Newspaper Clips

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Hindustan Times, ND 30-Mar-11 P-5 ht horizon

Robotics professional can work in other areas

Born in India, educated in Japan and now a scientist in Scotland, Prof Sethu Vijayakumar from the University of Edinburgh speaks about the 428-year-old university, its robotics department and impending tie-ups in India

Vimal Chander Joshi
■ Vimal joshi@hindustantimes com

What's the career scope of robotic science in India and abroad?
This is a science which brings together the expertise from different disciplines such as electronics, hardware design, algorithms and computer science along with other areas. A lot of our students have been recruited in IT (information technology) companies such as Google and Microsoft.

In India, robotics science is in very early stages. We have, however, seen changes happening and universities have started offering programmes in robotic science.

As robotics science integrates varied engineering sciences, we suppose, a professional must understand the basic dynamics before taking up the study of robotic science. At which level should the subject be studied - undergraduate or postgraduate?
I think one must study robotics at the postgraduate or doctoral level when the engineer already has a sound grounding of engineering.

At the University of Edinburgh also, we offer this programme at the master level and is known as Master in informatics (with specialisation in intelligence robotics). At the undergraduate level, we run Bachelor of artificial intelligence which gears towards research or job in robotics.

How much emphasis is given on research at the University of Edinburgh?
We give a lot of emphasis on research which is normally driven towards solutions to industry problems.

Though we carry out basic science research also but the underlying application in the industry must be kept in mind at the same time.

Just because we are a top university doesn't mean that we would get research funding for any project (feasible or non feasible). We have to identify critical areas which are of some benefit to the society such as climate change.

New connections: The University of Edinburgh is looking forward to institutional collaborations with IIT, Bombay, IISc, TIFR and JNU

Does the university plan to open a campus in India?
We don't have such expansion plan. Our chancellor believes that the ambience is hard to replicate and we want to maintain the quality.

The only expansion we are looking forward to is the institutional collaborations with the universities and research centres in India such as IIT (Indian Institute of Technology) Bombay, IISc (Indian Institute of Science-Bangalore), TIFR (Tata Institute of Fundamental Research- Mumbai) for science subjects and JNU (Jawaharlal Nehru University-Delhi) for social sciences.

These tie ups will essentially look at two things. One would be exchange of faculty for the research projects and the other one would entail exchanges between PhD students where they spend two years in UK and the remaining two years in India to earn the dual degrees from both the institutions.

Edinburgh is in Scotland whereas all top universities including Oxford and Cambridge are in England. Is there any striking difference between the universities of two countries?
There is no (radical) difference at all. The only difference is that the graduation is for three years in England while in Scotland, it is spread between four years.

The university is very old (established in 1583) and UNESCO has declared this as a world heritage site.

Recently the University of Edinburgh has opened an office in India (Mumbai). What purpose will be met by this office?
The liaison office will reach out to Indian universities and industries for collaborations. It will happen the other way round also. If a company wants to get in touch with the university, it would be facilitated.

Times of India ND 30/03/2011 P-21

This 'pacemaker' fights diabetes

Stimulates Muscles, Resulting In Release Of More Insulin

When implanted under the skin, the matchbox-sized gadget stimulates the stomach muscles while the patient is eating. This helps boost muscle movement resulting in the release of more insulin. Trials showed the device reduced blood glucose levels by a quarter over three months

London: Scientists have developed a new pacemaker-style device that delivers mild electric pulses to the stomach, an innovative medical gadget which they say could help tackle type-2 diabetes more effectively. When implanted under the skin, the matchbox-sized gadget, called the Diamond — or Diabetes Improvement And Metabolic Normalisation Device — stimulates the stomach muscles while the patient is eating.

This helps boost muscle movement resulting in the release of more insulin — the hormone responsible for removing excess sugar in the blood. Previous studies on this device have suggested that it results in the long-term lowering of blood glucose levels in overweight people with type-2 diabetes.

Developed by medical device company MetaCure, the device delivers electrical stimulation through two wires placed in the muscular layer of the stomach.

The wires are tunnelled under the skin to the generator. The device automatically senses when a patient is eating, by detecting when the stomach starts to naturally contract, and fires small painless electrical signals into the muscles of the stomach. This tricks brain into thinking more food has entered the stomach than the person has actually eaten. To deal with this supposedly large meal, the brain boosts insulin production as well as triggering the release of hormones that suppress appetite.

This means that the patient feels full much sooner than normal. A wireless charger system allows the patient to recharge the device at home by placing the charger over the abdomen for 45 minutes, once a week.

