

Full CV

Iñaki Martín-Subero

Date: December 2021

Total number of pages: limited to 15

PERSONAL DATA

Family name: Martin-Subero
ID/Passport no: 33442893-L
Nationality: Spanish

First name: Jose Ignacio
Date of birth: 20.04.1975
Gender: Male

PRESENT PROFESSIONAL POSITION

Institution 1: *Institució Catalana de Recerca i Estudis Avançats*
Institution 2: *University of Barcelona (associate teacher, 1+1 contract)*
Address: *Centre Esther Koplowitz, C/Rosselló 153, 2nd floor, 08036 Barcelona*
Country: *Spain*
Telephone (indicate prefix; number and extension): *0034 93 2275400 (ext 4583)*
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Profesional status: *Senior Group Leader (R4)* Start date: *01.11.2018*

Administrative status

Permanent Staff Hired on contracts Acting Fellowship

ACADEMIC BACKGROUND

Bachelor	Centre	Date
Biochemistry	Universidad de Navarra, Pamplona	22.07.1997

Ph.D.	Centre	Thesis Supervisors	Date
Biochemistry	Universidad de Navarra, Pamplona	María José Calasanz Reiner Siebert	21.06.2001

PAST SCIENTIFIC EXPERIENCE (*)

Position	R&D Centre	Institution (**)	Start date	End date
PhD	Departamento de Genética	Universidad de Navarra, Spain	01.09.1997	21.06.2001
Post-doctoral fellow	Institute of Human Genetics	Christian-Albrechts University Kiel, Kiel, Germany	01.09.2001	30.06.2006
Post-doctoral researcher	Institute of Human Genetics	Christian-Albrechts University Kiel, Kiel, Germany	01.07.2006	30.06.2008
Senior researcher	Epigenética y Biología del Cáncer	Institut d'Investigació Biomèdica de Bellvitge	01.01.2009	14.11.2009
Ramon y Cajal Researcher	Epigenética y Biología del Cáncer	Institut d'Investigació Biomèdica de Bellvitge	15.11.2009	30.09.2010
Ramon y Cajal Researcher	Department of Anatomic Pathology	University of Barcelona	01.10.2010	15.11.2014
Ramon y Cajal Researcher- Programa Retenció de Talent	Department of Anatomic Pathology	University of Barcelona	16.11.2014	30.09.2016

<i>Senior researcher</i>		<i>Fundació Clínic per a la Recerca Biomèdica</i>	<i>01.10.2016</i>	<i>29.12.2016</i>
<i>Junior Group Leader</i>	<i>Biomedical Epigenomics Group</i>	<i>Institut d'investigacions Biomèdiques August Pi i Sunyer</i>	<i>30.12.2016</i>	<i>31.10.2018</i>
<i>Senior group leader</i>	<i>Biomedical Epigenomics Group</i>	<i>Institució Catalana de Recerca i Estudis Avançats</i>	<i>01.11.2018</i>	<i>Present</i>

LANGUAGES (N = NORMAL; G = GOOD; P = PERFECTLY)

<i>Language</i>	<i>Speaking</i>	<i>Reading</i>	<i>Writing</i>
<i>Spanish</i>	<i>P</i>	<i>P</i>	<i>P</i>
<i>English</i>	<i>P</i>	<i>P</i>	<i>P</i>
<i>German</i>	<i>G</i>	<i>G</i>	<i>G</i>
<i>Catalan</i>	<i>G</i>	<i>G</i>	<i>N</i>

BRIEF SUMMARY OF THE CV

Dr. Martin-Subero graduated from the University of Navarra (Spain) with a degree in Biochemistry. In 2001, he completed a PhD with honours as a joint effort between the University of Navarra and the Christian-Albrechts University of Kiel (Germany). He continued his postdoctoral training at the Christian-Albrechts University and in 2005 he became faculty member. Upon returning to Spain in 2009, he started to coordinate a research group on epigenomics at the University of Barcelona. In 2016, he was appointed leader of the Biomedical Epigenomics group at the IDIBAPS research institute in Barcelona, and in 2018 he was awarded with an ICREA Research Professorship. He has published 197 peer-reviewed articles. His most recent publications include *Nature Genetics* (2012, 2015a, 2015b, 2022 (accepted)), *Nature Medicine* (2018), *Nature Cancer* (2020), *Nature Biotechnology* (2016), *Nature Communications* (2017, 2019x2, 2020x4, 2021), *Nature* (2015, 2020), *Cancer Cell* (2016), *Cell Reports* (2015, 2016), *PNAS* (2013) and *Genome Research* (2014, 2015, 2020). Other aspects that reflect the excellent quality of Dr. Martin-Subero's publications are his more than 12,000 citations and an H Index of 59 (data from Scopus Dec 2021). It is also worth mentioning Dr. Martin-Subero's interest in training new generations of scientists. He has directed or directs 9 PhD theses, is part of the mentoring program of the IDIBAPS, of the grants committee of the European Hematology Association and faculty member of the prestigious TRTH (Translational Research Training in Hematology) international program. Dr. Martin-Subero's research is supported by important national and international grants, including an ERC Synergy grant and an accelerator award. He also maintains a broad network of collaborators and is an active member of high impact consortia such as the International Cancer Genome Consortium, the PanCancer, the International Human Epigenome Consortium and the Human Cell Atlas. In 2021, in recognition to his research trajectory, he received the X Premio Nacional de Investigación Doctores Diz Pintado.

RESEARCH PROJECTS AS PRINCIPAL INVESTIGATOR

1. *PROJECT TITLE: High-throughput genome-wide methylation analysis: establishment of an array-based platform and application to classical Hodgkin lymphoma*

FINANCIAL ENTITY: Intramural Funds of the Medical Faculty of the Christian-Albrechts University Kiel

BUDGET: 30,000 €

DURATION: 2006

PRINCIPAL INVESTIGATOR: José Ignacio Martín-Subero

3. *PROJECT TITLE: Genome-wide analysis of the chromatin structure in aggressive B-cell lymphomas: correlation with chromosomal changes; gene expression and clinical data. Parte del consorcio "Molecular Mechanisms in Malignant Lymphomas".*

FINANCIAL ENTITY: Deutsche Krebshilfe (German Cancer Aid)

BUDGET: 254,700 €

DURATION: 2006- 2009

PRINCIPAL INVESTIGATOR: José Ignacio Martín-Subero, Lana Harder, Reiner Siebert

5. *PROJECT TITLE: Caracterización epigenómica de las neoplasias hematológicas (code SAF2009-08663)*

