

INTERNSHIP VACANCY FORM

Name of the Internship	Easy ES cell
Internship Duration	From 01/07/2017 until 30/09/2017. Possible to progress to a Master thesis.
Intern's Position	Undergraduate internship
Objectives and Schedule	<p>Recently, we generated a novel ES cell line, which we termed Easy ES cell. The Easy ES cell line contains a knock-in insertion into the Rosa26 locus that allows the expression of the PhiC31 recombinase. The PhiC31 recombinase enables the unidirectional integration of genes by genomic recombination. The Easy ES cell line thus potentially enables faster, efficient and site-specific integration of genomic constructs into the Rosa26 locus.</p> <p>We have now generated several clones of Easy ES cells, which now requires testing and validation. The student, for each Easy ES cell clone, will measure the PhiC31 recombinase activity and their recombination efficiency. After selection of the best clone, the student will further generate ES cell clones expressing 3-5 fluorescently-tagged proteins using the Easy ES cell line. The work will be orientated by Dr. Claudio Franco (Group Leader at iMM).</p>
Profile of the Institution	<p>The Instituto de Medicina Molecular de Lisboa (iMM Lisboa, https://imm.medicina.ulisboa.pt/en/) is a leading biomedical research institute of excellence, conducting basic, clinical and translational biomedical research and innovation with the aim of contributing to a better understanding of disease mechanisms, developing novel predictive and diagnostics tests, and new therapeutic approaches. iMM Lisboa expertise is focused on Oncobiology, Stem Cells & Regeneration, Clinical Sciences and Human Genetics, Immunology & Inflammation, Development & Aging, Neurosciences & Behaviour (https://imm.medicina.ulisboa.pt/en/investigacao/labs/).</p>
Main Tasks to accomplish	<p>Validate by qPCR levels of expression of the PhiC31 recombinase. Test efficiency of recombination with a control vector.</p> <p>Design and build 3-5 donor plasmids containing fluorescently tagged proteins.</p> <p>Target and select ES cell clones expressing the fluorescently tagged proteins.</p>
Profile of the Intern	Experience in cell culture, ES cell culture and cloning. The student must be open minded, organized, enthusiastic, hard-working.

Scholarship	<input type="checkbox"/>			Yes	<input checked="" type="checkbox"/>			No		
Monetary Value of the Scholarship				<input type="checkbox"/>	By day	<input type="checkbox"/>			By Month	
Other Benefits										
Transportation	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	Lunch	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	
Monetary Value	5 euros lunch card				<i>Ticket/Lunch Card</i>	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	
Other Benefits										