



## Antibody Repertoire Mining for Immune Profiling, Antibody Discovery and Vaccine Design

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### Message from the Guest Editors

Dear Colleagues,

Immunogenetic mechanisms underlying the complex processes of antibody V(D)J gene rearrangement, junctional modification and somatic mutation, which appear to randomly create repertoires of vast diversity. However, deep mining of antibody repertoires have demonstrated that normal and immune repertoires can be constrained and shaped by natural selection, immune checkpoints, and exposure to autoantigens, microbes and vaccines. Recent comparative deep sequencing studies of antibody repertoires between individuals have revealed the existence of public and private repertoires.

This Special Issue focuses on advances and applications in antibody repertoire mining from human and other organisms, including, high-throughput single B cell technologies for antibody discovery, NGS data mining pipeline and *in silico* analysis for clone selection and improved antibody library generation, evolutionary and developmental aspects of antibody repertoires, B-cell lineage vaccine design, immune profiling in cancer, autoimmunity, aging, viral infection/vaccination and understanding antibody responses at the repertoire level.

Dr. Prabakaran Ponraj  
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*Guest Editors*





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## Editor-in-Chief

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## Message from the Editor-in-Chief

*Antibodies* is a relatively new journal with a major focus on quick dissemination of knowledge related to antibodies, especially how to quickly translate basic research results to therapeutic applications. Because it covers all areas related to antibodies unexpected connections between different areas could be made, leading to major discoveries and opening new fields of research and development. This is enhanced by the large readership of the many antibody-related areas of research. A specific priority area is human monoclonal antibodies for therapy of diseases and aging.

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