

NIMHANS PROSPECTUS 2008 - 2009



CONTENTS

| | Page No. |
|-------------------------------------|----------|
| Introduction | 2 |
| Aims and Objectives | 3 |
| Institute Calendar | 4 |
| Institute Authorities | 6 |
| Heads of Departments | 6 |
| Central Facilities | 7 |
| Hospital Administration | 8 |
| General Administration | 8 |
| Courses | |
| Postgraduate Degree/Diploma Courses | 10 |
| B.Sc./Diploma Courses | 11 |
| Qualifying Examination | 12 |
| Sponsored Candidates | 13 |
| Foreign Nationals | 13 |
| Minimal Qualification for Admission | 13 |
| Age Limit | 17 |
| Reservation of Seats | 17 |
| Emoluments | 18 |
| Sponsorship Certificate | 19 |
| Fee Structure | |
| Indian Nationals | 20 |
| Foreign Nationals | 21 |
| Courses and Faculty | 22 |
| Method of Selection | 47 |
| Date of Joining | 49 |
| Prizes | 49 |
| General Instructions | 50 |
| Warning | 52 |
| Ragging | 52 |
| Accommodation | 52 |
| NIMHANS Library | 53 |
| Publication | 53 |
| Alumni Association | 53 |
| Kannada Language Learning Programme | 53 |

**NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES
(DEEMED UNIVERSITY), 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. A major objective of the Institute was manpower development in the field of mental health and neurosciences. The Mental Hospital, Bangalore which had already 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 introduced 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, the National Institute of Mental Health and Neuro Sciences (NIMHANS) 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.

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 the area of Mental Health and Neuro Sciences. The manpower development programmes at the Institute reflect the extent to which we have succeeded in bringing together and nurturing behavioural sciences, neurosciences, basic biological sciences and ancient health systems in Mental Health and Neurosciences.

AIMS AND OBJECTIVES

The broad objectives of NIMHANS are:

- To promote, through academic and professional endeavours, growth and development of mental health, neurosciences and allied subjects in tune with the global trends and developments in these fields.
- To develop the Institute into an advanced centre for service, training and research in the broad area of mental health and neurosciences.
- To study the molecular, neurophysiological, psychosocial and transcendental aspects of the brain-mind-behaviour axis and to evolve suitable techniques for alleviation of mental and neural problems.
- To provide and assist in providing services of research, evaluation, training, consultation and guidance related to mental health and neuroscience activities.
- To undertake communication of health information through print and electronic media viz., journals, research papers, proceedings of conferences, symposia, text books, manuals and hand outs.
- To augment and maintain library and information services in furtherance of the object of the society.
- To co-operate with international and national agencies engaged in research and training or clinical practice in the area of mental health and neurosciences and to arrange for interchange of personnel, material and data.
- To educate the public on mental health and neurosciences.
- To do all such lawful acts and things, either alone or in conjunction with other organizations or persons as the society may consider necessary which facilitate the attainment of any or all of the objectives referred to or implied above.

ACADEMIC CALENDAR

SESSION 1 : PG Medical, Non Medical and DPN/DNN Courses

- | | |
|--|--|
| a. Advertisement regarding admission | 1st week of October 2007 |
| b. Last date for issue of application | |
| Through post | 25th October 2007 |
| In person | 31st October 2007 |
| c. Last date for receipt of filled in applications | 5th November 2007 |
| d. Date of entrance test | 17th February 2008 |
| e. Commencement of courses | 2nd May 2008 |
| f. Last date for admission | 9th May 2008 |

SESSION 2: Super-Speciality, Post Doctoral Fellowship and DCNT/CNT courses

- | | |
|--|--|
| a. Advertisement regarding admission | 1st week of March 2008 |
| b. Last date for issue of application | |
| Through post | 25th March 2008 |
| In person | 31st March 2008 |
| c. Last date for receipt of filled in applications | 5th April 2008 |
| d. Date of entrance test | June 2008 |
| e. Commencement of courses | 1st August 2008 |
| f. Last date for admission | 8th August 2008 |

SESSION 3 : Ph.D. for candidates with Fellowship from recognized Institutions/Agencies

- | | |
|---------------------------------------|--|
| (i) Issue and receipt of applications | 1st August to 15th September 2008 |
| (ii) Entrance test | 20th October 2008 |

EXAMINATIONS

- | | |
|----------------------------------|----------------------------------|
| 1. Annual Examinations | |
| PG Medical & Non Medical courses | Second Monday of April |
| Superspeciality courses | Second Monday of July |
| B.Sc. courses | Second Monday of June |
| 2. Supplementary examinations | |
| PG Medical & Non Medical courses | Second Monday of October |
| Superspeciality courses | Second Monday of January |
| B.Sc. courses | Second Monday of December |
| 3. Institute Day | 14th February |
| 4. Convocation | November/December |
| 5. International Nurses' Day | 12th May |
| 6. Teacher's Day | 5th September |

INSTITUTE AUTHORITIES

| | Telephone |
|---|--|
| Dr.D.Nagaraja - Director/Vice Chancellor | 26995001 26995002 26564140 26561811 26565822 |
| Mrs.M.V.Savithri - Registrar | 26995005 26995006 26564199 |
| Dr.N.B.Joshi - Dean | 26995004 26995101 |

HEADS OF THE DEPARTMENTS

BIOPHYSICS

Dr.Preeti G.Joshi, Professor 26995102

BIOSTATISTICS

Dr.D.K.Subbakrishna, Professor 26995116
26995120

EPIDEMIOLOGY

Dr.G.Gururaj, Professor 26995245

HUMAN GENETICS

Dr.K.R.Manjunatha, Professor 26995121

MENTAL HEALTH & SOCIAL PSYCHOLOGY

Dr.Kiran Rao, Professor 26995195

MENTAL HEALTH EDUCATION

Dr.Jayashree Ramakrishna, Professor 26995155

NEUROANAESTHESIA

Dr.G.S.Umamaheswara Rao, Professor 26995416

NEUROCHEMISTRY

Dr.M.N.Subhash, Professor 26995159

| | |
|---|----------|
| NEUROIMAGING & INTERVENTIONAL RADIOLOGY Dr.P.N.Jayakumar, Professor | 26995425 |
| NEUROLOGY Dr.M.Veerendra Kumar, Professor | 26995140 |
| NEUROMICROBIOLOGY I/c Dr.Shripad A.Patil, Addl. Professor | 26995152 |
| NEUROPATHOLOGY Dr.S.K.Shankar, Professor | 26995130 |
| NEUROPHYSIOLOGY Dr.T.R.Raju, Professor | 26995168 |
| NEUROSURGERY Dr.B.A.Chandramouli, Professor | 26995403 |
| NEUROVIROLOGY Dr.V.Ravi, Professor | 26995126 |
| NURSING Dr.K.Reddemma, Professor | 26995226 |
| PSYCHIATRIC & NEUROLOGICAL REHABILITATION Dr.T.Murali, Professor | 26995281 |
| PSYCHIATRIC SOCIAL WORK Dr.K.Sekar, Professor | 26995234 |
| PSYCHIATRY Dr.B.N.Gangadhar, Professor | 26995260 |
| PSYCHOPHARMACOLOGY Dr.Chittaranjan Andrade, Professor | 26995109 |
| SPEECH PATHOLOGY & AUDIOLOGY Dr.M.Jayaram, Professor | 26995569 |

CENTRAL FACILITIES

| | |
|--|----------|
| AYURVEDIC RESEARCH UNIT Dr.D.Sudhakar, Asst. Director (Ay) | 26995243 |
|--|----------|

