilitation)



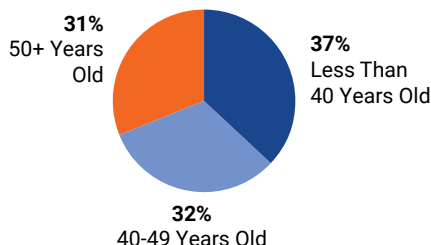
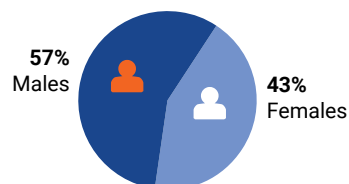
- 5 Years or Less
- 6 to 15 Years
- 16 to 25 Years
- More Than 25 Years



- 5 Years or Less
- 6 to 10 Years
- 11 to 15 Years
- More Than 15 Years



“One of the best online learning/testing modules I have taken part in.”



85%*

WOULD RECOMMEND THE POCUS CERTIFICATION ACADEMY™ TO THEIR COLLEAGUES

*Source: 2019 Intelex Post-Exam Survey; 2019 Intelex CRM cumulative data.

PROGRAM OUTLINE

LEVEL	CORE COMPETENCIES	ASSESSED BY
Fundamental: Foundational Knowledge	<p>Instrumentation</p> <ul style="list-style-type: none"> Describe the appropriate use of gain settings Understand the factors that determine transducer selection Describe the appropriate use of depth settings Describe the conventional image orientations <p>Principles of Ultrasound</p> <ul style="list-style-type: none"> Understand the basic principles & terminology of US physics Describe the variables that affect the echogenicity of tissue and structures Describe the variables that affect ultrasonic signal attenuation Describe the variables that affect ultrasonic signal reflection Understand the effect of different media on sound propagation Describe the fundamental differences between Doppler US and B-mode US <p>Ultrasound Artifacts</p> <ul style="list-style-type: none"> Recognize & understand the cause of common US artifacts <p>Safety and Bioeffects</p> <ul style="list-style-type: none"> Describe precautions used to prevent cross-contamination Describe the potential bioeffects of US 	<ul style="list-style-type: none"> POCUS Fundamentals Examination 35 Multiple Choice Questions Waived for professionals who have passed the Sonography Principles & Instrumentation (SPI) examination within the last 5 (five) years, or who hold specific credentials offered by ARDMS® or APCA™
Clinical: Interpretation/ Diagnostic	<ul style="list-style-type: none"> Familiarity with normal exploration paths Recognition of when patient condition or presentation requires deviations from the normal exploration paths Identification of regions or basic POCUS views described in consensus documents or protocols Ability to recognize and identify various anatomical features in M-mode and 2D images Knowledge of common sonographic artifacts or measurements Ability to identify artifacts that may aid in diagnosis Recognition of sonographic patterns and their implications for diagnosis Knowledge of common pathologies and conditions identified through POCUS Ability to comprehensively consider all case information (POCUS images, patient presentation, labs, etc.) to determine an initial diagnosis 	<ul style="list-style-type: none"> Online Examination 8 screen-based simulated clinical cases Approximately 24 questions in each case
Practical: Image Acquisition	<ul style="list-style-type: none"> Ability to obtain images of diagnostic quality Use and/or understanding of gain Use and/or understanding of depth Transducer placement Use and/or understanding of M-Mode Overall experience in acquisition and interpretation of POCUS images within the chosen clinical area 	<ul style="list-style-type: none"> Peer Evaluations

PROGRAM DETAILS



Eligibility Requirement

The eligibility criteria for a POCUS Certification Academy Lung Clinical Certificate includes:

- Must be a health care professional in good standing and actively practicing in a relevant clinical area;
- Must have demonstrated Fundamental POCUS proficiency (by holding a POCUS Certification Academy Fundamentals Certificate or other specific credentials offered by ARDMS® or APCA™);
- Must have performed and participated in the interpretation of 20 Lung Point-of-Care Ultrasound cases within the last 2 (two) years.



Preparation

In addition to your practice of POCUS, previous participants have used one of the following methods to prepare for the exams:

- Self-directed learning
- Courses
- Workshops
- Residency or Fellowship
- On the job/Hands-on training



Pricing

High value for money:

- \$125 for the POCUS Fundamentals (*Note: waived for professionals who have passed the Sonography Principles & Instrumentation – SPI – examination within the last 5 years, or who hold specific credentials offered by ARDMS® or APCA™.*)
- \$150 for Lung Certificate
- **Special packages and conditions for groups. Scholarships available for those in need. To learn more, write to POCUS@APCA.org**

To apply, go to POCUS.org

For questions, contact POCUS@APCA.org



**A good opportunity
to demonstrate
skills and
knowledge.”**

In addition to over 100 Subject Matter Experts from more than 15 countries, the POCUS Certification Academy™ has an advisory group of subject matter experts who are part of the POCUS Assessment Committee and help build the highest standards for practice of Point-Of-Care Ultrasound. Visit POCUS.org to see full list of participants and their complete bios.

We believe in the power of Point-of-Care Ultrasound (POCUS) to improve global health.



Ernesto Brauer, MD, FACP, FCCP, D, ABSM, graduated from The National University of Mexico City. Trained in Internal Medicine, Pulmonary and Critical Medicine at Mount Sinai Medical Center in Milwaukee, WI. Board-certified in Internal Medicine, Geriatrics, Pulmonary, Critical Care, Sleep and Adult Echocardiography. Associate Professor of Medicine at The University of Wisconsin School of Medicine and Public Health. Dr. Brauer is the Vice Chair of the APCA POCUS Certification Assessment Committee.



