



the
International Skeletal Society

41st Annual Meeting and Musculoskeletal Imaging Course: Fundamentals to Advanced Concepts

- Special Focus Session on Radiologic-Pathologic Correlations of Bone Diseases
- Film Quiz Panel hosted by Dr. Donald L. Resnick
- Four Rapid Fire Sessions
- Hot Topics: Steroids, PRP and Other Injectables

October 16 – 18, 2014
Edinburgh, Scotland



Musculoskeletal Ultrasound Course:
The Hip: October 15, 2014

YOU ARE INVITED

On behalf of the International Skeletal Society, we would like to invite you to the ISS 41st Annual Meeting and Imaging Update Courses to be held at the Edinburgh International Conference Centre, only a short walk from the conference hotel, the Sheraton Grand Hotel & Spa. This meeting brings together many of the best lecturers on musculoskeletal diagnosis from around the world. This will be the first time that the ISS has been back to the UK in almost 30 years when Edinburgh was also the host city. It is the capital city of Scotland, rich in associations with the past and has many historic buildings, including Edinburgh Castle and Holyrood Palace, all within easy walking distance from the conference and hotels. The social program will take full advantage of Scotland's cultural heritage.

Based on needs-assessments and comments from attendees at prior ISS courses, the Refresher Course committee has put together a comprehensive, multimodality program, consisting of two parallel programs on "Sports Injuries" and "Musculoskeletal



Diseases." Delegates may move freely between the two programs in order to maximize their areas of interest. Highlights of the upcoming Refresher Course will include an opening session on "Bone: Structure and Function, and Radiologic-Pathologic Correlations of Disease," four "Rapid-fire" sessions, a "Hot Topic" session on injectables such as corticosteroids and platelet-rich plasma and a closing session film quiz panel hosted by Dr. Don Resnick. Both the Sports program and the Musculoskeletal Diseases program will include lectures on interventional procedures, pathology and clinical perspectives, interspersed among the relevant imaging lectures.

Please join us in Edinburgh for an unforgettable educational and convivial cultural and social experience.

A. Mark Davies, MD
ISS President

Theodore T. Miller, MD, FACR
Chair, Scientific Program Committee 2014

PROGRAM COMMITTEE

Andrew J. Grainger, BM, BS, MRCP, FRCR
(Past Program Chair)
Theodore T. Miller, MD, FACR (Committee Chair)
Jon A. Jacobson, MD (Sports Sub-Committee Chair and
Ultrasound Chair)
Maryam Shahabpour, MD (MSK Sub-Committee Chair)
Mark W. Anderson, MD
Marcelo Boradalo-Rodrigues, MD
Miriam A. Bredella, MD
James F. Griffith, MD
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Monique Reijnierse, MD
Xavier Demondion, MD
Eugene G. McNally, MD, BCh, BAO, FRCR, FRCP
Seoung-oh Yang, MD
Marco Zanetti, MD

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COURSE PURPOSE

The ISS 41st Annual Meeting and Imaging Update Courses will offer two parallel programs running concurrently; a course on sports medicine imaging and a course on imaging musculoskeletal disease. Alongside the presentation of the imaging appearances of normal and pathological findings, the joint focused sports imaging sessions will also highlight current opinion on imaging protocols and techniques and discussion of joint specific interventional treatments. In addition, there will be a dedicated one-day Musculoskeletal Ultrasound Course offered by the leading international experts in musculoskeletal ultrasound.

OVERALL COURSE OUTLINE

The ISS 41st Annual Meeting and Imaging Update Courses will consist of two parallel programs running concurrently. One will focus on sports imaging including joint based sessions including techniques of US-guided percutaneous intervention and a special focus session on injectable medications. The second will cover a wide range of musculoskeletal diseases including musculoskeletal tumors, trauma, arthritis, intervention techniques and systemic disease processes. Delegates are encouraged to move between the two streams to tailor the course to their individual needs and learning requirements. An internationally renowned faculty of musculoskeletal radiologists, orthopedic surgeons, rheumatologists and pathologists will deliver the course.

In addition, the course will feature an expert panel film interpretation session, presented as a quiz to delegates and allowing them to test their knowledge against a selection of faculty members.

REFRESHER COURSE

Needs

The need for this year's ISS 41st Annual Meeting and Imaging Update Courses 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 track in the course 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 radiopathologic correlations of bone diseases, cartilage imaging techniques, including the latest clinical developments in cartilage repair, knee, shoulder, elbow, wrist and hand, the pediatric athlete, and the hip and pelvis. In addition, after very positive feedback from delegates at the last two courses, we have expanded the number of "Rapid Fire" sessions. These sessions comprise multiple short, focused, 10 minute talks focusing on a specific question, technique or problem.

The other course track will address musculoskeletal diseases including arthritis, trauma, tumors and systemic diseases affecting the musculoskeletal system. The sessions will focus on: bone tumor diagnosis, soft tissue tumors, bone marrow imaging, musculoskeletal infection, systemic conditions affecting the skeletal system, axial and appendicular trauma, arthritis and advanced imaging techniques. Additional Rapid Fire sessions will allow a number of short presentations on topics relating to bone tumors, soft tissue tumors and arthritis.

