THE INTERNATIONAL SKELETAL SOCIETY (ISS)
MUSCULOSKELETAL IMAGING COURSE:
BASIC PRINCIPLES TO ADVANCED CONCEPTS
SPORTS MEDICINE IMAGING, MUSCULOSKELETAL
DISEASES AND TUMOURS
12 - 15 SEPTEMBER 2012
THE ROME CAVALIERI HOTEL, ITALY
SPECIAL THANKS TO 2012 ISS MUSCULOSKELETAL IMAGING UPDATE COURSE EXHIBITORS

Apriomed, Inc.

GMG srl

Optasia Medical, Inc.
# PROGRAM AT A GLANCE

## DAY 1
**SEPTEMBER 12, 2012**

**SPORTS MEDICINE IMAGING**

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08:00 - 08:20</td>
<td>Introduction</td>
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<tr>
<td>08:20 - 10:00</td>
<td>CONCEPTS AND PRINCIPLES IN MSK RADIOLOGY</td>
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<td></td>
<td>Beltran / Maschiochi</td>
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<tr>
<td>10:00 - 10:30</td>
<td>BREAK</td>
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<td>10:30 - 12:40</td>
<td>SHOULDER</td>
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<td>Faletti &amp; Palmer</td>
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<tr>
<td>12:40 - 14:00</td>
<td>LUNCH</td>
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<tr>
<td>14:00 - 15:55</td>
<td>ELBOW</td>
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<td>Zlatkin &amp; Peh</td>
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<td>15:55 - 16:25</td>
<td>BREAK</td>
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<tr>
<td>16:25 - 18:00</td>
<td>UPPER LIMB RAPID FIRE</td>
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<td>White &amp; Bencardino</td>
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## DAY 2
**SEPTEMBER 13, 2012**

**SPORTS MEDICINE IMAGING**

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<th>Time</th>
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<tr>
<td>08:00 - 09:40</td>
<td>THE PEDIATRIC ATHLETE</td>
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<td>Mahboubi &amp; Abreu</td>
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<tr>
<td>09:40 - 10:10</td>
<td>BREAK</td>
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<tr>
<td>10:10 - 12:10</td>
<td>HAND &amp; WRIST</td>
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<td>Dion &amp; Magee</td>
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<td>12:10 - 13:30</td>
<td>LUNCH</td>
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<tr>
<td>13:30 - 15:30</td>
<td>DIAGNOSTIC &amp; THERAPEUTIC INTERVENTION</td>
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<td>Munk &amp; Kramer</td>
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<td>15:30 - 16:00</td>
<td>BREAK</td>
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<tr>
<td>16:00 - 17:50</td>
<td>FILM INTERPRETATION PANEL</td>
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## DAY 3
**SEPTEMBER 14, 2012**

**SPORTS MEDICINE IMAGING**

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<tr>
<td>08:00 - 09:40</td>
<td>HIP / PELVIS</td>
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<td>Anderson &amp; Crema</td>
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<td>09:40 - 10:10</td>
<td>BREAK</td>
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<td>10:10 - 12:10</td>
<td>KNEE</td>
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<td>12:10 - 13:30</td>
<td>LUNCH</td>
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<td>13:30 - 15:20</td>
<td>ANKLE / FOOT</td>
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<td>Genovese &amp; Gentili</td>
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<td>15:20 - 15:50</td>
<td>BREAK</td>
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<td>15:50 - 17:50</td>
<td>LOWER LIMB RAPID FIRE</td>
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<td>Miller &amp; Klauser</td>
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## DAY 4
**SEPTEMBER 15, 2012**

**COMBINED MORNING SESSION**

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<tr>
<td>08:00 - 09:50</td>
<td>POST - OPERATIVE IMAGING</td>
</tr>
<tr>
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<td>Learch &amp; Bancroft</td>
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<tr>
<td>09:50 - 10:20</td>
<td>BREAK</td>
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<tr>
<td>10:20 - 12:00</td>
<td>SPECIAL FOCUS - TECHNIQUES AND FUTURE DIRECTIONS</td>
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<td>Trattnig &amp; Kijowski</td>
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Welcome to ISS 2012 39th Annual Meeting and Musculoskeletal Imaging Course.

On behalf of the International Skeletal Society we would like to welcome you to the 39th Annual Meeting to be held in the Hotel Rome Cavalieri, Rome on September 12-15. One of the most important global cities, Rome is the most popular tourist attraction in Europe. Its historical center is listed by the UNESCO as a world Heritage Site. Its monuments and museums are amongst the world’s most visited destinations. Rome enjoys a Mediterranean climate through the year and September is considered the best time of the year to visit the city and enjoy its culture and cuisine.

