Focusing on the spinal cord and its role in motor control, the book details the clinical and neurophysiological assessment process and methods developed throughout the past half century by basic and clinical scientists. Then, through the use of specialized clinical and neurophysiological testing methods, conduction and processing performed within the surviving neural circuitry is examined and characterized in detail. Based on the results of such assessment, treatment strategies, also described in this book, are applied to augment, rather than replace, the performance of surviving neural circuitry and improve the functional capacity of people who have experienced injury to their spinal cords.