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## **Mutagenic mechanisms in normal and neoplastic B cells: from AID-induced diversification to genome-wide patterns**

Sepúlveda Yáñez, J.H.

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## LIST OF PUBLICATIONS AND CONFERENCE PRESENTATIONS

### PUBLICATIONS IN THIS THESIS

**Sepúlveda-Yáñez, J. H.**, Alvarez-Saravia, D., Fernández-Goycoolea, J., Aldridge, J., van Bergen, C. A. M., Posthuma, W., Uribe-Paredes, R., Veelken, H., & Navarrete, M. A. (2021). Integration of mutational signature analysis with 3D chromatin data unveils differential AID-related mutagenesis in indolent lymphomas. *International Journal of Molecular Sciences*, 22(23), 13015.

**Sepúlveda-Yáñez, J. H.**, Alvarez Saravia, D., Pilzecker, B., van Schouwenburg, P. A., van den Burg, M., Veelken, H., Navarrete, M. A., Jacobs, H., & Koning, M. T. (2022). Tandem substitutions in somatic hypermutation. *Frontiers in Immunology*, 12, 807015.

Quinten, E., **Sepúlveda-Yáñez, J. H.**, Koning, M. T., Eken, J. A., Pfeifer, D., Nteleah, V., de Groen, R. A. L., Saravia, D. A., Knijnenburg, J., Stuivenberg-Bleijswijk, H. E., Pantic, M., Agathangelidis, A., Keppler-Hafkemeyer, A., van Bergen, C. A. M., Uribe-Paredes, R., Stamatopoulos, K., Vermaat, J. S. P., Zirikli, K., Navarrete, M. A., Jumaa, H., & Veelken, H. (2023). Autonomous B-cell receptor signaling and genetic aberrations in chronic lymphocytic leukemia-phenotype monoclonal B lymphocytosis in siblings of patients with chronic lymphocytic leukemia. *Haematologica*, 109(3), 824-834.

**Sepúlveda-Yáñez, J. H.**, Saravia, D. A., Medina, D., Quinten, E., Kloet, S., Jansen, P. M., Posthuma, E. W. M., Kielbasa, S. M., van Bergen, C. A. M., Navarrete, M. A., & Veelken, H. (2024). Detection of occurrent somatic hypermutation and associated gene expression profile in single. *Blood Cancer Discovery*. Manuscript under review.

### PUBLICATIONS NOT IN THE THIS THESIS

Cabas-Mora, G., Daza, A., Soto-García, N., Garrido, V., Alvarez, D., Navarrete, M., Sarmiento-Varón, L., Yáñez, J. H. S., Davari, M. D., Cadet, F., Olivera-Nappa, Á., Uribe-Paredes, R., & Medina-Ortiz, D. (2024). Peptipedia v2.0: A peptide sequence database and user-friendly web platform. A major update (p. 2024.07.11.603053). *bioRxiv*. <https://doi.org/10.1101/2024.07.11.603053>

Eken, J. A., Koning, M. T., Kupcova, K., **Sepúlveda Yáñez, J. H.**, de Groen, R. A. L., Quinten, E., Janssen, J., van Bergen, C. A. M., Vermaat, J. S. P., Cleven, A., Navarrete, M. A., Ylstra, B., de Jong, D., Havranek, O., Jumaa, H., & Veelken, H. (2024). Antigen-independent, autonomous B cell receptor signaling drives activated B cell DLBCL. *Journal of Experimental Medicine*, 221(5), e20230941. <https://doi.org/10.1084/jem.20230941>

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Morande, P. E., Yan, X.-J., **Sepulveda, J.**, Seija, N., Marquez, M. E., Sotelo, N., Abreu, C.,

Crispo, M., Fernández-Graña, G., Rego, N., Bois, T., Methot, S. P., Palacios, F., Remedi, V., Rai, K. R., Buschiazzo, A., Di Noia, J. M., Navarrete, M. A., Chiorazzi, N., & Oppezzo, P. (2021). AID overexpression leads to aggressive murine CLL and nonimmunoglobulin mutations that mirror human neoplasms. *Blood*, 138(3), 246–258. <https://doi.org/10.1182/blood.2020008654>

Shafighi, S. D., Kielbasa, S. M., **Sepúlveda-Yáñez, J.**, Monajemi, R., Cats, D., Mei, H., Menafrá, R., Kloet, S., Veelken, H., van Bergen, C. A. M., & Szczurek, E. (2021). CACTUS: Integrating clonal architecture with genomic clustering and transcriptome profiling of single tumor cells. *Genome Medicine*, 13(1), 45. <https://doi.org/10.1186/s13073-021-00842-w>

van Bergen, C. A. M., Kloet, S. L., Quinten, E., **Sepúlveda Yáñez, J. H.**, Menafrá, R., Griffioen, M., Jansen, P. M., Koning, M. T., Knijnenburg, J., Navarrete, M. A., Kielbasa, S. M., & Veelken, H. (2023). Acquisition of a glycosylated B-cell receptor drives follicular lymphoma toward a dark zone phenotype. *Blood Advances*, 7(19), 5812–5816. <https://doi.org/10.1182/bloodadvances.2023010725>

