# Ultrasound: Toward Standards of Practice



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No disclosures

### Vision ~ Innovation ~ Leadership

Special thanks to

## Richard Hoppmann, MD

Dean, University of South Carolina School of Medicine

### AIUM



- The association for medical ultrasound
- Multidisciplinary/modality driven
- 8900 members
- Diverse membership:
  - physicians
  - sonographers
  - other clinicians
  - scientists
- Established in 1955

## Demographics



- Physicians 58%
- Sonographers 26%
- Basic Scientists 2%
- Students & Others 14%

## Leadership



- Executive Committee
  - 7 members
  - Physicians, Sonographers, Basic Scientists
- 20 Board of Governors Members
  - Maintain liaison with other societies:
    - American College of Obstetricians and Gynecologists
    - American College of Radiology
    - National Electrical Manufacturers Association
    - Society of Diagnostic Medical Sonography
    - Society for Maternal-Fetal Medicine
    - Society of Radiologists in Ultrasound
    - Society for Vascular Ultrasound

## **Management Services**



AIUM manages two international organizations



VI L

World Federation for Ultrasound in Medicine and Biology

International Society for Therapeutic Ultrasound

### Mission

AIUM - The American Institute of Ultrasound in Medicine is a multidisciplinary association dedicated to advancing the safe and effective use of ultrasound in medicine through professional and public education, research, development of guidelines, and accreditation.

SUSME - The mission of the Society of Ultrasound in Medical Education (SUSME) is to promote the use of ultrasound in medical education through development of educational experiences, research on outcomes, and distribution of results.





#### SUSME:

 Provide a forum for the exchange of information about the use of ultrasound in medical education

#### AIUM:

- Long history of facilitating collaboration via examination guidelines and forums.
  - Ultrasound Practice Forums
    - 2004: Compact Ultrasound
    - 2006: Training/Exam Guidelines and Scope of Practice
    - 2007: Patient Safety and Quality: The Role of Ultrasound
    - 2008: Training/Exam Guidelines and Scope of Practice
    - 2010: Point-of-Care Use of Ultrasound





#### SUSME:

 Facilitate communication and collaboration between educators who are using ultrasound in medical education

#### AIUM:

- Develop collaborative guidelines and statements on the performance of ultrasound examinations
- Facilitate communication and collaboration between specialties utilizing diagnostic medical ultrasound





#### SUSME:

 Develop a database of information about the use of ultrasound in medical school curricula

#### AIUM:

In 2010, developed and distributed Ultrasound Lecture Series:
 Obstetrics and Gynecology, an ultrasound curricula for use in medical schools





#### SUSME:

 Provide links to resources, events, and associations related to ultrasound in medicine

#### AIUM:

 Provide links to resources, events, and associations related to ultrasound in medicine





### Collaboration is key!







### **Ultrasound** is

- Safe
- Economical
- Accessible & Portable
- Quality-Controlled
- An IMAGE GENTLY Alternative

## Where is Ultrasound going?

- Ultrasonography will continue to diffuse across medical specialties.
  - Decreased medical errors
  - More efficient real-time diagnosis
  - Supplement/replace more advanced imaging
  - More widespread, less-expensive screening for defined indications

## AIUM Ultrasound Practice Accreditation

#### Assesses:

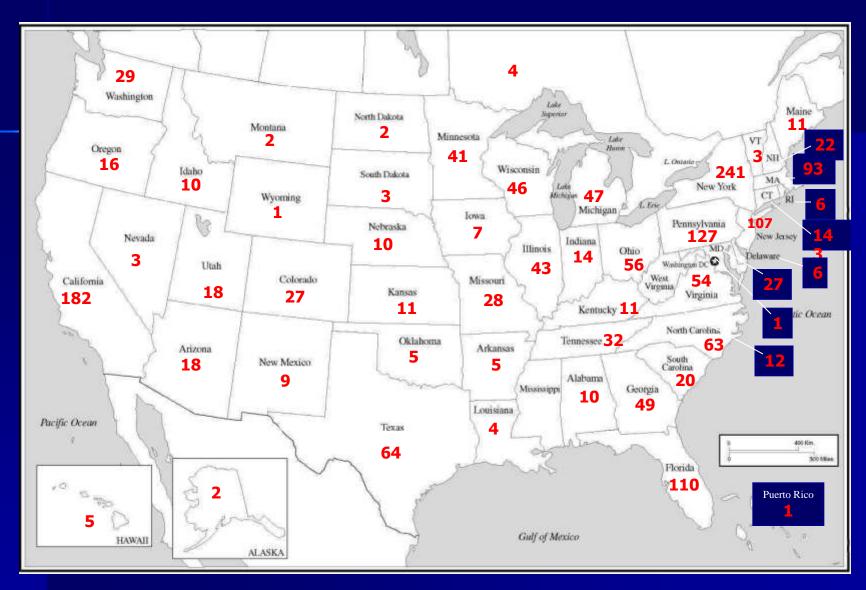
- Personnel qualifications and continuing medical education
- Examination Protocols
- Reporting and Record Retention Policies
- Patient Safety and Quality Assurance Policies
- Equipment Maintenance