This year the program will cover numerous topics related to Sports Injuries of the musculoskeletal system with a multimodality approach as well as a variety of topics beyond sports injuries, such as tumors, metabolic and endocrine diseases, arthritis, degenerative conditions, and bone marrow imaging. An optional practical hands-on course in Musculoskeletal Ultrasound will be offered. The entire course is given by the most world renowned experts in the fields of orthopedics, musculoskeletal radiology and pathology and it will include special sessions such as “rapid fire” sessions, an always popular Film Reading panel, and special focus sessions such as “The ISS Meets the Rizzoli Institute.”

Thank you for joining us in Rome and hope you enjoy an unforgettable educational and cultural experience!

Javier Beltran, MD
President
The International Skeletal Society

Andrew Grainger, FRCR
Chairman
Scientific Program Committee
About the International Skeletal Society
The International Skeletal Society is an interdisciplinary working group concerned with skeletal disease, its pathogenesis, diagnosis and treatment. The first meeting of the Society was held in 1972, in Washington, DC, during the Annual Meeting of the American Roentgen Ray Society. The newly formed society, with approximately 50 founding members, met for the first time in 1974. The new organization was enthusiastically received by the skeletal community and membership has grown steadily.

KEY INFORMATION
Members’ Meeting: September 10 - 11, 2012
Special Scientific Session: September 11, 2012
Ultrasound Hands-On Course: September 11, 2012
Musculoskeletal Imaging Update Course: September 12 - 15, 2012

Program Director: Andrew J. Grainger
Co-Chairs Radiology: Carlo Martinoli, William Morrison, Giuseppe Guglielmi
Co-Chair Pathology: Thomas Bauer
Chairpersons Special Scientific Sessions: Daniel Vanel, Siegfried Trattnig
Chairperson Ultrasound Course: Jon Jacobson
Chairperson Electronic Exhibits: Theodore Miller
Chairperson Scientific Session: Jenny Bencardino

Refresher Course Program Committee Members
Jenny Bencardino
Theodore Miller
Kate Stevens
Laura Bancroft
Lawrence White
Jon Jacobson

Local Advisors
Giuseppe Guglielmi
Antonio Leone
Carlo Maschiocchi
Carlo Martinoli

Society Officers 2011 - 2012
President: Javier Beltran
President-Elect: A. Mark Davies
Secretary: Lynne S. Steinbach
Treasurer: William E. Palmer
Immediate Past President: Klaus Bohndorf
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<th>Peh, Wilfred C.G.</th>
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The International Skeletal Society  
Needs, Objectives and Accreditation Statements

Annual Musculoskeletal Imaging Course  
Needs

The need for this year’s ISS Musculoskeletal Imaging Course has been established from a review of written meeting evaluation surveys from individual attendees from prior meetings, personal interviews of the Executive and Program Committees, discussions with meeting attendees and Society members and detailed discussions with the Program Committee membership.

As a result, this year’s program will focus on providing sessions to meet these identified needs. One course track will address sports injuries concentrating on advanced imaging techniques, in particular on MR and ultrasound imaging, both techniques which have revolutionized the evaluation and management of sport related injuries. This is a complicated and challenging field for general as well as subspecialty radiologists, pathologists, and clinicians involved in the evaluation and treatment of musculoskeletal disease. Individual sessions have been coordinated around themes of Concepts and Principles in MSK Radiology, Shoulder, Elbow, Hand and Wrist, the Pediatric Athletes, Diagnostic and Therapeutic Intervention in the Athlete, the Hip and Pelvis, the Knee and the Ankle and Foot. In addition, after discussion with previous delegates and success at our last meeting, two sessions of multiple short lectures focusing on specific aspects of upper limb and lower limb sports injuries will be included. The second course track will focus on other musculoskeletal diseases including arthritis, metabolic bone disease, trauma and tumors. Here sessions will focus on Primary Bone Lesions for the General Radiologist, Soft Tissue Tumors, Neoplastic Bone Lesions: Assessment and Workup, Metabolic and Endocrine Disease, Osseous Trauma, Tumor Biopsy and Treatment, Arthritis, Spinal Imaging, Imaging Bone Marrow and Post-Operative Musculoskeletal Imaging.

Each of the sessions in the parallel programs are focused to increase the understanding of common as well as challenging, poorly understood conditions of musculoskeletal disease, health, evaluation and treatment. Such sessions were coordinated to provide a better understanding of optimal evaluation of MSK disease/conditions that can lead to earlier diagnosis and better patient outcomes. Additionally, a case/film interpretation session will present challenging clinical cases to provide a forum to discuss difficult cases and combine expert approaches to improve the learning experience, and overall understanding and evaluation of the MSK system.

