Newspaper Clips

August 19, 2011

Sanmarg Bhopal 18.08.11 P-4

आईआईटी तमिलनाडु में छात्रों की आत्महत्या की घटनाएं सर्वाधिक

नयी दिल्ली : तमिलनाडु स्थित भारतीय प्रौद्योगिकी संस्थान (आईआईटी) में छात्रों द्वारा आत्महत्या की सर्वाधिक घटनाएं सामने आयी हैं।

मानव संसाधन विकास **मंत्री कपिल सिब्बल** ने लोकसभा में **वरुण गांधी** के सवाल के लिखित जवाब में बताया कि आईआईटी, तमिलनाडु, में वर्ष 2008 से पिछले तीन साल में छात्रों द्वारा आत्महत्या करने के छह मामले प्रकाश में आये। उन्होंने बताया कि वर्ष 2008, 09 और 10 में देश भर के सभी आईआईटी तथा उच्च तकनीकी संस्थानों में कुल 24 छात्रों ने इस प्रकार का आत्मघाती कदम उठाया।

इन सभी मामलों की जांच करने वाली समितियों ने पाया कि अवसाद, पढ़ाई के बोझ, साथी छात्रों के दबाव तथा मानसिक अवसाद के चलते छात्रों ने यह कदम उठाया। एजेंसियां

The Hindu ND 19/08/2011 P9

Transcending generations in education

A radical re-organisation of schools and classrooms and the teaching-learning process has become essential to meet the needs of the current generation of students.

Dileep Ranjekar

It was the year 2003. As a part of my efforts to understand schools and children of all ages, I happened to visit a Bangalore school that had a pre-school section. I followed the standard strategy of being a "fly on the wall," observing, absorbing, and when the situation was conducive, asking questions to students, teachers and administrators there.

The four-year-old in the junior kindergarten class was smart and highly communicative. She was very forthcoming with her responses. I asked her what she liked and what she did not like in general. She loved her school, her teacher, her mother, and her grandmother. She did not like it when her elder brother fought with her. She also did not like it when her grandmother told her bedtime stories!

This was rather strange, since I had believed that most children liked stories told by the elders in the family. So I was wondering why she did not like her grandmother telling her bed-time stories. Maybe the grandmother saw too many "Ramsay Brother" movies and told her some horror stories — so I thought.

After some patient interaction, the little girl told us: "When she tells me the stories, I go to sleep. But she wakes me up and asks me — the moral of the story!" I was stunned by her unexpected explanation. What struck me personally was the girl's ability to explain her discomfort. I also began to think about several misconceptions that elders have about issues related to the next generations.

Such as that we believe the stories are told in order that they would understand the moral of the story. Or that children go to the school to learn. Or that employees go to office to work.

Is it correct to assume that children go to school only to learn? They could be going there because that is what is expected of them by their parents. Or because they like to be with their friends in school. Or for the one teacher who tells them nice stories. Or they like the playground and the sports facilities.

The children are not even at a stage to understand the "moral" of the story. They may understand it cumulatively through several stories — which would be sunk in several layers of their understanding, only to emerge later. Or their moral of the story would be different than what we understand it to be. What about the pure enjoyment of the story by itself? What about several other uses of the story — such as understanding the language, relating to the characters, imagining the ethos, the feelings, and so on?

Third-generation learners

As in many spheres of life, one of the biggest challenges in the educational system is that we have a first generation of leaders and educators that decide the education policy, the second generation of teachers that are responsible for facilitating education for the children who belong to a third generation.

Understanding third-generation children is a complex process and needs special efforts on the part of all concerned, including parents.

The third-generation children are fearless, articulate, independent, rational (capable of a high degree of analysis on "what is right and wrong" for them), impatient, non-hierarchical, and have wider methods of accessing knowledge. Therefore, what is likely to work with them is not position, age, seniority, power and experience, but strategies that promote equality, democracy, placing before them hard data for them to analyse and infer, and where required, allowing them to take charge of their own learning.

The steps needed

This requires a radically different organisation of schools and classrooms, including in terms of the seating arrangements, the teaching-learning process, methods and material, and the quality of interaction with the children. Parents and teachers must jointly understand that comparing situations with their own childhood and therefore expecting certain types of responses from the children, will not work.

The first step towards making this happen is to completely overhaul the teacher education agenda. Today's teacher education must educate them with multiple current and future scenarios, provide ample opportunity for teachers to interact with the current generation, understand them in a more systematic way and evolve effective processes to interact with them based on this understanding.

The second big requirement is to develop excellent "Teacher Educators" who have such an understanding — since the teacher educators are even more far removed from the current generation of children and hence add to the list of challenges.

The third important step is to find a method to educate parents to accept the fact that their children are bound to respond differently to situations than what the parents did when they were children.

The fourth requirement is to sensitise the educational functionaries outside the schools to appreciate the need to transcend generations, while determining and understanding the needs of the schools, the school administration and the education system.

Children and their future must be at the heart of any decisions about curriculum, classroom practices, examination system and school management system.

(Dileep Ranjekar is chief executive officer of the Azim Premji Foundation.)

Financial Express ND 19-Aug-11 p-8

The man who made IT

India's software owes much to Narayana Murthy

TCS and Patni Computer Systems were the first to discover the offshoring model in the mid-70s, and Wipro followed suit a few years later. Yet, if there's one person that defines India's IT prowess, it is Infosys co-founder NR Narayana Murthy who retires today after 30 years, having steered the company he co-founded with ₹10,000 borrowed from his wife to a $6 billion enterprise. A $6 billion firm in a $60 billion Indian software industry doesn't do justice to Murthy's legacy, and there's little doubt the company appears to have lost its edge of late—the $3 billion of cash it is sitting on is seen as evidence of its conservatism, something that Murthy's successor and ace-banker KV Kamath will have to change.

Though others were there before him, Murthy changed the paradigm with the global services delivery model that he perfected. Others are doing the same now, but it was Murthy who delivered quality services to clients through Infosyians located in different parts of the world—multiple-locations but completely integrated services. And for those who thought Murthy ran just a wage arbitrage-driven shop of coding jocks, keep in mind that the banking industry's most successful 'product' is Finacle, developed under Murthy's guidance. None of this would have been possible without a talented and motivated team, and once again it was Murthy that took ESOPs to an entirely different level—from the time Infosys was founded, the company has given out ₹50,000 crore worth of stock options to employees.

