

## MHANS

(INSTITUTE OF NATIONAL IMPORTANCE)

## PROSPECTUS 2014=15

DISCLAIMER: DIRECTOR, NIMHANS RESERVES ALL THE RIGHT TO MODIFY/CHANGE/ADD/DELETE ANY OF THE CONTENTS, IN WHOLE OR IN PART, OF THE PROSPECTUS. AMMENDED ON 9<sup>TH</sup> JANUARY 2014 & 17<sup>TH</sup> FEBRUARY 2014

PHONE: 080 26995013/15 E-MAIL: academic@nimhans.kar.nic.in WEBSITE: www.nimhans.kar.nic.in FAX: 080 26566811/26564830

### **CONTENTS**

PAGE NO.

Introduction	3
Academic Calendar	4
Institute Authorities	6
Heads of Departments	6
Central Facilities	8
Hospital Administration	8
General Administration	9
Courses	
Postgraduate Degree/Diploma Courses	10
B.Sc./Diploma Courses	13
Qualifying Examination	14
Sponsored Candidates	15
Foreign Nationals	16
Minimal Qualification for Admission	16
Age Limit	23
Reservation of Seats	24
Emoluments	25
Enclosures	26
Sponsorship Certificate	27
OBC Certificate	28
Fee Structure	
Indian Nationals	29
Foreign Nationals	30
Courses and Faculty	31
Method of Selection	69
Date of Joining	71
Prizes	71
General Instructions	72
Guidelines for Online Entrance Test	74
Warning	75
Ragging	75
Complaints Committee	76
Accommodation	76
Kannada Language Learning Programme	76
Alumni Association	77
Central Facilities	·
Advanced Center for Ayurveda in Mental Health & Neuro Sciences	77
Biomedical Engineering	77
Cognitive Neurosciences	77
Free Legal Aid Cell – NIMHANS	77
Neuro Biology Research Centre, NIMHANS	78
NIMHANS Centre for Well Being	78
NIMHANS Gymkhana	78
Photography	78
Engineering Section	78
Convention Centre	78
Central Animal Research Facility	79
Library & Information Services	79
Centre for Public Health	79
Yoga Centre	80
Canteen	80
Publication	80

# NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES (INSTITUE OF NATIONAL IMPORTANCE) BANGALORE INTRODUCTION

The Government of India established the All India Institute of Mental Health in 1954 in association with the Mental Hospital of the Karnataka Government. Major objective of the Institute was manpower development in the field of mental health and neurosciences. The Mental Hospital, Bangalore, which had built up certain traditions since 1938 in matters related to undergraduate training in the field of Psychiatry, was chosen by the Government of India as the Centre of training. In tune with this objective, two diploma courses — one in Psychological Medicine (DPM) and the other in Medical Psychology (DMP) were started in January 1955. These were followed by a Post Certificate Course in Psychiatric Nursing (DPN) in January 1956. The Institute was affiliated to the University of Mysore for the courses.

Subsequently, the Institute got affiliated to the Bangalore University in 1964 when the latter was established. The Bangalore University established a separate faculty of Mental Health and Neurosciences. The Institute introduced MD in Psychological Medicine in 1966, Ph.D. in Clinical Psychology in 1967 and Post Graduate Diploma in Psychiatric Social Work (DPSW) in 1968. DM in Neurology and M.Ch. in Neurosurgery courses were started in 1970. Later, Ph.D. programmes in different disciplines were introduced.

The All India Institute of Mental Health and the Mental Hospital of the Government of Karnataka were amalgamated into an autonomous Institute and the National Institute of Mental Health and Neuro Sciences (NIMHANS) came into existance in 1974. In the subsequent years, many post-graduate training programs were started in the areas of Neurophysiology, Biophysics and Psychiatric Nursing. In 1994, NIMHANS was granted the "Deemed to be University" status under which the Institute awards degrees and diplomas. DM in Neuroradiology, Post Doctoral Fellowship in Neuroanaesthesia, Post Doctoral Fellowship in Neuropathology and M.Phil. in Neurosciences are the new courses initiated after the Institute was conferred the status of Deemed University. In the year 2006, B.Sc. in Nursing and B.Sc. in Radiography courses were started. In the year 2008, Post Doctoral Fellowship in Child & Adolescent Psychiatry and in the year 2010, Post Doctoral Fellowship in Neuroinfection and B.Sc. in Anaesthesia Technology were introduced. In the year 2011, DM in Neuroanaesthesia, DM in Child & Adolescent Psychiatry, Post Doctoral Fellowship in Neurology with special emphasis on a) Epilepsy and b) Movement disorders courses were started. New courses started from the academic year 2012-13 include Post Doctoral Fellowship in Acute Care & Emergency Psychiatry, Post Doctoral Fellowship in Community Mental Health, Post Doctoral Fellowship in Addiction Medicine, Post Doctoral Fellowship in Consultation Liaison Psychiatry, Post Doctoral Fellowship in Geriatric Psychiatry, Post Doctoral Fellowship in Obsessive Compulsive Disorder & Related Disorders and Post Doctoral Fellowship in Clinical Neuro Sciences & Therapeutics in Schizophrenia. NIMHANS has been declared as an Institute of National Importance vide the Gazette of India Notification dated 14.09.2012 by the Government of India. Ph.D. degree in History of Psychiatry, Fellowship in Psychosocial Support Disaster Management and Masters in Public Health were introduced from 2013-14. The following new courses will commence from 2014-15: Post Doctoral Fellowship in Hospital Infection Control, Post Doctoral Fellowship in Neuromuscular Disorder, Post Doctoral Fellowship in Stroke, Post Doctoral Fellowship in Transfusion Medicine, Post Doctoral Fellowship in Neurocritical Care and Fellowship in Psychiatric Rehabilitation.

The special feature of this Institute is its multidisciplinary approach in patient care, training programmes and also in the promotive, preventive and curative aspects of clinical services in Mental Health and Neurosciences. The manpower development programmes at NIMHANS reflect the extent to which the Institute has succeeded in fusing together and nurturing behavioural sciences, neurosciences, basic biological sciences and ancient health systems under one roof.

#### ACADEMIC CALENDAR

#### **SESSION 1**

#### PG Medical, Non Medical, Superspeciality, PDF, Ph.D. and Diploma Courses

a. Advertisement regarding admission
 b. Applications available online from
 c. Last date for online submission of application
 d. ONLINE entrance test
 1<sup>st</sup> January 2014
 d. ONLINE entrance test
 29<sup>th</sup> & 30<sup>th</sup> March 2014

e. Date of Interview & Counseling
f. Commencement of courses

1<sup>st</sup> week of June 2014

1<sup>st</sup> July 2014

g. Last date for admission 8<sup>th</sup> **July 2014** 

#### **SESSION 2**

#### **B.Sc. and DCNT/DPN/DNN courses**

a. Advertisement regarding admission
 b. Applications available online from
 1<sup>st</sup> week of May 2014
 1<sup>st</sup> May 2014

c. Commencement of courses 1st August 2014
d. Last date for admission 8th August 2014

#### **EXAMINATIONS**

#### **EXISTING BATCH**

1. Annual Examinations

PG Medical & Non Medical courses

DPN/DNN courses Superspeciality courses

B.Sc. Nursing courses (I, II, III Years)

B.Sc. Nursing course (IV Year)

B.Sc. Anaesthesia Tech.course (I, II, III Years)

B.Sc. Radiography course (I, II, III Years)

**DCNT Course** 

Pre-Ph.D.

**Second Monday of June Third Monday of July** Third Monday of July Third Monday of July Second Monday of July 2<sup>nd</sup> Monday of Feb./Aug.

Second Monday of April

Third Monday of April Second Monday of July

2. Supplementary Examinations

PG Medical & Non Medical courses

Superspeciality courses

B.Sc. courses

**Second Monday of October** Second Monday of January Second Monday of December,

#### **NEW BATCH EFFECTIVE FROM 2014-15**

1. Annual Examinations

PG Medical & Non Medical courses

DPN/DNN courses

Superspeciality courses

B.Sc. Nursing courses (I, II, III Years)

B.Sc. Nursing course (IV Year)

B.Sc. Anaesthesia Tech.course (I, II, III Years)

B.Sc. Radiography course (I, II, III Years)

**DCNT Course** 

Pre-Ph.D.

**Second Monday of June** Third Monday of July **Second Monday of June Second Monday of June** Third Monday of July Third Monday of July Third Monday of July Second Monday of July 2<sup>nd</sup> Monday of Feb./Aug.

2. Supplementary Examinations

PG Medical & Non Medical courses

Superspeciality courses

B.Sc. courses

Second Monday of November **Second Monday of November** Second Monday of December,

#### **CELEBRATIONS**

14th February 1. Institute Day

2. Convocation December/January

12<sup>th</sup> May 3. International Nurses' Day

5<sup>th</sup> September 4. Teachers Day

## INSTITUTE AUTHORITIES

Dr.P.Satish Chandra- Director/Vice Chancellor	<b>Telephone</b> 26995001 26995002 26564140 26561811 26565822
Dr.V.Ravi - Registrar	26995005 26995006 26564199
Dr.G.S.Umamaheswara Rao – Dean (Neurosciences)	26995004 26995416
Dr.D.K.Subbakrishna – Dean (Basic Sciences)	26995004 26995116
Dr.Shoba Srinath- Dean (Behavioural Sciences)	26995004 26995351
HEADS OF THE DEPARTMENTS	
BIOPHYSICS Dr.Preeti G.Joshi, Professor	26995102
BIOSTATISTICS Dr.D.K.Subbakrishna, Professor	26995116
CHILD & ADOLESCENT PSYCHIATRY Dr.Satish Chandra Girimaji, Professor	26995266
CLINICAL PSYCHOLOGY Dr.Anisha Shah, Professor	26995186
EPIDEMIOLOGY Dr.G.Gururaj, Professor	26995245
<b>HUMAN GENETICS</b> Dr.Rajalakshmi Gope, Professor	26995125
MENTAL HEALTH EDUCATION Dr.Jayashree Ramakrishna, Professor	26995155
<b>NEUROANAESTHESIA</b> Dr.K.R.Madhusudan Reddy, Professor	26995412

NEUROCHEMISTRY Dr.Rita Christopher, Professor	26995162
NEUROIMAGING & INTERVENTIONAL RADIOLOGY Dr.Arun Kumar Gupta, Professor	26995425
NEUROLOGY Dr.Nalini.A, Professor	26995139
NEUROMICROBIOLOGY Dr.R.Ravikumar, Professor	26995726
NEUROPATHOLOGY Dr.T.C.Yasha, Professor	26995130
NEUROPHYSIOLOGY Dr.T.R.Raju, Sr. Professor	26995168
NEUROSURGERY Dr.B.Indira Devi, Professor	26995403
NEUROVIROLOGY Dr.V.Ravi, Professor	26995126
NURSING Dr.K.Lalitha, Professor	26995226
NEUROLOGICAL REHABILITATION Dr.Arun B.Taly, Professor	26995143
PSYCHIATRIC REHABILITATION Dr.S.K.Chaturvedi, Professor	26995264
PSYCHIATRIC SOCIAL WORK Dr.K.Sekar, Professor	26995234
PSYCHIATRY Dr.Mathew Varghese, Professor	26995269
PSYCHOPHARMACOLOGY Dr.N.Pradhan, Sr. Professor	26995108
SPEECH PATHOLOGY & AUDIOLOGY Dr.N.Shivashankar, Professor	26995570

#### CENTRAL FACILITIES

ADVANCED CENTER FOR AYURVEDA IN MENTAL
HEALTH AND NEURO SCIENCES

Dr.D.Sudhakar, Asst. Director (Ay) 26995243

**BIOMEDICAL ENGINEERING** 

Mrs.M.G.Sindu, Biomedical Engineer 26995220

**CENTRAL ANIMAL RESEARCH FACILITY** 

Dr.J.Suresh Chandra, Sr. Veterinary Officer 26995040

**ENGINEERING** 

Mr.N.L.Sateesh, Asst. Executive Engineer 26995216

**LIBRARY & INFORMATION SERVICES** 

Dr.M.Jayaram, Sr.Professor, Officer-in-charge,
Library & Information Centre 26995031

**PHOTOGRAPHY** 

Dr. Jayashree Ramakrishna, Professor & I/C Head 26995044

**PUBLICATION** 

Dr.M.Jayaram, Sr. Professor, Officer-in-charge, Publication Section 26995036

#### **HOSPITAL ADMINISTRATION**

Dr.V.L.Sateesh
Medical Superintendent 26995201

Dr.V.S.Chandrashekar

Resident Medical Officer 26995203

Mr.M.Parameshwara

Asst. Admn. Officer (OPD) 26995524

Mr. M.Parameshwara

I/C Asst. Admn. Officer (Hospital) 26995205

Smt. N.Bhanumathi

I/C Asst. Admn. Officer (RS) 26995295

### **GENERAL ADMINISTRATION**

Mr.R.Thimothy Raj, Dy. FA & CAO	26995019
Mrs.G.Jayamonie, Principal Private Secretary	26995002
Mr.D.Rajendran, Administrative Officer	26995008 26995021
Mr.M.N.Shankarsa, Administrative Officer (Academic & Evaluation)	26995012
Mr.A.Loganathan, Accounts Officer	26995775
Mr.B.G.Balarama, Accounts Officer	26995018
Mr.S.Venkatesh, Special Officer	26995023
Mr.A.Loganathan, Officer i/c, Project Section	26995016
Mrs.S.R.Suvarna Bai, Asst. Admn. Officer (Accounts)	26995019
Mr.Parameswara, Asst. Admn. Officer (Co-Ordination)	26995007
Mr.T.Ravi, Asst. Administrative Officer (Claims)	26995026
Mr.P.Shankarappa, Asst. Administrative Officer	26995022
Mr.J.Ramaiah, Asst. Administrative Officer	26995020
Mr.J.Sandrews Xavier, I/C Asst. Administrative Officer (Personnel)	26995773
Ms.Lakshmi Kantha.K, Asst. Administrative Officer (Accts)	26995022
Dr.John P.John, Hon. Warden, NIMHANS Hostels	26995349
Dr.D.N.Nanda Kumar, Hon. Deputy Warden, NIMHANS Hostels	26995159
Dr.H.R.Aravinda, Hon. Deputy Warden, NIMHANS Hostels	26995810
Dr.Geetha Desai, Hon. Deputy Warden, Cauvery Hostel	26995251
Mr.Praseed Kumar, Public Relation Officer	26995010

#### COURSES

#### A. POST GRADUATE DEGREE/DIPLOMA COURSES

A. I OOI GRADOATE DEGREE/DII EGIIIA GOGRGEG	N (O (
	No. of Seats
1. Ph.D.	
1.1 Institute Fellowships	
a) Ph.D. degree in Clinical Psychology	03
b) Ph.D. degree in Neurophysiology	02
c) Ph.D. degree in Psychiatric Social Work	01
d) Ph.D. degree in Speech Pathology & Audiology	01
e) Ph.D. degree in Biostatistics	01*
ICMR Fellowship	
f) Ph.D. degree in Clinical Neurosciences	05
Under Wellcome Grant	
g) Ph.D. degree in History of Psychiatry	02

<sup>\*</sup>If no candidate is selected for Ph.D. in Biostatistics, the seat will be offered to a eligible candidate in Ph.D. in Clinical Psychology

1.2 External Fellowships: Candidates with Sponsorship from Government of India/State Govt. Institutions, Deputed or Sponsored from a recognized University, Fellowships from Government Agencies like UGC, CSIR, ICMR, DBT (JRF/SRF only) and permanent employees/tenured employees of NIMHANS can also apply for Ph.D. in the various departments of this Institute, which will be considered at the discretion of the competent authority for Entrance Test and interview to be held during the months of March and June. Candidates who have cleared the UGC, CSIR, ICMR, DBT (JRF/SRF only) qualifying exams are exempted from the Entrance Test.

All the candidates have to attend an interview and qualify by obtaining a minimum of 50% marks to be eligible for admission to the Ph.D. programme. Mere qualifying in Entrance test and interview does not entitle admission to Ph.D. course. Selection is subject to availability of eligible Guides in the respective departments. They have to work on full-time basis for a minimum period of THREE years. Entrance Test and interview for selection of candidates for Ph.D. programmes will be held in the following departments in the months of March and June.

e) g) i) N k) m) o) q)	Biophysics Child & Adolescent Psychiatry Human Genetics Mental Health Rehabilitation Neurological Rehabilitation Neuromicrobiology Neurophysiology Nursing Psychiatry Speech Pathology & Audiology	b) Biostatistics d) Clinical Psychology f) Mental Health Education h) Neurochemistry j) Neuro Imaging & Interventional Radiology l) Neuropathology n) Neurovirology p) Psychiatric Social Work r) Psychopharmacology
2.	DM in Neuroradiology	- 03 Seats (1 for sponsored)
3.	DM degree in Neurology	- 10 Seats (1 for sponsored under Post MD/DNB) (6 Post MD/DNB + 4 Post MBBS)
4.	DM degree in Neuroanaesthesia#	- 04 Seats (1 for sponsored)
5.	DM degree in Child & Adolescent Psychiatry	- 03 Seats (2 for sponsored)
6.	M.Ch. degree in Neurosurgery	- 08 Seats (1 for sponsored under Post MS/DNB) (5 Post MS/DNB + 3 Post MBBS)
7.	MD degree in Psychiatry	- 22 Seats (1 for sponsored)
8.	Diploma in Psychiatry	- 09 Seats (8 seats for Karnataka Domiciles and 1 for sponsored)
9.	Post Doctoral Fellowship in Child & Adolescent Psychiatry <sup>#</sup>	- 03 Seats (2 for sponsored)
10	. Post Doctoral Fellowship in Neuroanaesthesia#	- 04 Seats (2 for foreign##/sponsored)
11	. Post Doctoral Fellowship in Neuroinfection	- 02 Seats (1 for sponsored)
12	. Post Doctoral Fellowship in Hospital Infection Control	- 01 Seat (1 for sponsored)
13	Post Doctoral Fellowship in Neurology a) Epilepsy b) Movement Disorders c) Neuromuscular Disorder d) Stroke	- 02 Seats (1 for sponsored) - 02 Seats (1 for sponsored) - 01 Seat - 01 Seat

<ol> <li>Post Doctoral Fellowship in Neuropathology</li> </ol>	- 02 Seats (1 for foreign##/sponsored)
15. Post Doctoral Fellowship in Transfusion Medicine	- 02 Seats (2 for sponsored)
<ol><li>Post Doctoral Fellowship in Neurological Rehabilitation</li></ol>	- 02 Seats
17. Post Doctoral Fellowship in Acute Care & Emergency Psychiatry	- 02 Seats (1 for sponsored)
18. Post Doctoral Fellowship in Community Mental Health	- 03 Seats (2 for sponsored)
<ol><li>Post Doctoral Fellowship in Addiction Medicine</li></ol>	- 04 Seats (2 for sponsored)
20. Post Doctoral Fellowship in Consultation Liasion Psychiatry	- 02 Seats (1 for sponsored)
21. Post Doctoral Fellowship in Geriatric Psychiatry	- 02 Seats (1 for sponsored)
<ul><li>22. Post Doctoral Fellowship in Obsessive Compulisive disorder &amp; related disorders</li></ul>	- 03 Seats (2 for sponsored)
23. Post Doctoral Fellowship in Clinical Neuro Sciences & Therapeutics in Schizophrenia	- 03 Seats (2 for sponsored)
24. Fellowship in Psychosocial Support Disaster Management	- 08 Seats (4 for sponsored)
25. Fellowship in Psychiatric Rehabilitation*	<ul><li>- 02 Seats (Under Medical) (1 sponsored)</li><li>- 02 Seats (Under Non-Medical) (1 sponsored)</li></ul>
26. M.Phil. in Biophysics	- 03 Seats
27. M.Phil. in Clinical Psychology	- 21 Seats (3 for foreign##/sponsored)
28. M.Phil. in Psychiatric Social Work	- 21 Seats (3 for foreign##/sponsored)
29. M.Phil. in Neurophysiology	- 02 Seats

30. M.Phil. in Neurosciences - 04 Seats

31. Master of Public Health (MPH) - 05 Seats (All 5 for sponsored)

32. M.Sc. in Psychiatric Nursing - 09 Seats

Sponsored candidate means permanent employees sponsored by the State/ Central Government or Public Sector undertaking of State/Central Government.

