

Further information on the Vice Chancellor's PhD Scholarship

<http://www.jobs.ac.uk/job/AMP788/vice-chancellors-phd-scholarships/>

Thank you for your interest in doing a PhD in Liverpool Hope University. The project that will be conducted under my supervision is a "human" genetics project that requires expertise and interest in human genetic variation, genome biology, bioinformatics, statistical genetics and biostatistics/epidemiology. The project is about HLA region polymorphisms, their disease associations and functional annotations together with their relationships with one another and HLA alleles (linkage disequilibrium). The project will also have a laboratory-based component for experimental verification of bioinformatics predictions. If you think you are qualified to work on this project, I refer you to go through the announcement at: <http://www.hope.ac.uk/research/postgraduateresearch/vice-chancellorsphdscholarships> and confirm your eligibility explaining how you met each of the minimum entry criteria and the TOEFL/IELTS requirement (please see the information sheet: <http://www.hope.ac.uk/media/liverpoolhope/contentassets/documents/research/media,47420,en.pdf>). Only after that, your suitability for the proposed project will be an issue. If you think you are a suitable candidate for the funded project, please start preparing your personal statement in the suggested format (please see: <http://www.hope.ac.uk/media/liverpoolhope/contentassets/documents/postgraduateresearch/media,47413,en.pdf>). You will also need to have three reference letters (sent directly to Chris Lowry as explained in the information sheet). If you want to proceed, please follow these steps and bear in mind that application is via the online application system only. I can only provide information on the scientific aspects of the project. For questions on the application procedure, TOEFL/IELTS, reference letters and similar issues, please contact Chris Lowry (researchdegrees@hope.ac.uk).

Project summary:

Functional Genomic Analysis of HLA Region Disease Associations

Genome-wide association studies have identified many associations with common diseases, but their translational value is unclear. It has been a challenge to convert these statistical correlations to findings with some clinical utility. The HLA region is the most complicated part of the genome, and it shows the highest number of disease associations. Due to its complexity, most researchers shy away from detailed analysis of this region. The project will catalogue all known disease associations in this region (chromosome 6: 29.5 to 33Mb), examine their correlations with each other to prune secondary associations, correlate them to HLA types and functionally annotate. The results will be assessed for causality of these associations by bioinformatics methods in dry lab to be followed by experimental verifications using omics- and real-time PCR-based methods in wet lab. The project will be informed by ongoing studies such as ImmunoChip analysis of an HLA homozygous cell line panel and the focused analysis of Wellcome Trust Case-Control Consortium disease association study results. Expected results should contribute to our understanding of disease biology and the design of preventive and therapeutic approaches.

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Vice-Chancellor's PhD Scholarships

Liverpool Hope University

Location: Liverpool
Funding amount: Not specified
Hours: Full Time

Placed on: 16th December 2015

Closes: 15th January 2016

Applications are invited from outstanding applicants of a high calibre to pursue PhD research at Liverpool Hope University. We are seeking confident, innovative postgraduates with a record of achievement to undertake interdisciplinary research in the following projects:

1. **Bio-Sciences:** *Functional Genomic Analysis of HLA Region Disease Associations* – PI: Professor Mehmet T Dorak dorakm@hope.ac.uk.
2. **Mathematics and Computer Science:** *Mathematical analysis of periodic and quasi-periodic spiral and scroll waves* – PIs: Dr Andrew Foulkes foulkea@hope.ac.uk and Dr Anna Kirpichnikova kirpica@hope.ac.uk.

This call is open to both UK/EU and international applicants.

This award would cover full tuition fees and a monthly maintenance grant each year for a maximum of three years of full-time doctoral study (subject to evidence of satisfactory progress and periodical review as deemed suitable by the supervisory team).

As the successful candidates will undertake a PhD through full-time study there will be an expectation for you not to take an external commitment or job during the duration of the PhD studies. The only work that the candidates will be permitted to undertake is the GTA role for providing teaching support.

Candidates should have or expect to achieve:

- A Masters degree with Distinction from a UK university OR;
- A Masters degree with Merit from a UK university, including a Distinction grade for the Dissertation [or equivalent] OR;
- An equivalent qualification from outside of the UK – equivalency to be judged by Liverpool Hope's Registrar.

Where an applicant holds a Masters Degree from a UK university that does not offer awards with Merit, Liverpool Hope's Registrar will confirm that the profile of marks satisfies or exceeds our requirements.

Excellent written and oral communication skills in English are prerequisites of any successful application.

International applicants must produce appropriate TOFEL or IELTS score. Please refer to International Unit website at www.hope.ac.uk/international for more information.

Prospective applicants are advised to contact the relevant faculty member, i.e. Principal Investigator (PI) named on the Project listed above to informally discuss their application before submission. Eligible applicants should apply via the Online Application System located on our applicant web pages

at www.hope.ac.uk/research/postgraduateresearch – please refer to the 'Apply Now' tab.

The deadline for full applications is midnight on **Friday 15th January 2016**.

Shortlisted candidates will be invited to interview.

Expression of Interest is a formal stage of the online application – students applying should insert the following statement only: '2015 Vice-Chancellor PhD Scholarship's'. Applicants are advised to do this at the earliest opportunity as the full application form is not released until this stage of our application process is complete.

Applicants will be able to upload copies of official academic achievements in undergraduate degree classification and master degree award, plus copies of official transcripts of all degree subjects taken. Written sample of no more than 3,000 words will be required to demonstrate the applicant's skills as a researcher and/or shows skills in organising and presenting research findings.

For further details contact Research Officer Mr Chris Lowry quoting '2015 Vice-Chancellor's PhD Scholarships' in the subject line at researchdegrees@hope.ac.uk.

Applicants must also arrange for three academic references from academic referees to be sent directly to Mr Chris Lowry at researchdegrees@hope.ac.uk by the application deadline. Applications without supporting references, sent directly from referees, will not be accepted.