

PERSONAL INFORMATION

First name: **Silvia**
Surname: **Marchet**

 Fondazione IRCCS Istituto Neurologico Carlo Besta
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WORK EXPERIENCE

From 31/12/2019 until today

Individual fixed-term and full-time employment contract.

IRCCS Foundation - Neurological Institute "C. Besta", Division of Medical Genetics-Neurogenetics, Milan (Italy).

Professional profile: Health researcher (Biologist)

03/07/2017- 30/12/2019

Fixed-term contract (co.co.co).

Project title: "Mitochondrial disorders from a world-wide registry to medical genomics, toward molecular mechanisms and new therapies".

IRCCS Foundation - Neurological Institute "C. Besta", Division of Molecular Neurogenetic, Milan (Italy)

Professional profile: Biologist

01/10/2014 – 31/05/2017

Senior fellowships.

Project title: "Animal models characterization of mitochondrial disease".

IRCCS Foundation - Neurological Institute "C. Besta", Division of Molecular Neurogenetic, Milan (Italy).

Professional profile: Research fellow (Biologist)

01/10/2013 – 30/09/2014

Senior fellowship.

Project title: "Definition and characterization of disease genes in mitochondrial disorders".

IRCCS Foundation - Neurological Institute "C. Besta", Division of Molecular Neurogenetic, Milan (Italy).

Professional profile: Research fellow (Biologist)

01/10/2012 – 30/09/13

Junior fellowship.

Project title: "Definition and characterization of pathological aspects in animal models of mitochondrial disease".

IRCCS Foundation - Neurological Institute "C. Besta", Division of Molecular Neurogenetic, Milan (Italy).

Professional profile: Research fellow (Biologist)

16/05/2012- 30/09/12

Fixed-term contract (co.co.co).

Project title: "Definition and characterization of pathological aspects in animal models of mitochondrial disease".

IRCCS Foundation - Neurological Institute "C. Besta", Division of Molecular Neurogenetic, Milan (Italy).

Professional profile: Biologist

01/11/2008 -31/10/2011

Ministerial fellowship associated to Pharmacological Sciences PhD (XXIV cycle)

Project title: "Role of glutamatergic and nitrenergic transmissions in the neuronal enteric function alterations during an intestinal ischemic injury".

University of Pavia (Italy), Department of Internal Medicine and Medical Therapy.

Research activity was carried out at laboratories of Clinical and Sperimental Medicine Department, University of Insubria – Varese (Italy).

Professional profile: PhD student (Biologist)

- 01/03/2008-31/10/2008 **Research Bank check.**
Project title: "Phenotyping and molecular characterization of colorectal carcinoma"
Institute of Pathologic Anatomy and Histology - University of Insubria –Circolo-Fondazione Macchi Hospital - Varese (Italy).
Professional profile: Research fellow (Biologist)
- 28/02/2006-28/02/2008 **Fellowships.**
Projects title: "Immunohistochemical expression and abnormal MGMT gene hypermethylation in diffuse large B-cell lymphoma and in colorectal carcinoma"
and "Correlation between EGFR genic copy number and the treatment anti-EGFR reaction in colorectal carcinoma"
Institute of Pathologic Anatomy and Histology - University of Insubria – Circolo-Fondazione Macchi Hospital– Varese (Italy).
Professional profile: Research fellow (Biologist)
- 23/10/2003-28/02/2006 **Open-ended contract** at "Iperottica Matteucci s.r.l. - Corner Optique – Randazzo group" – Varese (Italy).
Professional profile: Shop assistant before and then saleswoman in charge of the store.
- June 2002- September 2003 Training for **Degree Thesis Student in Biological Sciences**
Graduation thesis title: "Localization of inhibins and activins in normal endocrine cells and in relative endocrine tumors of the gastroenteropancreatic system".
Institute of Pathologic Anatomy and Histology - University of Insubria –Circolo-Fondazione Macchi Hospital – Varese (Italy).
Professional profile: Graduate student in Biological Sciences.

EDUCATION AND TRAINING

- 06/09/2012 **Registration to O.N.B.** (National Biologist Association), Section A – association number: AA_066991.
- 08/02/2012 **Doctoral degree in Pharmacological Sciences**
University of Pavia (Italy), Faculty of Medicine and Surgery, Department of Internal Medicine and Medical Therapy.
- November 2003 **State exam for the qualification to practice as a Biologist**
University of Insubria – Varese (Italy)
- 06/10/2003 - Academic Year 2002-2003 **Degree in Biological Sciences**
University of Milan (Italy), Faculty of Mathematical, Physical and Natural Sciences, Course in Biological Sciences.
- 1983-1988 **Classical studies high school diploma**
State Lycaem Gymnasium "E. Cairoli" – Varese (Italy)

TEACHING ACTIVITY

- 2009-2011 Collaboration in teaching of Pharmacology (classroom lessons, support to examinations) in Course degree of Nursing, Obstetric, Dental Hygiene and Biomedical laboratory techniques - Medicine and Surgery Department – University of Insubria - Varese (Italy)

TECHNICAL SKILLS

- Data management: (National and International Registry of Mitochondrial Diseases; laboratory files)
- Partecipation in clinical trials (MI-RER Mitocon Registry, GENOMIT project; SPIM 301, PMM, REN001-201, MitoARS, PHE-MI)
- functional tests: six-minute walk test (6MWT) and 12-minute walk test (12MWT), triple timed up and go (3TUG), 5 times sit to stand test (5XSST), timed water swallowing test
- Histological staining (Hematoxylin and Eosin, Gomori Trichrome), histochemical staining (Oil red O, PAS and Diastase, Lillie's ferric ferrocyanide, Picrosirius red), histoenzymatic reactions (COX, SDH, Double staining COX/SDH, NADH, Miofibrillar ATPase pH 9.5, 4.6, 4.3, Acid phosphatase)

- Immunohistochemistry: Direct and indirect method of antigen localization, Signal amplification method (e.g.: ABC complex, Envision.), Antigenic co-localization by fluorescent antibodies, TUNEL assay- In situ hybridization (ISH): DIG-labelled RNA-riboprobe ISH; Cross Sectional Area analysis in muscle fibers.
- Whole mounts:
- Western Blot.
- HPLC-FD.
- Spectrophotometric analysis: Bradford protein assay, Lowry method protein assay, Griess reaction for nitrite and nitrate determination, Mieloperoxidase quantification, Biochemical quantification of Citrate synthase and Respiratory Chain Complexes, blood and cells lactate.
- Use of optical, fluorescence, stereo- and confocal microscope.
- Use of the main laboratory tools.
- Laser Microdissector
- Cryostat.
- Cellular cultures (fibroblasts cell lines, cybrids, enteric neurons).
- ELISA.
- PCR, Real Time PCR.
- DNA Sequencing.
- RFLP (Restriction Fragment Length Polymorphism).
- Sea Horse.
- Rat experiments in vivo: intestinal transit measurement, tracheotomy, clamp of upper mesenteric artery (ischemia) and reperfusion, neurons extraction from myenteric plexus.
- Use of Microsoft office (Word, Excel, Power Point), ImageJ, GraphPad Prism 4, Adobe Photoshop, Outlook. Surf the Internet.
- Analysis data
- Scientific paper writing