This book studies the organization of the white matter pathways of the brain. The book analyzes and synthesizes the corticocortical and corticosubcortical connections of the major areas of the cerebral cortex in the rhesus monkey. The result is a detailed understanding of the constituents of the cerebral white matter and the organization of the fiber tracts. The findings from the thirty-six cases studied are presented on a single template brain, facilitating comparison of the locations of the different fiber pathways. The summary diagrams provide a comprehensive atlas of the cerebral white matter. The text is enriched by close attention to functional aspects of anatomical observations. The clinical relevance of the pathways is addressed throughout the text and a chapter is devoted to human white matter diseases. The introductory account gives a detailed historical background. Translations of seminal original observations by early investigators are presented, and when these are considered in the light of the authors' new observations, many longstanding conflicts and debates are resolved.