

CURRICULUM VITAE
OF CAROLA MARIA
CONCA DIOGUARDI



**PERSONAL
INFORMATION**

Name	Conca Dioguardi Carola Maria
E-mail	
Professional Register	
Mother tongue	Italian
Other languages	English

**RESEARCH AND
PROFESSIONAL
EXPERIENCE**

Dates	December 2022 – Present
Name and address of employer	Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Via Francesco Sforza, 35, 20122 Milano MI
Division/research group	SC Patologia Clinica - SS Laboratorio di Genetica Medica
Occupation/position held	Incarico Libero Professionale
Main activities and responsibilities	<p>Title of the project: Mantenimento attività di routine e urgenza in Laboratorio di Genetica Medica con particolare riferimento alle analisi genetiche per Fibrosi Cistica e copertura turni diurni e notturni in Laboratorio di Urgenza</p> <p>Activities: library preparation and NGS data interpretation for CFTR gene; Sanger sequencing, immunoassay testing with INNO-LiPA for CFTR gene mutations. Basic training in Clinical Biochemistry for the management of the shifts in the clinical chemistry and laboratory medicine of the IRCCS Ca' Granda Ospedale Maggiore Policlinico Hospital.</p>
Dates	December 2021 – November 2022
Name and address of employer	Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Via Francesco Sforza, 35, 20122 Milano MI
Division/research group	U.O.S. Laboratorio di genetica Medica
Occupation/position held	Borsista
Main activities and responsibilities	<p>Title of the project: "Valutazione delle frequenze alleliche delle varianti patogenetiche nel gene CFTR per la creazione di un pannello custom di analisi".</p>

<p>Activities: library preparation and NGS data interpretation for CFTR gene; Sanger sequencing.</p> <p>Dates</p> <p>Name and address of employer</p> <p>Division/research group</p> <p>Occupation/position held</p> <p>Main activities and responsibilities</p>	<p>October 2019 – November 2021</p> <p>Consiglio Nazionale Ricerche (CNR) c/o Istituto Clinico Humanitas, via Manzoni 56, 20089 Rozzano (MI)</p> <p>Institute of Genetic and Biomedical Research</p> <p>Assegnista di ricerca</p> <p>Title of the main project: "Difficult to control hypertension: an integrated approach for the identification of the metagenomics, molecular, biochemical and therapeutic determinants in large populations".</p> <p>Activities: RNA: extraction, library preparation for total RNA and small RNA sequencing. DNA: extraction, library preparation for microbiome 16s and ITS analysis and metagenomic applications. Use of Illumina Miseq and NextSeq 550 platforms.</p> <p>Sample management and preparation for Single cell 10x applications with the Single-cell 10x Genomics Chromium system. Library preparation for 3', 5' and VDJ approach. Real-time PCR.</p>
<p>Dates</p> <p>Name and address of employer</p> <p>Division/research group</p> <p>Occupation/position held</p> <p>Main activities and responsibilities</p>	<p>May 2017- November 2020</p> <p>Università degli Studi Di Milano, Via Fratelli Cervi 93, 20090 Segrate (MI)</p> <p>Department of Medical Biotechnology and Translational Medicine</p> <p>Specializzando in Genetica Medica</p> <p>Genetic counselling for: infertility, poliabortivity, NIPT, array-CGH, pediatric genetics (NF1 and other syndromes).</p> <p>Techniques: Karyotypes, FISH; Array-CGH, NGS.</p>
<p>Dates</p> <p>Name and address of employer</p> <p>Division/research group</p> <p>Occupation/position held</p> <p>Main activities and responsibilities</p>	<p>October 2016 – September 2019</p> <p>Istituto Clinico Humanitas, via Manzoni 56, 20089 Rozzano (MI)</p> <p>Fertility center – IVF laboratory</p> <p>Fellow "Fondazione Humanitas"</p> <p>Embryology: oocyte retrieval from follicular fluid, oocyte assessment after denuding, in vitro fertilization (IVF) and Intracytoplasmic sperm injection (ICSI), embryo culture until blastocyst stage, embryo transfer, Laser Assisted Hatching. Artificial shrinkage.</p> <p>Training in cryobiology: spermatozoa cryopreservation and oocyte vitrification.</p> <p>Semenology: Sperm count, motility and morphology, Sperm viability, Sperm preparation for IUI, ICSI, IVF,</p> <p>Training in andrology: Treatment, assessment and cryopreservation of spermatozoa recovered surgically by Te.S.E.</p> <p>Organization and management of research projects: "The extracellular matrix of the cumulus oophorus complex: crosstalk with cumulus cells"; "Determination of the presence of endocrine disruptors in blood serum and human follicular fluid from patients undergone oocyte retrieval</p>

during standard assisted reproductive treatments"