BIOMEDICAL ENGINEERING

Mr.G.Lakshmana, Chief Biomedical Engineer 26995220

CENTRAL ANIMAL RESEARCH FACILITY

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

PHOTOGRAPHY

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

ENGINEERING

Mr.S.M.Krishnappa, Asst. Executive Engineer 26995215

LIBRARY & INFORMATION SERVICES

Dr.H.S.Siddamalliah, Principal Library & Information Officer 26995031

PUBLICATION

Mr.N.Gopalakrishna, Deputy Editor 26995036

HOSPITAL ADMINISTRATION

Dr.B.N.Gangadhar, I/C Medical Superintendent 26995260

Dr.C.R.Chandrashekar, Deputy Medical Superintendent 26995255

Dr.V.L.Sateesh, Resident Medical Officer 26995203

Mr.M.N.Shankarsa, Asst. Admn. Officer (Rehab. Ser.) 26995284

Mr.S.Venkatesh, Asst. Admn. Officer (OPD) 26995524

Mr.D.Rajendran, Asst. Admn. Officer (Hospital) 26995205

GENERAL ADMINISTRATION

Mrs.D.Sukumariamamma
Administrative Officer 26995008

Mr.T.H.Naik
Finance & Accounts Officer 26995018

| | |
|---|----------|
| Mrs.Sudha Ramamurthy Dy. Finance & Accounts Officer | 26995021 |
| Mr.G.Vasudevan Asst. Finance & Accounts Officer | 26995020 |
| Mr.A.Loganathan Asst. Administrative Officer, Accounts | 26995557 |
| Mrs.E.B.Lalitha Asst. Administrative Officer, Accounts | 26995705 |
| Mrs.Leticia Pires Special Officer (Academic & Evaluation) | 26995012 |
| Mr.H.C.Venkateshaiah Asst. Administrative officer, Personnel | 26995706 |
| Mrs.G.Jayamonie P.S to Director – Asst. Admn. Officer | 26995002 |
| Mr.B.G.Balaram Asst. Admn. Officer (Claims) | 26995026 |
| Mr.B.G.Nagaraj Asst. Admn. Officer (Co-ordination) | 26995016 |
| Mr.A.V.Ramaswamy Asst. Admn. Officer (Projects) | 26995015 |
| Dr.Satish Chandra Girimaji Hon. Warden, NIMHANS Hostels | 26995266 |
| Dr.Y.C.Janardhana Reddy Hon. Deputy Warden, NIMHANS Hostels | 26995278 |
| Dr.Bindu M.Kutty Hon. Deputy Warden, NIMHANS Hostels | 26995170 |
| Mr.Praseed Kumar Public Relation Officer | 26995010 |

COURSES

A. POST GRADUATE DEGREE/DIPLOMA COURSES

1. Ph.D.

1.1 Institute Fellowships

- a) Ph.D. degree in Mental Health & Social Psychology
- b) Ph.D. degree in Neurophysiology
- c) Ph.D. degree in Speech Pathology & Audiology
- d) Ph.D. degree in Clinical Neurosciences
(ICMR Fellowship)

1.2 External Fellowships: Candidates with Sponsorship from Government of India/State Govt. Institutions and Fellowships from Government Agencies like UGC/ICMR/CSIR etc., Permanent Employees and 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. They have to work on full time basis for a minimum period of THREE years (Two years in case of having M.Phil/DNB/MD/MS/DM/M.Ch. degrees). Entrance Test for selection of candidates for Ph.D. programmes will be held in the following departments in the months of February and October.

- a) Biophysics
- b) Biostatistics
- c) Epidemiology
- d) Human Genetics
- e) Mental Health Education
- f) Mental Health & Social Psychology
- g) Neuroanaesthesia
- h) Neurochemistry
- i) Neuroimaging and Interventional Radiology
- j) Neurology
- k) Neuromicrobiology
- l) Neuropathology
- m) Neurophysiology
- n) Neurosurgery
- o) Neurovirology
- p) Psychiatric Nursing
- q) Psychiatric & Neurological Rehabilitation
- r) Psychiatric Social Work
- s) Psychiatry
- t) Psychopharmacology
- u) Speech Pathology & Audiology

| | |
|--|---|
| 2. DM in Neuroradiology | - 2 Seats |
| 3. DM degree in Neurology | - 6* Seats |
| 4. M.Ch. degree in Neurosurgery | - 6* Seats |
| 5. MD degree in Psychiatry | - 14 Seats |
| 6. Diploma in Psychiatry | - 7 Seats (6 seats for Karnataka Domiciles and 1 for sponsored) |
| 7. Post Doctoral Fellowship in Neuroanaesthesia | - 4 Seats (2 for foreign/sponsored) |
| 8. Post Doctoral Fellowship in Neuropathology | - 2 Seats (1 for foreign/sponsored) |
| 9. M.Phil. in Biophysics | - 2 Seats |
| 10. M.Phil. in Mental Health & Social Psychology | - 15 Seats (3 for foreign/sponsored) |
| 11. M.Phil. in Psychiatric Social Work | - 15 Seats (3 for foreign/sponsored) |
| 12. M.Phil. in Neurophysiology | - 2 Seats |
| 13. M.Phil. in Neurosciences | - 4 Seats |
| 14. M.Sc. in Psychiatric Nursing | - 6 Seats |

*3 seats for Post MBBS Candidates and 3 seats for Post MD/DNB candidates for DM in Neurology and 3 seats for Post MBBS Candidates and 3 seats for Post MS/DNB candidates for M.Ch. in Neurosurgery. If suitable candidate/s are not available in any one of the above category, such unutilized seats will be filled by the candidates from the other category.

B. B.Sc. COURSES

No. of seats

| | |
|-------------------------|----------------------|
| 1. B.Sc. in Nursing | 75 |
| 2. B.Sc. in Radiography | 10 (4 for sponsored) |

B (1). DIPLOMA COURSES

No. of seats

| | |
|---|------------------------|
| 1. Diploma in Psychiatric Nursing (DPN) | 30 |
| 2. Diploma in Neurological & Neurosurgical Nursing (DNN) | 6 |
| 3. Diploma in Clinical Neurophysiology Technology (DCNT) | 8 (4 for sponsored) |
| 4. Certificate Course in Neuro Imaging and Technology (CNT) | 2 (for sponsored only) |

C. QUALIFYING EXAMINATION REQUIREMENT FOR VARIOUS 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) The candidate should complete 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 also have full registration with State Medical Council.
- (c) 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.
- (d) Candidates with M.Sc./MA/BE/B.Tech./B.Sc./B.Sc. (Hons) Nursing should have passed the examination from a recognized University or from any other University recognized as equivalent thereto, securing not less than 55% of marks in aggregate on or before the date of Entrance test. Candidates who have appeared for the qualifying examinations and are awaiting results, may also apply. However, such candidates will be eligible to appear in the Entrance test only if they produce the proof of having passed the examination in writing issued by the University as on the date of Entrance test.
- (e) 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.
- (f) Candidates with PUC or 10 + 2 with Physics, Chemistry, Biology and English with 50% aggregate in the above subjects can apply for B.Sc. in Nursing course.
- (g) Candidates with PUC or 10 + 2 with English, Physics, Chemistry, Mathematics and Biology or job oriented diploma courses from a recognized board can apply for B.Sc. in Radiography course.

D. SPONSORED CANDIDATES

1. Minimal qualifications are the same as indicated under item F.
2. The candidate should qualify in the Entrance test.
3. The candidate should produce the sponsorship certificate in the prescribed format (Please refer page 19)
4. This certificate should be enclosed along with the application.
5. Applications without the certificate will not be considered for sponsorship.

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:

1. 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 Medical degree, Secretary, Medical Council of India, Aiwan-E-Galib Marg, Kolta Road, New Delhi – 110 002 may be contacted.

