INFORMAZIONI PERSONALI

Andrea Nicola Mazzarello

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andreanicola.mazzarello@edi.unige.it

| Data di Nascita 26 Settembre 1985 | Nazionalità Italiana

ESPERIENZA PROFESSIONALE

Dal 31 Marzo 2022 ad oggi **Marie Skłodowska-Curie Actions (MSCA) Fellow**
(Assegnista di Ricerca)
Università degli Studi di Genova
Dipartimento di medicina sperimentale
AREA MIN. 05 - Scienze biologiche
Settore BIO/16 - Anatomia Umana

Titolo del progetto di ricerca:

"B cell receptor engagement and signalling in chronic lymphocytic leukemia: identify the structural and functional requirements for disease development and progression."

Dal 3 Maggio 2019 al 15 Dicembre 2021 **Instructor** (Equivalenza: Ricercatore a Tempo Determinato di Tipo A, DM del 1 Settembre 2016, n. 662)
The Feinstein Institute for Medical Research, Northwell Health System.
350 Community Drive, Manhasset, New York.

Titolo dei progetti di ricerca

- "Study the role of autonomous BCR signalling in chronic lymphocytic leukaemia development and progression focusing on the mechanism that leads to higher *in vivo* proliferation and more aggressive disease."

- "Identification of new targets for therapy using lentiviral libraries based on the CRISPR/Cas9 approach."

Ruoli di insegnamento e management:

- Insegnamento di tecniche di laboratorio e ricerca per studenti di lauree triennali e specialistiche.
- Management e Training di personale tecnico e borsisti di ricerca.

Dal 22 Giugno 2013 al 2 Maggio 2019 **Postdoctoral Researcher**
The Feinstein Institute for Medical Research, Northwell Health System.
350 Community Drive, Manhasset, New York

Titolo dei progetti di ricerca

- "Study the role of IgM- and IgD-BCR isotypes in chronic lymphocytic leukaemia development and progression."

- “Study of Chronic Lymphocytic Leukaemia *in vivo* growth kinetics and intracellular populations that differ in time since last division.”
- “Effects of Bruton tyrosine kinase inhibitor (ibrutinib) in primary cells of patients”

Ruoli di insegnamento e management:
Insegnamento di tecniche di laboratorio e ricerca per studenti di lauree triennali e specialistiche.
Management e Training di personale tecnico e borsisti di ricerca.

Dal 21 Aprile 2013 al 10 Giugno 2013

Borsista

Università degli Studi di Genova
Dipartimento di Medicina Sperimentale
AREA MIN. 05 - Scienze biologiche
Settore BIO/16 - Anatomia Umana

Titolo del progetto di ricerca:

“Understand the role played by the BCR/BCR interaction in chronic lymphocytic leukemia.”

INSEGNAMENTI

Anno Accademico 2022-2023

Docente a contratto (art 23 L240 c.2) per l'insegnamento di Neuroanatomia (87157)

Corso di studi: L9289 IGIENE DENTALE AREA MIN. 05 - Scienze biologiche Settore BIO/16 - Anatomia Umana

Presso Università degli Studi di Genova, Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate

Anno Accademico 2022-2023

Docente a contratto (art 23 L240 c.2) per l'insegnamento di Anatomia dell'Apparato Stomatognatico (67715)

Corso di studi: L9289 IGIENE DENTALE AREA MIN. 05 - Scienze biologiche Settore BIO/16 - Anatomia Umana

Presso Università degli Studi di Genova, Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate

ISTRUZIONE E FORMAZIONE

22 Aprile 2013 **Dottorato in Biotecnologie**

Scuola di Dottorato in Medicina e Biologia Molecolare, Sperimentale e Clinica.
Università degli Studi di Genova
Dipartimento di Medicina Sperimentale
Supervisore: Prof. Fabio Ghiotto
AREA MIN. 05 - Scienze biologiche
Settore BIO/16 - Anatomia Umana

Titolo della tesi:
"Production of recombinant Fabs belonging to chronic lymphocytic leukemia clones and analysis of their cluster-related reactivity."

24 Luglio 2009 **Laurea Specialistica in Biotecnologie Mediche, Farmaceutiche e Veterinarie**
Università degli Studi di Genova

Titolo della Tesi:
"Adoptive immunotherapy mediated by ex vivo expanded NKT cells against CD1d-expressing lymphoid neoplasms."
Votazione: 110/110 cum Laude e Dignità di Stampa

Tirocinio di ricerca svolto presso:
Dipartimento di Medicina Sperimentale
Supervisore: Prof. Franco Fais
AREA MIN. 05 - Scienze biologiche
Settore BIO/16 - Anatomia Umana

21 Settembre 2007 **Laurea Triennale in Biotecnologie**
Università degli Studi di Genova

Titolo della Tesi:
"Definition of an experimental model capable of evaluating the use of CD1d-restricted T lymphocytes for immunotherapy of $CD1d^{+}$lymphoproliferative disorders."

Tirocinio di ricerca svolto presso:
Dipartimento di Medicina Sperimentale
Supervisore: Prof. Franco Fais
AREA MIN. 05 - Scienze biologiche
Settore BIO/16 - Anatomia Umana

1999-2004 Diploma di Scuola Superiore, Indirizzo Scientifico
Liceo Scientifico-Tecnologico Barletti, Ovada (AL), Italia

ALTRE COMPETENZE

Lingua Madre Italiano

Altre Lingue

	Comprensione		Parlato		Scritto
	Ascolto	Lettura	Interazioni	Produzioni	
Inglese	C2	C2	C2	C2	C2

Livelli: A1/A2: Principiante - B1/B2: Indipendente - C1/C2 Proficiente
Riferimenti da: Common European Framework of Reference for Languages

Comunicazione Buone capacità di comunicazione apprese durante varie presentazioni a conferenze scientifiche internazionali

Organizzazione / Management

- Coordinamento gruppi di lavoro
- Management del laboratorio di ricerca (Organizzazione e mantenimento dell'ambiente di lavoro)
- Sviluppo di protocolli (Sicurezza ed Etica per l'utilizzo di determinate tecnologie)

Tecniche Colture cellulari, Citometria a Flusso, Microscopia Confocale, Imaging di Citometria a Flusso, PCR, RT-PCR, clonaggio, sviluppo di proteine chimeriche, produzione e purificazione di proteine ricombinanti, Uso e screening di Phage Display Libraries, Enzyme-linked Immunosorbent Assay (ELISA), SDS PAGE, Western Blot, IP e Co-IP, modelli murini (NOD/SCID e NSG), immunoterapia adottiva, Surface Plasmon Resonance (Biacore T100), Editing Genomico (CRISPR/Cas9), Misurazioni *In Vivo* delle cinetiche cellulari con isotopi non radioattivi.

Competenze Digitali

Autovalutazione				
Processamento Dati	Comunicazione	Creazione Contenuti	Sicurezza	Risoluzione Problemi
Proficiente	Proficiente	Indipendente	Proficiente	Indipendente

Livelli: Principiante - Indipendente - Proficiente
Riferimenti da: EU - Digital competences - Self-assessment grid

- Buona conoscenza della suite Office (Word, Excel, Powerpoint)
- Buone capacità' di photo editing acquisite durante esperienze di presentazioni scientifiche e preparazioni di articoli scientifici.

SINTESI ATTIVITA' DI PUBBLICAZIONE SCIENTIFICA PEER-REVIEWED

https://scholar.google.com/citations?hl=en&authuser=1&user=KPc_8nkAAAAJ
Citazioni: 338 (h-index: 12)
https://publons.com/researcher/3075743/andrea-nicola-mazzarello/ Citazioni: 251 (h-index: 10)

PREMI E RICONOSCIMENTI

2009 Laude and Right of Publication at the University of Genoa (Italy).

2015 Postdoctoral Excellence in Research Award (FIRM)

2017 Abstract Achievement Award (American Society of Hematology)

FINANZIAMENTI PEER-REVIEWED

2022
European Union - Horizon 2020 MSCA-IF-EF-RI (Reintegration panel)
PI: Andrea Nicola Mazzarello, Ph.D.
Mentor: Franco Fais, PhD.
Agency/Type: European Union - Horizon 2020 Project number: 101023721
Direct Cost/year: € 183.473,28
Goal: B cell receptor engagement and signalling in chronic lymphocytic leukemia: identify the structural and functional requirements for disease development and progression.

