Newspaper Clips

July 24, 2011

Hindu Chennai 23.07.2011 p-6

IIT professor awarded MDRF award

Special Correspondent

CHENNAI: Chinmoy Sankar Dey, professor at the Kusuma School of Biological Sciences, Indian Institute of Technology, Delhi, has been awarded the first 'MDRF Honour Lecture Award' by the Madras Diabetes Research Foundation (MDRF).

V.Mohan, president, MDRF, presenting the award here on Friday, said it was in recognition of Prof. Dey's significant contribution in the areas of "molecular mechanism of insulin resistance and drug target identification in type 2 diabetes". He pointed out that Prof. Dey had already received several prestigious national awards from major scientific bodies of the Ministry of Science and Technology, Government of India, including Shanti Swarup Bhatnagar Award, National Bio-science Award and JC Bose Fellowship.

"In patients with type 2 diabetes, beta cells of the pancreas made good amount of insulin"

Dr. Dey, in his lecture, said that in patients with type 2 diabetes, beta cells of the pancreas made fairly good amount of insulin. However, the insulin's action was defective and this led to raised blood sugar levels.

This was called "insulin resistance" and was the key pathogenic defect in type 2 diabetes unlike type 1 diabetes where insulin deficiency was the main defect.

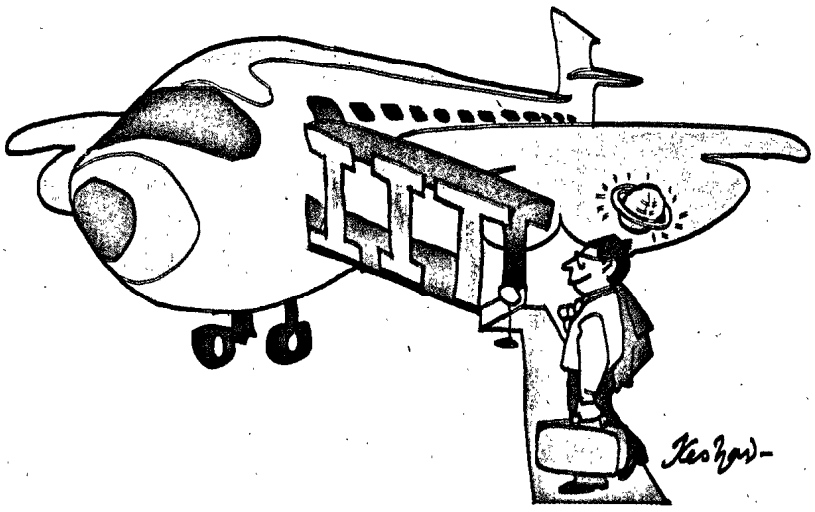
Through elegant cell culture and animal model work, Prof. Dey's team had identified the possible protein (kinase) that was responsible for insulin resistance.

He said he was now working on the mechanism by which this resistance could be broken down by identifying possible drug targets. If successful, this could potentially lead to development of new drugs for the treatment of type 2 diabetes.

HINDU ND 24/07/2011 P-11

Funds crunch... no dearth of talent

V. Natarajan



Jairam Ramesh, kicked off a controversy some time ago with his remark that the faculty at our premier engineering institutes, the IITs, is not world class, though he went on to make an equally implausible statement that students of the IITs are, however, world class!

Mr. Ramesh, an IIT alumnus, perhaps thought he knew better than anyone else — without anticipating the backlash his remark may unleash, apart from the potential for boomerang it can have on the subject itself.

Chetan Bhagat, an IIT alumnus turned-celebrity writer, rebuffed Mr. Ramesh, asking how many politicians in India were world class. Dr. P.V. Indiresan, a former IIT director, retorted jokingly that Mr. Ramesh probably was looking at the mirror when he made the remark, but added that the IITs cannot be world class considering that they are starved of funds for industry-sponsored research or grants from business houses. This was in contrast to the scene in the U.S. and other advanced countries, where funding for research — both basic and applied — is of the order of millions of dollars. He also cited other reasons as lack of infrastructure, lack of stress on research *per se*, and a ballooning teacher-student ratio contributing to mediocrity. He said that to qualify IIT students nevertheless as world class is ridiculous.

Prof. C.N.R. Rao, Scientific Adviser to the Prime Minister, said the IITs were in no way comparable to the MIT or Cambridge in the quality of research or infrastructure.

Hallmark

Prof Morton Schapiro, President of North Western University, Illinois, U.S., pointed out during his recent visit to India that access, affordability, and quality are the true hallmarks of a world-class university. He stressed that in the U.S., the institutions which churn out high quality research and graduates, invariably get huge grants by way of endowments from industry, alumni and the Federal Government, all the three working in close collaboration. North Western University operates on an annual budget of about $1.6 billion, of which almost 35% is spent on sponsored research.

