Call for Applications: **Postdoctoral Research Fellowship** (3-Year, Tax-Free)

Stellenbosch University (SU) is deeply committed to advancing knowledge, research, and innovation to serve society. As a world-class learning and development institution, SU promotes globally relevant research while contributing to the upliftment and transformation of local communities. The CLIMADE consortium in the Centre for Epidemic Response and Innovation (CERI) at SU invites applications from dedicated postdoctoral scholars for a 3-year fellowship to contribute to a transdisciplinary research project

"Geospatial Data Integration for Predicting and Tracking Infectious Disease Outbreaks in a Changing Climate"

Project Overview:
This project focuses on the use of satellite data, remote sensing, GIS, climate modeling, and related data-intensive fields to advance research in spatial epidemiology. The successful candidate will integrate extensive genomic datasets with geospatial data to enhance predictive models that track and control infectious diseases in regions affected by climate change

Key Responsibilities:

- Apply satellite image analysis and GIS tools to integrate genomic and spatial data for disease prediction and control.
- Develop and implement geospatial methodologies to analyze spatio-temporal patterns in disease spread.
- Conduct high-quality research, contributing to publications in top journals.
- Collaborate with an interdisciplinary team, receiving hands-on training in epidemiology, phylogeography, and machine learning.
- Participate in research activities at CERI's facilities and field sites, with possible collaborative visits abroad.

Minimum requirements for the Postdoctoral research fellowship:

- **Qualifications:** PhD in a related field (e.g., Bioinformatics, Remote Sensing, Climate Science) obtained within the last five years.
- **Technical Skills** (Essential):
- Experience in satellite image analysis, ideally Google Earth Engine.
- Proficiency with tools like ENVI, GDAL, GRASS, ArcGIS Pro, and Awk.
- Skilled in Python, R, and programming for geospatial analysis.
- High-quality publications demonstrating research expertise.
- **Technical Skills** (Desirable):
- Familiarity with machine learning, ecological niche modeling, or phylodynamic methods.
- Interest in developing computational tools for data integration and analysis.

How to apply:

- Deadline for applications: **1 December 2024**
- Click here to apply. Or visit https://t.ly/MiwLW
- For more information, contact Dr. Houriiyah Tegally, Head of Data science unit at CERI (houriiyah@sun.ac.za)
- Start date is January 2025 but can be flexible based on candidate needs.