

## The History of cross-border academia-academia collaboration between Prof. Li (China) and Prof. Kobayashi (Japan)



Prof. Kobayashi has been leading the research field of regenerative medicine for fabricating transplantable organs while he specializes in clinical practices of vascular anastomosis for hepatic artery reconstruction in infantile live donor liver transplantation. The rationale for microsurgery acts for both purposes; clinical practices and researches. Prof. Kobayashi was the 10<sup>th</sup> president of ISEM (International Society for Experimental Microsurgery).

The 9<sup>th</sup> Congress was held in Shanghai where he was appointed as the 10<sup>th</sup> president of ISEM.



(ISEM 9<sup>th</sup> Congress in Shanghai on 30<sup>th</sup> of October in 2008, the president role was transferred from Prof. Corradino Campisi to Prof. Kobayashi: Photo from ISEM global homepage)

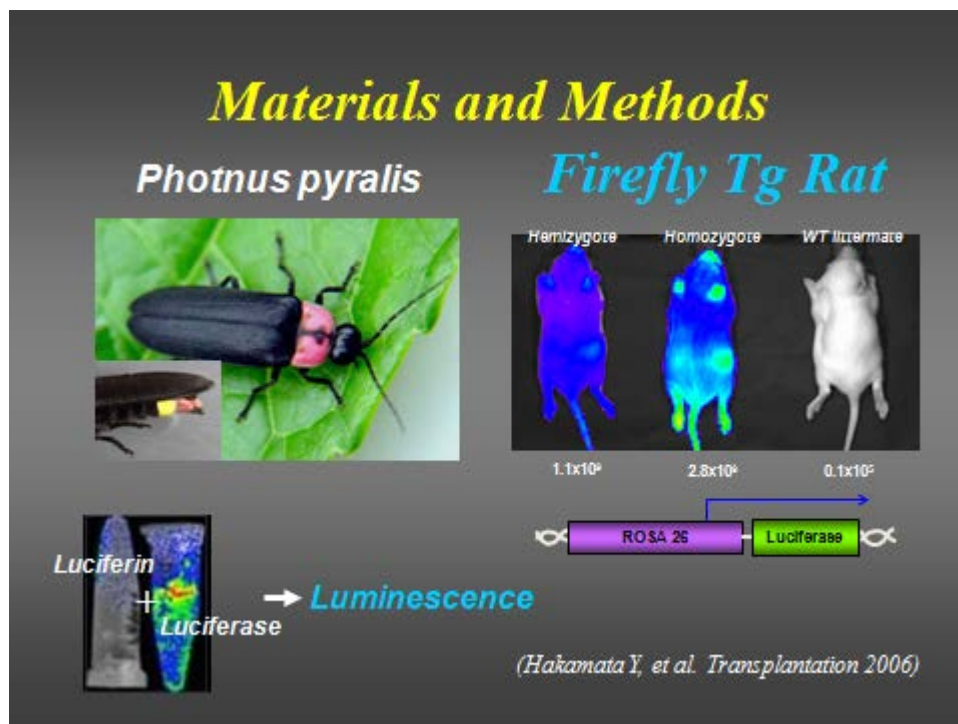
Lots of research results not only from overseas ISEM members but from domestic researchers in China were released at this Congress. The superior award “The Robert Zhong Award” was honored to Dr. Mei Yang of Prof. Li team. In the consequence, Dr. Mei summarized her works and successfully published it in the eminent surgical journal as the below. The concept of research was epoch-making; Optimization of patient-self stem cells to support self-tissue expansion inside patient body.

### **Bone marrow-derived mesenchymal stem cells transplantation accelerates tissue expansion by promoting skin regeneration during expansion**

Yang M, Li Q, Sheng L, Li H, Weng R, Zan T.

Ann Surg. 2011 Jan;253(1):202-9. doi: 10.1097/SLA.0b013e3181f9ba1ah

After the 2008 ISEM Congress, the “Firefly Rat” developed world-first in the early years of 2000s by Prof. Kobayashi was gifted to Shanghai Jiao Tong University as a strong research tool to prove that self stem cells optimized for tissue expansion would possibly relate to angiogenesis and differentiation of tissues.



Prof. Kobayashi gave a lecture to graduate school students at Shanghai Jiao Tong University in response to Prof. Li's invitation.



(Drs. Yang, Kobayashi and Zhou)



Thanks to the lecture given by Prof. Kobayashi, in addition to Prof. Li's team, the graduate school students of Shanghai Jiao Tong University have shown great interest, which led to the acceleration of excellent researches.

In 2011 a series of important events such as the 10<sup>th</sup> Congress of International Society for Plastic Surgery and 50<sup>th</sup> anniversary of Shanghai 9<sup>th</sup> People's Hospital (Shanghai Jiao Tong University) have strengthened mutual friendship.



(From front right to left, Prof. Ti-Sheng Chang, Prof. Qingfeng Li and Prof. Kobayashi, Doctors and graduate school students of Shanghai Jiao Tong University in the back)

The cross-border “Firefly Rat” as a token of friendship transferred from Japan to Shanghai has been generating excellent research results one after another. Dr. Zhou stimulated by Dr. Mei research results further developed another research, which scientifically proves how to optimize tissue expansion and genesis from successfully segregated angiogenesis from grafted fat instead of bone marrow with lighter patient’s pain.

**In vivo bioimaging analysis of stromal vascular fraction-assisted fat grafting: the interaction and mutualism of cells and grafted fat.**

Zhou SB, Chiang CA, Xie Y, Li H, Liu K, Kobayashi E, Li QF

Transplantation. 2014 Nov 27;98(10):1048-55. doi: 10.1097/TP.0000000000000397.

In 2012 the “Current of Translational Research Conference in Kobe” was held with the presence of guest doctors; teams of Prof. Li from Shanghai and Prof. Fu-Chan Wei from Taiwan. The objectives of the conference implied the supportive messages to the suffering citizens evacuated from Eastern Japan Mega Quake on 3.11, 2011.



The Conference was co-sponsored by the international members of The Japan Society for Organ Preservation and Biology, (Team members of Dr. Ishiyama of Hiroshima University and Dr. Takahara of Osaka University showed up in the picture above with doctors from China and Taiwan). Associate Prof. Liu and Dr. Zhou joined the conference from Shanghai.

In **2014** the 12<sup>th</sup> Congress of ISEM was held in Kyoto, Japan. Dr. Zhou made a presentation on the most advanced research results in regenerative medicine. And just recently at 50<sup>th</sup> Anniversary ESSR (European Society for Surgical Research) Congress **2015** in Liverpool, Dr. Zhou released updated research results as below.



According to the academia friendship between China and Japan, Prof. Kobayashi gave a keynote Speech on 29/Aug 2015 in the Shanghai International Convention Center for many Chinese doctors.

