

# Europass Curriculum Vitae

# **Personal information**

First name(s) / Surname(s)



Francesca Sironi

Nationality Italian

|                             | From 20th April 2015 to now  |
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|                             | HCPC – Health and Care Professions Council – UK Border Registration                                  |
| Occupation or position held | Clinical scientist _ Registration Number CS19176   |
| Dates                       | From 29th October 2014 to now  |
|                             | SIGU – ITALIAN SOCIETY OF HUMAN GENETICS   |
| Occupation or position held | Clinical Laboratory Geneticist   |
| Dates                       | From 2009 to now   |
|                             | ONB – Italian National Biologist Order   |
| Occupation or position held | Biologist: licensed to practise as Biologist in public hospital (registration number: AA_062065).    |
| Dates                       | From 15th April 2015 to April 2025   |
|                             | EBMG - European Board of Medical Genetics - Clinical Laboratory Geneticist Professional Branch (CLG) |
| Occupation or position held | Clinical Laboratory Geneticist   |



Francesca Sironi



# **PERSONAL SKILLS**

Mother tongue(s)
Other language(s)
European level (\*)

Italian English

Actually

IELT certification: overall score 6.5

2016

FIRST qualification - British Council certification (B2)

1998

PET - University of Cambridge certificate.

(\*) Common European Framework of Reference for Languages - checked by British Institute

### Communication skills

Good communication skills acquired through my experience working during the work at the medical genetics laboratory (writing international scientific papers, posters and projects) and thanks to my laboratory teaching activities in secondary technical schools.

# Organisational / managerial skills

Good organisational skills gained through my experience in hospital laboratories and teaching practical lessons.

- Ensure service is delivered under the sector's policies, procedures, and practices.
- CORELAB Biochemistry and Haematology
- To Know which tasks to prioritise
- Organization of the DNA samples extraction and collection of the "Human Genetic Bank of patients affected by Parkinson disease and parkinsonisms" Italian Telethon Project N. GTF03009.
- Coordination of few technician activities inside the IRCCS molecular genetics laboratory lab.
- Organization and involvement of students in laboratory practical work.
- University first degree tutor student stages supervisor, promoting student reflection and discussion.
- Internal laboratory SOPs reviewer
- Filling in and maintaining patient's records
- Maintain instrument records

## Job-related skills

- Molecular diagnostic testing
- Carrier testing
- Genetic test reporting
- Prenatal testing

## Computer skills

All Office applications, email and internet: acquired during my research laboratory work and teaching. NCBI search and related web biotechnology sources.



### **WORK EXPERIENCE**

**Dates** From October 1ST 2024

Occupation or position held **Biologist** 

Name and address of the employer

UOC Laboratorio Analisi, Ospedale di Desio, ASST-Brianza via Mazzini 1, 20832, Desio (MB)

Main activities and responsibilities

CORELAB Biochemistry, urine analysis and haematology

**Dates** From August 2023 to 30th September 2024

Occupation or position held Biologist, permanent contract.

Azienda Socio Sanitaria Territoriale (ASST) Valtellina ed Alto Lario Name and address of the

Presidio Ospedaliero di Sondrio employer

Main activities and responsibilities

CORELAB Biochemistry and Haematology, Toxicology Laboratory

**Dates** 26 June to 4 July 2023

Occupation or position held Biologist, permanent contract.

Genomics and Molecular Medicine Service Name and address of the

City Hospital campus employer Hucknall Road

Nottingham NG5 1P

Main activities and Cystic fibrosis screening responsibilities

> **Dates** From April 2021 to August 2021

Occupation or position held Biologist, five months fixed contract.

Name and address of the Santi Paolo e Carlo Hospitals, via di Rudinì - Milano.

employer Main activities and Urgent Biochemistry Laboratory responsibilities

> **Dates** From March 2019 to September 2022

Occupation or position held Four years of experience as University contract teacher – Molecular biology I course.

Biology Faculty - Department of Science and Innovation Technology (DISIT) University of Piemonte Name and address of the

Orientale "Amedeo Avogadro" - Vercelli.

employer Main activities and University lessons

responsibilities

**Dates** From October 2015 to 31st December 2018

Occupation or position held Human Molecular Biotechnology Geneticist – part-time activity

Labospace Srl Via Ranzato, 12 - 20128 Milano - http://www.labospace.com/ Name and address of the

LaboSpace Ltd Registered In England 8436463 Sander Gate, Churchfields -Stonesfield, Oxfordshire OX29 employer 8PP

Nutrigenetic area such as: Coeliac disease, Lactose intolerance, Bitter test and so on. Main activities and

responsibilities Mutation analysis by genotyping and RealTime SNPs detection.

