

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name Caterina Nannelli

EDUCATION AND TRAINING

	Post-Graduate School of Medical Genetics, graduation date 21/11/2024
	Univeristà degli Studi di Firenze
• November 2020 - October 2024	Scuola di Scienze della Salute Umana
	Varianti genetiche che causano la carenza di Glucosio-6-fosfato deidrogenasi: basi cliniche e biochimiche della nuova classificazione OMS
Dissertation/thesis title	70/70 cum laude
Final degree mark	PhD in Biomedical Sciences - PhD Cycle XXX, graduation date 15/03/2019
	Università degli Studi di Firenze - Research activity at CRL-ISPRO
• November 2014 - March 2019	Clinical and Experimental Oncology
	Somatic mutation rate and cancer: an exploratory study of mutant frequency in classical Philadelphia-negative myeloproliferative neoplasms
Curriculum	
Dissertation/thesis title	Qualification to exercise the Profession of Biologist
	Università degli Studi di Firenze
• April 2016	
	Master's degree in Medical Biotechnology, graduation date 29/04/2014
	Università degli Studi di Firenze
• September 2008 - April 2014	Scuola di Scienze della Salute Umana
	9/S - Class of second level degree in Pharmaceutical, Veterinary and Medical Biotechnologies
	Medical-diagnostic
	12 months, at the Cancer Research Centre - University of Liverpool
Curriculum	European Union program (Erasmus Placement)
Undergraduate Internship	Molecular methods for the analysis of epigenetic DNA modifications in lung cancer
	110/110 cum laude
Dissertation/thesis title	
Final degree mark	Bachelor's Degree in Biotechnology, graduation date 17/06/2008
	Università degli Studi di Firenze
• September 2004 - June 2008	Interfacoltà
	1 - Class of second level degree in Biotechnologies
	Medical-diagnostic Biotechnology
	8 months, at Università degli Studi di Firenze
Curriculum	
Undergraduate Internship	

Dissertation/thesis title	Isoforme dell'anidrasi carbonica IX: valutazione dell'espressione dell'mRNA nel cancro del polmone
Final degree mark	110/110 cum laude
• September 1999 - July 2004	Scientific high school degree Liceo scientifico Leonardo da Vinci, Firenze
Final degree mark	100/100
WORK EXPERIENCE	
• December 2021 - November 2024	Postdoctoral researcher on "La carenza parziale di molecole GPI-legate nell'Emoglobinuria Parossistica Notturna (EPN)" Università degli Studi di Firenze - Research activity at CRL-ISPRO
• December 2020 – December 2021	WHO technical adviser for updating the WHO classification of Glucose-6-Phosphate Dehydrogenase variants
• November 2019 - October 2021	Postdoctoral researcher on "Rapporto tra tipo di mutazioni acquisite del gene PIGA e deficienza di molecole GPI-legate nell'Emoglobinuria Parossistica Notturna" Università degli Studi di Firenze - Research activity at CRL-ISPRO
• October 2018 - September 2019	Research fellow on "Ruolo delle mutazioni acquisite del gene PIGA nell'ematopoiesi normale e patologica" Università degli Studi di Firenze - Research activity at CRL-ISPRO
• September 2015 - January 2016	Research fellow on "Ruolo del tasso di mutazioni somatiche nel cancro" Università degli Studi di Firenze - Research activity at CRL-ISPRO
• May 2015 - September 2015	Tutoring activity to students of the Bachelor's Degree Course in Biomedical Laboratory Technologies Università degli Studi di Firenze
• May 2017 - Present	Study coordinator in clinical trials: <ul style="list-style-type: none"> • Protocol ALXN1210-PNH-301 (Alexion Pharmaceuticals): "A phase 3, randomized, open-label, active-controlled study of ALXN1210 versus eculizumab in complement inhibitor-naïve adult patients with Paroxysmal Nocturnal Hemoglobinuria (PNH), Principal Investigator: Prof. Alberto Bosi • Protocol ALXN1210-PNH-302 (Alexion Pharmaceuticals): "A phase 3, randomized, open-label, active-controlled study of ALXN1210 versus eculizumab adult patients with Paroxysmal Nocturnal Hemoglobinuria (PNH) currently treated with eculizumab", Principal Investigator: Prof. Alberto Bosi • Protocol ACH471-100 (Achillion Pharmaceuticals): "A phase 2 open-label proof of concept study to assess the efficacy, safety, and pharmacokinetics of ACH-0144471 in untreated patients with Paroxysmal Nocturnal Hemoglobinuria (PNH)", Principal Investigator: Prof. Alberto Bosi • Protocol ACH228-110 (Alexion Pharmaceuticals): "A Phase 2 open-label proof of concept study to assess the efficacy, safety, and pharmacokinetics of the oral Factor D (FD) inhibitor ALXN2050 (ACH-0145228) in Paroxysmal Nocturnal Hemoglobinuria (PNH) patients as monotherapy", Principal Investigator: Prof. Alessandro Maria Vannucchi • Protocol ALXN2040-PNH-301 (Alexion Pharmaceuticals): "A phase 3 study of danicopan (ALXN2040) as add-on therapy to a C5 Inhibitor (eculizumab or ravulizumab) in patients with Paroxysmal Nocturnal Hemoglobinuria who have clinically evident Extravascular Hemolysis (EVH)", Principal Investigator: Prof. Alessandro Maria Vannucchi