\*For DM Degree in Neuroanaesthesia courses only: "If no eligible candidates are available under sponsored category, such seats shall be filled by candidates under General Merit Category subject to availability of Senior Residency position at NIMHANS"

##All Foreign Nationals (Holding Passports of Countries other than India), Non Resident Indians and Overseas Citizen of India should apply under Foreign National category only

\*Candidates sponsored by the NGO's also can apply for this course. The sponsorship letter should be in the NIMHANS prescribed format as shown under Sponsorship Certificate. If no candidates are qualified under Medical category, the seats will be filled by the Candidates from the Non-Medical category and vice-versa.

No. of seats

No. of seats

#### B. B.Sc. COURSES

1. B.Sc. in Nursing 77

2. B.Sc. in Radiography 10 (4 for sponsored)

3. B.Sc. in Anaesthesia Technology 06

#### B (1). DIPLOMA COURSES

1. Post Basic Diploma in Psychiatric/Mental Health Nursing 45

2. Post Basic Diploma in Neuroscience Nursing 09

3. Diploma in Clinical Neurophysiology Technology (DCNT) 06 (2 for sponsored)

\*\*23A Post Doctoral Fellowship in Neurocritical Care 02 Seats ICMR Fellowship under Centre for Advanced Research (CAR)

## C. QUALIFYING EXAMINATION REQUIREMENT FOR VARIOUS MEDICAL COURSES

- (a) MBBS degree from a recognized University or from any other University recognized as equivalent thereto by NIMHANS and by the Medical Council of India.
- (b) (i) The candidate should have completed compulsory rotation internship of one year after MBBS or its equivalent recognized by Medical Council of India on or before the date of commencement of course. A certificate to that effect has to be produced. The candidate should have permanent registration with State Medical Council.
  - (ii) In case of Candidates who have not completed the Internship and have not registered with any State Medical Council, but are selected in the counseling, will not be considered for admission unless the Internship Completion Certificate and the State Medical Council Registration Certificate are produced on or before the date of commencement of course failing which, the seat allotted will be cancelled without any further communication and the Candidate next in the order of Merit in the waiting list will be considered.
- (c) (i) Candidates who have MD/MS/DNB/DPM from a recognized University or from any other University recognized as equivalent thereto by NIMHANS and by the Medical Council of India may apply for the course. However, Candidates who are awaiting the results may also appear for the entrance test subject to production of proof of having passed the examination in writing issued by the University on or before the date of commencement of course.
  - (ii) Candidates who are selected for the course at this Institution in the counseling and have not produced the proof of passing in the qualifying examination must produce the proof of passing in the qualifying examination on or before the date of commencement of course failing which, the seat allotted will be cancelled without any further communication and the Candidate next in the order of Merit in the waiting list will be considered.

## C. 2. QUALIFYING EXAMINATION REQUIREMENT FOR VARIOUS NON-MEDICAL COURSES

(a) Candidates with M.Sc./MA/MSW/Ayurvedic Graduation/BE/B.Tech./B.Sc. Engineering should have passed the examination from a University recognized by University Grants Commission (UGC)/Rehabilitation Council of India (RCI), securing not less than 55% of marks in aggregate on or before the date of counseling/interview. Candidates who have appeared for the qualifying examinations and are awaiting results, may also apply. However, such candidates will be eligible to appear for the counseling/interview only if they produce the proof of having passed the examination in writing issued by the University as on the date of counseling/interview.

In case grades are awarded in lieu of marks in the qualifying examination, candidates have to produce a Certificate from the University clearly stating the range of marks into which each of the grades fit, failing which, such applications will be rejected.

- (b) Candidates with Master's degree obtained through research and awarded on the basis of the evaluation of the thesis (from a University recognized by NIMHANS which does not award marks at the master's level) are also eligible to apply for Ph.D. programme.
- (c) Candidates with PUC or 10 + 2 with Physics, Chemistry, Biology and English with 45% aggregate in the above subjects can apply for B.Sc. in Nursing course.
- (d) Candidates with PUC or 10 + 2 with English, Physics, Chemistry, Mathematics and Biology or job oriented diploma courses from a recognized board with an aggregate of 45% can apply for B.Sc. in Radiography course.
- (e) Candidates with PUC or 10 + 2 or equivalent with a Science group having secured an aggregate of 45% in Science subjects for B.Sc. in Anaesthesia Technology course.

#### D. SPONSORED CANDIDATES

- a. Minimum qualifications are the same as indicated under item F.
- b. The candidate should qualify in the Entrance test.
- c. The candidate should produce the sponsorship certificate in the prescribed format.
- d. This certificate should be enclosed along with the application.
- e. Applications without the certificate will not be considered for sponsorship.
- f. 10% relaxation in the qualifying marks of the Entrance Test will be given for all Sponsored/Deputed Candidates applying for Post Doctoral Fellowship courses

#### **E. FOREIGN NATIONALS**

Foreign Nationals are required to submit their applications through the Diplomatic Channel (through the Ministry of External Affairs). They shall also appear for a Common Entrance Test along with the other candidates.

Students possessing foreign qualifications who intend to seek admission to academic courses at NIMHANS are required to produce an EQUIVALENCE CERTIFICATE from Association of Indian Universities/Medical Council of India to facilitate their admission to the course.

The guidelines to obtain an Equivalence Certificate from Association of Indian universities are as follows:

- The candidate should submit degree/diploma certificate together with year-wise academic transcript/marksheet duly authenticated by Indian Mission abroad/concerned foreign Mission in India
- 2. Accreditation status of the degree awarding foreign University/authority
- 3. A Bank Draft of US \$ 50 or equivalent Indian currency in favour of the Secretary General, Association of Indian Universities, New Delhi as fee

The Association of Indian Universities does not recognize any degree/diploma awarded by accredited foreign Universities for programmes/courses conducted in India.

For the recognition of Medical degrees, Secretary, Medical Council of India, Pocket-14, Sector - 8, Dwarka Phase –I, New Delhi – 110 077 may be contacted.

#### F. MINIMAL QUALIFICATION FOR ADMISSION

#### 1.1 (a to g) Doctor of Philosophy (Ph.D.) Institute Fellowships

**Duration**: 3 – 5 years

- a) Ph.D. in Clinical Psychology: 2 years full time MA/M.Sc. in Psychology/Counseling Psychology/Psychological Counseling/Clinical Psychology/Applied Psychology/M.Phil. degree in Mental Health and Social Psychology/M.Phil. in Clinical Psychology.
- b) **Ph.D. in Neurophysiology**: M.Phil. in Neuroscience/Neurophysiology/MBBS/MD in Physiology/MD in Ayurveda/BE/ B.Tech. Electronics /Electrical /Computer Science/Biotechnology/M.Sc. in Physiology/Biochemistry/Anatomy/Neuroscience/Life Science/Biotechnology/Zoology/Masters in Physiotherapy/ Masters in Unani Medicine

- c) **Ph.D. in Psychiatric Social Work**: 2 years full time Masters Degree in Social Work/ M.Phil. in Psychiatric Social work
- d) **Ph.D. in Speech Pathology & Audiology**: M.Sc. in Speech Pathology & Audiology or M.Sc. in Speech-Language Pathology or M.Sc. in Audiology.
- e) **Ph.D. in Biostatistics**: M.Stat. (ISI)/M.Sc. in Statistics/ Biostatistics/Medical Statistics/Health Statistics/ Agricultural Statistics
- f) Ph.D. in Clinical Neurosciences: (1) MBBS degree with not less than 55% of the marks of any University recognized by the Medical Council of India (MCI). The candidate should have completed satisfactorily one year compulsory rotating internship or its equivalent as recognized by the MCI after passing the final MBBS examination and must have full registration with a State Medical Council. (2) Candidates with Postgraduate medical qualifications can also apply (but no special reservation or preference will be given)
- g) **Ph.D. in History of Psychiatry**: MBBS or Post graduation in Social Sciences/Humanities (History/Psychology/Sociology/Social Work/Cultural Studies)

#### 1.2 (a to s) Doctor of Philosophy (Ph.D.) External Fellowships

- **a) Ph.D. in Biophysics**: M.Phil. Biophysics/Neuroscience/MBBS/M.Sc. in Biophysics/Physics/Biochemistry/Biotechnology/Life Sciences/Physiology
- **b) Ph.D. in Biostatistics**: M.Stat. (ISI)/M.Sc. in Statistics/ Biostatistics/Medical Statistics/Health Statistics/ Agricultural Statistics.
- c) Ph.D. in Child & Adolescent Psychiatry: MD in Psychiatry or DNB in Psychiatry or M.Phil. in Clinical Psychology or M.Phil. in Psychiatric Social Work
- d) Ph.D. in Clinical Psychology: 2 years full time MA/M.Sc. in Psychology/Counseling Psychology/Psychological Counseling/Clinical Psychology/Applied Psychology/M.Phil. degree in Mental Health and Social Psychology/M.Phil. in Clinical Psychology.
- e) Ph.D. in Human Genetics: M.Sc. in any Life Sciences discipline.
- f) Ph.D. in Mental Health Education: Masters in Public Health, Health or Behavioural Sciences
- g) Ph.D. in Mental Health Rehabilitation: M.Sc. in Psychosocial Rehabilitation/ M.Phil. in Clinical Psychology/M.Phil. in Psychiatric Social Work/M.Sc. in Psychiatric Nursing/MBBS

- h) Ph.D. in Neurochemistry: M.Phil. in Neurosciences/M.Sc. in Biochemistry/ M.Sc. in Medical Biochemistry/M.Sc. in Biotechnology
- i) Ph.D. in Neurological Rehabilitation: MBBS, Masters in Physiotherapy (MPT), Masters in Occupational therapy (MOT), Masters in Orthotics & Prosthetics, M.Phil. in Clinical Psychology, M.Phil. in Psychiatric Social Work, M.Phil. in Clinical Neurosciences, M.Sc. in Nursing and M.Sc. in Speech Therapy, MD/DNB in Physical Medicine & Rehabilitation.
- j) Ph.D. in Neuroimaging & Interventional Radiology: MBBS/MD or DNB in Radiodiagnosis/M.Sc. in Medical Subjects/BE/B.Tech./M.Tech. Degree
- k) Ph.D. in Neuromicrobiology: MBBS/MD Microbiology/BE Biotechnology/ M.Phil. Neuroscience/M.Sc. in Medical Microbiology/Microbiology/ Biotechnology/Molecular Biology/MLT /Applied Microbiology/Biochemistry/ Biomedical Genetics/Neuroscience
- I) Ph.D. in Neuropathology: MD in Pathology/M.Sc. in Life Sciences/MBBS
- m) Ph.D. in Neurophysiology: M.Phil. in Neuroscience/Neurophysiology/MBBS/MD in Physiology/MD in Ayurveda/BE/B.Tech. Electronics/Electrical/Computer Science/Biotechnology/M.Sc. in Physiology/Biochemistry/Anatomy/Neuroscience/Life Science/Biotechnology/Zoology/Masters in Physiotherapy/Masters in Unani Medicine
- **n) Ph.D. in Neurovirology**: MBBS/MD in Microbiology/M.Sc. in Medical Microbiology/Microbiology/Biotechnology/Virology
- o) Ph.D. in Nursing: Master's Degree in Psychiatric Nursing
- **p) Ph.D. in Psychiatric Social Work**: 2 years full time Masters Degree in Social Work/ M.Phil. in Psychiatric Social work
- **q) Ph.D. in Psychiatry:** MBBS/MD/Postgraduate degree in the Basic Sciences or Humanities/BE/B.Tech./ME/M.Tech.
- r) Ph.D. in Psychopharmacology: MD in Pharmacology/Physiology/Biochemistry/ MBBS/ BE Biotechnology/ Bioinformatics/ B.Tech. Biotechnology/Bioinformatics/ ME Biotechnology/ Bioinformatics/ M.Sc. in Pharmacology/ Physiology/ Biochemistry/ Life Sciences/ Biotechnology/ Bioinformatics
- s) Ph.D. in Speech Pathology & Audiology: M.Sc. in Speech Pathology & Audiology or M.Sc. in Speech-Language Pathology or M.Sc. in Audiology.

- 2. **DM in Neuroradiology**: MD in Radiodiagnosis/DNB in Radiodiagnosis
- 3. DM in Neurology
  - (i) MBBS: The duration of the course will be for a period of five years.
  - (ii) **MD/DNB in Internal (General) Medicine or Pediatrics**: The duration of the course will be for a period of three years.
- 4. **DM degree in Neuroanaesthesia** MD/DNB in Anaesthesiology
- 5. **DM degree in Child & Adolescent Psychiatry** MD/DNB in Psychiatry
- 6. M.Ch. in Neurosurgery
  - (i) **MBBS**: The duration of the course will be for a period of five years.
  - (ii) **MS/DNB in General Surgery**: The duration of the course will be for a period of three years.
- 7. MD in Psychiatry
  - (i) **MBBS**: The duration of the course will be for a period of three years.
  - (ii) **DPM**: The duration of the course will be for a period of two years.
- 8. Diploma in Psychiatry (DPM): MBBS
- Post Doctoral Fellowship in Child & Adolescent Psychiatry: MD/DNB in Psychiatry
- 10. Post Doctoral Fellowship in Neuroanaesthesia: MD/DNB in Anaesthesia
- 11. Post Doctoral Fellowship in Neuroinfection: MD in Microbiology
- 12. Post Doctoral Fellowship in Hospital Infection Control: MD/DNB in Microbiology
- 13. Post Doctoral Fellowship in Neurology: DM/DNB in Neurology
  - a) Epilepsy
  - b) Movement Disorders
  - c) Neuromuscular Disorder
  - d) Stroke
- 14. Post Doctoral Fellowship in Neuropathology: MD/DNB in Pathology
- 15. Post Doctoral Fellowship in Transfusion Medicine: MD/DNB in Pathology/Medicine/Pediatrics/Microbiology/Anaesthesia/Emergency Medicine or any other clinical equivalent degree recognized from a recognized institution in India

- 16. Post Doctoral Fellowship in Neurological Rehabilitation: MD/DNB (Physical Medicine & Rehabilitation)
- 17. Post Doctoral Fellowship in Acute Care & Emergency Psychiatry: MD/DNB in Psychiatry
- 18. Post Doctoral Fellowship in Community Mental Health: MD/DNB in Psychiatry
- 19. Post Doctoral Fellowship in Addiction Medicine: MD/DNB in Psychiatry
- 20. Post Doctoral Fellowship in Consultation Liaison Psychiatry: MD/DNB in Psychiatry
- 21. Post Doctoral Fellowship in Geriatric Psychiatry: MD/DNB in Psychiatry
- 22. Post Doctoral Fellowship in Obsessive Compulsive disorder & related disorders: MD/DNB in Psychiatry
- 23. Post Doctoral Fellowship in Clinical Neuro Sciences & Therapeutics in Schizophrenia: MD/DNB in Psychiatry
- **23A.** Post Doctoral Fellowship in Neurocritical Care: MD/DNB in Anaesthesia, MD in Internal Medicine, DM in Neuroanaesthesia, DM in Neurology or M.Ch. in Neurosurgery.
- 24. Fellowship in Psychosocial Support Disaster Management: M.Phil. in Psychiatric Social Work/Clinical Psychology/Psychosocial Rehabilitation/ Disaster Management or M.Sc. in Psychiatric Nursing with one year experience after completion of M.Sc. course.
- 25. Fellowship in Psychiatric Rehabilitation: Candidates who possess the following degrees/diplomas a) Diploma in Psychiatry/Psychological Medicine or MD (Psychiatry) or DNB (Psychiatry), b) M.Phil. in Clinical Psychology/Psychiatric Social Work, c) M.Sc. in Psychosocial Rehabilitation. Direct candidates as well as those deputed from other organizations can be admitted to the course. Those with MBBS and those with MA in Psychology/MSW/M.Sc. Nursing who have had minimum of 2 years of experience of having worked in a mental health setting are eligible. (If M.Phil. or Diploma is for only 1 year duration, then 1 additional year of experience in mental health setting is necessary).

26 - 30 M.Phil. courses

**Duration**: 2 years

**M.Phil. in Biophysics**: MBBS/B.Tech. in Biotechnology/Electronics/Computer Science/M.Sc. in Biophysics/Physics/Biochemistry/Biotechnology/Life Science/Zoology/Chemistry/Physiology

**M.Phil. in Clinical Psychology**: 2 years full time MA/M.Sc. in Psychology/Counseling Psychology/Psychological Counseling/Applied Psychology/Clinical Psychology

**M.Phil.** in **Neurophysiology**: MBBS/BAMS (Ayurveda)/BDS/M.Sc. in Physiology/Neuroscience/ Anatomy/Biochemistry/Zoology/Biotechnology/Life Science/Molecular Biology/Bachelors in Unani Medicine

**M.Phil. in Neurosciences**: MBBS/BE/B.Tech. Electronics/Electrical/Computer Science/Biotechnology/M.Sc. in Physics/Chemistry/Biochemistry/Anatomy/ Physiology/Molecular Biology/Genetics/Biotechnology/Zoology/Life Science/MA Psychology/M.Sc. Psychology

**M.Phil. in Psychiatric Social Work**: 2 years full time MA/MSW degree in Social Work.

#### 31. Master of Public Health (MPH):

Duration 2 years

Eligibility: MBBS degree from a recognized University or from any other University recognized as equivalent thereto by NIMHANS/MCI and registered with a State Medical Council and currently working with Central or State Government's health departments

#### 32. M.Sc. in Psychiatric Nursing:

Duration: 2 years

- a) The candidate should be a Registered Nurse and Registered Midwife or equivalent with any State Nursing Registration Council.
- b) The minimum education requirements shall be the passing of B.Sc. Nursing/B.Sc. Hons.Nursing/Post Basic B.Sc. Nursing with minimum of 55% aggregate marks.
- c) The candidate should have studied B.Sc. Nursing/B.Sc. Hons. Nursing/Post Basic B.Sc. Nursing in an institution which is recognized by INC.
- d) Minimum of one year experience after Basic B.Sc. Nursing as on the day of counseling.
- e) Minimum of one year of work experience prior or after post Basic B.Sc. Nursing as on the day of counseling.
- f) Candidate shall be medically fit.

