# Table of contents

**CHAPTER 1:** General introduction 7

**CHAPTER 2:** Fibroblasts from women with pelvic organ prolapse show differential mechanoresponses depending on surface substrates 17

**CHAPTER 3:** Functional characteristics of vaginal fibroblastic cells from premenopausal women with pelvic organ prolapse 31

**CHAPTER 4:** Changes in tissue composition of the vaginal wall of premenopausal women with prolapse 51

**CHAPTER 5:** Microarray analysis of the anterior vaginal wall from premenopausal patients with pelvic organ prolapse 65

**CHAPTER 6:** Pelvic organ prolapse decreases the quality of the matrix produced by vaginal fibroblastic cells *in vitro* 83

**CHAPTER 7:** Extracellular matrix influences myofibroblast differentiation in pelvic organ prolapse – a pilot study 101

**CHAPTER 8:** General discussion 117

General summary 129

Algemene samenvatting 133

Acknowledgements, dankwoord, agradecimientos 137

About the author 143