

# **Hugo Botha**

## **ASSISTANT PROFESSOR**

Department of Neurology, Mayo Clinic

# Research Interests\_

Neurodegenerative disease, Neuroimaging, Machine learning, Bayesian statistics

# Education\_

**University of Stellenbosch** Cape Town, WC, SA BACHELOR OF MEDICINE BACHELOR OF SURGERY (MBCHB) 01/2006-12/2011 **Mayo Clinic** Rochester, MN, USA NEUROLOGY RESIDENCY, DEPARTMENT OF NEUROLOGY 07/2012-06/2016 **Mayo Clinic** Rochester, MN, USA BEHAVIORAL NEUROLOGY FELLOWSHIP, DEPARTMENT OF NEUROLOGY 07/2016-06/2017 **Mayo Clinic** Rochester, MN, USA CLINICIAN INVESTIGATOR PROGRAM, DEPARTMENT OF RADIOLOGY 07/2017-06/2019

# Awards

# **Rector's Award for Excellent Achievement: Academics**

2011

UNIVERSITY OF STELLENBOSCH

• Awarded for outstanding achievement in either academics, sport or culture

Graduated with Honors 2011

University of Stellenbosch

# Faculty of Health Sciences Medal for Best Graduating Student

2011

University of Stellenbosch

• Awarded to the best undergraduate student from the graduating classes in health and allied health sciences

# **Mayo Brother's Fellowship Award**

2016

MAYO CLINIC

· Based on the qualities associated with the founders, including outstanding clinical performance, humanitarianism, and scholarly activity

# **Department of Neurology Research Award**

2016

MAYO CLINIC

• Recognition of outstanding basic or clinical research during residency or fellowship

# Professional Memberships and Activities \_\_\_\_\_

# SOCIETY MEMBERSHIP

# **American Academy of Neurology**

Member 2013-present

# International Society to Advance Alzheimer's Research and Treatment

Member 2017-present

# **Organization for Human Brain Mapping**

Member 2017-present

## **International Society for Frontotemporal Dementias**

Member 2020-present

# **Organization for Computational Neurosciences**

Member 2020-present

## PROFESSIONAL SERVICE

#### **Conferences**

**COURSE MONITOR** 

· American Academy of Neurology Annual Meeting (2016)

#### ABSTRACT REVIEWER

• Alzheimer's Association International Conference (2018, 2019, 2020)

#### **Journals**

#### AD HOC REVIEWER

- · Alzheimer's Research & Therapy
- Brain
- · Human Brain Mapping
- JAMA Psychiatry
- Journal of Alzheimer's Disease
- Journal of the Neurological Sciences
- Mayo Clinic Proceedings
- Medical Image Analysis
- · Nature: Scientific Reports
- Neurobiology of Aging
- · NeuroImage: Clinical
- Neurology
- Neuropsychologia
- Parkinsonism and Related disorders

# **Teaching**

#### INTERNAL LECTURES

# **Neurology Residency Program**

BASIC SUMMER LECTURE SERIES

• Bedside Cognitive Assessment (2018,2019,2020)

#### NEUROANATOMY COURSE

- Cortex I: Cytoarchitecture and Organization (2019, 2020)
- Cortex II: Lobes and Functions (2019, 2020)

#### INTERNAL CONFERENCES

# **Neurology Department**

**GRAND ROUNDS** 

· Neurology Clinicopathologic Conference - A young man with progressive language difficulty (2015)

## SUBSPECIALTY CONFERENCE

- · Left Speechless: Dealing with the word salad of progressive aphasia and apraxia of speech (2015)
- The left hand of neurology: sinistrality, hemispheric specialization and neurodegenerative disease (2017)

# LAY PUBLIC FOCUSED TALKS

# **ADRC Patient-Caregiver Seminars**

POSTERIOR CORTICAL ATROPHY EDUCATION SEMINAR

· Making a Diagnosis

CBD and PSP Education Seminar

• Journey to the Diagnosis (2017)

# FRONTOTEMPORAL DEMENTIA AND PRIMARY PROGRESSIVE APHASIA EDUCATION SEMINAR

- FTD/PPA: Making a Diagnosis (2017)
- FTD/PPA: Pathology and Pathophysiology (2017)

# **Invited Talks**

CHESLEY CENTER ON AGING 2017 DEMENTIA CARE CONFERENCE

• Latest Findings and Trends in Research (2017)

Institutional/Departmental Activities	
ACTIVE	
Neurology Research Committee Voting Member	2019 - Current
Neurology Artificial Intelligence Program  DEPUTY DIRECTOR	2020 - Current
Behavioral Neurology Fellowship DEPUTY DIRECTOR	2020 - Current
Machine Learning/Deep Learning Journal Club Section Chair (Neurology)	2020 - Current
Prior	
Mayo Internal Medicine Residents Council PRELIM-YEAR REPRESENTATIVE	2012 - 2013
Neurology Residency Recruitment Committee  VOTING MEMBER	2014 - 2016
Mentoring	
Johhny Dang (Medical student)  PROJECT: DELAYS IN THE DIAGNOSIS OF PPAOS  • Abstract submitted to AAN 2021  • Manuscript in preparation	2019 - Current
Zeynep Secking (Intern)  PROJECT: NEUROLOGIC CAUSES FOR DELUSIONAL INFESTATION  • Manuscript in preparation	2020 - Current
Ryan Coburn (Neurology Resident)  PROJECT: FDG-PET TO PREDICT DECLINE IN ATYPICAL ALZHEIMER'S DISEASE  • Data collection in progress	2020 - Current
Research funding	
ACTIVE	
The neurobiology of two distinct types of progressive apraxia of speech (Co-I)  National Institute on Deafness and Other Communication Disorders	2017-2022 R01 DC 14942
Longitudinal multi-modality imaging in progressive apraxia of speech (Co-I)  National Institute on Deafness and Other Communication Disorders	2018-2023 R01 DC 12519
ARTFL LEFFTDS Longitudinal Frontotemporal Lobar Degeneration (ALLFTD) (Co-I) NATIONAL INSTITUTE ON AGING	2019-2024 U19 AG 63911
Independent brain metabolic patterns in Progressive Supranuclear Palsy (Co-I)  National Institute of Neurological Disorders and Stroke	2020-2022 R03 NS 114365
Publications	