#### B. B.Sc. COURSES

#### 1. B.Sc. in Nursing

#### **Duration**: 4 years

- a) Pre-University examination conducted by Department of Pre-University Education with Physics, Chemistry, Biology and English with a minimum 45% aggregate in the above subjects.
- b) Higher Secondary School Certificate Examination (12 years course) with Physics, Chemistry, Biology and English with a minimum 45% aggregate.
- c) Senior School Certificate examination Pre-Degree Examination (10+2) with Physics, Chemistry, Biology and English with a minimum 45% aggregate.
- d) An Equivalent with 12 years of Schooling from a recognized Board or University with Physics, Chemistry, Biology and English with a minimum 45% aggregate.

The Candidate shall be medically fit.

#### 2. B.Sc. in Radiography

**Duration**: 3 years

- a) Pre-University examination conducted by Department of Pre-University Education or any recognized state Board with English and Physics, Chemistry, Biology and Mathematics as optional subjects with 45% aggregate.
- b) Job oriented Diploma course from a recognized Board with Diagnostic Radiography as vocational subject or equivalent.
- c) Any equivalent examination recognized by the NIMHANS, Bangalore for the above purpose with Physics, Chemistry, Biology and Mathematics as principal subjects of study with 45% aggregate.

#### 3. B.Sc. in Anaesthesia Technology

**Duration**: 3 years

Pass in Two-year Pre-University examination or equivalent with a Science group having secured an aggregate of 45% in Science subjects.

#### B (1). Diploma Courses

**Duration**: 1 year

#### 1. Post Basic Diploma in Psychiatric/Mental Health Nursing

Should be a registered Nurse (R.N&R.M) in the State Nursing Council with one year experience as staff nurse.

#### 2. Post Basic Diploma in Neuroscience Nursing

Should be a registered Nurse (R.N&R.M) in the State Nursing Council with one year experience as staff nurse.

Nurses applying for the above courses from other countries to obtain an Equivalence Certificate from INC before applying.

#### 3. Diploma in Clinical Neurophysiology Technology (DCNT)

**Duration**: 2 years

a) B.Sc. with Physics/Electronics/Computer Sciences with minimum II Class in the qualifying examination.

OR

b) Diploma in Electronics/Electrical/Instrumentation/Computer (approved by Board of Technical Education).

OR

c) 3 years experience as EEG Technician after PUC.

A RELAXATION OF 5% MARKS WILL BE GIVEN TO DETERMINE ELIGIBILITY FOR ACCEPTING APPLICATION TO NON-MEDICAL AND Ph.D. COURSES IN RESPECT OF SC/ST CANDIDATES.

#### **G. AGE LIMIT**

For PG Medical and Superspeciality courses, age should not be more than 32 years for MBBS degree holders and 35 for PG medical degree holders and relaxable in case of SC/ST candidates by a maximum of 5 years as on the date of commencement of courses. For sponsored candidates, age should not be more than 45 years as on the date of commencement of courses.

For B.Sc. in Nursing, B.Sc. in Radiography and B.Sc. in Anaesthesia Technology courses, the age of the candidates should be between a minimum of 17 years and a maximum of 25 years as on the date of commencement of course.

#### RESERVATION OF SEATS

- Following reservation of seats is applicable to the courses (except Superspeciality courses - DM in Child and Adolescent Psychiatry, DM in Neuroanaesthesia, DM in Neurology, DM in Neuroradiology and M.Ch. in Neurosurgery).
  - a) 15% of the seats for SC
  - b) 7.5% of the seats for ST
  - c) 27% of the seats for OBC

If suitable candidates are not available under the reserved category, they will be filled up by General category candidates.

- 2. Number of seats and reservation may vary from time to time as per the direction of the Government of India through relevant notifications.
- 3. Eight seats in Diploma in Psychiatry (DPM) and three seats in M.Phil. in Clinical Psychology are reserved for domiciles of Karnataka State.
- 4. 3% of the PG seats are reserved for persons with above 40% and less than 70% disability (except Nursing, DM in Neurology, DM in Neuroradiology and M.Ch. in Neurosurgery and Post Doctoral Fellowship courses). One seat will be reserved every second year on rotation system subject to the candidate qualifying in the Entrance Test in the following courses: MD in Psychiatry, M.Phil. in Clinical Psychology, M.Phil. in Psychiatric Social Work and Ph.D.

#### NOTE

- To claim that candidates are residents/domiciles of Karnataka State, he/she should produce a certificate from the Tahsildar to the effect that he/she or his/her father/mother has been a resident of Karnataka State for a period of 10 years or has owned or possessed land or property or house in Karnataka State.
- 2. There will not be any entrance test for candidates appearing for Undergraduate courses i.e., B.Sc. in Nursing, B.Sc. in Anaesthesia Technology and B.Sc. in Radiography.
- There will not be any entrance test for Post Basic Diploma in Psychiatric/Mental Health Nursing, Post Basic Diploma in Neuroscience Nursing and Diploma in Clinical Neurophysiology Technology.

#### **EMOLUMENTS**

Candidates admitted to Medical courses will be paid as per the Residency Scheme. They will be paid emoluments of ₹ 15600/- per month in the first year, ₹ 16390/- per month in the second year and ₹ 17210/- in the third year along with admissible allowances. The emolument is subject to vary as per the Government orders from time to time.

Candidates with PG degree (MD/MS) admitted to the 3 years course in DM Neurology, DM in Neuroradiology, M.Ch. in Neurosurgery will be considered for the post of Senior Resident, subject to availability of vacancies.

Candidates admitted to the PDF courses and DM in Neuroradiology, DM in Neuroanaesthesia and DM in Child and Adolescent Psychiatry courses will be considered as Senior Resident. They will be paid emoluments of ₹ 18750/- per month in the first year, ₹ 19510/- per month in the second year and ₹ 20300/- in the third year along with admissible allowances. The emolument is subject to vary as per the Government orders from time to time.

Candidates admitted for Fellowship in Psychiatric Rehabilitation will be paid the following stipend a) Medical category: ₹ 15600/- per month along with admissible allowances (Junior Resident I year stipend). B) Non-Medical category: ₹ 12000/- per month (consolidated). Candidates admitted for Fellowship in Psychosocial Support Disaster Management will be paid ₹ 12000/- per month (consolidated).

Candidates admitted to the M.Phil. Courses will be paid stipend of ₹ 12000/- per month during the course of two years.

Candidates admitted to Ph.D. courses (under SI. No.1.1 (a to e)) will be paid stipend of ₹ 16000/- per month for all the three years. Contingency grants of ₹ 5000/- per annum for subjects under behavioural sciences and ₹ 7500/- per annum for subjects under basic and neuro sciences will be paid to Research Scholars.

Candidates admitted to Ph.D. in Clinical Neurosciences course (under Sl. No.1.1 (f)) (under ICMR Fellowship) will be paid emoluments of ₹ 15600/- per month in the first year, ₹ 16390/- per month in the second year and ₹ 17210/- in the third year along with admissible allowances. The emolument is subject to vary as per the Government orders from time to time. Contingency grants of ₹ 20000/- will be paid per year to Research scholars.

Candidates admitted to M.Sc. in Psychiatric Nursing course will be paid ₹ 3000/-as stipend per month during the period of the course with the exception of the candidates who are on sponsorship/drawing pay and allowances from their employers.

Candidates admitted to Diploma in Psychiatric Nursing Course/Diploma in Neurological and Neurosurgical Nursing Course will be paid ₹ 2000/- per month. Candidates admitted to Diploma in Clinical Neurophysiology Technology Course will be paid ₹ 2000/- per month, during the period of the course with the exception of the candidates who are on sponsorship/drawing pay and allowances from their employers.

Foreign Nationals and sponsored candidates from State Government/Government of India are not eligible for any stipendiary benefits. The fee structure for foreign nationals will be in US dollars and for sponsored Indian candidates will be in Indian Rupees.

#### **ENCLOSURES**

Medical courses: Final year Marks Sheet, Attempt Certificate, Internship Completion Certificate, Registration Certificates and SSC Marks sheet. Caste Certificate in case of SC/ST/OBC category. Non Medical courses: Final year/semester qualifying exam mark sheet, Caste Certificate in case of SC/ST/OBC category and experience certificate (if applicable). Applications without these enclosures will be rejected without intimation.

## SPONSORSHIP CERTIFICATE

ın	nis is to certify that:			
1.	Dr./Mr./Ms	is a pe	rmane	ent employee
	with the	(Name of	the	Government
	Organization) and the date of joining ser	vice is		<u></u> .
2.	The candidate is being sponsored for _			course
	at NIMHANS, Bangalore.			
3.	The candidate is being sponsored for	the entire duration	n of	the course, if
	selected.			
4.	The candidate will be paid all emolumer	nts by the State/C	entra	I Government
	or Public Sector Undertaking of State/Ce	entral Governmer	ıt and	no expenses
	will devolve upon NIMHANS, Bangalore			
5.	The candidate after getting training at N	NIMHANS, Banga	lore s	shall continue
	to be in regular service with the State/C	entral Governme	nt or	Public Sector
	Undertaking of State/Central Governme	nt and will work i	n the	State/Central
	Government or Public Sector Undertakir	ng of the State/Ce	entral	Government.
Date	e:			
Plac	ce:	•		n Seal of Juthority
		•		uthority

#### ANNEXURE 1

#### (Format of OBC Certificate)

## FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES APPLYING FOR ADMISSION TO CENTRAL EDUCATION INSTITUTES UNDER THE GOVERNMENT OF INDIA.

Th	nis	is	to	certify	that	Shri/Smt./	Kum		Son/Daughter	of	Shri/Smt.
						of	Village/Tov	vn		Distr	rict/Division
_					in the			State belongs to the			Community
wh	nich	is reco	gnize	d as a bad	kward c	ass under:					
I.	Re	solutio	on No.	12011/6	8/93-BCC	(C) dated 10	0/09/93 publish	ned in the Gazette of India Ext	traordinary Part I	Section	n I No. 186
	da	ted 13	09/93.								
II.		solutio /10/94.		12011/9/	94-BCC (	dated 19/10/9	94 published i	n the Gazette of India Extraord	inary Part I Section	on I No	. 163 dated
III.		solutio /05/95.		12011/7/	95-BCC	dated 24/05/	95 published i	n the Gazette of India Extraoro	dinary Part I Sect	ion I N	o. 88 dated
IV.	Re	solutio	on No.	12011/96	/94-BCC	dated 9/03/9	6.				
V.		solutio /12/96.		12011/44	1/96-BCC	dated 6/12/9	96 published i	n the Gazette of India Extraoro	dinary Part I Secti	on I No	o.210 dated
VI.	Re	soluti	on No.	12011/13	/97-BCC	dated 03/12/	97.				
VII.	Re	soluti	on No.	12011/99	/94-BCC	dated 11/12/	97.				
VIII.	Re	soluti	on No.	12011/68	/98-BCC	dated 27/10/	99.				
IX.		solutio /12/99.		12011/88	3/98-BCC	dated 6/12/9	99 published i	n the Gazette of India Extraord	inary Part I Section	on I No	. 270 dated
X.		solutio /04/200		12011/36	/99-BCC	dated 04/04/	2000 publishe	d in the Gazette of India Extrao	rdinary Part I Sec	tion I N	lo. 71 dated
XI.		solution			4/99-BCC	dated 21/09	9/2000 publish	ed in the Gazette of India Ext	raordinary Part I	Section	n I No. 210
XII.	Re	solutio	on No.	12015/9/2	2000-BC	dated 06/09	9/2001.				
XIII.	Re	soluti	on No.	12011/1/2	2001-BC	dated 19/06	6/2003.				
XIV.	Re	soluti	on No.	12011/4/2	2002-BC	dated 13/01	1/2004.				
XV.		esolution ted 16			2004-BC	C dated 16/0	01/2006 publis	hed in the Gazette of India Ex	traordinary Part I	Sectio	n I No. 210
Sh	ri/Sı	mt./Ku	m			an	d/or his fan	nily ordinarily reside(s) in	the		
(C 36	rean	ny Lay 22/93-I	er) me	ntioned i	n Columr	3 of the Sc	hedule to the (	lso to certify that he/she does Government of India, Departme // No. 36033/3/2004 Estt.(Res.) o	nt of Personnel &	-	
	itou.								г	District	Magistrate/
											ssioner, etc
Se	al								20000		,
	OTE:										
			Ordina	arilv' use	d here wi	II have the s	ame meaning	as in Section 20 of the Represe	ntation of the Peo	ple Ací	t. 1950.
								licated below:		p. 0 7 10 1	.,
				-				puty Commissioner / Addition	nal Deputy Comm	nissione	er / Deputy
.,			-			-		jistrate / Taluka	,,		,,
				•			•	er (not below the rank of lst Cla	ass Stipendiary M	agistra	te).
	_			_				agistrate / Presidency Magistra	-	•	•
٠,						nk of Tehsild	_	- , ,			
(iv	) Su	b-Divis	ional	Officer of	the area	where the c	andidate and /	or his family resides.			

#### FEE STRUCTURE FOR INDIAN NATIONALS

											(All figures are in rupees)
SI.	Nature of Fees	Ph.D.	DM/M.Ch.	MD/PDF/ MPH	DPM	M.Phil/ FPSDM/FPR <sup>##</sup>	M.Sc.	B.Sc. Nursing	B.Sc. Anaest- hesia Tech./ Radiography	DCNT DPN/DNN	Remarks
1	Eligibility fee: 1) Other Univ	versities of Ka	arnataka: Rs.1	00/- 2) Univer	sities outside		- 3) Foreign st	udents: Rs.5000/-			
2	Registration fee	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00		Payable at the time of joining
3	Tuition fee per year	18,000.00	50,000.00	50,000.00	36,000.00	10,000.00	10,000.00	35,000.00*#	10,000.00		
4	Laboratory fee (per year)	500.00	500.00	500.00	400.00	400.00	300.00	300.00	300.00		
5	Gymkhana & recreation fee (per year)	250.00	250.00	250.00	250.00	250.00	250.00	250.00	250.00	250.00	One time payment for the whole duration of the course at the time of joining.
6	Library fee (per year)	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	
7	Caution Money & Hostel Deposit	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	Refundable on completion of course
8	Identification card fee	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	Payable at the time of joining
9	Examination fee Part I Part II Part III		3,000.00 10,000.00 	1,000.00 5,000.00 	3,000.00	1,500.00 1,500.00 	1,000.00 1,000.00 	1,000.00 (I Yr) 1,000.00 (II Yr) 1,000.00 (III Yr) 1,000.00 (IV Yr)	1,000.00 1,000.00 1,000.00	325.00  	As prescribed by the Institute
10	Pre-Ph.D. exam fee	2,000.00									
11	Ph.D. Thesis evaluation	10,000.00									

Fees once paid will not be refunded at any cost. In case, if a candidate leave the course after joining and if the seat is offered to the waitlisted Candidate and if the waitlisted Candidate join the course, then, the refund will be made subject to approval by the competent authorities after necessary deductions.
\*One time payment, ₹20,000/- for SC/ST candidates (B.Sc. in Nursing). SNA ₹1000/- one time payment for B.Sc. Nursing students

Fee for the corresponding years should be paid immediately on completion of the Academic year failing which fine will be levied as applicable.

<sup>\*\*</sup>Hostel Rent (water & electricity charges) per annum ₹5000/- and ₹1000/- mess advance for B.Sc. Nursing students No Examination fee for PDF courses
##FPSDM/FPR: Fellowship in Psychosocial Support Disaster Management/Fellowship In Psychiatric Rehabilitation.

#### FEE STRUCTURE FOR FOREIGN NATIONALS

(All figures are in US \$) SI. Name of the Course \* Tuition fee Registration fee No. 1 Ph.D. 30000 500 2 For super speciality courses a. DM/M.Ch. (5 years duration) 60000 1000 b. DM/M.Ch. (3 years duration) 50000 1000 3 PDF in Neuropathology/Neuroanaesthesia 30000 1000 M.Phil. 20000 500 4 500 M.Sc. Psychiatric Nursing 15000 5 20000 6 B.Sc. in Nursing

100

The fees once paid will not be refunded at any cost

DPN/DNN/DCNT

7

<sup>\*</sup> Tuition fee to be paid in equal annual installments. The amount indicated is for the entire duration of the course

#### COURSES AND FACULTY

#### NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF BIOPHYSICS

**Duration**: 3 - 5 years.

**Programme of study**: Initially the candidate will be provisionally registered for Ph.D. The registration will be confirmed after qualifying the pre-Ph.D. examination. The candidate would be trained in both theory and practical aspects of the curriculum pertaining to the discipline. After successful completion of the proposed work and approval of the synopsis the candidate shall submit the thesis for award of Ph.D. degree.

Infrastructure/Laboratory facilities for research: The department has sophisticated research facilities to carry out research in neuroscience at the cellular and molecular level. The infrastructural facilities comprise of advanced techniques such as *in-vitro* fluorescence imaging (epiflurorescence, single photon and multi-photon confocal imaging), absorbance and fluorescence spectroscopy and electrical recording system (patch clamp set-up). In addition, the department has a well established cell culture facility. The department is well equipped with facilities for various biochemical (electrophoresis and blotting) and molecular biology techniques (PCR, RT-PCR, plasmid DNA isolation and purification and protein expression in mammalian system).

#### **ACADEMIC FACULTY AND RESEARCH INTERESTS:**

**Dr.Preeti G.Joshi, Professor**: Cell signaling, purinergic receptors in the nervous system, mechanisms of neuron-glia communication and its deregulation in neurological and psychiatric disorders and neurodegeneration.

Dr.V.K.Kalia, Professor: Radiosensitization.

**Dr.Padmanabhan B: Additional Professor**: Structural Biology, Structure-based drug design, Epigenetic markers/Chromatin regulators, Protein targets associated with neurodegenerative diseases and cancer.

#### NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF BIOSTATISTICS

**Duration**: 3 - 5 years

**Programme of study**: Development and application of biostatistics in the field of mental health and neurosciences.

**Areas for Research**: Applied multivariate techniques, Survival analysis, Longitudinal methods, Epidemiological methods, Meta analysis, Genetic statistical methods.

**Research Facilities**: Rich data base, Good computational facilities and adequate library.

#### **ACADEMIC FACULTY AND RESEARCH INTERESTS**

**Dr.D.K.Subbakrishna, Professor:** Applied multivariate analysis, Application of artificial neural networks in medicine, Survival analysis, Latent structure analysis.

**Dr.K.Thennarasu, Professor:** Applied multivariate analysis, Statistical applications in genetics, Survival analysis, Qualitative data analysis, Latent variable modeling, Micro array data and Cluster analysis.

**Dr.P.Marimuthu, Additional Professor**: Clinical trails, Simulation and projection for cancer, Mental Health, HIV/AIDS problems.

