# Newspaper Clips April 4-7, 2017

### April 7

### IIT-Madras scientists discover how humble aspirin kills mighty cancer

http://timesofindia.indiatimes.com/city/chennai/iit-madras-scientists-discover-how-humble-aspirin-kills-mighty-cancer/articleshow/58057378.cms

For more than three years now, scientists have been saying aspirin, the low-cost painkiller that also prevents heart diseases, can kill cancer cells. Just that they didn't know how.

Now, a team of scientists from Indian Institute of Technology - Madras has discovered how this non-steroidal antiinflammatory drug destroys cancer cells.

The study, published in peer-reviewed journal Scientific Reports, found aspirin targeted malignant cells which are high in a protein called voltage-dependent anion channel (VDAC). "The drug induces high levels of calcium ions in the mitochondria of the cancer cells. Elevated levels of calcium prevent mitochondria from breaking down food into energy. Aspirin prevents this energy production and releases toxic substances that kill the cell," said IIT-M professor of biotechnology Amal Kanti Bera.

The study will help pharmaceutical researchers design more potent anti-cancer drugs, said researcher Debanjan Tewari, who began his PhD work on the protein three years ago when animal studies showed anti-cancer properties in aspirin. "When we understand how a molecule works, the scope for new drug discovery widens," he said. Research has shown how low-dose aspirin taken every day can reduce risks of cardiac diseases in high-risk people. "We hope it has the same effect on cancer," said Tewari.

Data from cancer registries estimate that 14.5 lakh Indians live with the disease. Every year, more than seven lakh new cases are registered and 5.5 lakh die of the disease. An estimated 71 percent of all cancer-related deaths occur in the age group of 30-69 years.

Although most cancers are curable if detected early, oncologists like Dr V Shantha say that less than four out of 10 cancer patients receive any form of treatment mostly because treatment is not accessible or affordable. In 2015, the number of cancers was projected to be 1.1 million and the estimated number of cancer patients who received treatment, including palliative care, was 3.96 lakh.

On an average, a patient has to spend at least Rs1.75lakh for cancer treatment. The cost may go up depending on the type and stage of cancer and hospital where treatment is sought. For the IIT-M team, the study results are more than academic achievement. "We all have seen someone we love suffer due to cancer," said Dhriti Majumdar.

If low-cost molecules like those in aspirin can kill cancer cells, it can pave way for affordable therapy. "We may not be able to say if aspirin can be directly used as an anti-cancer drug right away since it needs large clinical studies. But we know there is light at the end of the tunnel," said Bera.

### IIT entrepreneurs develop fourth largest number of start-ups globally

http://www.enaindia.in/news/newsdetails/category/professional/iit-entrepreneurs-develop-fourth-largest-number-of-start-ups-globally

Entrepreneurs who have graduated from Indian Institutes of Technology (IITs), have achieved worldwide appreciation by building the fourth-largest number of start-ups that are valued at more than \$1 billion, according to an analysis done by a software firm, Sage, United Kingdom.

At present, India is in the third place in terms of start-ups and IITians have played a significant role in building 12 Unicorns and stood at the fourth place across the globe in terms of the number of Unicorns. Stanford University is in the first place with 51 Unicorns followed by Harvard University with 37 and the University of California with 18. IITs overtook the Massachusetts Institute of Technology (MIT) in the list. The alumni of MIT have set up 9 Unicorns so far.

Binny Bansal and Sachin Bansal, co-founders of Flipkart, India's largest e-commerce firm graduated from IIT, Delhi. In contrast, co-founder of Snapdeal, Rohit Bansal is from IIT, Kanpur. InMobi and Adtech firms were also founded by the graduates of IIT Kanpur. All these startups turned out to be profitable ventures last year.

Likewise, Ankit Bhati and Bhavish Agarwal, the co-founders of India's largest taxi aggregator Ola, were the graduates from IIT, Madras.

IITs are the leading technical institutes in the country after Indian Institute of Science (IIS). Most of the top most companies prefer to hire graduates from these institutes. These institutes also motivate students in starting their own ventures.

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IIT Delhi's mechanical engineer making hybrid plane in US, hopes to sell it to India by 2020 <a href="http://www.financialexpress.com/india-news/iit-delhis-mechanical-engineer-making-hybrid-plane-in-us-hopes-to-sell-it-to-india-by-2020/617406/">http://www.financialexpress.com/india-news/iit-delhis-mechanical-engineer-making-hybrid-plane-in-us-hopes-to-sell-it-to-india-by-2020/617406/</a>

According to a report, his startup has also received investments from aerospace giants -- Boeing and JetBlue owing to its goal to develop alternative propulsion aircraft.



Ashish Kumar is CEO and founder of Kirkland (Washington)-based Zunum Aero.