Though Murthy disappointed admirers for not standing up to the government when he was chairman of IIM Ahmedabad and the government wanted to push its reservation agenda, many see him as the first practitioner of 'do no evil', long before Google adopted this as its motto. He had no difficulty in parting ways with a colleague, widely seen as Infosys' rainmaker, on moral grounds; and when a top client (accounting for a fourth of Infosys' turnover) set unacceptable terms, he chose to walk out instead of cutting corners to deliver the product. Convincing clients of his corporate governance, however, required a lot more, so Infosys was the first Indian software firm to list on Nasdaq.

As Murthy hangs up his boots to create even more entrepreneurs with his Catamaran fund—it has investments in socially useful firms like SKS Microfinance and Manipal Learning—we wish him luck. His investors will cherish his advise more than his money—when the government-run education system didn't deliver, Infosys set up its own training facilities that rival many universities. Now that's thinking.

Financial Express ND 19/08/2011 p-7

THE FINAL BOW

It's flashback time as Infosys founder Narayana Murthy demits office. Darlington Jose Hector encapsulates the man's achievements, which are also milestones in the Indian IT industry's history

AS NR Narayana Murthy, founder-chairman of Infosys Ltd, steps into the IT firm in official capacity for the last time today, the pendulum of thought goes back and forth—to his journey, that is Infosys' too, and what lies ahead without the original agent of change.

It is difficult to sum up in a few sentences what his contribution to India has been, but his biggest achievement will remain the way in which he infused confidence into India's army of middle class employees, urging them to think big and succeed.

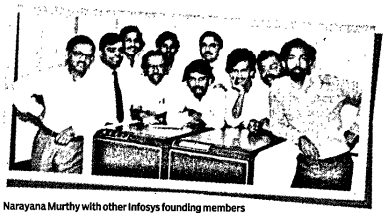
Born in Mysore on August 20, 1946, Narayana Murthy not only proved that a silver spoon is not a prerequisite for success, but also that wealth could be created in this country without having to cut corners. One often wonders how a man of such middle class upbringing rose to such heights and maintained lofty standards of excellence. In India, one always associates wealth with traditional corporate power houses or someone with a rags to riches background. Middle class was always a term associated with mediocrity in the country, but NRN's rise shattered that myth.

He made it fashionable for people to be educated, humble and wealthy—all at the same time. Percolation of wealth down the ranks was largely a foreign concept in the Indian corporate world, but Infosys' legendary ESOP scheme created millionaires out of ordinary people, with even cab drivers at the company becoming rich over a short period of time. Infosys is today considered a beacon of corporate governance practices and Murthy has de facto become the spokesperson for everything ethical and fair.

Even as a child, NRN was ahead of the pack. Outstanding in studies, he graduated with a degree in electrical engineering from the National Institute of Engineering, University of Mysore, in 1967. He was the product of a state government school who went on to acquire a Masters degree from IIT Kanpur, constantly pushing the envelope as he went along. But his real mettle was yet to be revealed, and what he would eventually do for the country and the outsourcing world.

He joined Patni Computer Systems in Pune after completing his studies in 1977 and it's around this time that NRN met Sudha (his wife), who was at that time an engineer working at Tata Engineering and Locomotive Co (TELCO).

But it was an incident in 1974 that proved to be the trigger for the foundation of Infosys and Murthy's transition into a 'compassionate capitalist', a belief he holds on to dearly even today. While travelling in a train near a border town between Bulgaria and Serbia, NR Narayana Murthy was engaged in a conversation in French with a young woman and the talk drifted to how tough it was to live in the communist world. Before too long, a few guards came along and pulled them out. Murthy was dragged through the platform into a little cell, where he spent the next 72 hours without food or drink. It was in that dingy room that NRN decided to part with his Leftist leanings and become an entrepreneur.



Narayana Murthy with other Infosys founding members

TRAILBLAZER

How it all started

- In 1981, NR Narayana Murthy, along with Nandan Nilekani, Kris Gopalakrishnan, SD Shibulal, K Dinesh, Ashok Arora and NS Raghavan, started Infosys Consultants Pvt Ltd in Pune's Model Colony with an initial capital of $250.

First break

In 1981 itself, Infosys signed its first client, US-based Data Basics Corporation. It started as an onsite software developer for Data Basics.

Global presence

- In 1992, Infosys opened its first international office at Boston in the US.

IPO

- Infosys made an initial public offer in February 1993 and was listed on stock exchanges in India in June 1993.

Nasdaq listing

- In March 1999, Infosys became the first India-registered company to be listed on NASDAQ.

$100-m and $1-bn marks

- In 1999, Infosys crossed $100-million in annual revenue.
- Twenty three years after it was started, Infosys crossed the billion-dollar mark, reporting revenues of $1.06 billion in fiscal 2004.

Murthy and Nandan

- In a message in the Infosys Annual Report 1998-99, Murthy introduced the new managing director of the company, Nandan Nilekani.
- Murthy served as founder CEO of Infosys for 21 years, and was succeeded by Nilekani in March 2002. In August 2006, Murthy retired from his executive role at Infosys.

Awards

- In 2000, Murthy was awarded the Padma Shri and Padma Vibhushan in 2008. In 2008 he was honoured by the French government with the 'Officer of the Legion of Honor'

Compiled by Debojyoti Ghosh

Infosys followed in 1981. Legend goes that he had to borrow some money from Sudha to give wings to his dreams. What transpired later is only too well known, as is the fact that Infosys today is a $6-billion behemoth employing more than 1.30 lakh people. It has given away stock options worth ₹50,000 crore to its employees in the last 30 years. The company today occupies more than 28 million sq ft of space across its operations and has over 4.5 lakh investors.

Reflecting all there is to the man, Murthy and his family own only a little over 3% in Infosys. His venture fund, Catamaran, a vehicle he uses to support bright ideas, is one of his pet projects today. He has been divesting his stake in Infosys to raise funds for Catamaran, and there are talks he may shed some more. His wife Sudha Murthy is a social worker and author, carrying out philanthropic activities through the Infosys Foundation. NRN's son Rohan Murthy married Venu Srinivasan's daughter Lakshmi Venu a few months ago, while daughter Akshata is happily settled as well.