Each of the sessions in the parallel programs are focused to increase the understanding of both common and more challenging, poorly understood conditions of musculoskeletal disease, health, evaluation and treatment. The sessions are specifically designed to improve understanding of the early diagnosis of MSK conditions, which will lead to 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 ISS 41st Annual Meeting and Imaging Update Courses, 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.

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 hip ultrasound.

Objectives:

At the conclusion of the 2014 ISS Ultrasound Course, attendees should be able to:

1. Explain hip ultrasound technique.
2. Describe basic hip pathology as seen with ultrasound.
3. Illustrate at least several aspects of a hip ultrasound examination.

TARGET AUDIENCE

The target audience for this course includes general radiologists, orthopedic surgeons, rheumatologists, pathologists and allied healthcare workers with special interest in the diagnosis and therapy of musculoskeletal disease.

CME ACCREDITATION

Please check the website at www.internationalskeletalsociety.com for accreditation updates.

COURSE FACULTY

Ronald S. Adler, MD, PhD
 Georgina M. Allen, BM
 Mark W. Anderson, MD
 Suzanne E. Anderson, MD, PhD
 Emine R. Arkun, MD
 K. Gunnar Astrom, MD
 Andrea Baur-Melnyk, MD
 Douglas P. Beall, MD
 Ian Beggs, FRCPE, FRCR
 Javier Beltran, MD
 Jenny T. Bencardino, MD
 Donna G. Blankenbaker, MD
 Alain Blum, MD, PhD
 Sally Fiona M. Bonar, MD
 Marcelo Boradalo-Rodrigues, MD
 Miriam A. Bredella, MD
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 Kenneth A. Buckwalter, MD
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 Robert S.D. Campbell, MD
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 Nogah Haramati, MD
 H. Theodore Harcze, MD
 Jeremiah C. Healy, MD
 George Hermann, MD
 Andreas Heuck, MD

Geoff Hide, MD
 Benjamin Hoch, MD
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 Tudor H. Hughes, MBBS, MD, FRCR
 Sinchun Hwang, MD
 Hakan Ilaslan, MD
 Carrie Y. Inwards, MD
 Jon A. Jacobson, MD
 Steven L.J. James, MD
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 Anne G. Jurik, MD
 Franz M. Kainberger, MD
 Jeremy J. Kaye, MD
 Jasvir S. Khurana, MD
 Richard Kijowski, MD
 Josef Kramer, MD
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 Kambiz Motamedi, MD
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 Monique Reijnierse, MD
 Winston J. Rennie, MB, MSc,
 FRCR, MFSEM
 Donald L. Resnick, MD
 Christopher M. Robinson, FRCS
 Philip Robinson, MB, ChB, FRCR

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 Kathryn Stevens, MD
 Naveen Subhas, MD
 Mihra S. Taljanovic, MD, PhD,
 FACP
 James Teh, MBBS, MRCP, FRCR
 Andon P. Toms, FRCR, PhD
 Martin Torriani, MD, MSc
 Prudencia Tyrrell, MD
 Hilary R. Umans, MD
 Daniel Vanel, MD
 Shi Wei, MD, PhD
 Lawrence M. White, MD
 Richard W. Whitehouse, MD
 David J. Wilson, MD
 Corrie M. Yablon, MD
 Seoung-oh Yang, MD
 Marco Zanetti, MD
 Michael B. Zlatkin, MD
 Adam C. Zoga, MD

ULTRASOUND COURSE AT THE ISS 2014

WEDNESDAY, OCTOBER 15, 2014

7:00 – 17:30 **Registration/Information
Desk Hours**

7:00 – 8:00 **Breakfast**

9:00 – 9:15 **Anterior Hip:
Technique and Demo**
Theodore T. Miller, MD, FACR
Robert S.D. Campbell, MD

9:15 – 9:30 **Lateral Hip:
Technique and Demo**
Theodore T. Miller, MD, FACR
Robert S.D. Campbell, MD

9:30 – 9:45 **Posterior Hip:
Technique and Demo**
Theodore T. Miller, MD, FACR
Robert S.D. Campbell, MD

9:45 – 10:00 **Questions**

10:00 – 3:30 **BREAKOUTS:
GROUPS A & B**

10:00 – 10:15 **Group A
Hip Joint and Arthroplasty
Pathology**
Steven L.J. James, MD

10:15 – 10:30 **Greater Trochanteris Pain
Syndrome**
Joseph G. Craig, MBChB

10:30 – 10:45 **Hamstring Pathology**
David J. Wilson, MD
Georgina M. Allen, BM

10:45 – 11:00 **Break**

11:00 – 11:15 **Snapping Syndromes**
Nathalie J. Bureau, MD

11:15 – 11:30 **Hernias**
Jon A. Jacobson, MD

11:30 – 11:45 **Ultrasound-Guided
Intervention**
Ronald S. Adler, MD, PhD

11:45 – 12:00 **Infant Hip**
H. Theodore Harcke, MD

12:00 – 13:30 **Lunch**

13:30 – 15:30 **Hands-On Scanning**
Ronald S. Adler, MD, PhD
Georgina M. Allen, BM
Nathalie J. Bureau, MD
Joseph G. Craig, MBChB
Karen Finlay, MD
Steven L.J. James, MD
Joel S. Newman, MD
Martin Torriani, MD, MSc
David J. Wilson, MD

