

## CURRICULUM VITAE

### PERSONAL DATA

Name	César Nombela-Arrieta PhD	
Date, place of birth	24 <sup>th</sup> April 1978, Madrid, Spain	
Nationality	Spanish	
Marital status:	Married, 2 children (2016, 2018)	
Private address	Zürichbergstrasse 191, 8044, Zurich, Switzerland Phone: +41786666759	
Professional address	Department of Medical Oncology and Hematology University and University Hospital Zurich Hädeliweg, 4 Zurich 8032, Switzerland Phone: +41432540216 <a href="mailto:Cesar.NombelaArrieta@usz.ch">Cesar.NombelaArrieta@usz.ch</a>	
Languages	Spanish (native), English (proficient), French (advanced-proficient), German (basic)	
Websites:	<a href="http://www.nombelaarrieta.com/">www.nombelaarrieta.com/</a>	
ORCID ID	0000-0003-0415-259X	

### PRESENT POSITION

05/2022-present	<b>Associate Professor</b> ( <i>ad Personam</i> ) of <i>Molecular Mechanisms of Hematopoiesis</i> , University of Zürich (UZH) and University Hospital Zürich (USZ)
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### PREVIOUS PROFESSIONAL ACTIVITIES

11/2015-05/2022	<b>Assistant Professor</b> of Hematopoietic Stem Cells and Bone Marrow Stroma, Department of Medical Oncology and Hematology, University of Zürich (UZH) and University Hospital Zürich (USZ)
10/2013 – 10/2015	<b>Junior Group Leader</b> , Assistant Department of Hematology, University Hospital Zurich (USZ), Switzerland
2007 – 2013	<b>Research Fellow</b> , Joint program in Transfusion Medicine, Boston Children's Hospital, Harvard University, Boston, USA. Head: Leslie Silberstein
2002-2007	<b>Graduate student in Immunology</b> in the <i>Lymphocyte trafficking</i> group of Dr. Jens V. Stein. 2004– 2007 Theodor Kocher Institute (TKI), University of Bern, Switzerland 2002 – 2003 Department of Immunology and Oncology, National Center for Biotechnology (CNB/CSIC), Madrid 06-07/2004 Visiting student in Dr. Ulrich von Andrian's laboratory, Harvard Medical School, Boston.

### DIPLOMAS

2007	<b>PhD in Immunology</b> . Title of thesis “Roles of DOCK2 and phosphoinositide-3-kinase (PI3K) in lymphocyte recirculation” (Universidad Complutense, Madrid) Thesis director: Dr. Jens V. Stein. Lymphocyte Trafficking Group 2004– 2007 Theodor Kocher Institute (TKI), University of Bern, Switzerland 2002 – 2003 Department of Immunology and Oncology, National Center for Biotechnology (CNB/CSIC), Madrid
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06-07/2004 Visiting student in Dr. Ulrich von Andrian's laboratory, Harvard Medical School, Boston.

## **TRAINING AND EDUCATION**

2006 **Advanced Studies Degree** in Microbiology and Immunology, Faculty of Pharmacy, Universidad Complutense de Madrid (UCM), Spain. Supervisor: Dra. María Molina

1996-2001 **Degree in Pharmacy** at the Complutense University of Madrid. Extraordinary Prize. Best academic record of the year.

## **RESEARCH AND TEAM**

**Research field (s):** Experimental Hematopoiesis, Immunology, Quantitative 3D Microscopy, Stem Cells

### Team composition (as of 01/2023)

Present 4 PhD Students, (Anjali Vijaykumar (01/2021-), Paul Büschl (08/2022-present) shared with Department of Quantitative Biomedicine, Prof. Bjoern Menze, Candice Arnaud-Boissel (11/2022-present), Claudio Bögli (09/2025-present)  
3 postdoctoral fellows: Flavian Thelen PhD, Serena Fazio PhD, YeVin Mun PhD  
Staff scientist: Karolina Zielinska PhD

