Brain Research Center

BRC Int'l Conference 2012 @ Jeju

in conjunction with
the 5th BRC-UK Joint Symposium on Neuroscience

"10 years of progress & perspectives in neuroscience"

27 ~ 29, June, 2012
ShineVille Luxury Resort, Jeju

Plenary Lectures

- **Graham Collingridge (Univ of Bristol)**
- **Morgan Sheng (Genentech)**

The 5th BRC-UK Joint Symposium on Neuroscience

- **Timothy J. Bussey (Univ of Cambridge)**
- **Trevour Robbins (Univ of Cambridge)**
- **Peter St. George-Hystop (Univ of Cambridge)**
- **Noel Buckly (King's College London)**
- **Kei Cho (Univ of Bristol)**
- **Hugh Piggins (Univ of Manchester)**

Symposia

- **S1** Neurogenesis
- **S2** Neural Plasticity
- **S3** Stroke
- **S4** Epilepsy
- **S5** Parkinson's Disease
- **S6** Neuronal Signaling
- **S7** Neuroethics
- **S8** Drug Abuse
- **S9** Brain Imaging
- **S10** NeuroTools
- **S11** GPCR
- **S12** Stress
- **S13** Pain
- **S14** BioClock
- **S15** Alzheimer's Disease

Forum for Promoting Neuroscience in Korea

주 최 : 21세기 프론티어연구개발사업 뇌기능활용및뇌질환치료기술개발연구사업단
주 관 : 교육과학기술부, 한국연구재단

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Program at a glance

27, June (Wed.)	28, June (Thu.)	29, June (Fri.)
Registration	S6 Neuronal Signaling (08:30-10:30) / S8 Drug Abuse (08:30-10:30)	Plenary Lecture (08:30-09:15)
	Coffee Break (10:30-10:45)	Coffee Break (09:15-09:30)
	S7 Neuroethics (10:45-12:25) / S9 Brain Imaging (10:45-12:25)	S14 BioClock (09:30-10:50) / S15 Alzheimer's Disease (09:30-10:50)
Opening Ceremony (13:00-13:30)	Lunch (12:25-13:30)	Closing & Dismiss / Lunch (12:25-13:30)
Plenary Lecture (13:30-14:15)	Plenary Lecture (13:30-14:15)	
Coffee Break (14:15-14:30)	Coffee Break (14:15-14:30)	
S1 Neurogenesis (14:30-17:30) / S3 Stroke (14:30-16:10)	S10 NeuroTools (14:30-16:50) / S12 Stress (14:30-16:30)	
Coffee Break (16:10-16:30)	Coffee Break (16:30-16:50)	
S1 Neurogenesis (14:30-17:30) / S4 Epilepsy (16:30-17:30)	Coffee Break (16:50-17:10) / S13 Pain (16:50-18:10)	
Coffee Break (17:30-17:45)	S11 GPCR (17:10-18:10)	
S2 Neural Plasticity (17:45-19:25) / S5 Parkinson's Disease (17:45-19:25)	Coffee Break (18:10-18:20)	
	Forum for Neuroscience (18:10-19:30) / Interview for Lecturer (18:10-19:30)	
Welcome Dinner	Banquet Dinner	

POSTER PRESENTATION

주 최 _ 21세기 프론티어연구개발사업 뇌기능활용및뇌질환치료기술개발연구사업단
주 관 _ 교육과학기술부, 한국연구재단

Program

* Session Chair

27, June (Wed.)

Registration

Opening Ceremony (13:00-13:30)

Plenary Lecture (13:30-14:15)

Graham Collingridge (Univ of Bristol) ---------- "Molecules of the mind : the study of synaptic plasticity in the hippocampus"

Coffee Break (14:15-14:30)

S1 Neurogenesis (14:30-17:30)

S1-01 Jaesnag Kim (Ewha Womans Univ)
A positive feedback loop between Sox2 and Sox6 inhibits neuronal differentiation in the developing CNS.

S1-02 Keejung Yoon (Sungkyunkwan Univ)
Non-canonical Notch signaling pathway during brain development.

S1-03 Noel Buckley (King's College London)
Transcriptional and epigenetic regulation of neural stem cells (tentative).

