

**MINUTES OF THE 9th MEETING OF THE ACADEMIC COUNCIL HELD ON
19th JULY 2016 AT 2.00 P.M. AT NBRC, MANESAR**

The Ninth Meeting of the Academic Council of NBRC was held at NBRC, Manesar on 19th July 2016. The following members attended the meeting :

1. Prof. Subrata Sinha	: Chairman
2. Prof. Ishan Patro	: Member
3. Prof. Gurcharan Kaur	: Member
4. Prof. Prasun K.Roy	: Member
5. Prof. Nihar R.Jana	: Member
6. Prof. Pravat Mandal	: Member
7. Prof. Pankaj Seth	: Member
8. Dr. Shiv K. Sharma	: Member
9. Dr. Soumya Iyengar	: Member
10. Dr. Nandini Singh	: Member
11. Dr. Yoganarasimha	: Member
12. Dr. Ranjit Giri	: Member
13. Dr. Sourav Banerjee	: Member
14. Dr. Anindya Ghosh Roy	: Member

Item No. 9 (1): Welcome by Chairman

Prof. Subrata Sinha, Chairman, Academic Council, welcomed all the members to the ninth meeting of the Academic Council and introduced external members of the Academic Council Prof. Ishan Patro and Prof. Gurcharan Kaur to other members.

The Chairman expressed appreciations to the previous Academic Council members for their contributions in developing the academic programmes of NBRC.

Prof. Sudha Bhattacharya, external member of the Academic Council, Prof. Neeraj Jain, Dr. Anirban Basu, Dr. Ellora Sen and Dr. Arpan Banerjee of NBRC could not attend the meeting due to prior commitments.

Item No. 9 (2): Confirmation of the minutes of the eighth meeting of the Academic Council.

The minutes of the eighth meeting of the Academic Council were confirmed, as no comments were received from the Members.

Item No. 9 (3): Action taken on the recommendation made by Academic Council in its 8th meeting.

The Academic Council noted and approved the action taken on the recommendations made in its 8th meeting.

Item No. 9 (4): Ratification of following points as approved by the Board of Studies of NBRC in its 13th and 14th meetings:

(i) Revision of Syllabus - M.Sc.(Neuroscience) Practicals.

The Academic Council approved the decision taken by the Board of Studies of NBRC and attached as **Annexure-A**

(ii) Rephrasing the content of the relevant regulation for submission of Synopsis and Thesis.

The need for rephrasing the content of the relevant regulation related to submission of Synopsis and Thesis was discussed in 13th meeting of BOS and approved to be rephrased as follows;

“The synopsis should be submitted by the student who is in the finishing stage of his / her research work. The synopsis should be seen by the Doctoral Committee and after obtaining approval of the Doctoral Committee, the student should submit the thesis subsequently”.

The Academic Council approved the decision of taken by the Board of Studies of NBRC.

(iii) Evaluation of PhD thesis by foreign examiners.

BOS members discussed the matter regarding availability of examiners with expertise in the field within India currently and also the time spent on getting the PhD thesis evaluated outside India in detail in 14th meeting of BOS and decided that the evaluation of PhD thesis by foreign examiner be made optional.

The Academic Council approved the decision of taken by the Board of Studies of NBRC.

Item No. 9 (5):

Ratification of the following points, approved by Chairman, Academic Council, NBRC on 21 July 2015:

- (i) M.Sc. Dissertation submission Fee – Rs. 1,000/-
- (ii) Reimbursement towards M.Sc. Dissertation submission – Rs. 2,000/-
- (iii) Performance reward for 1st and 2nd rank holder in M.Sc. Coursework – Rs. 10,000/- and Rs. 5,000/- respectively

The decisions taken by the Chairman, Academic Council, NBRC was ratified by the Academic Council.

Item No. 9 (6):

Any other point with the permission of the Chair.

As there were no other points, the meeting ended with vote of thanks to the Chair.

Syllabus for M.Sc. (Neuroscience) Practicals

SEMESTER - I

MOLECULAR BIOLOGY

Preparation of solution

Isolation of single colony and bacterial culture

Transformation

DNA electrophoresis

DNA extraction

Quantitation of DNA

Restriction analysis of DNA

Elution of DNA fragments

Ligation of DNA

Screening of positive clones

Extraction of total RNA, PCR

Extraction of Protein and sample preparation

Protein estimation and standard curve

SDS-PAGE and Coomassie staining

Immunoblot

Cell culture

Bright-field and Fluorescence Microscopy

SEMESTER - II

NEUROANATOMY *

Observation of the following in IAEC approved ongoing research projects
Tissue processing for microscopy
Cryo-sectioning
Staining – Nissl staining
Immunohistochemistry (IHC)

Observation of stained slides for differentiating cell types and brain regions

NEUROPHYSIOLOGY *

Observation of the following in IAEC approved ongoing research projects

Vibratome sectioning
Ex vivo slice physiology recordings
In vivo neurophysiology – anaesthetized animal recordings
In vivo neurophysiology – awake animal recordings
2-photon imaging

COMPUTATIONAL NEUROSCIENCE

Introduction to MATLAB programming
LFP and spike data analysis
EEG and ERP recordings and analysis
Magnetoencephalography

NEUROIMAGING

Revision of Radiological Anatomy
Demonstration of
Magnetic Resonance Imaging
Functional Magnetic Resonance Imaging
Magnetic Resonance Spectroscopy
Analysis of fMRI data (SPM)

COGNITIVE SCIENCE

Introduction to Eprime
Paradigm design and Data collection
Neuropsychological Assessment

BIOSTATISTICS

SPSS or SigmaStat: t-test; ANOVA
Analysis of data collected in Cognitive Science experiment

*** Students will be exposed to these techniques as and when the experiments happen.**