

ICRS 2018

International Cartilage Repair Society

Preliminary Programme 6th ICRS Surgical Skills Course

Mexico City | February 1–3, 2018

Highlights

- 4 x 2 Hours of Hands-on Wet Lab (Human Specimen)
- 12 Wet Lab Work Stations / 4 Surgeons each
- Basic Science in Cartilage Repair
- Chondroprotection of the Meniscus
- Joint Stability & Realignment Techniques
- The Complexity of the Patellofemoral Joint
- Bone Marrow Stimulation Techniques & Osteochondral Plugs
- Cell-based Therapies with or without Scaffolds: ACI & MSCs
- Follow-up of Repaired Articular Cartilage: Image & Rehabilitation
- Return to Activities & Sports



Mexico



www.cartilage.org



Aesculap Biologics

Facing a New Frontier in Cartilage Repair

Biologic approaches to tissue repair and regeneration represent the future in healthcare worldwide.

Aesculap Biologics is leading the way.

Learn more at www.aesculapbiologics.com

Aesculap Biologics, LLC | 866-229-3002 | www.aesculapusa.com

Aesculap Biologics, LLC – a B. Braun company

AESCLAP
Biologics

Dear Colleagues & Friends



The Department of Orthopedics Sports Medicine and Arthroscopy has the great pleasure and honour to welcome you to México, for the 6th ICRS Surgical Skills Course in Cartilage Repair, which will take place on February 1–3, 2018 at the Instituto Nacional de Rehabilitación “Luis Guillermo Ibarra Ibarra” in Mexico City.

The Instituto Nacional de Rehabilitación (INR) is a public hospital dedicated to clinical practice, research and teaching. The INR is the only in its gender in Mexico and Latin America with the mission of reduce the incidence of disability and the formation of Specialists Doctors with the multidisciplinary collaboration of Rehabilitation, Sports Medicine, Human Communication, Ophthalmology, Burn Center and Orthopedic Departments. The INR is an innovative Institution with a concept of modernity, human quality and with a culture of dedication and continuing education. Our faculty routinely provides coverage for the residents to gain experience in the management of difficult cases. For the Arthroscopy Department in collaboration with the Tissue Engineering, Cell Therapy and Regenerative Medicine Unit the cartilage field has been one of the priority lines of research and clinical practice. The INR has a modern facility employing the latest technological and medical advancements on its attractive campus that meets hospitalization, medical consultation area, classrooms, rehabilitation facilities, research laboratories, and auditoriums.

In the 6th ICRS Surgical Skills Course internationally acknowledged surgeons and experts in the field of cartilage repair will provide you the newest information, tips and tricks of all options in the surgical treatment of cartilage damage and concomitant lesions. The Programme Committee has developed an outstanding academic agenda to include scientific lectures, live demonstrations in the hands of the experts, and hands-on workshops on human cadaver specimens.

Mexico City is the economic center of our Country and has a great number of places to visit. Few cities in the world have such as rich and ancient history as Mexico City, a city which metropolitan zone has been the seat of important human settlements for more than two thousand years. This is a culturally diverse city, offering outstanding restaurants, varied entertainment, sporting events, monuments, and museums. There is an easy access to Coyoacan neighbourhood to walking, have a coffee and try the traditional Mexican churros. The Insurgentes Avenue is the longest avenue in Mexico City where you will find prestigious restaurants, shopping centres, Bars and Lounges for nightlife.

Please visit also our website www.cartilage.org for frequent updates on the course programme and other important details. We hope to exceed all your expectations and we look forward to welcoming you in Mexico City and wish you to have a most interesting and successful stay with us.

Sincerely,

**Clemente Ibarra, General Director and Professor &
Anell Olivos-Meza, Consultant and Assistant Professor**
Orthopaedic Sports Medicine and Arthroscopy Department
Instituto Nacional de Rehabilitación “Luis Guillermo Ibarra Ibarra”



Organisation

Course Director

Prof. Clemente Ibarra, MD, PhD
General Director
Instituto Nacional de Rehabilitación
Calzada Mexico-Xochimilco 289
ZC 14389 Mexico City
Phone: 55 99 10 00, Ext. 10035
Email: cibarra.corresponding@hotmail.com

Course Venue

Instituto Nacional de Rehabilitación
“Luis Guillermo Ibarra Ibarra”
Calzada Mexico-Xochimilco 289
ZC 14389 Mexico City
Phone: 55 99 10 00, Ext. 19607
Lectures: “Tenazcapati” Auditorium
<http://www.inr.gob.mx/>