2015
Lauri Strauss Leukemia Foundation (LSLF). Discovery Grant.
PI: Andrea Nicola Mazzarello, Ph.D.
Mentor: Nicholas Chiorazzi, M.D.
Agency/Type: LSLF – Project Code: GRTRI 540611
Direct Cost/year: $12,500
Goal: Immunoglobulin heavy chain isotype affects antibody reactivity and affinity and can lead to unabated B-cell stimulation in CLL.

2014
Lauri Strauss Leukemia Foundation (LSLF). Discovery Grant.
PI: Andrea Nicola Mazzarello, Ph.D.
Mentor: Nicholas Chiorazzi, M.D.
Agency/Type: LSLF – Project Code: GRTRI 540611
Direct Cost/year: $12,500
Goal: Associate human chronic lymphocytic leukemia B-cell receptor three-dimensional structure with epitope binding.

2012
Fondazione Italiana per la Ricerca sul Cancro (FIRC). Fellowship for Abroad.
PI: Andrea Nicola Mazzarello, Ph.D.
Mentor: Nicholas Chiorazzi, M.D.
Agency/Type: FIRC – Project Code: 13728
Direct cost/year: €26,000
Goal: Define the epitopes recognized by a large panel of recombinant Fabs derived from CLL B cells.

PUBBLICAZIONI PEER-REVIEWED

N. Bertola, S. Regis, S. Bruno, **A. N. Mazzarello**, M. Serra, M. Lupia, F. Sabatini, F. Corsolini, S. Ravera, E. Cappelli, *Effects of Deacetylase Inhibition on the Activation of the Antioxidant Response and Aerobic Metabolism in Cellular Models of Fanconi Anemia*. Antioxidants 12, 1100 (2023).

N. Bertola, S. Bruno, C. Capanni, M. Columbaro, **A. N. Mazzarello**, F. Corsolini, S. Regis, P. Degan, E. Cappelli, S. Ravera, *Altered Mitochondrial Dynamic in Lymphoblasts and Fibroblasts Mutated for FANCA-A Gene: The Central Role of DRP1*. Int J Mol Sci 24, 6557 (2023).

A. N. Mazzarello, B. Koroveshi, D. Guardo, L. Lanza, F. Ghiotto, S. Bruno, E. Cappelli, *Unexpected CD5+ B Cell Lymphocytosis during SARS-CoV-2 Infection: Relevance for the Pathophysiology of Chronic Lymphocytic Leukemia*. J Clin Med 12 (2023), doi:10.3390/jcm12030998

S. Vergani, D. Bagnara, A. Agathangelidis, A. K. Y. Ng, G. Ferrer, **A. N. Mazzarello**, F. Palacios, S. Yancopoulos, X.-J. Yan, J. C. Barrientos, K. R. Rai, K. Stamatopoulos, N. Chiorazzi, *CLL stereotyped B-cell receptor immunoglobulin sequences are recurrent in the B-cell repertoire of healthy individuals: Apparent lack of central and early peripheral tolerance censoring.* Front Oncol 13 (2023), doi:10.3389/fonc.2023.1112879.

D. Bagnara, *A. N. Mazzarello*, F. Ghiotto, M. Colombo, G. Cutrona, F. Fais, M. Ferrarini, *Old and New Facts and Speculations on the Role of the B Cell Receptor in the Origin of Chronic Lymphocytic Leukemia.* Int J Mol Sci 23, 14249 (2022).

D. Bagnara, M. Colombo, D. Reverberi, S. Matis, R. Massara, N. Cardente, G. Ubezio, V. Agostini, L. Agnelli, A. Neri, M. Cardillo, S. Vergani, F. Ghiotto, **A. N. Mazzarello**, F. Morabito, G. Cutrona, M. Ferrarini, F. Fais, *Characterizing Features of Human Circulating B Cells Carrying CLL-Like Stereotyped Immunoglobulin Rearrangements.* Front Oncol 12 (2022), doi:10.3389/fonc.2022.894419.

