TABLE OF CONTENTS

Chapter 1  General Introduction  9

Chapter 2  Phenotypic and functional characterization of human skin antigen presenting cell subsets  29

Chapter 3  In-situ delivery of antigen to DC-SIGN^+CD14^+ dermal dendritic cells results in enhanced CD8^+ T cell responses  51

Chapter 4  Langerin-mediated internalization of modified peptides routes antigens to early endosomes and enhances cross-presentation by human Langerhans Cells  73

Chapter 5  Cross-presentation through langerin and DC-SIGN targeting requires different formulation of glycan-modified antigens  97

Chapter 6  Topical rather than intradermal application of the TLR7 ligand imiquimod leads to human dermal dendritic cell maturation and CD8^+ T-cell cross-priming  123

Chapter 7  General discussion  143

Appendices  Nederlandse Samenvatting  159
Curriculum Vitae  165
List of publications  166
Dankwoord  168