- Protocol ALXN2040-PNH-303 (Alexion Pharmaceuticals): "A Long-Term Extension (LTE) study to characterize the safety and efficacy of danicopan as an add-on therapy to a complement component 5 inhibitor (C5i) in patients with Paroxysmal Nocturnal Hemoglobinuria (PNH) previously treated with danicopan in an Alexion-sponsored clinical study", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol CLNP023C12302 (Novartis Farma S.p.A.): "A randomized, multicenter, active-comparator controlled, open-label trial to evaluate efficacy and safety of oral, twice daily LNP023 in adult patients with PNH and residual anemia, despite treatment with an intravenous anti-C5 antibody", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol CLNP023C12001B (Novartis Farma S.p.A.): "An open label, multicenter Roll-over Extension Program (REP) to characterize the long-term safety and tolerability of iptacopan (LNP023) in patients with Paroxysmal Nocturnal Hemoglobinuria (PNH) who have completed PNH Phase 2 and Phase 3 studies with iptacopan", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol CLNP023C12303 (Novartis Farma S.p.A.): "A multicenter, single arm, open-label trial to evaluate efficacy and safety of oral, twice daily iptacopan in adult PNH patients who have Hb \geq 10 g/dL in response to anti-C5 antibody and switch to iptacopan", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol BO42161 (F. Hoffmann - La Roche Ltd.): "A phase 3, randomized, open-label, active-controlled, multicenter study evaluating the efficacy and safety of crovalimab versus eculizumab in adult and adolescent patients with Paroxysmal Nocturnal Hemoglobinuria (PNH) currently treated with complement inhibitors", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol BO42162 (F. Hoffmann - La Roche Ltd.): "A phase 3, randomized, open-label, active-controlled, multicenter study evaluating the efficacy and safety of crovalimab versus eculizumab in adult and adolescent patients with Paroxysmal Nocturnal Hemoglobinuria (PNH) not previously treated with complement inhibitors", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol R3918-PNH-2021 (Regeneron Pharmaceuticals Inc.): "A randomized, open-label, ravulizumab-controlled study to evaluate the efficacy and safety of pozelimab and cemdisiran combination therapy in patients with Paroxysmal Nocturnal Hemoglobinuria who are complement inhibitor treatment-naïve or have not recently received complement inhibitor therapy", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol R3918-PNH-2050 (Regeneron Pharmaceuticals Inc.): "An Open-Label Extension Study to Evaluate the Long-Term Safety, Tolerability, and Efficacy of Pozelimab and Cemdisiran Combination Therapy in Patients with Paroxysmal Nocturnal Hemoglobinuria", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol QOL-ONE PRO-PNH (Associazione Culturale e di Ricerca QOL-ONE): "Observational study to evaluate patient-reported outcomes in Paroxysmal Nocturnal Hemoglobinuria (PNH)", Principal Investigator: Prof. Alessandro Maria Vannucchi
- Protocol Sobi.PEGCET-304 (Swedish Orphan Biovitrum AB (publ)/SOBI): "A single arm, multicentre observational study to evaluate effectiveness of pegcetacoplan under real world conditions in patients with paroxysmal nocturnal hemoglobinuria (PNH)", Principal Investigator: Prof. Alessandro Maria Vannucchi