Mazzarello, A. N., Gentner-Göbel, E., Dühren-Von Minden, M., Tarasenko, T. N., Nicolò, A., Ferrer, G., Vergani, S., Liu, Y., Bagnara, D., Rai, K. R., Burger, J. A., McGuire, P. J., Maity, P. C., Jumaa, H., & Chiorazzi, N. (2022). B cell receptor isotypes differentially associate with cell signaling, kinetics, and outcome in chronic lymphocytic leukemia. Journal of Clinical Investigation, 132(2). https://doi.org/10.1172/JCI149308

D. Bagnara, M. Colombo, D. Reverberi, S. Matis, R. Massara, N. Cardente, G. Ubezio, V. Agostini, L. Agnelli, A. Neri, M. Cardillo, S. Vergani, F. Ghiotto, **A. N. Mazzarello**, F. Morabito, G. Cutrona, M. Ferrarini, F. Fais, *Characterizing Features of Human Circulating B Cells Carrying CLL-Like Stereotyped Immunoglobulin Rearrangements.* Frontiers in Oncology 12 (2022), doi:10.3389/fonc.2022.894419.

Ferrer, G., Jung, B., Chiu, P. Y., Aslam, R., Palacios, F., **Mazzarello, A. N.,** Vergani, S., Bagnara, D., Chen, S. S., Yancopoulos, S., Xochelli, A., Yan, X. J., Burger, J. A., Barrientos, J. C., Kolitz, J. E., Allen, S. L., Stamatopoulos, K., Rai, K. R., Sherry, B., & Chiorazzi, N. (2021). Myeloid-derived suppressor cell subtypes differentially influence T-cell function, T-helper subset differentiation, and clinical course in CLL. Leukemia, 35(11), 3163–3175. https://doi.org/10.1038/s41375-021-01249-7

D. Bagnara, C. Tang, J. R. Brown, S. Kasar, S. Fernandes, M. Colombo, S. Vergani, **A. N. Mazzarello**, F. Ghiotto, S. Bruno, F. Morabito, K. R. Rai, J. E. Kolitz, J. C. Barrientos, S. L. Allen, F. Fais, M. D. Scharff, T. MacCarthy, N. Chiorazzi, *Post-Transformation IGHV-IGHD-IGHJ Mutations in Chronic Lymphocytic Leukemia B Cells: Implications for Mutational Mechanisms and Impact on Clinical Course*. Frontiers in Oncology 11 (2021), doi:10.3389/fonc.2021.640731.

Di Pisa, F., Pesenti, E., Bono, M., **Mazzarello, A. N.,** Bernardi, C., Lisanti, M. P., Renzone, G., Scaloni, A., Ciccone, E., Fais, F., Bruno, S., Scartezzini, P., & Ghiotto, F. (2021). SH3BGRL3 binds to myosin 1c in a calcium dependent manner and modulates migration in the MDA-MB-231 cell line. *BMC Molecular and Cell Biology*, *22*(1). https://doi.org/10.1186/s12860-021-00379-1

Ravera, S., Ghiotto, F., Tenca, C., Gugiatti, E., Santamaria, S., Ledda, B., Ibatici, A., Cutrona, G., **Mazzarello, A. N**., Bagnara, D., Cardillo, M., Zarcone, D., Darzynkiewicz, Z., Ciccone, E., Fais, F., & Bruno, S. (2020). Berberine affects mitochondrial activity and cell growth of leukemic cells from chronic lymphocytic leukemia patients. *Scientific Reports*, *10*(1). https://doi.org/10.1038/s41598-020-73594-z

M. Colombo, D. Bagnara, D. Reverberi, S. Matis, M. Cardillo, R. Massara, L. Mastracci, J.L. Ravetti, L. Agnelli, A. Neri, M. Mazzocco, M. Squillario, **A.N. Mazzarello**, G. Cutrona, A. Agathangelidis, K. Stamatopoulos, M. Ferrarini, F. Fais, 2020. *Tracing CLL-biased stereotyped immunoglobulin gene rearrangements in normal B cell subsets using a high- throughput immunogenetic approach.* 2020. Mol Med. https://doi.org/10.1186/s10020-020-00151-9