#### NAME OF THE COURSE: Ph.D. IN CLINICAL NEUROSCIENCES

**Mode of Selection**: Competitive written test to assess the basic knowledge and aptitude for research in interdisciplinary fields related to clinical neuroscience.

**Duration of the Course**: Five academic years

**Programme of study**: The course will consist of an initial training phase of two years followed by three years of research work. During first and second year, the candidates will undergo clinical postings and basic neuroscience training, respectively, in various fields as envisaged in the curriculum. The course will consist of theory/lectures followed by practical exposure to various techniques used in different disciplines.

**First Year**: The candidate has to work in the clinical side, actively participating in patient care and exploring avenues of interdisciplinary research, utilizing the patient material.

**Second Year**: During the second year, the candidate would be posted to the various basic neuroscience departments and they would be provided "hands on training" in laboratory techniques.

Third-Fifth Year: Ph.D. Thesis work.

During the three-year period, the Ph.D. Thesis work will be undertaken by the candidate in a chosen area of research. The candidate will carry out research work under the supervision of a faculty member, who will function as the guide. Depending on the nature of the topic, the candidate can also have a joint guide. For the purpose of carrying out Thesis work, the candidate will be posted to the Department concerned for a period of three years.

**Evaluation**: The evaluation is a continuous process based on assignments, seminar/Journal club presentations, clinical postings and laboratory training. Students will be evaluated at all postings by the clinicians and basic neuroscientists. Evaluation on daily basis and by credit system will be used. A ten-point grading scale with corresponding letter grades will be used. Attendance at all academic activities and clinical work is mandatory.

**Ph.D. Registration**: All the Candidates have to undergo the prescribed course work and successfully complete it. The candidate has to submit a Ph.D. protocol for the registration from NIMHANS and should abide by the Ph.D. regulations of the Institute.

## NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF CLINICAL PSYCHOLOGY

**Duration**: 3 - 5 years

Ph.D. Guides: Allotment of guides will be subject to availability

**Programme of study**: Training in theoretical and practical aspects of Mental Health and Clinical Psychology and in research methodology would be provided. Two years of supervised clinical internship in Mental Health and Clinical Psychology with special emphasis in areas related to the topic of research would also be provided.

Candidates with M.Phil. degree in Mental Health and Social Psychology/ M.Phil. degree in Clinical Psychology or equivalent qualification recognized by NIMHANS would be registered immediately after they join the department. However, candidates with Master's degree in Psychology would be provisionally registered upon joining the department. One year from the date of provisional registration all the candidates should appear for pre Ph.D. examination and upon the successful completion of the Pre-Ph.D. examination, the registration would be confirmed.

After completion of a minimum of 3 years and upon satisfactory completion of proposed work, the candidates would be permitted to submit their thesis.

#### **ACADEMIC FACULTY AND RESEARCH INTERESTS**

**Dr.Anisha Shah, Professor**: Marital and family relationships and therapies, Emotion focused therapy, Gender in depression.

**Dr.Ahalya Raguram, Professor**: Psychosocial aspects of Mental Health, Family and marital therapies, Individual therapies.

**Dr.H.Uma, Professor**: Development of psychological tests, preventive & promotive interventions, therapies with children & adolescents, play & narrative therapies, creativity, school mental health & specific learning disabilities.

**Dr.Mahendra P.Sharma, Professor**: Behavioural medicine, Cognitive behaviour therapy and processes, Cognitions and metacognitions, Stress Management, Mindfulness Meditation and Interventions based on it and Psycho-oncology.

**Dr.L.N.Suman, Professor**: Adult Psychopathology and Psychotherapy, Addictive Behaviours and their management, Trauma Psychology, Forensic Psychology

**Dr.Seema Mehrotra, Additional Professor**: Mental health promotion, Positive Psychology, Emotional regulation, Adaptation to major life events and Psychooncology.

Dr.Jamuna.R, Additional Professor: Dr.Jamuna Rajeswaran is a consultant for the Neuropsychology Unit. Her clinical interests include: Neuropsychological pediatric neuropsychology, assessment and rehabilitation, neuropsychology, She has pioneered the Holistic Neuropsychological She is the first person to introduce the EEG Rehabilitation work in India. Neurofeedback training in India for various disease conditions. Research area is in behavioral and brain mechanisms of cognition as well as implementation of these mechanisms in cognitive skills and dysfunction. Research programs in the laboratory has been initiated use of electrophysiological (EEG & ERP) and functional neuroimaging (fMRI) methods to investigate brain correlates of Creativity, Empathy, Language and Memory.

**Dr.Paulomi M.Sudhir, Additional Professor**: Cognitive behavioural therapies for anxiety disorders, depression, personality disorders and major psychiatric disorders such as schizophrenia, behavioural medicine and health psychology, cognitive, interpersonal and personality factors in emotional disorders and psychiatric conditions.

Dr.J.Keshav Kumar, Additional Professor: is a consultant in the Neuropsychology Unit. His research interests in the field of clinical neuropsychology include neuropsychological rehabilitation in acquired brain damage including clinical conditions such as head injury, stroke and He has developed and standardized the NIMHANS Neuropsychological battery for elderly (NNB-E) as part of a Ph.D. thesis. He has developed Cognitive training programmes for mild cognitive impairment (MCI), Mild dementia and healthy normal elderly to procrastinate age related cognitive decline as Department of science and technology (DST Tide division) funded He is currently involved developing as an Integrated intervention programme for individuals with alcohol dependence syndrome by combining cognitive train and Tai chi, for individuals with alcohol dependence syndrome and

Cognitive remediation programme for social cognition for individuals with schizophrenia.

His other research interests include cognitive and emotional decision making (funded by Department of science and technology (DST) Cognitive science initiative) and executive functions in persons with traumatic brain injury, frontal, temporal lesions and healthy normals. This line of research has involved gambling paradigms and use of psycho physiological and electrophysiological and functional neuroimaging (fMRI) methods.

**Dr.Manoj Kumar Sharma, Associate Professor**: is a consultant for an Adult Psychiatry Unit, Centre for Addiction Medicine as well as at the Psychological Care Clinic at NIMHANS Centre for Well-being. His areas of interests include Behavioral addiction; E-based psychological intervention; Psychological tool development; tobacco cessation; substance use and prevention; emotional dyscontrol & management, psychotherapy; yoga, religiosity and spirituality.

**Dr.M.Manjula, Associate Professor**: Youth mental health issues, preventive and promotive interventions in youth, Cognitive behavior therapies for anxiety disorders, mood disorders and sexual dysfunctions, process research in Cognitive behavior therapies.

**Dr.Devvarta Kumar, Associate Professor:** Cognitive dysfunction and remediation in schizophrenia, Event Related Potentials (ERPs), CNS based detection of deception techniques, Memory and its falsifications, Meta-cognitive therapy for delusions, psychological test development.

**Dr.Poornima Bhola, Associate Professor:** Psychotherapy process research, psychotherapist development and training, youth mental health and self-injurious behaviors; personality disorders; gender variance; consultation-liaison issues among medical and surgical conditions.

**Dr.B.N.Roopesh, Assistant Professor:** Child & Adolescent Mental Health, School Mental Health, Autism, Conduct Disorders, ADHD, Marginalized Children and Development of Psychological Scales. Child neuropsychology, Development of Neuropsychological tests and Cognitive Retraining. EEG & Event Related Potentials (ERPs) of Psychiatric Disorders.

**Dr.Veena.A.S: Assistant Professor (On Contract)**: Women's mental health; adult individual and couples psychotherapy; promotion of mental health in vulnerable populations.

**Dr.Shanthala Hegde: Assistant Professor (On Contract)**: Neuropsychology and Neuropsychological rehabilitation, Music Cognition/Neuromusicology (EEG, ERP method of investigation).

## NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF HUMAN GENETICS

**Duration**: 3 - 5 years

**Programme of study**: Initially, the candidate will be provisionally registered for Ph.D. Before confirmation of registration, all the candidates have to complete Pre Ph.D. examination after one year from the date of provisional registration. The candidate would be trained in both theory and in practical aspects of the curriculum pertaining to the discipline. Later, the candidate would pursue regular Ph.D. research work and submit the thesis for award of Ph.D. degree.

**Research Interests**: Diagnosis of genetic disorders, DNA diagnosis of familial genetic disorders involving PCR, Southern and FISH related molecular techniques, Genotoxicity assays for a variety of chemicals, drugs and other related biological compounds and Genetic characterization of Brain Tumors.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.Rajalakshmi Gope, Professor:** Molecular genetics of human brain tumors, Genetic counseling, Molecular biology of wound healing.

**Dr.G.K.Chetan, Additional Professor:** Human Genetics, Constitutional cytogenetics, Genetic counseling, Genotoxicity, Genetics of MR and fragile X syndrome, Brain tumor biology.

**Dr.Monojit Debnath: Assistant Professor**: Immuno-genetical understanding of Psychiatric disorders, Human Genetic diversity.

## NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF MENTAL HEALTH EDUCATION

**Duration**: 3 – 5 years

**Programme of study**: Initially the candidate will be provisionally registered for Ph.D. The candidate will be trained in both the theoretical and practical aspects of Mental Health Education as well as research methodology. Before confirmation or registration, all the candidates have to complete pre-Ph.D. examination. After successful completion of the proposed research and approval of the synopsis, the candidate shall submit thesis for Ph.D. degree.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.Jayashree Ramakrishna, Professor:** HIV/AIDS, Qualitative research, Gender, Evaluation of health education interventions, stigma.

### Dr.K.S.Meena, Assistant Professor:

### NAME OF THE COURSE: Ph.D. IN MENTAL HEALTH REHABILITATION

**Duration**: 3 - 5 years

**Programme of study**: A candidate who has obtained M.Sc. in Psychosocial Rehabilitation, M.Phil. in Clinical Psychology, M.Phil. in Psychiatric Social Work, M.Sc. in Psychiatric Nursing and MBBS from any recognized University or any other University recognized as equivalent thereto by NIMHANS securing not less than 55% marks can register for Ph.D. examination after one year from the date of provisional registration. The candidate would be trained in research methodology, theoretical and practical aspects of the curriculum on Ph.D. for duration of 3 years. The candidate has to complete Pre-Ph.D. examination after one year from the date of provisional registration.

Research facility: Day care centre for people with chronic mental illness, clinical facilities for psychiatric rehabilitation, multidisciplinary team for rehabilitation, Services for Enhanced Recovery with Intensive and Continued Engagement (SERWICE) OPD, Inpatient referrals, Inpatient rehabilitation, home based rehabilitation, community based rehabilitation, social skills training, vocational training, community based day care centres and rehabilitation facilities by NGO's where NIMHANS provides technical support.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.S.K.Chaturvedi, Professor & Head i/c:** Psychiatric Rehabilitation Services, Department of Psychiatry.

Dr. Jagadisha Thirthalli, Additional Prof., Dept. of Psychiatry

Dr. Geetha Desai, Associate Prof., Dept. of Psychiatry

Dr. Poornima Bhola, Associate Prof., Dept. of Clinical Psychology

Dr.BP Nirmala, Associate Prof., Dept. of Psychiatric Social Work

Dr.Sailaxmi Gandhi, Assistant Prof., Dept. of Nursing

Dr.C Naveen Kumar, Assistant Prof., Dept. of Psychiatry

Dr.T.Sivakumar, Assistant Prof. in Psychiatric and Neurological Rehabilitation, Psychiatric Rehabilitation Services

## <u>NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF</u> NEUROCHEMISTRY

**Duration**: 3 - 5 years

**Programme of study**: Initially, the candidate will be provisionally registered for Ph.D. Before confirmation of registration, all the candidates have to clear the pre Ph.D. examination after one year from the date of Provisional registration. The candidate would be trained in both theoretical and practical aspects of the curriculum of Pre-Ph.D. course work. After satisfactory completion of proposed work and approval of synopsis, the candidate shall submit thesis for Ph.D. degree.

**Area of Research Interests**: Etiopathogenesis of cerebrovascular disease, Neurometabolic disorders, Immunochemical basis of neurodegenerative disorders, Molecular mechanisms of brain aging, neuromuscular and neurodegenerative disorders, primary brain tumors and its therapeutic targets.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.Rita Christopher, Professor**: Etiopathogenesis of cerebrovascular disease, Neurometabolic disorders.

**Dr.Sarada Subramanian, Additional Professor**: Immunotherapeutic approaches to Alzheimer's disease and related conformational disorders.

**Dr.M.M.Srinivas Bharath, Additional Professor**: Red-ox and mitochondrial dynamics in the pathophysiology of brain and muscle.

**Dr.D.N.Nanda Kumar, Assistant Professor**: Molecular Mechanisms of Primary brain tumors with emphasis on growth and invasion of glioblastoma and its therapeutic targets.

### NAME OF THE COURSE: Ph.D. IN NEUROLOGICAL REHABILITATION

**Duration**: 3 – 5 years

**Programme of study**: A Candidate who has obtained following degrees from recognized university securing not less than 55% marks, MBBS, Master in Physiotherapy (MPT), Masters in Occupational therapy (MOT), Masters in Orthotics & Prosthetics, M.Phil. in Clinical Psychology, M.Phil. in Psychiatric Social Work, M.Phil. in Clinical Neurosciences, M.Sc. in Nursing and M.Sc. in Speech Therapy, MD/DNB in Physical Medicine & Rehabilitation can register for Ph.D. examination after one year from the date of provisional registration.

The candidate would be trained in research methodology, theoretical and practical aspects of the curriculum on Ph.D. for the duration of 3 years. All the candidates have to complete Pre-Ph.D. examination after one year from the date of provisional registration.

Exemption: Faculty working in the department of Neurological Rehabilitation in NIMHANS will not be required to appear for Pre-Ph.D. examination (to be considered as a per institutes' guidelines). For such candidates the duration of Ph.D. will be for two years.

Research Facility: Clinical Neurological rehabilitation OPD and inpatient facilities, dynamic posturography, treadmill with bodyweight support, urodynamic laboratory, gait analysis laboratory, CANTAB for cognitive assessment, Hand robot and fully equipped occupational therapy and physiotherapy sections.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr. Arun B. Taly, Professor of Neurology & i/c Head of department:

**Dr.Anupam Gupta, Additional Professor (MD – Physical Medicine & Rehabilitation):** Traumatic brain injury, Stroke rehabilitation, spinal cord injury, cerebral palsy & Neurogenic Bladder

Dr.Meeka Khanna, Assistant Professor (MD - Physical Medicine & Rehabilitation): Spinal cord injury, Urodynamics

## <u>NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF</u> NEUROMICROBIOLOGY

**Duration**: 3 - 5 years

**Programme of study**: Initially, the candidate will be provisionally registered for Ph.D. Before confirmation of registration all the candidates have to complete Pre-Ph.D. examination after one year from the date of provisional registration. The candidate would be trained in both theoretical and practical aspects of the curriculum of Pre-Ph.D. examination. After satisfactory completion of proposed work and approval of synopsis, the candidate shall submit thesis for Ph.D. Candidates with fellowship from registered/recognized agencies only are eligible to apply for Ph.D. in Neuromicrobiology.

**Field of Interests**: Diagnosis of neuro infections with special reference to Neurotuberculosis and Neurocysticercosis, autoimmune diseases of the central nervous system. Molecular typing of microbes associated with central nervous system infections and molecular diagnosis of central nervous system infections.

Research facilities: State of the art facilities for microbiological diagnosis of routine samples, 24x7 CSF processing laboratory, Mycobacteriology laboratory with automated culture system. Bacteriology laboratory with automated culture and sensitivity systems. Mycology section and ELISA in Neuroimmunology section, Molecular biology section with facilities for DNA/RNA isolation, amplification using thermocycler (PCR), genotyping etc.

### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.R.Ravikumar, Professor:** Opportunistic bacterial, Parasitic, Fungal and Protozoal infections like Tuberculosis, Toxoplasmosis, Amoebic encephalitis and other neuroinfections in immunocompromised individuals.

**Dr.Shripad A.Patil, Professor:** Immunology of autoimmune diseases of the central and peripheral nervous system including leprosy. Development of immunodiagnostics for chronic infectious disease of CNS with special reference to CNS TB meningitis and Neurocysticercosis.

**Dr.S.Nagarathna, Additional Professor:** CSF cell analysis, cytological studies and bacterial isolation in pyogenic infections of the brain. Delineating cryptococcal meningitis in AIDS patients with clinical correlation; a study of mortality and morbidity. Rapid modes of isolation of M.tuberculosis – PCR, Bactec.

**Dr.H.B.Veena Kumari, Additional Professor:** Isolation and molecular analysis of microbial strains isolated from hospital infections in a neurosurgery and ICU set up of NIMHANS.

# NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF NEUROPATHOLOGY

**Duration**: 3 – 5 years

**Programme of study**: Initially the candidates will be provisionally registered for Ph.D. Before confirmation of the registration, all the candidates have to complete pre -Ph.D. examination after one year from the date of provisional registration. The candidate would be trained in both theory and practical aspects of the curriculum pertaining to the discipline. Later, the candidate would pursue and register for Ph.D. by research and submit the thesis for the award of Doctoral Degree.

**Research Facilities**: Well established Histopathology Laboratory for processing Muscle, Peripheral Nerve, Brain, Spinal cord of human and animal origin with special stains and Immunohistochemistry. Transmission Electron Microscopy for ultrastructural studies, Human Brain tissue Repository for Neurobiological Studies (Human Brain Bank) – a National Research Facility, Transfusion

Medicine Centre, Clinical Pathology and a Diagnostic Molecular Pathology Laboratory. Clinical Autopsies are regularly carried out for establishing the cause of death and progression of the disease. Facilities for research in neuro-oncology and neuromuscular disorder is available in the Neuro-oncology/Neuromuscular research laboratory located in the Neurobiology Research Centre. Facilities available include platforms for immunohistochemistry, fluorescent in-situ hybridization, tissue micro array, PCR and advanced imaging platforms, Western Blot, Immunoblots, Mitochondrial enzyme arrays, Molecular Genetics.

**Academic Faculty and Research Interest** (Refer under PDF in Neuropathology and Transfusion Medicine).

# <u>NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF NEUROPHYSIOLOGY</u>

**Duration**: 3 - 5 years

**Programme of study**: Initially the candidates will be provisionally registered for Ph.D. Before confirmation of the registration, all the candidates have to complete pre -Ph.D. examination. The candidate would be trained in both theory and practical aspects of the curriculum pertaining to the discipline. After satisfactory completion of proposed research work and approval of synopsis, the candidate shall submit the thesis for award of Ph.D. degree.

