Anatomic Double Bundle ACL Reconstruction

February 28, 29 ~ March 1, 2008

Course Chairman: Freddie H. Fu, MD, DSc (Hon), DPs (Hon)

Organizing Committee: Constance R. Chu, MD • Christopher D. Harner, MD • Johnny Huard, PhD
James J. Irrgang, PhD, PT, ATC • Patrick Smolinski, PhD • Scott Tashman, PhD

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Department of Orthopaedic Surgery
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The Anatomic Double Bundle
ACL Reconstruction conference is approved by the International Society of Arthroscopy, Knee Surgery & Orthopaedic Sports Medicine (ISAKOS)
Dear Colleagues:

I would like to invite you to join us in Pittsburgh for the Panther Global Summit 2008, an exciting two-day meeting to discuss recent advances and the future of anatomic double bundle ACL reconstruction. Anatomic double bundle ACL reconstruction focuses on restoring normal anatomy of the injured ACL and may improve outcomes of surgery in terms of enhanced stability and decreased arthritis in the long term.

In addition to our University of Pittsburgh faculty, our guest faculty includes nationally and internationally recognized pioneers in anatomic double bundle surgery from North & South America, Europe, Japan, and South Africa. The conference will include lectures and surgical demonstrations with plenty of time for lively discussion and interactions with our faculty. An optional surgical workshop using cadaveric knees is limited to 30 registrants.

I look forward to seeing you in Pittsburgh for the Panther Global Summit 2008.

Freddie H. Fu, MD, DSc (Hon), DPs (Hon)
Objectives
At the end of the course, participants will be able to:

- Describe the anatomy and function of the anteromedial and posterolateral bundles of the anterior cruciate ligament.
- Describe the effects of the injury and reconstruction to the anteromedial and posterolateral bundles of the ACL on the biomechanics and kinematics of the knee.
- Identify new and emerging technologies to critically evaluate the outcome of anatomic double bundle ACL reconstruction.
- Describe the advantages and techniques used to perform anatomic double bundle ACL reconstruction.
- Avoid common pitfalls and complications of anatomic double bundle ACL reconstruction.
- Describe the advantages and techniques to augment the anteromedial or posterolateral bundles of the ACL.
- Apply the concept of anatomic double bundle ACL reconstruction to revision ACL surgery.

Who Should Attend
Orthopaedic surgeons, fellows and residents, sports medicine physicians, physical therapists, athletic trainers and other sports medicine professionals.

Continuing Education Credit
The University of Pittsburgh School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Pittsburgh School of Medicine designates this educational activity for a maximum of **16.0 AMA PRA Category 1 Credits™**. Each physician should only claim credit commensurate with the extent of their participation in the activity.

Other health care professionals are awarded **1.60 continuing education units (CEU’s)** which are equal to **16.0 contact hours**.

Surgical Workshop – If you are attending either the Surgical Workshop on Wednesday, February 27, or Saturday, March 1, you will be awarded an additional **2.0 AMA PRA Category 1 Credits™** for a maximum of **18.0 AMA PRA Category 1 Credits™**.
Program Schedule - Wednesday, February 27, 2008

Surgical Skills Workshop
This workshop session will be limited to the first 12 surgeons. An additional fee will be charged for workshop.

10:00 am - Surgical Skills Workshop – Anatomic Double Bundle ACL Reconstruction
Noon Early Registration
4:00 pm - Location: Courtyard by Marriott Pittsburgh Shadyside

Program Schedule – Thursday, February 28, 2008

6:30 am Registration & Continental Breakfast
Location: Herberman Conference Center, UPMC Shadyside
7:20 am Welcome & Introduction


