# NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES

# NIMHANS

(INSTITUTE OF NATIONAL IMPORTANCE)
BENGALURU, INDIA



# PROSPECTUS 2018-19

The Institute reserves the right to modify/change the contents of this prospectus without prior notice. Number of seats for different courses notified in this prospectus will not be increased under any circumstance.

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# INTRODUCTION TO NIMHANS

# **Brief History of NIMHANS**

The Government of India established the All India Institute of Mental Health in 1954 in association with the then existing Mental Hospital of the Government of Karnataka. Major objective of the Institute was to generate manpower in the field of mental health and neurosciences. The Mental Hospital, Bangalore, which had built up certain traditions since 1938 in matters related to undergraduate training in the field of Psychiatry, was chosen by the Government of India as the centre for training. The Institute was then affiliated to the University of Mysore for all courses.

Subsequently, the Institute got affiliated to the Bangalore University in 1964. The Bangalore University established a separate faculty of Mental Health and Neurosciences.

The All India Institute of Mental Health and the Mental Hospital of the Government of Karnataka were amalgamated into an autonomous institute and thus the National Institute of Mental Health and Neuro Sciences (NIMHANS) came into existence in 1974.

NIMHANS was conferred 'Deemed to be University' status by UGC in 1994 and NIMHANS became an autonomous and independent university.

NIMHANS has been declared as an Institute of National Importance by an Act of Parliament vide Government of India Gazette Notification dated 14.9.2012. Notwithstanding anything contained in the Indian Medical Council Act, 1956, the Rehabilitation Council of India Act, 1992, the Indian Nursing Council Act, 1947, and the University Grants Commission Act, 1956, the medical degrees, diplomas, nursing degrees and certificates granted by the Institute under this Act shall be recognized medical qualifications for the purposes of the Acts aforesaid and shall be deemed to be included in the Schedule to the respective Acts.

Spread across 135 verdant acres in the heart of the garden city, NIMHANS offers the latest medical advances in an environment that promotes mental health and enhances a sense of wellness. The state-of-the-art facilities bolstered by highly skilled professionals and technicians—who are dedicated to providing patients with compassionate and comprehensive care—make NIMHANS a centre of excellence and specialized expertise.

The unique feature of this Institute is its multidisciplinary approach to patient care, training as well as research in the area of mental health and neurosciences. The manpower development programs at NIMHANS reflect the extent to which the institute has succeeded in fusing and nurturing behavioural, neuro, biological and ancient health sciences/systems under one roof.

# **Vision**

To be a world leader in the area of Mental Health and Neurosciences and evolve state-of-the-art approaches to patient care through translational research.

# **Mission**

- 1. To establish the highest standards of evidence-based care for psychiatric and neurological disorders and rehabilitation.
- 2. Develop expertise and set standards of care for diseases of public health relevance in the developing world
- Work with the government and provide consultancy services for policy planning and monitoring strategies in the field of Mental Health and Neurosciences and facilitate execution of national health programme.
- 4. Human resource capacity building by training in diverse fields related to Mental Health and Neurosciences.
- 5. Develop and strengthen inter-disciplinary, inter-institutional and international collaboration with universities and research institutes across the globe to foster scientific research, training in advanced technology and exchange of ideas in the areas of Mental Health and Neurosciences.
- 6. Strive to enhance equitable accessibility of primary care in Mental Health and Neurological Disorders to all sections of society and ages including the vulnerable population.
- 7. Evolve and monitor the strategies for disaster management and psycho-social rehabilitation in different cultural and ethnic groups.
- 8. Promote Mental Health literacy and eliminate the stigma attached to the Mental and Neurological Illnesses by taking the measures and the delivery system to the centres of primary health care honouring the human rights and dignity.
- 9. Integrate allopathic and oriental medicine into health care delivery and promote evidence-based research.
- 10. Integrate physical and metaphysical aspects of Neuroscience research to promote yoga and its application to positive mental health.
- 11. Participate in broad field of Neuroscience and Behavioural Research applicable to human ethics, organ transplantation, stem cell research, space science, and nuclear science.

# **ADMINISTRATION**

Institute Administration	
Name & Designation	Telephone Number
Dr. B. N. Gangadhar Director	26995001/26995002
Dr. K. Sekar Registrar	26995005/26995006
Dr. G. Gururaj Dean (Neuro Sciences)	26995004/26995850
Dr. S. K. Chaturvedi Dean (Behavioural Sciences)	26995004/26995851
Dr. Chittaranjan Andrade Dean (Basic Sciences)	26995004/26995852
Hospital Administration	
Dr. V. Bhadrinarayan Medical Superintendent I/c	26995201
Dr. K. Muralidharan Deputy Medical Superintendent	26995252
Dr. V.S. Chandrashekar Resident Medical Officer (on contract)	26995203
General Administration	
Sri. George Francis Kutty Deputy Financial Advisor & Chief Accounts Officer	26995019
Sri. Thanappa G. Administrative Officer  I/c	26995008/26995021
Smt. Chandramathi T. Administrative Officer I/c	26995076
Smt. B. K. Revathi Administrative Officer I/c (Academic & Evaluation Section)	26995012
Sri. K. Prabhakar Administrative Officer I/c (Accounts Section)	26995022
Sri. Murugan J. Asst. Administrative Officer I/c (Claims Section)	26995026
Sri. K. Parthiban Asst. Administrative Officer I/c (Projects Section)	26995016
Sri. Praseed Kumar Public Relations Officer (P.R.O.)	26995010
Hostel Administration	
Dr. Bindu M. Kutty Professor and HOD of Neurophysiology & Hon. Warden, NIMHANS Hostels	26995170
Dr. Harish T. Additional Professor & Hon. Deputy Warden, Kabini Hostel	26995279
Dr. Hima S. Pendharkar Additional Professor & Hon. Deputy Warden, Cauvery Hostel	26995848
Dr. T. Sivakumar Associate Professor & Hon. Deputy Warden, Thunga & Bhadra Hostels	26995834

# **CENTRAL FACILITIES**

# 1. Advanced Centre for Ayurveda in Mental Health and Neuro Sciences

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

Advanced Centre for Ayurveda in Mental Health and Neuro Sciences was established in the year 1959 as a regular department under NIMHANS and subsequently amalgamated in 1971, with the Central Council for Research in Ayurvedic Sciences, New Delhi, for financial and technical assistance. The centre extends research and therapeutic services predominantly in psychiatric and neurological disorders.

The centre has full-fledged outpatient and inpatient facilities. The inpatient unit consists of two general wards and four pay wards supported with well-equipped Panchakarma therapy rooms. It functions under the overall administrative and technical guidance of the Director, NIMHANS

# 2. Biomedical Engineering

### Smt. M.G. Sindu, Biomedical Engineer

The Biomedical Engineering department manages and provides the Computer Network (LAN) and Wi-Fi connectivity to more than 3000 nodes having 1 Gbps speed through National Knowledge Network of Government of India. All the hardware, network and software issues related to the systems connected in the network are taken care of by the department. Closed user group communication (mobile telephone) is provided to all the clinicians, residents and essential service staff in the Institute and this is monitored by the department of Biomedical Engineering. The biometric attendance and access control systems are maintained by Biomedical Engineering.

The institute email ID is provided to all the students of NIMHANS through in-house email server managed by Biomedical Engineering.

# 3. Canteen

### Dr. T.N. Sathyaprabha, Prof. of Neurophysiology

There are many eateries and canteen facilities catering to the needs of the staff, students and the public.

# 4. Central Animal Research Facility (CARF)

# Dr. B. S. Shankaranarayana Rao, Professor of Neurophysiology and Officer I/c

At the Central Animal Research Facility (CARF), a 60-hour certificate course on Care, Breeding and Management of Laboratory animals is conducted. In addition to this, practical training programs will be conducted using routine laboratory animal techniques.

# 5. Cognitive Neurosciences

# Dr. Jamuna Rajeswaran, Prof. of Clinical Psychology

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

## **6.** Convention Centre

### Sri. Praseed Kumar, Public Relations Officer (P.R.O.)

The state-of-the-art NIMHANS Convention Centre offers exceptional facilities for scientific conferences, seminars, trade shows, expositions, and media events. The centre houses three auditoriums with advanced amenities and seating capacities ranging from 150 to 850. The centre also has well-appointed dining hall, ample parking facility, and storage and guest rooms.

# 7. Engineering Section

### Sri. Yogesh M.J., Asst. Executive Engineer

A full-fledged Engineering Section encompassing Civil, Electrical and Horticultural Engineering divisions is functional at this Institute. Engineers deputed from the Government of Karnataka handle the construction works and maintenance of existing buildings/infrastructure.

# 8. Free Legal Aid Cell – NIMHANS

# Dr. Suresh B.M., Prof. of Psychiatry

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

# 9. Library & Information Services

## Dr. Mathew Varghese, Prof. of Psychiatry and Officer I/c

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

Online access to 5000 e-journals related to the field of mental health and neurosciences is provided through campus network, which has a fiber optic backbone with more than 700 nodes. The full text of the journals is integrated into single interface and bibliographical database for easy access to the users on any topic of interest for academic, research and health care purposes.

Library and Information Centre has published two full-text databases on CD viz. 'Neurology India on CD' covering 45 volumes (from 1953-1997) and 'NeuroMed on CD' encompassing three prominent Indian journals published for 15 years.

# 10. Neurobiology Research Centre

### Dr. B. S. Shankaranarayana Rao, Prof. of Neurophysiology and Coordinator

The research centre is located opposite to the Library and Information Centre in the Administrative Wing of NIMHANS. It has 16 laboratories working in frontiers areas of neurobiology promoting interdisciplinary research, sharing scientific ideas and sophisticated equipment.

# 11. NIMHANS Centre for Well Being

### Dr. Prabha S. Chandra, Prof. and HOD of Psychiatry

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

# 12. Gymkhana

## Dr. T.N. Sathyaprabha, Prof. of Neurophysiology

The NIMHANS Gymkhana provides recreational and sports facilities to the staff, students and their families. Multi-gym for ladies and gents and indoor/outdoor games facilities like badminton court, carom, chess, table tennis, football, cricket, hockey volleyball etc., are made available. It also has crèche, library, locker rooms, utility/yoga room, amphitheater, and a community hall. The Gymkhana also organizes various sports competitions and cultural activities for students and staff of NIMHANS.

# 13. Photography

# Dr. S.K. Chaturvedi, Senior Prof. of Psychiatry and Head I/c

The Photography Section extends photo and video coverage services for all the major programs of the Institute. It also assists clinicians in their dissertations/research activities and in the production of Information, Education & Communication materials.

### 14. Publication

## Sri. Prabhu Dev M., Asst. Editor and Officer I/c

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

# COORDINATORS FOR Ph.D. COURSE WORK

Sl. No	Name of the Module	Coordinators	
1	Research Methodology (RM)	Dr. Mariamma Phillip	
2	Computer Applications (CA)	Associate Professor of Biostatistics	
3	Quantitative and Qualitative Software (SS)	Dr. B. Binukumar Assistant Professor of Biostatistics	
4	Human / Animal Ethics (Ethics)	Dr. B. S. Shankaranarayana Rao Professor of Neurophysiology	
5	Basic Sciences	Dr. M. M. Srinivas Bharath Additional Professor of Neurochemistry Dr. B. N. Srikumar Assistant Professor of Neurophysiology	
6	Behavioural Sciences	Dr. Suresh B. M. Professor of Psychiatry  Dr. P. Naren Associate Professor of Psychiatry	
7	Neurosciences	Dr. M. S. Gautham Associate Professor of Epidemiology Dr. Anita Mahadevan Additional Professor of Neuropathology	
8	Nodal Officer for UGC/ICMR/CSIR/DST/ DBT/SERB supported programmes	Dr. P. Marimuthu Additional Professor of Biostatistics	

# ACADEMICS RELATED COMMITTEES

# 1. Anti-Ragging Committee

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

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

Dr. Sanjib Sinha, Prof. of Neurology, is the Chairperson of the Anti-Ragging Committee.

# 2. Grievance Redressal Committee

Grievance Redressal Committee of NIMHANS is headed by Dr. Shekhar P. Seshadri, Prof. & HOD of Child & Adolescent Psychiatry as Chairperson.

# 3. Internal Complaints Committee

NIMHANS has constituted an Internal Complaints Committee with Dr. Pratima Murthy, Prof. of Psychiatry, Centre for Addiction Medicine as Chairperson. The nomenclature of Sexual Harassment Committee was changed as Internal Complaints Committee under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013, on 07.10.2016.

# 4. Ethics Committee

NIMHANS, in keeping with the philosophy of better patient care through research/innovations and training, encourages its staff and students to undertake biomedical research in basic, behavioural and clinical areas through well-established methods and procedures. As the biomedical research often involves human subjects, defined guidelines with respect to ethical standards are to be followed to safe guard the issues related to human rights as well as the scientific and ethical aspects. In recognition of the need for such research endeavors and also to promote ethical considerations involved in all studies with human subjects, many national and international guidelines already exist. Biomedical research involving human subjects includes many areas like testing of - a new drug and/or testing the already available drug(s) with newer protocol, medical devices, medical radiation and imaging, surgical procedures, biological samples and others. It also includes epidemiological, social and psychological investigations measuring social and biomedical parameters in patient as well as healthy populations, conducting trials, or even studying social patterns of diseases.

In order to make the research protocols and studies involving human subjects more transparent and to promote strict adherence to the approved protocol (by an appropriate agency), NIMHANS has formulated 'Ethical guidelines for conducting biomedical research involving human subjects' so that the dignity, rights, safety and well-being of research participants are safe guarded and the results of such research are credible. The 'NIMHANS Ethics Committee' is empowered to grant ethical clearance and also to supervise the adherence to the guidelines while the study is being carried out. The ethical guidelines for biomedical research involving human subjects at NIMHANS have been formulated on the basis of information available from different sources, especially the one published by ICMR in 2006 with appropriate modifications, and are approved by the statutory bodies of the institute.

NIMHANS has constituted two ethics Committees to cover Behavioural Sciences (Behavioural Sciences Ethics Committee) and Basic and Clinical neurosciences (NIMHANS Ethics Committee for Basic and Neurosciences Division). Along with these apex committees and to facilitate quick review of student's thesis protocols/dissertations, Ethics Sub-Committee for Basic and Neurosciences Division have also been formed. In addition, various departments in NIMHANS have constituted Departmental Ethics Sub-Committees for review of students' theses / dissertations and for forwarding the same to the main Ethics Committee of NIMHANS.



# 1. Academic Activities

Phase 1 Ph.D., Superspeciality, Postdoctoral, Postgraduate and Postgraduate Diploma Courses				
Advertisement regarding admission	05.01.2018			
Online availability of application forms	05.01.2018			
Last date for online submission of application	04.02.2018			
Online entrance test (tentative dates)	23.03.2018 to 25.03.2018			
Date of interview & counselling	1st Week of June 2018			
Commencement of courses	02.07.2018			
Last date for admission	09.07.2018			
Phase 2 B.Sc., DCNT, DPN, DNN and CCNT Cou	rses			
Advertisement regarding admission	1st Week of May 2018			
Online availability of application forms	01.05.2018			
Last date for online submission of application	31.05.2018			
Online entrance test	24.06.2018			
Commencement of courses	01.08.2018			
Last date for admission	07.08.2018			
Phase 3 Ph.D. Courses for candidates with external fellowships along with permanent employees/tenured employees of NIMHANS only				
Advertisement regarding admission	01.08.2018			
Online availability of application forms	01.08.2018			
Last date for online submission of application	31.08.2018			
Online entrance test	28.10.2018			
Date of interview	1st Week of November 2018			
Commencement of courses	01.12.2018			
Last date for admission	07.12.2018			

# 2. Annual & Supplementary Examinations/Exit Exams

Annual Examinations				
	Superspeciality	DM , M.Ch. – Part I, Part III/ Final		
	PG Medical	MD, MPH- Part I, Part II/ Final		
June	PG Non-Medical	M.Phil., M.Sc Part I, Part II/Final		
		B.Sc. – I, II, III & IV Year		
	Under-Graduate Courses	Diploma Final		
November Superspeciality DM, M.Ch Part II		DM, M.Ch Part II		
Supplementary Examinations				
	Superspeciality	DM, M.Ch Part I, Part III/Final		
	PG Medical	MD, MPH- Part I, Part III/Final		
November	PG Non- Medical	M.Phil., M.ScPart I, Part II/Final		
	W. L. C. L C	B.Sc I,II,III & IV Year		
	Under-Graduate Courses	Diploma - Final		
Pre-Ph.D. Examinations				
June & November After completion of 1 Year from the date of admission				

# 3. Important Events

Event	Day	
Institute Day	14 <sup>th</sup> February	
International Nurses' Day	12 <sup>t</sup> h May	
Teachers' Day	5 <sup>th</sup> September	
World Mental Health Day	10 <sup>th</sup> October	
Graduation Day	29 <sup>th</sup> November	
International Day for Persons with Disability	3 <sup>rd</sup> December	
Convocation	December/January	

# COURSES OFFERED 2018-19

	Total Seats in 2018		
Name of the Course	Total Seats	Institute Stipendiary	External Fellowship (including Sponsorship)
Ph.D. Degree in Biophysics*	-	-	-
Ph.D. Degree in Biostatistics	01	01	-
Ph.D. Degree in Child & Adolescent Psychiatry*	-	-	-
Ph.D. Degree in Clinical Neurosciences	08	08(ICMR Funded)	-
Ph.D. Degree in Clinical Psychology	03	03	-
Ph.D. Degree in History of Psychiatry*	-	-	-
Ph.D. Degree in Human Genetics*	-	-	-
Ph.D. Degree in Mental Health Education*	-	-	-
Ph.D. Degree in Mental Health Rehabilitation	02	02	-
Ph.D. Degree in Neurochemistry*	-	-	-
Ph.D. Degree in Neuroimaging and Interventional Radiology*	-	-	-
Ph.D. Degree in Neurological Rehabilitation*	-	-	-
Ph.D. Degree in Neurology*	-	-	-
Ph.D. Degree in Neuromicrobiology*	-	-	-
Ph.D. Degree in Neuropathology*	-	-	-
Ph.D. Degree in Neurophysiology	02	02	
Ph.D. Degree in Neurovirology*	-	-	-
Ph.D. Degree in Nursing*	-	-	-
Ph.D. Degree in Psychiatric Social Work	01	01	-
Ph.D. Degree in Psychiatry*	-	-	-
Ph.D. Degree in Psychopharmacology*	-	-	-
Ph.D. Degree in Speech Pathology & Audiology	01	01	-
DM in Addiction Psychiatry	02	02	-
DM in Child & Adolescent Psychiatry	04	02	02
DM in Geriatric Psychiatry	02	02	-
DM in Neuroanaesthesia	06	04	02
DM in Neuroimaging and Interventional Radiology	04	03	01
DM in Neurology	14		
a. Post MD/DNB		10	01
b. Post MBBS		04	-
DM in Neuropathology	02	01	01
M.Ch. in Neurosurgery:	10	0=	04
a. Post MS/DNB b. Post MBBS		05 04	01
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	Total Seats in 2018		
Name of the Course	Total Seats	Institute Stipendiary	External Fellowship (including Sponsorship)
MD Degree in Psychiatry :	37	21	01
a. All India selection	22	08	01
b. Karnataka State Domicile	09	-	-
c. Domiciles from Arunachal Pradesh, Chhattisgarh, Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura & Uttarakhand	06		
Fellowship in Geriatric Mental Health Care	02	01	01
Fellowship in Mental Health Education	04	02	02
Fellowship in Psychiatric Rehabilitation:	04		
a. Under Medical-		01	01
b. Under Non-Medical-		01	01
Fellowship in Psychosocial Support in Disaster Management	08	04	04
Fellowship in Geriatric Mental Health Nursing	04	02	02
Fellowship in Psychosocial Care for elderly	03	02	01
M.Phil. in Biophysics	03	03	-
M.Phil. in Clinical Psychology: a. All India Selection b. Karnataka State Domicile c. Foreign/Sponsored Category	21	15 03	- 03
M.Phil. in Neurosciences	04	04	_
M.Phil. in Neurophysiology	02	02	_
M.Phil. in Psychiatric Social Work	21	18	03
Master of Public Health:	10	10	00
a. Sponsored Candidates b. Non-Sponsored Candidates		05	05
M.Sc. in Biostatistics	04	04	-
M.Sc. in Psychiatric Nursing	09	06	03
Postdoctoral Fellowship in Child & Adolescent Psychiatry	02	01	01
Postdoctoral Fellowship in Neuroanaesthesia	04	02	02
Postdoctoral Fellowship in Neurocritical Care:  a. ICMR Fellowship under Centre for Advanced Research Funded b. TVS Group Funded	03	02 01	-
Postdoctoral Fellowship in Neuroinfection	02	01	01
Postdoctoral Fellowship in Hospital Infection Control	01	-	01
Postdoctoral Fellowship in Epilepsy	03	02	01
Postdoctoral Fellowship in Movement Disorders	03	02	01
Postdoctoral Fellowship in Neuromuscular Disorder	03	02	01

	Total Seats in 2018		
Name of the Course	Total Seats	Institute Stipendiary	External Fellowship (including Sponsorship)
Postdoctoral Fellowship in Stroke	01	01	-
Postdoctoral Fellowship in Paediatric Neurology	01	01	-
Postdoctoral Fellowship in Cognitive Neurosciences	02	01	01
Postdoctoral Fellowship in Neuropathology	03	02	01
Postdoctoral Fellowship in Transfusion Medicine	02	01	01
Postdoctoral Fellowship in Neurological Rehabilitation	02	02	-
Postdoctoral Fellowship in Acute Care & Emergency Psychiatry	02	01	01
Postdoctoral Fellowship in Addiction Medicine	04	02	02
Postdoctoral Fellowship in Clinical Neuro Sciences & Therapeutics in Schizophrenia	03	01	02
Postdoctoral Fellowship in Community Mental Health	03	01	02
Postdoctoral Fellowship in Consultation Liaison Psychiatry	02	01	01
Postdoctoral Fellowship in Forensic Psychiatry	02	01	01
Postdoctoral Fellowship in Geriatric Psychiatry	02	01	01
Postdoctoral Fellowship in Non-Invasive Brain Stimulation of Psychiatric Disorders	02	01	01
Postdoctoral Fellowship in Obsessive Compulsive Disorder &Related Disorders	03	01	02
Postdoctoral Fellowship in Women's Mental Health	02	01	01
Postgraduate diploma in Clinical Biochemistry	04	04	-
B.Sc. in Anaesthesia Technology a. All India selection b. Karnataka State Domicile	03 07	03 07	-
B.Sc. in Nursing a. All India selection b. Karnataka State Domicile	27 50	27 50	-
B.Sc. in Radiography a. All India selection b. Karnataka State Domicile	03 07	03 07	4 (Out of overall 10)
Diploma Course in Clinical Neurophysiology Technology	06	04	02
Post Basic Diploma in Neurosciences Nursing	09	09	-
Post Basic Diploma in Psychiatric/Mental Health Nursing	45	45	-
Certificate Course in Neuropathology Technology	02	02	-

<sup>\*</sup>Externally funded Ph.D. courses, seats are subject to availability of guides

# DIVISIONS, DEPARTMENTS AND COURSES OFFERED

# **Basic Sciences Division**

# **Department of Biophysics**

The Department of Biophysics is involved in manpower development, research and teaching in the field of neuroscience and biophysics. The thrust areas of research in the Department of Biophysics includes structural biology; cellular and membrane proteins in disease pathology; linking relationship between structure and functions of chromatins, rational drug discovery & development in the area of neurodegenerative diseases, like Parkinson's disease (PD), ALS, and glioma; understanding synaptic dysfunctions in epilepsy, diabetes and pain, and their correcting at a single gene level; neuromodulation through glial cells and bone marrow mesenchymal stromal cells in CNS & PNS, development of patient derived stem cells to target etiology of several neurological disorders like Parkinson's disorder, and usage of the stem cell platform for drug screening. In addition, we are also interested in structural understanding of how certain bacteria and viruses, which infects CNS use their modular protein to manipulate the host chromatin and evade its immune system.

The department has sophisticated laboratories to carry out research in neuroscience at the structural, molecular and cellular level. Facilities for structural biology (recombinant protein production facility, dynamic-light scattering, Crystallography, surface Plasmon resonance and computational facility) small animal in vivo imaging, Real-time live cell, fluorescence imaging (epiflurorescence, single photon and multi-photon confocal imaging), absorbance and fluorescence spectroscopy and electrical recording system (patch clamp set-up) are available. The department is well equipped for cell culture studies (bacterial and mammalian), biochemical (SPR, electrophoresis and blotting), protein purification (FPLCs and HPLC), three dimensional structure determination and analysis of proteins and protein-protein complexes, and molecular biology experiments (PCR, RT-PCR, etc.).

The faculty members of the department have obtained research grants from various national funding agencies including DBT, DST/SERB, LSRB, ICMR, etc. Fellowships for Ph.D. programs are supported by DST WOS-A, DST-INSPIRE, ICMR, CSIR, UGC and DBT-Junior Research Fellowships.

### **Course Offered:**

1. **Ph.D. in Biophysics:** Only External Fellowship

**Duration:** 3 - 5 Years

**Minimum Qualification for Admission:** MBBS; M.Phil. Biophysics / Neuroscience; Master's Degree in Biochemistry / Biophysics / Biotechnology / Life Sciences / Physics / Physiology.

**Program of Study:** Initially the candidate will be provisionally registered for Ph.D. The registration will be confirmed after qualifying the Pre-Ph.D. examination. The candidate would be trained in both theory

and practical aspects of the curriculum pertaining to the discipline. After successful completion of the proposed work and approval of the synopsis the candidate shall submit the thesis for award of Ph.D. degree.

# 2. M.Phil. in Biophysics: 03 Seats

**Duration:** 2 Years

Minimum Qualification for Admission: B.Tech. in Biotechnology / Computer Science/ Electronics; MBBS; Master's Degree in Biophysics / Biochemistry / Biotechnology/Chemistry / Life Science/Physics / Physiology/ Zoology.

**Program 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, neuro biophysics, biophysical techniques, bioenergetics and medical biophysics. In the second year of the course, emphasis is given to specialization and research. The candidate will carry out a research project to be presented in the form of a dissertation. The laboratories are well equipped to conduct research on cellular and molecular aspects of nervous system.

# **Academic Faculty and their Research Interests:**

### 1. Dr. Balasundaram Padmanabhan, Professor and Head

Structural Biology; Structure-based Drug Design; Epigenetic Markers/Chromatin Regulators; Oxidative-Stress Factors; Protein Targets associated with Neurodegenerative Diseases and Cancer.

### 2. Dr. Indrani Datta, Assistant Professor

Pluripotent Stem Cells and Generation of In Vitro models of CNS Diseases; Neurobiology of Parkinson's Disease; Stem Cell Mediated Neuro-regeneration in Parkinson's Disease and Diabetic Neuropathy.

# 3. Dr. Bhupesh Mehta, Assistant Professor

Synaptic Physiology; Synaptic Modulations in Neuronal Hyperexcitability; Electrophysiology and Optogenetics.

### 4. Dr. Yogananda S. Markandeya, Assistant Professor

Ion Channel; Channelopathies; Calcium signalling; Patient Specific Pluripotent Stem Cell (iPSC) Derived Neuronal Model for Neurodegeneration and Proteomics.

### 5. Dr. Paddvatan Sivaraman, Assistant Professor

Structural Biology; Chromatin regulators; Nucleosome particles in the direction of neurodegenerative diseases.

# **Department of Biostatistics**

The Department of Biostatistics admits students for Ph.D. programme and two-year M.Sc. Biostatistics Courses. For the last three decades, the departmental faculty have been actively collaborating with the clinical departments of the Institute in several research projects funded by national and international agencies. The Department provides training in statistical techniques, statistical consultation and regular teaching service to researchers from other departments, to impart training and academic teaching in biostatistical, computational and research methods. The department possess a well-equipped computer lab with almost 50 computers and computing facility using upgraded statistical softwares such as IBM-SPSS, Stata, R, Matlab, etc. The Biostatistical Consultation Unit of the department is the leading research consultation facility that offers high standard of comprehensive consultation in various stages of the research leading to quality publications. Moreover, the department mentor the next generation of biostatisticians through innovative and relevant curriculum, hands-on experience, and exposure to the latest developments in methodological research to develop new theoretical models and applied statistical methods that can help to address problems in medical, neurological and behavioural sciences.

### **Course Offered:**

1. **Ph.D.in Biostatistics:** 01 Seat\* under Institute Fellowship

\*Candidates with external fellowship are also eligible.

**Duration:** 3 – 5 Years

**Minimum Qualification for Admission:** Master's Degree in Agricultural Statistics / Applied Statistics / Biostatistics / Health Statistics / Medical Statistics / Statistics / M.Stat (ISI)through regular course from recognized Universities / Institutions.

**Program of Study:** Development and application of biostatistics in the field of mental health and neurosciences.

2. M.Sc. in Biostatistics: 04 Seats

**Duration:** 2 Years

**Minimum Qualification for Admission:** Undergraduate Degree in Mathematics/ Statistics as main subjects from any University recognized by NIMHANS, with at least 55% marks.

