Kerry boosts up IITians’ morale

PTI photo

TECH TALK: The US secretary of state interacts with an IIT-D student

TIMES NEWS NETWORK

New Delhi: Indian Institute of Technology Delhi’s research project on biodegradable plastic has made a strong impression on US secretary of state John Kerry. After a student explained the project to him, Kerry was heard saying, “Very exciting. It would be a huge contribution to the world. Fantastic.”

Kerry, who is in the country on a three-day visit, took time out of his busy schedule and visited the campus between 8.30am and 10.30am on Thursday morning. He interacted with students in their laboratories and looked at their projects.

Director of IIT Delhi Prof. R K Shevgaonkar said that the US Embassy had specifically mentioned the laboratories that the dignitary wanted to visit. Apart from looking at the applied microbiology and bio-process labs, Kerry also checked out an experiment using algae to clean water and produce biomass. He described the projects showcased as “excellent” and “very exciting”.

Kerry arrived in the capital on Wednesday for the 5th Indo-US strategic dialogue, his nation’s first high-level engagement with the Narendra Modi government. Dressed in a blue suit, Kerry interacted with students and asked a number of questions about processes involved, tuition fees, patents system and also if they would get a job in India or would like to travel abroad.

(With inputs from agencies)
New Delhi, July 31: “Very exciting” and “excellent” were the words used by US secretary of state John Kerry as he visited two laboratories at the prestigious Indian Institute of Technology (IIT) here on Thursday and interacted with the students.

Kerry, who is here for the 5th Indo-US strategic dialogue, took time out of his schedule and visited the Applied Microbiology Laboratory and Bio-process lab.

Professor RK Shevgaonkar, director of the IIT, Delhi told PTI that the American embassy had specifically mentioned the laboratories that Kerry wanted to visit.

Dressed in a blue suit, Kerry interacted with the students there and asked a number of questions about the processes involved, the education fees, patent system and also if they would get a job in India or would they have to go out.

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As a student explained the project to him, Kerry said, “Very exciting. It would be a huge contribution to the world.

Very exciting. Fantastic”. Kunal Gupta, who is part of the project, said he was proud that Kerry visited his institute.

“I am very proud to be part of a institute which is recognised in the US as well. They (US) have done a lot of research which is much ahead of us and Kerry’s visit to the institute makes us feel very good,” said Gupta.

Kerry also visited the lab which was using algae to clean water and to produce biomass. PTI
Kerry visits IIT, walks out impressed with students

NEW DELHI, JULY 31
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State secretary’s day out

On his first day, Kerry visits IIT Delhi, meets students

NEW DELHI: US Secretary of State John Kerry on Thursday visited the Indian Institute of Technology (IIT) Delhi. He went to the school of biology and visited two of the laboratories there. Kerry was in the institution early morning between 8.30am to 10.30 am, an IIT professor said.

He also interacted with the students and looked at their projects. Kerry arrived here on Wednesday on a three-day visit to strike up the US’ first high-level engagement with the Narendra Modi government. He later met External Affairs Minister (EAM) Sushma Swaraj for a strategic dialogue.
Kerry visits
IIT, ‘excited’
about work
by students

PRESS TRUST OF INDIA
NEW DELHI, JULY 31

VERY 'exciting' and 'excellent' were the words used by
US Secretary of State John
Kerry after his visit to two
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Rashtriya Sahara, ND 01/08/2014  P-2

