CURRICULUM VITAE - PROF. VALENTINO BEZZERRI

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Work Experience:

Dec 2023- to date Associate Professor of Applied Medical Sciences (MED/50), University Link Campus, Rome, Italy

Oct 2021 - to date: Head of Preclinical Research Lab (Fixed-term position), *Cystic Fibrosis Center of Verona, Azienda Ospedaliera Universitaria Integrata, Verona.* Preclinical drug development for rare diseases, including Cystic Fibrosis and Inherited Bone Marrow Failure Syndromes; Coordination of laboratory analysis for clinical studies; Fundraising; international networking; implementation of technologies.

Sep 2019 - Feb 2021 Adjunct Professor in Applied Biology, *Faculty of Engineering, Università Politecnica delle Marche, Ancona, Italy.*

Apr 2018 - Oct 2021: Head of Preclinical Research Lab (Fixed-term position) *Cystic Fibrosis Center, Azienda Ospedaliero Universitaria Ospedali Riuniti, Ancona*, Italy. Coordination of preclinical research team, design and development of preclinical translational studies on rare diseases including Cystic Fibrosis, Shwachman-Diamond syndrome, and other inherited bone marrow failure syndromes. Early development of novel pharmaceutical drugs.

Sep 2017 - Apr 2018: Visiting Scientist, *Department of Pediatric Hematology, Oncology & Stem Cell Transplantation,* Massey Cancer Center, Virginia Commonwealth University, Richmond, USA. Preclinical drug discovery based on nonsense mutation suppression therapies in bone marrow failure syndromes at Dr. Seth J Corey's Lab.

Aug 2015 – Apr 2018: Research Associate, Department of Medicine, Unit of General Pathology, University of Verona, Italy. Team Leader position: study of the molecular mechanisms that underlie acute myeloid leukemia progression in patients affected by Shwachman-Diamond syndrome (SDS).

Sep 2014 – Jul 2015: Clinical Research Associate, *Shwachman-Diamond Regional Center and Cystic Fibrosis Center, Clinical Research Center, University Hospital of Verona,* Italy (head Dr. Marco Cipolli). Followed several clinical trials, including Phase II and III clinical studies on new CFTR corrector molecules.

May 2014 – Aug 2014: Postdoctoral Fellow, Laboratory of Molecular Pathology, *University Hospital of Verona*, Italy (head Dr. Giulio Cabrini). Performed in vitro studies to evaluate the efficacy of novel pharmaceutical modulators for the Cystic Fibrosis Transmembrane conductance Regulator (*CFTR*) gene.

Jan 2006 – Dec 2010: Research Fellow, Italian Cystic Fibrosis Foundation, QuantiGene Project, under the supervision of Dr. Giulio Cabrini and Prof. Gianni Mastella. Expert of qRT-PCR and pro-inflammatory gene expression.

Education:

Jan 2011- May 2014: PhD in Cellular and Molecular Biology and Pathology, University of Verona, Italy. Project reference figure Prof. Marco Antonio Cassatella; PhD supervisor: Dr. Giulio Cabrini. Thesis Dissertation title: Pro-inflammatory signal transduction in epithelial cells: the model of cystic fibrosis lung disease.

Oct 2008- Mar 2010: M.Sc. Degree in Medical Biotechnology, (Marks 108/110) Vita-Salute San Raffaele University, Milan, Italy

Oct 2001 – Dec 2005: B.Sc. Degree in Pharmaceutical Biotechnology (Marks 110/110 summa cum laude), University of Ferrara, Italy

Professional membership and award:

- 2022 to date: Topical Advisory Panel Member, International Journal of Molecular Sciences, MDPI.
- 2022 to date: Co-Chair of the Young Eu-NET INNOCHRON Committee, European Network for Innovative Diagnosis and Treatment of Chronic Neutropenias, COST Action CA18233.
- 2021 to date: National scientific qualification as Associate Professor of Clinical Biochemistry (05/E3), as Associate Professor of Molecular Biology (05/E2), and as Associate Professor of Applied Medical Technologies (06/N1).
- 2020 to date: Member of the Eu-NET INNOCHRON Committee, European Network for Innovative Diagnosis and Treatment of Chronic Neutropenias, COST Action CA18233

- 2020 to date: Member of the American Society of Hematology (ASH)
- 2019 to date: Member of the Italian Society of Cystic Fibrosis (SIFC)

List of main projects for which Dr. Bezzerri is PI:

- AISS 002/2024 from 01/02/2024 to 01/01/2025 (0.60 calendar), Associazione Italiana Sindrome di Shwachman-Diamond. Project title: Unravelling the role of ETS 1/2 transcription factors in Shwachman-Diamond Syndrome leukemogenic process.
- AISS 004/2023 from 04/25/2023 to 04/24/2024 (0.60 calendar), Associazione Italiana Sindrome di Shwachman-Diamond. Project title: Characterization of B cell subpopulations in patients with Shwachman-Diamond syndrome.

Top 5 Publications:

- Bezzerri V, Gentili V, Api M, Finotti A, Papi C, Tamanini A, Boni C, Baldisseri E, Olioso D, Duca M, Tedesco E, Leo S, Borgatti M, Volpi S, Pinton P, Cabrini G, Gambari R, Blasi F, Lippi G, Rimessi A, Rizzo R, Cipolli M. SARS-CoV-2 viral entry and replication is impaired in Cystic Fibrosis airways due to ACE2 downregulation. *Nat Commun*. 2023 Jan 10;14(1):132. doi:10.1038/s41467-023-35862-0.
- 2. Rimessi A, **Bezzerri V**, Patergnani S, Marchi S, Cabrini G, Pinton P. Mitochondrial Ca2+-dependent NLRP3 activation exacerbates the Pseudomonas aeruginosa-driven inflammatory response in cystic fibrosis. *Nat Commun*. 2015 Feb 4;6:6201. doi: 10.1038/ncomms7201.
- 3. Kawashima N, Oyarbide U, Cipolli M, **Bezzerri V**, Corey SJ. Shwachman-Diamond syndromes: clinical, genetic, and biochemical insights from the rare variants. *Haematologica*. 2023 Oct 1;108(10):2594-2605. doi:10.3324/haematol.2023.282949.
- Cipolli M, Boni C, Penzo M, Villa I, Bolamperti S, Baldisseri E, Frattini A, Porta G, Api M, Selicato N, Roccia P, Pollutri D, Marinelli Busilacchi E, Poloni A, Caporelli N, D'Amico G, Pegoraro A, Cesaro S, Oyarbide U, Vella A, Lippi G, Corey SJ, Valli R, Polini A, Bezzerri V. Ataluren improves myelopoiesis and neutrophil chemotaxis by restoring ribosome biogenesis and reducing p53 levels in Shwachman-Diamond syndrome cells. *Br J Haematol*. 2024 Jan;204(1):292-305. doi: 10.1111/bjh.19134.
- Bezzerri V, Bardelli D, Morini J, Vella A, Cesaro S, Sorio C, Biondi A, Danesino C, Farruggia P, Assael BM, D'amico G, Cipolli M. Ataluren-driven restoration of Shwachman-Bodian-Diamond syndrome protein function in Shwachman-Diamond syndrome bone marrow cells. *Am J Hematol*. 2018 Aug;93(4):527-536. doi: 10.1002/ajh.25025.

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Total citations (Google Scholar): 1960

H-Index (Google Scholar): 27

Other projects: R01 DK137155-01 4755047 (PI Corey, SJ) from 07/01/2023 to 06/30/2028 (1.20 calendar), NIH. Project title: EIF6 in the Pathophysiology of Shwachman-Diamond syndrome.