Dates	October 2014- October 2015
Name and address of employer	Joshua Johnson, Yale School of Medicine, Department of OB/GYN & Reproductive Sciences, 333 Cedar Street, New Haven, CT.
Type of business or sector	Reproductive sciences laboratory – Master thesis program
Occupation/position held	Postgraduate Fellow
Main activities and responsibilities	Mouse model of Fragile X disease: Evaluation of mitochondrial content and performance in oocytes and granulosa cells of mice with and without premutation. Determination of a potential mitochondrial dysfunction involved in Fragile X disease. Activities: Animal handling, mouse stimulation and oocyte recovery, genotyping, DNA and RNA extraction, Real Time PCR, histology.
Dates	February 2013 – July 2013
Name and address of employer	Irene Cetin, University of Milan - Department Biomedical and Clinical Sciences C/O L. Sacco Hospital, Milan- ITALY
Type of business or sector	Biomolecular Research for the Study of Pregnancy and Reproduction
Occupation/position held	Graduate Student
Main activities and responsibilities	Analysis of the content of mitochondrial DNA in placental tissue and cells, in fetal and maternal blood of physiological, pre-eclamptic and with intrauterine growth restriction pregnancies by real-time PCR .

SCIENTIFIC SOCIETIES

Dates	February 2017 - Present
Name and type of society	ONB (Ordine Nazionale Biologi) - Albo Professionale Nazionale dei Biologi
Dates	January 2017 - Present
Name and type of society	ESHRE (European Society of Human Reproduction and Embryology)
Dates	January 2017 - Present
Name and type of society	SIERR (Società Italiana di Embriologia Riproduzione e Ricerca)

EDUCATION AND TRAINING

Dates	16 October 2020
Name and type of organization providing education and training	Dipartimento di Biotecnologie Mediche e Medicina Traslazionale, Facoltà di Medicina e Chirurgia, Università degli Studi di Milano Via Fratelli Cervi 93, 20090 Segrate (MI)
Type of qualification awarded	Specialty in medical genetics. Experimental thesis: High-dimensional single cell immunomonitoring for esophageal adenocarcinoma prevention and treatment

Dates	15-16 July 2019
Name and type of organization providing education and training	Illumina, Inc
Title of the course	Training on the use of NextSeq 500 and 550
Dates	3 May 2019
Name and type of organization providing education and training	QIAGEN c/o Humanitas University
Title of the course	Training on the use and maintenance of QIACUBE connect
Dates	June 2018
Name and type of organization providing education and training	Ideas group Srl identificativo n. 352 – salvamento academy – 9coop
Principal subjects/occupational skills covered	BLSD-PBLSD and First Aid
Dates	13th October 2017
Name and type of organization providing education and training	SIERR (Società Italiana Embriologia Riproduzione e Ricerca) – Vitrification, hands-on training
Principal subjects/occupational skills covered	Training in vitrification with culture media and supports from different companies.
Dates	April 2017
Name and type of organization providing education and training	Embryotools, SL Headquarters and Laboratories Barcelona, Av. Dr. Marañón, 8, 08028 Barcelona, Spain
Principal subjects/occupational skills covered	Basic training program in ART
Dates	AA 2016-2017
Name of organization providing education and training	Università degli Studi di Napoli Federico II - Corso Umberto I 40, Napoli
Qualification awarded	Master's degree
Title of the course	Corso di perfezionamento: "Biologia e Tecnologie della Riproduzione Assistita"
Dates	AA 2013-2015
Name and type of organization providing	Università "Vita-Salute" San Raffaele, Via Olgettina 58, Milan, Italy

education and training	Master's degree in "Molecular and Cellular Medical Biotechnology"
Type of qualification awarded	International Experimental Thesis: "Granulosa cell and oocyte mitochondrial abnormalities in a mouse model of fragile X primary ovarian insufficiency"
Principal subjects/occupational skills covered	
Dates	AA 2010-2013
Name and type of organization providing education and training	Università degli Studi di Milano, Via Festa del Perdono, 7 - 20122 – Milano
Type of qualification awarded	Bachelor's degree
Principal subjects/occupational skills covered	Experimental Thesis: "Analisi del contenuto di DNA mitocondriale in tessuto e cellule placentari ed in sangue materno e fetale di gravidanze fisiologiche e affette da pre-eclampsia e ritardo di crescita intrauterino"

