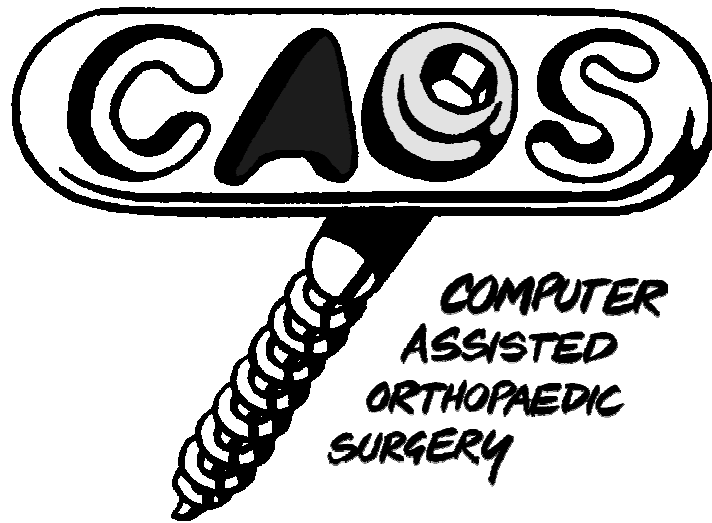


1st Annual Meeting



**International Society for
Computer Assisted Orthopaedic Surgery
CAOS-International**

February 7 – 10, 2001



Congress Center

Switzerland

Final Program

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The Meeting at a Glance

WEDNESDAY, FEBRUARY 7:

14.00	Pre-registration	4
18.00	Welcome Reception	4

THURSDAY, FEBRUARY 8:

7.00	Continental breakfast	4
8.00	Session I – Hip Surgery, Part 1	4
9.10	Session II – Spinal Interventions.....	4
10.50	Session III – Reconstructive Knee Surgery	5
12.00	Lunch.....	5
13.00	Session IV – Emerging Technology, Part 1	5
14.10	Session V – Poster Session, Part 1	6
15.50	Workshops I, II, III.....	8
18.20	Traditional Swiss Dinner with Floodlit Sledding Event	8

FRIDAY, FEBRUARY 9:

7.00	Continental breakfast	9
8.00	Session VI – Emerging Technology, Part 2.....	9
9.20	Session VII – Planning and Simulation	9
10.30	Workshops IV, V, VI, VII.....	10
12.30	Lunch.....	10
13.30	Session VIII – Poster Session, Part 2	10
14.40	Session IX – Hip Surgery, Part 2	12
16.10	General Assembly of CAOS-International	12
20.00	Conference Banquet	12

SATURDAY, FEBRUARY 10:

7.00	Continental breakfast	13
8.00	Session X – Trauma Surgery.....	13
9.20	Session XI – Total Knee Replacement.....	13
10.30	Workshops VIII, IX, X.....	14
12.20	Closing Events	14
18.00	End of 1 st Annual Meeting of CAOS-International	

Wednesday, February 7, 2001

- 14.00 Pre-registration
- 18.00 Welcome Reception

Thursday, February 8, 2001

- 7.00 Continental breakfast
On-site registration
- 7.45 Welcome and introduction to the 1st Annual Meeting of CAOS-International
L.-P. Nolte

Session I – Hip Surgery, Part 1

Chairmen: A. Bauer and R. H. Taylor

- 8.00 Clinical measurements of acetabular component orientation using surgical navigation technologies
A. M. DiGioia, J. E. Moody, R. S. LaBarca, C. Nikou, B. Jaramaz
- 8.10 Geometric accuracy in computer-assisted surgery for total hip replacement
J. Schneider, W. Kalender
- 8.20 Accuracy of computer-assisted cup placement in total hip arthroplasty: In vitro intra- and inter-observer analysis
B. M. Jolles, P. Genoud, P. Hoffmeyer
- 8.30 DISCUSSION
- 8.40 Robot assisted implantation of hip endoprosthesis – Microradiographic results
M. Prymka, L. Wu, J. Koebke, J. Hahne, J. Hassenpflug
- 8.50 Accuracy of image guided hip cup placement
R. Haaker, M. Stockheim, F. Rubenthaler, A. Senge, M. Wiese, R. H. Wittenberg
- 9.00 DISCUSSION

