

## 11 References

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# List of Abbreviations and Symbols

<i>Main Respiratory Terms</i>		<i>Modifiers</i>	
AHR	acute hypoxic response	<i>a</i>	arterial
$B_k$	apneic threshold	<i>C</i>	central loop related
$CO_2$	carbon dioxide	<i>e</i>	expired
<i>F</i>	fraction	<i>ET</i>	end-tidal
<i>G</i>	chemoreflex gain	<i>i</i>	inspired
HVD	hypoxic ventilatory decline	<i>n</i>	parallel noise
$O_2$	oxygen	<i>P</i>	peripheral loop related
<i>P</i>	partial pressure	<i>T</i>	total
<i>RR</i>	respiratory rate		
<i>S</i>	ventilatory $CO_2$ sensitivity		
$S_pO_2$	oxygen saturation		
<i>T</i>	time delay		
$\tau$	time constant		
$\dot{V}_i$	inspired minute ventilation		
$V_T$	tidal volume		
<i>W</i>	measurement noise		

## *Modeling Terms of Chapters 6 and 7*

AIC	Akaike's information criterion
$C_{25}$	concentration causing 25% effect
$C_{50}$	concentration causing 50% effect
<i>E</i>	effect
$E_0$	baseline effect
$\gamma$	shape parameter
$\lambda$	scaling parameter

## *Miscellaneous Terms*

AOX	antioxidant
BIS	bispectral index
CBF	cerebral blood flow
CBR	carotid body resection
DEF	dynamic end-tidal forcing
EEG	electroencephalogram
GABA	$\gamma$ amino butyric acid
HR	heart rate
MAP	mean arterial pressure
MFBS	multifrequency binary sequence
OR	opioid receptor
ROS	reactive oxygen species



## Curriculum Vitae

Diederik Jan Friso Nieuwenhuijs was born on Februari 8, 1972 in Utrecht, The Netherlands. He obtained his Atheneum diploma at the Sint Bonifatius college in Utrecht in July 1990. In September 1990 he entered medical school at the Vrije Universiteit in Amsterdam and received his medical degree in June 1998. From June to October 1998 he worked as a resident at the Intensive Care Unit at the Elisabeth Gasthuis in Eindhoven. In October 1998, he was appointed as graduate student, supported by Grant MW 902-19-144 from The Netherlands Organization for Pure Research (ZorgOnderzoek Nederland Medische Wetenschappen-NWO), at the Department of Anesthesiology, Leiden University Medical Center, and started the investigations described in this thesis. In October 2002, he will start his residency in anesthesiology at the Department of Anesthesiology at the Leiden University Medical Center (Chairman: Prof. Dr. J.W. van Kleef).

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