



Europass Curriculum Vitae	
Personal information	
First name / Surname	MARIANNA COSENTINO
Address	
Telephone	
E-mail	
Nationality	Italian
Date of birth	
Work experience	
Dates	November 2017-November 2020
Occupation or position held	PhD student in Morphogenesis and Tissue Engineering (Musarò Lab's)
Name and address of employer	SAIMLAL Department- Histology and Medical Embryology Section- Via Scarpa 16, Rome, Italy
Type of business or sector	Tissue Engineering and bio-medical: The research was focused on the characterization X-MET, a muscle engineered tissue as a tool for basic research and regenerative medicine. We have previously generated an <i>in vitro</i> bioengineered three-dimensional vascularized skeletal muscle tissue, named eX-vivo Muscle Engineered Tissue (X-MET), which displays several morpho-functional properties of an <i>in vivo</i> muscle; it is able to contract spontaneously as well as to respond to electrical stimulation. The general aim of the thesis's project was to further define, throughout three specific aims, the mechanical properties of X-MET and to disclose the functional plasticity of X-MET, subjected to mechanical stimuli.
Dates	July 2019-October 2019
Occupation or position held	VGR student (A. Khademhosseini, N. Annabi Lab's)
Name and address of employer	Chemical & Biomolecular Engineering Department
Type of business or sector	Tissue Engineering and bio-medical: The research was focused on 3D bioprinting of multi-functional cardiopatches. Specifically, we have synthesized various biomaterials that can act as supportive matrix for cardiac cells, performed extensive mechanical characterization of these materials and tested them for biocompatibility. Also, we optimized the material properties that match the mechanical, bioelectric and physicochemical properties of native tissues as well as rheological properties required for 3D printing.
Dates	Oct 2016- Oct 2017
Occupation or position held	Internship student at the IRCCS - Fondazione Santa Lucia (Puri P.L. Lab's)
Name and address of employer	S. Lucia Foundation and CNR-IBCN (via del Fosso di Fiorano 64, Rome, Italy)

Type of business or sector	Bio-Medical: The research activity is focused on the understanding of epigenetic mechanisms in Progeria syndrome. We collected data indicating that DNA damage sites accumulate in preferential regions that are actively transcribed and labeled by RNA Pol2. We have carried out further ChIP studies alongside RNA expression analysis to assess whether DNA damage that accumulates early in HGPS patients is due to the open conformation of transcriptionally active chromatin or whether transcription is a consequence of DNA damage and PolIII-mediated transcription is a functional event in response to DNA damage (DDR). Training course on the management of animal models at IRCCS - Fondazione Santa Lucia
Dates	Oct 2014- Oct 2015
Occupation or position held	Internship student at the Department of Pharmacology, Catholic University of Sacred Heart, Rome (RM) (Navarra Lab's)
Name and address of employer	Catholic University of Sacred Heart, Rome (RM)
Type of business or sector	Bio-Medical: The research activity was focused on the analysis of microglial polarization in brain tumors
Education and training	
Dates	26/10/2017
Title of qualification awarded	M.S. Degree in Pharmaceutical Biotechnology (DM270/04)-LM9 (Final Mark 110 / 110 e lode)
Principal subjects/occupational skills covered	"Epigenetic mechanisms in Hutchinson-Gilford Progeria syndrome"
Name and type of organization providing education and training	Faculty of Medicine and Pharmacy, University of Rome "La Sapienza", Rome, Italy S. Lucia Foundation and CNR-IBCN, Epigenetics Laboratory and Regenerative Pharmacology (via del Fosso di Fiorano 64, Rome, Italy) Tutor: Dott.ssa Lucia Latella, Dott. Pier Lorenzo Puri
Dates	22/10/2015
Title of qualification awarded	B.S. Degree in Health Biotechnology (Final Mark: 109/110)
Principal subjects/occupational skills covered	"Microglial polarization in brain tumors"
Name and type of organization providing education and training	Faculty of Medicine and Surgery, Catholic University of the Sacred Heart, Rome – Tutor: Dott.ssa Lucia Lisi, Dott. Pierluigi Navarra

Mother tongue	Italian				
Other language	English				
Self-assessment	Understanding		Speaking		Writing
¹ <i>European level (*)</i>	Listening	Reading	Spoken interaction	Spoken production	
English Language	B1 I can understand extended speech even when it is not clearly structured and when relationships are only	B1 I can understand long and complex factual and literary texts, appreciating distinctions of style. I can understand	B1 I can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers	B1 I can present clear, detailed descriptions on a wide range of subjects related to my field of interest. I can	B1 I can write clear, detailed text on a wide range of subjects related to my interests. I can write an essay or
	implied and not signaled explicitly. I can understand television programs and films without too much effort	specialized articles and longer technical instructions, even when they do not relate to my field.	quite possible. I can take an active part in discussion in familiar contexts, accounting for and sustaining my views.	explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.	report, passing on information or giving reasons in support of or against a particular point of view. I can write letters highlighting the personal significance of events and experiences.