Session II – Spinal Interventions

Chairmen: M. Aebi and U. Berlemann

- 9.10 The application of computer assistance in circumferential spinal fusion
C. Bolger, R. J. Kahler, N. Patel
- 9.20 Spinal motion analysis for robotic assisted spine surgery
O. Guyen, J. P. Carret, G. Perrin, P. Pittet, F. Blanche
- 9.30 Efficiency of patient registration for spinal navigation in transpedicular screw placement
U. März, A. Muacevic, J. Mehrkens, H. J. Reulen
- 9.40 DISCUSSION
- 9.50 Overall accuracy of a navigation system using 3-D optical localizer
Y. Tamura, N. Sugano, T. Sasama, Y. Sato, K. Yonenobu, T. Ochi

- 10.00 CT/fluoroscopy guided percutaneous vertebroplasty in the treatment of painful osteoporotic fractures of the spine
M. Braun, A. Gevargez, D. W. H. Grönemeyer
- 10.10 Intraoperative virtual fluoroscopy for placement of pedicle screws: Accuracy of insertion
E. Fritsch, J. Duchow, R. Seil, I. Grunwald, W. Reith
- 10.20 DISCUSSION
- 10.30 Coffee Break

Session III – Reconstructive Knee Surgery

Chairmen: A. Jürgens and J. Luites

- 10.50 KneeNav-ACL computer assisted measurement reliability
F. Picard, J. E. Moody, A. M. DiGioia, V. Martinek, F. Fu, M. Rytel, B. Jaramaz, R. S. LaBarca, C. Nikou
- 11.00 Determination of femoral and tibial insertion sites of the ACL on CT-scan: A way to clarify CT-based planning with CASPAR
A. Burkart, V. Musahl, P. McMahon, F. Fu
- 11.10 Anatomic landmarks for computer assisted posterior cruciate ligament reconstruction in the sagittal plane
H.-U. Stäubli, R. Kreuz, Ch. Bollmann, W. Rauschning, W. Becker
- 11.20 DISCUSSION
- 11.30 Computer and robot assisted ACL reconstruction with CASPAR system
J. Petermann, E. Ziring, P. Heinze, T. Krüger, P. F. Heekt, L. Gotzen
- 11.40 The use of CAOS to evaluate tunnel position guides for anterior cruciate ligament reconstruction
D. Suvà, J. Ménétrey, P. Genoud, M. Sati, D. Fritschy
- 11.50 DISCUSSION
- 12.00 Lunch Buffet in the industrial exhibition area

Session IV – Emerging Technology, Part 1

Chairmen: P. Cinquin and S. Martelli

- 13.00 On B-mode ultrasound based registration for computer assisted orthopaedic surgery
J. Kowal, C. A. Amstutz, L.-P. Nolte
- 13.10 Ultrasound based registration of the pelvic bone surface for surgical navigation
D. V. Amin, T. Kanade, A. M. DiGioia, B. Jaramaz, C. Nikou, R. S. LaBarca
- 13.20 Clinical validation of percutaneous computer assisted surgery using ultrasound
J. Tonetti, L. Carrat, S. Blendea, J. Troccaz, P. Merloz, S. Lavallée
- 13.30 DISCUSSION
- 13.40 C-arm-based computed tomography - A comparative study
E. Euler, S. Wirth, K. J. Pfeifer, W. Mutschler
- 13.50 A novel mobile C-arm system for use in image guided surgery – A feasibility study
L.-P. Nolte, H. Wälti, H. Fujita, G. Zheng, W. Seissler, J. Hey, J. Kusch

