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July 2019  
Rs. 800

# BIOTECH EXPRESS

**List of 85 papers of more than  
300 researchers from Indian  
biological science research  
which appeared on  
retraction watch list  
in last 1 year**

*33 Random faces*



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**Editorial:** 85 papers of more than 300 Scientists from Indian biological science research which appeared on retraction watch list in last 1 year

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IIT Hyderabad fabricates device for early diagnosis of heart attack delivery systems (ENDS)

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- ▶ CSIR Technology Management Directorates recruitment
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- ▶ DBT-NIAB Hyderabad Scientist
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# Advisory & Editorial Board

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# Editorial

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## 85 papers of more than 300 Scientists from Indian biological science research which appeared on retraction watch list in last 1 year

by Kamal Pratap Singh

There was time when few researchers were feeling overwhelmed because of their achievements, but suddenly a paradigm shift occurred and everything changed abruptly. This is case with few professors who graduated in scientific misconduct and of some who even continued it till superannuation, some are fellows of Indian Science Academies and some are enjoying international positions. In this article we have filtered out 85 papers of biological sciences, from 01-07-2018 to 15-07-2019 from "Retraction Watch database", a database that brings problemaic papers into attention. A total of 84 papers involving more than 300 researchers found the place in the list. Although there are many things that happened before retraction of papers but in this list the overall result was taken into consideration i.e. the paper has been retracted or not.

Recently, few names have come up in news because of bad reasons, the researchers were found to have done falsification of their data, falsification like image duplication/manipulation, data manipulation. Plagiarism for which our govt. has framed policies is just a tip of iceberg, the main accusations are against manipulators with wrong intention.

"There are many ways by which such kind of professors are hampering our growth, they are using huge public money for research consumables, they are getting salaries for doing fake research (a senior Professor in India gets minimum 1 lakh in present year) and last but not least (s)he is occupying position of much deserving candidate who can do real discoveries.



## Exceptions (Papers awaiting moderation/other reasons)

**Not All papers/scientists mentioned in the list the were retracted because it was sole mistake of Journal/Publisher, following three papers listed are because of mistake of journals/publisher:**

1. Molecular Biological Tools in Concrete Biodeterioration – A Mini Review.
2. A review of 45 candidate genes: association of single nucleotide polymorphism to schizophrenia risk.
3. Larvicidal effects of GC-MS fractions from leaf extracts of *Cassia uniflora* Mill non Spreng

**Similarly there are more articles which are are yet subjected to expression of concern, for example:**

1. Surveillance and genetic characterization of rotavirus strains circulating in four states of North Indian children.
2. MP-4 contributes to snake venom neutralization by *Mucuna pruriens* seeds through an indirect antibody-mediated mechanism .
3. Role of LOX/COX pathways in 3-nitropropionic acid-induced Huntington’s disease-like symptoms in rats: Protective effect of licofelone.
4. Emphysematous pyelonephritis due to *Aspergillus fumigatus*-a case report.
- 5.. Not given in this list, this article was republished as corrected version, “Secondary Metabolites in the Green Synthesis of Metallic Nanoparticles” by Gregory Marslin, Karthik Siram, Qaisar Maqbool, Rajendran Kamalabai Selvakesavan, Dariusz Kruszka, Piotr Kachlicki, Gregory Franklin. Gregory Marslin from Ratnam Institute of Pharmacy and Research, Nellore was main author of paper.

**Table: List of paper reported in last 1 year on retraction watch database.**

**Note:** exceptions are written above

	<b>Title of Research Article</b>	<b>Journal/ Publisher</b>	<b>Institute/ Organization</b>	<b>Reasons/ Concerns</b>	<b>Author(s)</b>	<b>MM/ DD/ YY</b>	<b>DOI/ Action</b>
1.	Larvicidal effects of GC-MS fractions from leaf extracts of <i>Cassia uniflora</i> Mill non Spreng	The International Journal of Biochemistry & Cell Biology ---Elsevier	Prof. Ramkrishna More Arts, Commerce and Science College. Pune  Abasaheb Garware College, Pune	+Error by Journal/ Publisher	V P Toro Anand D Padhye Megha V Biware Nivedita A Ghayal	07-11- 2019	10.1007/ s12038- 019- 9892-4  Retracted
2.	Ambient UV-B exposure reduces the binding of ofloxacin with bacterial DNA gyrase and induces DNA damage mediated Apoptosis	The International Journal of Biochemistry & Cell Biology ---Elsevier	CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow  Banaras Hindu University, Varanasi  King George’s Medical University, Lucknow	Concerns/ Issues About Data +Duplication of Image	Jyoti Singh Ashish Dwivedi Syed Faiz Mujtaba Krishna P Singh Manish Kumar Pal Deepti Chopra Shruti Goyal Ajeet K Srivastav Divya Dubey Shailendra K Gupta Chandana Haldar Ratan Singh Ray	07/08/ 2019	10.1016/ j.biocel.  Retracted

3.	Molecular mechanisms in progression of HPV-associated cervical carcinogenesis	Journal of Biomedical Science ---Springer - Biomed Central (BMC)	Department of Infectious Diseases Biology, National Institute for Research in Reproductive Health, J.M. Street, Parel, Mumbai 400012, India	Euphemisms for Plagiarism +Plagiarism of Article	Sadhana M Gupta Jayanti Mania-Pramanik	07/03/2019	10.1007/s13224-019-01232-4  Retracted
4.	Does the Time Interval Between Semen Collection, Processing and Insemination Affect Results of IUI	The Journal of Obstetrics and Gynecology of India ---Springer	Deccan Fertility Clinic, Shivaji Park, Mumbai, India	Euphemisms for Plagiarism  +Plagiarism of Article	Gautam N Allahbadia	07-03-2019	10.1007/s13224-019-01232-4  Retracted
5.	Multiwalled carbon nanotube wrapped nanoflake graphene composites for sensitive biosensing of leviteracetum	RSC Advances ---Royal Society of Chemistry (RSC)	Amity Institute of Nanotechnology, AMITY University, Noida  Department of Biochemistry, M. D. University, Rohtak	Concerns/ Issues About Authorship  +Concerns/ Issues About Image	Jagruti Narang Nitesh Malhotra Nidhi Chauhan C S Pundir	06/19/2019	10.1039/C9RA90046B  Retracted
6.	Ultra-diluted Toxicodendron pubescens attenuates pro-inflammatory cytokines and ROS-mediated neuropathic pain in rats	Scientific Reports ---Springer - Nature Publishing Group	R. C. Patel Institute of Pharmaceutical Education and Research, Maharashtra  Kalinga Institute of Industrial technology (a deemed to be University), Odisha  SVKM's Institute of Pharmacy Maharashtra  Janmangal Homeopathy and Wellness Centre, Gujarat	Duplication of Image  -Unreliable Data  -Unreliable Results  -Upgrade/ Update of Prior Notice	Shital Magar Deepika Nayak Umesh B Mahajan Kalpesh R Patil Sachin D Shinde Sameer N Goyal Shivang Swaminarayan Chandragouda R Patil Shreesh Ojha Chanakya Nath Kundu	06-11-2019	10.1038/s41598-019-44557-w  Retracted
7.	Functional Response of Four Syrphid Predators Associated With Green Apple Aphid ( <i>Hemiptera: Aphididae</i> ) in Laboratory	Journal of Economic Entomology ---Oxford Academic	Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar  Division of Plant Protection, Central Potato Research Institute, Shimla, H.P	-Error in Analyses  -Error in Data  -Error in Results and/or Conclusions	Akhtar Ali Khan Mohd Abas Shah Somina Majid	05/18/2019	10.1093/jee/tov264  Retracted



