

**IBRO-APRC ASSOCIATE SCHOOL
ON BASIC TECHNIQUES IN NEUROSCIENCE**
The 1st Ulaanbaatar School, Mongolia, September 17 – 22, 2018

Detailed program (day by day activities)

The IBRO-APRC Associate School on Basic Techniques in Neuroscience 2018 (Ulaanbaatar, Mongolia) will provide a 6-day program including comprehensive lectures, group discussions, and hands-on techniques. All lectures will be conducted in the Core Laboratory, Mongolian National University of Medical Sciences (MMNUS).

Sunday, September 16 th , 2018: Registration & Hotel check-in	
Day 1 : Monday, September 17th	
9:00-9:30	Registration
9:30-10:00	a) Opening ceremony b) Interactions between school faculties and students c) School Memorial Photography
10:00-11:00	Lecture 1: Cell signaling in the brain
11:00-11:15	Tea break
11:15-12:00	Technical lecture 1: Cell culture using ENDD cell line
12:00-13:00	Lunch
13:00-14:00	Lecture 2: Molecular cloning and applications of CRISPR-CAS
14:00-14:15	Tea break
14:15-15:00	Technical lecture 2: DNA extraction protocols
15:00-17:00	Lab training course 1: Preparation for cell culture
17:00-19:00	Welcome dinner & back to hotel
Day 2 : Tuesday, September 18th	
9:00-10:00	Invited lecture 1:
10:00-10:15	Tea break
10:15-11:15	Lecture 3: Neuroinflammation
11:15-12:00	Technical lecture 3: Essentials in RT-qPCR
12:00-13:00	Lunch
13:00-14:00	Lecture 4: Gene sequencing in neurodegenerative disorders
14:00-14:15	Break
14:15-15:00	Technical lecture 4: Genotyping methods
15:00-17:00	Lab training course 2: Culturing cell lines
17:00-18:00	Dinner & back to hotel
Day 3 : Wednesday, September 19th	
9:00-10:00	Lecture 5: Neuroendocrinology
10:00-10:15	Tea break
10:15-11:00	Technical lecture 5: Insulin tolerance test for rodents
11:00-12:00	Lecture 6: Consciousness and neural correlates
12:00-13:00	Lunch
13:00-13:30	Technical lecture 6: Cell viability assay

13:30-14:00	Technical lecture 7: Nitric oxide determination	
14:00-14:15	Tea break	
14:15-15:00	Visit to the start-up companies of MNUMS–Entrepreneurship	
15:00-17:00	Group Discussion 1: Poster presentations	
17:00-18:00	Dinner & back to hotel	
Day 4 : Thursday, September 20th		
9:00-10:00	Invited lecture 2: Developmental neuroscience	
10:00-10:15	Tea break	
10:15-12:00	Invited lecture 3: Behavioural Neurophysiology	
12:00-13:00	Lunch	
13:00-14:00	Technical lecture 8: Primary neuronal cell culture	
14:00-14:15	Tea break	
14:15-15:00	Group discussion 2: Oral presentations (selected students)	
15:00-17:00	Lab training course 3: Experiments based on the cell cultures	
17:00-18:00	Dinner & back to hotel	
Day 5 : Friday, September 21st -The 5th Annual Meeting of MNS		
9:00-10:30	IBRO lectures	
10:30-10:45	Coffee break	
10:45-12:00	IBRO lectures	
12:00-13:00	Lunch break	
13:00-13:30	Opening Ceremony of The 5 th Annual Meeting of MNS	
13:30-13:40	Meeting memorial photography	
13:40-16:00	Plenary lectures	
16:00-17:30	Introductory lectures	
18:00-21:00	Welcome reception	
Day 6 : Saturday, September 22nd- The 5th Annual Meeting of MNS		
	Hall A	Hall B
9:00-10:30	Neuroscience	Neuroimaging
10:30-10:45	Coffee break	
10:45-12:00	Neurology	Neurosurgery
12:00-13:00	Lunch break	
13:00-14:45	Psychiatry	Satellite event 1
14:45-15:00	Coffee break	
15:00-16:30	Social Psychology	Satellite event 2
16:30-17:00	Closing remarks& Award Ceremony	
17:00-18:00	Dinner & back to hotel	
Day 7 : Sunday, September 23rd –Cultural exchange program		
10:00-17:00	Check-out from hotel	
17:00-18:00	School Organizing Committee Meeting	

LECTURES, EXPERIMENTAL MODULES, AND GROUP DISCUSSIONS

- Proposed lectures and technical lectures:
 - Invited Lecture 1: Prof. Nansalma (Mongolian National University, Mongolia)
 - Invited Lecture 2: Masanori Murayama (Riken Brain Science Institute, Japan)
 - Invited Lecture 3: Tetsuya Hiramoto (Kyushu University, Japan)
 - Lecture 1: Cell signalling in the brain (BilegtsaikhanTs, MNUMS)
 - Lecture 2: Molecular cloning and applications of CRISPR-CAS systems in neurosciences (Tsevelmaa N, MNUMS)
 - Lecture 3: Neuroinflammation (Enkhsaikhan L, MMUMS)
 - Lecture 4: Gene sequencing in neurodegenerative disorders (Sevjidmaa B, MNUMS)
 - Lecture 5: Neuroendocrinology (Damdendorj B, MNUMS)
 - Lecture 6: Consciousness and neural correlates (Battuvshin L, MNUMS)
 - Technical lecture 1: Cell culture using ENDD cell line (Baljinnyam T, IMS)
 - Technical lecture 2: DNA extraction protocols (Enkhsaikhan L, MMUMS)
 - Technical lecture 3: Essentials in RT-qPCR (Jambaldorj J, MNUMS)
 - Technical lecture 4: Genotyping methods (Sevjidmaa B, MNUMS)
 - Technical lecture 5: Insulin tolerance test for rodents (Damdendorj D, MNUMS)
 - Technical lecture 6: Cell viability assay (Javkhlan B, MNUMS)
 - Technical lecture 7: Nitric oxide determination (Baasansuren E, MNUMS)
 - Technical lecture 8: Primary neuronal cell culture (Darambazar G, MNUMS)
 - IBRO Lectures: (The 5th Annual Meeting of MNS)
- Experimental modules:
 - Lab training course 1: Preparation for cell culture (Tsevelmaa N, MNUMS)
 - Hands-on session 1-1: Aliquoting of penicillin streptomycin mixture (Javkhan B, MNUMS)
 - Hands-on session 1-2: Heat inactivation of fetal bovine serum (Uranbileg U, MNUMS)
 - Hands-on session 1-3: Nucleic acid isolation (Khulan, MNUMS)
 - Lab training course 2: Culturing cell lines (Tsevelmaa N, MNUMS)
 - Hands-on session 2-1: Refreshing cell line (Baasansuren E, MNUMS)

Hands-on session 2-2: Cell counting method (Baljinnyam T, MNUMS)

Hands-on session 2-3: Nucleic acid quantification (Batkhisig M, MNUMS)

Lab Training Course 3: Experiments based on the cell cultures (Tsevelmaa N, MNUMS)

Hands-on session 3-1: Changing medium and passaging cell line (Khulan U, MNUMS)

Hands-on session 3-2: Preparation of nitrite standard reference curve (Batkhisig M, MNUMS)

Hands-on session 3-3: Determination to nitric oxide (Baasansuren E, MNUMS)

- Group discussions
Group discussion 1: Poster presentations (all students)
Group discussion 2: Oral presentations (selected students)
- Entrepreneur tour
Video introduction to start-up companies of MNUMS
Visit to Erdem Pharma start-up pharmaceutical company of MNUMS