Harvard University gets huge grants and endowments every year that it has built up a corpus of about $ 7.5 billon, which is utilised partly to subsidise the brilliant yet poor students from the not-so- rich families in the U.S. and elsewhere, facilitating access and affordability.

That brings us to the pertinent issue what constitutes world-class quality in teaching, research or education in general. Is it the amount of money that is poured into institutions or is it the infrastructure or is it the way they are managed?

Are IIT graduates world class? One has to only look at the number of top managers or even CEOs of the major multinationals of the world — all of them have at least one or a few IIT/IIM graduates at their helm invariably running the show successfully. You name them and you invariably find them all there. There are even senior advisory positions in the Federal Government of the U.S. being manned by Indian expatriates who passed out of the IITs/IIMs. Is it not proof enough of their being world class?

The Indian software major, Infosys, started by a few professionals — most of whom were from the IITs, including its chief, N.R. Narayana Murthy — is today rated as a world-class IT company. I personally feel that the work of our engineers and scientists in the atomic energy and space establishments can be termed high quality.

Does an institution get world-class status only when its members work and perform abroad and not when they work in India offering India-specific solutions for India-centric problems?

Take, for instance, the field of economics. The neo-liberal economic policies being pursued by the U.S. government have resulted in a high unemployment rate, hovering around 9-10 % which requires U.S.-centric solutions specific to the country's economic social and cultural milieu. Whereas, the same may not work in Third World countries such as India or China –with a vast difference in economic and skill levels. The content and delivery of primary and secondary education in India will not be quite the same as that of the U.S. or Europe or even some other Asian countries . The logistics and approach to disaster management during floods or earthquakes in India are very different from what they would be in the U.S. or Europe. Obviously, the research orientation and solutions have got to be different here to be relevant.

(The writer's email id is vnatrajan2001@yahoo.co.in)

Tribune ND 24/07/2011 P-4

HRD seeks Cabinet nod for Education Malpractices Bill

NITIN MAHAJAN

NEW DELHI

July 23: The much-delayed Education Malpractices Bill, which empowers the government to initiate criminal proceedings against private institutes that charge capitation fee or cheat students through other unfair practices, is soon likely to be brought before the Union Cabinet for its approval. The human resources development ministry is preparing to seek the Cabinet approval for the bill after the Parliamentary commit on HRD sent it back with its comments.

Sources stated that the bill has been cleared with "minor changes" and once cleared by the Cabinet is also likely to be brought before Parliament in the forthcoming Monsoon Session, begining August 1. The bill aims at cleaning up the education sector with the Centre being empowered to impose stiff penalties and fines against errant institutes.

clean image

motive The bill aims at cleaning up the education sector with the Centre being empowered to impose stiff penalties and fines against errant institutes

Official sources stated that the HRD ministry has identified as many as 25 malpractices for which educational institutions be penalised. A provision of imposing a fine of upto ₹50 lakhs and sentencing of up to 10 years in case of individuals has been proposed in the bill. "The mushrooming of fake universities is also expected be checked through the provisions of this bill," sources added.

The legislation also promises to crack down on institutes that promise a host of facilities to students at the time of admission and through their prospectus but fail to provide the same.

Despite being a part of HRD minister Kapil Sibal's much publicised educational reform process in the higher education sector of the country the bill has already faced a delay of over an year. The bill had to face stiff resistance in Parliament from the Opposition and treasury benches and later in the standing committee.

HINDU ND 24/07/2011 P-16

HRD, Health Ministry differences sorted out?

Aarti Dhar

NEW DELHI: The seemingly irreconcilable differences between the Union Ministries of Human Resource Development and Health and Family Welfare on supremacy over the two proposed over-arching regulators appear to have been sorted out.

While the National Commission for Higher Education and Research (NCHER) was mooted by the Human Resource Development Ministry, the National Council for Human Resources in Health (NCHRH) was promoted by the Health and Family Welfare Ministry.

Highly placed sources told *The Hindu* that the drafts of the National Commission for Human Resource for Health Bill and the Higher Education and Research Bill had been referred to the Legislative Department of the Union Ministry of Law and Justice, which is now acting as an arbitrator for reconciling the clauses of the Bills to bring them in tune with the consensus arrived at a series of meetings between the expert groups and senior officials of the two Ministries at the behest of the Prime Minister's Office.

Interconnected Bills

This paves the way for an early introduction of the two interconnected Bills in Parliament after the Cabinet approves them.