## CONFERENCE PRESENTATIONS

**59th American Society of hematology (ASH) Annual Meeting and Exposition, Atlanta, United States (2017)** (poster presentation) Sepulveda-Yanez, J.H., van Bergen, C.A.M., Alvarez, D., Kielbasa S.M., Mei H., Veelken, J.H., Navarrete, M.A.

The Mutation Landscape of Follicular Lymphoma and Chronic Lymphocytic Leukemia Reveals a Distinctive Frequency and Composition of Aid-Related Mutation Signatures

**60th American Society of hematology (ASH) Annual Meeting and Exposition, San Diego, United States (2018)** (poster presentation) Sepulveda-Yanez, J.H., Alvarez, D., Fernandez-Goycoolea, J., van Bergen, C.A.M., Veelken, J.H., Navarrete, M.A.

Differential Genome-Wide Mutational Patterns in Indolent B-Cell Lymphomas

**63rd American Society of hematology (ASH) Annual Meeting and Exposition, Atlanta, United States (2021)** (poster presentation) Sepulveda-Yanez, J.H., Alvarez, D., Quinten, E., Menafrá, R., Kloet, S.L., Monajemi, R., Kielbasa S.M., Navarrete, M.A., van Bergen, C.A.M., Veelken, J.H.

“Snapshotting” Somatic Hypermutation in Single Follicular Lymphoma Cells

**63rd American Society of hematology (ASH) Annual Meeting and Exposition, Atlanta, United States (2021)** (poster presentation, co-author) Koning, M.T., Sepulveda-Yanez, J.H., Alvarez, D., Pilzecker, B., van Schouwenburg, P., van den Burg, M., Navarrete, M.A., Jacobs, H., Veelken, J.H.

Tandem Substitutions in Somatic Hypermutation

**64th American Society of hematology (ASH) Annual Meeting and Exposition, New Orleans, United States (2022)** (poster presentation, co-author) Gonzalez-Puelma, J., Sepulveda-Yanez, J.H., Torres-Almonacid, Alvarez, D., Marquez, M.E., Alvarez-Ojeda, H., Cardemil, D., Urive-Paredes, R., Oppezzo, P., Navarrete, M.A.

Unbiased NGS Approach for IGHV Mutational Status, Clonal Space and Immune Repertoire Assessment in Chronic Lymphocytic Leukemia

**64th American Society of hematology (ASH) Annual Meeting and Exposition, New Orleans, United States (2022)** (poster presentation, co-author) Eken, J.A, Koning, M.T, Sepulveda-Yanez, J.H., van Bergen, C.A.M, Quinten, E., Kupcova, K., Havranek, O., De groen, R.A.L, Vermaat, J.S.P, de Jong, D., Kluin, P., Cleven, A., Jumaa, H, Veelken, J.H.

Antigen-Independent, Autonomous B-Cell Receptor Signaling in Diffuse Large B-Cell Lymphoma

**64th American Society of hematology (ASH) Annual Meeting and Exposition, New Orleans, United States (2021)** (poster presentation, co-author) Sepulveda-Yanez, J.H., Quinten, E., Koning, M.T, Eken, J.A, Pfeifer, D., De groen, R.A.L, Alvarez-Saravia, D., Agathangelidis, A., van Bergen, C.A.M, Stamatopoulos, S., Vermaat, J.S.P, Zirlik, K., Navarrete, M.A., Jumaa, H, Veelken, J.H.

Autonomous BCR Signaling and Genetic Aberrations in CLL-Phenotype Monoclonal B Lymphocytosis in Siblings of CLL Patients



**CURRICULUM VITAE**

Julieta Haydeé Sepúlveda Yáñez was born on October 26, 1987, in Punta Arenas, Chile. In 2005, she completed her high school education at Liceo Juan Bautista Contardi. She earned her bachelor's degree in Medical Technology (2006-2010), specializing in morphophysiology and cytodiagnosics at the University of Concepcion, graduating cum laude and as the top of her class. In 2011, she started her master's degree in Biochemistry and Bioinformatics at the University of Concepcion, having received a national scholarship, and graduated cum laude. In 2014, she was appointed as a lecturer at the Universidad de Magallanes. In December 2016, after receiving a national doctoral scholarship, she began her PhD in the Department of Hematology at Leiden University Medical Center. Currently, she is an associate professor in the Faculty of Health Sciences at Universidad de Magallanes.



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