But these are the happy nuggets. There have been some bitter ones as well. The exit of board member Mohandas Pai earlier this year, whom many consider NRN's protege, was a painful chapter for Murthy. It is said that Pai left Infosys because he missed out on the CEO's post, which eventually went Shibulal's way. Pai has officially denied this being the reason for his exit, but there is no doubting the fact that it was not a very pleasant incident for Infosys. There have also been allegations of violation of visa regulations in the US, an episode that has deeply hurt Murthy. NRN also had to fight off criticism that Infosys has been largely a conservative company afraid of taking any risks. In a few days, KV Kamath will come on board as chairman of the company with Kris Gopalakrishnan taking over as executive co-chairman. Analysts feel the new management will propel winds of change at Infosys, but what will be missing is the catalyst that brought it along in the first place. Infosys will surely miss Murthy and so will India Inc.

'High-platform and high-purpose'

Goutam Das

A MAN possessed with bountiful energy, always ready to set high standards, that is how colleagues in the industry talk of NR Narayana Murthy. He constantly surprised everyone, discussing even go-to-market strategies with arch rivals.

"Murthy was not just someone who was instrumental in building Infosys, he has been the flag bearer and beacon of the entire Indian IT industry. Open to sharing thoughts and ideas, Murthy never refrained from discussions with competitive organisations," says chairman and MD of Happiest Minds Technologies Ashok Soota. "During my Wipro days, while we were both organisations of comparable size, Azim Premji and I, along with Murthy, would regularly have open discussions to evaluate go-to-market strategies, new approaches, best practices, etc. Even when we started MindTree, the goodwill for us was enormous and he was always available for any counsel and advice," he remembers. Earlier this year, Soota quit MindTree to start his new IT services venture.

Subroto Bagchi, vice-chairman of MindTree, has known NRN since 1990. He believes his is a life that can truly be called high-platform and high-purpose. "I have known NRN since 1990. I had the benefit of knowing him through his work, his position on issues and his interactions with me. Through these, I believe that NRN is the greatest leader we have produced in our generation in the IT industry and he rises above everyone else with the power of his vision, his relentlessness in what he pursues, the legacy he has left behind and his phenomenal sense of inclusion," he says. "We have been blessed to have NRN in our midst and while the business leader of Infosys is demitting office, he now becomes the lighthouse for many leaders in the industry so that they may remain on course," Bagchi notes.

Som Mittal, president of industry lobby Nasscom, and Lakshmi Narayanan, vice-chairman of rival firm Cognizant, say NRN's contribution to the Indian IT industry and even to the nation stands out. "NR Narayana Murthy has made a stellar contribution towards raising the profile of the IT industry in India and has been instrumental in helping it gain the global recognition it currently enjoys. He has inspired great hope and aspiration in the younger generation," says Narayanan. Mittal has known NRN since 1992 and has shared many platforms with him, at Nasscom and outside. He agrees that Murthy has now become a great example of entrepreneurship. "What I remember is that Infosys did a lot of first-mover things—building their own campus, the way the firm engaged and serviced shareholders, in setting standards of transparency. This established the credibility of the industry and its governance. But he has also done much beyond the industry. Nationally, Murthy was responsible for projecting India as a brand around the world," Mittal adds.

P&B Daily ND 19/08/2011 p-1

OBC leverage not beyond 10 pc: SC

PBD BUREAU/PTI

NEW DELHI, AUG 18

THE Supreme Court today held that eligibility percentage for admission of the OBC candidates under 27 per cent quota in Central universities would be at most 10 per cent less than that of general category students.

A Bench headed by Justice RV Raveendran said that the eligibility criteria for OBC category students would not be decided on the basis of last cut-off for general category students.

QUOTA IN CENTRAL UNIVERSITIES

The verdict put at rest the confusion prevailing over the implementation of the April 10, 2008 judgement on the issue as different central educational institutions were adopting varying yardsticks for giving admission to the OBC candidates.

The Bench, however, clarified that there would be no disturbances in the admissions which have already been done by the universities for this academic session but extended the admission date till August 31 for filling vacant seats according to the rules laid down by it.

"Where minimum eligibility marks in the qualifying examinations are prescribed for admission, say as 50 per cent for general category candidates, the minimum eligibility marks for OBCs should not be less than 45 per cent (that is 50 less 10 per cent of 50).

"The minimum eligibility marks for OBCs can be fixed at any number between 45 and 50, at the discretion of the institution. Or, where the candidates are required to take an entrance examination and if the qualifying marks in the entrance examination is fixed as 40 per cent for general category candidates, the qualifying marks for OBC candidates should not be less than 36 per cent," the Bench said.

The court's clarification came a petition filed by PV Indersan, a former professor of IIT Madras, seeking its direction in the light of discrepancies in implementation of OBC quota in different educational institutions.

Pioneer ND 19-Aug-11 P1

Cut-off relaxed 10% for OBC admissions

ABRAHAM THOMAS ■ NEW DELHI

In times of spiralling cut-offs for admission in Central universities, students from other backward classes (OBC) can heave a sigh of relief. On Thursday, the Supreme Court gave a landmark decision laying down that cut-off marks for OBCs cannot be linked with cut-off for general category candidates.

Interpreting "cut-off marks" in context of 27 per cent quota under the Central Education Institutions (Reservation in Admission) Act, 2006, to mean "minimum qualifying marks", the Bench of Justices RV Raveendran and AK Pattnaik directed all Central institutions and universities to henceforth admit OBC students based on the minimum qualifying marks scored by them in the last examination.

SC DIRECTS CENTRAL INSTITUTIONS AND VARSITIES TO ADMIT OBC STUDENTS BASED ON MINIMUM QUALIFYING MARKS SCORED IN LAST EXAM

To balance the academic excellence of the institution and the socio-educational background of OBC candidates, the Bench noted that the minimum qualifying marks for OBCs will not be more than 10 per cent lower than the minimum eligibility marks for general category.