आईआईटी के छात्रों
से प्रभावित हुए केरी

नई दिल्ली (एसएनबी). अमेरिकी
विदेशमंत्री जॉन केरी ने बूढ़स्पितिवार को
प्रतिष्ठित भारतीय प्रौद्योगिकी संस्थान के दो
प्रयोगशालाओं का दौरा किया। उन्होंने छात्रों से
बातचीत के दौरान ‘बहुत रोमांचक’ और
‘उत्कृष्ट’ जैसे शब्दों के जरिए
उनकी सहानुभूति की। केरी कहा है कि
भारत-अमेरिका रणनीतिक वार्तालाप के साथ
भारतीय प्रौद्योगिकी संस्थानों और
शैक्षणिक गुणवत्ता, पेटेंट अधिकृतता के बारे में
सवाल पूछे। केरी ने छात्रों से यह भी पूछा कि वे भारत में नौकरी करने या उन्हें बाहर जाना है?
केरी ने जानना चाहते थे कि उन्हें वहाँ कैसे रहना?
उन्होंने कहा, ‘बहुत रोमांचक।
यह दुनिया के लिए बहुत बड़ा
योगदान है।’ बहुत रोमांचक,
शादी!’ इस परियोजना में
शामिल कुलाल गुरुत्वायक ने कहा कि
उन्हें इस वात पर गवाह है कि केरी
उनके संयोजन में आया। गुरुत्वायक
कहा, ‘मैं ऐसे संयोजन का हिस्सा बनकर गवाह
महसूस करता हूं, जिसकी पहचान अमेरिका में
यह है।’ अमेरिका ने बहुत शोध किया है और
हमसे यह बहुत आया है। केरी का हमारे संयोजन
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केरी ने उस प्रश्नशाला का भी दौरा
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ईमान बढ़ाने के लिए शैक्षनिक का उपयोग किया
जा रहा है।
आई.आई.टी. दौरे में कैरी छात्रों से हुए प्रभावित

मैं दिल्ली, 31 जुलाई (एजेंसी): अमेरिकी विदेशमंत्री जॉन केरी ने दौरे के दौरान भारत के प्रोफेशनल प्रौद्योगिकीय संस्थानों के दौरे पर हुए प्रभावित छात्रों से बाहर आए।

केरी ने हामी से पूछा कि तुम बताओ कि आपने किस बात में लाभ उठाया?

छात्रों ने दिल्ली में राष्ट्रीय संस्थान के प्रोफेशनल संस्थानों के दौरे पर हुए प्रभावित छात्रों से बाहर आए।

केरी ने कहा कि तुम्हारे बारे में हम राजस्थान के प्रोफेशनल संस्थानों के माध्यम से जान लेंगे।

अमेरिकी विदेशमंत्री जॉन केरी ने आई.आई.टी. का दौरा किया।

आईआईटी दिल्ली

बेहतरीन

केरी ने गुरूवार पर आईआईटी दिल्ली का भी दौरा किया। इस दौरे के दौरान उन्होंने आईआईटी दिल्ली को बेहतरीन और वहां अपने अनुभव को अभ्यास करार दिया। हालांकि आईआईटी अधिकारियों का कहना था कि अमेरिकी दूतावास ने विशेष गुजरात भेजा था कि केरी यहां फिकने का हिसाब करते हैं।
Kerry visits IIT, walks out impressed with students


New Delhi: "Very exciting" and "excellent" were the words used by US Secretary of State John Kerry as he visited two laboratories at the prestigious Indian Institute of Technology here on Thursday and interacted with the students.

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Professor R K Shevgaonkar, Director of the IIT, Delhi told PTI that the American Embassy had specifically mentioned the laboratories that Kerry wanted to visit.

In Pics: John Kerry visits IIT

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HC orders common counselling for IITs, NITs next year

Vanita Srivastava, Hindustan Times  New Delhi, August 01, 2014


The Delhi high court on Friday directed the HRD ministry and the IITs to have common counselling for the Indian Institutes of Technology (IITs) and the National Institutes of Technology (NITs) from next year.

The court also directed the HRD ministry and IITs to submit a report on or before November 30, 2014 on whether a provision for lateral entry into IITs in second year from the students of NITs and other engineering colleges can be made.

Last year more than 200 IIT seats had remained vacant. Every year hundreds of seats remain vacant in IITs mainly because of some unpopular courses for which there are few takers. The court gave the directive on an interim application, filed in a pending PIL, by Rajeev Kumar through lawyer Prashant Bhushan.

It had been alleged in the plea that IITs have been opposing the suggestion that a common database be prepared of all the candidates who clear the IIT and the NIT entrance examination.
Tailgating behind 45% of highway crashes: Study

Dipak.Dash@timesgroup.com

New Delhi: Data from about 130 crashes involving different vehicles on the Gurgaon-Jaipur stretch of NH-8 has indicated speeding, overloading and improper driving as some of the main reasons behind highways crashes.