FINANCIAL ENTITY: Ministerio de Ciencia e Innovación

BUDGET: 121,000 €

DURATION: 2010- 2012

PRINCIPAL INVESTIGATOR: José Ignacio Martín-Subero

6. *PROJECT TITLE: Epigenomic characterization of chronic lymphocytic leukemia (part of the ICGC-associated consortium "Chronic Lymphocytic Leukemia Genome Project" led by Prof. Elías Campo and Prof. Carlos López-Otín)*

FINANCIAL ENTITY: Spanish Ministry of Economy and Competitiveness

BUDGET: 175,000 €

DURATION: 2011-2013

PRINCIPAL INVESTIGATOR: José Ignacio Martín-Subero

7. *PROJECT TITLE: Differential DNA methylation in non-promoter regions: clinical and functional impact in lymphoid neoplasms (code SAF2012-31138)*

BUDGET: 70,200 €

FINANCIAL ENTITY: Spanish Ministry of Economy and Competitiveness

DURATION: 2013-2014

PRINCIPAL INVESTIGATOR: José Ignacio Martín-Subero

8. *PROJECT TITLE: Epigenome of normal and neoplastic B and T cells (part of the BLUEPRINT consortium funded by the FP7 European Commission) (code 282510)*

FINANCIAL ENTITY: European Union's Seventh Framework Programme

BUDGET: 948,177 €

DURATION: 2011-2016

PRINCIPAL INVESTIGATOR: José Ignacio Martín-Subero, Elias Campo

9. *PROJECT TITLE: Whole-genome analysis of the DNA (hydroxy)methylome and transcriptome in multiple myeloma (code 20132130)*

FINANCIAL ENTITY: *Fundació La Marató de TV3*

BUDGET: 171,280 €

DURATION: 2014-2017

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero**

10. PROJECT TITLE: *Functional and clinical impact of enhancer DNA methylation in mantle cell lymphoma*

FINANCIAL ENTITY: *European Hematology Association (Non-Clinical Advanced Research Fellowship Awards)*

BUDGET: 240,000 €

DURATION: 2014-2018

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero**

11. PROJECT TITLE: *Deciphering the pathogenetic and clinical role of aberrant DNA methylation of enhancer elements in chronic lymphocytic leukemia (code 16-1285)*

FINANCIAL ENTITY: *Worldwide Cancer Research*

BUDGET: £163,500

DURATION: 2016-2019

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero**

12. PROJECT TITLE: *Deciphering the pathogenetic and clinical role of aberrant DNA methylation of enhancer elements in chronic lymphocytic leukemia. Budget to cover the post-doctoral contract of Marta Kulis.*

FINANCIAL ENTITY: *Asociación Española Contra el Cáncer*

BUDGET: 135,000 €.

DURATION: 2016-2019

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero**

13. PROJECT TITLE: *Recognition as consolidated research group (code 2017 SGR 736)*

FINANCIAL ENTITY: *Generalitat de Catalunya*

BUDGET: 42,000 €.

DURATION: 2018-2021

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero**

14. PROJECT TITLE: *Whole-genome analysis of the chromatin structure in mantle cell lymphoma: biological and clinical impact (code SAF2017-86126-R)*

FINANCIAL ENTITY: *Ministerio de Economía, Industria y Competitividad*

BUDGET: 290,400 €

DURATION: 2018-2021

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero**

15. PROJECT TITLE: *Early detection and intervention: Understanding the mechanisms of transformation and hidden resistance of incurable haematological malignancies*

FINANCIAL ENTITY: *Accelerator Award CRUK/AIRC/AECC partnership*

BUDGET: 268,168 € (for JI Martín-Subero's group)

DURATION: 2018-2023

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero is PI and WP leader in a consortium coordinated by Prof. Jesus San Miguel.**

16. **PROJECT TITLE:** Single-cell genomics to comprehensively understand healthy B-cell maturation and transformation to chronic lymphocytic leukemia (BCLL@las)

FINANCIAL ENTITY: European Research Council (ERC Synergy)

BUDGET: 1,552,656 € (for JI Martín-Subero's group)

DURATION: 2019-2024

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero (co-PI in a project with a total of 4 PIs)**

17. **PROJECT TITLE:** Deciphering the role of transcription factors as chromatin modulators and drivers of lymphoid neoplasm (code 201924-30)

FINANCIAL ENTITY: Fundació La Marató de TV3

BUDGET: 194,375 €

DURATION: 2020-2023

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero (coordinator)**

18. **PROJECT TITLE:** Causes and consequences of chromatin activation in mantle cell lymphoma: a mechanistic and single cell study. (code PID2020-118167RB-I00)

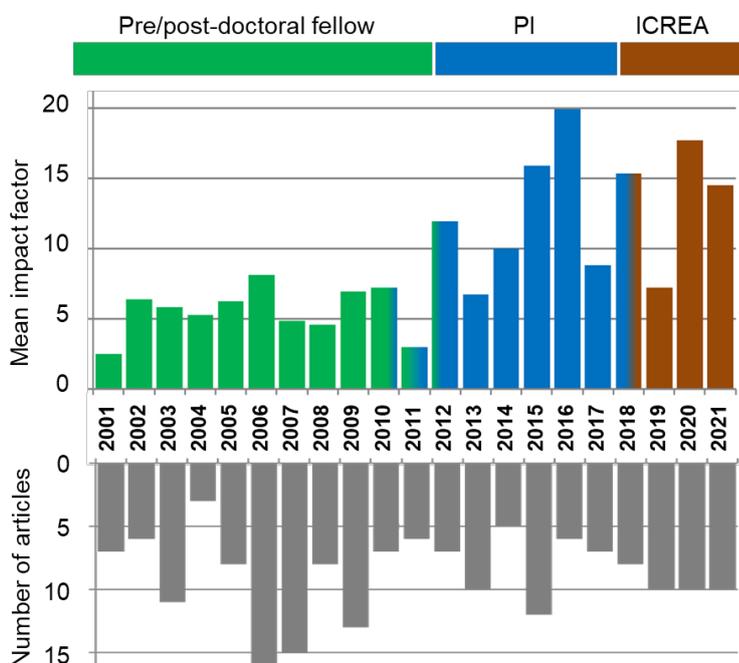
FINANCIAL ENTITY: Ministerio de Economía, Industria y Competitividad