Ashish Kumar, a mechanical engineer from IIT Delhi, is making a hybrid-electric aircraft for regional flights in the US and is planning to sell the same in India by 2020, according to media reports. Ashish Kumar is CEO and founder of Kirkland (Washington)-based Zunum Aero.

According to a PTI report, his startup has also received investments from aerospace giants — Boeing and JetBlue owing to its goal to develop alternative propulsion aircraft. "I consider us very fortunate to have backers like JetBlue and Boeing," Kumar told the Business Insider. "We have been engaged with both companies for about a year, and both are as passionate as we are in this opportunity to reinvent regional air travel," Kumar said.

The startup intends to use the financing to further develop its proposed regional aircrafts that hold 10 to 50 passengers for flights up to 1,000 miles. The jets primarily operate on battery power with an aviation diesel or turbine range-extending power generator available as a backup, a report in Fortune said.



Boeing said it made the investments in the startup through the ventures arm of a new group called 'Boeing HorizonX', an innovation cell focused on accelerating potentially transformative aerospace technologies, manufacturing innovations, and emerging business models. Boeing HorizonX is partnering with JetBlue Technology Ventures to invest in Zunum Aero.

According to his profile on Zunum Aero website, Kumar has held leadership roles in Microsoft, Google, Dell, and McKinsey. His startup experience includes helping the launch Aeroxchange, now the largest electronic marketplace for the aviation industry. He has a Ph.D. in Mechanical and Aerospace Engineering from the Cornell University. Kumar spent worked as a professor of engineering at Brown University in his early career, and as a research fellow at the Sandia National Laboratories.

## April 5

IIT Ropar Ranks 5th among Top New IITs; Improves In Outreach and Inclusivity Parameter <a href="http://www.ndtv.com/education/iit-ropar-ranks-5th-among-top-new-iits-improves-in-outreach-and-inclusivity-parameter-1677436">http://www.ndtv.com/education/iit-ropar-ranks-5th-among-top-new-iits-improves-in-outreach-and-inclusivity-parameter-1677436</a>

In the recently released National Institutional Ranking Framework (NIRF) for 2017 by the Ministry of Human Resource Development, Indian Institute of Technology (IIT) Ropar has improved in the parameter of Outreach and Inclusivity (OI). The institute has also made its place in the top five new IITs as per the rankings. Professor S K Das, Director, IIT Ropar expressed his happiness to be a part of the India Rankings 2017. He said that this year too, the institute has made its way to the top five new IITs and has ranked third among the new IITs and fifth in the overall engineering institutes category.

He also said that the improved score in Outreach and Inclusivity parameter showed that the institute promoted regional diversity, international outreach, as well as gender inclusivity. The institute also promoted inclusion of students from economically and socially challenged sections and physically challenged students.

Professor S K Das told Press Trust of India, that being placed at 21st rank among engineering institutes and 32nd in overall ranking was an achievement for the institute which is only nine years old.

IIT Ropar has improved in comparison to last year and has scored the best in the parameter of OI. The institute had scored in the parameter 105th rank last year and moved to 11th this year.

The National Institutional Rankings Framework (NIRF) is an indigenous ranking framework for higher educational institutions started in 2015-16 by MHRD. The institutes are ranked on various parameters which assess teaching, learning and resources, research and professional practices, graduation outcome, outreach and inclusivity and perception about an institution.

Indian Institutes of Technology are premier institutions for engineering education and research. Currently there are 23 IITs at Bombay, Delhi, Kanpur, Kharagpur, Madras, Guwahati, Roorkee, Hyderabad, Patna, Bhubaneshwar, Ropar, Jodhpur, Gandhinagar, Indore, Mandi, Varanasi, Tiruppati, Palakkad, Goa, Jammu, Dharwad and Bhilai.

### Needs to strengthen the student-faculty ration at IIT-Kgp: Director

https://www.brainbuxa.com/education-news/needs-to-strengthen-the-student-faculty-ration-at-iit-kgp-director-6209

According to the director of IIT-kgp, the institute which was ranked third in engineering institutions after IIT-Madras and IIT-Bombay, needs to strengthen its student-faculty ratio.

The ranking was conducted by the National Institutional Ranking Framework of the HRD ministry and the results were declared at a press conference in Delhi by Prakash Javadekar.

"NIRF India Rankings 2017: Engineering Rankings for the top 5 IITs remains same in 2017 as in 2016 with IIT-Kgp in the middle (3rd) after IITM and IITB," IIT-Kgp Director P.P. Chakrabarti said in a Facebook post.

He further pointed out that in the two newly introduced categories, namely overall ranking across all categories, IIT-Kgp stands third in the row after IIT-M and IIT-B. In the category of management the institute stands seventh in the row after 5 IIMs and IITD.

"Our main are in research outcome and graduation outcome which shows key value add of IIT-Kgp to both research community and student upbringing. However, there is scope for further improvement," Chakrabarti noted.