8.	Live birth of a Pashmina goat kid after transfer of handmade cloned embryos	Journal of Reproduction and Development ---The Society for Reproduction and Development	Sher-e- Kashmir University of Agricultural Sciences and Technology, Jammu and Kashmir	-Notice - Limited or No Information	Maajid Hassan Bhat Syed Hilal Yaqoob Firdous Ahmad Khan Hilal Musadiq Khan Mujeeb ur Rehman Fazili Nazir Ahmad Ganai Riaz Ahmad Shah	05/15/2019	10.1262/jrd.2018-126e  Retracted
9.	Review on Tribological Performance of Natural Fibre-Reinforced Polymer Composites	Journal of Bio- and Tribo-Corrosion ---Springer	St Peter's Institute of Higher Education and Research, Chennai  Sri Sairam Engineering College, Chennai  Sri Indu Institute of Engineering and Technology, Hyderabad  Koneru Lakshmaiah Education Foundation, A.P  Apollo Engineering College, Chennai	-Euphemisms for Plagiarism  -Plagiarism of Article	D Chandramohan L Ravikumar C Sivakandhan G Murali A Senthilathiban	05-02-2019	10.1007/s40735-019-0247-3  Retracted

## Major reasons for retractions

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>-Duplication of Image</li> <li>-Falsification/Fabrication of Image</li> <li>-Manipulation of Images”</li> <li>-Concerns/Issues About Image</li> <li>“Concerns/Issues About Data</li> <li>-Unreliable Data</li> <li>-Falsification/Fabrication of Data”</li> <li>-Duplication of Data</li> <li>-Objections by Author(s)</li> <li>-Unreliable Results</li> <li>-Error in Text</li> <li>-Plagiarism of Article</li> <li>-Concerns/Issues About Third Party Involvement</li> </ul> | <ul style="list-style-type: none"> <li>-Duplication of Article</li> <li>-Investigation by Company/Institution</li> <li>-Concerns/Issues About Authorship</li> <li>-Error in Data</li> <li>-Investigation by Journal/Publisher</li> <li>-Misconduct - Official Investigation/ Finding</li> <li>-Misconduct by Author</li> <li>-Error in Analyses</li> <li>-Error by Journal/Publisher</li> <li>-Cites Prior Retracted Work</li> <li>-Unable to Access via current resources</li> <li>-Lack of Balance/Bias Issues</li> <li>-Withdrawal</li> </ul> |
|---|--|

10.	Sodium nitroprusside enhances callus induction and shoot regeneration in high value medicinal plant <i>Canscora decussata</i>	Plant Cell, Tissue and Organ Culture (PCTOC) ---Springer	Bharathiar University, Coimbatore	Error in Materials (General)  -Error in Results and/or Conclusions	Sivakumar Subiramani Sathish Sundararajan Hari Priya Sivakumar Venkatesh Rajendran Sathishkumar Ramalingam	05-01-2019	10.1007/s11240-018-01551-w  Retracted
11.	An Electronic Glove—A Boon to the Deaf and Dumb	Journal of Physics: Conference Series ---IOP Publishing	Jain Deemed to be University, Bangalore	-Error in Text	Narayana Swamy Ramaiah Gawas Santoshi Shyamsundar	04/30/2019	10.1088/1742-6596/1172/1/012113  Retracted
12.	A novel approach for the treatment of dysphagia lusoria	European Journal of Cardio-Thoracic Surgery: Official Journal of the European Association for Cardio-thoracic Surgery ---Oxford Academic	Jayadeva Institute of Cardiovascular Sciences and Research, Bangalore	-Plagiarism of Article	Ram Rao Venugopal Jagannath Premanand Kolwalkar Sunil Putane Krishnajirao Madhusudana Narayan		10.1093/ejcts/ezz129
13.	Resveratrol and Black Tea Polyphenol Combination Synergistically Suppress Mouse Skin Tumors Growth by Inhibition of Activated MAPKs and p53	PLoS One --- PLoS	Indian Institute of Toxicology Research, Council of Scientific and Industrial Research (CSIR), Uttar Pradesh	Concerns/ Issues About Data  -Concerns/ Issues About Image  -Duplication of Image  -Manipulation of Images	Jasmine George Madhulika Singh Amit Kumar Srivastava Kulpreet Bhui Preeti Roy Pranav Kumar Chaturvedi Yogeshwer Shukla	04/19/2019	10.1371/journal.pone.0215980  Retracted

**It is bad that my name appears under retracted content in Proceedings of the Zoological Society. But please note, that the retraction was on a book review and the book (By Prof. D. Kar) itself was retracted earlier. The book review is no way a scientific contribution. I was misguided by the author of the book and my book review was based on the book. The irony is that book is still available online for sale while having retracted content.**