S1-04 Yun-Hee Kim-Kwon (Kyunghee Univ)
Regulation of neurogenic factors in neuronal differentiation by Homeodomain-interacting Protein Kinase 2

S1-05 Hae-young Suh-Kim (Ajou Univ)*
cAMP-mediated post-translation modification of a proneural bHLH transcription factor, NeuroD

S3 Stroke (14:30-16:10)

S3-01 Zhang ZG (Henry Ford Hospital)
MicroRNAs in brain remodeling after stroke

S3-02 Won-Ki Kim (Korea Univ)*
A3 adrenergic receptor-mediated suppression of inflammatory responses in cerebral ischemia

S3-03 Jong-sung Kim (Univ of Ulsan)
Post-stroke depression and emotional incontinence: role of serotonine and gene polymorphism

S3-04 Jee-Yin Ahn (Sungkyunkwan Univ)
Roles of B23/Nucleophosmin in neuroprotection

S3-05 Moo-Ho Won (Kangwon Nat'l Univ)
Neuroprotective effects of a new synthetic aspirin-decursinol adduct in animal models of ischemic stroke

Coffee Break (16:10-16:30)

S1 Neurogenesis (14:30-17:30)

S1-06 Woong Sun (Korea Univ)
Role of Ezrin-Radixin-Moesin Proteins in the migration of neuroblasts

S1-07 Soo-Chul Park (Sookmyung Women's Univ)
Eph-ephrin signaling regulates the neural epithelial stem cell expansion during the brain development

S1-08 Seungbok Lee (Seoul Nat'l Univ)
dCIP4 (Drosophila Cdc42-Interacting Protein 4) and synaptic growth

S4 Epilepsy (16:30-17:30)

S4-01 Tae-Cheon Kang (Hallym Univ)*
Oh-Shin Kwon (Kyungpook Nat'l Univ)
The roles of P2X7 receptor in epilepsy : Leukocyte infiltration, Astroglial death and Seizure susceptibility

S4-02 Young Mok Park (KBSI)
Proteomic analysis of epilepsy brain tissues using MALDI - MS imaging

S4-03 Byung Ju Lee (Univ of Ulsan)
Mitigated seizure susceptibility of mice lacking CD137 expression

Coffee Break (17:30-17:45)

S2 Neural Plasticity (17:45-19:25)

S2-01 Timothy J. Bussey (Cambridge Univ)
Plasticity and memory in the medial temporal lobe: novel approaches

S2-02 Hyeon Son (Hanyang Univ)*
Molecular evidences for antidepression mechanism in the hippocampus

S2-03 Suk-Ho Lee (Seoul Nat'l Univ)
Novel role of reluctant synaptic vesicles in short-term plasticity

S2-04 Joung-Hun Kim (POSTECH)
Molecular mechanisms underlying synaptic localization of NMDA receptors

S2-05 Min Whan Jung (Ajou Univ)
Hippocampal role in binding elements of episodic memory

S5 Parkinson's Disease (17:45-19:25)

S5-01 Hiroyoshi Ariga (Hokkaido Univ)
Function of DJ-1 and its therapeutic application to Parkinson's disease

S5-02 Young Jun Oh (Yonsei Univ)
A novel pro-survival role of Cdr2 during drug-induced neurodegeneration

S5-03 Onyou Hwang (Univ of Ulsan)*
MMP-3 in dopaminergic neurodegeneration

S5-04 Kwang Chul Chung (Yonsei Univ)
Ubiquitin, parkin, and parkinson's disease

S5-05 Eun Hye Joe (Ajou Univ)
Microglial function altered by LRRK2

Welcome Dinner

28, June (Thu.)

