

100 RSNA[®] 2015

Saturday

SPPH01

AAPM/RSNA Physics Tutorial for Residents: US

Saturday, Nov. 28 12:00PM - 2:00PM Location: E351



AMA PRA Category 1 Credits™: 2.00
ARRT Category A+ Credits: 2.00

Participants

Thaddeus A. Wilson, PhD, Memphis, TN (*Moderator*) Nothing to Disclose

LEARNING OBJECTIVES

1) Provide an overview of MRI/Ultrasound technology, recent advances and trends for the future. 2) Make the session attractive to both the clinician, clinician educator, medical physicist and other associated radiological fields. 3) First session hour will be spent reviewing the concepts of the modality. 4) Second session hour will be spent discussing artifacts of the modality.

Sub-Events

SPPH01A Update in Ultrasound

Participants

Kai E. Thomenius, PhD, Niskayuna, NY (*Presenter*) Stockholder, General Electric Company; Research Consultant, Endra, Inc

LEARNING OBJECTIVES

View learning objectives on main course title.

SPPH01B Primer and Clinical Significance of Artifacts in Ultrasound

Participants

David M. Paushter, MD, Chicago, IL, (dpaushter@uchicago.edu) (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

1) Understand the basic principles of ultrasound imaging and Doppler. 2) Apply these principles to identify the causative factors producing common artifacts in ultrasound. 3) Recognize artifacts encountered in clinical practice. 4) Identify methods to prevent or minimize artifacts in clinical practice.

ABSTRACT

Medical ultrasound including imaging and Doppler requires an understanding of basic principles of sound formation, propagation and display. Artifacts are common in ultrasound, and it is critical to: a) avoid production of artifacts when possible, b) recognize artifacts during imaging and c) control or eliminate artifacts that may interfere with image interpretation. Topics to be covered in this session will focus on equipment malfunction or design, operator error, violation of assumptions and physical principles as causative factors in artifact production. Included will be review and presentation of select examples of artifacts related to ultrasound basic principles, including: Ultrasound imaging Resolution, beam width, refraction, reverberation, comet tail, ringdown, multipath, side and grating lobes, speed error, range ambiguity and mirror image produced in ultrasound imaging. Doppler/Duplex Sonography Gain, scale, Doppler angle, aliasing/range ambiguity, mirroring, wall filter, color assignment, color bleeding, twinkle artifact, tissue vibration and mirroring. ,

URL

Active Handout: David M. Paushter

<http://abstract.rsna.org/uploads/2015/15001982/SPPH01B.pdf>

SPNIO1

NIH SBIR/STTR Programs To Support Innovative Commercial Product Development By Small Businesses and Academic Partners

Saturday, Nov. 28 1:00PM - 5:00PM Location: E350

OT

AMA PRA Category 1 Credits™: 4.00
ARRT Category A+ Credit: 0

Participants

Greg Evans, PhD, Rockville, MD (*Presenter*) Nothing to Disclose

Deepa Narayanan, MS, Rockville, MD (*Presenter*) Nothing to Disclose

Todd Merchak, Bethesda, MD (*Presenter*) Nothing to Disclose

Jennifer Shieh, PhD, Bethesda, MD, (nhlbi_sbir@mail.nih.gov) (*Presenter*) Nothing to Disclose

Chris Sasiela, PhD, Bethesda, MD, (chris.sasiela@nih.gov) (*Presenter*) Nothing to Disclose

Steve Flaim, PhD, Bethesda, MD (*Presenter*) Founder, CardioCreate, Inc; Director, CardioCreate, Inc; Stockholder, CardioCreate, Inc; Director, OncoFluor Inc; Stockholder, OncoFluor Inc; Director, Pivotal BioSciences, Inc; Stockholder, Pivotal BioSciences, Inc; Director, Leading BioSciences Inc; Stockholder, Leading BioSciences Inc; Director, AnaBios Corporation; Stockholder, AnaBios Corporation; Stockholder, InflammaGen, LLC; Stockholder, Verdezyne, Inc; Stockholder, Solulink, Inc; Spouse, Employee, Isis Pharmaceuticals, Inc

Ram Aiyar, PhD, MBA, Bethesda, MD (*Presenter*) Advisor, BeneVir BioPharm; Advisor, Corvidia Corporation

LEARNING OBJECTIVES

1) Gain understanding of the SBIR/STTR programs at NIH and the resources available to translate your technology into the clinic. 2) Learn how to develop a successful SBIR grant application. 3) Understand the importance of a commercialization strategy including regulatory pathway and/or investment and partnerships. 4) Learn more about non-funding resources available at NIH to help commercialize your technology.

