

# GENE EXPRESSION IS NOISY

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*Gene expression, leading to protein synthesis, involves biochemical events which are probabilistic in nature. The stochastic effects are prominent when the number of participating molecules is small or the transitions between the active and inactive promoter states slow. In the last few years, a large number of studies, combining physical theories with experiments, have been undertaken to explore the origin and consequences of the noise associated with gene expression. A number of novel strategies have been developed to detect and quantify noise. In this article, a brief overview is given on the cross-disciplinary research activity addressing the physical and quantitative aspects of stochastic gene expression.*

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