10:00 – 12:00 **Group B
Hands-On Scanning**
Geoff Hide, MD
Tudor H. Hughes, MBBS, MD,
FRCR
Franz M. Kainberger, MD
Josef Kramer, MD
Kambiz Motamedi, MD
Simon Ostlere, MD
Monique Reijnierse, MD
Winston J. Rennie, MB, MSc,
FRCR, MFSEM
Mihra S. Taljanovic, MD, PhD,
FACR
James Teh, MBBS, MRCP,
FRCR

12:00 – 13:30 **Lunch**

13:30 – 13:45 **Hip Joint and Arthroplasty
Pathology**
Simon Ostlere, MD

13:45 – 14:00 **Greater Trochanteric Pain
Syndrome**
Monique Reijnierse, MD

ULTRASOUND COURSE AT THE ISS 2014

14:00 – 14:15	Hamstring Pathology Winston J. Rennie, MB, MSc, FRCR, MFSEM
14:15 – 14:30	Break
14:30 – 14:45	Snapping Syndromes David P. Fessell, MD
14:45 – 15:00	Hernias Andrew J. Grainger, BM, BS, MRCP, FRCR
15:00 – 15:15	Ultrasound-Guided Intervention James Teh, MBBS, MRCP, FRCR
15:15 – 15:30	Infant Hip Mihra S. Taljanovic, MD, PhD, FACR



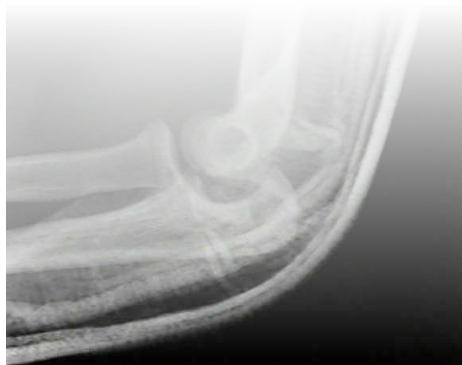
MUSCULOSKELETAL IMAGING COURSE: FUNDAMENTALS TO ADVANCED CONCEPTS

THURSDAY, OCTOBER 16, 2014

7:00 – 17:30	Registration/Information Desk Hours
7:00 – 16:00	Exhibit Hall Hours
7:00 – 8:00	Breakfast
18:30 – 20:30	Welcome Reception
8:00 – 8:10	Introduction
8:10 – 10:00	COMBINED SESSION Bone Moderators: Sally Fiona M. Bonar, MD Jeremy J. Kaye, MD
8:10 – 8:35	Bone: Structure and Function Donald L. Resnick, MD
8:35 – 8:55	Radiopathologic Correlation of Osseous Trauma Sally Fiona M. Bonar, MD
8:55 – 9:15	Radiopathologic Correlation of Osseous Infection Edward F. DiCarlo, MD
9:15 – 9:40	Radiopathologic Correlation of Osseous Tumors Julie Fanburg-Smith, MD
9:40 – 10:00	Radiopathologic Correlation of Metabolic and Systemic Diseases of Bone Mark D. Murphey, MD
10:00 – 10:30	Break

MUSCULOSKELETAL IMAGING COURSE: FUNDAMENTALS TO ADVANCED CONCEPTS

10:30 – 17:30	BREAKOUTS: CONCURRENT SESSIONS A & B	14:45 – 15:00	Posterior Glenohumeral Instability Mark W. Anderson, MD
10:30 – 12:30	Session A: Sports Medicine Imaging <u>Shoulder: Cuff</u> Moderators: Bruce B. Forster, MSc, MD, RCPC William E. Palmer, MD	15:00 – 15:15	Surgical Techniques for Labral Repair and Instability Christopher M. Robinson, FRCS
10:30 – 10:50	Imaging of Rotator Cuff Tears (US and MRI) Ian Beggs, FRCPE, FRCR	15:15 – 15:30	Imaging of the Postoperative Labrum: Is There a Re-Tear? Jung-Ah Choi, MD
10:50 – 11:10	Techniques of Rotator Cuff Repair Julie M. MicBirnie, FRCS	15:30 – 16:00	Break
11:10 – 11:30	Imaging of the Repaired Rotator Cuff William E. Palmer, MD	16:00 – 17:30	<u>Elbow</u> Moderators: Nathalie J. Bureau, MD Kathryn Stevens, MD
11:30 – 11:50	Impingement Syndromes Jenny T. Bencardino, MD	16:00 – 16:15	Imaging Techniques as They Apply to Anatomy Florian M. Buck, MD
11:50 – 12:10	Rotator Interval and Biceps Injuries Lynne S. Steinbach, MD	16:15 – 16:35	Biceps/Triceps/Epicondylitis (US and MRI) Nathalie J. Bureau, MD
12:10 – 12:30	AC Joint: Injury and Diseases Bruce B. Forster, MSc, MD, FRCPC	16:35 – 16:50	Elbow Instability: Implication for Ligaments Kathryn Stevens, MD
12:30 – 14:00	Lunch	16:50 – 17:00	The Thrower's Elbow: What to Look For Mark W. Anderson, MD
14:00 – 15:30	<u>Shoulder: Labrum</u> Moderators: Timothy Eisdell Moore, MD Michael B. Zlatkin, MD	17:00 – 17:15	Peripheral Nerves Kambiz Motamedi, MD
14:00 – 14:15	Imaging Techniques for Labrocapsular Structures Michael B. Zlatkin, MD	17:15 – 17:30	Interventional Techniques David P. Fessell, MD
14:15 – 14:30	SLAP Tears – Do I Need to Know Them All? Javier Beltran, MD		
14:30 – 14:45	Imaging of Bankart Injuries: Making Sense of the Alphabet Soup Donna G. Blankenbaker, MD		



