



2015 USCAP Companion Meeting

Sunday, March 22, 2015 – 8:30am-12:00 noon

Hayes Convention Center – Boston, MA

Diagnosis of Disease in Cardiac and Skeletal Muscle: A Multidisciplinary Approach

| Times | Title | Presenters |
|--------------------|--|---|
| 8:30am-9:15am | <p>From Morphology to Molecular Genetics: Role of the Pathologist in Diagnosis of Muscle Disorders</p> <p><i>Handout (pdf, 11.4mb)</i> </p> | <p>Karen M. Weidenheim, MD Montefiore Medical Center Bronx, New York, USA</p> |
| 9:15am-10:00am | <p>The Role of Muscle Biopsy Pathology in Diagnosing Genetic Myopathies</p> <p><i>Handout (pdf, 12.7kb)</i> </p> | <p>Steven A. Moore, MD, PhD University of Iowa Carver College of Medicine Iowa City, Iowa, USA</p>  |
| 10:00am-10:30am | Coffee Break | <p>Juan Valdez, et al ¡Disfrute de un buen café!</p>  |
| 10:30am-11:15am | <p>Diagnosis of Autophagic Vacuolar Myopathies: The Role of Immunohistochemistry and Electron Microscopy</p> <p><i>Handout (pdf, 10.8mb)</i> </p> | <p>Marta Margeta, MD, PhD UCSF Department of Pathology San Francisco, California, USA</p>  |
| 11:15am-11:45am | Electron Microscopic Correlates of Myocardial Disease | <p>Louis R. DiBernardo, MD Duke University Medical Center Durham, North Carolina, USA</p>  |
| 11:45am-12:00 noon | Electron Microscopic Findings in Skeletal Muscle Biopsies | <p>Anne F. Buckley, MD, PhD Duke University Medical Center Durham, North Carolina, USA</p>  |

Moderators

Anne F. Buckley, MD, PhD

Duke University Medical Center
Durham, North Carolina, USA



David N. Howell, MD, PhD

Duke University Medical Center
Durham, North Carolina, USA



ACCME Statement

- a. The topic for this Companion Meeting was determined by the Executive Committee of the Society for Ultrastructural Pathology..
- b. The diagnosis of skeletal and cardiac muscle disease is becoming increasingly complex in terms of the number of diagnostic approaches available. Whereas in the past diagnosis was largely made using enzyme histochemistry and electron microscopy, now immunohistochemistry, immunofluorescence, and biochemical and molecular analyses are frequent employed in the analysis of muscle tissue. A higher degree of diagnostic specificity is possible when all of these techniques are thoughtfully combined. An update on the most current approaches to skeletal and cardiac myopathies will therefore be of great benefit to practitioners. While muscle diagnostics is increasingly carried out in specialized centers, it is vital that the pathology community remain abreast of changes in the field, to ensure that muscle specimens of which they have charge are optimally handled so that their patients can take advantage of all available diagnostic modalities. This symposium will begin with the practical aspects of muscle biopsies: discussions with clinical colleagues about the differential diagnosis prior to obtaining specimens, and optimal handling and preparation of muscle tissue. Other topics to be discussed include the use of muscle biopsies in combination with genetic analysis, and multiple diagnostic approaches to a variety of conditions in skeletal and cardiac muscle, including EM, which still plays an important role in the diagnosis of muscle disorders.
- c. The target audience for this Companion Meeting includes ultrastructural pathologists, pathologists whose practices include skeletal and/or cardiac muscle pathology, and any general or subspecialty pathologists whose work touches on these areas, either as episodic practitioners or supporting colleagues.
- d. Completion of this educational activity should provide participants with:
 - Practical advice on how to prepare for and optimally process muscle biopsies for all diagnostic approaches
 - An understanding of the role of muscle histology in the molecular era that will inform the handling of muscle specimens
 - Information on multiple approaches to the diagnosis of genetic myopathies
 - An approach to using immunostaining in combination with EM in the diagnosis of vacuolar myopathies
 - An improved understanding of the ultrastructural features of cardiomyopathies
 - An increased ability to interpret ultrastructural findings in skeletal muscle