P.C. Maity, M. Bilal, M.T. Koning, M. Young, C. AM. van Bergen, V. Renna, A. Nicolò, M. Datta, E. Gentner-Göbel, R.S. Barendse, S.F. Somers, R.AL. de Groen, J.SP. Vermaat, D. Steinbrecher, C. Schneider, E. Tausch, T. Bittolo, R. Bomben, **A.N. Mazzarello**, G. Del Poeta, W.GM. Kroes, J.T. van Wezel, K. Imkeller, C.E. Busse, M. Degano, T. Bakchoul, A.R. Schulz, H. Mei, P. Ghia, K. Kotta, K. Stamatopoulos, H. Wardemann, A. Zucchetto, N. Chiorazzi, V. Gattei, S. Stilgenbauer, H. Veelken, H. Jumaa. 2020. *IGLV3-21*01 is an inherited risk factor for CLL through the acquisition of a single-point mutation enabling autonomous BCR signaling.* PNAS. https://doi.org/10.1073/ pnas. 1913810117

R. Sankowski, J.J. Strohl, T.S. Huerta, E. Nasiri, **A.N. Mazzarello**, C. D'Abramo, K.F. Cheng, O. Staszewski, M. Prinz, P.T. Huerta, and Y. Al-Abed. 2019. *Endogenous retroviruses are associated with hippocampus-based memory impairment.* PNAS. https://doi.org/10.1073/pnas.1822164116

Mazzarello A.N., Fitch M, Hellerstein MK, Chiorazzi N. 2019. *Measurement of leukemic B-cell growth kinetics in patients with chronic lymphocytic leukemia.* Methods Mol Biol. 10.1007/978-1-4939-8876-1_11

E. Gugiatti, Tenca C., Ravera S., Fabbi M., Ghiotto F., **Mazzarello A.N.**, Bagnara D., Reverberi D., Zarcone D., Cutrona G., Ibatici A., Ciccone E., Darzynkiewicz Z., Fais F., Bruno S.. 2018 *A reversible carnitine palmitoyltransferase (CPT1) inhibitor offsets the proliferation of chronic lymphocytic leukemia cells.* Haematologica, 103 (11) e531-e536; DOI: 10.3324/haematol.2017.175414.

Vergani, S., Korsunsky I., **Mazzarello A.N.**, Ferrer G., Chiorazzi N., Bagnara D.. 2017. *Novel method for high-throughput full-length IGHV-D-J sequencing of the immune repertoire from bulk B-cells with single-cell resolution*. Front Immunol 8: 1157

Bruno, S., Ledda B., Tenca C., Ravera S., Orengo A. M., **Mazzarello A.N.**, Pesenti E., Casciaro S., Racchi O., Ghiotto F., Marini C., Sambuceti G., DeCensi A., Fais F.. 2015. *Metformin inhibits cell cycle progression of B-cell chronic lymphocytic leukemia cells. Oncotarget* 6: 17.

Marcatili P, Ghiotto F, Tenca C, Chailyan A, **Mazzarello A.N.**, Xiao-Jie Yan, Colombo M, Albesiano E, Bagnara D, Cutrona G, Morabito F, Bruno S, Ferrarini M, Chiorazzi N, Tramontano A, Franco F. *Igs expressed by chronic*

lymphocytic leukemia B cells show limited binding-site structure variability. J Immunol 190, 5771-5778, doi:10.4049/jimmunol.1300321 (2013).

Bruno S, Ghiotto F, Tenca C, **Mazzarello A.**, Bono M, Luzzi P, Casciaro S, Recchia A, Decensi A, Morabito F, Fais F. *N-(4-hydroxyphenyl) retinamide promotes apoptosis of resting and proliferating B-cell chronic lymphocytic leukemia cells and potentiates Fludarabine and ABT- 737* cytotoxicity. *Leukemia*. 2012 Apr 5. doi: 10.1038/leu.2012.98.