Gautam Aditya, Department of Zoology,  
University of Calcutta, Kolkata, India



14.	Embedded Silica Nanoparticles in Poly(Caprolactone) Nanofibrous Scaffolds Enhanced Osteogenic Potential for Bone Tissue Engineering	Tissue Engineering. Part A ---Mary Ann Liebert	Amrita Vishwa Vidyapeetham University, Kochi	-Notice - Unable to Access via current resources	Nitya Ganesh Rangasamy Jayakumar Manzoor Koyakutty Ullas Mony Shantikumar V Nair	04/17/2019	10.1089/ten.tea.2012.0167. retract  Retracted
15.	Assessment of photocatalytic potentiality and determination of ecotoxicity (using plant model for better environmental applicability) of synthesized copper, copper oxide and copper-doped zinc oxide nanoparticles	PLoS One --- PLoS	Kalyani University, Kalyani, Nadia, West Bengal  A.B.N. Seal College, West Bengal	Concerns/ Issues About Data  -Concerns/ Issues About Image  -Concerns/ Issues About Third Party Involvement  -Error in Data/  -Error in Image  -Unreliable Data	Debadrito Das Animesh Kumar Datta Divya Vishambhar Kumbhakar Baoi Ghosh Ankita Pramanik Sudha Gupta Aninda Mandal	04/16/2019	10.1371/journal.pone.0215711  Retracted
16.	Radiofrequency ablation of osteoid osteoma in common and technically challenging locations in pediatric population	Indian Journal of Medical and Paediatric Oncology: Official Journal of Indian Society of Medical & Paediatric Oncology ---Wolters Kluwer - Medknow	Christian Medical College, Vellore, Tamil Nadu	Duplication of Article	Shaileshkumar Garge Shyamkumar Nidugala Keshava Vinu Moses George Koshy Munawwar Ahmed Suraj Mammen Vrisha Madhuri	04/16/2019	10.4103/0971-5851.188612  Retracted
17.	Suppression of Neuroinflammatory and Apoptotic Signaling Cascade by Curcumin Alone and in Combination with Piperine in Rat Model of Olfactory Bulbectomy Induced Depression	PLoS One --- PLoS	Panjab University, Chandigarh	Concerns/ Issues About Data	Puneet Rinwa Anil Kumar Sukant Garg	04/15/2019	10.1371/journal.pone.0215680  Retracted

18.	MicroRNA-125a reduces proliferation and invasion of oral squamous cell carcinoma cells by targeting estrogen-related receptor $\alpha$ : Implications for cancer therapeutics	The Journal of Biological Chemistry ---American Society for Biochemistry and Molecular Biology (ASBMB)	Indian Institute of Science, Bangalore	Concerns/ Issues About Data  -Duplication of Image	Ankana Tiwari Swarny Shivananda Kodaganur S Gopinath Arun Kumar	04-12-2019	10.1074/jbc.W119.008507  Retracted
19.	Role of LOX/COX pathways in 3-nitropropionic acid-induced Huntington's disease-like symptoms in rats: Protective effect of licofelone	British Journal of Pharmacology ---Wiley	Panjab University, Chandigarh	Concerns/ Issues About Data  -Concerns/ Issues About Results  -Investigation by Company/ Institution	Puneet Kumar Harikesh Kalonia Anil Kumar	03/28/2019	10.1111/bph.14655  Expres- sion of concern
20.	Ecological Significance of Microdiversity: Coexistence Among Casing Soil Bacterial Strains Through Allocation of Nutritional Resource	Indian Journal of Microbiology ---Springer	Mody Institute of Technology & Science (MITS), Sikar  Barkatullah University, Bhopal	Euphemisms for Plagiarism  -Plagiarism of Article	Devendra Kumar Choudhar Bhavdish N Johri	03/21/2019	10.1007/s12088-019-00779-0  Retracted
21.	Imidazolyl-PEI modified nanoparticles for enhanced gene delivery	International Journal of Pharmaceutics ---Elsevier	Institute of Genomics and Integrative Biology, Delhi University Campus, India	Concerns/ Issues About Data  -Duplication of Image	Archana Swami Anita Aggarwal Atul Pathak Soma Patnaik Pradeep Kumar Yogendra Singh Kailash C Gupta	03/15/2019	10.1016/j.ijpharm.2019.03.023  Retracted
22.	Monocrotophos Induces the Expression and Activity of Xenobiotic Metabolizing Enzymes in Pre-Sensitized Cultured Human Brain Cells	PLoS One --- PLoS	CSIR-Indian Institute of Toxicology Research, Lucknow  Integral University, Lucknow  CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow	Duplication of Image	Vinay K Tripathi Vivek Kumar Abhishek K Singh Mahendra P Kashyap Sadaf Jahan Ankita Pandey Sarfaraz Alam Feroz Khan Vinay K Khanna Sanjay Yadav Mohtshim Lohani Aditya B Pant	03/15/2019	10.1371/journal.pone.0214164  Retracted



23.	Polyethylenimine nanoparticles as efficient transfecting agents for mammalian cells	Journal of Controlled Release: Official Journal of the Controlled Release Society ---Elsevier	Institute of Genomics and Integrative Biology, Mall Road, Delhi University Delhi  Unilever Research Centre, Bangalore  Dr. B.R. Ambedkar Center for Biomedical Research, University of Delhi, Delhi	Concerns/ Issues About Data  -Duplication of Image	Surendra Nimesh Anita Goyal Vikas Pawar Sujatha Jayaraman Pradeep Kumar Ramesh Chandra Yogendra Singh Kailash C Gupta	03/15/2019	10.1016/j.jconrel.2019.02.029  Retracted
24	Biomedical	Saudi Pharmaceutical Journal ---Elsevier	C U Shah College of Pharmacy & Research, Gujarat	Plagiarism of Article	Rishad R Jivani Gaurang J Lakhtaria Dhaval O Patadiya Laxman D Patel Nurudin P Jivani Bhagyesh P Jhala	03/13/2019	10.1016/j.j.sps.2019.03.003  Retracted
25	Modulation of the Sirt-1/P53 axis by butyrate inhibits the Hepatitis B virus replication	Journal of Cancer Research and Therapeutics ---Wolters Kluwer - Medknow	South Asian University, New Delhi, India	Concerns/ Issues About Authorship -Plagiarism of Article	Saman Man Pradham Senthil K Venugopal	03/13/2019	10.4103/0973-1482.240666  Retracted

*That list, formally released to the public this week as a searchable database (<http://retractiondatabase.org/RetractionSearch.aspx?>), is now the largest and most comprehensive of its kind. It includes more than 18,000 retracted papers and conference abstracts dating back to the 1970s (and even one paper from 1756 involving Benjamin Franklin). It is not a perfect window into the world of retractions. Not all publishers, for instance, publicize or clearly label papers they have retracted, or explain why they did so. And determining which author is responsible for a paper's fatal flaws can be difficult.*

*Still, the data trove has enabled Science, working with Retraction Watch, to gain unusual insight into one of scientific publishing's most consequential but shrouded practices. Our analysis of about 10,500 retracted journal articles shows the number of retractions has continued to grow, but it also challenges some worrying perceptions that continue today. The rise of retractions seems to reflect not so much an epidemic of fraud as a community trying to police itself.*

**Source:** <https://www.sciencemag.org/news/2018/10/what-massive-database-retracted-papers-reveals-about-science-publishing-s-death-penalty>

Retraction Watch is a blog that reports on retractions of scientific papers and on related topics. The blog was launched in August 2010 and is produced by science writers Ivan Oransky and Adam Marcus. Its parent organization is the Center for Scientific Integrity.

