



<b>Europass Curriculum Vitae</b>	
<b>Personal information</b>	
<b>First name / Surname</b>	<b>MARIANNA COSENTINO</b>
Address	
Telephone	
E-mail	
Nationality	Italian
Date of birth	
<b>Work experience</b>	
Dates	<b>March 2023-present</b>
Occupation or position held	<b>Post-doctoral researcher</b>
Name and address of employer	SAIMLAL Department- Histology and Medical Embryology Section- Via Scarpa 16, Rome,
Type of business or sector	Tissue engineering and Regenerative Medicine.
Dates	<b>January 2023-June 2023</b>
Occupation or position held	<b>Visiting Post-doc (Sampaolesi Lab)</b>
Name and address of employer	Stem Cell Research Institute, KU Leuven
Type of business or sector	Regenerative Medicine.
Dates	<b>2022</b>
Occupation or position held	<b>Post-doctoral Fellow Winner of IBSA Foundation for scientific research fellowship 2021</b>
Name and address of employer	SAIMLAL Department- Histology and Medical Embryology Section- Via Scarpa 16, Rome, Italy; Stem Cell Research Institute, KU Leuven
Type of business or sector	Regenerative Medicine. A vascularized muscle engineered tissue as a patch for myocardial infarction repair
Dates	<b>2021-2022</b>
Occupation or position held	<b>Post-doctoral researcher</b>
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.
Dates	<b>July 2019-October 2019</b>
Occupation or position held	<b>VGR student (A. Khademhosseini, N. Annabi Lab's)</b>

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	<b>November 2017-November 2020</b>
Occupation or position held	<b>PhD student in Morphogenesis and Tissue Engineering (Musarò Lab's)</b>
Name and address of employer	SAIMLAL Department- Histology and Medical Embryology Section- Via Scarpa16, 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	<b>Oct 2016- Oct 2017</b>
Occupation or position held	<b>Internship student at the IRCCS - Fondazione Santa Lucia (Puri P.L. Lab's)</b>
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).
Dates	<b>Oct 2014- Oct 2015</b>
Occupation or position held	<b>Internship student at the Department of Pharmacology, Catholic University of Sacred Heart, Rome (RM) (Navarra Lab's)</b>
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
<b>Education</b>	
Dates	<b>05/02/2021</b>
Title of qualification awarded	<b>Ph.D in Morphogenesis and Tissue Engineering (Final Mark Ottimo e lode) Sapienza University of Rome, Rome, Italy</b>
Principal subjects/occupational skills covered	X-MET, a muscle engineered tissue as a tool for basic research and regenerative medicine

Name and type of organization providing education and training	Faculty of Medicine and Pharmacy, University of Rome “La Sapienza”, Rome, Italy SAIMLAL Department- Histology and Medical Embryology Section- Via Scarpa 16, Rome, Italy
Dates	<b>July 2020</b>
Title of qualification awarded	<b>Italian Professional qualification as Biologist; Università degli studi di Lecce.</b>
Dates	<b>26/10/2017</b>
Title of qualification awarded	<b>M.S. Degree in Pharmaceutical Biotechnology (DM270/04)-LM9 (Final Mark 110 / 110 e lode)</b>
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	<b>22/10/2015</b>
Title of qualification awarded	<b>B.S. Degree in Health Biotechnology (Final Mark: 109/110)</b>
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
<b>Languages</b>	
<b>Mother tongue</b>	Italian
<b>Other language</b>	English
	<b>Grade 9</b>  Graded Examination in Spoken English (GESE) Level 1 Certificate in ESOL International <b>CEFR Level B2.3</b>  Speaking and Listening  Qualification number: 603/3545/2 Unit number: D/617 /1934 Certificate issue number: 1 Trinity ID: 1-4704246160:1-4705876259 Candidate number: 1-4705876259  TRINITY COLLEGE LONDON