F. MINIMAL QUALIFICATION FOR ADMISSION

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

Duration: 3 – 5 years

- a) **Ph.D. in Mental Health & Social Psychology:** 2 years MA/M.Sc. degree in Psychology or two years M.Phil. degree in Mental Health and Social Psychology or equivalent qualification recognized by NIMHANS.
- b) **Ph.D. in Neurophysiology:** Master's degree in Life Science or M.Phil. or MBBS or BE degree.
- c) **Ph.D. in Speech Pathology & Audiology:** Master's degree in Speech & Hearing.
- d) **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).

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

Duration: 3 – 5 years

A Master's degree in the discipline securing not less than 55% of marks in the aggregate or MBBS/BE/B.Tech. to work full time for a minimum period of three years or M.Phil./DM in Neurology/M.Ch. in Neurosurgery/MD/MS/DNB to work full time for a minimum period of two years.

2. DM in Neuroradiology

MD/DNB in Radiodiagnosis: The duration of the course will be for a period of three years.

3. DM in Neurology

- (i) MBBS: The duration of the course will be for a period of five years.
- (ii) MD/DNB in General Medicine or Pediatrics: The duration of the course will be for a period of three years.

4. 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.

5. MD in Psychiatry

- (i) MBBS: The duration of the course will be for a period of three years.
- (ii) Diploma in Psychiatry (DPM): The duration of the course will be for a period of two years.

6. Diploma in Psychiatry (DPM)

MBBS: The duration of the course will be for a period of two years.

7. Post Doctoral Fellowship in Neuroanaesthesia

MD/DNB in Anaesthesia: The duration of the course will be for a period of one year.

8. Post Doctoral Fellowship in Neuropathology

MD/DNB in Pathology: The duration of the course will be for a period of one year.

9 – 13 M.Phil. courses

Duration: 2 years

M.Phil. in Biophysics

M.Sc. degree in Physical/Life Sciences or BE degree or MBBS.

M.Phil. in Mental Health & Social Psychology

2 years MA/M.Sc. degree in Psychology from a University recognized by NIMHANS.

M.Phil. in Neurophysiology

Master's degree in Life Sciences or MBBS.

M.Phil. in Neurosciences

Master's degree in Physical/Life/Behavioural Sciences or BE/B.Tech. or MBBS.

M.Phil. in Psychiatric Social Work

Master's degree in Social Work. Preference will be given to those who have specialized in Medical and Psychiatric Social Work.

14. M.Sc. in Psychiatric Nursing

Duration: 2 years

- (i) Registered Nurse with B.Sc./B.Sc. (Hons) Nursing.
- (ii) Should have a minimum of two years experience after obtaining B.Sc./B.Sc. (Hons) Nursing degree in Hospital, Nursing Education Institution or Community Health setting.

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 50% aggregate in the above subjects.
- b) Higher Secondary School Certificate Examination (12 years course) with Physics, Chemistry, Biology and English with a minimum 50% aggregate.
- c) Senior School Certificate examination Pre-Degree Examination (10+2) with Physics, Chemistry, Biology and English with a minimum 50% aggregate.
- d) An Equivalent with 12 years of Schooling from a recognized Board with Physics, Chemistry, Biology and English with a minimum 50% aggregate.

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.
- 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.

B (1). Diploma Courses

Duration: 1 year

1. Diploma in Psychiatric Nursing (DPN)

- a) Should possess 'A' Grade certificate in General Nursing recognized by Indian Nursing council.
- b) Should be a registered Nurse in the State Nursing Council with two years experience.

2. Diploma in Neurological and Neurosurgical Nursing (DNN)

- a) Should possess 'A' Grade certificate in General Nursing recognized by Indian Nursing council.
- b) Should be a registered Nurse in the State Nursing Council with two years experience.

3. Diploma in Clinical Neurophysiology Technology (DCNT)

- 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) PUC with 3 years experience as EEG Technician.

4. Certificate course in Neuroimaging & Technology (CNT)

- a) Diploma in Radiographic Technology from Vocational Board of Government of Karnataka or equivalent qualification.
- b) Bachelors degree in Radiation Technology from any recognized University or equivalent qualification.

A RELAXATION OF 5% ON THE AGGREGATE OF MARKS OBTAINED IN THE QUALIFYING EXAMINATION WILL BE GIVEN FOR 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 40 years as on the date of commencement of courses.

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

RESERVATION OF SEATS

1. 22.5% of the seats shall be reserved for candidates belonging to SC/ST (15% for SC and 7.5% for ST) of the total Postgraduate Medical and Non Medical courses (except DM in Neurology, DM in Neuroradiology and M.Ch. in Neurosurgery). Reservations are done as per the Government of India directions. If, candidates under SC/ST category are not qualified in the Entrance test, such reserved seat will be filled from the General category.
2. 5% of the total of MD and Diploma in Psychiatry are reserved for Medical Graduates who are working under the Family Welfare Programme in the rural areas having less than 5000 Population for more than 2 years subject to submission of certificate from the Tahsildar.
3. Number of seats and reservation may vary as per the direction of the Government of India order.

4. Six seats in Diploma in Psychiatry (DPM) and three seats in M.Phil. in Mental Health & Social Psychology are reserved for domiciles of Karnataka State.
5. 3% of the PG seats are reserved for persons with above 40% and less than 70% disability (except DM in Neurology, DM in Neuroradiology and M.Ch. in Neurosurgery).

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.

EMOLUMENTS

Candidates admitted to Medical courses will be paid as per the Residency Scheme. They will be paid emoluments of Rs.9400/- per month in the first year, Rs.9725/- per month in the second year and Rs.10050/- 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 M.Phil. courses will be paid stipend of Rs.5000/- per month during the course of two years.

Candidates admitted to Ph.D. courses (under Sl. No.1.1 (a to c)) will be paid stipend of Rs.9000/- per month for all the three years. Contingency grants of Rs.5000/- and Rs.7500/- will be paid per year to Research Scholars in Mental Health and Social Psychology and Science subjects respectively.

Candidates admitted to Ph.D. courses (under Sl. No.1.1 (d)) (under ICMR Fellowship) will be paid emoluments of Rs.9400/- per month in the first year, Rs.9725/- per month in the second year and Rs.10050/- in the third year along with admissible allowances. Contingency grants of Rs.20000/- will be paid per year to Research scholars.

Candidates admitted to M.Sc. in Psychiatric Nursing course will be paid Rs.700/- 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 Rs.560/- per month. Candidates admitted to Diploma in Clinical Neurophysiology Technology Course will be paid Rs.750/- 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 candidates in Indian Rupees.

SPONSORSHIP CERTIFICATE

This is to certify that:

1. Dr./Mr./Ms. _____ is a permanent employee with the _____ (Name of the Government Organization) and the date of joining service is _____.
2. The candidate is being sponsored for _____ course at NIMHANS, Bangalore.
3. The candidate is being sponsored for the entire duration of the course, if selected.
4. The candidate will be paid all emoluments by the State/Central Government or Public Sector Undertaking of State/Central Government and no expenses will devolve upon NIMHANS, Bangalore.
5. The candidate after getting training at NIMHANS, Bangalore shall continue to be in regular service with the State/Central Government or Public Sector Undertaking of State/Central Government and will work in the State/Central Government or Public Sector Undertaking of the State/Central Government.