Course Coordinator

Prof. Anell Olivos Meza, MD, PhD
Consultant of Orthopedic Sports Medicine
& Arthroscopy Departement
Instituto Nacional de Rehabilitación
Calzada Mexico-Xochimilco 289
ZC 14389 Mexico City.
Phone: 55 99 10 00, Ext. 19607
Email: aolivos_meza@hotmail.com

Course Organizing Office

Cartilage Executive Office (CEO) GmbH
c/o Mr. Stephan Seiler
Spitalstrasse 190 – House 3
8623 Wetzikon, Switzerland
Phone +41 44 503 73 70
Email: sseiler@cartilage.org
www.cartilage.org

Local Organizing Committee

Francisco Pérez-Jiménez, Mexico City, MX
Francisco Cruz-López, Mexico City, MX
Arturo Almazán-Díaz, Mexico City, MX
Luis Sierra Suárez, Mexico City, MX
Enrique Villalobos-Córdova, Mexico City, MX
Ivonne Trigueros-Anaya, Mexico City, MX
Gloria González Vellano, Mexico City, MX
Francisco Suárez-Bravo, Mexico City, MX

Scientific Programme Committee

Cole Brian, Chicago, USA
Erggelet Christoph, Zurich, CH
Ibarra Clemente, Mexico City, MX
Olivos-Meza Anell, Mexico City, MX



Bellas Artes Palace

ICRS Society

ICRS Executive Board

President

- Ken Zaslav, Richmond, USA

1st Vice President

- Alberto Gobbi, Milan, IT

2nd Vice President:

- Tom Minas, Chestnut Hill, USA

Treasurer

- Daniel Grande, USA

Secretary General

- Elizaveta Kon, Bologna, IT

Past President

- Norimasa Nakamura, Osaka, JP

International Faculty

Brittberg Mats, Kungsbacka, Sweden
 Erggelet Christoph, Zürich, Switzerland
 Fu Freddie, Pittsburgh, USA
 Gomoll Andreas, Boston, USA
 Ibarra Clemente, Mexico City, Mexico
 Krych Aaron, Rochester, USA
 Mardones Rodrigo, Santiago, Chile
 Masri Maria, Mexico City, Mexico
 Minas Tom, Chestnut Hill, USA
 Nehrer Stefan, Krems, Austria
 Olivos Meza Anell, Mexico City, Mexico
 Peterson Lars, Billdal, Sweden
 Rodeo Scott, New York, USA
 Suárez-Ahedo Carlos, Mexico City, Mexico
 Zaslav Ken, Richmond, USA

Testimonials

Comments from our previous ICRS Surgical Skills Course:

“Excellent Lectures, excellent Instructors, excellent Cadavers = ICRS Surgical Skills Course”.

“The objectives of the course met my objectives. The friendly atmosphere and the kind exchange of knowledge enhanced my overall experience”.

“The course was way beyond my expectations. It was simply excellent...”

“Excellent quality and friendly atmosphere...”

“It was a great opportunity to meet the leading scientists in this field.”

“It was a cocktail of best available practices in Cartilage Repair techniques”

“The ICRS Surgical Skills Course was very instructive for the daily practice of any orthopaedic surgeon and is strongly recommended”.

“This course is highly recommended! The teaching faculty was very impressive. The 20 hour travel time was definitely worth it. Hopefully one day the ICRS can bring this course to Asia”.

“As always, an excellent course for both, the young surgeon and the more experienced one, wishing to expand their horizons. The best hands-on course, I have ever seen”.

Please note:

This is a preliminary programme. The information in this programme is subject to change without prior notice. For updated information, please frequent our website: www.cartilage.org

Preliminary Scientific Programme

Thursday, February 01, 2018

08:30-12:00 **Optional: Visit to BioGraft Tissue Bank (Pre-registration is needed)**

12:00-14:00 **Registration**

Session 1: Basic Science in Cartilage Repair

Moderator: Clemente Ibarra (MX)

13:30-13:45 Introduction & Course Overview
Clemente Ibarra (MX)

13:45-14:00 Understanding the Complexity of Cartilage Anatomy & Biomechanics
Mats Brittberg (SE)

14:00-14:15 Which is the Appropriate Technique to Treat a Chondral Lesion: Make
a Decision according the Age, Level of Activity & Imaging Assessment
Christoph Erggelet (DE)

14:15-14:30 Pre-Clinical Models for Cartilage Repair: Live Demonstration
Maria Masri (MX)