Objectives

At the conclusion of the 2012 ISS Musculoskeletal Imaging Course, attendees should be able to:

1. Apply real life situations to clinical practice
2. Integrate knowledge and performance in the assessment and diagnosis of musculoskeletal sports injury, tumors, trauma and degenerative disease
3. Identify the anatomy of normal MSK tissues, variants and mimicker of disease
4. Identify morphologic, histologic and imaging characteristics of MSK disease
5. Describe the specific pathology that accounts for the appearance of osseous and soft tissues in the setting of trauma, overuse, metabolic, inflammatory/autoimmune and neoplastic conditions on various imaging modalities
6. Recognize the relationship of specific biomechanical activities, injuries and treatments to the appearance of joints, bone, and soft tissues on imaging, arthroscopic, and pathologic assessment
7. Review the optimal role of imaging, surgery and histopathology in the diagnosis and management of musculoskeletal disease and health
8. Identify the complementary role of emerging imaging techniques, modalities, and interventional/therapeutic procedures in the diagnosis and management of specific musculoskeletal conditions
9. Illustrate competency in Ultrasound, MRI, and therapeutic approaches in the assessment and management of the musculoskeletal system

Members’ Meeting
Needs
The ISS members’ meeting session will address unusual case presentations for radiologists, pathologists and clinicians. The presentations will detail how the diagnosis was established and how it can be applied to other cases. Case presentation learning raises the level of critical thinking skills, enhances listening skills and helps connect theory and practice. Case-based learning also provides opportunities for richer, deeper exploration of concepts and ideas.

Objective
At the conclusion of the 2012 ISS Member’s Meeting, attendees should be able to:
1. Evaluate unusual case presentations, establish a diagnosis and apply the concepts to other cases

Ultrasound Course
Needs
The need for the hands-on ultrasound workshop and lectures has been established from discussions with the ISS Program committee, the feedback from past ISS hands-on workshops, as well as participant participation in other similar hands-on ultrasound workshops across the world. As a result, this year’s ultrasound workshop will focus education on the topic of foot and ankle ultrasound.

Objectives
At the conclusion of the 2012 ISS Ultrasound Course, attendees should be able to:
1. Explain ankle and foot anatomy
2. Recognize common ankle and foot pathology as seen at ultrasound
3. Illustrate several components of an ankle and foot ultrasound examination
Accreditation Statement
This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the University of Oklahoma College of Medicine and the International Skeletal Society. The University of Oklahoma College of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

The University of Oklahoma College of Medicine designates this live activity for a maximum of 52.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Conflict Resolution Statement
The University of Oklahoma College Of Medicine, Office of Continuing Professional Development has reviewed this activity’s speaker and planner disclosures and resolved all identified conflicts of interest, if applicable.

Equal Opportunity Statement
The University of Oklahoma is an equal opportunity institution.

Programs Included in Maximum CME
The following programs are included in the maximum AMA PRA Category 1 Credits™ for the entire meeting: the Members’ Meeting (12.50), the Breakout Scientific Poster Session (.75), the Special Scientific Session (3.25), the Ultrasound Course (5.00), the Pathologists/Radiologists Review of Cases (12.50) and the annual Musculoskeletal Imaging Course, “2012 Musculoskeletal Imaging: Basic Principles to Advanced Concepts” (25.75). Portions of the Tuesday sessions are concurrent; therefore, it is not possible to obtain full credit for all programs listed.

Recognition by the AMA and EACCME
All CME activities approved by the American Medical Association (AMA) are recognized by the European counterpart, the EACCME. Vice-versa all CME activities approved by the EACCME are valid for recognition by the American Medical Association (AMA) towards the Physician’s Recognition Award (PRA).

Italian CME Accreditation
CME Italian Provider Secretariat: METHOD Incoming Meetings and Congresses
Contact of local co-organizer:
Silvana Arcidiacono
METHOD Incoming Meetings and Congresses
Via Pietro Cossa 54
00193 Rome, Italy
Phone: +39 063202902 - +39 063611897
Fax: +39 063225198
Email: methodco@tin.it
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Special Assistance
We encourage participation by all individuals. If you have a disability, advance notification of any special needs will help us better serve you. Call (847) 517-7225 if you require special assistance to fully participate in the meeting.
MUSCULOSKELETAL IMAGING COURSE

COMBINED SESSION

DAY 1, WEDNESDAY, September 12, 2012

08:00 - 10:00 Inauguration Session: Concepts and Principles in MSK Radiology
Location: Salone dei Cavalieri Section 4

08:00 - 08:20 Introduction
Moderators: Javier Beltran / Carlo Maschiochi

08:20 - 08:40 The Pathological Response of MSK Supporting Structures to Chronic Injury
Fiona Bonar

08:40 - 09:00 Imaging Muscle Injury
Robert Boutin

09:00 - 09:20 Chondral and Osteochondral Injuries; Anatomy, Biomechanics and Injury Patterns
Don Resnick

09:20 - 09:40 Imaging Nerve Injury
Carlo Martinoli

09:40 - 10:00 MSK Disease: Unified Concepts
William B. Morrison

10:00 - 10:30 BREAK
WELCOME MESSAGE

A - SPORTS MEDICINE IMAGING

Location: Salone dei Cavalieri Section 4

DAY 1, WEDNESDAY, September 12, 2012

Shoulder

Moderators Carlo Faletti / William E. Palmer

10:30 - 10:35  5 Min Case Presentation  Antonio Barile
10:35 - 11:00  Imaging The Rotator Cuff: Techniques and Findings  Jon Jacobson
11:00 - 11:25  Shoulder Impingement: Concepts and Imaging  William E. Palmer
12:10 - 12:30  Percutaneous Therapy in the Shoulder  Andrew J. Grainger
12:30 - 12:40  10 Min Case Discussion  Antonio Barile