The data and trends are based on an ongoing crash investigation project by NATRiP in association with IIT-Delhi. This is part of a pilot project undertaken by the ministry of road transport and highways to provide cashless treatment to crash victims to reduce fatalities.

NATRiP officials said that though over 600 crashes were reported, they have collected in-depth data of 134 motor vehicle accidents. NATRiP is the government’s apex agency for vehicle research and testing.

Almost 45% of the crashes investigated were due to tailgating or when vehicles follow each other too closely. Among other reasons identified, speeding caused 28 accidents, overloading 16 and improper driving another 15 mishaps. The other key causative factors were lane change, wrong turn, vehicle defect and driver fatigue.

“The trend of crashes in most of the national highways with divided carriageway would be same. If we have a stringent enforcement on speeding and overloading, crashes can be reduced significantly. Once more and more data from similar projects emerges, it will help us to formulate policies,” a road transport ministry official said.

The analysis showed that 10% of crashes were fatal, in another 24% people reported grievous injuries. In another 29%, the injuries were minor.
आईआईटी भुवनेश्वर के निदेशक पर पीई दर्ज
कुणाल/एसपूनवी

नई दिल्ली। सीबीआई ने आईआईटी भुवनेश्वर के निदेशक और पांच अन्य लोगों के खिलाफ प्रारंभिक जांच (पीई) दर्ज की है। जांच में पाया गया है कि उन्होंने अपने अधिकार का दुर्पयोग करते हुए नियुक्तियों में धांधली की है।

सूत्रों के अनुसार सीबीआई ने जांच में पाया है कि आईआईटी के निदेशक ने कुछ अधिकारियों के साथ मिलाकर फैक्टरी की नियुक्ति में धांधली की है। निदेशक पर आरोप है कि उन्होंने अपने अधिकार का दुर्पयोग करते हुए करियर डेवलपमेंट काउंसलर की नियुक्ति ठेके पर की और उसमें इंस्टीट्यूट से संबंधित नियमों का उल्लंघन किया। प्रारंभिक जांच में यह भी पाया गया कि कुछ और फैक्टरी में भी नियुक्तियों को लेकर निदेशक ने प्राइवेट संस्थान को आउटसोर्सिंग कर दिया था, जो कि जनरल वित्तीय नियम 2005 का उल्लंघन है।

सूत्रों के अनुसार इस बाबत सीबीआई जल्द ही आईआईटी भुवनेश्वर के प्रशासन और निदेशक से स्पष्टीकरण मांगेगी। कुछ दिन पहले सीबीआई ने जारिखंड विभाग सेंट्रल गृह विश्वविद्यालय के पूर्व वाइस चांसलर के खिलाफ पीई दर्ज की है, जिसमें उन पर आरोप है कि उन्होंने टीचिंग और नॉन टीचिंग स्टाफ की नियुक्ति में धांधली की थी। पीई में इस बात की भी जांच की जा रही है कि उन्होंने विश्वविद्यालय केम्पस के निर्माण के संबंधित ठेके में भी कुछ ठेकेदारों को मदद की थी।

शुरुआती जांच में पाया गया कि पूर्व वीसी ने स्क्रीनिंग कंमेटी के सदस्यों के साथ मिलकर वैसे-वैसे उम्मीदवारों की नियुक्तियां की, जो मानक पर खरे ही नहीं उतरते। इसी के साथ-साथ सीबीआई ने चेन्नई स्थित एक केंद्रीय विश्वविद्यालय इंडियन मेरीटेइम के पूर्व वाइस चांसलर के खिलाफ भी मामला दर्ज किया था।

उनके खिलाफ आयोग से अधिक संपत्ति का मामला तय है। सीबीआई ने जांच पूरी कर ली है और आरोपकार्य दाखिल करने की तैयारी कर रही है। सूत्रों के अनुसार राष्ट्रपति ने इनके खिलाफ मुकदमा चलाने की अनुमति दी है।
BENGALURU: Indian Institute of Science (IISc) should scale new heights by reaping the benefits of higher funding, opening of new laboratories for research in frontier areas, and the addition of new faculty and research scholars, says the new Director Dr. Anurag Kumar.

