

POSTDOCTORAL POSITION IN CLINICAL APPLICATIONS OF NOVEL PROPRIETARY CAPTURE TECHNOLOGY

Dr. Gane Ka-Shu Wong's laboratory is seeking a post-doctoral fellow willing to operate at the cutting edge of technology development in the service of biomedical research. Candidates must be comfortable with both wet and dry lab procedures, *i.e.* generation of omics-scale data and the associated bioinformatics. Our lab's history dates back to the Human Genome Project, including the launch of an internationally renowned sequencing organization and leadership of complex interdisciplinary consortiums. Recently, in a collaboration with Dr. Carlo Montemagno of Ingenuity Lab in the Faculty of Engineering, we developed a novel proprietary technology (InBeads) to capture extremely low abundant targets from clinical samples. This technology has a better limit-of-detection than qPCR and is at least 1000-fold better than commercial kits on the market. We are seeking an imaginative young scientist to beta-test this new technology in various projects, including but not limited to virus discovery, allograft rejection, and cancer diagnostics. He/she will be responsible for the entire process from the design of the experiment, to the acquisition and analysis of the data, to the publication of the results. The required skills include NGS sequencing, bioinformatics, genetics, immunology and virology. Candidates must show the interpersonal skills to interface with engineers on the technology development and medical collaborators on the sample acquisition. We do not focus on any particular disease and our allies include PI's in the Departments of Medicine, Oncology, and Pathology, as well as the Li Ka Shing Institute of Virology.

This full-time position is available for a period of 12 months, with the possibility of renewal. Salary will be commensurate with experience and skills. Benefits information for this position can be found at the following link: <http://www.postdoc.ualberta.ca/healthcoverage.aspx>.

Duties and responsibilities

- Determines most appropriate methodologies for identified research goals; plans research activities and provides research designs
- Designs experiments, biosample collection protocols and standards; performs advanced computational analysis of research results
- Designs, operates and maintains bioinformatic pipelines, databases and documentation
- Participates in the scientific writing of research papers
- Organizes day-to-day aspects of lab operations including the maintenance of equipment, reagent inventories, standard protocols and biological stocks
- Participates as team member for the drafting of ethics submissions and grant applications
- Presentations at national and international conferences
- Meetings with stakeholders ranging from technology developers to health care professionals
- Watch over activities of technicians and grad students

Qualifications

- PhD or equivalent in Bioinformatics, Genetics, Immunology or Virology, or related field
- Experience in generation of next-generation sequencing datasets
- Experience in bioinformatics for accessing and analyzing large datasets
- Experience in research with clinical or patient-focused outcomes
- Experience with knowledge translation and/or implementation science

- Skilled in interpretation and presentation of quantitative datasets
- Skilled in collaboration, negotiation, and problem solving within multi-disciplinary teams

To Apply

Interested applicants must submit an electronic application consisting of a cover letter, curriculum vitae, and contact information for three references. Address the inquiry to:

Dr. Gane Ka-Shu Wong
Department of Medicine (and Biological Sciences)
4-126 Katz Group Centre for Pharmacy and Health Research
University of Alberta
Edmonton AB, T6G 2E1

Please e-mail the application to Karen Deng, Department of Biological Sciences, kdeng3@ualberta.ca
T: 780 492-5959 (+1 if outside of Canada).

Closing date

The position will remain open until a suitable candidate is found.

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta offers appointments on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities and Aboriginal persons.