# Cv Prof. Cesare Gargioli

Family name, First name: Gargioli, Cesare

Date of birth: 12 November 1972

Nationality: Italian

#### EDUCATION

2005 PhD in Developmental Biology,

Centre of Regenerative Medicine, Department of Biology and Biochemistry, University of Bath, UK.

2000 Bachelor in Biology (Summa cum laude).

Department of Biology, University of Rome Tor Vergata, IT.

### POSITION

2014 – present Fixed Term Researcher in Muscle Stem Cells and Skeletal Muscle Tissue Engineering.

Department of Biology, University of Rome Tor Vergata, IT.

#### • FELLOWSHIPS AND AWARDS

2014 Fixed term Researcher competition Rome University Tor Vergata, IT.

2012 Chancellor's Fellowship Edinburgh University, UK.

2005 – 2009 Research Competitive University of Rome La Sapienza, IT.

2004 2<sup>nd</sup> Development/Welcome Picture Prize

2001 – 2005 Welcome Trust Prize Studentship, Bath, UK.

2000 – 2001 Rome University Tor Vergata/IRBM Young Biologist Studentship, IT.

## SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2010 - 2013 One post-doc

Institute of Cell Biology and Tissue Engineering, S. Raffaele Biomedical Park Foundation Rome, IT.

2009 – 2012 One PhD Dgree in Biochemistry and Molecular Biology

Department of Experimental Medicine and Surgery, University of Rome Tor Vergat, IT.

2008 – 2015 Two PhD Degrees in Cellular and Molecular Biology

Department of Biology, University of Rome Tor Vergat, IT.

2007 – 2014 Five Master Degrees in Cellular and Molecular Biology

Department of Biology, University of Rome Tor Vergat, IT.

2011 – 2012 One Master Degree in Material Science and technology

Department of Chemical Science and Technologies, University of Rome Tor Vergat, IT.

# • COMMISSIONS OF TRUST

2012 – present Reviewer for international journal:

Stem Cells, Current Gene Therapy, Frontiers, Open FEBS, Regenerative Medicine, Drug Delivery, ActaBiomaterialia, Scientific Report, Biofabrication

and Oncotarget

2012 – present Reviewer for international funding agency:

AFM, FWO, Swiss National Science Foundation, French ANR and University

KU Leuven.

#### SELECTED PUBLICATION

Gargioli C, Coletta M, De Grandis F, Cannata SM, and Cossu G. PIGF-MMP9 expressing cells restore microcirculation and efficacy of cell therapy in old dystrophic muscle. Nat Med. 2008b Sep 14(9):97

Rizzi R, Bearzi C, Arianna M, Bernardini S, Cannata S and Gargioli C. Tissue engineering for skeletal muscle regeneration. MLTJ 2012; 2(3): 230-34

Fuoco C, Biondo A, Salvatori ML, Shapira-Schweitzer K, Santoleri S, Bernardini S, Cannata S, Seliktar D, Cossu G and Gargioli C. Injectable PEG-fibrinogen improves survival and differentiation of transplanted myogenic progenitors in acute and chronic skeletal muscle degeneration. Skelet Muscle 2012; 26;2(1):24. [Epub ahead of print]

Bearzi C, Gargioli C, Baci D, Fortunato O, Shapira-Schweitzer K, Kossover O, Latronico MV, Seliktar D, Condorelli G, Rizzi R. PIGF-MMP9-engineered iPS cells supported on a PEG-fibrinogen hydrogel scaffold possess an enhanced capacity to repair damaged myocardium. Cell Death Dis. 2014 Feb 13;5:e1053. doi: 10.1038/cddis.2014.12.

Fuoco C, Sangalli E, Vono R, Testa S, Sacchetti B, Bernardini S, Madeddu P, Cesareni G, Seliktar D, Rizzi R, Bearzi C, Cannata S, Spinetti G, Gargioli C. 3D hydrogel environment rejuvenates aged pericytes for skeletal muscle tissue engineering. Front Physiol. 2014 May 30;5:203.

Fuoco C, Biondo A, Longa E, Mascaro A, Shapira-Schweitzer K, Salvatori ML, Santoleri S, Testa S, Bernardini S, Bottinelli R, Cannata S, Seliktar D, Cossu G, Gargioli C. *In vivo* generation of an entire, functional skeletal muscle. EMBO Mol Med. 2015 Feb 25. pii: e201404062 [Epub ahead of print]

Spada F, Fuoco C, Pirrò S, Paoluzi S, Castagnoli L, Gargioli C, Cesareni G N Biotechnol. Characterization by mass cytometry of different methods for the preparation of muscle mononuclear cells. 2016 Jan 7. pii: S1871-6784(15)00275-7. doi: 10.1016/j.nbt.2015.12.007. [Epub ahead of print]

Vono R, Fuoco C, Testa S, Pirrò S, Maselli D, Mc Collough DF, Sangalli E, Pintus G, Giordo R, Finzi G, Sessa F, Cardani R, Gotti A, Losa S, Cesareni G, Rizzi R, Bearzi C, Cannata S, Spinetti G, Gargioli C<sup>#</sup>, Madeddu P<sup>#</sup>. Activation of the Pro-Oxidant PKCβII-p66Shc Signaling Pathway Contributes to Pericyte Dysfunction in Skeletal Muscles of Diabetic Patients with Critical Limb Ischemia. Diabetes. 2016 Sep 6. pii: db160248. [Epub ahead of print] (#Cocorresponding authors)

Testa S, Costantini M, Bernardini S, Trombetta M, Seliktar D, Cannata S, Rainer A and Gargioli C. Combination of biochemical and mechanical cues for tendon tissue engineering. J Cell Mol Med. 2017 May 4. [Epub ahead of print]

Costantini M, Testa S, Fornetti E, Barbetta A, Trombetta M, Cannata S, Gargioli C<sup>#</sup> and Rainer A<sup>#</sup>. Engineering Muscle Networks in 3DGelatin Methacryloyl Hydrogels: Influence of Mechanical Stiffnessand Geometrical Confinement. Front Bioeng Biotechnol. 2017 Apr 7;5:22. (#Co-corresponding authors)

Costantini M, Testa S, Mozetic P, Barbetta A, Fornaretti E, Tamiro F, Jaroszewicz J, Święszkowski W, Trombetta M, Seliktar D, Garstecki P, Cesareni G, Cannata S, Rainer A and Gargioli C. Microfluidically enhanced 3D bioprinting of highly aligned hydrogel structures for *in vitro* and *in vivo* fabrication of artificial muscle tissue. Biomaterials. 2017 Jul;131:98-110.

Gargioli C, Turturici G, Barreca MM, Spinello W, Fuoco C, Testa S, Feo S, Cannata SM, Cossu G, Sconzo G, Geraci F. Oxidative stress preconditioning of mouse perivascular myogenic progenitors selects a subpopulation of cells with a distinct survival advantage in vitro and in vivo. Cell Death Dis. 2018 Jan 3;9(1):1. doi: 10.1038/s41419-017-0012-9.