29
NEXENTURY

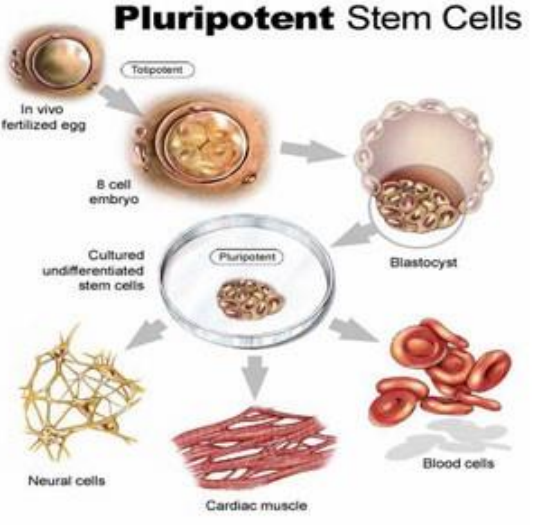
SCF III

ampoule

Clinical Study

By: Dr. David A. Greenberg

Director of BUCK Institute of Anti-Aging Medicines, USA

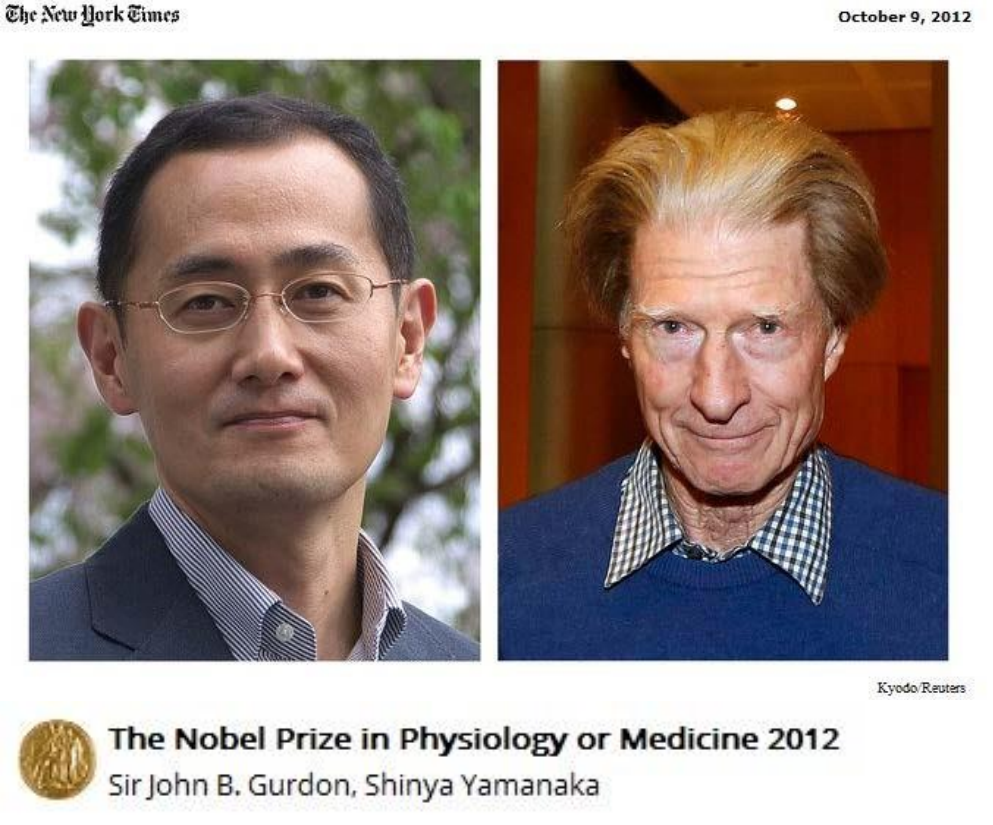


In 2007, Sir Martin Evans, director of Stem Cell Research Centre, Cambridge University, UK, successfully converted the inner cell mass from blastocyst into pluripotent stem cells via genetic and SCF technology, and then change the pluripotent stem cells into multipotent stem cells. He was awarded Noble Prize in Physiology and Medicines in 2007 for his discovery, which bring the stem cell therapy into the new era. (6)

6) "The Nobel Prize in Physiology or Medicine 2007". Nobelprize.org. http://nobelprize.org/nobel_prizes/medicine/laureates/2007/index.html. Retrieved 8 October 2007

6）"The Nobel Prize in Physiology or Medicine 2007". Nobelprize.org. http://nobelprize.org/nobel_prizes/medicine/laureates/2007/index.html

Cloning and Stem Cell Work Earns Nobel



Dr. Shinya Yamanaka of Kyoto University in Japan & Dr. John B. Gurdon of the University of Cambridge.

The Nobel Assembly at Karolinska Institutet has today decided to award

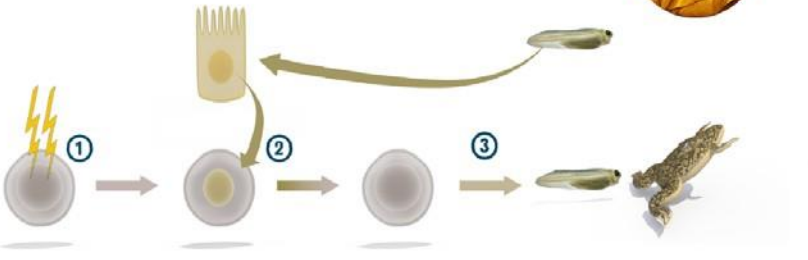
The Nobel Prize in Physiology or Medicine 2012 jointly to
John B. Gurdon and Shinya Yamanaka

for the discovery that mature cells can be reprogrammed to become pluripotent.