MUSCULOSKELETAL IMAGING COURSE: FUNDAMENTALS TO ADVANCED CONCEPTS

10:30 – 12:30	Session B: Musculoskeletal Disease <u>Bone Tumors</u> Moderators: Mary G. Hochman, MD, MBA Sinchun Hwang, MD	14:20 – 14:30	Post Operative Surveillance: Pitfalls and Pearls Sinchun Hwang, MD
10:30 – 10:45	When Are Radiographs Not Enough? Daniel Vanel, MD	14:30 – 14:40	Bone Biopsy: Tips and Tricks Peter L. Munk, MDCM, FRCPC, FSIR
10:45 – 11:05	Bone Forming Tumors: Imaging Steven L.J. James, MD	14:40 – 14:50	Multiple Bone Lesions: Is it Metastatic Disease? K. Gunnar Astrom, MD
11:05 – 11:15	Bone Forming Tumors: How Does Imaging Help Me? Jasvir S. Khurana, MD	14:50 – 15:00	MR Imaging: What Protocols Are Useful? Marco Zanetti, MD
11:15 – 11:35	Cartilage Forming Tumors: Imaging Paul G. O'Donnell, MD	15:00 – 15:10	PET CT: Pitfalls and Artifacts Jeffrey J. Peterson, MD
11:35 – 11:45	Cartilage Forming Tumors: How Does Imaging Help Me? Claudia R. G. C. M. de Oliveira, MD	15:10 – 15:20	PET MRI: Pitfalls and Artifacts Seoung-oh Yang, MD
11:45 – 12:05	Surface Lesions of Bone: Imaging A. Mark Davies, MD	15:20 – 15:30	What Does the Surgeon Want to See in the Radiology Report? Matthew Moran, FRCS
12:05 – 12:15	Surface Lesions of Bone: How Does Imaging Help Me? Carrie Y. Inwards, MD	15:30 – 16:00	Break
12:15 – 12:30	Pseudotumors of Bone Mary G. Hochman, MD, MBA	16:00 – 17:30	<u>Rapid Fire Soft Tissue Tumors</u> Moderators: Alessandro Franchi, MD, PhD Pietro Ruggieri, MD, PhD
12:30 – 14:00	Lunch	16:00 – 16:10	The Fat Containing Tumor: Is it Benign or Malignant? Suphaneewan Jaovisidha, MD
14:00 – 15:30	<u>Rapid Fire Bone Tumors</u> Moderators: Edward F. DiCarlo, MD Peter L. Munk, MDCM, FRCPC, FSIR	16:10 – 16:20	Soft Tissue Sarcomas: How I Describe Them and Stage Them David M. Panicek, MD
14:00 – 14:10	Periosteal Reaction: The Good, the Bad and the Ugly Geoff Hide, MD	16:20 – 16:30	Calcium in Soft Tissue Masses: Good or Bad? Benjamin Hoch, MD
14:10 – 14:20	Assessing Response to Neoadjuvant Therapy Laura M. Fayad, MD	16:30 – 16:40	Differential Diagnosis of a Soft Tissue Mass: Does Location Help? Mark D. Murphey, MD

MUSCULOSKELETAL IMAGING COURSE: FUNDAMENTALS TO ADVANCED CONCEPTS

**16:40 – 16:50 MR Imaging:
What Protocols Are Useful?**
Philip Robinson, MB, ChB,
FRCR

**16:50 – 17:00 US of Soft Tissue Tumors:
When is it Helpful?**
Joseph G. Craig, MBChB

**17:00 – 17:10 Biopsy of Soft Tissue
Tumors: How Do I Do it?**
Jean Luc Drape, MD

17:10 – 17:20 Soft Tissue Tumor Mimickers
Alain Blum, MD, PhD

**17:20 – 17:30 Post Operative Surveillance:
Pitfalls and Pearls**
David M. Panicek, MD

FRIDAY, OCTOBER 17, 2014

**7:00 – 17:30 Registration/Information
Desk Hours**

7:00 – 16:00 Exhibit Hall Hours

7:00 – 8:00 Breakfast

**8:00 – 17:30 BREAKOUTS:
CONCURRENT SESSIONS
A & B**

**8:00 – 10:00 Session A:
Sports Medicine Imaging
Wrist**

Moderators:
Clarissa C. Moraes Do
Carmo, MD
Karen Finlay, MD

8:00 – 8:20 Imaging Techniques
James Teh, MBBS, MRCP,
FRCR

**8:20 – 8:40 Imaging of Ulnar-Sided
Wrist Pain**
Soterios Gyftopoulos, MD

8:40 – 9:00 Carpal Bones: Dead or Alive?
Mihra S. Taljanovic, MD, PhD,
FACR

**9:00 – 9:20 Ligaments and Carpal
Instability Patterns**
Maryam Shahabpour, MD

**9:20 – 9:40 Tendon Disorders:
MRI and US**
Karen Finlay, MD

**9:40 – 10:00 MRI and US of Nerve
Entrapment**
Marcelo Boradalo-Rodrigues,
MD

10:00 – 10:30 Break

10:30 – 12:00 Upper Extremity Rapid Fire
Moderators:
Winston J. Rennie, MB, MSc,
FRCR, MFSEM
Luca M. Sconfienza, MD, PhD