14:30-14:45 **Q&A / Discussion**

Session 2: Follow-Up of Repaired Articular Cartilage: Image & Rehabilitation

Moderator: Andreas Gomoll (US)

14:45-15:00 Post-Operative Care of Cartilage Repair:
When Return to Daily Activities & Sports
Tom Minas (US)

15:00-15:15 Barriers of Cartilage Restoration
Andreas Gomoll (US)

15:15-15:30 Cartilage Imaging: Tools to Evaluate the Quality of the Repair Tissue
Tom Minas (US)

15:30-15:45 Treatment Algorithms for Cartilage Repair
Clemente Ibarra, (MX)

15:45-16:00 **Q&A / Discussion**

16:00-16:45 **Coffee Break / Exhibition**

Session 3: Joint Stability & Reducing the Joint Surface Loading - Osteotomies
Moderator: Freddie Fu (US)

- 16:45-17:00 The Role of Stability in Cartilage Repair Treatment: ACL Reconstruction
Freddie Fu (US)
- 17:00-17:15 Distal Femoral Osteotomies
Christoph Erggelet (DE)
- 17:15-17:30 High Tibial Osteotomies
Stefan Nehrer (AT)
- 17:30-17:45 Pathomorphology of the knee in varus malalignment and robotic guided hemiarthroplasty: a solution after failed osteotomy?
Carlos Suárez-Ahedo, (MX)
- 17:45-18:00 Combined Procedures: Osteotomy, ACL Reconstruction & Cartilage Repair Techniques
Aaron Krych (US)
- 18:00-18:15 New Implants for Anatomic ACL Reconstruction & Surgical Techniques
Freddie Fu (US)

18:15-18:30 Q&A / Discussion

19:00-21:00 Welcome Reception

 Temazcales room, Instituto Nacional de Rehabilitación

Friday: February 02, 2018
Session 4: The Chondroprotective Effect of the Meniscus
Moderator: Scott Rodeo (US)

- 08:30-08:45 The Role of the Meniscus in Articular Cartilage Treatment
Scott Rodeo (US)
- 08:45-09:00 When should we repair the Meniscus and which are the available Techniques?
Aaron Krych (US)
- 09:00-09:15 Meniscal Replacement: Transplantation or Substitution?
Scott Rodeo (US)
- 09:15-09:30 Chondroprotection of Meniscal Implants
Anell Olivos-Meza (MX)
- 09:30-09:45 Live Demonstration: Meniscal Repair and Substitutes for Partial Meniscectomy + ACL Reconstruction in the Expert Hands
Aaron Krych (US)

09:45-10:00 Q&A / Discussion

10:00-10:45 Coffee Break / Exhibition & Preparation for the Wet-Lab

Session 5: **Hands-On Skills Lab 1: Meniscal Repair, ACL Reconstruction & High Tibial Osteotomy**
Lab Leaders: Scott Rodeo (USA), Aaron Krych (US), Freddie Fu (US), Stefan Nehrer (AT) Lab Instructors: All Faculty

10:45-12:45 Meniscal Repair & Substitutes:

- Fast-fix (Smith & Nephew)
- Meniscus Mender (Smith & Nephew)
- Meniscal Cinch (Arthrex)
- Omnispan (DePuy Synthes)
- Meniscus Protector (Arthrex)
- Micro Suture Lasso (Arthrex)
- Sequent (ConMed)
- Actifit Meniscal Scaffold (Orteq)

ACL Reconstruction:

- Tighrope, all inside Technique (Arthrex)
- Endobutton, Clancy Guide (Smith & Nephew)
- Ultrabutton (Smith & Nephew)
- GraftMax (ConMed)
- Rigid-loop & Rigid fix (Depuy Synthes)
- Biointrafix Screw (DePuy Synthes)

High Tibial Osteotomy & Femoral Osteotomy

- Tomofix (Depuy Synthes)
- Femoral Opening Wedge Osteotomy Plate (Arthrex)
- ContourLock HTO Plate (Arthrex)
- Puddu Plate (Arthrex)

12:45-13:30 Lunch Break / Exhibition

Session 6: **Bone Marrow Stimulation, Osteochondral Plugs & Metal Implants**
Moderator: Rodrigo Mardones (CL)

13:30-13:45 Microfractures vs Nanofractures: Benefits and Pitfalls
Aaron Krych (US)

13:45-14:00 Autologous Matrix-Induced Chondrogenesis
Rodrigo Mardones (CL)

