Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Emanuele, Luigi Sciuto**
Address(es)	Via Acicastello / 26 95126 Catania (CT), Sicily, Italy
Telephone(s)	+39-095-498420 Mobile: +39-339-2851954
E-mail	emanueleluigi.sciuto@imm.cnr.it / emanueleluigi.sciuto@biologo.onb.it
Nationality	Italian
Date of birth	08/09/1988
Gender	Male

Desired employment / Occupational field

Molecular Biology and Biotechnology

Work experience

Dates	17/02/2014 - 31/10/2014
Occupation or position held	Scholarship holder
Main activities and responsibilities	Optical and structural characterization of the innovative fluorophore $Ru(bpy)_3^{2+}$, through silicon photodetectors and transmission electron microscopy (TEM), for biosensing applications in Biomedical field.
Name and address of employer	CNR-IMM sede di Catania. VIII Strada Z.I., 5 - 95121 Catania, Sicily, Italy
Type of business or sector	Microelectronics and Microsystems (HIPPOCRATES - PON02_00355_2964193)

Dates	01/04/2014 (2 hours)
Occupation or position held	Seminar's
Main activities and responsibilities	Seminary entitled "Study of fluorescent markers for the construction of an optical DNA-chip" organized by the course of Cellular and Molecular Biology of Catania.
Name and address of employer	University of Catania. G.F. Ingrassia Department. Via Santa Sofia, 87, 95100 Catania, Sicily, Italy
Type of business or sector	Department of Anatomy, Biology and Genetics, Pathology Diagnostics, Forensic Medicine, Hygiene and Public Health

Dates	04/2011 - 07/2013
Occupation or position held	Collaborator
Main activities and responsibilities	Sampling for monitoring of contamination by *Legionella* spp.
Name and address of employer	University of Catania. G.F. Ingrassia Department. Via Santa Sofia, 87, 95100 Catania, Sicily, Italy
Type of business or sector	Department of Anatomy, Biology and Genetics, Pathology Diagnostics, Forensic Medicine, Hygiene and Public Health

Education and training

Date	28/05/2015
Title of qualification	Member of Professional Register Section A (AA_073451)
Name and type of organisation providing education and training	National Register of Biologists
Dates	03/11/2014 →
Title of qualification	PhD in Materials Science and Nanotechnologies
Principal subjects/occupational skills covered	New materials, processes and devices for biosensor applications.
Name and type of organisation providing education and training	University of Catania. Piazza Università, 2, 95131 Catania, Sicily, Italy.
Level in national or international classification	PhD
Dates	15/07/2014
Title of qualification awarded	Enabling to the Biological Profession.
Name and type of organisation providing education and training	University of Catania. Piazza Università, 2, 95131 Catania, Sicily, Italy.
Dates	10/2011 - 27/11/2013
Title of qualification awarded	Degree in Cellular and Molecular Biology, with a mark of 110/110 cum laude.
Principal subjects/occupational skills covered	Molecular Genetics, Cellular Biotechnology, Advanced Biochemistry, Advanced Cellular Physiology, Applied Molecular Microbiology, Molecular Biology and Bioinformatics elements. Thesis in "*Study of fluorescent markers for realization of an optical DNA-chip based on Silicon technology*." Prof. Fulvia Sinatra. Tutor: Dr. Sebania Libertino
Name and type of organisation providing education and training	University of Catania. Piazza Università, 2, 95131 Catania, Sicily, Italy.
Level in national or international classification	Master Degree in Cellular and Molecular Biology, Class LM-6 of master degrees in Biology.
Dates	10/2012-10/2013
Occupation or position held	Training / Thesis
Main activities and responsibilities	Optical and structural characterization of innovative fluorescent markers biosensing application.
Name and address of employer	CNR-IMM sede di Catania. VIII Strada Z.I., 5 - 95121 Catania, Sicily, Italy
Type of business or sector	Microelectronics and Microsystems
Dates	10/2008-10/2011
Title of qualification awarded	Degree in Biological Sciences, with a mark of 110/110 cum laude.
Principal subjects/occupational skills covered	Cytology and Histology, Molecular Biology, Genetics, Inorganic Chemistry, Organic Chemistry, Biochemistry, Cell Physiology, Microbiology. Thesis in " Molecular Biomedicine of Complex Systems and diabetes mellitus: role of microRNAs in the resistance to cytokines of mammalian pancreas's alpha cells." Prof. Michele Purrello. Tutor: Dr. Davide Barbagallo
Name and type of organisation providing education and training	University of Catania. Piazza Università, 2, 95131 Catania, Sicily, Italy.