12:40 - 14:00 Lunch

Elbow

Moderators Michael B. Zlatkin / Wilfred Peh

14:00 - 14:05  5 Min Case Presentation  Michael B. Zlatkin
14:05 - 14:25  Elbow Ligament Injuries  Lynne S. Steinbach
14:25 - 14:45  Imaging the Common Flexor and Extensor Tendons  Eugene McNally
14:45 - 15:05  Biceps Anatomy and Pathology  Kathryn Stevens
15:25 - 15:45  Cartilage Lesions, Bodies and Impingement  Russell C. Fritz
15:45 - 15:55  10 Min Case Discussion  Michael B. Zlatkin

15:55 - 16:25 Break

Upper Limb Rapid Fire

Moderators Lawrence White / Jenny T. Bencardino

16:25 - 16:30  Introduction  Lawrence White
16:30 - 16:40  Imaging the Shoulder: What Position Is Best?  Jenny T. Bencardino
16:40 - 16:50  Diagnosing the Frozen Shoulder  Carolyn M. Sofka
16:50 - 17:00  The Elbow: When Does Ultrasound Help?  Karen Finlay
17:00 - 17:10  Triceps Injuries and the Olecranon Bursa  Joseph Craig
17:10 - 17:20  Extensor Carpi Ulnaris Instability  Philip J. O’Connor
17:20 - 17:30  Pectoralis Major Tears: What the Radiologist Needs to Know  Eugene McNally
17:30 - 17:40  Imaging the Shoulder: Do I Need Contrast?  Russell C. Fritz
17:40 - 17:50  The Acromioclavicular Joint in the Athlete  Wilfred C.G. Peh
Primary Bone Lesions For The General Radiologist  10:30 - 12:40

Moderators  A. Mark Davies & Nogah Shabshin

10:30 - 10:35  5 Min Case Presentation  Nogah Shabshin
10:35 - 10:55  How to Spot the “Don’t Touch Lesion”  A. Mark Davies
10:55 - 11:15  Cystic Lesions in Bone: Diagnosis and Management  Nogah Haramati
11:55 - 12:10  Biopsy Material: What the Pathologist Does, and Doesn’t Want to See  John Reith
12:10 - 12:30  Myeloma: Its Many Faces  Michael E. Mulligan
12:30 - 12:40  10 Min Case Discussion  Nogah Shabshin

12:40 - 14:00  Lunch

Soft Tissue Tumors Rapid Fire  14:00 - 15:55

Moderators  Murali Sundaram / Ian Beggs

14:00 - 14:05  Introduction  Ian Beggs
14:05 - 14:15  Ultrasound of the Soft Tissue Mass: Do We Need Any Further Imaging?  Armanda De Marchi
14:15 - 14:25  MRI of the Soft Tissue Mass: How Specific Can We Be?  Murali Sundaram
14:25 - 14:35  Imaging the Soft Tissue Mass: What the Surgeon Needs to Know  Bruno Fuchs
14:45 - 14:55  Non-Neoplastic Causes of Soft Tissue Lumps  James Teh
14:55 - 15:05  Following Up the Soft Tissue Tumour: Recurrent Disease Versus Other  Laura Fayad
15:45 - 15:55  Lumps on Nerves: Ultrasound Features  Ian Beggs

15:55 - 16:25  Break

Neoplastic Bone Lesions: Assessment And Work-Up  16:25 - 18:00

Moderators  Suphaneewan Jaovisidha / Mark D. Murphey

16:25 - 16:30  5 Min Case Presentation  Suphaneewan Jaovisidha
16:30 - 16:50  Bone Metastases: How I Detect and Diagnose  Mark D. Murphey
16:50 - 17:10  The Challenge of Assessing Therapeutic Response: The Pathologist’s View  John Reith
17:10 - 17:30  The Challenge of Assessing Therapeutic Response: The Radiologist’s View  Johan L. Bloem
17:30 - 17:50  Imaging the Post-Operative Patient: A Structured Approach  David M. Panicek
17:50 - 18:00  10 Min Case Discussion  Suphaneewan Jaovisidha
A - SPORTS MEDICINE IMAGING

Location: Salone dei Cavalieri Section 4

Day 2, Thursday, September 13, 2012

The Pediatric Athlete

Moderators Soroosh Mahboubi / Marcelo Rodrigues De Abreu

08:00 - 08:05  5 Min Case Presentation
Soroosh Mahboubi

08:05 - 08:30  Physeal Injuries
Jerry Dwek

08:30 - 08:50  Non-Physeal Pediatric Sports Injuries
E. Michel Azouz

08:50 - 09:10  10 Things You Should Know About the Adolescent Spine
Robert S.D. Campbell