Dr. Kumar, an expert in communication networks, is the first engineer to take over as Director after a gap of more than three decades. The last Director with engineering background was the late Prof. Satish Dhawan. He, however, maintained that the institute was known for its mix of scientists and engineers and such distinction was inconsequential.

He values experience gained at AT&T Bell Labs, the Cornell University, and IISc, and plans to strike a balance between administration and research during his five-year tenure at the top but contemplates cutting down the number of students guided by him at department of electrical communication engineering (ECE), where he serves as a professor.

He said Indian entrepreneurs and enterprises are beginning to support science in a big way at IISc. For instance, Infosys Technologies Ltd has just set up two high-profile chairs, one each in Physics and Mathematics departments, a move which helps renowned physicists and mathematicians from across the world to visit these departments for long duration. Besides, several small companies too are stepping forward to collaborate with researchers at the institute.

“It is true that the IT industry has been services-based for many years, but they have become famous like TCS. I hope that they move up the value chain or move sideways and invest in science,” he added.
He said he would like to witness the coming together of the large number of people trained in high quality instrumentation, those with doctorate degrees and venture capitalists of Bengaluru though such a unification would be a challenge.

Dr. Kumar said he was surprised to receive a call from the outgoing Director Prof. P. Balaram and to be invited to head the institute. “I took a day to think about the responsibilities and whether my personal, research and family plans will be impacted. I guess I will have to spend more time on administration, but will continue to teach and work even on weekends,” he added.

Born in Meerut, Uttar Pradesh, Dr Anurag Kumar secured his B.Tech degree from Indian Institute of Technology (IIT), Kanpur, and his doctorate from the Cornell University. He worked at AT&T Bell Labs, for six years and joined IISc in 1988. From 1989 to 2003, he was the coordinator at IISc of the nationwide Education and Research Network (ERNET) project, which established the first country-wide packet communication network in the country, and supported more than 1,300 R & D laboratories across India.
D.U. TEACHERS PAINT V.C. BLACK WITH WHITE PAPER

Dinesh Singh faces allegations of financial, administrative and academic irregularities

DELHI University Vice-Chancellor Dinesh Singh hasn’t seen the last of his troubles with the burial of the FYUP controversy. The university’s teachers are well into the process of coming out with a ‘White Paper’ that compiles the financial, administrative and academic issues.

DU academicians declare war on V-C

The DU Teachers Association (DTA) has urged the DU administration to stop the process of the new academic year unless V-C Dinesh Singh clarifies his stand on the FYUP issue. DTA leaders said they have received a complaint from a professor that V-C is stopping the admission process.

Money matters

The DTA has alleged that the DU administration is not providing proper facilities to the students. The administration has been asked to provide proper facilities and amenities to the students.

DU staffsuicide

The DTA has also demanded the DU administration to provide proper medical facilities to the staff members. The administration has been asked to provide proper medical facilities to the staff members.

Academic issues

The DTA has demanded the DU administration to provide proper academic facilities to the students. The administration has been asked to provide proper academic facilities to the students.
Entrepreneurs go Back to IIM Classrooms

As many as 41 students in latest batch at 7 IIMs are in various stages of starting up

SREERADH BASU
MUMBAI

In a remarkable display of India’s growing fervour for entrepreneurship, at least 41 students in the new batch at seven IIMs are in various stages of starting up and running new businesses even as they pursue their MBAs, exclusive data collated by ET shows. This means that an unusually high 90% of students in the new batch at these IIMs are already entrepreneurs.

“There has never been a year in which the number of such student entrepreneurs at IIMs,” said Debasish Chatterjee, director of IIM Bhubaneswar.

These new IIM students have built startups in mobile apps, development, horticulture, mobile solutions, event management, solar-powered equipment, food-related businesses and coaching schools.