**Program of study:** The course will consist of theory lectures on Mathematical Statistics and Probability Theory, Statistical Inference, Sampling theory & design of Experiments, Demography & Epidemiology and Statistical Software I (using SPSS and SAS software) for the first year and Multivariate Methods; Genetic Epidemiology, Bioinformatics & Psychometrics; Clinical Trials & Survival Analysis; Statistical Software II (using R and Stata software); and Project Work/Dissertation for the second year.

# **Academic Faculty and their Research Interests:**

### 1. Dr. K. Thennarasu, Professor and Head

Applied Multivariate Analysis; Quantile and Poisson Regressions; Statistical Applications in Genetics; Survival Analysis; Categorical Data Analysis; Latent Variable and Growth Mixture Models in Longitudinal data Analysis; Micro Array Data and Cluster Analysis.

### 2. Dr. P. Marimuthu, Additional Professor

Clinical Trials; Simulation and Projection for Cancer; Mental Health; HIV/AIDS Problems; Survival Analysis; Linear and Nonlinear Models; Scale Construction; Morbidity Survey and Bayesian Methods.

### 3. Dr. Mariamma Phillip, Associate Professor

Applied Multivariate Analysis; Application of Artificial Neural Networks in Medicine and Incomplete Data Analysis.

### 4. Dr. Binukumar B., Assistant Professor

Statistical Epidemiology; Categorical Data Analysis; Survey Methods; Meta-analysis; Missing Data Analysis and Applied Multivariate Methods.

### 5. Dr. Binu V.S., Assistant Professor

Spatial Epidemiology; Multi-variate Analysis; Survival Analysis; Missing data Analysis; Statistical Genetics and Error Analysis.

# **Department of Human Genetics**

The Department of Human Genetics was established in the year 1985. The current objectives of the department are to carry out research, provide patient care in terms of diagnosis and genetic counselling as well as impart training to the students. The faculty members of the department are involved in research in the areas of mental as well as neurological health keeping in mind, the overall mission and vision of the Institute.

The thrust areas of research are Genetics of CNS Tumors, understanding of Immunogenetic aspects of Psychiatric as well as Neurological Disorders, Neurodevelopmental genetics including CNS malformations, genetics of Intellectual disability, Austim and syndromology; genetics of neuromuscular disorders; Impact of Yoga on Immuno-Inflammatory pathways, animal model study of Schizophrenia, Cellular differentiation, Transcription Factors, Epigenetics, Development of Targeted Therapeutics for Pediatric diseases (neuromuscular disorders, cancer and psychiatric diseases).

The faculty members of the Department have obtained research grants from various national funding agencies like DBT, DST/SERB, LSRB, Welcome Trust, DBT India Alliance etc., as well as international funding agencies like INSERM, CEPIPRA, etc. The faculty members extensively collaborate with various national institutes like JIPMER, RGCB, etc. and international institutes like INSERM, France; Deakin

University, Australia and University of Geneva, Switzerland; Roswell Park Cancer Institute, USA; Ospedale San Raffaele, Italy.

Ph.D. programs are supported by DST WOS-A, DST-INSPIRE, ICMR, CSIR, UGC and DBT-Junior Research Fellowships.

A large number of Post-Graduate and Under-Graduate students from various universities and colleges are trained in the research methodologies pertaining to the complex human genetic disorders. The Department conducts speciality clinics in liaison with Child and Adolescent Psychiatry and Neuromuscular unit for the diagnosis, management and counselling of variety of genetic disorders.

The department is equipped with facilities like thermal cycler, real time PCR, Elisa reader and washer, multiplex suspension array system and chemiluminescence imaging system, western blot apparatus, molecular cloning and tissue culture facilities to carry out genetic research.

# **Course Offered:**

1. **Ph.D. in Human Genetics:** Only external fellowship

**Duration:** 3 – 5 Years

Minimum Qualification for Admission: Master's Degree in any Life Sciences discipline.

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

# **Academic Faculty and their Research Interests:**

### 1. Dr. G. K. Chetan, Additional Professor and Head

Molecular Genetics of Human Brain Tumors; Genetic Basis of Neuro-Psychiatric Diseases.

### 2. Dr. Monojit Debnath, Associate Professor

Immuno-Genetic Understanding of Psychiatric and Neurological Disorders; Impact of Yoga on Cellular pathways in patients with Psychiatric Disorders; Animal model study of Psychiatric Disorders.

### 3. Dr. Mathivanan Jothi, Assistant Professor

Cellular Differentiation; Transcription Factors; Epigenetics; Development of targeted Therapeutics for Pediatric diseases (neuromuscular disorders, cancer and psychiatric diseases).

## 4. Dr. Gautham Arunachal Udupi., Assistant Professor

Developmental neurogenetics including CNS malformations, syndromic as well as nonsyndromic intellectual disability; Genetics of Congenital Myasthenic syndrome and other Neuromuscular disorders; Genetics of Hypomyelination disorders

# **Department of Neurochemistry**

The Department of Neurochemistry is involved in diagnostics, research and teaching. The department offers diagnostic services to all the clinical departments through its 24-hour Clinical Biochemistry Unit (CBU) which is accredited by the National Accreditation Board for Testing & Calibration of Laboratories (NABL), New Delhi. The CBU is furnished with state-of-the-art equipment for analysis of blood, urine and CSF samples. The department also offers high throughput mass spectrometry-based screening tests for Inborn Errors of Metabolism.

The faculty members of the department train Ph.D. students and teach basic and applied Neurochemistry for students enrolled in different courses of the Institute and conduct research to understand the pathogenic mechanisms underlying brain disorders.

### **Course Offered:**

1. **Ph.D. in Neurochemistry:** Only External Fellowships

**Duration:** 3 – 5 Years

**Minimum Qualification for Admission:** Master's Degree in Biochemistry / Biotechnology / Medical Biochemistry; M.Phil.in Neurosciences.

**Program of Study:** Initially, the candidate will be provisionally registered for Ph.D. before confirmation of registration; all the candidates have to clear the pre Ph.D. examination, after one year from the date of provisional registration. The candidate would be trained in both theoretical and practical aspects of the curriculum of Pre-Ph.D. course work. The progress of the research work would be monitored and periodically reviewed by the Doctoral committee constituted for that purpose. After satisfactory completion of proposed work and approval of synopsis, the candidate shall submit the thesis for Ph.D. degree.

Area of Research Interests: Research activities of the department involve both applied and basic aspects of mental health and neurosciences. Some of the current areas of research are molecular and genetic basis of cerebrovascular disorders, biochemical basis of neurometabolic disorders, molecular mechanisms in brain aging, Parkinson's disease, Alzheimer's disease, traumatic brain injury, neuromuscular disorders and primary brain tumors and their therapeutic implications.

### 2. Postgraduate diploma in Clinical Biochemistry: 04 Seats

**Duration:** 1 Year

**Minimum Qualification for Admission:** Master's Degree in Biochemistry with a minimum of 50% aggregate marks.

**Program of Study:** The main purpose of the program is to equip the candidates with practical and analytical skills in clinical biochemistry. Accordingly, it comprises of theory classes (30 Hours) on principles of techniques, automation, quality management and interpretation of laboratory reports. The practical training involving hands-on analysis of clinical samples (1790 Hours) includes routine biochemistry tests with serum, plasma, urine and cerebrospinal fluid, therapeutic drug monitoring, metabolic disorder work-up and tandem mass spectrometry for clinical diagnosis. Annual examination will be conducted at the end of the program.

# **Academic Faculty and their Research Interests:**

### 1. Dr. Rita Christopher, Professor and Head

Targeted Metabolomics in Neurometabolic Disorders; Molecular Basis of Cerebrovascular Diseases.

### 2. Dr. Sarada Subramanian, Additional Professor

Development of Animal Models; Elucidation of the Molecular Mechanisms; Design of Therapeutic Strategies for Alzheimer's Disease and related Cognitive Disorders.

### 3. Dr. M. M. Srinivas Bharath, Additional Professor

Red-ox and Mitochondrial Dynamics in the Pathophysiology of Brain and Muscle.

### 4. Dr. D. N. Nanda Kumar, Additional Professor

Molecular Mechanisms of Primary Brain Tumors with Emphasis on Growth Angiogenic Signaling and Invasion of Glioblastoma and its Therapeutic Targets.

### 5. Dr. H. Ravish, Assistant Professor

Applications of Nanotechnology in Mental Health and Neurosciences; Metabolomics; Learning & Memory.

# **Department of Neuromicrobiology**

The Department of Neuromicrobiology has been functioning at this Institute since 1978 and continues to provide clinical diagnostic services in central nervous system infections. Teaching facilities for the post-graduate students of the departments of Neurology, Neurosurgery, Psychiatry and Nursing are provided. The department is actively involved in conducting research in certain identified thrust areas of Neuro-infections, Neuroimmunology, Immunodiagnostics of neuroinfections, Molecular diagnosis of Neurotuberculosis and other opportunistic infections in Neuro AIDS. The immunology section re-

established in the year 1991-1994, especially for the immune diagnosis of tuberculous meningitis has been expanded to include other CNS infections and has been further strengthened with the available facilities. Many other centres in the country are availing this diagnostic facility. Molecular diagnostic section carried out routine Polymerase chain reaction in cases of tuberculous meningitis and chronic meningitis both for Institute patients and also for all the referred cases from different neuro centres from Bengaluru and other parts of the State.

Another thrust area of this department is neurocysticercosis and its immune diagnosis. After intensive research, an immunodiagnostic test with a high specificity and sensitivity, which can be performed both on CSF and serum, is being used at this department for the diagnosis of neurocysticercosis. Many such cases are referred from other hospitals and institutes from various parts of India for this diagnostic test.

The emergency laboratory services at the Neuro Centre are provided round the clock. Hospital Infections Surveillance System unit of this department, which was started in 2002, has been in regular service with timely visits by the team to the wards, operation theatres, postoperative wards, and ICUs. The team also conducts regular classes and updates on the practice of prevention of hospital infections and need for universal precautions regularly from time to time. The meetings with the Medical Superintendent and the teams from anaesthesia, Neurosurgery, Neurology and Psychiatry are held once in 3-4 months. Hospital infections strains are being preserved routinely for further molecular typing for epidemiology of hospital infections.

### **Course Offered:**

1. Ph.D. in Neuromicrobiology: Only External Fellowships

**Duration:** 3 – 5 Years

Minimum Qualification for Admission: BE Biotechnology; MBBS; MD Microbiology; M.Phil. Neuroscience; Master's Degree in Applied Microbiology/ Biochemistry / Biomedical Genetics / Biotechnology/ Medical Microbiology / Microbiology / MLT / Molecular Biology/ Neuroscience

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

**Research Facilities:** The department has state-of-the-art facilities for microbiological diagnosis of routine samples. It also has facilities like 24x7 CSF processing laboratory, Mycobacteriology laboratory with automated culture system, bacteriology laboratory with automated culture and sensitivity systems, mycology section and ELISA, DNA/RNA isolation, amplification using thermocycler (PCR), genotyping, among others.

### **2. Postdoctoral Fellowship in Neuroinfections:** 02 Seats (01 seat for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: MD in Microbiology

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

**3. Postdoctoral Fellowship in Hospital Infection Control:** 01 Seat (01 seat for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: MD in Microbiology; DNB in Microbiology

# **Academic Faculty and their Research Interests:**

## 1. Dr. R. Ravikumar, Professor

Opportunistic Bacterial, Parasitic, Fungal and Protozoal Infections like Tuberculosis, Toxoplasmosis, Amoebic Encephalitis and other Neuroinfections in Immune Compromised Individuals.

### Dr. Shripad A. Patil, Professor and Head

Development of Immunodiagnostics for Chronic Infectious Disease with special reference to TB and Neurocysticercosis, Molecular and Cultural Diagnostic Tests for TB like MGIT, PCR and other Drug Resistant Detection Tests; Immunology of Autoimmune Diseases of the Central and Peripheral Nervous System like Myasthenia Gravis, Multiple Sclerosis and Leprosy.

### 3. Dr. S. Nagarathna, Professor

CSFCell 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; Study of Neurobrucellosis, Toxoplasmosis and Leptospirosis apart from studies on Anti-DNA Antibodies in Clinical Specimens.

### 4. Dr. H. B. Veena Kumari, Additional Professor

Isolation and Molecular Analysis of Microbial Strains Isolated from Hospital Infections in a Neurosurgery and ICU Setup of NIMHANS.

# **Department of Neurophysiology**

The Department of Neurophysiology was started in the year 1975 with the objectives of providing teaching program in the discipline of neurophysiology for students undertaking various courses in NIMHANS, to conduct state-of-the-art research with a high degree of translational content and to play an important role in manpower capacity building in the area of neuroscience. The department also provides clinical/diagnostic services in the area of autonomic and pulmonary function as well as sleep evaluation for neuropsychiatric patients.

M.Phil. and Ph.D. courses in Neurophysiology were initiated in 1980 and so far 80 Ph.D. and 50 M.Phil. degrees have been awarded. The department provides short-term training opportunities to students (MD Physiology, B.Tech./M.Tech. Biotechnology, M.Sc. Life Sciences, etc.) from various Indian Universities and other recognized educational institutions. The members of the faculty successfully obtains extramural research grants from major National funding agencies like DBT, SERB, DST, CCRYN, DRDO, CSIR, ICMR and CCRAS as well as industries such as Pfizer, Asia and ITC Life Science and Technology Centre for supporting their research studies. The Department has collaborative research programs with several Departments within NIMHANS as well as with other Institutions in India and abroad like National Centre for Biological Sciences (NCBS), Bangalore; Banaras Hindu University, Varanasi; Massachusetts Institute of Technology, U.S.A; University of Sydney and Trinity College, Dublin. The recognition of the departmental activities at the national level is reflected by the fact that the faculty of the department are constantly sought after to conduct training programs/ workshops/conferences by professional bodies and funding agencies.

### **Course Offered:**

1. Ph.D. in Neurophysiology: 02 Seats\*under Institute Fellowship 
\*Candidates with external fellowship are also eligible

**Duration:** 3 – 5 years

Minimum Qualification for Admission: BE; B.Tech Electronics/Electrical/Computer Science/Biotechnology; Masters in Physiotherapy / Unani Medicine; MBBS; MD in Ayurveda/Physiology/Yoga & Naturopathy; M.Phil. in Neuroscience; Master's Degree in Anatomy/Biochemistry/Biotechnology/Life Science / Neuroscience / Physiology / Zoology with minimum 55% in the qualifying examination.

**Program of study**: Initially the candidates will be provisionally registered for Ph.D. Before confirmation of the registration, all the candidates have to complete Ph.D. Course work and Pre -Ph.D. examination. The candidate would be trained in both theoretical and practical aspects of the curriculum pertaining to the discipline. The progress of the candidate is assessed periodically by the Doctoral Committee. After satisfactory completion of proposed research work, the Ph.D. Colloquium is conducted and after approval of synopsis, the candidate shall submit the thesis for award of Ph.D. degree.

## 2. M.Phil. in Neurophysiology: 02 Seats

**Duration:** 2 years

Minimum Qualification for Admission: Bachelors in Unani Medicine; BAMS (Ayurveda); BDS; MBBS; Master's Degree in Physiology / Anatomy / Biochemistry / Biotechnology / Life Science / Molecular Biology/Neuroscience / Zoology.

**Program of study:** The course consists of lectures, seminars, laboratory work and dissertation. The course aims at training students to acquire comprehensive knowledge of Neurophysiology from the system to the cellular level. The areas 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 experience in wide range of experimental neuroscience skills. The candidates will carry out specific research project, which will be presented in the form of a dissertation.

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

- 1) Neurophysiology of sleep, cognition and consciousness
- 2) Autonomic functions including HRV and BP variability
- 3) Evaluation of pulmonary functions in neuropsychiatric disorders
- 4) Cellular and molecular mechanisms of learning and memory
- 5) Neuronal plasticity in developing and adult nervous system
- 6) Neurobiology of motor neuron disease
- 7) Neurobiology of stress, anxiety, depression, epilepsy and brain stimulation reward
- 8) Central nervous system regeneration and the role of stem cells
- 9) Synaptic physiology
- 10) Neural plasticity and brain repair mechanisms
- Activation of resident stem cells in the adult brain: Implications for the treatment of neuropsychiatric disorders
- 12) Single unit recording of action potentials in a freely moving animal.
- 13) Neurobiology of Emotion
- 14) Neurobiology of Yoga & Ayurveda
- 15) Neural mechanisms of aging and Parkinson's disease
- Synaptic plasticity using extracellular field potentials and patch-clamp recordings
- 17) Neurobiology of addiction and drug dependency

## **Academic Faculty and their Research Interests:**

### 1. Dr. Bindu M. Kutty, Professor and Head

Role of Subiculum in Spatial Learning and Memory Functions; Neurobiology of Sleep/Neurophysiology of Meditation/Consciousness.

#### 2. Dr. T. N. Sathyaprabha, Professor

Autonomic and Pulmonary Functions in Neuropsychiatric Disorders; Neurophysiology of Yoga; Neurobiology of Motor Neuron Disease.

#### 3. Dr. B. S. Shankaranarayana Rao, Professor

Cellular and Molecular Mechanisms of Learning and Memory; Amelioration of Stress Epilepsy and Depression Induced Cognitive Deficits; Mechanisms of Synaptic Plasticity in the Hippocampus; Activation of Resident Stem Cells in the Adult Brain: Implications for Treating Neuropsychiatric Disorders; Synaptic Plasticity in Transgenic and Knockout Mouse Models of Neuropsychiatric Disorders; Neural Plasticity and Brain Repair Mechanism.

#### 4. Dr. Laxmi T. Rao, Additional Professor

Brain Adaption Mechanisms to Adverse Experiences in Life such as Postnatal Maternal Separation Stress; Ischemic Stroke during Adulthood and Prenatal Valproic Acid Exposure.

### 5. Dr. Kaviraja Udupa, Additional Professor

Neuromodulation in Mood and Movement Disorders using Non-Invasive Neurostimulation Techniques such as Transcranial Magnetic Stimulation and Transcranial Direct Current Stimulation; Cardiac Autonomic Functions in Neurological and Psychiatric Disorders; Integrating Indian Systems of Medicine (Yoga, Ayurveda and Naturopathy) with Evidence Based Medicine.

### 6. Dr. Vijayalakshmi K., Assistant Professor

Patient specific iPSCs in Modeling Neurodegenerative Diseases; Delineating the Etiopathogenesis of Sporadic ALS using Cell Culture and Animal Models; Ayurvedic Interventions for Treating ALS.

#### 7. Dr. Srikumar B.N., Assistant Professor

Neurosteroids in Neuropsychiatric Illnesses, Neurobiology of Addiction; Drug Discovery and Pharmacology of Ion Channels and Channelopathies.

## **Department of Neurovirology**

The Department of Neurovirology was started in 1986. It has completed 31 years of existence in the Institute. The main objectives of the department are: (a)To provide diagnostic services for viral infection of CNS and other viruses (b) Research and training in the field of Neurovirology (c) Manpower development

The NABL accreditation for all the viral diagnostic assays has been renewed for a further period of two years. In the area of research the department currently has a prestigious international grant from Centre

for Disease Control (CDC), USA, on "Strengthening surveillance for Japanese encephalitis in India". The department continues to maintain its good publication record in national and international peer reviewed journals.

### **Course Offered:**

1. **Ph.D. in Neurovirology:** External Fellowship Only.

**Duration:** 3 – 5 Years

**Minimum Qualification for Admission:** MBBS; MD in Microbiology; Master's Degree in Biotechnology / Medical Microbiology / Microbiology / Virology

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

2. **Postdoctoral Fellowship in Neuroinfections:** 02 Seats (01 seat for sponsored)

For course details, please refer to Department of

Neuromicrobiology (Page 34)

## **Academic Faculty and their Research Interests:**

1. Dr. V. Ravi, Professor

Development of Kits; Antiretroviral Therapy; Japanese Encephalitis.

2. Dr. Anita S. Desai, Professor and Head

Laboratory Diagnosis of Viral Infections of the Nervous System; Molecular Virology of Neurotropic Viruses to Understand Pathogenesis

3. Dr. Reeta Subramaniam Mani, Associate Professor

Molecular Diagnosis of Viral Infections; Acute Encephalitis Syndrome; Rabies.

4. Dr. Manjunatha M.V., Assistant Professor

Diagnosis of CNS Viral Infections; Immunology of CNS Viral Infections.

## **Department of Psychopharmacology**

The Department of Psychopharmacology has conducted much research in basic science on topics such as the mechanism of action of electroconvulsive therapy (ECT), cognitive adverse effects of ECT and methods for the attenuation thereof, neurocognitive benefits of herbal medicines, clinical psychopharmacology

and related subjects. At present, the department is increasing its focus on clinical (rather than animal) research in the fields of psychopharmacology, electroconvulsive therapy and transcranial direct current stimulation. Hundreds of studies have been completed and several are ongoing. The research interests of the department can be understood from a perusal of the publications from the department. These are listed at the NIMHANS website in the web pages of the department and the faculty of the department.

#### **Course Offered:**

1. Ph.D. in Psychopharmacology: External Fellowship Only

**Duration:** 3 – 5 Years

**Minimum Qualification for Admission:** MBBS; Master's Degree in Biochemistry / Pharmacology / Physiology; Master's Degree in a life sciences discipline (related to Medical Research)

### Program of Study:

- Anatomy and physiology of the central nervous system (CNS).
- 2. Neurotransmitters and molecular signaling in the CNS central nervous system.
- 3. Drugs acting on the CNS with especial relevance to psychiatry and neurology.
- 4. Animal models in psychopharmacology
- 5. Clinical and experimental psychopharmacology
- 6. Brain stimulation, with especial reference to electroconvulsive therapy (ECT) and transcranial direct current stimulation (tDCS).
- 7. Statistics and research methodology.

#### Fields of investigation:

- 1. Electroconvulsive therapy (clinical and animal investigations)
- 2. Transcranial direct current stimulation (clinical investigations)
- 3. Clinical and experimental psychopharmacology (with allopathic and herbal medicinal substances)
- 4. Learning and memory (clinical and animal investigations)

#### Research facilities:

- 1. Instrumentation for computerized ECT and tDCS
- 2. Animal models of depression, learning, memory and locomotor activity
- 3. Common laboratory facilities as available in the Institute

### **Academic Faculty and their Research Interests:**

1. Dr. Chittaranjan Andrade, Professor and Dean (Basic Sciences) and Head

Clinical Psychopharmacology; Electroconvulsive Therapy; Transcranial Direct Current Stimulation; Herbal Medicines (clinical research favoured over animal research).

## **Behavioural Sciences Division**

## **Department of Child & Adolescent Psychiatry**

The Department of Child & Adolescent Psychiatry, established in 2010, is the first independent department of its kind in India. However, Child and Adolescent Psychiatry services at NIMHANS were started in the 1950s with the objectives of catering to mental health needs of children and adolescents, training mental health professionals and facilitating research in the area of child and adolescent psychiatry.

#### **Clinical Services**

The department offers both outpatient and inpatient clinical services for neuro-developmental disorders such as autism spectrum disorders, intellectual disability (mental retardation), specific learning disorders (dyslexia, dyscalculia and others), emotional and behavioral problems and other child and adolescent psychiatric disorders such as attention deficit hyperactivity disorder, obsessive compulsive disorders, depression, bipolar disorders and mental health issues.

### Training

Psychiatrists, paediatricians and other allied medical professionals from outside NIMHANS (both Govt. and Pvt. Sectors) hone their skills in child and adolescent psychiatry as observers for a duration ranging from two weeks to three months in the department. Several international trainees and consultants, especially from South Asia, avail the opportunity to observe and train in Department of child and adolescent psychiatry.

#### Research Activities

The broad areas of research the department has actively pursued include epidemiology, community child and adolescent mental health, autism spectrum disorders, intellectual disability, juvenile obsessive compulsive disorder, externalizing disorders (attention deficit hyperactivity disorder, oppositional defiant disorder and conduct disorder), internalizing disorders (anxiety disorders, dissociative disorders), juvenile bipolar affective disorder, child sexual abuse and children in difficult circumstances.

## **Course Offered:**

1. Ph.D. in Child & Adolescent Psychiatry: Only External Fellowship

**Duration:** 3 – 5 Years

**Minimum Qualification for Admission:** DNB in Psychiatry; MD in Psychiatry; M.Phil.in Clinical Psychology / Psychiatric Social Work

2. DM in Child & Adolescent Psychiatry: 04 Seats (02 seats for sponsored candidates)

**Duration:** 3 Years

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

3. **Postdoctoral Fellowship in Child & Adolescent Psychiatry:** 02 Seats (01 seat for sponsored

candidate)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

## **Academic Faculty and their Research Interests:**

1. Dr. Satish Chandra Girimaji, Professor

Intellectual Disability; Clinical Child & Adolescent Psychiatry.

2. Dr. Shekhar P. Seshadri, Professor and Head

Adolescent Mental Health; Therapy and Therapy Training; Gender; Sexuality; Sexual Abuse; Difficult Populations like Street Children; Qualitative Research and Experiential Methodology; Life Skills Education, School Programs; Community Child and Adolescent Mental Health.

3. Dr. K. John Vijay Sagar, Additional Professor

Specific Learning Disorder; Autism Spectrum Disorder; Psychopharmacology; Attention Deficit Hyperactivity Disorder; Consultation – Liaison in CAP.

4. Dr. Preeti Jacob, Associate Professor

Attention Deficit Hyperactivity Disorder; Early Onset Schizophrenia; Mood Disorders; Dual Diagnosis and Psychopharmacology.

## **Department of Clinical Psychology**

The Department of Clinical Psychology was started in the year 1954 as the Department of Psychology and Human Relations. In tune with the guiding philosophy of NIMHANS, the department is engaged in clinical service, human resource development and research. Clinical services include providing psychological assessment, psychological interventions and community outreach services. The department currently offers a two year full-time M. Phil. program and a 3-5 year doctoral program in Clinical Psychology. Extensive direct engagement with the clients and close one-to-one supervision are integral components of both the training programs. The department also offers certificate

programs in Child and Family Therapy (6 months), Cognitive Behaviour Therapy (6 months) and Positive Psychology Perspective: Research, Education and Communication for Health-P3REACH (1 month). In addition, workshops and other programs for continuing professional development are periodically organized by the department. The faculty team runs various specialized clinics in the NIMHANS Centre for Well-Being. The research carried out by the faculty and students contribute to scientific advancement in thrust areas of Clinical Psychology. The faculty also provides consultancy and advisory services to governmental, non-governmental organizations, academic institutions and corporate sector in order to assist them in human resource development, organization of psychological services and research.

### **Course Offered:**

1. Ph.D. in Clinical Psychology: 03 Seats under Institute Fellowship

\*Candidates with external fellowship are also eligible

**Duration:** 3 – 5 years

**Minimum Qualification for Admission:** M.Phil.in Clinical Psychology / Mental Health and Social Psychology; 2 years Master's Degree in Applied Psychology / Clinical Psychology / Counselling Psychology / Psychological Counselling / Psychology.

**Program of Study:** The program of study involves undergoing training in theoretical and practical aspects of Mental Health and Clinical Psychology and in research methodology would be provided. It includes supervised clinical internship in Mental Health and Clinical Psychology with special emphasis in areas related to the topic of research would also be provided.

Initially the candidates will be provisionally registered for Ph.D. Their registration will be confirmed upon successful completion of Pre Ph.D. examination after 1 year from the date of provision registration. After completion of a minimum of 3 years and upon satisfactory completion of research work and approval of synopsis, the candidates would be permitted to submit their thesis for award of Ph.D. degree.

**2. M.Phil. in Clinical Psychology:** Total - 21 Seats; break-up indicated below:

- i) 15 Seats for All India
- ii) 03 Seats for Karnataka Domicile
- iii) 03 Seats for foreign/sponsored candidates

**Duration:** 2 Years

**Minimum Qualification for Admission:** 2 years Master's degree in Applied Psychology / Clinical Psychology / Counselling Psychology / Psychological Counselling / Psychology.

## **Academic Faculty and their Research Interests:**

### 1. Dr. Ahalya Raguram, Professor

Psychosocial Aspects of Mental Health; Family and Marital Therapies; Individual Therapies.

#### 2. Dr. H. Uma, Professor

Development of Psychological Tests; Preventive and Promotive Interventions; Therapies with Children & Adolescents; Play & Narrative Therapies; Creativity; School Mental Health and Specific Learning Disabilities.

#### 3. Dr. Anisha Shah, Professor

Marital and Family Relationships and Therapies; Emotion Focused Therapy; Gender in Depression.

#### 4. Dr. Mahendra P. Sharma, Professor

Behavioural Medicine; Cognitive Behaviour Therapy and Processes; Cognitions and Metacognitions; Stress Management; Mindfulness Meditation and Mindfulness Integrated Cognitive Behavioural Interventions and Psycho-oncology.

### 5. Dr. L. N. Suman, Professor & Head

Adult Psychopathology and Psychotherapy; Addictive Behaviours and their Management; Trauma Psychology; Forensic Psychology.

#### 6. Dr. Seema Mehrotra, Professor

Mental Health Promotion; Positive Psychology; Emotional Regulation; Adaptation to Major Life Events; Psycho-oncology and Internet Based Self-care Interventions.

