ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO
selezione pubblica per n._1_ posto di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera a) della Legge 240/2010 per il settore concorsuale 06/A2 – PATOLOGIA GENERALE E PATOLOGIA CLINICA , settore scientifico-disciplinare MED/04 - PATOLOGIA GENERALE presso il Dipartimento di SCIENZE DELLA SALUTE, (avviso bando pubblicato sulla G.U. n. _____94__ del ___1/12/2020___) Codice concorso 4503

Valentina Citro
CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	**CITRO**
NOME	**VALENTINA**
DATA DI NASCITA	[26, 05, 1982]

• EDUCATION

10.01.2017 Specialization in Clinical Pathology, cum laude at University of Rome "Sapienza", Rome, Italy.

18.01.2010 PhD in " Biochemistry and Cellular and Molecular Biology "at Department of Structural and Functional Biology, University of Naples "Federico II, Naples, Italy. Supervisor Maria Vittoria Cubellis.

26.07.2006 Cum laude degree Master in Biotechnological Science, University of Naples "Federico II", Naples Italy.

• CURRENT POSITION

2020 at present Post-doctoral fellow (assegnista di ricerca di tipo B) at the Dept of Health Sciences (Università degli Studi di Milano). Project title "Impact of Notch signaling on extracellular vesicles-mediated tumor progression in multiple myeloma".

• **PREVIOUS POSITIONS**

2019 Term-contract worker (prestazione occasionale) for "Search for variants by analyzing bioinformatics exome sequencing of BWS cases with multiple imprinting defects" at the Department of Environmental Sciences, University of Campania Luigi Vanvitelli, Caserta, Italy.

2018 Term-contract worker (prestazione occasionale) for "Investigation of mutations in patients with Beckwith-Wiedemann syndrome and Silver-Russell syndrome by exome sequencing and targeted sequencing of candidate genes" at the Department of Environmental Sciences, University of Campania Luigi Vanvitelli, Caserta, Italy.

2017 Term-contract worker (prestazione occasionale) for "immortalization of eukaryotic cells - Prin 2015" at the Department of Biology, University of Naples "Federico II", Naples, Italy.

2016 Term-contract worker (prestazione occasionale) for "maintenance of cell lines and selection of stable transfectants" at the Department of Environmental Sciences, University of Campania Luigi Vanvitelli, Caserta, Italy.

2015 Term-contract worker (prestazione occasionale) for "development of the cell-based screening of substances capable of enhancing the activity of phosphomannomutase2 for the treatment of 1A glycosylation disorder" at the Department of Biology, University of Naples "Federico II", Naples, Italy.

2014-2015 Term-contract worker (contratto a progetto) for 21 months for "training of young researchers in the application of computational biology and bioinformatics in biotechnological research and diagnostics" at the BIOGENE, Naples, Italy.

2012 Term-contract worker (prestazione occasionale) for "research on genomic imprinting defects" at the Department of Environmental Sciences, University of Campania Luigi Vanvitelli, Caserta, Italy.

2006-2007 Term-contract worker (contratto a progetto) for three months at the Bioindustry Park, Ivrea, Italy.

• **FELLOWSHIPS**

2017 Fellowship for "Research of biomarkers for glycosylation deficiencies and possible evaluation of the induced environmental toxicity", Department of Biology, University of Naples "Federico II", Naples, Italy.

2016 Fellowship for "Health effects of imino sugars", Department of Biology, University of Naples "Federico II", Naples, Italy.

2010-2011 Post-doctoral Fellowship, Department of Environmental Sciences, University of Campania Luigi Vanvitelli, Caserta, Italy.

• TEACHING ACTIVITIES

2016-2017 – Course in computer methodologies for genome analysis at University of Campania Luigi Vanvitelli, Caserta, Italy.

2015-2016 – Course in Bioinformatics Laboratory at University of Campania Luigi Vanvitelli, Caserta, Italy.

2014-2015 – Course in Bio-informatics and computer biochemistry laboratory at University of Campania Luigi Vanvitelli, Caserta, Italy.

2018-2019 – annual contract as special education teacher at high secondary school.