09:10 - 09:30  Normal Variants Which Can Stimulate Disease
Paul K. Kleinman

09:40 - 10:10  Break

Hand & Wrist

Moderators Elisabeth Dion & Thomas Magee

10:10 - 10:15  5 Min Case Presentation
Elisabeth Dion

10:15 - 10:40  Carpal Instability and the Intrinsic Ligaments of the Wrist
Philip J. O’Connor

10:40 - 11:00  The TFCC: Unravelling Its Complexities
Maryam Shahabpour

11:00 - 11:20  Dead Bone and How to Spot It: AVN of the Scaphoid and Lunate
Nancy Major

11:20 - 11:40  Nerves in Tunnels About the Wrist
William R. Reinus

11:40 - 12:00  Fingers: So Small, What Could Go Wrong?
Mihra S. Taljanovic

12:00 - 12:10  10 Min Case Discussion
Elisabeth Dion

12:10 - 13:30  Lunch

Diagnostic & Therapeutic Intervention

Moderators Peter Munk / Josef Kramer

13:30 - 13:35  5 Min Case Presentation
Peter Munk

Josef Kramer

13:50 - 14:05  Arthrography Tips and Tricks: The Wrist
Simon Ostliere

14:05 - 14:20  Arthrography Tips and Tricks: The Hip
Jeffrey J. Peterson

14:20 - 14:40  Epidural and Facet Injections: The Basics
Jean-Denis Laredo

14:40 - 15:00  Vertebroplasty and Kyphoplasty: What the Literature Says, Should We Do It?
David J. Wilson

15:00 - 15:20  In and Around the Tendon: What Are We Putting in and Does It Work?
Hugue Ouellette

15:20 - 15:30  10 Min Case Discussion
Peter L. Munk

15:30 - 15:50  Break

Film Interpretation Panel - Battle of the Giants

Quizmaster: Victor Cassar - Pullicino
Team Leaders: Don Resnick & Jeremy Kaye

15:50 - 17:50
Special Focus Session - ISS Meets The Rizzoli Institute

08:00 - 08:20 Musculoskeletal Tumors: Resources and Archives
Piero Picci

08:20 - 08:40 Musculoskeletal Tumors: From Imaging to Treatment
Daniel Vanel

08:40 - 09:00 Beyond Morphology: Molecular Approach to the Diagnosis of Musculoskeletal Tumors
Marco Alberghini & Frederique Larousserie

09:00 - 09:20 Chondrosarcoma: Diagnostic and Surgical Aspects and Beyond
Pietro Ruggieri

09:20 - 09:40 Regenerative Medicine: Repair in Femoral Head Osteonecrosis, Magnetic Resonance Imaging and Histology
Davide Donati

09:40 - 10:10 Break

Metabolic & Endocrine

10:10 - 10:15 5 Min Case Presentation
Giuseppe Guglielmi

10:15 - 10:35 Identifying Vertebral Fractures: What the Radiologists Need to Know
Harry K. Genant

10:35 - 10:55 Bisphosphonates: Friend or Foe? Vigilance and Perspective
Judith Adams

10:55 - 11:10 Bone Densitometry: The Essentials
Leon Lenchick

11:10 - 11:25 Oncogenic Osteomalacia: Causes and Consequences
Frieda Feldman

11:25 - 11:40 Vertebroplasty & Kyphoplasty: How I Do It?
Francisco Aparisi-Rodriguez

11:40 - 12:00 High Resolution Imaging Techniques
Thomas M. Link

12:00 - 12:10 10 Min Case Discussion
Giuseppe Guglielmi

12:10 - 13:30 Lunch

Trauma - The Radiograph Revisited

13:30 - 13:55 The Hand & Wrist
Lee Rogers

13:55 - 14:15 The Pediatric Elbow
Alan Oestreich

14:15 - 14:40 The Shoulder
Murray Dalinka

14:40 - 15:05 The Pelvis & Acetabulum: Has CT Made the Radiograph Redundant?
Jeremy J. Kaye

15:05 - 15:30 The Foot and Ankle
Richard Whitehouse

15:30 - 15:50 Break
A - SPORTS MEDICINE IMAGING

Location: Salone dei Cavalieri Section 4

DAY 3, FRIDAY, September 14, 2012

Hip / Pelvis

08:00 - 08:05  5 Min Case Presentation  Suzanne Anderson
08:05 - 08:25  Groin Pain in the Athlete  Philip Robinson
08:25 - 08:45  Diagnosing the Labral Tear and the Pitfalls!  Donna G. Blankenbaker
08:45 - 09:10  Getting to Grips with FAI  Christian W. Pfirrmann
09:10 - 09:30  MR of the Hip: Beyond Impingement and Internal Derangement  Mark E. Schweitzer
09:30 - 09:40  10 Min Case Discussion  Suzanne Anderson

