

2020 BIENNIAL MEETING
KITZBÜHEL
AUSTRIA

SUNDAY, JANUARY 26TH thru
THURSDAY, JANUARY 30TH



SUNDAY, JANUARY 26

19:00 - 21:00 **Welcome Reception/
Registration at Hotel Rasmushof**

MONDAY, JANUARY 27

06:00 - 06:30 **BREAKFAST**

06:30 - 06:45 **WELCOME - Christopher Kaeding | John Bergfeld |
Christian Fink | Christian Hoser | Volker Musahl
| Karl Peter Benedetto**

**MODERATORS - Andrew Amis | Carl Imhauser
BASIC SCIENCE**

06:45 - 06:52 **Sandro Fucentese** (Guest of Peter Burkart)
(1) Randomized Controlled Trial of an Osteoconductive Scaffold
Positioned to Augment Graft Incorporation after ACL-Reconstruction -
Interim Analysis

06:53 - 07:03 **Andrew Amis**
(2) Should We Cut The ACL In Lab Experiments Or Should It Be
Ruptured Traumatically?

07:04 - 07:11 **Mirco Herbort**
(3) The "Bankart Knee": Biomechanical Consequences Of A
Posterolateral Tibia Plateau Impression Fracture As Concomitant Injury
Of ACL Rupture

07:12 - 07:19 **Jason Koh**
(4) Does The ACL Fail Through Attrition? Subfailure Impingement Of
The Native Rat ACL Results In Biomechanical Changes And Cell Death.

07:20 - 07:27 **David McAllister**
(5) Cyclic Testing Of Soft Tissue Grafts For ACL Reconstruction

07:28 - 07:35 **Marc Safran**
(6) Is There Really A Relationship Between Femoroacetabular
Impingement And The Anterior Cruciate Ligament

07:36 - 07:43 **Amelie Stoehr**
(7) Histological And Immunohistochemical Differences In Remodeling
Of Human ACL Grafts

07:44 - 07:51 **Niv Marom** (Guest of Andrew Pearle)
(8) Forces And Torques Of The Pivot Shift (PS)

07:52 - 07:59 **Florian Imhoff** (Guest of Hermann Mayr)
(9) The Effect Of Slope And Varus Correction High Tibial Osteotomy In An
ACL-Deficient Und ACL-Reconstructed Knee – A Biomechanical

08:00 - 08:20 **DISCUSSION**

08:20 - 08:35 **BREAK**

**MODERATORS - Julian Feller | Jacques Menetrey
ACL AND MENISCUS**

08:35 - 08:42 **Karl Eriksson**
(10) Meniscus Transplant/Substitution Using Autologous Tendon Graft.
Early Experiences From First 5 Cases In A Prospective Pilot Study

08:43 - 08:50 **Elmar Herbst**
(11) Distraction Forces On The Meniscal Roots Depend On Axial
Loading Rather Than Flexion Angle

08:51 - 08:58 (12) ACL & Meniscus ACC Rehab **Thomas Klootwyk**

08:59 - 09:06 **James Robinson**
(13) Concomitant Repair Of Displaced Bucket Handle Repairs And ACL
Reconstruction

09:07 - 09:14 **Romain Seil**
(14) High Incidence Of Previously Neglected Meniscus Lesions
Influencing Knee Biomechanics In Association With ACL Injuries.

09:15 - 09:23 **Tim Spalding**
(15) Results Of Primary And Revision ACL Reconstruction With Meniscal
Transplant: Good Results In Selected Patients

09:24 - 09:31 **Renee Verdonk**
(16) A Polyurethane Partial Meniscal Implant For Chronic Painful Partial
Meniscectomy- A 5 Y+ Follow Up Evaluation

09:32 - 09:57 **DISCUSSION**

ADJOURN

15:30 - 16:00 **SNACK**

**MODERATORS - Ryosuke Kuroda | Andrew Pearle
ANATOMIC ACL**

16:00 - 16:07 **Joan Monllau**
(17) Selective Bundle Reconstruction In Partial ACL Tears Leads To
Excellent Long-Term Functional Outcomes And A Low Percentage Of
Failures

16:08 - 16:15 **Atsuo Nakamae**
(18) Improvement Of Proprioceptive Function After Anterior Cruciate
Ligament Augmentation: Comparison With Single- And Double-Bundle
Reconstruction

