

Surname: Colombini

Name: Alessandra

E-mail: alessandra.colombini@grupposandonato.it

Scopus Author ID: 23391821100

ORCID: 0000-0002-1800-3424

Researcher ID: I-2441-2012

Education

March 2012: Fellowship at Viscogliosi Molecular Genetics Laboratory of Musculoskeletal Disorders, CHU Sainte Justine, Montreal, Canada, held by Prof. Alain Moreau; project title: “Diagnostic and prognostic biochemical markers for the Adolescent Idiopathic Scoliosis (AIS)”.

2006-2011: Specialist in Clinical Biochemistry (60/60 cum laude), Faculty of Medicine, University of Milan, Italy; resident at Laboratory of Biochemistry and Molecular biology, held by Prof. Giuseppe Banfi, at IRCCS Istituto Ortopedico Galeazzi, Milan, Italy; thesis title: “Creatinine, cystatin C and equations for the GFR estimation in professional athletes: potential, limits and correlation with the activity of creatine kinase”.

2004- 2006: Master’s Degree in Medical Biotechnology and Molecular Medicine (110/110 cum laude), Department of Medical Chemistry, Biochemistry and Biotechnology, Faculty of Medicine, University of Milan, Italy; thesis title: “Modifications induced by reversine treatment at the metabolic, cellular and gene levels in primary cultures and in murine myoblast lines”. Stage in the Laboratory of Biochemistry, held by Prof. Guido Tettamanti and Prof. Bruno Venerando.

2001-2004: Bachelor’s Degree in Medical Biotechnology (105/110), Department of Medical Chemistry, Biochemistry and Biotechnology, Faculty of Medicine, University of Milan, Italy; thesis title: “Effects of reversine in primary cultures of murine fibroblasts”. Stage in the Laboratory of Biochemistry, held by Prof. Guido Tettamanti and Prof. Bruno Venerando.

Awards

2013: Best poster prize at the 3° National Congress on Gender Medicine, Padova, Italy; poster title: “Gender-related association between FokI polymorphism in the gene encoding for vitamin D receptor (VDR) and spine disorders”. Authors: Colombini A., Banfi G., Brayda-Bruno M., Lombardi G., Croiset S., Vrech V., Maione V., Cauci S.

Work experiences

2015-present: Researcher at Orthopaedics Biotechnology Lab, held by Dr. Laura de Girolamo, at IRCCS Istituto Ortopedico Galeazzi, Milan, Italy.

2013-2017: Adjunct professor, University of Milan, Italy; teacher in the course of clinical biochemistry and in elective courses of the School of Specialization in Clinical Biochemistry; co-supervisor of two thesis.

2007-2014: Researcher at Laboratory of Biochemistry and Molecular biology, held by Prof. Giuseppe Banfi, at IRCCS Istituto Ortopedico Galeazzi, Milan, Italy.

Lab/job-related skills

Isolation and culture, especially in chondro-inductive conditions, of human chondrocytes from intervertebral disc and articular cartilage and human mesenchymal stem/stromal cells from bone marrow, adipose tissue and Hoffa's fat pad. She worked also with human peripheral blood mononuclear cells (PBMCs), fibroblasts, tendon cells, CaCo2, HT29 and SAOS2 cells. She conducted proliferation and cytotoxicity assays, nucleic acids (DNA, RNA) and protein extraction from cells, protein (Bradford and Lowry assays) and nucleic acids (Ribogreen) quantification, Reverse Transcription-PCR, Real Time PCR (Sybr Green and TaqMan® probes), SNPs detection through PCR-RFLP assay or TaqMan® SNPs assays, siRNA gene silencing, Western Blot, histology, immunofluorescence, immunohistochemistry, agarose and polyacrylamide gel electrophoresis, enzymatic assays, FACS analysis and ELISA assays. She acquired competences in clinical biochemistry concerning renal function, bone, metabolic and blood markers evaluation, especially in sportsmen, with particular attention to pre-analytical aspects of sample handling. She is very skilled with Endnote, Haploview, Chaplin and Graphpad programs.