10:30 – 10:40 Gamekeeper's Thumb
Naveen Subhas, MD

10:40 – 10:50 Finger Pulleys
Andreas Heuck, MD

10:50 – 11:00 Physeal Sports Injuries
Michael G. Fox, MD

**11:00 – 11:10 Pectoralis Tears:
How to Image and How to
Interpret**
Russell C. Fritz, MD

**11:10 – 11:20 Dynamic US of the Shoulder
and Elbow: When is it Useful?**
Ronald S. Adler, MD, PhD

**11:20 – 11:30 US-Guided Interventions of
the Wrist and Hand**
Jeremiah C. Healy, MD

11:30 – 11:40 Adhesive Capsulitis
Howard Galloway, FRANZCR

**11:40 – 11:50 Image-Guided Treatment of
Calcific Tendinosis**
Andrew J. Grainger, BM, BS,
MRCP, FRCR

**11:50 – 12:00 Other Image-Guide
Percutaneous Shoulder
Treatments**
Luca M. Sconfienza, MD, PhD

12:00 – 13:30 Lunch

MUSCULOSKELETAL IMAGING COURSE: FUNDAMENTALS TO ADVANCED CONCEPTS

13:30 – 15:30	<u>Hip and Groin</u> Moderators: Haron Obaid, MD, FRCS, FRCR, FRCPC Mini N. Pathria, MD	17:00 – 17:15	Posterolateral Corner: What's Important? Andrew J. Grainger, BM, BS, MRCP, FRCR
13:30 – 13:40	Labrum: How to Image and Describe (Including Normal Variants) Suzanne E. Anderson, MD, PhD	17:15 – 17:30	Patellofemoral Pain Nogah Shabshin, MD, MBA
13:40 – 13:55	Femoroacetabular Impingement: Beyond the Labrum Christian W. Pfirrmann, MD	8:00 – 10:00	Session B: Musculoskeletal Disease <u>Marrow and Infection</u> Moderators: Michael E. Mulligan, MD Shi Wei, MD, PhD
13:55 – 14:10	Extra-Articular Impingement Miriam A. Bredella, MD	8:00 – 8:20	Marrow Imaging: Normal Bone Marrow and Benign Lesions Simulating Disease Andrea Baur-Melnyk, MD
14:10 – 14:30	Trochanteric Pain Syndrome Mini N. Pathria, MD	8:20 – 8:40	Marrow Edema Pattern: What is the Differential Diagnosis? Mark E. Schweitzer, MD
14:30 – 14:50	Hamstring: Anatomy and Injury Jean P. Schils, MD	8:40 – 9:00	Marrow Replacement Disorders and Whole Body Imaging Michael E. Mulligan, MD
14:50 – 15:10	Groin Pain Adam C. Zoga, MD	9:00 – 9:20	Atypical Musculoskeletal Infections Simon Ostlere, MD
15:10 – 15:30	Interventional Techniques Philip Robinson, MB, ChB, FRCR	9:20 – 9:40	Diabetic Foot: Infected or Not? William N. Morrison, MD
15:30 – 16:00	Break	9:40 – 10:00	Pediatric Infections: Special Considerations David J. Wilson, MD
16:00 – 17:30	<u>Knee</u> Moderators: Marcelo R. De Abreu, MD Thomas H. Magee, MD	10:00 – 10:30	Break
16:00 – 16:15	Meniscal Tears: Classification and Nomenclature Leanne L. Seeger, MD, FACR	10:30 – 12:00	<u>Arthritis Rapid Fire</u> Moderators: Neils Egund, MD Anne G. Jurik, MD
16:15 – 16:30	Imaging of the Postoperative Meniscus Lawrence M. White, MD	10:30 – 10:40	Radiographic Patterns of Disease Franz M. Kainberger, MD
16:30 – 16:45	ACL and PCL: Pre-Op and Post-Op Thomas L. Pope, Jr., MD, FACR	10:40 – 10:50	US of Arthritis: When is it Useful? Robert R. Lopez, MD
16:45 – 17:00	MCL and Posteromedial Corner Hakan Ilaslan, MD		