Session V – Poster Session, Part 1

- 1) Accuracy of Iso-C-arm based navigated drill holes at the proximal femur
M. Arand, L. Kinzl, F. Gebhard
- 2) Simulator for virtual prototyping of spinal deformity surgeries: Preliminary design
C.-E. Aubin, Y. Petit, L. Duong, F. Cheriast, I. Stokes, F. Verniest, P. D’Astous, H. Labelle
- 3) Accuracy of intraoperative registration of mechanical limb axes by using computer assisted systems - An in-vitro study
K. Bernsmann, M. Kunz, F. Langlotz, L.-P. Nolte
- 4) Computer-assisted preoperative planning of linear metatarsal osteotomies for hallux valgus
F. Bettazzoni, V. P. Castelli, A. Leardini
- 5) Computer-assisted cementless total hip replacement in cases of posttraumatic osteoarthritis
M. Börner, M. Tenbusch, A. Lahmer, U. Wiesel
- 6) Computer-robotic assisted femoral and tibial osteotomies
*K. Bouazza-Marouf, I. Browbank, A. Reedman, R. Phillips, J. W. Ward,
A. M. M. A. Mohsen, K. P. Sherman, J. R. Hewit, S. I. Brown, A. P. Slade*
- 7) Accuracy assessment for non-targeted hip rotation centre determination using an optical 3-D navigation system with minimum invasive operation
H. Broers, W. Berner, M. Ködderitzsch, B. Kotten, T. Luhmann
- 8) Computer generated drilling template for plate and screw placement in four patients with complex acetabular fractures
G. A. Brown, K. Firoozbakhsh, B. F. Milner, F. P. Gerstle, C. A. Atwood, M. Ensz
- 9) Computer generated drilling template guidance systems for pedicle screw placement in the spine
G. A. Brown, K. Firoozbakhsh, A. Argawala, F. P. Gerstle, C. A. Atwood, M. Ensz
- 10) XIMIT – X-ray migration measurement using implant models and image templates
K. Burckhardt, G. Székely, J. Hodler, C. Gerber
- 11) CT-less three-dimensional fluoroscopic navigation for femur head surgery
R. Burgkart, M. Dötter, M. Roth, A. Schweikard
- 12) A comparison of precision for traditional and robotic ACL reconstruction techniques
A. Burkart, P. McMahon, R. Debski, A. van Scyoc, V. Musahl, F. Fu
- 13) Comparison study OrthoPilot/Search versus intra and extramedullary alignment system in total knee replacement
N. Confalonieri, P. Cerea, K. Motavalli
- 14) Fixation-based surgery: A new approach to CAS
R. E. Ellis, D. R. Pichora
- 15) Periprosthetic densitometry and morphometry in the vicinity of hip endoprostheses – A software prototype for clinical routine
J. Freund, R. Petzold, R. Schmidt, H. Hirschfelder, W. A. Kalender
- 16) Accuracy of CT-based navigated pedicle screws in the thoracic and lumbar spine. A prospective clinical study
F. Gebhard, L. Kinzl, M. Arand

