

# Contents

Julie Bernhardt BSc, PhD

Centre for Very Early Rehabilitation Research Program,

Contributors.....	vii
Preface to the first edition.....	ix
Preface to the second edition.....	xi
Acknowledgements .....	xiii

## Part 1: Introduction: adaptation, training and measurement

1. The adaptive system: plasticity and recovery.....	3
2. Training motor control, increasing strength and fitness and promoting skill acquisition .....	15
3. Measurement.....	57

## Part 2: Task-related exercise and training

4. Standing up and sitting down .....	77
5. Walking.....	95
6. Reaching and manipulation.....	123
7. Balance.....	163

Phu D Hoang PhD (Syd)

AIHMRC Post-doctoral Training Fellow

## Part 3: Body function and structure, limitations in activities and participation

8. Upper motor neuron lesions .....	193
9. Cerebellar ataxia.....	217
Written with Phu Hoang	
10. Somatosensory and perceptual–cognitive impairments .....	235
11. Stroke .....	247
Written with Julie Bernhardt	
12. Traumatic brain injury .....	281
Written with Anne Moseley and Leanne Hassett	
13. Parkinson's disease .....	307
Written with Colleen Canning	
14. Multiple sclerosis .....	335
Written with Phu Hoang	
Index.....	351