Postdoctoral Fellowship in Molecular Modelling of Microbial Carbohydrates

The High Performance Computing Laboratory, within the Department of Computer Science at the University of Cape Town is offering a post-doctoral fellowship for the computational investigation of the conformation, dynamics and interactions of microbial polysaccharides. The fellowship will be under the supervision of Prof. Michelle Kuttel.

The fellowship is in the cross-disciplinary area of computational glycochemistry: using molecular modelling methods to investigate the conformation and interactions of microbial carbohydrates playing key roles in infection and disease. The project is expected to inform efforts to develop effective conjugate vaccines against microbial disease.

Period: One year, renewable contingent on satisfactory progress and the availability of funds.

The value of the Fellowship: R350 000 - 400 000 per annum, depending on experience. The fellowship carries no benefits and a directive for tax exemption will be applied for by UCT on behalf of the successful candidate.

Conditions and Eligibility:

- The successful applicant must have achieved a PhD degree within the past 5 years in Chemistry, Computer Science or a field relevant to the project - and have not yet held any comprehensive permanent professional posts (specifically as an academic). Preference will be given to applicants with previous experience with microbial carbohydrates.
- The applicant will be expected to have experience with the basic techniques of in molecular modelling and computational chemistry, with evidence of ability to undertake research in this area.
- The candidate should be independent and self-motivated as the candidate will be expected to play a leading role within the project. The candidate will also be required to drive and conclude their work independently, to take initiative and discuss/develop their own ideas including writing well-formulated reports and articles.
- The successful candidate will be expected to publish at least two journal publications in DoE accredited journals per year during the fellowship tenure.
- The successful applicant must be prepared to comply with the University's approved policies, procedures and practices for the postdoctoral sector.

Application Process: A letter of application (stating areas of expertise, research interests and experience), a CV (no more than two pages), a list of publications, copies of academic transcripts as well as names/contact details of two academic references who have taught, supervised or worked alongside the applicant should be addressed to Professor Michelle Kuttel by the **15th December 2023**. Eligible and complete applications will be considered by a sub-committee that will include Prof. Kuttel. Short-listed candidates may be invited to present a seminar. The successful applicant should ideally be available to commence with the Fellowship in early 2024.

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The University of Cape Town reserves the right to disqualify ineligible, incomplete and/or inappropriate applications and the right to change the conditions of award or to make no awards at all.