RNA codons govern the mechanism of protein folding through the shape memory effect

ABSTRACT

The complex protein folding mechanism had been researched during the past halfcentury, given its potential to offer cures for illnesses caused by viruses and protein misfolding. However, to date, the work remains inadequately successful and mastered, provoking the question of whether researchers are looking at the wrong place for the answer. Specifically, can RNA codons define the protein folding mechanism? This review will first present existing mechanisms for protein folding and their limitations. Then, the logic and evidence supporting the use of a protein folding mechanism governed by RNA codons will be presented. This paper explains protein folding as a shape-memory phenomenon wherein the protein chain memorises the native folded structure. Under the right chemical environment, the protein chain will fold back into its native memorised structure. The RNA codon is the imprint for the natively folded protein shape memory, responsible for programming the native folded structure shape memory onto the protein chain.