Date:
Place:

Signature with Seal of
Competent Authority

FEE STRUCTURE FOR INDIAN NATIONALS

(All figures are in rupees)

| Sl. No. | Nature of Fees | Ph.D | DM/M.Ch. | MD/PDF | DPM | M.Phil. | M.Sc. | B.Sc. Nursing | B.Sc. Radiograph | DPN/DCNT DNN/CNT | Remarks |
|---------|--|-----------|-----------|-----------|-----------|-----------|-----------|---------------|------------------|------------------|--|
| 1 | Eligibility fee: 1) Other Universities of Karnataka: Rs.100/- 2) Universities outside Karnataka: Rs.500/- 3) Foreign students: 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 | 45,000.00* | 10,000.00* | --- | Payable in instalments |
| 4 | Laboratory fee | 500.00 | 500.00 | 500.00 | 400.00 | 400.00 | 300.00 | 300.00 | 300.00 | --- | One time payment for the whole duration of the course at the time of Joining |
| 5 | Gymkhana & recreation fee | 250.00 | 250.00 | 250.00 | 250.00 | 250.00 | 250.00 | 250.00 | 250.00 | 250.00 | |
| 6 | 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 |
| 7 | Library fee (per year) | 1,000.00 | 1,000.00 | 1,000.00 | 1,000.00 | 1,000.00 | 1,000.00 | 10,000.00 | 10,000.00 | 1,000.00 | One time payment for whole duration of course at the time of joining |
| 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 | | | | | | | | | | As prescribed by the Institute |
| | Part I | --- | 3,000.00 | 1,000.00 | 3,000.00 | 1,500.00 | 1,000.00 | 1000.00 | 1000.00 | --- | |
| | Part II | --- | 3,000.00 | 5,000.00 | --- | 1,500.00 | 1,000.00 | 1000.00 | 1000.00 | --- | |
| | Part III | --- | 10,000.00 | --- | --- | --- | --- | 1000.00 | 1000.00 | --- | |
| 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.

*One time payment

FEE STRUCTURE FOR FOREIGN NATIONALS

(All figures are in US \$)

| Sl. No. | Name of the Course | * Tuition fee | Registration fee |
|---------|--|---------------|------------------|
| 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 |
| 4 | M.Phil. | 20000 | 500 |
| 5 | M.Sc. Psychiatric Nursing | 15000 | 500 |
| 6 | DPN/DNN/DCNT/CNT | | 100 |

* Tuition fee to be paid in equal annual instalments. The amount indicated is for the entire duration of the course

The fees once paid will not be refunded at any cost

COURSES AND FACULTY

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

Duration: (i) 3 – 5 years for general candidates (ii) 2 – 4 years for candidates with M.Phil. degree in Biophysics.

Programme of study: During the first year, the candidate will be given training in the theoretical aspects of the problem and the research methodology related to the proposed topic. The candidate will appear for Pre Ph.D. examination after one year from the date of provisional registration. After completion of the proposed research work, the candidate will submit the thesis for the award of Ph.D. Candidates having M.Phil. degree in Biophysics will be exempted from Pre Ph.D. examination.

ACADEMIC FACULTY AND RESEARCH INTERESTS:

Dr.Nanda B.Joshi, Professor: Molecular mechanisms of neurodegeneration, receptor specificity and role of mitochondria excitotoxicity, glutamatergic receptors in ageing, Ion channels.

Dr.Preeti G.Joshi, Professor: Neuron-glia communication and its deregulation in neurological and psychiatric disorders, signal transduction in relation to growth and differentiation of neural cells, signaling mechanisms of pain, lipid rafts and cell signaling.

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

Dr.Sudha Mishra, Assistant Professor: Glutamatergic receptors and downstream signaling in neural cells, modulation of protein expression and function in neurological disorders-ischemia and stroke.

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.

Specification fields: 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.M.Venkataswamy Reddy, Additional Professor: Epidemiological methods, Cluster analysis, Meta analysis, Applied multivariate analysis.

Dr.K.Thennarasu, Associate Professor: Applied multivariate analysis, statistical applications in genetics, Survival analysis, Qualitative data analysis, Latent variable modeling.

Dr.P.Marimuthu, Assistant 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. The candidates will be assessed periodically during these two years and are required to score a minimum of 80% credits for each year. At the beginning of the third year, a doctoral committee consisting of Guide, Joint Guide (if applicable) with two other experts in the area of research will be constituted for each candidate. This committee would be responsible to monitor the candidate's progress in his or her chosen area of research till the submission of the Ph.D. thesis.

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. research/Dissertation work.

During the three-year period, the Ph.D. Dissertation 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 dissertation work, the candidate will be posted to the concerned Department 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 sites 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: A minimum of 80% of credits clearance, separately in first and second year will be required for Ph.D. registration. The candidate has to submit a Ph.D. project proposal (protocol) for the registration from NIMHANS and should abide by the Ph.D. regulations of the Institute. The candidates are exempted from the pre-Ph.D. examination.

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.T.R.Raju, Professor & Head of the Department of Neurophysiology – Chairman

Dr.S.K.Shankar, Professor & Head of the Department of Neuropathology – Member

Dr.M.N.Subhash, Professor & Head of the Department of Neurochemistry – Member

Dr.Shoba Srinath, Professor of Psychiatry – Member

Dr.A.B.Taly, Professor of Neurology – Member

NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF MENTAL HEALTH & SOCIAL PSYCHOLOGY

Duration: 3 years

Eligibility: a) 2 year Master's degree in Psychology from a recognized University or Equivalent Qualification recognized by NIMHANS securing not less than 55% of marks in aggregate. OR b) A two year M.Phil. degree in Mental Health & Social Psychology or equivalent qualification recognized by NIMHANS.

Exemption: Pre-Ph.D. examination and duration of one year for those candidates possessing M.Phil. degree in Mental Health & Social Psychology or equivalent qualification recognized by NIMHANS.

Programme of study: Candidates will be allowed for registration immediately after they join the department.

Candidates with 2 years MA/M.Sc., degree in Psychology have to complete pre-Ph.D. examination after one year from the date of provisional registration.

Two years of supervised clinical internship in Clinical Psychology with special emphasis on areas related to the topic of research.

Training in research methodology, theoretical and practical aspects of Clinical Psychology.

Completion of thesis work.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.Shobini L. Rao, Professor: Neuropsychology, Cognitive Neuroscience.

Dr.Kiran Rao, Professor: Stress, Coping, Vulnerability, Resilience & Well being, Psychotherapy & Psychosocial Rehabilitation.

Dr.Ahalya Raguram, Additional Professor: Psychosocial aspects of mental Health/Family/Marital/Individual therapies.

Dr.Uma.H, Additional Professor: Child & Adolescent Mental Health, School Mental Health.

Dr.Mahendra P.Sharma, Additional Professor: Behavioural Medicine, Cognitive Behaviour Therapy, Stress Management, Meditation and Psycho-oncology.

Dr.Anisha Shah, Additional Professor: Marital and Family Relationships & Therapies, Psychotherapies.

Dr.L.N.Suman, Associate Professor: Adult Psychopathology & Psychosocial aspects of substance abuse, Forensic Psychology.

Dr.Seema Mehrotra, Assistant Professor: Psycho-oncology, Emotional regulation, Adaptation to major life events, Positive Psychology.

Dr.N.Jamuna, Assistant Professor: Neuropsychological Assessment and Rehabilitation, Paediatric Neuropsychology, Forensic Neuropsychology and Neuropsychiatric disorders.

Dr.Paulomi M.Sudhir, Assistant Professor: Behavioural Medicine, Cognitive Behaviour therapies, Anxiety disorders & Psychological Intervention in diabetes.

Dr.Keshav Kumar.J, Assistant Professor: Neuropsychology, Cognitive Neuroscience, Cognitive Psychiatry and Neuropsychological Rehabilitation.

Dr.Manoj Kumar Sharma, Assistant Professor: Tobacco cessation, Child, Adolescent, Adult substance abuse & dependence – Neuropsychological aspects and Psychological intervention.