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

ENGLISH

- Reading skills Excellent
- Writing skills Excellent
- Verbal skills Good

<ul style="list-style-type: none"> • Reading skills • Writing skills • Verbal skills 	FRENCH Good Basic Basic
TECHNICAL SKILLS AND COMPETENCES	<p><u>Molecular biology</u>: DNA and RNA extraction from cells and tissues, nucleic acids purification techniques, qualitative and quantitative analysis of nucleic acids by PCR and Real-Time PCR, reverse transcription, electrophoresis, Sanger sequencing, Pyrosequencing, second-generation sequencing, cloning of DNA fragments into plasmids, bacterial transformation, Restriction Fragment Length Polymorphism analysis, nucleic acids pull-down assays.</p> <p><u>Cellular biology</u>: growth and maintenance of cell cultures, transfection of eukaryotic cells by chemical reagents and electroporation, separation of cell populations from bone marrow and peripheral blood by density centrifugation methods, cell immunophenotyping by flow cytometry, flow cytometry analysis of rare cell populations, cell immunomagnetic separation, cell sorting, complement functional assays, <i>in vitro</i> generation of colonies from bone marrow and peripheral blood progenitors.</p> <p><u>Clinical trials</u>: coordination of clinical activities of patients, management of the eCRF, receipt of study drugs, management of the Investigator File documentation, processing and shipping of biological samples, safety reporting.</p> <p><u>Informatics</u>: Microsoft Office Word, Excel and PowerPoint, GaphPad Prism, PubMed, DNA sequence analysis softwares (Sequencher, CodonCode Aligner, Ape), flow cytometry analysis softwares (BD FACSDiva, FCS Express, CytExpert, Kaluza).</p>
CONFERENCES AND TRAINING COURSES ATTENDED	<p>“Paroxysmal Nocturnal Hemoglobinuria: at the crossroads of somatic mutations, clonal expansion and immunity” Firenze, 3-4 October 2024</p> <p>2nd International Symposium: “From Genes to target therapy in Hematology” Firenze, 18-19 April 2024</p> <p>1st International IPIG Conference: Recent Advances in PNH Harrogate, 18-19 May 2023</p> <p>Oxford Nanopore Cancer Research Seminar Firenze, 15 November 2022</p> <p>International Symposium: “From Genes to target therapy in Hematology” Firenze, 1-2 July 2022</p> <p>“Neoplasie mieloproliferative Ph-” Firenze, 7 June 2019</p> <p>“EPN 10 anni di storia” Bologna, 4-5 April 2019</p> <p>10th International Florence Meeting on Hematology Firenze, 12-13 April 2018</p> <p>“Recent advances in understanding and treating chronic myeloid neoplasms” Firenze, 8-10 September 2016</p> <p>“Prospettive della Medicina Personalizzata: la biopsia liquida in oncologia” Firenze, 18 May 2016</p> <p>10th Annual Scientific conference of Istituto Toscano Tumori Pisa, 3 July 2015</p> <p>17th Fritz-Bender Foundation International Symposium Pisa, 1-2 July 2015</p> <p>“ICH Good Clinical Practice E6 (R2)” e-learning course 5 August 2024</p> <p>“49CFR 172.700/IATA 1.5” e-learning course 7 May 2024</p>

PUBLICATIONS AND ABSTRACTS

"Medrio Data Entry - EDC (R41.3)" e-learning course
30 March 2022

"Medidata Classic Rave EDC Essentials for Clinical Research Coordinators" e-learning course
14 July 2021

