

## **PhD Opportunity – Immunovirology & Pathogenesis Program, Kirby Institute, UNSW Australia**

---

A unique opportunity is available for an outstanding full-time PhD scholar in the field of human immunodeficiency virus type 1 (HIV-1), working on a novel way of suppressing HIV replication using promoter targeted siRNAs to induce transcriptional gene silencing (TGS). The 3 year PhD will be based in the Kirby Institute's Immunovirology & Pathogenesis Program (IVPP) led by Professor Anthony Kelleher at the Wallace Wurth Building, Kensington Campus. PhD supervisors will include Professor Anthony Kelleher, Dr Kazuo Suzuki and Dr Chantelle Ahlenstiel.

Over the last 10 years we have developed a novel method of suppressing HIV replication using promoter-targeted siRNAs to induce TGS. This novel approach induces prolonged and profound suppression of viral replication by inducing a repressive chromatin structure in the integrated forms of both HIV-1 and SIV. Current efforts in our research group focus on assessing effective delivery systems for these constructs and understanding the mechanisms underlying the induction and maintenance of this state that is similar to viral latency.

The specific PhD project will involve further characterization and development of novel promoter-targeted siRNAs. There is scope to accommodate the specific interests and strengths of potential PhD candidates. Potential areas of focus include live cell imaging of siRNAs and lentivirus (shRNA) construct development for use in primary human CD34+ cells and/or CD4+ T cells transduction for subsequent HIV gene therapy application.

PhD projects are available for high quality candidates. Successful application for an APA/UPA, NHMRC or other funding prior to enrolment in the program is required to obtain a scholarship covering fees and a stipend. Applicants must also meet UNSW Australia's PhD entry requirements, be enrolling full-time and must hold an Honours degree (First Class) or a Master's degree in a related field with a substantial research component and publication record. Candidates are required to have some laboratory experience and a background in medical or health science is advantageous.

Please contact Dr Chantelle Ahlenstiel (email [cahlenstiel@kirby.unsw.edu.au](mailto:cahlenstiel@kirby.unsw.edu.au) or phone 02 9385 0198) for further information.