BUDGET: 338,800 €

DURATION: 2021-2024

PRINCIPAL INVESTIGATOR: **José Ignacio Martín-Subero**

GRAPHICAL SUMMARY OF THE ENTIRE PUBLICATION RECORD



Global summary

Articles published: 194

Articles in Q1: >90%

Senior author articles: 20
(mean IF: 16.2)

H index: 59 (from Scopus)

Citations received: 12,005
(From Scopus)

Summary up to December 21st 2021
Includes published articles (not those recently accepted for publication)

TOP10 MOST RELEVANT STUDIES AS SENIOR AUTHOR

1. Knisbacher BA, Lin Z, Hahn CK, Nadeu F, Duran-Ferrer M, Stevenson KE, Tausch E, Delgado J, Barbera-Mourelle A, Taylor-Weiner A, Bousquets-Muñoz P, Diaz-Navarro A, Dunford A, Anand S, Kretzmer H, Gutierrez-Abril J, López-Tamargo S, Fernandes SM, Sun C, Sivina M, Rassenti LZ, Schneider C, Li S, Parida L, Meissner A, Aguet F, Burger JA, Wiestner A, Kipps TJ, Brown JR, Hallek M, Stewart C, Neuberg DS, Martín-Subero JI*, Puente XS*, Stilgenbauer S*, Wu CJ*, Campo E*, Getz G* (*shared senior authorship, my role was to coordinate the epigenetics and gene regulation part of this integrative manuscript). Molecular map of chronic lymphocytic leukemia and its impact on outcome. **Nature Genetics 2022 (accepted for publication).**
2. Vilarrasa-Blasi R, Soler-Vila P, Verdaguer-Dot N, Russiñol N, Di Stefano M, Chapaprieta V, Clot G, Farabella I, Cuscó P, Kulis M, Agirre X, Prosper F, Beekman R, Beà S, Colomer D, Stunnenberg HG, Gut I, Campo E, Marti-Renom MA, Martin-Subero JI. *Dynamics of genome architecture and chromatin function during human B cell differentiation and neoplastic transformation.* **Nat Commun. 2021 Jan 28;12(1):651.**
3. Duran-Ferrer M, Clot G, Nadeu F, Beekman R, Baumann T, Nordlund J, Marincevic-Zuniga Y, Lönnerholm G, Rivas-Delgado A, Martin S, Ordoñez R, Castellano G, Kulis M, Queirós A, Seung-Tae L, Wiemels J, Royo R, Puiggrós M, Lu J, Gine E, Beà S, Jares P, Agirre X, Prosper F, López-Otín C, Puente XS, Oakes CC, Zenz T, Delgado J, López-Guillermo A, Campo E, Martin-Subero JI. *The proliferative history shapes the DNA methylome of B-cell tumors and predicts clinical outcome.* **Nat Cancer. 2020 Nov;1(11):1066-1081.**
4. Ordoñez R, Kulis M, Russiñol N, Chapaprieta V, Carrasco-Leon A, García-Torre B, Charalampopoulou S, Clot G, Beekman R, Meydan C, Duran-Ferrer M, Verdaguer-Dot N, Vilarrasa-Blasi R, Soler-Vila P, Garate L, Miranda E, San José-Enériz E, Rodríguez-Madoz JR, Ezponda T, Martínez-Turrillas R, Vilas-Zornoza A, Lara-Astiaso D, Dupéré-Richer D, Martens JHA, El-Omri H, Taha RY, Calasanz MJ, Paiva B, San Miguel J, Flicek P, Gut I, Melnick A, Mitsiades CS, Licht JD, Campo E, Stunnenberg HG, Agirre X, Prosper F, Martin-Subero JI. *Chromatin activation as a unifying principle underlying pathogenic mechanisms in multiple myeloma.* **Genome Res. 2020 Sep;30(9):1217-1227.**
5. Speedy HE, Beekman R, Chapaprieta V, Orlando G, Law PJ, Martín-García D, Gutiérrez-Abril J, Catovsky D, Beà S, Clot G, Puiggròs M, Torrents D, Puente XS, Allan JM, López-Otín C, Campo E, Houlston RS, Martín-Subero JI. *Insight into genetic predisposition to chronic lymphocytic leukemia from integrative epigenomics.* **Nat Commun. 2019 Aug 9;10(1):3615.**

6. Beekman R, Chapaprieta V, Russiñol N, Vilarrasa-Blasi R, Verdaguer-Dot N, Martens JHA, Duran-Ferrer M, Kulis M, Serra F, Javierre BM, Wingett SW, Clot G, Queirós AC, Castellano G, Blanc J, Gut M, Merkel A, Heath S, Vlasova A, Ullrich S, Palumbo E, Enjuanes A, Martín-García D, Beà S, Pinyol M, Aymerich M, Royo R, Puiggros M, Torrents D, Datta A, Lowy E, Kostadima M, Roller M, Clarke L, Flicek P, Agirre X, Prosper F, Baumann T, Delgado J, López-Guillermo A, Fraser P, Yaspo ML, Guigó R, Siebert R, Martí-Renom MA, Puente XS, López-Otín C, Gut I, Stunnenberg HG, Campo E, Martín-Subero JI. *The reference epigenome and regulatory chromatin landscape of chronic lymphocytic leukemia*. **Nat Med**. 2018 Jun;24(6):868-880.
7. Queirós AC, Beekman R, Vilarrasa-Blasi R, Duran-Ferrer M, Clot G, Merkel A, Raineri E, Russiñol N, Castellano G, Beà S, Navarro A, Kulis M, Verdaguer-Dot N, Jares P, Enjuanes A, Calasanz MJ, Bergmann A, Vater I, Salaverría I, van de Werken HJG, Wilson WH, Datta A, Flicek P, Royo R, Martens J, Giné E, Lopez-Guillermo A, Stunnenberg HG, Klapper W, Pott C, Heath S, Gut IG, Siebert R, Campo E, Martín-Subero JI. *Decoding the DNA methylome of mantle cell lymphoma in the light of the entire B cell differentiation*. **Cancer Cell** 2016; 30: 806-21.
8. Kulis M, Merkel A, Heath S, Queirós AC, Schuyler RP, Castellano G, Beekman R, Raineri E, Esteve A, Clot G, Verdaguer-Dot N, Duran-Ferrer M, Russiñol N, Vilarrasa-Blasi R, Ecker S, Pancaldi V, Rico D, Agueda L, Blanc J, Richardson D, Clarke L, Datta A, Pascual M, Agirre X, Prosper F, Alignani D, Paiva B, Caron G, Fest T, Muench MO, Fomin ME, Lee ST, Wiemels JL, Valencia A, Gut M, Flicek P, Stunnenberg HG, Siebert R, Küppers R, Gut IG, Campo E, Martín-Subero JI. *Whole-genome fingerprint of the DNA methylome during human B cell differentiation*. **Nat Genet** 2015; 47: 746-56.
9. Agirre X, Castellano G, Pascual M, Heath S, Kulis M, Segura V, Bergmann A, Esteve A, Merkel A, Raineri E, Agueda L, Blanc J, Richardson D, Clarke L, Datta A, Russiñol N, Queirós AC, Beekman R, Rodríguez-Madoz JR, San José-Enériz E, Fang F, Gutiérrez NC, García-Verdugo JM, Robson MI, Schirmer EC, Guruceaga E, Martens JH, Gut M, Calasanz MJ, Flicek P, Siebert R, Campo E, Miguel JF, Melnick A, Stunnenberg HG, Gut IG, Prosper F, Martín-Subero JI. *Whole-epigenome analysis in multiple myeloma reveals DNA hypermethylation of B cell-specific enhancers*. **Genome Res** 2015; 25: 478-87.
10. Kulis M, Heath S, Bibikova M, Queirós AC, Navarro A, Clot G, Martínez-Trillos A, Castellano G, Brun-Heath I, Pinyol M, Barberán-Soler S, Papasaikas P, Jares P, Beà S, Rico D, Ecker S, Rubio M, Royo R, Ho V, Klotzle B, Hernández L, Conde L, López-Guerra M, Colomer D, Villamor N, Aymerich M, Rozman M, Bayes M, Gut M, Gelpí JL, Orozco M, Fan JB, Quesada V, Puente XS, Pisano DG, Valencia A, López-Guillermo A, Gut I, López-Otín C, Campo E, Martín-Subero JI. *Epigenomic analysis detects widespread gene-body DNA hypomethylation in chronic lymphocytic leukemia*. **Nat Genet** 2012; 44: 1236-42.

