

Title	Feasibility of novel mm-size biomolecule analyser microchips
Duration of student-ship	3 years
Stipend	£17,009 per annum plus UK/EU tuition fees
Vacancy information	Applications are invited for a PhD studentship to work on microelectronics and microchips for lab-on-chip and wearable applications.
Studentship Description	<p>Our primary goal in this project is to develop a microchip that is capable of real-time analysis of small biomolecules in biofluids (e.g. saliva).</p> <p>The student will be working to design and develop an integrated circuit (analogue and mixed signal IC design). This will be followed by post-processing of the IC to develop an array of biosensors on-chip. The tools developed in the project will ultimately enable the investigation of biomarkers of pain in saliva.</p> <p>The student is expected to publish the outcome of the project in multiple articles for top journal and conference of the field and attend at least one international conference every year.</p>
Eligibility	<p>The studentship covers the fees for UK/EU students only. Please check the UCL website for full criteria at https://www.ucl.ac.uk/prospective-students/graduate/research-degrees/fees-and-funding</p>
Person specification	<p><u>Essential</u></p> <ol style="list-style-type: none"> 1- At least an upper second-class honours degree (2:1, or equivalent qualification) in Electrical engineering, bioengineering, or equivalent. 2- Knowledge in integrated circuit design 3- proven experience of PCB design. 4- Knowledge of design and analysis software tools such as C/C++, MATLAB. 5- Ability to think independently, interpret data. <p><u>Desirable</u></p> <ol style="list-style-type: none"> 1- Knowledge in electrochemical biosensors 2- experience in IC design and IC design softwares such as Cadence.
Application	To apply for the vacancy please email your CV, full transcript, and covering letter to Dr Sara Ghoreishizadeh (s.ghoreishizadeh@ucl.ac.uk). Your covering letter should explain your interest in the project, previous research experience (including example of previous project work) and why you would be a suitable candidate for this post.
Contact name	Dr Sara Ghoreishizadeh (s.ghoreishizadeh@ucl.ac.uk) and Dr Anne Vanhoestenbergh (a.vanhoest@ucl.ac.uk)

Closing date	we will be shortlisting the candidates on 2nd December but will keep looking until we find an excellent candidate.
Interview date	December 9th
Intended start date	Flexible, Immediate start possible.