SESSION 1 – ANATOMY OF THE ACL
Moderators: Willem van der Merwe, MD & William G. Clancy Jr., MD, PhD (Hon)
7:30 am Anatomy of the ACL
Pascal S. Christel, MD, PhD
7:45 am Insertion Site Anatomy and Orientation of the Anteromedial & Posterolateral Bundles
Andrew A. Amis, PhD, DSc (Eng)
8:00 am Size and Orientation of the ACL Insertion Sites
Rainer Siebold, MD
8:10 am Should the “O’Clock” Position Be Used to Locate the Femoral Tunnels?
Mark D. Miller, MD

8:20 am Magnetic Resonance Imaging of the Native and Reconstructed ACL
Jeffrey D. Towers, MD
8:30 am Mammalian Evolution of the ACL
Freddie H. Fu, MD, DSc (Hon), DPs (Hon)
8:45 am Discussion

9:10 am Keynote Lecture: Biological Considerations for Graft Healing and Regeneration
Johnny Huard, PhD
9:30 am Discussion
9:40 am Break

SESSION 2 – BIOMECHANICS AND KINEMATICS OF THE KNEE
Moderators: Masahiro Kurosaka, MD, PhD & Patrick Smolinski, PhD
10:00 am Use of Robotic Technology to Study Knee Biomechanics and Kinematics
Thore Zantop, MD
10:15 am What Have We Learned about Rotation of the Knee?
Andrew A. Amis, PhD, DSc (Eng)
10:30 am In Vivo Dynamic Kinematics of the Knee – Effects of ACL Reconstruction
Scott Tashman, PhD
10:45 am Biomechanics of Double Bundle ACL Reconstruction
Kazunori Yasuda, MD, PhD
11:00 am Proprioception of the ACL Deficient and Reconstructed Knee: Effects of Double Bundle ACL Reconstruction
Timothy C. Sell, PhD, PT, ATC
11:10 am Discussion

11:35 am Keynote Lecture: What Have I Learned in 30 years of ACL Reconstruction
William G. Clancy Jr., MD, PhD (Hon)
Noon Lunch

SESSION 3 – ASSESSING OUTCOME OF ANATOMIC DOUBLE BUNDLE ACL RECONSTRUCTION – CURRENT PRACTICE AND FUTURE DIRECTIONS FOR MEASURING ROTATIONAL LAXITY
Moderators: James H. Lubowitz, MD & Mitsuo Ochi, MD, PhD
1:00 pm Current Status of Measuring Clinical Outcomes – Are They Good Enough???
James J. Irrgang, PhD, PT, ATC
1:15 pm In Vivo Measurement of Knee Kinematics Using an Electromagnetic Tracking System
Masahiro Kurosaka, MD, PhD

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1:30 pm  Use of Computer Navigation to Measure Intra-operative Kinematics: The French Experience
Philippe D. Colombet, MD

1:45 pm  Use of Computer Navigation to Measure Intra-operative Kinematics: The Italian Experience
Stefano Zaffagnini, MD

2:00 pm  Use of MRI to Measure Rotation of the Knee
Willem van der Merwe, MD

2:15 pm  Use of MRI and OCT to Measure Early Changes of the Knee Joint Following ACL Injury and Surgery
Constance R. Chu, MD

2:30 pm  Discussion

3:00 pm  Break

► SESSION 4 – ANATOMIC DOUBLE BUNDLE ACL RECONSTRUCTION – A GLOBAL PERSPECTIVE
Moderators: Christopher D. Harner, MD & Thore Zantop, MD

3:20 pm  Paolo Aglietti, MD
Pascal S. Christel, MD, PhD
Moisés Cohen, MD, PhD
Philippe D. Colombet, MD
Freddie H. Fu, MD, DSc (Hon), DPs (Hon)
Darren L. Johnson, MD
Masahiro Kurosaka, MD, PhD
James H. Lubowitz, MD
Mark D. Miller, MD
Mitsuo Ochi, MD, PhD
Rainer Siebold, MD
Willem van der Merwe, MD
Kazunori Yasuda, MD, PhD
Stefano Zaffagnini, MD

5:00 pm  Summary & Discussion

5:30 pm  Thursday Adjournment

6:15 pm  Transportation to Reception
(buses will leave from Courtyard by Marriott Pittsburgh Shadyside)

7:00 pm  Reception – Center for Sports Medicine

Program Schedule – Friday, February 29, 2008

6:30 am  Registration & Continental Breakfast

► SESSION 5 – LIVE SURGICAL DEMONSTRATIONS
Moderators: Darren L. Johnson, MD, Rainer Siebold, MD & Willem van der Merwe, MD

7:30 am  Live Surgical Demonstration – Case 1
Freddie H. Fu, MD, DSc (Hon), DPs (Hon)

8:30 am  Live Surgical Demonstration – Case 2
Christopher D. Harner, MD

9:40 am  Keynote Lecture: The Role of ACL Injury in the Development of Knee Osteoarthritis – Is Arthritis Inevitable?
Constance R. Chu, MD

10:00 am  Break

► SESSION 6 – PARDON THE INTERRUPTION: A CASE-BASED DISCUSSION OF SINGLE BUNDLE VS. DOUBLE BUNDLE ACL RECONSTRUCTION
Moderators: Christopher D. Harner, MD & Paolo Aglietti, MD

10:20 am  Case 1 – Acute ACL Injury in Young Competitive Athlete
Mark D. Miller, MD
Moisés Cohen, MD, PhD

10:45 am  Case 2 – Isolated ACL Injury in Middle-Aged Office Worker that Participates in Recreational Sports
William G. Clancy Jr., MD, PhD (Hon)
Masahiro Kurosaka, MD, PhD

11:10 am  Case 3 – Chronic ACL Injury with High Degree of Laxity and Instability
James H. Lubowitz, MD
Stefano Zaffagnini, MD

11:35 am  Case 4 – Revision for Failed Single-Bundle ACL Reconstruction
Darren L. Johnson, MD
Pascal S. Christel, MD, PhD

Noon  Lunch
SESSION 7 – PITFALLS AND COMPLICATIONS OF ANATOMIC DOUBLE BUNDLE ACL RECONSTRUCTION
Moderators: James P. Bradley, MD & Kazunori Yasuda, MD, PhD

1:00 pm Graft Options for Double Bundle ACL Reconstruction
Masahiro Kurosaka, MD, PhD

1:15 pm Avoiding Tunnel Coalition
Thore Zantop, MD

1:30 pm Considerations for Revision following Anatomic Double Bundle ACL Reconstruction
Freddie H. Fu, MD, DSc (Hon), DPs (Hon)

1:45 pm Discussion

SESSION 8 – AUGMENTATION OF THE POSTEROLATERAL OR ANTEROMEDIAL BUNDLES OF THE ACL
Moderators: Freddie H. Fu, MD, DSc (Hon), DPs (Hon) & Philippe D. Colombet, MD

2:15 pm Augmentation of the Posterolateral or Anteromedial Bundles of the ACL: The Brazilian Experience
Moisés Cohen, MD, PhD

2:30 pm Augmentation of the Posterolateral or Anteromedial Bundles of the ACL: The Japanese Experience
Mitsuo Ochi, MD, PhD

2:45 pm Augmentation of the Posterolateral or Anteromedial Bundles of the ACL: The Pittsburgh Experience
Christopher D. Harner, MD

3:00 pm Discussion

3:30 pm Break

SESSION 9 – REVISION ACL SURGERY USING THE ANATOMIC DOUBLE BUNDLE CONCEPT
Moderators: Christopher D. Harner, MD & Moisés Cohen, MD, PhD

4:00 pm Revision ACL Surgery Using the Anatomic Double Bundle Concept: The South African Experience
Willem van der Merwe, MD

4:15 pm Revision ACL Surgery Using the Anatomic Double Bundle Concept: The Pittsburgh Experience
Freddie H. Fu, MD, DSc (Hon), DPs (Hon)

4:30 pm Revision ACL Surgery Using the Anatomic Double Bundle Concept: The Kentucky Experience
Darren L. Johnson, MD

4:45 pm Discussion

5:15 pm Conference Adjournment

Program Schedule – Saturday, March 1, 2008
Surgical Skills Workshops
Each workshop session will be limited to the first 15 surgeons. An additional fee will be charged for workshop.
7:30 am Surgical Skills Workshop I – Anatomic Double Bundle ACL Reconstruction
10:00 am Surgical Skills Workshop II – Anatomic Double Bundle ACL Reconstruction
12:30 pm Workshop Adjournment

Registration Closed for Saturday Surgical Skills Workshops... Please See Wednesday Workshop on page 3
Course Chairman

Freddie H. Fu, MD, DSc (Hon), DPs (Hon)
David Silver Professor and Chairman
Department of Orthopaedic Surgery

Organizing Committee

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Department of Orthopaedic Surgery

Christopher D. Harner, MD
Blue Cross of Western Pennsylvania Professor of Orthopaedic Surgery
Department of Orthopaedic Surgery
Chief, Division of Sports Medicine
UPMC Center for Sports Medicine

Johnny Huard, PhD
Henry E. Mankin Professor of Orthopaedic Surgery
Department of Orthopaedic Surgery

James J. Irrgang, PhD, PT, ATC
Visiting Associate Professor of Orthopaedic Surgery
Department of Orthopaedic Surgery

Patrick Smolinski, PhD
Visiting Associate Professor of Engineering and Orthopaedic Surgery
Department of Mechanical Engineering
Department of Orthopaedic Surgery
University of Pittsburgh School of Engineering and
University of Pittsburgh School of Medicine

Scott Tashman, PhD
Visiting Associate Professor of Orthopaedic Surgery
Department of Orthopaedic Surgery

Guest Faculty ~ International

Paolo Aglietti, MD
Professor and Chairman
The First Orthopaedic Clinic
University of Florence
Florence, Italy

Andrew A. Amis, PhD, DSc (Eng)
Professor of Orthopaedic Biomechanics
Departments of Mechanical Engineering and Musculoskeletal Surgery
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Rizzoli Orthopaedic Institute
Biomechanics Laboratory
Bologna, Italy

Thore Zantop, MD
Resident
Department of Trauma
Hand and Reconstructive Surgery
University of Muenster
Muenster, Germany
Guest Faculty ~ United States

William G. Clancy Jr., MD, PhD (Hon)
Staff Orthopaedic Surgeon
Andrews Sports Medicine and Orthopaedic Center
St. Vincent’s Hospital
Birmingham, AL

Darren L. Johnson, MD
Professor and Chairman
Department of Orthopaedic Surgery
Director of Sports Medicine
University of Kentucky School of Medicine
Lexington, KY

James H. Lubowitz, MD
Director
Taos Orthopaedic Institute
Taos, NM

Mark D. Miller, MD
Professor and Head Division of Sports Medicine
Department of Orthopaedic Surgery
University of Virginia
Charlottesville, VA

Local Faculty

James P. Bradley, MD
Clinical Professor of Orthopedic Surgery
Department of Orthopedic Surgery

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Assistant Professor of Sports Medicine and Nutrition and Orthopaedic Surgery
Sports Medicine and Nutrition/Department of Orthopaedic Surgery
School of Health and Rehabilitation Sciences/University of Pittsburgh
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New York, NY

Samuel P. Robinson, MD
Sports Medicine Fellow
University of Pittsburgh Medical Center

Samir G. Tejwani, MD
Associate Southern California Permanente Medical Group
Kaiser Permanente Hospital
Department of Orthopaedic Surgery
Division of Sports Medicine
Fontana, CA

All course chairs and local course faculty members reside in the metropolitan Pittsburgh, Pennsylvania area and have an appointment at the University of Pittsburgh School of Medicine unless otherwise specified.