S6 Neuronal Signaling (08:30-10:30)

S6-01 Kei Cho (Bristol Univ)
Aberrant synaptic plasticity in alzheimer's disease
S6-02 Dongeun Park (Seoul Nat'l Univ)*
Role of βPix in dendritic spine development
S6-03 Sunghoe Chang (Seoul Nat'l Univ)
Linking glutamatergic and dopaminergic signaling in dendritic spines
S6-04 Sung-Oh Huh (Hallym Univ)
Critical role of lysophospholipid signalings in migration of telencephalic neuroepithelial cells
S6-05 Sukwoo Choi (Seoul Nat'l Univ)
Amygdala synaptic plasticity and conditioned fear memory
S6-06 EunJoon Kim (KAIST)
Synaptic proteins in autism spectrum disorders

S8 Drug Abuse (08:30-10:30)

S8-01 Toshitaka Nabeshima (Meijo Univ)
New physiological functions of drug dependence regulating molecule, Shati
S8-02 Hyoung-Chun Kim (Kangwon Nat'l Univ)*
Role of enzymatic antiperoxidant in the methamphetamine-induced neuropsychotoxicity
S8-03 Choon-Gon Jang (Sungkyunkwan Univ)
The role of TRPV1 in drug dependence
S8-04 Jeong Won Jahng (Seoul Nat'l Univ)
Food rewarding in the regulation of stress response
S8-05 Sang Ki Park (POSTECH)
Multifaceted functions of disrupted-in-schizophrenia 1 in the cell
S8-06 Hyewhon Rhim (KIST)
Potential roles of 5-HT6 receptors and its binding proteins in neurological disease

Coffee Break (10:30-10:45)

S7 Neuroethics (10:45-12:25)

S7-01 Sakura Osamu (Tokyo Univ)
A proposal of three laws for ethics of BMI
S7-02 Sungook Hong (Seoul Nat'l Univ)*
fMRI lie detection: ethical and legal issues
S7-03 Dayk Jang (Seoul Nat'l Univ)
Humanities of mirror-neuron
S7-04 Yeonsoo Cho (Young In Mental Hospital)
The ethics of psychopharmacological enhancement
S7-05 Sang Wook Yi (Hanyang Univ)
More is different: a case against 'no-disconitinuity' argument for human enhancement

S9 Brain Imaging (10:45-12:25)

S9-01 Michael Chee (Duke-NUS Graduate Medical School)
Cognitive mechanisms underlying performance impairment in sleep
S9-02 Jun-Soo Kwon (Seoul Nat'l Univ)
Endophenotype of schizophrenia
S9-03 Seung-Bong Hong (Sungkyunkwan Univ)
Neuroimaging study on brain pathophysiology of sleep disorders
S9-04 Sang Eun Kim (Seoul Nat'l Univ)
Imaging biomarkers in CNS drug discovery and development
S9-05 Dong Soo Lee (Seoul Nat'l Univ)*
Brain disease-designation based on connectivity

Lunch (12:25-13:30)

Plenary Lecture (13:30-14:15)
Morgan Sheng (Genentech) ---------- "Life, death and disease of synaptics"

Coffee Break (14:15-14:30)

S10 NeuroTools (14:30-16:50)

S10-01 Hyung-Cheul Shin (Hallym Univ)*
Odorant discrimination by decoding many single units from main olfactory bulb
S10-02 Beop-Min Kim (Korea Univ)
Development of near-infrared (NIR) based neurotool for brain machine interface (BMI)
S10-03 Chun Kee Chung (Seoul Nat'l Univ)
Foreseeing brain's motor intention and implication in brain-machine interface
S10-04 Mincheol Kim (LAXTHA Inc.)
EEG and ECG detection using electric contactless electric potential
S10-05 Yoonkey Nam (KAIST)
In vitro neural stimulation tools for synaptic plasticity
S10-06 Sunyoung Kim (Seoul Nat'l Univ)
Ultrasound image-guided gene delivery technology and its application in brain and neurodegerative disease research
S10-07 Chulhee Choi (KAIST)
Novel ICG fluorescence imaging for cerebral blood flow measurement in small animals

S12 Stress (14:30-16:30)

S12-01 Trevour Robbins (Cambridge Univ)
A topic in psychopharmacology
S12-02 Pyung-Lim Han (Ewha Womans Univ)*
Behavioral stress promotes depression via metabolic stress
S12-03 Hong-Won Suh (Hallym Univ)
Behavioral stress causes alterations in multiple signal pathways in the mouse brain
S12-04 Ja-Hyun Baik (Korea Univ)
Dopamine D2 receptor in stress and addiction
S12-05 Daesoo Kim (KAIST)
Activity lateralization of mPFC hemispheres induced by social defeat stress
S12-06 In-Kyoon Lyoo (Seoul Nat'l Univ)
Metabolic stress and depression

