Esteban R. Arrieta Bolaños, DrMBCC, MSc, PhD, PD

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Scientific vita

2025	***Habilitation*** in Experimental Cell Therapy, University of Duisburg-Essen
2025 - Present	**Group Leader,** Institute for Experimental Cellular Therapy, University Hospital Essen, Germany
2015 - 2025	**Postdoctoral scientist,** Institute for Experimental Cellular Therapy, University Hospital Essen, Germany
2020 - 2023	**Fellow,** *Deutsches Konsortium für Translationale Krebsforschung* (DKTK) School of Oncology
2014	**PhD, Haematology,** University College London
2010 - 2014	**PhD student,** Clinical Research Group, Anthony Nolan Research Institute, Royal Free & University College Medical School, UCL Cancer Institute, UK
2007 - 2014	**Lecturer and Research Associate,** Haematology section, Department of Clinical Analyses, Faculty of Microbiology and Centre for Research in Haematology and Related Disorders (CIHATA), University of Costa Rica
2010	***Magister Scientiae* – Microbiology,** University of Costa Rica
2007 - 2009	**Academic postgraduate studies in Haematology,** University of Costa Rica
2009	**Specialty studies in Clinical Immunology,** University of Costa Rica
2008	**Visiting Scientist,** Anthony Nolan Trust Histocompatibility Laboratories, Research Institute, and Cell Therapy Centre, Royal Free Hospital, UCL, and Nottingham Trent University, United Kingdom
2006	**Doctor of Microbiology & Clinical Chemistry,** University of Costa Rica
2006	**Microbiology & Clinical Chemistry Intern**, *Dr. Clodomiro Picado Twight* Clinical Laboratory, San Juan de Dios Hospital, San José, Costa Rica
2001 - 2005	**Study of Microbiology & Clinical Chemistry** (Clinical Pathology/Laboratory Medicine)**,** Faculty of Microbiology, University of Costa Rica

Selected coordinating functions

Since 2022	Junior Coordinator, Immunogenetics Subcommittee, Cellular Therapy & Immunobiology Working Party (CTIWP) of the EBMT
Since 2024	Co-Chair, Immunobiology Working Committee, Center for International Blood & Marrow Transplant Research (CIBMTR)
Since 2024	Representative for the European Federation of Immunogenetics (EFI) to the Worldwide Network for Blood & Marrow Transplantation (WBMT)

Since 2024	*Beauftragter für Lateinamerika* (Coordinator for cooperation with Latin America), Medizinische Fakultät, Universität Duisburg-Essen (UDE)
2020-2023	Councillor to the Executive Committee, European Federation for Immunogenetics (EFI)

Selected Awards and Honors

December 2023	**Abstract Achievement Award,** American Society of Hematology (ASH)
October 2023	**Next Generation Award,** German Society for Immunogenetics (DGI)
April 2023	**Julia Bodmer Award,** European Federation of Immunogenetics (EFI)
May 2021	**Jon van Rood Award,** 34th European Immunogenetics and Histocompatibility Conference, Glasgow
January 2021	**DKMS John Hansen Research Grant (€240,000)**
May 2016	**Adaptive Biotechnologies Young Investigator Award ($5,000)**
April 2010	**Global Excellence Scholarship (£5,000),** University College London, United Kingdom
November 2005	**First Place**, National Examination for University Clinical Internship for Medical, Pharmacy and Microbiology & Clinical Chemistry Students, Costa Rican Social Security Authority (CCSS)

Selected publications

1) **Arrieta-Bolaños** E, Bonneville EF, Crivello P, Robin M, Gedde-Dahl T, Salmenniemi U, Kröger N, Yakoub-Agha I, Crawley C, Choi G, Broers AEC, Forcade E, Carre M, Poiré X, Huynh A, Lenhoff S, Ciceri F, Tholouli E, Schroeder T, Deconinck E, Carlson K, de Wreede LC, Hoogenboom JD, Malard F, Ruggeri A, Fleischhauer K; Cellular Therapy and Immunobiology Working Party of the EBMT. Human Leukocyte Antigen Mismatching and Survival in Contemporary Hematopoietic Cell Transplantation for Hematologic Malignancies. J Clin Oncol. 2024 Oct;42(28):3287-3299.