Trials at the Medical University of Vienna showed the device reduced blood glucose levels by a quarter over three months. PTI

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Push to study impact of soot on climate

TIMES NEWS NETWORK

FOCUS ON BLACK CARBON

New Delhi: The government on Tuesday launched a black carbon research initiative to study the phenomenon of soot, its sources and impact on health and environment. Black carbon is among those non-greenhouse gas emissions that is fast becoming the focus of climate change science.

Commonly known as soot, black carbon is a form of respiratory suspended particulate matter that is produced from incomplete combustion through biomass burning, cooking with solid fuels and diesel exhaust. While India and China are credited for 25-35% of global black carbon emissions, there is not much scientific information on the actual reasons or sources behind its production.

"We need to be pro-active in our approach. This is an important step forward, not just for India but for the international community. India is well aware of the importance of the issue (of climate change), and is committed to addressing it, based on sound scientific assessments," said environment minister Jairam Ramesh.

The black carbon research initiative will be undertaken under the aegis of Indian network of climate change assessment. The Rs 200-crore project will be a five-year research programme, and will be a joint effort among the ministries of environment, earth sciences, science and technology and Isro. The report is meant to build on the existing aerosol study, and will involve nearly 101 institutions in research activities.

"This is one of the most ambitious programmes in the world on aerosol research and black carbon. It is a culmination of over 25 years research from pioneering Indian scientists. India has positioned itself to be second to none in this area of research," said V Ramanathan, a leading scientist.

Times of India ND 30-Mar-11

P-21

Beyond sci-fi: Journey to the centre of Earth

London: In what mimics the classic sci-fi movie 'Journey To The Centre Of The Earth', British scientists claim to be planning to drill through five miles of solid rock to Earth's mantle for the first time, and bring back samples.

A team led by Damon Teagle of the National Oceanography Centre in Southampton says that the incredible feat would involve tunnelling through five miles of solid rock on the sea bed in temperatures as high as 298° C.

Scientists in Britain are planning to drill through five miles of solid rock to Earth's mantle for first time and bring back samples

Once there, the pressure on the equipment would be a staggering four million pounds per square inch — 285,000 times that of normal gravity, the scientists say. They hope to take samples and get them back up to the surface so people can learn more about the origins of the planet; they chose the mantle because it contains most of Earth's rocks so would likely yield specimens of interest, the Daily Mail reported.

According to Teagle, the best place to drill to the mantle would be in the ocean as the crust is thinner there. The technical challenges would be enormous and the drill would have to function without a riser, a common safety feature where double pipes are used to vent gasses. Instead, seawater would have to be pumped into the hole with enough pressure to force samples being dug up back up to the surface.

There have been previous attempts to drill to the mantle but Project Mohole in the 1960s failed due to poor organisation and cost overruns. Samples of rock from mantle have also found their way to the surface but they have been spouted out by volcanoes. PTI

Financial Express ND 30-Mar-11 p-5

India's inequality low thanks to more education

fe Bureau

New Delhi, Mar 29: One of the remarkable features of India's growth story, over the past three decades, according to Surjit S Bhalla, has been the fact that inequality levels haven't risen much. The Gini coefficient, Bhalla pointed out in a presentation to NCAER, was 35.4 in 1983, fell to 33.2 in 1999-00 and then rose to 37.8 in 2007-08 (Bhalla's findings were, however, contested by Himanshu, Assistant Professor at JNU).

Bhalla's explanation for this is essentially two-fold. For one, he argued citing facts, that the poorer states' growth has picked up dramatically over the past few years – nothing but the usual 'catch-up' process that resulted in poorer countries like India seeing their growth rising – and also the sharp rise in education levels over the past few decades. If Bihar's growth rises more than that of a Maharashtra or a Punjab, this means the inequality between the average Bihari and the average Maharashtrian or the average Punjabi falls.

Bhalla cited figures to show the education inequality has also fallen dramatically over the past few decades. Since a higher education results in income levels rising, a higher education for the poor automatically resulted in their income levels rising in relative terms.

As a direction finder for policy reforms, Bhalla's paper is significant. It shows the government is on the right track when it pushes for more education reforms. He notes that irrespective of gender or geographical differences like urban or rural, there has been a nearly 30% decline in educational inequality in India in the last twenty years. From 0.71 in 1983, educational inequality has steadily declined to 0.52 in 2007-08. He correlates that with reducing income inequality.

THE PAPER SHOWS THE GOVERNMENT IS ON THE RIGHT TRACK WHEN IT PUSHES FOR MORE EDUCATION REFORMS. THERE HAS BEEN A NEARLY 30% DECLINE IN EDUCATIONAL INEQUALITY IN INDIA IN THE LAST TWENTY YEARS

While Sudipto Mundle, a discussant for Bhalla's paper, pointed out that the paper didn't take into account the role of rising investment levels in India's growth story, Bhalla pointed out that the role of the middle class was more important. His analysis, of countries across the globe, showed that when the middle class crossed a share of 10%, this resulted in less arbitrary policies and this, in turn, led to higher investment levels.