2017-2018 – annual contract as special education teacher at high secondary school.

2013-2014 – annual contract for teaching Biology and Chemistry at high secondary school.

• SUPERVISION OF STUDENTS

Laboratory research tutor for 1 PhD and 8 Bachelor/Master Students at Department of Biology, University of Naples "Federico II", Naples, Italy.

PhD program in Biology

- Chiara Cimmaruta - Dottorato di ricerca in Biologia - thesis title: Analisi di una malattia genetica rara dovuta a instabiliutà proteica: studio e caratterizzazione del disturbo congenito della glicosilazione di tipo IA.

Master's degree

- Mario D'Andrea - 2016/2017 - thesis title: Modelli cellulari per l'individuazioe di biomarcatori per il disordine della glicosilazione PMM2-CDG.
- Gaetano Viscido - 2015/2016 - thesis title: L'ampio spettro fenotipico della malattia di Fabry richiede una diagnosi personalizzata.
- Ludovica Liguori- 2014/2015 - thesis title: Analisi delle mutazioni dell'alfa-galattosidasi umana.
- Nadia Minopoli - 2014/2015 - thesis title: Caratterizzazione e analisi dei mutanti della fosfomannomutasi-2 che causano il disordine congenito della glicosilazione PMM2-CDG.
- Enza Di Meo - 2014/2015 - thesis title: Approccio terapeutico basato sull'uso di chaperons farmacologici per la cura della malattia di Pompe.

- Rosita Del Prete - 2014/2015 - thesis title: Screening di potenziali chaperons farmacologici nel trattamento della malattia di Anderson-Fabry.
- Antonia Paone - 2013/2014 - thesis title: Identificazione di un polimorfismo nel gene A4GALT nei pazienti Fabry.

Bachelor's degre

- Ilenia Antonelli - 2013/2014 - thesis title: I disordini congeniti della glicosilazione e la fosfomannomutasi-2.

2007 - Activity of counseling and study orientation to help high school students with selecting the right degree program.

• ORGANISATION OF SCIENTIFIC MEETINGS

2015 "Genomic imprinting in Development and disease" 9-11 November, Naples Italy, 140 participants, the applicant collaborated in the organization and in the selection of posters.

• ACTIVITY AS EDITOR AND REVIEWER

Since 2017 – Member of the editorial Board, SL Nutrition and Metabolism.

Reviewer for International Journal of Molecular Sciences (MDPI), Current Medicinal Chemistry (Bentham Science) and BioMed Research International.

• MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2017 – Member of Italian Society of Biochemistry and Molecular Biology, Italy.

• SCIENTIFIC PRODUCTION

Dr Citro is co-author of 21 articles published in scientific journal and one book chapter. She is the first or last author in 6 of these publications.

Articles

1. Jagged Ligands Enhance the Pro-Angiogenic Activity of Multiple Myeloma Cells.
   Palano MT, Giannandrea D, Platonova N, Gaudenzi G, Falleni M, Tosi D, Lesma E, **Citro V**, Colombo M, Saltarella I, Ria R, Amodio N, Taiana E, Neri A, Vitale G, Chiaramonte R.
   Cancers (Basel). 2020 Sep 11;12(9):2600. doi: 10.3390/cancers12092600.

2. Proteostasis regulators modulate proteasomal activity and gene expression to attenuate multiple phenotypes in Fabry disease.

Seemann S, Ernst M, Cimmaruta C, Struckmann S, Cozma C, Koczan D, Knospe AM, Haake LR, **Citro V**, Bräuer AU, Andreotti G, Cubellis MV, Fuellen G, Hermann A, Giese AK, Rolfs A, Lukas J.
Biochem J. 2020 Jan 31;477(2):359-380. doi: 10.1042/BCJ20190513.

3. Data on the inhibition of cell proliferation and invasion by the D2A-Ala peptide derived from the urokinase receptor.
   Furlan F, Eden G, Archinti M, Arnaudova R, Andreotti G, **Citro V**, Cubellis MV, Motta A, Degryse B.
   Data Brief. 2019 Jan 9;22:903-908. doi: 10.1016/j.dib.2019.01.009. eCollection 2019 Feb.