## **SUPERVISION**

### PhD thesis

03/2025 Ana Luisa Pereira (Cancer Biology Program, UZH) "*Remodeling of the Bone Marrow microenvironment in Regenerative and Malignant Hematopoiesis*"

03/2025 YeVin Mun (Immunology and Microbiology Program, UZH) "*Investigating the role of the Bone Marrow Microenvironment in regulating Hematopoietic Stem Cells in Postnatal Development and Chronic Inflammation*"

03/2025 Serena Fazio (Cancer Biology Program, UZH) "*Dynamics of Cxcl13-Mesenchymal Progenitor Cells during Development, Aging and Inflammation*"

02/2021 Álvaro Gomáriz (co-supervisor, Department of Electrical Engineering, ETH, Zurich) "*Quantitative fluorescence microscopy with marker efficiency and uncertainty aware segmentation and detection using deep learning*"

03/2020 Patrick Helbling (Cancer Biology Program, UZH) "*Hematopoietic stem cell niches from fetal stages to the aging bone marrow*"

02/2020 Ute Suessbier (Immunology and Microbiology Program, UZH) "*Structural and functional changes of bone marrow tissues after chemotherapy*"

06/2019 Stephan Isringhausen (Immunology and Microbiology Program, UZH) "*Characterization and dynamics of hematopoietic bone marrow tissues during homeostasis and chronic infection*"

### Master thesis

2025 Ivona Juric (Immunology program, UZH): "*Investigating the interactions of CD8 memory T cells with Hematopoietic Stem and Progenitor cells within the bone marrow microenvironment*"

2019 Morgane Chambovey (Immunology program, UZH), "*Studying the structural and functional effects of acute myeloid leukemia development on the bone marrow microenvironment*"

2018 Master thesis: K. Loosli, (Environmental health sciences ETH, Zurich) *Novel regulators of hematopoietic stem cell expansion in fetal liver niche*

2016 A. Gomariz (Department of Electrical Engineering, ETH Zurich) *Applying 3D quantitative microscopy to study global topography and cellular interactions in the bone marrow.*

09/2010 B. Winkel student from Medical School, Leiden University, Netherlands. *Novel imaging*

*technologies for the study of BM microvasculature and Hematopoietic Stem Cell intracellular hypoxia*

## **ADMINISTRATION- INSTITUTIONAL RESPONSIBILITIES**

- 06/2025 Chair of the Cancer Biology Program of the Life Science Zurich Graduate School
- 2022-present Vicepresident of the Carmen and Severo Ochoa Foundation, Spain
- 2022- present Member of the Steering Committee of the Center for Experimental and Clinical Imaging Technologies (EXCITE) Zurich (UZH and ETH).
- 2021- present Member of the Steering Committee Cancer Biology Program of the Life Science Zurich Graduate School.
- 2021- present Member of the Open Science Faculty Commission of the University of Zurich
- 2018- present Member of the Steering Committee of the Flow Cytometry Facility of the UZH
- 2017-present Promotion rights at the Faculty of Natural Sciences of the UZH
- 2017-present Member of the Steering Committee of Flow Cytometry Facility, University of Zurich
- 2015-present Member of > 40 Advisory Committees for PhD students of the University of Zurich, Basel University of Basel, University of Bern, ETH Zurich, University Complutense and Autónoma of Madrid, The Arctic University of Norway, Freie Universität Berlin, Oxford University

## **HONOURS AND AWARDS**

- 2023 Ellerman Prize of the Swiss Society of Hematology
- 2019 European Research Council (ERC) Consolidator Grant (ERC-CoG 2019)
- 2018 Invitational fellowship Japanese Society for the Promotion of Science
- 2013 Ramón y Cajal Contracts Spanish Ministry of Economy for the reintegration of young scientists (declined)
- 2013 Winner of the Harvard Stem Cell institute 2013 Imaging Contest
- 2008 Human Frontiers Science Program Long Term Postdoctoral Fellowship (LT-00194/2008).
- 2008 Spanish Royal Academy of Doctors, Best Thesis in Biomedical Sciences Research Award 2007
- 2008 Eduardo Gallego Young Doctor Award, Francisco Cobos Foundation, Spain
- 2004 EMBO Short term Fellowship to visit Dr. Ulrich von Andrian's laboratory, Harvard Medical School, Boston