PUBLICATION LIST

Out of the entire list (n=197), a selection of the TOP40 articles published during the last five years is shown

1. Knisbacher BA, Lin Z, Hahn CK, Nadeu F, Duran-Ferrer M, Stevenson KE, Tausch E, Delgado J, Barbera-Mourelle A, Taylor-Weiner A, Bousquets-Muñoz P, Diaz-Navarro A, Dunford A, Anand S, Kretzmer H, Gutierrez-Abril J, López-Tamargo S, Fernandes SM, Sun C, Sivina M, Rassenti LZ, Schneider C, Li S, Parida L, Meissner A, Aguet F, Burger JA, Wiestner A, Kipps TJ, Brown JR, Hallek M, Stewart C, Neuberger DS, **Martín-Subero JI***, Puente XS*, Stilgenbauer S*, Wu CJ*, Campo E*, Getz G* (***shared senior authorship**). Molecular map of chronic lymphocytic leukemia and its impact on outcome. Nature Genetics 2022 (accepted for publication).
2. Amundarain A, Valcárcel LV, Ordoñez R, Garate L, Miranda E, Cendoya X, Carrasco-Leon A, Calasanz MJ, Paiva B, Meydan C, Mason CE, Melnick A, Rodriguez-Otero P, **Martín-Subero JI**, San Miguel J, Planes FJ, Prósper F, Agirre X. Landscape and clinical significance of long non-coding RNAs involved in multiple myeloma expressed fusion transcripts. American Journal of Hematology (accepted for publication).
3. Bühler MM, **Martin-Subero JI**, Pan-Hammarström Q, Campo E, Rosenquist R. Towards precision medicine in lymphoid malignancies. J Intern Med. 2021 Dec 7. doi: 10.1111/joim.13423.
4. Vilarrasa-Blasi R, Verdaguer-Dot N, Belver L, Soler-Vila P, Beekman R, Chapaprieta V, Kulis M, Queirós AC, Parra M, Calasanz MJ, Agirre X, Prosper F, Beà S, Colomer D, Marti-Renom MA, Ferrando A, Campo E, **Martin-Subero JI**. Insights into the mechanisms underlying aberrant SOX11 oncogene expression in mantle cell lymphoma. Leukemia. 2021 Aug 28. doi: 10.1038/s41375-021-01389-w. Online ahead of print.
5. Haertle L, Barrio S, Munawar U, Han S, Zhou X, Vogt C, Fernández RA, Bittrich M, Ruiz-Heredia Y, Da Viá M, Zovko J, Garitano-Trojaola A, Bolli N, Ruckdeschel A, Stühmer T, Chatterjee M, Kull M, Krönke J, Agirre X, **Martin-Subero JI**, Raab P, Einsele H, Rasche L, Martinez-Lopez J, Haaf T, Kortüm KM. Cereblon enhancer methylation and IMiD resistance in multiple myeloma. Blood. 2021 Nov 4;138(18):1721-1726.
6. Valcárcel LV, Amundarain A, Kulis M, Charalampopoulou S, Melnick A, San Miguel J, **Martín-Subero JI**, Planes FJ, Agirre X, Prosper F. Gene expression derived from alternative promoters improves prognostic stratification in multiple myeloma. Leukemia. 2021 Oct;35(10):3012-3016.
7. Hübschmann D, Kleinheinz K, Wagener R, Bernhart SH, López C, Toprak UH, Sungalee S, Ishaque N, Kretzmer H, Kreuz M, Waszak SM, Paramasivam N, Ammerpohl O, Aukema SM, Beekman R, Bergmann AK, Bieg M, Binder H, Borkhardt A, Borst C, Brors B, Bruns P, Carrillo de Santa Pau E, Claviez A, Doose G, Haake A, Karsch D, Haas S, Hansmann ML, Hoell JI, Hovestadt V, Huang B, Hummel M, Jäger-Schmidt C, Kerssemakers JNA, Korbel JO, Kube D, Lawerenz C, Lenze D, Martens JHA, Ott G, Radlwimmer B, Reisinger E, Richter J, Rico D, Rosenstiel P, Rosenwald A, Schillhabel M, Stilgenbauer S, Stadler PF, **Martín-Subero JI**, Szczepanowski M, Warsaw G, Weniger MA, Zapatka M, Valencia A, Stunnenberg HG, Lichter P, Möller P, Loeffler M, Eils R, Klapper W, Hoffmann S, Trümper L; ICGC MMML-Seq consortium; ICGC DE-Mining consortium; BLUEPRINT consortium, Küppers R, Schlesner M, Siebert R. Mutational mechanisms shaping the coding and noncoding genome of germinal center derived B-cell lymphomas. Leukemia. 2021 Jul;35(7):2002-2016.