Thus, for admission to graduate or postgraduate courses, minimum qualifying marks would be based on the Class XII qualifying exam score or the common entrance examination for admission to a particular course. However, the Bench clarified that previous admissions made by any universities under contrary cut-off principles will not be disturbed.

Continued on Page 4

Cut-offs relaxed 10% for OBC...

From Page 1

At the same time, it directed vacant OBC seats to be filled up, latest by August 31. Only in the event that eligible OBC candidates do not come forward for admission, the reserved seats would divert to general category, the judges added.

The order came on a petition moved by former IIT Director PV Indiresan who brought to the Court's notice the dichotomy existing in deciding cut-offs for OBC admissions pursuant to the April 10, 2008 decision of the Apex Court approving 27 per cent quota for OBCs in central educational institutions. The application had sought a clarification on the order subsequently delivered by the same five-judge Bench on October 14, 2008 where it laid down that the difference between OBC cut-off marks and general cut-off marks should not be more than 10 per cent.

Indiresan demanded that the cut-off for OBC must be linked with the marks obtained by the last student admitted under general category.

But the Bench was not convinced as by doing so, several OBC seats remained unfilled and got diverted to general category.

Referring to its October 14, 2008 order, of which Justice Raveendran was a part, the Bench said, "The use of the words cut-off marks in none of the three places of the order dated October 14, 2008 refers to the marks secured by the last candidate to be admitted in general category."

Financial Express ND 19/08/2011
p-8

Capitulation fees

Govt allows supply to be restricted, high fees result

There are no two opinions on the fact that there is a widening demand-supply gap in higher education. Two months ago, it had yielded a jaw-dropping cutoff of 100% for the BCom Honours course at Shri Ram College of Commerce, Delhi University. Now there is the news of a sensational ₹1.7 crore worth of capitation fee being collected for a postgraduate radiology seat by a private medical college in Mumbai—imagine the unnecessary tests which will be ordered to recoup this cost! Note that the Supreme Court had banned capitation fees in 2003 but obviously that ban hasn't eliminated such fees, only pushed them underground. Perhaps the Prohibition of Unfair Practices in Technical Educational Institutions, Medical Educational Institutions and University Bill, 2010 would provide a more effective counterweight, given that it actually prescribes penalties up to ₹50 lakh for charging capitation fees, publishing misleading advertisements and similar malpractices. So might the National Accreditation Regulatory Authority Bill, 2010, which seeks to effect quality control by ensuring that every institute goes through a mandatory, independent and rigorous accreditation process. Both these Bills were introduced in the Lok Sabha last year. Both of them have fallen by the wayside, like so much other pending legislation, as Parliament sinks into an internecine quagmire.

The health sector has been one of the most ignored areas of India's economy. The ratio of hospital beds, doctors and nurses for every 1,000 people here is less than half of that in Pakistan, while Bangladesh beats us at the rates of immunisation for DTP3 and measles. Meanwhile, the Medical Council of India has proved itself not just an ineffectual but also a controversy-ridden regulator, with the corruption rot engulfing even its top officials. Yes, there have also been some sunnier developments, like the announcement of a common medical entrance test and the lifting of the bar on the direct entry of companies into the field of medical education. But the addition of seats just isn't keeping pace with the rise in aspirants, and it's the supply side that's critical. Unless matters are fixed at this end, it's the consumers who will really end up paying for price distortions at the training end. A few years ago, Assocham had reported that coaching for admission to engineering colleges was netting such huge amounts as could fund 30-40 new IITs. No doubt a similar calculation for medicine and capitation fees wouldn't be any less dramatic.

Times of India ND 19/08/2011 P-13

Scientists move closer to HIV vaccine, isolate antibodies

Can Fight A Broad Spectrum Of Virus Variants, Raises Hopes

Kounteya Sinha | TNN

New Delhi: Scientists have isolated the most powerful broadly neutralizing antibodies (bNAbs) against HIV so far — a major step towards finding an effective vaccine against the deadly virus.

Capable of fighting a broad spectrum of variants of HIV, the virus that causes AIDS, some of the 17 antibodies discovered jointly by The International AIDS Vaccine Initiative (IAVI) and The Scripps Research Institute blocked HIV infection of cells as much as 10 to 100 times as potently as the previously discovered bNAbs.

An antibody is an infection-fighting protein produced by our immune system when it detects harmful substances like viruses and bacteria. These HIV neutralizing antibodies are produced naturally by a minority infected with HIV, but who show no symptoms.

Since HIV was first identified in 1981, 40 million have been infected. Annually, an estimated four million new infections occur, of which 90% are in developing countries. In the past 25 years, AIDS has claimed over 25 million lives

The new antibodies that target the CD4 binding site on HIV — the site where the virus engages the T cells to initiate its infection — was isolated from blood serum samples across the world.

Dr Rajat Goyal, IAVI's India head said, "This cocktail of bNAbs will help us design the most effective immunogens, the active ingredients of vaccines, which will then help us find the elusive HIV vaccine. Only a minority, who are HIV-positive, begin to produce bNAbs after several years of infection. Animal studies suggest that such antibodies could block HIV infection if they were elicited by a preventive vaccine."

The 17 new bNAbs were isolated from four HIV-positive individuals that are mostly of African descent. Earlier in 2009, this same research team had found two potent bNAbs, PG9 and PG16.

Dennis Burton, director of the IAVI Neutralizing Antibody Center, said, "Most antiviral vaccines depend on stimulating the antibody response to work effectively. Because of HIV's remarkable variability, an effective HIV vaccine will probably have to elicit broadly neutralizing antibodies. This is why we expect these new antibodies will prove to be valuable assets in the field of AIDS vaccine research."