Source: Wikipedia

26.	Green Synthesis of Silver Nanoparticles Using <i>Polyalthia longifolia</i> Leaf Extract along with D-Sorbitol: Study of Antibacterial Activity	Journal of Nano-technology ---Hindawi	University of Madras, Chennai  Indian Institute of Technology, Chennai	Duplication of Image	Somasundaram Kaviya Jayadevan Santhanalakshmi Balasubramanian Viswanathan	03-07-2019	10.1155/2019/1613475  Retracted
27.	A Comprehensive Review on Metabolic Syndrome	Cardiology Research and Practice ---Hindawi	Ex-Servicemen Contributory Health Scheme (ECHS) Polyclinic, Sultanpur Lodhi, Kapurthala	Plagiarism of Article	Jaspinder Kaur	03-06-2019	10.1155/2019/4301528  Retracted
28.	Deep convolutional neural network-based speech enhancement to improve speech intelligibility and quality for hearing-impaired listeners	Medical & Biological Engineering & Computing ---Springer	Hindusthan College of Engineering and Technology, Coimbatore  Rajagiri School of Engineering and Technology, Cochin  Sri Ramakrishna Institute of Technology, Coimbatore, India	Euphemisms for Plagiarism  -Plagiarism of Article	P F Khaleelur Rahiman V S Jayanthi A N Jayanthi	03-01-2019	10.1007/s11517-018-1933-x  Retracted
29.	Genome sequence and comparative genomics of <i>Rhizobium</i> sp. Td3, a novel plant growth promoting phosphate solubilizing <i>Cajanus cajan</i> symbiont	Microbiological Research ---Elsevier	Nirma University, Gujarat	Error in Data	Bhagya Iyer Shalini Rajkumar	02/27/2019	10.1016/j.micres.2019.02.002  Retracted
30.	Identification, Occurrence, and Validation of DRE and ABRE Cis-Regulatory Motifs in the Promoter Regions of Genes of <i>Arabidopsis thaliana</i>	Journal of Integrative Plant Biology ---Wiley	CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow  CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow, 226031 India	Falsification/Fabrication of Image	Sonal Mishra Aparna Shukla Swati Upadhyay Sanchita Pooja Sharma Seema Singh Ujjal J Phukan Abha Meena Feroz Khan Vineeta Tripathi Rakesh Kumar Shukla Ashok Shrama	02/20/2019	10.1111/jipb.12783  Retracted



31.	Synthesis and characterization of Mn/Co/Ti LDH and its utilization as a photocatalyst in visible light assisted degradation of aqueous Rhodamine B	RSC Advances ---Royal Society of Chemistry (RSC)	Gauhati University, Guwahati	Investigation by Company/ Institution  -Investigation by Journal/ Publisher	Priyadarshi Roy Chowdhury Krishna G Bhattacharyya	02/19/2019	10.1039/C9RA90011J  Retracted
32.	Organocatalytic stereoselective synthesis of passifloricin A	Organic & Biomolecular Chemistry ---Royal Society of Chemistry (RSC)	National Chemical Laboratory (CSIR), Pune,  University of Pune,	Concerns/ Issues About Data -Concerns/ Issues About Image -Investigation by Company/ Institution	Pradeep Kumar Menaka Pandey Priti Gupta Dilip D Dhavale	02-08-2019	10.1039/C9OB90027F  Retracted
33.	Theaflavins induced apoptosis of LNCaP cells is mediated through induction of p53, down-regulation of NF-kappa B and mitogen-activated protein kinases pathways	Life Sciences ---Elsevier	CSIR - Industrial Toxicology Research Centre, Lucknow	Falsification/ Fabrication of Image	Neetu Kalra Kavita Seth Sahdeo Prasad Madhulika Singh Aditya B Pant Yogeshwer Shukla	02-08-2019	10.1016/j.lfs.2019.02.001  Retracted
34.	A highly concise and practical route to clavaminols, sphinganine and (-)-spisulosine via indium mediated allylation of $\alpha$ -hydrazino aldehyde and a theoretical insight into the stereochemical aspects of the reaction	RSC Advances ---Royal Society of Chemistry (RSC)	CSIR-NCL (National Chemical Laboratory), Pune	Investigation by Company/ Institution	Menaka Pandey Partha Sarathi Chowdhury Achintya Kumar Dutta Pradeep Kumar Sourav Pal	02-01-2019	10.1039/C9RA90005E  Retracted

**Error and falsification of data are two different things.**

Shalini Rajkumar, Nirma University

35.	Development of Gene-Pyramid Lines of the Elite Restorer Line, RPHR-1005 Possessing Durable Bacterial Blight and Blast Resistance	Frontiers in Plant Science ---Frontiers	Indian Institute of Rice Research, Hyderabad, India	Duplication of Image  -Investigation by Company/ Institution	V Abhilash Kumar C H Balachiranjeevi S Bhaskar Naik R Rambabu G Rehka G Harika S K Hajira K Pranathi M Anila M Kousik S Vijay Kumar A Yugander J Aruna T Dilip Kumar K Vijaya Sudhakara Rao A S Hari Prasad M S Madhav G S Laha S M Balachandran M S Prasad B C Viraktamath V Ravindra Babu R M Sundaram	01/24/2019	10.3389/fpls.2019.00125  Retracted
36.	Mosquitocidal properties of Bacillus species isolated from mangroves of Vellar estuary, Southeast coast of India	Journal of Parasitic Diseases: Official Organ of the Indian Society for Parasitology ---Springer	Annamalai University, Parangipettai, India	Euphemisms for Plagiarism  -Plagiarism of Article	Srinivasan Balakrishnan Kalyanasundram Indira Muthukumarasamy Srinivasan	01/17/2019	10.1007/s12639-019-01085-8  Retracted
37.	PknE, a Serine/Threonine Protein Kinase of <i>Mycobacterium tuberculosis</i> Initiates Survival Crosstalk That Also Impacts HIV Coinfection	PLoS One --- PLoS	National Institute for Research in Tuberculosis, Chennai	Concerns/ Issues About Data  -Concerns/ Issues About Results  -Duplication of Image	Dinesh Kumar Parandhaman Luke Elizabeth Hanna Sujatha Narayanan	01/17/2019	10.1371/journal.pone.0211247  Retracted
38.	<i>Mycobacterium tuberculosis</i> EsxL inhibits MHC-II expression by promoting hypermethylation in class-II transactivator loci in macrophages	The Journal of Biological Chemistry ---American Society for Biochemistry and Molecular Biology (ASBMB)	KIIT University, Bhubaneswar  National Institute of Immunology, Delhi  India Institute of Life Science, Bhubaneswar	-Duplication of Image  -Falsification/ Fabrication of Data	Srabasti Sengupta Saba Naz Ishani Das Abdul Ahad Avinash Padhi Sumanta Kumar Naik Geetanjali Ganguli Kali Prasad Pattanaik Sunil Kumar Raghav Vinay Kumar Nandicoori Avinash Sonawane	01-07-2019	10.1074/jbc.W119.007461  Retracted