**Research Facilities**: Laboratory facilities are available to carry out research in the following areas:

- 1) Neurophysiology of Sleep and Cognition
- 2) Autonomic functions including HRV and BP variability
- 3) Evaluation of pulmonary functions in neuropsychiatric disorders
- 4) Neurobiology of sleep and memory systems
- 5) Cellular and molecular mechanisms of learning and memory
- 6) Neuronal plasticity in developing and adult nervous system
- 7) Neurobiology of motor neurone disease
- 8) Neurobiology of stress, anxiety, depression, epilepsy and brain stimulation reward
- 9) Central nervous system regeneration and the role of stem cells
- 10) Synaptic physiology
- 11) Neural plasticity and brain repair mechanisms
- 12) Activation of resident stem cells in the adult brain: Implications for the treatment of neuropsychiatric disorders
- 13) Single unit recording of action potentials in a freely moving animal.
- 14) Neurobiology of Emotion

### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.T.R.Raju, Senior Professor**: Animal model of motor neurone disease, Trophic factors, CNS regeneration and role of stem cells, Neuronal plasticity.

**Dr.Bindu M.Kutty, Professor**: Role of subiculum in spatial learning and memory functions, Strategies of environmental stimulation and transplantation in establishing functional recovery, Neurobiology of sleep, Neurophysiology of consciousness.

**Dr.T.N.Sathyaprabha, Additional Professor**: Autonomic and pulmonary functions in neuropsychiatric disorders, Neurophysiology of yoga, Neurobiology of motor neuron disease.

**Dr.B.S.Shankaranarayana Rao, Additional Professor**: Cellular and molecular mechanisms of learning and memory, Amelioration of stress epilepsy and depression induced cognitive deficits, Mechanisms of synaptic plasticity in the hippocampus, Activation of resident stem cells in the adult brain: Implications for treating neuropsychiatric disorders, Synaptic plasticity in transgenic and knockout mouse models of neuropsychiatric disorders, Neural plasticity and brain repair mechanism.

**Dr.Laxmi T.Rao, Associate Professor**: The information processing at the neuronal circuitry of the hippocampus, amygdale and prefrontal cortex due to early adverse experience, Information processing in the somatosensory cortex during and following focal ischemia.

# <u>NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF NEUROVIROLOGY</u>

**Duration**: 3 - 5 years

**Programme of study**: Initially, the candidate will be provisionally registered for Ph.D. Before confirmation of registration all the candidates have to complete Pre-Ph.D. examination after one year from the date of provisional registration. The candidate would be trained in both theoretical and practical aspects of the curriculum of Pre-Ph.D. examination. After satisfactory completion of proposed work and approval of synopsis, the candidate shall submit thesis for Ph.D. degree.

### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.V.Ravi, Professor:** HIV diagnosis, development of kits, antiretroviral therapy. Japanese encephalitis.

**Dr.S.N.Madhusudana, Professor:** Rabies development of diagnostic kits, clinical trails on intradermal vaccines with cell culture vaccines, development of plant based vaccines for rabies, development of monoclonal antibodies for rabies, Antiviral drugs, immune-pathology of Rabies.

**Dr.Anita S.Desai, Additional Professor:** Laboratory diagnosis of viral infections of the nervous system, molecular virology of neurotropic viruses to understand pathogenesis.

**Dr.Reeta Subramaniam Mani, Assistant Professor**: Molecular diagnosis of viral infections

### NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF NURSING

**Duration**: 3 - 5 years

**Programme of study**: During the first year, the candidate will be given training in the theoretical and practical aspects of the problem and the research methodology related to the proposed topic. All the candidates have to appear for pre -Ph.D. Examination after one year from the date of provisional registration. The candidate will have two years of supervised clinical work in nursing with special emphasis on areas of related to the topic of research. After the completion of the proposed research work, the candidate will submit the thesis for the award of Ph.D.

**Research facilities**: The Department of Nursing has a well-developed infrastructure to support teaching and research activities. There is good clinical facility and adequate reference books in the library for the students. The faculty members guide the research activities of the students in the areas of Neuro critical, infection control, effectiveness of structured teaching program, self care ability development among neurologically dependent and psychiatrically ill patients. Counseling psychiatric patients and their families, follow up work on domiciliary care services in OPD and community.

There are excellent clinical facilities in the areas of psychiatric nursing, neuro sciences nursing, community mental health – neuro nursing both in rural and urban and neuro-psychiatric rehabilitation nursing. The department has close collaboration with all other departments of the Institute for further support in the research activities and it is a part of multi-disciplinary team.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.K.Lalitha, Professor:** Mental health counseling and disaster intervention. Developing empathy skills in nursing personnel, School mental health programmes, Stress management programmes.

**Dr.Ramachandra, Additional Professor:** Electro-convulsive therapy, Substance Abuse related problems, Rehabilitation, HIV & Mental Health.

**Dr.Sailaxmi Gandhi, Assistant Professor:** Occupational Stress, Stress Management programmes, School Mental Health, Child & Adolescent Psychiatric Nursing and Psychiatric Rehabilitation.

**Dr.Prasanthi Nattala, Assistant Professor**: Developing and testing interventions for individuals with substance use disorders.

# NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF PSYCHIATRIC SOCIAL WORK

**Duration**: 3 – 5 years

**Programme of study**: A candidate who has obtained MSW and/or M.Phil. in Psychiatric Social Work degree from any recognized University or any other University recognized as equivalent thereto by NIMHANS securing not less than 55% marks can register for Ph.D. examination after one year from the date of provisional registration. The candidate would be trained in research methodology, theoretical and practical aspects of the curriculum on Ph.D. for a duration of 3 years. All the candidates have to complete Pre -Ph.D. examination after one year from the date of provisional registration.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.R.Parthasarathy, Professor**: Student Mental Health and Family Mental Health.

**Dr.K.Sekar, Professor**: Community Mental Health, Disaster Psychosocial Support and Mental Health Services.

**Dr.D.Muralidhar, Professor**: Substance abuse, Chronic mentally ill and Psychosocial Interventions for Mental disorders, sexual minorities.

**Dr.N.Krishna Reddy, Additional Professor**: Psychiatric Social Work Interventions in Neurosurgery and Fieldwork training.

**Dr.Prakashi Rajaram, Additional Professor**: Psychiatric Social Work Intervention in Neurology and Women issues.

**Dr.R.Dhanasekara Pandian, Additional Professor**: De-addiction Community Care, Counseling and Allied training programme.

**Dr.A.Thirumoorthy, Additional Professor**: Suicide prevention, Stress management, Geriatric care and palliative care.

**Dr.Md. Ameer Hamza, Associate Professor**: Rehabilitation of persons with psychosis, Caregiver intervention, Adolescent health.

**Dr.B.P.Nirmala, Associate Professor**: Psychiatric and Neurological Rehabilitation and Field work training in Social Work.

**Dr.N.Janardhana, Assistant Professor**: Community based rehabilitation, Child and Adolescent Mental Health, Preventive and Promotive Mental health activities.

**Dr.Vranda.M.N, Assistant Professor**: Psychosocial interventions and women with intimate partner violence.

**Dr.Kavita V.Jangam, Assistant Professor**: (On Contract) Child abuse and neglect, Intervention and research, Psychosocial care and Disaster management, Women and Mental Health, Research in Psychiatric Social Work.

**Dr.E.Arvind Raj, Assistant Professor**: (On Contract)

### NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF PSYCHIATRY

## NAME OF THE COURSE: Ph.D. IN HISTORY OF PSYCHIATRY

# <u>NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF PSYCHOPHARMACOLOGY</u>

**Duration**: 3 – 5 years **Programme of Study**:

- 1. Theoretical applied aspects of fundamental systemic neurosciences and Molecular psychopharmacology.
- 2. Clinical Psychopharmacology.
- 3. Experimental psychopharmacology.

### Fields of investigation:

- 1. Molecular modeling and computational biology
- 2. 2. Computational neuroscience involving nonlinear complex systems structure and dynamics.
- 3. Synchronization and coherence in neural systems.
- 4. Theoretical cognitive neuroscience.
- Electroconvulsive therapy and psychopharmacology (using herbal or allopathic medications) in rodent models of anxiety, depression, locomotor activity, learning and memory and cellular neuroplasticity.
- 6. Investigation of behavioral, neuropsychological, and other effects of medications in psychiatric disorders.
- 7. Psychosocial aspects of medication in psychiatric disorders.
- 8. Transcranial direct current stimulation

**Research facilities**: Advanced computing and modeling environment (SGI ONYX 3200 Server, DEC Alpha 4100 Server Pentium 4 Fedora Linux Servers. MATLAB, MATHEMATICA, facilities of biomedical signal processing, image processing. Facilities for clinical and animal research, computerized ECT technology, instruments for the evaluation of the animal models listed above.

### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.N.Pradhan, Senior Professor**: Nonlinear dynamics, Complex systems, Molecular modeling, Behavioural psychopharmacology, Indigenous drug development.

**Dr.Chittaranjan Andrade, Professor**: Electroconvulsive Therapy, Drug trials, Herbal medicines.

# NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF SPEECH PATHOLOGY & AUDIOLOGY

**Programme of study**: The Candidate admitted for the program will be thoroughly trained on clinical and theoretic aspects of the field of Speech-Language Pathology and Audiology. However, the emphasis of theoretical training will be on the topics related to doctoral program. This is in addition to the training program that the candidate has to undergo which is stipulated by the Institute. The candidate shall also undergo clinical training and in particular in the area of their research as well as supervise the intern in Speech Pathology and Audiology and participate in the teaching programs.

**Research Facilities**: Full fledged speech pathology and audiology laboratory. Multidisciplinary interaction. Excellent clinical material in the area of neuropsychiatric communication disorders.

### **ACADEMIC FACULTY AND RESEARCH INTERESTS**

**Dr.M.Jayaram, Senior Professor**: Neurogenic communication disorders, Stuttering, Voice disorders, Speech perception and production, Instrumentation, Auditory dyssynchrony.

**Dr.N.Shivashankar, Professor**: Clinical neuroaudiology, Central auditory processing disorders, Adult and childhood speech-language disorders. **Dr.Vandana.V.P, Assistant Professor**: Neurogenic communication disorders, Autism, Dysarthria, AAC, Neuroimaging studies of speech-language.

**Dr.B.K.Yamini, Assistant Professor**: Dysarthria, Neurogenic oropharyngeal dysphagia.

### NAME OF THE COURSE: DM IN NEUROLOGY

**Duration**: For candidates with MBBS qualification the duration of the course will be for a period of five years. For candidates with MD/DNB in General Medicine or Pediatrics, the duration of the course will be for a period of three years.

Clinical & Research Facility: Department of Neurology has experienced faculty with varied research interest and offers research facilities in the areas of diagnosis and management of various neurological disorders. This is backed by well-developed Electrodiagnostic Laboratory with facilities for EEG, Electroneuromyography, Evoked potentials, Long term Video EEG, Transcranial magnetic stimulation, Sleep laboratory, Doppler ultra sonography and Autonomic nervous system laboratory. In addition, the department has specialized stroke unit, neuro critical care and exclusive neuro infection wards. A well developed neurorehabilitation facility is also available apart from acute and chronic care neurology.

### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.P.Satishchandra, Senior Professor & Director / Vice-Chancellor**: Epilepsy, Neuroepidemiology, Neuroinfections, Neuro-AIDS, Epilepsy and genetics, Electroencephalography and evoked potentials.

**Dr.A.B.Taly, Professor**: Neurological disabilities and rehabilitation, Neuromuscular disorders, Sleep and alternative medicine.

**Dr.M.Veerendra Kumar, Professor**: Neurocysticercosis, Clinical Electrophysiology, Advanced EMG.

**Dr.S.R.Chandra**, **Professor**: Cognitive and behavioural sciences and dementia.

**Dr.A.Nalini, Professor**: Motor neurone disease, Neuro Muscular disorders.

**Dr.Pramod Kumar Pal, Professor**: Transcranial magnetic stimulation and motor physiology, Parkinson's disease and other movement disorders, Ataxias.

**Dr.P.S.Mathuranath, Additional Professor:** Cognitive Neuroscience.

Dr.Sanjib Sinha, Additional Professor: Epilepsy, Wilson's disease, Sleep.

**Dr.P.S.Bindu, Additional Professor**: Pediatric neurology, Neurometabolic disorders, Leukodystrophies and Dysmorphic syndromes

**Dr.Girish B.Kulkarni, Associate Professor**: Immune mediated neuropathies, Headache, Neuroepidemiology.

**Dr.Ravi Yadav, Associate Professor**: Parkinsonism and related disorders, headache, neurocritical care.

Dr.Netravathi.M, Assistant Professor: Neuroinfections.

**Dr.Madhu.N, Assistant Professor**: Immune mediated neurological disease viz Myasthenia Gravis

**Dr.Subasree.R, Assistant Professor**: Peripheral Neuropathy, Clinical Electrophysiology

### NAME OF THE COURSE: DM IN NEURORADIOLOGY

**Duration**: 3 years

#### Clinical and Research Facilities:

- 1. Three sate of the art 16 slice CT scanners with CT Angiography, CT Perfusion, BMD and CT Guided minimally invasive procedures like biopsy.
- 2. Biplane digital Substraction Angiography for diagnostic and interventional management of neurovascular diseases with 3T rotational angiography, Dyna CT and DSA guided fluoroscopic intervention facilities. Five bedded post procedure observation ward.
- 3. Four state of the art top of the line MRI Scanner out of which two are 3T units with facilities like MR Angiography, Perfusion, Proton, Phosphorous, Carbon Spectroscopy and Sodium Imaging. Image processing facilities for functional MRI including both task and resting sate functional analysis, connectivity analysis and Multimodal network analysis.
- 4. Molecular imaging and SPECT/PET MR for tumor, epilepsy imaging, imaging of neurodegenerative and psychiatric disorders.
- 5. Computerized Radiography (CR) and Digital Radiography (DR) system. Pictures archiving communication system, Radiology Information System.
- 6. Picture Archival and Communication System (PACS) with Radiology System integrated with HIS.
- 7. State of art Ultrasound for routine imaging, nerve and muscle imaging and Trans cranial Doppler.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.Arun Kumar Gupta, Professor:** Interventional Neuroradiology, Advanced Neuroimaging, Materials for Interventional Radiology, PACS.

**Dr.Rose Dawn Bharath, Associate Professor**: Functional MRI applications in pre-operative work up, Psychiatric Neuroimaging, cognitive & behavioral sciences, Advanced imaging techniques like spectroscopy, DTI in Neurosciences, CT and MR Perfusion imaging in tumors and vascular disorders and infections.

**Dr.Hima Shriniwas Pendharkar, Associate Professor:** Diagnostic Non invasive imaging of neurovascular lesions; Interventional endovascular treatment of all neurovascular – arterial & venous lesions.

**Dr.Aravinda.H.R, Associate Professor**: Diagnostic Neuroimaging – Application of perfusion and diffusion MR imaging of brain tumors and mass lesions, Endovascular treatment of brain and spinal AVM, dural AV fistulae and aneurysm coiling.

**Dr.Jitender Saini, Assistant Professor**: Diagnostic and interventional Neuroradiology.

**Dr.Chandrajit Prasad, Assistant Professor**: Proton and phosphorus MRS, Perfusion study in mass lesion, Diffusion tensor imaging, Neurointervention including thrombolysis, aneurysm coiling and treatment of AVM and fistulas.

**Dr.Maya Dattatraya Bhat, Assistant Professor:** Pediatric Neuroradiology Imaging of Neuroinfections, Diffusion tensor imaging.

### NAME OF THE COURSE: M.Ch. IN NEUROSURGERY

**Duration**: (i) The duration of the course will be five years for candidates with MBBS Qualification.

(ii) The duration of the course will be three years for candidates with MS/DNB in General Surgery.

**Training facilities**: The Department of Neurosurgery offers comprehensive training in all aspects of this developing field. It has an advanced OT complex equipped with the most modern microscopes, endoscopes, neuronavigation etc.

It also has a stereotaxy and Gammaknife radio surgery unit, the first of its kind in South India. It manages a specialized head and spine trauma center with excellent facilities. In addition to this, the department has ongoing clinical and experimental research in basic and applied Neurosciences namely Head Injury,

Glioma, Cerebral ischemia, Subarachnoid Haemorrhage, Peripheral Nerve and all grafts and spinal dysraphism.

## The Training includes:

- 1. Basic Neurosurgery, to be able to perform Neurosurgical procedures under supervision under assistance and independently.
- 2. Checking both in and outpatients at casualty.
- Neurology and Neuroradiology and Neuropathology posting and training. In addition the Post MBBS candidates will undergo one year General Surgery training at the General Hospitals attached to Bangalore Medical College.

### ACADEMIC FACULTY AND RESEARCH INTERESTS

### Dr.R.M. Verma, Emeritus Professor:

**Dr.B.Indira Devi, Professor**: Surgery for Craniovertebral junction anomalies, Peripheral nerve repairs, Spinal dysraphism, Neurorehabilitation, Surgery for gliomas General Neurosurgery. Clinical and basic research on peripheral nerve, spinal dysraphism, sub arachnoid hemorrhage and cerebral ischemia, cortical plasticity and functional MRI.

**Dr.S.Sampath, Professor**: Spinal trauma, Instrumentation and stabilization procedures, Endoscopic neurosurgery, Cerebro vascular surgery, Surgery for supraseller lesions, Gamma Knife Radiosurgery.

**Dr.Malla Bhaskara Rao, Professor**: Epilepsy surgery

**Dr.Paritosh Pandey, Additional Professor**: Clinical research in glioma, Cranial infection, Cerebrovascular.

**Dr.Dhananjay I Bhat, Additional Professor**: Cerebro vascular surgery, Peripheral nerve injuries, Craniovertebral and spine fusions, Clinical and Basic research on Peripheral nerve and sub arachnoid hemorrhage, Gammaknife.

**Dr.Dwarakanath Srinivas, Additional Professor**: Functional and minimally invasive surgery, Skull base surgery, Pediatric neurosurgery.

**Dr.Dhaval P.Shukla, Additional Professor**: Pediatric neurosurgery, aesthetic and reconstructive neurosurgery, basic and clinical research on autonomic nervous system, clinical and basic research on head injuries, peripheral nerve surgery.

**Dr.Arivazhagan.A, Associate Professor**: Functional and minimally invasive surgery, Skull base surgery, Endoscopic surgery.

**Dr.Nupur Pruthi, Associate Professor**: Surgery for spine and Gliomas, Clinical and basic research on Head Injuries.

**Dr.Jagath Lal.G, Associate Professor**: Glioma surgery and research, Neurotrauma and Neuro re-habilitation, Stereotaxy for tumours.

**Dr.Manish Ranjan, Associate Professor**: Spine, Surgery for glioma and research, Gammaknife radiosurgery, minimally invasive.

**Dr.K.V.L.Narasinga Rao, Associate Professor**: Spine surgery, Meningioma and Glioma surgery, Gammakinfe.

**Dr.V.Vikas, Assistant Professor:** 

Dr.A.R.Prabhu Raj, Assistant Professor:

### **DEPARTMENT OF CHILD & ADOLESCENT PSYCHIATRY**

Child and Adolescent Psychiatry services at NIMHANS were started in the 1950s with objectives of catering to mental health needs of children and adolescents, training mental health professionals and facilitating research in the area of child and adolescent psychiatry.

Department of Child & Adolescent Psychiatry, formed on 30.12.2010 is the first department of its kind in India.