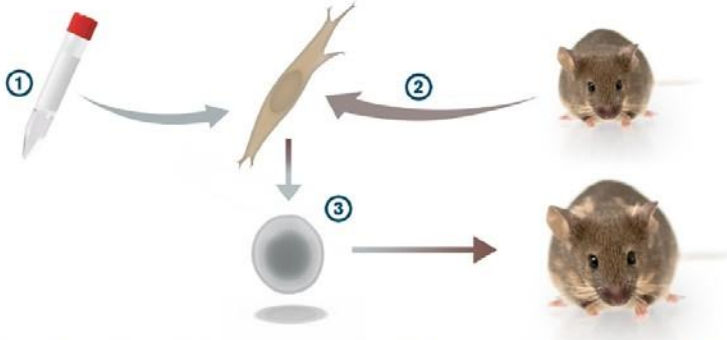
Two scientists who were awarded the Nobel Prize in Physiology or Medicine helped lay the foundation for regenerative medicine, the hotly pursued though still distant idea of rebuilding the body with tissues generated from its own cells. They are John B. Gurdon of the University of
Cambridge in England and Shinya Yamanaka of Kyoto University in Japan.

The Nobel Prize in Physiology or Medicine 2012

John B. Gurdon

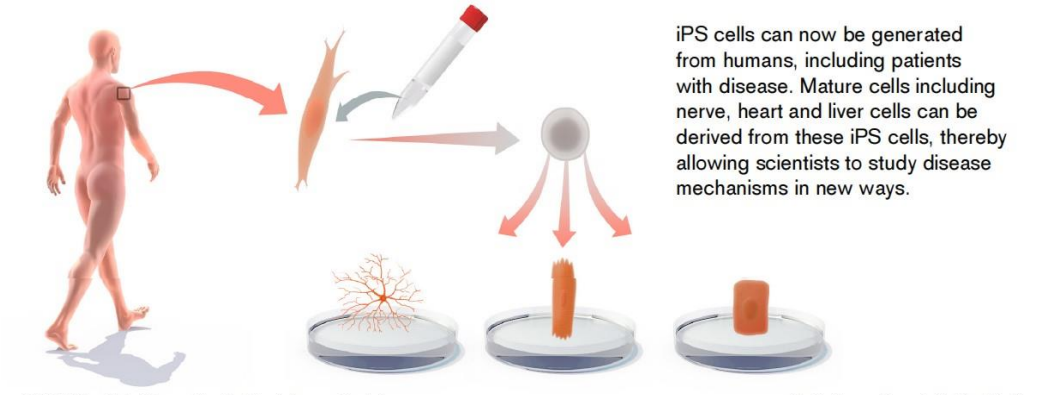


John B. Gurdon eliminated the nucleus of a frog egg cell (1) and replaced it with the nucleus from a specialised cell taken from a tadpole (2). The modified egg developed into a normal tadpole (3). Subsequent nuclear transfer experiments have generated cloned mammals (4).



Shinya Yamanaka

Shinya Yamanaka studied genes that are important for stem cell function. When he transferred four such genes (1) into cells taken from the skin (2), they were reprogrammed into pluripotent stem cells (3) that could develop into all cell types of an adult mouse. He named these cells induced pluripotent stem (iPS) cells.



iPS cells can now be generated from humans, including patients with disease. Mature cells including nerve, heart and liver cells can be derived from these iPS cells, thereby allowing scientists to study disease mechanisms in new ways.

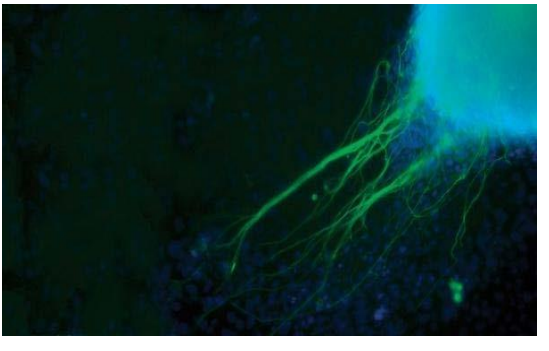
Illustration and layout: Mattias Karlén

7） MLA style: "The 2012 Nobel Prize in Physiology or Medicine - Press Release". Nobelprize.org. Nobel Media AB 2013. Web. 17 Oct 2013.
<http://www.nobelprize.org/nobel_prizes/medicine/laureates/2012/press.html>

8） http://www.verumserum.com/?p=724

9） http://stemcelltreatments.org/clinics/easterneurope/emcell/

Nobel Prize Rockets Stem Cell Program to New Heights
Shinya Yamanaka's Feat Brings Fresh Attention to Promise of Regeneration Medicine



Gladstone scientists took

skin cells from a patient with a heart disease and reprogrammed them into something known as iPS cells, which act very much like embryonic stem cells. In this magnified image, the iPS cells are growing into heart cells (blue) and nerve cells (green). *Photo by Jin Lee/Gladstone Institutes*

By Kate Volkman Oakes on May 14, 2013

Stem cell science blasted across front pages worldwide when Shinya Yamanaka, MD, PhD, won the 2012 Nobel Prize in Physiology or Medicine.

The UCSF professor and senior investigator at the UCSFaffiliated Gladstone Institutes received the award for discovering how to transform ordinary adult skin cells into cells that, like embryonic stem cells, are pluripotent – capable of becoming any cell in the human body.

The news – bringing UCSF's total of Nobel laureates to five – brought fresh attention to something UCSF long ago sensed and seized: the promise of regeneration medicine for repairing or replacing damaged cells, tissues, and even whole organs.