The PMO played a crucial role from the background, nudging the two ministries to arrive at rapprochement for drafting the respective legislation, as both staked claim to medical education.

A three-point understanding, arrived at between the two task forces, has been referred to the Law Ministry, and it will be used as the template for vetting the draft Bills submitted by the two Ministries.

The expert groups have agreed on the following points: while the minimum standards of medical education shall be the domain of the NCHRH, universities will be free to set even higher standards for which they would deal with the NCHER, for example in respect of the standards for joint degree programmes; there would be cross-representation in the membership of the two proposed commissions; and all research in the university system, including medical research, shall be in the domain of the NCHER, and the research done by bodies outside the university system such as by the Indian Council of Medical Research shall not be with the NCHER.

The coming into force of the two laws will lead to the dismantling and subsuming of such regulators as the University Grants Commission, the All-India Council for Technical Education, the National Council for Teachers Education under the NCHER, and of the Medical Council of India, the Indian Nursing Council, the Dental Council of India under the NCHRH.

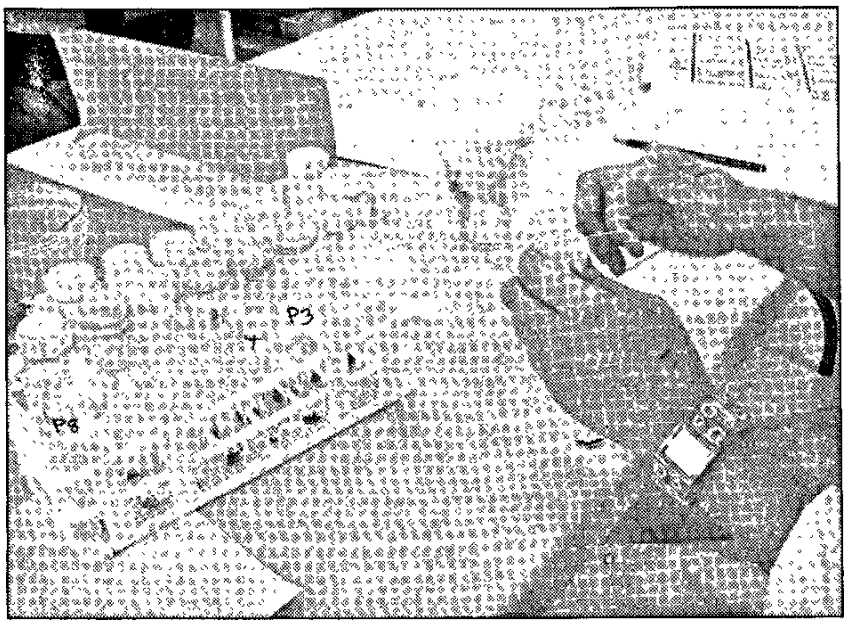
The two Commissions had been announced by the President two years ago in her address to Parliament but could not be set up as the Ministry of Health and Family Welfare insisted that medical education be kept under the NCHRH, though the initial draft of the NCHER had it in its purview.

Hindu Chennai 23.07.2011 P-11

Asian Age ND 24/07/2011 P-14

Scientists warn of running into Frankenstein in the future

research Aashima Dogra



Risky are the experiments involving infectious agents specific to humans and never seen in the test animal species. Experiments that bring human and animal tissues together might lead to the activation of dormant viruses within an animal and allow them to recombine, swap their genetic material and possibly create new disease risks.

INTRODUCING HUMAN cells into animals needs better regulation in keeping with popular ethical opinion and to avoid running into "Frankenstein" in the future, an elite group of British medical scientists have warned.

In a report published on Saturday, they express their concerns over handling the "fast moving pace" of research projects that use ACMH — animals containing human material — a type of experimentation where human biological material is added to modify the test animals to better represent the human condition being studied.

Professor Martin Bobrow, chair of the working group that produced the report said: "The very great majority of experiments present no issues beyond the general use of animals in research and these should proceed under current regulation. A very limited range should not be undertaken, at least until the potential consequences are more fully understood."

This technique is commonplace in advanced neurological research, and is also applied in other areas of medical testing and basic research.

Through public surveys and rigorous scientific discussion at the Academy of Medical Science in London, the report rejects ACMH in research that involves modification of the animal brain that resembles a human-like cerebral function and fertilisation to produce human-animal embryo.

Notably, survey respondents were for such research if it benefited medical advancement but as long as it didn't thrust any persistent human traits on the animals, physical or otherwise.

Impairing the gene pool through such experiments is a possible outcome in case of closely-linked species — non-human primates like chimps.

