

# ISAKOS

## ISAKOS NEWSLETTER 2017 • VOLUME II

Current Concepts on Arthroscopy, Knee Surgery & Orthopaedic Sports Medicine



11<sup>TH</sup> BIENNIAL

**ISAKOS CONGRESS**

JUNE 4-8, 2017 | SHANGHAI, CHINA

**MOST SUCCESSFUL  
CONGRESS TO DATE!**



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## A Season of Change...

It is the season of change at ISAKOS. With the completion of the 11<sup>TH</sup> Biennial ISAKOS Congress in June 2017, ISAKOS will bid a fond farewell with this issue of the ISAKOS Newsletter, and say 再见小心 (“good bye, take care”) to Shanghai, and ¡Hola! (hello!) to Cancun, Mexico as preparations begin in earnest for the 12<sup>TH</sup> Biennial ISAKOS Congress. We invite all Newsletter readers to read more about the ISAKOS Congress on Pages 4–18 of this Newsletter. A special thank you and congratulations to Julian Feller, ISAKOS Program Committee Chairman, and the ISAKOS Congress Program Committee for their diligent efforts and a wonderful Congress.

Other recent changes have included the changing of the guard from 2015–2017 ISAKOS President, Dr. Philippe Neyret, to 2017–2019 ISAKOS President Dr. Marc Safran. We invite all ISAKOS members to welcome Dr. Safran, and read more about his visions for ISAKOS in his first Presidential Message on page 2.

With the conclusion of the ISAKOS Congress in Shanghai, our committees are already hard at work with new projects and publications in the works! A full list of the ISAKOS Committee members for the 2017–2019 Committee Term can be found on Page 22. More information on the new Committee projects will be coming soon, but we encourage all members to follow ISAKOS on Facebook and Linked In for frequent updates.

Ready to go to Cancun? Dr. Stefano Zaffagnini, 12<sup>TH</sup> Biennial ISAKOS Congress Program Chair, is already hard at work with his Program Committee developing the Scientific Program. Abstract submission will open on September 1, 2017 for the 12<sup>TH</sup> Biennial ISAKOS Congress. Award applications will also open on September 1, 2017, and all applications and abstracts must be submitted by September 1, 2018 for consideration.

We hope you enjoy this issue of the ISAKOS Newsletter!





I hope you were able to attend the 11<sup>TH</sup> Biennial ISAKOS Congress in Shanghai. It was yet another fantastic meeting with a tremendous amount of information presented. With 302 presenters from 41 countries, and attendees from many more places around the globe, it was once again the best international sports medicine meeting of the year. The discussion at the symposia and instructional courses, as well as the audience questions, were at a very high-level, and I learned a lot as always! Our Chinese hosts and organizing committee did a great job with everything from meeting facilities to hotels and transportation. Please visit page 4 of this Newsletter for a full recap of the Congress, including the outstanding Award winners, social events and more. We also have some special reflections on the ISAKOS Congress from some of the promising Young Investigator Research Mentoring program participants—we will see these scientists on the podium around the world in the coming years!

This Newsletter also contains some fantastic scientific content, including a feature from our ISAKOS Communications Committee on how to best utilize social media in your practice. We also have a great article from the ROCK group about their Research in OsteoChondritis of the Knee. As we all experience in our practice, OCD of the knee can have a major impact on the athletes we treat. Finally, I invite you to read the article on Meniscal Ramp Repair, a controversial and difficult to define pathology.

I am already checking my 2019 calendar and looking forward to Cancun, Mexico in May. Having been to Cancun before, it is a spectacular vacation destination and should be a perfect location for the ISAKOS Congress. Personally, I may even indulge in the opportunity for a little rest and relaxation at the beach after the conference day is over! From personal experience, I can attest to the outstanding hospitality of the local Mexican people. Living in New York City, I am fortunate to have many Spanish speakers around me and I am practicing my Spanish language skills for the trip. Don't worry, everyone in Cancun speaks English too! Hasta luego—See you there!

**Robert G. Marx, MD**

ISAKOS Newsletter Editor 2017–2019





# Greetings from ISAKOS

On behalf of the ISAKOS Executive Committee 2017–2019, I would like to welcome and thank you for your continued membership with ISAKOS. It is my esteemed pleasure to assume the presidency of ISAKOS, and I thank you for your confidence and support. As I said in Shanghai, the ISAKOS Presidency is a profound honor!

It is often said that politics are small, but friendships are great. This is especially true in the family of ISAKOS, as our members are able to reach across political and cultural divides to form great friendships and educational collaborations. Just on our Executive Team, we have representatives from every continent except Antarctica (not a lot of orthopaedic surgeons!). Our member diversity is our strength, and it is your ability to see beyond the borders of your city, state, and country to seek educational opportunities that allows ISAKOS to have a profound impact on patient care around the world.

ISAKOS will continue to seek to fulfil our mission statement to “Advance the worldwide exchange and dissemination of education, research and patient care in Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine.”

We are fortunate to have great principles on which this society was built, including our core values of:

**Global Perspective**—We respect diversity and international viewpoints.

**Excellence**—We take pride in ensuring quality.

**Integrity**—We advocate high ethical conduct in all we do.

**Dedication**—We believe in the ISAKOS Mission, its teachings and collaboration with others.

ISAKOS has much to look forward to in the coming two years. As I also mentioned in Shanghai, it is our membership and the participation of our members in our committees that are our strength. With more than twenty active committees, ISAKOS looks to continue the great work that was on display in Shanghai during the 11<sup>TH</sup> Biennial ISAKOS Congress. The 2017–2019 Committees are already hard at work, and have submitted many requests for projects and publications that will benefit our membership for years to come. We thank the committees for their efforts and look forward to seeing their results.

ISAKOS is pleased to announce the great success of the ISAKOS Research Grants! ISAKOS has offered grants in four areas:

- New Researcher
- Osteoarthritis
- Clinical Outcomes
- Countries with Limited Resources

More than 20 applications have been received and are currently under review.

I look forward to the opportunity to meet many of our ISAKOS members during my term as your ISAKOS President. We appreciate your continued support of this wonderful organization.

Thank you,

**Marc Safran, MD**

ISAKOS President 2017–2019

# ISAKOS Around the World!



During the successful **ACCART** meeting in Cartagena, Colombia April 27–29, 2017, ISAKOS was very well represented with ISAKOS President Philippe Neyret, Treasurer Joao Espregueira-Mendes, and many ISAKOS Committee Members such as Philippe Landreau and David Figueroa. ACCART President Manuel Mosquera gave the opportunity to ISAKOS to present our mission.



ISAKOS thanks **AGA**–Society for Arthroscopy and Joint Surgery and Dr. Dimitr A. Jontschew (Germany) for their promotion of ISAKOS at their recent Congress in Germany!



## **Société Algérienne de Chirurgie Orthopédique Traumatologique**

ISAKOS President Dr. Philippe Neyret, and Committee members Pieter D’Hooghe and Elvire Servien were pleased to participate in the SACOT Meeting in Algiers on April 7–8, 2017.



ISAKOS was well represented during **IHKS** (Indonesian Hip and Knee Society) 3rd congress, August 24 to 26, 2017 in Jakarta, Indonesia with presentations by ISAKOS Past President Philippe Neyret (pictured), Past President Masahiro Kurosaka, and ISAKOS Committee Members Jon Karlsson, John Bartlett, Sebastien Lustig, Shuichi Matsuda, Mark Clatworthy, Philippe Landreau, and Ryosuke Kuroda.

Special thanks to IHKS host Nicolaas Budhiparama.



## 非常感谢你

Thank you to all who attended the 11<sup>TH</sup> Biennial ISAKOS Congress in Shanghai! The most attended ISAKOS Congress in our history, the Shanghai Congress was a wonderful opportunity for ISAKOS members to enjoy the rich and vibrant culture of China, and reconnect with friends from around the world!

More than 4,150 attendees participated in the ISAKOS Congress! This is a new record for ISAKOS, surpassing the Lyon Congress. Eighty-four different countries were represented by registrants during the ISAKOS Congress. An international event to its very core, the ISAKOS Congress featured more than 865 unique presenters, including faculty, paper and e-poster presenters. The ISAKOS Congress continues to be a diverse learning opportunity for our participants to interact with some of the best faculty in the world. We sincerely thank all the faculty and presenters who took time out of their schedules to prepare for, and attend the meeting, to provide the best education for our participants!



The ISAKOS Congress began with six pre-courses on a variety of topics, ranging from the Knee, to treatment of elite athletes, use of biologics, diagnosis and treatment of the hip, and ten live surgical demonstrations on topics relate to the shoulder! ISAKOS thanks the pre-course chairs for their efforts in organizing these courses.

The ISAKOS Congress continues to be a highly respected and sought-after meeting to attend and present at. More than 2,000 abstracts were received for consideration for the ISAKOS Congress scientific program. More than 225 were accepted as papers, with an additional 30 invited to participate in the inaugural Gong Show quick paper sessions. An additional 800 abstracts were invited to be electronic posters, with more than 750 accepting to be electronic posters. This represents a less than 50% acceptance rate.

The ISAKOS Program Committee worked very hard to provide a program that was diverse in faculty, topics and content. We hope all attendees were able to gain useful knowledge to take home to your colleagues and patients!

Weren't able to attend the ISAKOS Congress in Shanghai? Visit the ISAKOS Global Link to watch presentation videos! [www.isakos.com/globalink/](http://www.isakos.com/globalink/) COMING SOON – ISAKOS Congress Surgical Demonstration Courses. Our Surgical Demonstration faculty are editing their videos and creating mini-courses to further your education. These videos will be available through the Global Link very soon. Finally, all abstracts and faculty-provided handouts are available through the ISAKOS Congress Interactive Agenda – [www.isakos.com/2017/InteractiveAgenda](http://www.isakos.com/2017/InteractiveAgenda).

A special thanks to our ISAKOS Office Team, Audio Visual Team and our surgical skills team for their outstanding organization, professionalism and support.

Mark your calendars for the 12<sup>TH</sup> Biennial ISAKOS Congress! The 12<sup>TH</sup> Biennial ISAKOS Congress will be held in Cancun, Mexico on May 12–16, 2019. Program Chair Stefano Zaffagnini is already hard at work with the Program Committee developing another exciting scientific program.

## 谢谢,

**Philippe Neyret, MD PhD**

ISAKOS President 2015–2017

**Julian Feller, FRACS**

ISAKOS Program Chair,  
11<sup>TH</sup> Biennial ISAKOS Congress

# MOST SUCCESSFUL CONGRESS TO DATE!



84

COUNTRIES REPRESENTED



6

PRE-COURSES



31

INSTRUCTIONAL COURSES



4157

REGISTRANTS



2054

ABSTRACTS SUBMITTED



256

PAPERS



753

E-POSTERS



23

LIVE SURGICAL DEMONSTRATIONS

## THANK YOU!

# THANK YOU

## Thank You to the Local Organizing Committee!

### CSSM

Gouping Li, MD  
Yingfang Ao, MD  
Shiyi Chen, MD, PhD  
Manyi Wang, MD

### COA

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Yingze Zhang, MD  
Wei Tian, MD  
Kunzhen Wang, MD  
Peifu Tang, MD

### CAOS

Yan Wang, MD

### SMA

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Fudan University:  
Chouwen Zu, MD  
Xiaohui Liu, MS  
Huashan Hospital:  
Qian Ding, MD  
Ying Mao, MD  
Jianhua Shao, MD  
Dekun Guan, MD

### FUSM

Jiwu Chen, MD  
Hongyun Li, MD  
Jiarui Chen, MD

### Shanghai Government for Tourism Administration

Ping Chen

### Others

KM Chan, MD (HK)  
Patrick Yung, MD (HK)  
Yi-Sheng Chan, MD (Taiwan)  
Waisean Chan, MD (Macao)

## Thank you Pre-Course Chairs!

### The Knee: Maximizing Surgical Procedures in the Active & Athletic Patient

Elizabeth A. Arendt, MD UNITED STATES  
Mark Clatworthy, FRACS NEW ZEALAND  
Christopher John Vertullo, MBBS, FRACS (Orth),  
FAOrthA AUSTRALIA

### The IOC Prevention of Injuries & Illnesses in High Level Athletes

Lars Engebretsen, MD, PhD NORWAY  
Gino M.M.J. Kerkhoffs, MD, PhD, Prof.  
NETHERLANDS

### Current Concepts in Shoulder Surgeries: New Insights into Instability, Rotator Cuff Repair and Minimal Invasive Humeral Fracture Fixation

Andreas B. Imhoff, MD, Prof. GERMANY  
Felix Henry Savoie III, MD UNITED STATES

### Advanced Course on Knee Arthroplasty

Sebastien Lustig, MD, PhD, Prof. FRANCE  
Shuichi Matsuda, MD, PhD JAPAN  
Willem Mare van der Merwe, MBChB, FCS, SA  
Ortho SOUTH AFRICA

### The Use of Biologics to Treat Sports Medicine Pathology

Johnny Huard, PhD UNITED STATES  
Robert F. LaPrade, MD, PhD UNITED STATES  
Nicola Maffulli, MD, PhD, MS, FRCS(Orth)  
UNITED KINGDOM

### Evaluating Athletes with Hip and Groin Problems: From Symptoms to Diagnosis and Treatment

Per Hölmich, Prof., DMSc DENMARK  
Nick Mohtadi, MD, MSc, FRCSC CANADA  
Allston J. Stubbs, MD UNITED STATES



## Thank you to the Program Committee!

Julian A. Feller, FRACS AUSTRALIA, Chair  
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 Nobuo Adachi, MD, PhD JAPAN  
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 Ramon Cugat, MD, PhD SPAIN  
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 Allston J. Stubbs, MD UNITED STATES  
 C. Niek Van Dijk, MD, PhD NETHERLANDS  
 Patrick Shu Hang Yung, FRCS (Orth Surgery), FHKCOS, FHKAM, FRCS, MBChB HONG KONG  
 Anastasios D. Georgoulis, MD, Prof. GREECE, Past Chair

## Thank you to the ISAKOS Team of professionals for their expertise and passion in making the congress a great success!

Michele Johnson, Executive Director  
 Katie Anderson  
 Hilary Merliner  
 Joy Allen-Joseph  
 Sarah Corpuz  
 Kayleigh Foley  
 Beverlee Galstan

### **Surgical Demo Staff**

Judy Cooper  
 Santana Gonzales  
 Rich Leutheuser  
 Greg Weaver

### **Audio Visual Team**

Phil Haney  
 Dale DeWitt

# ISAKOS Congratulates

## Award & Fellowship Winners!

The International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine proudly presented the following awards at the 11<sup>TH</sup> Biennial ISAKOS Congress held June 4–8, 2017 in Shanghai, China.