Dr.M.Manjula, Assistant Professor: Process issues in cognitive behaviour therapies, Phenomenology & CBT in anxiety disorders, Brief dynamic therapies, sexual dysfunctions, interventions with college students, Forensic Psychology.

Dr.Naveen Grover, Assistant Professor: Psychotherapy process research, psychotherapy supervision, Sports psychology.

NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF EPIDEMIOLOGY

Duration: 3 – 5 years

Programme of study: Development and application of epidemiological methods in the field of Mental Health and Neurosciences. Specified fields includes epidemiology of Psychiatric disorders, Neurological disorders, injuries, traumatic brain injuries and Health Behaviour surveillance.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.G.Gururaja, Professor: Injury prevention and control – epidemiology, surveillance, utilization of services, organization of emergency and trauma care, disability assessment and rehabilitation services. Road traffic injuries, traumatic brain injuries, suicides, violence, burns, agricultural injuries and work related injuries. Health behaviour surveillance, prevention and control of non-communicable diseases. Epilepsy, stroke, mental health, HIV/AIDS.

Dr.N.Girish, Assistant Professor: Psychiatric Epidemiology, Maternal Mental Health issues and concerns. Traditional complementary and alternate systems of Medicine use, Iodine deficiency disorders, Health systems research.

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, the candidate has 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.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.K.R.Manjunatha, Professor: Genetics of mental retardation, Genotoxicity, Human molecular cytogenetics.

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

Dr.G.K.Chetan, Assistant Professor: Human genetics, Molecular cytogenetics, Genetic counseling, Genotoxicity, Genetics of MR and fragile X syndrome.

RESEARCH INTERESTS

Diagnosis of genetic disorders, DNA diagnosis of familial genetic disorders involving PER, 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.

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

Programme of study: Theoretical basis for development and application of public health education interventions, opportunity for practical experience and relevant research methodology.

Facilities: Audio-visual facilities, video production and editing.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.Jayashree Ramakrishna, Professor: Social cultural aspects of health education interventions, reproductive health, HIV/AIDS, qualitative research, action research.

NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF NEUROCHEMISTRY

Duration: 3 – 5 years

Minimum qualification: M.Sc. degree in Biochemistry/Chemistry with biochemistry/medical biochemistry with 55% aggregate marks.

Programme of study: Initially, the candidate will be provisionally registered for Ph.D. Before confirmation of registration, the candidate has 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. 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: Receptor mediated second messenger system, Biochemical basis of stroke and inborn metabolic disorders, Neuronal specific proteins/cytoskeletal system phosphorylation, Immunochemical basis of Neurodegenerative disorders.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.K.Taranath Shetty, Professor: Protein phosphorylation and cytoskeletal proteins, Studies of P67, a neuron specific protein, Biochemical studies on alcoholism and related problems, Inborn metabolic disorders.

Dr.M.N.Subhash, Professor: Characterization of 5-HT receptors in brain, Second messenger system in neuropsychiatric disorders, Adrenergic receptors in brain, G – Proteins.

Dr.Rita Christopher, Additional Professor: Biochemical studies on inborn errors of metabolism, Biochemical studies in stroke.

Dr.Sharada Subramanian, Assistant Professor: Immunotherapeutic approaches to Amyloidoses/Prionoses.

Dr.M.M.Srinivas Bharath, Assistant Professor: Role of oxidative stress, oxidation and aggregation of proteins in parkinson's disease.

NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF NEUROMICROBIOLOGY

Duration: 3 – 5 years

Programme of study: Initially, the candidate will be provisionally registered for Ph.D. Before confirmation of registration the candidate has 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.

ACADEMIC FACULTY AND RESEARCH INTERESTS

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

Dr.S.Nagarathna, Associate 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.

Dr.H.B.Veena Kumari, Assistant 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 confirming of the registration, the candidate has 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 Microscope with facility for 3-D reconstruction of the image, Human Brain tissue Repository for Neurobiological Studies (Human Brain Bank) – a National Research Facility, Transfusion Medicine Centre and a Diagnostic Molecular Pathology Laboratory. Clinical Autopsies are regularly carried out for establishing the cause of death and progression of the disease.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.S.K.Shankar, Professor: Neuropathology of Viral Infections with special reference to HIV/AIDS, CJD, Rabies, Neurodegenerative diseases, Pathology of epilepsy.

Dr.Vani Santosh, Additional Professor: Biology of Brain Tumours, Developmental pathology of brain.

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

Dr.Sunder Periyavan, Associate Professor: Transfusion Medicine and Immunohematology.

Dr.N.Gayathri, Associate Professor: Pathology of Neuromuscular diseases, Ultrastructural Pathology.

Dr.B.K.Chandrasekhar Sagar, Assistant Professor in Electron Microscopy: Ultrastructural Pathology, In-charge Electron Microscopy Laboratory, a common facility.

NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF NEUROPHYSIOLOGY

Duration: 3 – 5 years

Programme of study: Initially the candidates will be provisionally registered for Ph.D. Before confirming of the registration, the candidate has 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 thesis for award of Ph.D. degree.

Candidates with two years M.Phil. degree from NIMHANS or MD/MS/M.Ch./DM and DNB may be given one year exemption by the Ph.D. committee and also be exempted from taking pre Ph.D. examination.

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

- 1) Neurophysiology of Yoga
- 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, depression and brain stimulation reward
- 9) Central nervous system regeneration and the role of stem cells
- 10) Synaptic Physiology
- 11) Neural plasticity and brain repair
- 12) Activation of resident stem cells in the adult brain: Implications for the treatment of neuropsychiatric disorders

ACADEMIC FACULTY AND RESEARCH INTERESTS

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

Dr.Bindu M.Kutty, Additional Professor: Role of subiculum in cognition using various behavioral paradigms of spatial learning and memory Strategies to ameliorate the learning impairments by environmental stimulation and transplantation, Neurobiology of sleep in various psychiatric disorders and yogic practices.

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

Dr.B.S.Shankaranarayana Rao, Associate Professor: Cellular and molecular mechanisms of learning and memory, Neurobiology of stress, depression and brain stimulation reward, Synaptic physiology and adult brain neurogenesis, Neural plasticity and brain repair, Rewiring and remodeling of brain circuits in transgenic and knockout mouse models of neuropsychiatric disorders.

Dr.Laxmi T.Rao, Assistant Professor: Extinction as a therapeutic tool for post-traumatic stress disorder, Neural circuits and cellular mechanisms underpinning passive (extinction) and active (emotion regulation) strategies to regulate behavioural changes using fear condition in animal model.

NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF NEUROVIROLOGY

Duration: 3 – 5 years

Programme of study: Initially, the candidate will be provisionally registered for Ph.D. Before confirmation of registration the candidate has 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 (i) diagnosis, antiviral drugs (ii) development of kits.

Dr.S.N.Madhusudana, Additional 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.

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

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

Duration: 3 – 5 years

Eligibility: A candidate who has obtained a Master's degree in Nursing from NIMHANS or any recognized University, securing not less than 55% of marks in the aggregate of Master's degree.

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. The candidate will 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.

Exemption: Candidates who have obtained M.Phil. degree recognized by NIMHANS will not be required to appear for Pre-Ph.D. examination. For such candidates the duration of Ph.D. will be for two years.

Research facilities: The department of Nursing has all the infrastructure for the teaching and research activities. There is good clinical facility and adequate reference books in the library for the students. There are four faculty members for teaching the Doctorate students in nursing. 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. Counselling 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 Institute for further support in the research activities and it is a part of multi-disciplinary team. The faculty members guide the research activities of the students in nursing.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.K.Reddemma, Professor: Job oriented stress, job satisfaction, manpower requirement, time-motion.