14:00-14:15 Osteochondral Autograft Transplantation: Benefits and Pitfalls
Andreas Gomoll (US)

14:15-14:30 Osteochondral Resurfacing Implants to Treat Cartilage Lesions: Episealer and HemiCap Condyle
Mats Brittberg (SE)

14:30-14:45 Q&A / Discussion

14:45-15:30 Coffee Break / Exhibition & Preparation for the Wet-Lab

Session 7: **Treatment of Cartilage Lesions with Bone Marrow Stimulating Techniques, Osteochondral Autograft Transplantation & Metal Implants**
Lab Leaders: Aaron Krych (US), Rodrigo Mardones (CH), Tom Minas (US)
Lab Instructors: All Faculty

15:30-17:30 Bone Marrow Stimulating Techniques

- Power pick (Arthrex)
- Nano-Fx (Arthrosurface)

Osteochondral Autograft Transplantation

- OATS (Arthrex)
- COR System (Depuy Synthes)
- MOSAIC PLASTY (Smith & Nephew)

Metal Implants

- Episeal (Episurf)
- HemiCap Condyle (Arthrosurface)

18:30-21:00 Faculty/Course Dinner at Antigua Hacienda Tlalpan
(Cost 60.00 Euros)

Saturday: February 03, 2018

Session 8: Cell-Based Therapies for Cartilage Repair: ACI & MSCs

Moderator: Lars Peterson (SE)

- 08:30-08:45 Evolution of the ACI (1st to 4th Generations): From Biopsy to Implantation
Lars Peterson (SE)
- 08:45-09:00 ACI vs Microfracture Technique: Long Term Results
Freddie Fu (US)
- 09:00-09:15 Increased Failure Rate of Autologous Chondrocyte Implantation after Previous Treatment with Microfracture
Tom Minas (US)
- 09:15-09:30 The Importance of Subchondral Architecture Regeneration in Cartilage Repair, new Scaffold & Cell Techniques
Ken Zaslav (US)
- 09:30-09:45 How to deal with Failures of Articular Cartilage Repair: What is Next?
Scott Rodeo (USA)
- 09:45-10:00 Mesenchymal Stem Cells in Cartilage Repair: Could MSCs reach the formation of hyaline-like Tissue?
Rodrigo Mardones (CH)

10:00-10:15 Q&A / Discussion

10:15-10:45 Coffee Break / Exhibition & Preparation for the Wet-Lab

Session 9: Hands-On Skills Lab 3 (ACI)

Lab Leaders: Lars Peterson (SE), Mats Brittberg (SE)

Lab Instructors: All Faculty

- 10:45-11:00 Live Demonstration: Defect Preparation, Shouldering & Cartilage Biopsy, Autologous Chondrocyte Implantation
Mats Brittberg, (SE)
- 11:00-12:30 Hands-On Workshop in Cartilage Repair with ACI
- MaioRegen (Finceramica)
 - Hyalofast (Anika Therapeutics)
 - Agili-C Implants (CartiHeal)

12:30-13:15 Lunch Break / Exhibition

Session 10: The Complexity of the Patellofemoral Joint

Moderator: Mats Brittberg (SE)

- 13:15-13:30 Challenge in Diagnostic and Treatment of PFJ
Andreas Gomoll (US)
- 13:30-13:45 Cartilage Treatment combined with Soft Tissue and Osseous Balancing in PFJ Pathologies
Stefan Nehrer (AT)
- 13:45-14:00 Trochleoplasty and PFJ Instability
Lars Peterson (SE)
- 14:00-14:15 ACI or Microfracture to treat Cartilage Lesions in PFJ?
Clemente Ibarra (MX)
- 14:15-14:30 The Boundary in the Use of Biological or Metal Implants in Cartilage Lesions of the PFJ
Mats Brittberg (SE)

14:30-14:45 Q&A / Discussion

Session 11: Hands-On Skills Lab 4: Treatment of the PFJ

Lab Leaders: Lars Peterson (SE), Christoph Erggelet (DE)

Stefan Nehrer (AT)

Lab Instructors: All Faculty

- 14:45-15:00 Live Demonstration: Trochleoplasty, MPFL Reconstruction & Fulkerson Osteotomy
Chris Erggelet (CH)
- 15:00-16:30 Hands-On Workshop MPFL Reconstruction (Arthrex, Smith & Nephew)

16:30-17:00 Q&A / Take Home Points

17:00 Adjourn

18:00-20:00 City Tour (Cost 25.00 Euros)

General Information

Travel & Transportation

Most international travellers arrive in Mexico City by air, to the Benito Juárez International Airport (IATA: MEX), located in the eastern part of the city, around 5 km (3.1 mi) from Downtown Mexico City. The airport offers a service of licensed and secure taxis known as “Sitios”. These may be a bit more expensive, but they are well worth the expense.