### John J. Joyce Award

In 1981, Dr. John J. Joyce, III offered a monetary prize for the best arthroscopy paper read by an orthopaedic surgery resident or fellow during the Scientific Program of the 4th Congress of the International Arthroscopy Association in Rio de Janeiro. With characteristic generosity, he endowed a prize to be awarded at every IAA Congress thereafter. John Joyce created the award with the intention to stimulate and reward younger members who contribute high-quality data and presentations. A committee comprised of members of the ISAKOS Education Committee selects first and second place prize-winning papers from manuscripts presented at the ISAKOS Biennial Congress.



### 1st Place Winner

The Management of the Long Head of the Biceps in Rotator Cuff Repair: Prospective Cohort Study of High Versus Subpectoral Tenodesis

**Edoardo Franceschetti, MD ITALY**

### 2nd Place Winner

High Activity Level and Return to Sports Following Knee Osteotomy in Young Athletic Patients

**Suzanne Witjes, MD NETHERLANDS**

### Richard B. Caspari Award

Beginning at the 2003 ISAKOS Congress in Auckland, New Zealand, a monetary prize in honor of Richard B. Caspari was awarded to the best upper extremity paper read at the scientific program of the Congress. A panel composed of members of the ISAKOS Shoulder Committee selects the prize-winning paper read at the ISAKOS Biennial Congress.

### 1st Place Winner

Individual Shoulder Anatomy and Degenerative Rotator Cuff Tear (RCT): Comparison of Radiographic Parameters of 800 Patients with RCT and 800 Non-Affected

**Edoardo Franceschetti, MD ITALY**



### 2nd Place Winner

Does Concomitant Biceps Surgery Affect the Outcome of Rotator Cuff Repair?

**Bruce S. Miller, MD, MS UNITED STATES**

## Jan Gillquist Scientific Research Award

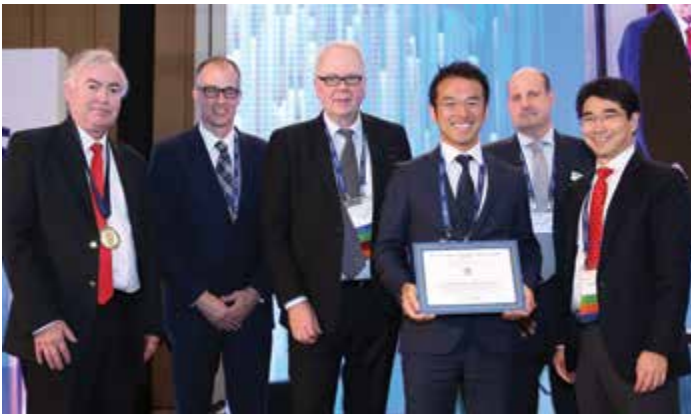
SPONSORED BY ÖSSUR

Beginning at the 2007 ISAKOS Congress in Florence, Italy, a monetary prize was awarded to the best scientific paper presented during the scientific program of the Congress. A panel composed of members of the ISAKOS Scientific Committee selects the prize-winning paper from manuscripts presented at the ISAKOS Biennial Congress.

### 1st Place Winner

Aggravated Rotational Laxity Due to the Concomitant Meniscus Tear in the Anterior Cruciate Ligament-Injured Knees Detected by the Quantitative Measurement of the Pivot-Shift Test

**Yuichi Hoshino, MD, PhD JAPAN**



### 2nd Place Winner

The Role of Calcaneofibular Ligament (CFL) Injury in Ankle Instability: Implications for Surgical Management

**Kenneth J. Hunt, MD UNITED STATES**



## Albert Trillat Young Investigator's Award

Established in memory of Professor Albert Trillat, past President and founder of the International Society of the Knee, this award provides recognition for a young researcher who has done outstanding clinical laboratory research contributing to the understanding, care or prevention of injuries to the knee. A panel composed of members of the ISAKOS Knee Committees reviews the award applications and the winning manuscript is presented at the ISAKOS Biennial Congress.

### Winner

Anterior Cruciate Ligament Reconstruction With or Without a Lateral Extra-Articular Tenodesis–Early Functional Outcomes of the ISAKOS Sponsored Stability Study

**Alan Getgood, MD, FRCS(Tr&Orth), DipSEM CANADA**



### **Gary Poehling Award**

Former ISAKOS President, Gary G. Poehling, is an innovator, teacher and leader in the field of Arthroscopy-specializing in the elbow, wrist and hand. Beginning at the 2017 ISAKOS Congress in Shanghai, China, a monetary prize in honor of Dr. Poehling is to be awarded to the best Elbow, Wrist and Hand paper read during the scientific program of the ISAKOS Congress.

#### **Winner**

All-Endoscopic Distal Biceps Repair: Cadaveric Portal Safety Analysis and Technical Feasibility Using 2 Fixation Techniques.

**Deepak N. Bhatia, MS, DNB INDIA**



### **Patellofemoral Research Excellence Award**

SPONSORED BY THE PATELLOFEMORAL FOUNDATION & ISAKOS

The Patellofemoral Research Excellence Award was established in 2003 to encourage outstanding research leading to improved understanding, prevention and treatment of patellofemoral pain or instability. A panel composed of representatives from the ISAKOS Knee and Scientific Committees, The International PF Study Group and The Patellofemoral Foundation review the award applications and the winning manuscript is presented at the ISAKOS Biennial Congress

#### **Winner**

Comparison of Soft Tissue and Bone Graft Fixation for Reconstruction of the Medial Patellofemoral Ligament. A Randomized Controlled Trial

**Martin Lind, Prof., MD, PhD DENMARK**



## Achilles Orthopaedic Sports Medicine Research Award

SPONSORED BY DJO GLOBAL

This ISAKOS award recognizes researchers who have done outstanding clinical or laboratory research in the field of sports medicine, such as the care and prevention of injuries. A panel composed of members of the ISAKOS Orthopaedic Sports Medicine Committee reviews the award applications and the winning manuscript is presented at the ISAKOS Biennial Congress.

### Winner

The Lateral Meniscus Posterior Root and Menisconfemoral Ligaments are Stabilizing Structures in the ACL Deficient Knee: A Biomechanical Study

**Gilbert Moatshe, MD NORWAY**



## Patellofemoral Traveling Fellowships

SPONSORED BY THE PATELLOFEMORAL FOUNDATION & ISAKOS

This travel award was developed to promote better understanding and communication regarding patellofemoral pain. This opportunity is awarded on a competitive basis to an orthopaedic surgeon interested in the study and advancement of understanding of the patellofemoral joint. Preference is given to those who have established an academic record of accomplishment. The Patellofemoral Foundation and ISAKOS will provide a stipend to permit visits to several centers, worldwide, that offer opportunities to learn about the complexities of patellofemoral pain. The fellows will write a report of the experience, which will be published in a future ISAKOS Newsletter.

**Sheanna Maine, FRACS AUSTRALIA**

**Mauro Núñez, MD COSTA RICA**



### Upper Extremity Traveling Fellowships

This fellowship was developed to promote better understanding and communication regarding injuries or conditions involving the structures of the Upper Extremity. This opportunity is available on a competitive basis to an orthopaedic surgeon between the ages of 35 and 45 years, interested in the study and advancement of understanding of injuries to the Upper Extremity. Preference is given to those who have established an academic record of accomplishment. A stipend will be provided to permit visits to several centers, worldwide, that can match their facilities with the applicant's interest. The fellow will write a report of the experience which will be published in a future ISAKOS Newsletter.

**Manit Arora, MSOrtho, MSportsMed INDIA**

**Mohamed A. Imam, MD, MSc, PhD, FRCS (ORTH)  
EGYPT**

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### Watanabe Arthroscopy Travelling Fellowship

The Masaki Watanabe Arthroscopy Traveling Fellowship was named for Dr. Masaki Watanabe, who developed the first device for minimally invasive surgery. The arthroscope was developed based on his original ideas and formed the basis for arthroscopic surgery today. The Masaki Watanabe Arthroscopy Traveling Fellowship Award is intended to provide funding for two young arthroscopic surgeons from developing countries to travel to several medical centers and learn more about the current practice of arthroscopic surgery from well-respected experts in the field. At each site, the fellows will have an opportunity to observe arthroscopic surgeries, discuss surgical procedures, patient management, and research in the various fields of arthroscopy. The knowledge learned by the traveling fellows can then be taken back to their respective countries to improve patient care and advance the local teaching of arthroscopic surgery

**Bujar Shabani, PhD ALBANIA**

**Hong Li, MD CHINA**



### ISAKOS Young Investigator's Scholarship and Research Mentoring Program

The ISAKOS Young Investigator's Scholarship and Research Mentoring Program was developed by the ISAKOS Scientific Committee as a mentor-mentee program for young investigators from developing countries with limited access to research resources. The Young Investigator Program seeks to assist young surgeons advance research by awarding a Fellowship at an ISAKOS recognized research facility and funding high-impact projects in the applicants' countries.

**Vineet Thomas Abraham, MBBS, MS Ortho INDIA**

**Taofeek O. Adeyemi, MD, MBA, Diploma Ortho, FMC  
Ortho NIGERIA**

**Fabio V. Arilla, MD BRAZIL**

**Levan Chikvatia, MD GEORGIA**

**Oscar Antonio Colmenares, MD VENEZUELA**

**Fernando Antonio Fernández, MD MEXICO**

**Crissth Paul Gonzales Alvarez, MD PERU**

**Jean Michel Hovsepian, MD VENEZUELA**

**Robi Kelc, MD, PhD SLOVENIA**

**Hong Li, MD CHINA**

**Juan Pablo Martinez, MD, MSc COLOMBIA**

**Mohamed Ahmed Salem Mohamed, MBBC EGYPT**

**Joao Pedro Moreira De Oliveira, MD PORTUGAL**

**Saroj Rai, MD NEPAL**

**Andriy Rublenko, PhD UKRAINE**

**Bharat Sharma, DNB (Ortho), DOrth (JIPMER) INDIA**

**Dong Liang Shi, MD, PhD CHINA**

**Trifon Totlis, MD, PhD GREECE**

**Guilherme Henrique Vieira Lima, MD BRAZIL**



## ISAKOS 2017: Where Dreams are Accomplished



Dr. Maftun Ahmed  
Medical Officer,  
*National Institute of Traumatology  
and Orthopaedic Rehabilitation  
Dhaka, BANGLADESH*



My journey to the 11<sup>TH</sup> Biennial ISAKOS Congress was a long one. As a young orthopaedic surgeon with limited resources, I was provided with a scholarship to attend the Biennial Congress in Shanghai. It may sound so simple, but for a young orthopaedic dreamer like me from a developing country, the harsh reality is that it is almost impossible to attend such a prestigious, world famous and mammoth event without the support ISAKOS provided to me.

On Sunday, June 4th, I found myself joining the greatest gathering of renowned and world famous arthroscopic surgeons and Orthopaedic sports medicine experts from each corner of the world at the Shanghai International Convention and Exhibition Center. For the entire Congress, I was in the midst of great academicians and surgeons.

