



## **The 2nd International Association of Neurorestoratology**

### **Annual Conference**

### **(Second Announcement)**

**Time: April 24-26, 2009**

**Place: Taiyangdao Hotel, Beijing, China**

**Website: <http://www.ianr.org.cn>**

**E-mail: [ianr999@gmail.com](mailto:ianr999@gmail.com), [ianr998@gmail.com](mailto:ianr998@gmail.com)**

**Hosting Unit:**

International Association of Neurorestoratology (IANR)

**Sponsoring Units:**

Yuquan Hospital of Tsinghua University

Beijing Hongtianji Neuroscience Academy

Chinese Society for Anatomical Sciences

Beijing Military General Hospital of PLA

China Rehabilitation Research Centre

Orthopedic Hospital of PLA General Hospital

Taishan Medical University

Beijing Sanbo Brain Institute

Beijing Rehabilitation Centre

### **The 2nd IANRAC Organizing Committee**

President: Hongyun Huang

Vice President: Almudena Ramón-Cueto(Spain), Qingbao Wang, Yan Wang, Huanzong Zuo, Enzhong Liu, Tiansheng Sun, Jianjun Li, Zuo Luan, Guoming Luan

Members: Gengsheng Mao, Xinglin Wang, Jiming Wang, Rui Wang, Ming Lu, Kui Liu, Guanghong Xiang, Yihua An, Tao Song, Yunlin Li, Hanggen Du, Lin Chen, Zuncheng Zheng, Bo Xiu, Yaojian Rao, Zhouping Tang, Zheng Gu, Zhiming Cui, Jun Tan, Kaibin Wei

### **The 2nd IANRAC Academic Committee**


President: Geoffrey Raisman (UK)

Vice President: Wagih S El Masri (UK), Dajue Wang (UK), Shiqing Feng, Zonghui Liu, Hui Zhu, Chengyuan Wu, Shaocheng Zhang, Changman Zhou, Shaoting Xu, Xijing He

Members: Ying Li (UK), Song Liu(France), Hua Feng, Weiping Wu, Huiyong Shen, Fangang Meng, Tingbao Zhao, Haitao Xi, Peng Liang, Huiling Huang, Guozhen Hui, Mingde Qiu

## **Presidential Address from the 2<sup>nd</sup> IANRAC Organizing Committee**

Dear all colleagues,



As an emerging sub-discipline of neuroscience in the 21st century, neurorestoratology mainly studies neural regeneration, neural structural repair or replacement, neuroplasticity and neuromodulation. The core goal is to promote neural functional reconstruction and recovery of all neural degenerative diseases and damages. The research and therapeutic scope of neurorestoratology covers neurotrauma, neurodegeneration, hypoxic-ischemic encephalopathy, demyelination disorders, cerebrovascular disorder sequelae, motor disorders, nerve damages caused by intoxication or physical factors, hereditary and congenital or developmental lesions and other nervous degenerative changes and damages. Various kinds of interventions are used, such as tissue or cell transplantation, biological and tissue engineering or bioengineering, nerve stimulation or modulation by physical factors such as magnetic/electrical intervention, pharmaceutical or chemical strategies et al.

As an independent discipline, neurorestoratology had an eventful birth and develops with defeating challenges. In recent years, the restorative and therapeutic door for a certain degree of structural and functional restoration in central nervous system has been opened and the traditional concept that there is no available therapy or effective methods for central nervous system diseases and damages has been changed; it is no longer a dream for some patients with chronic spinal cord injury to stand or walk again to a certain extent.

As the only international academic organization in neurorestorative field--International Association of Neurorestoratology (IANR), it is the unavoidable social responsibility and duty-bound era mission to actively promote the development and growth of Neurorestoratology. According to the Conference Council's plan "hold the conference annually" and on the basis of the 1st annual conference being convened successfully in May of 2008, the 2nd IANRAC will be held in Beijing again in April of 2009.

The annual conference is the world's top academic meeting on neurorestoratology and it will set up a broad professional platform of academic exchange for numerous

basic scientific researchers and clinicians studying and working in neurorestorative field, which including neurology, neurosurgery, orthopedics, neural rehabilitation, pediatrics, physiotherapy, neural transplantation, hyperbaric oxygen, ophthalmology, urinary surgery, pain department, and some interdisciplinary research areas with neurorestoratology. It is hoped that all participants can keep the principle "exchanging, learning and making common progress" , in order to achieve the goal "developing, collaborating and bringing benefit to patients".

As the organizer of the conference and on behalf of the IANR as well as the organizing committee, I sincerely invite you and your colleagues to participate in this event. On the occasion, the world's top experts will overall exchange the latest advancement and deeply explore prospective prospect in neurorestoratology. We are looking forward to meeting you in Beijing in April of 2009!

*Huang Hongyuan*

December 18, 2008

## **Presidential Address from the 2nd IANRAC Academic Committee**



Geoffrey Raisman,  
FRS, Professor of  
Neural Regeneration  
at University College  
London Director of the  
Spinal Repair Unit at  
the Institute of Neurology,  
Queen Square.