#### 7. Dr. Jamuna Rajeswaran, Professor

Neuropsychological Assessment and Rehabilitation; Paediatric Neuropsychology; Forensic Neuropsychology; fMRI Studies.

#### 8. Dr. Paulomi Matam Sudhir, Professor

Cognitive Behavioural Therapies for Anxiety Disorders; Depression; Personality Disorders and Major Psychiatric Disorders such as Schizophrenia; Behavioural Medicine and Health Psychology; Cognitive; Interpersonal and Personality Factors in Emotional Disorders and Psychiatric Conditions.

#### 9. Dr. J. Keshav Kumar, Professor

Neuropsychological Rehabilitation in Acquired Brain Damage including Clinical Conditions such as Head Injury; Stroke and Schizophrenia; Cognitive and Emotional Decision Making.

### 10. Dr. Manoj Kumar Sharma, Additional Professor

Behavioral Addiction; E-based Psychological Intervention; Psychological Tool Development; Tobacco Cessation; Substance Use and Prevention; Emotional Dyscontrol & Management, Psychotherapy; Yoga, Religiosity and Spirituality.

#### 11. Dr. M. Manjula, Additional Professor

Youth Mental Health Issues; Preventive and Promotive Interventions in Youth; Cognitive Behavior Therapies for Anxiety Disorders; Mood Disorders and Sexual Dysfunctions; Trans Diagnostic Therapies; Process Research in Cognitive Behavior Therapies.

#### 12. Dr. Devvarta Kumar, Additional Professor

Prospective Memory, Cognitive Dysfunction and remediation in Schizophrenia; Non-pharmacological Interventions in Schizophrenia (Cognitive Behaviour Therapy and Meta-Cognitive Therapy for Delusions and Hallucinations); Forensic Psychology (Witness Memory, Detection of Deception Techniques; Memory and its Falsifications; Blame Conformity and memory Conformity; Effective Interviewing in Forensic setups; Police Psychology); EEG and Event Related Potentials (ERPs); School Mental Health; Suicide.

#### 13. Dr. Poornima Bhola, Additional Professor

Psychotherapy Process Research; Psychotherapist Development and Training; Youth Mental Health and Self-Injurious Behaviours; Personality Disorders; Gender Variance; Consultation-liaison Issues among Medical and Surgical Conditions.

#### 14. Dr. B. N. Roopesh, Associate Professor

Child & Adolescent Mental Health; School Mental Health, Autism; Conduct Disorders; ADHD; Marginalized Children and Development of Psychological Scales; Child Neuropsychology; Development of Neuropsychological tests and Cognitive Retraining; EEG & Event Related Potentials (ERPs) of Psychiatric Disorders.

### 15. Dr. M. Thomas Kishore, Associate Professor

Child and Adolescent Mental Health with special interest in neurodevelopmental disorders particularly Intellectual and Developmental Disorders; Autism Spectrum Disorders and SLD; Infant Mental Health; Early Interventions and School Mental Health Programs.

#### 16. Dr. Veena A. Sathyanarayana, Assistant Professor

Women's Mental Health; Adult Individual and Couples Psychotherapy; Promotion of Mental Health in Vulnerable Populations.

#### 17. Dr. Aruna Rose Mary Kapanee, Assistant Professor

Community Mental Health; Individual and Family Psychotherapy; Creative and Expressive Art in Psychotherapy; Cultural Psychology; and Peace and Conflict Resolution.

### 18. Dr. Shanthala Hegde, Assistant Professor

Neuropsychology and Neuropsychological Rehabilitation; Music Cognition / Neuromusicology (EEG, ERP Method of Investigation).

### 19. Dr. Rajkumari P. Reddy, Assistant Professor

Forensic Psychology; Neuropsychological Assessment and Neuropsychological Rehabilitation; Cognitive Neuroscience; EEG – Neurofeedback Training; Functional Neuroimaging; and Forensic Neuropsychology.

#### 20. Dr. Nitin Anand, Assistant Professor

Cognitive Behavioral and Mindfulness-based Interventions for Adults with Mental Health Disorders with Special Interest in Anxiety Disorders, Depression and Obsessive Compulsive Disorder; Psychotherapeutic Interventions for Unhelpful Personality Traits and Personality Disorders; Psychological Evaluation of Problematic Internet Use/Internet Addiction; Psychotherapeutic Management of Internet Addiction; Healthy use of Technology; Promotion, Development and Standardization of Psychological Assessments; Human Rights Concerns of Mentally ill Persons.

#### 21. Dr. Nithya Poornima M, Assistant Professor

Parenting children and Adolescents with Mental Health Issues; Mindfulness; Yoga; Ayurveda for Children and Adolescents with Mental Health Issues; School Mental Health Services; Consumer friendly Child and Adolescent Clinical Services; Self-care in Mental Health Professionals.

### 22. Dr. Gitanjali Narayanan, Assistant Professor

Personality Traits and Personality Disorders especially in connection to Addiction; Qualitative Methods to Study Substance Use Disorders; Application of Integrated Psychotherapy; Dialectical Behavior Therapy in Co-morbid Mental Health Conditions; Ethics in Research Across Different Populations.

#### 23. Dr. Jyotsna Agrawal, Assistant Professor

Positive Psychology; Indian Psychology; and Public Mental Health.

#### 24. Dr. Ajay Kumar, Assistant Professor

Obsessive Beliefs and Cognitive Appraisals in Obsessive Compulsive Disorder; Cognitive Behaviour Therapy; Application of Mindfulness in Psychiatric Disorder.

#### 25. Himani Kashyap, Assistant Professor

Neurocognition in Psychiatric Disorders (with particular focus on Obsessive –Compulsive Disorder); Cognitive Strategy Training; Individual Psychotherapies; Holistic Psychological Interventions for Acquired Brain Injuries; Psychological Interventions for Emotional Disorders.

## **Department of Mental Health Education**

The Department of Mental Health Education aims to promote the health and wellbeing of individuals and communities through excellence in teaching, research and service in the area of mental and neurological disorders. The department is an integral part of the institute and actively involved in teaching, research and training activities in the field of health education. Over a period of time, the quality and nature of work has improved with advanced technology and digitalization. With minimal resources in the past, the department has large research projects to its credit and developed collaborations with other clinical departments providing quality work. The department provides intensive specialized training in the development of strategies ranging from an individual to systemic level that can assist individuals, communities and societies in adopting and maintaining healthy lifestyles.

The focus of the department is to prepare students, health care professionals, caregivers and the community at large to promote health in individual and group settings and among diverse populations

using culturally appropriate health education methodologies. Its goal is to facilitate voluntary health-related behavioural and social change through the application of principles of behavioural and social sciences. The department aims at developing health education and training materials that will help in meeting the goals of the National Mental Health Plan. The department has expanded its services and strengthened existing activities with new collaborations.

### **Course Offered:**

1. Ph.D. in Mental Health Education: Only external fellowship\*

\* If sponsored candidates are not available, it will go to the

General Pool

**Duration:** 3 – 5 Years

Minimum Qualification for Admission: Master of Public Health / Health / Behavioural Sciences.

2. Fellowship in Mental Health Education: 04 Seats \*(02 seats for sponsored candidates from

State/Central Govt./NGO)

\* If sponsored candidates are not available, it will go to the

General Pool.

**Duration:** 1 Year

**Minimum Qualification for Admission:** MBBS; Master's Degree in Social Work / Nursing / Psychology / Public Health or any other Behavioural Sciences.

Sponsored candidates from State/Central Government/Armed Forces/Other NGO's and direct candidates as well as those deputed from other organizations can be admitted to the course.

**Program of Study:** The course shall be conducted at the NIMHANS and during the study period the candidates will work under the guidance of consultant, with academic and clinical responsibilities. The structure of training program includes active participation in departmental and clinical work, seminars, journal clubs, case conferences, didactic lectures, and hands-on training in mental health education strategies. Upon successful completion of the course, candidate shall be awarded the fellowship certificate in Mental Health Education.

## **Academic Faculty and their Research Interests:**

- 1. Dr. S. K. Chaturvedi, Senior Professor of Psychiatry and Head and Dean (Behavioural Sciences)

  Cancer and Mental Health; Bioethics; Pedagogy; Chronic Pain; Psychosomatics; Quality of Life & Consultation–Liaison Psychiatry.
- 2. Dr. K. S. Meena, Associate Professor
  Adolescent Mental Health; Suicide Prevention; Developing and Evaluation of IEC; First-aid for Mental
  Health Problems.

## **Department of Nursing**

The Department of Nursing extends comprehensive, holistic and evidence based nursing service round the clock to patients with neurological, neurosurgical and psychiatric disorders in the inpatient wards, outpatient department, rural and urban mental health centres and rehabilitation daycare centres. The department caters to the needs of the family members of both in-patients as well as out-patients including those in the community.

The department empowers nurses from India as well as other countries with competencies to provide standard nursing care in the neurological and psychiatric nursing super-specialties'. Students are trained to apply theory in the clinical scenario using critical thinking, problem solving and decision making abilities. Students as well as nursing personnel are encouraged to conduct quality research and disseminate the findings either through indexed journals or conference presentations. The department efficiently co-ordinates various educational programs namely Post Basic Diploma in Psychiatric/ Mental Health Nursing, Post Basic Diploma in Neuroscience Nursing, M.Sc. in Psychiatric Nursing &Ph.D. in Psychiatric Nursing.

The department provides consultative services for organizing neuro, psychiatric nursing care services and educational program in various parts of the country as well as within NIMHANS through the multi-disciplinary team approach.

### **Course Offered:**

1. Ph.D. in Nursing: External candidates with fellowship and candidates deputed from NIMHANS.

**Duration:** 3 – 5 Years

Minimum Qualification for Admission: Master's Degree in Psychiatric Nursing

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

Research facilities: The Department of Nursing has a well-developed infrastructure to support teaching and research activities. There is good clinical facility and adequate reference books in the library for the students. The faculty members guide the research activities of the students in the areas of Neuro–Psychiatric Nursing in expended roles within the hospital and extended roles outside the hospital such as in community programs, schools, colleges, old age homes, etc.

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

2. M.Sc. in Psychiatric Nursing: 09 Seats (including 03 seats for deputed candidates from NIMHANS)

Separate online entrance test will be conducted for 3 seats reserved for deputed candidates from NIMHANS during Phase 3 subject to availability of Faculty. Applicants from NIMHANS need not apply during Phase 1 in January.

**Duration:** 2 Years

#### Minimum Qualification for Admission:

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

### 3. Post Basic Diploma in Psychiatric/Mental Health Nursing: 45 Seats

**Duration:** 1 Year

**Minimum Qualification for Admission:** Should be registered with State Nursing Council and have one year experience as staff nurse.

4. Post Basic Diploma in Neurosciences Nursing: 09 Seats

**Duration:** 1 Year

**Minimum Qualification for Admission:** Should be registered with the State Nursing Council and have one year experience as staff nurse.

Nurses applying for the above course from other countries have to obtain an equivalence certificate from INC before applying.

## **Academic Faculty and their Research Interests:**

#### 1. Dr. Sai Laxmi Gandhi, Additional Professor and Head

Psychiatric Rehabilitation, Occupational Stress; Stress Management Programs; School Mental Health; Child & Adolescent Psychiatric Nursing.

#### Dr. Prasanthi Nattala, Associate Professor

Developing and Testing Interventions for Individuals with Substance Use Disorders.

#### 3. Dr. G. Radhakrishnan, Assistant Professor

Child & Adolescent Psychiatry; Relapse Prevention in Alcoholism; Geriatric Mental Health Nursing; Family Mental Health Interventions; School Mental Health Counselling and Forensic Psychiatric Nursing.

### **College of Nursing:**

1. B.Sc. in Nursing: 77 Seats (50 Seats for Karnataka Domicile)

**Duration:** 4 Years

#### Minimum Qualification for Admission:

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

### **Academic Faculty and their Research Interests:**

### 1. Dr. B. V. Kathyayani, Professor cum Principal

Geriatrics; Quality of Life; Women Health; Team Building; Dimensions of Quality Care; Alternative Health Care Practices (Yoga); Evidence Based Practice; Independent Nurse Practitioner.

### 2. Dr. Pratibha Swamy, Associate Professor

Quality of Life in Cancer Patients, Status of Working Women, Complementary Therapies in Health Care & Home Remedies for Minor Ailments.

#### **Lecturers:**

- 1. Dr. K. N. Jayanthi: Rehabilitation of Psychiatric Patients; Legal and Ethical Issues in Nursing.
- 2. Sri. B. Jayakumar: Health Education.
- 3. Smt. H. N. Poornima: Lifestyle of Adolescents; Guidance and Counselling.
- 4. Dr. Priya Baby: Stroke Nursing; Traumatic Brain Injuries; Nursing in Movement Disorder.
- 5. Smt. D. Kanitha: Work Place Incivility in Nursing
- 6. Dr. S. Valliammal: Quality of Life of School Children and Adolescents; Psycho-Social Needs of Adolescents.
- 7. Dr. C. Rajeswari: Prisoners and Correctional Nursing.
- 8. Ms. S. Jeeva: Neonatology and Non-Communicable Diseases.

#### **Clinical Instructors:**

- 1. Smt. T. S. Sunitha: Care of Elderly.
- 2. Smt. P. Vijayalakshmi: Human Rights of Mentally Ill; Women's Mental Health, Violence against Women with mental illness,
- 3. Smt. A. Shamala: Child Psychiatry, Electro Convulsive Therapy.
- 4. Smt. N. Padmavathi: Adult Psychiatry and Child Adolescent Psychiatry
- 5. Smt. P. Jayanthi: Hospital Budgeting; Non-pharmacological Management in Diabetes.
- 6. Smt. G. Jothimani: Guidance and counselling for Wives of Alcoholics; Quality of Life of Substance Abuse Individuals.
- 7. Smt. S. Jeyamari: Case Studies.
- 8. Smt. Pamela John: Disaster Nursing
- 9. Smt. C. Y. Kesiya: Guidance & Counselling in Hospice and Palliative Care.
- 10. Smt. P. Vimal Devi: Health Education.
- 11. Smt. R. Rajalakshmi: Child abuse & Life Skill management.
- 12. Dr. D. Mythili: Innovations in Nursing Education, New Teaching Strategies in Nursing Education.
- 13. Smt. S. Sivakami: Evaluation Techniques.
- 14. Smt. N. Sathyavathy: Stress Management in Nurses; Effective Parenting Techniques.
- 15. Smt. K. Suguvana Selvi: Performance Appraisal.
- 16. Smt. P. Annie John: Adolescent Psychiatry & Life Skills Management
- 17. Sri. K. Kannan: Geriatric Psychiatry; Quality of Life of Mentally Ill Persons Attending PRS.
- 18. Smt. T. Suseela: Role Play in Health Teaching.
- 19. Smt. S. Vijayalakshmi: Pain Management during Labour; Postpartum Depression and Management.
- 20. Smt. Bingi Rajeshwari: Stress Counselling.
- 21. Sri. N. Rajesh: Health Administration in Community.
- 22. Smt. K. Deiva: Rehabilitation of Neuro Patient; AYUSH for Psychiatric Patients.

## **Department of Psychiatry**

The Department of Psychiatry is one of the largest in South East Asia with 40 faculty members, 26 senior residents, 6 DM residents, 11 postdoctoral fellows and 90postgraduate trainees.

#### I. Clinical:

Clinical services in the department are extended through outpatient clinics, inpatient services and emergency psychiatry services. The general outpatient services, both evaluation and follow-up, are run 6 days a week.

Special clinics run by the department are as follows:

- a. De-Addiction Clinic
- b. Tobacco Cessation Clinic
- c. OCD Clinic
- d. Metabolic Clinic in Psychiatry
- e. Schizophrenia Clinic
- f. Psychiatric Rehabilitation
- g. Perinatal Psychiatry Clinic
- h. Geriatric Psychiatry Clinic

The department has a large inpatient set-up with 550 beds, De-addiction Services, Family Psychiatric Centre and Psychiatric Rehabilitation Day Care Centre. Psychiatric Rehabilitation Services are provided in OPD, Day care and inpatient settings. The department also runs Community Mental Health Services.

## II. Training:

### a. For MD Psychiatry and Postdoctoral Fellowship Students

The department has a vibrant teaching program for MD students. The program runs two parallel streams of training one for first year and the other for second/third years.

Debates, workshops, invited talks and courses on leaderships and professionalism add to the variety. Newer training methods related to medical teaching like Objective Structure Clinical Examination (OSCE) and Problem based learning are also conducted on a regular basis.

#### b. For External Trainees

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

- 1. Training of PHC doctors under the National Mental Health Program.
- 2. Certificate courses in Family Psychiatry and Substance Abuse.
- 3. Regular training in addiction medicine for both medical and non-medical health professionals

- 4. Periodic training workshops on diverse topics life Communication Skills, Grief & Bereavement, Clinical Audits, Psycho oncology, Chronic Pain, Perinatal Psychiatry, Palliative Care, ECT and other brain stimulation techniques, Yoga and Forensic Psychiatry.
- 5. Caregivers' education and support program workshops.
- 6. Use of Virtual Knowledge Network (VKN) to provide onsite and distance learning.

#### III. Research:

The faculty in the department are involved in a large number of research activities which includeresearch in pedagogy, brain stimulation, genetics, neurobiology of major psychiatric disorders, cultural aspects of mental illness, social determinants of mental health, psychiatric epidemiology, dementia and old age psychiatry, addiction (socio cultural, neurobiology and treatment methods, suicide prevention, electrophysiological methods in brain disorder, consultation liaison psychiatry (Diabetes, Cancer, Chest Diseases, HIV, Maternal & Infant mental health, Psychiatric Rehabilitation, Somatization and associated disorders), Women's Mental Health (gender specific disorders, domestic violence), forensic psychiatry and several other areas.

### Special Facility: Yoga Centre

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

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

## **Course Offered:**

1. **Ph.D. in History of Psychiatry:** External Fellowship Only

**Duration:** 3 – 5 Years

**Minimum Qualification for Admission:** MBBS; Postgraduate Degree in Social Sciences/Humanities (Cultural Studies / History/Psychology / Social Work/Sociology)

2. Ph.D. in Mental Health Rehabilitation: 02 Seats under Institute Fellowship

\*Candidates with external fellowship are also eligible

**Duration:** 3 – 5 years

Minimum Qualification for Admission: MBBS; M.Phil.in Clinical Psychology / Psychiatric Social Work

/ Master's Degree in Psychiatric Nursing / Psychosocial Rehabilitation.

Program of study: A candidate who has obtained M.Sc. in Psychosocial Rehabilitation, M.Phil.in Clinical Psychology, M.Phil. in Psychiatric Social Work, M.Sc. in Psychiatric Nursing and MBBS from any recognized University or any other University recognized as equivalent thereto by NIMHANS securing not less than 55% marks can register for Ph.D. examination after one year from the date of provisional

registration. The candidate would be trained in research methodology, theoretical and practical aspects of the curriculum on Ph.D. for duration of 3 years. The candidate has to complete Pre-Ph.D. examination

after one year from the date of provisional registration.

Research facility: Day care centre for people with chronic mental illness, clinical facilities for psychiatric rehabilitation, multidisciplinary team for rehabilitation, Services for Enhanced Recovery with Intensive

and Continued Engagement, OPD, Inpatient referrals, Inpatient rehabilitation, home based rehabilitation, community based rehabilitation, social skills training, vocational training, community based day care

centres and rehabilitation facilities by NGO's where NIMHANS provides technical support.

3. Ph.D. in Psychiatry: External Fellowship only.

**Duration:** 3 – 5 Years

Minimum Qualification for Admission: BE; B.Tech.; MBBS; MD; ME; M.Tech; Postgraduate degree in

Basic Sciences or in the field of mental health.

4. DM in Addiction Psychiatry: 02 Seats

**Duration:** 3 years

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

5. DM in Geriatric Psychiatry: 02 Seats

**Duration:** 3 Years

Minimum Qualification for Admission: DNB in Psychiatry; MD Psychiatry from a University / Institute /

college recognized by the Medical Council of India

MD in Psychiatry: Total -37 Seats; Break-up indicated below:

i) 21 seats for All India

ii) 08 seats for Karnataka Domicile

iii) 06 seats for Candidates from Arunachal Pradesh, Chhattisgarh, Jammu and Kashmir, Manipur Meghalaya, Mizoram, Nagaland, Sikkim, Tripura & Uttarakhand domicile only\*

 iv) 02 seats for sponsored candidates of which one seat is for domicile of Karnataka, however, if sponsored candidates are not available, the seats will go to the general pool
 \*Decided solely on overall merit and not necessarily state-wise

**Duration:** 3 Years (Uniform Curriculum for Post MBBS and Post DPM candidates with 3 Years Course Term for both. Post DPM, MD Candidates who seek one year exemption may be considered after assessment.)

Minimum Qualification for Admission: DPM; MBBS

7. Postdoctoral Fellowship in Acute Care & Emergency Psychiatry: 02 Seats (01 seat for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

8. Postdoctoral Fellowship in Community Mental Health: 03 Seats (02 seats for sponsored)

**Duration**: 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

9. Postdoctoral Fellowship in Addiction Medicine: 04 Seats (02 seats for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

**10. Postdoctoral Fellowship in Consultation Liaison Psychiatry**: 02 Seats (01 seat for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

11. Postdoctoral Fellowship in Geriatric Psychiatry: 02 Seats (1 seat for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

**12. Postdoctoral Fellowship in Obsessive Compulsive Disorder & Related Disorders:** 03 Seats (02 seats for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

13. Postdoctoral Fellowship in Clinical Neuro Sciences & Therapeutics in Schizophrenia: 03 Seats (02

Seats for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

14. Postdoctoral Fellowship in Women's Mental Health: 02 Seats (01 seat for sponsored)

**Duration**: 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

15. Postdoctoral Fellowship in Non-Invasive Brain Stimulation of Psychiatric Disorders: 02 Seats (01

seat for

sponsored)

**Duration:** 1 year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

**16.** Postdoctoral Fellowship in Forensic Psychiatry: 02 Seats (01 seat for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Psychiatry; MD in Psychiatry

**17. Fellowship in Psychiatric Rehabilitation\*** - 02 Seats (Under Medical) (01 seat for sponsored)

-02 Seats (Under Non-Medical) (01 seat for sponsored)

\*Candidates sponsored by the NGO's also can apply for this course. If no candidates are qualified under medical category, the seats will be filled by candidates from the non-medical category and vice-versa.

**Duration:** 1 Year

**Minimum Qualification for Admission:** Diploma in Psychiatry / Psychological Medicine; DNB in Psychiatry; MBBS; MD Psychiatry; M.Phil.in Clinical Psychology / Psychiatric Social Work; Master's Degree in Psychology / Social Work / Psychosocial Rehabilitation / Nursing.

Direct candidates as well as those deputed from other organizations can be admitted to the course. Those with MBBS and those with Master's Degree in Psychology / Social Work / Nursing who have had minimum of 2 years of experience of having worked in a mental health setting are eligible. (If M.Phil. or Diploma is for only 1 year duration, then 1 additional year of experience in mental health setting is necessary).

**18. Fellowship in Geriatric Mental Health Care:** 02 Seats (01 seat for sponsored)\*

\*Candidates sponsored by the NGO's can also apply

for this course.

**Duration:** 1 Year

**Minimum Qualification for Admission:** MBBS with minimum of 2 years of experience of having worked in a general hospital as medical officer; MD General Medicine / Geriatric Medicine; DNB in General Medicine / Geriatric Medicine.

Direct candidates as well as those deputed from other organizations are also eligible.

19. Fellowship in Geriatric Mental health Nursing: 04 Seats-02 Seats sponsored from NIMHANS 02 Seats sponsored from State/Central Govt.

**Duration**: 1 Year

**Minimum Qualification for Admission:** B.Sc. Nursing (or equivalent qualification) with at least 1 year experience in a mental health care institution

**20. Fellowship in Psychosocial Care for Elderly:** 03 Seats- 02 candidates sponsored from NIMHANS 01 Sponsored from State/Central Govt.

**Duration: 1 Year** 

**Minimum Qualification for Admission:** M.Phil. in Clinical psychology / Psychiatric Social Work; Master's degree in Psychosocial Rehabilitation / Psychology / Social work.

Those with Master's degree in Psychology / Social Work should have a minimum of 2 Years of experience of having worked in a mental health setting.

## **Academic Faculty and their Research Interests:**

### 1. Dr. B. N. Gangadhar, Senior Professor and Director

Schizophrenia; Electro Convulsive Therapy; Yoga & Complementary Medicine; Community Mental Health.

### 2. Dr. S. K. Chaturvedi, Senior Professor of Psychiatry and Dean (Behavioural Sciences)

Cancer and Mental Health; Bioethics; Pedagogy; Chronic Pain; Psychosomatics; Quality of Life & Consultation–Liaison Psychiatry.

#### 3. Dr. Sanjeev Jain, Professor

Genetics of Psychiatric Disorders; History of Psychiatry; Phenomenology; Biological Psychiatry

#### 4. Dr. Mathew Varghese, Professor

Family Psychiatry; Geriatric Psychiatry and Community Psychiatry

#### 5. Dr. Prabha S. Chandra, Professor and Head

Women's Mental Health; Perinatal Psychiatry; Psychiatric Training; Bio-ethics; Mental Health Promotion; Palliative Care; HIV Psychiatry and Psycho-oncology.

#### 6. Dr. Pratima Murthy, Professor

Substance Abuse; History of Psychiatry; Psychiatric Training; Neuropsychiatry.

#### 7. Dr. Y. C. Janardhan Reddy, Professor

Obsessive Compulsive Disorders; Anxiety Disorders and Bipolar Disorder.

#### 8. Dr. Vivek Benegal, Professor

Substance Abuse Related Disorders; Neurobiology and Genetics of Addiction.

#### 9. Dr. Jagadisha Thirthalli, Professor and Head of Psychiatric Rehabilitation Services

Schizophrenia; Somatic therapies (ECT, rTMS, Yoga); Community Psychiatry; Urban Mental Health.

#### 10. Dr. John P. John, Professor

Phenomenology; Nosology and Neurobiology EEG; Structural and Functional MRI; Neuropathology; Neuropsychology; Molecular Genetics of Schizophrenia.

### 11. Dr. Suresh B. M., Professor

Obsessive Compulsive Disorder; Genetics; Forensic Psychiatry & Community Psychiatry.

### 12. Dr. G. Venkatasubramanian, Professor

Evolutionary Psychiatry; Psychoneuroendocrinology; Psychoneuroimmunology; Metabolic Disorders in

Psychiatry; Neuroimaging (MRI, fMRI, DTI & MRS) and Genetics in Psychiatry; Schizophrenia; Biology of Obsessive Compulsive Disorder; Human Evolutionary Genetics; Evolutionary Biology.

#### 13. Dr. P. T. Sivakumar, Professor

Geriatric Psychiatry.

#### 14. Dr. Geetha Desai, Additional Professor

Women's Mental Health; Chronic Pain; Somatoform Disorders; Perinatal Psychiatry and Psychotherapy.

### 15. Dr. Shivarama Varambally, Additional Professor

Early Onset Psychosis and Schizophrenia; Neurological Signs in Schizophrenia; Yoga in Psychiatry; Electro Convulsive Therapy.

#### 16. Dr. Prabhat Kumar Chand, Additional Professor

Substance/Drug Abuse related Disorder; Bipolar Disorder; Dual Diagnosis and Virtual Training Methods.

#### 17. Dr. K. Muralidharan, Additional Professor

Vulnerability to Alcoholism and Substance Use Disorders; Treatment of Substance Use Disorders; Transcranial Magnetic Stimulation; Electro-Convulsive therapy.

#### 18. Dr. Harish T., Additional Professor

Maternal Infant Bonding; Neurobiology of Postpartum Psychiatric Disorders; Acute Psychosis; Consultation-Liaison Psychiatry; Bioethics.

### 19. Dr. Santhosh Loganathan, Additional Professor

Stigma and Mental Illness; Geriatric Psychiatry; Family Therapy; Mental Health Literacy and Advocacy.

#### 20. Dr. V. Senthil Kumar Reddi, Additional Professor

Emergency Psychiatry; Consultation Liaison Psychiatry and Suicide Prevention.

#### 21. Dr. C. Naveen Kumar, Additional Professor

Severe Mental Disorders in Rural Communities; Electro Convulsive Therapy and other Brain Stimulation Techniques; Forensic Psychiatry; Psychiatric Rehabilitation.

#### 22. Dr. Shyam Sundar A., Associate Professor

Obsessive Compulsive Disorders; Anxiety Disorders; Trans Cranial Magnetic Stimulation.

#### 23. Dr. Preeti Sinha, Associate Professor

Psychopharmacology; Geriatric Psychiatry and Brain Stimulation.

#### 24. Dr. Naren P, Associate Professor

Schizophrenia; Obsessive Compulsive Disorder; Magnetic Resonance Imaging and Positron Emission, Tomography (PET).

### 25. Dr. Jaisoorya T.S., Associate Professor

Obsessive Compulsive Disorder and Public Health.