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

<p><b>Publications</b></p>	<ul style="list-style-type: none"> <li>• Latella L., Dall’Agnese A., Boscolo Sesillo F., Nardoni C., <b>Cosentino M.</b>, 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</li> <li>• Pisu S., <b>Cosentino M.</b>, 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.</li> <li>• Forcina L., <b>Cosentino M.</b>, Musarò A. Mechanisms Regulating Muscle Regeneration: Insights into the Interrelated and Time-Dependent Phases of Tissue Healing <i>Cells</i> 9 (5), 129, 2020.</li> <li>• Apa, L.; <b>Cosentino, M.</b>; Forconi, F.; Musarò, A.; Rizzuto, E.; Del Prete, Z. The Development of an Innovative Embedded Sensor for the Optical Measurement of <i>Ex-Vivo</i> Engineered Muscle Tissue Contractility. <i>Sensors</i> <b>2022</b>, <i>22</i>, 6878.</li> <li>• Bonato, A., Raparelli, G., Luvisetto, S., Forconi, F., <b>Cosentino, M.</b>, Tirone, F., Rizzuto, E., &amp; Caruso, M. (2023). Cyclin D3 deficiency promotes a slower, more oxidative skeletal muscle phenotype and ameliorates pathophysiology in the mdx mouse model of Duchenne muscular dystrophy. <i>FASEB journal: official publication of the Federation of American Societies for Experimental Biology</i>, 2023.</li> <li>• <b>Cosentino, M.</b>, Nicoletti, C., Valenti, V., Schirone, L., Di Nonno, F., Apa, L., Zouhair, M., Genovese, D., Madaro, L., Dinarelli, S., Rossi, M., Del Prete, Z., Sciarretta, S., Frati, G., Rizzuto, E., &amp; Musarò, A. (2023). Remodeled eX vivo muscle engineered tissue improves heart function after chronic myocardial ischemia. <i>Scientific reports</i>, 2023</li> <li>• <b>M. Cosentino</b>, L. Forcina, M. Zouhair, L. Apa, D. Genovese, C. Boccia, E. Rizzuto, A. Musarò Modeling 3D cancer-associated cachexia; the molecular basis and therapeutic potential of IL-6 blockade in cancer cachexia. <i>Journal of Cachexia, Sarcopenia and Muscle</i>, 2023.</li> </ul> <p>Conference papers:</p> <ul style="list-style-type: none"> <li>• Pisu S, Apa L, <b>Cosentino M</b>, Musarò A, Rizzuto E., Del prete Z. Measuring the X- MET’s maximum power: A preliminary study. Conference Paper · June 2018</li> <li>• Forconi F., Apa L., D’alvia L., <b>Cosentino M.</b>, Rizzuto E., Del Prete Z. Electric field distribution analysis for the design of an electrode system in a 3D neuromuscular junction microfluidic device. <i>IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT</i>, 2021</li> <li>• -F. Forconi, L. Apa, <b>M. Cosentino</b>, A. Musarò, E. Rizzuto and Z. Del Prete, "Effects of ROI positioning on the measurement of engineered muscle tissue contractility with an optical tracking method," <i>2022 IEEE International Symposium on Medical Measurements and Applications (MeMeA)</i>, 2022, pp. 1-5, doi: 10.1109/MeMeA54994.2022.9856554</li> </ul>
<p><b>Training course</b></p>	<ul style="list-style-type: none"> <li>• <b>Felasa B certification (Stem cell Institute, Ku Leuven April 2023)</b></li> <li>• Training course on the management of animal models at IRCCS - Fondazione Santa Lucia</li> <li>• XII Workshop on in vivo and in vitro models, Anguillara 6-7 February</li> <li>• -BIOLOGIA E GESTIONE DEGLI ANIMALI DA</li> </ul>

