

Special Issue

Advanced Research on the Major Histocompatibility Complex (MHC): From Bench to Bedside

Message from the Guest Editor

It has been over 40 years since the human Major Histocompatibility Complex (MHC), also known as HLAs, was first studied in relation to disease.

But what is the relationship between these recognised functions of the MHC and the use of HLAs in choosing donors and recipients in transplantation in order to minimise rejection, and what links are there between the MHC, disease, and drug reactions? The answers to these questions are not clear, and only theoretical ones are available. In addition, in birds, some molecular anomalies have been found in canonical-presenting MHC molecules, without a straightforward molecular and evolutionary explanation. Perhaps more emphasis should be placed on studying the molecular evolution and function not of single but of multiple MHC allelic genes conjointly, in a single haplotype, including complement alleles. This will probably help to uncover direct, pathogenetic molecular and cellular mechanisms that explain the role of the MHC in the diseases it is linked to and allow for the improvement of transplantation outcomes with allelic MHC compatibility. These are the aims of this Special Issue of our journal.

Guest Editor

Prof. Dr. Antonio Arnaiz-Villena
Department of Immunology, Universidad Complutense de Madrid,
28012 Madrid, Spain

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Message from the Editor-in-Chief

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