

Methods in Molecular Biology 1042
John M. Walker, *Series Editor*

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Imaging Gene Expression

Methods and Protocols

As imaging technologies and approaches have evolved, the scope of certain imaging techniques has moved far beyond the production of purely illustrative images or appealing time-lapse movies to providing the scientist with a rich range of ways to measure and quantify the biological process and outcome of gene expression. In *Imaging Gene Expression: Methods and Protocols*, expert authors offer up-to-date approaches and protocols that scientists in the field have developed, which would benefit the broader scientific community. Divided in three convenient parts, this detailed book covers the output of a gene, namely the RNA molecules that are transcribed from the gene and the way by which these molecules can be tracked or quantified in fixed or living cells, protocols that focus on the gene, DNA, or chromatin, as well as a variety of ways by which nuclear processes intertwined with gene expression can be followed and quantified in living cells as well as approaches for studying several sub-nuclear structures found in eukaryotic cells. Written in the highly successful *Methods in Molecular Biology* series format, chapters include introductions to their respective subjects, lists of materials and reagents, step-by-step, readily reproducible laboratory protocols, and tips on troubleshooting and avoiding known pitfalls.

Authoritative and up-to-date, *Imaging Gene Expression: Methods and Protocols* will serve researchers working toward imaging in the context of complete organisms.

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