- 17) Drilling for long lag screws: Comparison of a new developed aiming device with a CAS system
J. Geerling, A. Gänsslen, H. Rosenthal, N. Bazak, T. Pohlemann, T. Hüfner
- 18) Computer assisted cutting guide for total knee replacement. First clinical experiences
H. Gellner, T. Hauri, B. Hauri, W. Moser
- 19) Knee joint kinematics before and after ACL resection: Is there a difference?
P. Genoud, J. Ménétrey, D. Suvà, D. Fritschy, P. Hoffmeyer
- 20) A new method of implanting pedicle screws by spinal navigation
R. Geske, T. Grieshammer
- 21) Is spinal navigation necessary and practicable?
T. Grieshammer, R. Geske
- 22) Fluoroscopy based multiplanar guidance for periacetabular osteotomy
A. F. Hinsche, P. V. Giannoudis, R. M. Smith
- 23) How does fluoroscopy based CAOS compare to the conventional C-arm technique? An experimental study for the insertion of sacroiliac screws
A. F. Hinsche, P. V. Giannoudis, R. M. Smith
- 24) Accuracy analysis of CAS controlled drilling
T. Hüfner, A. Gänsslen, J. Geerling, T. Pohlemann, H. Rosenthal, C. Krettek
- 25) CAS allows accurate resection of recurrent carcinomas in the pelvis
T. Hüfner, A. Gänsslen, J. Geerling, R. Raab, T. Pohlemann, C. Krettek
- 26) Inter- and intraobserver variance of CAOS tibial landmark digitisation for ACL reconstruction
S. Käsermann, H.-U. Stäubli
- 27) The percutaneous dorsal instrumentation and indirect reduction of unstable thoracolumbar fractures in the open MRI
S. Katscher, A. P. Verheyden, S. Glasmacher, T. Schulz, J. P. Schneider, T. Kahn, C. Josten
- 28) Computer navigation of parapedicular screw placement in the thoracic spine
R. Kothe, J. M. Strauss, G. Deuretzbacher, T. Hemmi, M. Lorenzen, L. Wiesner
- 29) ShaftNavigation – A computer system for intraoperative navigational guidance of femoral implant placement in total hip replacement surgery
M. Kubiak, F. Langlotz, L.-P. Nolte

Special Posters, Part 1

Moderated oral presentations and interactive discussions at the poster booths. The following eight posters will be presented in two parallel sessions.

Chairmen: D. Vandeveld and L. Joskowicz

- 30) Manual vs. computer assisted ACL reconstruction – A prospective controlled study
K. Bernsmann, A. Rosenthal
- 31) In-vitro experiences with fluoroscopy guided frameless stereotaxy: Feasibility for spinal pain treatment
E. Chen, M. Croitoru, P. Tate, L. Fu, M. Sati

- 32) Computer integrated instrumentation in knee arthroplasty – The first 100 cases with the OrthoPilot knee navigation system
U. Clemens, R. K. Miehle, J. H. Jens
- 33) Percutaneous radiofrequency ablation and vertebroplasty of unresectable spine tumors under CT/fluoroscopy-guidance
A. Gevargez, M. Brau, D. W. H. Grönemeyer

Chairmen: R. Wetzel and F. F. Henning

- 34) Virtual implantation and canal fit evaluation of femoral components using ORTHODOC
K. Haraguchi, N. Sugano, T. Nishii, T. Koyama, N. Nakamura, Y. Hideki
- 35) Postoperative radiographic measurement of pelvic and implant orientation in the supine and standing positions
B. Jaramaz, T. J. Levison, A. M. DiGioia, C. Nikou
- 36) C-arm navigation for percutaneous screw fixations in pelvic surgery – Experimental basics and clinical experiences
B. König, U. Stöckle, N. P. Haas
- 37) Influence of CT-protocol and registration method on the accuracy of spinal navigation for Magerl-Screws
M. Krismer, T. Herz, A. Franz, S. M. Giacomuzzi, R. Bale

Workshops, Part I

- 15.50 The CAOS 2001 Workshops provide a comprehensive overview of clinical applications of computer assisted orthopaedic surgery. Ten state-of-the-art CAOS-systems are presented to groups of participants by leading experts in the field. Coffee will be served during the workshops.

Workshop I:

Free-hand Fluoro-Navigation
Moderators: E. Fritsch & A. Weidner
Sponsor: Medtronic Sofamor Danek

Workshop II:

The Third Dimension in Intraoperative Imaging
Moderators: L.-P. Nolte & E. Euler
Sponsor: Siemens Medical Engineering AG

Workshop III:

CT-based Freehand Navigation TKR
Moderators: A. Swoboda & D. Dennis
Sponsor: BrainLAB GmbH

Traditional Swiss Dinner followed by a Family Sledding Event

- 18.20 Busses will depart from the parking lot behind the Congress Center to the Rinerhorn Gondola-Station. A Traditional Swiss Dinner will be served at the Rinerhorn Mountain Top Restaurant. At the end of the day we will be sledding 3.5 kilometers down-hill over the unique floodlit slope. As an alternative you may take the Gondola. Bus transfer back to Davos will be provided.