4. Challenging popular tools for the annotation of genetic variations with a real case, pathogenic mutations of lysosomal alpha-galactosidase.
   Cimmaruta C, **Citro V**, Andreotti G, Liguori L, Cubellis MV, Hay Mele B.
   BMC Bioinformatics. 2018 Nov 30;19(Suppl 15):433. doi: 10.1186/s12859-018-2416-7.

5. The Analysis of Variants in the General Population Reveals That PMM2 Is Extremely Tolerant to Missense Mutations and That Diagnosis of PMM2-CDG Can Benefit from the Identification of Modifiers.
   Citro V, Cimmaruta C, Monticelli M, Riccio G, Hay Mele B, Cubellis MV, Andreotti G.
   Int J Mol Sci. 2018 Jul 30;19(8). pii: E2218. doi: 10.3390/ijms19082218.

6. In Vitro Enzyme Measurement to Test Pharmacological Chaperone Responsiveness in Fabry and Pompe Disease.
   Lukas J, Knospe AM, Seemann S, **Citro V**, Cubellis MV, Rolfs A.
   J Vis Exp. 2017 Dec 20;(130). doi: 10.3791/56550.

7. D2A-Ala peptide derived from the urokinase receptor exerts anti-tumoural effects in vitro and in vivo.
   Furlan F, Eden G, Archinti M, Arnaudova R, Andreotti G, **Citro V**, Cubellis MV, Motta A, Degryse B.
   Peptides. 2018 Mar;101:17-24. doi: 10.1016/j.peptides.2017.12.016. Epub 2017 Dec 19.

8. A mutant of phosphomannomutase1 retains full enzymatic activity, but is not activated by IMP: Possible implications for the disease PMM2-CDG.
   Citro V, Cimmaruta C, Liguori L, Viscido G, Cubellis MV, Andreotti G.
   PLoS One. 2017 Dec 19;12(12):e0189629. doi: 10.1371/journal.pone.0189629. eCollection 2017.

9. D2A sequence of the urokinase receptor induces cell growth through αvβ3 integrin and EGFR.
   Eden G, Archinti M, Arnaudova R, Andreotti G, Motta A, Furlan F, **Citro V**, Cubellis MV, Degryse B.
   Cell Mol Life Sci. 2017 Nov 28. doi: 10.1007/s00018-017-2718-3.

10. E-Learning for Rare Diseases: An Example Using Fabry Disease.
    Cimmaruta C, Liguori L, Monticelli M, Andreotti G, **Citro V**.
    Int J Mol Sci. 2017 Sep 24;18(10). pii: E2049. doi: 10.3390/ijms18102049.

11. The Large Phenotypic Spectrum of Fabry Disease Requires Graduated Diagnosis and Personalized Therapy: A Meta-Analysis Can Help to Differentiate Missense Mutations.
    Citro V, Cammisa M, Liguori L, Cimmaruta C, Lukas J, Cubellis MV, Andreotti G.
    Int J Mol Sci. 2016 Dec 1;17(12):2010. doi: 10.3390/ijms17122010.

12. Identification of an Allosteric Binding Site on Human Lysosomal Alpha-Galactosidase Opens the Way to New Pharmacological Chaperones for Fabry Disease.
    Citro V, Peña-García J, den-Haan H, Pérez-Sánchez H, Del Prete R, Liguori L, Cimmaruta C, Lukas J, Cubellis MV, Andreotti G.
    PLoS One. 2016 Oct27;11(10):e0165463. doi:10.1371/journal.pone.0165463. eCollection 2016.

13. Heterodimerization of Two Pathological Mutants Enhances the Activity of Human Phosphomannomutase2.
    Andreotti G, Monti MC, **Citro V**, Cubellis MV.
    PLoS One. 2015 Oct 21;10(10):e0139882. doi: 10.1371/journal.pone.0139882. eCollection 2015.

14. Drug repositioning can accelerate discovery of pharmacological chaperones.
    Hay Mele B, **Citro V**, Andreotti G, Cubellis MV.
    Orphanet J Rare Dis. 2015 May 7;10:55. doi: 10.1186/s13023-015-0273-2.