Scapolan O*, **Mazzarello A.N.*,** Bono M, Occhino M, Ogryzko V, Bestagno M, Scartezzini P, Bruno S, Fais F, Ghiotto F. *A Vector Design that Allows Fast and Convenient Production of Differently Tagged Proteins. Mol Biotechnol*. 2011 Nov 11. [Epub ahead of print] ***These authors contributed equally to the work.*

Bagnara D, Ibatici A, Corselli M, Sessarego N, Tenca C, De Santanna A, **Mazzarello A.,** Daga A, Corvò R, De Rossi G, Frassoni F, Ciccone E, Fais F. *Adoptive immunotherapy mediated by ex vivo expanded natural killer T cells against CD1d-expressing lymphoid neoplasms. Haematologica*. 2009 Jul; 94(7): 967-74.

ABSTRACT PEER-REVIEWED PER CONFERENZE

A.N. Mazzarello, M. Fitch, A. Ng, S. Bhuiya, E. Sharma, A. Shih, M. Cardillo, S.L. Allen, J.E. Kolitz, J. Barrientos, K.R. Rai, M. Hellerstein, N. Chiorazzi. *Analyses of the Kinetics and Phenotype of Multiple Intraclonal CXCR4/CD5 B Cell Subsets Suggest Differences in Life Cycle Transitioning in CLL*, Blood, Volume 138, Supplement 1, 2021, Page 2622, ISSN 0006-4971, https://doi.org/10.1182/blood-2021-154224.

A. Ng, M. Fitch, **A.N. Mazzarello**, G. Ferrer, J. Barrientos, K. Rai, M. Hellerstein, N. Chiorazzi. 2020. Intraclonal analysis of various subpopulations defined by the reciprocal levels of CXCR4 and CD5 highlight the complex kinetic patterns of CLL B-cells. Leukemia & Lymphoma.

D. Bagnara, S. Vergani, A. Agathangelidis, S. Kasar, S. Fernandes, **A.N. Mazzarello**, G. Ferrer, F. Ghiotto, K. Stamatopoulos, F. Fais, J. Brown, N. Chiorazzi. 2020. *IGH repertoire of CD5+ B cells from CLL patients: insights into CLL ontogeny.* Leukemia & Lymphoma.

E Gentner, **AN Mazzarello**, N Chiorazzi, H Jumaa, PC Maity. 2019. *Investigation of the Association between the Chemokine Receptor CXCR4 and the B Cell Receptor (BCR) Isotype IgM or IgD in Healthy and CLL Patient Samples.* European Journal of Immunology.

Mazzarello, A. N., Dühren-von Minden, M., Gentner, E., Maity, P. C., Ferrer, G., Tarasenko, T., Vergani, S., Barrientos, J. C., Rai, K. R., McGuire, P., Jumaa, H., & Chiorazzi, N. (2018*). Chronic Lymphocytic Leukemia B Cells Display IgM and IgD Isotype-Restricted Features That Affect Association with Co-Receptors, BCR Signaling, and Leukemic B-Cell Growth In Vivo. Blood,* 132(Suppl 1), 3124. https://doi.org/10.1182/blood-2018-99-119989.

Ferrer, G., Jung, B., Rukhsana, A., Chiu, P. Y., **Mazzarello, A. N**., Palacios, F., Chen, S., Yan, X. J., Barrientos, J. C., Burger, J. A., Kolitz, J. E., Allen, S. L., Rai, K. R., Sherry, B., & Chiorazzi, N. (2018). *Ibrutinib Treatment Reduces Myeloid Derived Suppressor Cell Numbers and Function in Chronic Lymphocytic Leukemia*. *Blood,* 132(Suppl 1), 239. https://doi.org/10.1182/blood-2018-99-114799.

Gentner, E., **Mazzarello, A. N.**, Becker, M., Nicolò, A., Renna, V., Chiorazzi, N., Reth, M., Jumaa, H., & Maity, P. C. (2018). *Association of CXCR4 with IgM and IgD BCR Isotypes: Role in B Cell Malignancies. Blood,* 132(Suppl 1), 1852. https://doi.org/10.1182/blood-2018-99-116585.