16:16 - 16:23 **Konsei Shino**
(19) Tunnel Location And Clinical Outcomes After The Anatomic
Triple Bundle ACL Reconstruction With Hamstring Tendon Graft

16:24 - 16:31 **Robert Smigielski**
(20) Ribbon ACL Reconstruction Using Quad Tendon – The Preliminary
Findings Of A Two-Year Follow-Up Including CT And MRI Scans

16:32 - 16:39 **Daniel Guenther** (Guest of Volker Musahl)
(21) Remnant Preserving Is Crucial To Improving Patient Outcomes
After ACL Reconstruction

16:40 - 17:05 **DISCUSSION**

17:05 - 17:20 **BREAK**

**MODERATORS - Andy Williams | Yuichi Hoshino
ACL INSTABILITY**

17:20 - 17:27 **Lukas Willinger** (Guest of Andrew Amis)
(22) Attachment Points And Length Change Patterns Of The Medial
Knee Structures

17:28 - 17:35 **Guido Wierer** (Guest of Karl Peter Benedetto)
(23) Anteromedial Instability Of The Knee

17:36 - 17:43 **Christoph Kittl** (Guest of Christian Hoser)
(24) Anteromedial Rotatory Instability Of The Knee: Biomechanics And
Related Reconstructions

17:44 - 17:51 **Moises Cohen**
(25) The Presence Of The Arthroscopic "Floating Meniscus" Sign As An
Indicator For Surgical Intervention In Patients With Combined Anterior
Cruciate Ligament And Grade II Medial Collateral Ligament Injury

17:52 - 17:59 **Kanto Nagai** (Guest of Ryosuke Kuroda)
(26) In Vivo ACL Bundle Elongation Shows Complex Change During
Walking And Running: Analysis Using Biplane Radiography System

18:00 - 18:07 **Julian Feller**
(27) Is The Kira Device Useful In Quantifying The Pivot Shift

18:08 - 18:15 **Yuichi Hoshino**
(28) The Coalition Of Tibial Tunnels In Anatomic Double Bundle ACL
Reconstruction, Does It Matter? Investigation Using An Electromagnetic
Pivot-Shift Measurement.

18:16 - 18:41 **DISCUSSION**

ADJOURN

TUESDAY, JANUARY 28

06:00 - 06:30 **BREAKFAST**

**MODERATOR - Constance Chu
ACL IMAGING**

06:30 - 06:37 **Daisuke Araki**
(29) Different Cutting Planes For Evaluating Bone Tunnels Affect
Accurate Tunnel Position Description In Anterior Cruciate Ligament
Reconstruction.

06:38 - 06:45 **Matteo Denti**
(30) Anterior Cruciate Ligament Inclination Angles On The Coronal And
Sagittal Planes After Reconstructions By Different Techniques

06:46 - 06:53 **David Flanigan**
(31) Correlation Of PET MR Imaging In ACL Surgery With Tunnel
Widening

06:54 - 07:01 **Jacques Menetrey**
(32) Isolated Anterior Cruciate Ligament Injury Could Be Much Less
Common Than Conventional Wisdom

07:02 - 07:17 **DISCUSSION**

**MODERATORS - Romain Seil | Stefano Zaffagnini
ACL PEDIATRIC**

07:17 - 07:24 **Diego Astur** (Guest of Moises Cohen)
(33) Anterior Cruciate Ligament Re-Rupture In Pediatric Population Is
Related To Lower Functional Scores At Return To Activity:
A Prospective, Mid-Term Follow-Up Study

07:25 - 07:32 **Mary Lloyd Ireland**
(34) Secondary Injuries More Prevalent For Females Following
Pediatric ACL Reconstruction: A Systematic Review

07:33 - 07:40 **Walter Lowe**
(35) Anterior Cruciate Ligament Reconstruction With Quadriceps
Tendon Autograft In Skeletally Immature Adolescents

07:41 - 07:56 **DISCUSSION**

**MODERATORS - Karl Eriksson | Mary Lloyd Ireland
ACL TIMING**

07:56 - 08:03 **Bjorn Barenius**
(36) Early Results Of Treating ACL Ruptures With A Dynamic Brace

08:04 - 08:12 **Christopher Kaeding**
(37) Using A Risk Calculator In ACL Reconstruction Decision Making

