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Part A. PERSONAL INFORMATION

CV date 26/07/2023

First name	Virginia		
Family name	G. de Yebenes		
Gender (*)	Female	Birth date (dd/mm/yyyy)	30/10/1972
Social Security, Passport, ID number	51416216S		
e-mail	vgarciay@ucm.es	URL Web	https://www.ucm.es/iao/bcellphysiopatology
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-3785-5868		

(*) *Mandatory*

A.1. Current position

Position	Associate Professor		
Initial date	01/12/2019		
Institution	Universidad Complutense de Madrid (UCM)		
Department/Center	Immunology	Faculty of Medicine	
Country	Spain	Teleph. number	34-91 394 1641
Key words	microRNA, B lymphocyte, lymphoma, Germinal Center		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
12.2015-11.2019	Research Associate. Centro Nacional de Investigaciones Cardiovasculares (CNIC). Spain
12.2011-11.2015	“Ramon y Cajal” Researcher. Centro Nacional de Investigaciones Cardiovasculares (CNIC). Spain. Maternity leave (14/05/2012 to 02/09/2012: 4 months)
04.2010-11.2011	“Ramon y Cajal” Researcher. Centro Nacional de Investigaciones Oncologicas (CNIO). Spain. Maternity leave (03/08/2010-22/11/2010: 4 months)
04.2006 -03.2010	Postdoctoral Researcher. Centro Nacional de Investigaciones Oncologicas (CNIO). Spain
04.2003-03.2006	Head of flow cytometry research technical unit. Centro de Biología Molecular Severo Ochoa (CBMSO-CSIC). Spain
01.2003 -03.2003	Postdoctoral Researcher. Centro de Biología Molecular Severo Ochoa (CBMSO-CSIC). Spain
01.1997-12.2002	Predoctoral Researcher. Centro de Biología Molecular Severo Ochoa (CBMSO-CSIC). Spain
10.1995 -06.1996	Predoctoral Researcher. Centro Nacional de Biotecnología (CNB-CSIC). Spain

A.3. Education

PhD	University/Country	Year
Ph.D. Immunology	Universidad Autónoma de Madrid (UAM). Spain	2002
Degree	University/Country	Year
Biochemistry	Universidad Autónoma de Madrid (UAM)	1995



Part B. CV SUMMARY (*max. 5000 characters, including spaces*)

Virginia G. de Yebenes (Detroit, USA 1972) obtained her BS degree in Biochemistry and Molecular Biology at the Universidad Autónoma de Madrid in 1995. De Yebenes received her PhD and First Class Honours distinction from the Universidad Autónoma de Madrid in 2002. Dr. de Yebenes joined Almudena R. Ramiro's group at the Spanish National Oncology Research Center (CNIO) as a postdoctoral fellow.

In 2009 de Yebenes was awarded a "Ramon y Cajal" research position and her scientific career was acknowledged with an I3 outstanding research trajectory certificate from the Spanish National Evaluation Agency in 2014.