Level in national or international classification	Bachelor's Degree in Biological Sciences - Class 12
Dates	09/2010-09/2011
Occupation or position held	Training / Thesis
Main activities and responsibilities	Study of microRNA involved into the pathogenesis of diabetes mellitus type I.
Name and address of employer	University of Catania. G.F. Ingrassia Department. Via Santa Sofia, 87, 95100 Catania, Sicily, Italy
Type of business or sector	Department of Anatomy, Biology and Genetics, Patology Diagnostics, Forensic Medicine, Hygiene and Public Health
Dates	09/2002–09/2007
Title of qualification awarded	Scientific High School, with a score of 100/100
Principal subjects/occupational skills covered	Expression Italian, Mathematics, Physics, Science, Foreign Language (English), Philosophy, Latin, History, Geography, Chemistry.
Name and type of organisation providing education and training	Expression Italian, Mathematics, Physics, Science, Foreign Language (English), Philosophy, Latin, History, Geography, Chemistry. Liceo Scientifico Statale "Galileo Galilei", Catania
Level in national or international classification	High school upper secondary

Publications

Articles in Scientific Journals

1. M.F. Santangelo, E.L. Sciuto, S. Lombardo, A.C. Busacca, S. Petralia, S. Conoci, S. Libertino, "Si photomultipliers for bio-sensing applications", Journal of Selected Topics in Quantum Electronics, 2015, doi: 10.1109/JSTQE.2015.2504979.
2. M. Favetta, A. Valletta, G. Fortunato, M.E. Castagna, S. Conoci, E.L. Sciuto, T. Cosentino, F. Sinatra, S. Libertino, *Development of Si-based Electrical Biosensors: simulations and first experimental results,* Sensing & Bio-sensig Research 6 (2015) 72–78, 2015.
3. E.L. Sciuto, M.F. Santangelo, G. Villaggio, F. Sinatra, C. Bongiorno, G. Nicotra, S. Libertino, "Photo-physical characterization of fluorophore $Ru(bpy)_3^{2+}$ for optical biosensing applications", Sensing and Bio-sensing research,vol.6, pp. 65-71, December 2015.
4. M.F. Santangelo, E.L.Sciuto, A.C.Busacca, S.Petralia, S. Conoci, S. Libertino, "SiPM as miniaturized optical biosensor in DNA-microarray applications", Sensing and Bio-sensing research,vol.6, pp. 95-98, December 2015.

Proceeding in International Conference

1. G. Nicotra, E.L. Sciuto, M.F. Santangelo, G. Villaggio, F. Sinatra, C. Bongiorno, S. Libertino, "Single Atom Detection Through HAADF-STEM and EELS/EDX Characterization of Fluorophore $Ru(bpy)_3^{2+}$ for Optical DNA-Chip Applications", Microscopy & Microanalysis, Portland, Oregon, August 2015, doi:10.1017/S1431927615007928.
2. M.F. Santangelo, R. Pagano, E.L. Sciuto, A.C. Busacca, S. Conoci, P.G. Fallica, S. Lombardo and S. Libertino, "SiPM as miniaturized optical biosensor in DNA-microarray applications", EMRS conference, Lille, May 2015.
3. M.F. Santangelo, R. Pagano, E.L. Sciuto, A.C. Busacca, S. La Cono, P. Vasquez, P. G.Fallica, S. Conoci, S. Lombardo and S. Libertino, "CY5 Fluorescence measured with Silicon Photomultipliers", Biomedical Circuits and Systems Conference (BioCAS), 2014 IEEE, pp. 284 - 287, Lausanne, Switzerland, 22-24 Oct. 2014, doi:10.1109/BioCAS.2014.6981718.
4. M.F. Santangelo, R. Pagano, S. Lombardo, E.L. Sciuto, D.N. Sanfilippo, P.G. Fallica, F. Sinatra and S. Libertino, "Silicon Photomultipliers application to biosensors", Proc. SPIE 8990, Silicon Photonics IX, 89900T (8 March 2014), doi:10.1117/12.2037765, San Francisco, California, United States, February 2014.
5. S. Libertino, S. Conoci, M.F. Santangelo, R. Pagano, E.L. Sciuto, F. Sinatra, D. Sanfilippo, G. Fallica and S. Lombardo. "Optical and Electrical Si-Based Biosensors: Fabrication and Trasduction Issues", J Anal Bioanal Tech, S12: 007 (doi:10.4172/2155-9872.S12-007), February 2014.

Personal skills and competences

Mother tongue(s) **Italian**

Self-assessment	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user

(*) Common European Framework of Reference for Languages

Social skills and competences

Ability to work in a multidisciplinary team, coordinating some of the experimental activities, participating in weekly group meetings, presenting data at national and international conferences and publishing works in scientific journals.

Organisational skills and competences

Coordination of research projects in biological and biotechnological field, focusing works on studying macromolecules of interest for bio sensing applications and developing innovative genetic Point-of-Care technologies for molecular diagnosis.

Technical skills and competences

Use of equipment and machinery for biological laboratory (pipettes, biological and chemical hood, thermal cycler, electrophoresis cell, centrifuge, fluorescence microscope, spectrophotometer, climatic chamber, spotter, scan array, potentiostat); particular specialization with experimental set-up based on the use of optical laser of various wavelengths. Excellent familiarity with techniques of DNA-RNA extraction, PCR, RT-PCR, Real-Time PCR, electrophoresis, eukaryotic/prokaryotic cell culture, spectrophotometry and electrochemistry.

Computer skills and competences

Knowledge of Microsoft applications and Microsoft Office, especially Excel, Word and Power Point. Good ability to browse the Internet and use the email tool.
Using software for editing text files; using the browser to browse the Internet; use of software for multimedia presentations, software for digital image processing and data analysis software such as Origin.

Driving licence

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