



## PhD studentship to develop an adult human stem cell-derived lung model to explore novel risk assessment approaches.

### Description:

A four-year BBSRC-CASE PhD studentship co-sponsored by Unilever is available in the Centre for Respiratory Research at University College London under the supervision of Dr Adam Giangreco.

The funding covers an annual stipend, tuition fees at the rate for UK nationals and EEA migrant workers, and a Unilever student supplement (up to £19,999/year total award). The student will be registered for a PhD in the Department of Medicine at University College London.

Unilever scientists are currently working with a number of external partners to develop alternative non-animal safety risk assessment approaches. Successful *in vitro* models must exhibit reproducibility, robustness, and tissue-appropriate growth and differentiation whilst also addressing intrinsic inter-individual variability. Recent advances in human lung stem cell isolation have begun to produce *ex vivo* models that replicate many aspects of normal adult lungs. This studentship will test the hypothesis that human-derived lung stem cells and cell lines can provide robust, reproducible, and predictive models for both lung disease pathogenesis research and inhalation toxicity testing. The project will involve training in state of the art techniques including flow cytometric analysis of adult derived human lung stem cells, organotypic stem cell growth and differentiation in matrigel or other tissue substrates, and whole genomic/proteomic analysis of lung stem cells under normal, pathogenic, and toxicant-exposed conditions. It is expected that successful completion of this project will provide a good basis for a potential future career in academic or industrial bioscience.

### Requirements:

The candidate is expected to have at least an upper second class degree, a Masters degree or equivalent qualifications (see [www.ucl.ac.uk/prospective-students/graduate-study/application-admission/general-entrance-requirement](http://www.ucl.ac.uk/prospective-students/graduate-study/application-admission/general-entrance-requirement)) in a relevant subject area. Additional research experience such as publication in peer-reviewed scientific journals would be a distinct advantage. The candidate must be committed to deliver excellence in research, and will also be expected to provide regular, biannual reports on research progress.

To make an application please send a CV and the contact details, including email addresses for two referees, to Dr Adam Giangreco at [a.giangreco@ucl.ac.uk](mailto:a.giangreco@ucl.ac.uk). Please include a covering letter indicating why you believe you are suitable for the studentship, your long-term research and professional goals, and any particular expertise you have that you feel may be applicable in this work.

TO APPLY FOR THIS POSITION PLEASE VISIT

<http://www.ucl.ac.uk/hr/jobs/>, QUOTING JOB REFERENCE NUMBER 1221630

PLEASE NOTE THE CLOSING DATE FOR THIS JOB IS 22 DECEMBER 2011

INFORMAL ENQUIRIES SHOULD BE DIRECTED TO [a.giangreco@ucl.ac.uk](mailto:a.giangreco@ucl.ac.uk)