> **Dates** August 2018

Occupation or position held Biologist – one month internal full-time activity as support at the Biochemistry Laboratory Department.

Name and address of the Lacor Hospital, Fondazione Corti, Gulu, Uganda. www.fondazionecorti.it. employer



Main activities and responsibilities

To improve the internal performance of the laboratory:to set a new reception desk facility; to follow up the turnaround times (TAT); to clarify the interface within the lab and the other internal departments; to organize prioritization of the execution of urgencies.

## **Dates**

## August 2017

Occupation or position held

Biologist – one month voluntary full-time activity at the Biochemistry Laboratory Department.

Name and address of the employer
Main activities and

Lacor Hospital, Fondazione Corti, Gulu, Uganda. www.fondazionecorti.it.

Internal laboratory SOPs reviewer

# **Dates**

responsibilities

## From August 2011 to August 2012

Occupation or position held

**Biologist** 

Name and address of the employer

Immunohematology Laboratory – affiliated to the American Association of Blood Banks (AABB) - Transfusion Medicine Centre of IRCCS Foundation "Ospedale Maggiore Policlinico, Mangiagalli e Regina Elena", Milan, Italy.

Main activities and responsibilities FIRST PROJECT

Involved in the Regional Rare Hemocomponent Blood Bank (AABB) activities:

- extensive DNA extraction by QIAcube® (Qiagen Inc., Basel, Switzerland);
- extensive micro-array genomic DNA genotyping of blood donors of A and O type of ABO group and for platelet antigens;
- PCR and genomic DNA sequencing of unclear blood group SSP-PCR identified genotypes;
- immunohematology standar test tube.

# **SECOND PROJECT**

Performed a validation analysis of *RhD* gene through real-time PCR using free fetal circulating DNA (ffcDNA) for:

- RhD fetus status detection from RhD negative pregnant maternal plasma through real-time PCR.
- Using the presence of Y chromosome in maternal blood to check for the presence of sex linked deseases.

Collaborated with Peter Martin, NHS Blood & Transplant, Blood Group Genotyping, 500 North Bristol Park, Filton Bristol UK.

Type of business or sector

- Molecular biology techniques: DNA extraction by high-throughput Qiagen System, cffDNA extraction by Geoff Daniel Bristol-NHS method (UK), blood and platelete genotyping by micro-array high-throughput system BeadChipTM (from BioArray Solutions), standard PCR-SSP, standard PCR, Real-time PCR of cffDNA. DNA sequencing.
- Immunohematology: standard blood group antigene test tube.

### **Dates**

# From 2006 to 2011

Occupation or position held

Human Molecular Biotechnology Geneticist

Name and address of the employer

Parkinson Institute, Istituti Clinici di Perfezionamento, Via Bignami 1, 20126 Milan, Italy. Tel:

Research grants.

Telethon Project GTF03009 (Human Genetic Bank of patients affected by Parkinson disease and parkinsonisms (http://www.parkinson.it/dnabank.htm).

Fondazione Grigioni per il Morbo di Parkinson (Milano), Italy.

Main activities and responsibilities

- Spearheaded DNA Biobank collection: storage and use of biological resources for the biomedical community with open access to researchers around the world.
- Genotyped different Parkinson related genes in a selected number of cases: DJ1, Parkin, Pink1, SNCA, Park8, GIGYF2.

Type of business or sector

Molecular biology techniques: standard genomic DNA extraction, Genomic DNA extraction from saliva using Oragene<sup>TM</sup> method (DNA Genotek), DNA quantification (Nanodrop and UV), standard PCR, first level mutational screening by DHPLC (WAVE®, Transgenomic), esonuclease mutation detection method (Surveyor<sup>TM</sup>), DNA sequencing, Real-time PCR of *Parkin PRKN-gene*. MLPA detection method for Parkinson related genes.

**Dates** 

June 2006 - December 2006



Occupation or position held

Visiting biotechnology researcher.

Name and address of the employer

Erasmus Medical Centre Rotterdam, Department of Clinical Genetics the Netherlands (NL)

Research grants.

