

**Multiple Job Vacancy:** Postdoctoral Scholar, Research Assistant, PhD Candidates

**Where:** Department of Chemistry, Hong Kong Baptist University, Hong Kong

**Academic Fields:** Biomedical Engineering (all Bio-related fields)

**Application Deadline:** Open until filled

**Position Start Date:** Available immediately

**Application:** By e-mail directly to the PI Dr. Angelo ALL at [angelo@hkbu.edu.hk](mailto:angelo@hkbu.edu.hk)

The chemistry and neuroscience laboratory in the Department of Chemistry at the Hong Kong Baptist University (Hong Kong) invites applications for multiple postdoctoral positions, research assistant positions and PhD candidates in the areas of **functionalized nanomedicine**, in particular **optogenetics transfection** of nervous system in combination with the application of **upconversion nanoparticles and NIR excitation for neuro-modulation** and potential treatment -- as well as -- **human stem cell** application for **central nervous system repair and regeneration**.

Our lab is interested in interdisciplinary and translational research that includes regenerative medicine (using human cells) as well as developing biological nanomaterials, studying the nano-bio interface at the neurons, cells and molecular levels. A particular interest of the lab is to further develop an *in vivo* nano-viral hybrid delivery system for both neuromodulation and utilizes this system for potential treatment of neurotrauma and neurodegenerative diseases.

The interested applicants should have education, working experience and expertise in at least one of the following fields:

- **Human cell culture techniques and assessments**
- **Human stem cell differentiation, proliferation and iPSC methods – the Oligodendrocytes are of particular interest**
- ***In vivo* rodent surgical procedures and animal care with emphasis on neurotrauma (Spinal Cord Injury and Traumatic Brain Injury)**
- **Hands-on *in vitro* and *in vivo* optogenetics science**
- ***In vitro* and *in vivo* patch-clamp technology sciences**
- **Nanomedicine**
- **Functionalized upconversion nanoparticles (*although knowledge in synthesizing nanoparticles is not a requirement, any experience will favorably be considered*)**
- **Quantitative analyses of sensing in biological tissues with UCNP-based probes**
- **Advanced nanoparticle imaging techniques**

Since the research team in our laboratory has already established specific short- and long-term projects, the candidates should be able to demonstrate their genuine experience, specific knowledge and working expertise through their peer reviewed publications in reputable academic journals and or by providing detailed reference letters from their mentors and supervisors.

The successful candidate will be encouraged to work with the PI and our other international collaborators as well as students and postdocs to pursue multiple research projects of interest to build a successful research career. Additional responsibilities will include general lab management and mentoring, which will be discussed individually.

The position starts immediately and the appointment will be full-time for a 12-month period. Renewal of the appointment will be contingent upon performance.

**A completed application for postdoc applicants and PhD candidates shall include:** (1) a cover letter describing education, experience, expertise, academic goals and research plan, (2) current CV, (3) research statement, and (4) the contact information of at least two references.

**Research Assistant applicants** should contact the PI to discuss their interest and the required documents prior to submitting their application.

For further information, contact directly the PI Dr. Angelo ALL by e-mail at: [angelo@hkbu.edu.hk](mailto:angelo@hkbu.edu.hk)