

List of figures

Chapter 2

Figure 1	<i>Morphometric comparison of the larval and the adult MN5</i>	21
Figure 2	<i>Mapping of putative GABAergic inputs onto the dendritic surface of MN5</i>	24
Figure 3	<i>The density of GABAergic contacts with MN5 changes through different stages</i>	27
Figure 4	<i>Sholl analysis reveals non-random distribution of putative GABAergic input into the dendritic tree of the adult MN5</i>	30
Figure 5	<i>Overall densities of putative synapses in the neuropil are similar between low and high Sholl spheres in the adult</i>	32
Figure 6	<i>Only in the adult MN5 putative GABAergic inputs occur predominantly at the roots of thick low order braches</i>	35
Figure 7	<i>Asynchronous synaptic inputs at putative GABAergic sites onto the larval and adult dendritic tree are summated by purely passive integration properties to support a behavioraly adequate response.</i>	40
Figure 8	<i>Comparison of the effect of GABAergic versus randomized synaptic distribution patterns on the passive integration of synaptic activation.</i>	42

Chapter 3

Figure 1	<i>Inluences of drug injection on developmental time during metamorphosis and neuronal excitability by stimulation of the gin trap reflex</i>	61
Figure 2	<i>Morphometric comparison of control and picrotoxin manipulated adult MN5</i>	63
Figure 3	<i>Quantitative morphometric comparison of control and picrotoxin manipulated adult MN5</i>	65
Figure 4	<i>Analysis of the control and manipulated dendritic tree of MN5 as a function of branch order</i>	67
Figure 5	<i>Scholl analysis of morphometric parameters</i>	69
Figure 6	<i>Mapping of putative GABAergic inputs onto the dendritic surface of MN5</i>	72
Figure 7	<i>Comparison of stationary flight ability of control and PTX injected adult animals</i>	74