"Our main comparative weakness lie in faculty-student ratio (we have the highest student strength) and general perception, which though improved needs significant further strengthening," he added.

## IIT-Kharagpur to launch MBBS course from 2019 with 50 students

http://timesofindia.indiatimes.com/city/kolkata/iit-kharagpur-to-launch-mbbs-course-from-2019-with-50-students/articleshow/58019286.cms

IIT-Kharagpur will be the first technology institute to offer medicine courses, set to start from the 2019 session with a batch of 50 students.

A 400-bed hospital on the campus+, which will act as a teaching facility, will start admitting patients from mid-2018.

The institute will seek permission from the Medical Council of India only after the hospital starts functioning. "For the first

MBBS batch, we will restrict the number of candidates to 50," said Sriman Kumar Bhattacharyya, deputy director of the country's oldest IIT. The MBBS degree will be awarded by IIT-Kharagpur, which is yet to formulate the admission process. "We will be at liberty to conduct our own entrance examination and not necessarily admit students from NEET. The IITs are governed by a separate law, which enables them to hold their own admission exams, like for engineering courses. Admissions to engineering take place through IIT-JEE (Advanced). A final decision is yet to be taken," a source said.

Explaining the reason behind introducing the course, Bhattacharyya said, "The purpose is to cater to the needs of local patients as well as the institute. We want this to be a research hospital and patients should benefit from the technological developments at IIT."

The super-specialty hospital will include departments, such as cardiology, neurology, orthopaedic, out-patient, besides a medical diagnostic centre and an emergency ward. "The hospital will run as a special purpose vehicle under a registered society with a Board of Governors at the helm. The society will be registered under the West Bengal Registration Act. The IIT-Kgp director will be the chairman of the board," Bhattacharyya said. With the IIT planning to sign an MoU with the society-run hospital, activities at the two places will be collaborative.

Several reputable hospitals have been approached to manage the hospital operations."Talks are on with cardiologist Devi Shetty. Several renowned doctors will be associated with the hospital," said a source.

With the IIT wanting the hospital to focus on research, associated doctors will have an opportunity to carry out medicotechnical research. "We aim to introduce videography during treatment, with the patient's permission. This will allow us to gather information, which can be transmitted anywhere across the globe to other doctors, who can then go through the treatment procedure and records to make recommendations," said the institute deputy director.

The Kharagpur institute has already received permission to start the curriculum from the human resource and development ministry.

## Bioagile Therapeutics entered into an agreement with IIT Guwahati

http://www.thehindu.com/education/iisc-tops-national-rankings-iit-madras-comes-second/article17782108.ece

This collaboration will facilitate research and entrepreneurial activities in order to create commercial opportunities and build partnerships

IIT Guwahati and Bioagile have entered into mutual collaboration for promoting research and development and to serve as a location for the industrial collaborators to encourage their new Product Development.

This collaboration will facilitate research and entrepreneurial activities in order to create commercial opportunities and build partnerships between academics and industry, to enhance the innovation and creativity.

This facilitates evolution of new models of academia-industry interactions as well as academia-social interactions and develops institutional networks for innovations in the thematic areas. Also aids to promote increased interactions/collaborations with institutes/organizations World-wide working in the areas of research and development.

Team Bioagile therapeutics is extremely excited to work on new research projects in collaboration with IIT and guidance of experienced professors. This is one of the milestones for BioAgile Therapeutics for being an industrial partner for IIT Guwahati.

### JNU: 300 lecturers and professors to be appointed, says HRD Minister

http://indianexpress.com/article/education/jnu-300-lecturers-and-professors-to-be-appointed-says-hrd-minister/

The number of enrollments in MPhil and PhD programmes in the forthcoming academic session will be more

Union Human Resource Development Minister Prakash Javadekar said the interviews for appointing about 300 teachers in JNU have begun. He also said vacancies of lecturers in the SC/ST and physically challenged categories in JNU have not been filled for years. While responding to a Zero Hour mention in the Rajya Sabha, he said in comparison to the previous year, the number of enrollments in MPhil and PhD programmes in the forthcoming academic session will be more.

"Now the process and interviews have started. In a couple of months, 300 lecturers and professors would be appointed and if there were 970 MPhil and PhD students last year, then the number this year will be more," he said.

JD-U member Sharad Yadav said students from rural and far-flung areas of the country come to JNU for studies. But the number of enrollments in MPhil and PhD courses have been come down from 970 to 102 and as a result students were desperate.

As members tried to raise questions following Javadekar's statement, Deputy Chairman P J Kurien said "I have no reason to disbelieve what the Minister has said."

For past few months, the JNU students are protesting of "massive seat cuts" in MPhil and PhD courses. While the university has hiked the number of seats for PhD students of the Science stream, there has been no increase in number of seats for courses in social sciences, arts, aesthetics, language literature and culture studies.

