

# CONTENT

## CHAPTER 1

7

General introduction

## CHAPTER 2

25

Enhancement of zebrafish sperm production via a large body-sized surrogate with germ cell transplantation

## CHAPTER 3

37

Genome-wide comparative methylation analysis reveals the fate of germ stem cells after surrogate production in teleost

## CHAPTER 4

57

Partial gonadectomy: A new approach to obtain germline stem cells for transplantation while preserving the donor

## CHAPTER 5

69

General discussion

71

English summary

79

Czech summary

80

Acknowledgments

81

List of publications

82

Training and supervision plan during study

83

*Curriculum vitae*

84