SCIENTIFIC PUBLICATIONS

Pozzi C, Levi R, Braga D, Carli F, Darwich A, Spadoni I, Oresta B, **Dioguardi CC**, Peano C, Ubaldi L, Angelotti G, Bottazzi B, Garlanda C, Desai A, Voza A, Azzolini E, Cecconi M; ICH COVID-19 Task-force, Mantovani A, Penna G, Barbieri R, Politi LS, Rescigno M. A 'Multiomic' Approach of Saliva Metabolomics, Microbiota, and Serum Biomarkers to Assess the Need of Hospitalization in Coronavirus Disease 2019. *Gastro Hep Adv.* 2022;1(2):194-209. doi: 10.1016/j.gastha.2021.12.006. Epub 2022 Feb 7. PMID: 35174369; PMCID: PMC8818445.

Baragetti, A.; Severgnini, M.; Olmastroni, E.; **Dioguardi, C.C.**; Mattavelli, E.; Angius, A.; Rotta, L.; Cibella, J.; Caredda, G.; Consolandi, C.; et al. Gut Microbiota Functional Dysbiosis Relates to Individual Diet in Subclinical Carotid Atherosclerosis. *Nutrients* 2021, 13, 304. <https://doi.org/10.3390/nu13020304>.

Paoli, D.; Pallotti, F.; Dima, A.P.; Albani, E.; Alviggi, C.; Causio, F.; **Dioguardi, C.C.**; Conforti, A.; Ciriminna, R.; Fabozzi, G.; Giuffrida, G.; Gualtieri, R.; Minasi, M.G.; Ochetti, S.; Pisaturo, V.; Racca, C.; Rienzi, L.; Sarcina, E.; Scarica, C.; Tomasi, G.; Verlengia, C.; Villeggia, R.; Zullo, F.; Lenzi, A.; Botrè, F.; De Santis, L., on behalf of the Italian Society of Embryology Reproduction and Research (SIERR); Phthalates and Bisphenol A: Presence in Blood Serum and Follicular Fluid of Italian Women Undergoing Assisted Reproduction Techniques. *Toxics* 2020, 8, 91.

Levi-Setti PE, Negri L, Baggiani A, Morengi E, Albani E, **Dioguardi CMC**, Specchia C, Patrizio P. Testicular sperm extraction and intracytoplasmic sperm injection outcome in cancer survivors with no available cryopreserved sperm. *J Assist Reprod Genet.* 2020 Apr;37(4):875-882. doi: 10.1007/s10815-020-01697-7. Epub 2020 Jan 24. PMID: 31981037; PMCID: PMC7183024.

Levi-Setti P. E., Negri L., Baggiani A., Morengi E., Albani E., Parini V., Cafaro L., **Conca Dioguardi C.M.**, Cesana A., Smeraldi A., Santoro A. Delayed childbearing and female ageing impair assisted reproductive technology outcome in survivors of male haematological cancers. J Assist Reprod Genet. 2018 Aug 10. doi:10.1007/s10815-018-1283-5.

Conca Dioguardi, C., Uslu, B., Haynes, M., Kurus, M., Gul, M., Miao, D.Q., Johnson, J. (2016). Granulosa cell and oocyte mitochondrial abnormalities in a mouse model of fragile X primary ovarian insufficiency. Molecular Human Reproduction. <http://doi.org/10.1093/molehr/gaw023>

Uslu B.; **Conca Dioguardi C.**; Haynes M.; Miao D.Q.; Kurus M.; Hoffman G; Johnson J., Ph.D. Quantifying growing versus non-growing ovarian follicles in the mouse, Journal of Ovarian Research. 2017;10:3. doi:10.1186/s13048-016-0296-x.

Uslu B, **Dioguardi CC**, Haynes M, Hoffman G, Usdin K, Johnson J. Oocyte quality and follicle atresia are changed in a mouse model of fragile X primary ovarian insufficiency. Journal of The Turkish German Gynecological Association 2016 05;17:S133-S134.

Conca Dioguardi C.M., De Santis L, Johnson J. Mitochondria and reproductive diseases of the female tract. Current Trends in Clinical Embryology 2016; 3 (2): 66-72. doi: 10.11138/cce/2016.3.2.066.