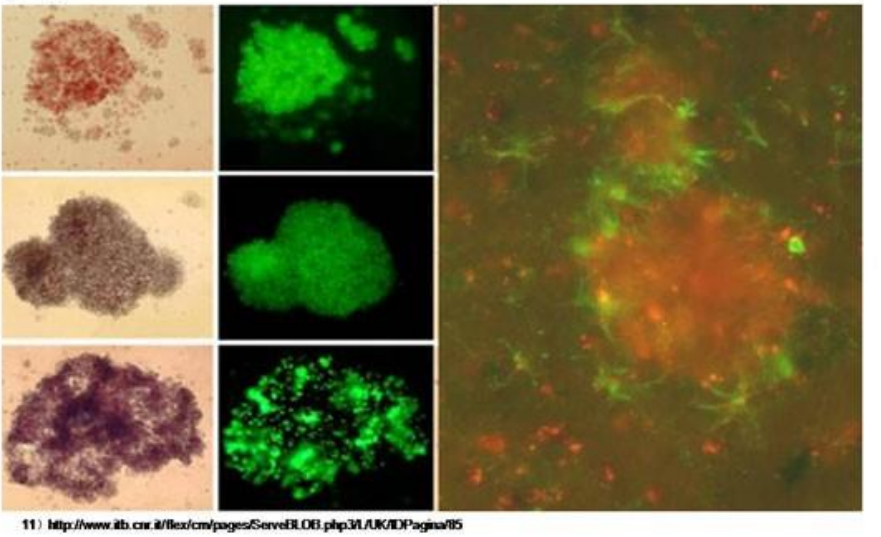
Controversies of Stem Cell Research

Despite its powerful medicinal potentials, clinical application of human stem cells are always full of controversies. In USA, George W. Bush banned the research with Human Embryonic Stem Cells (HESC) due to ethical controversies (10). Ban of HESC was lifted when Obama become president of USA. To date, HESC research still cannot be conducted without hindrances. Municipal government of New York perceived such research as deprivation of living rights of embryos and had announced permanent ban on HESC research.

10) http://en.wikipedia.org/wiki/Stem_cell_controversy

10) http://en.wikipedia.org/wiki/Stem_cell_controversy

At the same time, SCF was proven in many in vitro studies to have increased the stem cell mass, as shown in the following diagram, where the number of hematopoietic stem cells increased in number following the addition of SCF (the green object) (11). Such results give scientists new hopes in the development of treatment, where the body can produce pluripotent stem cells without the need of transplantation.



11) http://www.itb.cnr.it/flex/cm/pages/ServeBLOB.php3/L/UK/IDPagina/85

11) http://www.itb.cnr.it/flex/cm/pages/ServeBLOB.php3/L/UK/IDPagina/85

The Limitations of SCF

Currently, SCF are chemically synthesized, hence the molecular structures greatly differ from the natural SCF produced by the human body. This has its limited efficacies when treated in vivo. At the moment, synthetic SCF is only used in in vitro stem cell experiments with limited efficacies of increasing hematopoietic stem cells when injected in vivo.

Stem Cell Factor III (SCF III)

Annona Senegalensis

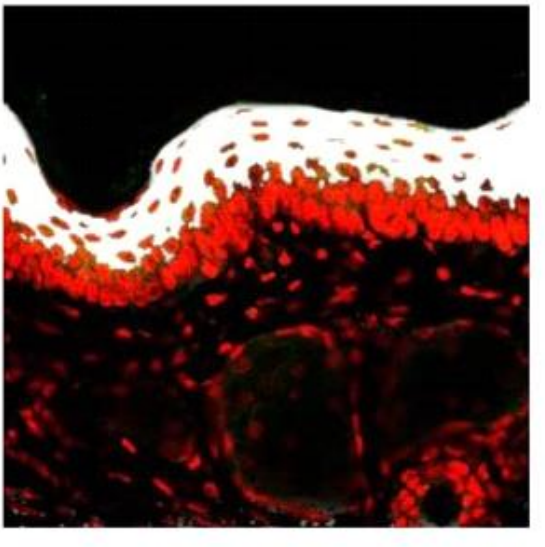
Stem Cell factor III is the latest breakthrough in clinical stem cell therapy. It is extracted from the biggest & toughest cactus in the world & then modified molecularly to have the same molecular structure with natural human SCF.

In mid 2009, Prof. Jason R. of Genetic Medicines of Institution of Biomedical Sciences, Switzerland led a Research team to the Ghana's largest national park – Mole National Park, to conduct a research on the melanocytes level of the native Africans. There, the team came across with a unique fruit - Annona Senegalensis. The native Africans take this fairy fruit for treating a wide array of ailments & capable to strengthen the wall of body stem cell.

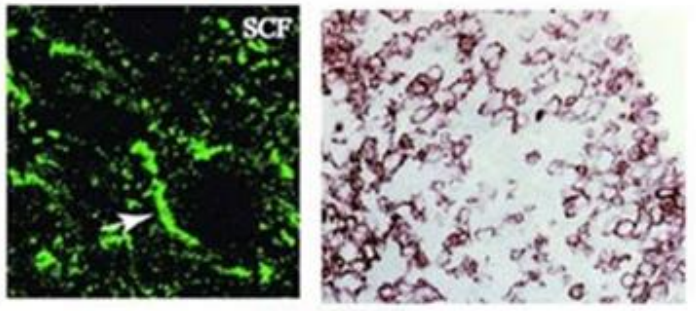
When back to his laboratory, in vitro & in vivo Prof. Jason R, successfully proved & combined the Annona Senegalensis Stem Cell with the Echinocactus Grusonii Stem Cell, evolve the new generation of Stem Cell Factor III (SCF III) .

SCF III is extracted from Echinocactus Grusonii, which is the biggest, toughest cactus in the world. It can grow to the height of 20 meters with roots growing beyong 30 meters. It can store up to 9000 liters of water in its trunk, allowing it to live comfortably in an extremely dry, deserted area. It is also found to produce great deal of stem cell factors to constantly repair itself, making it lives more than 200 years in such an extremely hostile desert !!