Flow cytometry training on the Beckman Coulter CytoFLEX
Firenze, 23-24 January 2019

Special Application Training "Flow Cytometry course on site" - Miltenyi Biotec
Firenze, 5 October 2017

Risitano AM, Frieri C, Marano L, Urciuoli E, Sanseverino A, **Nannelli C**, Notaro R.
"Massive hemolysis in paroxysmal nocturnal hemoglobinuria after switching from proximal complement inhibitor to anti-C5 therapy: A lesson not to be forgotten"
Am J Hematol. 2024 Oct 12. doi: 10.1002/ajh.27502. Epub ahead of print. PMID: 39394926.

Luzzatto L, Bancone G, Dugué PA, Jiang W, Minucci A, **Nannelli C**, Pfeffer D, Prchal J, Sirdah M, Sodeinde O, Vulliamy T, Wanachiwanawin W, Cunningham J, Bosman A.
"New WHO classification of genetic variants causing G6PD deficiency"
Bull World Health Organ. 2024 Aug 1;102(8):615-617. doi: 10.2471/BLT.23.291224. Epub 2024 Jun 10. PMID: 39070600.

Luzzatto L, **Nannelli C**, Notaro R.
"Potentially pathogenic and pathogenic G6PD variants"
Am J Hum Genet. 2023 Nov 2;110(11):1983-1985. doi: 10.1016/j.ajhg.2023.10.003. PMID: 37922885.

Nannelli C, Bosman A, Cunningham J, Dugué PA, Luzzatto L.
"Genetic variants causing G6PD deficiency: Clinical and biochemical data support new WHO classification"
Br J Haematol. 2023 Sep;202(5):1024-1032. doi: 10.1111/bjh.18943. Epub 2023 Jul 6. PMID: 37415281.

Sica M, Barone F, **Nannelli C**, Ricci P, Marano L, De Angioletti M, Di Bona E, Risitano AM, Notaro R.
"The long-acting anti-C5 ravulizumab results in C3 binding to PNH red cells similar to its parental molecule eculizumab"
Br J Haematol. 2023 Jan 19. doi: 10.1111/bjh.18662. PMID: 36660816.

Sica M, Pellicchia A, De Angioletti M, Caocci G, **Nannelli C**, La Nasa G, Luzzatto L, Notaro R.
"Complement-mediated oxidative damage of red cells impairs response to eculizumab in a G6PD-deficient patient with PNH"
Blood. 2020 Dec 24;136(26):3082-3085. doi: 10.1182/blood.2020007780. PMID: 32845970.

Luzzatto L, **Nannelli C**, Notaro R.
"Glucose-6-Phosphate Dehydrogenase Deficiency"
Hematol Oncol Clin North Am. 2016 Apr;30(2):373-93. doi: 10.1016/j.hoc.2015.11.006. PMID: 27040960.

Malentacchi F, Simi L, **Nannelli C**, Andreani M, Janni A, Pastorekova S, Orlando C.
"Alternative splicing variants of carbonic anhydrase IX in human non-small cell lung cancer"
Lung Cancer. 2009 Jun;64(3):271-6. doi: 10.1016/j.lungcan.2008.10.001. Epub 2008 Nov 20. PMID: 19022520.

Cosi I, Pellicchia A, De Lorenzo E, Moccia A, Iozzo M, Sica M, **Nannelli C**, Notaro R, De Angioletti M.
"ETV4 over-expression promotes prostate cancer through different pathways"
XI Symposium Bases Biologicas del Cancer Terapias Personalizadas
Salamanca (ES) 23-24 maggio 2019

Gargiulo L, Sica M, **Nannelli C**, Luzzatto L, Notaro R.
"Two Distinct but Functionally Related Autoreactive T Cell Populations in Paroxysmal Nocturnal Hemoglobinuria and Idiopathic Aplastic Anemia: Glycosylphosphatidylinositol- Specific and IFN γ -Producing T Cells"
Blood 2017 130:1166;
59th Annual Meeting of the American Society of Hematology. Atlanta (USA) 9-12 dicembre 2017