The trip to Shanghai was one of many firsts for me. The ISAKOS Congress was my first international meeting as an orthopaedic surgeon. I had the opportunity to practice on my first arthroscopic surgery simulation in the Congress Exhibit Hall. The valuable lectures, lunch time sessions, and scientific paper presentations by wonderful international experts in our fields has revitalized my enthusiasm for Orthopaedics and Sports Medicine.



I had the opportunity to meet ISAKOS President, Philippe Neyret, ISAKOS Treasurer Joao Espregueira-Mendes, Michele Johnson, ISAKOS Executive Director, and Katie Anderson, Director of Education for ISAKOS – this was an emotional moment that I can't express words. I kept it in my memories deep inside my heart.

I must express my heartfelt gratitude ISAKOS for giving me the opportunity to join the 11<sup>TH</sup> Biennial ISAKOS Congress. Through the spreading of your hands to support and care for underprivileged young surgeons like myself, you are enabling us to develop our skills and improve patient care in my country! Your support will make me a successor of your footsteps in future. I dream of the day when I'll be standing at the ISAKOS Congress podium presenting my paper. I believe ISAKOS will stay with me to make my dream come true.

Once again, thank you ISAKOS for providing me the great opportunity to meet great people and believe your supporting hands towards me will be sustained to achieve the "Dream of a young Orthopaedic Surgeon"

Thank you.

## Welcome Reception

The ISAKOS Congress welcome reception was a festive occasion, welcoming all Congress participants and their guests to Shanghai. The Welcome Reception featured traditional drummers, a group of dragon dancers, and a collection of Chinese artisans who provided wonderful keepsakes for reception attendees.



## Pre-Courses

Three morning and three afternoon pre-courses offered Congress attendees the option to start their Congress experience on Saturday, June 3. Topics ranged from Knee sports and preservation to arthroplasty, shoulder surgery, treatment of the hip, biologics, and treatment of elite athletes.

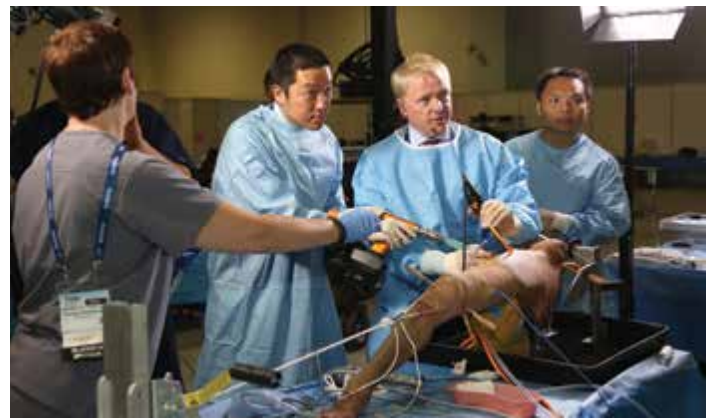
## Exhibits

ISAKOS thanks the ISAKOS Congress Exhibitors for their continued support of our mission of education and improved patient care!



## Surgical Demos

The 11<sup>TH</sup> Biennial ISAKOS Congress included more than twenty live surgical demonstrations! Visit the ISAKOS Global Link to view archived surgical demonstrations and participate in online courses.





### Lunch Time Sessions

Lunchtime Lectures and Workshops were also sponsored by various companies, and provided up-to-the-minute information on various techniques with lectures and hands-on workshops.



### Presidential Medallion Presentation

Dr. Philippe Neyret, ISAKOS President 2015–2017 passes the Presidential Medallion to Dr. Marc Safran, ISAKOS President 2017–2019.



### Honorary Members

ISAKOS congratulates new Honorary Members Dr. Jiri Dvorak and Dr. Lars Engebretsen!



### Presidential Guest Lecture

ISAKOS would like to thank former professional basketball player Yao Ming for his presentation as the ISAKOS Presidential Guest Lecture.



# ISAKOS

## HONORARY MEMBERS

Honorary Membership is the highest honor awarded to an ISAKOS Member who has demonstrated outstanding or exemplary leadership in the specialties of arthroscopy, knee surgery, and orthopaedic sports medicine.

**We congratulate the ISAKOS Honorary Member recipients for 2017!**



**Jiri Dvorak, Prof.**

Jiri Dvorak was born on 22 November 1948 in the Czech Republic. He started pre-clinic studies at the Charles University in Prague. He left the Czech Republic in 1968 continuing his studies in Zurich. He obtained a medical degree in 1976 from the Medical Faculty in Zurich. In 1990, Jiri was awarded the “Venia Legendi” of Zurich University for the original work on the subject of the “upper cervical spine”. In 1995 He became Professor at the University of Zurich.

In 1987, Prof. Dvorak became Chair of the Department of Neurology, Spine Unit in the Schulthess Clinic, Zurich. One of his major contribution was the development of the F-MARC (FIFA Medical Assessment and Research Centre) from 1994 to 2016 as FIFA Chief Medical Officer. Prof. Dvorak was also involved in the anti-doping activities with WADA (World Anti-Doping Agency) (Health, Science and Research committee) during the period 2003–2016.

Among his many activities in scientific journals, Prof. Dvorak assumed his role as Editor for the *American Journal of Sports Medicine* in 2003 and Senior Editor for the *British Journal of Sports Medicine* in 2005.

Prof. Dvorak was also President of Spine Society of Europe (1999 / 2000). He has served as a member of the IOC Science committee from 2002 to 2016.

Jiri Dvorak is a very productive author and widely published with 95 original papers on spine, 438 papers on football medicine and 48 textbooks. During his career he received several awards.

He got married in 1972 to Babette Kisling, and has four children. He practices water skiing at a national competitive level and also enjoys windsurfing, diving, golf, cycling.

He established the scientific links between the medical commission of FIFA and ISAKOS and participated in numerous sports meetings with ISAKOS.



## Lars Engebretsen, MD, PhD

Lars Engebretsen embodies the intent of Honorary Membership of ISAKOS due to his many contributions to the understanding of injury and its prevention in athletes all over the world. Professor Engebretsen did his university, medical school and orthopaedic training in Norway, as well as completing a fellowship followed by a faculty position at the University of Minnesota. Dr. Engebretsen, is a professor and director of research at the Orthopaedic Center of the Ullevaal University Hospital and University of Oslo Medical School and professor and co-chair of the Oslo Sports Trauma Research Center. He had been the Chairman for the Department of Orthopaedic Surgery at Ullevaal Hospital 1996–2000 and 2002–2004 and the Orthopaedic University Clinic in Oslo 2000–2002. From 2005–2007 he was the Divisional Director for Orthopaedics, Neurosurgery, Neurology, Physical Medicine and Rehabilitation in the Division of Musculoskeletal and Neurosciences at the University of Oslo.

Lars is the Chief Physician for the Norwegian Federation of Sports, and headed the medical service at the Norwegian Olympic Center until the autumn of 2011, though he still serves as the Chief Team Physician for the Norwegian Olympic Teams. In 2007, he was appointed the inaugural Head of Science and Research for the International Olympic Committee (IOC), which he is utilizing to improve the prevention and care of athletes worldwide through research grants, collaborations, lectures and the new IOC-BJSM journal (of which he is the Editor in Chief): *Injury Prevention and Health Protection*. He also serves on the editorial board of the *American Journal of Sports Medicine (AJSM)*; the *Scandinavian Journal of Medicine and Science in Sports*; *Knee Surgery, Arthroscopy and Sports Traumatology (KSSTA)*; and *The Knee* and is a reviewer for all the major orthopaedic and sports traumatology journals. He is also an Associate Editor of the *Journal of Bone and Joint Surgery*.

Dr. Engebretsen has been the President of the Norwegian Sports Medicine Society, the Scandinavian Foundation of Sports Medicine and The European Society of Sports Traumatology and Arthroscopy (ESSKA). Lars has been a board member of many other societies including, the Norwegian Society of Sports Medicine, the Scandinavian Foundation of Medicine & Science in Sports, the International Society for Arthroscopy, Knee Surgery and Orthopaedic Sports medicine (ISAKOS), the Orthopaedic Research Society and International Knee Society.

Dr. Engebretsen is known for his prolific and significant research in three main areas: resurfacing techniques of cartilage injuries, combined and complex knee ligament injuries, and prevention techniques of sports injuries. He is also collaborating on significant work on stem cells. Dr. Engebretsen has published nearly 400 articles and book chapters, as well as several books and has received research grants and awards from many agencies and associations, including the National Institutes of Health, the Norwegian Council for Research in Science and humanities, the Norwegian Ministry of Health, AOSSM and the IOC.

Dr. Lars Engebretsen embodies ISAKOS in International Collaboration and Advancement of Sports Medicine and Science.

## My Experience as an ISAKOS Young Investigator Scholarship & Research Mentoring Program Recipient



Saroj Rai, MD  
Wuhan, NEPAL

Hailing from a small but beautiful Himalayan nation, Nepal, it was an incredible opportunity for me to attend “The 11<sup>TH</sup> Biennial ISAKOS Congress 2017, Shanghai” as a winner of the ISAKOS Young Investigator’s Scholarship & Research Mentoring Program. This scholarship award will be a great starting point for me to establish an Arthroscopy and Sports Medicine Center back in my country.



ISAKOS has bestowed upon me a great opportunity to meet and learn with the world’s renowned experts in the field of Arthroscopy and Sports Medicine. Their kindness and encouraging words were astonishing and provided me with an utmost inspiration to make my dream come true. I was fascinated by the wonderful presentations and surgical demonstrations where I was able to learn about the most recent innovations and technical advances. It was indeed ‘a moment to remember’ experience for me to be presenting my research proposal for a research fellowship grant as a Young Investigator in front of the Scientific Chair.



As one of the scholarship recipients, ISAKOS waived my Congress Registration fee along with travel and hotel expense assistance. Without financial support from ISAKOS, it would not have been possible for me to attend the Congress. I am very thankful to ISAKOS for selecting me for this Scholarship. I am extremely grateful to Professors Philippe N. Neyret, Marc R. Safran, Freddie H. Fu, Masahiro Kurosaka, Robert G. Marx, Volker Musahl, and Olufemi R. Ayeni. My gratitude also goes to the staff at the ISAKOS office, especially Katie Anderson for her tremendous help and support.





On behalf of the ISAKOS Board of Directors, we are saddened to announce the passing of long time ISAKOS Member, Professor Philippe Hardy, MD, PhD (France) on Saturday, September 2, 2017, after battling illness the last few months. Professor Hardy was the Head of the Orthopaedic and Traumatology Department of Ambroise Paré and Raymond Poincaré University Hospitals, West Paris University. He was a renowned surgeon, an enthusiastic teacher, and a dynamic scientist. He was a true leader and a one of a kind mentor — supportive of his fellows and always challenging them, all while cultivating friendships. The residents and fellows who were lucky enough to work with him were proudly known as “The Hardy’s Boys”.

ISAKOS was fortunate to have Professor Hardy as a longtime active member in ISAKOS, including service as Chair of the ISAKOS Upper Extremity Committee from 2003–2005, as well as a member of the Board of Directors from 2013–2017. Professor Hardy was also a member of the Arthroscopy Committee, Newsletter Editorial Board, and a member of the ISAKOS Strategic Planning Committee. It was Philippe’s discussions with Marc Safran and other ISAKOS leaders in 2001 that led to the increased presence of shoulder surgery within ISAKOS.

Professor Hardy loved to collaborate with his international friends as well as learn from them. He instilled in all the importance of learning from different countries around the world. His pride was his family — his wife, Marie H el ene, and his children Victoire, William, Edouard and Alexandre. He possessed all the finest qualities that a surgeon and a human being should possess. His spirit will live on in his beloved family and in the many friends, patients, and students whose lives he touched. He was a lighthouse in our field, and our society, and will surely be missed by all those he has touched directly and indirectly.

**ISAKOS Board of Directors 2017–2019**

## NEW FOR 2019!

### ISAKOS IS PLEASED TO ANNOUNCE **TWO NEW AWARDS** FOR THE **12<sup>TH</sup> BIENNIAL** ISAKOS CONGRESS!



#### Paolo Aglietti Award

ISAKOS is pleased to announce the Paolo Aglietti Award for Knee Arthroplasty. This award is in recognition of Professor Aglietti’s numerous contributions to knee surgery as a prolific researcher, teacher and surgeon. Professor Aglietti served as Chairman of the ISAKOS Knee Committee and was ISAKOS President from 2007–2009.



#### ISAKOS Global Travelling Fellowship

The ISAKOS Global Travelling Fellowship is a new initiative from ISAKOS to foster the international exchange of knowledge and skills in the field of sports orthopaedic surgery. Fellows will have the opportunity to observe sports orthopaedic surgeries performed by highly respected surgeons, to discuss not only the surgical procedures but all aspects of patient management, and to discuss and share research experience.