In overall terms, Bhalla's model said each 10% rise in the size of the middle class resulted in an increase in GDP by one percentage point; and each one year increase in the average education-years results in a 2.3-3 percentage point hike in GDP growth rates.

Bhalla's analysis also showed that while India needed to spend 7.8 % of its GDP to eliminate poverty in 1983-4, this is now down to 0.43% right now. This figure, Bhalla said, was roughly equal to the current spending being down on the MNREGA scheme. Does this mean Bhalla is in favour of the spending on MNREGA?

Not really. In a news story in this newspaper some weeks ago, Bhalla examined the record of the MNREGA and found that there were substantial leakages in the programme, and that its efficacy was not much higher than that for other non-MNREGA programmes.

Hindu ND 30/03/2011 P-9

Major changes in MBBS curriculum proposed

A graduate would have to pass an exit exam or licentiate examination in order to practise medicine

Aarti Dhar

- **A two-year Master of Medicine programme proposed**
- **New curriculum structured to bridge gaps between theory and practice**

NEW DELHI: The Board of Governors of the Medical Council of India (MCI) has proposed major changes in the undergraduate curriculum and training programme that would create an "Indian Medical Graduate," who will have necessary competence to assume his or her role as a healthcare provider.

The "Indian Medical Graduate" will have to pass an exit exam or a licentiate examination after an internship to get licence to practise anywhere in the country. The national-level exit exam is expected to set a standard for doctors. The MCI also proposes to introduce the National Eligibility-cum-Entrance Test from 2012.

A new two-year Master of Medicine (M. Med) programme is also proposed with focus on skill development. Degree holders will be eligible to teach undergraduate courses. There will be no competitive exam for this course and the assessment will be based on the student's performance during the course and the national exit exam.

The restructured curriculum laid emphasis on clinical exposure, integration of basic and clinical sciences, clinical competence and skills and new teaching-learning methodologies that would lead to a new generation of graduates of global standards, Dr. S.K. Sarin, Chairperson, Board of Governors of the MCI, said here on Tuesday, after a day-long national meet on "Implementation of Reforms in Undergraduate and Postgraduate Medical Education" where the proposed reforms were adopted.

The proposals will have to be approved by the Ministry of Health and Family Welfare before their implementation in 2012.

The licentiate system, if approved, would be optional between 2012 and 2016, but mandatory thereon, Dr. Sarin said. While the duration of the undergraduate course would remain five-and-half-years, a two-month Foundation Course after admission to prepare a student to study medicine effectively is proposed. This would help in orienting students to national health scenarios, medical ethics, health economics, learning skills and communication, life support, biohazard and environment safety.

The new curriculum had been structured to facilitate horizontal and vertical integration between disciplines and bridge the gaps between theory and practice. In the first year, focus would be on basic and laboratory sciences (integrated with their clinical relevance), while in the second and third years, focus would be on clinical exposure and learning. Clinical training would start in the first year and there would be more focus on common problems seen in outpatients and emergency settings.

Importantly, an 'elective' subject had been added to the 'core' subjects to allow flexible learning options in the curriculum and the options include clinical electives, laboratory postings and or community exposure in areas that students were not normally exposed to as part of the regular curriculum.

The post-graduate specialisation would essentially involve a research component and prepare this group of specialists to pursue the academic stream.

Dr. Sarin said that after M. Med, students would have the option of pursuing one of the five doctorate streams depending on the aptitude and professional aspirations. After M. Med, the graduates would be able to compete for Doctor of Medicine or Master of Surgery or other dual programmes (MD-PhD, MHA, MD-DM and MD-fellowships).

An additional weightage of 5 per cent would be given to candidates for putting in six months of intensive rural service during the M. Med course. The duration after finishing MBBS course would be M. Med (2 years); one more year will get candidate an MD degree. Candidate would get dual degrees after four years and he or she has a choice to go on a fellowship programme or a Ph D programme or a DM degree in five years.

Indian Express 30/03/2011 P-4

Medical Council plans to scrap PG exam

TEENA THACKER
NEW DELHI, MARCH 29

IF THE Medical Council of India (MCI) has its way, medical students may not have to sit for post-graduate exams. The proposal of the MCI, however, will only be valid for those who clear the newly proposed 'Indian Medical Graduate Exam' and the final MBBS/exit exam.