Fondazione Grigioni per il Morbo di Parkinson (Milano), Italy. www.parkinson.it

Main activities and responsibilities
Type of business or sector

Performed large-scale DNA genotyping of DJ-1 gene in Parkinson patients.

Genomic genotyping of Parkinson patients.

**Dates** 

## From 2001 to 2005

Occupation or position held

Human Molecular biotechnology, experiences in mutation analysis genotyping of different genetic disease genes - Hospital and Telethon scholarships

Name and address of the employer

Medical Genetics Laboratory, IRCCS Foundation "Ospedale Maggiore Policlinico, Mangiagalli e Regina Elena", via Commenda 12, 20127 Milan

Main activities and responsibilities

Genotyped different genes with in silico mutation identification:

- Bartter type I (SLC12A1)
- Bartter type II (KCNJ1)
- Connexin26 (GJB2 gene)
- Connexin30 (GJB6 gene)

Type of business or sector

- Molecular biology techniques: standard DNA extraction, standard PCR, first level mutational screening by DHPLC (WAVE®, Transgenomic) and SSCP technique, genomic DNA sequencing, DNA quantification (Nanodrop and UV).
- Prenatal diagnosis of few Connexin cases.

# From 2000 to 2001

# **Dates**

Occupation or position held

Laboratory Assistant (Erasmus experience)

Name and address of the employer

Plant Cell and Molecular Biology, University of Glasgow College of Medical, Veterinary & Life Sciences Glasgow, G12 8QQ, Scotland. email: <a href="mailto:Gareth.Jenkins@glasgow.ac.uk">Gareth.Jenkins@glasgow.ac.uk</a>

Department of Agricultural and Environmental Sciences - Production, Landscape, Agroenergy, via Celoria 2, Milan, Italy. Email: <a href="mailto:gabriella.consonni@unimi.i-thttp://eng.disaa.unimi.it/ecm/home">gabriella.consonni@unimi.i-thttp://eng.disaa.unimi.it/ecm/home</a>

Main activities and responsibilities

- Performed plant cell cultures and Agrobacterium vegetable tissue transformation.
- Transformed Arabodopsis cell cultures by particle gun bombardment for tissue.

Type of business or sector

Plant transformation.

# **Dates**

# From 2000 to present

Occupation or position held

EDUCATION EXPERIENCE - Italian Public Education.

Working as laboratory teacher. Topics: chemistry, biology and microbiology.

Main activities and responsibilities

- Running secondary school laboratory lessons for future chemical-analyst technicians.
- Teaching theoretical and methodological information.
- Topics: biology, microbiology, chemistry, organic chemistry and analytical chemistry.

Level in national

Classification

110/110



# **EDUCATION AND TRAINING**

#### From 2011 to 2012

Bachelor in Molecular Biology, University of Milano Bicocca, Italy, discussing the thesis: "Large-scale genotyping by high-throughput method for blood donor red blood cell and platelet antigens: from phenotype to genotype and vice versa".

Department of Biotechnology and Biosciences; University of Milano-Bicocca (<a href="http://www.unimib.it/go/102/Home/English">http://www.unimib.it/go/102/Home/English</a>) Email: <a href="mailto:antonella.ronchi@unimib.it">antonella.ronchi@unimib.it</a>

- Free fetal circulating DNA (ffcDNA) extraction and RhD gene and Y chromosome Real-time PCR detection.
- Micro-arrays high-throughput Blood group detection system BeadChipTM, standard PCR-SSP.
- Immunohaematology: standard blood group antigenes test tube.

#### From 2003 to 2007

Diploma of Postgraduate Specialisation School in Technical Medical Geneticist (four year course), University of Milan, Italy, discussing the thesis: "Parkinson disease: Classification molecular analysis of Mendelian forms."

Molecular biology techniques: DNA extraction, PCR, DHPLC, SSCP, Real-time PCR, genomic sequencing.

# UK Erasmus work experience from July to September 2000

Laboratory Erasmus working experience - Glasgow University

Plant Cell and Molecular Biology, University of Glasgow College of Medical, Veterinary & Life Sciences Glasgow, G12 8QQ, Scotland.

Arabidopsis cell cultures and particle gun bombardment for tissue transformation.