#### 26. Dr. Krishna Prasad M., Associate Professor

Psychiatric Rehabilitation; Geriatric Psychiatry and Emergency Psychiatry.

#### 27. Dr. K. Arun, Associate Professor

Adolescents and Addiction; Dual Diagnosis; Teaching and Training.

### 28. Dr. Sivakumar T., Associate Professor (Psychiatric Rehabilitation)

Psychiatric Rehabilitation; Psychiatric Disability; Caregivers Education and Support Programs; Teaching/Training in Psychiatric Rehabilitation; Daycare in Psychiatry; Community Based Rehabilitation.

#### 29. Dr. Sydney Moirangthem, Associate Professor

Community Psychiatry; Genetics

#### 30. Dr. N. Manjunatha, Assistant Professor

Academic Psychiatry; Anxiety Disorders; Public Mental Health.

#### 31. Dr. Janardhanan C.N., Assistant Professor

Obsessive Compulsive Disorder; Biomarkers of Treatment Response; Neuroimaging in Psychiatric Disorders (functional MRI);Transcranial Direct Current Stimulation; Cognitive Behavior Therapy.

#### 32. Dr. Biju Viswanath, Assistant Professor

Cell Models in Psychiatry and Bioplar Disorder.

# 33. Dr. Urvakhsh Meherwan Mehta, Assistant Professor of Psychiatry & welcome Trust DBT India alliance Early Career Fellow

Social Cognitive Neuroscience; Brain Stimulation and Neurobiology of Schizophrenia

#### 34. Dr. Sundarnag Ganjekar, Assistant Professor

Perinatal Psychiatry; Consultation Liaison Psychiatry.

#### 35. Dr. Dahale Ajit Bhalchandra, Assistant Professor

Geriatric Psychiatry; Consultation Liaison Psychiatry.

#### 36. Dr. Angothu Hareesh, Assistant Professor (Psychiatric Rehabilitation)

Forensic Psychiatry; Social Psychiatry; Rehabilitation Psychiatry; Personality and Deviant Personality Traits in Adolescents.

## 37. Dr. Deepak Jayarajan, Assistant Professor(Psychiatric Rehabilitation)

Substance Use disorder; Rehabilitation; Adolescents Substance Use.

### 38. Dr. Vijay Kumar K.G., Assistant Professor

Psychopharmcology; Psychopathology; Functional near infrared spectroscopy

- 39. Dr. Rashmi A., Assistant Professor
- 40. Dr. Shashidhara H.N., Psychiatrist (Specialist Grade)
- 41. Dr. Vinay B., Psychiatrist (Specialist Grade)

## **Department of Psychiatric Social Work**

The Department of Psychiatric Social Work has been established with a vision of promoting psychosocial well-being of individuals, families and communities. The department has translated its vision into reality by providing the best possible psychosocial services and offering advanced level of teaching and training through pre doctoral, doctoral and fellowship programs. It is creating evidence based research for building theory and practice. It has enriched the collaboration and cooperation with a network of Schools and departments of Social Work both in India and across the globe. It is working in close collaboration with the state/central government departments, non-governmental and governmental organizations. The members of the department through the nodal centres for psychosocial support for disaster survivors play a pivotal role in provision of service, training and research in the newer areas of psychosocial disaster risk reduction and preparedness in the state of Karnataka. The department has been recognized for its innovative activity of capacity building the grass root, mid and senior level personnel of the Women and Child Department of the Government in actualizing the Integrated Child Protection Scheme. The members of the department are significantly contributing to other Central, State and Deemed Universities in their boards of study, exam, appointment and selection in the area of social work. The department is an Institutional Member of the International Association of Schools of Social Work and the Asia Pacific Association of Social Work Education.

#### **Course Offered:**

1. Ph.D. in Psychiatric Social Work: 01 Seat\* under Institute Fellowship

\* Candidates with external fellowship are also eligible

**Duration:** 3 – 5 Years

**Minimum Qualification for Admission:** 2 years Master's Degree in Social Work; M.Phil.in Psychiatric Social work.

**Program of Study:** The candidate would be trained in research methodology, theoretical and practical aspects. All the candidates have to complete Pre-Ph.D. examination after one year from the date of provisional registration.

**2. M.Phil. in Psychiatric Social Work:** 21 Seats (including 03 Seats for foreign/sponsored candidates)

**Duration**: 2 Years

Minimum Qualification for Admission: 2 years MA in Social Work; Master's Degree in Social Work

**Program of Study:** In the two-year program, the candidates are exposed to application of methods, techniques and skills of social work for promotion of mental health, prevention of mental disorders, therapeutic interventions at individual, group and family level as well as after care and rehabilitation in institutional, semi institutional and non-institutional settings. At the end of the second year, they have to submit a dissertation using explorative-descriptive, experimental-evaluative research studies related to Psychiatric Social Work.

**Research facility:** 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.

3. Fellowship in Psychosocial Support in Disaster Management: 08 Seats (04 Seats for sponsored)

**Duration**: 1 year

**Minimum Qualification for Admission:** Master's Degree in Social Work/Disaster Management/Psychology / Psychiatric Nursing; Master of Public Health.

### **Academic Faculty and their Research Interests:**

1. Dr. K. Sekar, Professor

Community Mental Health; Disaster Psychosocial Support; Mental Health Services.

Dr. D. Muralidhar, Professor

Substance Abuse; Chronic Mentally Ill; Psychosocial Interventions for Mental Disorders; Sexual Minorities.

### 3. Dr. A. Thirumoorthy, Professor and Head

Suicide Prevention; Stress Management; Geriatric and Palliative Care.

### 4. Dr. N. Krishna Reddy, Additional Professor

Psychiatric Social Work Interventions in Neurosurgery and Fieldwork Training.

#### 5. Dr. R. Dhanasekara Pandian, Additional Professor

De-addiction Community Care; Counselling; Allied Training Program.

#### 6. Dr. Mohammed Ameer Hamza, Additional Professor

Rehabilitation of Persons with Psychosis; Caregiver Intervention; Adolescent Health.

#### 7. Dr. B. P. Nirmala, Additional Professor

Psychiatric and Neurological Rehabilitation and Field Work Training in Social Work.

#### 8. Dr. N. Janardhana, Additional Professor

Community Based Rehabilitation; Child and Adolescent Mental Health; Preventive and Promotive Mental Health Activities.

#### 9. Dr. M. N. Vranda, Associate Professor

Psychosocial Interventions and Women with Intimate Partner Violence.

### 10. Dr. E. Arvind Raj, Associate Professor

Community Mental Health, Disability and Functionality.

### 11. Dr. Gobinda Majhi, Assistant Professor

Psychiatric Social Work Interventions with Caregivers of Adult Psychiatric Population; Rehabilitation.

### 12. Dr. Kavitha Jangam, Assistant Professor

Child Abuse and Neglect; Women Mental Health.

#### 13. Dr. Priya Treesa Thomas, Assistant Professor

Psychosocial Interventions in Neurological Disorders; Children with Disability.

#### 14. Dr. Aarti Jagannathan, Assistant Professor

Psychiatric Rehabilitation (for Patients and Caregivers); Yoga for Mental Health.

#### 15. Dr. E. Sinu, Assistant Professor

Children and Women with Substance Use; Street Children; Social Work Research and Training.

#### 16. Dr. C. Jayakumar, Assistant Professor

Disaster Mental Health; Stress Management and Wellbeing; Policy and Legislation.

### 17. Dr. Bino Thomas, Assistant Professor

Adolescent Mental Health; Martial Family Interventions; Parenting Skills Development.

### 18. Dr. Sojan Antony, Assistant Professor

Psychosocial Care for Elderly; Youth Mental Health Interventions; Capacity Building Social Work.

#### 19. Dr. T. R. Kanmani, Assistant Professor

Psychosocial Interventions to Caregivers of Traumatic Brain Injury; Psychiatric Social Work Interventions and Rehabilitation for Patients with Spinal Cord Injury; Therapeutic Interventions and Palliative Care for Patients and Care Givers of Neuro Oncology.

#### 20. Dr. Anish V. Cherian, Assistant Professor

Common Mental Disorders; Psychosocial Intervention by Lay Health Work; e-Mental Health.

### 21. Dr. Janaki Raman K., Assistant Professor

Homeless persons with mental illness; Psychiatric Social Work Practice; Training & Research; Community Mental Health; Networking with Govt. & NGO Sectors.

#### 22. Dr. Shanivaram Reddy K., Assistant Professor

Psychiatric Rehabilitation for Persons with Mental illness; Community Based Rehabilitation; Advocacy for Persons with Mental illness; Mental Health Setting in Correctional Settings.

### 23. Dr. Kimneihat Vaiphei, Assistant Professor

## **Neurosciences Division**

## **Department of Clinical Neurosciences (Virtual Department)**

The virtual department of Clinical Neurosciences was created in 2013. The department has three adjunct faculty members: Dr. John P. John (HOD), Dr. M. M. Srinivas Bharath and Dr. A. Arivazhagan. From the current academic year (2018-19), the department would be running a 3-year post-MD/DM/M.Ch.-PhD programme (8 vacancies) funded by the Indian Council of Medical Research (ICMR)\*. Accordingly, 8 candidates who have completed MD in Psychiatry, DM in Neurology, DM in Child and Adolescent Psychiatry, DM in Geriatric Psychiatry, DM in Addiction Medicine or M.Ch. in Neurosurgery would be selected for this 3-year PhD programme on the basis of a competitive national level entrance examination and personal interview, conducted along with the annual entrance examinations for all courses at NIMHANS.

The department has been created to foster research temperament amongst clinicians who are interested in translational neuroscience research. The long-term objective of creation of this discipline is to boost capacity building at the national level in the emerging field of Translational Medicine, specifically as it applies to Neuroscience. The Institute envisages that the department would succeed in bringing out clinician-neuroscientists, who are equally adept in both clinical and research aspects. This department, therefore expects to bridge the wide gap that exists between the "bench and the bed-side", thereby leading on to translational research that will have more direct clinical applications. These young clinician-neuroscientists are expected to lead the way in the field of Translational Neuroscience in the country in the coming decades.

### **Course:**

Name: PhD in Clinical Neurosciences: 8 Seats (ICMR Fellowship)

Mode of Selection: A national level competitive online examination of 1½ hours duration (100 questions) covering basic neuroscience, applied neuroscience, research methodology and biostatistics would be conducted annually. Those candidates who qualify in the online entrance examination will be called for an interview, to assess the knowledge of the candidate in basic and clinical neuroscience specialties as well as aptitude for research in interdisciplinary fields related to clinical neuroscience. The Interview panel will comprise nominee/s from ICMR along with other members constituted by NIMHANS. Selection would be on the basis of performance in the online examination as well as in the interview.

#### Minimum Qualification for Admission:

(1) MD in Psychiatry; DM in Neurology, DM in Child and Adolescent Psychiatry, DM in Geriatric Psychiatry, DM in Addiction Medicine, or M.Ch. in Neurosurgery of any University recognized by the Medical Council of India (MCI). The candidate must have full registration with a State Medical Council.

\*Till 2017-18, the department had been running a 5-year PhD Clinical Neurosciences programme for post-MBBS candidates (5 vacancies) funded by the Indian Council of Medical Research (ICMR). Program of study:

**Duration of the course:** 3 academic years, commencing on the 1<sup>st</sup> of July every year. The Director General-ICMR will make a final decision on grant of extension for one year upon the recommendation of the Principal Guide and the NIMHANS administration. An additional 1-year post-doctoral fellowship will be given to successful candidates, as per the final decision of the Director General-ICMR.

**Stipend:** Selected candidates will be paid stipend equivalent to that of Senior Resident on a running pay scale for three years. An additional 1-year post-doctoral fellowship will be given to successful candidates, as per the final decision of the Director General-ICMR.

In the event of a candidate leaving the course without completing the programme, the whole amount will have to be remitted to the ICMR through the institute with suitable justifications. A surety bond will have to be executed by the candidates entering the programme on Rs 100/- non-judicial stamp paper. The original certificates will be retained and it will not be returned to the candidates before completion of the course unless he/she deposits a sum of Rs. 50,000/-.

The Scheme: During the first year, the scholars attend the PhD course work as well as complete the Pre-PhD examination. In the initial three months, the scholars would be matched with a faculty mentor in the respective department based on their qualifying post-graduate degree. Subsequently, the scholars undertake their PhD dissertation work under the guidance of the mentor (Principal Guide) as well as co-guides from clinical and basic specialties. They will be posted in the respective clinical department of the Principal Guide till completion of their course, where they will be working in the capacity of a Senior Resident. The PhD scholars are mandated to undertake a dissertation that involves translational research involving clinical and basic specialties. The scholars are expected to complete the preparation of their thesis protocols in consultation with their Principal Guide and co-guides and submit the same for the approval of the PhD Committee and Institute Ethics Committee within the initial 6 months of their course. During the first year, the scholars are also expected to successfully complete the PhD course work over a 3-month period, comprising Research Methodology, Human and Animal ethics, computer applications, quantitative and qualitative software, basic sciences, behavioural sciences, neurosciences as well as presentation of research protocols before course co-ordinators.

During the second and third years, the candidates would work clinically in the capacity of Senior Resident under the supervision of the Principal Guide at the respective clinical department, while simultaneously undertaking their dissertation work. They must submit the synopsis of their thesis at least 1 month before the completion of their course and present their PhD colloquium before submission of the thesis.

During their course, the candidates are mandated to submit periodic reports to the PhD Committee of NIMHANS as well as to ICMR as per the guidelines governing the course.

#### **Evaluation:**

- Evaluation as part of the PhD course work: Assessments will be carried out as part of the PhD course work in the first year. All the scholars have to undergo the prescribed course work and successfully complete the same.
- 2. Pre-PhD examination (theory and viva voce): will be held within 6 months of initiation of the course.
- 3. Clinical evaluation: The clinical evaluations would be carried out periodically by the Principal Guide in the respective department where the candidate chooses to carry out the dissertation work.
- 4. The scholars are required to maintain a log book of their clinical and research activities regularly and get the same approved by the Guide and the Head of Department of Clinical Neurosciences.

The scholars have to abide by the PhD regulations of the institute as well as the regulations of ICMR, the funding agency.

## **Academic Faculty and their Research Interests:**

1. Dr. John P. John, Professor of Psychiatry and Head

Neurobiology of Schizophrenia and Neurodegenerative Disorders; Cognitive Neuroscience; Multimodal Brain Imaging; Imaging-genomics of Schizophrenia and Alzheimer's Dementia.

2. Dr. M. M. Srinivas Bharath, Additional Professor of Neurochemistry

Red-ox and Mitochondrial Dynamics in the Pathophysiology of Brain and Muscle.

3. Dr. A. Arivazhagan , Additional Professor of Neurosurgery

Functional and Minimum Invasive Surgery; Skull Base Surgery; Endoscopic Surgery.

### **Course Offered:**

M.Phil.in Neurosciences: 04 Seats

**Duration:** 2 years

Minimum Qualification for Admission: BE in Electronics / Electrical / Computer Science; B.Tech in Electronics / Electrical / Computer Science / Biotechnology; MBBS; Master's Degree in Anatomy / Biochemistry / Biotechnology / Chemistry / Genetics / Life Science / Molecular Biology / Physics / Physiology / Psychology / Zoology.

**Program of Study:** The course consists of theory lectures on structure and function of the nervous system at molecular, cellular and systems level. In addition, candidates will have an exposure to pathological and applied aspects of the nervous system. Theory lectures will be complemented with practicals and

demonstrations of various techniques used in different disciplines. Each candidate is required to carry out research work, which will result in a dissertation.

### **Course Committee:**

The course will be coordinated by a course committee nominated by the Director/Vice-Chancellor, NIMHANS. The current members of the Course Committee are:

Dr. T. N. Sathyaprabha, Prof. of Neurophysiology : Chairperson
 Dr. N. Gayathri, Prof. of Neuropathology : Member
 Dr. Sarada Subramanian, Addl. Prof. of Neurochemistry : Member
 Dr. Balasundaram Padmanabhan, Prof. of Biophysics : Member
 Dr. Mariamma Philip, Associate. Prof. of Biostatistics : Member

## **Department of Epidemiology & Centre for Public Health**

The Department of Epidemiology was established in 1987 to conduct, strengthen and support epidemiological and public health research in mental health, neurological sciences, injuries and other related NCDs. The major domains of the Department are epidemiological and public health research, training, service, policy support and program development. The department aims to develop relevant information on different disorders and health aspects and attempts to incorporate these issues into policy making, planning, programming and implementation of health programs and services.

#### The specific objectives are to:

- a. Develop epidemiological information on prioritized mental and neurological disorders and injuries,
- b. Carry out research independently, as well as on a collaborative nature with other departments, organizations, national and international agencies,
- c. Provide inputs for service and teaching programs of the Institute
- d. Collaborate with national and international agencies in promoting evidence based health and public health programs and activities.

Over the years the department has developed expertise in focused area of research, service and program development and the current areas of work include injury surveillance, suicide prevention, road traffic injuries, maternal mental health, stroke surveillance, headache disorders, substance abuse, geriatric mental health, health economics, youth health issues, Occupational mental health, urban mental health, etc.. In addition, in the past the department provided inputs for health and health related planning, policies and programs in the areas of mental health, injury surveillance, road safety, alcohol control, geriatric mental health, prevention and control of non-communicable disease, Youth Health issues, Occupational health and Child Mental Health. The department was entrusted to co-ordinate the second largest study globally on Mental Health in the Country and has recently completed the Phase I of the National Mental Health Survey across 12 states of India.

### Centre for Public Health (CPH)

In its 25<sup>th</sup> Year, the Department of Epidemiology initiated the establishment of the Centre for Public Health at NIMHANS (CPH@NIMHANS) as a centre of excellence with a vision to foster evidence based public health practices, policies and programs focusing on Mental Health, Neurological, Substance Use and Behavioural Disorders, Injuries and Emerging NCDs. CPH@NIMHANS aims to provide strong inputs for strengthening public health components in formulating policies and program development, focusing on problems, priorities, challenges and solutions in the areas of mental health, neurological sciences, substance use and behavioural disorders and injuries as well as other NCDs. The major spheres of influence and domains of activities would be public health research, human resource development, advocacy apart from development, implementation, monitoring and evaluation of policies and programs.

The CPH and the Department of Epidemiology has the expertise to plan and conduct large scale epidemiological studies, undertake operational research (feasibility of public health programs, evaluate health interventions, etc.), establish health surveillance, disease registries, monitor community based interventions, undertake systematic reviews and meta-analysis, support policy analysis as well as guide and advise on program planning, implementation, monitoring and evaluation at regional, national and international levels.

A district level field practice area which would enable an in-depth examination of the dynamics of the functioning of health services, help understand determinants of health, provide macro and micro level analyses of health situations and events and serve as an observatory for health managers, public health students and researchers has been initiated. This Public Health Observatory is at Kolar District with a population of 1.5 Million helps understand the macro and micro dynamics of functioning of health services and specifically focuses on MNSuDI.

Apart from a large hospital facility that caters to about 5,00,000 patients per year, the department has well established facilities like lecture halls with audio-visual aids, a public health laboratory, demonstration rooms, conference room and several small group discussion rooms. Along with several work stations, standard statistical software is available for data analysis and data presentation. The department also maintains e-databases of several population and hospital-based research programs along with the main Library and Information Centre at NIMHANS.

#### **Course Offered:**

1. Master of Public Health (MPH):

10 Seats (05 Seats for sponsored candidates from the government sector and 05 Seats for non-sponsored candidates).

\*If the seats are not filled by the sponsored candidates, then those seats will be filled by the eligible candidates from non-sponsored category and vice versa.

**Duration:** 2 Years

Minimum Qualification for Admission:

For Sponsored Candidates: MBBS degree / Bachelor of Dental Sciences / Bachelor of Veterinary

Sciences from a recognized University or from any other University recognized as equivalent thereto by NIMHANS or MCI and registered with a State Medical Council and currently working with Central or State Government's health departments / Postgraduate degree in Sociology / Statistics / Environmental Sciences from a recognized University or recognized as equivalent thereto by NIMHANS.

**For Non-Sponsored Candidates:** MBBS; Graduate Degree in Medicine/Dental Sciences; Post graduation in Physiotherapy/Occupational Therapy/Health Management/Social Work/ Statistics/ Economics/ Speech Pathology and/or Audiology/Nursing.

**Program of Study:** The Master of Public Health (MPH) course from the academic year 2013-14 to bridge the gap in human resources and to strengthen public health capability of health and health related sectors. The MPH course aims to develop quality public health specialists who will be able to efficiently and effectively manage the constantly evolving health situation and systems of the country. The course based on adult-learning principles would be skill-based and adopt a modular learner-centered methodology. The course will have mental health, neurosciences as the thrust areas and will also focus on practice of public health principles and tools.

The Master of Public Health is recognized qualification under the Medical/Dental/Nursing Council of India as deemed in Clause 25 of the NIMHANS Act.

## **Academic Faculty and their Research Interests:**

#### 1. Dr. G. Gururaj, Senior Professor and Dean (Neurosciences) and Controller of Examinations

Traumatic Brain Injury; Road Traffic Injury; Suicides; Stroke; Prevention of Harm from Alcohol; Mental Health; Non communicable diseases; Epilepsy.

#### 2. Dr. N. Girish, Professor and Head

Maternal Mental Health; Geriatric Mental Health; Epilepsy; Prevention of Harm from Alcohol, Health Economics, Psychiatric Epidemiology.

#### 3. Dr. Pradeep B. S., Additional Professor

Youth Mental Health; Infectious Diseases; Public Mental Health Interventions; Community-Based Rehabilitation for MNSuDIs.

#### 4. Dr. Gautham M. S., Associate Professor

Occupational Mental and Neurological Problems; Integrating NCDs and Mental Health in Workplaces; Road Traffic Injuries.

#### 5. Dr. Senthil Amudhan R., Associate Professor

Stigma and Mental illness; Mental Health Literacy; Child Mental Health; Epilepsy; Mental Health Management and Information System.

#### 6. Dr. B. A. Arvind, Assistant Professor

Urban Mental Health, Youth Mental Health, NCD Risk Factors in Urban Areas.

## Department of Neuroanaesthesia and Neurocritical Care

The Department of Neuroanaesthesia and Neurocritical Care is involved in providing services to primarily neurosurgery, neurology, psychiatry and neuroradiology departments. The department handles 7 operation theatres for Neurosurgery including 24 hours emergency services (head injury, trauma etc.). Neuroanaesthetists are also involved in the maintenance of neurointensive care (30 beds) which is utmost essential for critical care patients.

Neurology Intensive Care caters to patients with Guillian-Barre Syndrome (GBS), myasthenia gravis, stroke, status epilepticus and other neurological patients are admitted to the ICU. The Neuroimaging and Interventional Radiology department performs large number of MRI under anaesthesia, 4 vessel angiogram and therapeutic embolization and coiling under anaesthesia for various conditions. Psychiatry department requires the help of anesthetists to carry out modified ECT.

### **Course Offered:**

1. DM in Neuroanaesthesia: 06 Seats – 02 sponsored candidates

**Duration:** 3 Years

Minimum Qualification for Admission: DNB in Anaesthesiology; MD in Anaesthesiology.

Program of Study: The course envisages training the candidates in the following areas:

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

Research Facilities: The clinical material of the department offers a wide scope for investigation. The department is also equipped with extensive cardiovascular, respiratory and neurological monitoring facilities including pulmonary function testing Transcranial Doppler, bispectral index, spectral entropy, minimally-invasive and non-invasive cardiac output, regional cerebral oxygenation, intra-operative and critical care EEG, bed-side blood gas and electrolyte analysis, anaesthetic agent monitoring and cardiac enzyme assessment. Trans-thoracic and transoesophageal echocardiography are being used regularly. The department also has the facility of monitoring intra-operative evoked potentials and intracranial pressure.

2. **Postdoctoral Fellowship in Neuroanaesthesia**: 04 Seats (02 seats for foreign / sponsored candidates)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Anaesthesiology; MD in Anaesthesiology

3. Postdoctoral Fellowship in Neurocritical Care: 03 Seats (02 seats ICMR Fellowship under Centre

for Advanced Research and 01 seat sponsored by

TVS Group)

**Duration:** 1 Year

Minimum Qualification for Admission: DM in Neuroanaesthesia / Neurology; DNB in Anaesthesiology / Neurology / Neurosurgery; M.Ch. in Neurosurgery; MD in Anaesthesiology / Internal Medicine.

**Program of Study:** Students are trained in the following areas:

- i. General principles of critical care including organization of critical care, scoring systems, admission and discharge criteria, transport of patients.
- ii. Basic neuroanatomy and physiology.
- iii. Pre hospital and neurointensive care in patients with neurologic injury.
- iv. Cerebrovascular accidents.
- v. Traumatic brain and spinal cord injury.
- vi. Neurological disease including seizure disorder, peripheral motor neurone disease, infectious diseases of CNS.
- vii. Monitoring in critical care.
- viii. Neuroimaging and other radiological investigations.
- ix. Neurorehabilitation and treatment of complications.
- x. Research in the neurocriticalcare.

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

4. B.Sc. in Anaesthesia Technology: 10 Seats (07 seats for Karnataka domicile)

**Duration:** 3 Years (plus 1 year of internship)

**Minimum Qualification for Admission:** Pass in 2-year Pre-University examination or equivalent with a Science group having secured an aggregate of 45% in Science subjects.

## **Academic Faculty and their Research Interests:**

### 1. Dr. G. S. Umamaheswara Rao, Senior Professor and former Dean & Director

Intensive Care; Head Injury; Mechanical Ventilation; Cerebral Blood Flow Studies; Indigenization of Medical Equipment; Music and Anaesthesia; Depth of Anaesthesia Monitoring; Infections in ICU; Critical Care in Neuro-muscular Diseases.

#### 2. Dr. V. Bhadrinarayan, Professor

Head Injury; Intensive Care.

#### 3. Dr. K. R. Madhusudan Reddy, Professor

Neuroendoscopy; Studies in Intraoperative ICP Measurement.

#### 4. Dr. V. J. Ramesh, Professor and Head

Outcome in Intensive Care; Subarachnoid Haemorrhage; Mechanical Ventilation.

#### 5. Dr. M. Radhakrishnan, Additional Professor

Clinical Investigation in Neuroanaesthesia.

### 6. Dr. K. Sriganesh, Additional Professor

Traumatic Brain Injury (TBI); Neuromonitoring.

#### 7. Dr. Sudhir V., Associate Professor

Traumatic Brain Injury (TBI); Neuromonitoring; Ultrasound in Neurocritical Care

#### 8. Dr. Gopala Krishna K N, Associate Professor

Traumatic Brain Injury (TBI); Neurosonology

#### 9. Dr. Sonia Bansal, Assistant Professor

Head Injury

#### 10. Dr. Rohini M. Surve, Assistant Professor of Critical Care

Traumatic Brain Injury (TBI); Critical Care.

#### 11. Dr. Dhritiman Chakrabati, Assistant Professor

Biostatistics, Neuro Monitoring

### 12. Dr. Suparna Bharadwaj, Assistant Professor

Intra operative; Neurophysiological Monitoring; Neuro Monitoring.

#### 13. Dr. Shweta Naik, Assistant Professor

Intensive Care Management; Fluid Management in Neurological Patients.

### **Department of Neuroimaging and Interventional Radiology**

The Department of the Neuroimaging and Interventional Radiology is an important department of the Institute delivering both diagnostics and interventional services for the management of neurological and non-neurological disorders. The department performs vascular and nonvascular neuro radiological interventions, and it is actively involved in endovascular management of neurovascular disorders such as of cerebral AVM's, aneurysms, dural AVFs, CCFs, vein of Galen aneurysmal malformation, spinal AVM and AVFs, various intracranial and extracranial, facial AVM & fistualas. In addition, minimally invasive non vascular procedures like facetal injection, vertebroplasty, trigeminal rhizotomyetc, for pain management are performed. Presurgical embolization and intraoperative embolisation for devascularization of vascular tumors are also done. The above mentioned diagnostics and interventional services are being provided at minimal cost to the patients and there is a steady increase in the number of patients availing care at Neuroimaging and Interventional Radiology.

To keep up with the technological advances in the field, the department takes utmost care in procuring state of the art, top of the line equipment. Molecular Imaging facility for simultaneous acquisition of PET MRI has been added last year. Cyclotron facility to provide the radiopharmaceuticals will be functional in the coming year and Animal MR PET facility will be added in due course. The department takes lead role in training manpower for the country and is running a 3-year DM Neuroimaging and Interventional Radiology (NIIR) course. It is also involved in providing education related to imaging and intervention to postgraduate students from Radiology, Neurology, Psychiatry and Neurosurgery from NIMHANS and other institutions and medical colleges as part of their course requirement. Students from various parts of the country come to NIMHANS for short-term training.

