Seventh Israeli Symposium on Computer-Aided Surgery, Medical Robotics, and Medical Imaging

**ISRACAS'2004 – SCHEDULE**

**Thursday, May 13, 2004**

**Medical Center Auditorium, Rabin Medical Center (Bellinson), Petach Tikva**

8:00-8:30 REGISTRATION

8:30-8:45 Welcome and introductory remarks
M. Shoham and L. Joskowicz
Technion and Hebrew University, Israel.

8:45-9:15 **Paper Session 1: Neurosurgery**

1. Real-time 3D ultrasound neuronavigation system experience with 114 cases
M. Constantinescu, S. Abeshaus, et al.
Dept. of Neurosurgery, Rambam, Technion, Israel.

2. Intraoperative magnetic resonance imaging system with mobile radiofrequency shielding: Hadassah experience
Y. Shoshan, S. Spektor, and F. Unansky

9:15-10:45 **Paper Session 1**

Computer-Aided Orthopaedic Surgery

1. The role of computerized navigation in fixing femoral neck fractures
D. Ben-David, R. Mosheiff, Y. Weill, A. Peyster, and M. Liebergall

2. Computerized navigation for closed reduction during femoral intramedullary nailing
R. Mosheiff, Y. Weill, E. Peleg, and M. Liebergall

3. Navigation assisted two incision minimally invasive total hip arthroplasty: preliminary results
Y. Weill, Y. Mattan, A. Kandell, and M. Liebergall

4. The assimilation process of navigated total knee surgery: comparison study during the learning curve phase
D. Robinson, A. Garti, M. Yassin
Dept. of Orthopaedics, Rabin Medical Center, Israel.

5. Initial experiments with SpineAssists - miniature robot for spinal procedures
M. Shoham, M. Burman, and B. Silberstein
Technion and Mazor Surgical Technologies, Israel.

6. Robot-assisted distal locking of long bone intramedullary nails
Z. Yaniv and L. Joskowicz
The Hebrew Univ. of Jerusalem, Israel.

10:45-11:15 COFFEE BREAK

11:15-11:45 **Special Session** time subject to change
Live Cardiac surgery with Zeus
Dr. Alon Stamil, Rabin Medical Center

11:45-12:30 **Invited lecture 1**

Synergy of man and machine in CAS
Prof. K. Rademacher, PhD
U. of Aachen, Germany.

12:30-13:00 **Paper Session 3: Cardiology**

1. Navigation system for coronary catheter-based interventions
R. Beyar and T. Wenderow
Rambam, Technion, and Navicath Ltd., Israel.

2. Image analysis of Doppler echocardiography for patients with atrial fibrillation
O. Shechtner, M. Shiniont, M. Feinberg, H. Greenspan
Tel-Aviv Univ. and Sheba Medical Center, Israel.

13:00-14:15 LUNCH

14:15-14:45 **Papers Session 4**

Laparoscopy and Endoscopy

1. Endoscopic image orientation using magnetic sensor
G. Kosa, O. Salsnion, G. Megal, O. Toset, M. Zaatour, and M. Shoham
Rambam, Technion, Israel, and CRIM Lab., Italy.

2. The Tenatish robot: hands-free laparoscopic navigation system
J.L. Mosso, A. Minor, M.R. Olivares, and Oca ISSSTE, IMSS, and CINVESTAV, Mexico City, Mexico.

14:45-15:30 **Invited lecture II**

Medical visualization and simulation
Prof. H. Fuchs, PhD
Univ. of North Carolina at Chapel Hill, USA

15:30-16:00 COFFEE BREAK

16:00-17:00 **Paper Session 5**

Medical Image Processing

1. Use of holographic sensor for 3D computerized scanning of orthodontic cast models
T. Weinstock, Y. Holdstein, M. Redlich et al., Hebrew University, and Technion, Israel.

2. Virtual study in three rare cases of visceral aneurisms and Budd-Chiari syndromes
Surgery Dept., Univ. of Verona, Italy.

3. Novel registration system for robotically-assisted surgery without external optical tracker
A. Natanzon, A. Vitchevsky, and Batiklin ANAV Software and Mazar Surgical Technologies, Israel.

4. Flexible needle steering for percutaneous therapies
G. Glorman and M. Shoham
Faculty of Mechanical Engineering, Technion, Israel.

17:00 **Closing remarks**
L. Joskowicz and M. Shoham, Hebrew University and Technion.