# Applications of Continuum Mechanics in Biomedicine and Fluid Dynamics

Guest Editor:

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Deadline for manuscript submissions:
**30 June 2025**

## Message from the Guest Editor

Dear Colleagues,

During the last few decades, continuum mechanics has been used to furnish several powerful instruments, which were then demonstrated to be useful for capturing the behavior of real physical phenomena involved, for example, in industry, dynamic populations, economics, biology and medicine.

Biofluid mechanics is, in fact, an area of research that furnishes challenges such as in describing complex fluids, studying time dependent problems, modeling specific geometries and developing devices. Modeling the motion of biological fluids can be an important resource for understanding, simulating and exploring cardiovascular, renal, lymphatic and respiratory systems as well as of flying animals or flows of swimmers.

The aim of this Special Issue is to collect manuscripts concerning analytical, experimental or computational studies related to continuum mechanical models of biofluids in humans and animals. We are looking at studies related to blood and lymph modelitation, simulation in pathological situations or the presence of medical devices. Moreover, papers dealing with any other field related to biological application are also welcome.

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**Special** Issue

## Editor-in-Chief

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## Message from the Editor-in-Chief

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