### The department has:

- a. Three state-of-the-art 16 slice CT scanners with CT Angiography, CT Perfusion, BMD and CT guided minimally invasive procedures like biopsy.
- b. Two Biplane digital Subtraction Angiography for diagnostic and interventional management of neurovascular diseases with 3T rotational angiography, Dyna/Extent CT and DSA guided fluoroscopic intervention facilities. Five bedded post procedure observation ward.
- c. Five state-of-the-art top of the line MRI Scanners, out of which two are 3T units with facilities like MR Angiography, Perfusion, Proton, Phosphorous, Carbon Spectroscopy and Sodium Imaging. Image processing facilities for functional MRI including both task and resting sate functional analysis, connectivity analysis and multimodal network analysis.
- Molecular imaging and SPECT and MR-PET for tumor, epilepsy imaging, imaging of neurodegenerative and psychiatric disorders.
- e. Computerized Radiography and Digital Radiography system.
- f. Picture Archival and Communication System with Radiology System integrated with HIS.
- g. Two state-of-the-art ultrasound equipment for routine imaging, nerve and muscle imaging and transcranial Doppler.

### **Course Offered:**

1. Ph.D. in Neuroimaging and Interventional Radiology: Only External Fellowships

**Duration:** 3 – 5 Years

**Minimum Qualification for Admission:** BE; B.Tech; DNB in Radiodiagnosis; MBBS; MD; Master's Degree in Medical Subjects; M.Tech Degree

2. DM in Neuroimaging and Interventional Radiology: 04 Seats (01 Seat for sponsored candidate)

**Duration**: 3 Years

Minimum Qualification for Admission: DNB in Radiodiagnosis; MD in Radiodiagnosis

**3. B.Sc. in Radiography:** 10 Seats – Breakup indicated as below:

i. 04 seats for sponsored;

ii. Overall 05 seats for Post Diploma candidates;

iii. Overall 07 seats are reserved for Karnataka Domicile

**Duration:** 3 years

### Minimum Qualification for Admission:

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

### **Academic Faculty and their Research Interests:**

### 1. Dr. Arun Kumar Gupta, Professor and Head

Interventional Neuroradiology; Advanced Neuroimaging; Materials for Interventional Radiology; PACS.

### 2. Dr. Rose Dawn Bharath, Additional Professor

Functional MRI Applications in Pre-operative Work Up; Psychiatric Neuroimaging; Cognitive &Behavioral Sciences; Advanced Imaging Techniques like Spectroscopy; DTI in Neurosciences; CT and MR Perfusion Imaging in Tumors and Vascular Disorders and Infections.

### 3. Dr. Hima Shriniwas Pendharkar, Additional Professor

Diagnostic Noninvasive Imaging of neurovascular Lesions; Interventional Endovascular Treatment of all Neurovascular – Arterial &Venous Lesions.

### 4. Dr. Aravinda H.R., Additional Professor

Diagnostic Neuroimaging – Application of Perfusion and Diffusion MR Imaging of Brain Tumors and Mass Lesions; Endovascular Treatment of Brain and Spinal AVM; Dural AV Fistulae and Aneurysm Coiling.

### 5. Dr. Jitender Saini, Additional Professor

Diagnostic and Interventional Neuroradiology.

### 6. Dr. Chandrajit Prasad, Additional Professor

Proton and Phosphorus MRS, Perfusion Study in Mass Lesion; Diffusion Tensor Imaging; Neurointervention including Thrombolysis; Aneurysm Coiling and Treatment of AVM and Fistulas.

### 7. Dr. Maya Dattatraya Bhat, Associate Professor

Pediatric Neuroradiology Imaging of Neuroinfections; Diffusion Tensor Imaging.

### 8. Dr. M. Sandhya, Assistant Professor

fMRI, Molecular Imaging; Cognitive Neurology; Multimodal Imaging; Simultaneous EEG-fMRI, Resting fMRI and Connectivity; Image Processing DTI VBM FSL; Epilepsy.

### 9. Dr. Chandana, Assistant Professor (Nuclear Medicine)

Molecular Imaging, Neuro Oncology, Epilepsy, Radionuclide Labeling, Movement Disorders, Nuclear Medicine Therapy- Dosimetry Studies.

### **Department of Neurological Rehabilitation**

The Department of Neurological Rehabilitation, the only such department in the country caters to the rehabilitation needs of patients with disabilities due to a wide range of neurological and neurosurgical disorders. The department receives referrals from not only across the length and breadth of the country but also from overseas. The work in the department also includes corrective surgeries for patients with cerebral palsy and decubitus ulcers. Urodynamic Lab facilitates provides opportunities for precise diagnosis and clinical research work. The department has got 22-bedded indoor facilities for inpatient rehabilitation. With significant contribution from paramedical staff like physiotherapists, occupational therapists and orthotic technician, and one faculty each from the departments of Psychiatric Social Work and Clinical Psychology working with rehabilitation team, this is a multi-disciplinary neurological rehabilitation facility in true sense.

### **Course Offered:**

**1. Ph.D. in Neurological Rehabilitation:** Only External Fellowships

**Duration:** 3 – 5 Years

Minimum Qualification for Admission: DNB in Physical Medicine & Rehabilitation; Master's Degree in Physiotherapy (MPT) /Occupational therapy (MOT) / Orthotics & Prosthetics; MBBS; MD in Physical Medicine & Rehabilitation; M.Phil. in Clinical Psychology /Psychiatric Social Work /Clinical Neurosciences / Master's Degree in Nursing /Speech Therapy with not securing less than 55% marks.

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

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

2. Postdoctoral Fellowship in Neurological Rehabilitation: 02 Seats

**Duration:** 1 year

**Minimum Qualification for Admission:** DNB in Physical Medicine & Rehabilitation; MD in Physical Medicine & Rehabilitation

**Program of Study:** To train physiatrists in neurological rehabilitation. Training is offered to post graduates in Physical Medicine and Rehabilitation.

**Research Facility:** Comprehensive Neurological Rehabilitation Unit with out-patient and in-patient services; well-equipped Physiotherapy, Occupational Therapy and Orthotic Sections with equipment like body weight support treadmill, dynamic post-urography, robotic hand therapy and CANTAB for cognitive assessment; state-of-the-art Gait Analysis Laboratory and Urodynamic Study Lab.

### **Academic Faculty and their Research Interests:**

1. Dr. Anupam Gupta, Professor & Head

Traumatic Brain Injury; Stroke Rehabilitation; Spinal Cord Injury; Cerebral Palsy & Neurogenic Bladder.

2. Dr. Meeka Khanna, Associate Professor Spinal Cord Injury; Urodynamics.

### **Department of Neurology**

The Department of Neurology has experienced faculty with varied research interests. It offers research facilities in the areas of diagnosis and management of various acute and chronic neurological disorders. This is backed by well-developed electro diagnostic laboratory with facilities for EEG, electroneuromyography, evoked potentials; long term video EEG, transcranial magnetic stimulation, sleep laboratory, motor physiology laboratory, magnetoencephalography and Doppler ultra-sonography. The department runs specialty clinics for patients with neuromuscular disorders, refractory seizures, movement disorders and Wilson's disease and also has specialized stroke unit, neuro critical care and exclusive neuro infection wards.

### **Course Offered:**

1. Ph.D. in Neurology: Only External Fellowships

**Duration:** 3-5 Years

**Minimum Qualification for Admission:** M.Tech with experience in Neuroscience Research; M.Sc. in Lifesciences; MBBS; BDS; MD

2. DM in Neurology: Total 14 Seats\*- 4 Seats for Post MBBS and 10 Seats for Post MD/DNB –

Within this 01 seat is for sponsored candidate.

\*If sponsored candidates are not available, it will go to the general pool

**Duration:** 6 years for post MBBS candidates (Junior Resident for 3 Years and Senior Resident for 3 Years) 3 years for post MD/DNB candidates (Senior Resident for 3 Years)

Final DM examination will be held at the end of 5 years for Post MBBS course and at the end of 3 years for Post MD/DNB course. The students of Post MBBS course will be eligible for award of DM certificate only after completion of 3 years of Senior Residency

**Minimum Qualification for Admission:** DNB in Internal (General) Medicine / Pediatrics; MD in Internal (General) Medicine / Pediatrics; MBBS

**Postdoctoral Fellowship in Epilepsy:** 03 Seats (01 seat for sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DM in Neurology; DNB in Neurology

3. Postdoctoral Fellowship in Movement Disorders: 03 Seats (01 seat for sponsored) Duration: 1 Year

Minimum Qualification for Admission: DM in Neurology; DNB in Neurology

4. **Postdoctoral Fellowship in Neuromuscular Disorder:** 03 Seats (01 seat for Sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DM in Neurology; DNB in Neurology

5. **Postdoctoral Fellowship in Stroke**: 01 Seat

**Duration:** 1 Year

Minimum Qualification for Admission: DM in Neurology; DNB in Neurology

6. Postdoctoral Fellowship in Paediatric Neurology: 01 Seat

**Duration:** 1 Year

Minimum Qualification for Admission: DM in Neurology; DNB in Neurology

7. **Postdoctoral Fellowship in Cognitive Neurosciences:** 02 Seats (01 seat for Sponsored)

**Duration:** 1 Year

Minimum Qualification for Admission: DM in Neurology; DNB in Neurology

If there are no takers for PDF in a given specialty, then maximum of 01 seat shall be allowed to go to the other specialty.

**8. Diploma Course in Clinical Neurophysiology Technology:** 06 Seats (02 seats for sponsored candidates)

**Duration:** 2 Years

Minimum Qualification for Admission: B.Sc. with Physics/Electronics/Computer Sciences with minimum II Class in the qualifying examination; Diploma in Electronics/Electrical/Instrumentation/Computer (approved by Board of Technical Education);3 years' experience as EEG Technician after PUC.

### **Academic Faculty and their Research Interests:**

1. Dr. M. Veerendra Kumar, Professor

Neurocysticercosis; Clinical Electrophysiology; Advanced EMG.

### 2. Dr. S. R. Chandra, Professor

Cognitive and Behavioural Sciences; Dementia.

### 3. Dr. A. Nalini, Professor

Motor Neuron Disease; Neuromuscular Disorders.

### 4. Dr. Pramod Kumar Pal, Professor and Head

Parkinson's Disease and other Movement Disorders; Ataxias Psychogenic Movement Disorders; Human Motor Physiology including Transcranial Magnetic Stimulation; Genetics and Neuroimaging of Extrapyramidal Disorders.

### 5. Dr. Sanjib Sinha, Professor

Epilepsy; Sleep; Electroencephalography; Wilson's Disease; Magneto-encephalography.

### 6. Dr. Suvarna Alladi, Professor

Cognitive Neurology with reference to Alzheimer's Disease; Frontotemporal Dementia and Vascular Cognitive Impairment; Protective and Risk Factors for Cognitive Decline in Aging.

### 7. Dr. P. S. Bindu, Professor

Pediatric Neurology; Mitochondrial Disorders; Neurometabolic and Neurogenetic Disorders; Leukoencephalopathies.

### 8. Dr. P. S. Mathuranath, Additional Professor

Cognitive Neuroscience.

### 9. Dr. Girish Baburao Kulkarni, Additional Professor

Stroke; Headache; Neuroepidemiology.

### 10. Dr. Ravi Yadav, Additional Professor

Parkinsonism and Related Disorders; Headache; Neurocritical Care.

### 11. Dr. Netravathi M., Associate Professor

 $Demyelinating\ Disorders; Auto\ Immune\ Encephalitis; Pediatric\ Movement\ Disorders\ and\ Neuroinfections.$ 

### 12. Dr. Madhu N., Associate Professor

Inherited and Acquired Neuropathies; Mithochondrial Disorders; Neurogenetics; Immune Mediated Neurological Diseases viz. Guillain-Barre Syndrome and Myasthenia Gravis; Sleep; Magnetoencephalography.

### 13. Dr. Subasree R., Assistant Professor

Guillain-Barre Syndrome; Peripheral Neuropathy; Clinical Neurophysiology; Cognitive Neuroscience and Neuro-ophthalmology.

### 14. Dr. Ravindranadh Chowdary, Assistant Professor

Epilepsy; Electrophysiology (including VEEG and MEG); Stroke; Movement Disorders; Neuroimmunology.

### 15. Dr. Pooja M., Assistant Professor

Movement Disorders; Neuro-ophthalmology; Cognition.

### 16. Dr. Raghavendra K., Assistant Professor

**Epilepsy** 

### 17. Dr. Nitish Kamble, Assistant Professor

Movement Disorder

### 18. Dr. Srijithesh P R, Assistant Professor

Stroke

### 19. Dr. Saraswati Nashi, Assistant Professor

Neuromuscular Disorder

### **Department of Neuropathology**

The Department of Neuropathology encompasses the following sections:

- 1. Histopathology
- 2. Electron Microscopy
- 3. Human Brain Tissue Repository
- 4. Neuropathology Museum and
- 5. Autopsy Service Sections (Mortuary)

The department provides expert neuropathology services to neuroscientists within and outside the institute. The year 2016-17 saw an increasing demand for its diagnostic, teaching and research activities. The autopsy service is available at all hours to facilitate clinical autopsies. The histopathology section of the department has obtained the prestigious NABL (National Accreditation Board for Testing and Calibration Laboratories) Accreditation for Medical Laboratory as per ISO 15189:2012, and is currently the sole super specialty government histopathology laboratory with this credit.

The Histopathology section provides high quality diagnostic Neuropathology services. It serves as a nodal referral centre for several hospitals and Institutions throughout the country and abroad.

The Electron Microscopy section provides, the research facility, to Scientists and researchers across the country, contributes to the ultrastructural study of muscle, nerve, skin and brain tissues.

The department has a state-of-the-art mortuary which runs 24x7 and conducts clinical and medico-legal autopsies.

The Human Brain Tissue Repository (HBTR/Brain Bank), a unique national facility, provides tissues and fluids from normal and diseased states for researchers in the field of Neurobiology.

The Neuropathology Museum, with well-maintained specimens, is a star attraction for a large number of curious minds. The research activities of the faculty has translated into the establishment of newer tests and establishment of a self-sustaining advanced diagnostic facility for Neuromuscular, Autoimmune and Neuro-oncology diseases utilizing molecular and specialized serological testing.

Comprehensively, the department offers the much needed and appreciated resources and expertise for training Postdoctoral fellow (Postdoctoral Fellowship), DM and Ph.D. students. After successfully conducting the Postdoctoral Fellowship course in Neuropathology for more than a decade, the department has initiated the course of DM in Neuropathology for the first time in the country for capacity building and manpower development. The course started in July 2015 and the 3 DM students are pursuing the program. The department has also initiated 'Certificate course in Neuropathology Technology' from the academic year 2016-17.

### **Course Offered:**

1. Ph.D. in Neuropathology: Only External Fellowships

**Duration:** 3 – 5 Years

Minimum Qualification for Admission: MBBS; MD in Pathology; Master's Degree in Life Sciences

**Program of Study:** The student upon admission will be provisionally registered to the course. A Pre-Ph.D. examination is conducted within one year from the date of provisional registration. The registration is confirmed only after successfully completing the Pre-Ph.D. examination. As per curriculum, the student also has to undergo the various theory and practical training modules pertaining to the discipline that is conducted at the Institute for Ph.D. scholars. The Ph.D. course work of these scholars is closely monitored by a Ph.D. Doctoral committee, comprising internal and external experts, nominated by the institute. Successful completion of the Ph.D. course requires submission of the research work and acceptance of dissertation towards the award of the Doctoral Degree.

Research Facilities: A well-established Histopathology Laboratory for processing muscle, peripheral nerve, brain, spinal cord and other tissues with special stains, enzyme histochemistry and immunohistochemistry, Transmission Electron Microscopy Facility, Human Brain Tissues Repository (Human Brain Bank) for neurobiological studies and Diagnostic Molecular Pathology Laboratories constitute the major research facilities extended. Well-characterized brain tissues and CSF/serum collected from post mortem are frozen and archived in the Brain Bank are available for research. Facilities for research in neuro-oncology, neuromuscular disorders and autoimmune disorders are available in the Neuro-oncology/Neuromuscular Research Laboratories located in the Neurobiology Research Centre. Platforms for immunohistochemistry, fluorescent in-situ hybridization, tissue micro array, PCR and

advanced imaging, Immunoblots, Mitochondrial enzyme assays, DNA sequencing facility and Auto immune testing facility are some of the facilities available.

DM in Neuropathology: 02 Seats (01 seat for sponsored candidate) 2.

**Duration**: 3 Years

Minimum Qualification for Admission: DNB in Pathology; MD in Pathology

Program of Study: The students are trained in diagnostic, molecular and ultrastructural Neuropathology and are exposed to teaching and research activities. They also receive comprehensive training in related aspects of clinical and basic neurosciences. The students gain proficiency in diagnostic neuropathology by extensive exposure to large number of biopsies received for diagnosis. Participation in the clinicopathologic slide sessions and brain cutting conferences provides insight into clinical, radiological and therapeutic implications of diagnosis. Taking part in regular academic activities of the department augments their learning/teaching capabilities. The clinical autopsy rotations provide exposure and training in the techniques of brain removal, anatomy and evaluation of cause of death. The abundant surgical and autopsy material provides ample opportunity for research. The program is aimed at holistically nurturing the students to gain expertise in diagnostic neuropathology, to carry out research and imparting teaching, thus enhancing capacity building in the nation in the field of Neuropathology.

Postdoctoral Fellowship in Neuropathology: 03 Seats (01 seat for Sponsored) 3.

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Pathology; MD in Pathology

**Program of Study:** The fellows are trained in diagnostic, molecular and ultrastructural Neuropathology. They actively participate in routine work, assist in diagnosis, undertake autopsies and participate in teaching sessions of Neuropathology department and allied departments. Adequate diagnostic and research facilities are available for the students.

Diagnostic and Research Facilities: Well-established Histopathology Laboratory for processing muscle, peripheral nerve, brain, spinal cord from human and animal origin with special stains (Human Brain Bank) and Immunohistochemistry, Transmission Electron Microscopy Facility, Human Brain Tissue Repository for Neurobiological Studies and a Diagnostic Molecular Pathology Laboratory are available. Clinical / autopsies are regularly carried out for establishing the cause of death and progression of the disease. Wellcharacterized brain tissues and CSF/serum collected from post-mortem are frozen and archived in Brain bank are available for research. Facilities for research in neuro oncology and neuromuscular disorder are available in the Neuro-oncology/Neuromuscular research laboratory located in the Neurobiology Research Centre. Other facilities available include platforms for immunohistochemistry, fluorescent insitu hybridization, tissue micro array, PCR, advanced imaging, immunoblots, mitochondrial enzyme assays, auto immune tests and molecular genetics.

### 4. Certificate Course in Neuropathology Technology: 02 Seats

**Duration:** 1 Year

**Minimum Qualification for Admission:** B.Sc. with MLT/Life Sciences; DMLT(with one year experience) with a minimum of 50% aggregate marks

Mode of Selection: Minimum 50% aggregate marks, highest marks in qualifying examination

**Program Structure:** The program will provide the aspirants with theory knowledge and practical skills in specialized histopathology techniques with special reference to neuropathology and electron microscopy.

Students enrolled in this program will participate in a curriculum designed to expose them to the everyday workflow of a Neuro-histopathology Laboratory and teach them the knowledge and skills necessary to work as a fully competent Histopathology Technician with expertise in Techniques and other specialized techniques such as immunohistochemistry, electron microscopy quality control & quality assurance, laboratory safety, audit and inventory management. The program awards a certificate after completing the program.

### **Academic Faculty and their Research Interests:**

### 1. Dr. Vani Santosh, Professor and Head

Molecular Neuro Oncology; Pathology of Cerebrovascular Disorders.

### 2. Dr. T. C. Yasha, Professor

Pathology of Peripheral Nerves; Neurodegenerative Diseases; Pathology of Neurometabolic Disorders.

### 3. Dr. N. Gayathri, Professor

Neuro Muscular Diseases; Neuro Metabolic Disorders; Ultrastructural Pathology.

### 4. Dr. Anita Mahadevan, Additional Professor

Neuroinfections; Peripheral Neuropathology; Epilepsy; Developmental Disorders of CNS; Fetal Neuropathology; Brain Banking.

### 5. Dr. B. K. Chandrasekhar Sagar, Additional Professor

Ultrastructural Neurobiology; Developmental Neurobiology; Ultrastructural Pathology.

### 6. Dr. Nandeesh B.N., Assistant Professor

Neuroncology; Neuromuscular Disorders; Enteric Nervous System and Ultrastructural Neuropathology.

### **Department of Neurosurgery**

The Department of Neurosurgery is one of the premier neurosurgical training centres in the country. The department provides quality patient care, provides one of the most comprehensive neurosurgical residency programs and is involved in cutting edge basic and translational research. The residency program aims to equip the next generation of neurosurgeons with contemporary neurosurgical skills and foster a healthy research interest.

### **Course Offered:**

1. M.Ch. in Neurosurgery: Total-10 Seats; 04 Seats for Post MBBS and 06 Seats for Post MS/DNB – Within this 01seat for reserved for sponsored candidate.

\*If sponsored candidates are not available, it will go to the general pool

Duration: 6 years for post MBBS candidates (Junior Resident for 3 Years and Senior Resident for 3 Years) 3 years for post MS/DNB candidates (Senior Resident for 3 Years)

Final M.Ch. examination will be held at the end of 5 years for Post MBBS course and at the end of 3 years for Post MS/DNB course. The students of Post MBBS course will be eligible for award of M.Ch. certificate only after completion of 3 years of Senior Residency

Minimum Qualification for Admission: DNB in General Surgery; MS in General Surgery; MBBS

**Training facilities:** There are 7 functioning neurosurgical theatres which host the most advanced surgical equipment. Gamma Knife Unit is unique to South India which caters to patients of India and abroad. The program offers comprehensive training in all aspects of neurosurgical care. A state-of-the-art microneurosurgical lab with dedicated microscopes and endoscopes is available for a structured training in neurosurgical procedures.

Contemporary neurosurgical procedures for cerebrovascular diseases, endoscopic surgery, skull base surgery, epilepsy and surgery for movement disorders are performed on a regular basis.

### **Academic Faculty and their Research Interests:**

### 1. Dr. B. Indira Devi, Professor

Peripheral Nerve Surgery; Skull Base Surgery; Craniovertebral Junction Surgery; Neurotrauma and Rehabilitation.

### 2. Dr. S. Sampath, Professor

Endoscopic Vascular Surgery; Extended Endoscopic Skull Base Surgery; Endoscopic Transcranial Surgery; Skull Base Surgery; Cerebrovascular Surgery; Gamma Knife Radiosurgery and Spinal Instrumentation.

### 3. Dr. Malla Bhaskara Rao, Professor and Head

Epilepsy Surgery.

### 4. Dr. Dhananjay I Bhat, Professor

Cerebrovascular Surgery; Endoscopic Neurosurgery; Skull Base Neurosurgery; Peripheral Nerve Surgery; CVJ and Complex Spine Surgery; GKRS.

### 5. Dr. Dwarakanath Srinivas, Professor

Cerebrovascular Surgery; Skull Base Surgery; Movement Disorder Surgery; Paediatric Neurosurgery; GKRS.

### 6. Dr. Dhaval Shukla, Professor

Endoscopic Neurosurgery; Cerebrovascular Surgery; Skull Base Surgery; Peripheral Nerve Surgery; Paediatric Neurosurgery; Neurotrauma and Neurocritical Care.

### 7. Dr. A. Arivazhagan, Additional Professor

Neuro-endoscopy; Skull Base Surgery; Neuro-oncology; Functional Neurosurgery.

### 8. Dr. Nupur Pruthi, Additional Professor

Cerebrovascular Surgery; Craniovertebral Junction and Spine

### 9. Dr. Kannepalli Venkata Laxmi Narasinga Rao, Additional Professor

Cerebrovascular Surgery; Complex Spine Surgery; Neuro-Endoscopy

### 10. Dr. V. Vikas, Associate Professor

Neurosurgical Robotics; Neuro-oncology; Skull Base; Cerebrovascular Surgery; Artificial Intelligence, Medical Device Design.

### 11. Dr. A. R. Prabhu Raj, Assistant Professor

Neuro-oncology, Complex Spine Surgery, GKRS, Head Injury

### 12. Dr. Manish Beniwal, Assistant Professor

Neuro-oncology; Neuro-endoscopy; Head Injury

### 13. Dr. Nishanth Sadashiva, Assistant Professor

Neuro-oncology; Complex Spine Surgery

### 14. Dr. Subhas Kanti Konar, Assistant Professor

Paediatric Neurosurgery, Vascular Surgery, Neuro-oncology and Gamma Knife

### 15. Dr. Abhinith Shashidhar, Assistant Professor

Neuroendoscopy, Neuro-oncology, Image Guided Surgery & Trauma

### **Department of Speech Pathology and Audiology**

The main activities of the Department of Speech Pathology and Audiology are in the domains of clinical service, training and research. The department has been contributing to manpower development programs in the country through its internship program for graduates in speech and hearing, and allied sciences. The department is most sought after for this program as evident from the large number of applications for internship training. The department's contribution to national and international programs is through membership in the advisory councils of several organizations as well as through multidisciplinary research projects.

### **Course Offered:**

Ph.D. in Speech Pathology & Audiology: 01 seat \*under Institute Fellowship\*Candidates with external fellowship are also eligible

**Duration**: 3 – 5 Years

**Minimum Qualification for Admission:** Master's Degree in Speech Pathology & Audiology / Speech-Language Pathology / Audiology.

Candidates appearing for the entrance test are expected to answer multiple choice questions (MCQs). The MCQs cover the areas of Speech Language Pathology and Audiology as well as Neurology, Psychiatry, Neurophysiology, Neuropathology, Research Methods, Statistics and Genetics related to Speech and Hearing.

**Program of Study:** The candidate admitted to the program will be thoroughly trained in clinical and theoretic aspects of the field of Speech-Language Pathology and Audiology. However, the emphasis of theoretical training will be on the topics related to the doctoral program. This is in addition to the training program that the candidate has to undergo which is stipulated by the Institute. The department has full-fledged laboratories for work in the areas of Speech-Language Pathology and Audiology. The strength of the department is in the number and variety of the clinical population it caters to.

**Research Facilities:** Full-fledged speech pathology and audiology laboratory; multidisciplinary interaction; excellent clinical material in the area of neuropsychiatric communication disorders.

### **Academic Faculty and their Research Interests:**

1. Dr. N. Shivashankar, Professor & Head

Clinical Neuroaudiology, Central Auditory Processing Disorders, Adult and Childhood Speech-Language Disorders.

### 2. Dr. V. P. Vandana, Associate Professor

Neurogenic Communication Disorders, Autism, Dysarthria, AAC, Neuroimaging Studies of Speech-Language.

### 3. Dr. B. K. Yamini, Associate Professor

Neurogenic Communication Disorders, Neurogenic Dysphagia, Childhood Communication Disorders.

### **Department of Transfusion Medicine and Haematology**

The Department of Transfusion Medicine and Haematology consists of two sections:

- 1. Transfusion Medicine Centre (TMC), situated in the Neurocentre.
- 2. Clinical Pathology and Haematology section (CPH), situated on the first floor of Silver Jubilee Emergency Block.

Both the sections function round-the-clock and 365 days a year.

TMC is involved in procurement of blood from blood donors at in-door and from outdoor camps, splitting the blood into different components like packed red cells, platelet concentrate and fresh frozen plasma etc., and subject all the donated blood for mandatory tests for HIV<sub>1&2</sub>, Hepatitis B, Hepatitis C, Malaria and Syphilis. NAT test for HIV<sub>1&2</sub>, Hepatitis B and Hepatitis C is being tested in common facility at Bowring & Lady Curzon Hospital, Bengaluru, for Government Hospitals of Karnataka, which complements ELISA Testing.

TMC is also involved in therapeutic procedures like plasma exchange and phlebotomy thereby helping the neurologist.

Transfusion Medicine Centre, recognized as a training centre for Karnataka, conducts induction, refresher and blood quality management training for Blood Banks of the state, mainly National AIDS Control Organization (NACO) assisted. TMC also regularly conducts training for Blood Storage Centres (BSCs) of Taluk level Hospitals or First Referral Units (FRUs).

TMC is involved in research in immunohematology and transfusion medicine.

CPH section processes the blood samples for

- Complete Blood Count, Peripheral Smear, ESR, Sickling test, Reticulocyte Count, Saline Dilution test for Acanthocytes
- ii. Bone Marrow Study
- iii. Routine Urine Examination
- iv. Routine Stool Examination.

The tests done in CPH are accredited by National Accreditation Board for Testing and Calibration Laboratories(NABL) as per the guidelines of both ISO: 15189:2007 and 2012.

The department is running one year Postdoctoral Fellowship program in Transfusion Medicine for the last two years. The department houses various facilities like blood component preparation, apheresis and automated immunohematology and ELISA equipment: automated and semi-automated, for this program.

TMC is doing a project funded by Government of Karnataka: NHM-NVBDCP Project. The aim of the program is to provide single donor platelet to patients admitted in any hospital in Karnataka, at an affordable cost of Rs. 8,500, 24 hours a day.

A large number of blood donation camps are held to procure blood from voluntary blood donors. More than fifteen thousand units of blood are procured per year, and processed and issued for transfusion to various wards and other hospitals in and around Bengaluru.

In addition, a large number of therapeutic plasma exchanges are carried out for various neurological conditions.

NACO and National Blood Transfusion Council (NBTC) have identified TMC as training centre for the state of Karnataka. TMC conducts several training programs for blood bank officers, technologists and nursing staff working in blood banks throughout the state of Karnataka. TMC also provides training for staff of Blood Storage Centres (BSCs) throughout the state; several private blood banks – stand alone, hospital and medical college based, utilize and benefit training from TMC.