MUSCULOSKELETAL IMAGING COURSE: FUNDAMENTALS TO ADVANCED CONCEPTS

10:50 – 11:00	MRI of Arthritis: How to Do it and What More Does it Add? Frank Roemer, MD	14:50 – 15:10	How to Describe Ankle Fractures Nogah Haramati, MD
11:00 – 11:10	Patterns of Crystal Deposition Bruce M. Rothschild, MD	15:10 – 15:30	Childhood Upper Extremity Injuries: Why Kids Are Not Just Small Adults David A. Rubin, MD
11:10 – 11:20	Sacroiliitis: Imaging Strategies and Findings Anne Cotten, MD	15:30 – 16:00	Break
11:20 – 11:30	Early MRI Appearances of Spondyloarthropathies Robert G.W. Lambert, MBBCh, FRCR, FRCPC	16:00 – 17:30	<u>Metabolic and Systemic Diseases</u> Moderators: Roberto Blanco Sequeiros, MD, PhD Elaine S. Gould, MD, FACR
11:30 – 11:40	OA: Is it a Disease? Ali Guermazi, MD, PhD	16:00 – 16:15	Bone Densitometry: Pitfalls in Interpretation Josef Kramer, MD
11:40 – 11:50	Put an Emphasis on the Enthesis Georgina M. Allen, BM	16:15 – 16:30	Renal Osteodystrophy, Rickets, and Osteomalacia Elaine S. Gould, MD, FACR
11:50 – 12:00	Imaging of Arthritis: The Rheumatologist's Perspective Veena Dhillon, MA, MD, FRCPC	16:30 – 16:45	CRMO and Sappho Syndrome Simon Ostlere, MD
12:00 – 13:30	Lunch	16:45 – 17:00	Storage Diseases George Hermann, MD
13:30 – 15:30	<u>Appendicular Trauma</u> Moderators: Leon Lenchik, MD Lee F. Rogers, MD	17:00 – 17:15	Sickle Cell Disease and Hemophilia Emine R. Arkun, MD
13:30 – 13:50	How to Avoid Mistakes Radiographically Leon Lenchik, MD	17:15 – 17:30	Pagets Disease: Is it Gone or Just Hiding? Victor N. Cassar Pullicino, MD
13:50 – 14:10	Fracture Patterns: Don't Forget to Look Elsewhere Lee F. Rogers, MD	SATURDAY, OCTOBER 18, 2014	
14:10 – 14:30	CT and MRI of Osseous Trauma: What More Do They Add? Michael E. Mulligan, MD	7:00 – 17:30	Registration/Information Desk Hours
14:30 – 14:50	US of Osseous Trauma: Is There a Role? Theodore T. Miller, MD, FACR	7:00 – 16:00	Exhibit Hall Hours
		7:00 – 8:00	Breakfast
		19:00 – 23:00	Annual Gala

MUSCULOSKELETAL IMAGING COURSE: FUNDAMENTALS TO ADVANCED CONCEPTS

8:00 – 15:30	BREAKOUTS: CONCURRENT SESSIONS A & B	11:25 – 11:40	Do We Need to Inject Anything at All?: Fenestration and Tendon Stripping Philip J. O'Connor, MD
8:00 – 10:00	Session A: Sports Medicine Imaging <u>Ankle and Foot</u> Moderators: Xavier Demondion, MD Johnny U.V. Monu, MD	11:40 – 12:00	Botox: More Than Just a Pretty Face Martin Torriani, MD, MSc
8:00 – 8:15	Imaging Techniques Johnny U.V. Monu, MD	12:00 – 12:15	Questions and Answers
8:15 – 8:30	Ligaments and Instability Mario Maas, MD	12:15 – 13:30	Lunch
8:30 – 8:45	Osteochondral Abnormalities Avneesh Chhabra, MD	13:30 – 15:30	<u>Advanced Imaging Techniques: How I Do It</u> Moderators: Christian Glaser, MD Andoni P. Toms, FRCR, PhD
8:45 – 9:00	Heel Pain David A. Rubin, MD	13:30 – 13:50	MR Imaging of Arthroplasty: How to Scan it, How to Report it, Is it ALVAL? Andoni P. Toms, FRCR, PhD
9:00 – 9:15	Neuropathies Zehava S. Rosenberg, MD	13:50 – 14:10	Diffusion-Weighted Imaging: When is it Useful and What Does it Mean? Christian Glaser, MD
9:15 – 9:30	Flatfoot Deformity Carolyn M. Sofka, MD	14:10 – 14:30	CT Update: Dose Reduction, Reconstructions Kenneth A. Buckwalter, MD
9:30 – 9:45	Peroneal Tendon Pathology Xavier Demondion, MD	14:30 – 14:50	MR Spectroscopy and Other Tumor Imaging Mark J. Kransdorf, MD
9:45 – 10:00	Turf Toe and Plantar Plate Injuries Hilary R. Umans, MD	14:50 – 15:10	Techniques to Increase Imaging Speed Michael P. Recht, MD
10:00 – 10:30	Break	15:10– 15:30	How Do I Convert My Protocols from One Field Strength to Another? Mark E. Schweitzer, MD
10:30 – 12:15	<u>Hot Topic: Injectables</u> Moderators: Theodore T. Miller, MD, FACR Martin Torriani, MD, MSc	15:30 – 16:00	Break
10:30 – 10:50	PRP: An Overview Jon A. Jacobson, MD	16:00 – 17:30	<u>Film Quiz Panel</u> Moderator: Donald L. Resnick, MD
10:50 – 11:10	Corticosteroids: Uses and Complications Corrie M. Yablon, MD	17:30	Adjourn
11:10 – 11:25	Prolotherapy and Sclerosing Agents Robert S.D. Campbell, MD		