Bagnara, D., Vergani, S., **Mazzarello, A. N.**, Ferrer, G., Fais, F., & Chiorazzi, N. (2017) *IGHV-D-J Repertoire Analysis Obtained By High-Throughput Sequencing of CD5+ B-Cells in CLL Patients: Prognostic Markers and Disease Development Implications. Blood,* 130(Suppl 1), 54.

Chen, S., Ravichandran, P., Ferrer, G., **Mazzarello, A. N.,** Palacios, F., Ibrahim, M., Kieso, Y., Barrientos, J. C., Clark, E., Sherry, B., Burger, J. A., Rai, K., & Chiorazzi, N. (2017*). Ibrutinib Disrupts IL-4R - IL-4 Axis By Inhibiting IL-4R Signaling and Reversing Th2/Th1 Polarization through Diminished CLECL1 in CLL B Cells. Blood,* 130(Suppl 1), 387.

Ferrer, G., Franca, B., Chiu, P. Y., Vergani, S., **Mazzarello, A. N.,** Palacios, F., Chen, S., Bagnara, D., Yancopoulos, S., Liu, Y., Xochelli, A., Yan, X. J., Kolitz, J. E., Allen, S. L., Barrientos, J. C., Stamatopoulos, K., Rai, K., Sherry, B., & Chiorazzi, N. (2017). *Myeloid-Derived Suppressor Cell Subtypes Are Responsible for the Th2 Phenotype of T Cells in CLL. Blood,* 130(Suppl 1),4294.

Mazzarello, A. N., Dühren-von Minden, M., Maity, P. C., Eva, G., Vergani, S., Ferrer, G., Bagnara, D., Chen, S., Yancopoulos, S., Yan, X. J., Barrientos, J. C., Rai, K., Jumaa, H., & Chiorazzi, N. (2017). *IgM and IgD Differential CLL BCRs Organization and Interaction with Co-Receptors before and during Ibrutinib Therapy. Blood,* 130(Suppl 1), 1716.

E. Gugiatti, C. Tenca, F. Ghiotto, S. Matis, D. Reverberi, G. Cutrona, D. Bagnara, **A.N. Mazzarello**, A. Ibatici, E. Ciccone, F. Fais, S. Bruno. *Unexpected Effects of Bisphosphonates in In Vitro Models of Activated CLL Cells.* (2017) International Workshop of CLL (iwCLL).

D. Bagnara, S. Vergani, G. Ferrer, **A.N. Mazzarello**, F. Fais, N. Chiorazzi. *Intraclonal Diversification and Evolution in Chronic Lymphocytic Leukemia Patients by High- Throughput Sequencing of IGHV-D-J Rearrangements.* (2017) International Workshop of CLL (iwCLL).

E. Gugiatti, C. Tenca, F. Ghiotto, S. Ravera, G. Cutrona, D. Reverberi, S. Matis, **A.N. Mazzarello**, D. Bagnara, A. Ibatici, E. Ciccone, F. Fais, S. Bruno. *Effects of Fatty Acid Oxidation Inhibitors on In Vitro Stimulated Chronic Lymphocytic Leukemia Cells.* (2017) International Workshop of CLL (iwCLL).

A.N. Mazzarello, S. Vergani, G. Ferrer, S-S. Chen, Y. Liu, S. Yancopoulos, J. Yan, J. Barrientos, K. Rai, N. Chiorazzi. *Differential CLL BCR/Co-Receptor Density Regulation in Various Intraclonal Fractions, Before and During Ibrutinib Treatment.* (2017) International Workshop of CLL (iwCLL).

S. Vergani, D. Bagnara, **A.N. Mazzarello**, G. Ferrer, S. Yancopoulos, K. Stamatopoulos, N. Chiorazzi. *CLL Stereotyped IGHV-D-J Rearrangements Can Be Detected in Normal B-Cell Populations Using Ultra-Deep, Next Generation Sequencing Techniques.* (2017) International Workshop of CLL (iwCLL).

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