A number of people in their 30s who are starting up their own ventures are at a new high,” says Mukul Singh, principal, SAIF Partners.

Global B-schools are giving a major push to foster entrepreneurship and domestic counterparts are also placing a similar premium on student startups.

“Entrepreneurial students are like all-rounders in a cricket team. They are able to fully appreciate and participate in the whole process of creation of value,” Chatterjee said.

At the Kozhikode IIM-school alone, around 15 students in the batch that joined in June are entrepreneurs.

Having an IIM Tag Helps a Lot

The batch at IIM-Kozhikode includes, among others, Birla Reddy who runs Presto, that builds educational games to teach and test high school students’ concepts of physics, mathematics, chemistry, Krishnan Jeesh who provides out-of-home advertising solutions to businesses, and Sumit Kumar Shaw who has set up a coaching institute as well as a taxi and travel company.

IIM-Calcutta has seven such student-entrepreneurs in its new batch. IIM-Bangalore has two and IIM-Ahmedabad has another six. Among the newer IIMs, IIM-Rajasthan has five such students while IIM-Rohtak and IIM-Shillong have three and four respectively.

For these young entrepreneurs, an MBA comes with several advantages, most importantly, the network these top schools can provide and the opportunity to brush up their knowledge in areas that are lacking. An IIM tag certainly doesn’t hurt for those wanting to raise money for their own ventures.

“All other things being equal, validate someone with a solid educational background. A qualification from an IIM or an IIT does lend a bit more credibility when talking to a VC (venture capital fund) or an investor,” says Abhay Pandey, MD, Sequoia Capital India. “Earlier, the entrepreneurial ecosystem was not so vibrant. Now it’s great that people are taking a risk to work towards a much larger outcome.”

So, if Aditya Pangoty of IIM-Calcutta owns a third of Indiabix, a managed marketplace for Indian independent artists and designers, his peers at the Joka institute inlude Nikesh Vora, who founded AfterEgo, a e-commerce venture in the personalised giftware domain; and Pranesh Kacholia, a BTIS-Puli grad who co-founded a mobile app development startup called Droid Studios. His Android app saw as many as 30,000 downloads in six months. “I don’t have the business or finance knowledge and that’s where an MBA comes in. Also, I want to leverage IIM-Calcutta’s network in the future,” says Kacholia.

At IIM-Ahmedabad, students have co-founded ventures providing software solutions; launched healthcare mobile apps and app development startups; designed and prototyped a product that harvests energy from cooking stoves; and launched ventures aimed at addressing declining analytical abilities among school students.

Over 80% of the ventures promoted by this year’s student entrepreneurs are still operational. Many such students have partners or co-founders who take on additional responsibilities while they are at school.

The remaining 20% of student entrepreneurs, whose ventures closed down, are keen to start something new again in the future. “Entrepreneurship flourishes when failure and experimentation is tolerated by societies. The Indian society has reached a certain inflection point when a new generation is not afraid of taking chances and experimenting, “feels Prof Chatterjee.

In IIM-Shillong, businesses run by students include consulting agency Innovative We, Epitome IT Coaching that focuses primarily on IT education and Xeopin Solutions, also in the same space. At IIM-Rajpur, Pratik Suting, an aircraft maintenance engineer, ran his transcription company. Rajesh Jangam opened up a school and Saiyadeo Thakur started his venture as a web hosting and designing company.

IIM-Rohtak, Prateek Agarwal, along with three friends, started a snacks business serving offices such as Accenture and IBM, which is in the process of opening more outlets in Hyderabad. His batchmate Gaurav Agarwal uses data technologies to help small retailers grow their business.

“A good management education equips a person with necessary tools and greater perspective to analyse complex situations,” says D Chetan of IIM-K.

His interest in agriculture led him to invest in a 10-acre plot and adopt highly mechanised techniques to grow horti-cultural crops such as chiku, mango, black jamun, coconut and lemon alongside fast-growing timber-yielding varieties.

Despite the success of his business, Chetan still believes in the power of an MBA. “I want to expand my enterprise and enter new avenues such as food processing in the future,” says Chetan.

For IIM-Bangalore’s Sourav Das, who runs a startup in the solar technology space with an IIT-Kharagpur batchmate, the MBA is a ticket to scale up his venture to the next stage. The partners sell solar mobile phone chargers—they have sold some 500 pieces through NGOs—and Das says he needs some guidance to fine-tune his business plan.

Nitin Sethia, of IIM-A who ran her own fashion wear business called Urban Junkie entirely through Facebook, earned around Rs 5 lakh through four exhibitions, says she loved the whole experience of running her own show.
Times of India ND 1/08/2014  P-6

‘Scope of robotics in surgery expanding’

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New Delhi: There are already robots that can assist in surgery, like the da Vinci surgery system. But what if a robot can be programmed into performing a certain procedure without any direct intervention from the surgeon? Like the driverless Google car?

The current robotic surgical system cannot run on its own, it has to be manoeuvred by a surgeon. While opinion is divided on the outcome, top surgeons, however, do not rule out such a possibility.

"Presently, robotic equipment can take you to the abnormal area like tumour; blood clot and abscess so that tissues can be biopsied safely. The next stage will be robotic instrument that can be manipulated 360 degrees, conducting the biopsy on its own based on the programme fed into the software system," said Dr Rajendra Prasad, senior neuro and spine surgeon at Apollo Hospitals.

He said this could be done because “we have the benefit of all diagnostic imaging—CT scan and MRI—results being fused together into robotic computer” so the mechanical arm can avoid damage to other organ.

"Most medical equipments are being invented abroad and we have to import them at a high cost. India has lagged behind. If engineering institutes such as IITs and top medical colleges can work together, we can outpace them in developing new technologies," the doctor said. He cited the example of a software programme developed by IIT wherein a boy paralysed neck down could operate computer with only five keys.

"In 1970s, till the CT scan was made available, surgeons would explore just on history and clinical examination to see which part of brain is involved. But now we have advanced imaging system such as MRI to explore all details of the abnormality," Prasad said.

Times of India, ND 01/08/2014  P-19

USB offers hackers direct route to computers

Boston: USB devices such as keyboards, thumb-drives and mice can be used to hack into personal computers in a potential new class of attacks that evade all known security protections, a top computer researcher revealed on Thursday.

Karsten Nohl, chief scientist with Berlin’s SR Labs, noted that hackers could load malicious software onto tiny low-cost computer chips that control functions of USB devices but which have no built-in shields against tampering with their code.

"You cannot tell where the virus came from. It is almost like a magic trick," said Nohl, whose research firm is known for uncovering major flaws in mobile phone technology.

The finding shows that bugs in software used to run tiny electronics components that are invisible to the average computer user can be extremely dangerous when hackers figure out how to exploit them. Security researchers have increasingly turned their attention to uncovering such flaws. Nohl said his firm has performed attacks by writing malicious code onto USB control chips used in thumb drives and smartphones. Once the USB device is attached to a computer, the malicious software can log keystrokes, spy on communications and destroy data, he said.

Computers do not detect the infections when tainted devices are inserted because antivirus programs are only designed to scan for software written onto memory and do not scan the "firmware" that controls the functioning of those devices, he said. Nohl said Jakob Leil, a security researcher at SR Labs, will describe their attack method at next week’s Black Hat hacking conference in Las Vegas, in a presentation titled "Bad USB: On Accessories that Turn Evil."

Thousands of security professionals gather at the annual conference to hear about the latest hacking techniques, including ones that threaten the security of business computers, consumer electronics and critical infrastructure.

Nohl said he would not be surprised if intelligence agencies, like the National Security Agency, already figured out how to launch attacks using this technique.

Last year, he presented research at Black Hat on breakthrough methods for remotely attacking SIM cards on mobile phones. In December, documents leaked by former NSA contractor Edward Snowden demonstrated that the U.S. spy agency was using a similar technique for surveillance, which it called "Monkey Calendar." An NSA spokeswoman declined to comment.

