Preface

Animal models are vital to biomedical research, and they are almost the only way to test basic hypotheses regarding brain formation and function. In this special issue of *Developmental Neuroscience*, we have gathered studies addressing how neurodevelopmental adaptations and maladaptations contribute to a wide variety of complex neurological and psychiatric disorders. The papers focus on linking cellular and circuit-level integrative approaches in animal models, including a large number of contributions containing behavioral techniques. Topics covered encompass both genetic and environmental perturbations of mammalian brain development with relevance to the study of attention-deficit hyperactivity disorder, autism, learning disabilities, neurodegeneration, and schizophrenia (among others). Original research in the field is balanced by several focused reviews which summarize current knowledge and identify key gaps in our understanding. By bringing together multiple perspectives, we hope to provide a valuable resource for basic scientists and clinicians alike.

We would like to thank all of the investigators who have contributed their articles, knowledge and time to this special issue. Steve Levison (Editor-in-Chief), Pradeep Bhidé (Special Issue Editor) and Debra Gysin (Karger) also all deserve special acknowledgements for their assistance, advice, and attention to detail! We hope this issue will serve as a valuable reference tool for relevant ways in which one can use animal models to their fullest potential in studying the developmental origins of neurological and psychiatric diseases. We believe the issue exemplifies the multidisciplinary nature and broad impact of developmental neuroscience and hope that you, the readers, agree.

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