NEAR EAST UNIVERSITY

ICEHTM 2011 10-12 October

Nicosia - North Cyprus

1stInternational Conference on E-HEALTH & TELEMEDICINE

1stInternational Course on

TelePathology Systems and Applications

Proceedings

*Honorary Committee*

Dr. Suat I. Gunsel (Founding President of NEU) - President Prof. Dr. Omit Hassan (President of NEU)

Prof. Dr. Hojjat Adeli (Ohio State University)

Prof. Dr. Essam Ayad (Cairo University)



*M. Salem Abdel-Badeeh (Egypt) Cemal Ardil {Turkey) Charles Cihangir Conver (Cyprus) Giancarlo Mauri (Italy) Bajram Hysa (Albania) Erkan Kaptanoglu (Cyprus) Bekir Karlik {Turkey) Adnan Khashman (Cyprus) Sergio Bella (Italy)*

2. e-Health Aspects for Applications

5. Telemedicine Projects and Applications

6. Hospital Information Systems

Contents

Part I: Course on TelePathology Systems and Applications

1. "Why T elePathology?"

1

.......•.........••........•..........•.....••...•......•••...•......•••.......•......•......•......•................•......•.•.....................•........•.....

Prof. Dr. Gamze Mocan Kuzey *(Near East University, North Cyprus)*

1. "Clinical and Technical Basic Concepts, Tissue Based Telemedicine (no slides);

 Telepathology/Teleeducation aspects" ~........................... 5

Prof. Dr. Essam Ayad *(Cairo University, Egypt)*

1. "Interhospital TelePathology Practice in a Multi-institutional Health Group

 Located in Different Cities in Turkey" 10

Assoc. Prof. Dr. Omit Ince *(Aabadem University, Turkey)*

Part II: Conference on E-Health & Telemedicine

1. Keynote Presentation: e-Health and Telemedicine in the Information Society 26

Prof. Dr. Hojjat Adeli (Ohio State University - USA)

"E-Health: Automated Diagnosis of the Neurological and Psychiatric Disorders."........ 26

Prof. Dr. Abdel-Badeeh Salem (Ain Shams University, Egypt)

 Knowledge Engineering Methodologies for Medical e-Learning Systems 32

2. e-Health Aspects for Applications 46

A Smartphone Application for Medical Terminology.......................................................... 46 Miranda N. Martin, W.R. Winfrey (Concord University, USA);

James Nemitz, (West Virginia School of Osteopathic Medicine, USA)

Legal Aspects of Telemedicine 53

Burcu Ertem (Department of Criminal Law & Procedure, ~ankaya University, Turkey)

Justification and Attitude Towards the Establishment of M-Learning

to Support Field Workers Safety in Saudi Arabia............................................................... 58

Musaab Aldekhyyel, Anglia Ruskin University, UK,

Ziad Hunaiti, Knowledge Well Group, UK,

Zayed Huneiti, University of Ha' ii, Saudi Arabia, Nasim Matar, Zarqa University, Jordan

Rasmeh Al-Huneiti, Brunel University, UK.

iii

Designing for Emerging Technologies Aimed at Aiding Patient-Healthcare

Community Communication 72

Irmak Nur SUNAL (School of the Arts, Loughborough University, UK)

RUmeysa DEMiRDAMAR (Faculty of Pharmacy, Near East University, North Cyprus)

3. Artificial Intelligence, Clinical Assessment *&* Assistive Technology 76

A Correlation-based Classification of Renal Cell Carcinoma Patients ···············-·············· 76 Italo Zoppis, Massimiliano Borsani, Giancarlo Mauri (Department of Informatics,

Systems and Communication University of Milano-Bicocca, Milan),

Erica Gianazza, Cliza Chinello, Fulvio Magni (Department of Experimental Medicine, University of Milano-Bicocca, Monza, Italy)

Electromyographic and Clinical Assessment of Occlusal Mismatch 86

Silvana Beraj, Fejzi Keraj, Genti Vyshka, (Department of Odontology,

Faculty of Medicine, University of Tirana, Albania)

4. Ontology in Medicine *&* Decision Support Systems 98

Ontological Engineering in Bioinformatics ·····································································-··········-····. 98 Marco Alfonse, Abdel-Badeeh M. Salem, (Faculty of Computers & Information

Sciences - Computer Science Department - Ain Shams University, Cairo, Egypt)

5. Telemedicine Projects and Applications 114

Protective Innovative Videoconf erence Equipment for Emergency T elemedicine 114

Valery Stolyar, Russian Association for Telemedicine;

Anatoly Panfilov, Tradition Group Ltd., Moscow, Russia;

Andrey Selkov, Russian Association for Telemedicine,

Yuri Tsekhmister, Tradition Group Ltd., Moscow, Russia

Russian Mobile Telemedical Unit-Test During Round-the-World Cruise

(preliminary results) . 118

Andrey Selkov, Valery Stolyar, Oleg Atkov, Elena Selkova (Russian Association for Telemedicine, Moscow, Russia)

Telemedicine in Dermatology 125

Ash Kaptanoglu (Near East University Hospital)

A Telehomecare Monitoring Project in Cystic Fibrosis 129

Murgia F., Alghisi F., Majo F., Montemitro E., Lucidi V. and Bella S.

(Cystic Fibrosis Unit, Bambino Gesu Pediatric Hospital - IRCCS - Rome:

external consultant)

Teleradiology in Dentistry for DentoMaxilloFacial Imaging :.................... 135

Kaan Orhan (Faculty of Dentistry, NEU)

iv

6. Hospital Information Systems 152

Laboratory Information Systems and Pathology 152

Meryem Ebedi (Near East University Hospital, North Cyprus)

ICT in Neurosurgery.............................................................................................................................. 155

Erkan Kaptanoglu (University Hospital, NEU)

Analysis and Integration of Nursing Education for

E-Health/ E-Nursing Components................................................................................................ 158

Rasmeh Al-Huneiti, Brunel University, UK.

Ziad Hunaiti, Knowledge Well Group, UK.

Ebrahim Mansour, Applied Science Private University, Jordan. Wadmadiva Balachanrdan, Brunel University, UK.

Maysam Abood, Brunel University, UK.

Final Recommendations of the ICEHTM 2011 Conference 165

v