8. Llaó-Cid L, Roessner PM, Chapaprieta V, Öztürk S, Roider T, Bordas M, Izcue A, Colomer D, Dietrich S, Stilgenbauer S, Hanna B, **Martín-Subero JI**, Seiffert M. EOMES is essential for antitumor activity of CD8⁺ T cells in chronic lymphocytic leukemia. *Leukemia*. 2021 Nov;35(11):3152-3162.
9. Carrasco-Leon A, Ezponda T, Meydan C, Valcárcel LV, Ordoñez R, Kulis M, Garate L, Miranda E, Segura V, Guruceaga E, Vilas-Zornoza A, Alignani D, Pascual M, Amundarain A, Castro-Labrador L, Martín-Uriz PS, El-Omri H, Taha RY, Calasanz MJ, Planes FJ, Paiva B, Mason CE, San Miguel JF, **Martin-Subero JI***, Melnick A*, Prosper F*, Agirre X* (***shared senior authorship**). Characterization of complete lncRNAs transcriptome reveals the functional and clinical impact of lncRNAs in multiple myeloma. *Leukemia*. 2021 May;35(5):1438-1450.
10. Vilarrasa-Blasi R, Soler-Vila P, Verdaguer-Dot N, Russiñol N, Di Stefano M, Chapaprieta V, Clot G, Farabella I, Cuscó P, Kulis M, Agirre X, Prosper F, Beekman R, Beà S, Colomer D, Stunnenberg HG, Gut I, Campo E, Marti-Renom MA*, **Martin-Subero JI*** (***shared senior authorship**). Dynamics of genome architecture and chromatin function during human B cell differentiation and neoplastic transformation. *Nat Commun*. 2021 Jan 28;12(1):651.
11. Nadeu F, Royo R, Clot G, Duran-Ferrer M, Navarro A, Martín S, Lu J, Zenz T, Baumann T, Jares P, Puente XS, **Martín-Subero JI**, Delgado J, Campo E. IGLV3-21R110 identifies an aggressive biological subtype of chronic lymphocytic leukemia with intermediate epigenetics. *Blood*. 2021 May 27;137(21):2935-2946.
12. Klintman J, Appleby N, Stamatopoulos B, Ridout K, Eyre TA, Robbe P, Pascua LL, Knight SJL, Dreau H, Cabes M, Popitsch N, Ehinger M, **Martín-Subero JI**, Campo E, Månsson R, Rossi D, Taylor JC, Vavoulis DV, Schuh A. Genomic and transcriptomic correlates of Richter transformation in chronic lymphocytic leukemia. *Blood*. 2021 May 20;137(20):2800-2816.
13. Duran-Ferrer M, Clot G, Nadeu F, Beekman R, Baumann T, Nordlund J, Marincevic-Zuniga Y, Lönnerholm G, Rivas-Delgado A, Martin S, Ordoñez R, Castellano G, Kulis M, Queirós A, Seung-Tae L, Wiemels J, Royo R, Puiggrós M, Lu J, Gine E, Beà S, Jares P, Agirre X, Prosper F, López-Otín C, Puente XS, Oakes CC, Zenz T, Delgado J, López-Guillermo A, Campo E, **Martin-Subero JI**. The proliferative history shapes the DNA methylome of B-cell tumors and predicts clinical outcome. *Nat Cancer*. 2020 Nov;1(11):1066-1081.
14. Tsagiopoulou M, Chapaprieta V, Duran-Ferrer M, Moysiadis T, Psomopoulos F, Kollia P, Papakonstantinou N, Campo E, Stamatopoulos K, **Martin-Subero JI**. Chronic lymphocytic leukemias with trisomy 12 show a distinct DNA methylation profile linked to altered chromatin activation. *Haematologica*. 2020 Dec 1;105(12):2864-2867.
15. Bailey MH, Meyerson WU, Dursi LJ, Wang LB, Dong G, Liang WW, Weerasinghe A, Li S, Li Y, Kelso S; MC3 Working Group; PCAWG novel somatic mutation calling methods working group, Saksena G, Ellrott K, Wendl MC, Wheeler DA, Getz G, Simpson JT, Gerstein MB, Ding L; **PCAWG Consortium**. Retrospective evaluation of whole exome and genome mutation calls in 746 cancer samples. *Nat Commun*. 2020 Sep 21;11(1):4748.
16. Li CH, Prokopec SD, Sun RX, Yousif F, Schmitz N; PCAWG Tumour Subtypes and Clinical Translation, Boutros PC; **PCAWG Consortium**. Sex differences in oncogenic mutational processes. *Nat Commun*. 2020 Aug 28;11(1):4330.

