

Postdoctoral Fellowship Opportunity for 2026

Project Title: Evaluation of hydroxybenzoic acid derivatives and corresponding liposomal conjugates in experimental models of neurodegenerative diseases.

Position overview

We invite applications for Postdoctoral Research Fellows to join an interdisciplinary project investigating the neuroprotective mechanisms of hydroxybenzoic acid derivatives in neurodegenerative diseases (NDDs). This research integrates cellular neuroscience, natural-product synthesis and pharmacology, mitochondrial biology, synaptic plasticity, metabolomics, and zebrafish in vivo NDDs models. The successful candidate will contribute to ongoing research aimed at identifying new disease-modifying strategies for neurodegeneration.

Key Responsibilities

- Conduct independent experiments across in vitro and in vivo platforms
- Lead metabolomic assays
- Perform behavioural and immunohistochemical analysis in zebrafish PD models
- Publish findings in high-impact peer-reviewed journals
- Mentor postgraduate students and contribute to grant writing
- Present results at national and international conferences

Essential Qualifications

- A PhD in Neuroscience, Pharmacology, Biochemistry, Molecular Biology, Physiology, or related fields within the last 5 years.
- Strong background in at least four of the following:
 - Neurodegeneration and mitochondrial biology
 - Transfections
 - Natural-product pharmacology
 - Drug delivery systems
 - Zebrafish or small-model experimental animals
 - Metabolomics (LC-MS/MS)
- Proven record of peer-reviewed publications
- Excellent experimental, analytical, and organisational skills
- Ability to work independently and within a multidisciplinary team
- Good written and oral communication skills

Duration & Funding

First for one year, renewable for another year, subject to satisfactory performance, with a stipend of R320,000.00, non-taxable.

Application Requirements

- A cover letter of motivating suitability for the position.
- Academic transcripts.

- A full curriculum vitae,
- Names and contact details of 2 academic referees.
- Candidates must be South African Citizens or South African Permanent Residents

All completed applications (as a single PDF document) and queries should be submitted to Dr Sylvester Omoruyi (sylvester.omoruyi@wits.ac.za) with the subject line:

“Postdoctoral Fellowship Application – Hydroxybenzoic acid derivatives and neuroprotection”

Closing date: **17th January 2026**