

Report on the ISN-APSN-SNCI sponsored workshop on “Modern Neurochemical techniques to understand brain functions” held at NIMHANS and NCBS, Bangalore during Jan 7-16, 2008

ISN-APSN-SNCI sponsored workshop was held concurrently at National Institute of Mental Health & Neurosciences (NIMHANS) and National Center for Biological Sciences (NCBS), Bangalore. The details of the workshop were provided in our website (www.sncimeet2008.org) specially created for this purpose. A total of twenty applications were received from the aspirants all over the country. The Organizing Secretary, along with the scientific committee members, scrutinized and selected eight applicants to take part in the workshop. For overseas applicants, Dr. Alfreda Stadlin received the applications and seven were selected (Three from Sri Lanka, two from Thailand, one each from Bangladesh and Pakistan). Out of those, only two candidates could attend the workshop.

The program at NIMHANS began with welcome address by the Organizing Secretary on the morning of Jan 7, 2008. He presented an overview of the workshop and briefly explained the techniques to be taught in the workshop. All the participants were then divided into two batches of five each with the first batch undergoing the training from Jan 7-11, 2008 and the second batch from Jan 12-16, 2008. While one batch was at NIMHANS, in parallel, the other batch was trained at NCBS. After one round, the batches were exchanged between the two Institutes. The participants were provided with workshop kit containing detailed protocols, programme and schedule.

Each day of the workshop began with scientific lectures by the faculty in areas related to the hands-on training provided. The topics included (1) Animal models: Role and scope in biomedical research; (2) Receptor mediated signal transduction; (3) Neural plasticity and brain repair; (4) Proteomics and neurodegenerative disorders; (5) Neurotransmitters and brain function; (6) Therapeutic aspects of neurodegenerative diseases.

The participants were then provided with hands-on training in the following techniques: (i) Dissection of different regions from rat brain; (ii) Preparation of synaptosomal membrane proteins and their estimation; (iii) Competitive radioligand binding assays and estimation of the density and affinity of receptors; (iv) Isolation of mitochondria from mouse brain; (v) Characterization of peroxynitrite treated mitochondria by SDS-PAGE followed by Western blotting; (vi) 2D-electrophoresis of proteins followed by in-gel tryptic digestion of selected proteins for mass spectrometry; (vii) Estimation of biogenic amines and their metabolites by HPLC with electrochemical detection; (viii) Estimation of amino acids in the brain by HPLC using fluorescence detector with pre-column derivatization; (ix) Assay of acetyl cholinesterase activity in discrete regions of the rat brain; (x) Extraction of total RNA from brain tissue and determination of specific mRNA transcripts by RT-PCR; (xi) Generation of neural stem cells – embryonic neurospheres from mouse; (xii) Characterization of differentiation of stem cells by immunostaining and fluorescence microscopy.

The training program concluded with group discussions followed by individual presentations by all the participants in the afternoon of the final day i. e. Jan 16, 2008. Two APSN teachers, Prof. Peter Dodd and Dr. Alfreda Stadlin took part in discussions along with other teachers of the workshop and suggestions made to candidates with regard to their individual experiments. All participants were encouraged to present their work as poster during the

International Symposium on Regenerative Neuroscience on Jan 17-18, 2008 and were given certificate of participation. Three of them received best poster awards.

The organizing committee wholeheartedly thanks ISN for providing financial assistance to conduct hands on training workshop at NIMHANS and NCBS.

Dr. M. N. Subhash
Organizing Secretary

Financial report

	Expenditure	USD
1.	Postage charges	150-00
2.	Consumables at NCBS	1545-00
3.	Consumables at NIMHANS	1875-00
4.	Cartridges, rubber stamps, Xerox and stationery	335-00
5.	Printing charges for protocol manuals	197-00
6.	Folders and badges	231-00
7.	Meeting expenses at NIMHANS	69-00
8.	Meeting expenses at NCBS	75-00
9.	Accommodation at NIMHANS	177-00
10.	Accommodation at NCBS	75-00
11.	Accommodation for APSN school teachers	688-00
12.	Catering expenses at NIMHANS	425-00
13.	Catering expenses at NCBS	354-00
14.	Transportation charges from NIMHANS	121-00
15.	Transportation charges from NCBS	125-00
16.	TA bill to APSN teachers	3330-00
17.	TA for workshop (Indian) participants	592-00
18.	TA for overseas participants	811-00
19.	Misc. expenses towards workshop arrangements	250-00
20.	Secretarial assistance	500-00
21.	Creation and maintenance of SNCI website	375-00
22.	Bank commission charges	200-00
	Total	12,500-00

