



**Isolation and Characterization of Mesenchymal Stem Cells  
from Umbilical cord, Placenta and Amnion**

**By**

**Mr. Supadej Rojphrisarn**

**A Thesis Submitted in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy in Medical Sciences**

**Faculty of Medicine**

**Thammasat University**

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