Clinical Services: The Department offers clinical services for Developmental disorders (Autism, Mental retardation, Specific Learning Disorders (dyslexia) and Mental health disorders like ADHD, Mood disorders, OCD, Emotional and behavioral problems, Substance abuse, Psychosis, Anxiety disorders etc. The department serves as a major tertiary care referral center for India and countries like Sri Lanka, Maldives, Bangladesh etc. The first contact outpatient services are available all days of the week except Sunday. There is a 40-bedded inpatient facility (Child Psychiatry Centre) with 30 general and 10 special beds. Clinical service inputs are multi-disciplinary in nature and provided in liaison with the Departments of Clinical Psychology, Psychiatric Social Work, Speech Pathology & Audiology, Neurochemistry, DP&NR, Neurology etc.

**Training**: The Department offers training to several MD/DPM/DNB/DM residents from within NIMHANS and from other Institutions all over India. Trainees from outside institution may be from the Department of Psychiatry, Pediatrics, Neurology, Psychology, Social Work. They stay as observers for a duration ranging from 2 weeks to 3 months or more. Apart from these, consultants (Psychiatry/Pediatrics) from outside NIMHANS (both Govt. and Pvt. Sectors)

hone their skills in child and adolescent mental health at NIMHANS. Several international trainees and consultants, especially from South Asia, avail the opportunity to observe and train with us in child and adolescent mental health. Further a three month orientation programme starting in the months of February, May, August and November of each year in child and Adolescent Psychiatry is offered by the department.

**Research activities**: Faculty has been actively involved in several research activities. Ongoing research projects include: projects on autism spectrum disorder, X-linked Mental retardation, Molecular genetics of primary microcephaly, Ayush-Manas project etc.

### NAME OF THE COURSE: (1) DM IN CHILD & ADOLESCENT PSYCHIATRY

**Duration**: 3 years

# NAME OF THE COURSE: (2) POST DOCTORAL FELLOWSHIP IN CHILD & ADOLESCENT PSYCHIATRY

**Duration**: 1 year

### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.Shoba Srinath, Professor**: Mood Disorders, Autism Spectrum Disorder, Obsessive Compulsive Disorders and Epidemiology.

**Dr.Satish Chandra Girimaji, Professor**: Mental Retardation, Syndromology, Clinical Child & Adolescent Psychiatry.

**Dr.Shekhar P. Seshadri, Professor**: Adolescent Mental Health, Therapy and Therapy Training, Gender, Sexuality, Sexual Abuse, Difficult Populations like Street Children, Qualitative Research and Experiential Methodology, Life Skills Education, School Programmes.

**Dr.K.John Vijay Sagar, Associate Professor**: Specific learning disorder, Autism spectrum disorder, Psychopharmacology, Attention deficit hyperactivity disorder, Consultation – Liaison in CAP

### **DEPARTMENT OF PSYCHIATRY**

The Department of Psychiatry, NIMHANS is one of the largest in South East Asia with 30 faculty members, 22 senior residents and 84 post graduate trainees.

#### A: Services

Clinical work in the department is through Outpatient Clinics and Inpatient Services. The General Outpatient runs 6 days a week with both evaluation and follow-up services each day. SPECIAL CLINICS RUN BY THE DEPARTMENT ARE AS FOLLOWS:

De-Addiction Clinic - Monday, Thursday, Saturday (AM)

Tobacco Cessation Clinic - Monday, Saturday (AM)

OCD Clinic - Tuesday (AM)
Metabolic Clinic in Psychiatry - Wednesday (AM)
Schizophrenia Clinic - Wednesday (AM)
Rehabilitation OPD - Wednesday (AM/PM)

Perinatal Clinic - Friday (AM)
Old Age Psychiatry - Saturday (PM)

The Department has a large inpatient set up with 550 beds, De-addiction Services, Family Psychiatric Center and Psychiatric Rehabilitation Day Care Centre.

Psychiatric rehabilitation services are provided in OPD, daycare and inpatient settings: Inpatients admitted under psychiatry are referred for rehabilitation services.

The Department also runs the Community Mental Health Services for the last three decades. The facility provides community based mental health services in 6 districts of Karnataka in addition to supporting several more districts.

### **B.** Training

Under the aegis of NIMHANS the Department of Psychiatry is involved in training in a continuous manner under MD, DPM, Ph.D. in Psychiatry and Post Doctoral Fellowship Psychiatry courses.

### NAME OF THE COURSE: (1) MD IN PSYCHIATRY

**Duration**: 3 years after MBBS/2 years after DPM.

### NAME OF THE COURSE: (2) DIPLOMA IN PSYCHIATRY (DPM)

**Duration**: 2 years

<u>NAME OF THE COURSE: (3) FELLOWSHIP IN PSYCHIATRIC REHABILITATION</u>

**Duration**: 1 year

### **Research facilities**: As given under MD Psychiatry

The department is active in the training of professionals from other disciplines in the Institute and from other parts of India and SAARC region. Other training activities of the department include

- 1. PHC doctors under the National Mental Health Program.
- 2. Certificate courses in Family Psychiatry, Child Psychiatry and Substance Abuse
- 3. Regular de-addiction training for both medical and non-medical health professionals
- 4. One week training program in students Counseling for college teachers
- 5. Regular workshops for teachers of secondary schools, Community Level Workers, volunteers, NGOs on School Mental Health using Life Skills Education for adolescents
- 6. There are periodic training workshops on diverse topics like Communication Skills, Grief & Bereavement, Clinical Audits, Psycho oncology, chronic pain and Palliative care.
- 7. 'Caregivers' education and support programme workshops.

Newer training methods related to Medical Teaching like Objective Structure Clinical Examination (OSCE), problem based learning, role play and Small Group Activities are being conducted on a regular basis.

### C. Research Activities

The faculties of the department have diverse research interests. They include Clinical Psychiatry, Investigative Aspects of various psychiatric conditions – Neuro-imaging, Molecular Genetics, Electro-physiology and Interventions including Electro Convulsive Therapy, Yoga, Psychotherapy and Transcranial Magnetic Stimulation. There is active research work in special areas like Obsessive Compulsive Disorder, Child Mental Health, Old Age Psychiatry, Women's Mental Health, Substance Abuse, Consultation Liaison Psychiatry, Neuropsychiatry and Community Mental Health. The department has liaison with other national and international research centers (example NCBS, SVYASA).

The department works in collaboration and has consultation liaison towards clinical services with other departments of the institute – Neurology, Clinical Psychology, Psychiatric Social Work, Psychiatric Nursing, Psychopharmacology, Neurochemistry, Neuropathology, Neurophysiology, Neurological Rehabilitation, Biostatistics etc.

### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.R.S.Pandey, Professor**: Biological Psychiatry and Mind Body Medicine.

**Dr.B.N.Gangadhar, Professor**: Schizophrenia, Electro Convulsive Therapy, Yoga & Complementary Medicine, Community Mental Health.

**Dr.S.K.Chaturvedi, Professor**: Cancer and Mental Health, Chronic Pain, Psychosomatics, Quality of Life & Consultation – Liaison Psychiatry.

**Dr.Sanjeev Jain, Professor**: Genetics of Psychiatric disorders, History of Psychiatry, Phenomenology, Biological Psychiatry.

**Dr.Mathew Varghese, Professor**: Family Issues and Mental Health, Geriatric Psychiatry, Community Psychiatry.

**Dr.Prabha S.Chandra, Professor**: HIV and mental health, Women's mental health.

**Dr.Pratima Murthy, Professor**: Substance Abuse, History of Psychiatry, Psychiatric Training, Neuropsychiatry.

**Dr.Srikala Bharath, Professor**: Old Age Psychiatry, School Mental Health using Life Skills Education, Children at risk, Disaster and Mental Health.

**Dr.Y.C.Janardhan Reddy, Professor**: Obsessive Compulsive Disorders, Anxiety Disorders and Bipolar disorder.

**Dr.Vivek Benegal, Professor (De-Addiction Unit)**: Substance abuse related disorders, Neurobiology and genetics of addiction.

**Dr.Jagadisha Thirthalli, Additional Professor**: Schizophrenia, Somatic therapies (ECT, rTMS, Yoga).

**Dr.John P.John, Additional Professor**: Phenomenology, Nosology and Neurobiology EEG, Structural and Functional MRI, Neuropathology, Neuropsychology, Molecular Genetics of Schizophrenia.

**Dr.B.M.Suresh, Additional Professor**: Obsessive compulsive disorder: Genetics, Forensic Psychiatry & Community Psychiatry.

**Dr.G.Venkatasubramanian, Additional Professor**: Evolutionary Psychiatry, Psychoneuroendocrinology, Psychoneuroimmunology, Metabolic Disorders in Psychiatry, Neuroimaging (MRI, fMRI, DTI & MRS) and Genetics in Psychiatry, Schizophrenia, Biology of Obsessive Compulsive Disorder, Human Evolutionary Genetics, Evolutionary Biology.

**Dr.P.T.Sivakumar, Additional Professor**: Geriatric Psychiatry, Metabolic Disorders in Psychiatry, Psychiatric Rehabilitation.

**Dr.Geetha Desai, Associate Professor**: Women's Mental Health, Chronic Pain and Somatoform disorders.

**Dr.Shivarama Varambally, Associate Professor**: Early onset psychosis and Schizophrenia, Neurological Signs in Schizophrenia, Yoga in Psychiatry, Electro Convulsive Therapy.

**Dr.Prabhat Kumar Chand, Associate Professor**: Substance/Drug abuse related disorders, Bipolar disorder and dual diagnosis.

**Dr.Muralidharan.K, Associate Professor**: Vulnerability to Alcoholism and Substance use disorders, Treatment of substance use disorders, Transcranial Magnetic Stimulation, Electro-Convulsive therapy.

**Dr.Harish.T, Associate Professor**: Maternal Infant Bonding. Neurobiology of Postpartum Psychiatric Disorders, Acute Psychosis, Seizures and Psychiatry, Bioethics.

**Dr.Santhosh Loganathan, Associate Professor**: Stigma and Mental illness, Geriatric Psychiatry, Family therapy, Mental health literacy and advocacy.

**Dr.V.Senthil Kumar Reddi, Assistant Professor**: Emergency Psychiatry, Consultation Liasion Psychiatry

**Dr.C.Naveen Kumar, Assistant Professor**: Severe Mental Disorders in Rural Communities, Electro convulsive therapy and other brain stimulation techniques, Forensic Psychiatry, Psychiatric Rehabilitation.

**Dr.A.Shyam Sundar, Assistant Professor:** Obsessive compulsive disorders, Anxiety disorders, Trans cranial magnetic stimulation.

**Dr.Arun.K, Assistant Professor**: Adolescents and addiction, Dual diagnosis, Teaching and training.

**Dr.Preethi Sinha, Assistant Professor**: Psychopharmacology, Geriatric Psychiatry.

**Dr.T.Sivakumar, Assistant Professor**: Psychiatric disability, Psychiatric rehabilitation, Caregiver programs.

Dr.Sydney Moirangthem, Assistant Professor: Community Psychiatry

Dr.Janardhanan.C.N. Assistant Professor:

### Dr.Biju Viswanath, Assistant Professor:

### NAME OF THE COURSE: DM IN NEUROANAESTHESIA

**Duration**: 3 years

## <u>NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN</u> <u>NEUROANAESTHESIA</u>

Duration: 1 year

**Programme of study**: The course envisages training the candidates in the following areas:

- (i) Basic sciences related to neuroanaesthesia
- (ii) Clinical neuroanaesthesia for neurosurgery
- (iii) Anaesthesia for neuroradiological procedures including interventional neuroradiology and magnetic resonance imaging
- (iv) Neuromedical and neurosurgical intensive care
- (v) Principles of research in neuroanaesthesia
- (vi) Experience in handling modern anaesthesia and intensive care equipment.

Research facilities: The clinical material of the department offers a wide scope for investigation. The department is also equipped with extensive cardiovascular, respiratory and neurological monitoring facilities including pulmonary function testing Transcranial Doppler, bispectral index, spectral entropy, minimally-invasive and non-invasive cardiac output, regional cerebral oxygenation, intraoperative and critical care EEG, bed-side blood gas and electrolyte analysis, anaesthetic agent monitoring and cardiac enzyme assessment. Trans-thoracic and transoesophageal echocardiography are being added shortly. In collaboration with other clinical departments, it is possible to study intracranial pressure and related intracranial dynamics.

# <u>NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN</u> NEUROCRITICAL CARE

**Duration**: 1 year

**Programme of study**: The course envisages training the candidates in the following areas:

- (i) General principles of critical care including organization of critical care, scoring systems, admission and discharge criteria, transport of patients.
  - (ii) Basic Neuroanatomy and Physiology.
  - (iii) Pre hospital and Neurointensive care in patients with neurologic injury.
  - (iv) Cerebrovascular accidents.
  - (v) Traumatic brain and spinal cord injury.

- (vi) Neurological disease including seizure disorder, peripheral motor neurone disease, infections diseases of CNS.
  - (vii) Monitoring in critical care.
  - (viii) Neuroimaging and other radiological investigations.
  - (ix) Neurorehabilitation and treatment of complications.
  - (x) Research in the neurocritical care.

Research facilities: The clinical material of the department offers a wide scope for investigation. The department is also equipped with extensive cardiovascular, respiratory and neurological monitoring facilities including pulmonary function testing Transcranial Doppler, bispectral index, spectral entropy, cardiac output monitor, Arterial blood gas machine, anaesthetic agent monitoring and cardiac enzyme assessment. Transthoracic and Transoesophageal echocardiography has been procured and used in the ICU. The department has state of the art high end ventilator for 30 bedded ICU. Ultrasound machine with all probes procured recently.

### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.G.S.Umamaheswara Rao, Senior Professor:** Intensive care, Head injury, mechanical ventilation, Cerebral blood flow studies, Indegenization of medical equipment, Music and anaesthesia, depth-of-anaesthesia monitoring, infections in ICU, critical care in neuro-muscular diseases.

**Dr.V.Bhadrinarayan, Professor:** Head injury, Intensive care.

**Dr.V.J.Ramesh, Professor:** Outcome in intensive care, Mechanical ventilation.

**Dr.K.R.Madhusudan Reddy, Professor:** Neuroendoscopy, Studies in intraoperative ICP measurement.

**Dr.M.Radhakrishnan, Additional Professor:** Clinical investigation in Neuroanaesthesia.

Dr.Sriganesh.K, Associate Professor:

Dr.Sudhir.V, Assistant Professor:

Dr.Gopala Krishna.K.N, Assistant Professor:

Dr. Sonia Bansal, Assistant Professor:

<u>NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN NEUROINFECTIONS</u>

**Duration**: 1 year

Course of Study and work: The Fellowship program shall be conducted at NIMHANS and such other centers approved by NIMHANS. During the period of study, the candidate has to work under the guidance of the faculty of Neuromicrobiology and Neurovirology, with academic and diagnostic responsibilities. Active participation in seminars, journal clubs, case conferences, didactic lectures shall form the main structures of the fellowship program. The candidate shall be required to share the duties of Senior Resident and participate in all the teaching and training programs of the two departments where they are posted.

# NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN HOSPITAL INFECTION CONTROL

Duration: 1 year

ACADEMIC FACULTY AND RESEARCH INTERESTS: (Please refer under

Ph.D. Neuromicrobiology/Ph.D. Neurovirology)

NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN NEUROLOGY

a) EPILEPSY

b) MOVEMENT DISORDERS

c) NEUROMUSCULAR DISORDER

d) STROKE

**Duration**: 1 year

FACILITY: Clinical and Research Opportunity

ACADEMIC FACULTY AND RESEARCH INTERESTS: (Please refer under DM

in Neurology)

NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN NEUROPATHOLOGY

**Duration**: 1 year

**Programme of Study**: To train diagnostic Neuropathologist. Training offered to Postgraduate in Pathology (Medical only).

**Research facilities**: Well established Histopathology laboratory for processing Muscle, Peripheral Nerve, Brain, Spinal cord from human and animal origin with special stains and Immunohistochemistry, Transmission Electron Microscopy Facility, Human Brain Tissue Repository for Neurobiological Studies (Human Brain Bank) – A National Research Facility, Transfusion Medicine Centre, Neuro-oncology and Neuromuscular research laboratory facilities.

# <u>NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN TRANSFUSION MEDICINE</u>

**Duration**: 1 year

**Programme of Study**: The Candidate who works whole time in the transfusion medicine centre taking care of blood donor counseling, selection and bleeding, therapeutic procedures like phlebotomy, therapeutic plasma exchange and in transfusion transmitted infection screening and other blood safety activities and other responsibilities similar to Senior Resident. The course content will be such as to cover training in all related disciplines transfusion medicine.

**Research facilities**: NIMHANS is a tertiary care referral centre with that caters to patients with psychiatric, neurology and neurosurgery conditions. TMC and the blood component separation facility is licensed by DCI and is recognized by NACO as a training centre.

The TMC is well equipped with state of art equipments necessary for therapeutic activities and blood safety. More than ten thousand units of blood per year are issued to various wards and other hospitals in and around. A large number of blood donation camps are held to procure blood from voluntary blood donors. In addition, a large number of therapeutic plasma exchanges are carried out. TMC has three cell separators for therapeutic plasma exchanges in TMC and ICUs. Component separation is regularly performed appropriate to clinical requirements.

NACO has identified TMC as training centre for the state of Karnataka. TMC conducts several training programs for blood bank offcers, technologists and nursing staff working in blood banks throughout the state of Karnataka. TMC also provides training for staff of Blood Storage Centers (BSCs) throughout the state; several private blood banks – stand alone, hospital and medial college based, take training from TMC, NIMHANS.

# ACADEMIC FACULTY AND RESEARCH INTERESTS FOR NEUROPATHOLOGY & TRANSFUSION MEDICINE

### Dr.S.K.Shankar, Emeritus Professor:

**Dr.Vani Santosh, Professor**: Neuro Oncology Research, Developmental Neuro Pathology.

**Dr.T.C.Yasha, Professor**: Pathology of Peripheral Nerves, Neurodegenerative diseases, Pathology of Neurometabolic disorders.

**Dr.Sundar Periyavan, Professor of Transfusion Medicine**: Transfusion Medicine, Immunohematology and Therapeutic aphaeresis.

**Dr.N.Gayathri, Professor**: Neuro Muscular diseases, Neuro Metabolic Disorders and Ultrastructural Pathology.

**Dr.B.K.Chandrasekhar Sagar, Additional Professor in Electron Microscopy**: Ultrastructural Neurobiology, Developmental Neurobiology and Ultrastructural Pathology.

**Dr.Anita Mahadevan, Additional Professor**: Pathology of Neuroinfections (AIDS/CJD/Rabies, etc.,), Pathology of Peripheral Nerves, Brain Banking, Epilepsy, Developmental disorders of CNS, Fetal Neuropathology.

# NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN NEUROLOGICAL REHABILITATION

**Duration**: 1 year

**Programme of study**: To train Psysiatrists in Neurological rehabilitation. Training is offered to post graduates in Physical Medicine and Rehabilitation.