17. Ordoñez R, Kulis M, Russiñol N, Chapaprieta V, Carrasco-Leon A, García-Torre B, Charalampopoulou S, Clot G, Beekman R, Meydan C, Duran-Ferrer M, Verdaguer-Dot N, Vilarrasa-Blasi R, Soler-Vila P, Garate L, Miranda E, San José-Enériz E, Rodríguez-Madoz JR, Ezponda T, Martínez-Turrilas R, Vilas-Zornoza A, Lara-Astiaso D, Dupéré-Richer D, Martens JHA, El-Omri H, Taha RY, Calasanz MJ, Paiva B, San Miguel J, Flicek P, Gut I, Melnick A, Mitsiades CS, Licht JD, Campo E, Stunnenberg HG, Agirre X, Prosper F, **Martin-Subero JI**. Chromatin activation as a unifying principle underlying pathogenic mechanisms in multiple myeloma. *Genome Res.* 2020 Sep;30(9):1217-1227.
18. Nadeu F, Martin-Garcia D, Clot G, Díaz-Navarro A, Duran-Ferrer M, Navarro A, Vilarrasa-Blasi R, Kulis M, Royo R, Gutiérrez-Abril J, Valdés-Mas R, López C, Chapaprieta V, Puiggros M, Castellano G, Costa D, Aymerich M, Jares P, Espinet B, Muntañola A, Ribera-Cortada I, Siebert R, Colomer D, Torrents D, Gine E, López-Guillermo A, Küppers R, **Martin-Subero JI**, Puente XS, Beà S, Campo E. Genomic and epigenomic insights into the origin, pathogenesis, and clinical behavior of mantle cell lymphoma subtypes. *Blood.* 2020 Sep 17;136(12):1419-1432.
19. Massoni-Badosa R, Iacono G, Moutinho C, Kulis M, Palau N, Marchese D, Rodríguez-Ubreva J, Ballestar E, Rodríguez-Esteban G, Marsal S, Aymerich M, Colomer D, Campo E, Julià A, **Martín-Subero JI**, Heyn H. Sampling time-dependent artifacts in single-cell genomics studies. *Genome Biol.* 2020 May 11;21(1):112.
20. Grossi E, Raimondi I, Goñi E, González J, Marchese FP, Chapaprieta V, **Martín-Subero JI**, Guo S, Huarte M. A IncRNA-SWI/SNF complex crosstalk controls transcriptional activation at specific promoter regions. *Nat Commun.* 2020 Feb 18;11(1):936.
21. ICGC/TCGA **Pan-Cancer Analysis of Whole Genomes Consortium**. Pan-cancer analysis of whole genomes. *Nature.* 2020 Feb;578(7793):82-93.
22. Speedy HE, Beekman R, Chapaprieta V, Orlando G, Law PJ, Martín-García D, Gutiérrez-Abril J, Catovsky D, Beà S, Clot G, Puiggròs M, Torrents D, Puente XS, Allan JM, López-Otín C, Campo E, Houlston RS, **Martín-Subero JI**. Insight into genetic predisposition to chronic lymphocytic leukemia from integrative epigenomics. *Nat Commun.* 2019 Aug 9;10(1):3615.
23. Chatonnet F, Pignarre A, Sérandour AA, Caron G, Avner S, Robert N, Kassambara A, Laurent A, Bizot M, Agirre X, Prosper F, **Martin-Subero JI**, Moreaux J, Fest T, Salbert G. The hydroxymethylome of multiple myeloma identifies FAM72D as a 1q21 marker linked to proliferation. *Haematologica.* 2020 Mar;105(3):774-783.
24. Agirre X, Meydan C, Jiang Y, Garate L, Doane AS, Li Z, Verma A, Paiva B, **Martín-Subero JI**, Elemento O, Mason CE, Prosper F, Melnick A. Long non-coding RNAs discriminate the stages and gene regulatory states of human humoral immune response. *Nat Commun.* 2019 Feb 18;10(1):821.
25. Martínez-Calle N, Pascual M, Ordoñez R, Enériz ESJ, Kulis M, Miranda E, Guruceaga E, Segura V, Larráyoz MJ, Bellosillo B, Calasanz MJ, Besses C, Rifón J, **Martín-Subero JI**, Agirre X, Prosper F. Epigenomic profiling of myelofibrosis reveals widespread DNA methylation changes in enhancer elements and ZFP36L1 as a potential tumor suppressor gene that is epigenetically regulated. *Haematologica.* 2019 Aug;104(8):1572-1579.
26. Roisman A, Castellano G, Navarro A, Gonzalez-Farre B, Pérez-Galan P, Esteve-Codina A, Dabad M, Heath S, Gut M, Bosio M, Bellot P, Salembier P, Oliveras A, Slavutsky I, Magnano L, Horn H, Rosenwald A, Ott G, Aymerich M, López-Guillermo A, Jares P, **Martín-Subero JI**, Campo E, Hernández L. Differential expression of long non-coding

RNAs are related to proliferation and histological diversity in follicular lymphomas. Br J Haematol. 2019 Feb;184(3):373-383.

27. Oakes CC, **Martin-Subero JI**. Insight into origins, mechanisms, and utility of DNA methylation in B-cell malignancies. Blood. 2018 Sep 6;132(10):999-1006.
28. Albero R, Enjuanes A, Demajo S, Castellano G, Pinyol M, García N, Capdevila C, Clot G, Suárez-Cisneros H, Shimada M, Karube K, López-Guerra M, Colomer D, Beà S, **Martin-Subero JI**, Campo E, Jares P. Cyclin D1 overexpression induces global transcriptional downregulation in lymphoid neoplasms. J Clin Invest. 2018 Aug 31;128(9):4132-4147
29. Beekman R, Chapaprieta V, Russiñol N, Vilarrasa-Blasi R, Verdaguer-Dot N, Martens JHA, Duran-Ferrer M, Kulis M, Serra F, Javierre BM, Wingett SW, Clot G, Queirós AC, Castellano G, Blanc J, Gut M, Merkel A, Heath S, Vlasova A, Ullrich S, Palumbo E, Enjuanes A, Martín-García D, Beà S, Pinyol M, Aymerich M, Royo R, Puiggros M, Torrents D, Datta A, Lowy E, Kostadima M, Roller M, Clarke L, Flicek P, Agirre X, Prosper F, Baumann T, Delgado J, López-Guillermo A, Fraser P, Yaspo ML, Guigó R, Siebert R, Martí-Renom MA, Puente XS, López-Otín C, Gut I, Stunnenberg HG, Campo E, **Martin-Subero JI**. The reference epigenome and regulatory chromatin landscape of chronic lymphocytic leukemia. Nat Med 2018; 24: 868-880.
30. **Martin-Subero JI**. Predicting leukemia relapse. Nat Med. 2018; 24: 385-387.
31. Burns A, Alsolami R, Becq J, Stamatopoulos B, Timbs A, Bruce D, Robbe P, Vavoulis D, Clifford R, Cabes M, Dreau H, Taylor J, Knight SJL, Mansson R, Bentley D, Beekman R, **Martín-Subero JI**, Campo E, Houlston RS, Ridout KE, Schuh A. Whole-genome sequencing of chronic lymphocytic leukaemia reveals distinct differences in the mutational landscape between IgHVMut and IgHVunmut subgroups. Leukemia 2018; 32: 332-342.
32. **Martin-Subero JI**, Oakes CC. Charting the dynamic epigenome during B-cell development. Semin Cancer Biol. 2018 Aug; 51: 139-148.
33. Carrillo-de-Santa-Pau E, Juan D, Pancaldi V, Were F, **Martin-Subero I**, Rico D, Valencia A. BLUEPRINT Automatic identification of informative regions with epigenomic changes associated to hematopoiesis. Nucleic Acids Res 2017; 45: 9244-9259.
34. San José-Enériz E, Agirre X, Rabal O, Vilas-Zornoza A, Sanchez-Arias JA, Miranda E, Ugarte A, Roa S, Paiva B, Alvarez RM, Casares N, Segura V, **Martín-Subero JI**, Castellano G, Fernandez de Barrena MG, Rodriguez-Madoz JR, García-Barchino MJ, Lasarte JJ, Avila MA, Martinez-Climent JA, Oyarzabal J, Prosper F. Discovery of first-in-class small molecule reversible dual inhibitors against G9a and DNMT1 with in vivo activity in hematological malignancies. Nat Commun. 2017; 8: 15424
35. Paiva B, Puig N, Cedena MT, de Jong BG, Ruiz Y, Rapado I, Martinez-Lopez J, Cordon L, Alignani D, Delgado JA, van Zelm MC, Van Dongen JJ, Pascual M, Aguirre X, Prosper F, **Martín-Subero JI**, Vidriales MB, Gutierrez NC, Hernandez MT, Oriol A, Echeveste MA, Gonzalez Y, Johnson SK, Epstein J, Barlogie B, Morgan GJ, Orfao A, Blade J, Mateos MV, Lahuerta JJ, Miguel JF. Differentiation stage of myeloma plasma cells: biological and clinical significance. Leukemia 2017; 31: 382-92
36. Queirós AC, Beekman R, Vilarrasa-Blasi R, Duran-Ferrer M, Clot G, Merkel A, Raineri E, Russiñol N, Castellano G, Beà S, Navarro A, Kulis M, Verdaguer-Dot N, Jares P, Enjuanes A, Calasanz MJ, Bergmann A, Vater I, Salaverría I, van de Werken HJG, Wilson WH, Datta A, Flicek P, Royo R, Martens J, Giné E, Lopez-Guillermo A, Stunnenberg HG, Klapper W, Pott C, Heath S, Gut IG, Siebert R, Campo E, **Martín-Subero JI**. Decoding