Course Language

The official course language is English. No simultaneous translation will be provided.

Climate

Mexico City has a mild temperate climate with dry winters and warm summers. The month of February is characterized by temperatures between 20°C to 25°C during the day and cold 08°C to 12°C at night. On average, the coolest month is January.

Credit Cards

All major credit cards are widely accepted.

Time Zone

Central Standard Time: CST
 UTC/GMT - 6 hours

Weights and Measures

Electricity: 127 volts 60 Hz
 Measures: Metric and Kilo System

Health Care

Vaccinations are not required for entry into Mexico but an individual travel- & health insurance is highly recommended.

Disclaimer

ICRS and the course organizers cannot accept any liability for the acts of any suppliers to this meeting nor of the safety of any attendee while in transit to or from this event. All participants are strongly advised to carry proper travel- & health insurance.

Cancellation of the Course by the Organizer

Course fees can only be reimbursed if the course is cancelled for any other reasons than war, warlike events, and acts of terrorism or sickness epidemics (force majeure). In the latter circumstances only a portion of the course fee would be refundable.



Plaza Central “Zócalo”

Information of Registration

Online registration is possible only at www.cartilage.org Register **before October 30, 2017** in order to benefit from our highly reduced registration fees!

Wet Lab Registrations are limited to 48 participants (4 per station).

Wet-Lab & Lectures	Until Oct 30 Early Fee	Nov 01 – Jan 10 Normal Fee	From Jan 11 Onsite Fee
Residents / Students*	EUR 500.00*	EUR 600.00*	EUR 750.00*
ICRS-Members	EUR 700.00	EUR 800.00	EUR 950.00
Non-ICRS Members	EUR 850.00	EUR 950.00	EUR 1100.00
Industry Representatives	EUR 1000.00	EUR 1150.00	EUR 1300.00

Above registration fees includes access to all sessions, wet-lab, congress bag, programme as well as the welcome reception, coffee breaks and lunch.

* Resident & Student fees to be accompanied by a certificate signed by the head of department.

Lectures Only (No Wet-Lab)	Until Oct 30 Early Fee	Nov 01 – Jan 10 Normal Fee	From Jan 11 Onsite Fee
Residents / Students*	EUR 200.00*	EUR 250.00*	EUR 300.00*
ICRS-Members	EUR 300.00	EUR 350.00	EUR 400.00
Non-ICRS Members	EUR 400.00	EUR 450.00	EUR 500.00
Industry Representatives	EUR 500.00	EUR 550.00	EUR 600.00

Above registration fees includes access to lectures, congress bag, programme, welcome reception, coffee breaks and lunch. No Hands-on workshops are included in these fees.

*Resident & Student fees to be accompanied by a certificate signed by the head of department.

Attendees who apply for ICRS membership right before registration will immediately profit from the highly reduced fees for ICRS Members. Membership applications can be done online at www.cartilage.org. ICRS Members who are not in good standing with their membership dues 2013/2014 will automatically be charged with the Non-Member fee.

Payment – Fees

- Bank Remittance to:
Bernener Kantonalbank,
BEKB – 3001 Bern, Switzerland
Ref: “ICRS Skills Course 2017, Mexico”
Clearing-No: 790 BIC,
SWIFT Code: KBBECH22
Account-Nr.: 16 246244671 /
IBAN: CH97 0079 0016 2462 4467 1

- AMEX/ VISA or Euro-/MasterCard

Cancellation Policy

Written notification is required for all registration cancellations and changes. Cancellations of registrations should be sent to the ICRS Executive Office in Zurich office@cartilage.org.

Please note the following refund policy for paid registrations.

- 80% refund for cancellation before October 30, 2017.
- 50% refund for cancellations between November 1 – Jan 10, 2018.
- No refunds thereafter

Name Changes

Name changes of registrations will be charged with an administrative fee of € 100.00.

Official Course Hotel

Radisson Paraiso Perisur Hotel

Cuspide 53 , Parques del Pedregal
14010 Mexico City, MX
www.radisson.com/mexicocitymx



The Radisson Paraiso is a convenient business hotel, located in South Mexico City's Business District / University Campus, a 30 Minutes drive away from the venue INR. A modern upscale shopping center is located accross the Street. The Hotel offers contemporary rooms, suites, restaurants, 24 hours Room Service and include valet service, business & fitness center, on-site dining and free Wi-Fi.