	<p>LABORATORIO, MODULI 3.1, 4, 5, 6.1, 7. DM 5 AGOSTO 2021 RODITORI E LAGOMORFI - Edizione Unica 2022 -Corso IZSLER</p> <ul style="list-style-type: none"> <li>• - LEGISLAZIONE NAZIONALE ED ETICA LIVELLO 1, MODULI 1 E 2, DM 5 AGOSTO 2021 - Edizione Unica 2022-Corso IZSLER</li> <li>• - ETICA E CONCEZIONE DEI PROGETTI, MODULI 9, 10, 11, DM 5 AGOSTO 2021 - Edizione Unica 2022_Corso IZSLER</li> <li>• Corso di Formazione permanente e continua ADVANCED MYOLOGY, Università degli Studi di Perugia (Ottobre 2019)</li> </ul>
<b>Conference participations</b>	<ul style="list-style-type: none"> <li>• XX Meeting IIM (Interuniversity Institute of Myology) held in Assisi, Perugia (PG), 12-15 October 2023</li> <li>• The Medicine and Technological Singularity 4<sup>th</sup> International Symposium on the Advances on Regenerative Medicine 14-15 September 2023, Capitol Hill, Rome.</li> <li>• 8th BeMM Symposium Biology and Molecular Medicine PhD School Roma 20 November 2017</li> <li>• 9th BeMM Symposium Biology and Molecular Medicine PhD School Roma 13 November 2018</li> <li>• XV Meeting IIM (Interuniversity Institute of Myology) held in Assisi, Perugia (PG), 11-14 October 2018</li> <li>• Micro-and Nanotechnology for Medicine Workshop: New frontiers and Applications. July 8-12 UCLA, Los Angeles, CA</li> <li>• XX BeMM Symposium Biology and Molecular Medicine PhD School Roma 22 November 2019</li> <li>• XVI Meeting IIM (Interuniversity Institute of Myology) held in Assisi, Perugia (PG), 17-20 October 2019</li> <li>• XII Workshop on in Vivo models, Anaguillara 6-7 February 2020</li> <li>• XVII Meeting IIM (Interuniversity Institute of Myology) held in Assisi, Perugia (PG), October 2020</li> <li>• Collegio dei Docenti di Istologia ed Embriologia, I Edizione del Premio Monesi Rizzoli, February 2021</li> <li>• Medicina Rigenerativa : progressi scientifici e nuove applicazioni. June 2022.</li> </ul>
<b>Teaching activity</b>	<ul style="list-style-type: none"> <li>• 2022: <b>Expert in regenerative medicine for muscle tissues. Project Festa della Scienza, Regione Puglia. I.I.S.S. "Don Tonino Bello" Tricase.</b></li> <li>• 2019-present: <b>Tissue Engineering, Faculty of Industrial Bioengineering at University "Campus Biomedico di Roma". Role of Tutor and teaching and examination activity.</b></li> <li>• 2018-present: <b>Tutor of Laboratory experiences, Faculty of Medicine Biotechnology, Sapienza University of Rome;</b></li> <li>• 2018-present: <b>Tutor of Laboratory experiences, Faculty of Medicine, Sapienza University of Rome</b></li> <li>• 2017-present: <b>Tutor of bachelor's degree students, Faculty of Clinical Engineering, Sapienza University of Rome</b></li> <li>• 2017-present: <b>Supervision and tutor of master's degree students, Sapienza University of Rome</b></li> </ul>
<b>Organizational skills and competences</b>	Capacity and skills to conduct a laboratory starting from the organization of consumables or necessary instruments to the management of human resources.

<b>Grants and Donor</b>	<ul style="list-style-type: none"><li>• <b>Winner of IBSA Foundation Fellowship 2021</b></li><li>• <b>Fondi Avvio alla Ricerca 2021</b></li><li>• <b>Winner of Premio Monesi Rizzoli</b> per la migliore ricerca scientifica in Istologia ed Embriologia medica, I edizione, anno 2021</li><li>• <b>Winner of joint research projects for the mobility abroad of doctoral students, Sapienza University of Rome</b></li><li>• <b>Fondi Avvio alla Ricerca 2019</b></li><li>• <b>Best Poster Awards XV Meeting IIM</b> (Interuniversity Institute of Myology) Assisi, Perugia (PG), 11-14 October 2018</li><li>• <b>Guest PhD at UniStem Tour in collaboration with Prof. Elena Cattaneo</b>, 8 May 2019</li><li>• <b>Member of IIM young committee (2018-Present)</b></li><li>• <b>Laureata eccellente aa 2016/2017</b>, Sapienza University of Rome</li></ul>
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