

# Making Bioactive Peptides Druggable

Subjects: Biochemistry & Molecular Biology

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International Journal of Molecular Sciences Special Issue on the topic "Making Bioactive Peptides Druggable: Challenges and Prospects" is open for submissions.

The Editorial Board of IJMS, and Guest Editors [Paula Gomes](https://orcid.org/0000-0002-6018-4724) (<https://orcid.org/0000-0002-6018-4724>) and [Cátia Teixeira](http://orcid.org/0000-0001-9506-3781) (<http://orcid.org/0000-0001-9506-3781>) are honored to invite all those devoted to the field of peptide-focused research to contribute to this special issue. This issue is intended to be an up-to-date collection of works, either original or literature reviews, focused on the current challenges, approaches, and prospects towards the improvement of peptide pharmacokinetics. Submissions are open till the 30th of March, 2021. For detailed information, please, use this [link](https://www.mdpi.com/journal/ijms/special_issues/Bioactive_Peptides_Druggable) ([https://www.mdpi.com/journal/ijms/special\\_issues/Bioactive\\_Peptides\\_Druggable](https://www.mdpi.com/journal/ijms/special_issues/Bioactive_Peptides_Druggable)).

Keywords: peptide druggability ; peptide pharmacokinetics ; clinical translation of peptides ; peptide analogs ; peptidomimetics ; cyclic peptides ; stapled peptides ; peptide nanoencapsulation approaches

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The growing relevance of peptides in many areas of industrial and academic R&D is undeniable. Peptides have been explored in the most diverse fields, from molecular biology to materials science, from synthetic chemistry to computational and structural biology, from food science to biotechnology, from early drug discovery to clinics. The huge potential of bioactive peptides, especially, but not exclusively, for therapeutic applications, has been a major driving force for the development of robust chemical methods for peptide synthesis in the second half of the 20th century, with Merrifield's solid-phase peptide synthesis (SPPS) emerging in the 1960s as the most revolutionary achievement. At present, researchers have easy access to a panoply of building blocks, as well as chemical and synthetic biology approaches to produce the most diverse peptides and peptidomimetics. Yet, two decades have passed in the 21st century and there is still one major obstacle to be overcome if the clinical translation of bioactive peptides is to become a trivial matter: making bioactive peptides druggable. Abolishing the well-known limitations of bioactive peptides as therapeutics, mostly due to their poor pharmacokinetics, is currently a top-priority for peptide scientists worldwide.

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