She joined the Centro Nacional de Investigaciones Cardiovasculares (CNIC) in 2011, where she worked as a Research Associate in the B Cell Biology Lab until her appointment as Associate Professor at the Universidad Complutense de Madrid (UCM) in 2019. During this time as postdoctoral and senior researcher, she developed a new research line focused in the characterization of the role of microRNAs in the regulation of mature Germinal Center (GC) B cell biology and oncogenic transformation processes. Dr. de Yebenes developed new state-of-the-art microRNA gain and loss of function mouse models, including "microRNA sponges" bone marrow chimeras, microRNA transgenics and *knock-ins*, and conditional *knock-outs*. These works showed that microRNAs are key regulators of the GC response and led to the identification of microRNAs that play essential roles in: i) the regulation of GC molecular processes (i.e. miR-181 through AID expression regulation), ii) suppressing GC-derived neoplastic transformation (i.e. miR-28 is a GC tumor-suppressors through BCR signaling regulation) and iii) promoting GC transformation (i.e. miR-217 is a GC oncogene that regulates DNA damage response and Bcl6 expression). As a Research Associate, Dr. de Yebenes directly contributed to the scientific mentoring of some of the students in the B cell Lab laboratory (6 PhD students: 12 collaborative articles and 4 reviews), codirected a Master work (Teresa Fuertes Novella; UAM 2017) and two PhD thesis (Nahikari Bartolomé; UAM 2016 and Teresa Fuertes; UAM 2023). Dr. de Yebenes has published 8 highly cited articles about the role of microRNAs in GC regulation and oncogenic transformation topic (5 as corresponding author) in the most important journals of the field (Journal of Experimental Medicine, cited 198 times; Immunity, cited 123 times; Immunol Rev, cited 71 times; Blood; EMBO Reports; Trends in Immunology and a book chapter in Methods in Molecular Biology). The clinical applications of these works for B cell lymphoma treatment have been patented (EP15382249.9 and EP17382740.3). Dr. de Yebenes obtained an "Investigador AECC" grant in 2018 to develop these research lines and a grant as principal investigator.

Dr de Yébenes is the group leader of B cell physiopathology Group at the Immunology Department of the Faculty of Medicine from the UCM since December 2019. The laboratory is interested in charactering the role of non-coding RNAs in the regulation of B cell responses to use this knowledge for the design of new strategies to modulate immune responses and develop therapies for B cell lymphomas. Dr de Yebenes has directed 2 Master works (Irene Salgado; UCM 2021 and María Laguna; UCM 2022) and is directing a PhD Thesis (Emigdio Álvarez; UCM) with the financial support from the Spanish Ministerio de Ciencia e Innovación (I+D+i 2019 call; PID2019-107551RB-I00) and Comunidad de Madrid (CT4/21/PEJ-2020-AI/BMD-18112) and in collaboration with national (Salvador Iborra, UCM; Nuria Martinez Martin, CBMSO and Álvaro Somoza, Idmea-Nanociencia) and international (Andrea Ventura, MSK. NY.USA) experts. In addition, Dr. de Yébenes is the scientific co-director of the Lymphocyte Immunobiology Research Group, that includes 9 IPs working in immunology research lines, at the Instituto de Investigación Sanitaria Hospital 12 de Octubre.

During her research career, Dr. de Yébenes has published 28 scientific articles, 13 as principal author and 6 as corresponding author. These articles have been published in high-impact journals and have had a relevant contribution in the field, as shown by different bibliometric parameters; 1,175 total citations,



91 average citations/year in the last 5 years, high citation percentiles and an H index of 21. Dr de Yébenes contributes regularly to other scientific activities including: (a) peer-review of research articles and grant applications, (b) participating as member of PhD and master thesis committees, and (c) being part of evaluation committees for research positions at the UCM. In addition, Dr. de Yébenes participates regularly in scientific dissemination activities (i.e. school talks, activities for “*Semana de la Ciencia*” dissemination programs and publication of a science general audience articles in “*The Conversation*”) and has a regular activity as university teacher of Immunology in graduate and master courses since 2019.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Selected Publications (including books)

1. Fuertes-Novella, T; Salgado, I; de Yébenes, V.G. 2021. microRNA Fine-Tuning of the Germinal Center Response. **Frontiers in Immunology**.12: 660450. IF: 8.8. Quartile: 1
2. Fuertes-Novella, T; Ramiro, A.R.; de Yébenes, V.G. 2020. miRNA-based therapeutics in non-Hodgkin lymphoma: advances and future challenges. **Trends Immunol.** 932-947. IF: 16.7. Decile:1 Quartile: 1. Citations: 15
3. de Yébenes VG[&], Briones AM, Martos-Folgado I, ...Ramiro AR[&]. (& corresponding author). (1/16; CA). 2020. Aging-Associated miR-217 Aggravates Atherosclerosis and Promotes Cardiovascular Dysfunction. **Arterioscler Thromb Vasc Biol.** 40(10):2408-2424. IF: 8.3. Decile:1 Quartile: 1. Citations: 39 (97th percentile Scopus).
4. Fernández-Messina L, Rodríguez-Galán A, de Yébenes VG, Gutiérrez-Vázquez C, Tenreiro S, Seabra MC, Ramiro AR, Sánchez-Madrid F. Transfer of extracellular vesicle-microRNA controls germinal center reaction and antibody production. **EMBO Rep.** 2020 Apr 3;21(4):e48925. IF: 8.8. Quartile: 1 Citations: 27 (92th percentile Scopus).
5. Álvarez-Prado, Á.F; Pérez-Durán, P; Pérez-García, A; Benguria, A; Torroja, C; de Yébenes, V.G.; Ramiro AR. 2018. A broad atlas of somatic hypermutation allows prediction of activation-induced deaminase targets. **J Exp Med.** 215(3):761-771. IF:10.9 Decile:1 Quartile: 1 Citations: 52 (93th percentile Scopus)
6. Bartolomé-Izquierdo, N[#]; de Yébenes V.G^{#&}; Álvarez-Prado, A.F; Mur, S.M; Lopez del Olmo, J.A; Roa, S; Vazquez, J.; Ramiro[&] A.R. (# fist co-author; & corresponding author). 2017. miR-28 regulates the germinal center reaction and blocks tumor growth in preclinical models of Non-Hodgkin Lymphoma. **Blood.** 129(17):2408-2419. IF:13.2 Decile:1 Quartile: 1 Citations: 38 (84th percentile Scopus).
7. de Yébenes, V.G[&]; Bartolome-Izquierdo, N; Nogales-cadenas, R; ... Ramiro, A.R[&]. (& corresponding author). (1/12; CA). 2014. miR-217 is an oncogene that enhances the germinal center reaction. **Blood.** 124(2):229-39. IF:10.5 Decile:1 Quartile:1 Citations: 52 (85th percentile Scopus).
8. de Yébenes, V.G.; Bartolome-Izquierdo, N; Ramiro, A.R. 2013. Regulation of B-cell development and function by microRNAs. **Immunol Rev.** 253(1):25-39. IF:12.2 Decile:1 Quartile: 1 Citations: 71 (78th percentile Scopus).
9. Belver, L; de Yébenes, V.G.; Ramiro, A.R. 2010. MicroRNAs prevent the generation of autoreactive antibodies. **Immunity.** 33(5):713-22. IF:19.8 Decile:1 Quartile: 1 Citations: 123 (91th percentile Scopus).
10. de Yébenes, V.G; Belver, L; Pisano, DG; González, S; Villasante, A; Croce, C; He, L; Ramiro, A.R. 2008. miR-181b negatively regulates activation-induced cytidine deaminase in B cells. **J Exp Med.** 205(10):2199-206. IF:15.5. Decile:1 Quartile: 1 Citations: 198 (92th percentile Scopus).

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

1. miR-28 enhances the anti-tumoral effect of ibrutinib inducing a cell cycle arrest transcriptional program in aggressive B lymphomas. 4th European B cell Forum 2022. Egmond aan Zee - The Netherlands. From 06/27/201 to 06/29/2017. European B cell Network. *Authors:* Teresa Fuertes, Emigdio Álvarez-Corrales, Patricia Ubieto,...Virginia G. de Yébenes (9/9). Oral presentation