### **Course Offered:**

1. **Postdoctoral Fellowship in Transfusion Medicine:** 02 Seats (01 seat for sponsored candidate)

**Duration:** 1 Year

Minimum Qualification for Admission: DNB in Anaesthesia / Emergency Medicine / Medicine / Microbiology / Pathology / Paediatrics; MD in Anaesthesia / Emergency Medicine / Medicine / Microbiology / Pathology / Paediatrics or any other clinical equivalent degree recognized from a recognized institution in India

**Program of Study:** The candidate will work full time in the Transfusion Medicine Centre (TMC), actively participating in Counselling, screening and bleeding of voluntary blood donors, therapeutic procedures that include phlebotomy and therapeutic plasma exchange, blood component separation, screening for

transfusion transmitted infections and other blood safety activities and other responsibilities similar to Senior Resident including participation in teaching and training activities of the centre. The course content will be such as to cover training in all related disciplines of transfusion medicine. A short posting will be done in other hospitals where specific facility relevant to transfusion medicine is available.

**Clinical and Research Facilities:** TMC and the blood component separation facility is licensed by DCI and is recognized by NACO as a training centre. The TMC is well equipped with state-of-the-art equipment necessary for therapeutic activities and blood safety.

### **Academic Faculty and their Research Interests:**

- Dr. Sundar Periyavan, Professor and Head Immuno-haematology; Therapeutic Aphaeresis
- 2. Dr. Vijay Kumawat, Assistant Professor

# GENERAL INFORMATION AND INSTRUCTIONS

# **General Instructions**

- 1. Application should be submitted through the online mode (only) along with all the enclosures and photograph.
- 2. All claims made in the application must be supported with documentary proof in original along with a set of photocopies at the time of interview/counselling.
- 3. Candidates called for ONLINE Entrance Test will have to make their own arrangements for travel and stay at the respective city where the test is conducted. Candidates called for interview/counselling will have to make their own arrangements for travel and stay at Bengaluru, if required. No TA/DA will be paid by NIMHANS.
- 4. Eligible candidates for ONLINE Entrance Test can download the e-hall ticket online to produce at the time of Entrance Test.
- 5. No individual intimation will be sent to candidates who are not selected and no correspondence on this subject will be entertained.
- 6. Any changes in date, time, venue and or schedule of the ONLINE Entrance Tests, Counselling, and Interview will be announced on the website and notice boards of the Institute, no individual intimation will be given to the candidates.
- 7. List of all the qualified candidates and those called for interview/counselling will be notified on the Institute's website and notice board. 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 matters regarding selection will be final and no representation in any form will be entertained.
- 8. The candidates are requested to keep themselves updated by visiting the website regularly from time to time or keeping in touch with the Academic Section of NIMHANS on 080-26995013.
- 9. The rules and regulations in this prospectus are subject to change in accordance with the decision of the Institute from time-to-time.
- 10. All courses are conducted on a full time basis. Private practice in any form is prohibited. The candidates are strictly not permitted to undertake any other part time or correspondence courses.
- 11. All candidates admitted to the Institute shall maintain good conduct, attend their classes regularly and abide by the regulations of the Institute.

- 12. Selected candidates should submit Transfer Certificate (from the College/Institute where the last qualification is attained) and migration Certificate (from the University to which the College/Institute is affiliated where the last qualification is attained) and at the time of joining the Institute.
- 13. Employees of State or Central Government or of any Public Sector Undertaking of State or Central Government should send their applications through their employers. However, the advance copy of the application (complete in all respects) can be submitted. In case the application is not received through the employer before the date of the ONLINE Entrance Test, a NO OBJECTION CERTIFICATE from the employer should be produced at the time of interview/counselling failing which the candidate will not be allowed to appear for interview/counselling.
- 14. 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.200/-. The bond, duly completed in all respects, shall be submitted at the time of joining, failing which they will not be allowed to join the course. Similarly, all candidates for Ph.D., M.Phil. and M.Sc. in Psychiatric Nursing are required to submit a bond on a non-judicial stamp paper of the value of Rs.200/-. The bond, duly completed in all respects, shall be submitted at the time of joining, failing which they will not be allowed to join the course. A sample Copy of the bond in available at the end of the Prospectus. Selected candidates must join the course, after paying the necessary fees on or before the date 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.
- 15. In case any candidate is found to have supplied false information or a false certificate or is found to have withheld or concealed some information, he/she shall be debarred from continuing the course and shall face such appropriate action initiated against him/her by the Director of the Institute.
- 16. A candidate can apply for a maximum of 3 (three) courses only. MD in Psychiatry, Ph.D. in Clinical Neurosciences, DM in Neurology and M.Ch. in Neurosurgery are all treated as separate courses.
- 17. As per the Circular Ref. No. KMC C.R./2014 dated 18.01.2014 from Karnataka Medical Council, all candidates admitted to NIMHANS for various courses, must write to Karnataka Medical Council to obtain Permanent Registration Certificate and submit it to AO(Academic & Evaluation Section) before the commencement of the course.
- 18. All the candidates applying for admission to a course at NIMHANS have to give the following declaration: "I fulfill all the eligibility criteria and I am applying for the courses at NIMHANS. I understand that my candidature will be cancelled, if I am found to have given wrong information. I also substantiate my claim by attaching necessary certificates".

- 19. The decision of the Director of the Institute shall be final in all matters of selection of candidates for admission to the various courses and no appeal shall be entertained on this subject.
- 20. All the selected candidates should produce a certificate stating that they are Medically fit for the course they are selected for by a competent authority.

### **Accommodation**

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

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

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

# **Categories of Students**

### **Indian Nationals**

### i. Unreserved/General:

All Indian Nationals except those under reserved categories including **Overseas Citizen of India (OCI)** are considered under this category.

Overseas Citizen of India (OCI) candidates who are registered under Section 7A of Citizenship Act 1955 are eligible to apply under this category and all terms and conditions applicable for Indian Nationals will be applicable to such candidates. Such candidates will submit proof of Registration as OCI under Section 7A of Citizenship Act 1955 to be eligible to appear for Online Entrance Test.

### ii. Other Backward Classes:

Indian Nationals belonging to Non-Creamy Layer of various communities as per the Gazette Notification issued by Government of India from time to time, are considered under this category.

For more information, kindly visit the following link to see the Central list of OBC: http://www.ncbc.nic.in/User\_Panel/CentralListStateView.aspx.

Candidates belonging to Non-Creamy Layer of various Caste/Communities designated as OBC, should be in possession of OBC Certificate (Format enclosed) issued by the following Gazetted Officers should be uploaded in the online application form:

- a. District Magistrate/Additional Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/Deputy Collector/1st Class Stipendiary Magistrate/Sub-Divisional Magistrate/ Taluka Magistrate/Executive Magistrate/Extra Assistant Commissioner (not below the rank of 1st Class Stipendiary Magistrate).
- b. Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate.
- c. Revenue Officer not below the rank of Tehsildar and
- d. Sub-Divisional Officer of the area, where the candidate and/or his or her family resides.

The candidates must upload/attach while filing the Online Application Form and produce a certified English Translation Copy of the Caste Certificate during the Counselling, if the Caste Certificate is in Regional Language.

### iii. Scheduled Caste (SC)/Scheduled Tribe (ST):

Indian Nationals belonging to Scheduled Caste (SC) or Scheduled Tribe (ST) as per the Gazette Notification issued by various State Governments or Government of India from time to time, fall under this category.

Candidates belonging to SC or ST should be in possession of SC/ST Certificate issued by Gazetted Officers of various State Governments or Government of India and the SC/ST Certificate should be uploaded in the Online Application Form. The candidates must upload/attach/produce a certified English Translation Copy of the Caste Certificate, if the Caste Certificate issued is in Regional Language.

### iv. External Fellowship

### a) For Ph.D. Program-

Candidates with sponsorship / deputation from Government of India / State Govt. Institutions / Universities, candidates with Fellowships from Government Agencies like UGC, CSIR, ICMR, DBT, AYUSH (specific reference to courses in Yoga and Ayurveda) (JRF / SRF only) etc., permanent employees / tenured employees of NIMHANS\*and candidates sponsored by NGO's can apply for Ph.D. in the various departments of this Institute. However, such applications will be considered at the discretion of the competent authority at NIMHANS for permitting them to appear for Entrance Test and interview.

Candidates who have cleared the UGC, CSIR, ICMR, DBT and AYUSH (specific reference to courses in Yoga and Ayurveda) (JRF/ SRF only) qualifying exams are exempted from entrance test. All other candidates should clear the Online Entrance Test with minimum of 50% Marks to become eligible for Interview.

All the candidates who are selected for appearing before selection committee for Interview are required to qualify by obtaining a minimum of 50% marks to be eligible for admission to a Ph.D. course. Mere qualifying in Entrance test and interview does not entitle admission to a Ph.D. course. Selection is subject to availability of eligible guides in the respective departments.

The admitted students have to work on full-time basis for a minimum period of three years. Entrance test and interview for selection of candidates for Ph.D. courses will be held in the months of March and June under Phase 1 and October and November under Phase 3 in an Academic Year.

The candidates pursuing Ph.D. programme will be provided 2 extensions of 6 months each at the end of the stipulated 5 years of course duration, subject to the approval of the competent authority.

\*Employees of NIMHANS applying for Ph.D. should have at least 10 years of service left before registering for Ph.D.

### v. Sponsored/Deputed Candidates:

Indian Nationals who are permanent employees sponsored by the State/Central Government or Public Sector undertakings of State/Central Government, fall under this category.

Sponsored Candidates should keep the following points in mind while applying:

- a. Minimum qualification for sponsored/deputed candidates will be the same as indicated for all the respective courses. Age should not be more than 45 years as on the date of commencement of courses in case of sponsored / deputed candidates.
- b. Sponsored / deputed candidates should also qualify in the entrance test.
- c. Application can be forwarded by immediate superior officer. However, the sponsorship / deputation letter from the competent authority has to be furnished by the candidate at the time of counselling. The candidature of applicants failing to produce sponsorship / deputation letter at the time of counselling will be treated as cancelled and not allowed for counselling.
- d. Sponsorship for Foreign Nationals to pursue Ph.D. course is permitted only from Governmental Organizations, recognized Universities and National Scholarships of any reputed/recognized organization. Candidates sponsored by NGO's also can apply, however such applications will be considered at the discretion of the competent authority at NIMHANS for permitting them to appear for Entrance Test and interview. No other source of funding will be considered.
- e. The candidate should produce the sponsorship / deputation certificate in the prescribed format as provided in the Prospectus. The course/s for which the candidate is being sponsored should be clearly specified in the sponsorship certificate by the sponsoring authority.
- f. 10% relaxation in the qualifying marks of the Entrance Test will be given for all Sponsored/ Deputed Candidates applying for Postdoctoral Fellowship courses.
- g. Sponsored candidates from State Government / Government of India are not eligible for any stipendiary benefits.
- h. If any communication is received from Parent department/office of a sponsored applicant/candidate withholding permission to appear for the online entrance test or admission to the course, the candidature/admission of such candidates will be cancelled, and no further correspondence in this regard will be entertained.

## **Foreign Nationals**

All foreign nationals (holding passports of countries other than India) and non-resident Indians should apply under "Foreign National" category.

They shall appear for a common entrance test along with the other candidates.

Admission will be subject to the candidate qualifying in the online entrance test and obtaining "No Objection Certificate for pursuing the course applied" from Government of India.

Students possessing foreign qualifications who intend to seek admission to academic courses at NIMHANS are required to apply for an EQUIVALENCE CERTIFICATE from the Association of Indian Universities and NOC from Medical Council of India, immediately after the merit list of the online entrance test is announced, to facilitate their admission to the course.

Sponsorship for Ph.D. for Foreign Nationals is permitted only from Governmental Organizations and recognized Universities; and National Scholarships from reputed/recognized organizations will only be considered. No other source of funding will be considered.

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

- i. The candidate should submit degree/diploma certificate together with year-wise academic transcript / mark sheet duly authenticated by Indian Mission abroad / concerned foreign Mission in India.
- ii. Accreditation status of the degree awarding foreign University/authority.
- iii. 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 programs / courses conducted in India.

For obtaining temporary registration number, foreign students (who have qualified in the Online Entrance Test) having medical degrees should contact, the , Secretary, Medical Council of India, Pocket-14, Sector - 8, Dwarka Phase –I, New Delhi – 110 077..

Foreign Nationals are required to route their application through the Ministry of Health and Family Welfare, Government of India, New Delhi. All Foreign Nationals should register their MBBS Degree in the Medical Council of their respective countries and will have to take prior permission from the Medical Council of India (MCI) before applying for PG Courses in the Institute. An advance copy must be submitted at NIMHANS before the last date of receipt of applications. However applications of such candidates will be processed after receipt of the same through diplomatic channels. These candidates are also required to appear in the entrance examination along with other candidates. In the event of selection, the candidates have to apply for temporary registration with Medical Council of India (MCI) for the duration of postgraduate study.

# **Eligibility Criteria**

### **Medical Courses**

- i. MBBS degree from a recognized University or from any other University recognized as equivalent thereto by NIMHANS and by the Medical Council of India.
- ii. The candidate should have completed compulsory rotation internship of one year after MBBS or its equivalent as recognized by Medical Council of India on or before the date of commencement of course. A certificate to that effect has to be produced. The candidate should have permanent registration with State Medical Council. Candidates who do not submit the certificate of completion of internship on the day of admission to the course will not be admitted under any circumstance.
- iii. 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 on or before the date of admission to the course.

### **Non-Medical Courses**

- i. Candidates with M.Sc. / MA/ MSW/ BAMS / BE/ B.Tech/ B.Sc. should have passed the requisite examination from a University recognized by the University Grants Commission (UGC) or the Rehabilitation Council of India (RCI) with not less than 55% of marks in aggregate on or before the date of Counselling/interview. Candidates who have appeared for the qualifying examination and are awaiting results, may also apply. However, such candidates will be eligible to appear for the Counselling/interview only if they produce the proof of having passed the examination in writing.
- ii. In case, grades are awarded in lieu of marks in the qualifying examination, candidates have to produce a certificate from the University clearly stating the range of marks into which each of the grades fit, failing which, such applications will be rejected.
- iii. 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. Program.
- iv. Candidates with PUC or 10 + 2 with Physics, Chemistry, Biology and English with 45% aggregate in the above subjects can apply for B.Sc. in Nursing course.
- v. Candidates with PUC or 10 + 2 with English, Physics, Chemistry, Mathematics and Biology or job oriented diploma courses from a recognized board with an aggregate of 45% can apply for B.Sc. in Radiography course.
- vi. Candidates with PUC or 10 + 2 or equivalent with a Science group having secured an aggregate of 45% in Science subjects for B.Sc. in Anaesthesia Technology course.
- vii. A relaxation of 5% marks in aggregate will be given for candidates belonging to SC/ST category.

# **Reservation of Seats**

- Reservation Roster prescribed by the Government of India will be followed for each course as applicable.
   If suitable candidates are not available under the reserved category, they will be filled up by General category candidates.
- 2. Number of seats and reservation may vary from time to time as per the directions of the Government of India through relevant notifications.
- 3. There is no reservation of seats for superspeciality courses.
- 4. Nine seats in MD in Psychiatry (1 for sponsored) and three seats in M.Phil.in Clinical Psychology are reserved for domiciles of Karnataka State.
- 5. Six seats in MD in Psychiatry are reserved for domiciles of Arunachal Pradesh, Chhattisgarh, Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, & Uttarakhand.
- 6. 65% of seats in all B.Sc. courses are reserved for domiciles of Karnataka State.
  - Domicile Certificate has to be produced from the respective state without fail, certified translation copy in English has to be produced if the Domicile Certificate is in the Language of the state by the issuing authority.
- 7. 5% of the seats are reserved for persons with disability (above 40% and less than 70%) as per Government of India regulations. However, this will not apply for Nursing, DM in Neurology, DM in Child & Adolescent Psychiatry, DM in Neuroimaging and Interventional Radiology, DM in Neuropathology, DM in Addiction Psychiatry, DM in Geriatric Psychiatry, DM in Neuroanaesthesia, and M.Ch. in Neurosurgery and all Postdoctoral Fellowship courses.

Age is relaxable by a maximum of 5 years in the case of PWD candidates as on the date of commencement of course (check PWD block under reservation of seats section for more information).

All provisions as per the PWD Act 2016 are applicable.

The confirmed admission shall be given to candidate subject to fitness on medical examination duly constituted by Medical board involving the faculty from relevant discipline.

Vacant seat, if any under PWD, shall be offered to the candidate from the general/relevant category.

### Note:

To claim that candidates are residents/domiciles of Karnataka State, he/she should produce a certificate from the Tehsildar 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. Candidates submitting Domicile Certificate in any other language than English need to provide a certified Translation of the Certificate at the time of the Counselling/Interview.

# **Age Limit**

- 1. 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.
- 2. Age is relaxable by a maximum of 5 years in the case of SC/ST candidates and by a maximum of 3 years for OBC candidates as on the date of commencement of course except for Superspeciality courses.
- 3. Age should not be more than 45 years as on the date of commencement of courses in case of sponsored/deputed candidates.
- 4. For B.Sc. in Nursing, B.Sc. in Radiography and B.Sc. in Anaesthesia Technology courses, age of the candidates should be between 17 and 25 years as on the date of commencement of course.
- 5. The maximum age limit for applying to M.Sc. in Biostatistics course is 30 years and relaxable by a maximum of 3 years for OBC candidates as on the date of commencement of course
- 6. Employees of NIMHANS applying for Ph.D. should have at least 10 years of service left before registering for Ph.D.
- 7. Age is relaxable by a maximum of 5 years in the case of PWD candidates as on the date of commencement of course (check PWD block under reservation of seats section for more information).

# **Guidelines for Online Entrance Test and Counselling**

Phase 1 Ph.D., Superspecialty, Postdoctoral, Postgraduate Postgraduate Diploma Courses	
Date of Online Entrance Test:	23.03.2018 to 25.03.2018 (Tentative Dates)
Venue:	7 cities with multiple test centres in each city *
Type:	Computer Based Test-Online Multiple Choice Questions (MCQs)
Duration of Online Entrance Test:	90 Minutes
Marking Scheme:	1 Mark for correct Answer Minus 0.25 Mark for Incorrect Answer
Total number of questions:	100 Questions
Cut-off Percentage in Online Entrance Test:	Postgraduate Courses- UR/OBC -50% & SC/ST - 45% Super-speciality Courses- UR/SC/ST/OBC- 50% Ph.D. Courses- UR/SC/ST /OBC- 50%
Phase 2 B.Sc. and DCNT/DPN/DNN/CCNT Courses	
Date of Online Entrance Test:	24.06.2018
Venue:	4cities with multiple test centres in each city *
Type:	Computer Based Test -Online Multiple Choice Questions (MCQs)
Duration of Online Entrance Test:	90 Minutes
Marking Schemes:	1 Mark for correct Answer Minus 0.25 Mark for Incorrect Answer
Total number of questions:	100 Questions
<b>Cut-off Percentage in Online Entrance Test:</b>	UR/OBC -50% & SC/ST- 45%

Phase 3 Ph.D. Courses for candidates with External Fellowship along with permanent employees/tenured employees of NIMHANS only	
Date of Online Entrance Test:	28.10.2018
Venue:	NIMHANS Campus (1 test centre)
Type:	Computer Based Test -Online Multiple Choice Questions (MCQs)
<b>Duration of Online Entrance Test:</b>	90 Minutes
Marking Schemes:	1 Mark for correct Answer Minus 0.25 Mark for Incorrect Answer
Total number of questions:	100 Questions
Cut-off Percentage in Online Entrance Test:	UR/SC/ST /OBC- 50%

- \* In the event of unforeseen problem/force majeure, a re-exam will be held at a later date only for those who attended the abandoned exam. NIMHANS reserves the right to decide whether the re-exam relates to one or more cities, or one or more centre, or one or more courses
- 1. A candidate has to select three cities, for taking the examination, in the order of priority, i.e., first, second and third choices. There may be multiple test centres in the cities mentioned in the table and NIMHANS reserves the right to distribute applicants to any test centres. However, the choice of city for taking examination, or the centre in a given city, cannot be claimed as a matter of right. Under exceptional circumstances like lack of minimum number of applicants for a given centre in a given city, NIMHANS reserves the right to cancel the choice of city / centre.
- 2. Common Entrance Test will be conducted for
  - i. 8 Postdoctoral Fellowship courses under Psychiatry (except Postdoctoral Fellowship in Geriatric Psychiatry and Postdoctoral Fellowship in Addiction Psychiatry Courses) in two stages:

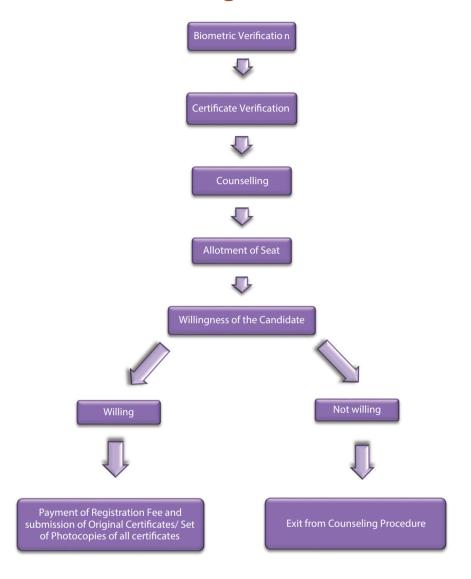
First Stage-Multiple Choice Questions (MCQ): Match the Following / True or False - 80 Marks

Second Stage-Clinical / Practical / Lab Based Assessment (OSCE) – 20 Marks

and choice of course will be given to candidates based on the order of merit in the entrance examination those i.e., the candidate securing highest marks will have the first option of selecting any of the 10 Postdoctoral Fellowship courses.

- ii. 5 Postdoctoral Fellowship courses under Neurology and choice of course will be given to candidates based on the order of merit in the entrance examination those i.e., the candidate securing highest marks will have the first option of selecting any of the 5 Postdoctoral Fellowship courses.
- iii. DM in Neuroanaesthesia and Postdoctoral Fellowship in Neuroanaesthesia courses.
- iv. DM in Neuropathology and Postdoctoral Fellowship in Neuropathology Courses.
- v. DM in Child and Adolescent Psychiatry and Postdoctoral Fellowship in Child and Adolescent Psychiatry Courses.
- vi. DM in Geriatric Psychiatry and Postdoctoral Fellowship in Geriatric Psychiatry Courses.
- vii. DM in Addiction Psychiatry and Postdoctoral Fellowship in Addiction Psychiatry Courses.
- 3. There will be a common entrance test for candidates appearing for undergraduate courses, i.e., B.Sc. in Nursing, B.Sc. in Anaesthesia Technology and B.Sc. in Radiography.
- 4. Separate ONLINE Entrance Tests will be conducted for
  - i. DM in Neurology with PG qualification.
  - ii. M.Ch. in Neurosurgery courses with PG qualification.
    - Candidates possessing PG qualification in Medicine (MD/DNB) and Surgery (MS/DNB) will be considered only under PG category for admission to DM in Neurology and M.Ch. in Neurosurgery courses, respectively. If any candidate applies under the MBBS category, then his/her their candidature will be disqualified.
  - iii. Separate online entrance test will be conducted for MD in Psychiatry, DM in Neurology and M.Ch. in Neurosurgery courses for candidates with MBBS qualification from Academic Year 2018-19.
  - iv. Separate online entrance test will be conducted for M.Phil. in Biophysics, M.Phil. in Neurosciences and M.Phil. in Neurophysiology Courses.
- 8. Separate entrance tests will be conducted for all other courses offered at NIMHANS.
- 9. A mock test demo will be hosted on the NIMHANS website 15 days prior to the Online Entrance Test. The Online Entrance Test will be conducted for 2 days at all the test centres across the country.
- 10. In the event of unforeseen problem/force majeure, a re-exam will be held at a later date only for those who attended the abandoned exam. NIMHANS reserves the right to decide whether the re-exam relates to one or more cities, or one or more centre, or one or more courses.
- 11. Possession/use of mobile phones/spy cameras/ Bluetooth and any other electronic devices is strictly prohibited on the premises of NIMHANS entrance test centres and candidates shall be liable for penal action for any such act.

# **Counselling Procedure**



### **Detailed Counselling Procedure:**

- 1. After the Online Entrance Test, a list of candidates qualified for Counselling in the order of merit will be announced both on the website and the notice board of the Institute with the details of venue, date and time of counselling.
- 2. Biometric Verification—both finger print and photo verification, of all the candidates who attend counselling will be performed. Therefore, all candidates so named in the Merit List for Counselling are required to be physically present in person on the day of Counselling.

No form of representations on behalf of any candidate/s will be entertained on the day of Counselling. If a candidate does not attend Counselling on the designated day as per the Counselling Schedule

announced, will be marked as absent and his/her candidature for the admission process will be cancelled. Such candidates will not be considered for the purpose of operating waiting list for the particular course/s.

- 3. After Biometric Verification of the candidate has been performed, candidates will be instructed to produce original certificates/documents for verification.
  - a) A candidate should produce all necessary documentary proof of all claims made in the online application form.
  - b) Tie-breaking exercise will be carried out during this stage, hence a candidate who has been tied with other candidate/s will be informed of the rank or the status of the tie after this stage. Tie-breaking rules are detailed in Method of Selection Section.
  - c) Candidates without proper documentation to support claims made in the Online Application Form, will be disqualified from Counselling Process.
- 4. Candidates who qualify after Biometric Verification and Certificates Verification, will be called for Counselling in the order of merit under the particular course. Such candidates shall appear before a Selection Committee during this stage.

The Selection Committee shall decide upon the candidature of the candidate and allot seat according to the respective category based on the merit.

- 5. After the candidate has been allotted seat under the category which he/she has been selected for Counselling, a candidate can either accept or reject the seat allotted to him/her.
  - a) If a candidate accepts the seat allotted:
    - i. He/she is required to submit the Original Certificates/Documents as per the directions provided during the Counselling Procedure.
    - ii. If a candidate does not submit the Original Certificates/Documents on the day of Counselling, he/she has to submit 1 set of photocopies of all the Original Certificates/Documents verified during the Counselling and originals on the day of joining the Course.
    - iii. He/she is required to submit a declaration directing his/her preference of courses, if he/she is selected for Counselling in multiple courses.
    - iv. He/she is required to remit Registration Fee of Rs. 1,000/- (Non-refundable) through Debit/Credit Card only.
    - v. He/she is required to provide willingness to join the Course within the stipulated period of time, which will be communicated through a notice on the NIMHANS Website.
  - b) If a candidate does not accept the seat allotted, then the candidate shall exit the Counselling procedure immediately.

In such circumstances, the candidate will be enlisted in the waiting list for the course concerned under the respective category in which he/she had attended the Counselling.

Counselling process will be stopped once the seats are filled.

# **Method of Selection**

- Selection will be purely based on merit in the ONLINE entrance test. There will be Counselling for students to ascertain their preference of subject, verification of documents and to implement statutory reservation provisions.
- 2. If no eligible candidates are available against reserved seats, they shall be filled up from general merit category.
- Candidates who have cleared the UGC, CSIR, ICMR, DBT and AYUSH (specific reference to courses
  in Yoga and Ayurveda) (JRF/ SRF only) qualifying exams are exempted from entrance test. All other
  candidates should clear the Online Entrance Test with minimum of 50% Marks to become eligible for
  Interview.
- 4. All the candidates who are selected for appearing before Selection Committee for Interview are required to qualify by obtaining a minimum of 50% marks to be eligible for admission to a Ph.D. course. Mere qualifying in Entrance test and interview does not entitle admission to a Ph.D. course. Selection is subject to availability of eligible guides in the respective departments.

A merit list will be prepared course wise and reserved category wise based on the marks scored by the candidates in the ONLINE entrance test. Eligible candidates will be called for Counselling(interview in case of Ph.D. candidates) until all the seats are filled up in all the categories. Counselling will be stopped as soon as the last seat is filled. Waiting list will be based on the merit list so prepared. A separate merit list will be prepared for MD in Psychiatry &M.Phil.in Clinical Psychology for the seats reserved for Karnataka domiciles and separate merit list will be prepared for seats reserved for domiciles of Arunachal Pradesh, Chhattisgarh, Jammu and Kashmir, Manipur Meghalaya, Mizoram, Nagaland, Sikkim, Tripura & Uttarakhand in MD in Psychiatry

- 5. In the case of two or more candidates obtaining equal marks in the Entrance test, their inter se merit will be determined as under:
  - i. No. of attempts in the qualifying exam.
  - ii. If the number of attempts are same, candidates securing higher marks in the qualifying exam will be considered.

In case of non-medical courses, consolidated marks of all the years/semesters of the qualifying examination will be considered.

In case of medical courses, marks of the qualifying examination Final year Part II of MBBS or final year MD/MS (if available) will be considered as the case may be.