# ISAKOS PUBLICATIONS



## Full Access in myISAKOS

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*Management of Knee Osteoarthritis*

*The Menisci*

*Shoulder Instability Across the Life Span*

*Muscle and Tendon Injuries*

*Elbow Arthroscopy*

*Shoulder Concepts 2013: Consensus and Concerns*

*Meniscal Transplantation*

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*Injuries and Health Problems in Football*

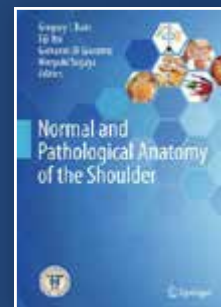
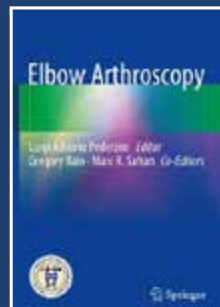
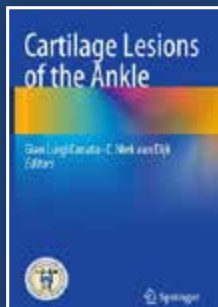
*Bio-orthopaedics*

*Cartilage Lesions of the Ankle*

*Normal and Pathological Anatomy of the Shoulder*

*Shoulder Stiffness—Current Concepts and Concerns*

*The Patellofemoral Joint*





## ¡BIENVENIDO!

On behalf of the membership of ISAKOS, we cordially invite you to attend the 12<sup>TH</sup> Biennial ISAKOS Congress in Cancun, Mexico! The ISAKOS Congress continues to be a premier international meeting, providing a unique opportunity for attendees to share, discuss and learn the latest advancements in arthroscopy, knee surgery and sports medicine.

The five-day ISAKOS Congress includes a myriad of educational opportunities. The meeting provides a variety of new and cutting edge surgical techniques and approaches to clinical management, combined with overviews of current controversies in orthopaedic practice.

Submit your Abstracts! Abstracts will be considered for both podium presentations and electronic posters. Abstract submission will be open until September 1, 2018. In addition, exceptional abstracts can be submitted for consideration for several ISAKOS Awards for outstanding clinical or laboratory research!

The city of Cancun was just a small sand barrier some 35 years ago. It has since blossomed into one of the most popular vacation destinations in the world! Cancun consists of a medium-sized coastal city and a long, thin island connected to the mainland through bridges at its north and south ends. It is home to world-class resorts, dance clubs, shopping malls and of course, some of the most beautiful beaches in the world! Cancun offers something for everyone, and we hope you will join us there. A variety of Congress social events will also be offered including a Welcome Reception, a spouse and guest program and tour assistance.

You are a vital part of the 12<sup>TH</sup> Biennial ISAKOS Congress! We hope you will plan to participate in the international experience that is the ISAKOS Congress.



- |   |  |   |  |
|---|--|---|--|
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| Gregory Ian Bain, MBBS, FRACS, PhD AUSTRALIA                    | Julian A. Feller, FRACS AUSTRALIA              | Jason L. Koh, MD UNITED STATES              | Luigi Adriano Pederzini, MD ITALY  |
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12<sup>TH</sup> Biennial

# ISAKOS CONGRESS 2019

Cancun, Mexico • May 12–16, 2019

## CALL FOR ABSTRACTS

### 6 MEETING DAYS

- Pre-Courses on Saturday, May 11, 2019
- Sports Rehabilitation Concurrent Course
- 300+ Scientific Papers
- Panel Discussions and Debates
- Symposia
- Lunch Time Lectures and Workshops
- Surgical Demonstrations
- Instructional Course Lectures
- ePoster Presentations
- Technical Exhibits
- CME Certification
- Spouse and Guest Program
- Welcome Reception

### CME CERTIFICATION

The 12<sup>TH</sup> Biennial ISAKOS Congress will be planned and implemented in accordance with the essential areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through joint sponsorship.

### AWARDS AND FELLOWSHIPS

- John J. Joyce Award
- Richard B. Caspari Award
- Jan I. Gillquist Scientific Research Award
- Albert Trillat Young Investigator's Award
- New! Paolo Aglietti Award
- Achilles Orthopaedic Sports Medicine Research Award
- Patellofemoral Research Excellence Award
- Gary G. Poehling Award
- The Patellofemoral Traveling Fellowship
- New! The ISAKOS Global Traveling Fellowship
- Young Investigator's Scholarship & Research Mentoring Program

### ONLINE ABSTRACT SUBMISSION

ISAKOS is pleased to announce the  
Call for Abstracts for the 2019 Congress  
[isakos.com/2019congress](http://isakos.com/2019congress)

### ABSTRACT SUBMISSION DEADLINE

September 1, 2018

APPLY ONLINE  
FOR AWARDS  
& FELLOWSHIPS



#ISAKOS2019



## ROCK Summary

Kevin Shea, MD, St. Luke's Health System, Boise, ID

Ted Ganley, MD, Children's Hospital of Philadelphia

Jim Carey, MD, University of Pennsylvania

John Polousky, MD, The Children's Health Andrews Institute

Ben Heyworth, MD, Boston Children's Hospital

Allen Anderson, MD, Tennessee Orthopaedic Alliance

Bujar Shabani, PhD

OCD of the Knee can have a major impact on young athletes,



and its etiology remains unclear. It is much less than common than other conditions, such as ACL injury, meniscus tear, shoulder instability, and Multi-center studies will be essential to determine the best treatment options and outcomes. To address the need for a multi-center approach to the study of this condition, the Research on Osteochondritis Dissecans of the Knee Research Group (ROCK) was formed in 2010 (kneeocd.org). ROCK defined OCD of the knee as follows: "A focal, idiopathic alteration of subchondral bone with risk for instability and disruption of adjacent articular cartilage that may result in premature osteoarthritis". (Edmonds EW, Shea KG. Osteochondritis dissecans: editorial comment. Clin Orthop Relat Res 2013; 471(4): 1105-6.)

Assessment of OCD lesion stability and propensity for healing remain challenging, and may be the most important variables to monitor in this condition. Variables which assess and predict stability and healing will help guide the clinician through treatment recommendations of observation, activity modifications, bracing/immobilization, and surgery. Most, but not all lesions in skeletally immature children have a good prognosis for healing. It appears that older patients, those near or beyond skeletal maturity, and larger lesions, have a worse prognosis for healing with non-operative means.

The ROCK Group (kneeocd.org) has grown from 3 surgeons in 2010, to over 50 members, including 30+ surgeons, and research staff including those with PhD, DVM, Musculoskeletal Radiology, and PT backgrounds.

The AAOS Clinical Practice Guideline for OCD Knee was published in 2011. This Guideline emphasized the lack of higher level evidence for the treatment of this condition, but did provide a comprehensive outline for appropriate future research questions.

This OCD research outline has provided a 'road map' for the ROCK study group. Specific research investigations conducted by the ROCK Group include the following:

### Development, validation of a highly reliable arthroscopy classification system for OCD of the knee.

The ROCK Arthroscopy Classification includes 3 categories of stable lesions (Fig. 1a–Cue Ball, Shadow, Wrinkle), and 3 unstable lesions (Fig. 1b–Locked Door, Trap Door, Crater).

#### IMMOBILE LESIONS



01a

#### MOBILE LESIONS



01b

- a James L. Carey, MD, MPH, Eric J. Wall, MD, Nathan L. Grimm, MD, Theodore J. Ganley, MD, Eric W. Edmonds, MD, Allen F. Anderson, MD, John Polousky, MD, M. Lucas Murnaghan, MD, Carl W. Nissen, MD, Jennifer Weiss, MD, Roger M. Lyon, MD, Henry G. Chambers, MD, Rick W. Wright, MD, Benton E. Heyworth, MD, Lars Peterson, MD, PhD, Greg Myer, PhD, Kevin G. Shea, MD. Novel Arthroscopic Classification of Osteochondritis Dissecans of the Knee: A Multicenter Reliability Study. *Am J Sports Med.* Epub 2016 Apr 6.

### Development of standard multi-center treatment protocols to minimize variation in treatment for OCD.

To facilitate power of multi-center research groups, standard treatment protocols have been developed to reduce variation for the 6 arthroscopic categories of OCD. This work has been led by Ben Heyworth, Eric Wall, and other members of ROCK, and has been presented at two international meetings, and submitted for publication.

### Evaluation of reliable radiology findings for OCD.

The study has identified the radiographic features that can be evaluated reliably in a large multi-center study group setting.

EJ Wall, MD Milewski, JL Carey, KG Shea, TJ Ganley, JD Polousky, NL Grimm, EA Eismann, JC Jacobs, LM Murnaghan, CW Nissen, JM Weiss, GD Myer. The Reliability of Assessing Radiographic Healing of Osteochondritis Dissecans of the Knee. *Am J Sports Med.* 2017.

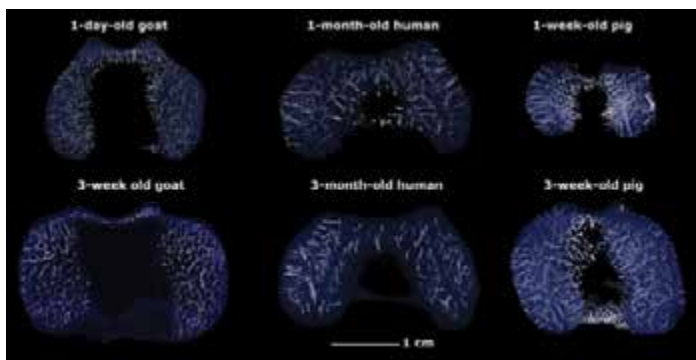
### Development of AAOS Appropriate Utilization Criteria for OCD of the knee.

Using the Clinical Practice Guideline, Expert Opinion, and the Rand/UCLA Delphi process, Appropriate Utilization Criteria (AUC) have been developed for OCD of the knee. This work has been led by James Carey, Kevin Shea, and other members of ROCK. This AUC is available at the American Academy of Orthopaedic Surgeons Website, and can be downloaded as a cell phone/tablet APP from OrthoGuidelines.org



### Evaluation of OCD etiology related to vascular insufficiency.

This investigation aims to further elucidate the etiology of OCD, and uses inter-species comparisons of humans and pigs. Both species are prone to OCD of the knee, which may be related, in part, to vascular insufficiency of the developing knee joint. Vascular 'watershed' areas of the knee have been identified in both pigs and humans, which correspond to the most common anatomic regions of OCD development (Fig. 3)



03

- a Toth F, Nissi MJ, Ellermann JM, Wang L, Shea KG, Polousky J, and Carlson CS. Novel application of Magnetic Resonance Imaging Demonstrates Characteristic Differences in Vasculature at Predilection Sites of Osteochondrosis. *Am J Sports Med* August 18, 2015, published online.

### Production of the largest epidemiology study of OCD of the knee.

This study looked at the population of Los Angeles, California to determine the incidence of OCD of the knee. This study has evaluated age, sex, and ethnicity with regards to OCD incidence. Under the leadership of Drs. Jeff Kessler, and Jennifer Weiss, the ROCK group has done additional work on evaluating the development to OCD of the ankle, elbow, and factors which predict progression to surgeon for OCD of the knee.

- a Kessler JI, Nikizad H, Shea KG, Jacobs JC, Jr., Bebchuk J, Weiss JM. The Demographics and Epidemiology of Osteochondritis Dissecans of the Knee in Children and Adolescents. *Am J Sports Med:* 42(2) 2014 pp. 320–326.

### ROCK RCT Comparison of trans-articular versus retro-articular drilling for OCD of the knee.

The project, lead by Ben Heyworth and with Funding from AOSSM, is investigating the differences in outcomes between trans-articular and retro-articular drilling for OCD of the medial femoral condyle. Approximately 90 patients have been entered into this study.

### ROCK Prospective Cohort for OCD Knee.

- a Under leadership from Jim Carey and the entire ROCK Group, the ROCK Prospective Cohort study was initiated in December 2014. Approximately 500 patients have been entered into the Prospective Cohort.

### Genetic factors/etiology of OCD of the Knee.

The ROCK group, under the leadership of Drs. Ted Ganley, Allen Anderson, and Kevin Shea, have several investigations ongoing on the genetics of OCD. This includes a Genome-Wide Association Study of Juvenile Osteochondritis Dissecans. Further genetics research is being conducted on the Utah Population Database, which allows for the evaluation of medical conditions that can be cross referenced to a larger genealogy registry.

- 01a ROCK Arthroscopy Classification—Immobile Lesions  
01b ROCK Arthroscopy Classification—Mobile Lesions  
03 Interspecies comparisons femoral condyle vascular development of goat, human, and pig specimens.

## Meniscal Ramp Repair



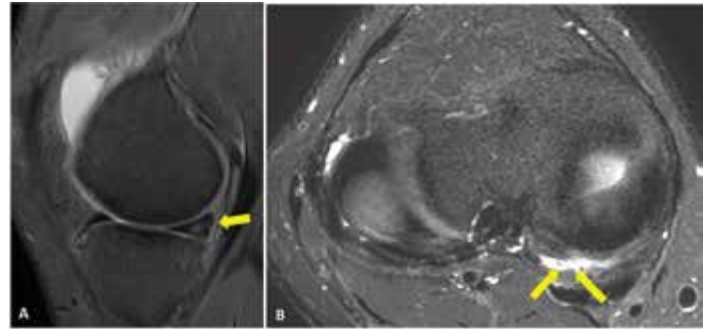
Sachin Ramchandra Tapasvi  
MBBS, MS, DNB, FRCS  
Pune, Maharashtra, INDIA

A tear at the peripheral attachment of the posterior horn of the medial meniscus, an injury that is now recognized as the ramp lesion, was probably first described by Strobel. The exact definition of this injury is still not settled as there is controversy about the exact structure that is injured. Nonetheless, both a longitudinal tear at the meniscocapsular junction and an injury involving the meniscotibial ligament of the posterior horn of medial meniscus are considered to be ramp lesions. This injury pattern traditionally has been under-recognized because it lies in an area that is difficult to visualize arthroscopically, especially in small or tight knees when viewed from the anterolateral portal, and also because the pathomechanics of the injury are poorly understood (Hetsroni et al). The reduced mobility of the medial meniscus makes it prone to this injury with rotational trauma in deep flexion. Hughston and Eilers postulated that the capsular arm of the semimembranosus is attached to the medial meniscus and that contraction of this muscle can cause peripheral tears when the meniscus is wedged between the femoral and tibial condyles.

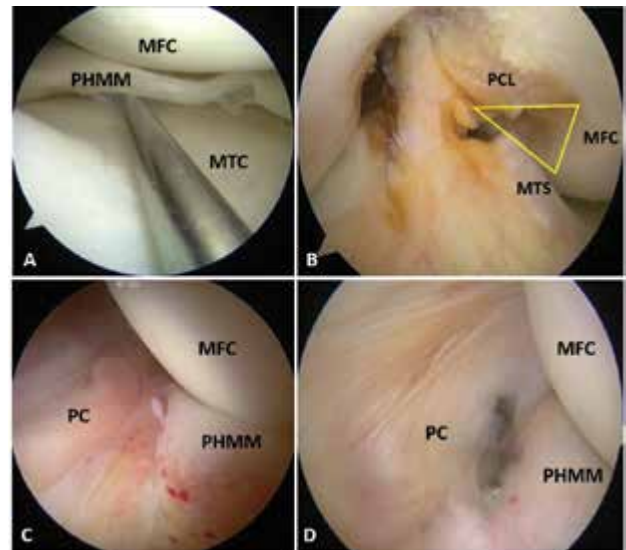
### Diagnosis

The reported prevalence of ramp lesions associated with anterior cruciate ligament (ACL) tears has ranged from 9% to 40% in the literature. A knowledge and suspicion of this injury pattern and the use of a systematic method for diagnosis are paramount. Magnetic resonance imaging (MRI) is notorious for its failure to detect this lesion, although a sensitivity of 77% has been reported. Bollen et al presumed that as the meniscocapsular separation reduces in an extended knee, this finding is missed on an MRI. However, the presence of a fluid signal between the posterior capsule and the posterior horn is a very specific sign of a ramp lesion (Fig. 1). The reliable diagnosis of a ramp lesion is possible only with use of arthroscopy.

Sonnery-Cottet et al. described a systematic method of visualizing and probing to detect a ramp lesion with use of a 30° arthroscope (Fig. 2). The first stage involves anterior visualization by inserting the scope through the standard anterolateral portal and probing the posterior horn of the meniscus via the anteromedial portal with the knee in extension.



01

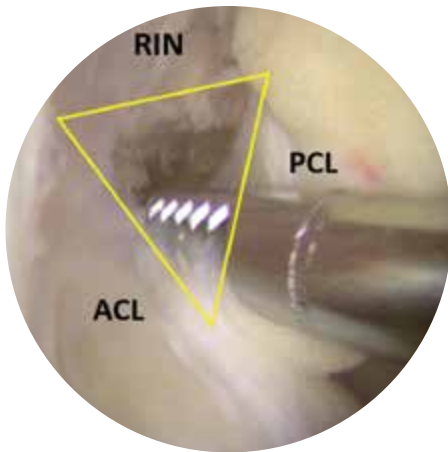


02

The second stage involves posteromedial visualization by advancing the scope in the triangular recess between the posterior condylar ligament (PCL), medial femoral condyle, and medial tibial spine. The third stage involves creating a posteromedial portal under vision and thoroughly probing the posterior meniscocapsular junction. The arthroscope can be inserted through this portal to directly visualize this corner as well. Pie-crusting of the deep MCL while applying a valgus force in extension helps to open up the medial space considerably, allowing thorough probing and as well as working space. We have found that passing the 30° arthroscope in a transcondylar fashion through the septum, in the triangle formed by the ACL, PCL, and roof of intercondylar notch, provides better visualization, with the knee in 90° flexion and the meniscocapsular separation is more apparent (Fig. 3). Furthermore, using a 70° arthroscope gives a bird's eye view of the recess where a ramp lesion is often missed (Fig. 4). The importance of meticulous probing is emphasized.

**Classification**

A detailed classification system for ramp lesions was proposed by Thauinat et al. A knowledge of this classification system can help the physician to understand the pathology of a ramp lesion, improve diagnostic accuracy, and formulate a treatment plan. The 5 types of lesions are described in Table I. It cannot be overstressed that probing to assess the mobility of the tear is critical.

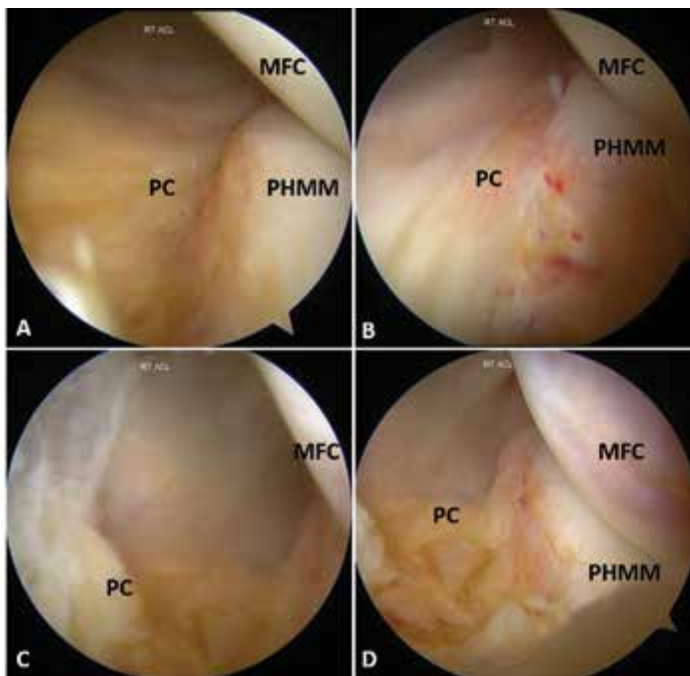


03

**Classification of Ramp Lesions**

Type	Description	Mobility on Probing
1	Meniscocapsular junction, in the synovial sheath	Very low
2	Partial superior lesions, diagnosed only with trans-notch approach	Low
3	Partial inferior "hidden lesion," not seen with trans-notch approach	Significant
4	Complete tear in red-red zone	Very high
5	Double tear	

Table 01



04

- 01 MRI scans illustrating the appearance of a ramp lesion. The presence of a fluid signal at the meniscocapsular junction as seen on sagittal proton-density fat-saturated sections (Fig. 1-A, yellow arrow) or on axial sections (Fig. 1-B, double yellow arrow) are highly suggestive of a ramp lesion.
- 02 Arthroscopic images illustrating the sequence of diagnosing a ramp lesion. First, visualization through the anterolateral portal and probing reveals mobility of the posterior horn of the medial meniscus (Fig. 2-A). The arthroscope is then advanced posteriorly across the triangular recess between the posterior condylar ligament, medial femoral condyle, and medial tibial spine (Fig. 2-B, yellow arrowhead) and the lens is rotated to view the ramp area, revealing the rent at the meniscocapsular junction (Fig. 2-C). Probing from the posteromedial portal (Fig. 2-D) helps to identify the tear even better. (MFC = medial femoral condyle, MTC = medial tibial condyle, MTS = medial tibial spine, PHMM = posterior horn of medial meniscus, PC = posterior meniscus, and PCL = posterior cruciate ligament.)
- 03 Arthroscopic image illustrating the transcondylar approach to the posterior horn of the medial meniscus. The site of the ramp lesion can be seen by advancing the arthroscope in a transcondylar fashion through the septum, in the triangle between the ACL, PCL, and roof of the notch. (ACL = anterior cruciate ligament, PCL = posterior cruciate ligament, and RIN = roof of intercondylar notch).
- 04 Arthroscopic images illustrating comparative views of the posterior horn of the medial meniscus. A ramp lesion can be seen by advancing a 30° arthroscope between the PCL and the medial femoral condyle (Fig. 4-A), and visualization is improved when a 70° arthroscope is used (Fig. 4-B). Passing a 30° arthroscope in a transcondylar fashion provides better visualization of the area and allows for working space as well (Fig. 4-C), but using a 70° arthroscope in this manner provides the best visualization (Fig. 4-D). (MFC = medial femoral condyle, PHMM = posterior horn of the medial meniscus, and PC = posterior meniscus.)

## Meniscal Ramp Repair

### Treatment

As the understanding of the ramp lesion has continued to evolve, so has its treatment. While conservative management can be considered, based on the premise that location in the peripheral vascular zone might allow healing when the knee is stabilized after an ACL reconstruction. However, this is unproven at best. Liu et al., in a prospective study, found that “stable” ramp lesions that had been treated with either repair or abrasion and trephination alone during ACL reconstruction had similar outcomes in terms of subjective assessments (IKDC scores, Lysholm scores), knee-stability assessments (pivot-shift tests, Lachman tests, KT-1000 measurements), and the status of meniscal healing on MRI scans.

Nonetheless, repair is generally advocated given the biomechanical implications of ramp lesions in terms of knee kinematics. The anatomical location of such lesions, however, makes repair potentially technically demanding. Inside-out repair in the far posterior meniscus is fraught with complications because of injury to the neurovascular structures, necessitating a “safety incision” at all times. Hence, we prefer an all-inside repair technique for the repair of a ramp lesion. There are two ways in which an all-inside repair of a ramp lesion can be done:

#### 1 All-inside suture technique:

This technique involves inserting a suture shuttling device through a posteromedial portal, passing sutures through the tear, and employing an arthroscopic knotting technique to close the rent (Fig. 5). The patient is positioned supine in a hanging-leg or table-flat position with a foot support at 90° of flexion, and a high thigh tourniquet is applied. A systematic method to rule out a ramp lesion must be undertaken in every case of an ACL tear. Visualizing the lesion through the transcondylar portal with the knee in 90° of flexion and meticulous probing are essential because some lesions can be “hidden.” Once a ramp lesion is diagnosed, a posteromedial portal is created.

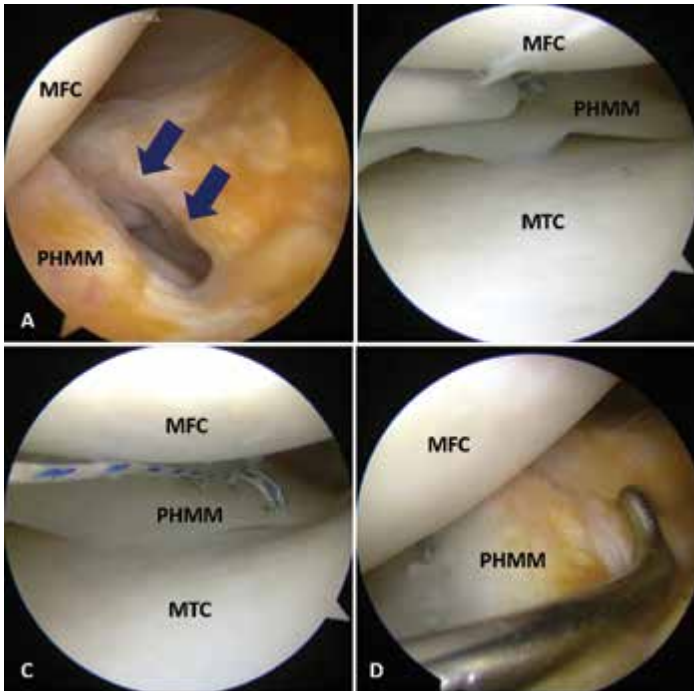


05

Transillumination helps to avoid injury to the saphenous neurovascular bundle during the creation of this portal with use of a spinal needle and an outside-in technique. Initial probing is performed to classify the lesion and its extent. A meniscal rasp is then used to abrade the torn edges on either side. Next, a suture shuttling device such as a 45° Accupass® Suture shuttle (Smith & Nephew, Andover, MA) or a 25° QuickPass™ SutureLasso (Arthrex, Naples, FL) is introduced from the posteromedial portal. A right-curve device is used for the left knee and vice-versa. The device tip is first passed across the posterior capsule and then through the posterior horn of the medial meniscus. A second posteromedial portal is created, and a grasper is introduced to deliver out the shuttling suture. A high-strength suture such as No. 2 FiberWire (Arthrex) is preferred for the repair and is railroaded with the shuttling suture across the meniscus. A suture retriever is introduced through the posteromedial portal, and both ends of the suture are delivered out of this portal. Any arthroscopic knot-tying technique can be used to tie the suture ends and close the rent with use of a vertical mattress configuration. The suture ends are then cut, and probing is performed to assess the need for additional sutures. The same steps are repeated, advancing more anteriorly. The limitations of this technique include the creation of an additional posteromedial portal, the learning curve of the technique itself, and the risk of injury to the saphenous neurovascular bundle.