Friday, February 9, 2001

7.00 Continental breakfast

Session VI – Emerging Technology, Part 2

Chairmen: K. T. Foley and S. Lavallée

- 8.00 Fiducial registration using single 2D images
T. S. Y. Tang, R. E. Ellis
- 8.10 In-vitro accuracy study of contact and image-based registration: Materials, methods, and experimental results
Z. Yaniv, O. Sadowski, L. Joskowicz
- 8.20 Accuracy evaluation of the AURORA magnetic tracking system
N. Glossop, K. Cleary, D. Lindisch
- 8.30 DISCUSSION
- 8.40 A novel concept to track deformable tools in image guided surgery
C. A. Amstutz, J. Kowal, L.-P. Nolte
- 8.50 Noninvasive registration in head surgery by A-mode ultrasound
N. Guinand, C. A. Amstutz, J. Kowal, L.-P. Nolte, R. Häusler, M. Caversaccio
- 9.00 Excision of osteoid osteoma from the tibia
R. E. Ellis, J. F. Rudan
- 9.10 DISCUSSION

Session VII – Planning and Simulation

Chairmen: D. Pichora and G. Székely

- 9.20 Virtual planning and simulation of complex posttraumatic deformities
P. Keppler, O. Krivonos, D. Moskalenko, F. Gebhard, L. Kinzl, J. Hessler, R. Männer
- 9.30 Clinical implications of virtual preoperative planning and simulation in long bone fracture treatment
P. Messmer, G. Long, N. Suhm, A. L. Jacob, P. Regazzoni
- 9.40 Fluoroscopic image based planning for femoral neck surgery
A. Zimolong, D. Friedrichs, F. Portheine, K. Radermacher, F. Traub, H. W. Staudte
- 9.50 DISCUSSION
- 10.00 Design concept of the virtual observatory database for VÖEU
T. Wu, G. Müller, A. E. Zielinska, E. Schkommodau, K. Radermacher, F. Langlotz, G. Rau
- 10.10 The use of the spine tool for preoperative simulation and intraoperative navigation of oral implants
A. Schramm, N.-C. Gellrich, R. Schimmig, R. Gutwald, R. Schön, R. Schmelzeisen
- 10.20 DISCUSSION

Workshops, Part 2

10.30 Coffee will be served during the workshops.

Workshop IV:

Cup Placement with Navigation Technology

Moderators: T. Mattes & A. M. DiGioia

Sponsor: Sulzer Orthopedics Ltd.

Workshop V:

Robotic Assistance in TKR

Moderators: W. E. Siebert & R. K. Miehle

Sponsor: orto Maquet GmbH & Co. KG

Workshop VI:

Advanced C-arm Navigation in Trauma

Moderators: P. A. Grützner & N. N.

Sponsor: Medivision AG

Workshop VII:

Ligament Balancing in TKR

Moderators: J. M. Strauss & W. Rüter

Sponsor: DePuy Orthopädie GmbH

12.30 Lunch Buffet in the industrial exhibition area

Session VIII – Poster Session, Part 2

- 38) Total knee replacement using the ROBODOC system
A. Lahmer, U. Wiesel, M. Tenbusch, M. Börner
- 39) The impact of registration method and bone motion on the precision of the ROBODOC system
M. Nogler, M. Krismer, C. Wimmer, C. Bach, S. Shimble, K. Kahlifa
- 40) Motivation, realization, and first results of robot assisted total knee arthroplasty
S. Mai, C. Lörke, W. Siebert
- 41) Preliminary clinical experiences with the development of the Navitrack system for computer navigated total knee replacement (TKR)
T. Mattes, K. P. Günther, W. Puhl, H.-P. Scharf
- 42) Measuring migration of the femoral component of a total hip prosthesis using standard radiographs – Validation of the stems sub method
H. Meyers, M. Barink, N. J. J. Verdonschot, C. Fankhauser, M. Spruit
- 43) A classification proposal for computer assisted knee systems
F. Picard, J. E. Moody, B. Jaramaz, A. M. DiGioia, C. Nikou, R. S. LaBarca
- 44) Computer assisted ACL reconstruction: Customizing the user-interface
F. Picard, J. E. Moody, B. Jaramaz, A. M. DiGioia, C. Nikou, R. S. LaBarca, T. Levison
- 45) Computer assisted navigation and robot-cutting for total knee replacement
P. Ritschl, R. Fuiko, H. Broers, A. Wurzing, W. Berner
- 46) First experiences with the Stratec computer assisted navigation system in total hip replacement
D. Schulte-Bockholt, P. A. Grützner, F. Holz, A. Wentzensen