(*) [*Common European Framework of Reference for Languages*](#)

<p>Technical skills and competences</p>	<ul style="list-style-type: none"> • DNA, RNA extraction • PCR, RT-PCR, • Western blot • Immunoprecipitation • Immunofluorescence • PI staining for Cell Cycle and Vybrant DyeCicle Staining • Bacterial cultures • Mini and MaxiPrep • Dosage of nitrites, dosage of proteins and urea • ChIP (Chromatin immunoprecipitation) • Morphological analysis by light and confocal microscopy • Cell culture, cell transfection and transformation • Animal handling/surgery, genotyping and experience with transgenic mouse model • Dissection and analysis of adult mouse tissues (skeletal muscle) • FACS analysis • Primary cells purification and culturing from muscle • Rheological characterization of biomaterial • 3D Cell encapsulation • 2D encapsulation • Mechanical characterization of biomaterial • 3D-bioprinting • Live/dead staining
<p>Computer skills and competences</p>	<ul style="list-style-type: none"> • Operating systems: Windows, Apple
	<ul style="list-style-type: none"> • Knowledge of various applications including Word, Excel, PowerPoint, Photoshop, Image J • Using current browsers on the net (Explorer, Mozilla) and email (Outlook Express, Mail).

<p>Publication</p>	<ul style="list-style-type: none"> • Latella L., Dall’Agnese A., Boscolo Sesillo F., Nardoni C., Cosentino M., Armin Lahm, Sacco,A. and Puri P.L. DNA damage signaling mediates the functional antagonism between replicative senescence and terminal muscle differentiation. <i>Genes and Development</i>, 2017 • Pisu S, Apa L, Cosentino M, Musarò A, Rizzuto E., Del prete Z. Measuring the X- MET’s maximum power: A preliminary study. Conference Paper · June 2018 • Pisu S., Cosentino M., Apa L., Musarò A., Rizzuto E., Del prete Z. Measuring the Maximum Power of an ex vivo Engineered Muscle Tissue With Isovelocity Shortening Technique. <i>IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT</i>, 2019. • L Forcina, M Cosentino, A Musarò. Mechanisms Regulating Muscle Regeneration: Insights into the Interrelated and Time-Dependent Phases of Tissue Healing <i>Cells</i> 9 (5), 129, 2020
<p>Conference partecipations</p>	<ul style="list-style-type: none"> • 8th BeMM Symposium Biology and Molecular Medicine PhD School Roma 20 November 2017 • 9th BeMM Symposium Biology and Molecular Medicine PhD School Roma 13 November 2018 • XV Meeting IIM (Interuniversity Institute of Myology) held in Assisi,Perugia (PG), 11-14 October 2018 • Micro-and Nanotechnology for Medicine Workshop: New frontiers and Applications. July 8-12 UCLA, Los Angeles, CA • XX BeMM Symposium Biology and Molecular Medicine PhD School Roma 22 November 2019 • XVI Meeting IIM (Interuniversity Institute of Myology) held in Assisi,Perugia (PG), 17-20 October 2019
<p>Grants and Donor</p>	<ul style="list-style-type: none"> • Best Poster Awards XV Meeting IIM (Interuniversity Institute of Myology) Assisi, Perugia (PG), 11-14 October 2018 • Guest PhD at UniStem Tour in collaboration with Prof. Elena Cattaneo, 8 May 2019 • Member of IIM young committee
<p>Teaching activity</p>	<p>2019: involved in teaching and examination activity for the following academic courses:</p> <p>-Tissue Engineering, Faculty of Industrial Bioengineering at University “Campus Biomedico di Roma”.</p> <p>- Supervision of an undergraduate students, Sapienza University of Rome</p>
<p>Organizational skills and competences</p>	<p>Capacity and skills to conduct a laboratory starting from the organization of consumables or necessary instruments to the management of human resources.</p>

