



Diagnostic Aptamers in Present and Future Tense

Guest Editor:

Dr. Tamás Mészáros

Department of Molecular Biology,
Institute of Biochemistry and
Molecular Biology, Semmelweis
University, H-1094 Budapest,
Hungary

Deadline for manuscript
submissions:

closed (30 April 2020)

Message from the Guest Editor

In the last decade, literally thousands of papers have attested that the selectivity and affinity of aptamers are comparable or even superior to those of antibodies. Furthermore, due to their straightforward production and ideal chemical properties, aptamers could be the method of choice for the development of diagnostic devices. In spite of their advantageous characteristics and panel of proof-of-principle studies demonstrating their sensor capability, aptamers have barely taken position in the routine diagnostics. This Special Edition aims at providing insight into the present status and the prospects of aptamers in medical, environmental, and food analysis. Some of the papers discuss the pitfalls of selection of aptamers for diagnostic purposes and the issues to be considered for increasing the success rate of generation of practically applicable aptamers. Another set of papers highlights the unique challenges of the development of aptamer-based analytical devices describing that this task is not equal to simply replacing antibodies with aptamers. Finally, we show examples of commercialized kits and systems that could indicate a prosperous future for aptamers in diagnostics.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. José L. Quiles

Department of Physiology,
Institute of Nutrition and Food
Technology “Jose Mataix”,
Biomedical Research Center,
University of Granada, Avda.
Conocimiento s/n, 18100 Armilla,
Granada, Spain

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, and molecular biophysics. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI