# Daniele D'Arrigo

Graduated in "Biotechnologies applied to regenerative and reparative medicine" programme of the Master Degree Course in Medical, Pharmaceutical and Veterinary Biotechnologies. I am a curious person, always ready to learn. My internship and work experience have offered me opportunities to develop in-depth knowledge of biological bases and techniques for regeneration and repair of differentiated tissue, cellular therapy and biomaterials. I am available to work in Italy and abroad and flexible to be transferred.





Date of birth: 20.03.1990 Nationality: Italian Studies applied for: **Biotechnology** Contact: daniele.darrigo@studenti.unipr.it

# WORK EXPERIENCE

### 01/02/2018 – Present RESEARCHER

Regenerative Medicne Laboratory, Regional Hospital of Lugano (EOC), Lugano (Switzerland).

*Main activities:* Evaluation of the immunomodulatory effect of mesenchymal stem cells in a microfluidic model of an osteoarthritic joint. Primary cells isolation; histology and immunostaining; molecular biology and cell culture techniques.

### <u>15/05/2017 - 31/01/2018</u> **RESEARCHER**

Cell and Tissue Engineering Laboratory, IRCCS Galeazzi Orthopaedic Institute, Milan (Italy).

Main activities: Tissue engineering-based therapies for bone and tendon repair using human primary cells and evaluation of their interactions with biomaterials; developing of bioreactors for tendon regenerative medicine; physical therapies for musculoskeletal disorders (PEMF); tendon and nerve decellularization; histology and histomorphometric analyses; planning, execution and evaluation of in-vivo experiments to produce tendinopathy models; molecular biology and cell culture techniques.

### <u>Mar. 2016 – Apr. 2017</u> INTERNSHIP

Department of Animal Health, Laboratory of Normal Anatomy, University of Parma, Parma (Italy).

Main activities: Study of the bone tissue osteogenesis and remodelling dynamics in various species; evaluation of the osteogenesis and osteointegration potential of bioactive new generation biomaterials; assessment of lung fibrosis and its treatment. Planning and execution of in-vivo experiments, morphostructural histology, dynamic and static histomoprhpometry, ultrastructure analysis by SEM and TEM, immunofluorescence and immunohistochemistry techniques.

<u>Sept. 2013 - July 2014</u>	INTERNSHIP Department of Medical Sciences, Laboratory of Medical Genetics, University of Turin, Turin (Italy).
Main activities:	Study of the molecular causes of genetic diseases, genetic screening for breast cancer susceptibility, mainly using PCR, real-time PCR, Western Blot, RT-PCR,

sequencing, cell culture and transfection techniques.

### **EDUCATION**

<u>Oct. 2014 – Apr. 2017</u>	Master degree in Medical, Pharmaceutical and Veterinary Biotechnologies, orientation in "Biotechnologies applied to regenerative and reparative medicine". University of Parma, ITALY.		
Final degree mark:	110/110 cum laude		
Thesis title:	Biomimetic functionalization of titanium implants improves the osteogenic activity in an in vivo study on rats.		
<u>Oct. 2010 – July 2014</u>	Bachelor degree in Biotechnologies University of Turin, ITALY.		
Final degree mark:	103/110		
Thesis title:	Circular Chromosome Conformation Capture (4c): a technique to identify regulator regions of gene expression in-cis and in-trans.		

## FOREIGN LANGUAGE SKILLS

Mother tongue:

Italian

Other Languages:

	Overall	Listening	Reading	Writing	Speaking	
	C1	B2	C2	C1	B2	
English	IELTS attained on 16/09/2017 Overall band: 7 (Listening: 6, Reading: 8.5, Writing: 7, Speaking: 6)					
French	A1	A1	B2	A1	A1	

## **PERSONAL SKILLS**

Communication skills:

- Good written and verbal communication skills and ability to evaluate performance gained while tutoring students.
- Flexibility and adaptability gained through my master degree and training period.
- Ability to work as a team member as well as independently, strong problemsolving and analytical skills gained through my training and work experience.
- Good presentation skills gained through my university experience.

<u>Computer skills:</u>			
	<ul> <li>Excellent command of Microsoft Office<sup>TM</sup> tools.</li> <li>Good command of image editing softwares (Adobe Photoshop and ImageJ) developed through my internship experiences.</li> </ul>		
	<ul> <li>Good command of of biostatistics, curve fitting and scientific graphing software (GraphPad Prism).</li> </ul>		
Organisational skills:	My internship experiences allowed me to gain the ability to work independently and to meet deadlines and objectives.		
Driving license:	В		

### **ADDITIONAL INFORMATIONS**

### Publications:

- D'Arrigo D, Bottagisio M, Lopa S, Moretti M, Lovati AB (2017) Tissue engineering approaches to develop decellularized tendon matrices functionalized with progenitor cells cultured under undifferentiated and tenogenic conditions. AIMS Bioengineering, 2017, 4(4): 431-445. doi: 10.3934/bioeng.2017.4.431.
- Ravanetti F, Gazza F, D'Arrigo D, Graiani G, Zamuner A, Zedda M, Manfredi E, Dettin M and Cacchioli A. Enhancement of peri-implant bone osteogenic activity induced by a peptidomimetic functionalization of titanium. Annals of Anatomy. [SUBMITTED]

### Congress proceedings

Perucca Orfei C, Lovati AB, Viganò M, Bottagisio M, D'Arrigo D, Setti S, Sansone V, de Girolamo L (2018) Effect of pulsed electromagnetic fields (PEMFs) in different phases of rat Achilles tendinopathy - 18th ESSKA Congress, Glasgow, UK, April 2018 [Oral presentation].

### Seminaries:

 2nd Workshop "Advanced microscopy techniques for research and clinic" 07/06/2013, Didactic Pole of the Medicine and Surgery School, AOU San Luigi Gonzaga – Regione Gonzole 10, Orbassano (TO). Organisers: Prof. Saverio Retta, Dr.ssa Eliana Trapani – Department of Clinique and Biological Sciences, University of Turin; Dott. Alessandro Di Nicola – Carl Zeiss Italy, Microscopy Division.

### Courses:

Certificate of the course: "General formation to the prevention and safety on the work" according to the D.Lgs.81/2008 and to the agreement State-Regions of 21/12/2011 and 25/07/2012. Consisting in three modules: general formation (4 hours), specific formation low risk (4 hours) and specific formation average risk (4 hours).