

# Measuring information in biological structures and processes

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Diversity is a major feature of life. This must also apply to the way information is carried in the living systems there should be more than one different fundamental mechanism, other than the dogmatically adopted nucleotide sequences.

This paper presents another effort to search for such information carrying machinery at nano- and micro- scales. Various biological structures and processes, with an appropriate taxonomy, are represented as a reduced set of mathematical objects, for which quantitative measures of information are formulated in previous work. Experimental estimation of information content is introduced as a methodology and results are shown for several specific structures and processes.