Dr.K.Lalitha, Additional Professor: Mental health counseling and disaster intervention.

Dr.Nagarajaiah, Assistant Professor: Non-pharmacological management of individuals suffering from Neurotic disorders, domiciliary care for Neuro-Psychiatric clients, family level interventions in the management of Schizophrenia.

Dr.Ramachandra, Assistant Professor: Electro convulsive therapy, Substance Abuse related problems, rehabilitation, HIV & Mental Health.

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

Duration: 3 years

Exemption: Candidates who have obtained M.Phil. degree from NIMHANS or a similar degree recognized as equivalent by NIMHANS will not be required to appear for Pre Ph.D. examination. For such candidates the duration of Ph.D. will be for two years.

Programme of study: A candidate who has obtained MSW 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 duration of 3 years. The candidate has to complete Pre Ph.D. examination after one year from the date of provisional registration.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.K.Sekar, Professor: Community Mental Health, Disaster Intervention.

Dr.R.Parthasarathy, Professor: Student Mental Health.

Dr.V.N.Rao, Additional Professor: School Mental Health.

Dr.D.Muralidhar, Additional Professor: Substance Abuse and Related Problems.

Dr.M.Chandrasekhara Rao, Additional Professor: Psychiatric Social Work Interventions.

Dr.N.Krishna Reddy, Associate Professor: Psychiatric Social Work Interventions in Neurosurgery.

Dr.Prakashi Rajaram, Assistant Professor: Psychiatric Social Work Intervention in Neurology and Psychiatric Rehabilitation.

Dr.V.Indiramma, Assistant Professor: Child Mental Health.

Dr.R.Dhanasekara Pandian, Assistant Professor: De-addiction Counselling and Allied Training Programme, Disaster Intervention.

Dr.A.Thirumoorthy, Assistant Professor: Counselling, Psychiatric Social Work in General Health Care.

Dr.Md.Ameer Hamza, Assistant Professor: Group work with Schizophrenia and alcohol and substance abuse.

NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF PSYCHIATRIC & NEUROLOGICAL REHABILITATION

Duration: 3 – 5 years

Programme of study: A candidate who has obtained Master of Physiotherapy, Master of Occupational Therapy, Master of Orthotics and Prosthesis, M.Sc. in Psychosocial Rehabilitation, M.Phil. in Clinical Psychology, M.Phil. in Psychiatric Social Work 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.

Exemption: Candidates who have obtained MD/MS/DM/M.Ch. or M.Phil. degree from NIMHANS or a similar degree recognized as equivalent by NIMHANS will not be required to appear for Pre-Ph.D. examination. For such candidates the duration of Ph.D. will be for two years.

Research facility: Day care center for people with chronic mental illness, Dynamic posturography, Treadmill with body weight support, supine Urodynamic laboratory, Skills training laboratory. Fully equipped physiotherapy, occupational therapy and orthotic sections. Clinical facilities for psychiatric and neurological rehabilitation, multidisciplinary team for rehabilitation. Community based Day Care Centres and Rehabilitation facilities by NGO's where NIMHANS provides technical support.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.T.Murali, Professor: Psychiatric rehabilitation. Low cost models of rehabilitation, community based rehabilitation, disability assessment, policy issues in psychiatric rehabilitation and quality assurance in service delivery, peoples' participation in rehabilitation, role of NGO's in psychosocial rehabilitation.

Dr.Anupam Gupta, Assistant Professor: Physical Medicine and Rehabilitation.

NAME OF THE COURSE: Ph.D. IN THE DEPARTMENT OF PSYCHOPHARMACOLOGY

Duration: 3 – 5 years

Programme of Study: Theoretical applied aspects of fundamental systemic Neurosciences and Molecular Psychopharmacology.

Specific fields: Behavioral Psychopharmacology and Neuro-chemical Correlates. Molecular Modeling and Computational Biology. Computational Neuroscience involving Nonlinear Complex. Systems Structure and Dynamics. Synchronization and coherence in neural systems. Theoretical cognitive neuroscience. Electroconvulsive therapy. Herbal medicine and drug trials.

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.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.N.Pradhan, Professor: Nonlinear Dynamics, Complex systems, Molecular Modelling, 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: After selecting the candidate through Entrance test and counseling, the candidate will be provisionally registered for Ph.D. For confirmation of registration, the candidate has to complete the pre Ph.D. examination conducted after one year from the date of provisional registration. The candidate would be trained on theoretical and practical aspects of the doctoral course work and will also be trained on clinical evaluation and management of patients with particular emphasis in the area of the candidate's research topic. Following the satisfactory completion of the doctoral work and approval of the synopsis, the candidate shall submit the full thesis.

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, Professor: Neurogenic communication disorders, stuttering, voice disorders, speech perception and production, instrumentation.

Dr.N.Shivashankar, Professor: Clinical neuroaudiology, Central auditory processing disorders, adult and childhood speech-language disorders.

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 13 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, 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.D.Nagaraja, Professor & Director/Vice-Chancellor: Cerebrovascular diseases, behaviour and cognitive neurology, Cerebral venous sinus thrombosis, Headache, Multiple sclerosis.

Dr.P.Satishchandra, Professor: Epilepsy, Neuroepidemiology, Neuroinfections, Neuro-AIDS, Epilepsy and genetics, Electroencephalography and evoked potentials.

Dr.A.B.Taly, Professor: Neurological disabilities and rehabilitation, Neurological complications of alcoholism, Neuromuscular disorders, sleep and alternative medicine.

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

Dr.Uday B.Muthane, Additional Professor: Movement disorders and Parkinson's disease, Autonomic Nervous system dysfunction.

Dr.A.Nalini, Associate Professor: Motor neurone disease, Neuro-AIDS, Neuro, Muscular disorders.

Dr.Pramod Kumar Pal, Associate Professor: Transcranial Magnetic stimulation and motor physiology, movement disorders.

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

Dr.Samhita Panda, Assistant Professor: Stroke, epilepsy and sleep.

Dr.Joy Vijayan, Assistant Professor: Cognitive neurology, Dementia, Clinical electrophysiology.

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

Dr.Girish B.Kulkarni, Assistant Professor: Immune mediated neuropathies Headache.

NAME OF THE COURSE: DM IN NEURORADIOLOGY

Duration: 3 years

Research Facilities: Spiral CT Scanner, 1.5 Tesla MRI Scanner with facilities for EPI studies, MR Angiography Perfusion, Proton and Phosphorous spectroscopy

and functional MRI, Digital Subtraction Angiographic facility for interventional management of neurovascular disorders including 3D CT Angiography and Virtual Angiographic endoscopy, 3 Tesla MRI system with functional imaging and Tractography and 16 slice CT Scanner.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.P.N.Jayakumar, Professor: MRI & MR Spectroscopy of “Schizophrenia” Brain tumour, Infection, Functional MRI, Epilepsy. Interventional treatment of tumors, Cerebral Aneurysm and AVM.

Dr.M.K.Vasudev, Professor: Co-Investigator in MRI & MRS in Schizophrenia MRI in Wilson’s disease, MRI of Diffuse and perfusion in acute stroke. Latest MRI imaging protocols, Interventional techniques in the Aneurysm using GDC coil, Onyx Gel, Interventional techniques – Occlusion of AVM using Histoacryl Glue.

Dr.Jerry M.E.Kovoor, Associate Professor: Diffusion weighted MRI, Quantitative MR techniques, Epilepsy, Neuro Interventions.

