Computational Biology and Vice Versa
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Biology recently celebrated the 50th anniversary of the discovery of the double helix structure of DNA. Rapid strides have been made in these five decades and biology is now playing a key role in the scientific agenda for the 21st century. In a surprisingly parallel development, Computer Science has progressed largely in the last five decades as well, building on the theoretical foundations built by logicians in the first half of the 20th century. Although largely parallel, these two paths have crossed on occasion, and sometimes with spectacular results. The information theoretic foundations of the genetic code, computational complexity and the Levinthal paradox of protein folding, DNA Computing, are some of the obvious crossings with very synergistic effects. The exciting prospect is that the best is yet to come.