39.	E3 ubiquitin ligase Fbw7 negatively regulates osteoblast differentiation by targeting Runx2 for degradation	The Journal of Biological Chemistry ---American Society for Biochemistry and Molecular Biology (ASBMB)	CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow	-Duplication of Image  -Error in Analyses  Manipulation of Images	Yogesh Kumar Isha Kapoor Kainat Khan Gatha Thacker Mohd Parvez Khan	01-04-2019	10.1074/jbc.W118.007037  Retracted
40.	Experimental investigations of oxidation stability of biodiesel produced from prunus armeniaca oil (apricot oil) and effect of various antioxidants on stability, engine performance and emissions	Fuel ---Elsevier	Chandigarh Group of Colleges, Mohali, Punjab, India	Euphemisms for Plagiarism  -Plagiarism of Article	Santosh Kumar Rakesh Kumar Mukesh Kumar	01-04-2019	10.1016/j.fuel.2018.11.106  Retracted
41.	Development of a Multiplex PCR for Detection and Evaluation of Prevalence Rate of CTX-M-15, AADA1, QNRS1 Gene among Enterobacteriaceae from Clinical Isolates	International Journal of Pharmacy and Pharmaceutical Sciences ---Innovare Academic Sciences	Vels University, Chennai Loyola college, Chennai  Sankara Nethralaya, Chennai	- Limited or No Information  -Withdrawal	J Rubala Nancy A P Padmajaa K Kaviyarasan N Murugan	01-01-2019	10.22159/ijpps.2018.v10i10.28250  Retracted
42.	Performance evaluation of DNA motif discovery programs	Bioinformation ---Biomedical Informatics Publishing Group	R.S.M.T., U.P. College, Varanasi,  C.I.M.A.P. (C.S.I.R.), Lucknow,  I.E.T., U.P. Technical University, Lucknow,  Uttarakhand Technical University, Dehradun, India	Investigation by Journal/ Publisher  -Plagiarism of Text	Chandra Prakash Singh Feroz Khan Durg Singh Chauhan Bhartendu Nath Mishra	11/30/2015	10.6026/97320630011516  Retracted



43.	Deciphering the consumer behaviour facets of functional foods: A literature review	Appetite ---Elsevier	Punjabi University Regional Centre for IT & Management, Mohali, India	-Plagiarism of Article	Navdeep Kaur Devinder Pal Singh	12/27/ 2018	10.1016/ j.appet. 2018.12. 031  Retracted
44.	Molecular Cloning and Docking of speB Gene Encoding Cysteine Protease With Antibiotic Interaction in <i>Streptococcus pyogenes</i> NBMKU12 From the Clinical Isolates	Frontiers in Microbiology ---Frontiers	Madurai Kamaraj University, Madurai  Apollo Hospitals, Chennai, India	-Concerns/ Issues About Data	Natesan Balasubramanian Govintharaj Varatharaju Vellasamy Shanmugaiah Karuppiah Balakrishnan Mandayam A Thirunarayan		10.3389/ fmicb. 2018. 03309  Retracted
45.	Choroidal osteoma with CNVM - Successful treatment with intravitreal Bevacizumab	Saudi Journal of Ophthalmology ---Elsevier	M.M. Joshi Eye Institute, Hubli	-Duplication of Article	Guruprasad S Ayachit Neeraj Pandey Vandana Dwivedi		10.1016/ j.sjopt. 2018.12. 003  Retracted
46.	Detection of Mycobacterium lepromatosis in patients with leprosy in India	Infection and Drug Resistance --- Dove Press	TLM Community Hospital, Delhi,  Postgraduate Institute of Medical Education and Research, Chandigarh	-Error in Analyses  -Error in Data  -Error in Results and/or Conclusions  -Investigation by Journal/ Publisher	Madhvi Ahuja Mallika Lavania Itu Singh Ravindra P Turankar Seema Chhabra Tarun Narang Sunil Dogra Utpal Sengupta	12/14/ 2018	10.2147/ IDR. S198258  Retracted
47.	Diagnostic efficacy of adenosine deaminase levels in cerebrospinal fluid in patients of tubercular meningitis: A comparison with polymerase chain reaction for <i>Mycobacterium tuberculosis</i>	Annals of Neurosciences ---Karger	Post Graduate Institute of Medical Education and Research, Chandigarh,	Duplication of Article  Investigation by Journal/ Publisher -Duplication of Article -Investigation by Journal/ Publisher	Fiju Chacko Manish Modi Vivek Lal S Prabhakar S V Rana S K Arora	12/13/ 2018	10 .1159/ 000 495123  Retracted

48.	Environmental impact of plantations in and around the petroleum refinery: a case study	Environmental Monitoring and Assessment ---Springer	NEERI KoZL, Kolkata  VNIT, Nagpur	-Duplication of Article -Euphemisms for Duplication	Padma S Rao Vasant A Mhaisalkar A Shrivastava Animesh Kumar T Chakrabarti S Devotta	12-10-2018	10.1007/s10661-018-7144-y  Retracted
49.	Molecular Biological Tools in Concrete Biodeterioration – A Mini Review	Environmental Technology ---Taylor and Francis	Sathyabama Institute of Science and Technology, Chennai  Indira Gandhi Centre for Atomic Research, Kalpakkam	-Error by Journal/Publisher	Vinita Vishakarma Balakrishnan Anandkumar	12-10-2018	10.1080/09593330.2019.1546082  Retracted
50.	Ondansetron loaded pectin based microspheres for nasal administration: in vitro and in vivo studies	Powder Technology ---Elsevier	R C Patel Institute of Pharmaceutical Education and Research, Maharashtra, India	-Plagiarism of Article  -Plagiarism of Image	Hitendra S Mahajan Bhushankumar V Tatiya Pankaj P Nerkar	12-07-2018	10.1016/j.powtec.2018.11.087  Retracted
51.	Emphysematous pyelonephritis due to <i>Aspergillus fumigatus</i> -a case report	Journal of Nephrology ---Springer	Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow	-Duplication of Article	Muffazal Ahmad	12-05-2018	10.1007/s40620-018-0558-3  Expression of concern
52.	Amino acid derived highly luminescent, heteroatom-doped carbon dots for label-free detection of Cd <sup>2+</sup> /Fe <sup>3+</sup> , cell imaging and enhanced antibacterial activity	RSC Advances ---Royal Society of Chemistry (RSC)	Indian School of Mines, Dhanbad	-Author Unresponsive  -Duplication of Data  -Objections by Author(s)  -Unreliable Data  -Unreliable Results	Paramita Karfa Ekta Roy Santanu Patra Sunil Kumar Abhrajyoti Tarafdar Rashmi Madhuri Prashant K Sharma	12-03-2018	10.1039/C8RA90093K  Retracted