Yuriy Bronshteyn, MD, graduated from Vanderbilt University School of Medicine. Board-certified in Anesthesiology, Advanced Perioperative Transesophageal Echocardiography, and Critical Care Medicine. Currently practicing at Duke University Hospital and the Durham Veterans Administration Hospital. Assistant Professor of Medicine at Duke University Medical School and teaches POCUS Ultrasound.



Christopher Davis, PA-C, RT, graduated from A.T. Still University PA program and Weber State University Radiologic Sciences program. Physician Assistant in the Interventional Radiology department at Banner Baywood Medical Center in Mesa, AZ. Adjunct faculty at A.T. Still University Physician Assistant program and guest lecturer at NAU Physician Assistant program.



David L. Dawson, MD, RVT, RPVI, graduated from the University of Southern California and completed his residency in surgery and fellowship in vascular surgery at the University of Washington. Dr. Dawson is a decorated Air Force veteran who worked at NASA as Chief of the Medical Sciences Division at the Johnson Space Center in Houston, TX. After 16 years on the University of California, Davis Department of Surgery faculty, he is now with Baylor Scott & White Health in Central Texas. He is a Fellow of the American College of Surgeons, Society for Vascular Ultrasound, and Society for Vascular Medicine, and a distinguished Fellow of the Society for Vascular Surgery. Dr. Dawson is the Vice Chair of the APCA Council.



James DellaValle, MD, graduated from Drexel University School of Medicine. Board-certified in Emergency and Family Medicine, focusing on those in rural areas and underserved populations. Served as medical advisor and member of the Board of Trustees of Hands Together. Involved in undergraduate and graduate medical education and is an Associate Professor of Emergency Medicine at The Upstate Medical University in Syracuse, NY. Dr. DellaValle is Chair of the APCA POCUS Certification Assessment Committee.



Hong Wang, M.D., Ph.D., FASE, FASA, received her Ph.D. from the Department of Physiology at McGill University in Montreal Canada. Dr. Wang completed her Anesthesiology residency and was Chief Resident at the Henry Ford Hospital in Detroit Michigan in 2000. She is board certified with the American Board of Anesthesiology and Advanced Perioperative TEE. She serves the Department as Professor and Vice Chair of Clinical Operations. She is the director of department's Point-of-Care Ultrasound (POCUS). Dr. Wang is a member of WVU Perioperative Surgical Home (PSH)/Enhanced Recovery after Surgery (ERAS) taskforce.



Brian Shian, MD, FHM, graduated from Southwest Medical University in China and was trained in Orthopedic Surgery at Southwest Medical University Hospital. In the United States he worked in Emergency Medicine, then completed his Family Medicine residency at the University of Iowa Hospitals & Clinics. Board-certified in Family Medicine with a Designation of Focused Practice in Hospital Medicine (DFPHM). Associate Professor at The University of Iowa College of Medicine and a Fellow in Hospital Medicine.



Robert E. Kollpainter, PA-C, FAPACVS, RDMS, CAQ in CVTS has been involved with Point-of-Care-Ultrasound (POCUS) since 2005, receiving credentials as a Diagnostic Medical Sonographer in 2008. Robert is very active in teaching Critical Care POCUS throughout the Physician Assistant profession and is the Education/Co-Course Director for the Aspirus Physician Assistant POCUS Internship Program. Most recently, Robert represented the American Association of Physician Assistant in the revision of the "AIUM Practice Parameter for the Use of Ultrasound to Guide Vascular Access Procedures". Robert has a specific interest in protocols for POCUS evaluations.



Dean Vlahaki, MBBS, RDMS, FRCP, graduated from the University of Queensland Medical School in Brisbane, Australia. Completed Emergency Medicine Residency training and POCUS specialty training at McMaster University in Hamilton, Canada. Assistant Clinical Professor with McMaster University and a major contributor to the Emergency Medicine Point of Care Ultrasound Fellowship program at McMaster University.



R. Eugene Zierler, MD, RPVI, graduated from the Johns Hopkins University. Professor of Surgery in the Division of Vascular Surgery at the University of Washington School of Medicine. Medical Director of the D. E. Strandness, Jr. Vascular Laboratory at the University of Washington Medical Center in Seattle, WA. Research interests focused on the clinical applications of noninvasive diagnostic techniques for vascular disease. Author or Co-author of over 100 journal articles and 50 book chapters. Past-President of the Inter-Societal Commission for the Accreditation of Vascular Laboratories (ICAVL). Served on the Board of Directors of the American Registry for Diagnostic Medical Sonography (ARDMS) and Inteleos.

**EMPOWER
IMPROVE
INSPIRE
VALIDATE
LEAD**

**BETTER CARE.
BETTER FUTURE.**

Our Partner Organizations

The pioneering organizations working with the POCUS Certification Academy™ in setting direction and strategy include:



The American Registry for Diagnostic Medical Sonography® (ARDMS®)
For more than 40 years, ARDMS has set the standard for administering examinations and awarding credentials in areas of ultrasound. ARDMS empowers sonographers to provide exceptional patient care through rigorous assessments and continual learning.



The Alliance for Physician Certification & Advancement™ (APCA™)
Spun out of ARDMS in 2016 to meet the exclusive needs of physicians, APCA is dedicated to continual learning and providing high-quality and compassionate patient care through certification. APCA joins ARDMS in furthering its long-standing mission of raising the global standards of excellence in healthcare and patient safety.