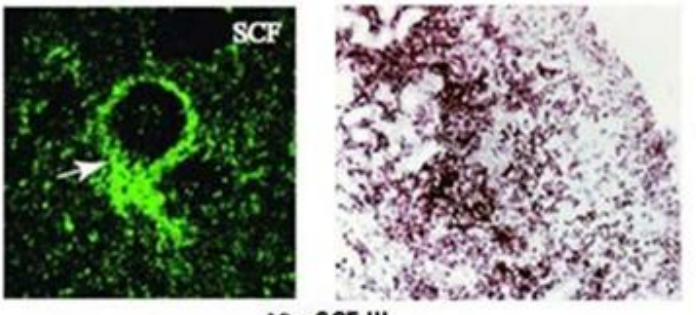
SCF III is shown to produce the right type of multipotent stem cells required by individual human body. As shown in the following diagram, SCF III treated in vivo (white object) start to gather around the skin cells (red) after treated in vivo, to generate skin stem cells for the damaged skin.



The following diagrams shows the increase of neuronal stem cells (left) and joint cartilage (right) following the treatment of SCF III



Before SCF III



After SCF III

12） http://www.jci.org/articles/view/20001/figure/3

13） http://singularityhub.com/2010/06/24/new-report-showsstem-cells-can-cure-blindness-for-ten-years-and-counting/

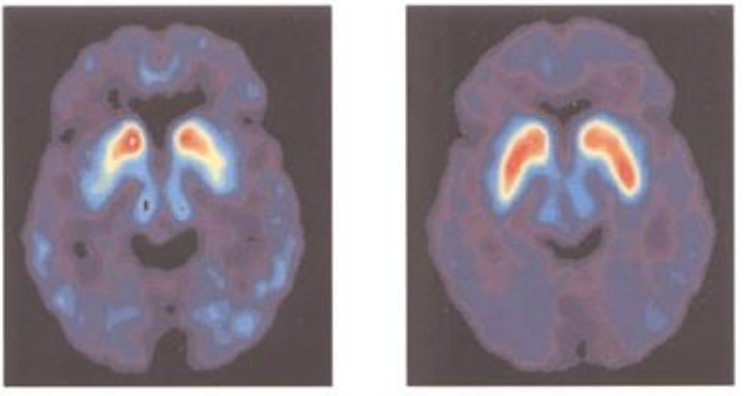
Details

SCF III is a 3rd generation of SCF which is developed by Institute of Biomedical Research from Echinocactus Grusonii cactus from South America. Some studies suggested that SCF III has the biological intelligence, which could generate different types of multipotent stem cells depending on individual condition, exerting different efficacies in different patients.

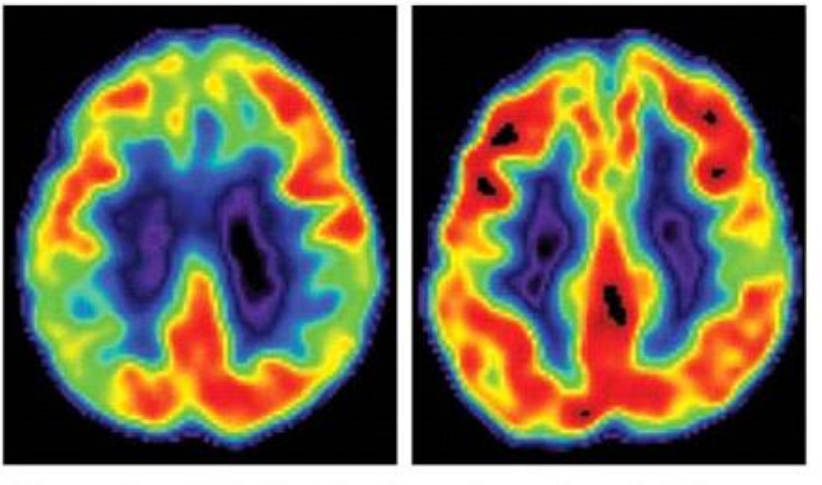
This study shall explore the efficacies of SCF III towards few commonly seen clinical conditions. There are 3000 subjects taking part in the study and they are separated in to 3 group. Group A is comprised of subjects with varying degrees of cognitive neurodegeneration (n = 1000), while group B is comprised of subjects with tissue sagging, wrinkles and skin inflammatory conditions (n = 1000) and group C is comprised of subjects with varying degrees of hair drop (n = 1000).

Subjects in each group are giving 10 treatments of SCF III, 10ml per treatment once every 3 days.