the DNA methylome of mantle cell lymphoma in the light of the entire B cell differentiation. Cancer Cell 2016; 30: 806-21.

37. Stunnenberg HG, **Martin-Subero JI**, ... Hirst M. The International Human Epigenome Consortium: A Blueprint for Scientific Collaboration and Discovery. Cell 2016; 167: 1145–49.
38. Schuyler RP, Merkel A, Raineri E, Altucci L, Vellenga E, Stunnenberg HG, Martens JHA, Pourfarzad F, Kuijpers TW, Ouwehand W, **Martín-Subero JI**, Gut I, Simon Heath S. D Distinct Trends of DNA Methylation Patterning in the Innate and Adaptive Immune Systems. Cell Reports 2016; 17: 2101–11.
39. Kandaswamy R, Sava GP, Speedy HE, Beà S, **Martín-Subero JI**, Studd JB, Migliorini G, Law PJ, Puente XS, Martín-García D, Salaverria I, Gutiérrez-Abril J, López-Otín C, Catovsky D, Allan JM, Campo E, Houlston RS. Genetic Predisposition to Chronic Lymphocytic Leukemia Is Mediated by a BMF Super-Enhancer Polymorphism. Cell Reports 2016; 16: 2061-7.
40. Bock C,...**José I Martín-Subero**,... Kun Zhang, for The BLUEPRINT consortium. Quantitative comparison of DNA methylation assays for biomarker development and clinical applications. Nat Biotechnol 2016; 34: 726-37.

ABSTRACTS IN CONGRESSES

Over 300 abstracts with I. Martin-Subero as author have been presented in national and international conferences in the last 20 years.

SELECTION OF INVITED CONFERENCES IN THE LAST FIVE YEARS

2021

KEYNOTE LECTURE: An epigenetic journey into CLL biology and clinical behaviour, UK CLL Forum Annual Scientific Day: Closer to deciphering disease complexity, London (UK, virtual), March 2021.

KEYNOTE LECTURE: Epigenomic insights into CLL biology and clinical behavior, 16th International CLL Workshop, Salzburg (Austria, virtual), May 2021.

PLENARY LECTURE: Profiling epigenetic alterations in CLL, Annual meeting FILO-CLL/WM group, Lyon (France), October 2021.

INVITED LECTURE: Integrative epigenomics in chronic lymphocytic leukemia: biological and clinical insights, eSeminar Series - Genome Dynamics & Cancer, Montpellier (France, virtual), January 2021.

INVITED LECTURE: An epigenetic journey into the biology and clinical behavior of lymphoid tumors, Gene Regulation 2021, Haute-Nemdaz, Alps (Switzerland, virtual), February 2021.

INVITED LECTURE: A portrait of the CLL epigenome, XIIth International Workshop of the German CLL Study Group, Cologne (Germany, virtual), April 2021.

INVITED LECTURE: Epigenomics of lymphoid malignancies, Precision Medicine in Hematology, Stockholm (Sweden, virtual), May 2021.

INVITED LECTURE: What is the interplay between genetic and epigenetic determinants of heterogeneity in lymphoid malignancy?, Annual Meeting of the European Hematology Association, Virtual, June 2021.

INVITED LECTURE: Epigenetic alterations in mantle cell lymphoma, 6th ESH Translational Research Conference on Lymphoid Malignancies, Estoril (Portugal, virtual), October 2021.

2020 (due to the pandemic, several invited lectures were cancelled/postponed)

INVITED LECTURE: Best of theme session: Lymphoma, Annual Meeting of the European Hematology Association, Virtual, June 2020.

INVITED LECTURE: Integrative multiomics in lymphoid neoplasms, Multiomics- Where discoveries are made, Virtual, December 2020.

2019 (due to the pandemic, several invited lectures were cancelled/postponed)

INVITED LECTURE: An epigenetic journey into the origin and evolution of B cell tumors. Seminar Series Centro de Investigación del Cáncer, Salamanca (Spain), Feb 2019.

INVITED LECTURE: The role of epigenomics to diagnose and estimate prognosis in lymphoid neoplasms, Annual Meeting of the European Hematology Association, Virtual, June 2019.

2018

KEYNOTE LECTURE: Epigenetic analyses in chronic lymphocytic leukemia: a journey from DNA methylomes to reference epigenomes. 10th Epigenetics-DKFZ meeting. Heidelberg, (Germany), January 2018.

INVITED LECTURE: Epigenomic analyses in chronic lymphocytic leukemia: a journey from DNA methylomes to reference epigenomes. Invited seminar series, Department of Oncology, University of Oxford, Oxford (UK), February 2018.

2017

KEYNOTE LECTURE: Epigenetics and Hematology. Joint Meeting: SEHH-Memorial Sloan Kettering Cancer Center, Malaga (Spain), October 2017.

