

# Contents

<b>Chapter 1</b>	General introduction	7
<b>Chapter 2</b>	Cerebral microdialysis of Interleukin (IL)-1 $\beta$ and IL-6: extraction efficiency and production in the acute phase after severe traumatic brain injury in rats <i>Acta Neurochir 2008(150)1277-84</i>	15
<b>Chapter 3</b>	Increased cerebral (R)-[ <sup>11</sup> C]PK11195 uptake and glutamate release in a rat model of traumatic brain injury: a longitudinal pilot study <i>Journal of Neuroinflammation 2011(8)67</i>	31
<b>Chapter 4</b>	Reference tissue models and blood-brain barrier disruption: lessons from (R)-[ <sup>11</sup> C]PK11195 in traumatic brain injury <i>J Nucl Med 2009 (50)1975-9</i>	47
<b>Chapter 5</b>	Widespread and prolonged increase in (R)-[ <sup>11</sup> C]PK11195 binding after traumatic brain injury <i>J Nucl Med 2011 (52)1235-9</i>	57
<b>Chapter 6</b>	Long-term increased (R)-[ <sup>11</sup> C]PK11195 binding in perilesional traumatic brain injury zones <i>Submitted</i>	69
<b>Chapter 7</b>	General discussion	81
<b>Chapter 8</b>	Summary	91
<b>Chapter 9</b>	Samenvatting	97
<b>Appendices</b>	List of abbreviations	102
	Bibliography	104
	Dankwoord	106
	Curriculum Vitae	110
	References	111