A study published last year demonstrated the possibility of the germline inheritance of genetic modifications introduced in monkeys.

The report further says that such an occurrence "holds out the possibility of creating a breeding colony of transgenic humanised monkeys."

Especially risky are the experiments involving infectious agents, like viruses, specific to humans and never seen in the test animal species.

"Experiments that bring human and animal tissues close together might lead to the activation of dormant human or animal viruses within an animal and allow them to recombine, swap their genetic material and possibly create new disease risks."

The study group also recommends improving the regulatory standards for such research and extrapolating these internationally, as "outsourcing" such laboratory work is hardly a challenge.

were not victims of an asset bubble burst, according to Mr. Reddy, who is currently Professor Emeritus, University of Hyderabad.

"The balancing helped us to avoid financial instability and record the highest growth rates with price stability," he said.

need to have good values on a continuing basis that determine relative weights to competing considerations, especially, between personal welfare and public interest.

Citing an anecdote about a Lieutenant in the French Army being told by his General that at his level there was no

hinged on the output of doctorates per million of population.

"We in the academia have the spiritual freedom to pursue blue sky research, innovate and yet not be affected by oppressive corporate and management pressures," he said.

Times of India ND 24/07/2011 P-17

Now, a weather 'Google'

Officials launched a database recently which they dubbed as the "Google of Central American weather." It's designed to predict natural disasters as the region grapples with devastating consequences due to climate change.

Technical director Norman Avila said the project will gather information from 150 stations in seven countries and has already accumulated decades of historical data. The shared information will pave the way for improved forecasts of hurricanes and other severe weather.

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"Extreme hydrometeorological phenomena are the main threat to central America," said Patricia Ramirez, head of the Regional Water Resources Committee based in Costa Rica, the organization in charge of developing the database.

Launched with the support of the Inter-American Development Bank, the database aims to help the agricultural sector, which has been damaged by severe weather in recent years. "The challenge of climate change is how we prepare the region to better address this problem to reduce the risks," said El Salvador's Environmental Minister Herman Rosa Chavez.

During the past 40 years, natural disasters on the central American isthmus have left 57,000 people dead, 123,000 injured and 10 m displaced. Hurricane Mitch and other natural disasters between 1996 and 1999 alone cost $16 billion and caused a 1.3% reduction in regional GDP. AFP

Times of India ND 24/07/2011 P-17

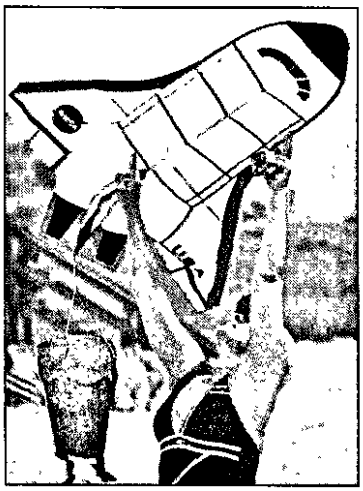
Life after Atlantis: layoffs, uncertainty

Cape Canaveral, Fla.: Kennedy Space Center workers in Florida celebrated and mourned the landing of Atlantis, the final space shuttle. While they were thrilled with the success of the last mission, they also traded goodbye hugs and took souvenir photos of their colleagues, knowing some of them won't be returning next week.

The latest round of pink slips – between 1,500 and 1,800 in Florida – are expected soon. Two thousand more are expected in coming months. Close to 9,500 contract workers in total will have been laid off from the shuttle programme's demise.

Angie Buffaloe shed tears earlier in the day with three colleagues who are losing their posts in her engineering office. "I spend more time with these guys than I do with my family," said Buffaloe, a 22-year space center veteran. "We've been through everything: divorce, sick children, grandchildren. We've shared life together...and now their last day is today."

The layoffs range from high-ranking managers to janitorial staff. Many had spent their entire careers at the Kennedy Space Center and were inspired as children to work at the home of the moonshot launches from the Apollo era and the place that has hosted every shuttle liftoff in the past 30 years.



NASA employee Robin Allen launches a kite on Cocoa Beach, Fla., recently. She will be leaving her job shortly

"For me the shuttle is my life, and it's very sad to see that part of my life end," said Glen Longwood, who has worked at shuttle emergency landing sites overseas. Longwood said he hopes to find another job within NASA, where he has spent his entire 18-year career, but he is looking at other jobs too. "I'm looking for the next adventure," he said. "It's a bridge I have to cross but I'm not sure what's on the other side."

