Induced fit: a common strategy used by the ribosome in decoding, peptidyl transferase and termination

V. Ramakrishnan
MRC Laboratory of Molecular Biology, Cambridge, UK

The determination of the high-resolution structures of ribosomal subunits and more recently of the entire ribosome have made it possible to study the ribosome in different states along the translation pathway. I will describe work from my laboratory that shows induced conformational changes in the ribosome that are associated with several fundamental processes in translation, namely tRNA selection during decoding, the formation of a peptide bond, and stop codon recognition and peptide release during termination.