- iii. If marks are also same, then, age will be the criterion i.e., person who is senior in age shall be ranked higher.
- iv. In the event of one of the candidates or all of the candidates have not been awarded marks in the qualifying exam relevant to the course, then, age will be the sole criterion i.e., person who is senior in age shall be ranked higher.
- v. In the event of same date of birth, candidate with lesser number of negative marks in the Qualifying exam to be considered ranked higher.
- 6. Eligible candidates in each category shall be called to appear before a duly constituted Selection Committee for the counselling.
- 7. There will not be any entrance test for Post Basic Diploma in Psychiatric/Mental Health Nursing, Post Basic Diploma in Neuroscience Nursing and Diploma in Clinical Neurophysiology Technology.
- 8. All applications received for DPN/DNN and CCNT courses shall be considered by a Committee constituted by the Director. Weightage in selection shall be given to those candidates sponsored by the Government and other Institutions.
- All applications received for DCNT course shall be considered by a Committee constituted by the Director
  and the applicants fulfilling the basic qualifications shall appear before the committee constituted by the
  Director.

The 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.

# **Enclosures**

Candidates selected to join any course at NIMHANS should submit all the documents/certificates at the time of admission along with five set of photocopies of the same

### **Postgraduate Medical Courses:**

- a. Bachelor's Degree Marks Sheets of all the years
- b. Bachelor's Degree Certificate
- c. Master's Degree Certificate (If applicable)
- d. Master's Degree Marks Sheet (If applicable)
- e. Attempt Certificate (Mandatory)
- f. Internship Completion Certificate
- g. Registration Certificates (Mandatory)
- h. SSC Marks sheet (Mandatory)
- i. Caste Certificate (If applicable) (with certified translation copy in English if the Certificate is in the language of the state by the issuing authority)
- j. Domicile Certificate (if applicable) (with certified translation copy in English if the Certificate is in the language of the state by the issuing authority)
- k. Sponsorship Certificate (If applicable)
- 1. Transfer Certificate from Institution where the candidate last studied
- m. Migration Certificate from the University/Board where the candidate last studied

### **Postgraduate Non-Medical courses:**

- a. All the year/semester qualifying exam mark sheets
- b. Degree Certificate
- c. Caste Certificate (If applicable) (with certified translation copy in English if the Certificate is in the language of the state by the issuing authority)
- d. Domicile Certificate (if applicable) (with certified translation copy in English if the Certificate is in the language of the state by the issuing authority)
- e. Experience certificate (if applicable)
- f. Sponsorship Certificate (If applicable)
- g. Transfer Certificate from Institution where the candidate last studied
- h. Migration Certificate from the University/Board where the candidate last studied

#### **Undergraduate Courses:**

- a) SSLC or 10th Mark Sheet or Statement of Marks (Mandatory)
- b) HSLC or 12thor I & II PUC or Equivalent of 12 Years of schooling from a Recognized Board or University Mark Sheet or Statement of Marks
- c) Statement of Marks of Job Oriented Diploma with Diagnostic (If applicable)
- d) Experience Certificate for 3 Years' as EEG Technician after PUC (If applicable)
- e) Experience Certificate as a Staff Nurse for a minimum of 1 Year (If applicable)
- f) Sponsorship Certificate (If applicable)
- g) Mark Sheets or Statement of Marks for All Years of a Degree or Diploma Course (If applicable)
- h) Registration Certificate of State Nursing Council or Indian Nursing Council (If applicable)
- i) Transfer Certificate (If applicable)
- j) Migration Certificate

#### **Fees**

#### 1. Fee Structure for Indian Nationals

(All figures are in rupees)

Sl. No	Nature of Fees	Ph.D.	DM/M.Ch	МРН	MD/ Postdoctoral Fellowship	M.Phil. /PG Diploma Fellowship courses
1.	Eligibility fee for all courses:	<ul><li>a. Universities of Karnataka Rs.100/-</li><li>b. Universities outside Karnataka Rs.500/-</li><li>c. Foreign students Rs. 5000/-</li></ul>				
2.	Registration fee*	1,000/-	1,000/-	1,000/-	1,000/-	1,000/-
3.	Tuition fee per year	18,000/-	50,000/-	75,000/-	50,000/-	10,000/-
4.	Laboratory fee per year#	500/-	500/-	500/-	500/-	400/-
5.	Gymkhana & recreation Fee per year#	250/-	250/-	250/-	250/-	250/-
6.	Library fee per year#	1,000/-	1,000/-	1,000/-	1,000/-	1,000/-
7.	Caution Money & Hostel Deposit**	5,000/-	5,000/-	5,000/-	5,000/-	5,000/-
8.	Identification card fee*	100/-	100/-	100/-	100/-	100/-
9.	Examination fee					
	Part I		4,000/-	4,000/-	4,000/-	1,750/-
	Part II		6,000/-	6,000/-	6,000/-	1,750/-
	Part III		12,000/-			
10.	Pre-Ph.D. exam fee					
11.	Ph.D. Thesis evaluation					

Payable at the time of joining.

- Fee once paid will not be refunded at any cost. In case, if a candidate leave the course after joining and if the seat is offered to the wait listed candidate and if the wait listed candidate join the course, then, the refund will be made subject to approval by the competent authority after deductions.
- Fee for the corresponding years should be paid immediately on completion of the Academic year failing which fine will be levied as applicable.
- Application fee of Rs.50/- has to be paid for all PG / UG/ Diploma exit examinations
- Marks card fee of Rs.100/- will be charged to MPH/ MPhil/ M.Sc./ B.Sc./ Diploma students
- No examination fee for Ph.D., Postdoctoral Fellowship and Fellowship courses.

<sup>#</sup> The total fee under these sub heads, for the entire course will have to be paid at the time of admission itself.

<sup>\*\*</sup> Refundable on completion of the course.

(All figures are in rupees)

Sl. No	Nature of Fees	M.Sc. Psychiatric Nursing / Biostatistics	B.Sc. Nursing	B.Sc. Anaesthesia Tech./ Radiography	CCNT/DCNT/ DPN/DNN
1.	Eligibility fee for all courses	a. Universities of Karnataka Rs.100/- b. Universities outside Karnataka Rs.500/- c. Foreign students Rs.5000/-			
2.	Registration fee*	1,000/-	1,000/-	1,000/-	
3.	Tuition fee per year	10,000/-	35,000/-##	10,000/-	
4.	Laboratory fee per year#	300/-	300/-	300/-	
5.	Gymkhana & recreation Fee per year#	250/-	250/-	250/-	250/-
6.	Library fee per year#	1,000/-	1,000/-	1,000/-	1,000/-
7.	Caution Money & Hostel Deposit**	5,000/-	5,000/-	5,000/-	5,000/-
8.	Identification card fee*	100/-	100/-	100/-	100/-
9.	Examination fee: Part I	1,500/-	1,000/-	1,000/-	500/-
	Part II	1,500/-	1,000/-	1,000/-	
	Part III		1,000/-		
	Part IV		1,000/-		

- \* Payable at the time of joining.
- # The total fee under these sub heads, for the entire course, will have to be paid at the time of admission itself.
- \*\* Refundable on completion of the course.
- ## Rs.20,000/- for SC/ST candidates.
- Fee once paid will not be refunded at any cost. In case, if a candidate leave the course after joining and if the seat is offered to the wait listed candidate and if the wait listed candidate join the course, then, the refund will be made subject to approval by the competent authorities after necessary deductions.
- Fee for the corresponding years should be paid immediately on completion of the Academic year failing which fine will be levied as applicable.
- SNA Rs.1,000/- one-time payment for B.Sc. Nursing students. Hostel Rent (water & electricity charges) Rs.5,000/- per annum and Rs.1000/- mess advance for B.Sc. students.

#### 2. Fee Structure for Foreign Nationals

(All figures are in US Dollars)

Sl. No.	Name of the Course	* Tuition fee	Registration fee
1	Ph.D.	30,000	500
2	For super speciality courses:		
	a. DM/M.Ch. (5 years duration)	60,000	1000
	b. DM/M.Ch. ( 3 years duration)	50,000	1000
3	Postdoctoral Fellowship in Neuropathology/Neuroanaesthesia	30,000	1000
4	M.Phil.	20,000	500
5	M.Sc. Psychiatric Nursing	15,000	500
6	B.Sc. in Nursing	20,000	
7	DPN/DNN/DCNT		100

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

- The fees once paid will not be refunded at any cost
- The fee for SAARC Nationals applying for various courses at NIMHANS will be on par with Indian Nationals.

#### **Emoluments**

Candidates admitted to Medical courses will be paid as per the Residency Scheme of the Government of India. They will be placed in the pay band of Rs.15,600 – Rs.39,100/-. The Junior Residents will be paid a Grade pay of Rs.5,400/- and the Senior Residents Rs.6,600/-.

Junior Residents will be paid a basic pay of Rs. 15,600/- per month in the first year, Rs.16,230/- per month in the second year and Rs. 16,880/- in the third year (Rs.5,400/- as Grade pay) along with admissible allowances. Post MBBS candidates of DM in Neurology and M.Ch. in Neurosurgery who are given senior residentship will be paid a basic pay of Rs.18,750/- in the 4th year and Rs.19,510/- in the fifth year (Rs.6,600/- as Grade pay) along with admissible allowances. The stipend is subject to Government orders from time to time.

Candidates admitted for Fellowship in Geriatric Mental Health Care and MD in Psychiatry will be paid the salary equivalent to first year Junior Resident.

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

Candidates admitted to the Postdoctoral Fellowship courses, DM in Neuroimaging and Interventional Radiology, DM in Neuroanaesthesia, DM in Child and Adolescent Psychiatry, DM in Neuropathology, DM in Geriatric Psychiatry and DM in Addiction Psychiatry will be considered as Senior Residents.

Post MD/MS senior residents will get a basic pay of Rs.18,750/- per month in the first year, Rs.19,510/-per month in the second year and Rs.20,300/- in the third year (Rs.6,600/- as Grade pay) along with admissible allowances. The stipend is subject to Government orders from time to time.

Candidates admitted for Fellowship in Psychiatric Rehabilitation will be paid the following stipend: a) Medical category: basic pay of Rs.15,600/- per month with admissible allowances equivalent to I year Junior Resident stipend. b) Non-Medical category: Rs.25,000/- per month (consolidated). Candidates admitted for Fellowship in Psychosocial Support in Disaster Management, Master of Public Health and Fellowship in Psychosocial care for Elderly will be paid Rs. 25,000/- per month (consolidated).

Candidates admitted to the M.Phil. and Fellowship in Mental Health Education Courses will be paid a stipend of Rs.25000/- per month during the course period.

Candidates admitted to the Postdoctoral Fellowship courses will be considered as Senior Residents with stipend of Basic Pay of Rs.20,300/- (Rs.6,600/- as Grade pay) along with admissible allowances.

Candidates admitted to Postgraduate diploma in Clinical Biochemistry course will be paid consolidated stipend of Rs.15000/- per month.

Candidates admitted to Ph.D. courses under Institute fellowship will be paid stipend of Rs.25,000/- per month for first two years and Rs.28,000/- per month from the third year till fifth year or submission of thesis whichever is earlier. Contingency grant of Rs.20,000/- per year will be paid to Research scholars.

Candidates admitted to Ph.D. in Clinical Neurosciences course (under the ICMR Fellowship) will be paid on par with post MBBS residents in Neurology and Neurosurgery. In addition, these research scholars are entitled for a contingency grant of Rs.15,000/- per year.

Candidates admitted to M.Sc. in Psychiatric Nursing, M.Sc. in Biostatistics, Fellowship in Geriatric Mental Health Nursing, and Certificate Course in Neuropathology Technology course will be paid Rs.3,000/- 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.2,000/-per month. Candidates admitted to Diploma in Clinical Neurophysiology Technology Course will be paid Rs.2,000/- 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.

Students undergoing B.Sc. in Nursing, B.Sc. in Radiography and B.Sc. in Anaesthesia Technology courses should undergo compulsory Internship of one year duration immediately on successful completion of course failing which Rs.5,00,000/- has to be paid as penalty (An agreement has to be furnished at the time of joining the course). A stipend of Rs.12,000/- per month will be paid during the internship.

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

## **Awards and Prizes**

The following awards are given by NIMHANS to the best outgoing students in various examinations:

Prize/Award	For	Course
Dr. Anisya Vasanth Memorial Award	Best Postgraduate Resident	DM in Neuroradiology
Silver Jubilee Award	Best Outgoing Student	DM in Neurology
Golden Jubilee Award	Best Outgoing Student	DM in Neuroradiology
Dr. M.V. Govindswamy Memorial Award	Best Outgoing Student	DM in Child & Adolescent Psychiatry
Dr. Usha Punja Award	Best Outgoing Student	DM in Neuroanaesthesia
Silver Jubilee Award	Best Outgoing Student	M.Ch. in Neurosurgery
Silver Jubilee Award	Best Outgoing Student in the Examination out of 21 Candidates (General)	MD in Psychiatry
	Best Outgoing Student for Academic Excellence	B.Sc. in Nursing
	Best Outgoing Student	Diploma in Clinical Neurophysiology Technology
Dr. M.V.Govindswamy Memorial Prize	Best Outgoing Student for securing the highest marks	M.Phil. in Psychiatric Social Work
Dr. M.V.Govindswamy Memorial Prize	Best Outgoing Student for securing highest marks	M.Phil. in Clinical Psychology
Dr. D.L.N. Murthy Rao Memorial Prize	Best Outgoing Student in the Examination Out of 15 Candidates (Domicile)	MD in Psychiatry
Dr. R.N. Moorthy Award	Candidates securing highest marks	M.Phil. in Neurophysiology M.Phil. in Biophysics M.Sc. in Psychiatric Nursing
Dr. V. Sivarajan Award	Candidate securing highest marks in 'Microbiology' Subject	B.Sc. in Nursing
Dr. M.V. Govindswamy Memorial Prize and Dr. D.L.N. Murthy Rao Memorial Prize	Candidate securing highest marks in the Examination	Post Basic Diploma in Psychiatric/Mental Health Nursing
Infosys Foundation Award for Excellence	Candidate securing highest marks in Examination	Post Basic Diploma in Psychiatric/ Mental Health Nursing Post Basic Diploma in Neurosciences Nursing
Shri. Mukund Memorial Prize	Candidate securing highest marks in Examination	Post Basic Diploma in Neurosciences Nursing
Shri. Mukund Memorial Prize	Candidate securing highest marks in Examination	Diploma in Clinical Neurophysiology Technology

# PROGRAMS FOR STUDENTS

#### I. Kannada Language Learning Program

Kannada is one of the oldest Dravidian languages. It is the Karnataka state's official language. It is desirable that Non-Kannada speaking PG students make efforts to learn this language for better communication with patients and their family members.

The Department of Publication organizes a three-month Kannada Language Learning Program in collaboration with the Department of Kannada & Culture, Government of Karnataka. Students are required to attend these sessions. As majority of the patients seen at NIMHANS speak Kannada, it is mandatory that students learn to comprehend and speak Kannada.

#### **II.** Orientation Lectures

Orientation Lectures are organized for all the newly admitted students by the Heads of the Departments in order to familiarize the students with the vast diversification of facilities under Basic, Behavioural and Neurosciences Divisions at NIMHANS.



#### I. Sponsorship Certificate Format

Thi	s is to certify that:	
1.	Dr./Sri./Smt is a permanent employ	ee
	with the (Name of the Government)	n
	Organization) and the date of joining service is	
2.	The candidate is being sponsored / deputed for	
	(name of the course) at National Institute of Mental Health And Neuro Science	es
	(NIMHANS), Bengaluru.	
3.	The candidate is being sponsored / deputed 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	ng
	of State/Central Government (tick which is applicable) and no expenses will devolve upon Nation	ıa
	Institute of Mental Health And Neuro Sciences (NIMHANS), Bengaluru.	
5.	The candidate after getting training at National Institute of Mental Health And Neuro Science	es
	(NIMHANS), Bengaluru, shall continue to be in regular service with the State/Central Government	01
	Public Sector Undertaking of State/Central Government (tick which is applicable) and will work in the	
	State/Central Government or Public Sector Undertaking of the State/Central Government (tick which	is
	applicable).	
Dat	e:	
Pla	re:	
	Signature with Seal of	
	Competent Authority	

#### II. OBC Certificate Format

Resolution No. 12011/1/2001-BCC dated 19/06/2003. Resolution No. 12011/4/2002-BCC dated 13/01/2004.

Section I No. 210 dated 16/01/2006.

Form of Certificate to be produced by Other Backward Classes Applying for Admission to Central Education Institutes under the Government of India.

This is to certify that Shri/Smt./Kum.	Son/Daughter of Shri/Smt
of Village/Town	District/Division
	Statebelongs to the
Community which is recognized as a backward class t	ander:
Resolution No. 12011/68/93-BCC(C) dated 10/09/93	published in the Gazette of India Extraordinary Part I
Section I No. 186 dated 13/09/93.	
Resolution No. 12011/9/94-BCC dated 19/10/94 publi	shed in the Gazette of India Extraordinary Part I Section
I No. 163 dated 20/10/94.	
Resolution No. $12011/7/95$ -BCC dated $24/05/95$ publication publication in the second secon	shed in the Gazette of India Extraordinary Part I Section
I No. 88 dated 25/05/95.	
Resolution No. 12011/96/94-BCC dated 9/03/96.	
Resolution No. 12011/44/96-BCC dated $6/12/96$ public	shed in the Gazette of India Extraordinary Part I Section
I No.210 dated 11/12/96.	
Resolution No. 12011/13/97-BCC dated 03/12/97.	
Resolution No. 12011/99/94-BCC dated 11/12/97.	
Resolution No. 12011/68/98-BCC dated 27/10/99.	
Resolution No. 12011/88/98-BCC dated 6/12/99 public	shed in the Gazette of India Extraordinary Part I Section
I No. 270 dated 06/12/99.	
Resolution No. 12011/36/99-BCC dated 04/04/2000	published in the Gazette of India Extraordinary Part I
Section I No. 71 dated 04/04/2000.	
Resolution No. 12011/44/99-BCC dated 21/09/2000	published in the Gazette of India Extraordinary Part I
Section I No. 210 dated 21/09/2000.	
Resolution No. 12015/9/2000-BCC dated 06/09/2001.	

Resolution No. 12011/9/2004-BCC dated 16/01/2006 published in the Gazette of India Extraordinary Part I

Shri/Smt./Kum.		_ and/or his family ordinarily reside(s) in the			
	District/Division of	State.			
This is also to certify that he/she	e does not belong to the persons/s	ections (Creamy Layer) mentioned in Column			
3 of the Schedule to the Govern	3 of the Schedule to the Government of India, Department of Personnel & Training O.M. No. 36012/22/93-				
Estt.(SCT) dated 08/09/93 which is modified vide OM No. 36033/3/2004 Estt.(Res.) dated 09/03/2004.					
Dated:	District Magistrate/ Deputy Co	ommissioner			

#### NOTE:

- a. The term 'Ordinarily' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.
- b. The authorities competent to issue Caste Certificates are indicated below:
  - i. District Magistrate / Additional Magistrate / Collector / Deputy Commissioner / Additional Deputy
    Commissioner / Deputy Collector / I Class Stipendiary Magistrate / Sub-Divisional magistrate /
    Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner (not below the rank of I
    Class Stipendiary Magistrate).
  - ii. Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.
  - iii. Revenue Officer not below the rank of Tehsildar and
  - iv. Sub-Divisional Officer of the area where the candidate and / or his family resides.

#### **III.** Agreement Bond Formats

Bond to be executed by the student selected for Ph.D. Courses under Institute Stipendiary and his/her sureties

Kno	ow all men by those presents that We/ISon/
Daı	ıghter of
resi	dingat
(Fu	ll Address) hereinafter called the 'STIPENDIARY' (which expression shall unless excluded by or a
rep	ugnant to the context include his/her heirs, executors, administrators and legal representatives) and
(Fu	ll name and address):
	and (Full name and
ado	dress)
	(Full name and
adc	lress)
her	einafter called 'the First Surety' and 'the Second Surety' respectively (which expression shall unless
XC	luded by or repugnant to the context include their respective heirs, executors, administrators and legal
ep	resentatives) bind ourselves jointly and severally to pay the Board of Management of the Nationa
ins	titute of Mental Health and Neuro Sciences, Bengaluru- 560 029 (hereinafter called the 'NIMHANS'
on (	demand and without demur in the event of breach of contract as provided in Clause.4 of the agreemen
all ·	the amount spent on the stipendiary together with further sum not exceeding 30% thereof drawn as
per	alty during the course. Further it is also agreed upon to pay a sum equal to six full month's stipend
in t	he event of discontinuance of the course as provided in Clause.5 of the agreement.
Sig	ned thisin the year two thousand and eighteen

3.	Whereas the stipendiary is nominated to the NIMHANS stipend at the rate of Rs.25,000/- per month for
	I and II years and Rs.28,000/- for III, IV and V Years for the study of postgraduate Ph.D. in
	Bengaluru- 560 029 on the condition of his/her executing a bond supported by two sureties on the terms
	appearing hereinafter which the stipendiary has agreed to do.

- 4. Now the condition of the above written obligation is that in the event of the above bounden stipendiary participating in a strike or being made to leave the training course on account of indiscipline or misconduct on his/her part or refusing to serve the Institute for a period of 3 years is required to do so within a period of six months after qualifying for full registration completing the course or for other reasons not considered valid and satisfactory by the Director, National Institute of Mental Health and Neuro Sciences, Bengaluru- 560 029, whose decision in this behalf shall be final, the stipendiary and the sureties jointly and severally pay and refund to the Director, NIMHANS, on demand and without demur all the amount spent on the stipendiary together with a further sum not exceeding in the aggregate 30% thereof as penalty on account of the said training of studies as the Director, NIMHANS may direct. The decision of the Director, NIMHANS as to the commission of breach or any indiscipline, misconduct on the part of the stipendiary as also the amount of penalty payable and as to whether the stipendiary has or has not performed and observed the conditions and obligations under these presents shall be final and binding on the stipendiary and the sureties.
- 5. The stipendiary except as provided in the agreement, discontinues the course to which he/she has been admitted without completing in the middle shall be liable to pay a sum of six full months stipend to the Institute as penalty besides forfeiture of stipend for the month in which he/she discontinues the course with interest until realization, and the sureties are equally responsible.
- 6. And upon making such payment, the above written obligation shall be void and of no effect, but otherwise, it shall be and remain in full force and virtue.
- 7. And the sureties hereby covenant with the Director, NIMHANS that liability of the sureties hereunder shall not be impaired or discharged by reason of time being granted or any forbearance, act or omission of the Institute (whether with or without the knowledge or consent of the sureties) in respect of or in relation to the several obligations and conditions to be performed or discharged by a stipendiary or by any other matter or thing whatsoever which under the law relating to sureties, shall but for this provision, have the effect of releasing the sureties from such liability, nor shall it be necessary for the Institute to sue

the stipendiary before suing either of the sureties for amount due hereunder.

		Signature of the Magistrate/Notary (With Seal)			
	Certified that the above named sure	ties are solvent and acceptable.			
(ID,	Address proof should be enclosed)	Signature of second surety			
Sign	ed by the Second Surety (Guardian)in the Presence o	f 			
	Address proof should be enclosed)	Signature of first surety			
Sion	ed by the First Surety (Parent) in the presence of				
oe p	roduced at the time of admission)				
(Peri	manent address proof should	Signature of the Stipendiary			
Sign	ed by the Stipendiary in the Presence of				
	year herein above written hereunto and Sri/Smt/Dr				
9.	In witness whereof the said stipendiary and the su				
3.	It is agreed that the stamp duty shall be borne by the student.				

# Bond to be executed by the student selected for Ph.D. Courses under external fellowship category and his/her sureties

1.	Know all men by those presents that We/I
	residing at (Full Address)
	shall unless excluded by or a repugnant to the context include his/her heirs, executors, administrators
	and legal representatives) and (Full name and address):
i.	
	and(Full name and
	address)
ii.	
	( Full name and address
	hereinafter called 'the First Surety' and 'the Second Surety' respectively (which expression shall unless
	excluded by or repugnant to the context include their respective heirs, executors, administrators and legal representatives) bind ourselves jointly and severally to pay the Board of Management of the National
	Institute of Mental Health and Neuro Sciences, Bengaluru- 560 029 (hereinafter called the 'NIMHANS')
	on demand and without demur in the event of breach of contract as provided in Clause.4 of the agreement
	all the amount spent due to be paid by the UGC/CSIR/ICMR/DBT/ AYUSH (specific reference to courses in Yoga and Ayurveda), together with further sum not exceeding 30% thereof drawn as penalty
	during the course.
2.	Signed this day of in the year two thousand and eighteen.
3.	Whereas the student selected for postgraduate Ph.D. in

the National Institute of Mental Health and Neuro Sciences, Bengaluru- 560 029 has to execute a bond supported by two sureties on the terms appearing hereinafter which the student has agreed to do.

- 4. Now the condition of the above written obligation is that in the event of the above bounden student participating in a strike or being made to leave the training course on account of indiscipline or misconduct on his/her part or refusing to serve the Institute for a period of 3 years is required to do so within a period of six months after qualifying for full registration completing the course or for other reasons not considered valid and satisfactory by the Director, National Institute of Mental Health and Neuro Sciences, Bengaluru- 560 029, whose decision in this behalf shall be final. The decision of the Director, NIMHANS as to the commission of breach or any indiscipline, misconduct on the part of the student as also the amount of penalty payable and as to whether the student has or has not performed and observed the conditions and obligations under these presents shall be final and binding on the student and the sureties.
- 5. And upon making such payment, the above written obligation shall be void and of no effect, but otherwise, it shall be and remain in full force and virtue.
- 6. And the sureties hereby covenant with the Director, NIMHANS that liability of the sureties hereunder shall not be impaired or discharged by reason of time being granted or any forbearance, act or omission of the Institute (whether with or without the knowledge or consent of the sureties) in respect of or in relation to the several obligations and conditions to be performed or discharged by a stipendiary or by any other matter or thing whatsoever which under the law relating to sureties, shall but for this provision, have the effect of releasing the sureties from such liability, nor shall it be necessary for the Institute to sue the student before suing either of the sureties for amount due hereunder.
- 7. It is agreed that the stamp duty shall be borne by the student.
- 8. In witness whereof the said student and the sureties have put their respective hands the day and year herein above written hereunto and Sri/Smt/Dr.....

	Signature of the Magistrate/Notary (With Seal)
Certified that the above named sureties a	are solvent and acceptable.
Signed by the Second Surety (Guardian) in the Presence of (ID, Address proof should be enclosed)	Signature of second surety
Signed by the First Surety (Parent) in the presence of (ID, Address proof should be enclosed)	Signature of first surety
Signed by the Stipendiary in the Presence of (Permanent address proof should be produced at the time of admission)	Signature of the Stipendiary

#### Bond to be executed by the student selected as Senior Resident and his/her sureties

Articles of agreement made this day of year 2018 between Dr
son/daughter of
residing at (Full Address)
(hereinafter called
the 'SENIOR RESIDENT') on the one part and the Governing Body of the National Institute of Mental
Health and Neuro Sciences, Bengaluru-560 029 (hereinafter called "the NIMHANS") on the other part.
Whereas the NIMHANS intend to appoint the part of the first part as Senior Resident for a period from
to till the completion of the course.
And whereas it has been agreed by and between the parties hereto that the Senior Resident shall serve the NIMHANS on the terms and conditions herein contained.
Now these present witnesseth and parties hereto respective agree as follows:
The Senior Resident shall submit himself/herself to the orders of the NIMHANS and the Officers and
authorities under whom he/she from time to time be placed by the NIMHANS and shall serve as
Senior Resident for a period till completion of the PG course commencing from
year 2018 until his/her services are terminated previously as herein after provided. The
NIMHANS may in its discretion however extend this term by a short period until arrangements for a
substitute is made.

- 2. The services of the Senior Resident may be terminated as follows:
- i. By the NIMHANS or its authorised Officers without any previous notice if the NIMHANS is satisfied on medical evidence that the Senior Resident is unfit and is likely for a considerable period to continue unfit by reason of ill health for the discharge of his/her duties provided always that the decision of the NIMHANS that the Senior Resident is unfit and is likely to continue unfit shall be conclusive and binding on him/her.

1.

