

Pietro Crivello, PhD



14 June, 1984 - Palermo (Italy)

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Married, 2 child

Scientific Vita

- 2014 - present **Postdoctoral scientist**, Institute for Experimental Cellular Therapy, University Hospital Essen, Germany
- 2012 - 2014 **Postdoctoral research fellow**, Unit of Molecular and Functional Immunogenetics, San Raffaele Scientific Institute, Milan, Italy
- 2009 - 2012 **PhD in Molecular and translational medicine**, Unit of Molecular and Functional Immunogenetics, San Raffaele Scientific Institute, and University of Milano-Bicocca, Milan, Italy,
- 2008 **Master of science in Medical Biotechnology**, University of Milano-Bicocca, Milan, Italy
- 2006 **Bachelor of science in Biotechnology**, University of Palermo, Palermo, Italy

Appointments and awards

- Since 2024 **Deputy Chair of Scientific Committee** of the European Federation for Immunogenetics (EFI) and **Editorial board member** of *Frontiers in Genetics*, *section Immunogenetics* and of *Experimental and Molecular Pathology*
- Since 2023 **Member of Scientific Committee** of the European Federation for Immunogenetics (EFI) and **Editorial board member** of *HLA journal*
- 2025 **Invited speaker** at 10th Shenzhen Academic Conference on Hematopoietic Stem Cell Transplantation, Shenzhen, China, at the 38th European Immunogenetics and Histocompatibility Conference of EFI, Prague, Czech Republic and at the 17th East-West Immunogenetics Conference, Warsaw, Poland
- 2024 **Hans-Jochem Kolb Research Award 2024**, "GvH/GvL Meeting 2024", University Hospital Regensburg and Neovvi Biotech GmbH
Invited speaker at the Transplantation & Cellular Therapy Meetings of ASTCT and CIBMTR (2024 Tandem Meetings), San Antonio, USA
- 2022 **Third best abstract award**, 35th European Immunogenetics and Histocompatibility Conference
Invited speaker at the 28th National meeting of the Associazione Italiana di Immunogenetica e Biologia dei Trapianti (AIBT)
- 2018 – 2021 **Mechtild Harf Research Grant of the Deutsche Knochenmarkspenderdatei (DKMS)**

- 2018 **Invited speaker** at the 22nd National meeting of the Sociedade Brasileira de Transplante de Medula Óssea (SBTMO)
Next Generation Award 2018, Deutsche Gesellschaft für Immunogenetik (DGI)
Top Young Science Best Paper Award 2018, Medical Faculty of the University of Duisburg-Essen
- 2015 **Best Abstract Award**, 23rd annual meeting of the Deutsche Gesellschaft für Immunogenetik (DGI)

Selected Publications

1. **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 Immunoepitome on Survival of Leukemia Patients After Unrelated Donor Transplantation. *J Clin Oncol* 2023 May 1;41(13):2416-2427. doi: 10.1200/JCO.22.01229. (IF 42.1)
2. Meurer T*, **Crivello P***, Metzger 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 immunoepitome divergence and editing by HLA-DM. *Blood*. 2021 Feb 18;137(7):923-928. doi: 10.1182/blood.2020008464. (*Equal contribution). (IF 21.1)
3. Budeus B, Álvaro-Benito M, **Crivello P**. HLA-DM and HLA-DO interplay for the peptide editing of HLA class II in healthy tissues and leukemia. *Best Pract Res Clin Haematol*. 2024 Jun;37(2):101561. doi: 10.1016/j.beha.2024.101561. (IF 2.2)
4. **Crivello P**, Ahci M, Maaßen F, Wossidlo N, Arrieta-Bolaños E, Heinold A, Lange V, Falkenburg JHF, Horn PA, Fleischhauer K, Heinrichs S. Multiple Knockout of Classical HLA Class II β -Chains by CRISPR/Cas9 Genome Editing Driven by a Single Guide RNA. *J Immunol*. 2019 Mar 15;202(6):1895-1903. doi: 10.4049/jimmunol.1800257. (IF 3.6)
5. **Crivello P**, Heinold A, Rebmann V, Ottinger HD, Horn PA, Beelen DW, Fleischhauer K. Functional distance between recipient and donor HLA-DPB1 determines nonpermissive mismatches in unrelated HCT. *Blood* 2016 Jul 7;128(1):120-9. doi: 10.1182/blood-2015-12-686238. (IF 21.1)
6. Merli P*, **Crivello P***, Strocchio L, Pinto RM, Algeri M, Del Bufalo F, Pagliara D, Becilli M, Carta R, Gaspari S, Galaverna F, Quagliarella F, Boz G, Catanoso ML, Bocchieri E, Troiano M, Fleischhauer K, Andreani M, Locatelli F. Human leukocyte antigen evolutionary divergence influences outcomes of paediatric patients and young adults affected by malignant disorders given allogeneic haematopoietic stem cell transplantation from unrelated donors. *Br J Haematol*. 2023 Mar;200(5):622-632. doi: 10.1111/bjh.18561. (*Equal contribution). (IF 5.1)
7. Meurer T, Arrieta-Bolaños E, Metzger M, Langer MM, van Balen P, Falkenburg JHF, Beelen DW, Horn PA, Fleischhauer K, **Crivello P**. Dissecting Genetic Control of HLA-DPB1 Expression and Its Relation to Structural Mismatch Models in Hematopoietic Stem Cell Transplantation. *Front Immunol*. 2018; doi: 10.3389/fimmu.2018.02236. (IF 5.7)
8. 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. doi: 10.1200/JCO.24.00582. (IF 42.1)
9. 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. doi: 10.1182/blood.2022015708. (IF 21.1)
10. Maguire C, **Crivello P**, Fleischhauer K, Isaacson D, Casillas A, Kramer CSM, Copley HC, Heidt S, Kosmoliaptsis V, Meneghini M, Gmeiner M, Schold J, Louzoun Y, Tambur AR. Qualitative, rather than quantitative, differences between HLA-DQ alleles affect HLA-DQ immunogenicity in organ transplantation. *HLA*. 2024 Apr;103(4):e15455. doi: 10.1111/tan.15455. (IF 6.5)