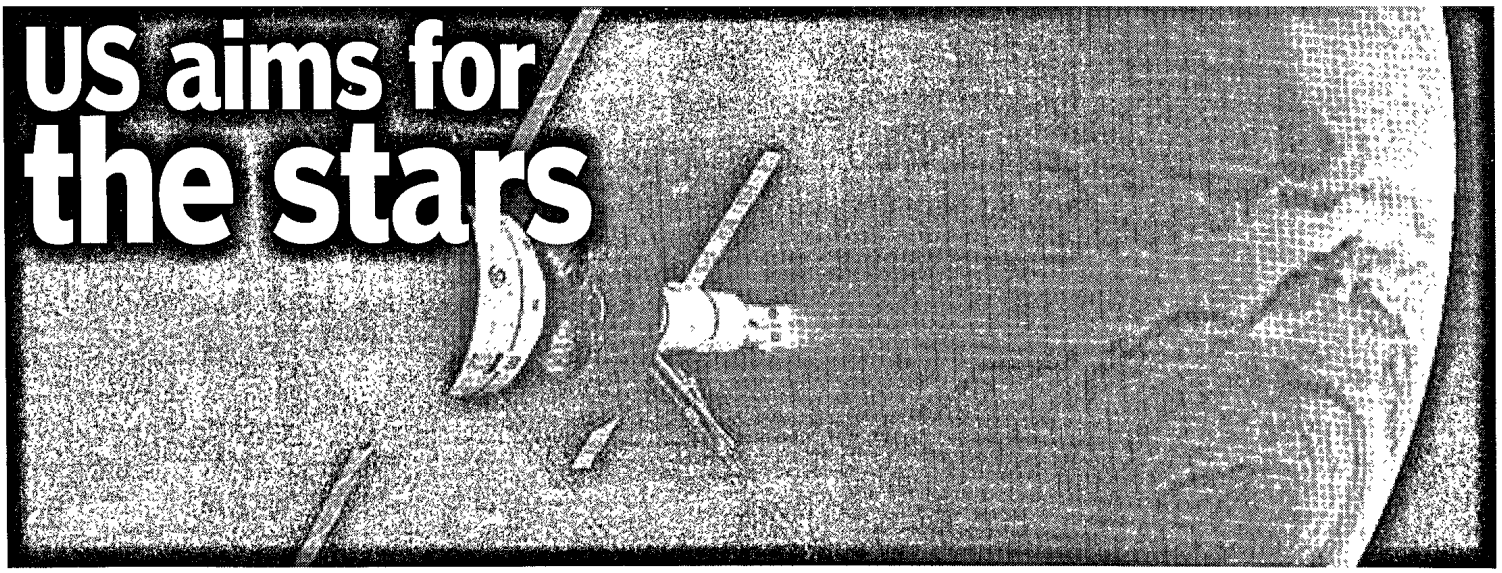
Experts say a vaccine against HIV is a must with 7,000 new HIV infections occurring daily and 9 million HIV-infected individuals unable to access life-saving antiretroviral medication.

The new bNAbs are encouraging. Many of them bind to unknown molecular structures on the surface of HIV. This means that they could significantly broaden the target options researchers have in designing vaccines to elicit similar antibodies.

Since HIV was first identified in 1981, 40 millions have been infected with the virus. Annually, an estimated four million new infections occur, of which 90% are in developing countries. Over the last 25 years, AIDS has claimed more than 25 million lives.

ASIAN AGE 19/08/2011 P14

US aims for the stars



Dennis Overbye
focus

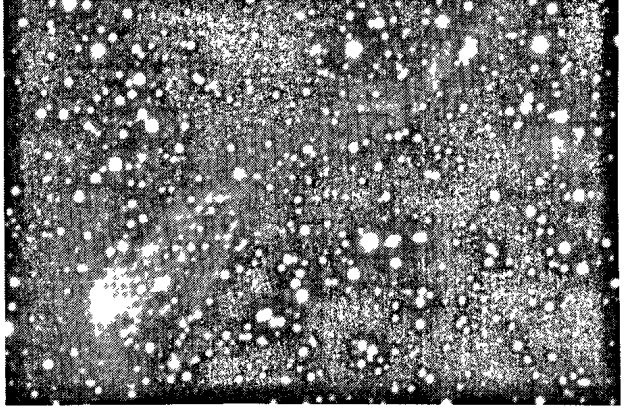
Many scientists wonder if life, especially intelligent life, exists beyond earth. Some day, the interstellar dreamers vow, the life out there will be us.

The government agency that helped invent the Internet now wants to do the same for travel to the stars. In what is perhaps the ultimate startup opportunity, Darpa, the Defence Advanced Research Projects Agency, plans to award some lucky, ambitious and star-struck organisation roughly $500,000 in seed money to begin studying what it would take — organisationally, technically, sociologically and ethically — to send humans to another star, a challenge of such magnitude that the study alone could take a hundred years.

The awarding of that grant, on November 11 — 11/11/11 — is planned as the culmination of a yearlong Darpa-Nasa effort called the 100-Year Starship Study, which started quietly last winter and will include a three-day public symposium in Orlando, Florida, on September 30 on the whys and wherefores of interstellar travel. The agenda ranges far beyond rocket technology to include such topics as legal, social and economic considerations of interstellar migration, philosophical and religious concerns, where to go and — perhaps most important — how to inspire the public to support this very expensive vision.

The Darpa plan has generated buzz as well as befuddlement in the labs, pubs, diners and websites that ring Nasa centres both physically and virtually, where the dream of space travel has never died and where a few stubborn bands of scientists and engineers, fuelled by science fiction dreams and prophecies, are designing spacecraft that could cross interstellar space, incubating a technology and preserving it for the day when it will be used.

"If you want to have a hobby, why can't it be designing an interstellar spacecraft?" said Andreas Tziolas, who teaches at the University of Aldska and directs Project Icarus, a worldwide volunteer effort to design a spacecraft that could carry a scientific



probe to a nearby star — perhaps Alpha Centauri, 4.4 light-years from here — in a trip that would take less than 100 years.

"This is what we do," said Louis Friedman, former executive director of the Planetary Society, in Pasadena, California, which bills itself as the world's largest public space organisation.

Many scientists wonder if life, especially intelligent life, exists beyond Earth. Some day, the interstellar dreamers vow, the life out there will be us.

People like Dr Tziolas say the technology already exists or will soon exist to send instruments and perhaps even people to nearby stars, although a human flight could cost hundred of trillions of dollars. The half-million dollars Darpa will award is not enough to build a starship or even to buy a modest office in which to imagine one — but it is enough to start serious fundraising and, perhaps, to invite ridicule from critics of government spending.