**The Editors and Publisher are withdrawing the above article because it was incorrectly published in Environmental Technology by publisher. The article has been republished as intended in Environmental Technology Reviews. This was error of publisher exclusively.**

V Vishwakarma

53.	Creation of ultrasound and temperature-triggered bubble liposomes from economical precursors to enhance the therapeutic efficacy of curcumin in cancer cells	RSC Advances ---Royal Society of Chemistry (RSC)	Indian School of Mines, Dhanbad,	-Duplication of Data -Duplication of Image -Unreliable Data -Unreliable Results	Santanu Patra Ekta Roy Rashmi Madhuri Prashant K Sharma	12-03-2018	10.1039/C6RA14584A  Retracted
54.	Red luminescent manganese-doped zinc sulphide nanocrystals and their antibacterial study	Journal of Materials Chemistry B ---Royal Society of Chemistry (RSC)	University of Allahabad	-Author unresponsive -Duplication of Data -Objections by Author(s) -Unreliable Data -Unreliable Results	Prashant K Singh Prashant K Sharma Manvendra Kumar Ranu Dutta Shanthy Sundaram Avinash C Pandey	12-03-2018	10.1039/C8TB90177E  Retracted
55.	Shape-specific silver nanoparticles prepared by microwave-assisted green synthesis using pomegranate juice for bacterial inactivation and removal	RSC Advances ---Royal Society of Chemistry (RSC)	Indian School of Mines, Dhanbad	-Duplication of Data -Unreliable Data -Unreliable Results	Ekta Roy Santanu Patra Shubham Saha Rashmi Madhuri Prashant K Sharma	12-03-2018	10.1039/C8RA90094A  Retracted
56.	The next generation cell-penetrating peptide and carbon dot conjugated nano-liposome for transdermal delivery of curcumin	Biomaterials Science ---Royal Society of Chemistry (RSC)	Indian School of Mines, Dhanbad,	-Duplication of Data -Duplication of Image -Unreliable Data -Unreliable Results	Santanu Patra Ekta Roy Rashmi Madhuri Prashant K Sharma	12-03-2018	10.1039/C8BM90064G  Retracted

I have myself requested to withdraw my paper when i came to know that journal was not indexed in co-pernicus and scopus. Journal first asked me to pay 50USD for publishing and then asked to pay 150USD for withdrawl. Now after 1 year I saw my paper and name in retraction list citing data bias and balance issue, which is not true. It seems journal has put wrong reasons for withdrawing my paper.

Danish Rafiq, Pandit Jawahar Lal Nehru Government Medical College



57.	Triple signalling mode carbon dots-based biodegradable molecularly imprinted polymer as a multi-tasking visual sensor for rapid and “on-site” monitoring of silver ions	Journal of Materials Chemistry C ---Royal Society of Chemistry (RSC)	Indian Institute of Technology (Indian School of Mines), Dhanbad	-Author Unresponsive  -Duplication of Data  -Duplication of Image  -Objections by Author(s)  -Unreliable Data  -Unreliable Results	Santanu Patra Raksha Choudhary Ekta Roy Rashmi Madhuri Prashant K Sharma	12-03-2018	10.1039/C8TC90248H  Retracted
58.	Occurrence, spread and control measures of <i>Bothriocephalus acheilognathi</i> ( <i>Bothriocephalidae: Cestoda</i> )	Journal of Parasitic Diseases: Official Organ of the Indian Society for Parasitology ---Springer	University of Kashmir, Srinagar, India	-Euphemisms for Plagiarism	Tanveer A Sofi Fayaz Ahmad Bashir A Sheikh	12-01-2018	10.1007/s12639-018-1059-y  Retracted
59.	Surveillance and genetic characterization of rotavirus strains circulating in four states of North Indian children	Infection, Genetics and Evolution ---Elsevier	Jamia Hamdard, New Delhi  All India Institute of Medical Sciences, New Delhi  Rajendra Prasad Govt. Medical College, Tanda, HP  LalaLajpatRai Memorial Medical College, Meerut  Lady Hardinge Medical College, New Delhi  Post Graduate Institute of Medical Sciences, Rohtak  Indian Institute of Technology Delhi, New Delhi  Jamia Millia Islamia, New Delhi, India	-Concerns/ Issues About Authorship	Mohammad Islamuddin Wajihul Hasan Khan Shipra Gupta Vasundhara Razdhan Tiku Naushad Khan Ali Ilter Akdag Sanjeev Chaudhary Amit Upadhyay Praveen Kumar Geeta Ghatwala Pratima Ray	11/19/2018	10.1016/j.meegid.2018.11.005  Expression of concern

