भारत सरकार GOVERNMENT OF INDIA विज्ञान और प्रौद्योगिकी मंत्रालय MINISTRY OF SCIENCE AND TECHNOLOGY



Fellowship in Genetic Diagnostics

CALL FOR APPLICATIONS

With an aim to expand National Inherited Disorders Administration Kendras (NIDAN Kendras) to provide comprehensive clinical care including diagnosis, management, multidisciplinary care, counseling, prenatal testing at Government Hospitals/ Medical Colleges, Department of Biotechnology (DBT), Government of India has launched a 6 month 'Fellowship in Genetic Diagnostics' for Faculty/ Clinicians only from Government Medical Colleges and Hospitals. Four (4) trainees in a year (in two batches) will be taken by each centre.

In the current era of genomics, genetics has become an integral component of medicine. This platform would offer a great opportunity to Govt. Hospitals and Medical Colleges by training their permanent faculty, physicians and scientists who are keen to develop Genetic Facilities to cater the need of patients. The program will provide training in cytogenetic and molecular genetic techniques along with the understanding about their applications in patient care. Under this program well-established centres with facilities for diagnosis and management of genetic disorders have been selected to provide training. The list of centres where the Fellowship is available is given at the end. Interested and eligible candidates should send application to the centre of their interest in the format provided below. **Applicant should not apply to more than two centres at a time.** The fellowship will provide an opportunity to get training in the exciting field of genetics as applied for patient care. Further, the faculty members trained under this program will be eligible to apply for DBT grant for Establishment of National Inherited Disorders Administration Kendras (NIDAN Kendras) at their respective institutes/colleges/hospitals after successful completion of their training.

Eligibility and Mode of selection of trainees: Post-graduate degree (MD/MS/DNB) in Pediatrics, Medicine or Obstetrics & Gynaecology, Pathology, Microbiology, Biochemistry, Laboratory Hematology, Laboratory Medicine, Anatomy, Physiology, Dermatology, Hematology, Radiotherapy, Endocrinology, Ophthalmology, Oncology or any other clinical / paraclinical specialty/Superspecialty and holding regular position in Government medical college/hospital.

Mode of selection: Screening and selection based on scrutiny of Application form and telephonic interview. The commitment to learn and the possibilities of implementation at the workplace will be judged.

Award Support: The trainee/clinicians from outstation institutes will be paid a displacement allowance of Rs 30, 000 per month.

Fellowship Schedule: 1st Batch from 1st September 2019 to 28th February 2020; and 2nd Batch from 1st March 2020 to 31st August 2020

<u>Fellowship of 1st Batch will start from 1st September 2019</u> <u>Last date for submission of applications: 31st July 2019</u>

How to Apply: Application form (in the format given below) along with self-attested photocopies of degree certificates, MCI registration certificate and experience certificates should be sent to the following address. The application should be forwarded by the head (Director / Principal) of the institute. Soft copy of the application is to be sent by email to the training coordinator of the concerned centre (s) and it should be followed by duly forwarded hard copy of the application along with copies of necessary certificates.

While sending soft copy of the application to the concerned centre, copy of the email may please also be marked to <u>Dr. Onkar N. Tiwari, Scientist 'E',</u> Department of Biotechnology, Govt. of India in the email ID: <u>onkar.dbt@nic.in</u> for information.

LIST OF THE ALL NINE (9) CENTRES WHERE THE FELLOWSHIP IN GENETIC DIAGNOSTICS IS AVAILABLE IS AS FOLLOWS:

| Sr No | Name of the Centre | Thrust areas | Clinical services | Laboratory facilities | Number of seats | Contact address of Training Co-ordinator |
|----------|--|---------------------------|---------------------|------------------------|-----------------|---|
| | | | | | per year | |
| 1. | Department of Medical | Birth defects, Genetic | Clinical genetics, | Cytogenetics, Cell | | Dr Shubha Phadke, |
| | Genetics, Sanjay Gandhi | Hematology, | Prenatal Diagnosis, | Culture, Molecular | | Head, Department of |
| | Postgraduate Institute of | Dysmorphology, IEM, | Disease Mangement, | Cytogenetics including | | Medical Genetics |
| | Medical Sciences, | Skeletal Dysplasias, | Fetal malformation | Microarray, MLPA, | 4 | shubharaophadke@gma |
| | Raibarelly Road, | Neurological and muscular | diagnosis, | Molecular Genetics, | | <u>il.com</u> |
| | Lucknow, 226014 [UP] | disorders, Clinical | Reproductive | Sanger Sequencing, | | 0522 249 4334 / 4325 |
| | व्यस्ति ३० | Genetics | genetics, Genetic | NGS Analysis, Enzyme | | |
| | क्षितित्तर अस्ति | | counseling, | Assays, Newborn | | |
| | | | Management of | screening | | |
| | स्यां सम्यां | | genetic disorders, | | | |
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| 2. | Department of Haematology, Christian Medical College, Vellore, Tamilnadu | Hemoglobinopathies, Disorders of Haemostasis, Bone marrow Failure syndromes Rare haematological disorders, Primary immunodeficiency Diseases | All inherited haematological disorders-Diagnosis and Management including Haematopoietic Stem cell transplant | State of the art molecular lab, Molecular Genetics- Identification of genetic variants, Sanger Sequencing, NGS Analysis, Interpretation of results and clinical correlation, Prenatal Diagnosis | 4 | Dr. Eunice Sindhuvi Department of Haematology eunice@cmcvellore.ac.i n 0416 -228- 3569/3577 |
|----|---|---|---|--|---|---|
| 3 | Department of Clinical Genetics Christian Medical College, Vellore, Tamilnadu Genetics Christian Medical College, Vellore, Tamilnadu | Dysmorphology, Rare syndromes, Neuromuscular and neurodegenerative disorders, Genodermatosis, Cardiac and Renal, Autoimmune, Multifactorial disorders | Clinical genetics, Prenatal Diagnosis, Adult Genetics, Disease Management | Molecular Genetics laboratory for genetic variants by Sanger,genescan, NGS, Bioinformatics, Protein analysis, Relevant enzyme assays | 4 | Dr. Sumita Danda Head, Department of Clinical Genetics. sdanda@cmcvellore.ac. in 0416-228-3161/2304 |
| 4 | Centre for Genetic Studies and Research, The Madras Medical Mission, Chennai – 600037, Tamilnadu | Genetic diagnosis, Prenatal genetics, Infertility, ART, Aneuploidy, Single gene disorders, Cardiac genetics | Clinical genetics, Prenatal genetic diagnosis, Fetal medicine, Paediatric cardiology, Reproductive medicine | Cytogenetics, Molecular Cytogenetics (FISH), Prenatal sample culturing, Aneuploidy screening and testing, Sperm aneuploidy test (SAT) | 4 | Dr.Bibhas Kar Consultant and Head Centre for Genetic Studies and Research drbibhaskar65@gmail.c om 0 44 – 26561801 / 4259 |

| 5 | Department of Haematology N.R.S Medical College and Hospital, 138 AJC Bose Road Kolkata- 700014, West Bengal | Hemoglobinopathies like β-thalassemia, α-thalassemia and sickle cell anaemia, hemophilias, Metabolic disorders like, G6PD Deficiency, Congenital adrenal hyperplasia and Galactosemia, Down's syndrome etc | Clinical genetics, Prenatal Diagnosis, Disease Management by genetic counselling | PCR and Real time PCR based Molecular genetics, Enzyme assays | 4 | Prof(Dr) Prantar Chakrabarti Head, Department of Haematology prantar@gmail.com Hematology@nrsmc.ed u.in Landline: 03322860033 9433018899 Fax: 03322658179 |
|---|--|---|---|---|---|---|
| 6 | Diagnostics Division, Centre for DNA Fingerprinting and Diagnostics, Hyderabad, Telangana | Cytogenetic testing for chromosomal disorders and copy number variations, Molecular testing for Thalassemia, DMD, SMA, other single gene disorders, NGS panel testing, Whole exome/ genome sequencing, enzyme assay for lysosomal storage diseases, inborn errors of metabolism testing | Not available | Cytogenetics, Cell Culture, Molecular Cytogenetics including FISH, Microarray analysis, Molecular Genetics, Sanger Sequencing, MLPA, Genotyping, NGS Analysis for whole exome/genome, Enzyme Assays | 4 | Dr Ashwin Dalal Head, Diagnostics Division, Centre for DNA Fingerprinting and Diagnostics adalal@cdfd.org.in 040-27216147/6148 |
| 7 | Division of Genetics, Department of Pediatrics, AIIMS, New Delhi 110029 | Dysmorphology, IEM, LSD, Skeletal dysplasia, birth defects, Neurodevelopmental disorders | Management of IEMs Enzyme replacement therapy for LSDs Genetic counselling And Prenatal diagnosis Fetal autopsy | Cytogenetics, Cell Culture, Molecular Genetics, Sanger Sequencing, MLPA, QF PCR, Real time PCR, Bioinformatics Analysis (NGS, CMA), Enzyme Assays, HPLC, Prenatal screening and testing | 4 | Dr Madhulika Kabra Dr Neerja Gupta madhulikakakbra@hot mail.com, neerja17aiims@gmail.c om |

| 8 | ICMR-National Institute of Immunohaematology, 13th Floor, KEM Hospital, Parel, Mumbai, 400015 | Primary Immunodeficiency Diseases, Transfusion medicine, Hemoglobinopathies, Red cell membranopathies and enzymopathies, Haemophilia and other inherited bleeding disorders, Inherited thrombotic disorders, Cytogenetics | Specialized diagnostic services for various inherited haematological and immunological disorders, Carrier detection and Prenatal diagnosis | Sanger sequencing, Cytogenetics, Karyotyping and FISH, HPLC system, Cell culture facility, Flowcytometry, Red cell enzyme assays, Automated coagulometer and thromboelastograph | 4 | Dr Manisha Madkaikar, Director, madkaikarmanisha@ya hoo.co.in directorniih@gmail.co m 02224132928 022 24138518/19 |
|---|---|---|---|---|---|---|
| 9 | Division of Medical Genetics & Metabolism, Genetic lab, Department of Pediatrics, Maulana Azad Medical College, New Delhi | IEM, Newborn Screening, Dysmorphology, Skeletal Dysplasias, Neurological and muscular disorders, Clinical Genetics, Neurotramsmitter disorders | Clinical genetics, Prenatal Diagnosis, Disease Mangement, Emergency sick day IEM management | Mass spectrometry, Cytogenetics, Cell Culture, Molecular Cytogenetics, Molecular Genetics, Sanger Sequencing,, Enzyme Assays, Newborn screening & Confirmation | 4 | Dr Seema Kapoor, Head , Division of Medical Genetics drseemakapoor@gmail. com 011232397417, 01123221927 |

Last date for submission of applications: 31st July 2019
Application form is on the next page

Application form for the Fellowship in Genetic Diagnostics

| 1. | Full Name (in Block le | | | | | | | |
|----|--|---------------------------------|-----------|-----------------|--------------------------------|--|--|--|
| 2. | (As per SSC / X Class R Gender: | ecora) | | | Stick passport size photograph | | | |
| 3. | Date of birth: | | | | | | | |
| 4. | Qualifications: | | | | | | | |
| 5. | . Medical council registration number: | | | | | | | |
| 6. | Present designation: | | | | | | | |
| 7. | Complete address: | | | | | | | |
| | | | | | | | | |
| 8. | Contact number(s): | | Email id: | | | | | |
| 9. | Educational qualificat | tions (starting with graduation |): | | | | | |
| | Degree | College/ University | | Year of passing | Awards/ distinctions/ honours | | | |
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| 10. Professional ex | perience (| in the o | chronologicall | v descending | order begi | nning with t | he current i | oosition): |
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| Designation | Hospital/ Institute | Duration | Special experience/ honours if |
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| | | | any |
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11. Additional academic achievements/ professional activities:

12. **Number & list of publications** (beginning with the most recent publication, list all publications with the complete reference): Please also attach the list

| 13. Mention briefly (in not more than 250 words) you medical practice: | ir reasons for applying for this fellowship and how you think it would help you in you | | | | |
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| Date: | | | | | |
| Place: | Signature of the applicant | | | | |
| Comment by forwarding authority: | | | | | |
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| Director / Principal / Dean of the Institute / Medical College (Signature and Stamp) | | | | | |