#### 2 All-inside meniscal repair device:

A number of all-inside meniscal repair devices can be employed to repair a ramp lesion (Fig. 6). The use of an actively deploying device is preferred for the repair of a ramp lesion. The standard anterolateral portal is used for viewing, while the suture device is inserted from the anteromedial portal. As many sutures as are required to stabilize the lesion and to close the defect must be used on either the superior or the inferior surface of the meniscus. Probing after each suture passage is advised. While this technique is more familiar to most surgeons, it has inherent problems. The most important of these is the difficulty obtaining a vertical mattress suture configuration. Other potential limitations include inadequate tension of the repair and problems associated with the device itself, including cartilage scuffing, breakage, and pull-out of the repair construct. Nevertheless, this is an important technique to learn and master.



06

- 05 Arthroscopic images illustrating an all-inside suture repair of a ramp lesion. First, a posteromedial portal is created, a meniscal rasp is introduced from this portal, and both edges of the tear are freshened (Fig. 5-A). A suture shuttling device such as the 45° Accupass® Suture shuttle (Smith & Nephew, Andover, MA) is introduced from the posteromedial portal and is passed through the posterior capsule (Fig. 5-B). The shuttle is then passed through the posterior horn of the medial meniscus, and the suture is shuttled across (Fig. 5-C). An accessory posteromedial medial portal is created, and a suture retriever is used to retrieve both suture ends (Fig. 5-D). The suture ends are knotted and are pushed down with use of a knot pusher (Fig. 5-E). The rent at the meniscocapsular junction is completely closed after the knotting is completed, and the suture ends are then cut (Fig. 5-F). (MFC = medial femoral condyle, PHMM = posterior horn of the medial meniscus, and PC = posterior meniscus.)
- 06 Arthroscopic images illustrating the repair of a ramp lesion with use of an all-inside device. Gaping of the meniscocapsular junction is seen through the transcondylar portal (Fig. 6-A, arrows). The repair in this example is performed with use of FastFix™ 360 (Smith & Nephew, Andover, MA), and a horizontal mattress suture configuration is achieved on the superior surface of meniscus (Figs. 6-B and 6-C). At the end of repair, stability is assessed by probing (Fig. 6-D). (MFC = medial femoral condyle, PHMM = posterior horn of the medial meniscus, and PC = posterior meniscus).

## Rehabilitation

The rehabilitation of a ramp lesion is as per the ACL rehab protocol when as this injury is managed concomitant with an ACL reconstruction. Edema control, quadriceps activation, and achieving range of motion are the early goals. Knee flexion beyond 90° is restricted for 2 to 3 weeks to avoid shear forces at the repair site. Weight bearing restriction may or may not be applied as there is no evidence to support either post-operatively.

## Conclusion

Ramp lesions of the medial meniscus are increasingly being recognized in association with ACL tears. A thorough and systematic approach to view and probe this area of the knee is critical. Once a ramp lesion is diagnosed, repair is worthwhile and must be attempted as such lesions are likely to heal well, being located in a vascular area. Of all the meniscal repair techniques available, the use of an all-inside device or all-inside sutures is preferred.

- Strobel MJ. Manual of Arthroscopic Surgery. Springer Berlin Heidelberg; 2002
- Liu X, FengH, Zhang H, Hong L, Wang XS, Zhang J. Arthroscopic Prevalence of Ramp Lesion in 868 Patients With Anterior Cruciate Ligament Injury. *The American Journal of Sports Medicine*. 2011;39(4):832-837.
- Sonnery-Cottet B, Conteduca J, Thauan M, Gunepin FX, Seil R. Hidden Lesions of the Posterior Horn of the Medial Meniscus. *The American Journal of Sports Medicine*. 2014;42(4):921-926.
- Hetsroni I, Lillemoe K, Marx RG. Small medial meniscocapsular separations: a potential cause of chronic medial-side knee pain. *Arthroscopy*. 2011;27(11):1536-1542.
- Chahla J, Dean CS, Moatshe G, et al. Meniscal Ram Lesions. *Orthopaedic Journal of Sports Medicine*. 2016;4(7):23259671165781.
- Hughston JC, Eilers AF. The Role of the Posterior Oblique Ligament in Repairs of Acute Medial (Collateral) Ligament Tears of the Knee. *The Journal of Bone & Joint Surgery*. 1972;55(5):923-940.
- Bollen SR. Posteromedial meniscocapsular injury associated with rupture of the anterior cruciate ligament: A PREVIOUSLY UNRECOGNISED ASSOCIATION. *Journal of Bone and Joint Surgery—British Volume*. 2010;5(4):e871-e875.
- Liu X, FengH, Zhang H, Hong L, Wang X-s, Song G-y. Is It Necessary to Repair Stable Ramp Lesions of the Medial Meniscus During Anterior Cruciate Ligament Reconstruction? A Prospective Randomized Controlled Trial. *The American Journal of Sports Medicine*. 2017;45(5):1004-1011.

## Potential of Social Media in Orthopaedics

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### Introduction

Social media, understood as social networks, blogs, and other digital media, has changed the way society communicates. The major social platforms – Instagram, Youtube, Twitter, LinkedIn, and Facebook – are challenging traditional networks, leading public figures, newspapers, and clothing multinational companies, among others, to adopt them as a primary communication channel. Other informative websites, such as Wikipedia, have become the place to-go-to for information for many patients. Despite not being knowledgeable in a certain subject, we have begun to assume that an explanation to any question is just a few clicks away. Social media is where many of these answers are most easily found and, given its rapid rise and unparalleled potential, its role as a tool for healthcare has been explored, and yet definite objectives, as well as accurate ways of measuring its impact and quality, remain to be defined.

### Major social media networks

The Internet's growth has made information accessible and easy to use, resulting in patients turning to social media to assess their health issues. More than 3.8 billion (51% of the world population) now use the internet while 3 billion (40%) now use some form of social media. According to the website Statista, Facebook is the leading social platform with 2 billion active users as of August 2017. Others, such as YouTube (1.5 billion), Instagram (700 million), Twitter (328 million), and LinkedIn (106 million) complete the top of the list. On the other hand, Wikipedia, a free information site, registers 4.7 billion monthly visits and is the sixth most visited website worldwide. In a national telephone survey conducted in the United States in 2010 found that 59% of adults have searched for up to 15 health topics in search engines. The same survey found that 25% of adults read other user's comments and 19% view videos about health-related topics. This is all enclosed within an estimated 6.5 million health-related search engine queries per day.

Given the rapid changes in the US healthcare system since 2010, these numbers are likely underestimates of today's usage.

The common characteristic between all forms of social media is that they're user-generated. In general, especially the larger platforms, share very lax filter guidelines, resulting in users posting content of their choice, which is ultimately accessible to anyone with an Internet connection. This originates an excess of information that can easily misguide medically unqualified readers. If you've ever wondered how the anti-vaccine movement gained traction beyond a b-celebrity endorsement, look no further than social media.

Social networks are websites or applications where personal relationships and social interactions take place. People are able to chat, upload photos, share content, and follow relevant figures or institutions, such as their favorite newspaper or sports team. There are different forms of networks, generally specializing in a specific type of content. Facebook holds the broadest content, integrating anything from videos to e-commerce pages. Twitter specializes in short fragments of text – although it has evolved to also allow images, surveys or videos. Instagram is a high-engagement app with an exclusive focus on images and short videos. Youtube, probably the most informative in the list, is the place to go for longer form video content. Tutorials and corporate videos can easily be found using its search engine. LinkedIn is a platform centered on professional networking where professionals across a variety of industries come together in order to keep up with colleagues and network with others in their fields. Job recruiters are heavily active on LinkedIn for professional hiring searches. In general terms, having all of these has become a requirement for any institution that wishes to remain relevant, particularly for younger generations. Therefore, in the coming years, communication will heavily shift towards social media in favor of more traditional media.

### Use of social media in Medicine

Social interactions can be divided into three main groups depending on the parties involved: those among patients, those between medical professionals and patients, and those between members of the medical community. Patients generally refer to one another in order to discuss comparable experiences, such as their opinion of a particular physician or their recommendation regarding a health issue. Patient-physician communication can have many forms, such as clinical trial recruiting, clinical care, public health interventions, marketing, etc. This second form does not only include physicians, but also healthcare institutions such as hospitals or research laboratories.



### Social media uses for patients

Social media has revolutionized the way patients approach their health. Society is gradually becoming more informed, and patients are now more often demanding physicians to consider information they have read about previously. Duymus et al ran a survey within an Orthopaedic service to assess social media's role on patient information. Results were not definitive, although clearly showed that more patients are gradually turning toward social media for advice. Therefore, physicians must adopt a new role: moderator and information filter. Social media is not something to be dismissed, but integrated into clinical care. Making a patient understand that most information in the Internet has little quality filter and that their case is unique is a place to start. Physicians may also advise patients on the correct way of searching for information, and the best sources to find it. Lastly, they should remind the patient that this is only an accessory, and that information online won't replace the counsel and dedication of a qualified medical team.

### Social media uses for physicians

Not only is social media a great tool to enhance clinical care, but also for public health matters, elevation of professional brand, education, and many other activities. The prospect of a patient-physician relationship through social media has an incalculable potential. In fact, Sculco et al believe that social media will evolve to a point where patients will be guided through early and post phases of surgery with a digital assistant, post their results on a physician-controlled health care network, track their radiographic and clinical performance remotely, and ultimately choose to follow up with the physician in the office or remotely from home. Tsoh found engagement of patients through social media apps improved exercise compliance. In general, being in virtual contact with patients may improve the connection and increase their commitment and adherence to treatments.

Social media also has great use for preventive and rehabilitation medicine. Orthopaedics could specifically benefit from social media for two main reasons: reducing the incidence of preventable injuries and increasing adherence to nonoperative recovery strategies. Smartphones and wearables are a few examples of how technology has provided us with the necessary tools to enhance our communication with patients through social media. Recovery times and even prevention of disease through healthy lifestyle advice could be achieved through an effective social media strategy. Social media has also been used effectively to recruit patients for clinical trials. For example, Mina defended Twitter as a new tool to communicate with the public about clinical trials and increase awareness and enrollment, while De Lepeleere et al, Radu and Noar recruited patients for their study through social media.

Above all, the importance of social media has also affected physician-physician relationships. LinkedIn profiles have become almost as important as a curriculum vitae.

Social media has also raised awareness of events and connected physicians throughout the world. It is no surprise that physicians are increasing their presence in social media. In terms of education, it is also used as an additional tool in learning, especially since engagement is much higher than traditional methods. However, as Sterling et al reviewed, the effect of social media platforms on residency is mixed, and the quality of existing studies is modest at best.

Several thousand orthopaedic surgeons have begun interacting with each other and with the broader medical community through Twitter, sharing articles on new techniques or evidence from orthopaedic journals. Similarly, orthopedists and other musculoskeletal health professionals have joined LinkedIn to interact on issues surrounding clinical care in orthopaedics. LinkedIn posts are organized much like online news stories or blog posts, allowing clinicians to and earn engagement with other professionals, which can both enhance their own reputations and that of their partner clinics and hospitals. A well written and shared LinkedIn story can generate thousands of page views and hundreds of shares (other users sharing the article on their own page). One of our authors (SL) wrote his first LinkedIn piece on patient outcomes measurement, which was viewed more than 2,000 times, "liked" more than 450 times, and shared more than 130 times within the first month of posting

The ISAKOS Communications Committee plans to enhance the ISAKOS presence on LinkedIn to facilitate interactions between ISAKOS members on the site.

## Potential of Social Media in Orthopaedics

### Pitfalls and Ethical Boundaries

Despite social media's potential, it must always be used within a context of respect, privacy, and professionalism towards the patient. Due to the public nature of the mentioned platforms, the legal and ethical boundaries surrounding online medical practice must be firm and clear. Keeping the professional nature of a patient-physician must be considered an imperial and nonnegotiable priority. Clinical information and patient confidentiality must always remain secret and never be published.

