Curriculum Vitae

of Rosa Scapaticci

PERSONAL INFORMATION

First Name/Surname	Rosa Scapaticci
Address	Via Lussemburgo, 2 CAP 80029 Sant'Antimo (NA), Italy
Telephone	+39 081 5051675
Mobile	+39 3480822577
E-mail	scapaticci.r@irea.cnr.it
Nationality	Italian
Date of birth	19/09/1985

CURRENT POSITION

PhD student in Information Engineering at University Mediterranea of Reggio Calabria.

EDUCATION AND TRAINING

• Date (from – to)	**March 2008 – March 2010**
• Name and type of organization providing education and training	University of Naples "Federico II"; Faculty of Engineering, Piazzale Tecchio n°80, 80125 Naples, Italy
• Principal subjects/occupational skills covered	Biomedical Instrumentation, Biomedical Signal Processing, Biomedical Images Processing, Biomedical Data Processing, Reliability of Systems and Instrumentation, Hospital Facilities, Clinical Engineering, Electromagnetic Fields in Diagnosis and Therapy, Health Physics, Organization and Automatization in Healthcare, Telemedicine and Telematics in Healthcare, Technique of Electrical Safety, Economy in Healthcare.
• Title of qualification awarded	**Master Degree in Biomedical Engineering**
• Vote	**110/110 cum Laude**
• Title of the Thesis	"*Use of multiresolution representations for microwave imaging in breast cancer diagnostics*".

• Date (from – to)	**June 2009 – March 2010**
• Name and type of organization providing education and training	Institute for Electromagnetic Sensing of the Environment – National Council of Research (**IREA-CNR**), Via Diocleziano n°328, 80124 Naples, Italy.
• Principal subjects/occupational skills covered	Study of electromagnetic scattering problems and in particular of the inverse scattering problem. Searching for innovative approaches and development of software for microwave imaging, with particular reference to the application on biomedical imaging in the diagnosis of breast cancer
• Title of qualification awarded	**Training**

• Date (from – to)	**June 2009 – October 2009**
• Name and type of organization providing education and training	University of Naples "Federico II"; Faculty of Engineering, P.le Tecchio n°80, 80125 Naples, Italy
• Principal subjects/occupational skills covered	Mechanisms of interaction between electromagnetic fields and biological tissues, effects of electromagnetic fields on biological tissues, regulations on the levels of electromagnetic fields in work environments, risks arising from exposure to high frequency electromagnetic fields.
• Title of qualification awarded	**Specialization Course "Electromagnetic Fields: Risk and Protection".**
• Date (from – to)	**September 2004 – February 2008**
• Name and type of organization providing education and training	University of Naples "Federico II"; Faculty of Engineering, Piazzale Tecchio n°80, 80125 Naples, Italy
• Principal subjects/occupational skills covered	Bioengineering, Tissues Engineering, Biomaterials, Elements of Computer Science, Computer Architecture, Electrical Engineering, Mathematics, Physics, Thermodynamics, Biochemical Reactors, Mechanics of Materials and Structures, Bioelectromagnetics.
• Title of qualification awarded	**Degree in Biomedical Engineering**
• Vote	**109/110**

EXPERIENCES

• Date (from – to)	**March 2010 – December 2010**
• Name and address of employer	*Institute for Electromagnetic Sensing of the Environment – National Council of Research (**IREA-CNR**), Via Diocleziano n°328, 80124 Naples, Italy.*
• Type of business or sector	Research
• Occupation or held position	**Stage**
• Main activities and responsabilities	Searching for innovative approaches and development of software for electromagnetic diagnostic imaging in the microwave narrow, with particular reference to the application on biomedical imaging in the diagnosis of breast cancer.
• Date (from – to)	**December 2009 – September 2010**
• Name and address of employer	University of Naples "Federico II", C.so Umberto I n°40, 80138 Naples, Italy.
• Type of business or sector	University
• Occupation or held position	**Tutor**
• Main activities and responsabilities	Guide and assist students in distress, removing any obstacles to a successful course attendance and active participation to all educational activities through initiatives related to the needs and attitudes of each single student.

