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U.O. Chirurgia Orale e Maxillo Facciale (Prof. C. Marchetti)
Policlinico S. Orsola-Malpighi

U.O. Chirurgia Maxillo Facciale (Dr. R. Cocchi)
Ospedale Bellaria-Maggiore

ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

IN COLLABORATION WITH

**DEIS**
Department of Electronics
Computer Sciences and Systems
of the Engineering Faculty,
University of Bologna

# 3D BO

## 3D Bologna Meeting and Workshop

*New Technologies in Diagnosis, Planning & Treatment in Maxillofacial Surgery*

Conference Centre of Bologna Research Area, via Gobetti 101, Bologna, Italy
January 22-23, 2010


**SECRETARIAT SCIENTIFIC COMMITTEE**
Alberto Bianchi MD DMD Oral & Maxillofacial Unit
S. Orsola-Malpighi Hospital, University of Bologna, Italy
Via Massarenti 9 – 40138 Bologna
alberto.bianchi@aosp.bo.it

**SECRETARIAT ORGANISING COMMITTEE**
ART4 srl
Via Mazzini 18
40138 Bologna
Tel. +39 051 3951124
Fax +39 051 3951130
info@3dbologna.com
www.3dbologna.com


## FACULTY

**A. Ayoub** Professor in Oral and Maxillofacial Surgery, University of Glasgow
**G. Badiali** Postgraduate School in Maxillofacial Surgery, University of Bologna
**G. Baldazzi** Adjunct Professor in Physics, University of Bologna
**A. Bianchi** Oral and Maxillofacial Surgery Unit, S.Orsola Malpighi Hospital, Bologna
**S.D. Bianchi** Professor in Radiology and Radiotherapy, University of Turin
**G. Corinaldesi** Researcher, Odontostomatologic Sciences Dept., University of Bologna
**M. Dalstra** Associate Professor, Orthopaedic Research Laboratory, Aarhus University Hospital
**G. Farronato** Professor in Orthodontics, University of Milan
**G. Ferronato** Professor in Maxillofacial Surgery, Dept. of Oral and Maxillofacial Surgery, University of Padua
**G. Gerbino** Maxillofacial Surgery Unit, Le Molinette Hospital, Turin
**C. Lamberti** Professor in Engineering, Dept. of Electronics, Computer Science and Systems, University of Bologna
**A. Lamma** MD, DDS, private practice, Bologna
**L. Lancellotti** Postgraduate School in Maxillofacial Surgery, University of Bologna
**C. Lane** Chairman and Chief Executive Officer of 3dMD Company, Atlanta
**S. Mazzoni** Oral and Maxillofacial Surgery Unit, S.Orsola Malpighi Hospital, Bologna
**B. Melsen** Professor in Orthodontics, Royal Dental College, University of Aarhus
**A. Motroni** Biomedical Engineer, technical Manager 3dMD Company, Milan
**E. Pasquini** ENT Unit, S.Orsola Malpighi Hospital, Bologna
**R. Peretta** Dept. of Oral and Maxillofacial Surgery, Padua
**M. Pironi** Adjunct Professor in Orthodontics, Odontostomatologic Sciences Dept., University of Bologna
**A. Ramieri** Professor in Maxillofacial Surgery, University of Turin
**M. Rinaldi** MD, DDS, private practice, Bologna
**A. Sarti** Professor in Engineering, Ecole Polytechnique, Paris
**G. Schiroli** MD, DDS, private practice, Genoa
**A. Schramm** Dept. of Oral and Cranio-Maxillofacial Surgery, Plastic and Aesthetic Facial Surgery, Military Hospital, Ulm
**A. Sugar** Senior Lecturer in Cleft and Maxillofacial Surgery, Morriston Hospital and Swansea University Medical School, ABM University, Swansea
**G. Swennen** 3-D Facial Imaging Research Group, Division of Maxillofacial Surgery, St. Jan General Hospital Bruges, University of Bruges and Radboud
**H.F. Zeilhofer** Professor in Maxillofacial Surgery, University Hospital of Basel

## *Dear Colleagues,*

the development of computerization in recent years has swiftly changed imaging in medical sciences; at the same time the introduction of investigation methods with little or no intrusion. CBCT, MRI, laser scan, three dimensional photograms and image fusion have made possible the study of the face in three dimensional mode for its dental, skeletal and surface components. Techniques have therefore been developed of three dimensional diagnosis and pre-operation simulation which permit health operators to achieve greater accuracy.

Inter-operational navigation allows better control of the realization of the pre-established therapeutic programme.

Doctors of today, and even more those of tomorrow, will have to move increasingly in this innovative diagnostic, therapeutic and educational scenario. We have therefore felt the need to propose, with the help of some of the leading international experts, a complete three-dimensional overview from diagnosis to therapy of the cranio-maxillofacial pathologies.