Also, the online reputations of physicians, clinics, and hospitals should be carefully managed to assure that reputations are not ruined through unfair reviews. Websites such as Yelp and HealthGrades allow patients to review their care, but without the filter of expertise so the poor ratings or complaints could be driven by anything from a rude secretary to stale coffee in the waiting room. Obviously not pleasant experiences, but completely unhelpful in trying to find a physician based on his or her skills or expertise. Physicians should be aware of these review sites and carefully monitor their reviews to mitigate unfair judgments.

Professionals should also try to avoid making ill-advised public comments. Public statements made online can be captured by other users using screen capture technology so anything posted publicly should be assumed to be permanent. This can be particularly risky when engaging in online discussions as the urge to "win" a debate may lead to unfortunate claims. This may also lead to future employment risk, both in being terminated for unprofessional behavior or having a hard time finding future employment. Fortunately, the American College of Physicians and Federation of State Medical Boards have released statement on ethical guidelines for "Online Medical Professionalism" which should be required reading for any clinical professional considering establishing an online presence in order to preserve integrity and reputation.

### Future perspectives

Social media must be adequately integrated within our practice, not dismissed. We must also develop quality filters that allow us to offer advice on trustworthy sites and develop guidelines in order to educate patients on how to look up information regarding their health issues. We must also increase our presence in social media, learn how to use it to increase engagement and, most importantly, integrate it with clinical care in order to increase our efficiency.

In years to come, social media will become a parallel meeting point where healthcare professionals conduct a large part of their practice. This will greatly affect patient adherence to treatments, their outcomes, and possibly will help improve efficiency of hospitals. A larger role will shift from the physician towards the patient, whose involvement will increase, improving the overall satisfaction in both parties.

However, not everyone has access to social media. We must integrate social media our practice without dismissing parts of society with lower literacy, lower means to access a computer, etc.

Medical organizations such as ISAKOS should accept the responsibility of improving the presence and engagement rates of Orthopaedics in social media. We should also aim to instruct patients on how to effectively research medical matters online through tutorials and guidelines.

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## Masaki Watanabe Arthroscopy Traveling Fellowship – 2017

Bujar Shabani, PhD  
*Prishtina, KOSOVO*

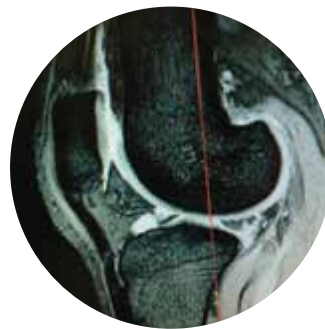


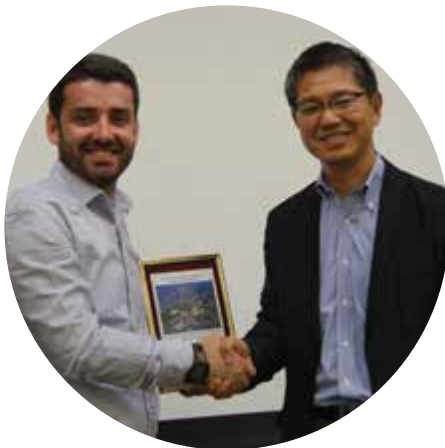
First of all, I would like to thank the Education Committee of ISAKOS for this unique opportunity to travel in many centers in ASIA and to learn and discuss many things about arthroscopy, sports injuries and more. It was an honor for me to be part of this fellowship.



We started the fellowship in Doha, Qatar. On our first day at Aspetar, we received a very warm welcome from all the staff. In term of surgeries, we attended an ACL reconstruction with BTP graft special technique in harvesting graft in order to prevent injury of the nerve; Bony Bankart lesion, lateral meniscus repair and rotator cuff repair.

Our second day was also full of activities. First, we attend the surgery, where we saw lateral meniscus repair, biceps tenodesis, rotator cuff repair. After that, we visited the Aspire Zone - a rehabilitation center, sport science center, Aspetar altitude dormitory, and biomechanics laboratory, where we discussed about the importance of these facilities.





As the previous days, the third was special also. On our third day, we visited the Sport Surgery Training Centre – a wonderful center, where Dr. Pilipe Landreau demonstrated the Latarjet procedure on a cadaver. It was great experience for both of us to see and practice under the eyes of such a known expert.

From Qatar, we moved to Japan. Our first destination was Sendai, where we met Prof. Eiji Itoi and his team. There I presented one of my studies and we saw calcifying tendinitis and rotator cuff repair procedures.

Kobe was our second destination in Japan. In Kobe, we visited many centers in Kobe University and I presented part of my PhD dissertation about ACL reconstruction.

Our final destination in Japan was Osaka. On the first day in Osaka, we attended a seminar at the Innovation Center of Osaka University and the topic was: Scaffold-free, stem cell-based cartilage repair. The seminar was closed by a very open and constructive discussion.

Our last day in Osaka was unforgettable. I met Dr. Shino and he performed ACL reconstruction with rectangle tunnels, which was amazing. He did also meniscal repair with IN-OUT technique.

For me this was my first trip to Japan and I would like to thank Prof. Nakamura, Prof. Itoi and their teams that except surgical tips, they also taught me how to eat with chopsticks! A great Japanese food tasting.

I would like to conclude this report by saying that this fellowship was a surgical, scientific, and cultural eye opener! Once again thank you for this opportunity!

## 7th Pune Knee Course

April 21–22, 2017

Pune, INDIA

The 7th Pune Knee Course, 2017 was held at Hotel JW Marriott, Pune, India. The event was graced by the participation of about 1000 Orthopaedic surgeons as delegates from India, South-East Asia and Middle East, 19 International faculty and 19 National faculty members. Dr. Charles Brown from Abu Dhabi was the Scientific Chairman while Dr. Sachin Tapasvi and Dr. Parag Sancheti were the Course Chairmen. This academic extravaganza was organized for the seventh year in a row and the popularity keeps growing every year. This year's event was a focus meeting on ACL and Meniscus injuries, as these are extremely common issues with hardly any consensus in diagnosis or management. This course provides an excellent opportunity for the delegates to learn the nuances of arthroscopy and interact with masters in the field from across the globe. The course was approved and supported by ISAKOS, APKASS and Royal College of Surgeons, Glasgow besides national and regional academic bodies in India.

The International faculty were:

Charles Brown–ABU DHABI  
 Sanjeev Chitnis–UNITED KINGDOM  
 Mark Clatworthy–NEW ZEALAND  
 Thomas Harlem–NORWAY  
 Christian Hoser–AUSTRIA  
 Deryk Jones–UNITED STATES  
 JC Monllau–SPAIN  
 Volker Musahl–UNITED STATES  
 Luke O'Brien–UNITED STATES  
 Jim Richards–UNITED KINGDOM  
 James Robinson–ABU DHABI  
 Romain Seil–LUXEMBOURG  
 Robert Smigielski–POLAND  
 Lynn Snyder-Mackler–UNITED STATES  
 Bertrand Sonnery-Cottet–FRANCE  
 Ronald van Heerwaerden–HOLLAND  
 Christopher Vertullo–AUSTRALIA  
 Kate Webster–AUSTRALIA  
 David Yucha–UNITED STATES

The course commenced with five Breakfast Instructional Course Lectures which were didactic in nature but allowed total interaction between the delegates and faculty.

The five different meeting rooms were packed with small groups of about 50 each and the topics covered were: Single bundle ACL reconstruction chaired by Mark Clatworthy, Meniscus repair chaired by James Robinson, Osteotomy around the knee chaired by Ronald van Heerwaarden, Graft preparation chaired by Charles Brown and Rehabilitation after ACL surgery chaired by Lynn Snyder-Mackler.

The main course began with a LIVE surgery of ACL reconstruction with Quadriceps tendon autograft performed in the OR by Christian Hoser which are relayed to the Auditorium via fiber-optic cables and direct interaction between the surgeon in the OR and delegates in the auditorium. This feature remains the highlight of Pune Knee Course and eight such surgeries for the ACL and Meniscus were performed over two days including ACL reconstruction with an adjustable-loop suspensory fixation device by Deryk Jones, All-inside ACL with Anterolateral ligament reconstruction by Bertrand Sonnery-Cottet, Medial open wedge high tibial osteotomy with slope correction by Ronald van Heerwaarden, Bucket handle medial meniscus repair by Sachin Tapasvi, Medial meniscus root repair by James Robinson, Lateral meniscus root repair by Mark Clatworthy and Revision ACL reconstruction by Charles Brown and Volker Musahl. These surgeries were highly appreciated by everyone.

Two special Sessions were conducted this year: One was where the clinical assessment of ACL laxity in three patients by five senior faculty including Romain Seil, Mark Clatworthy, JC Monllau, Bertrand Sonnery-Cottet and Preteek Gupta was compared and co-related with dynamic MRI examination by Anupama Patil and an objective iPad based accelerometer analysis by Volker Musahl. It gave insights into the limitation and application of each of these techniques. The other session was where eight surgeons marked their desired ACL femoral and tibial tunnel placement in a patient with ACL tear and this was plotted and compared using an iPad software for Hertel grid assessment by Thomas Harlem and placement of all surgeons was critically analyzed. This was the first time such activities were performed in any scientific meeting in the world!

The other highlight is the PKC Oration, where a stalwart of knee arthroscopy shares his journey of learning and teaching, followed by felicitation by the organizing team. This honor has been previously bestowed upon Prof. Freddie Fu, Prof. Michael Strobel, Dr. Charles Brown and Prof. Joao Espregueira Mendes. This year, Prof. Romain Seil, President ESSKA was honored for his contribution towards ACL surgery in skeletally immature patients. He present his experience on this subject during the Oration. He was presented a coconut fruit, a shawl, a Puneri pagadi and a citation recognizing this achievements.

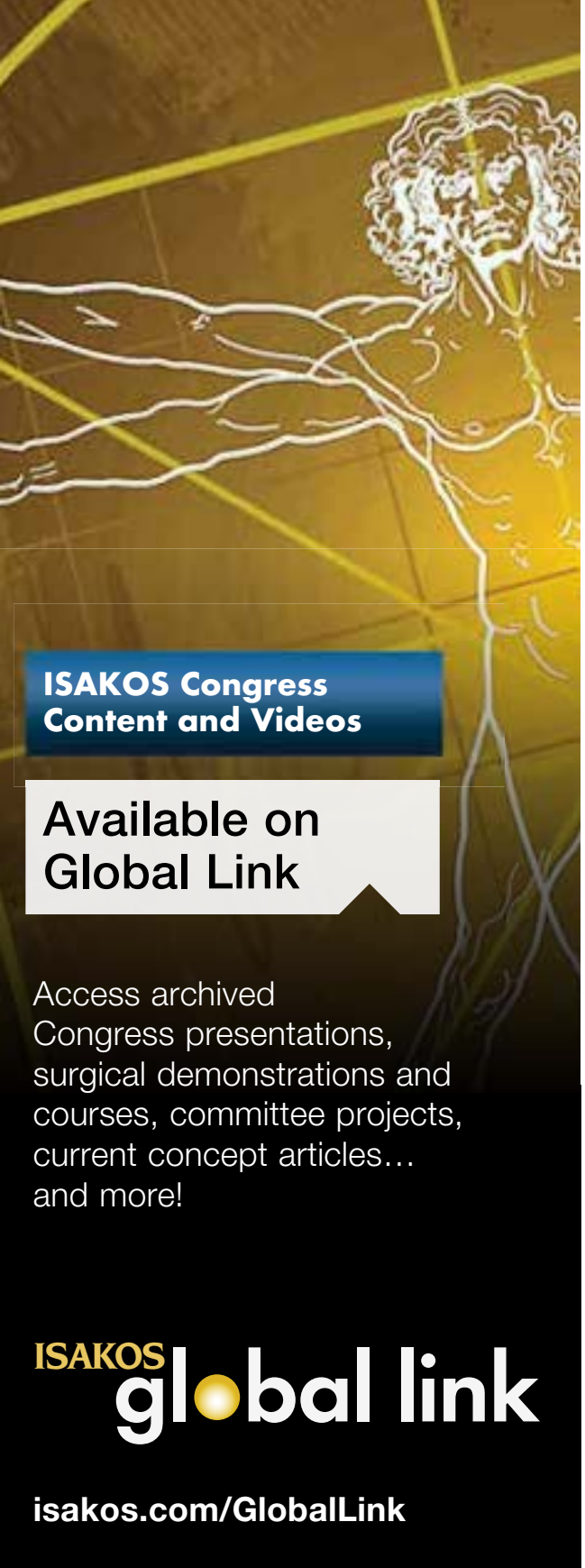
Besides these, there were sessions with didactic lectures on ACL anatomy chaired by Charles Brown, Treatment options for an ACL injured knee chaired by Luke O'Brien, Extra articular ACL surgery chaired by James Robinson, Rehabilitation after ACL surgery and return to sports chaired by Kate Webster on the first day of the course. A Panel discussion on "Optimization of ACL reconstruction technique to restore normal anatomy and function" was a brain storming session to help build a consensus or guidelines for the benefit of the delegates.