Funds received from ISN:	USD 16 000-00
Expenditure incurred:	USD 12 500-00
Unspent balance:	USD 3 500-00

LIST OF SPEAKERS FOR THE SNCI SYMPOSIUM

ORAL PRESENTATIONS

No.	Speaker's name	Presentation no.
1.	Kalluri Subba Rao UOH, Hyderabad, India	PL1
2.	D. Nagaraja NIMHANS, Bangalore, India	PL2
3.	P.R. Dodd SMMS, Brisbane, Australia	S1
4.	T.R. Raju NIMHANS, Bangalore, India	S2
5.	Shireen Vali Cellworks, Bangalore, India	S3
6.	M.M. Panicker NCBS, Bangalore, Indi	S4
7.	M.K. Thakur BHU, Varanasi, India	S5
8.	C.S. Paulose CUSAT, Cochin, India	S6
9.	P. Prakash Babu UOH, Hyderabad, India	S8
10.	K.P.Mohana Kumar IICB, Kolkata, India	S9
11.	Anita Jagota UOH, Hyderabad, India	S10
12.	Sarada Subramanian NIMHANS, Bangalore, India	S11
13.	Kazuhiro Ikenaka Natl Inst for Physiol Sci, Okazaki, Japan	S12

14. **R. V. Omkumar**
RGCB, Thiruvananthapuram, India **S13**

ISN SPONSORED PRESENTATIONS

- | No. | Speaker's name | Presentation no. |
|------------|---|-------------------------|
| 1. | Dandan Sun
University of Wisconsin, Madison, USA | S7 |
| 2. | Purnima Narasimhan
Stanford University, Stanford, USA | S14 |
| 3. | Raghu Vemuganthi
University of Wisconsin, Madison, USA | S15 |
| 4. | Michael Chopp
Henry Ford Hospital, Detroit, USA | S16 |
| 5. | Hazell AS
University of Montreal, Montreal, Canada | S17 |

CONFERENCE POSTERS

- | No. | Speaker's name | Presentation no. |
|------------|---|-------------------------|
| 1 | Balagopal Pai S.
RGCB, Thiruvananthapuram, India | P8 |
| 2 | Umakanta Swain
UOH, Hyderabad, India | . |
| 3 | Soumya Paul
RGCB, Thiruvananthapuram, India | P11 |
| 4 | Ojaswini Pandey,
Cellworks, Bangalore, India | P10 |
| 5 | Zeba Sultana
Cellworks, Bangalore, India | P17 |
| 6 | Mathew Steephan
RGCB, Thiruvananthapuram, India | |

7	Anand Sripada, E. UOH, Hyderabad, India	P15
8	Arumugam Padmini UOH, Hyderabad, India	P9
9	A.D.J Titus NIMHANS, Bangalore, India	P19
10	V. Bhagya NIMHANS, Bangalore, India	P1
11	K. Mahati NIMHANS, Bangalore, India	P7
12	J. Veena NIMHANS, Bangalore, India	P20
13	M.Y. Reddy UOH, Hyderabad, India	P12
14	Kapil M. Shah UOH, Hyderabad, India	P14
15.	Geetika Gupta UOH, Hyderabad, India	
16.	Manorama Patri UOH, Hyderabad, India	
17.	Prabhakar Eeka UOH, Hyderabad, India	

WORKSHOP POSTERS

<i>No.</i>	<i>Speaker's name</i>	<i>Presentation no.</i>
1	Parthiban K Velayutham CMC, Vellore, India	P21
2	Manpreet Kaur, Guru Nanak Dev Univ, Amritsar, India	P3
3	Sarika BHU, Varanasi, India	P13

4	Anu Joseph CUSAT, Cochin, India	P2
5	Dinesh Lakhanpal Guru Nanak Dev Univ, Amritsar, India	P6
6	Amees Krishnakumar CUSAT, Cochin, India	P4
7	Pallab Bhattacharya BHU, Varanasi, India	
8	Suneel Kumar AIIMS, New Delhi, India	P5
9	Dr. Chandima Ramesh Sri Lanka	
10	Mr. Nalin Dammika Sri Lanka NA	
11	Dr. Lalajini Velayuthapillai Univ. of Sri Jayawardanapura, Sri Lanka	P23
14	Mohammad Arif University of Dhaka, Dhaka, Bangladesh	P22
15	Mr. Farhan Ul Haq Subhani Bolan Medical college, Quetta, Pakistan	P16