Prof. Claudio Marchetti
Dr. Roberto Cocchi

**CREDITS**
European and Italian credits for CME/ECM will be requested

**OFFICIAL LANGUAGE**
The official language is English

WITH THE PATRONAGE OF

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SIO SOCIETA' ITALIANA DI IMPLANTOLOGIA OSTEOINTEGRATA
SICMF Società Italiana Chirurgia Maxillo-Facciale
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# 3D Bologna Meeting and Workshop

*New Technologies in Diagnosis, Planning & Treatment in Maxillofacial Surgery*

## Friday, January 22

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| 8,45 – 9,30 | **Congress Registration** | |
| | **MEETING** | |
| 9,30 – 9,50 | **Opening Ceremony** | **The Authorities' Welcome**<br>*J. Acero (EACMFS Education and Training Officer, Madrid, Spain)* |
| 9,50 – 10,00 | **Meeting Presentation** | *R. Cocchi (Bologna, Italy)* |
| | **Session no. 1 – BASIC SCIENCE**<br>*CHAIRMEN: L. Califano, R. Canini, G. Ghigi* | |
| 10,00 | Computer-aided surgery in cranio-maxillofacial surgery *(C. Marchetti – Bologna, Italy)* | |
| 10,20 | Virtual Planning in Maxillofacial Surgery *(A. Sarti – Paris, France, C. Lamberti – Bologna, Italy)* | |
| 10,40 | A Real Time Spectrometer for image and dose optimization in Diagnostic Radiology *(G. Baldazzi – Bologna, Italy)* | |
| 11,00 | Surplus value of CBCT imaging in dento-maxillofacial district *(S.D. Bianchi – Turin, Italy)* | |
| 11,20 | **Coffee Break – Company Time with Planmeca** | |
| | **Session no. 2 – DIAGNOSIS**<br>*CHAIRMEN: R. Brusati, C. Savastano, L. Trevisiol* | |
| 11,50 | 3D vs 2D Cephalometrics: comparison between TC Cone Beam and Traditional Lateral Radiograph *(G. Farronato – Milan, Italy)* | |
| 12,10 | 3D Cephalometry *(G. Swennen – Bruges, Belgium)* | |
| 12,30 | 3D Analysis of Soft Tissues in orthognathic surgery: experiences and goals of Padua Group *(G. Ferronato, R. Peretta – Padua, Italy)* | |
| 12,50 | Completing the 3D Picture: Stereo Photogrammetry *(C. Lane – Atlanta, USA)* | |
| 13,10 | The use of 3D imagining to assess facial deformities *(A. Ayoub – Glasgow, UK)* | |
| 13,30 | **Lunch & "3D New Technologies Exhibition"** | |
| | **Session no. 3 – ORTHOGNATHIC SURGERY PLANNING**<br>*CHAIRMEN: B. Giannì, G. Iannetti, D. Vanni* | |
| 14,10 | 3D Simulation in orthognathic surgery *(A. Bianchi – Bologna, Italy)* | |
| 14,30 | 3D Simulation in cranio-maxillofacial deformities *(A. Sugar – Swansea, UK)* | |
| 14,50 | 3D Virtual dental occlusion *(L. Lancellotti – Bologna, Italy)* | |
| 15,10 | 3D Othognathic surgery planning and wafer production using an integrated approach of CBCT and digital study models *(M. Dalstra, B. Melsen – Aarhus, Denmark)* | |
| 15,30 | **Coffee Break – Company Time with Morita** | |
| | **Session no. 4 – NAVIGATION**<br>*CHAIRMEN: A. Benech, C. Mortellaro, A. Rinaldi Ceroni* | |
| 16,00 | Navigation in cranio-maxillofacial surgery: current concepts *(H.F. Zeilhofer – Basel, Switzerland)* | |
| 16,20 | Navigation in traumatology *(A. Schramm – Ulm, Germany)* | |
| 16,40 | The clinical use of BrainLab navigation system in maxillofacial surgery *(G. Gerbino, A. Ramieri – Turin, Italy)* | |
| 17,00 | Simulation Guided Navigation in orthognathic surgery *(S. Mazzoni – Bologna, Italy)* | |
| 17,20 | Polyethylene prosthesis positioning using navigation *(G. Badiali – Bologna, Italy)* | |
| 17,40 | Navigation and Endoscopy: the ENT point of view *(E. Pasquini – Bologna, Italy)* | |
| 18,00 | **Conclusion** | |
| 20,30 | **Informal dinner with typical Bolognese menu** | |

## Saturday, January 23

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| | **Session no. 5 – 3D TECHNOLOGIES IN IMPLANT SURGERY**<br>*CHAIRMEN: L. Checchi, G. Luongo, R. Scotti* | |
| 9,30 | New technologies in implant surgery *(A. Motroni – Milan, Italy)* | |
| 10,00 | Prostodontic guided implant surgery planning: ten years' experience in tools development and clinical application *(F. Franchini, A. Lamma – Bologna, Italy)* | |
| 10,30 | Reconstruction surgery and implant placement with bone–supported guide *(M. Rinaldi – Bologna, Italy)* | |
| 11,00 | **Coffee Break** | |
| 11,30 | Computer-aided implant surgery as interpretation of the correct implant planning *(G. Schiroli – Genoa, Italy)* | |
| 12,00 | Stereolitography in reconstructive surgery *(G. Corinaldesi – Bologna, Italy)* | |
| | **WORKSHOP**<br>*C. Marchetti, M. Pironi, A. Bianchi, S. Mazzoni, L. Lancellotti, G. Badiali* | |
| 9,30 – 12,30 | Bologna 3D workflow (presentation of clinical cases in orthognathic surgery)<br>CBCT Acquisition<br>3dMD Image acquisition (practical demonstration)<br>3D Cephalometry, 3D Visualization of orthodontic and orthognathic treatment planning with CBCT data and 3D virtual dental casts<br>Occlusal planning using Simplant OMS | |
| 11,00 | **Coffee Break** | |
| | Skeletal and soft tissues planning and simulation using Surgicase<br>Simulation Guided Navigation<br>Reliability and reproducibility of the complete 3D Bologna work-flow | |
| 12,30 | **Conclusion** | |