Two special sessions on the second day were: a) Arthroscopy Video Theatre where five innovative arthroscopic techniques were presented including Ramp repair by Anant Joshi, Optimized transportal ACL reconstruction by Arumugam S, Primary ACL repair with augmentation by Sachin Tapasvi, Double row ACL avulsion suture bridge repair by Mihir Patel and C arm guided ACL tunnel placement by Sudeep Kumar; b) A session where five published papers which changed arthroscopy practice globally were presented and critiqued by Mark Clatworthy, Charles Brown, JC Monllau, James Robinson and Sanjeev Chitnis. Besides these, didactic lectures by faculty were presented during the sessions on Revision ACL Surgery chaired by Deryk Jones, Complications in ACL surgery chaired by Christopher Vertullo and Meniscus surgery chaired by Christian Hoser.

The special 'Fire-side Chats' session was held again at the end of the first day like the sixth edition of the course for limited number of invited delegates in five different meeting rooms. It had sessions like ACL Reconstruction, Overview of Reconstruction technologies, GraftLink ACL and Meniscus repair with Cinch device, ACL reconstruction with adjustable Rigidloop and Milagro advance screw and Osteochondral defect repair with COR device conducted for an hour simultaneously. A special session was also conducted by Sanjeev Chitnis on "Education and Fellowship Opportunities with Royal College of Surgeons, Glasgow" to initiate young surgeons and introduce them to an alternative learning experience.

The course also witnessed the launch of the first edition of the book "Techniques in ACL Surgery" by Romain Seil, Mark Clatworthy, Ajit Damle and Vijay Kakatkar which has been edited by Sachin Tapasvi and foreword by Phillipe Neyret. Complimentary copy of the book was distributed to all delegates.

The course was highly appreciated for its scientific content, format, presentation and conduct by the delegates as well as faculty. We believe that close interaction between the fraternities from across the globe opens up new avenues of research, innovation and opens flood gates for ideas to flow across.



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## 7th Greek Arthroscopy Society “Georgios Noulis” Biannual Congress

May 3–17, 2017

Thessaloniki, GREECE

Almost 300 participants attended the high-level scientific program with intriguing lectures and the round tables, as well as interactive discussion and special questions. The Congress faculty was comprised of invited guest from Europe and the United States including Simon Frostick (UNITED KINGDOM), Jose Huylebroek (BELGIUM), Mustafa Karahan (TURKEY), Giuseppe Milano (ITALY), Merter Ozenci (TURKEY), John Richmond (USA), Roman Seil (LUXEMBOURG) and Rainer Siebold (GERMANY), as well as many faculty members from Greece. The faculty highlighted state-of-the-art issues concerning knee, shoulder, hip and ankle arthroscopy. Sports medicine and chondral lesions were also presented including new trends in clinical and treatment options.

Just before the opening, in the modern facilities of Aristotle University of Thessaloniki, the Board of the Greek Arthroscopy Society organized a successful cadaveric pre-course. Forty young orthopaedists had the opportunity to see and perform knee and shoulder arthroscopic procedures in a ten station course.

There was encouraging and highly positive feedback from the participants and the faculty about the meeting. All stated that had a great experience, felt more informed, and learned new things. The outstanding academic program covered the challenges of the arthroscopy. It was another successful step of the continuing effort of Greek Arthroscopy Society to provide knowledge and training.

Michael Iosifidis, MD, PhD  
2nd Vice President of Greek Arthroscopy Society

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## 2017 Vail International Complex Knee Symposium IV

June 22–24, 2017

Vail, CO, UNITED STATES

The fourth annual Vail International Complex Knee Symposium (VICKS) was held at the Vail Marriott Mountain Resort. Sponsored by Smith and Nephew, there were over 180 attendees from 15 different countries. The course had a very engaged and distinguished group of faculty representing 5 different continents. The course was based upon the principles of anatomic-based reconstructions to address complex knee pathology. As such, the first day of the course went through the basic anatomy of the knee including the collaterals, menisci and meniscal roots, and the ACL and PCL. From this, a review of the clinically-relevant biomechanics and how it relates to the physical examination was outlined. From there, individual anatomic-based treatments for the medial collateral ligament, lateral collateral ligament, popliteus tendon and posterior oblique ligament, posterolateral corner, and double-bundle PCL reconstructions were reviewed. After each set of 2–3 lectures, a live surgical demonstration was performed by one of the faculty to further enhance the ability for the attendees to understand these principles.



On the second day of the course, a review of even more complex issues, including the treatment of combined ligament injuries, the tightening order for multiple ligament reconstructions, how to address failed ACL reconstructions, trochleoplasties for trochlear dysplasia, arthroscopic posterior capsular releases, and other high-level complex knee pathologies and treatments were reviewed. In addition to the lectures and 23 live surgical demonstrations, all surgeons who attended the course were able to have a 3-hour laboratory session with the faculty to review the principles that they learned during this course.



All in all, the fourth annual VICKS course was a huge success. The feedback from both faculty and attendees alike has been outstanding. Course co-chairs, Robert F. LaPrade, MD, PhD, and Lars Engebretsen, MD, PhD, appreciate the sponsorship of ISAKOS for this course and we look forward to the fifth annual VICKS course June 14–16, 2018.

Robert F. LaPrade, MD, PhD  
 STEADMAN-PHILIPPON RESEARCH INSTITUTE  
 Chief Medical Officer  
 Co-Director of the Sports Medicine Fellowship Program  
 Director of the International Research Scholar Program

## UPCOMING ISAKOS APPROVED COURSES

III International Meeting on Arthroscopic Knee Surgery (IMAKS)  
University of Málaga. Faculty of Medicine  
Málaga, SPAIN

**September 14–15, 2017**

Chair(s): Dr. Alejandro Espejo Baena

**For further information, please contact:**

Alejandro Espejo Baena  
Tel: +0034 952 44 55 86  
Fax: +0034 952 73 79  
[www.jicar2017.com](http://www.jicar2017.com)

4th Saúde Atlântica & ISAKOS & ESSKA  
International Meeting—Challenges in  
Football Injuries

Porto Palácio Congress Hotel  
Porto, PORTUGAL

**September 22–23, 2017**

Chair(s): João Espregueira-Mendes

**For further information, please contact:**

Vânia Teixeira  
Tel: +351220100117  
Fax: +351220100122  
[jornadassaudeatlantica.com/](http://jornadassaudeatlantica.com/)

ICRS Focus Meeting—Osteoarthritis in Athletes  
Schulthess Clinic  
Zurich, SWITZERLAND

**September 28–29, 2017**

Chair(s): Gian Salzmann

**For further information, please contact:**

Melanie  
Tel: 0041-44-5037373  
Fax: 0041-44-5037373  
[cartilage.org/icrs-focus-meeting-osteoarthritis-in-athletes/](http://cartilage.org/icrs-focus-meeting-osteoarthritis-in-athletes/)

The 37th Annual Meeting of the Korean  
Arthroscopy Society  
Yookwangsa Hall, College of Medicine,  
Korea University Anam Hospital  
Seoul, KOREA, REPUBLIC OF

**October 14, 2017**

Chair(s): Kwang-Won Lee

**For further information, please contact:**

Jong-Min Kim  
Tel: +82-2-3010-8632  
Fax: +82-2-6919-2444  
[www.korarthro.com](http://www.korarthro.com)

icSPORTS 2017—5th International  
Congress on Sport Sciences Research  
and Technology Support  
Funchal, PORTUGAL

**October 30–31, 2017**

Chair(s): Pedro Pezarat

**For further information, please contact:**

Ana Guerreiro  
Tel: +351 265 520 185  
Fax: +351 265 520 186  
[www.icssports.org/](http://www.icssports.org/)

International Consensus Meeting on Cartilage  
Repair of the Ankle  
Pittsburgh, PA, UNITED STATES

**November 17–18, 2017**

Chair(s): John G. Kennedy, MD

**For further information, please contact:**

Christopher Murawski  
Tel: +1 570 236 4628

Evolution & Innovation In Knee Surgery  
Metropolitan Hospital Athens  
Palao Faliro, GREECE

**November 18, 2017**

Chair(s): Panagiotis Kouloumentas

**For further information, please contact:**

Tsichlia Chrysa  
Tel: +302106838001, +302104807196  
Fax: +302106838034  
[evolutioninnovationkneesurgery.wordpress.com](http://evolutioninnovationkneesurgery.wordpress.com)

Arthromost 2017 “Modern Technology  
in Arthroscopy, Sports Traumatology  
and Rehabilitation”

President Hotel.

Moscow, RUSSIAN FEDERATION

**December 2, 2017**

Chair(s): Milenin Oleg

**For further information, please contact:**

Oleg Milenin  
Tel: +79262232835  
Fax: +79257406688  
[www.artromost.ru](http://www.artromost.ru)

Orthopaedic Summit 2017: Evolving Techniques  
The Bellagio

Las Vegas, NV, UNITED STATES

**December 6–9, 2017**

Chair(s): Kevin D. Plancher, MD

**For further information, please contact:**

Orthopaedic Summit Course Office  
Tel: 925-807-1190  
Fax: 925-807-1199  
[www.orthosummit.com](http://www.orthosummit.com)

7th Advanced Course On Knee Surgery

Centre Henri Oreiller

Val D'isere, FRANCE

**January 14–18, 2018**

Chair(s): Francois Kelberine, Sebastien Lustig,

Philippe Landreau, Nicolas Gravelleau

**For further information, please contact:**

Corine Bensimon  
Tel: +33 6 76 59 89 15  
Fax: +33 442375005  
[www.kneecourse.com](http://www.kneecourse.com)

18th International Sports Medicine  
Fellows Conference

Sheraton Carlsbad Resort & Spa

Carlsbad, CA, UNITED STATES

**January 26–28, 2018**

Chair(s): Bert Mandelbaum, MD

**For further information, please contact:**

ISMf Course Office  
Tel: 925-807-1190  
Fax: 925-807-1199  
[www.ismf-conference.com](http://www.ismf-conference.com)

Paris Shoulder Symposium

Hôtel Le Méridien Etoile

Paris, FRANCE

**February 1–March 2, 2018**

Chair(s): Philippe Valenti/Laurent Lafosse

**For further information, please contact:**

Maud Abrial  
Tel: +33 7 76 81 57 08  
Fax: +33 4 91 94 30 33  
[www.paris-shoulder-symposium.com](http://www.paris-shoulder-symposium.com)

Athens Shoulder Course  
Conference Center “N. Louros” Mitera Hospital &  
Laboratory of Anatomy of the Medical School of  
the University of Athens  
Athens, GREECE

**February 1–3, 2018**

Chair(s): Antonogiannakis Emmanouel

**For further information, please contact:**

Despina Nikolopoulou  
Tel: +302109609400  
Fax: +302104190905  
[www.athens-shoulder-course.com](http://www.athens-shoulder-course.com)

Rome Shoulder Course—Revision Arthroplasty  
University Campus Bio-Medico  
Rome, ITALY

**February 23, 2018**

Chair(s): F. Franceschi

**For further information, please contact:**

Luca la Verde  
Tel: +393381307625 +393358007236

Madrid Foot and Ankle Course

CEU University Madrid

Madrid, SPAIN

**April 5–6, 2018**

Chair(s): Prof C.N.Van Dijk, M. de Prado,

Dr. P.L. Ripoll and Prof. F. Forriol

**For further information, please contact:**

M<sup>o</sup>Jose Castell - Ready Congress SL  
Tel: 0034 963734690  
Fax: 0034 963337930  
[madridfootandankle.com/](http://madridfootandankle.com/)

18èmes Journées Lyonnaises de Chirurgie  
du Genou

Advanced Course: Revision Knee Arthroplasty  
Convention Centre

Lyon, FRANCE

**September 20–22, 2018**

Chair(s): Roger Badet

**For further information, please contact:**

Roger Badet  
Tel: 33 472 07 62 22  
[www.lyon-knee-surgery.com](http://www.lyon-knee-surgery.com)

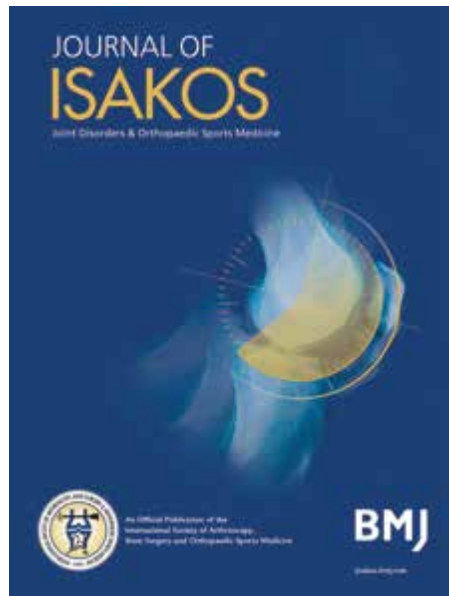
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