## From 1995 to 2000

Bachelor in Plant biotechnology (five year course). University of Milan, Italy, discussing the thesis: "Optimization of genetic transformation of Cyclamen (Cyclamen persicum Mill.)

Istituto Sperimentale per le Piante Ornamentali di San Remo, Corso degli Inglesi n°508 SanRemo (IM), Italy.

Istituto di Genetica Agraria di Milano, via Celoria 2, Milan, Italy.

Plant cell cultures and Agrobacterium vegetable tissue transformation.



## Publications References

- DJ.1 analysis in a large cohort of Italian early onset Parkinson Disease. Sironi F, Primignani P, Ricca S, Tunesi S, Zini M, Tesei S, Cilia R, Pezzoli G, Seia M, Goldwurm S. Neuroscience Letters 557 (2013) 165–170.
- 2) SNCA and MAPT genes: Independent and joint effects in Parkinson disease in the Italian population. Luca Trotta, Ilaria Guella, Giulia Soldà, Francesca Sironi, Silvana Tesei, Margherita Canesi, Gianni Pezzoli, Stefano Goldwurm, Stefano Duga, Rosanna Asselta. Parkinsonism and Related Disorders 18 (2012) 257-262
- Screening of LRRK2 gene mutations in patients with Parkinson's disease in Ghana. R Cilia, F Sironi, A Akpalu, M Cham, FS Sarfo, T Brambilla, A Bonetti, M Amboni, S. Goldwurm, G Pezzoli. J Neurol. 1/08/2011 DOI 10.1007/s00415-011-6210-y
- 4) <u>Kin-cohort analysis of LRRK2-G2019S penetrance in Parkinson's disease.</u> Goldwurm S, Tunesi S, Tesei S, Zini M, **Sironi** F, Primignani P, Magnani C, Pezzoli G. Mov Disord. 2011 Jun 28. doi: 10.1002/mds.23807.
- 5) Mutational screening and zebrafish functional analysis of GIGYF2 as a Parkinson-disease gene. Guella I, Pistocchi A, Asselta R, Rimoldi V, Ghilardi A, Sironi F, Trotta L, Primignani P, Zini M, Zecchinelli A, Coviello D, Pezzoli G, Del Giacco L, Duga S, Goldwurm S. Neurobiol Aging. 32 (2010).
- 6) Comment on "compound heterozygosity in DJ-1 gene non-coding portion related to Parkinsonism". Sironi F, Primignani P, Goldwurm S. Parkinsonism Relat Disord. 2010 Jun;16(5):360-1; author reply 362-3. Epub 2010 Mar 12.
- 7) Long-term follow-up of patients with Bartter syndrome type I and II. Puricelli E, Bettinelli A, Borsa N, Sironi F, Mattiello C, Tammaro F, Tedeschi S, Bianchetti MG; Italian Collaborative Group for Bartter Syndrome.Nephrol Dial Transplant. 2010 Sep;25(9):2976-81.
- 8) Alpha-Synuclein multiplication analysis in Italian familial Parkinson disease. Sironi F, Trotta L, Antonini A, Zini M, Ciccone R, Della Mina E, Meucci N, Sacilotto G, Primignani P, Brambilla T, Coviello DA, Pezzoli G, Goldwurm S. Parkinsonism Relat Disord. 2010 Mar;16(3):228-31.
- Analysis of the GJB2 and GJB6 Genes in Italian Patients with Nonsyndromic Hearing Loss:
  Frequencies, Novel Mutations, Genotypes, and Degree of Hearing Loss. P Primignani, L
  Trotta, P Castorina, F Lalatta, F Sironi, C Radaelli, D Degiorgio, C Curcio, M Travi, U Ambrosetti,
  Cesarani, L Garavelli, P Formigoni, D Milani, Murri, D Cuda, DA Coviello Genetic Testing and
  Molecular Biomarkers: Vol 13, Number 2, 2009.
- Phenotipe, genotype and worldwide genetic penetrance of LRKK2-associated Parkinson's disease: a case-control study. D G Healy, M Falchi, S S O'Sullivan, V Bonifati, A Durr, S Bressman, Al Brice, J Aasly, C P Zabetian, S Goldwurm, J J Ferreira, E Tolosa, D M Kay, C Klein, D R Williams, C Marras, A E Lang, Z K Wszolek, J Berciano, A H V Schapira, T Lynch, K P Bhatia, T Gasser, A J Lees, N W Wood, Other members of the International LRRK2 Consortium: F Sironi et al. Lancet Neural 2008; 7: 583-90.
- 11) HFE gene mutations in a population of Italian Parkinson's disease patients. G Biasiotto, S Goldwurm, D Finazzi, S Tunesi, A Zecchinelli, F Sironi, G Pezzoli, P Arosio. Parkinsonism and Related Disorder 14(2008) 426-430.
- 12) Parkin analysis in early onset Parkinson's disease F Sironi, P Primignani, M Zini, S Tunesi, C Ruffmann, S Ricca, T Brambilla, AAntonini, S Tesei, M Canesi, A Zecchinelli, C Mariania, N Meucci, G Sacilotto, R Cilia, IU. Isaias, B Garavaglia, D Ghezzi, M Travi, A Decarli, DA. Coviellob, G Pezzolia, S Goldwurm. Parkinsonism and Related Disorders 14 (2008) 326-333.
- 13) Analysis of ferritin genes in Parkinson disease B Foglieni, F Ferrari, S Goldwurm, P Santambrogio, E Castiglioni, M Sessa, M A Volontè, S Lalli, C Galli, X-S Wang, J Connor, F Sironi, M Canesi; G Biasiotto, G Pezzoli, S Levi, M Ferrari, P Arosio, L Cremonesi. Clin Chem Lab Med2007; 45(11):1450-1456.
- 14) Evaluation of LRRK2 G2019S penetrance: relevance for genetic counseling in Parkinson's disease. S Goldwurm, M Zini, L Mariani, S Tesei, R Miceli, F Sironi, M Clementi, V Bonifati and G Pezzoli. Neurology 2007, April 3;68(14):1141-3.