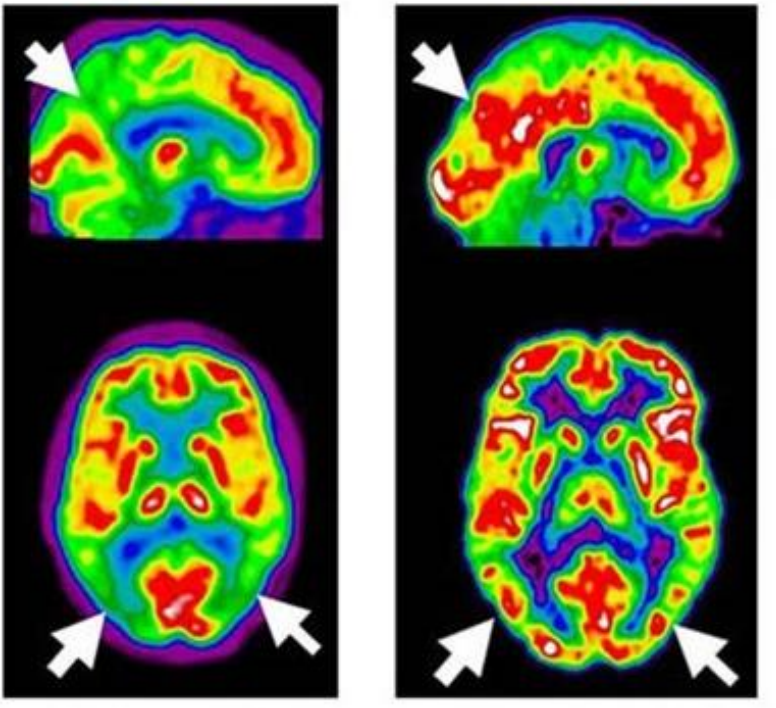
RESULTS



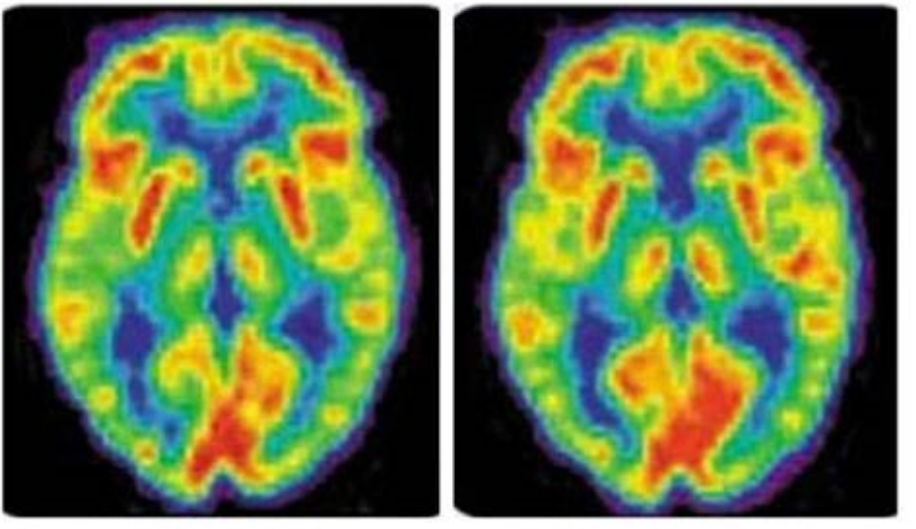
All subjects in 3 groups experienced at least 50% increase in stamina and energy level, with brain imaging showing improved blood circulation to the brain after 1 month. All subjects are followed 3 months after the completion of clinical study, which shown the all subjects remain high level of stamina and energy 3 months after completion of study. This has proven that SCF III produces neuronal stem cells which repairs the damages and inactives in the brain.



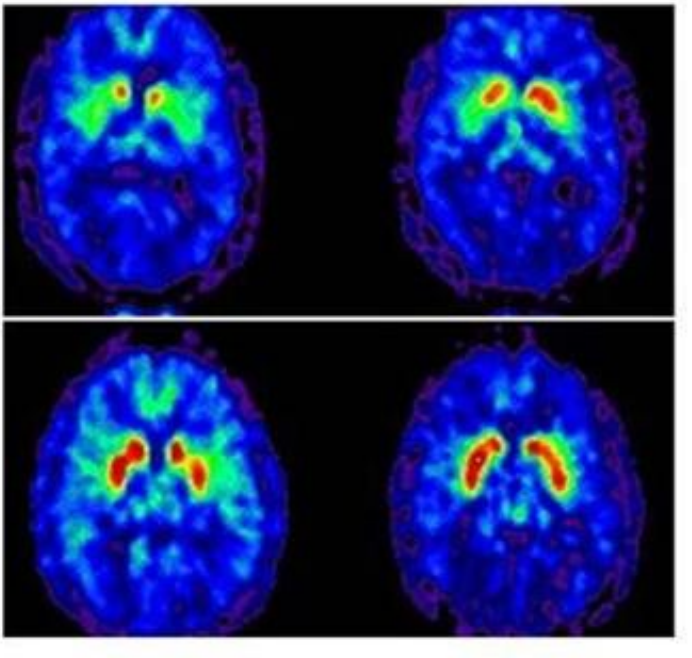
PET scan of the brain of subject with mild neurodegeneration, with clinical symptoms of dementia, impaired mental status and cognitive before SCF III , showing reduced metabolism in the brain with lesser bright area(left). Bright areas in the brain increase after 10 SCF III treatments (right), with clinical improvement of memory, cognitive and mental status as much as 80-90% !!



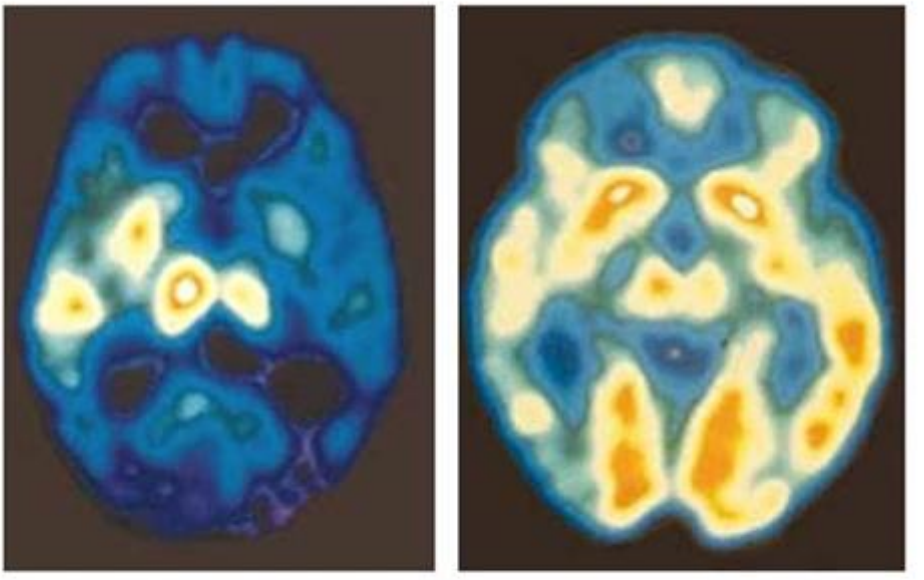
PET Scan of the brain of subjects with Alzheimer before (left) and after 20 treatments of SCF III(right), which shows increased brain metabolism and energy intake.



