



# IIUM Research, Invention and Innovation Exhibition IRIIE 2011

*Enhancing Quality Research and Innovation for Societal Development*

- ▶ 9-10 February 2011
- ▶ Culture Activity Centre (CAC) and KAED Gallery, IIUM

## EXHIBITION ENTRY FORM

Deadline for submission of entries : 15<sup>th</sup> December 2010

1. Provide title of research/invention/Innovation, all researcher(s)/Inventor(s)/Innovator(s) name and abstract (maximum 300 words).

	<b>Cell migration for in vitro wound healing evaluation- a pilot study on <i>Channa striata</i></b>
	Muhammad Taher <sup>1</sup> , Nurhazni Khir Jauhari <sup>2</sup> , Deny Susanti <sup>2</sup> , Solachuddin JA Ichwan <sup>3</sup> <sup>1</sup> Department of Pharmaceutical Technology, Kulliyah of Pharmacy, <sup>2</sup> Department of Biomedical Science, Kulliyah of Science, <sup>3</sup> Kulliyah of Dentistry, International Islamic University Malaysia , Jalan Istana, Bandar Indera Mahkota, 25200 Kuantan, Pahang Malaysia
<p><b>Abstract:</b> This study was aimed to assess the potential wound healing properties of <i>Channa striatus</i> (haruan) on migration of HaCaT keratinocytes. <i>In vitro</i> study was preferred to provide a clearer view wound healing process at cellular level specifically cellular migration activity. <i>C. striata</i> has been significantly studied to alleviate the healing process. Specific fatty acids and amino acids contents of <i>C. striata</i> had been studied to enhance and rejuvenate the dermal cells in the healing process. Extracts were prepared from whole muscle tissue of the fish by using Folch's method for the lipids and lysis buffer for the proteins and presence of compounds were positively analyzed via qualitative analysis of gas chromatography mass spectrophotometer (GCMS) and sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE) accordingly. Three different concentrations of lipid extract (0.005 mg/mL, 0.05 mg/mL, and 0.5 mg/mL) introduced onto the scratch assay proved no significant result in migration rate (<math>p &gt; 0.05</math>) between treatment groups and control while relation with protein extract failed to be conducted due unavoidable consequence. Association between effects of <i>C. striata</i> extracts on migration activities of HaCaT keratinocytes hardly can be concluded due to several limitations faced hence needs further assessment.</p> <p><b>Keywords:</b> Cell migration, wound healing, cell culture, <i>Channa striatus</i></p>	

2.	<b>Condition of exhibits:</b> [Tick (✓) one]
	<input checked="" type="checkbox"/> Poster <input type="checkbox"/> Product and Poster
3.	<b>Category of Entry</b> [Tick (✓) the relevant class below]:
	<input type="checkbox"/> Islamic Revealed Knowledge and Heritage <input type="checkbox"/> Social Sciences and Humanities <input type="checkbox"/> Science, Engineering and Technology <input checked="" type="checkbox"/> Health and Allied Sciences
	I, the undersigned, agree to abide by the competition rules.
	<p style="text-align: center;">Date: 17 Dec 2010</p> <div style="text-align: right; margin-right: 100px;">   <hr style="width: 30%; margin: 0 auto;"/> <p>Muhammad Taher</p> </div>
4.	<p>Approved by:</p> <p style="text-align: center;">Date:</p> <p style="text-align: center;">Signature :</p> <div style="text-align: right; margin-right: 100px;"> <hr style="width: 30%; margin: 0 auto;"/> <p>Dean/Director</p> </div> <p>Kulliyah/Institute/Centre Chop</p>

**NB:** Hard copy of Entry form should submit to the respective Kulliyah/Institute/Centre. Soft copy also needs to be submitted online through IRIIE2011 website at <http://www.iium.edu.my/irrie/11>.

The respective Kulliyah/Institute/Centre will compile all the entries and send to Organizing committee at Dean, Kulliyah of Architecture & Environmental Design, IIUM, P.O. Box 10, 50728 Kuala Lumpur, Malaysia.