SR Labs tested the technique by infecting controller chips made by major Taiwanese manufacturer, Poison Electronics Corp, and placing them in USB memory drives and smartphones running Google Inc’s Android operating system. Alex Chiu, an attorney with Poison, told Reuters via email that Nohl had contacted the company about his research in May. "Nohl did not offer detailed analysis together with work product to prove his finding," Chiu said. "Poison doesn’t have ground to comment on (his allegation)." Chiu said that "from Poison’s reasonable knowledge and belief, it is hardly possible to rewrite Poison’s controller firmware without accessing our confidential information."
Robotic arms fix deformed spine, help 10-yr-old stand

City Docs Remove Pus, Put Screws To Straighten Vertebrae

New Delhi: A 10-year-old boy from Bihar, who suffered from a collapsed vertebra at the mid-chest level leading to compression of the spinal cord with a large collection of pus in the area, recently underwent robotic surgery at a private hospital. Doctors claim this is the first time a complex spinal deformity has been fixed using robotic arms.

The robot not only fixed screws to straighten the vertebrae that had turned into a hunchback but it also helped surgeons remove the pus collected inside without cutting open the chest. It is suspected that the pus formation was caused due to tuberculosis infection.

Dr Rajendra Prasad, senior consultant in the neurosurgery department at Apollo Hospital, said the surgery—performed on July 15—involved draining the pus in the first stage. Once he recovered from the surgery, his vertebrae were fixed from behind after a week to enable early mobilization.

The doctors decided to conduct surgery using robotic arms to ensure faster recovery and reduce the risk of any inconsistency in fixing the screws. “Conventionally, the chest has to be cut open to remove the pus and then another procedure is conducted to fix the vertebrae using screws. It takes longer to recover and even with the skills of an experienced surgeon, there are chances of screw penetration and damage of the spine nerves and, in some cases, paralysis,” said Dr Arun Prasad, senior consultant, minimal access surgery.

“The surgery is expensive by over Rs 40,000 to Rs 50,000 than the normal surgery, but there are several benefits,” he added.

Nutan Jaiswal, Shivam’s mother, could not thank the doctors enough. “My child had been suffering from fever and back pain for over six months. We took him to local physicians and specialists in Dhanbad and Patna but they failed to diagnose the infection. This led to pus formation in the vertebrae and spinal curve. Had he not been operated in time, he would have been paralysed,” she said.

Dr Naresh Trehan at Escorts Hospital procured the first robot in Asia in 2001 for cardiac surgery. The first urological robotic programme was started at AIIMS in 2006. Over 15 centres across the country now have active robotic surgery units for gynaecological, bypass, prostate and bariatric procedures.

High-Tech HAND

HOW IT WORKS

Step 1: Unlike conventional procedures where surgeons have to cut open a patient to gain access to internal organs, robotic surgery is done by making 3 small holes in the body.

Step 2: Through 1 hole, a high-powered camera or endoscope is inserted and held by a robotic arm. It helps the surgeon get a 3D vision of diseased organs.

Step 3: Two more robotic arms are used to insert instruments through 2 holes. Doctors manipulate surgical tools using hand-held joysticks.

How it started in India

Dr Naresh Trehan at Escorts Hospital procured the first robot in Asia in 2001 for cardiac surgery. The first urological robotic programme was started at AIIMS in 2006. Over 15 centres across the country now have active robotic surgery units for gynaecological, bypass, prostate and bariatric procedures.

Advantage

- 3D vision
- 360-degree movements
- Accurate cutting
- Less pain & bleeding
- Faster recovery

In spine surgery/fixed, high precision helps reduce risk of damage to nerves while putting screw.

Future

Current robotic system cannot run on its own. Surgeons have to manœuvre it. Researchers are exploring the possibility of designing special software and equipment that will allow a robot to perform the procedure on its own, like a driverless vehicle.

Apollo Institute of Robotic Surgery has performed 316 successful surgeries till date in several disciplines—urology, paediatrics, gynaecology, bariatric and gastroenterology.
London: An inventor in the UK has developed the world’s first synthetic biological leaf that absorbs water and carbon dioxide to produce oxygen just like a plant, and it could enable long-distance space travel.

The leaf, created by Royal College of Art student Julian Melchiorri, consists of chloroplasts suspended in a matrix made out of silk protein. “The material is extracted directly from the fibres of silk,” Melchiorri said. “This material has an amazing property of stabilizing molecules. I extracted chloroplasts from plant cells and placed them inside this silk protein. As an outcome I have the first photosynthetic material that is living and breathing as a leaf does,” he said.

Like the leaves of a plant, Melchiorri’s Silk Leaf needs light and a small amount of water to produce oxygen, ‘Dezeen’ reported. “Silk Leaf is very light, low energy-consuming, it’s completely biologicl,” he said, adding, “Plants don’t grow in zero gravity. Nasa is looking at different ways to produce oxygen for long-distance space journeys to let us live in space. Fresh material could allow us to explore space much further than we can now.”

Melchiorri hopes his creation could be used in futuristic architectural projects like deploying giant leaves as air filters, hanging them on the exterior of buildings to absorb CO2 and channel fresh air inside.

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Startups Go on a Hiring Spree

Talent Superhighway

Kelly Services estimates the creation of 15,000 jobs in the startup space in the next six months.

At ABC Consultants, the demand for startup talent has doubled over last year.

ANUMEHA CHATURVEDI

NEW DELHI

SUbmit your resignation today! Awesome startups are hiring,” screams an advertisement by Bangalore-based Venturestars, which finds talent for angel and VC-backed companies. The ad goes on to list the many perks of working for a startup and the openings.

“It’s raining jobs,” says Venturesity co-founder Subhendu Panigrahi. His firm has seen a 300% increase in the number of Java openings and twice the number of user acquisition job profiles in firms since last year.

Julian Frachtman is networking in San Francisco for his six-month-old funded startup AppKeys, a mobile app promotion network, which curates lists of apps.

Bain’s private equity report for 2014 states that despite an overall slowdown, private equity continued to play a pivotal role in India’s capital needs, accounting for 54% of foreign direct investment inflows in 2013 against 46% in 2012. This year has seen 73 VC deals so far, generating $320 million, according to research firm Venture Intelligence.

The need for talent is also leading firms to launch unique search processes, as they hire across positions.

The need for talent is also leading firms to launch unique talent hunts. TaxiForSure, which raised a second round of funding worth $10 million from VC firm Bessemer Venture Partners in May, is running the Most Awesome Job campaign. The unconventional role could, according to the job description, make the selected candidate the most sought after in the company.

“In our expansion spree, we keep coming up with various innovations like viral campaigns and social media ideas. We feel it’s now a full-time job that needs an extraordinary person to plan and execute them. That’s how the most awesome job campaign was conceived,” says Aprameya Radakrishna, co-founder, TaxiForSure.

TaxiForSure is aiming at closing 100 to 115 positions in operations, engineering and marketing across various locations in this quarter. For almost all positions, the requirement has gone up by 50% over the previous quarter.

Chennai-based cloud based customer support firm Freshdesk’s headcount went to 250 last quarter from 200 in the previous quarter as the company scaled up its engineering operations. The company received $11 million Series D funding (the fourth stage in the seed stage funding cycle of a new business growth) from Tiger Global, Accel Partners and Google Capital in June after raising $7 million in Series C funding from Accel Partners and Tiger Global in November last year.

“Once Series A and B financing comes in, the focus shifts to growth – acquiring new customers rapidly and scaling up international operations. We’ve hired a considerable number of sales people in the last quarter alone,” says Girish Mathrubootham, founder and CEO.

At online curated furniture seller Urban Ladder, the bulk of hiring has taken place over the past two quarters and the employee base is set to double in the next six months with 150-200 new recruits.

With the new round of funding, the company plans to focus on building its technology platform, and is looking for people who can provide digital solutions for furniture shopping.

“Most of the hiring will happen within these functions to support our plans of scaling up. We are looking at senior profiles for finance, operations and quality control where vertical skillset is highly valuable,” says Rajiv Srivatsa, COO and co-founder, Urban Ladder.