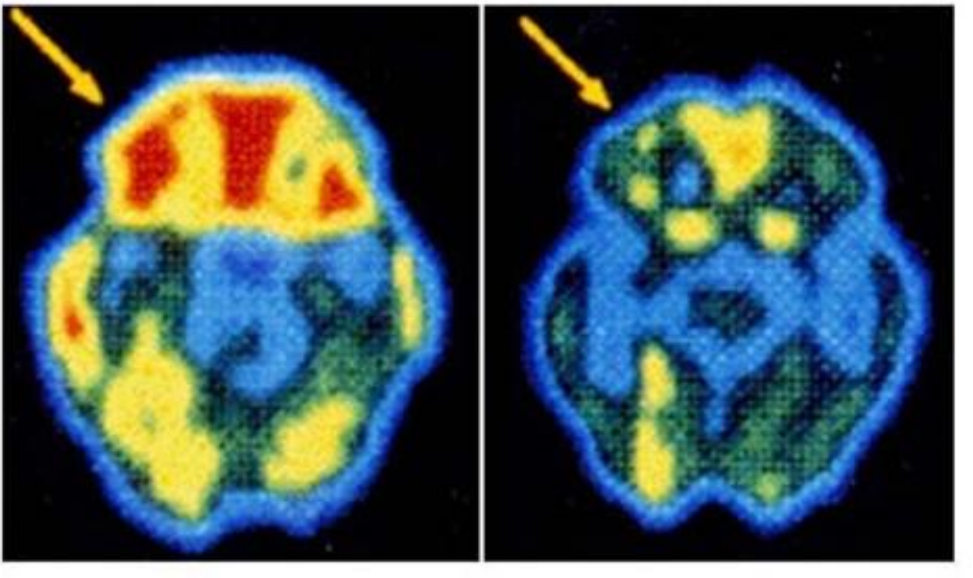
PET Scan of subjects with mild neurodegeneration due to aging (left), the image in the right shows improvements after 10 treatments with increased bright area.



PET brain scan of 2 subjects with Parkinsonism, showing decreased energy uptake in substantial nitro (above). Improvements are observed in PET Scan image after 10 SCF III treatments, which showed increased metabolism in substantial nitro (below), with reduction of clinical symptoms and functional improvements.

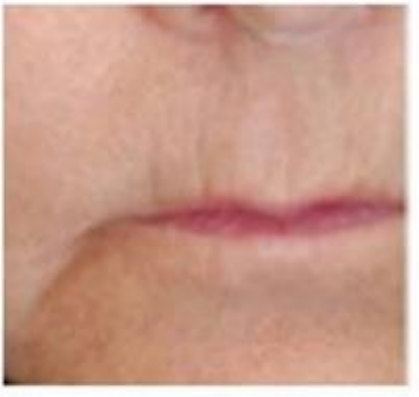


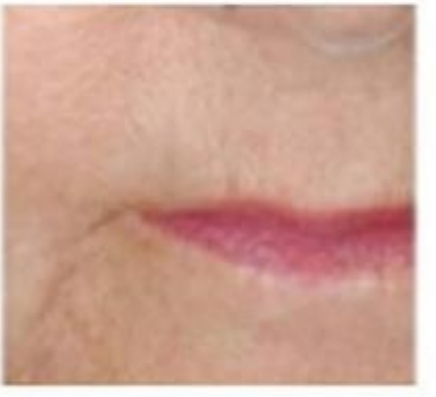
PET Brain sca of subject with depressive syndrome (left) with improvement observed after 10 SCF III treatments (right) , with reduction in clinical symptoms.



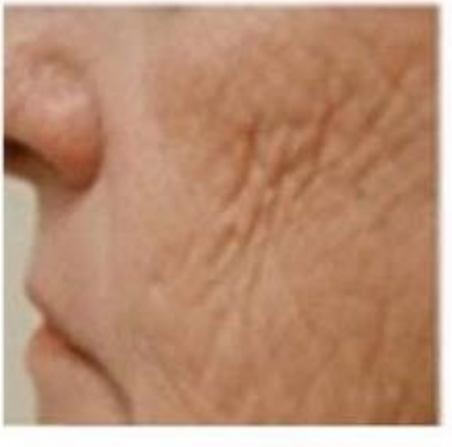
PET brain scan of subject with Obsessive Compulsive Disorders revealed a hyperactive brain region (left) characterized by extremely bright region. Improvements are observed after 10 SCF III treatments (right) with excellent clinical improvements. This showed that SCF III is able to modulate and stabilize the brain functions depending on individual condition.

In group B, subjects with skin conditions will receive 1 treatments of SCF III every 3 days for 30 days. Before and after comparisons are made with photography and skin histology. All subjects show reduction in wrinkles, sagging and skin inflammatory conditions after 10 treatments . There are also improvements observed from skin histology with normal proportion of skin matrices and thickness. The following is one of the subjects before (left) and after SCF III (right).