Some students filed plea demanding the university to roll back the new admission policy, however, the Delhi High Court dismissed the plea. The Court said the UGC guidelines for these courses are binding on all varsities.

In March, the varsity released its prospectus last month suggesting seat cuts in the MPhil/PhD programmes across different courses in line with the University Grants Commission (UGC) guidelines.

## April 4

## NIRF India Ranking 2017: Top 10 Educational Institutes in All Categories

http://www.ndtv.com/education/nirf-indian-ranking-2017-top-10-educational-institutes-in-universities-management-engineering-colleg-1676760

NEW DELHI: Human Development Resources Minister Prakash Javadekar released the National Institutional Ranking Framework (NIRF) 2017 today. The Indian Institute of Science (IISc), Bangalore, the first Indian institution to make it to the top 10 in a small universities global ranking, has been placed at the top in the annual national rankings released by the HRD ministry. Seven Indian Institutes of Technology (IITs) have also found their place in the list of the top 10 educational institutions released under the National Institutional Ranking Framework (NIRF), the other two being Banaras Hindu University (BHU) and Jawaharlal Nehru University (JNU).

See the complete list of top 10 educational institutes in these categories below: Overall, Universities, Management, Engineering, College and Pharmacy.

#### **Top 10 Common Overall Ranking**

- 1. Indian Institute of Science, Bengaluru
- 2. Indian Institute of Technology, Madras
- 3. Indian Institute of Technology, Bombay
- 4. Indian Institute of Technology, Kharagpur
- 5. Indian Institute of Technology, Delhi
- 6. Jawaharlal Nehru University, Delhi
- 7. Indian Institute of Technology, Kanpur
- 8. Indian Institute of Technology, Guahati
- 9. Indian Institute of Technology, Roorkee
- 10. Banaras Hindu University (BHU)

#### **Top 10 Universities**

- 1. Indian Institute of Science, Bangalore
- 2. Jawaharhal Nehru University, Delhi
- 3. Banaras Hindu University, Varanasi
- 4. Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore
- 5. Jadavpur University, Kolkata
- 6. Anna University, Chennai
- 7. University of Hyderabad
- 8. Delhi University
- 9. Amrita Vishwa Vidyapeetham, Coimbatore
- 10. Savitribai Phule Pune University

#### **Top 10 Management Institutes**

- 1. Indian Institute of Management, Ahmedabad
- 2. Indian Institute of Management, Banglore
- 3. Indian Institute of Management, Calcutta
- 4. Indian Institute of Management, Lucknow
- 5. Indian Institute of Management, Kozhikode
- 6. Indian Institute of Technology, Delhi Management School
- 7. Indian Institute of Technology, Kharagpur- Management School
- 8. Indian Institute of Technology, Roorkee- Management School
- 9. Xavier Labour Relations Institute (XLRI)
- 10. Indian Institute of Management, Indore

#### **Top 10 Engineering Institutes**

- 1. Indian Institute of Technology (IIT), Madras
- 2. Indian Institute of Technology (IIT), Bombay
- 3. Indian Institute of Technology (IIT), Kharagpur
- 4. Indian Institute of Technology (IIT), Delhi

- 5. Indian Institute of Technology (IIT), Kanpur
- 6. Indian Institute of Technology (IIT), Roorkee
- 7. Indian Institute of Technology (IIT), Guwahati
- 8. Anna University, Chennai
- 9. Jadavpur University
- 10. Indian Institute of Technology (IIT), Hyderabad

#### **Top 10 Colleges**

- 1. Miranda House, Delhi
- 2. Loyola College, Chennai
- 3. Shri Ram College of Commerce, Delhi
- 4. Bishop Heber College, Tiruchirapalli
- 5. Atma Ram Sanatan Dharma, Delhi
- 6. St. Xaviers College, Kolkata
- 7. Lady Shri Ram College for Women, Delhi
- 8. Dyal Singh College, Delhi
- 9. Deen Dayal Upadhyaya College, Delhi
- 10. The Women's Christian College, Chennai

#### **Top 10 Pharmacy Institutes**

- 1. Jamia Hamdard, Delhi
- 2. National Institute of Pharmaceutical Education and Research, Mohali
- 3. University Institute of Pharmaceutical Sciences, Chandigarh
- 4. Institute of Chemical Technology, Mumbai
- 5. National Institute of Pharmaceutical Education and Research, Hyderabad
- 6. Birla Institute of Technology & Science -Pilani
- 7. Manipal College of Pharmaceutical Sciences, Manipal
- 8. Poona College of Pharmacy, Erandwane, Pune
- 9. S.R.M Institute of Science and Technology, Chennai
- 10. JSS College of Pharmacy