08:13 - 08:20 **Eiji Kondo**
(38) Impact Of The Surgical Timing On The Clinical Outcome In
Anatomic Double-Bundle Anterior Cruciate Ligament Reconstruction
Using Hamstring Tendon Autografts

08:21 - 08:36 **DISCUSSION**

08:36 - 08:51 **BREAK**

**MODERATORS - Bertrand sonnery-Cottet | Alan Getgood
ACL ANTEROLATERAL**

08:51 - 08:56 **Camlio Helito** (Guest of Christopher Kaeding)
(39) Combined Reconstruction Of The Anterolateral Ligament In
Patients With ACL Injury And Ligamentous Hyperlaxity Leads To
Better Clinical Stability And A Lower Failure Rate Than Isolated ACL
Reconstruction

08:57 - 09:02 **Joao Novaretti** (Guest of John Bergfeld)
(40) Does Lateral Extra-Articular Tenodesis Of The Knee Affect ACL
Graft In-Situ Forces And Tibiofemoral Contact Pressures?

09:03 - 09:08 **Brian Devitt**
(41) Radiological Identification Of Injury To The Kaplan Fibers Of
The Iliotibial Band

09:09 - 09:14 **Alan Getgood**
(42) Predictors Of Poor Outcome Following ACL Reconstruction With Or
Without Lateral Extra-Articular Tenodesis: The STABILITY Experience

09:15 - 09:20 **Danyal Nawabi**
(43) The Effect Of Lateral Extra-Articular Tenodesis (LET) On Anterior
Cruciate Ligament Graft Forces And Knee Kinematics
ACL Graft

09:21 - 09:26 **Hideyuki Koga**
(44) Contribution Of Additional Anterolateral Structure Augmentation
To Controlling Pivot Shift In Anterior Cruciate Ligament Reconstruction
Based On Objective Evaluation Of Pivot Shift Phenomenon Using
Triaxial Accelerometer

09:27 - 09:32 **Volker Musahl**
(45) Clinical Biomechanics Of ACL Reconstruction With And Without
Tenodesis

09:33 - 09:38 **Carl Imhauser**
(46) Engagement Of Lateral Extra-Articular Tenodesis (LET) And An

09:39 - 09:44 **Andrew Pearle**
(47) Impact Of Lateral Extraarticular Tenodesis (LET) On Tibiofemoral
Contact Mechanics

09:45 - 09:50 **Nicolas Bouguenec** (Guest of Philippe Colombet)
(48) Combined Reconstruction Of ACL And ALL With Hamstrings
According To A Current Technique: What Is The Rate Of Osteoarthritis
At 15 Years Of Mean Follow-Up

09:51 - 09:56 **Brett Fritsch** (Guest of David Parker)
(49) A Kinematic And Contact Pressure Analysis Of Commonly Used
Anterolateral Procedures In Combination With Anterior Cruciate
Ligament Reconstruction

09:57 - 10:17 **DISCUSSION**

ADJOURN

15:30 - 16:00 **SNACK**

16:00 - 17:00 **FIRST BUSINESS MEETING**

**MODERATORS - Christian Fink | Martin Lind
ACL QUADRICEPS TENDON**

17:00 - 17:07 **Marc Strauss** (Guest of Christian Fink)
(50) Qualitative And Quantitative Anatomy Of The Human
Quadriceps Tendon

17:08 - 17:15 **Christian Fink**
(51) Revision Rates Following ACL Reconstruction With Quadriceps
Tendon Vs. Hamstring Grafts – Influence Of Age, Sex And Sports
Activity

17:16 - 17:23 **Christian Hoser**
(52) Comparison Of Hamstring And Quadriceps Tendon Autografts
In ACL Reconstruction: A Prospective "Patient-Reported-Outcome-
Measurement" (PROM) Study On 551 Patients

17:24 - 17:31 **Martin Lind**
(53) Increased Revisions Of Quadriceps Tendon Autografts
Compared To Other Autografts Used For Anterior Cruciate Ligament
Reconstruction. Results From The Danish Knee Ligament Registry.