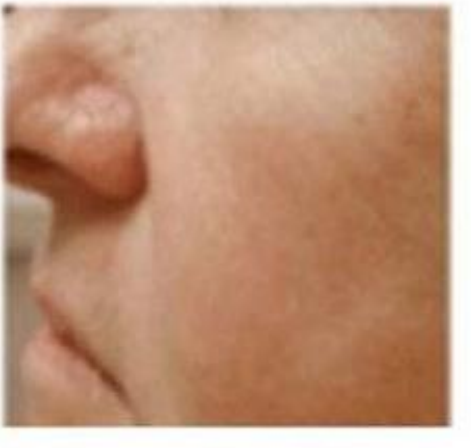


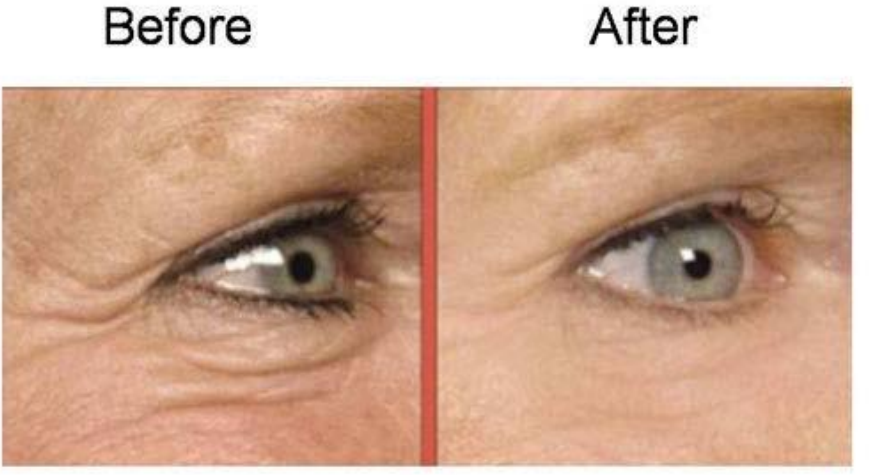


Before



After

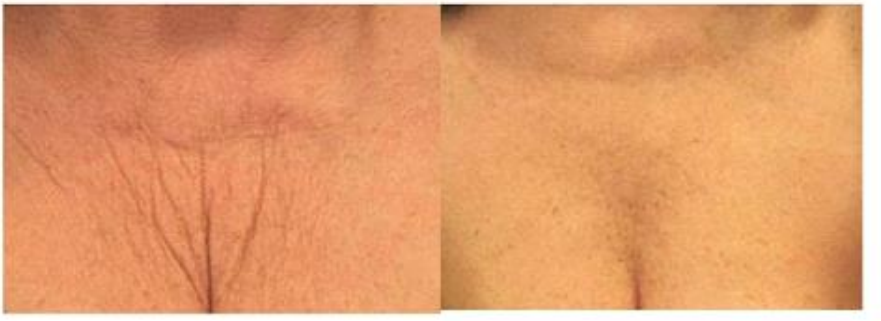



Before
After

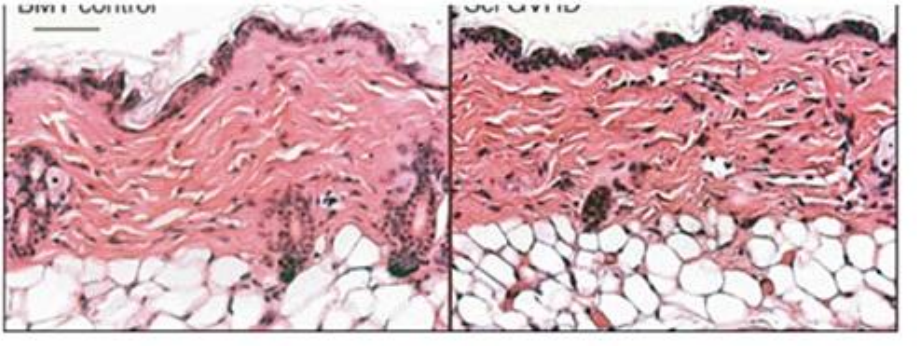

Before (left)
After (right)