Hundreds of other soon-to-be-laid-off employees gathered with their co-workers over hot dogs, Popsicles and sandwiches at a thank-you gathering NASA held outside Atlantis' hangar. The space shuttle was parked out front, offering a final close-up view of the vehicle they had worked on for years.

Tony Robertson, who works on the maintenance team that cleans the launch pad, cracked jokes with co-workers. Nearby, others signed a banner that read, "We Made History! Welcome Home Atlantis." Robertson said, "It's sad that the programme is done, but I'm going to go home, relax and cut the grass." NASA Administrator Charles Bolden said the agency will try to bring back laid-off shuttle workers to help on private-sector spaceflight ventures or for NASA's efforts to build a vehicle for an eventual mission to an asteroid or Mars. NASA has yet to settle on a rocket design to get astronauts there. Shuttle workers should "stick their chests out proudly to say they were a part of the most incredible era in American spaceflight," Bolden said.

For those workers sticking around, there will be old business to wrap up and new skills to learn. Test director Michael Ciannill will prepare the three shuttles for museums at Cape Canaveral, Los Angeles and Washington. AP

Business Line ND 24/07/2011 P-16

With space shuttle era over, NASA readies robot for Mars

Plutonium-powered Curiosity lab set for Nov launch

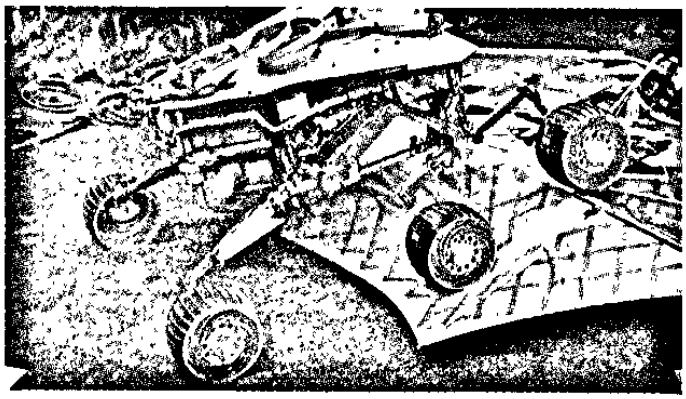
Reuters

Cape Canaveral, Fla., July 23

NASA moved on to a new chapter in space exploration on Friday, a day after the end of its shuttle programme, by announcing details of plans to determine if Mars has or ever had the ingredients for life.

Managers at the US space agency said a robotic science laboratory, being prepared for a Nov. 25 launch, will land in August 2012 near a mountain in a crater on the planet most like Earth in the solar system.

The announcement came after the final curtain fell on NASA's 30-year-old space shuttle programme with Thursday's landing of shuttle Atlantis at the Kennedy Space Center. At a Cape Canaveral briefing next Wednesday, NASA officials will discuss preparations for the agency's upcoming Juno mission to Jupiter. The unmanned spacecraft, set for launch in August, is expected to reach Jupiter's orbit in July 2016 and should further understanding of the solar system's beginnings by revealing the origin and evolution of its largest planet.



Spirit of enquiry: This undated file photo provided by NASA shows NASA's Mars Spirit rover. — AP

"Things change, things evolve, but what remains constant is the urge to explore, to reach out beyond where we are and understand our surroundings and our place in it," NASA chief scientist Waleed Abdalati said at the National Air and Space Museum in Washington, D.C., where the landing site for the Mars Science Laboratory was announced.

NASA plans to turn over its three space shuttles to museums and regroup for development of the new manned exploration programme. This will be aimed at the inner solar system, which so far has only been explored by robots, albeit increasingly more capable ones.

Among the most sophisticated probes in the offing is the plutonium-powered roving Mars Science Lab, nicknamed Curiosity, which is being prepared for launch in November.

Twice as long and five times heavier than previous Mars rovers, Curiosity packs 10 science instruments, including two for on-site chemical analysis of pulverized rock. With it, scientists hope to learn if Mars has or ever had the organics necessary for life – at least life as it appears on Earth.

LANDING SITE SPOTTED

Scientists spent five years mulling 60 possible landing sites before narrowing the list to four: Eberwalde Crater, Mawrth Vallis, Holden Crater and -- the winner -- Gale Crater, which sports a stunning 5 km-high mountain of rocks rising from the crater floor. That's about twice the height of the stack of rocks exposed in the Grand Canyon.

Scientists do not know how the mountain formed, but it maybe the eroded remnant of sediment that once completely filled the crater.

"If you start at the bottom and you go to the top, it's like reading a novel and we think that Gale Crater is going to be a great novel," said lead mission scientist John Grotzinger, with the California Institute of Technology in Pasadena.