

## Symposium on Computer Assisted Orthopaedic Surgery (CAOS)

During the 57<sup>th</sup> Annual International Congress of The



**Egyptian Orthopaedic Association**

**Grand Hyatt, Cairo, Egypt, Nov 21-24, 2005**



The EOA would like to welcome you to the first CAOS symposium in Egypt. This is part of the EOA commitments to update its surgeons with the latest orthopaedic techniques.

### What is CAOS?

It is the use of computer enabled technologies (robotic, navigation, and others) in the management of orthopaedic conditions using different applications such as preoperative planning, simulation, intraoperative guidance & machinery actions, telesurgery and training. Although navigation techniques started first in neurosurgery, orthopaedic is now leading the way with total knee replacement being the most common procedure performed by navigation.

### Why CAOS in Cairo?

The strategic location between Africa, Asia and Europe

The heart of ancient Egypt, which is a dream holiday for all ages

The Nile, the fantastic weather (20°C in November) and the spectacular Nile cruise

The EOA conference with around 1500 participants from Egypt and Middle East

The growing enthusiasm to learn about CAOS and new technologies

### Aim and scope of the symposium

Present CAOS basic science and clinical applications in trauma, spine, hip & knee surgery

The format is lectures, discussion, posters, workshops and possible live surgery delivered in 2 formal sessions on Monday and Tuesday plus an informal Nile-side discussion on Tuesday.

### International faculty

Professor Florian Gebhard, (University of Ulm, Program Committee CAOS Int), **Germany**

Associate Prof. Branislav Jaramaz (Scientific Director, ICAOS Institute, Pittsburgh), **USA**

Associate Professor Hani Haider (University of Nebraska), **USA**

Dr. Eckart Mayr (University of Innsbruck), **Austria**

Professor Justin P Cobb (University College London Hospitals), **UK**

Dr Mahmoud A Hafez (CAOS Fellow & Scientist, West Penn Hospital, Pittsburgh), **USA**

### Topics

Basic science of CAOS, engineering perspective

Clinical applications of CAOS (the current state of the art)

Navigation for long bone, pelvic and acetabular fractures

Navigation for arthroplasty, navigation for spine surgery

Robotics for total and unicondylar knee replacement

Other CAOS applications; ACL and osteotomy, hip resurfacing, revision arthroplasty

Alternatives to robotics and navigation, CAOS for developing countries

### Action

Come to explore Egypt and CAOS at the same time. Attending CAOS is free for the participants of the EOA conference. The conference language is English. For details on the EOA conference, contact Prof. Mohammed Fadel [EOA2005@EOA.ORG.EG](mailto:EOA2005@EOA.ORG.EG) and on the CAOS symposium, contact Dr Mahmoud Hafez [mhafez@msn.com](mailto:mhafez@msn.com)

# Program

<b>Monday 21<sup>st</sup> November</b>		
<b>Time</b>	<b>Topics</b>	<b>Speakers</b>
<b>10:00</b>	Overview of CAOS: Theory and application	B Jaramaz/ Hafez
<b>10:15</b>	Navigation for spinal surgery	F Gebhard
<b>10:30</b>	Rapid prototyping in orthopaedic trauma	Haider
<b>10:45</b>	Discussion	Panel
<b>11:00</b>	Navigation for minimally invasive hip arthroplasty	E Mayr
<b>11:15</b>	Robotics for total & Unicodylar knee replacement	J Cobb
<b>11:30</b>	CAOS: Limitations and future applications	MA Hafez
<b>11:45</b>	Discussion	Panel
<b>12:00</b>	Normal EOA sessions	

<b>Tuesday 22<sup>nd</sup> November</b>		
<b>Time</b>	<b>Topics</b>	<b>Speakers</b>
<b>09:00</b>	CAOS for hip resurfacing	J Cobb
<b>09:10</b>	Comparison between navigated and conventional hip replacement	E Mayr
<b>09:20</b>	CAOS for revision hip arthroplasty	Hafez
<b>09:30</b>	Navigation for long bone & acetabular fractures	F Gebhard
<b>09:40</b>	Free hand navigation	Haider
<b>09:50</b>	Discussion	Panel
<b>10:00</b>	Normal EOA sessions	
	Nile side discussion	Panel

## **Wednesday and Thursday**

### Normal EOA sessions:

Basic science and all orthopaedic subspecialties (hand, upper limb, spine, trauma, oncology, hip and knee, foot and ankle, paediatric and sports medicine):

Basic science session: Lecture on biomechanics for hip and knee surgery (Haider)

### CAOS related:

Workshops for navigated total knee replacement and spinal surgery