- 47) Improvement of the surgeon's skills using the SurgiGATE navigation system through a virtual supervisor for total hip replacement
J. de Siebenthal, F. Langlotz
- 48) Fluoroscopic control as a quality standard for computer assisted anterior cruciate ligament reconstruction
H.-U. Stäubli, R. Parli, S. Käsermann
- 49) Clinical experiences with CT-based navigation in the thoracic spine
U. Stöckle, B. König, F. Kandziora, K. Schnake, C. Klostermann, N. P. Haas
- 50) Adapting the C-arm to optimized image guided orthopedic surgery
N. Suhm, P. Müller, M. Hehli, U. Bopp, S. Koller, A. L. Jacob, P. Regazzoni, P. Messmer
- 51) Force control as a means to realize supervisory control in robot assisted total joint arthroplasty
J. Vander Sloten, G. van Ham, K. Denis, R. van Audekercke, G. van der Perre, J. de Schutter, J. Bellemans, J. P. Simon
- 52) The influence of the milling path in hip robotics – The clinical outcome of two different stem configurations
R. Wetzel, U. Lönnecke
- 53) Augmented reality in computer assisted fluoroscopy based trauma surgery
G. Zheng, J. Kowal, P. A. Grützner, L.-P. Nolte
- 54) Early clinical results with a novel computer navigation system for total knee arthroplasty
J. M. Strauss, R. Kothe, G. Deuretzbacher, M. Kunz, L.-P. Nolte, W. Rüdter

Special Posters, Part 2

Moderated oral presentations and interactive discussions at the poster booths. The following eight posters will be presented in two parallel sessions.

Chairmen: R. G. T. Geesink and H. Zippel

- 55) A virtual preoperative planning system built on a 2D/3D medical database
G. Long, N. Suhm, A. L. Jacob, P. Regazzoni, P. Messmer
- 56) The use of CAOS to evaluate the intra- and inter-surgeon reliability in tunnel placement for ACL reconstruction
J. Ménétrey, P. Genoud, D. Suvà, P. Hoffmeyer, D. Fritschy
- 57) A methodology for assessing end-to-end accuracy in surgical navigation systems
J. E. Moody, A. Z. Omer, C. Nikou, B. Jaramaz, A. M. DiGioia
- 58) Computer-assisted navigation for knee arthroplasty: Intra-operative measurements of alignment and soft tissue balancing
F. Picard, A. M. DiGioia, D. Sell, J. E. Moody, B. Jaramaz, C. Nikou, R. S. LaBarca, T. Levison

Chairmen: L. Kinzl and M. Krismer

- 59) Geometric co-relation between topogram-tomogram for computer assisted surgical planning of total knee replacement
E. Schkommodau, F. Portheine, K. Radermacher
- 60) Computer assisted total knee replacement surgery: An analysis of an initial experience with the OrthoPilot system
S. D. Stulberg, P. Loan, V. Sarin

- 61) Influence of image guided navigation systems of the surgeon and implant positioning
R. H. Wittenberg, M. Stockheim, F. Rubenthaler, A. Senge, M. Wiese, R. Haaker
- 62) Frameless optical computer aided tracking microscope for ORL surgery
G. Zheng, R. Bächler, M. Caversaccio, F. Langlotz, L.-P. Nolte, R. Häusler

