

## **17<sup>th</sup> CUHK- Stryker Advanced Trauma Course, 2010**

### **The Second Workshop-Symposium on CAOS in Orthopaedic Trauma Surgery**

Date: July 10-11, 2010. (Saturday and Sunday)

Venue: Orthopaedic Learning Centre  
Department of Orthopaedics and Traumatology  
The Chinese University of Hong Kong

Participants: Orthopaedic surgeons  
Orthopaedic surgical trainees  
Operating room nurses  
Engineers

Faculty: Prof. KS Leung, MD, FRCSEd, FHKCOS  
Chairman Professor  
Department of Orthopaedics and Traumatology,  
The Chinese University of Hong Kong

Mr. Eric Ng, MSc(BME)  
Project Leader  
ACAOS-ITAV  
Department of Orthopaedics and Traumatology  
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Dr. N Tang, FRCSEd(Orth), FHKCOS  
Associate Consultant,  
Team Head, Trauma Team,  
Department of Orthopaedics and Traumatology,  
Prince of Wales Hospital, Hong Kong

Dr. CY Tso MBBS, BSc. MSc(Computing & Information Sciences).  
Department of Orthopaedics and Traumatology  
Prince of Wales Hospital, Hong Kong

Dr. Y Wang, PhD  
Visiting Engineer scholar  
School of Biomedical Engineering  
Beihang University, Beijing, China

Technical team      Eric Ng, Project Leader  
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                                 ACAOS-ITAV Laboratory  
                                 Department of Orthopaedics and Traumatology,  
                                 The Chinese University of Hong Kong

Sponsors:      Stryker Pacific  
                                 Stryker Japan  
                                 Stryker China

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## **Scientific Program<sup>i</sup>**

*July 10, 2010. Saturday*

08:30 Registration

09:00 Welcome and Introduction KS Leung

### **Session I Principles**

09:05 History and development of Computer Aided Orthopaedic Surgery KS Leung

09:25 Principles and Design of Fluoro-navigation KS Leung

09:40 Workflow of Fluoro-navigation N Tang

10:00 Principles of CT-fluoro matching N Tang

10:15 Discussion

10:20 Break

### **Session II Clinical Applications**

10:40 Fluoro-Navigation in Hip screw fixation CY Tso

10:55 Fluoro-Navigation in Gamma nailing KS Leung

11:10 Fluoro-Navigation in long bone fractures N Tang

11:25 Fluoro-Navigation in pelvi-acetabular fractures KS Leung

11:45 Fluoro-Navigation with 3-D images N Tang

12:00 Complications and limitation of Fluoro-Navigation KS Leung

12:20 Discussion

12:30 Group Photo taking

12:40 Lunch

### **Session III Live Surgery Demonstration**

13:40 Live surgery relay KS Leung/  
N Tang/

Discussion

**Session IV    Hands-on workshop I**  
Demonstration followed by Hands-on practice

15:00	Hip screws	N Tang
15:40	Gamma nail	N Tang
16:20	Distal locking	N Tang
17:00	Evaluation of presentation	N Tang
17:15	End of First day meeting	
18:30	Banquet	

*July 11, 2010. Sunday*

**Session V    Hands-on workshop II**  
Demonstration followed by Hands-on practice

08:30	Sacro-iliac screws	N Tang
09:15	Acetabular fractures	KS Leung
	Posterior column screw	
	Anterior column	
	Antegrade screw	
	Retrograde screw	
10:00	Break	

**Session VI    New applications**

10:20	Pre-operative Planning with Mimics	E Ng
10:40	Robot assisted surgery	KS Leung
11:00	A new design of a robot arm	Y Wang
11:20	A new imaging on CAOS of Pelvi-acetabular fractures	E Ng
11:40	Numeric modeling of Trauma surgery	KS Leung
12:00	Discussion	

**Session VII    Conclusion**

12:10	Concluding remarks	KS Leung
12:15	Course Evaluation	N Tang
12:20	End of course and Farewell	

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<sup>i</sup> May 11, 2010