60.	Size-specific imprinted polymer embedded carbon nanodots modified magnetic nanoparticle for specific recognition of titanium nanoparticle: The round versus round	Biosensors & Bioelectronics ---Elsevier	Department of Applied Chemistry, Indian School of Mines, Dhanbad,	-Concerns/ Issues About Data  -Concerns/ Issues About Results  -Duplication of Image	Santanu Patra Raksha Choudhary Ekta Roy Rashmi Madhuri Prashant K Sharma	11/13/2018	10.1016/j.bios.2018.10.059  Retracted
61.	Bisindole-oxadiazole hybrids, T3P mediated® -synthesis and appraisal of their apoptotic, antimetastatic and computational Bcl-2 binding potential	Journal of Biochemical and Molecular Toxicology ---Wiley	Manipal University, Manipal  CSIR – National Institute for Interdisciplinary Science & Technology (NIIST), Kerala  Regional Cancer Centre, Kerala	-Date of Retraction/ Other Unknown  -Unreliable Data  -Unreliable Results  -Upgrade/ Update of Prior Notice	Pooja R Kamath Manu M Joseph Abdul Ajees Abdul Salam Sreelekha T Therakathinal Dhanya Sunil Subhakar Biswas Karkala Sreedhara Ranganath Pai	11-01-2018	10.1002/jbt.22212  Retracted
62.	Development and In vitro-In vivo Characterization of Chronomodulated Multi-Particulate Drug Delivery System of Terbutaline Sulphate for Treatment of Nocturnal Asthma by box– Behnken Statistical Design	Journal of Applied Pharmaceutical Science ---Journal of Applied Pharmaceutical Science	Ch. Devilal College of Pharmacy, Jagadhri,  Jaipur National University, Jaipur, Rajasthan  Amar Shaheed Baba Ajit Singh Jujhar Singh Memorial College of Pharmacy, Ropar, Punjab	-Cites Prior Retracted Work  -Duplication of Data	Prabhjot Singh Bajwa Jaya Sharma Shailesh Sharma Anurag Bhargava	11-01-2018	10.7324/JAPS.2018.81123  Retracted
63.	Methods to measure stability of dental implants	Journal of Dental & Allied Sciences ---Wolters Kluwer	Sinhgad Dental College and Hospital, Pune	-Plagiarism of Article	Shruti Digholkar Venigalla Naga Venu Madhav Jayant Palaskar	11-01-2018	10.4103/2277-4696.241420  Retracted
64.	Signalling cross-talk between nitric oxide and active oxygen in Trifolium repens L. plants responses to cadmium stress	Environmental Pollution ---Elsevier	Motilal Nehru National Institute of Technology, Allahabad	-Plagiarism of Article  -Plagiarism of Image	Shiliang Liu Rongjie Yang Durgesh Kumar Tripathi Xi Li Mingyan Jiang Bingyang Lv Mingdong Ma Qibing Chen	10/30/2018	10.1016/j.envpol.2018.10.096  Retracted

65.	Carbon nanotubes/pectin/minerals substituted apatite nanocomposite depositions on anodized titanium for hard tissue implant: In vivo biological performance	Materials Chemistry and Physics ---Elsevier	Madurai Kamaraj University, Madurai	-Concerns/ Issues About Data  -Concerns/ Issues About Results  -Duplication of Image	Dharman Govindaraj Mariappan Rajan Murugan A Munusamy Abdullah A Alarfaj Akon Higuchi S Suresh Kumar	10/	10.1016/j.match emphys. 2018. 10.004  Retracted
66.	Interaction of AtHMGB15, an ARID-HMG family protein, with RING-H2 type E3 ubiquitin ligase AtATL79	Plant Science: An International Journal of Experimental Plant Biology ---Elsevier	Bose Institute, Kolkata, India	-Concerns/ Issues About Data  -Concerns/ Issues About Image  -Date of Retraction/ Other Unknown	Payel Ganguly Sudip Saha Aditya Prasad Behera Adrita Roy Ajit Bikram Datta Shubho Chaudhuri	10/24/2018	10.1016/.plantsci. 2018.07. 020  Retracted
67.	Optimized extraction, composition, antioxidant and antimicrobial activities of exo and intracellular polysaccharides from submerged culture of Cordyceps cicadae	BMC	Himachal Pradesh Agriculture University, Palampur  Central University of Punjab, Bathinda  Punjabi University, Punjab	-Concerns/ Issues About Data  -Duplication of Image	Sapan Kumar Sharma Nandini Gautam Narender Singh Atri	10/16/2018	10.1186/s12906-018-2344-0  Retracted
68.	Male Meiotic Behavior of Apple Germplasm in Kashmir: Towards Understanding the Evolution of Apple	Cytologia ---Japan Mendel Society, International Society of Cytology	University of Kashmir  University of Jammu	-Notice - Unable to Access via current resources	Jahangir A Dar Aijaz A Wani Manoj K Dhar	10-12-2018	10.1508/cyto logia. 83.343  Retracted

**Our article has nothing to do with any technical nor is data related, falsifications of data or plagiarism. The reason was simple on email I.d. and authorship which has been resolved. Very soon this is article is going to be published.**

**Prof. Pratima Ray, Jamia Hamdard University**



69.	Identification of Autoantibodies against Transthyretin for the Screening and Diagnosis of Rheumatoid Arthritis	PLoS One --- PLoS	CSIR-Institute of Genomics and Integrative Biology, Delhi,  Department of Environmental Studies, Delhi University, Delhi  All India Institute of Medical Sciences, New Delhi  Army Hospital (Research and Referral), New Delhi	-Concerns/ Issues About Data  -Duplication of Data	Saurabh Sharma Sreejoyee Ghosh Lalit Kumar Singh Ashish Sarkar Rajesh Malhotra Onkar Prasad Garg Yogendra Singh Radhey Shyam Sharma Darshan Singh Bhakuni Taposh Kumar Das Sagarika Biswas	10-11-2018	10.1371/journal.pone.0205914  Retracted
70.	Anti-Tumor Activity of a Novel Compound-CDF Is Mediated by Regulating miR-21, miR-200, and PTEN in Pancreatic Cancer	PLoS One --- PLoS	Dr. D. Y. Patil University, Pimpri, Pune, India	-Concerns/ Issues About Data -Duplication of Image -Investigation by Company/ Institution -Misconduct - Official Investigation/ Finding  -Misconduct by Author	Bin Bao Shadan Ali Dejuan Kong Sanila H Sarkar Zhiwei Wang Sanjeev Banerjee Amro Aboukameel Subhash Padhye Philip A Philip Fazlul H Sarkar	10-02-2018	10.1371/journal.pone.0205300  Retracted
71.	Utility of FNAC in Metastatic Lymphadenopathy	Journal of Medical Oncology --- iMed.pub	Pandit Jawahar Lal Nehru Government Medical College, Chamba, India	-Date of Retraction/ Other Unknown  -Lack of Balance/Bias Issues  -Withdrawal	Danish Rafiq Tazeenjeelani Wajahat Un Nazir Yaavar Shafi Nusrat Bashir	10-01-2018	Data Not available  Retracted

We have already contacted the Central Council For Research in Homeopathy (CCRH), Ministry of AYUSH. The director of CCRH has accepted to check the reproducibility of our results through a separate study through an independent investigator. CCRH has already allotted funds for repeating the study and this development has been communicated to the Editor of the journal.