Session IX – Hip Surgery, Part 2

Chairmen: R. Gradinger and K. Radermacher

- 14.40 Accurate acetabular component orientation measurement from CT
J. E. Moody, A. Z. Omer, C. Nikou, B. Jaramaz, A. M. DiGioia
- 14.50 Mini incision THR assisted with surgical navigation
A. M. DiGioia, B. Jaramaz, J. E. Moody, T. J. Levison, R. S. LaBarca, C. Nikou
- 15.00 The measurement of anteversion and inclination with respect to the pelvic frontal plane
M. Tannast, U. Langlotz, K. Bernsmann, L.-P. Nolte, F. Langlotz
- 15.10 DISCUSSION
- 15.20 Limitations of radiographic measurement of cup orientation after THR surgery
B. Jaramaz, D. LaRose, L. Cassenti, T. J. Levison, J. E. Moody, A. M. DiGioia, C. Nikou
- 15.30 Computer assisted pelvic osteotomies: Clinical experience in 25 cases
G. G. van Hellemond, M. de Kleuver, P. W. Pavlov
- 15.40 DISCUSSION
- 15.50 Coffee break in the industrial exhibition area

General Assembly of CAOS-International

- 16.10 The CAOS-International General Assembly is open only to members of the society. Besides varia the agenda covers the reports of the president and the treasurer, the election of all committee members, and the presentations for the 2002 CAOS-International Meeting.

Conference Banquet

- 20.00 The conference banquet will take place in the festively decorated theater of the Davos Congress Center. It is the social highlight of the 1st Annual Meeting of CAOS-International and features the presentation of the *Maurice E. Müller Award for Excellence in Computer Assisted Surgery* as well as the handover of CAOS-International to the new president. The magic of the night will be enforced by a magician who will be entertaining and surprising you with his show.

Saturday, February 10, 2001

- 7.00 Continental breakfast
CAOS-International committee meetings

Session X – Trauma Surgery

Chairmen: C. Krettek and D. M. Kahler

- 8.00 Computer assisted distal locking of intramedullary implants: A controlled clinical study including 84 patients
N. Suhm, A. L. Jacob, T. Beck, P. Regazzoni, P. Messmer
- 8.10 CT-based navigation in minimal invasive screw stabilization of the iliosacral joint
M. Arand, L. Kinzl, F. Gebhard
- 8.20 Computer aided reduction and fixation of long bone fractures
P. A. Grützner, B. Vock, J. Kowal, L.-P. Nolte, A. Wentzensen
- 8.30 DISCUSSION
- 8.40 Computer-based femoral anteversion measurement for aligning fractured femur fragments during surgery
O. Ron, L. Joskowicz, A. Simkin, C. Milgrom
- 8.50 3D accuracy analysis for CAS controlled fracture reduction
T. Hüfner, S. Tarte, F. Langlotz, A. Gänsslen, T. Pohlemann, C. Krettek
- 9.00 Percutaneous stabilization of dorsal pelvic ring fractures – Transiliosacral screw placement in the open MRI
A. P. Verheyden, S. Katscher, S. Glasmacher, T. Schulz, F. Schmidt, T. Kahn, C. Josten
- 9.10 DISCUSSION

Session XI – Total Knee Replacement

Chairmen: D. S. Stulberg and B. L. Davis

- 9.20 Computer assisted total knee arthroplasty: Comparison with a conventional procedure – Results of a 50 cases prospective randomized study
D. Saragaglia, F. Picard, C. Chaussard, E. Montbarbon, F. Leitner, P. Cinquin
- 9.30 Development and verification of a non-CT based total knee arthroplasty system for the LCS prosthesis
M. Kunz, F. Langlotz, J. M. Strauss, W. Rüther, L.-P. Nolte
- 9.40 Computer aided knee arthroplasty versus conventional technique – First results
H. Kiefer, D. Langemeyer, U. Schmerwitz, F. Krause
- 9.50 DISCUSSION
- 10.00 First results using the ROBODOC system for total knee replacement
M. Tenbusch, A. Lahmer, U. Wiesel, M. Börner
- 10.10 A 3D patient-specific model of passive post-TKR kinematics
E. Chen, R. E. Ellis, J. F. Rudan
- 10.20 DISCUSSION

