



使細胞回春之方法

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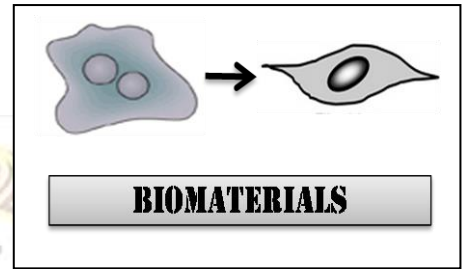
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市場及需求：

細胞治療是一種新的治療方向，其能提供給治療患部豐富的生長因子和理想的物理性支持。但異體細胞治療易有免疫之問題，於是自體細胞移植和治療便成為醫療趨勢。但老年人或受損之老化細胞在治療時容易因為細胞增生能力不足或遷移能力低下，而減緩傷口癒合時程和降低治療之效果。因此，我們提出一個使用生醫材料於細胞培養之方法，希冀能使細胞提高增生能力、活動力和功能性。且該方法在未來不只用於體外細胞培養，更可進一步擴展至體內治療。

技術摘要(含成果)：

本發明係提供一種使細胞回春的方法：將細胞培養於含有生物相容性高分子之培養液中使老化細胞回春。

優勢：

此技術方法不涉及病毒轉殖和基因改造，對細胞無癌化之影響與風險。且所使用之生醫材料具有生物相容性與生物可降解性，其售價也低於一般合成或蛋白純化之藥物。

競爭產品：

無

專利現況：

- (1)本技術已有相關專利 (中華民國專利證書號: I550088)。
- (2)本技術已有相關文獻發表 (PLoS One. 2015 Oct 14;10(10):e0140747.)

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METHOD FOR REJUVENATING CELLS

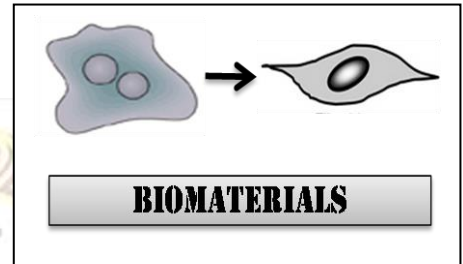
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Institute of Biomedical Engineering, National Taiwan U.

Experience:

2000/08 -- National Taiwan U. Distinguished Professor

2008/08- 2011/07 Institute of Biomedical Engineering,
National Taiwan U. Director and Professor



Market Needs:

Cell therapy is a novel way for clinical therapy, and it can provide abundant and diverse growth factors and physical supporting for medical treatment. However, allogeneic cell therapy would cause immune response, so autologous cell therapy becomes a novel medical trend. Moreover, the aged cells with poor proliferation capacity and low migration ability would weaken the healing and treatment effect. Therefore, we declare that the aged cells are cultured with biomaterials, and these cells would enhance the cellular proliferation, mobile and function. This method can apply not only *in vitro* cell expansion but also *in vivo* treatment in the future.

Our Technology:

The present invention provides a method for rejuvenating aged cells: The aged cells were culture with biocompatible polymer material, and then these cells would rejuvenate.

Strength:

The invention doesn't use virus transformation and gene modification. Moreover, the price of the biomaterials is lower than normal synthetic and protein purified drugs, and this biomaterial is biocompatible and biodegradable.

Competing Products:

None

Intellectual Properties:

- ✓ The related pattern of this invention has applied. (*Taiwan Patent No.: 103101564*)
- ✓ The related paper of this invention has published. (*PLoS One. 2015 Oct 14;10 (10):e0140747.*)

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