2) **Arrieta-Bolaños E**, van der Burg LLJ, Gedde-Dahl T, Robin M, Salmenniemi U, Kröger N, Yakoub-Agha I, Huynh A, Crawley CR, Deconinick E, Bulabois CE, Forcade E, Tholouli E, van der Hem JGK, van Balen P, Hoogenboom JD, de Wreede LC, Malard F, Ruggeri A, Fleischhauer K. Directionality of HLA-DP permissive mismatches improves risk prediction in HCT for acute leukemia and MDS. Blood. 2024 Oct 17;144(16):1747-1751.

3) Crivello P, **Arrieta-Bolaños E**, He M, Wang T, Fingerson S, Gadalla SM, Paczesny S, Marsh SGE, Lee SJ, Spellman SR, Bolon YT, Fleischhauer K. Impact of the HLA Immunopeptidome on Survival of Leukemia Patients After Unrelated Donor Transplantation. J Clin Oncol. 2023 May 1;41(13):2416-2427.

4) **Arrieta-Bolaños E**, Hernández-Zaragoza DI, Barquera R. An HLA map of the world: A comparison of HLA frequencies in 200 worldwide populations reveals diverse patterns for class I and class II. Front Genet. 2023 Mar 23;14:866407.

5) **Arrieta-Bolaños E**, Crivello P, He M, Wang T, Gadalla SM, Paczesny S, Marsh SGE, Lee SJ, Spellman SR, Bolon YT, Fleischhauer K. A core group of structurally similar HLA-DPB1 alleles drives permissiveness after hematopoietic cell transplantation. Blood. 2022 Aug 11;140(6):659-663.

6) Meurer T*, Crivello P*, Metzing MF, Kester M, Megger DA, Chen W, van Veelen PA, van Balen P, Westendorf A, Homa G, Layer SE, Turki AT, Griffioen M, Horn PA, Sitek B, Beelen DW, Falkenburg JHF, **Arrieta-Bolaños E***, Fleischhauer K*. Permissive HLA-DPB1 mismatches in HCT depend on immunopeptidome divergence and editing by HLA-DM. Blood. 2021 Feb 18;137(7):923-928. *Equal contribution

7) Barquera R*, Hernández-Zaragoza DI*, Bravo-Acevedo A*, **Arrieta-Bolaños E***, Clayton S*, Acuña-Alonzo V*, Martínez-Álvarez JC*, et al. The immunogenetic diversity of the HLA system in Mexico correlates with underlying population genetic structure. Hum Immunol. 2020 Sep;81(9):461-474. *Joint first authorship

8) **Arrieta-Bolaños E***, Crivello P*, Shaw BE, Ahn KW, Wang H-L, Verneris MR, Hsu KC, Pidala J, Lee SJ, Fleischhauer K, Spellman SR. In silico prediction of nonpermissive HLA-DPB1 mismatches in unrelated HCT by functional distance. Blood Adv. 2018 Jul 24;2(14):1773-83. *Joint first authorship

9) **Arrieta-Bolaños E**, Crivello P, Metzing M, Meurer T, Ahci M, Rytlewski J, Vignali M, Yusko E, van Balen P, Horn PA, Falkenburg JHF, Fleischhauer K. Alloreactive T Cell Receptor Diversity against Structurally Similar or Dissimilar HLA-DP Antigens Assessed by Deep Sequencing. Front Immunol. 2018 Feb 19;9:280.

10) **Arrieta-Bolaños E**, Mayor NP, Marsh SG, Madrigal JA, Apperley JF, Kirkland K, Mackinnon S, Marks DI, McQuaker G, Perry J, Potter MN, Russell NH, Thomson K, Shaw BE. Polymorphism in *TGFB1* is associated with worse non-relapse mortality and overall survival after stem cell transplantation with unrelated donors. Haematologica. 2016 Mar;101(3):382-90.

24.11.2025