15. A splicing mutation of the HMGA2 gene is associated with Silver-Russell syndrome phenotype.
    De Crescenzo A, **Citro V**, Freschi A, Sparago A, Palumbo O, Cubellis MV, Carella M, Castelluccio P, Cavaliere ML, Cerrato F, Riccio A.
    J Hum Genet. 2015 Jun;60(6):287-93. doi: 10.1038/jhg.2015.29. Epub 2015 Mar 26.

16. A thermodynamic assay to test pharmacological chaperones for Fabry disease.
    Andreotti G, **Citro V**, Correra A, Cubellis MV.
    Biochim Biophys Acta. 2014 Mar;1840(3):1214-24. doi: 10.1016/j.bbagen.2013.12.018. Epub 2013 Dec 21.

17. The molecular function and clinical phenotype of partial deletions of the IGF2/H19 imprinting control region depends on the spatial arrangement of the remaining CTCF-binding sites.
    Beygo J, **Citro V**, Sparago A, De Crescenzo A, Cerrato F, Heitmann M, Rademacher K, Guala A, Enklaar T, Anichini C, Cirillo Silengo M, Graf N, Prawitt D, Cubellis MV, Horsthemke B, Buiting K, Riccio A.
    Hum Mol Genet. 2013 Feb 1;22(3):544-57. doi: 10.1093/hmg/dds465. Epub 2012 Oct 30.

18. Therapy of Fabry disease with pharmacological chaperones: from in silico predictions to in vitro tests.
    Andreotti G, **Citro V**, De Crescenzo A, Orlando P, Cammisa M, Correra A, Cubellis MV.
    Orphanet J Rare Dis. 2011 Oct 17;6:66. doi: 10.1186/1750-1172-6-66.

19. Inherited and Sporadic Epimutations at the IGF2-H19 locus in Beckwith-Wiedemann syndrome and Wilms' tumor.
    Riccio A, Sparago A, Verde G, De Crescenzo A, **Citro V**, Cubellis MV, Ferrero GB, Silengo MC, Russo S, Larizza L, Cerrato F.
    Endocr Dev. 2009;14:1-9. doi: 10.1159/000207461. Epub 2009 Feb 27.

20. In silico docking of urokinase plasminogen activator and integrins.
    Degryse B, Fernandez-Recio J, **Citro V**, Blasi F, Cubellis MV.
    BMC Bioinformatics. 2008 Mar 26;9 Suppl 2:S8. doi: 10.1186/1471-2105-9-S2-S8.

21. Different mechanisms cause imprinting defects at the IGF2/H19 locus in Beckwith-Wiedemann syndrome and Wilms' tumour.
    Cerrato F, Sparago A, Verde G, De Crescenzo A, **Citro V**, Cubellis MV, Rinaldi MM, Boccuto L, Neri G, Magnani C, D'Angelo P, Collini P, Perotti D, Sebastio G, Maher ER, Riccio A.
    Hum Mol Genet.2008 May 15;17(10):1427-35. doi: 10.1093/hmg/ddn031. Epub 2008 Feb 1.

Book Chapter

1. Pegylation, the ultimate strategy to improve the in vivo efficiency of bioactive compounds.
   Bernard D , Eden G, Archinti M, Arnaudova R, Andreotti G, **Citro V**, Murphy R, Cubellis MV, Motta A, Furlan F.
   Book Chapter Advances in Medicine and Biology. 2019;143:35–112.

• CONGRESS PARTECIPATION

1. Oral presentation at Department of Health Sciences-DiSS Congress, 13th November 2020, Milano, Italy. Title: The complexity of the Notch pathway in extracellular vesicles-mediated communication in multiple myeloma.

2. Oral presentation at 59th Congress of the Italian Society of Biochemistry and Molecular Biology 2017, Caserta, Italy. Title: at Discovery and validation of pharmacological chaperones.

3. Oral presentation at Enzymology & Mol. Biology 2017 Rome, Italy. Title: Pharmacological chaperones for curing enzymopathies: the case of lysosomal alpha-galactosidase.