Beginning with a single cell, the embryo builds an entire body and weaves the web of the most complex structure in the entire living universe, the human nervous system. In finding their way to form a network of unimaginable intricacy the untold numbers of nerve fibers are fulfilling the instructions of an intrinsic genetic code honed and handed down to us by millions of years of evolution, whose effect is to adapt each one of us to that unique path our lives will take. We now know that this adaptation, which was called plasticity, continues throughout adult life. What we are beginning to understand is that after injury it may be possible to recapitulate the events, re-establish severed connections, and restore lost functions to patients with brain and spinal cord injuries.

We cannot expect it will fall to us to reconstruct a damaged spinal cord. What we can do is attempt to aid the nervous system to exploit this intrinsic plasticity to repair itself by modifying the obstacles in the scar, by providing the molecules needed for nerve growth, and by enabling it to construct the scaffold needed to lay down the pathway for nerve fibers to regenerate across injuries. Transplantation of reparative cells is one approach by which we might address these multiple requirements.

Between man's desire and its goal there always lies a gap. Between what science has revealed to us and the patients whose lives are blighted by disability that gap is crossed by the fragile bridge of hope. And across the gulf, from his side, the scientist reaches out to the physician, and from his, the physician reaches back towards the scientist. Upon that slender bridge of hope we who come together from all parts of the world for these few days in Beijing now venture. In our hands we carry a precious vessel within which lie mysteries still unrevealed to us. The cure of spinal injury is a dream, only a dream, but we must remember that everything that man has ever achieved began only as a dream in the mind of a man.

*Geoffrey Raisman*

December 28, 2008

## Part of Keynote Speakers



Wise Young, Time Magazine named him as one of the 18 scientists that dramatically impacted the medical development in United States of 2005. Professor Young's promoted the high-dosage treatment in spinal cord injury clinical trial, which has become the standard treatment for early spinal cord injury treatment. He has been called the "Neural Constructor" and "Neural Architect" in the medical profession.



Almudena Ramón-Cueto, Director of the Laboratory of Neural Regeneration Institute of Biomedicine, Valencia, Spanish Council for Scientific Research. She had made a great contribution on basic research that OECs can promote neural structural and functional restoration.



Wagih S El Masri, President of the International Spinal Cord Society (ISCOS); Consultant Surgeon in Spinal Injuries.



Kwok-Fai SO, Currently Chair Professor and Head of the Department of Anatomy, Jessie Ho Professor in Neuroscience at The University of Hong Kong, a member of the Chinese Academy of Sciences, Co-Chairman of the Board of Director of the China SCI Network.



Milan Dimitrijevic, expert in restorative neurology and human neurobiology. Emeritus Professor of Baylor College of Medicine, Houston, Texas, USA. Sr. Science Consultant to the University Institute of Clinical Neurophysiology, Ljubljana, Slovenia. Leader of Consortium of Vienna Program for restoration of Human Locomotion, Vienna, Austria.



Vedran Deletis, M.D., PhD. He is the Director of the Intraoperative Neurophysiology Department in St. Luke's/Roosevelt Hospital and an Associate Professor at the Albert Einstein College of Medicine in New York



Michael Chopp, Distinguished Professor and Vice Chairman. Zolton J. Kovacs Chair in Neuroscience Research, Henry Ford Health Sciences Center, Detroit, MI; Distinguished Professor, Department of Physics, Oakland University, Rochester, MI; Scientific Director, Neurosciences Institute, Henry Ford Hospital, Detroit, MI.



Russell Joseph Andrews, M.D. Undergraduate, graduate, medical school—Dartmouth and Harvard University; Currently Ames Associate (Smart Systems & Nanotechnology) at NASA Ames Research Center, Moffett Field, CA, USA.



Albert Bohbot, expert in laserpuncture; first laserpuncture applications on spinal cord injuries; founder and director of the Laboratoire de Recherche sur le laserpuncture.



Qunyuan Xu, doctoral supervisor. Director of the Beijing Institute for Neuroscience in Capital Medical University; director of the key laboratory on neural regeneration and repair research, honorary chairman of Chinese Society for Anatomical Sciences.

## Part of the Speech Titles on the 2<sup>nd</sup> IANRAC 24 April—26 April 2009

### 24 April 2009 (Friday):

#### Pre-conference and Council meeting of IANR

8:00–16:00 Workshop of China SCI Net ( Program in further notice )  
16:00–18:00 Brain Motor Control Assessment ( Program in further notice )  
19:00–21:00 Council Meeting of IANR

1. Form the Editorial Board of the book "CNS Neurorestoratology" (1<sup>st</sup> edition in English), discuss the outline and distribute the task;
2. Discuss the "Beijing Declaration on neurorestoratology";
3. Establish common standards for the three clinical application scales: Standard Recommendations on Clinical Application of Neural Cell Transplantation Strategy, Spinal Cord Injury Functional Rating Scale (SCI-FRS) and ALS/MND Self-Assessment Scale.