According to MCI president Dr S K Sarin, "50 per cent weightage each will be given for deciding ranking in the post-graduate course".

This was one of the proposals made by the MCI on Tuesday in a meeting with about 300 experts, including vice- chancellors of medical universities, state or Union Territory directorates of medical education, principals and deans of medical colleges, heads of post-graduate institutes, management officials and key representatives from the Ministry of Health and Family Welfare.

The MCI plans to start the national-level 'Indian Medical Graduate Exam' which will have credibility beyond any particular university or college

As part of medical education reforms, the regulatory body plans to start the national-level 'Indian Medical Graduate Exam' which will have credibility beyond any particular university or college. The idea behind the move is to bring uniformity. "The students will no more be classified on the basis of universities/colleges they are coming from but on the basis of this national-level exam," said Prof Ranjit Roy Chaudhary, an MCI member.

While the MCI has proposed the exam to be elective for students from next year, it is of the view that from 2017 the exam should be made mandatory. "This process will restore internship which can be utilised for development of a basic doctor catering to the Indian population. As of now, the medical students are seen to be busy preparing for PG after MBBS. After this is done, they can instead relax and concentrate more on practical aspect of the profession."

"After internship, the student will have to take a licentiate exam that will make him an Indian Medical Graduate," added Dr Sarin.

For the newly proposed MBBS curriculum two new elements have been added — a 'foundation course' will give an insight to students about the profession catering to information about ethics and developing an aptitude for becoming a doctor and a two-month 'elective learning' in the beginning of the third year of MBBS.

The MCI has also proposed another concept called 'Master of Medicine (M.Med)' to generate specialists required for the community. After completing MBBS, an aspirant will have an option to pursue M.Med — a two-year course.

"After M.Med, he may pursue multiple career path — after a year he can become an MD, in two years he can have dual degree (MD+hospital administration) and after putting in three years, he can be a PhD," added Dr Sarin.

The proposals will now go to the Health Ministry for approval.

Tribune ND 30/03/2011 P-15

From 2017, MBBS won't be enough to practice medicine

ADITI TANDON/TNS

NEW DELHI, MARCH 29

In the years to come, an MBBS degree alone would not be sufficient for those aspiring to practice medicine in India.

Medical undergraduates would have to clear an additional exam to get a licence to practice medicine. In a landmark move to introduce uniformity in the standards of undergraduate medical teaching and basic medicine delivery, the medical Council of India's Board of Governors today recommended a national-level Indian Medical Graduation Licence Examination beginning April 2013.

MBBS graduates would have to clear an additional exam to get a licence

The exam modelled on the exit tests for medical graduates which several European countries conduct, would be optional till 2016, but from the very next year "when the first batch of MBBS graduates passes out after studying the revised medical curriculum prepared by the MCI", it would be compulsory and no MBBS graduate would be allowed to practice unless he/she cleared the test and got a licence.

Those passing the exit test would be given "Indian Medical Graduate" certification by the MCI, which would itself hold the said examination.

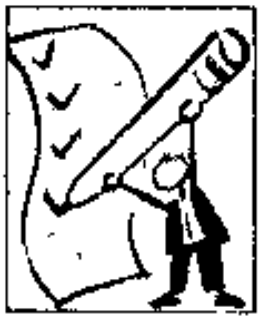
The exit test would be in the nature of an online test for the 40,000 annual MBBS pass outs, whose minimum standards of medical comprehension would be assessed. There could be one or more papers of three-hour duration with each question worth one mark. There would be no negative marking, the MCI Vision Document, 2015, stated.

The move was discussed today at the meeting of 200 experts, which the MCI had called. They endorsed the test, which the MCI would now have to notify.

In another development, the expert gathering also gave a go ahead to a new, two-year Masters of Medicine course after the MBBS. This course would be equivalent to the diplomas currently being given in clinical specialties, but would allow the pass outs to practice medicine in district and rural hospitals.

Navbharat Times 30/03/2011 P-11

आईआईटी में पेंसिल की बजाय बॉलपेन



हाल ही में आईआईटी एंट्रेस में ऑब्जेक्टिव सवालों का जवाब पेंसिल की बजाय बॉल पेन से देने की व्यवस्था की बात सामने आई है। मानव संसाधन विकास मंत्रालय ने इस पैटर्न को हरी झंडी दे दी है। गौरतलब है कि तमाम प्रतियोगी परीक्षाओं में जवाब के लिए पेंसिलों के प्रयोग का प्रावधान है। संभवत: इस बार के आईआईटी एंट्रेस से ही यह बदलाव लागू हो जाएगा। इस संबंध में क्या है आपकी राय? हमें बताएं। फोटो भी भेजें, तो बेहतर :