LANGUAGES

MOTHERTONGUE	**ITALIAN**

OTHER LANGUAGES

ENGLISH

• Understanding	Excellent
• Writing	Excellent
• Speaking	Good

FRENCH

• Understanding	Basic
• Writing	Basic
• Speaking	Basic

COMPUTER SKILLS AND COMPETENCES

- Programs: Microsoft OfficeTM (WordTM, ExcelTM, PowerPointTM, AccessTM).
- Programming languages: C++, Fortran, Matlab.
- Operative systems: Windows, Linux/Unix

OTHER INFORMATION

SCIENTIFIC PUBLICATIONS

- G. Bellizzi, I. Catapano, L. Crocco, R. Scapaticci, O.M. Bucci, "*Feasibility Issues in Brast Cancer Microwave Imaging Enhanced with Magnetic Nanoparticles*", EuCAP 2013 (European Conference on Antennas and Propagation), accepted.

- R. Scapaticci, O.M. Bucci, I. Catapano, L. Crocco, "*On the required accuracy of a microwave system for brain stroke monitoring*", EuCAP 2013 (European Conference on Antennas and Propagation), accepted.

- O.M. Bucci, I. Catapano, L. Crocco, R. Scapaticci, " *Inversion procedure for MNP enhanced Breast Cancer Microwave Imaging: a Performance Assessment*", Antennas and Propagation Symposium, Orlando, 2013, (accepted).

- E.A. Attardo, M. Perez Cerquera, F.P. Andriulli, G. Vecchi, R. Scapaticci, O.M. Bucci, I. Catapano, L. Crocco, " *Full-Wave Assessment of Feasibility Guidelines for 3-D Microwave Imaging of Brain Strokes*", Antennas and Propagation Symposium, Orlando, 2013, (accepted).

- O.M. Bucci, G. Bellizzi, I. Catapano, L. Crocco, R. Scapaticci, "*MNP Enhanced Microwave Breast Cancer Imaging: Measurement Constraints and Achievable Performances*", IEEE Antennas and Wireless Propagation Letters, vol.11 ,pp. 1630-1633, December 2012.

- R. Scapaticci, L. Di Donato, I. Catapano, L. Crocco, "*Differential Microwave Imaging for Brain Stroke Monitoring*", RiNEm, Roma, 2012.

- G. Bellizzi, O.M. bucci, I. Catapano, L. Crocco, R. Scapaticci, "*Advancements in Microwave Breast Cancer Imaging Enhanced by Magnetic Nanoparticles as contrast agents*", in Proceedings of XIX RiNEm, Roma, 2012.

- Catapano, R. Scapaticci, L. Crocco, "*Wavelet-based adaptive multiresolution inversion for quantitative microwave imaging of breast tissues*", IEEE Transaction on Antennas and Propagation, vol. 60, n.8, pp.3717-3726, August 2012.

- G. Bellizzi, O.M. Bucci, I. Catapano, L. Crocco, R. Scapaticci, "*Feasibility Study of a Novel Microwave Breast Cancer Imaging Approach Exploiting Magnetic Nanoparticle as Contrast Agents*", in Proceedings of Antennas and Propagation Symposium, Chicago, 2012.

- Catapano, L. Crocco, R. Scapaticci, G. Bellizzi, O.M. Bucci, "*Recent results on a novel microwave breast cancer imaging approach based on magnetic nanoparticles as contrast agent*", in Proocedings of ICEmB, Bologna, 2012.

- R. Scapaticci, L. Crocco. O.M. Bucci, I. Catapano, "*Assessment of Inversion Strategy for Microwave Imaging of Weak Magnetic Scatterers Embedded into a Biological Enviroment*", in Proocedings of European Conference on Antennas and Propagation (EuCAP), Prague, 2012.

- G. Bellizzi, O.M. Bucci, I. Catapano, L. Crocco, R. Scapaticci, "*Magnetic Nanoparticles Enhanced Microwave Imaging: a Feasibility Assessment*", in Proocedings of European Conference on Antennas and Propagation (EuCAP), Prague, 2012.

- L. Di Donato, R. Scapaticci, T. Isernia, I. Catapano and L. Crocco, *"An effective method for borehole electromagnetic imaging of buried"*, International Journal of Antennas and Propagation, vol. 2012, Article ID 246472, 9 pages, doi:10.1155/2012/246472, 2012.

- R. Scapaticci, L. Di Donato, I. Catapano, L. Crocco, *" A feasibility study on Microwave Imaging for Brain Stroke Monitoring"*, Progress in Electromagnetic Research B, vol.40, pp.305-324, 2012.

- Catapano, L. Crocco, L. Di Donato, R. Scapaticci, F. Soldovieri, R. Massa, G. Angiulli, T. Isernia, S. Tringali, O. M. Bucci , "*Guidelines and Imaging Strategies for Effective Microwave Breast Screening",* RINEM 2010.