## **PROFESSIONAL SOCIETIES**

- Associate member of the International Society of Experimental Hematology
- Associate member of the American Society of Hematology
- Associate member of the European Hematology Association
- Associate member Swiss Society of Hematology

## **TECHNICAL AND SCIENTIFIC ROLES**

- Permanent Member of the Grants and Fellowships committee of the European Hematology Association (EHA)
- Editorial Board member: *Blood Advances* (2016-2020), *Hemasphere* (2025-2028)
- For journals (ad hoc reviewer): *Cell Stem Cell*, *Science*, *Nature Cancer*, *Science Translational Medicine*, *Journal of Experimental Medicine*, *Nature Communications*, *Blood*, *EMBO reports*, *Cell Reports*, *Hemasphere*, *Hematologica*, *Stem Cell Reports*, *Stem Cells*, *Hypoxia Journal*, *Scientific Reports*, *European Journal of Immunology*, *Cell stress*, *The Journal of Biochemistry*, *Cellular and Molecular Life Science*, *Biological Reviews*, *Stem Cell Research and Therapies*.

- For funding organizations: European Research Council (ERC), Swiss National Science Foundation (SNSF), Swiss Cancer Research Foundation, Austrian Science Fund (FWF), Wellcome Trust UK, Medical Research Council (UK), Biotechnological and Biological Sciences Research Council (UK), French National Cancer Institute (INCa), Inserm France, Spanish Agency of Evaluation (ANEPE), Agence National de Recherche Francaise (ANR), Japanese Society for the Promotion of Science, Netherlands Organization for Scientific Research (NWO), Icelandic Research Fund, United States-Israel binational Science Foundation, Landsteiner Foundation (Netherlands), Telethon Foundation (Italy), King Abdullah University of Science and Technology (Saudi Arabia)
- For scientific societies: American Hematology Society (ASH) Annual Meeting, European Society for Molecular Imaging (ESMI) Annual Meeting, European Society of Hematology (EHA) Annual Meeting.

#### **GRANTS (PI or Co-PI)**

- 2025-2026 Julius Muller Foundation “*Characterization of the human Bone Marrow Microenvironment in Acute Myeloid Leukemia*”
- 2025-2029 Swiss Cancer league “*Dissecting the role of inflammation-driven remodeling of the bone marrow microenvironment in the pathogenesis of acute myeloid leukemia*”
- 2023-2027 Swiss National Science Foundation “*Fibroblast-macrophage circuits in the regulation of bone marrow hematopoiesis in steady state, stress responses and tissue regeneration*”
- 2022 Freenovation Grant from the Novartis Institute of Biomedical Research (University of Zurich “*Stromal Immune memory*”)
- 2021-2022 Zurich Krebsliga “*Characterization of the human bone marrow microenvironment in Acute Myeloid Leukemia*”
- 2020-2025 European Research Council Consolidator Grant “*Intrapopulation communication and collective cell decisions of Hematopoietic Stem Cells*”
- 2019-2024 Swiss National Foundation (SNSF) project grant, “*Regulation of hematopoiesis by stromal cells in homeostasis, inflammation and development*”
- 2019-2021 Promedica Foundation, “*3D spatial mapping of the human bone marrow microenvironment in health and disease*”
- 2019-2024 Clinical Priority Program, University Hospital Zurich, *ImmunoCure*.
- 2019 Monique Dornonville de la Cour Foundation, “*Investigating the effects of chronic viral infections in the bone marrow microenvironment and hematopoiesis*”
- 2017 Swiss Cancer League project grant, “*Structural and functional dynamics of the effects of acute myeloid leukemia development and regression on the bone marrow stromal microenvironment*”
- 2016 Swiss National Foundation (SNSF) R' Equip grant, “*Enhanced Resolution Confocal Laser Scanning Microscope*”
- 2016 Novartis Foundation for Biomedical Research project grant, “*Analysis of hematopoietic microenvironments during embryonic development and early postnatal life*”
- 2015-2018 Swiss National Foundation (SNSF) project grant, “*Multidimensional analysis of the dynamics of the BM microenvironment during inflammation*”
- 2014-2017 Vontobel Stiftung “*Dynamics of BM microenvironment during inflammation*”
- 2013-2017 Marie Curie Program Reintegration grant “*BM 3D-Aging*”