Workshops, Part 3

10.30 Coffee will be served during workshops.

Workshop VIII:

THR Surgery with Robotic Assistance
Moderators: M. Börner & M. Krismer
Sponsor: Integrated Surgical Systems

Workshop IX:

Computer Assistance for Tibial Osteotomies
Moderators: J. Hassenpflug & R. E. Ellis
Sponsor: Aesculap AG & Co. KG

Workshop X:

Computer Assistance in Knee Reconstructive Surgery
Moderators: K. Bernsmann & L. Gotzen
Sponsor: Medivision AG

Closing Events

The 1st Annual Meeting of CAOS-International will be closed by a sequence of special events. After the last workshop, participants will be transferred to the Pischa Ski Area, where a lunch will be served at the mountain restaurant. The lunch will feature the presentations of the winners of the best paper and poster awards as well as the winners of the travel fellowships. Skiers and snow-boarders will then meet at the start of the CAOS-Ski Race. If you would like to participate, please make sure to have your skiing/boarding equipment with you. Ski rental information will be available at the registration desk upon request. All others have the opportunity to walk down to the finish line. After the winners' ceremony, the day ends with an informal get-together at the CAOS-Snowbar. Travel back to Davos will be provided.

12.20 Departure of busses from the parking lot behind the Congress Center

13.00 Lunch at the Pischa mountain restaurant

Presentation of the Awards

Best Clinical Paper

Best Basic Science Paper

Best Clinical Poster

Best Basic Science Poster

Presentation of the Travel Fellowships

Clinical Travel Fellowship

Technical Travel Fellowship

CAOS-Ski Race

Get-together at the CAOS-Snowbar

18.00 Organized travel back to Davos

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It is a pleasure to acknowledge our CAOS-International Corporate Sponsors. Without the contributions of these leading navigation and medical robotics companies, orthopaedic device manufacturers, and renowned associated foundations, CAOS-International could not have been established. For a detailed listing with links to their homepages please consult the CAOS-International homepage under <http://www.caos-international.org/>

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During the entire time of the Meeting the industrial exhibition is open to the participants. Companies that cover a wide range of recent developments present hands-on cutting-edge technology for surgical planning, simulation, execution, and documentation.

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Symposium Information

Venue Davos Congress Center
Promenade 92
7270 Davos
Switzerland

During the Symposium Phone +41-81-414-6407
Fax +41-81-414-6426
Email caos@caos-international.org

Beginning Wednesday, February 7, 2:00 p.m.

Ending Saturday, February 10, 6:00 p.m.

Registration Wednesday, February 7
2:00 – 9:00 p.m. at the venue
Thursday, February 8
7:00 – 8:00 a.m. at the venue

Reception Wednesday, February 7
6:00 – 9:00 p.m. at the venue

	Surgeons	Basic Scientists
Registration Fees		
Members of CAOS-International	CHF 700,-	CHF 550,-
Non-members of CAOS-International	CHF 850,-	CHF 700,-
Accompanying persons	CHF 250,-	

Social Program Welcome Reception
Traditional Swiss Dinner with Family Sledding Event
Conference Banquet
CAOS-Ski Race with get-together at the CAOS-Snowbar
(All included in the registration fee)

Awards

Maurice E. Müller Award for Excellence in Computer Assisted Surgery
Sponsored by the Maurice E. Müller Foundation, Bern, CH

Best Clinical & Best Basic Science Paper Awards
Sponsored by Northern Digital Inc., Waterloo, CAN

Best Clinical & Best Basic Science Poster Awards
Sponsored by Sulzer Orthopedics Ltd., Baar, CH

Fellowships

CAOS-International Clinical & Technical Travel Fellowships
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Information

Symposium

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