

**Ninth Israeli Symposium on
Computer-Aided Surgery, Medical Robotics, and Medical Imaging
ISRACAS 2006 – SCHEDULE**

Thursday, May 11, 2006

Medical Research 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.

8:45-9:45 Paper Session 1: Surgical navigation

Chair: A. Wolf.

1. *Navigation-assisted cannulated hip screw insertion*
I. Ilisar, Y. Weill, R. Mosheiff, A. Peyser, M. Liebergall
Hadassah-Hebrew Univ. Med. School, Jerusalem, Israel.

2. *Computer-aided navigation in total joint replacement*
M. Bhattacharyya and B. Gerber
Univ. Hospital of Lewisham, London, UK.

3. *Augmented reality for image-guided surgical navigation*
R. Shamir, L. Joskowicz, and Y. Shoshan
The Hebrew University of Jerusalem and
Hadassah-Hebrew Univ. Med. School, Jerusalem, Israel.

4. *A real-time hand gesture interface for a medical image
guided system*
J. Wachs, H. Stern, Y. Edan, M. Gillman, C. Feied, et al
Ben-Gurion University of the Negev, Be'er-Sheva and
Washington Hospital Center, Washington, USA.

9:45-10:45 Paper Session 2: Medical robotics

Chair: A. Wolf.

5. *Robotic replacement of the descending thoracic aorta*
E. Porat, A. Stamler, P. Herrera, R. Scheinbaum,
A. Estrera, A. Azzizadeh, H. Safi
Univ. of Texas, Houston, USA, and
Rabin Medical Center, Petach Tikva, Israel.

6. *HARP: Highly articulated robot probe*
A. Wolf, A. Degani, H. Choset, M. Zenati
Technion, Haifa, Israel, Carnegie-Mellon University, and
Univ. of Pittsburgh Medical Center, Pittsburgh, USA.

7. *Swimming micro robot for medical applications*
G. Kosa, M. Shoham, and M. Zaaroor
Technion and Rambam Medical Center, Haifa, Israel.

10:45-11:15 COFFEE BREAK

11:15-12:00 Invited lecture 1

Imaging and simulation in otorhinolaryngology
Prof. M.P. Fried, M.D., FACS
Montefiore Medical Center, New York, USA.

12:00-12:45 Industrial Session 1

Chair: D. Toubia

12:45-14:00 LUNCH

14:00-14:45 Industrial Session 2

Chair: D. Toubia

14:45-15:30 Invited lecture 2

Medical augmented reality in surgery Prof. Nassir Navab,
PhD
Technical University of Munich, Germany.

15:30-16:00 COFFEE BREAK

**16:00-17:45 Papers Session 3: Medical image
processing and simulation**

Chair: H. Greenspan.

1. *The point spread function of spiral CT*
G. Schwarzband and N. Kiryati
Tel-Aviv University, Israel.

2. *Segmentation of brain MRI by adaptive mean shift*
A. Mayer and H. Greenspan
Tel-Aviv University, Israel.

3. *Liver tumor segmentation and volume computation
with user-guided 3D active contours*
P. Katz, J. Sosna, and L. Joskowicz
The Hebrew University of Jerusalem and
Hadassah-Hebrew Univ. Med. School, Jerusalem, Israel.

4. *Surface reconstruction and segmentation from
volumetric data for medical analysis*
S. Azernikov, A. Fischer
Technion, Haifa, Israel.

5. *Content analysis of uterine cervix images: initial steps
towards content-based indexing and retrieval of cervigrams*
S. Gordon, G. Zimmerman, and H. Greenspan
Tel-Aviv University, Israel.

6. *Real-time haptic incision simulation using FEM-based
discontinuous free-form deformation*
at G. Sela, J. Subag, A. Linblad, D. Albocher, S. Stein,
G. Elber, G. Turkiyya
Technion, Haifa, Israel, and Univ. of Washington, USA.

17:45-17:50 Closing remarks

L. Joskowicz and M. Shoham
Hebrew University and Technion.

Coffee breaks are sponsored by Northern Digital Inc.