In accordance with Accreditation Council for Continuing Medical Education requirements on disclosure, information about relationships of presenters with commercial interests (if any) will be included in materials distributed at the time of the conference.
Registration Information

PRE–REGISTER: All pre-registrations are due two weeks prior to the date of the conference. Registrations after this date cannot be guaranteed.

On-line Registration accepted until February 14, 2008.

Registering online is the quickest and easiest way to reserve your space at CCEHS conferences.

• Visit our online registration site at https://ccehs.upmc.edu/formalCourses.jsp#1269

• Click the Registration button and enter all of the requested information

• After registering, an electronic confirmation will be sent to the email address you provided us when you registered.

Please note: Registration is not complete until you receive the confirmation letter / email for your pre-registration. If you do not receive this letter within 5-7 days of registration, please contact us at +1 (412) 647-8257 or +1 (412) 647-8232.

You must bring this confirmation with you to the conference.

Paper Registrations by Fax or Mail (see contact information below)
If you are unable to register online please contact us for a paper registration form. UPMC employees whose registration fee will be remitted via journal transfer should request the paper registration form.

Registration Cancellation
All cancellations must be in writing and sent to us via U.S. mail, e-mail or fax. Tuition for cancellations postmarked or date stamped before February 14, 2008 will be completely refunded. After February 14, 2008 a $35 administrative fee will be assessed. No refunds will be made after February 22, 2008.

Conference Contact for cancellation requests:
Dan Lewis
UPMC/CCEHS
Medical Arts Building, Suite 200
200 Lothrop Street
Pittsburgh, PA 15213
CCEHS@upmc.edu
Direct Line: +1 (412) 647-9541
Conferences Line: +1 (412) 647-8257
General Office Line: +1 (412) 647-8232
Fax: +1 (412) 647-8222

The UPMC/Center for Continuing Education in the Health Sciences reserves the right to cancel this program if sufficient registrations are not received. In the case of cancellation, the department will fully refund registration fees. However, other costs incurred by the registrant, such as airline or hotel penalties, are the responsibility of the registrant.

Early Registration Rates

Conference Fees
Orthopaedic Surgeons and Other Physicians: $999
Residents and fellows; and other health care professionals: $650

Conference with Surgical Workshop
Orthopaedic Surgeons Only: $1,449

Late Registration Rates (after February 1, 2008)

Conference Fees
Orthopaedic Surgeons and Other Physicians: $1,099
Residents and fellows; and other health care professionals: $750

Conference with Surgical Workshop
Orthopaedic Surgeons Only: $1,549

Registration fee includes:
• Continuing education credit
• Registration and course materials
• Continental breakfast, refreshments and lunch
• Thursday evening reception at UPMC Center for Sports Medicine

Special Needs

Participation by all individuals is encouraged. Advance notification of any special needs will help us provide better service. Please notify us of your needs at least two weeks in advance of the program by calling +1 (412) 647-8257.

For additional information, contact:
Shauna Brown, Senior Conference Manager
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Meeting Location

The conference will be held at the Herberman Conference Center located at UPMC Shadyside, 5230 Center Avenue Pittsburgh, PA 15232.

Lodging

A block of rooms has been reserved at the Marriott Courtyard located at 5308 Liberty Ave; telephone +1 (412) 683-3113. The rate is $179 per night plus applicable taxes for an extended queen room; $189 per night for a Jacuzzi room. When calling please mention you are attending the Panther Global Summit 2008 in order to secure the reduced rate. This block will be closed on February 11, 2008.

Visa Information

Prospective registrants in need of a letter of invitation should e-mail us a request for the letter at CCHES@upmc.edu.

Visit the Center for Continuing Education in the Health Sciences Web Site

Our Internet address is: http://ccehs.upmc.edu

The UPMC/Center for Continuing Education in the Health Sciences invites you to visit our web location. Receive information on CME programs; earn CME credits on the Internet, and access information about our formal courses and much more. Discover who we are and how you can contact us. Please visit our web location often to get updated information on upcoming programs.

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Anatomic Double Bundle
ACL Reconstruction

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