Coffee Break (16:30-16:50)

Coffee Break (16:50-17:10)

S11 GPCR (17:10-18:10)

S11-01 Kazuyoshi Tsutsui (Waseda Univ)
Origin and molecular evolution of gonadotropin-inhibitory hormone (GnIH)
S11-02 Jae Young Seong (Korea Univ)*
Identification of novel neuropeptides acting at GPCRs
S11-03 Young Joon Kim (GIST)
Central peptidergic ensembles modulate the mating decision of female Drosophila melanogaster

S13 Pain (16:50-18:10)

S13-01 Seog-Bae Oh (Seoul Nat'l Univ)
TRPV1 in GABAergic interneurons mediates long-term depression and disinhibition in the spinal cord: implication for mechanical allodynia
S13-02 Jang-Hern Lee (Seoul Nat'l Univ)
The mechanism of spinal sigma-1 receptor mediated phosphorylation of NMDA receptor NR1 subunit in pain
S13-03 Heung-Sik Na (Korea Univ)*
Chronically relapsing pruritic dermatitis manifested in rats by neonatal treatment of capsaicin

Coffee Break (18:10-18:20)

Forum for Neuroscience (18:10-19:30)

Interview for Lecturer (18:10-19:30)

Banquet Dinner

29, June (Fri.)

Plenary Lecture (08:30-09:15) ---------- **"To be announced"**

Coffee Break (09:15-09:30)

S14 BioClock (09:30-10:50)

S14-01 Hugh Piggins (Manchester Univ)
To be announced

S14-02 Seung-Hee Yoo (UT Southwestern Medical Center Neuroscience)
Positional Cloning and Characterization of Circadian Mutant Past-time

S14-03 Kyungjin Kim (Seoul Nat'l Univ)*
Nuclear receptor, rev-erb alpha impacts on circadian regulation of mood

S14-04 Joon-Ho Choe (KAIST)
Sleep regulation of histamine receptors in Drosophila

S15 Alzheimer's Disease (09:30-10:50)

S15-01 Peter St. George-Hyslop (Cambridge Univ)
Genetics of alzheimer's disease

S15-02 Yoo-Hun Suh (Seoul Nat'l Univ)
Stem cell therapy for Alzheimer's disease

S15-03 Yong-Keun Jung (Seoul Nat'l Univ)*
New target validation and modifier of amyloid pathway in Alzheimer's disease

S15-04 Ho-Jin Jang (CrystalGenomics, Inc.)
Drug discovery against LynK for the treatment of AD

Closing & Dismiss

Lunch (12:25-13:30)

Transportation

● Airline

- **Korean Air (kr.koreanair.com)**
  Promotion fare (Mon~Thur): 73,,400 KRW / Normal fare (Fri-~Sun): 84,000 KRW
- **Asiana (www.flyasiana.com/)**
  Promotion fare (Mon~Thur): 73,,400 KRW / Normal fare (Fri-~Sun): 84,000 KRW
- **Jeju Air (www.jejuair.net)**
  Promotion fare (Mon~Thur): 58,800 KRW / Normal fare (Fri-~Sun): 67,600 KRW
- **Jin Air (www.jinair.com)**
  Promotion fare (Mon~Thur): 58,800 KRW / Normal fare (Fri-~Sun): 67,600 KRW

● Free Shuttle (Jeju Int'l Airport ➡ ShineVille Luxury Resort)

- Operation Time : 08:30 / 09:00 / 10:30 / 11:00 / 13:30 / 15:30 / 17:00 / 20:30
- Place of departure : Jeju Int'l Airport parking lot no.7, Limousine bus with grey Shineville logo

● Taxi (Jeju Int'l Airport ➡ ShineVille Luxury Resort)

- Cost of Pyo-sun(Inc.) Call Taxi service : 25,000 KRW (064-787-5252/8282)
- Cost of Jeju(Inc.) Taxi service : 35,000 KRW