Developmental Biology of Urodeles

Edited by

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Preface

Historically, urodeles played a key role in the emerging science of embryology. Today, this special issue highlights not only the great historical legacy but also the continuing experimental and conceptual contribution of urodeles to modern developmental biology.

As the articles included herein illustrate, contemporary urodele research encompasses many of today's important topics in developmental biology, such as cell migration, cell-cell interaction, induction, regulation, pattern specification, heterochrony, neural development, and evolution and development. The growing molecular toolbox available for the urodele system is also evident in this issue, and the melding of molecular techniques with the extensive body of knowledge accumulated by classical embryology hold the promise of even more productive research to come.

Urodele embryos are excellent for classroom use as well as for research purposes. Their relatively large size and slow developmental rate (compared to commonly used anuran embryos) make them favorites for teaching purposes. Included in this issue are examples of the way in which they can be successfully used for generating effective learning experiences.

We wish to thank the authors for taking time out of their busy schedules to write the many excellent reviews in this special issue. We regret that there were others that, reluctantly, had to be omitted for lack of space. We hope we have succeeded in presenting adequately the diversity of contemporary urodele research.

We also wish to thank Randy Johnson for his diligent and able editorial assistance, and we are indebted to Juan Aréchaga for proposing this special issue on urodeles and for his encouragement and support.

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