#### **Fellowships/Grants to laboratory members:**

- 2024 Forschungskredit University of Zurich “*Unraveling the role of a distinct subset of bone marrow mesenchymal stromal cells in healthy and pathological hematopoiesis*” to Serena Fazio
- 2022/2023 European Hematology Association Kick-off grant “*Regulation of Hematopoietic Stem Cells by Bone Marrow CD8 T cells*” to Flavian Thelen

- 2022 Forschungskredit University of Zurich “*Regulation of Hematopoietic Stem Cells by Bone Marrow CD8 T cells*” to F. Thelen
- 2022 Forschungskredit University of Zurich “*Investigating the role of the bone marrow microenvironment in Acute Myeloid Leukemia*” to AL. Pereira
- 2021 Forschungskredit University of Zurich “*Investigating molecular cues driving the self-renewing expansion of hematopoietic stem cells in postnatal periods*” to Y. Mun
- 2019 Hassler Foundation “*A versatile image analysis tool for analysis of multidimensional microscopy images using artificial intelligence*” to A. Gomariz (PhD student) in collaboration with Prof. O. Goksel, Computer Vision labs, ETH, Zurich
- 2018 Forschungskredit University of Zurich “*Identification of key niche cell types supporting expansive extramedullary hematopoiesis in the fetal liver*” to P. Helbling

#### **INVITED LECTURES (selection)**

- 06/2025 Annual Meeting European Hematology Association (EHA)
- 05/2025 Institute of Molecular Genetics of the Czech Academy of Sciences
- 02/2025 Meeting “*Tumor Microenvironment in Hematological Malignancies and its Therapeutic Targeting*”, European School of Hematology, London, UK
- 11/2024 Molecular Hematopoiesis Workshop, Francis Crick Institute, London, UK
- 02/2024 Keystone Meeting on *Hematopoiesis*, Colorado, United States
- 10/2023 Annual John Goldman Conference on Chronic Myeloid Leukemia: Biology and Therapy, Mandelieu, France
- 08/2023 Annual Meeting of the International Society for Experimental Hematology (ISEH), NYC, United States
- 04/2023 Meeting of the Iberian Society for Hematology, Madrid, Spain
- 09/2022 Department of Immunology, Institute Pasteur, Paris, France
- 05/2022 Annual Meeting European Society for Calcified Tissue, Helsinki, Finland
- 10/2021 Annual Meeting German/Swiss/Austrian Societies of Hematology, Berlin, CH
- 10/2021 Meeting of the European Society for Cell and Gene Therapy, Virtual
- 10/2021 Annual Meeting German/Swiss/Austrian Societies of Hematology, Berlin, DE
- 06/2021 Annual Meeting European Hematology Association (EHA), Virtual
- 10/2020 Annual Meeting German/Swiss/Austrian Societies of Hematology, Basel, CH
- 09/2020 Summer School for Advanced Therapies, Universidad Internacional Menendez Pelayo
- 11/2019 Department of Hematology, Erasmus Medical Center, Rotterdam, NL
- 09/2019 Dept. Hematology and Oncology, University of Birmingham, Alabama, US
- 06/2019 Else-Kröner Symposium, “*Translational Immunology, from Target to Therapy*”, University of Würzburg
- 05/2019 International Symposium “*The hematopoietic niches*”, Munich
- 09/2018 20<sup>th</sup> Annual John Goldman Conference on Chronic Myeloid Leukemia: Biology and Therapy. Miami, USA
- 09/2018 10<sup>th</sup> Special Meeting on Hematopoietic Stem Cells. University of Tübingen, Germany
- 09/2018 EXCITE Symposium on Next Generation Microscopy, Zurich