A complimentary bus transport from and to the INR Venue will be provided by the ICRS in the mornings and evenings.

Hotel Room Rates

(Breakfast, Taxes and WLAN included)

Reduced ICRS Hotel Rates are available only until December 10, 2017
SGL: \$MXN 1,646.85 (approx. 80 Euros)
DBL: \$MXN 1,889.20 (approx. 90 Euros)

Reservations (Group Code: ICRSMEX)

Email: ventas@radisson.com.mx or

dluna@radisson.com.mx

Phone (0155) -5927-6969

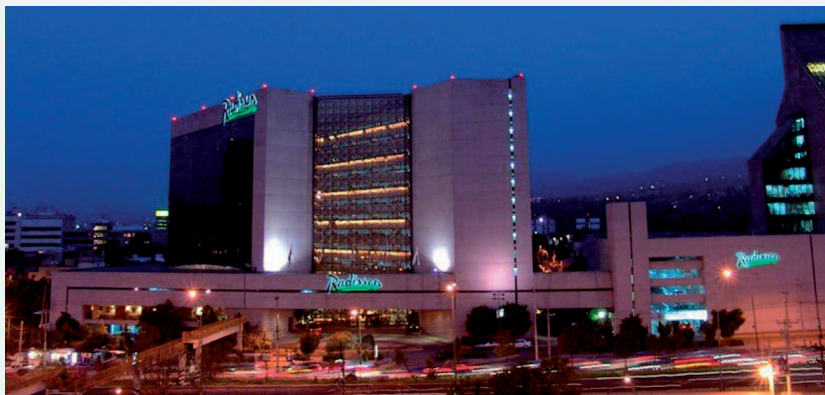
Use Group Code: ICRSMEX

A valid Credit Card is necessary to guarantee your reservation.

Attention:

Special ICRS Room Rates are available until December 10, 2017 only.

After that date the cost of each room will increase to \$MEX 2,513.35 SGL/DBL without Breakfast.



Social Networking Opportunities

**Thursday, February 01, 2018
from 08.30 – 12.00**

Visit and tour to Biograft tissue bank. Biograft is the first private tissue bank in Mexico meeting the increasing demand for implants of human musculoskeletal tissue. Please confirm your participation on the online registration form. **Symbolic Fee: 10 Euros (incl. transportation and lunch)**

**Thursday, February 01,
2018 from 19:00 – 21:00**

Welcome Reception: All course participants, industry representatives and accompanying persons are cordially invited for a welcome reception, offered by the ICRS. Please confirm your participation on the online registration form.

**Friday, February 02,
2018 from 19.00 – 23.00**

Course & Faculty Dinner: Take in the success of the ICRS Meeting while enjoying a flavour packed menu of Mexican cuisine filled with spicy and delicious culinary options. Seize this unique opportunity and get together with our faculty experts. Extend your networking with your

international peers and colleagues in an inspiring ambience. Dating back to 1837, this 300 hundred year old hacienda manor house sits in the heart of colonial Tlalpan in the south of Mexico City. Previously home to the brother of President Manuel Gonzalez and the famous poet Laura Enriquez, this stately home has since become a prestigious restaurant that offers the finest in traditional Mexican and international cuisine in two dining rooms and terraces. **Dinner Fee: 60 Euros** (all Faculty members are invited)

**Saturday, February 03, 2018 from
18.00 – 20.00**

City Tour: Discover the sights of Mexico City from on board the open top sight-seeing bus. Enjoy the city center from the top deck of the bus as you listen to the provided audio guide (available in 6 different languages) and visit the most emblematic areas in Downtown as Bellas Artes, the Zócalo, National Museum of Anthropology, and Revolution Monument. Take a tequila or mezcal, taste Mexican snacks, and listen traditional Mexican music on board. **Tour Fee: 25 Euros**



Course & Faculty Dinner at “Antigua Hacienda Tlalpan”



Leading the way in regenerative medicine



www.vcel.com

64 Sidney Street
Cambridge, MA 02139
617-588-5555

ICRS 2018

International Cartilage Repair Society

第十四届国际软骨修复协会年会
中国·澳门

Macao (SAR), China

April 09 – 12, 2018

14th World Congress of the
International Cartilage Repair Society

Abstract Submission: Sept 1 – Oct 27, 2017

www.cartilage.org

Mark your agenda!

