

# Preface

This volume is the most recent installment of the *Progress in Motor Control* series. It contains contributions based on presentations by invited speakers at the Progress in Motor Control VIII meeting held in Cincinnati, OH, USA in July, 2011. Progress in Motor Control is the official scientific meeting of the International Society of Motor Control (ISMC). There were 23 invited presentations at the meeting, which was organized into eight themed symposia and included a special ISMC Past President's Address by Michael Turvey, along with 137 poster presentations.

The Progress in Motor Control VIII meeting, and consequently this volume, were meant to provide a broad perspective on the latest research on motor control in humans and other species. The invited talks at the meeting addressed topics such as neural regeneration, the mirror neuron system, movement disorders, dynamical systems models and analyses, cortical representation and control of movement, spinal circuitry for movement control, neuromechanics, motor learning, computational modeling, and interactions between cognitive and motor processes. Neuroscience, psychology, physiology, kinesiology, biomechanics, engineering, neurology, physics and applied mathematics are among the disciplines represented by the chapters and their authors. The chapters also reflect a broad range of approaches and theoretical points of view, including neural, computational, and dynamical systems perspectives.

This diversity of perspectives and approaches, while certainly not exhaustive or even fully representative, provides a flavor of the complex and multi-faceted nature of motor coordination and control. While it is clear that much progress has been made—fueled in part, hopefully, by the eight Progress in Motor Control meetings to date and the publications associated with them—it is nonetheless apparent that a thorough and complete understanding of motor control is not yet within our grasp. It will require a sustained effort to achieve this understanding, and continued efforts to synthesize the results of studies that are accruing at what seems to be an exponentially increasing rate. We hope that this volume contributes to these important goals in at least some small way.

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