This is the first truly comprehensive survey of cognitive rehabilitation, spanning the spectrum from basic science to functional outcome. It offers a critical review of theoretical and methodological issues relating to specific rehabilitation procedures and also to programme organization and management. The international team of expert authors consider the multiple determinants contributing to the success of cognitive rehabilitation and present the most scientifically sound methods of practice.

The book is based on the twin premises that basic science is the foundation of rehabilitation and that successful outcome is dependent on the specificity of the rehabilitation. In demonstrating this, the book goes beyond cognitive rehabilitation treatments to cover biological issues such as the course of recovery, psychological status such as mood and motivation, social context such as the family environment, and historical factors such as education and age.

With its emphasis on scientific principles, multidisciplinary practice, and functional outcome, this book will serve as an essential resource for all scientists and clinicians concerned with cognitive deficits secondary to altered brain functioning, and particularly to psychologists, neurologists, psychiatrists, occupational therapists and physical therapists. It will also serve as a stimulus to the further development of cognitive rehabilitation as a discipline based on the complex influences of brain plasticity and behavioural change.

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Cognitive Neurorehabilitation

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Preface

From where

Each year, the Rotman Research Institute of Baycrest Centre for Geriatric Care, an academic centre affiliated with the University of Toronto, holds a conference that focuses on one of the major research thrusts of the institute. The content of past conferences had been on the cognitive functions to which the scientists direct their efforts, such as the functions of the frontal lobes, attention and memory, or on groups of people who may exhibit changes in these functions, such as normal old people, and patients with acute or progressive neurological disorders such as stroke and Alzheimer’s disease.

The philosophy of the Rotman Institute has been to develop basic science, theory and methodologies which would then be directed to the development of more applied research. This was exemplified in each conference, in which the organization of the two days started with basic research findings, with the second day dedicated to clinical applications. It seemed appropriate to maintain this organization when the decision was made to have a more applied content for the fifth annual (1995) conference. Sponsored by Baycrest Centre and the Ontario Mental Health Foundation, the conference, entitled ‘Cognitive Rehabilitation: Advances in the Rehabilitation of Acute and Age-related Brain Disorders,’ was a resounding success. At the termination of the conference, many of the attendees asked if a book would be forthcoming based on the content of the conference. We were hesitant for several reasons. First, we do not make it a practice to ask our presenters to write up their presentations as chapters, and we had not forewarned them that this would be the case. Second,
conference proceedings often do not transfer into good editions. Third, we felt that the content of our conference, while excellent, was not sufficiently comprehensive to be the type of book on cognitive rehabilitation we would want to edit.

Why

The urging of the conference attendees did lead us to consider the matter, and several other factors pushed us to initiate the project. There was an absence of a truly comprehensive survey of cognitive rehabilitation which would (1) span the spectrum from basic science related to rehabilitation efforts to functional outcome; (2) consider theoretical and methodological issues related not only to the specific rehabilitation procedures but also to programme organization and management; (3) review the multiple determinants that contribute to the success of cognitive rehabilitation; and (4) present the most scientifically sound methods of cognitive rehabilitation. We agreed on the need for a book that would review the current status of cognitive rehabilitation. While our desire was to fill a void and edit a ‘comprehensive’ approach to cognitive rehabilitation, we realized that we could only approximate this wish if we were to have a book of reasonable size. We hoped that the book would serve as an update as well as a handy reference for those interested in the science and practice of cognitive rehabilitation. A hope rather than a specified objective was that this book might spur the next surge in cognitive rehabilitation. A final factor that pushed us to produce the book was our own desire to develop the next aspect of the Rotman Institute – a research programme which would lead to the development of directed cognitive rehabilitation procedures. To achieve this objective, we needed to expand our interactions, and Ian Robertson became a part-time scientist of the institute. While remaining a full-time researcher at the Cambridge MRC APU, Ian, through his interactions and visits to the Rotman Institute, expanded his rehabilitation efforts. We also obtained funding from the McDonnell Foundation to develop a cognitive rehabilitation programme, which led to two workshops designed to address the needs of rehabilitation endeavors. Many of the ideas developed in our introductory sections were discussed in these workshops, and the participants are all acknowledged: (in alphabetical order) C. Alain, M. Alexander, S. Black, P. Burgess, F. Craik, M. Cusimano, D. Dawson, M. Freedman, C. Grazi, L. Jacoby, S. Kapur, B. Kolb, M. Kopelman, B. Levine, C. Mundy, R. McIntosh, M. Moscovitch, J. Murre, S. O’Mara, T. Picton, G. Pizzamiglio, G.-B. Proulx, I. Robertson, M. Schwartz, T. Shallice, D. Stuss, B.A. Wilson, and G. Winocur.

Reflections

In editing the book, we asked all the authors to make the chapters scientifically solid, readable, and practically useful, with a reasonably comprehensive if selective reference list. In this way our objective was to develop a resource handbook on the current status of cognitive rehabilitation. In each chapter, the reader will find not only summary paragraphs, but also ‘bullets’ which highlight the main points of different sections in the chapter. Our goal here was for the volume to serve as a handy and easy reference book in addition to being a general resource book.

We think the book is unique in its breadth of information. Most books on rehabilitation deal with one disorder, such as head injury, or one dysfunction, usually memory. Our overall goal was to develop a foundation on which rehabilitation should be formulated. We hope that, if we have achieved our objectives, this edited volume will serve as a seed for the growth and development of basic and applied research into cognitive disorders, and the implementation of this knowledge into the clinical domain.

The book will have value for virtually all health care professionals and scientists working in the field of understanding and/or treating cognitive deficits secondary to altered brain functioning. This includes psychologists, neurologists, psychiatrists, imaging scientists, occupational therapists and physiotherapists. It is also our hope that the book will have value for nurses, social workers, and others who have direct involvement with patients.

D.T. Stuss
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This book was possible because of the support of Baycrest Centre for Geriatric Care. We thank all the contributors for their efforts in preparing their chapters, and in responding to the editors.

The preparation of any book is an extremely time-consuming task. The submission of this edition was possible because of the efforts of our excellent staff. We are truly grateful to Carole Copnick and Darlene Floden, with the additional support of Stacey Paterson and Sean Bischop.