An actual human launching is at least a couple of centuries away and, barring the invention of Star Trek-like warp drives, could take additional centuries to complete. Whoever goes on such a journey will not be coming back.

But there are plenty of reasons that humans will eventually summon the political will to make the trip, scientists say, if not for human restlessness that has taken us out of the caves and across the oceans, then to escape being wiped out when the killer asteroid appears or the Sun boils the oceans, which it will do in a couple of billion years.

Another lure could be the discovery of a habitable planet elsewhere, something that could happen in the next few years through the efforts of Nasa's Kepler satellite and related astronomical efforts, according to Jill Tarter, an astronomer at the Seti Institute in Mountain View, California, who has devoted her life to the search for extraterrestrials. "This will get real when we have an earth analogue as a destination," she said. —*NYT*

IBM pursues chips that behave like brains

San Francisco, Aug. 18: Computers, like humans, can learn. But when Google tries to fill in your search box based only on a few keystrokes, or your iPhone predicts words as you type a text message, it's only a narrow mimicry of what the human brain is capable.

The challenge in training a computer to behave like a human brain is technological and physiological, testing the limits of computer and brain science. But researchers from IBM Corp. say they've made a key step toward combining the two worlds.

The company announced on Thursday that it has built two prototype chips that it says process data more like how humans digest information than the chips that now power PCs and supercomputers.

The chips represent a significant milestone in a six-year-long project that has involved 100 researchers and some $41 million in funding from the government's Defence Advanced Research Projects Agency, or DARPA. IBM has also committed an undisclosed amount of money.

The prototypes offer further evidence of the growing importance of "parallel processing," or computers doing multiple tasks simultaneously. That is important for rendering graphics and crunching large amounts of data.

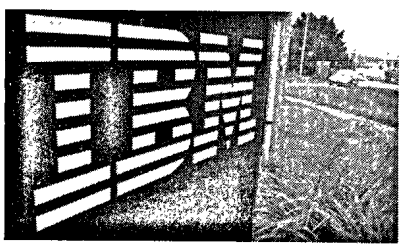
The uses of the IBM chips so far are prosaic, such as steering a simulated car through a maze, or playing Pong. It may be a decade or longer before the chips make their way out of the lab and into actual products.

But what's important is not what the chips are doing, but how they're doing it, says Giulio Tononi, a professor of psychiatry at the University of Wisconsin at Madison who worked with IBM on the project.

The chips' ability to adapt to types of information that it wasn't specifically programmed to expect is a key feature.

"There's a lot of work to do still, but the most important thing is usually the first step," Tononi said in an interview. "And this is not one step, it's a few steps."

Technologists have long imagined computers that learn like humans. Your iPhone or Google's servers can be programmed to predict certain behaviour based on past events. But the techniques being explored by IBM and other companies and university research labs around "cognitive computing" could lead to chips that are better able to adapt to unexpected information.



IBM's interest in the chips lies in their ability to potentially help process real-world signals such as temperature or sound or motion and make sense of them for computers.

IBM, which is based in Armonk, New York, is a leader in a movement to link physical infrastructure, such as power plants or traffic lights, and information technology, such as servers and software that help regulate their functions. Such projects can be made more efficient with tools to monitor the myriad analog signals present in those environments.

Dharmendra Modha, project leader for IBM Research, said the new chips have parts that behave like digital "neurons" and "synapses" that make them different than other chips. Each "core," or processing engine, has computing, communication and memory functions.

"You have to throw out virtually everything we know about how these chips are designed," he said.

"The key, key, key difference really is the memory and the processor are very closely brought together. There's a massive, massive amount of parallelism."

The project is part of the same research that led to IBM's announcement in 2009 that it had simulated a cat's cerebral cortex, the thinking part of the brain, using a massive supercomputer. Using progressively bigger supercomputers, IBM had previously simulated 40 per cent of a mouse's brain in 2006, a rat's full brain in 2007, and one per cent of a human's cerebral cortex in 2009.

A computer with the power of the human brain is not yet near. But Modha said the latest development is an important step.

"It really changes the perspective from 'What if?' to 'What now?'" Modha said. "Today we proved it was possible. There have been many skeptics, and there will be more, but this completes in a certain sense our first round of innovation." —*AP*

Tribune ND 19/08/2011 P14

How computers will soon get under our skin

A simple stick-on circuit can monitor heart rate and muscle movements as well as conventional medical monitors, but with the benefit of being weightless and almost completely undetectable

STEVE CONNOR

IT may soon be possible to wear your computer or mobile phone under your sleeve, with the invention of an ultra-thin and flexible electronic circuit that can be stuck to the skin like a temporary tattoo. The devices, which are almost invisible, can perform just as well as more conventional electronic machines but without the need for wires or bulky power supplies, scientists said.

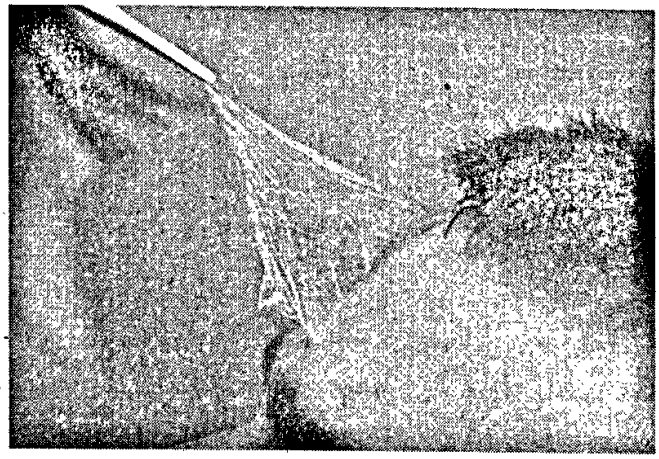
The development could mark a new era in consumer electronics. The technology could be used for applications ranging from medical diagnosis to covert military operations.

The "epidermal electronic system" relies on a highly flexible electrical circuit composed of snake-like conducting channels that can bend and stretch without affecting performance. The circuit is about the size of a postage stamp, is thinner than a human hair and sticks to the skin by natural electrostatic forces rather than glue.

