

## PREFACE

Transgenic animal technology and the ability to introduce functional genes into animals are powerful and dynamic tools for dissecting complex biological processes. The questions to be addressed span the scientific spectrum from biomedical and biological applications to production agriculture. Transgenic methodologies continue to evolve and have dramatically influenced a cross section of disciplines. They are recognized as instrumental in expanding our understanding of gene expression, regulation, and function. There are many general reviews on the topic of transgenic animals that are indeed very useful and timely. However, aside from the manuals devoted to mouse embryology, a single text illustrating the methodologies employed by leading laboratories in their respective disciplines has not previously been compiled prior to the first edition of this text. This handbook covers the technical aspects of gene transfer in animals—from molecular methods to whole animal considerations across a host of species. With this in mind, this handbook is envisioned as a bridge for researchers and as a tool to facilitate training of students and technicians in the development of numerous transgenic animal model systems.

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