4. **Citro V.**, Giannandrea D., Platonova N., et al. Multiple myeloma-derived extracellular vesicles transfer Notch signalling to tumor microenvironment. Cells 2020 | The Cross-Talk between Cell Adhesion and Metabolism & Exosomes and Extracellular Vesicles in Health and Disease.

5. Giannandrea D., Palano M. T, Platonova N., Gaudenzi G., Falleni M., Tosi D., Lesma E., **Citro V.**, et al. Jagged ligands as the new targets in multiple myeloma associated angiogenesis. DiSS Congress, 13th November 2020

6. Cubellis M. V, **Citro V**., Monticelli M., Liguori L., Hay-Mele B., Andreotti G.
   Disease missense mutations: a challenge for biochemists
   SIB (Italian Society of Biochemistry and Molecular Biology) 2019 60th Congress, September 2019, Lecce, Italy

7. Monticelli M., Liguori L., Allocca M., **Citro V**., Hay Mele B., Cubellis M.V. and Andreotti G. Biochemistry and Bioinformatics in the Service of PMM2-CDG: Finding Pharmacological Chaperones And Modifier Genes, 4th World Conference on CDG, July 2019, Lisbon, Portugal

8. Liguori L., Monticelli M., Cimmaruta C., **Citro V**., Cubellis M.V., Andreotti G.
   Functional and structural comparison of human phosphomannomutases, 59th Congress of the Italian Society of Biochemistry and Molecular Biology, September 2017, Caserta, Italy

9. Andreotti G., Liguori L., Monticelli M., Viscido G., Cimmaruta C., **Citro V**., Cubellis M.V.
   Functional characterization of human phosphomannomutases by 31P-NMR
   International Scientific CDG Symposium 2017 on "Congenital Disorders of Glycosylation and related disorders", July 2017, Leuven (Belgium)

10. Andreotti G., **Citro V**., Cimmaruta C., Monticelli M., Liguori L., Cubellis M.V.
    Pharmacological chaperones to cure genetic diseases: development of drugs and identification of new targets", Telethon XIX Scientific Convention, March 2017, Trento, Italy

11. Cammisa M., Viscido G., Cimmaruta C., **Citro V**., Monza E., Guallar V., Andreotti G.
    Ligand docking to decipher functional specificity of paralogous enzymes.
    13th Annual Meeting of the Bioinformatics Italian Society June, 2016, University of Salerno, Italy

12. **Citro V**., Riso V., Del Prete R., Di Meo E., Paone A., Chiara C., Andreotti G.
    Pharmacological chaperones for the cure of metabolic diseases.
    Organization: The 13th International Congress of Human Genetics, Kyoto 2016

13. Riccio A., Sparago A.,Verde G.,Cerrato F., De Crescenzo A., **Citro V**.,Cubellis M.V., Trono D., Feil R. Grimaldi G.
    Investigation mechanisms for maintenance of genomic imprinting at the Beckwith-Wiedemann syndrome locus.
    Gordon Research Conference, Holderness, 2009.

14. **Citro V**., Ferreira C.S., Sparago A., Verde G., CerratoF., De Crescenzo A., Cubellis M.V., Riccio A.
    How mutations alter the function of the IGF2/H19 imprinting control region in the Beckwith-Wiedemann syndrome. SIBBM, Frontiers in Molecolar Biology, Naples, Italy. 4-6 June2009.

15. CerratoF., Sparago A., De Crescenzo A., Verde G., **Citro V**., Cubellis M.V. Riccio A.
    Inherited and acquired epimutations in humans: lessons from congenital growth disorders. BENZON SYMPOSIUM No. 55:Transcription, chromatin and disease, Copenaghen, 2008.

16. Cerrato F., Sparago A., Verde G., De Crescenzo A., **Citro V**., Cubellis M.V., Perotti D. and Riccio A.
    Different mechanisms causing loss of imprinting of the IGF2 gene in Beckwith-Wiedemann Syndrome and Wilms'tumour". Società Italiana di Cancerologia, Pordenone, Italia, 2007.

Data 13/12/2020 Luogo MILANO