### 25 April 2009 (Saturday):

#### 8:00–12:20 Discipline introductin/ Cell and tissue transplantation (I)

Hongyun Huang ( China ) : Introduction of neurorestoratology and related discussion one the subject  
Xiao mei Zhai ( China ) : Ethical Discussion on neurorestoratology  
Almudena Ramón-Cueto(Spain): Repair of chronic spinal cord injuries by olfactory bulb ensheathing glia and feasibility of autologous therapy  
Geoffrey Raisman & Li Ying (UK): Functional/Anatomical repair of spinal roots by olfactory ensheathing cells  
Chernykh ER(Russia): Application of autologous bone marrow stem cells in the therapy of spinal cord injury patients  
Lin Chen(China): Establishment of a clinical neurorestorative strategy based on olfactory ensheathing cell intracranial/intraspinal transplant: evidence from 1255 patients with CNS diseases  
Albert Bohbot: (France):OECs and Laserpuncture from 2005 to today: follow-up and progress

#### 13:20–14:40 Cell and tissue transplantation (II)

Yoon Ha (Korea): Complete spinal cord injury treatment using autologous bone marrow cell transplantation and bone marrow stimulation with granulocyte macrophage-colony stimulating factor: clinical trial  
Ziad M. Al Zoubi & Adeeb Al-Zoubi & Mohammed Jamoos (Jordan): Treatment of Spinal Cord Injuries Using Purified Stem Cells -- A Jordanian Experience  
Harry S. Goldsmith (USA): Omentum Transposition for Alzheimer Disease and Spinal Cord Injury

#### 14:50–16:20 Medicine, neural restoration and protection

Kwok-Fai So ( Hong Kong ) : Neuroprotective Therapies for CNS Injuries Debora R. Fior-

Chadi (Brazil) : Effects of nicotine on neuronal plasticity and neurorestoration  
Michael Chopp (USA) : Cell and pharmacological restorative treatments for neurological disease, injury and stroke

#### **16:20–17:50 Tissue engineering and bioengineering**

Eva Syková (Czech Republic) : Treatment of spinal cord injury using autologous stem cells and biomaterials

Qunyan Xu (China) : A Study on Experimental Therapy of Rat Model of Stroke by Tissue Engineering with Hyaluronic Acid Based Scaffold

#### **19:00–21:00 Neurorestoratological Youth Forum**

Selecting outstanding papers from the 2<sup>nd</sup> IANRAC submissions for the Youth Forum presentation. Selection criteria: less than 35 years old, engaged in basic and clinical research of neurorestoratology and as the first author of the paper. IANR will award the top 3 winners selected by the Academic Committee, who will be presented trophy cup and cash award, which is separately RMB¥5,000, ¥3,000 and ¥2,000.

#### **26 April 2009 (Sunday):**

#### **8:00–12:00 Neuromodulation and neural stimulation**

Milan R. Dimitrijevic & Justin Brown (USA) : Clinical practice of restorative neurology of the spinal cord injury

Vedran Deletis (USA) : Neuromonitoring of descending spinal tract

Larry Jordan (Canada) : Brainstem and spinal neural systems for the initiation of locomotion

Russell J. Andrews (USA) : Neuromodulation for neurorestoration

Gerson Chadi (Brazil) : Neuronal stimulation in CNS for neurorestoration

Guoming Luan (China) : Clinical Application of neuromodulation in China

Carmelo Sidoti (Italy) : Cortical neuromodulation in ALS. What we learned

Reggie Edgerton (USA) : Regaining stepping with epidural stimulation and pharmacological modulation

#### **13:00–15:10 Neural rehabilitation and neural restoration**

Gitendra Uswatte (USA) : Constraint-Induced Movement therapy: Remodeling Neural Structures and Restoring Function

Wagih Shafik El Masri (UK) : Quantitative temporal motor recovery in patients with complete traumatic motor paralysis and spino thalamic sensory sparing

Serge Rossignol (Canada) : The importance of the spinal CPG in the recovery of locomotion after partial spinal cord lesions

#### **15:20–18:00 Peripheral nerve, plasticity and others**

Wise Young (USA) Subdural decompression study for acute or subacute spinal cord injury in rats

Yan Wang (China) : Research progress on peripheral neural restoration

Dajue Wang (UK) : Reticular formation and repair of the central nervous system

Carlos Lima (Portugal) : Beyond brain cell therapies: the neuroplasticity issue

Ole Kiehn (Sweden) : Locomotor circuits in the mammalian spinal cord

Hans Hultborn (Denmark) : Neuroplasticity following spinal cord injury – with emphasis on changes “below lesion”

#### **Taiyangdao Hotel Address:**

No.33 Shijingshang Road, Shijingshang District, Beijing, China

The way from Beijing Capital Airport to Taiyangdao Hotel: Take the airport bus to Gongzhufen Station, transfer to the Subway Line 1 to Babaoshan Station, and by Bus No. 337/389/728/941 Bus to Beijing Taiyangdao Hotel