Handout:Deepa Narayanan

http://abstract.rsna.org/uploads/2015/15019193/NCI_SBIR_Overview.pdf

Handout:

http://abstract.rsna.org/uploads/2015/15019193/NHLBI-SmallBusiness_Handout_RSNA.pdf

SPSP01

Diagnóstico Precoz por Imagen en la Población el CIR: Sesión del Colegio Interamericano de Radiología (CIR) en Español/Population based Preventive Imaging from CIR: Session of the Interamerican College of Radiology (CIR) in Spanish

Saturday, Nov. 28 1:00PM - 5:00PM Location: E451A



AMA PRA Category 1 Credits™: 3.75
ARRT Category A+ Credits: 4.00

Participants

Pablo R. Ros, MD, PhD, Cleveland, OH (*Moderator*) Medical Advisory Board, Koninklijke Philips NV; Medical Advisory Board, KLAS Enterprises LLC; Medical Advisory Committee, Oakstone Publishing; Departmental Research Grant, Siemens AG; Departmental Research Grant, Koninklijke Philips NV; Departmental Research Grant, Sectra AB; Departmental Research Grant, Toshiba Corporation
Miguel E. Stoopan, MD, Mexico City, Mexico (*Moderator*) Nothing to Disclose

LEARNING OBJECTIVES

1) To review the state-of-the-art of population based preventive imaging 2) To discuss preventive imaging approaches in all major organ systems and key pathologies, ranging from dementia, cardiovascular disease, colon, liver, lung and breast cancer 3) To illustrate the use of different imaging technologies in preventive imaging such as CT, MRI and ultrasound

Sub-Events

SPSP01A Introducción/Introduction

Participants

Dante R. Casale Menier, MD, Ciudad Juarez, Mexico (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPSP01B Parte 1/Part 1

Participants

LEARNING OBJECTIVES

View learning objectives under main course title.

SPSP01C Presentación de Ponentes/Panel Introduction

Participants

Pablo R. Ros, MD, PhD, Cleveland, OH (*Presenter*) Medical Advisory Board, Koninklijke Philips NV; Medical Advisory Board, KLAS Enterprises LLC; Medical Advisory Committee, Oakstone Publishing; Departmental Research Grant, Siemens AG; Departmental Research Grant, Koninklijke Philips NV; Departmental Research Grant, Sectra AB; Departmental Research Grant, Toshiba Corporation

LEARNING OBJECTIVES

View learning objectives under main course title.

SPSP01D Colon: La Colonografía Virtual: ¿Un Método de Escrutinio en la Poblacion?/Colon: Virtual Colonography: A Population Screening Tool?

Participants

Jorge A. Soto, MD, Boston, MA (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

Honored Educators

Presenters or authors on this event have been recognized as RSNA Honored Educators for participating in multiple qualifying educational activities. Honored Educators are invested in furthering the profession of radiology by delivering high-quality educational content in their field of study. Learn how you can become an honored educator by visiting the website at: <https://www.rsna.org/Honored-Educator-Award/>

Jorge A. Soto, MD - 2013 Honored Educator
Jorge A. Soto, MD - 2014 Honored Educator
Jorge A. Soto, MD - 2015 Honored Educator

SPSP01E Cardiovascular: Cribaje de Enfermedad Cardiovascular por Imagen Medica/Cardiovascular: Diagnostic Imaging in Cardiovascular Screening

Participants

Carlos S. Restrepo, MD, San Antonio, TX (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

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Carlos S. Restrepo, MD - 2012 Honored Educator

Carlos S. Restrepo, MD - 2014 Honored Educator

SPSP01F **Neurología: Diagnóstico Temprano de Demencias: ¿Dónde Estamos?/Neurology: Dementia Early Diagnosis: Where Are We?**

Participants

Carlos Zamora, MD, PhD, Chapel Hill, NC (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

Objetivos: 1) Comprender conceptos clínicos básicos para el diagnóstico de los síndromes principales de demencia. 2) Reconocer características anatómicas y metabólicas fundamentales de neuroimagen en los síndromes principales de demencia, con especial atención a enfermedad de Alzheimer. 3) Explorar direcciones futuras y desafíos para el diagnóstico temprano. Learning objectives: 1) Understand basic clinical concepts for the diagnosis of major dementia syndromes. 2) Recognize fundamental anatomic and metabolic neuroimaging features of major dementia syndromes, with special focus on Alzheimer's disease. 3) Explore future directions and challenges for early diagnosis.

SPSP01G **Parte II/Part II**

Participants

LEARNING OBJECTIVES

View learning objectives under main course title.

