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Sommario/riassunto	<p>Mathematical modeling is a powerful approach supporting the investigation of open problems in natural sciences, in particular physics, biology and medicine. Applied mathematics allows to translate the available information about real-world phenomena into mathematical objects and concepts. Mathematical models are useful descriptive tools that allow to gather the salient aspects of complex biological systems along with their fundamental governing laws, by elucidating the system behavior in time and space, also evidencing symmetry, or symmetry breaking, in geometry and morphology. Additionally, mathematical models are useful predictive tools able to reliably forecast the future system evolution or its response to specific inputs. More importantly, concerning biomedical systems, such models can even become prescriptive tools, allowing effective, sometimes optimal, intervention strategies for the treatment and control of pathological states to be planned. The application of mathematical physics, nonlinear analysis, systems and control theory to the study of biological and medical systems results in the formulation of new challenging problems for the scientific community. This Special Issue includes innovative contributions of experienced researchers in the field of mathematical modelling applied to biology and medicine.</p>