Knee

10:10 - 10:15  5 Min Case Presentation  Remide Arkun
10:15 - 10:35  Cruciate Anatomy and Injury  Lawrence White
10:35 - 10:50  Meniscal Traps for the Unwary  Thomas L. Pope Jr.
10:50 - 11:05  The Meniscal Root and Meniscocapsular Separation  Mark Anderson
11:05 - 11:25  Collateral Stabilisers and the PLC  Klaus Bohndorf
11:25 - 11:40  Overuse Injuries at the Knee  Andreas Heuck
11:40 - 12:00  Cartilage Injury at the Knee  Carl S. Winalska
12:00 - 12:10  10 Min Case Discussion  Remide Arkun

Ankle / Foot

13:30 - 13:50  Ankle Impingement  Jeremiah C. Healy
13:50 - 14:10  Ankle Ligament Injury and Healing  Bruce B. Forster
14:10 - 14:30  Plantar Tendons of the Ankle & Foot  Zehava S. Rosenberg
14:30 - 14:50  Tendon Pathology at the Ankle: Achilles and Peroneals  James F. Griffiths

Lower Limb Rapid Fire

15:50 - 15:55  Introduction  Theodore T. Miller
15:55 - 16:05  Snapping Syndromes at the Hip  David P. Fessell
16:05 - 16:15  Injuries to the Ligamentum Teres  Jean Schils
16:15 - 16:25  Iliotibial Band Friction Syndrome  Xavier Demondion
16:35 - 16:45  Muscle Herniation  Ian Beggs
16:45 - 16:55  Synovial Plica at the Knee and Hip  Donna G. Blankenbaker
16:55 - 17:05  Cysts About the Knee  Leanne L. Seeger
17:05 - 17:15  Return to Play: How Do I Get The Right Answer?  Nancy Major
17:15 - 17:25  Nerve Entrapments at The Foot & Ankle  Andrea Klauser
17:25 - 17:35  Imaging of Tibialis Posterior  Monique Reijnierse
17:35 - 17:45  Pathology of Tibialis Anterior  Robert R. Lopez-Ben
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00</td>
<td>Tumor Biopsy &amp; Treatment</td>
<td>moderators: Harry Griffiths, Marnix Van Holsbeek</td>
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<tr>
<td>08:00-08:20</td>
<td>Percutaneous Biopsy: Technical Considerations</td>
<td>K. Gunnar Anstrom</td>
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<td>08:20-08:40</td>
<td>Anatomic Approaches for Percutaneous Biopsy: What-to-Do and What-to-Avoid</td>
<td>Peter Munk</td>
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<tr>
<td>08:40-09:00</td>
<td>Latest Techniques and Tips in Ultrasound Guided Biopsy</td>
<td>Marnix Van Holsbeek</td>
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<td>09:00-09:20</td>
<td>Percutaneous Intervention Using MR Guidance</td>
<td>John A. Carrino</td>
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<td>09:20-09:40</td>
<td>Ablation Techniques: Hot and Cold</td>
<td>Daniel Rosenthal</td>
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<td>09:40-10:10</td>
<td>Break</td>
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<tr>
<td>10:10-10:30</td>
<td>Arthritis</td>
<td>moderators: Anne Cotten, Ali Guermazi</td>
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<td>10:10-10:30</td>
<td>Bone Erosions in the Hand: Pattern Recognition</td>
<td>Marcello Zappia</td>
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<td>10:30-10:50</td>
<td>Marrow Lesions in Rheumatoid Arthritis: What Do They Mean?</td>
<td>Frank Roemer</td>
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<td>10:50-11:10</td>
<td>Crystals in the Joint: What They Mean and What They Look Like?</td>
<td>Anne Cotten</td>
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<td>11:10-11:30</td>
<td>Early Ultrasound Diagnosis and Monitoring of Arthritis: How I Do It</td>
<td>Ron Adler</td>
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<tr>
<td>11:30-11:50</td>
<td>Early MRI Diagnosis and Monitoring of Arthritis: How I Do It?</td>
<td>Robert G.W. Lambert</td>
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<td>11:50-12:10</td>
<td>Osteoarthritis: From Radiograph to MRI</td>
<td>Ali Guermazi</td>
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<td>12:10-13:30</td>
<td>Lunch</td>
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<tr>
<td>13:35-13:55</td>
<td>5 Min Case Presentation</td>
<td>Claudia Regina de Oliveira</td>
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<td>13:55-14:15</td>
<td>Spinal Infections</td>
<td>Victor Cassar-Pullicino</td>
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<td>14:15-14:35</td>
<td>Thoracic and Lumbar Spinal Trauma</td>
<td>George El-Khoury</td>
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<td>14:35-14:55</td>
<td>Primary Tumours of the Spine</td>
<td>Filip Vanhoenacker</td>
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<td>14:55-15:10</td>
<td>The Axial Skeleton in Spondyloarthritis: Diagnosis and Complications</td>
<td>Vladimir Jevtic</td>
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<td>15:10-15:20</td>
<td>Perils and Pitfalls of Reporting Disk Degeneration and Nerve Impingement</td>
<td>Prudencia Tyrell</td>
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<td>15:20-15:50</td>
<td>10 Min Case Discussion</td>
<td>Claudia Regina de Oliveira</td>
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<tr>
<td>15:50-15:55</td>
<td>Imaging Bone Marrow</td>
<td>moderators: George Hermann, Hakan Ilaslan</td>
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<td>15:55-16:10</td>
<td>Imaging Techniques for Bone Marrow</td>
<td>Sandra L. Moore</td>
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<td>16:10-16:30</td>
<td>Marrow Edema, What’s the Differential?</td>
<td>Miriam A. Bredella</td>
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<td>16:30-16:50</td>
<td>Post Treatment Marrow Abnormalities: Tumor or Not?</td>
<td>Frederic LeCouvet</td>
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<td>16:50-17:05</td>
<td>T1 Imaging of Bone Marrow: When the Marrow Goes Dark</td>
<td>Georgina Allen</td>
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<td>17:05-17:25</td>
<td>MRI of Stress and Insufficiency Fractures</td>
<td>Mini N. Pathria</td>
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<td>17:25-17:40</td>
<td>Marrow Edema in the Diabetic Foot: Is It Infection?</td>
<td>Mario Maas</td>
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<td>17:40-17:50</td>
<td>10 Min Case Discussion</td>
<td>Hakan Ilaslan</td>
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MUSCULOSKELETAL IMAGING COURSE

Location: Salone dei Cavalieri Section 4

COMBINED SESSION

Day 4, Saturday, September 15, 2012

**Post - Operative Imaging**

Moderators: Thomas Learch / Laura W. Bancroft

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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
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<tr>
<td>08:00 - 08:20</td>
<td>Basics of Orthopaedic Hardware: What the Radiologist Should Know</td>
<td>Michael J. Tuite</td>
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<tr>
<td>08:20 - 08:40</td>
<td>Advanced Imaging of Arthroplasty</td>
<td>Andoni Toms</td>
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<tr>
<td>08:40 - 09:00</td>
<td>Surgical Complications; Iatrogenesis Imperfecta Profunda</td>
<td>Laura W. Bancroft</td>
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<td>09:00 - 09:20</td>
<td>Pathological Manifestations of Hardware Failure</td>
<td>Thomas Bauer</td>
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<td>09:20 - 09:35</td>
<td>Imaging the Postoperative Shoulder</td>
<td>Ara Kassarjian</td>
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<tr>
<td>09:35 - 09:50</td>
<td>Imaging the Postoperative Knee</td>
<td>Klaus Muhle</td>
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<td><strong>09:50 - 10:20</strong></td>
<td><strong>Break</strong></td>
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**Special Focus - Techniques And Future Directions**

Moderators: Siegfried Trattnig / Richard Kijowski

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<tr>
<th>Time</th>
<th>Topic</th>
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<tbody>
<tr>
<td>10:20 - 10:40</td>
<td>CT Advances and Optimisation for the MSK System</td>
<td>Kenneth A. Buckwalter</td>
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<td>10:40 - 10:55</td>
<td>Dedicated Extremity Coned Beam CT</td>
<td>Kimmo Mattila</td>
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<td>10:55 - 11:15</td>
<td>Diffusion Weighted Imaging</td>
<td>Christian Glaser</td>
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<td>11:15 - 11:30</td>
<td>Optimising MRI for Imaging Near Metal</td>
<td>Andrea Giovagnoni</td>
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<td>11:30 - 11:50</td>
<td>Sodium Imaging</td>
<td>Siegfried Trattnig</td>
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**Closing Remarks**

11:50 - 12:00
**EVENING EVENTS**

**WEDNESDAY, SEPTEMBER 12, 2012**

Welcome Reception (ALL REGISTERED ATTENDEES WELCOME)

**Time:** 19:00 – 20:00  
**Location:** Tiepolo Terrace - Rome Cavelieri (outdoor venue)  
**Attire:** Smart Casual

**FRIDAY, SEPTEMBER 14, 2011**

Gala Dinner (TICKET REQUIRED)

**Time:** 20:00 - 24:00  
**Location:** Room Bell Arti - Rome Cavalieri  
**Cost:** 80 € per person  
**Attire:** Cocktail Attire
INFORMATION ON CONFERENCE VENUE

REGISTRATION/INFORMATION DESK HOURS
Location: Garden Lobby

Sunday, September 9, 2012: 09:00 – 18:00
Monday, September 10, 2012: 07:30 – 18:00
Tuesday, September 11, 2012: 07:30 – 18:00
Wednesday, September 12, 2012: 07:30 – 18:00
Thursday, September 13, 2012: 07:30 – 18:00
Friday, September 14, 2012: 07:30 – 18:00
Saturday, September 15, 2012: 07:30 – 12:30