**Dr C R Patil (Professor and Head), R C Patel Institute of Pharmaceutical Education and Research**

72.	Gemcitabine Sensitivity Can Be Induced in Pancreatic Cancer Cells through Modulation of miR-200 and miR-21 Expression by Curcumin or Its Analogue CDF	Cancer Research ---American Association for Cancer Research	Dr. D.Y. Patil University, Pimpri, Pune, India	Falsification/ Fabrication of Image -Investigation by Company/ Institution	Shadan Ali Aamir Ahmad Sanjeev Banerjee Subhash Padhye Kristin Dominiak Jacqueline M Shaffert Zhiwei Wang Philip A Philip Fazlul H Sarkar	09/14/ 2018	10.1158/ 0008- 5472. CAN- 18-1178  Retracted
73.	Coronarin D, a Labdane Diterpene, Inhibits both Constitutive and Inducible Nuclear Factor- $\kappa$ B Pathway Activation, Leading to Potentiation of Apoptosis, Inhibition of Invasion, and Suppression of Osteoclastogenesis	Molecular Cancer Therapeutics ---American Association for Cancer Research	National Institute for Interdisciplinary Science and Technology (NIIST), Kerala, India	-Concerns/ Issues About Data  -Duplication of Image  -Investigation by Company/ Institution	Ajaikumar B Kunnumakkara Haruyo Ichikawa Preetha Anand Chiramel J Mohankumar Padmanabhan S Hema Mangalam S Nair Bharat B Aggarwal	09-04- 2018	10.1158/ 1535- 7163. MCT- 8-0871  Retracted
74.	Histopathological Significance and Prognostic Impact of Tumor Budding in Colorectal Cancer	Annals of Clinical & Laboratory Science ---Association of Clinical Scientists	Rajiv Gandhi Cancer Institute & Research Centre, Delhi	-Notice - Limited or No Information	Anurag Mehta Malini Goswami Rupal Sinha	09-01- 2018	Data Not available  Retracted
75.	In-silico Analysis of LncRNA-mRNA Target Prediction	Advances in Machine Learning and Data Science ---Springer	Central University of Rajasthan, Ajmer, India	-Error in Analyses  -Error in Results and/or Conclusions	Deepanjali Sharma Gaurav Meena	08/23/ 2018	10.1007/ 978-981- 10-8569 -7_28  Retracted
76.	Investigations on the emission characteristicsof diesel engine blende with jatropaha oil and di methyl ether	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ---Trans Stellar (Transstellar)	M Kumarasamy College of Engineering Karur, Tamilnadu, India	-Date of Retraction/ Other Unknown  -Notice - Limited or No Information  -Withdrawal	M Kathe R Manivel	08-01- 2018	10.24 247/ ijmperda pr 2018109  Retracted

77.	Coronary Angiography Safety between Transradial and Transfemoral Access	Cardiology Research and Practice ---Hindawi	G.S.V.M. Medical College, Kanpur	-Concerns/ Issues About Data  -Concerns/ Issues About Results  -Plagiarism of Article	Santosh Kumar Sinha Vikas Mishra Nasar Afdaali Mukesh Jitendra Jha Ashutosh Kumar Mohammad Asif Ramesh Thakur Chandra Mohan Varma	07/19/2018	10.1155/2018/3045963  Retracted
78.	A review of 45 candidate genes: association of single nucleotide polymorphism to schizophrenia risk	New Genetics and Society ---Taylor and Francis	University of Jammu, Jammu and Kashmir, India	-Error by Journal/ Publisher	Indu Priya Sakshi Sharma Isar Sharma Ritu Mahajan Nisha Kapoor	07/13/2018	10.1080/14636778.2018.1481740 Retracted
79.	MP-4 contributes to snake venom neutralization by <i>Mucuna pruriens</i> seeds through an indirect antibody-mediated mechanism	The Journal of Biological Chemistry ---American Society for Biochemistry and Molecular Biology (ASBMB)	National Institute of Immunology, Delhi  Regional Centre for Biotechnology, Haryana  International Centre for Genetic Engineering and Biotechnology	Concerns/ Issues About Data  -Investigation by Journal/ Publisher	Ashish Kumar Chitra Gupta Deepak T Nair Dinakar M Salunke	07/13/2018	10.1074/jbc.EC118.001735  Expres-sion of concern
80.	Assessment of an Integrative Anticancer Treatment Using an in Vitro Perfusion-Enabled 3D Breast Tumor Model	ACS Biomaterials Science & Engineering ---American Chemical Society (ACS)	DBT - Agharkar Research Institute, Pune	-Duplication of Image	Vaishnavi Kulkarni Dhananjay Bodas Kishore Paknikar	07-12-2018	10.1021/acsbio materials.8b00698  Retracted
81.	Production of Potent Antimicrobial Compounds from <i>Streptomyces cyaneofuscatus</i> Associated with Fresh Water Sediment	Frontiers in Microbiology ---Frontiers	Mizoram University, Aizawl  CSIR-Central Drug Research Institute, Lucknow, India	-Error in Methods  -Investigation by Journal/ Publisher  -Unreliable Data	Zothanpuia Ajit K Passari Preeti Chandra Vincent V Leo Vineet K Mishra Brijesh Kumar Bhim P Singh	07-05-2018	10.3389/fmicb.2018.01681  Retracted
82.	Overcoming antibiotic resistance: Is siderophore Trojan horse conjugation an answer to evolving resistance in microbial pathogens	Journal of Controlled Release: Official Journal of the Controlled Release Society ---Elsevier	Sam Higginbottom University of Agriculture, Technology and Sciences (SHUATS), Allahabad	-Concerns/ Issues About Data  -Concerns/ Issues About Results	Kalyani Dhusia Archana Bajpal P W Ramteke	07-04-2018	10.1016/j.jconrel.2018.05.036  Retracted



83.	WRKY71 and TGA1a physically interact and synergistically regulate the activity of a novel promoter isolated from Petunia vein-clearing virus	Biochimica et Biophysica Acta (BBA) - Gene Regulatory Mechanisms ---Springer	Institute of Life Sciences, Odisha	-Error in Analyses -Error in Data -Error in Results and/or Conclusions	Ankita Shrestha Ahamed Khan Dipti Ranjan Mishra Kashyap Bhuyan Bhabani Sahoo Indu B Maiti Nrisingha Dey	07-04-2018	10.1016/j.jbba.2018.05.004  Retracted
84.	Wetlands and Lakes of the World: Devashish Kar	Proceedings of the Zoological Society ---Springer	University of Calcutta, Kolkata	-Cites Prior Retracted Work	Gautam Aditya	07-02-2018	10.1007/s12595-018-0266-y  Retracted
85.	Biogas production - A review on composition, fuel properties, feed stock and principles of anaerobic digestion	Renewable and Sustainable Energy Reviews ---Elsevier	Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, Chennai  Anna University, Chennai  Arunai Engineering College, Tiruvannamalai  Aarupadai Veedu Institute of Technology, Chennai	-Date of Retraction/ Other Unknown -Euphemisms for Plagiarism -Plagiarism of Article	Balasubramaniam Bharathiraja T Sudharsana Jayaraman Jayamuthunagai Sivasankaran Chozhavendhan Jeyaraj Iyyappan	07-01-2018	10.1016/j.rser.2018.03.093  Retracted

### