

CONTENTS

| | | |
|-------------------|--|-----|
| Chapter 1 | Introduction | 7 |
| Chapter 2 | Magnetoencephalographic study of posterior tibial nerve stimulation in patients with intracranial lesions around the central sulcus | 21 |
| Chapter 3 | Topographical organization of mu and beta band activity associated with hand and foot movements in patients with perirolandic lesions | 39 |
| Chapter 4 | Slowing of M1 oscillations in brain tumor patients in resting state and during movement | 53 |
| Chapter 5 | Magnetoencephalographic study of hand and foot sensorimotor organization in 325 consecutive patients evaluated for tumor or epilepsy surgery | 71 |
| Chapter 6 | Spatiotemporal imaging of somatosensory cortical activity with identical paradigms: comparison of fMRI and MEG. | 89 |
| Chapter 7 | Localisation of the central sulcus region in glioma patients with three-dimensional fluid-attenuated inversion recovery and volume rendering: comparison with functional and conventional magnetic resonance | 111 |
| Chapter 8 | General discussion and future perspectives | 127 |
| Chapter 9 | Summary | 137 |
| Chapter 10 | Dutch Summary Nederlandse samenvatting | 143 |
| Appendices | List of abbreviations | 150 |
| | List of publications | 151 |
| | Acknowledgements Dankwoord | 153 |
| | About the author | 155 |
| | Dissertations Brain Tumor Center Amsterdam | 156 |