SPEAKERS PREVIEW ROOM HOURS
Location: Pisa

Sunday, September 9, 2012: 10:00 – 17:00
Monday, September 10, 2012: 07:30 – 17:00
Tuesday, September 11, 2012: 07:30 – 17:00
Wednesday, September 12, 2012: 07:30 – 17:00
Thursday, September 13, 2012: 07:30 – 17:00
Friday, September 14, 2012: 07:30 – 17:00

EXHIBIT HALL/ePOSTERS HOURS
Location: Foyer Salone dei Cavalieri

Monday, September 10, 2012: 08:00 – 18:00
Tuesday, September 11, 2012: 08:00 – 18:00
Wednesday, September 12, 2012: 08:00 – 18:00
Thursday, September 13, 2012: 08:00 – 18:00
Friday, September 14, 2012: 08:00 – 18:00

LANGUAGE
The official language of the ISS is English. English to Italian translation will be provided for Refresher Course Sessions.

BADGES AND SECURITY
All delegates will receive a distinctive badge upon registration. It is mandatory that participants wear their registration identity badges at all times when in the conference venue. Similarly, it is also necessary that the identity badges be worn to all functions outside the venue, such as social events.

ACCOMPANYING PERSON
Accompanying persons are not eligible to attend the ISS meetings.

LIABILITY DISCLAIMER
• The ISS and the Meeting Organizing Committee shall not be held responsible for personal accidents, illness, losses or damage to private property. Delegates are advised to arrange their personal insurance for the duration of the Member’s Meeting, Musculoskeletal Imaging Update Course and the Ultrasound Course.
• While every attempt will be made to ensure that all aspects of the Member’s Meeting and Refresher Course mentioned in this announcement will take place as scheduled, the Meeting Organizing Committee reserves the right to make last minute changes without prior notice, should the need arise.
• We reserve the right to modify these terms and conditions at any time and without notice to you or any of its users. We may add to, change, delete or end your use of the service at any time.
• The Meeting Organizing Committee is not responsible for any personal expenses incurred or any loss suffered by any delegate or his/her guest in connection with the event.
ABOUT ROME
Modern and old, past and present go side by side, all the time. The capital of Italy and the political-cultural centre of the Mediterranean area, is one of the world’s most important destinations. Also called the Eternal City, Rome has been spoiled and abused over many centuries, but the city still manages to be both solid and irresistibly beautiful. Old and new blend together to create beautiful scenery and a classic European city with all the amenities of the modern world. With over two thousand years of history and a current population of over three million, Rome offers endless historical and cultural attractions. Rome is one of world’s most photogenic cities; be sure to visit the famous Colosseum, the ruins at the Roman Forum, the Vatican Museums, Raphael’s tomb at the Pantheon, the massive St. Peter’s Basilica, Villa Borghese, and try some classic Italian food in Piazza Navona.

MAP OF ROME
DESTINATION: ROME

QUICK FACTS
Electric Current: 220V AC (50Hz)
Time: GMT +1
Weights and Measures: Metric
Country Code: 39
Police: 113 or 112
Currency: Euro
Tipping: Included in the bill, but an extra 10-15% if the service is good.

USEFUL NUMBERS
Directory Information: 12
International Access Code: 39
International Code calling out of Italy: 00
General Emergencies: 113
Carabinieri: 112
Ambulance: 118
Fire Service: 115
Roadside Assistance: 116

WORKING HOURS IN ITALY
Offices: Italian business hours are approximately from 08:00 to 13:00 and from 15:00 to 19:00, Monday to Friday.

Libraries: In General, public libraries in Italy are open from Monday to Friday all day (09:00 - 19:00), Saturdays open just until 13:00 and they close on Sunday.

Pharmacies: Usually pharmacies are open from 08:30 to 12:30 in the morning and from 15:30 to 19:30 in the afternoon unless the pharmacy is an “open pharmacy” and it is open also at night, holidays and Sundays.

Museums: The majority of museums open daily from 09:00 to 17:00 and they close on Holidays. Opening hours sometimes vary due to seasonal and climate factors. We advice you to check the schedule directly at the museum you’re interested in.

Stores: Most stores are open from approximately 09:00 to 12:30, and from 15:30 to 19:30. Clothing stores usually are closed on Monday morning or sometimes for the entire day, while grocery stores generally close on Monday and Wednesday afternoons.
Save the Date

International Skeletal Society

ISS 2013

MUSCULOSKELETAL IMAGING: Fundamentals to Advanced Concepts and Hands-On Ultrasound Course
October 1 – 5, 2013
Loews Philadelphia Hotel
Philadelphia, USA

Enjoy the “City of Brotherly Love” at the luxurious and modern Loews Philadelphia Hotel

ISS 2013 Members’ Annual Meeting
September 28 - October 1