



University of Messina

Department of Biomedical Sciences and of Morphological and Functional Images

## CERTIFICATE OF PARTICIPATION

This is to certificate that

**DR. GAETANO ISOLA**

has attended as a conference speaker

**Symposium on Medical Imaging:**

**“New deals in teaching, research and diagnostic”**

*Messina, February 6<sup>th</sup> 2013*



AnalyzeDirect  
Michael Philcock

University of Messina  
Prof. Giuseppe Anastasi

AnalyzeDirect  
Beth Adams

**Dr. Beth Adam**

AnalyzeDirect – Mayo Clinic

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**Prof. Placido Bramanti**

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**Prof. Giancarlo Cordasco**

University of Messina

**Prof. Raffaele De Caro**

University of Padua

**Prof. Francesco Saverio De Ponte**

University of Messina

**Prof. Antonio Esposito**

Università Vita-Salute San Raffaele, Milan

**Prof. Michele Gaeta**

University of Messina

**Prof. Eugenio Gaudio**

University of Rome

**Dr. Gaetano Isola**

University of Turin

**Prof. Marcello Longo**

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**Prof. Ludovico Magaudo**

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**Prof. Demetrio Milardi**

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**Prof. Michele Papa**

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**Dr. Michael Philcock**

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**Prof. Domenico Puzzolo**

University of Messina

**Prof. Angelo Quartarone**

University of Messina

**Prof. Emanuele Scribano**

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The Workshop on Analyze 11.0

will be held by AnalyzeDirect:

**Michael Philcock**

General Manager

**Beth Adams**

Senior Application Support Specialist

AnalyzeDirect

The medical software image leader



**Crediti ECM:**

Al Corso sono stati preassegnati n° **28,7 crediti ECM**.

L'attestato crediti sarà rilasciato solo ed esclusivamente ai partecipanti che avranno superato il questionario di apprendimento e che avranno raggiunto la soglia minima di partecipazione dell' **80%** delle ore totali.



Dipartimento di Scienze Biomediche  
e delle Immagini Morfologiche e Funzionali

**Symposium on Medical  
Imaging:  
“New deals in teaching,  
research and diagnostic”**

**&**

**First European Workshop on  
Analyze 11.0  
Multimodal Medical  
Imaging**

*Crediti ECM: 28,7*

*Messina, February 6<sup>th</sup>-7<sup>th</sup>-8<sup>th</sup>, 2013*

Palazzo dei Congressi,  
Policlinico Universitario  
Wednesday, February 6<sup>th</sup>, 2013

**“New deals in teaching, research and diagnostic”**

Aula De Leo, Torre Biologica 1<sup>st</sup> floor  
Policlinico Universitario  
Thursday, February 7<sup>th</sup>, 2013

**Analyze 11.0 Multimodal Medical Imaging**

Aula De Leo, Torre Biologica 1<sup>st</sup> floor  
Policlinico Universitario  
Friday, February 8<sup>th</sup>, 2013

**Analyze 11.0 Multimodal Medical Imaging**

- 9.00 WELCOME / INTRODUCTION**  
**Prof. F. Tomasello**, President, University of Messina  
**Dr. G. Caudo**, President, Medical Association of Messina  
**Prof. G. Anastasi**, Chairman, Department of Biomedical Sciences and of Morphological and Functional Images, University of Messina  
*Session Chairmen: Prof. F.S. De Ponte - Prof. D. Puzzolo*
- 10.00 Dr. M. Philcock** - *“Analyze: Comprehensive Visualization & Analysis Software for Medical Imaging”*
- 10.20 Prof. E. Gaudio** - *“Teaching anatomy: living anatomy and medical imaging”*
- 10.40 Prof. R. De Caro** - *“Tridimensional Reconstructions in Anatomy: from didactic to research applications”*
- 11.00 Coffee Break**
- 11.30 Prof. M. Longo** - *“Application of 3D, VRT and image fusion techniques in the study of intracranial vessels and nerves correlation”*
- 11.50 Prof. M. Papa** - *“Evaluation of Default Mode Network in prediction of disorders of consciousness clinical prognosis”*
- 12.10 Prof. A. Esposito** - *“San Raffaele Experimental Imaging Center: a model of integration between clinical and preclinical research”*
- 12.30 Prof. G. Cordasco** - *“3D Imaging in Orthodontics”*
- 13.00 Lunch Break**  
*Session Chairmen: Prof. P. Bramanti - Prof. L. Magaudda*
- 15.00 Prof. M. Gaeta** - *“Dixon technique. A fast method for muscle fat fraction quantification”*
- 15.20 Prof. A. Quartarone** - *“Measuring and manipulating brain connectivity: an integrated TMS-neuroimaging approach”*
- 15.40 Prof. D. Milardi** - *“Multimodal approach to trace motor cortical pathways based on mixed TMS/DTI technique”*
- 16.00 Dr. G. Isola** - *“Jaw muscle and mastication: new frontiers of fMRI and DTI techniques”*
- 16.20 Prof. G. Anastasi** - *“Tractography DTI study of basal ganglia systems”*
- 16.40 Closing Remarks**  
**Prof. E. Scribano**

- 9.00 INTRODUCTION**  
*Concept & Terminology*  
*Interface overview*
- 10.00 IMAGE DATA REPRESENTATION, ACCESS AND MANAGEMENT**  
*Coordinate System / Anatomical Orientation*  
*Image File Formats*  
*Loading and Saving Data*  
*DICOM Tool*
- 11.00 Coffee Break**
- 11.30 2D IMAGE GENERATION AND DISPLAY**  
*Multiplanar Sections*  
*Oblique Sections*
- 12.00 3D IMAGE GENERATION AND DISPLAY**  
*Volume Render*  
*Surface Extractor*
- 13.30 Lunch break**
- 15.00 IMAGE PROCESSING**  
*Image Calculator*  
*Image Algebra*  
*Spatial Filters*
- 16.00 IMAGE SEGMENTATION I**  
*Image Edit*  
*Volume Edit*  
*Object Extractor*
- 17.00 “Hands-On” Session**

- 9.00 IMAGE SEGMENTATION II**  
*Multispectral Classification*
- 10.00 2D AND 3D IMAGE REGISTRATION AND FUSION**  
*2D Registration*  
*3D Voxel Registration*  
*3D Surface Registration*
- 11.00 Coffee Break**
- 11.30 IMAGE MEASUREMENT I**  
*Line Profile*  
*Region of Interest*
- 12.30 IMAGE MEASUREMENT II**  
*Stereology*  
*Object Counter*  
*Tree Analysis*
- 13.30 Lunch break**
- 15.00 ADD-ON MODULES**  
*SISCOM*  
*Mayo 3D Brain Atlas*  
*DTI*
- 16.00 SPECIAL APPLICATION**  
*Electrode Grid Visualization*  
*Abdominal Adipose Tissue Quantification*  
*Bone Mineral Density Analysis*  
*Lung Segmentation and Volume Assessment*
- 17.00 “Hands-On” Session**