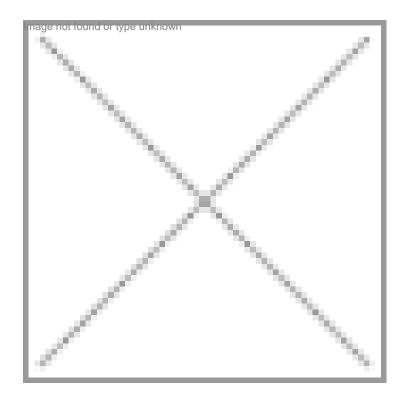


BioResearch unlocks newer research avenues

12 May 2004 | News



BioSpectrum spoke to Dr SK Brahmachari, Director Institute of Genomics and Integrative Biology (IGIB), New Delhi, Dr Lalji Singh, Director Center for Cellular and Molecular Biology (CCMB), Hyderabad and Dr CM Gupta, Director Central Drug research Institute (CDRI), Lucknow, to understand what challenges, opportunities and prospects will the future researchers have in this fast changing scenario.

Employer Expectations

Quantifications dilute to the ICM Bot ISRO, IBARG and propagations with considerable autonomy in their functioning and no

basic subject and ability to pick up related areas, in addition visible red tapism. According to Dr Lalii Singh, Director Center for Cellular and Molecular Biology (CCMB) CSIR laboratories to a good practical hand and observation skill. have a lot of autonomy. And these organizations work in various research activities. Dr CM Gupta, Director Central Drug ន្ទះខ្លួនទៀត្រង្គាំដែរទៀតអាងក្រុមប្រជុំ ក្រុមប្រជុំ ក្រុមប្រាស់ integral of integral combination of medicinal chemistry and biological sciences that value that leaders into, sally injury to major that leading out she will develop ment. The major strength of the nastitute in its often in vitro and in vivo screening models in dispandiations with the drug R&D program. These include new disciplines and expertise in combinatorial chemistry, highthroughput screening, genomics, മ്ളെഗേസ്തും അടയാൾ tionah biology lithis in propartion at iting to propagate and molecular biology."

would help the students in organizing themselves with respect The inferse that the the has seed by the second in basic research for the discovery and development of new drugs. However, only a few disease areas are covered by these pharma companies as theto Selections should be treduced by the concentration in the concentration of government institutions sapsolicated paroblishings researcher indicatory. Vi laster betrivien more by societal welfare and knowledge contribution. CDRI's major comoditiebostiaionosingunent threcosuato jitio ctasia cicia la distregoste and company and company com Institietiens carried the welfer can detabrilly dentrersk of if the carl ten carried the practical skill charvally praise being of the thing that and mid-career professionals, added Dr Gupta. Also the industry and R&D institutions are

beginning to talk with each other. CDRI for example has collaborations with prominent pharma companies like Themis Medicare, Dabur Research Foundation, Lupin Labs, and Novo Nordisk.

These institutes have world-class infrastructure. Informed Dr Singh, "CCMB's real strength lies in its being an institute having one of the best infrastructure in the world to carry out basic research in the area of modern biology. We have a very strong instrumentation division and all our equipment are maintained, serviced and repaired in-house." Another reason why these research institutes are attractive is the good ambience and working culture. Dr Singh said, "Students prefer to join CCMB because it provides single occupancy hostel facility with kitchenette and attached bathroom, facility for gym and lounge, common washing facilities, solar water heating and canteen facility for breakfast, lunch and dinner. The institute and all the services operate round the clock. We provide transport to students and scientists at late hours to drop them at their residences. Most of the facilities at CCMB are centrally operated by trained technical staff. Everyone including students are free to go to any floor and use any equipment, if it is not already in use, simply by entering into a log book."

Added Dr SK Brahmachari, director, Institute of Genomics and Integrative Biology (IGIB), New Delhi, "IGIB offers excellent infrastructure and our mandate encompasses interesting areas of research. But our true strength is a unique environment where the researcher can strike an optimal balance between fundamental research and that oriented with application potential."

Selection Procedure

trend

Government funded non-profit organization typically advertise in leading national dailies, scientific journals like Nature and Science and websites. Ad-hoc appointments are also made through "Quick Hire Schladie" of examination of examina Research (CSIR) in cases of extremely suitable candidates. Research trainees હંઉમાંધાના a માર્ગ જો પ્રાથમિક a માર્ગ જો પ્રાથમિક માર્ગ પ્રાથમ For admission to the PhD programs, the CSIR-NET qualified candidates can directive the contract of interest subject to consent of the institute's faculty as his/her supervisor and director's approval. Also added Dr Gupta, "Considering the emergence of new specialized disciplines and their need in drug R&D medical Graduates and M Pharma candidates with a valid GATE score to avail CSIR fellowships for pursuing a reservence, in addition to CSIR lateral entry as senior research fellow. Besides, CDR holds a writtern examination/interview solection of research fellows to work in grant-in-aid projects and research schemes. selection of research fellows to work in grant-in-aid projects and research schemes.

Dr Lalji Singh added, "A large number of Indian scientists from all over the world apply to CCMB every year. We also advertise in internationally reputed journals giving details of specific expertise that away are looking for. All the patential job applicants are requested to give a seminar and have one-to-one discussions with intermediate to give a seminar and have one-to-one discussions with intermediate to give a seminar and have one-to-one discussions with intermediate to give a seminar and have one-to-one discussions with intermediate to give a seminar and have one-to-one discussions with intermediate to give a seminar and have one-to-one discussions with intermediate to give a seminar and have one-to-one discussions with the contract of the co includes experts from outside CCMB and outside CSIR) would short-list candidates for interview. Selection of candidates is based on their publication record, their research proposal that they want to take up in CGMB suitability of the research proposal in the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denotes the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the on-going projects in CCMB and CCMB's aspirations to eight a powrite denote the context of the context o would appear for interviews, which are done in two rounds. Success rate of the final selection is between 5 and 15."

Dr SK Brahmachari informed, "Students come to IGIB either during their post graduating for 2-agreements as impines or an PhD students. The trainees may apply by directly writing to Head, PME, IGHID to Head, examination are eligible for applying to join for PhD under the guidance of scientime at a GResidant y to purply a weather be selected through an interview conducted once in a year."

The opportunity for researchers in all national research laboratories in the country pie partine continuously refurbished with regard to modern infrastructure. The aim is to attract the best talent and build capability for new technology absorption. It will grow at much faster rate opine directors. Several new institutes are corning up and many old ones are also initiating new fields in order to be in the forefront of biotechnology.

Rolly Dureha

Agriculture Research (ICAR), Council of Scientific and Industrial Research (CSIR)

Biotechnology being an interdisciplinary field consists of studies of biochemistry. molecular biology, genetics, microbiology and other related subjects