SPSP01H **Presentación de Ponetes/Panel Introduction**

Participants

Miguel E. Stoopan, MD, Mexico City, Mexico (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPSP01I **Mama: Rol de la RM en el Cáncer de Mama en Mujeres de Alto Riesgo/Breast: Role of MR in High Risk Breast Cancer Patients**

Participants

Linei A. Urban, Curitiba, Brazil (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPSP01J **Pulmón: TC de Cribaje en Cancer de Pulmon: ¿Debe Hacerse en Fumadores y Exfumadores?/Lung: Lung Cancer CT Screening: Should It Be Performed in Smokers and Former Smokers?**

Participants

Claudio S. Silva Fuente-Alba, MD, MSc, Santiago, Chile, (csilvafa@alemana.cl) (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPSP01K **Hígado: Cribaje del Hepatocarcinoma en Pacientes de Riesgo: ¿Cómo Hacerlo y a Quién Incluir?/Liver: Hepatocellular Carcinoma Screening in High Risk Patients: How and Whom?**

Participants

Carmen Ayuso, MD, PhD, Barcelona, Spain, (cayuso@clinic.ub.es) (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

1) Definir la población en riesgo de desarrollar un carcinoma hepatocelular que debe ser incluida en un programa de cribado. 2) Analizar la mejor estrategia para llevar a cabo el cribado del hepatocarcinoma en la población en riesgo de padecerlo. 3) Discutir la conducta a seguir una vez que se detecta un nódulo hepático en pacientes incluidos en un programa de cribado. 1) To define the population at risk of hepatocellular carcinoma to be included in a surveillance program. 2) To analyze the best strategy for

surveillance in patients at risk of hepatocellular carcinoma. 3) To discuss how to proceed when a liver nodule is detected in patients on surveillance

SPSP01L Comentarios Finales y Clausura/Closing Remarks

Participants

Dante R. Casale Menier, MD, Ciudad Juarez, Mexico (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPGW01

NIH Grantsmanship Workshop

Saturday, Nov. 28 1:00PM - 5:00PM Location: E253AB



AMA PRA Category 1 Credits™: 3.75
ARRT Category A+ Credits: 4.00

Participants

Gayle E. Woloschak, PhD, Chicago, IL (*Moderator*) Nothing to Disclose

LEARNING OBJECTIVES

1) Gain greater understanding of the NIH grants process: a. understand the process for preparing a research or training grant application. b. learn the elements of a competitive grant application. 2) Gain insight into the new features of the NIH review process. 3) View the review process in action through a mock study section.

Sub-Events

SPGW01A Welcome and Introductory Remarks

Participants

Gayle E. Woloschak, PhD, Chicago, IL (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPGW01B Preparing an R01 Research Application

Participants

Pratik Mukherjee, MD, PhD, San Francisco, CA (*Presenter*) Research Grant, General Electric Company; Medical Advisory Board, General Electric Company;

LEARNING OBJECTIVES

View learning objectives under main course title.

SPGW01C Preparing K Awards

Participants

Ruth C. Carlos, MD, MS, Ann Arbor, MI (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

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Ruth C. Carlos, MD, MS - 2015 Honored Educator

SPGW01D Clinical Trials in Applications

Participants

Michael W. Vannier, MD, Chicago, IL (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

Active Handout: Michael Walter Vannier

<http://abstract.rsna.org/uploads/2015/15004306/SPGW01D.pdf>

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Michael W. Vannier, MD - 2015 Honored Educator

SPGW01E Program Perspectives

Participants

Antonio Sastre, PhD, Bethesda, MD (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPGW01F The Process of Review

Participants

Gayle E. Woloschak, PhD, Chicago, IL (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPGW01G Questions to the Faculty

Participants

Gayle E. Woloschak, PhD, Chicago, IL (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPGW01H Summary and Evaluation Form

Participants

Gayle E. Woloschak, PhD, Chicago, IL (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

SPPH02

AAPM/RSNA Tutorial on Equipment Selection: MRI

Saturday, Nov. 28 2:15PM - 4:15PM Location: E351



AMA PRA Category 1 Credits™: 2.00
ARRT Category A+ Credits: 2.00

Participants

Thaddeus A. Wilson, PhD, Memphis, TN (*Moderator*) Nothing to Disclose

LEARNING OBJECTIVES

1) Provide an overview of MRI/Ultrasound technology, recent advances and trends for the future. 2) Make the session attractive to both the clinician, clinician educator, medical physicist and other associated radiological fields. 3) First session hour will be spent reviewing the concepts of the modality. 4) Second session hour will be spent discussing artifacts of the modality.

Sub-Events

SPPH02A Update in MRI

Participants

Edward F. Jackson, PhD, Madison, WI, (efjackson@wisc.edu) (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.

Active Handout: Edward F. Jackson

<http://abstract.rsna.org/uploads/2015/15001984/SPPH02A1.pdf>

SPPH02B Primer and Clinical Significance of Artifacts in MRI

Participants

Timothy J. Carroll, PhD, Chicago, IL (*Presenter*) Nothing to Disclose

LEARNING OBJECTIVES

View learning objectives under main course title.