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## Senior Bioinformatics Scientist

Position Type: Full-Time Employee

Location: Cape Town, South Africa

### Company Overview

Kapa Biosystems is a young, dynamic, and rapidly growing biotechnology company employing cutting edge technologies for enzyme engineering and directed evolution to provide innovative products for Next Generation Sequencing (NGS), PCR workflows, and molecular diagnostics in the life sciences market. All R&D is carried out by a growing team of ~20 scientists in our new facility in Cape Town. KAPA products are manufactured in-house and are sold worldwide.

At Kapa Biosystems we strive to create a challenging yet collegial environment where we encourage collaboration and the open exploration of ideas, combining some of the most attractive features of academia with the excitement and rewards of working in an innovative commercial environment.

### Role

KAPA is inviting applications for the full-time position of **SENIOR BIOINFORMATICS SCIENTIST** in our R&D Department. The successful applicant will report to the R&D Manager (NGS) and will lead the expansion of existing bioinformatics capacity to support our product development and validation efforts in the areas of Next Generation Sequencing, enzyme evolution and engineering, and bioprospecting.

#### Key responsibilities:

- Contribute to a multidisciplinary team that is dedicated to developing, manufacturing, selling, and supporting innovative, world-class products for the NGS market.
- Expand existing and develop new in-house bioinformatics capacity, including the creation, maintenance and utilization of data analysis and visualization pipelines as well as the training and supervision of a Bioinformatics Scientist.
- Work closely with R&D as well as other departments to ensure that data is received and processed in a systematic, replicable, traceable and timely manner.
- Ensure that processed data is made available to other departments in a clear, concise and informative format.
- Work closely with sequencing service providers, The Centre for High Performance Computing (CHPC), and other relevant remote facilities (such as customers and test sites) to ensure efficient data transfer, analysis and dissemination.

- Actively maintain a close working relationship with the local bioinformatics community to maximize the sharing of expertise and to keep up to date with the latest developments in the field.
- Stay up to date with current and emerging NGS platforms and associated data types and analysis paradigms.
- Liaise with the IT department to determine computing resource requirements, and coordinate the procurement and installation thereof.

### Required qualifications

- MSc or PhD degree in a relevant subject (computational biology, bioinformatics, computer science or a closely related subject), with demonstrable experience appropriate to the responsibilities of the position.
- Extensive experience with UNIX-based operating systems.
- Proficiency in scripting languages (Perl/ Python, Bash).
- Proficiency in data visualization.
- Broad and up-to-date knowledge of bioinformatics with a focus on NGS.
- Adequate knowledge of biology, especially molecular genetics and genomics.
- Familiarity with common NGS applications and concepts, including whole exome sequencing (WES), whole genome sequencing (WGS), RNA-Seq, amplicon sequencing, SNP/variant detection, ChIP-Seq, etc.
- Familiarity with the commonly used platform-specific and generic NGS data formats and the ability to manipulate these very large data sets.
- Experience in working with open source bioinformatics tools and applications.
- Ability to create data analysis pipelines and implement them in a high performance computing environment.
- Ability to mine and analyze data from public resources (eg. Entrez, NCBI, UCSC).
- Good personal and communications skills.

### Desirable qualifications

- Familiarity with the major NGS platforms i.e. Illumina HiSeq, Illumina MiSeq, Ion Torrent PGM, Ion Torrent Proton.
- Experience in parallel computing and its application to NGS data analysis.
- Experience with human genetics/ genomics and statistical/ population genetics.
- Good command of biostatistics and a working knowledge of one or more statistical computing languages e.g. SAS, MATLAB, Statistica or R.

### Mind set and interpersonal skills

- Highly motivated.
- Takes ownership.
- Analytical rigor and focused on results.
- Flexible and agile.
- Pro-active.
- Team player.

## Application Procedure

To apply for the position, please submit the following in a single MSWord or PDF file by e-mail with the following reference in the **subject line** to [hr@kapabiosystems.com](mailto:hr@kapabiosystems.com): **Ref# 01-01-008**

**NOTE:** Applications that do not have the correct reference in the subject line will **NOT** be considered.

1. Letter of motivation (one A4 page maximum).
2. *Curriculum vitae*, highlighting relevant qualifications and experience, and including:
  - a current e-mail address and cell phone number;
  - the names and contact numbers (e-mail address and daytime telephone number) of three or more references who are able to assess your suitability for the position in terms of the specified requirements.

**Closing date for applications: 16 February 2015.**

**Appointment date: ASAP.**

For additional information, please contact Dr Eric van der Walt by email:

**[eric.vanderwalt@kapabiosystems.com](mailto:eric.vanderwalt@kapabiosystems.com)**

Kapa Biosystems reserves the right not to make an appointment. Only short-listed candidates will be contacted. By applying for this position, the applicant understands, consents and agrees that Kapa Biosystems may solicit a credit and criminal report from a registered credit bureau and/or SAPS, and may also verify the applicant's educational qualifications and employment history.