Genetic Aspects of Hearing Loss in the Limpopo Province of South Africa

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DEDICATION

To Almighty God who has by grace made all this possible.

To my daughters Constance and Theodora, who experienced the cost of a PhD at an early age and yet remained encouraging, supportive, always believing for their mother.

To Ezra whose support gave me the space to fly.

‘But he knows the way that I take; when he has tested me, I will come forth as gold.’

Job 23:10
DECLARATION

I, Rosemary Ida Kabahuma, do hereby declare that this dissertation submitted in fulfillment of the requirements for the degree of Doctor of Philosophy in the Faculty of Humanities, Department of Speech Pathology and Audiology, University of Witwatersrand, is my own original work. All assistance I have received has been stated in the acknowledgements. This work has not been submitted before for any degree or examination at this or any other university. I declare that the protocol was cleared by the Committee for Research on Human subjects, Ethics committee clearance certificate protocol number M991005.

Rosemary Ida Kabahuma

____ day of ________________ 2010
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LIST OF ABBREVIATIONS

HL  Hearing Level
StatsSA  Statistics South Africa
DNA  Deoxyribose nucleic acid
EcoG  Electrochocleography
GP  general practioner
OME  Otitis media with effusion
PTA  Pure tone average
ECG  Electrocardiogram
MRI  Magnetic resonance imaging
TORCH  Toxoplasmosis, Rubella, Cytomegalovirus, Herpes
CSF  Cerebral spinal fluid
CT  Computerised tomography
CME  Continued medical education
SEN  Special education needs
ENT  Ear Nose and Throat
SNHL  Sensorineural hearing loss
TEOAEs  Transient evoked otoacoustic emissions
ART  Acoustic reflex threshold
PMHC  Pietersburg Mankweng Hospital Complex
ENG  Electronystagmography
NHLS  National Health Laboratory Services
PCR  Polymerized chain reaction
WS  Waardenburg syndrome
ARNSHL  Autosomal recessive nonsyndromic hearing loss
NSSNHL  Nonsyndromic sensorineural hearing loss
NSAHL   Nonsyndromic autosomal hearing loss
Cx26    Connexin 26
DOH     Department of Health
WHO     World Health Organisation
BP      Base Pair(s)
EDHI    early detection of hearing impairment
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