

**NORTH-WEST UNIVERSITY (POTCHEFSTROOM CAMPUS)
FACULTY OF HEALTH SCIENCES - PhASRec
VACANCY: POSTDOCTORAL FELLOWSHIP
EMPLOYMENT TYPE: FIXED TERM APPOINTMENT**

The Physical Activity, Sport and Recreation (PhASRec) Research Focus Area in the Faculty of Health Sciences of the Potchefstroom campus at the North-West University, South Africa, welcomes applications for a post-doctoral position.

PhASRec consists of experienced researchers focusing on physical activity in health, sport, and recreation to optimise health and performance over the life span.

A full-time Postdoctoral Fellowship position is available in **Physical Activity, Sport and Recreation (PhASRec)**, Faculty of Health Sciences, at the North-West University (NWU), South Africa. This is an excellent opportunity for an emerging scholar to engage in high-impact, internationally collaborative research at the interface of **sport performance and cognitive neuroscience** (specifically: decision-making in athletes and neurophysiological processes that underpin skilled perception, cognition and action). The fellowship will be hosted in PhASRec with Prof Habib Noorbhai as the primary host.

This full-time Postdoctoral Fellowship is funded through the NWU Postdoctoral Programme. The fellowship carries a value of R320 000 (tax-free) per annum, once-off relocation costs, and R50 000 per annum research funding. The fellowship is tenable for three years in the first instance, subject to annual renewal based on performance, and can be extended to a period of up to five years. The Postdoctoral Fellowship will be based in Potchefstroom, South Africa.

Depending on available funding, there may be opportunities for additional remuneration linked to strong research productivity and high-quality publications arising from collaborative work with the host scientist.

Research Focus

The research will centre on methodological and applied problems in the neuroscience of athlete decision-making, with possible research themes including:

- Perceptual-cognitive expertise, anticipation and decision-making in dynamic, open-skill sport environments.
- Brain-activity and neurophysiological correlates of decision-making, action selection and skilled performance in athletes.
- Application of portable and laboratory measures of brain and body activity; including electroencephalography (EEG) and event-related potentials (ERPs), functional near-infrared spectroscopy (fNIRS), eye-tracking and gaze behaviour (e.g. the "quiet-eye"), and autonomic measures such as heart-rate variability (HRV) - in both controlled and ecologically valid sport settings.
- Interactions between cognitive load, fatigue, arousal and stress and the quality of athletes' decisions, as well as their neural signatures.
- Design and analysis of experimental and applied studies integrating behavioural, neurophysiological and performance data, including signal processing and appropriate statistical or computational modelling.
- Translation of findings into training, talent-identification and performance-optimisation applications.

Key Responsibilities

Successful applicants will be required to:

- Study the specific research topic as negotiated with the host scientist.
- Play an active role as an investigator in all aspects of the research project.
- Play an active and independent role in the project and prepare at least two research articles per year, in collaboration with the host scientist, for submission to high-impact international journals.
- Present research findings at national and international seminars and conferences.

Minimum Criteria

- Applicants must be under the age of 45 years.
- A recently obtained PhD degree (within the last five years) in one of the following fields: Human Movement Sciences / Sports Science / Physiology (including Exercise Physiology) / Psychology / Neuroscience / Engineering (with a relevant focus applicable to sport, cognition or neurophysiology).
- A publication record in suitable peer-reviewed journals.

Required Competencies and Experience

- Experience in perceptual-cognitive, decision-making, cognitive-neuroscience or sport/exercise-neuroscience research.
- Experience with brain-activity or neurophysiological measurement (e.g. EEG/ERP, fNIRS, eye-tracking, HRV, or related methods) is highly advantageous.
- Experience in psychophysiological signal processing and the analysis of time-series or neuroimaging data is preferred.
- Strong coding skills in a scientific programming language such as R, Python or MATLAB. Familiarity with analysis toolboxes such as EEGLAB, FieldTrip, MNE-Python, or fNIRS/NIRS toolboxes is advantageous.
- A demonstrable ability to conduct independent research, write scientific papers and communicate effectively in English.

Application

The closing date for application is **30 September 2026**. Applications must include:

- Letter of motivation, detailing relevant experience and research interests, current research activities, and interest in this position.
- Detailed CV, including a list of peer-reviewed publications.
- Contact details of two referees.
- Certified copy of the applicant's doctoral degree certificate or PhD award letter.
- Certified copy of the applicant's ID / permanent residency / passport document. Foreign nationals must obtain relevant permits before appointment.

Applications should be submitted by email to Mrs Hestie Parkin (hestie.parkin@nwu.ac.za)

The NWU reserves the right not to make an appointment. Please consider your application unsuccessful if you have not been contacted within two weeks of the application closing date. Any enquiries regarding this position can be directed to Prof Noorbhai - habib.noorbhai@nwu.ac.za