2. The age-associated microRNA miR-217 impairs endothelial function in vivo. “CURRENT TRENDS IN BIOMEDICINE”. NONCODING RNA-MEDIATED METABOLIC REGULATION IN HEALTH AND DISEASE. Baeza, España. From 11/05/2017 to 11/08/2017. Universidad Internacional de Andalucía. **Authors:** Virginia G. de Yebeles; Faiz Bilal, Ana Briones,... Almudena R. Ramiro (1/8). Oral presentation and poster
3. Non-Hodgkin lymphoma therapeutics by microRNA-28 replacement. B Cells at the Intersection of Innate and Adaptive Immunity Keystone Symposia. Stocholm, Sweden. From: 05/29/2016 to 06/02/2016. Keystone Symposia. **Authors:** Virginia G. de Yebeles; Nahikari Bartolome; Angel F. Alvarez, Sonia M. ...Almudena R. Ramiro (1/9). Oral presentation and poster
4. miR-217 is an oncogene that enhances the germinal center reaction. Biology of B cell responses Keystone Symposia. Keystone, Colorado, United States of America. From: 02/09/2014 to 02/14/2014. Keystone Symposia. **Authors:** Virginia G. de Yebeles; Nahikari Bartolome; Almudena R. Ramiro. Oral presentation and poster.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

1. **Title:** Contribución funcional de los microARNs a la transformación neoplásica de linfocitos B. (PID2019-107551RB-I00). **Participant Institution:** Universidad Complutense de Madrid. **PI:** Virginia G. de Yébenes. **Funding Institution:** Ministerio de Ciencia e Innovación (Retos-colaboración 2019). **From:** 01/06/2020 **To:** 30/05/2023. **Total Amount:** 133.100€
2. **Title:** Ayudas para la contratación de ayudantes de investigación. PEJ-2020-AI/BMD-18112. **Participant Institution:** Universidad Complutense de Madrid **PI:** Virginia G. de Yébenes. **Funding Institution:** Comunidad De Madrid. **From:** 01/04/2021 **To:** 31/03/2023. **Total Amount:** 45.000€
3. **Title:** Understanding the function of miR-28 in the immune response and in B cell lymphomas. **Participant Institution:** Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III. **PI:** Virginia G. de Yébenes. **Funding Institution:** Asociación Española Contra el Cáncer (AECC). Investigador AECC 2018. **From:** 01/12/2019 **To:** 31/12/2021. **Total Amount:** 200.000€
4. **Title:** Estudio de la contribución funcional de microRNAs a la generación de fenómenos linfomagénicos asociados a las reacciones de centros germinales. **Participant Institutions:** Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III and Centro Nacional de Investigaciones Oncológicas. **PI:** Virginia G. de Yébenes. **Funding Institution:** Ministerio de Ciencia e Innovación. Programa Ramón y Cajal. **From:** 15/04/2010 **To:** 01/05/2016. **Total Amount:** 192.480 €.
5. **Title:** microRNA replacement therapy for mature B cell neoplasias – HEAL-BY-MIR 713728. ERC Proof of Concept Grant 2015. **Participant Institution:** Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III. **PI:** Almudena R Ramiro. **Funding Institution:** European Research Council (H2020 European Framework Program). Total Amount: 149.750€. **Applicant’s line of research in the project:** Therapeutic potential of miR-28 for B cell lymphomas.

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any

1. **Inventors** (by order of signature): María Luisa Toribio García, Graciela Carrillo Rosales, Almudena R. Ramiro, Virginia G de Yébenes and Yolanda R. Carrasco. **International Application No:** 200101903. **Title:** Pre-receptor de las células T (pre-TCR). Caracterización y regulación de su expresión y función durante el desarrollo de las células T en humanos. **Priority country:** Spain **Priority Date:** 10/14/2004 **Holder Entity:** Consejo Superior de Investigaciones Científicas.
2. **Inventors** (by order of signature): Almudena R. Ramiro, Nahikari Bartolomé-Izquierdo and Virginia G de Yébenes. **International Application No:** EP15382249.9 **Title:** miRNA compositions for the treatment of mature B-cell neoplasms. **Priority country:** Europe **Priority Date:** 05/14/2015 **Holder Entity:** Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC).
3. **Inventors** (by order of signature): Almudena R. Ramiro and Virginia G de Yébenes. **International Application No:** EP17382740. **Title:** miRNAs and combinations thereof for use in the treatment of human B cell neoplasia. **Priority country:** Europe **Priority Date:** 11/03/2017. **Holder Entity:** Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC).