



University of Cape Town
Scientific Computing Research Unit (SCRU) and Department of Chemistry

in collaboration with
Division of Human Genetics



Professor Kevin J. Naidoo
SARChI Chair & Director: SCRU

Faculty of Science, PD Hahn Building, Rondebosch, 7701
Tel: +27 21 650-2542/68, Fax: +27 21 686-4333,
email: kevin.naidoo@uct.ac.za, website: <http://www.scientificcomputing.com>



GENETICS POSTDOCTORAL RESEARCH FELLOWSHIPS – 2017/2018

The Scientific Computing Research Unit (SCRU) and the Division of Human Genetics invites highly motivated individuals to apply for a Genetics Postdoctoral Research Fellowship to be part of a multidisciplinary team investigating a gene expression cancer biomarker.

Scope of research:

The successful applicants will perform research in the area of RNA extraction from blood samples and sequencing as part of a multidisciplinary team developing a non-invasive early detection system for breast cancer. This aspect of the work will be carried out in the Division of Human Genetics under the supervision of Prof Raj Ramesar and be expected to work closely with an international collaborating NGS technology company. Bioinformatics aspects of the research will be conducted at the SCRU laboratories under the supervision of Prof Kevin Naidoo.

Applicants must have:

- A PhD degree (achieved within 2 years of this application) in an area of Molecular and Cellular Biology.
- Proficient in standard molecular biology techniques (e.g. cloning, site-directed mutagenesis, and RT-PCR, DNA and RNA isolation, quantitative Real Time PCR, RNA interference), and immunoblotting), common cell biology techniques (e.g. immunofluorescence). Experience in sequence library preparation (e.g., using the Illumina NextSeq™ 500) and Quality Control of RNA samples.

The following would be advantageous:

- Experience in Histological techniques (e.g. cryostat sectioning, H&E staining).
- Evidence of a publication record
- Bioinformatics skill set needed to process raw FASTQ files

General Conditions:

The appointee will be responsible for experimental design, data analyses, and manuscript preparation and have a research trajectory that includes competitive applications for collaborative funding to support their research focus. Further

- applicants may not have held any prior professional or academic posts;
- successful applicants will be required to comply with the university's policies and practices for the postdoctoral sector;
- the fellowships do not include any benefits or allowances, and
- the successful candidate will be required to register as a Postdoctoral Research Fellow at UCT from 1 January 2018.

Value and tenure:

The fellowship is valued at R220 000 per annum. The fellowship may be renewed for a second year depending on satisfactory progress and mutual agreement.

Applications:

Must be made online at: <http://www.scientificcomputing.com>

The following documents are required:

- a letter of application in which the candidate's research interests are outlined;
- a Curriculum Vitae, including a list of publications;
- certified copies of all academic transcripts (no certificates); and
- the names and contact details of two academic referees who have taught/supervised the applicant.

Closing date for applications is 27 November 2017

Enquiries:

Please contact Lydia Dreyer at the Scientific Computing Research Unit for further information.

Tel: +27 21 650-2568, email: adminsclu@uct.ac.za