Positions in Computational Cancer Genomics in Skandlab@GIS

Interested in computational biology, medical genomics, cancer, and/or non-coding DNA?

Positions at Postdoc, Data Analyst (Research officer) and graduate student levels are available in the group of Anders Jacobsen Skanderup at Genome Institute of Singapore.

Background

The Skanderup lab is a newly started combinational biology group at Genome Institute of Singapore (GIS). Our focus is on developing integrated clinical, experimental, and computational approaches to solve important challenges in medical genomics, especially cancer diagnosis and treatment. We accomplish this in close collaboration with excellent experimental and clinical groups at GIS and in Singapore. Additionally, we are particularly interested developing computational approaches to decipher the influence of non-coding elements in cancer (see Weinhold, Jacobsen et al. 2014, Nature Genetics; Jacobsen et al. 2013, Nature Structural & Molecular Biology).

Projects

The successful candidates will work on projects relating to, 1) computational methods for discovery and characterization of non-coding

driver elements from large-scale cancer whole-genome sequencing data, 2) computational analysis of non-coding RNAs in cancer, 3) computational analysis of cancer epigenetics. All projects will use both in-house generated data as well as large datasets from international cancer consortia (TCGA and ICGC).

Qualifications

The successful candidate must have documented skills in analyzing large-scale datasets and have a computational/statistical/data-analytic background. Experience with analysis of DNA sequence data is a major advantage. The candidate must have a strong passion for (or be motivated to learn) cancer biology and genomics.

PostDoc, required qualifications:

1. PhD in Bioinformatics or related field with strong emphasis on quantitative data analysis
2. Strong and documented programming and quantitative data-analysis skills
3. Proven excellence in research (e.g. publication in reputable journals)
4. Fluent written and spoken english

Bioinformatics Data Analyst (Research officer), required qualifications:

1. Bachelor or Masters degree in Bioinformatics, Computer Science, Statistics, Physics, Engineering or related field with strong emphasis on quantitative data analysis
2. Documented programming and data-analysis skills
3. Excellent written and spoken english

Additional beneficial qualifications for all candidates:

- Proven experience with analysis of *raw* high-throughput sequence data
- Proven experience with analysis of ChIP-seq data
- Proven and flexible programming skills (ideally multiple programming languages)
- Proven experience with statistical programming in R
- Proven experience with statistical learning (machine learning)

Application

Applications should consist of the following:

1. Cover letter (**Max 1 page**): previous experience and results, describe your motivation for working on the above-mentioned problems.
2. CV (**Max 2 pages**): include publication list and contact information for 2–3 references
3. Reference letters

Please send applications to Anders Jacobsen Skanderup (skanderupamj@gis.a-star.edu.sg).