

Opening for a full-time master student for research internship (6+ months)

The laboratory of Eric J. Brown, Department of Cancer Biology at the University of Pennsylvania, is seeking a motivated international master student to perform a full-time research internship for at least 6 months.

Potential projects will center on mechanisms that maintain genome integrity, particularly in relation to DNA replication. The laboratory has recently developed techniques to identify the sites of the genome where DNA breaks occur in response to novel targeted therapeutics (Shastri *et al.*, Mol. Cell, 72, p. 222-238, 2018) as well as enhanced means to retrieve replication forks for proteomic analysis (Rivard *et al.*, in preparation).

For this master student project, changes in proteins at replication forks will be quantified following treatment with targeted cancer treatment agents for ultimate correlation with clinical trial data.

Possible lab techniques acquired during this internship include:

- Cell culture
- Generation of CRISPR/Cas9 knock-out cell lines
- Small molecule inhibitor treatments *in vitro*
- Western blot analysis
- Flow cytometry
- Immunofluorescence staining and/or SIRF (Roy *et al.*, 217, p.1521-1536, 2018)
- Data analysis using Microsoft Excel and/or R

We are looking for a highly motivated master student who:

- is preferably in his/her last stage of a (research-oriented) master program in biomedical sciences, biomolecular sciences or similar
- is interested in translational (oncology) and molecular research
- is interested in cell cycle dynamics, genome integrity and DNA replication in the perspective of cancer treatment
- has successfully finished a prior full-time lab internship
- preferably has some experience in one or more techniques described above
- is full-time available for at least 6 months

For additional information or to express interest in this internship, please email Anne van Harten (anne.vanharten@penmedicine.upenn.edu) and Dr. Eric J. Brown (brownej@upenn.edu). Please include your resume, motivation and qualifications for the position if you would like to apply.