MUSCULOSKELETAL IMAGING COURSE: FUNDAMENTALS TO ADVANCED CONCEPTS

8:00 – 10:00	Session B: Musculoskeletal Disease Cartilage Moderators: Thomas M. Link, MD Michael P. Recht, MD	11:50 – 12:15	Pelvis and Acetabular Fractures: How Do I Describe Them? Richard W. Whitehouse, MD
8:00 – 8:20	Anatomy and Conventional MR Protocols Richard Kijowski, MD	12:15 – 13:30	Lunch
8:20 – 8:45	Advanced Cartilage Techniques: What Are They and Do They Really Help? Michael P. Recht, MD	13:30 – 15:30	Spine and Peripheral Nerves Moderators: Prudencia Tyrrell, MD Douglas P. Beall, MD
8:45 – 9:10	Cartilage Injury: How Do I Describe it? Alice Ha, MD, MS	13:30 – 13:50	Neurography: How to Do it and What Does it Show Avneesh Chhabra, MD
9:10 – 9:35	Cartilage Injury: How is it Repaired? TBD	13:50 – 14:10	Imaging the Brachial Plexus: Protocols and Findings Anne Cotten, MD
9:35 – 10:00	Imaging of Cartilage Repair: What to Look For Thomas M. Link, MD	14:10 – 14:30	Spine Infection and its Mimickers David J. Wilson, MD
10:00 – 10:30	Break	14:30 – 14:50	Spinal Instrumentation: Why is it There and How Do I Describe it? Richard J. Hughes, MD
10:30 – 12:15	Axial Trauma Moderators: Richard W. Whitehouse, MD Xiao Guang Cheng, MD	14:50 – 15:10	Pediatric Scoliosis: The Surgeon's Perspective On Treatment TBD
10:30 – 10:50	Pediatric Spine and Pelvis Injuries Robert S.D. Campbell, MD	15:10 – 15:30	What's New in Percutaneous Spine Intervention Douglas P. Beall, MD
10:50 – 11:10	Cervical Spine Trauma: Are Radiographs Enough? Prudencia Tyrrell, MD	15:30 – 16:00	Break
11:10 – 11:30	MRI of Cervical Ligament Injury Wilfred C.G. Peh, MD	16:00 – 17:30	Film Quiz Panel Moderator: Donald L. Resnick, MD
11:30 – 11:50	Compression Fractures: Can We Distinguish Benign from Malignant? Mark J. Kransdorf, MD	17:30	Adjourn

EVENING FUNCTIONS

Thursday, October 16, 2014

Welcome Reception

Time: 18:30 – 20:30*

Location: Edinburgh Castle

Attire: Business casual (outdoor event – please dress for the weather; note: wear shoes appropriate for cobblestone streets)

This year's Welcome Reception will be held at the beautiful Edinburgh Castle and will showcase an array of local food complemented by local music and activities. Edinburgh Castle dominates Scotland's capital city from its great rock. Its story has helped shape the nation's story.

Cost: Two tickets included in registration fee.

Additional guest tickets are \$50 each.

* *Times are subject to change.*

Saturday, October 18, 2014

Annual Gala

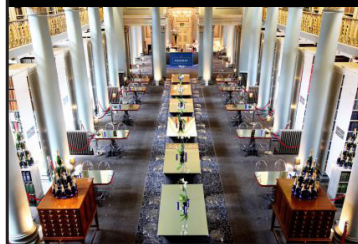
Time: 19:00 – 23:00*

Location: Signet Library

Attire: Formal (*Coat and Tie*)

The closing social event of the 2014 ISS Annual Meeting is sure to please with an expertly crafted menu, musical entertainment and dancing. The Signet Library, in the centre of Edinburgh's old town, is synonymous with prestige and Georgian elegance. Steeped in history, the building, with its lower and upper libraries, was completed in 1822 in time for the celebrated visit to Edinburgh of King George IV who described the upper library as "the finest drawing room in Europe." This event is only open to the first 150 participants.

Cost: Not included in registration fee. \$100 per registrant/guest(s).



ABOUT EDINBURGH

ABOUT EDINBURGH

Edinburgh is rich in history and culture, which dates back to the 18th century. Scotland's capital has cobbled streets, beautiful architecture and unique shops for its visitors and those who call it home. Explore Edinburgh Castle, the city's most iconic attraction that sits on volcanic rock atop the Royal Mile. This castle was home to many of Scotland's kings and queens and is home to the Royal Palace and the Crown Room where the Scottish Crown Jewels are stored. Though Edinburgh still has many of its old buildings, it also contains modern architecture creating a mix of past and present as you explore this timeless city.



ACCOMMODATIONS



HOTEL INFORMATION

Sheraton Grand Hotel & Spa
(Located across from the Edinburgh
International Conference Centre)
1 Festival Square
Edinburgh, Scotland EH3 9SR
Main: +44 131 229 9131
Website: www.sheratonedinburgh.co.uk/

Room Rate: £220.00 Single
£240.00 Double

Hotel Deadline: September 1, 2014

Reservations: +44 131 229 9131 or <https://www.starwoodmeeting.com/Book/ISS2014>

Room Rate

ISS has negotiated a discounted rate of £220.00 for single occupancy and £240.00 for double occupancy inclusive of tax. This also includes a daily Scottish breakfast at hotel restaurant One Square at the Sheraton Grand Hotel & Spa and complimentary Wi-Fi in the guest rooms.