# Publications References

- 15) LRRK" G2019S mutation and Parkinson's disease: a clinical, neuropsychological and neuropsychiatric study in a large Italian sample S Goldwurm, M Zini, A Di Fonzo, D De Gasperi, C Siri, EJSimons, M van Doeselaar, S Tesei, A Antonini, M Canesi, A Zecchinelli, C Mariani, N Meucci, G Sacilotto, R Cilia, I Isaias, A Bonetti, F Sironi, S Ricca, BA Oostra, V Bonifati and G Pezzoli Parkinsonism and Related Disorders. 12(2006): 410-419.
- 16) The G6055A (G2019S) mutation in LRRK2 is frequent in both early and late onset Parkinson's disease and originates from a common ancestor S Goldwurm, A Di Fonzo, EJSimons, CF Rohè, M Zini, M Canesi, S Tesei, A Zecchinelli, A Antonimi, C Mariani, N Meucci, G Sacilotto, F Sironi, G Salani, J Ferriera, HF Chien, E Fabrizio, N Vanacore, A Dalla Libera, F Stocchi, C Diroma, P Lamberti, C Sampaio, G meco, E Barbosa, AM Bertoli-Avella, GJ Bredveld, BA Oostra, G Pezzoli and V Bonifati J.Med. Genet. 2005 Aug;42;65-doi:10.1136/jmg.2005,035568 Electronic Letter.
- 17) First-trimester prenatal screening of the common 35delG GJB" mutation causing prelingual deafness Coviello DA., Brambati B., Tului L., Percesepe A., Sironi F., Sahai A., Bertorelli R., Forabosco A. Prenat Diagn 2004 Aug;24(8):631-4.
- A novel dominant missense mutation D179N in the GJB2 gene (Connexin 26) associated with non- syndromic hearing loss. Primignani P., Castorina P., Sironi F., Curcio C., Ambrosetti U., Coviello DA. Clinical Genetics 2003: 63: 516-521.

La sottoscritto/a Francesca Sironi.dichiara che le informazioni indicate nel presente curriculum vitae ai sensi degli artt. 46 e 47 del D.P.R. n. 445 del 28/12/2000, sono veritiere, e di essere consapevole delle sanzioni penali richiamate dall'art. 76 del medesimo D.P.R. nel caso di dichiarazioni non veritiere, di formazione o uso di atti falsi.

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base alla normativa privacy (D.Lgs. n. 196/2003) come integrata dal D.Lgs 101/2018, nonché nel rispetto del Regolamento Europeo in materia di protezione dei dati personali (GDPR 2016/279).

Luogo, data 01/10/2024

F.TO Francesca Sironi