Requires the submission of case studies to determine whether ultrasound examinations meet AIUM guidelines

## AIUM Ultrasound Practice Accreditation

#### **Accreditation Specialties:**

- Abdominal/General Ultrasound
- Breast Ultrasound (diagnostic and/or interventional)
- Gynecologic Ultrasound
- Obstetric Ultrasound (complete or trimester-specific)
- Fetal Echocardiography
- Thyroid/Parathyroid Ultrasound
- Musculoskeletal Ultrasound



Number of AIUM-Accredited Sites by State

## **Setting Standards**

- Practice Guidelines for the Performance of Ultrasound Examinations
- Official Statements
- Contributing to Safe and Effective Patient
   Care around the World

## Setting Standards AIUM Official Statements

- AIUM's Role in the Legislative Arena
- Prudent Use
- 3rd Party Accreditation Reporting Packages
- Providing Images to Patients
- Improving Delivery and Quality of Ultrasound Services
- Statement Regarding Naturally Occurring Gas Bodies
- Conclusions Regarding Tissue Models and Equipment Survey
- Reimbursable Obstetrical Ultrasound
- Statement on Mammalian In Vivo Ultrasonic Biological Effects
- In Vitro Biological Effects
- Clinical Safety
- Safety in Training and Research
- Statement on Data Needed to Characterize Ultrasound System Output
- Training Guidelines for Physicians Who Evaluate and Interpret Diagnostic Ultrasound Examinations
- Interpretation of Ultrasound Examinations
- Conclusions Regarding Epidemiology for Obstetric Ultrasound
- Statement on Heat
- Nonoperative Spinal/Paraspinal Ultrasound in Adults
- Limited Obstetrical Ultrasound
- Recommendations for Inclusion on Written Reports

## Setting Standards AIUM Official Statements

- Definition of a Final Report
- Recommendations for Cleaning Transabdominal Transducers
- 3D Technology
- Definition of Physician Supervision for Ultrasound Practice Accreditation Standards
- Bioeffects of Diagnostic Ultrasound with Gas Body Contrast Agents
- Standards and Guidelines for the Accreditation of Ultrasound Practices
- Guidelines for Cleaning and Preparing Endocavitary Ultrasound Transducers Between Patients
- Carotid Screening in the Asymptomatic Patient
- Guidelines for Hands-on Scanning in Pregnant Subjects During AIUM-Sponsored Educational Activities
- Keepsake Fetal Imaging
- Employment of Credentialed Sonographers
- Prudent Use in Obstetrics
- Prudent Use and Clinical Safety
- Statement Regarding Tissue Models
- Safety in Training and Research
- In Vitro Biological Effects
- Policy Regarding Endorsements, Recognition, and Collaboration
- As Low As Reasonably Achievable (ALARA) Principle
- Training Guidelines for the Performance of Musculoskeletal Ultrasound Examinations
- Statement on the Safe Use of Doppler Ultrasound During 11-14 week scans (or earlier in pregnancy)

## Setting Standards AIUM Clinical Practice Guidelines

- 25 Practice Examination Guidelines
- Available for download at www.aium.org
- Collaborative effort with many organizations
- Updated every 5 years



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## We are ultrasound... You are the future.

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## See you in Phoenix



2012 AIUM Annual Convention & Preconvention Program

March 29-April 1, 2012 • JW Marriott Desert Ridge Resort and Spa • Phoenix, AZ

## Harvey L. Nisenbaum, MD

■ Immediate Past President, AIUM

