



The Role of Nucleic Acids in Normal and Aberrant Immunity

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Message from the Guest Editor

Dear Colleagues,

DNA and RNA can play a key role in host defense to infection as well as the pathogenesis of autoimmune and inflammatory diseases such as systemic lupus erythematosus (SLE); SLE is characterized by antibodies to nuclear molecules (antinuclear antibodies or ANAs). The role of nucleic acids as endogenous and exogenous stimulators of innate immunity has broad relevance in medicine and is leading to the development of immunomodulatory approaches for increasing or decreasing the amount and activity of DNA and RNA in the system in various diseases. This Special Issue will include cutting-edge articles on the following topics: the structure of DNA and RNA with respect to immune activity; the DNA and RNA sensors responding to cytoplasmic nucleic acids; the role of intracellular and extracellular nucleases in the response to DNA and RNA; antinuclear antibodies; the role of immune complexes in driving cytokine production; the role of mitochondrial DNA in immune activation; the generation of extracellular cell free (cf) DNA; the role of extracellular nucleic acids as biomarkers; and the role of DNA and RNA in driving disease pathogenesis.





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Message from the Editor-in-Chief

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