INVITED LECTURE: The reference epigenome of multiple myeloma, 8th Biennial Workshop on the Clinical Translation of Epigenetics in Cancer Therapy, Jekyll Island (Georgia, USA), January 2017.

INVITED LECTURE: The epigenetic landscape of normal and neoplastic B cells – The Blueprint Project". Invited Seminar University of Florida Health Cancer Center. Gainesville (Florida, USA), January 2017.

INVITED LECTURE: Decoding the epigenome of normal and neoplastic B cells: from biological insights to clinical applications. Human Genome Meeting 2017. Barcelona (Spain), February 2017.

INVITED LECTURE: The CLL epigenome. Invited Seminar Series at the Center for Research and Technology Hellas. Thessaloniki (Greece), May 2017

INVITED LECTURE: Decoding the epigenome of normal and neoplastic B cells. 2nd European Cancer Epigenetics Conference. Heidelberg (Germany) May 2017.

INVITED LECTURE: Epigenetics of CLL - The Blueprint project. 22nd Congress of the European Hematology Association, Madrid (Spain), June 2017.

INVITED LECTURE: Epigenetic insights into chronic lymphocytic leukemia biology and clinical behavior: from DNA methylomes to reference epigenomes. 7th International Workshop on Genetic Epidemiology. Barcelona (Spain), September 2017.

INVITED LECTURE: The epigenome of chronic lymphocytic leukemia: biological and clinical insights. Symposium JC Dreyfus, Cochin Institute, Paris (France), September 2017.

MEDIA IMPACT AND DISSEMINATION OF THE RESEARCH

We are aware of the importance of presenting the results of our research to the general public, both to contribute to generate a knowledge-based society and to give back to society what is given to us in terms of funding for research. The main articles of my group (Kulis et al., *Nat Genet* 2012/2015; Queiros et al., *Cancer Cell* 2016; Beekman et al., *Nat Med* 2018; Speedy et al., *Nat Commun* 2019; Duran-Ferrer et al., *Nat Cancer* 2020; and Vilarrasa-Blasi et al., *Nat Commun* 2020) have been widely covered by TV, radio and/or printed/digital press.

PATENTS

Martín-Subero JI, López-Otín C, Campo E. *Method to predict the clinical evolution of a patient suffering of chronic lymphocytic leukemia (CLL)*. Patent Number WO2014056986, year 2014

SUPERVISION OF DOCTORAL THESIS

- **Marta Kulis**. Title: *Deciphering the DNA methylome of normal and neoplastic B cells*. Date: 11th April 2014. Mark: Excellent Cum Laude (extraordinary award and 1st price of the University Cloister for best thesis of the entire University of Barcelona in 2014)
- **Ana Queirós**. Title: *Unraveling the epigenome of Chronic Lymphocytic Leukemia and Mantle Cell Lymphoma*. Date: 5th February 2016. Mark: Excellent Cum Laude (extraordinary award).
- **Roser Vilarrasa-Blasi**. Title: *The role of genome architecture in normal and neoplastic B cells: a multi-omics approach*. Date: 9th October 2020. Mark: Excellent Cum Laude.
- **Marti Duran-Ferrer**. Title: *Tracing the developmental history of B-cell tumors by DNA methylation*. Date: 19th November 2020. Mark: Excellent Cum Laude.

I am currently supervising five additional doctoral theses: **Vicente Chapaprieta** (completion by 2022), **Ramon Massoni** (completion by 2022, cosupervised with Holger Heyn, CNAG, Barcelona), **Beatriz Garcia-Torre** (completion by 2023), **Stella Charalampopoulou** (completion by 2023), and **Judith Mateos** (completion by 2024).

AWARDS

2001	Extraordinary Award for the best PhD thesis of the Faculty of Biology of the University of Navarra
2014	Non-Clinical Advanced Research Fellowship Award from the European Hematology Association
2019	Best CIBERONC Young Leader Researcher
2021	10th National Award in Cancer Research “Doctores Diz Pintado”

OTHER EXPERIENCE AND BOARDS/COMMITTEES MEMBERSHIP

International boards and committees

- 2017-2021 Member of the Scientific Program Committee - Advisory Board and abstract coordinator of the CLL-Biology topic for European Hematology Association (EHA)
- since 2018 Member of the Fellowships & Grants Committee of the EHA
- since 2021 Member of the scientific advisory board of the Lymph&Co foundation
- 2016, 2020-22 Faculty member of the international mentoring program "Translational Research Training in Hematology (TRTH) co-organized by the European Hematology Association and the American Society of Hematology
- 2020-2022 Member of the international peer review panel for grants from the Independent Research Fund Denmark

Reviewing activities

Ad-hoc reviewer for multiple journals, including Nature, Nature Genetics, Nature Medicine, Nature Chemical Biology, Nature Communications, Genome Research, Blood and Leukemia, among others. Additionally, I have reviewed grants for many organizations. To quote some: the European Research Council (ERC, consolidator and advanced), the German Cancer Aid, the Association for International Cancer Research, the Royal Swedish Academy of Sciences, The Dutch Cancer Society, the French National Alliance for Life and Health Sciences, the French National Cancer Institute, the Leukaemia & Lymphoma Research Foundation and the Agencia Nacional de Evaluación y Prospectiva (ANEP).

- (Inter)national networking

As can be seen from my publication record, during all the years I have been involved in research I have worked with over 200 researchers. I am currently involved in multiple collaborations, which include the following group leaders: Elias Campo (IDIBAPS), Ivo Gut, Holger Heyn and Marc Marti-Renom (National Genome Analysis Centre, Spain), Xabier Agirre and Felipe Prosper (University Clinic of Navarra, Spain), Reiner Siebert (Christian-Albrechts University of Kiel, Germany), Ralf Küppers (University of Duisburg-Essen, Germany), Florence Nguyen-Khac (Sorbonne Université-INSERM, Paris, France), Jerome MOREAUX (University of Montpellier, France), Ingo Ringhausen (University of Cambridge, UK), Jude Fitzgibbon (Barts Institute, London, UK), Anna Schuh (University of Oxford, UK), Richard Rosenquist (Uppsala University, Sweden), Kostas Stamatopoulos (Center for Research and Technology Hellas, Greece), Cathy Wu (Dana Farber Cancer Institute, Boston, USA), Gaddy Getz (Broad Institute, Boston, USA), Ari Melnick (Weill Cornell Medical College, USA), Christopher Oakes (Ohio State University, USA) and Jonathan Licht (The University of Florida, USA).