17:32 - 17:39 **Seth Sherman**
(54) Comparison Of Bone-Patella Tendon-Bone (BTB) And Quadriceps
Autograft For ACL Reconstruction In Patients Under 18 Years Of Age

17:40 - 17:47 **Etienne Cavaignac** (Guest of Jacques Menetrey)
(55) Cutaneous And Neurological Complications Of Anterior Cruciate Ligament (ACL) Reconstruction With Quadriceps Tendon (QT), Bone Patellar-Tendon Bone (BPTB) Or Hamstring Tendon (HT)

17:48 - 17:55 **Theresa Diermeier** (Guest of Volker Musahl)
(56) No Difference In Restoration Of Knee Kinematics Between Bone-Patella Tendon Bone Graft And All-Soft Tissue Partial Thickness Quadriceps Graft For Anatomical Single Bundle ACL Reconstruction

17:56 - 18:11 **DISCUSSION**

18:11 - 18:26 **BREAK**

MODERATORS - Gregory Maletis | Amelie Stoehr
ACL COMPLICATIONS

18:26 - 18:33 **Thomas Branch**
(57) Efficacy Of Non-Operative Treatment Of Knee Arthrofibrosis Using High-Intensity Home Mechanical Therapy: Results From 11,000+ Patients.

18:34 - 18:41 **Gregory Maletis**
(58) Screw And Sheath Tibial Fixation And 90-Day Deep Infection Following Hamstring Graft ACLR

18:42 - 18:49 **Hermann Mayr**
(59) Immunohistochemical Examination In Arthrofibrosis Of The Knee Joint

18:50 - 18:57 **Anders Stalman**
(60) Septic Arthritis After Anterior Cruciate Ligament Injury, Incidence, Risk Factors And Outcome

18:58 - 19:05 **Yusuke Nakagawa** (Guest of Hideyuki Koga)
(61) Infra-Patellar Fat Pad Fibrosis Is Associated With Elevation Of Inflammatory Cytokines Level In The Synovial Fluid And Delays Functional Recovery In ACL-Reconstructed Patients

19:06 - 19:21 **DISCUSSION**

19:21 - 19:51 **FEAGIN LECTURE**
"History of the Kitzbuhel Ski Race - 80 Years"
and presented by **Dr. Michael Huber**

WEDNESDAY, JANUARY 29

06:00 - 06:30 **BREAKFAST**

MODERATORS - Timothy Spalding | Thomas Patt
ACL PREVENTION

06:30 - 06:37 **Peter Angele**
(62) Injury Prevention Concept To Reduce Severe Knee Injuries In Elite Football Clubs – An Interventional Multifaceted Study Project

06:38 - 06:45 **Joseph Janosky** (Guest of Thomas Patt)
(63) Effects Of Neuromuscular Training On Biomechanical Efficiency In High School Athletes

06:46 - 06:53 **Jose Huylebroeck**
(64) Prevention Before And After Injury- The ACL Paradigma What Did We Learn Until Now

07:02 - 07:09 **Christopher Vertullo**
(66) Barriers To Funding And Implementation Of A National Youth Sports Injury Prevention Program

07:10 - 07:17 (67) G.U.A.R.D.I.A.N.S of the ACL **Thomas Patt**

07:18 - 07:38 **DISCUSSION**

MODERATORS - Christian Hoser | Christophe Vertullo
ACL AND RETURN TO PLAY

07:38 - 07:45 **Eivind Inderhaug**
(68) Return To Play And Long-Term Participation In Pivoting Sports After Anterior Cruciate Ligament Reconstruction

07:46 - 07:53 **Bertrand Sonnerly-Cottet**
(69) Factors Affecting The Knee-Santy Return To Sports Test Score (K-STARTS) After ACL Reconstruction: A Retrospective Analysis Of 676 Patients

07:54 - 08:01 **Stefano Zaffagnini**
(70) Biomechanical Assessment For The Return To Sport After ACL Injury: Wearable Inertial Sensors Vs Marker-Based Motion Capture

08:02 - 08:09 **Martyn Snow** (Guest of Tim Spalding)
(71) Can The ACL-Hamstring Reflex Be Used As An Objective Measure Of Proprioception And Thus A Method Of Assessing Appropriate Return To Play

08:10 - 08:30 **DISCUSSION**

08:30 - 08:50 **John Bergfeld**

REMEMBERING JOHN FEAGIN:
OUR FOUNDER, INNOVATOR AND TEACHER-FRIEND

08:50 - 09:05 **BREAK**

MODERATORS - Christopher Kaeding | Elvire Servien
ACL AND OSTEOARTHRITIS

09:05 - 09:12 **Constance Chu**
(72) Pre-Osteoarthritis Is Seen In Nearly Half Of Patients Just One Year After ACL Reconstruction

09:13 - 09:20 **Cale Jacobs**
(73) An "Inflamma-Type" Patient Subset Had A Dysregulated Inflammatory Response Related To Early Cartilage Degradation After Acute Anterior Cruciate Ligament Injury

09:21 - 09:28 **Hayden Morris**
(74) Worsening Knee Osteoarthritis Features On MRI - 2=1 To 5 Years After ACLR

09:29 - 09:36 **Kevin Plancher**
(75) Development Of OA Following ACL Reconstruction: The Influence Of Meniscus Pathology

09:37 - 09:44 **Kevin Stone**
(76) Short-Term Changes In Osteoarthritic Knee Synovial Fluid Biochemistry Following Intra-Articular Injection Of Amniotic Fluid

09:45 - 09:55 **Caroline Mouton**
(77) ACLSG Traveling Scientist: Anterior Knee Laxity Profiles After ACL Injury

09:56 - 10:16 **DISCUSSION**

ADJOURN

AFTERNOON OFF

14:30 **SKI RACE**

18:30 **BBQ - RED BULL RESTAURANT**

THURSDAY, JANUARY 30

06:00 - 06:30 **BREAKFAST**

MODERATORS - Mark Clatworthy | Moises Cohen
ACL GRAFT CHOICE

06:30 - 06:37 **Charles Brown**
(78) 3-And 4-Strand Hamstring Tendon Autografts Produce Graft Diameters Less Than 8 Mm In Male Patients Undergoing ACL Reconstruction In The Middle East

06:38 - 06:45 **Thomas Carter**
(79) ACL Reconstruction With Tibialis Tendon Allograft: Does The Donor Age Make A Difference?

06:46 - 06:53 **Mark Clatworthy**
(80) Does A Thicker Hamstring Or Patella Tendon Graft Reduce The Failure Rate In Anterior Cruciate Ligament Reconstruction In Young Patients?

06:54 - 07:01 **Arne Ekeland**
(81) Similar Risk Of ACL Graft Revision For Alpine Skiers, Football And Handball Players - The Graft Revision Rate Is Influenced By Age And Graft Choice

07:02 - 07:09 **Tatsuo Mae**
(82) SPEEDTRAP® Suture Slippage Onto Graft In ACL Reconstruction With Hamstring Tendon Graft

07:10 - 07:17 **David A. Parker**
(83) Graft Size And Orientation Within The Femoral Notch Affects Graft Healing At One-Year After ACLR

07:18 - 07:25 **Elvire Servien**
(84) Is There A Gender Difference For Hamstring Muscle In A Sportive Population?

07:26 - 07:41 **K. Don Shelbourne**
(85) Results Of Anterior Cruciate Ligament Reconstruction With Contralateral Patellar Tendon Autograft

07:42 - 07:49 **Patrick Smith**
(86) All-Inside Quadrupled Semitendinosus Vs Bone-Patellar Tendon-Bone ACL Reconstruction In Athletes 24 Years Or Younger: A Randomized Controlled Trial

07:50 - 07:57 **Simon Young**
(87) Lower Revision Rates With Bone-Patellar Tendon-Bone Versus Hamstring Tendon Autografts In 7,155 Anterior Cruciate Ligament (ACL) Reconstructions: Results From The New Zealand ACL Registry

07:58 - 08:28 **DISCUSSION**

08:28 - 08:43 **BREAK**

MODERATORS - Martha Murray | Michael Hirschmann
ACL REPAIR

08:43 - 08:50 **Jon Olav Drogset**
(88) Autologous BPTB ACL Reconstruction Results In Lower Failure Rates Compared To ACL Repair With And Without Synthetic Augmentation At 30 Years Follow-Up: A Prospective Randomized Study

08:51 - 08:58 **Joao Espregueira-Mendes**
(89) Bone Morphology: Is This Important In Instability?

08:59 - 09:06 **Michael Hirschmann**
(90) Primary ACL Repair – Where Are We?

09:07 - 09:14 **Martha Murray**
(91) Bridge-Enhanced ACL Repair: Early Results From A Randomized Clinical Trial

09:15 - 09:22 **Tim Whitehead**
(92) Tibial Stump Retention In ACLR With Respect To Re-operation and Graft Rupture Rates

09:23 - 09:33 2018-2020 Traveling Scientist Report **Jo Stephen**

09:34 - 09:54 ACLSG Survey **Seth Sherman**

09:54 - 10:09 **DISCUSSION**

10:09 - 11:09 **SECOND BUSINESS MEETING**

ADJOURN

15:30 - 16:00 **SNACK**

MODERATORS: Timothy Whitehead | Andreas Imhoff
ACL REVISION

16:00 - 16:07 **Andreas Imhoff**
(93) Three-Dimensional Realignment And Slope Reducing Osteotomy With Anatomic ACL Reconstruction In Patients With Revision Anterior Cruciate Ligament Deficiency

16:08 - 16:15 **Andrew Williams**
(94) Two-Stage Revision Anterior Cruciate Ligament Reconstruction Is Rarely Required: Experience With 92 Cases (41 Elite Athletes), Using An Algorithm For Decision-Making.

16:16 - 16:23 **Peter Verdonk**
(95) Higher Risk Of ACL Reconstruction Graft Failure In A Population Of Smokers

16:24 - 16:31 **Wolf Christian Pratt** (Guest of Amelie Stoehr)
(96) Cancellous Allogenic And Autologous Bone Grafting Ensure Comparable Tunnel Filling Results In Two-Stage Revision ACL Surgery

16:32 - 16:47 **DISCUSSION**

16:47 - 17:02 **BREAK**

MODERATOR - Robert Magnussen
ACL OUTCOME

17:02 - 17:09 **Maksym Golovakha** (Guest of Karl Peter Benedetto)
(97) Long Terms Results Of ACL-Reconstruction By Technology «All Inside»

17:10 - 17:17 **Peter Annear**
(98) 7-10 Year Comparison Of Clinical And MRI-Based Outcomes After Double Bundle Hamstrings Or Hamstrings/LARS Hybrid Anterior Cruciate Ligament Reconstruction

17:18 - 17:25 **Philippe Colombet**
(99) Healing Of Hamstring Graft Within The Tibial Tunnel And In The Notch Following ACL Reconstruction: Clinical And MRI Evaluation Of Suspensory Fixation Versus Interference Screws 4.5 Years Follow-Up

17:26 - 17:33 **Robert Magnussen**
(100) Moderately Increased Post-Operative Anterior Knee Laxity Does Not Predict Decreases In Patient-Reported Outcome Scores Or Subsequent Knee Surgery Between 2 And 6 Years After ACL Reconstruction

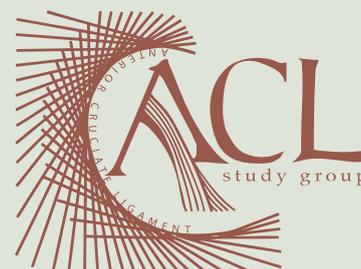
17:34 - 17:41 **Wojciech Widuchowski**
(101) Long-Term Results Of Arthroscopic Meniscectomy: A Minimum 20 Years Of Follow-Up

17:42 - 18:02 **DISCUSSION**

ADJOURN

19:00 **MEET AT GONDOLA FOR HOCHKITZBUHEL RESTAURANT**

GALA DINNER



ACL STUDY GROUP EXECUTIVE BOARD 2018 – 2020

CHRISTOPHER KAEDING – PRESIDENT – NORTH/SOUTH AMERICA

TIM SPALDING – VICE PRESIDENT - EUROPE

RYOSUKE KURODA – VICE PRESIDENT – AUSTRAL-ASIA

MOISES COHEN - MEMBER-AT-LARGE

DAVID PARKER – MEMBER-AT-LARGE

MARK CLATWORTHY – PAST PRESIDENT

JOHN BERGFELD – EXECUTIVE DIRECTOR

JOHN FEAGIN – FOUNDER (DECEASED)

ACL STUDY GROUP COMMITTEES

Magnus Forssblad – Chair, Membership

Robert Magnussen – Chair, Scientific

Volker Musahl – Chair, Program

The ACL Study Group

Acknowledges and Appreciates the Support from the Following Companies:



Smith+Nephew