Research Facility: Comprehensive Neurological Rehabilitation unit with outpatient and in-patient services. Well equipped Physiotherapy, Occupational therapy and orthotic section with equipments like body weight support treadmill, dynamic posturography, robotic hand therapy and CANTAB for cognitive assessment. State-of-the-art gait analysis laboratory and urodynamic study lab.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.Arun B.Taly, Professor of Neurology & i/c Head of department:

**Dr.Anupam Gupta, Additional Professor (MD – Physical Medicine & Rehabilitation):** Traumatic brain injury, Stroke rehabilitation, spinal cord injury, cerebral palsy & Neurogenic Bladder

Dr.Meeka Khanna, Assistant Professor (MD - Physical Medicine & Rehabilitation): Spinal cord injury, Urodynamics

# NAME OF THE COURSE: FELLOWSHIP IN PSYCHOSOCIAL SUPPORT DISASTER MANAGEMENT

**Duration**: 1 year

NAME OF THE COURSE: M.PHIL. IN BIOPHYSICS

**Duration**: 2 years

**Programme of study**: The course has been designed to build up the general background in the major areas of biophysics such as molecular biophysics, membrane biophysics, neurobiophysics, biophysical techniques, bioenergetics and medical biophysics. In the second year of the course, emphasis is given to specialization and research. The candidate will carry out a research project to be presented in the form of a dissertation. The laboratories are well equipped to conduct research on cellular and molecular aspects of nervous system.

**ACADEMIC FACULTY AND RESEARCH INTERESTS:** (Please refer under Ph.D. in Biophysics)

### NAME OF THE COURSE: M.PHIL. IN CLINICAL PSYCHOLOGY

**Duration**: 2 years

The Department of Clinical Psychology is the first department to start a teaching programme in the field of Clinical Psychology in the country. The Diploma in Medical Psychology was started in the year 1955. The M.Phil. course in Clinical Psychology aims to generate highly skilled and competent human resources for delivering clinical psychology services as well as undertaking research. course gives a comprehensive coverage of (1) Psychodiagnostic assessment (2) Counseling and psychotherapy (3) Family & Martial therapies (4) Behaviour Medicine and Cognitive Behaviour therapy (5) Child and Adolescent Mental Health (6) Management of Substance Abuse (7) Psychosocial Rehabilitation & (8) Neuropsychology. (9) Psychopathology. (10) Statistics & Research Methods. The didactic lectures, clinical teaching through case conferences and topic discussions are held regularly. Seminars and Journal clubs provide additional input. Candidates are required to carry out a research project on topics of clinical relevance to gain an orientation to research methods. Candidates work under supervision, with adult and child populations with a range of psychiatric and neurological problems, thereby gaining clinical expertise.

### Clinical Services through special clinics at NCWB.

**Marital Enrichment Clinic:** Dr. Anisha Shah and Team provide consultation to individuals/couples on enhancing quality of marital relationships.

**Stress Management and Lifestyle Clinic:** Dr.Paulomi Sudhir and Team provide consultation to individuals on cognitive-behavioural strategies to manage stress effectively and prevent lifestyle related diseases.

**Flourish:** Dr.Seema Mehrotra and Team provide consultation to youth on promoting positive mental health and wellbeing.

**Psychology Care Clinic:** Dr.Ahalya Raguram and Team provide brief psychotherapy and counseling interventions to distressed individuals.

**Trauma Recovery Clinic:** Dr.Suman and Team will provide psychological and social interventions to facilitate recovery from traumatic experience and enhance resilience.

**DEPARTMENT OF CLINICAL PSYCHOLOGY ACADEMIC FACULTY AND RESEARCH INTERESTS.** (Please refer under Ph.D. in Clinical Psychology).

### NAME OF THE COURSE: M.PHIL. IN NEUROPHYSIOLOGY

**Duration**: 2 years

**Programme of study**: The course consists of lectures, seminars, laboratory work and dissertation. The course aims at training students to acquire comprehensive knowledge of Neurophysiology from the organism to the cellular level. The areas to be covered include: (i) cellular and developmental neurobiology, (ii) mechanisms of the systems of sensation, movement and posture, (iii) mechanisms of nervous systems governing visceral and endocrinal processes, (iv) neurophysiology of consciousness and higher nervous activity, (v) clinical neurophysiology, electroencephalography and neural imaging and (vi) research methodology covering research techniques in neurophysiology.

The candidates will actively participate in seminars and journal clubs and acquire skills in critically evaluating research findings. They would be exposed to research methodologies covering various aspects of Neurophysiology through postings in several laboratories of the department. Each candidate is expected to acquire a wide range of experience in experimental skills, which will be achieved by regular participation in practicals.

The candidates will carry out specific research project, which will be presented in the form of a dissertation.

**Research Facilities**: Research facilities to carry out dissertation work are available in the department. It has well equipped laboratories to conduct research in cellular neurophysiology, synaptic physiology, behavioral neurobiology, learning and memory, neuroanatomy, growth and differentiation of CNS, regeneration and degeneration, brain chemistry, neurobiology of stress, Epilepsy, depression and brain stimulation reward, Stem cells and neurogenesis, neurobiology of motor neuron disease, neuronal plasticity, Autonomic and pulmonary functions, neurophysiology of cognition, sleep etc.

The laboratory facilities include electrophysiology, neuromorphology, psychophysiology, neuronal culture and biochemistry to investigate the functioning of nervous system through electrophysiological, morphological, behavioral and biochemical approaches.

**ACADEMIC FACULTY AND RESEARCH INTERESTS:** (Please refer under Ph.D. in Neurophysiology)

### NAME OF THE COURSE: M.PHIL. IN NEUROSCIENCES

Duration: 2 years

**Programme of study**: The course consists of theory lectures on structure and function of the nervous system at molecular, cellular and systems level. In addition, candidates will have an exposure to pathological and applied aspects of the nervous system. Theory lectures will be complemented with practicals and demonstrations of various techniques used in different disciplines. Each candidate is required to carry out research work, which will result in a dissertation.

**COURSE COMMITTEE**: The course will be coordinated by a Course Committee consisting of five faculty members nominated by the Director/Vice-Chancellor, NIMHANS from the participating departments. The current members of the course committee are:

Dr. Vani Santosh, Professor, Department of Neuropathology & HOD of Clinical Neurosciences (Virtual department) - Chairperson

Dr. Preeti G. Joshi, Professor & Head, Department of Biophysics - Member

Dr.S.N.Madhusudana, Professor, Department of Neurovirology - Member

Dr.K.Thennarasu, Professor, Department of Biostatistics - Member

Dr.T.N.Sathyaprabha, Additional Professor, Department of Neurophysiology - Member

Dr.M.M.Srinivas Bharath, Additional Professor, Department of Neurochemistry - Member

### NAME OF THE COURSE: M.PHIL. IN PSYCHIATRIC SOCIAL WORK

**Duration**: 2 years

**Programme of Study**: In the two years programme, the Candidates are exposed to application of methods, techniques and skills of social work for promotion of mental health, prevention of mental disorders, therapeutic interventions at individual, group and family level as well as after care and rehabilitation in institutional, semi institutional and non institutional settings. In the first year, strong grounding is made for advanced theoretical aspects of Psychiatric Social Work, Psychosocial Perspectives on Mental Health and Psychiatric Social Work

Research and Statistics. The candidates are required to submit a compilation of 5 Case Records based on their psychosocial interventions with clients and family members. Likewise in the second year, the candidates are given a strong theoretical base with regard to social issues in mental health, Psychiatric Social Work interventions and Psychiatry, including common neurological problems. At the end of the second year, they have to submit Dissertation using explorative-descriptive, experimental-evaluative research studies related to Psychiatric Social Work. In all these activities the candidates are given adequate supervision and guidance by the faculty and staff members. A variety of participatory methods are made use of in imparting training to the candidates in the two years programme.

Research facilities: Research facilities are available. The candidate will complete research work through partial fulfillment during Part II of the programme. Eligible candidates are encouraged to register for Ph.D. The department has faculty and Staff members who have cultivated special interests in fields like Marriage and Family, Group Therapy, Theoretical Framework, Marriage and Family Intervention techniques, Child and Adolescent issues, Psychosocial Rehabilitation, Community based mental health activities, Alcohol and substance abuse, Social Work interventions in Neurology and Neurosurgery and Collaboration with educational, correctional and industrial organizations. The department's active collaboration with voluntary agencies, governmental agencies, schools of social work and Universities facilitates the process of undertaking interdisciplinary research in priority areas of mental health in general and Psychiatric Social Work in particular.

**ACADEMIC FACULTY AND RESEARCH INTERESTS**: (Please refer under Ph.D. in Psychiatric Social Work)

## NAME OF THE COURSE: Master of Public Health (MPH)

**Duration**: 2 years

**Programme of Study**: With a vision to establish a centre of excellence to foster evidence based public health practices, policies and programmes focusing on Mental Health, Neurological, Substance use and Behavioural disorders, Injuries (MNSuDI) and emerging NCDs, NIMHANS has started the Centre for Public Health (CPH). To bridge the gap in human resources and strengthen public health capability of health and health related sectors, the Centre for Public Health started the Masters in Public Health (MPH) course from the academic year 2013-14.

The MPH course at NIMHANS aims to develop quality public health specialists who will be able to efficiently and effectively manage the constantly evolving health situation and systems of the country. The course based on adult-learning principles would be skill-based and adopt a modular learner-centered

methodology. The course will have mental health, neurosciences as the thrust areas and also focus on practice of public health principles and tools.

Facilities: The CPH offers excellent opportunities for researchers, academicians and policy analysts to address emerging problems. Apart from a large hospital facility that caters to about 5,00,000 patients per year, the department has well established facilities like lecture halls with audio-visual aids, a public health laboratory, demonstration rooms, conference room and several small group discussion rooms. Along with several work stations, standard statistical softwares are available for data analysis and data presentation. Along with the main Library and Information Centre at NIMHANS, the department also maintains e-databases of several population and hospital-based research programmes. A Public Health Observatory at Kolar district with a population of 1.5 million has been initiated, which provides opportunity for in-depth examination and understanding of the determinants, dynamics of functioning of health services, provides macro and micro level analysis of health situation and events, specifically focused on MNSuDI disorders.

#### ACADEMIC FACULTY AND RESEARCH INTERESTS

**Dr.G.Gururaj, Professor**: Traumatic Brain Injury; Road Traffic Injury; Suicides; Stroke; Prevention of harm from alcohol; Epilepsy.

**Dr.N.Girish, Additional Professor**: Maternal mental health; Geriatric mental health; Epilepsy; Prevention of harm from alcohol, Health economics.

**Dr.Pradeep.B.S, Associate Professor:** Youth mental health, Infectious diseases, Public mental health interventions, Community Based Rehabilitation for MNSuDIs

**Dr.Gautham.M.S, Assistant Professor**: Occupational mental and neurological problems; tobacco control; mental health in disasters.

**Dr.Vivek Gupta, Assistant Professor**: Movement disorders: Neuro-infections; chronic psychiatric disorders.

**Dr.Senthil Amudhan.R, Assistant Professor**: Child mental health including school mental health; role of AYUSH in mental health; psychiatric and neurological rehabilitation.

### NAME OF THE COURSE: M.SC. IN PSYCHIATRIC NURSING

**Duration**: 2 years

**ACADEMIC FACULTY AND RESEARCH INTERESTS**: (Please refer under Ph.D. in Nursing)

### NAME OF THE COURSE: B.Sc. IN NURSING

**Duration**: 4 years

# ACADEMIC FACULTY AND RESEARCH INTERESTS FOR COLLEGE OF NURSING:

**Dr.Ramachandra, Principal**: Electro Convulsive therapy, Substance abuse related problems, Rehabilitation, HIV & Mental Health.

**Mrs.Pratibha Swamy, Associate Professor**: Quality of life in cancer patient, Status of working women.

### LECTURERS:

Ms.Jayanthi.K.N: Rehabilitation of Psychiatric patients

Mr.Jayakumar.B: Health Education

Mrs.Asha Anitha D'Souza: Coronary care Mrs.Poornima.H.N: Girl children and Sports Mrs.Priya Baby: Stroke nursing in acute phase

Mrs.Kanitha.D: Mentorship in Nursing

Mrs.Valliammal.S: Value of play in children and nurse autonomy Ms.Rajeswari.C: Women prisoners and correctional nursing Ms.Jeeva.S: Neonatology and non-communicable diseases

#### **CLINICAL INSTRUCTORS:**

Mrs.T.S.Sunitha: Care of Elderly

Mrs.P.Vijayalakshmi: Human rights of mentally ill, Women's mental health

Mrs.A.Shamala: Child Psychiatry, Electro Convulsive Therapy

Mrs.N.Padmavathi: Behaviour therapy for children

Mrs.P.Jayanthi: Hospital budgeting, Non-pharmacological management in

**Diabetes** 

Mrs.G.Jothimani: Guidance and counseling for wives of alcoholics

Mrs.Jeyamari.S: Case study

Mrs.Pamela John: Telephonic conversation in nursing, Surgical Intensive Care

Nursing

Mrs.Kesiya.C.Y: Guidance & Counselling Ms.P.Vimal Devi: Health Education

Mrs.R.Rajalakshmi: Rehabilitation of patients

Mrs.D.Mythili: Inventory in nursing, New teaching strategies in nursing education

Mrs.S.Sivakami: Evaluation techniques

Mrs.Sathyavathy.N: Stress Management in nurses, Effective parenting

techniques

Mrs.K.Suguvana Selvi: Performance appraisal

Mrs.Annie John.P: Case discussion Mr.Kannan.K: Nursing care conference Mrs.Bingi Rajeshwari: Stress Counselling Ms.T.Suseela: Role play in health teaching

Mrs.S.Vijayalakshmi: Non-Pharmacological approaches to relieve labour pain

Mr.N.Rajesh: Health Administration in community

### NAME OF THE COURSE: B.Sc. IN ANAESTHESIA TECHNOLOGY

**Duration**: 3 years

ACADEMIC FACULTY AND RESEARCH INTERESTS: (Please refer under DM

in Neuroanaesthesia)

NAME OF THE COURSE: B.Sc. IN RADIOGRAPHY

**Duration**: 3 years

ACADEMIC FACULTY AND RESEARCH INTERESTS: (Please refer under DM

in Neuroradiology)

**DIPLOMA COURSES** 

### POST BASIC DIPLOMA IN PSYCHIATRIC/MENTAL HEALTH NURSING

**Duration**: 1 year

POST BASIC DIPLOMA IN NEUROSCIENCES NURSING

**Duration**: 1 year

All the applications received shall be considered by a Committee constituted by the Director. Weightage in selection shall be given to those candidates sponsored by the Government and other Institutions. The selected/sponsored candidates shall be informed directly by Registered Post Acknowledgement Due.

**ACADEMIC FACULTY AND RESEARCH INTERESTS**: (Please refer under Ph.D. in Nursing)

# <u>DIPLOMA COURSE IN CLINICAL NEUROPHYSIOLOGY TECHNOLOGY</u> (DCNT)

**Duration**: 2 years

All applications received shall be considered by a Committee constituted by the Director and the applicants fulfilling the basic qualifications shall appear before the committee constituted by the Director. The selected candidates shall be informed directly by Registered Post Acknowledgement Due.

## METHOD OF SELECTION

- A. The Selection procedure for all the postgraduate courses listed under A will be as follows:
  - Selection will be purely based on merit as determined in the ONLINE Entrance test (computer based) only. There will be counseling for students to ascertain their preference of subject, verification of documents and to implement statutory reservation provisions. General candidates securing less than 50% of marks and SC/ST candidates securing less than 45% of marks in the Entrance test shall not be eligible to be called for counseling.
  - 1a. If no eligible candidates are available against reserved seats, they shall be filled up from general merit category students.
    - Candidates who have cleared the UGC, CSIR, ICMR, DBT qualifying exams and secured JRF/SRF are exempted from the Entrance Test. All the candidates have to attend an interview and qualify in it by obtaining a minimum of 50% marks to be eligible for admission into the Ph.D. programme. Mere qualifying in Entrance test and interview does not entitle admission to Ph.D. course. Selection is subject to availability of eligible Guides in the respective departments.
  - 2. The question paper for ONLINE Entrance test will contain multiple choice objective type questions. The duration of the test for each course will be 90 minutes and the number of guestions to be For all wrong answer 0.25 marks will be answered is 100. deducted and there will be no marks deducted for unanswered question. The negative marking is followed for all the Medical and Non-Medical subjects. A single Common ONLINE Entrance Test of 2 hours duration and 150 questions will be conducted for MD in Psychiatry, DPM in Psychiatry, Ph.D. in Clinical Neurosciences, DM in Neurology and M.Ch. in Neurosurgery courses for candidates with MBBS degree. Separate ONLINE Entrance Tests will be conducted for DM in Neurology and M.Ch. in Neurosurgery courses with PG qualification. Candidates possessing PG qualification in Medicine (MD/DNB) and Surgery (MS/DNB) will considered only under PG category for DM in Neurology and M.Ch. in Neurosurgery courses respectively. If they apply under MBBS category, their Candidature will be disqualified. Entrance test for candidates applying for DM in Neuroradiology course will be conducted separately. There will be a Single

Entrance Test for selection of Candidates for DM in Neuroanaesthesia Post Doctoral Fellowship and in Neuroanaesthesia courses. Similarly there will be a single Entrance Test for DM in Child and Adolescent Psychiatry and Post Doctoral Fellowship in Child and Adolescent Psychiatry. candidate can apply for a maximum of 4 courses only which includes both Medical and Non-Medical courses (MD in Psychiatry, DPM in Psychiatry, Ph.D. in Clinical Neurosciences, DM in Neurology and M.Ch. in Neurosurgery are all treated as separate courses).

3. A merit list will be prepared course wise and reserved category wise based on the marks scored by the candidates in the ONLINE Entrance test. Eligible candidates will be called for counseling (interview in case of Ph.D. candidates) until all the seats are filled up in all the categories. Counseling will be stopped as soon as the last seat is filled. Waiting list will be based on the merit list so prepared. A separate list will be prepared for Diploma in Psychiatry & M.Phil. in Clinical Psychology for the seats reserved for Karnataka domiciles.

In case of two or more candidates obtaining equal marks in the Entrance test, then, their inter se merit will be determined as under:

- a. No. of attempts in the previous qualifying exam.
- b. If the number of attempts are same, candidates securing higher marks in the pervious qualifying exam will be considered\*.
- c. If marks are also same, then, age will be the criterion i.e., person who is senior in age shall rank higher.

Such eligible candidates in each category shall be called to appear before a duly constituted Selection Committee for the counseling.

\*In case of non-medical courses, consolidated marks of all the years/semesters will be considered and in case of MBBS, Final MBBS Part II marks only will be considered.

4. The admission will be on the basis of Merit as determined by the marks secured in ONLINE Entrance test. The list of selected candidates will be prepared separately for each course and displayed in the order of merit on the notice boards of the Institute and the NIMHANS website. In case of Ph.D. candidates, the admission will be based on ONLINE Entrance test and Interview (only interview for candidates with UGC, CSIR, ICMR, DBT JRF/SRF) and subject to availability of Guides.

