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[\[生物醫學\] 發現帕金森氏症剋星 研究員之一來自台灣](#)

[生物醫學] 發現帕金森氏症剋星 研究員之一來自台灣

2009年2月2日發表的一份醫學研究指出，只要強化大腦一種自然保護機制的作用，就能完全防範帕金森氏症。老鼠實驗顯示，增加老鼠大腦星狀膠質細胞形成的蛋白質Nrf2量，能抵抗導致帕金森氏症的化學毒物不致發病。來自台灣的陳珮君參與該研究。

帕金森氏症是因大腦「黑質體」中製造神經傳導物質多巴胺的神經細胞死亡或退化而引起的運動功能失調症，患者身體肌肉無法順暢、協調活動，症狀如顫抖、行動變遲緩、僵化等。目前帕金森氏症可藉由藥物提供多巴胺治療，但是效果會隨治療時間增加而衰減。威斯康辛大學麥迪遜分校在美國國家科學院學報發表的報告中，實驗老鼠以基因改造技術讓大腦星狀膠質細胞製造出比正常值高一倍的蛋白質Nrf2後，即使被注射高量的神經毒物MPTP（該物質會殺死大腦黑質體的神經元藉此模擬帕金森氏症條件）也不會出現帕金森氏症。此外，來自台灣的博士後研究員陳珮君在研究中將能超量製造Nrf2的老鼠與另一隻完全剔除這種蛋白質的老鼠混種，發現後者也能完全抵抗MPTP對神經細胞的傷害。

陳珮君畢業於長庚大學醫技系，後來在長庚基礎醫學研究所（現改名生物醫學研究所）取得碩、博士學位，2006年畢業後就赴美從事博士後研究，專攻成癮性藥物與多巴胺系統相關研究。

資料來源：

[自由時報電子報 2009/02/04](#)

[BioMedicine] Anti-Parkinsonism Solution Found! One of the Researchers from Taiwan

A medical report, presented on 2nd-Feb., 2009, points out that strengthening a particular natural protection mechanism of brain can make Parkinsonism totally preclusive. In mice experiments, it is concluded that by invigorating the Nrf2 production of the star-shaped astrocytes, the reaction against some chemical poisonous alluring Parkinson's syndrome is prohibited. P. C. Chen (陳珮君) from Taiwan participated the finding.

Parkinson's syndrome is due to the death or the degeneration of the neurons in substantia nigra. These nerve cells produce neurotransmitter dopamine. If the dopamine secretion is not enough, the patient would show disordered muscle performances such as tremor, hypokinesia, rigidity, and postural instability. Recent solution to Parkinson's syndrome is drug treatment, but the effect is in an inverse relation to time. A research team of the University of Wisconsin-Madison presents a report in PNAS, Proceedings of National Academy of Sciences, showing that genetically modified mice whose astrocytes can produce protein Nrf2 twice in quantity than regular ones, have no Parkinson's characteristics when injected with high-dose neuro-chemical poisonous MPTP, which can kill neurons in substantia nigra to simulate Parkinsonism condition. Besides, the postdoctoral researcher P. C. Chen from Taiwan finds in the research that the mixed breed of a g-modified mouse which has super protein Nrf2 production astrocytes, and a g-modified mouse which cannot produce Nrf2 at all, has the resistance ability against the injury from MPTP, as well.

P. C. Chen was graduated from the Department of Medical Engineering, Chang Gung University (CGU), and got her master and doctor degree in CGU-Graduate Institute of Basic Medical Science. She went to the United States for postdoctoral research in 2006; her research fields are mainly about drugs of addiction and dopamine systems.

Reference:

[Liberty Times E-paper 2009/02/04](#)

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