Hotel Deadline

The deadline to receive the ISS group rate is **September 1, 2014**. *ISS encourages you to make your reservation early, as the hotel and discount block may sellout before this date. After this date, reservations will be accepted based on availability and higher rates may apply.*

Reservations

Attendees are responsible for making their reservations by calling the hotel at +44 131 229 9131 or visiting the website at <https://www.starwoodmeeting.com/Book/ISS2014>. Please reference the ISS to receive the discounted rate.

Hotel Deposit & Cancellation Policy

A deposit equal to one night's stay is required to hold a reservation. These deposits are non-refundable.



SECONDARY HOTEL INFORMATION

The Point Hotel Edinburgh
(Located .6 km from the Edinburgh
International Conference Centre)
34 Bread Street
Edinburgh EH3 9AF
Phone: +44 131 221 5555
Website: www.pointhoteledinburgh.co.uk

Room Rate: £139.00 Single
£149.00 Double

Hotel Deadline: September 1, 2014

Reservations: +44 131 221 5555

Room Rate

ISS has negotiated a discounted rate of £139.00 for single occupancy and £149.00 for double occupancy inclusive of tax. This also includes a daily breakfast at hotel restaurant at The Point Hotel Edinburgh and complimentary Wi-Fi in the guest rooms.

Hotel Deadline

The deadline to receive the ISS group rate is **September 1, 2014**. *ISS encourages you to make your reservation early, as the hotel and discount block may sellout before this date. After this date, reservations will be accepted based on availability and higher rates may apply.*

Reservations

Attendees are responsible for making their reservations by calling the hotel at +44 131 221 5555. Please reference the code "GISSA" when you call to receive the discounted rate.

Hotel Deposit and Cancellation Policy

A deposit equal to one night's stay is required to hold a reservation. These deposits are fully refundable if the hotel is notified 72-hours prior to arrival and a cancellation number is obtained.

TRAVEL & TRANSPORTATION

Airport Information

Edinburgh Airport is approximately seven miles from both the Sheraton Grand Hotel & Spa and the Point Hotel Edinburgh or about 17 minutes by car.

Taxi Cab Services

Edinburgh Airport has an approved Taxi and Licensed Private Hire service that is jointly managed by City Cabs (Edinburgh) Ltd and Edinburgh City Private Hire. For travel in a Private Hire vehicle, you must pre-book your vehicle. This can be done through the Edinburgh City Private Hire kiosk. There is no need to pre-book a Public Hire taxi. Both can be found on the ground floor of the multi-storey car park opposite the main terminal.

Private Hire vehicle: 0844 448 8576
City Cabs: 0131 656 0830

Taxi rates for a one-way transfer to the Sheraton Grand Hotel & Spa and the Point Hotel Edinburgh cost approximately £30.00, while rates for private hire will vary based on the vehicle.

Rental Car Information

Avis® Rent-A-Car is the official rental car company for the ISS 41st Annual Meeting. For reservations, please call (800) 331-1600, and use the code "J901055" to receive the discounted rates.

Bus Shuttle Service

AirLink is a bus shuttle service that is available from the airport to Shandwick Place—a five minute walk from the Sheraton Grand Hotel & Spa. From Shandwick Place, head towards Lothian Road and the hotel will be on the right.

Shandwick Place is about a 10 minute walk from the Point Hotel Edinburgh. From Shandwick Place, head towards Lothian Road, turn right and follow Lothian Road until you reach Bread Street where you will make another right and arrive at the Point Hotel Edinburgh.

AirLink costs £3.50/Adult and £2.00/Child for one-way; £6.00/Adult and £3.00/Child for roundtrip to Shandwick Place. Travel time is approximately 30 minutes.

Parking

The Sheraton Grand Hotel & Spa offers self and valet parking for £12.00 per day. Please note that rates are subject to change.

ADDITIONAL REGISTRATION INFORMATION

ULTRASOUND COURSE

Registration for the Ultrasound Course on Wednesday, October 15, 2014, is limited and will be allocated on a first-come-first-served basis to the first 100 participants upon payment of the registration fee. Please be sure to register on the meeting registration form if you wish to attend.

EARLY REGISTRATION DEADLINE

Meeting registration forms must be received by the ISS Executive Office by **July 15, 2014**, to receive the discounted early registration rate. All forms received after this deadline will be assessed the regular registration fee.

REGISTRATION CANCELLATION & REFUND POLICY

Registration refund requests must be submitted in writing to the ISS Executive Office by 9/15/14. All refund requests will be subject to a \$100 processing fee. No refunds will be made after 9/15/14.

SPECIAL NEEDS

For accommodations on the basis of disability or special dietary needs, please call (847) 517-7225.

QUESTIONS

Please feel free to contact the ISS Executive Office by:
Phone: (847) 517-7225
Fax: (847) 517-7229
Email: iss@wjweiser.com
Website: www.internationalskeletalsociety.com



International Skeletal Society

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1100 E Woodfield Road, Suite 350
Schaumburg, IL 60173-5116 USA