B. Admission to B.Sc. Courses listed under B

The selection will be based on the marks obtained by the Candidate in the qualifying exam i.e., P.U.C or equivalent examination. The list of selected candidates will be prepared separately for each course and displayed on the notice boards of the Institute and the NIMHANS website. *There will be no Entrance Test for B.Sc. courses.* 

B (1). Admission to Diploma Courses listed under B

All applications received for DPN/DNN courses shall be considered by a Committee constituted by the Director. Weightage in selection shall be given to those candidates sponsored by the Government and other Institutions. The selected candidates shall be informed directly by Registered Post Acknowledgement Due. There will be an interview for Candidates who apply for DCNT course and selection will be based on the performance in the Interview.

## DATE OF JOINING

Selected candidates must join the course, after paying the necessary fees on or before the dates stipulated in the selection letter failing which the selection shall automatically stand cancelled. The Institute shall offer such seats to the candidates in the waiting list in the order of merit.

## **PRIZES**

The following prizes are awarded by NIMHANS to the best outgoing students in various examinations:

- 1. **Dr.D.L.N.Murthy Rao Memorial Prize** for the best outgoing student in Diploma in Psychiatry (DPM) examination.
- 2. **Dr.M.V.Govindaswamy Memorial Prize** for the best outgoing student (for securing the highest marks in the aggregate of Part I and Part II in M.Phil.) in Clinical Psychology examination.
- 3. **Dr.M.V.Govindaswamy Memorial Prize** for the best outgoing student (for securing the highest marks in the aggregate of Part I and Part II in M.Phil.) in Psychiatric Social Work examination.
- 4. **Dr.M.V.Govindaswamy and Dr.D.L.N.Murthy Rao Memorial Prize** for the candidate who secures the highest marks in the examination of Post Basic Diploma in Psychiatric/Mental Health Nursing.
- 5. **Infosys Foundation Award** for excellence in Post Basic Diploma in Psychiatric/Mental Health Nursing and Post Basic Diploma in Neurosciences Nursing for securing highest marks.

- 6. **Shri.Mukund Memorial Prize** for the candidate who secures the highest marks in Post Basic Diploma in Neurosciences Nursing examination.
- 7. **Silver Jubilee Award** for the best outgoing student in DM in Neurology.
- 8. Silver Jubilee Award for the best outgoing student in M.Ch. Neurosurgery.
- 9. Silver Jubilee Award for the best outgoing student in MD in Psychiatry.
- 10. **Dr.R.N.Moorthy Award** for the candidates who secure the highest marks (in the aggregate of Part I and Part II) of M.Phil. in Neurophysiology, M.Phil. in Biophysics and M.Sc. in Psychiatric Nursing examinations.
- 11. **Dr.Anisya Vasanth Memorial Award** for the best Postgraduate Resident in Neurology.
- 12. **Golden Jubilee Award** for the best outgoing student in DM Neuroradiology.
- 13. Best outgoing student in Diploma in Clinical Neurophysiology Technology.

## **GENERAL INSTRUCTIONS**

- 1. Application should be submitted online along with all the enclosures and photograph. No hard copy needs to be sent.
- 2. Candidates called for Interview/Counseling on qualifying in the Entrance test should submit a copy of their application abstract along with copies of certificates at the time of interview/counseling.
- 3. All claims made in the application must be supported with documentary proof in original at the time of interview/counseling.
- 4. Employees of State or Central Government or of any Public Sector Undertaking of State or Central government should send their applications through their employers. However, the advance copy of the application (complete in all respects) can be submitted. In case the application is not received through the employer before the date of the ONLINE Entrance test, a NO OBJECTION CERTIFICATE from the employer should be produced at the time of interview/counseling failing which the candidate will not be allowed to appear for interview/counseling.
- Candidates called for ONLINE Entrance test and interview/counseling will have to make their own arrangements for stay at respective Test Centre. No TA/DA will be paid by NIMHANS.

- The decision of the Director of the Institute shall be final in all matters of selection of candidates for admission to the various courses and no appeal shall be entertained on this subject.
- 7. No individual intimation will be sent to candidates who are not selected and no correspondence on this subject will be entertained.
- 8. All courses are conducted on a full time basis. Private practice in any form is prohibited. The candidates are strictly not permitted to undertake any other part time or correspondence courses.
- 9. All candidates admitted to the Institute shall maintain good conduct, attend their classes regularly and abide by the regulations of the Institute.
- 10. Selected candidates shall have to submit migration certificate and TC from the University from which they have passed the last qualifying examination, at the time of joining the Institute.
- 11. All the Junior/Senior Residents receiving emoluments from the Institute and admitted to any course will be on contract service for the duration of the studies. They are required to submit a contract bond on a non-judicial stamp paper of the value of ₹ 200/-. The bond, duly completed in all respects, shall be submitted at the time of joining, failing which they will not be allowed to join the course. Similarly, all candidates for Ph.D., M.Phil. and M.Sc in Psychiatric Nursing are required to submit a bond on a non-judicial stamp paper of the value of ₹ 200/-. The bond, duly completed in all respects, shall be submitted at the time of joining, failing which they will not be allowed to join the course.

A sample Copy of the bond to be executed will be provided at the time of joining.

- 12. Eligible candidates for ONLINE Entrance Test can download the e-hall ticket online to produce at the time of Entrance Test.
- 13. List of all the qualified candidates and list of candidates called for interview/counseling will be notified on the Institute's Notice Board and the Website. No separate individual intimation will be given. Non receipt of notice by any individual candidate will not vitiate the selection process having regard to publication of result as also schedule on the notice board and the website. The decision of the Director in all matter regarding selection will be final and no representation in any form will be entertained.
- 14. Any changes in date, time, venue and or schedule of the ONLINE Entrance Tests, Counseling, Interview will be announced on our website and notice boards, no individual intimation will be given to the candidates.

- 15. The candidates are requested to keep themselves updated by visiting our website regularly from time to time or keeping in touch with the Academic section of NIMHANS on 080 26995013.
- 16. The rules and regulations in this prospectus are subject to change in accordance with the decision of the Institute from time-to-time.

## GUIDELINES FOR ONLINE ENTRANCE TEST

The Entrance Test will be held online (i.e., computer based). The seven cities identified for conduct of ON-LINE Entrance Test are BANGALORE, CHENNAI, COCHIN, HYDERABAD in the South, PUNE in the West, DELHI in the North, KOLKATA in the East. There will be multiple test centres in each of these cities and NIMHANS reserves the right to distribute applicants to any test centre as per its requirements. A candidate has to select three cities in the order of priority i.e., 1<sup>st</sup> choice, 2<sup>nd</sup> choice and 3<sup>rd</sup> choice.

# THE ENTRANCE TEST FOR ALL THE COURSES WILL BE HELD AT ALL THE CENTERS ACROSS INDIA

- 1. Common Entrance Test will be conducted for MD in Psychiatry, DPM in Psychiatry, Ph.D. in Clinical Neurosciences, DM in Neurology and M.Ch. in Neurosurgery courses for Candidates with MBBS qualification
- 2. Common Entrance Test will be conducted for DM in Neuroanaesthesia and Post Doctoral Fellowship in Neuroanaesthesia courses.
- 3. Common Entrance Test will be conducted for DM in Child & Adolescent Psychiatry and Post Doctoral Fellowship in Child & Adolescent Psychiatry courses.
- 4. Common Entrance Test will be conducted for all the 7 Post Doctoral Fellowship courses under Psychiatry and choice of course will be given to those securing highest marks i.e., the candidate securing highest marks will have the option of selecting any of the 7 PDF courses till all the seats are filled.
- 5. Common Entrance Test will be conducted for all the 4 Post Doctoral Fellowship courses under Neurology and choice of course will be given to those securing highest marks i.e., the candidate securing highest marks will have the option of selecting any of the 4 PDF courses till all the seats are filled.
- 6. Common Entrance Test will be conducted for M.Phil. in Biophysics, M.Phil. in Neurophysiology and M.Phil. in Neurosciences courses.

The choice of City/Centre cannot be claimed as a matter of right. If there are no minimum number of candidates filled for a particular city, the test in such a city will be cancelled and the applicants will be informed about the change of city well in advance to avoid inconvenience.

A mock test demo will be hosted on the NIMHANS website 15 days prior to the Online Entrance Test. The Online Entrance Test will be conducted for 2 days at all the Test Centres across the country.

In the event of unforeseen problem/force majeure, a re-exam will be held in the particular centre at a later date as specified by the Institute for those who attended the exam only.

Possession/use of Mobile Phones/Spy Cameras/ Bluetooth and any other electronic devices is strictly prohibited on the premises of NIMHANS Entrance Test Centres and candidates shall be liable for penal action for any such act.

All the Candidates applying for admission to any course at NIMHANS, should give a declaration stating that "I HAVE ALL THE ELIGIBILITY CRITERIA AND I AM APPLYING FOR THE COURSES AT NIMHANS AND AT ANY GIVEN POINT OF TIME IF FOUND THAT I HAVE GIVEN WRONG INFORMATION, MY CANDIDATURE CAN BE CANCELLED WITHOUT CONSIDERATION FOR THE COURSES AT NIMHANS. I ALSO SUBSTANTIATE MY CLAIM BY ATTACHING NECESSARY CERTIFICATES WHEREVER APPLICABLE"

## WARNING

In case any candidate is found to have supplied false information or a false certificate or is found to have withheld or concealed some information, he/she shall be debarred from continuing the course and shall face such appropriate action initiated against him/her by the Director of the Institute.

## **RAGGING**

Ragging is banned in this institution and if any incident of ragging comes to the notice of the authority, the student concerned shall be given opportunity to explain and if his/her explanation is not found satisfactory, the authority would expel him/her from the Institute.

The candidates along with their parents/guardians have to sign a declaration that they are aware about ragging being banned at this Institution and if found indulging in ragging, the student concerned shall be given liberty to explain and if his/her explanation is not found satisfactory, the authority would expel him/her from the Institute.

## **COMPLAINTS COMMITTEE**

NIMHANS has a Complaints Committee pertaining to sexual harassment of Women at work place headed by Dr.Shoba Srinath, Professor, Dept. of Child & Adolescent Psychiatry.

## ACCOMMODATION

There are six hostels attached to the Institute – Kabini hostel and its annexe, staff hostel, hostel for men, hostel for ladies and two hostels for female nurses. Hostel accommodation is provided only to resident doctors, students, research fellows/officers and to trainees from other institutes. Employees (both permanent and ad-hoc) are not eligible for hostel accommodation.

All residents are expected to stay in the hostel and its annexe, subject to availability of accommodation. Kabini hostel and its annexe are meant for resident doctors. Senior residents will be given priority in allocation of accommodation for family rooms.

Students admitted to post-graduate courses or the Ph.D. programme or to M.Phil. courses are provided accommodation in either staff hostel, mens' or ladies' hostels. The accommodation generally will be a single room facility and is partially furnished. Family accommodation cannot be guaranteed. Preference is given for senior residents and Ph.D. students. The accommodation is free for junior residents. However, they are required to pay ₹ 250/- per month towards electricity and water charges. Candidates who are admitted to the Ph.D. and M.Phil. courses are required to pay ₹ 250/- per month towards electricity and water charges and the hostel rent is as per the rates fixed by the Institute. Candidates admitted to the nursing course are provided rent free and partially furnished accommodation.

Those residing in the hostels should compulsorily join the mess, which is run on a sharing basis. The warden appointed by the Director shall have general supervising authority over the hostel inmates. Those residing in the hostel are required to adhere to hostel rules and regulations.

## KANNADA LANGUAGE LEARNING PROGRAMME

Kannada is one of the oldest Dravidian languages. It is the state's official language. It is desirable that Non-Kannada speaking PG students make efforts to learn this language for better communication with patients and their family members. The department of Publication organizes a 3 months Kannada language education programme in collaboration with the Department of Kannada & Culture, Government of Karnataka to learn and to speak in Kannada. Students are required to attend these sessions. As majority of the patients seen at

NIMHANS speak Kannada, it is mandatory that students learn to comprehend and speak Kannada.

## **ALUMNI ASSOCIATION**

All graduates of NIMHANS are requested to become members of the NIMHANS Alumni Association.

## **CENTRAL FACILITIES**

# ADVANCED CENTRE FOR AYURVEDA IN MENTAL HEALTH AND NEURO SCIENCES

The Centre was established in the year 1959 as a regular department under NIMHANS and subsequently amalgamated in 1971, with the Central Council for Research in Ayurvedic Sciences, New Delhi, for financial and technical assistance. The Centre extends Research and Therapeutic Services predominantly in Psychiatric and Neurological disorders.

The Centre has full-fledged Outpatient and Inpatient facilities. The Inpatient Unit consists of two General Wards and four Pay Wards supported with well equipped Panchakarma Therapy rooms. It functions under the overall administrative and technical guidance of the Director/Vice-Chancellor, NIMHANS

### **BIOMEDICAL ENGINEERING**

The Biomedical Engineering department manages and provides the Computer Network (LAN) and wi-fi connectivity to more than 2500 nodes having 100 mbps speed through National Knowledge Network of Government of India. All the hardware, network and software issues related to the systems connected in the network are taken care of by the department. Closed user group communication (mobile telephone) is provided to all the clinicians, residents and essential service staff in the Institute and this is monitored by the department of Biomedical Engineering.

### **COGNITIVE NEUROSCIENCES**

The laboratory is located in the Ashwini Building next to Emergency Services. A 3T MRI with capability to record EEG simultaneously with FMRI is established to undertake studies in Cognitive Neurosciences.

### FREE LEGAL AID CELL - NIMHANS

Advocates listed by Karnataka State Legal Aid Authority provide free legal services to needy patients and the caregivers. The facility is located in the OPD complex of NIMHANS.

### **NEURO BIOLOGY RESEARCH CENTRE, NIMHANS**

The centre is located opposite to the Library and Information Centre in the Administrative Wing of NIMHANS. The Research Centre has 14 laboratories working in frontiers of Neuro Biology promoting inter disciplinary research, sharing scientific ideas and sophisticated equipment. The building is Wi-Fi enabled and under video surveillance.

### NIMHANS 'CENTRE FOR WELL BEING'

The centre located at BTM Layout (4 kilometers from NIMHANS), is utilized by the faculty of Clinical Psychology, Psychiatry and Psychiatric Social Work to promote preventive and positive mental health and offer counseling services to the needy in an urban city.

#### **NIMHANS GYMKHANA**

NIMHANS has a state-of-the-art 'GYMKHANA'. Ladies'/Gents' gym and Indoor/Outdoor games facilities like badminton court, carrom, chess, table tennis, football, cricket, hockey volleyball etc., are available. The Gymkhana also organizes various sports competitions and cultural activities for both students and staff of NIMHANS.

### **PHOTOGRAPHY**

A Photography section assists in video coverage and taking photographs of all the major programmes of the Institute. It also assists clinicians in their dissertations/research activities and in the production of Information, Education & Communication materials

### **ENGINEERING**

A full-fledged Engineering section is functional at this Institute. The Engineers are deputed from the Government of Karnataka. They take care of the maintenance of all the NIMHANS buildings, involve in the new constructions. There are Civil, Electrical and Horticultural Engineering divisions under the Engineering Section.

#### **CONVENTION CENTRE**

A state-of-the-art Convention Centre facility is available for Medical and other related programmes/conferences. There are 3 auditoriums with seating capacities ranging from 150 to 850 persons. It has a huge dining hall as well as guest and storage rooms, and ample parking facility is also available.

#### CENTRAL ANIMAL RESEARCH FACILITY

At the Central Animal Research Facility (CARF), a certificate course on Care, Breeding and Management of Laboratory animals is conducted. The course is of 60 hour duration. It is presented in the power point presentation format. In addition to this, there will be practical training programme using routine laboratory animal techniques.

### **LIBRARY & INFORMATION SERVICES**

Library and Information Centre, NIMHANS, recognized as National Neurosciences Information Centre (NNIC), functions as a national clearing-house for mental health and neurosciences information in India. It has 51,000 volumes and subscribes to both print and electronic journals.

Online access to 4700 e-journals related to the field of mental health and neuro sciences is provided through campus network, which has a fiber optic backbone with more than 700 nodes. The full text of the journals is integrated to single interface and bibliographical database for easy access to the users on any topic of interest for academic, research and health care purposes.

Library and Information Centre has published two full text databases on CD viz., (1) 'Neurology India on CD' with full text of 45 years covered from Vol.1 – Vol.45 (1953-1997) (2) 'NeuroMed on CD' which covers three Indian Journals for 15 years.

The Library has a functional spacious independent building with seating capacity for 240 with internet and database access.

### **CENTRE FOR PUBLIC HEALTH**

The Centre for Public Health (CPH) has been established at NIMHANS to provide strong inputs for strengthening public health components in formulating policies and program development focusing on problems, priorities, challenges and solutions in the areas of mental health, neurological sciences, substance use and behavioural disorders and injuries as well as other NCDs. The major spheres of influence and domains of activities would be public health research, human resource development, advocacy apart from development, implementation, monitoring and evaluation of policies and programmes.

A two-year Masters in Public Health (MPH) course has been started with effect from the Academic year 2013-14. The CPH has the expertise to plan and conduct large scale epidemiological studies, undertake operational research (feasibility of public health programs, evaluate health interventions, etc.,), establish health surveillance, disease registries, monitor community based interventions, undertake systematic reviews and meta analysis, support policy analysis as well as guide and advise on program planning, implementation,

monitoring and evaluation at regional, national and international levels. A district level field practice area with a population of 2 to 2.5 million will soon be initiated, which would enable an in-depth examination of the dynamics of the functioning of health services, help us understand determinants of health, provide macro and micro level analyses of health situations and events and serve as a observatory for health managers public health students and researchers.

### YOGA CENTRE

The Advanced Centre for Yoga at NIMHANS is a facility that offers Yoga therapy to patients with psychiatric and neurological disorders. This was set up in collaboration with the Morarji Desai National Institute of Yoga, New Delhi and the Dept. of AYUSH, Govt. of India. The faculty associated with the Centre have also established a technical collaboration with Swami Vivekananda Yoga Anusandhana Samsthana, Bangalore. Each day, close to 40 patients receive yoga services under the aegis of the Centre.

Along with patient services, multidisciplinary research on Yoga has been initiated, involving several departments of NIMHANS. The Centre provides opportunities to pursue not only independent research but also course-related research as part of MD, DM, M.Sc and Ph.D courses. Areas of research include clinical studies of yoga in different disorders with neurobiological correlates the neurobiological mechanisms of yoga therapy in psychiatric and neurological disorders and the neurobiology of consciousness as related to yoga.

#### **CANTEEN**

There is a good canteen facility catering to the needs of the staff, students and the public.

## **PUBLICATION**

The Publication Department brings out Annual Reports, Institute activity reports, research publications and health education materials periodically. More than 70 publications have been brought out so far. In addition, the department coordinates the translation work of materials from English to Hindi and regional languages. Hindi Cell, now part of the Publication Department, undertakes various activities under the guidance of the Department of Official Language, Union Ministry of Health and Family Welfare, Government of India with a view to ensure compliance with the Official Language Implementation policies and Constitutional provisions, and to promote progressive use of Hindi for the official purposes.

\* \* \* \* \* \*