

Curriculum vitae

ROXANNE HATTINGH

Address: 49 Liesbeek Road, Rosebank, Cape Town, 7700

Phone: 0747203025

Email: httrox001@myuct.ac.za



EDUCATION

UNIVERSITY OF CAPE TOWN

MASTER OF SCIENCE IN MEDICINE (NEUROSCIENCE)

Thesis entitled “ *Investigating the impact of postnatal development on human pyramidal neuron signal processing* ” Supervised by Dr. Joseph Raimondo and Dr. Matthijs Verhoog.

2021-
PRESENT

BACHELOR OF MEDICAL SCIENCE (HONOURS) IN NEUROSCIENCE AND PHYSIOLOGY

Thesis entitled “ *Investigating the impact of developmental spine plasticity on neural signal processing* ” Supervised by Dr. Joseph Raimondo, Dr. Matthijs Verhoog and Tariro Chatiza

2020

BACHELOR OF SCIENCE IN PHYSICS AND ASTROPHYSICS

Majors completed in 2018. Studied additional second year level courses in human biology and statistics in 2019.

2016 –2019

BACHELOR OF ARCHITECTURAL STUDIES

Completed first year with 72% GPA

2015

DANVILLE PARK GIRLS’ HIGH SCHOOL

MATRIC

Matriculated with 7 distinctions.

2010 –2014

ACHIEVEMENTS AND AWARDS

Attended the IBRO-SIMONS Computational Neuroscience summer school

2022

Awarded an Oppenheimer Memorial Trust Scholarship

Awarded a UCT Masters Research Scholarship.

2021-2022

Awarded a UCT Human Biology departmental scholarship

BMedSci (Honours) degree awarded with distinction (78%)

2020

Awarded a UCT Council Honours Merit Award.

Received the Umlazi District Prize for the Highest Mark in Visual Art in Grade 12.

2014

EXPERIENCE AND LEADERSHIP

CO-SUPERVISOR OF BMEDSCI HONOURS PROJECT

Thesis entitled “A quantitative study of the microanatomy of the supragranular layers of pyramidal neurons in brain tissue from infants and adults” by Yanelisa Pulani

2022

TUTOR/ DEMONSTRATOR FOR UCT HUMAN PHYSIOLOGY DEPARTMENT

Tutoring and demonstrating for undergraduate and Honours level physiology students.

2021-
PRESENT

UCT CORTEX CLUB COMMITTEE MEMBER

IT and marketing portfolio for this student-run neuroscience society.

**2021-
PRESENT**

TUTOR FOR UCT PHYSICS DEPARTMENT

Tutored and demonstrated weekly for first year physics students. Responsibilities included supervising tutorials and practicals, marking, and invigilating during tests.

2019

TUTOR AT TEACHME2

Privately tutored Grade 8 - 12 mathematics students.

**2018 –
2021**

UCT SPACE AND ASTRONOMY COMMITTEE MEMBER

In charge of communications. Responsibilities included marketing events and running social media accounts.

2018

WAITRESS, JUMELI CAFE

2016

BALLET

Completed 13 years of RAD ballet training up to and including the Advanced I Ballet exam.

**2002 –
2014**

TECHNICAL SKILLS

COMPUTER SKILLS

Proficient in coding for data analysis and visualization with MATLAB and Python, have experience with using R and SPSS for statistical analysis.

Proficient with the NEURON +Python simulation environment for computational modelling of individual neurons.

Experienced using the software ImageJ for image processing and quantitative analysis

Well versed in Microsoft Office Access for database creation and management, as well as Adobe Illustrator and Photoshop.

LABORATORY SKILLS

Immunohistochemical staining

Brightfield, fluorescence and confocal microscopy

Preparation of acute slices and organotypic slice cultures of human and mouse brain tissue

Electrophysiological recordings using whole-cell patch clamping

RESEARCH INTERESTS

Neuroscience, specifically cellular neurophysiology and computational neuroscience. My master's project is investigating morphological and physiological changes in human cortical neurons and their signalling properties over development.