- ii. By the NIMHANS or its authorised Officers without any previous notice if the Senior Resident shall be guilty of any insubordination, intemperance or other misconduct or any breach or non-performance of any of the provisions of this agreement or of any rules pertaining to the Institution where he/she may from time to time be place by the NIMHANS.
- iii. By thirty days' notice in writing given at any time during service under this agreement by the NIMHANS or its authorised officers to him/her without cause assigned.
- 3. Provided always that the NIMHANS may in lieu of any notice herein provided for, give the Senior Resident a sum equivalent to the amount of his salary for thirty days or shorter notice than thirty days if it pays him a sum equal to the amount of his salary for the period by which such notice falls short of thirty days. The term salary for the purpose of this provision shall mean the salary the Senior Resident would be receiving under Clause.6 of this agreement.
- 4. If the Senior Resident be suspended from duty in connection with the investigation into his/her conduct, he/she shall not be entitled to any salary during such period of suspension but shall be entitled to receive a subsistence grant at such rate as the NIMHANS may decide to allow him/her.
- 5. The Senior Resident shall devote his/her whole time to the duties of the said service and shall not engage, directly or indirectly in any trade, business, occupation or profession (including any private practice) on his/her own account and shall not (except in case of accident or sickness certified by competent medical authority) absent himself/herself from his/her said duties without having first obtained permission from the NIMHANS or its authorised Officers.
- 6. The Senior Resident shall not except as provided in this agreement resign his/her appointment without completing the postgraduate course to which he/she has been admitted by the University concerned. Defaulters shall be liable to pay a sum equal to six full months' salary last drawn by him/her to NIMHANS as penalty besides forfeiture of his/her emoluments for the month in which he/she leaves the Institution with interest until realisation and the sureties are equally responsible.
- 7. With effect from the .......day of .......2018 the NIMHANS shall pay the Senior Resident so long as he/she remains in the said service and actually performs his/her duties as aforesaid at

the monthly rate of Rs.18,750/- + Grade pay Rs.6,600/- for the I Year, Rs.19,510/- + Grade pay Rs.6,600/- for the II Year Resident and Rs.20,300/- + Grade pay Rs.6,600/- as III Year Resident as the case may be. This will be inclusive of allowance like PGA. They are eligible for allowances like NPA, DA and CCA as applicable from time to time.

- 8. The Senior Resident shall be eligible for such concession in relation to Medical attendance and treatment as may be prescribed by the NIMHANS.
- 9. Subject to availability, the Senior Resident will be entitled to free furnished Hostel Accommodation with free electricity and water within the prescribed limits. Family quarters close to the Hostel at concessional rate may be given wherever possible. The Senior Resident shall have to abide by the rules and regulations of the Hostel where he/she is accommodated and shall occupy the room allotted to him/her only as a licensee.
- 10. The Senior Resident shall vacate the accommodation given to him/her as aforesaid within ten days of the expiry of the term or earlier in the event of early termination of employment. The Head of the Institution where such accommodation is provided shall be entitled to take action for eviction in case the Senior Resident fails or neglects to vacate such accommodation and delivery of peaceful possession thereof to the Head of the Institution.
- 11. Besides academic working in pursuance of the postgraduate studies the Senior Resident shall carry out all the duties and responsibilities required of him/her to be performed and under taken by the Head of the Institution where he/she will be placed in the discharge of the patient care and maintenance of records and such other clinical and technical duties as may be assigned to him/her by the aforesaid authorities from time to time in the interest of efficient patient care and running of the Hospital. The decision of such authority as to whether the Senior Resident has satisfactorily carried out all the duties and responsibilities aforesaid shall be final and binding on the Senior Resident for the completion of that course.
- 12. The working hours of the Senior Resident will not normally exceed continuous duty for more than 12 hours in a day subject to such exigencies as may arise in the working of the Institution where he/she may be placed and in this respect also, the decision of the Head of the Institution shall be final and binding on the Senior Resident.
- 13. The Senior Resident may be allowed one day off in a week on rotation basis subject to exigencies of work.

14.	The Senior Resident shall be liable to be on call duty	which shall not normally exceed 12 hours at a time.
15.	During the term of employment Senior Residents and	re eligible for leave as per the Residency scheme.
16.		for a job position/assignment elsewhere during the plications shall not be forwarded during the validity
17.	The Senior Resident shall not be issued certificate/tes work, experience, performance, etc., in case of disco	timonials of any kind bearing evidence of satisfactory ntinuation of his/her studies.
Sigr	ned by the Stipendiary in the Presence of	
(Per	manent address proof should	Signature of the Stipendiary
be p	produced at the time of admission)	
Sigr	ned by the First Surety (Parent)in the presence of	
(ID,	Address proof should be enclosed)	Signature of first surety
Sigr	ned by the Second Surety (Guardian)in the Presence o	
(ID,	Address proof should be enclosed)	Signature of second surety
	Certified that the above named sure	ties are solvent and acceptable.
		Signature of the Magistrate/Notary
		(With Seal)

#### Bond to be executed by the student selected as Junior Resident and his/her sureties

Know all men by those presents that I/We	Son/Daughter
of	
residing at (Full Address)	
hereinafter called the Junior Resident (which expression shall unless excluded or a re	pugnant to the context
include his/her heirs, executors, administrators and legal representatives) and (Full na	me and address):
i	
and (F	full name and address)
ii	
(F	Full name and address)
hereinafter called 'the First Surety' and 'the Second Surety' respectively (which ex	xpression shall unless
excluded by or repugnant to the context include their respective heirs, executors, ad	ministrators and legal
representatives) bind ourselves jointly and severally to pay Board of Management of the	ne National Institute of
Mental Health and Neuro Sciences, hereinafter called the 'NIMHANS' on demand and	l without demur in the
event of breach of contract as provided in clause.4 of the agreement all the amount sp	ent on the stipendiary
together with further sum not exceeding 30% thereof drawn as penalty during the cou	arse. Further, it is also
agreed upon to pay a sum equal to six full months' salary in the event of discontinuance	e of course as provided
in the Clause.6 of the agreement.	
ARTICLES OF AGREEMENT SIGNED THIS day of in the ye eighteen.	ear two thousand and
WHEREAS the NIMHANS intend to appoint the party of the first part as Junior Resi	-
Now these present witnesseth and the parties here to respectively agree as follows:	

- 2. The services of the Junior Resident may be terminated as follows:
- i. By the NIMHANS or its authorised Officers without any previous notice if the NIMHANS is satisfied on medical evidence that the Junior Resident is unfit and is likely for a considerable period to continue unfit by reason of ill health for the discharge of his/her duties provided always that the decision of the NIMHANS that the Junior Resident is unfit and is likely to continue unfit shall be conclusive and binding on him/her.
- ii. By the NIMHANS or its authorised Officers without any previous notice if the Junior Resident shall be guilty of any insubordination, intemperance or other misconduct or any breach or non-performance of any of the provisions of this agreement or of any rules pertaining to the Institution where he/she may from time to time be place by the NIMHANS.
- iii. By thirty days' notice in writing given at any time during service under this agreement by the NIMHANS or its authorized officers to him/her without cause assigned provided always that the NIMHANS may in lieu of any notice herein provided for, give the Junior Resident a sum equivalent to the amount of his/her salary for thirty days or shorter notice then thirty days if it pays him/her a sum equal to the amount of his/her salary for the period by which such notice falls short of thirty days. The term salary for the purpose of this proviso shall mean the salary the Junior resident would be receiving under clause.6 of this agreement.
- 3. If the Junior Resident be suspended from duty in connection with investigation into his/her conduct, he/she shall not be entitled to any salary during such period of suspension but shall be entitled to receive a subsistence grant at such rate as the NIMHANS may decide to allow him/her.
- 4. Now the condition of the above written obligation is that in the event of the above bounden beneficiary

participating in a strike or being made to leave the training course on account of indiscipline or misconduct on his/her part or refusing to serve the Institute for a period of \_\_\_\_\_\_\_ years is required to do so within a period of six months after qualifying for full registration completing the course or for other reasons not considered valid and satisfactory by the Director, National Institute of Mental Health and Neuro Sciences, Bengaluru- 560 029, whose decision in this behalf shall be final, the beneficiary and the sureties jointly and severally pay and refund to the Director, NIMHANS, on demand and without demur all the amount spent on the beneficiary together with further sum not exceeding in the aggregate 30% thereof as penalty on account of the said training of studies as the Director, NIMHANS may direct. The decision of the Director, NIMHANS as to the commission of breach or to any indiscipline, misconduct on the part of the beneficiary as also the amount of penalty payable and as to whether the beneficiary has or has not performed and observed the conditions and obligations under these presents shall be final and binding on the beneficiary and the sureties.

- 5. The Junior Resident shall devote his/her whole time to the duties of the said service and shall not engage, directly or indirectly in any trade, business, occupation or profession (including any private practice) on his/her own account and shall not (except in case of accident or sickness certified by competent medical authority) absent himself/herself from his/her said duties without having first obtained permission from the NIMHANS or its authorized Officers.
- 6. The Junior Resident shall not except as provided in this agreement resign his/her appointment without completing the postgraduate course to which he/she has been admitted by the University concerned. Defaulters shall be liable to pay a sum of six months' salary to the NIMHANS as penalty besides forfeiture of his/her emoluments for the month in which he/she leaves the Institutions with interest until realisation and the sureties are equally responsible.
- 8. The Junior Resident shall be eligible for such concession in relation to Medical attendance and treatment as may be prescribed by the NIMHANS.

- 9. Subject to availability, the Junior Resident will be entitled to free furnished Hostel Accommodation with free electricity and water within the prescribed limits.
- 10. Family quarters close to the Hostel at concessional rate may be given wherever possible. The Junior Resident shall have to abide by the rules and regulations of the Hostel where he/she is accommodated and shall occupy the room allotted to him/her only as a licensee.
- 11. The Junior Resident shall vacate the accommodation given to him/her as aforesaid within ten days of the expiry of the term or earlier in the event of early termination of employment. The Head of the Institution where such accommodation is provided shall be entitled to take action for eviction in case the Junior Resident fails or neglects to vacate such accommodation and delivery of peaceful possession thereof to the Head of the Institution.
- 12. Besides academic working in pursuance of the postgraduate studies the Junior Resident shall carry out all the duties and responsibilities required of him/her to be performed and under taken by the Head of the Institution where he/she will be placed in the discharge of the patient care and maintenance of records and such other clinical and technical duties as may be assigned to him/her by the aforesaid authorities from time to time in the interest of efficient patient care and running of the Hospital. The decision of such authority as to whether the Junior Resident has satisfactorily carried out all the duties and responsibilities aforesaid shall be final and binding on the Junior Resident.
- 13. The working hours of the Junior Resident shall not normally exceed continuous duty for more than 12 hours in a day subject to such exigencies as may arise in the working of the Institution where he/she may be placed and in this respect also, the decision of the Head of the Institution shall be final and binding on the Junior Resident.
- 14. The Junior Resident shall be liable to be on call duty which shall not normally exceed 12 hours at a time.
- 15. During the term of employment 30 days leave for first year and 36 days for each subsequent years will be permissible.
- 16. The Junior Resident shall not be allowed to apply for a job position/assignment elsewhere during the course of his/her postgraduate studies and such applications shall not be forwarded during the validity of the agreement.

work, experience, performance, etc., in case of discontinuation of his/her studies. In witness whereof the said stipendiary and the sureties have put their respective hands the day and year herein above written hereunto and Dr..... Signed by the Stipendiary in the Presence of ..... (Permanent address proof should Signature of the Stipendiary be produced at the time of admission) Signed by the First Surety (Parent)in the presence of (ID, Address proof should be enclosed) Signature of first surety Signed by the Second Surety (Guardian) in the Presence of (ID, Address proof should be enclosed) Signature of second surety Certified that the above named sureties are solvent and acceptable. ..... Signature of the Magistrate/Notary (With Seal)

17. The Junior Resident shall not be issued certificate / testimonials of any kind bearing evidence of satisfactory

Note:Deputed and sponsored candidates who are not receiving residency benefit from NIMHANS are also required to furnish this bond with the deletion of Clause.6 & 7 of the agreement.

#### Bond to be executed by the student selected for M.Phil. Courses and his/her sureties

Know all men by	y those presents that We/I	Son
		residingat (Full Address)
		TIPENDIARY' (which expression shall unles
excluded by or a	a repugnant to the context include his/	her heirs, executors, administrators and lega-
representatives) a	and (Full name and address):	
•••••		
		and (Full name and address
		(Full name and address
hereinafter called	l 'the First Surety' and 'the Second Sure	ty' respectively (which expression shall unless
excluded by or re	pugnant to the context include their resp	ective heirs, executors, administrators and lega-
representatives)	bind ourselves jointly and severally to p	pay the Board of Management of the Nationa
Institute of Ment	al Health and Neuro Sciences, Bengalur	u- 560 029 (hereinafter called the 'NIMHANS
on demand and v	vithout demur in the event of breach of co	ontract as provided in Clause.4 of the agreemen
all the amount sp	pent on the stipendiary together with fur	rther sum not exceeding 30% thereof drawn a
penalty during th	ne course. Further it is also agreed upon	n to pay a sum equal to six full month's stipen
in the event of di	scontinuance of course as provided in th	ne Clause.5 of the agreement.
Signed this	day of in the year two t	thousand and eighteen.
Whereas the stipe	endiary is nominated to the NIMHANS	stipend at the rate of Rs.2,5000/- per month fo
the I and II Years	for the study of postgraduate M.Phil. in	n at the Nationa
Institute of Menta	al Health and Neuro Sciences, Bengaluru	ı- 560 029 on the condition of his/her executin
a bond supported	d by two sureties on the terms appearing	g hereinafter which the stipendiary has agree
to do.		

- 4. Now the condition of the above written obligation is that in the event of the above bounden stipendiary participating in a strike or being made to leave the training course on account of indiscipline or misconduct on his/her part or refusing to serve the Institute for a period of 2 years is required to do so within a period of six months after qualifying for full registration completing the course or for other reasons not considered valid and satisfactory by the Director, National Institute of Mental Health and Neuro Sciences, Bengaluru- 560 029, whose decision in this behalf shall be final, the stipendiary and the sureties jointly and severally pay and refund to the Director, NIMHANS, on demand and without demur all the amount spent on the stipendiary together with further sum not exceeding in the aggregate 30% thereof as penalty on account of the said training of studies as the Director, NIMHANS may direct. The decision of the Director, NIMHANS as to the commission of breach or any indiscipline, misconduct on the part of the stipendiary as also the amount of penalty payable and as to whether the stipendiary has or has not performed and observed the conditions and obligations under these presents shall be final and binding on the stipendiary and the sureties.
- 5. The stipendiary except as provided in the agreement, discontinues the course to which he/she has been admitted without completing in the middle shall be liable to pay a sum of six full months stipend to the Institute as penalty besides forfeiture of emoluments for the month in which he/she discontinues the course with interest until realisation and the sureties are equally responsible.
- 6. And upon making such payment, the above written obligation shall be void and of no effect, but otherwise, it shall be and remain in full force and virtue.
- 7. And the sureties hereby covenant with the Director, NIMHANS that liability of the sureties hereunder shall not be impaired or discharged by reason of time being granted or any forbearance, act or omission of the Institute (whether with or without the knowledge or consent of the sureties) in respect of or in relation to the several obligations and conditions to be performed or discharged by a stipendiary or by any other matter or thing whatsoever which under the law relating to sureties, shall but for this provision, have the effect of releasing the sureties from such liability, nor shall it be necessary for the Institute to sue the stipendiary before suing either of the sureties for amount due hereunder.
- 8. It is agreed that the stamp duty shall be borne by the student.
- 9. In witness whereof the said stipendiary and the sureties have put their respective hands the day and year herein above written hereunto and Sri/Smt/Dr.....

	Signature of the Magistrate/Notary
Certified that the above named sureties	are solvent and acceptable.
Signed by the Second Surety (Guardian) in the Presence of (ID, Address proof should be enclosed)	Signature of second surety
Signed by the First Surety (Parent) in the presence of (ID, Address proof should be enclosed)	Signature of first surety
Signed by the Stipendiary in the Presence of (Permanent address proof should be produced at the time of admission)	Signature of the Stipendiary

#### Bond to be executed by the student selected for M.Sc. in Psychiatry Nursing Course and his/ her sureties

Know	all men by those presents that I/WeSon/
	ter ofresiding at(Full Address)
hereir	after called the 'STIPENDIARY' (which expression shall unless excluded or a repugnant to the
conte	t include his/her heirs, executors, administrators and legal representatives) and (Full name and
addre	s):
	(Full name and address)
hereir	after called 'the First Surety' and 'the Second Surety' respectively (which expression shall unless
exclu	ed by or repugnant to the context include their respective heirs, executors, administrators and
egal	epresentatives) bind ourselves jointly and severally to pay Board of Management of the National
Institu	te of Mental Health and Neuro Sciences, Bengaluru- 560 029 (hereinafter called the 'NIMHANS')
on de	nand and without demur in the event of breach of contract as provided in Clause.4 of the agreement
all the	amount spent on the stipendiary together with further sum not exceeding 20% thereof drawn as
penal	y during the course.
Signe	this day of in the year two thousand and eighteen.
Wher	as stipendiary is nominated to the NIMHANS stipend at the rate of Rs.3,000/- per month for the I
and II	Years without any allowances for the study of Postgraduate M.Sc. in Psychiatric Nursing Course
at the	National Institute of Mental Health and Neuro Sciences, Bengaluru on the condition of his/her
execu	ing a bond supported by two sureties on the terms appearing hereinafter which the stipendiary

has agreed to do.

- 4. Now the condition of the above written obligation is that in the event of the above bounden stipendiary participating in a strike or being made to leave the training course on account of indiscipline or misconduct on his/her part or refusing to serve the Institute for a period of two years if required to do so within a period of six months after qualifying for full registration completing the course or other reasons not considered valid and satisfactory by the Director, National Institute of Mental Health and Neuro Sciences, Bengaluru- 560 029, whose decision in this behalf shall be final, the stipendiary and the sureties jointly and severally pay and refund to the Director, NIMHANS, on demand and without demur all the amount spent on the stipendiary together with a further sum not exceeding in the aggregate 20% thereof as penalty on account of the said training of studies and the aggregate sum not exceeding Rs.18,000/- as the Director, NIMHANS may direct. The decision of the Director, NIMHANS as to the commission of breach or any indiscipline, misconduct on the part of the stipendiary as also the amount of penalty payable as to whether the stipendiary has or has not performed and observed the conditions and obligations under these presents shall be final and binding on the stipendiary and the sureties.
- 5. The stipendiary except as provided in the agreement discontinues the course to which he/she has been admitted without completing in the middle shall be liable to pay a sum of six full months stipend to the Institute as penalty besides forfeiture of emoluments for the month in which he/she discontinues the course with interest until realization and the sureties are equally responsible.
- 6. And upon making such payment, the above written obligation shall be void and of no effect, but otherwise, it shall be and remain in full force and virtue.
- 7. And the surety hereby covenant with the Director, NIMHANS that liability of the sureties hereunder shall not be impaired or discharged by reason of time being granted or any forbearance, act or omission of the Institute (whether with or without the knowledge or consent of the sureties) in respect of or in relation to the several obligations and conditions to be performed or discharged by a stipendiary or by any other matter or thing whatsoever which under the law relating to sureties, shall but for this provision, have the effect of releasing the sureties from such liability, nor shall it be necessary for the Institute to sue the stipendiary before suing either of the sureties for amount due hereunder.
- 8. It is agreed that the stamp duty shall be borne by the student.
- 9. In witness whereof the said stipendiary and the sureties have put their respective hands the day and year herein above written hereunto and Sri/Smt......

	Signature of the Magistrate/Notary (With Seal)
Certified that the above named sureties a	re solvent and acceptable.
Signed by the Second Surety (Guardian) in the Presence of (ID, Address proof should be enclosed)	Signature of second surety
Signed by the First Surety (Parent) in the presence of (ID, Address proof should be enclosed)	Signature of first surety
be produced at the time of admission)	
(Permanent address proof should	Signature of the Stipendiary
Signed by the Stipendiary in the Presence of	

#### Bond to be executed by B.Sc.(Nursing / Radiography / Anaesthesia Technology students)

KNOW ALL MEN BY THESE PRESENTS THAT WE S	Son / Daughter of
residing at (full address)	in the
district of at present undergoing B.Sc. (Nursing / Radiography / Anae	esthesia Technology)
course in NIMHANS (hereinafter called 'the obligor') AND Shri / Smt./ Miss	Son /
daughter of Shri / Smt (hereinafter called "the sureties") do	o hereby jointly and
severally bind ourselves and our respective heirs, executors and administrators to p	pay to the Director,
NIMHANS (hereinafter called "the Government") on demand for the sum of Rs.5,00,000,	/- (Rupees five lakhs
only) besides emoluments paid during the period of one year Compulsory Internship to	ogether with interest
thereon from the date of demand at Government rates for the time being in force on G	overnment loans or,
if payment is made in a country other than India, the equivalent of the said amount in	the currency of that
country converted at the official rate of exchange between that country and India AND	TOGETHER with all
costs between attorney and client and all charges and expenses that shall or may have be	peen incurred by the
NIMHANS, Bangalore.	
WHEREAS the obligor is allotted seat by NIMHANS, Bengaluru to undergo B.Sc. (Nursi Anaesthesia Technology) course from to	
AND WHEREAS for the better protection of NIMHANS the obligor has agreed to execute condition as hereunder is written.	this bond with such
AND WHEREAS the said sureties have agreed to execute this bond as Sureties on behalf o	of the above bounden
NOW THE CONDITION OF THE ABOVE WRITTEN OBLIGATIONS IS THAT in the Shri. / Smt (failing to undergo one year's compulsory internship	Č .

internship after the successful completion of B.Sc. course, the obligor and the sureties shall forthwith pay to the NIMHANS or as may be directed by the NIMHANS on demand the said sum of Rs.5,00,000/- (Rupees five lakhs only) besides emoluments paid / payable during the period of Compulsory Internship together with interest thereon from the date of demand at Government rates for the time being in force on Government loans or together with interest thereon from the date of demand at Government rates for the time being in force on Government loans.

And upon the obligor Shr	ri. / Smt	and	l, or Shri. / Sm	t	and, or
Shri. / Smt	the sureties afores	said making such pa	ayment the abo	ve written obligati	on shall be
void and of no effect, other	erwise it shall be and	l remain in full force	e and virtue.		
PROVIDED ALWAYS TH	IAT THE Liability of	f the sureties hereu	nder shall not b	e impaired or dise	charged by
reason of time being grant	ed or by any forbeara	ance, act or omission	n of the NIMHA	NS or any person	authorized
by them (whether with or	without the consen	t or knowledge of	the sureties) no	r shall it be necess	ary for the
NIMHANS to sue the oblig	gor before suing the	sureties Shri. / Smt.	8	and Shri. / Smt	
or any of them for amoun	ts due hereunder.				
PROVIDED ALWAYS and	d it is HEREBY SPE	CIFICALLY AGRE	ED and DECLA	ARED that the dec	ision of the
Government, as to whethe					
conditions herein before s	et out and recited sh	nall be final and bin	ding on the par	ties hereto.	
The bond shall in all resp	ect be governed by	the laws of India fo	or the time bein	g in force and the	rights and
liabilities hereunder shall	where necessary be	accordingly determ	nined by the app	propriate Courts in	n India.
Signed and dated this		day of		_ two thousand an	d eighteen.
Signed and delivered by	the obligor above n	amed (ID, Address	proof should b	e enclosed)	
Shri. / Smt			_(Name and S	ignature of the Ol	oligor)

In the presence of Witnesses:	1	
	2	
Signed and delivered by the I	First surety (ID, Address proof s	should be enclosed)
Shri. / Smt		(Name and Signature of the First Surety)
In the presence of Witnesses:	1	
	2	
Signed and delivered by the S	Second surety (ID, Address pro	of should be enclosed)
Shri. / Smt		(Name and Signature of the First
Surety)		
In the presence of Witnesses:	1	
	2	
Certified	that the above named sureties a	are solvent and acceptable.
		Signature of the Magistrate/Notary
		(With Seal)
	ACCEPTED	DIRECTOR
		NIMHANS, Bengaluru– 560 029

#### IV. Declaration Certificate Format

#### **DECLARATION CERTIFICATE**

#### 1. To be provided by the Applicant

- a. I agree to undergo the course on a full time basis and shall not engage myself in any kind of private practice during the period of the course. I will not pursue any part time course elsewhere unless permitted by the Institute.
- b. I agree that during my stay at the Institute, I shall not draw my pay/allowances or fellowships from any other source, if I am employed as a Resident.
- c. I declare that I shall abide by the Rules and Regulations of the Institute and those that are framed from time to time.
- d. I hereby declare that the information given in this application is true and correct to the best of my knowledge and belief. In case any information given in this application proves to be false or incorrect, I shall be responsible for the consequences.
- e. I agree that I will not indulge in ragging and am aware that Ragging is banned in this Institution. If at any point of time, any incident of ragging comes to the notice of the authority, and if I cannot give satisfactory explanation, the authority may expel me from the Institute.
- f. I also declare that if any information provided by me is found false, my candidature will be rejected at any point of time. Mere permission to write the Entrance Test does not mean that I am eligible for admission to courses at NIMHANS.

Place:	(Signature of the Applicant)
Date:	

2.	To	be provided Parent/Spouse/Guardian of the Applicant
	a.	I hereby declare that I am responsible for the timely payment of all dues to the National Institute of
		Mental Health and Neuro Sciences, Bengaluru (NIMHANS), in respect of my son/daughter/ward/
		spouse
		(Name of the Applicant)
		during the period of his/her study at the Institute and thereafter, until the accounts are cleared.
	b.	I am also aware that Ragging is banned in this Institution, if any incident of ragging comes to the
		notice of the authority and if my son/daughter/ward/spouse cannot give satisfactory explanation,
		the authority can expel him/her from the Institute.
Plac Date		(Signature of Parent/Spouse/ Guardian of the Applicant)
3.		rwarding note to be signed by the Employer under whom the applicant is employed(Applicable for onsored/Deputed Candidates)
	1.	I certify that the application is being made with my permission and that there is no objection to release the applicant if selected for the courses, within the prescribed limit of time.
	2.	I also certify that I shall inform the authorities of the National Institute of Mental Health and Neuro Sciences, Bengaluru(NIMHANS), about the financial terms and remit salary, Leave salary, Deputation Allowances etc., to the Institute Account which will be paid to the Applicant for the period of the period of training from the Institute.
Plac Date		(Signature and Seal of the Employer)

# **ABBREVIATIONS**

Ph.D DOCTOR OF PHILOSOPHY

CPH CENTRE FOR PUBLIC HEALTH

M.Phil MASTER OF PHILOSOPHY

M.Sc MASTER OF SCIENCEDM DOCTOR OF MEDICINE

MD DOCTOR OF MEDICINE

SR SENIOR RESIDENT

JR JUNIOR RESIDENT

PDF

B.Sc BACHELOR OF SCIENCE

DCNT DIPLOMA COURSE IN CLINICAL NEUROPHYSIOLOGY TECHNOLOGY

CCNT CERTIFICATE COURSE IN CLINICAL NEUROPHYSIOLOGY TECHNOLOGY

DPN POST-BASIC DIPLOMA IN PSYCHIATRIC/MENTAL HEALTH NURSING

DNN POST-BASIC DIPLOMA IN NEUROSCIENCE NURSING

POST DOCTORAL FELLOWSHIP

M.Ch MAGISTER CHIRURGIAE

MBBS BACHELOR OF MEDICINE, BACHELOR OF SURGERY

M.Sc MASTER OF SCIENCE

M.Stat.(ISI) MASTER OF STATISTICS

CAP CHILD & ADOLESCENT PSYCHIATRY

DNB DIPLOMATE OF NATIONAL BOARD

ICMR INDIAN COUNCIL OF MEDICAL RESEARCH

TSS TALENT RESEARCH SCHEME
MCI MEDICAL COUNCIL OF INDIA

MA MASTER OF ARTS

BE BACHELOR OF ENGINEERING
MPH MASTER OF PUBLIC HEALTH

UGC UNIVERSITY GRANTS COMMISSION

CSIR COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

DBT DEPARTMENT OF BIOTECHNOLOGY

MSW MASTER OF SOCIAL WORK

DST DEPARTMENT OF SCIENCE AND TECHNOLOGY

PSW PSYCHIATRIC SOCIAL WORK

CP CLINICAL PSYCHOLOGY

NIIR NEUROIMAGING AND INTERVENTIONAL RADIOLOGY

B.Tech BACHELOR OF TECHNOLOGY

M.Tech MASTER OF TECHNOLOGY

MPT MASTER OF PHYSIOTHERAPY

MOT MASTER OF OCCUPATIONAL THERAPY

MLT MEDICAL LABORATORY TECHNOLOGY

DMLT DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY

B.Sc MLT BACHELOR OF SCIENCE IN MEDICAL LABORATORY TECHNOLOGY

SERB SCIENCE AND ENGINEERING RESEARCH BOARD

DRDO DEFENCE RESEARCH AND DEVELOPMENT ORGANIZATION

BAMS BACHELOR OF AYURVEDIC MEDICINE AND SURGERY

BDS BACHELOR OF DENTAL SCIENCES

CCRYN CENTRAL COUNCIL FOR RESEARCH IN YOGA & NATUROPATHY

CCRAS CENTRAL COUNCIL FOR RESEARCH IN AYURVEDIC SCIENCES

NCBS NATIONAL CENTRE FOR BIOLOGICAL SCIENCES

MS MASTER OF SURGERY

INC INDIAN NURSING COUNCIL

OCD OBSESSIVE COMPULSIVE DISORDER

SAARC SOUTH ASIAN ASSOCIATION FOR REGIONAL COOPERATION

DPM DIPLOMA IN PSYCHIATRY

AYUSH AYURVEDA, YOGA AND NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY

TMC TRANSFUSION MEDICINE CENTRE

CPH CLINICAL PATHOLOGY AND HAEMETOLOGY SECTION

NACO NATIONAL AIDS CONTROL ORGANIZATION

NABL NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION

**LABORATORIES** 

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