"We think this could be an important conceptual advance in wearable electronics, to achieve something that is almost unnoticeable to the wearer. The technology can connect you to the physical world and the cyberworld in a very natural way that feels comfortable," said Professor Todd Coleman of the University of Illinois at Urbana-Champaign, who led the research team.

A simple stick-on circuit can monitor a person's heart rate and muscle movements as well as conventional medical monitors, but with the benefit of being weightless and almost completely undetectable. Scientists said it may also be possible to build a circuit for detecting throat movements around the larynx in order to transmit the information wirelessly as a way of recording a person's speech, even if they are not making any discernible sounds.

Tests have already shown that such a system can be used to control a voice-activated computer game, and one suggestion is that a stick-on voicebox circuit could be used in covert police operations where it might be too dangerous to speak into a radio transmitter.



The patch of electronic skin consists of an array of electrical devices for monitoring the vital signs of the body

"The blurring of electronics and biology is really the key point here," said Yonggang Huang, Professor of Engineering at Northwestern University in Evanston, Illinois. "All established forms of electronics are hard, rigid. Biology is soft, elastic. It's two different worlds. This is a way to truly integrate them."

Engineers have built test circuits mounted on a thin, rubbery substrate that adheres to the skin. The circuits have included sensors, light-emitting diodes, transistors, radio frequency capacitors, wireless antennas, conductive coils and solar cells.

"We threw everything in our bag of tricks on to that platform, and then added a few other new ideas on top of those, to show that we could make it work," said John Rogers, Professor of Engineering at the University of Illinois at Urbana-Champaign, a lead author of the study, published in the journal Science.

— *The Independent*

Times of India ND 19/08/2011 P-17

A computer with a brain of its own?

A Prototype Chip Developed That Can Process Data The Way Humans Do

San Francisco: Computers, like humans, can learn. But when Google tries to fill in your search box based only on a few keystrokes, or your iPhone predicts words as you type a text message, it's only a narrow mimicry of what the human brain is capable.

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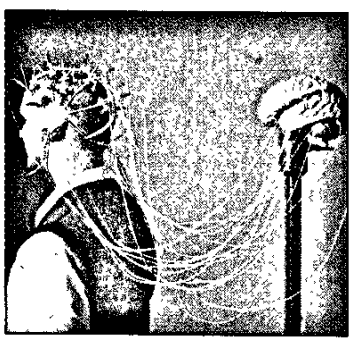

THINKING MACHINE

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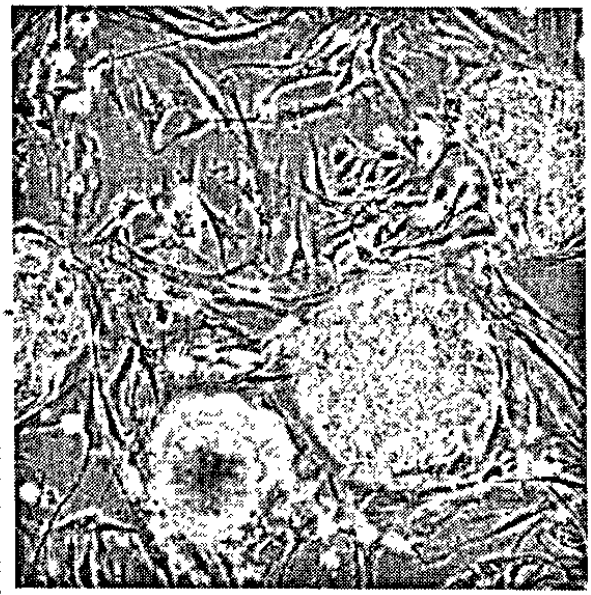
P&B Daily ND 19/08/2011 p-8

Researchers set five- year deadline for heart parts

TAN EE LYN



STEM cell researchers in Hong Kong and the United States are trying to grow spare parts for the human heart that may be ready for tests on people within five years, they said on Thursday.

Scientists have already made basic heart muscle from stem cells, but the Hong Kong-led team wants to refine it so it can replace any part damaged in heart attacks, and to recreate the natural pacemaker, where the heartbeat originates.

"When you get a heart attack, there is a small time window for a cure when the damage is still small. You can cure with a patch, a small tissue, so you won't progress to late stage heart failure," said team leader Ronald Li, director of the University of Hong Kong's Stem Cell & Regenerative Medicine Consortium.

"We have the muscle strip now, but we want it to mimic what we see in the native heart better, (and) that requires engineering," Li told Reuters in an interview.

An organ or section of tissue grown from a person's stem cells can, in general, be surgically implanted only in that same person.

"There are many different types of heart cells. If cells that are responsible for electricity aren't going right, you get arrhythmias or heart rhythm disturbances. There are heart muscle cells that do mechanical heart pumping that work all the time."

The team will use approved human embryonic stem cell lines to build these human heart muscle strips, as well as the native pacemaker for people with arrhythmia, or irregular heart beat.

The team plans first to transplant these muscle strips and pacemakers into pigs, and, if successful, to move to human clinical trials where they will transplant parts of the heart that are grown using the patients' own stem cells in about five years.

"The question is whether we can put it in the heart to integrate with the recipient organ. Even if it becomes integrated, will it last?" Li said.

He added that the team chose to use pigs because porcine hearts were anatomically and functionally more similar to human hearts.

"I am hoping that at the end of the five years, we will have a number of blueprints for designing different prototypes that can be tested," he said.

Stem cells are the body's source of all cells and tissues. They can generate all the cell types of the organ from which they originate. Because of their ability to generate different types of cells, to multiply and self-renew, scientists hope to harness stem cells to treat a variety of diseases and disorders, including cancer, diabetes and injuries.

As well as the Hong Kong experts, the team will include scientists from the Harvard Stem Cell Institute, National Institutes of Health (NIH) and the Mount Sinai School of Medicine in the United States. —**Reuters**

Business Line ND 19/08/2011 P-19

New VC for Banaras Hindu University

Our Bureau

Hyderabad, Aug. 18

Dr Lalji Singh, former Director, Centre for Cellular and Molecular Biology (CCMB), Hyderabad, has been named the new Vice-Chancellor of the Banaras Hindu University (BHU), Varanasi.

According to a communication from the Union Ministry of Human Resources Development, he has been appointed as Vice-Chancellor for a period of three years.

Coincidentally, Dr Lalji Singh, a noted molecular biologist, who made DNA fingerprinting a strong medical and diagnostic tool in the country

Dr Lalji Singh

obtained his doctorate (PhD), as well as his graduation and post-graduation from BHU.

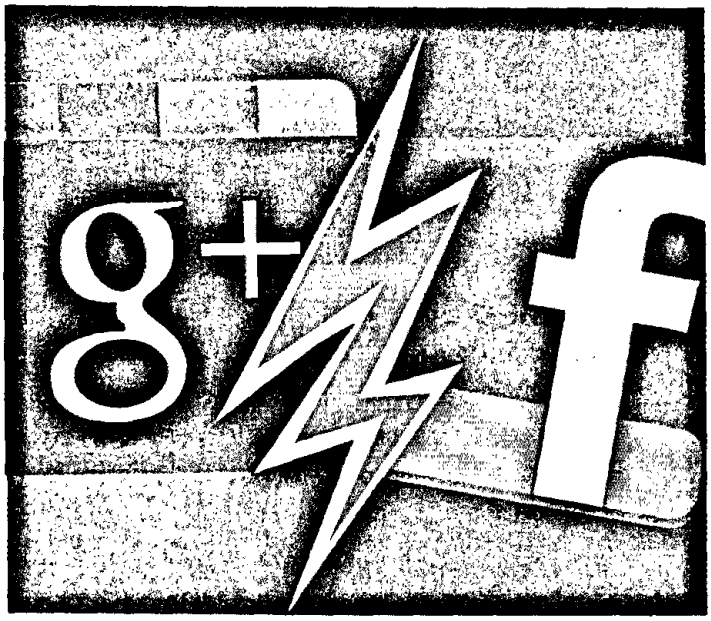
"It is a very good feeling, but the task is very challenging," said Dr Lalji Singh.

Financial Express ND 19/08/2011 p-24

Is Google+ starting to get on Facebook's nerves

Aug 18: There's no question that Google+ has quickly become the most successful social offering that Google (GOOG) has ever released, racking up more than 25 million users in a matter of weeks.

That may still be light-years behind Facebook's user base of more than 750 million, but the search company's social platform seems to be getting Facebook's attention, particularly with the recent launch of Google+ social games, such as Angry Birds. While a Facebook executive recently dismissed the Google network as inconsequential, it seems clear the competition is keeping Facebook awake at night—which may be a good thing.



Google's challenge to Facebook may be a good thing for Facebook users & third-party developers

It was fairly easy for Facebook to dismiss Google's earlier social efforts such as Buzz and Wave, in much the same way it was easy for users to dismiss them. Neither one managed to gain much traction outside a small group of Google fans and early adopters, in part because Buzz suffered from some serious privacy concerns early on (after it automatically added people from a user's e-mail address book without making it clear this would happen) and Wave was just too complicated and the purpose of the service was unclear. Although Buzz continues to exist—for now—Wave has been shut down.

Google+, by contrast, has been hailed by many users as everything Google's previous social efforts weren't: attractively designed, easy to use, and with some appealing features such as the use of Circles to separate a user's social graph into different groups. The company's approach to the use of pseudonyms has gotten criticism from users—including us—but apart from that, it has been well-received. And according to ComScore (SCOR), Google+ got to 25 million users more than 10 times faster than any other service in the history of social networking (although some are already complaining it is a ghost town).

Last week, Google upped the ante by adding social games including the popular Angry Birds and Bejeweled to the platform. And that entry into social games definitely got Facebook's attention, since games are one of the big drivers of revenue and engagement on the larger social network, thanks to a partnership with social-gaming leader Zynga.

Not only did Facebook quickly tweak its game-related features to make them more appealing to developers such as Zynga but a Facebook executive also seemed downright snippy when asked about this new competitor at a recent game-industry event, according to a report in Fortune magazine. In talking about Google's offer to developers—the search company is offering to take only 5% of the proceeds from games, in contrast to Facebook's 30%—Director of Game Partnerships Sean Ryan said: "Google is at 5% because they don't have any users."

Like McDonald's and Starbucks Ryan went on to describe Google's effort as being similar to McDonald's (MCD) getting into coffee in an attempt to compete with Starbucks (SBUX) (although that might not be the best comparison from Facebook's point of view, since a number of analysts believe McDonald's entry into the coffee business put substantial competitive pressure on Starbucks). And the Facebook executive described Google's launch as a copycat move, saying the company had managed to "emulate aspects of our system, which ... they have the right to do."

Games aren't the only element of Google+ that seems to be getting on Facebook's nerves. There have also been reports—which have been circulated on Google's network by the company's head of social, Vic Gundotra—that invitation links to Google+ posted on users' Facebook pages are not showing up. Given the history of tension between the two companies over issues such as the exporting of contact information, there has been speculation that Facebook might be blocking these links, but the social network says it isn't aware of any such blocking.

Can Google+ become a full-fledged competitor for Facebook? The Web giant has said the launch of social games is "just the tip of the iceberg" when it comes to what the company plans to add to its social platform, and some see mobile photo-sharing as a big element of Google's plans for the future—in part because of the recent launch of a mobile photo application called Photovine. This would take Google+ straight into another core product area for Facebook, which has become the world's largest photo-hosting service.

This isn't just about competing with Facebook

As I described in a recent GigaOM Pro report (subscription required), Google is making this push into social networking not just because it wants to compete with Facebook but also because it needs to tap into the "social signals" and activity that users are engaging in on such networks as part of its core search and advertising business. And Google's new CEO and co-founder Larry Page has made it clear these efforts are a central part of what the company wants to do by restructuring Google's incentive system to compensate employees who contribute to its social plans.

Facebook may have had the social-networking business more or less to itself for the past few years, thanks in part to the rapid decline of Myspace, but Google has made it obvious that it wants to become a major player. And while it is still early, the launch of Google+ shows the search giant may just have what it takes to put some competitive pressure on the larger network. In the long run, that is likely to be good for Facebook users and for developers of third-party applications as well.

Bloomberg