Before

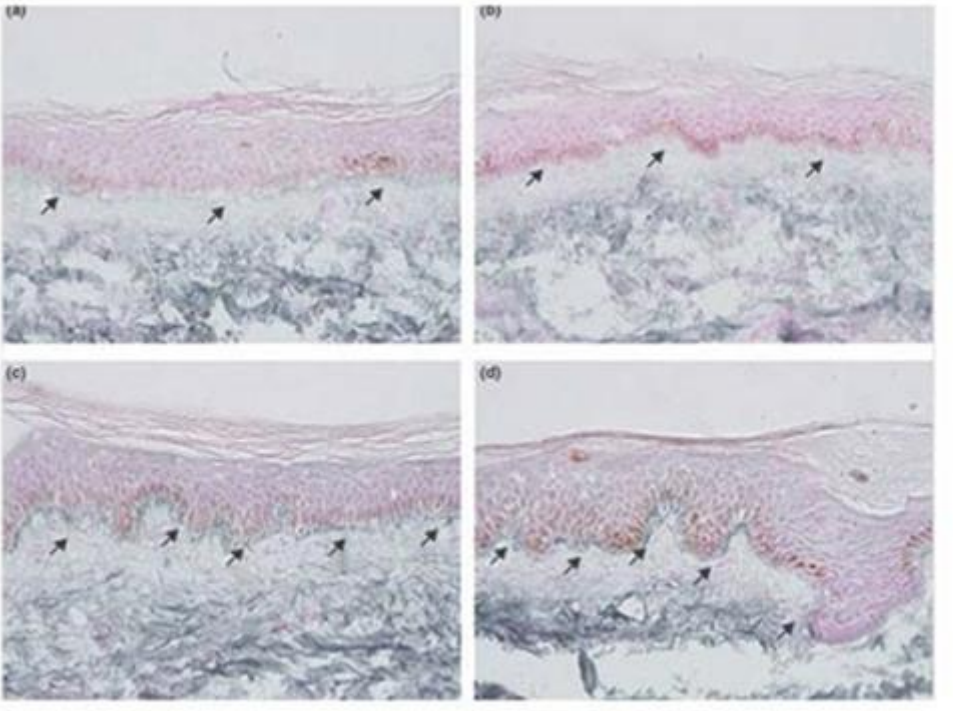
After



Skin Histology

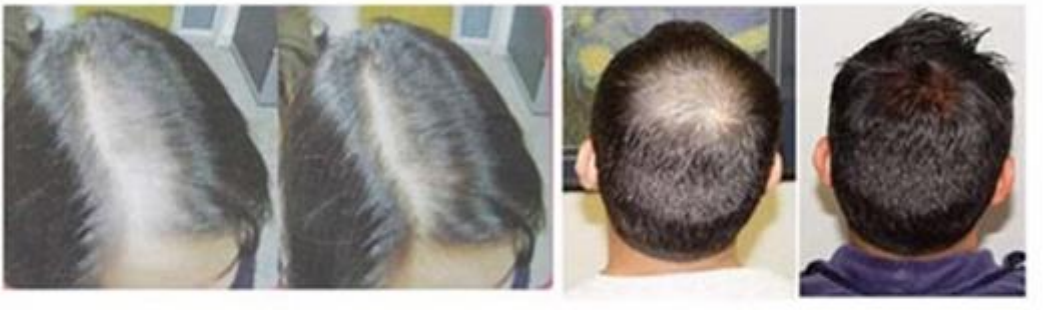


The above skin histology is a classical before and after comparison in all subjects. Skin are of uneven thickness, with irregular proportion of collagen and fibroblasts (black dots), uneven thickness of epidermis, leading to poor skin texture and wrinkles (left). Improvements are observed after 10 SCF III treatments with even epidermis thickness, increased synthesis of fibroblasts with clinical reduction of wrinkles and increased tissue firming (right) .

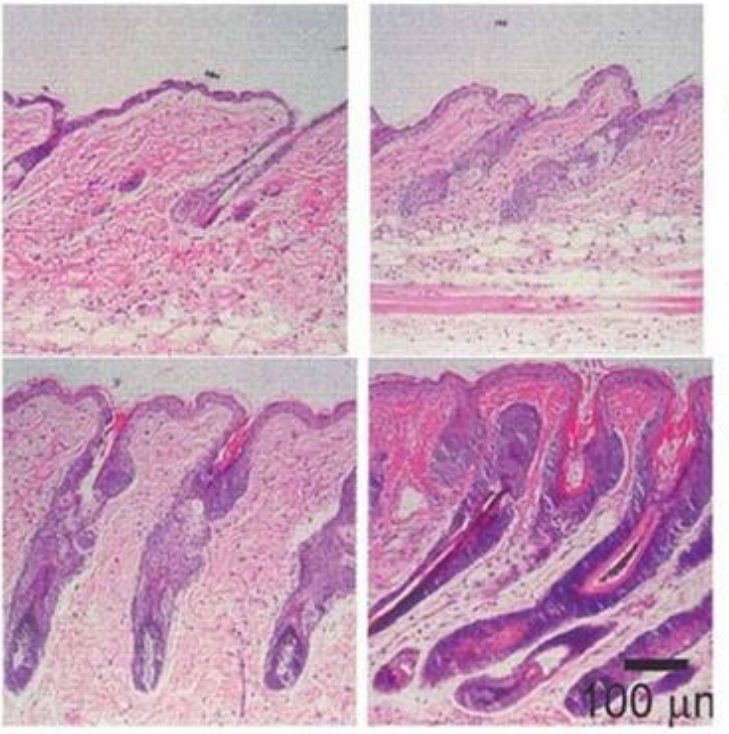


Low level of skin matrices are observed before SCF III treatment(left and right above), with increased in skin matrices after SCF III treatment (left and right below).

Subjects in group C suffer from varying degree of hair drop, and were given 1 SCF III treatment every 3 days. The following are before (left) and after (right) SCF III treatment



Before 15 days after SCF III 30 days after SCF III



Histology of hair follicle before SCF III (left upper) . Hair follicle started to revitalized after 3 SCF III treatment (right upper). Diagram in the left and right lower are hair follicle after 6th and 10th SCF III treatment , showing the hair growth in the treated follicles. This shows that SCF III can generate stem cells which repair the hair follicles, hence stopping the hair drops.

Conclusion

Base on the results from the above 3 groups of subjects, it is proven that treatment of SCF III will produce the multipotent stem cells required by individual subject, to produce different efficacies in neurodegeneration, improved skin texture, elasticity and endocrine regulation of hair growing mechanism.

The above data revealed the enormous therapeutic potentials of SCF III, by producing multipotent stem cells in vivo. More research should be conducted to explore its potential furthers, so that it could benefit more patients.

References :

1） Wolf-Preis für Rastatter Ehrenbürger Professor Dr. Axel Ullrich". ka-news. http://www.ka-news.de/region/rastatt/Wolf-Preis-fuerRastatter-Ehrenbuerger-Professor-Dr-Axel-Ullrich;art6216,345954. Retrieved 2010-04-02.

2） "2010 THE 2010 WOLF FOUNDATION PRIZE IN MEDICINE". Wolf fundation. http://www.wolffund.org.il/cat.asp?id=24&cat_title=MEDICINE. Retrieved 2010-04-02.

3） Wolf-Preis für Rastatter Ehrenbürger Professor Dr. Axel Ullrich". ka-news. http://www.ka-news.de/region/rastatt/Wolf-Preis-fuerRastatter-Ehrenbuerger-Professor-Dr-Axel-Ullrich;art6216,345954. Retrieved 2010-04-02.

4） "2010 THE 2010 WOLF FOUNDATION PRIZE IN MEDICINE". Wolf fundation. http://www.wolffund.org.il/cat.asp?id=24&cat_title=MEDICINE. Retrieved 2010-04-02.

5） "The Nobel Prize in Physiology or Medicine 2007". Nobelprize.org. http://nobelprize.org/nobel_prizes/medicine/laureates/2007/index .html. Retrieved 8 October 2007

6） Stem Cell Therapy & Stem Cell Treatmentwww.emcell.com/

7） EmCell: Faith Healers for a Modern World | Verum Serumwww.verumserum.com/?p=724

8） http://stemcelltreatments.org/clinics/eastern-europe/emcell/