Dr.S.Ravishankar, Assistant Professor: MR Imaging in Neurodegenerative disorders, Pediatric neuroimaging, Functional MRI, Epilepsy 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.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.R.M.Varma, Emeritus Professor:

Dr.B.A.Chandramouli, Professor: Surgery for craniovertebral junction anomalies, Cerebrovascular surgery, Skull base surgery, Epilepsy surgery.

Dr.S.Sampath, Professor: Spinal trauma, Instrumentation and stabilization procedures, Endoscopic neurosurgery, Surgery for suprasellar lesions, Gamma Knife Radiosurgery.

Dr.B.Indira Devi, Professor: Craniovertebral junction anomalies, Peripheral nerve repairs, spinal dysraphisms, Neuro rehabilitation, Surgery for gliomas.

Dr.Anandh Balasubramaniam, Associate Professor: Stereotactic procedures for tumours and movement disorders, Endoscopic neurosurgery, Basic and clinical research in gliomas, Gamma Knife Radiosurgery.

Dr.Pillai Shibu Vasudevan, Assistant Professor: Neuro Trauma, Stereotactic procedures for tumours and movement disorders, Gamma Knife Radiosurgery.

Dr.Paritosh Pandey, Assistant Professor: Skull base surgery, stereotaxy, basic clinical research in glioma, cranial infection.

Dr.Rojin George Abraham, Assistant Professor: Spinal surgery, research interest in cerebral ischaemia, stem cell, hydrocephalus

Dr.Dhananjay I Bhat, Assistant Professor:

Dr.Dwarakanath Srinivas, Assistant Professor:

NAME OF THE COURSE: (1) MD IN PSYCHIATRY

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

The department of Psychiatry, NIMHANS is one of the largest in South East Asia. 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. **THERE ARE SPECIAL CLINICS**

Child and Adolescent Psychiatry including Mental Retardation –
Monday, Tuesday, Thursday, Friday, Saturday

OCD Clinic – Tuesday

Schizophrenia Clinic – Wednesday

Perinatal Clinic – Friday

Old Age Psychiatry – Saturday

De-Addiction Clinic – Monday, Saturday

Tobacco Cessation Clinic – Monday, Saturday

The Department has a large inpatient set up with 550 beds including separate Child & Adolescent Psychiatry services, De-addiction services and Family Psychiatric Center.

A. Training

Under the aegis of NIMHANS University the Department of Psychiatry is involved in training in a continuous manner. MD, DPM and Ph.D. in 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 is offered
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 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.

The department of Psychiatry also has the Community Health services for the last three decades. This facility provides community based mental health services in 6 districts of Karnataka in addition to supporting several more districts.

B. Research Activities

The faculty 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 Child Mental Health, Old Age Psychiatry, Women's Mental Health, Substance Abuse and Community Mental Health also. The department has liaison with other research centers nationally (example NCBS, SVYASA) and internationally.

The department works in collaboration and has consultative liaison towards clinical services with other departments of the institute – Neurology, Mental Health and Social Psychology, Psychiatric Social Work, Psychiatric Nursing, Psychopharmacology, Neurochemistry, Neuropathology, Neurovirology, Epidemiology, Psychiatric and Neurological Rehabilitation etc.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.S.M.Channabasavanna, Emeritus Professor: Forensic Psychiatry, Family Psychiatry, Biological Psychiatry.

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

Dr.C.R.Chandrashekar, Professor: Cultural issues, Somatisation, Legal and Community Psychiatry, Mental Health Education.

Dr.Shoba Srinath, Professor: Child Psychiatry, Mood Disorders, Autism, Epidemiology.

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

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

Dr.Satish Chandra Girimaji, Professor: Mental retardation, Child Psychiatry.

Dr.Shekar P. Seshadri, Professor: Child & Adolescent Psychiatry (Adolescent Mental Health) Therapy & Therapy training, Gender, Sexuality, Sexual Abuse, Mental Health of Street Children, Qualitative Research and Experimental Methodology, Life skills education, School programs.

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.

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

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

Dr.Srikala Bharath, Professor: Life skills education for Schools, Children at risk, Old age psychiatry, Disaster and Mental Health.

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

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

Dr.Jagadisha, Associate Professor: Schizophrenia, Somatic therapies (ECT, rTMS, Yoga).

Dr.Manjula Devi, Assistant Professor: Music Therapy, Community Psychiatry – conducting Mental Health camps.

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

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

Dr.G.Venkatasubramanian, Assistant Professor: Schizophrenia, Structural and functional MRI in Psychiatric disorders, Psychopharmacology and Psychiatry-Medicine Interface.

Dr.Om Prakash, Assistant Professor: Dementia evaluation, depression in the elderly, Seizures in Alcoholism, Alcohol Pharmacoprophylaxis, 'Culture Bound Syndromes', Community Mental Health.

Dr.P.T.Sivakumar, Assistant Professor: Geriatric Psychiatry, Community Psychiatry.

Dr.Geetha Desai, Assistant Professor: Women's Mental Health, Consultation Liaison Psychiatry, Adolescent Psychiatry.

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

Dr.Y.P.Mukesh, Assistant Professor: Child and Adolescent Psychiatry, anxiety disorders, School related Mental Health problems, pediatric Psychopharmacology, Autism and Mental reterdation.

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

Dr.Shivrama Varambally, Assistant Professor: Early onset psychosis and Schizophrenia, Neurological Signs in Schizophrenia, Yoga in Psychiatry, Electro Convulsive therapy.

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

Duration: 2 years

Research facilities: As given under MD Psychiatry (page 40).

ACADEMIC FACULTY AND RESEARCH INTERESTS

As given under MD Psychiatry (page 40)

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 human and animal with special stains and Immunohistochemistry, Transmission Electron Microscopy Facility, Human Brain Tissue Repository for Neurobiological Studies (Human Brain Bank) – A National Facility, Transfusion Medicine Centre.

ACADEMIC FACULTY AND RESEARCH INTERESTS

As given under Ph.D. in Neuropathology (page 30)

NAME OF THE COURSE: POST DOCTORAL FELLOWSHIP IN NEUROANAESTHESIA

Duration: 1 year

Programme of study: The course envisages to train 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 and respiratory monitoring facilities including pulmonary function testing and cerebral monitoring including Transcranial Doppler & BIS which may be used for clinical research. Other facilities include blood gas analysis and anaesthetic agent monitoring. In collaboration with other clinical departments, it is possible to study Intracranial pressure.

ACADEMIC FACULTY AND RESEARCH INTERESTS

Dr.G.S.Umamaheswara Rao, Professor: Intensive care, head injury, mechanical ventilation, cerebral blood flow studies.

Dr.H.K.Venkatesh, Additional Professor: Pediatric Neuroanaesthesia, bronchoscopy and airway complications in critical care.

Dr.V.Bhadrinarayan, Associate Professor: Head injury, intensive care.

Dr.T.S.Devaragudi, Associate Professor: Infections in intensive care units, intraoperative haemodilution.

Dr.K.R.Madhusudan Reddy, Associate Professor: Neuroendoscopy, studies in intraoperative ICP measurement.

Dr.V.J.Ramesh, Associate Professor: Outcome in intensive care, mechanical ventilation.

Dr.M.Radhakrishnan, Assistant Professor: Clinical investigation in Neuroanaesthesia.

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, 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 page 22)

NAME OF THE COURSE: M.PHIL. IN MENTAL HEALTH AND SOCIAL PSYCHOLOGY

Duration: 2 years

ACADEMIC FACULTY AND RESEARCH INTERESTS: See under Ph.D. in Mental Health and Social Psychology (page 25).

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 a 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 carryout dissertation work are available in the department. It has well equipped laboratories to carryout 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, depression and brain stimulation reward, Stem cells and neurogenesis, neurobiology of motor neuron disease, neuronal plasticity, Autonomic and pulmonary functions 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: See under Ph.D. in Neurophysiology (page 31)

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. The importance of computational neuroscience in understanding brain function also will be stressed. Theory lectures will be followed by practical demonstration 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.M.N.Subhash, Professor & Head of the Department of Neurochemistry - Chairman

Dr.Nanda B.Joshi, Professor of Biophysics - Member

Dr.N.Pradhan, Professor of Psychopharmacology - Member

Dr.S.K.Shankar, Professor & Head of the Department of Neuropathology - Member

Dr.Bindu M.Kutty, Additional Professor of the Department of Neurophysiology - Member

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

Duration: 2 years

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, Theoretical Framework, marriage and Family Intervention techniques, Psychosocial Rehabilitation, Community based mental health activities, Alcohol and drug 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 (page 33)

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

Duration: 2 years

ACADEMIC FACULTY AND RESEARCH INTERESTS: Please refer (page 33)

NAME OF THE COURSE: B.Sc. IN NURSING

Duration: 4 years

ACADEMIC FACULTY AND RESEARCH INTERESTS: Please refer (page 33)

NAME OF THE COURSE: B.Sc. IN RADIOGRAPHY

Duration: 3 years

ACADEMIC FACULTY AND RESEARCH INTERESTS: Please refer (page 38)

DIPLOMA COURSES

DIPLOMA IN PSYCHIATRIC NURSING (DPN)

Duration: 1 year

DIPLOMA IN NEUROLOGICAL & NEUROSURGICAL NURSING (DNN)

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 (page 33)

DIPLOMA COURSE IN CLINICAL NEUROPHYSIOLOGY TECHNOLOGY (DCNT)

Duration: 1 year

All applications received shall be considered by a Committee constituted by the Director and all 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.

CERTIFICATE COURSE IN NEUROIMAGING & TECHNOLOGY (CNT)

Duration: 1 year (sponsored candidates only)

Sponsored candidates should submit their applications to the Institute through proper channel. It shall be considered by a committee constituted by the Director. All the applicants fulfilling the basic qualifications shall appear before the committee constituted by the Director.

METHOD OF SELECTION

- A. The Selection procedure for all the postgraduate courses listed under A (page 10) will be as follows:

1. Selection will be purely based on merit as determined in the Entrance test 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 44% 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.
2. The question paper for Entrance test will contain multiple choice objective type questions. The duration of the test for each course will be determined by the concerned departments. A single common Entrance test will be conducted for MD and DPM in Psychiatry courses for candidates with MBBS degree. A single common Entrance test will be conducted for DM in Neurology and M.Ch. in Neurosurgery courses for candidates with MBBS degree. Separate Entrance tests will be conducted for candidates with MD/MS/DNB qualification applying for DM in Neurology and M.Ch. in Neurosurgery courses. The Entrance test for candidates applying for DM in Neuroradiology course will be conducted separately.
3. A merit list will be prepared course wise and reserved category wise based on the marks scored by the candidates in the Entrance test. Eligible candidates will be called for counseling 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 Mental Health and Social 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 previous 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.

4. The admission will be on the basis of Merit as determined by the marks secured in 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.

B. Admission to B.Sc. Courses listed under B (page 11)

The admission will be on the basis of Merit as determined by the marks secured in 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.

B (1). Admission to Diploma Courses listed under B (page 11)

All 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 candidates shall be informed directly by Registered Post Acknowledgement Due

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 Mental Health & Social 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 Diploma in Psychiatric Nursing (DPN).

5. **Infosys Foundation Award** for excellence in Diploma in Psychiatric Nursing (DPN) and Diploma in Neurological and Neurosurgical Nursing (DNN) for securing highest marks.
6. **Shri.Mukund memorial Prize** for the candidate who secures the highest marks in Diploma in Neurological and Neurosurgical Nursing (DNN) 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 secures 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.

GENERAL INSTRUCTIONS

1. Applications received after the closing date or which are not complete in all respects will not be considered.
2. Candidates are advised to send their application form(s) preferably by registered post. The Institute takes no responsibility for any delay in the receipt or loss of application in transit.
3. All claim made in the application must be supported with documentary proof
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 sent. In case the application is not received through the employer before the date of the Entrance test, a NO OBJECTION CERTIFICATE from the employer should be produced at the time of Entrance test failing which the candidate will not be allowed for Entrance test.
5. Candidates called for Entrance test and counseling will have to make their own arrangements for stay at Bangalore (min. 2 – 3 days). No TA/DA will be paid by this Institution.

6. The decision of the Director of the Institute shall be final in 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 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 Rs.100/-. 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 Rs.100/-. 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 Copy of the bond to be executed will be given at the time of joining.
12. Eligible candidates for Entrance Test will be intimated about their eligibility by post and Institute will not take any responsibility for non-receipt of the call letters.
13. Qualified candidates list for 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 Entrance Tests, Counseling 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 this Institute.
16. The rules and regulations in this prospectus are subject to change in accordance with the decision of the Institute from time-to-time.

WARNING

In case any candidate is found to have supplied false information or 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 anyone found indulging in ragging is likely to be punished appropriately which may include expulsion from the Institute.

The candidates along with the parents/guardians of the candidates have to sign a declaration that they are aware about ragging being banned at this Institution and if found indulging in ragging is likely to be punished appropriately which may include expulsion from the Institute.

ACCOMMODATION

There are five hostels attached to the Institute – Kabini hostel, a Staff hostel, a hostel for men, a hostel for ladies and a hostel for female nurses. The junior residents admitted for various courses are required to stay in the hostels, subject to availability.

Students admitted to post-graduate courses, or the Ph.D. programme or to M.Phil courses are provided accommodation in either men's or ladies hostels. The accommodation generally will be a single room facility and is partially furnished. Family accommodation is not available. The accommodation is free for junior residents. However, they are required to pay Rs.250/- per month towards electricity and water charges. Candidates who are admitted to the Ph.D and M.Phil courses are required to pay Rs.250/- per month towards accommodation, electricity and water charges. 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 supervision over the hostels. Those residing in the hostel are required to adhere to hostel rules and regulations.

NIMHANS LIBRARY

Library and Information Centre, NIMHANS, is recognized as National Neurosciences Information Centre (NNIC) functioning as national clearing-house for mental health and neurosciences information in India. It has 51,000 volumes and subscribes to 325 journals. Library and Information Centre has published two full text databases on CD viz., (1) 'Neurology India on CD' which has full text of 45 years covered from Vol.1 – Vol.45 (1953-1997) (2) 'NeuroMed on CD' covers three Indian Journals for 15 years. Library is equipped with 64 KBPS RF link and connected to 512 KBPS leased line from VSNL has internet proxy server, e-mail server, internet web domain, CD-NET server and Library Automation server. Library is connected to campus wide network which has fiber optic back bone with more than 400 nodes. The Library has a functional spacious independent building with 240 seat capacity, with 12 terminals for users to have internet access, e-mail and database access.

More than 1780 e-Journals have been included in the field of Neurosciences, Mental Health & Allied Sciences enhancing access to the literature. The majority of the journals are on-line access on campus network. The full text of the journals are integrated to single interface and bibliographical database for easy access to the users on any topic of interest for academic, research and health care.

PUBLICATION

The Publication department in the Institute brings out reports of activities, research publications, health education material periodically. More than 66 publications have been brought out so far. In addition, translation of material from English to other Indian languages are enabled. The implementation of official language in the Institute as per the directions of the Union Ministry of Health & Family Welfare is undertaken with the help of Hindi unit.

ALUMNI ASSOCIATION

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

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. Department of Psychiatry organizes 10 to 12 sessions to learn and to speak in Kannada. Students are required to attend these sessions.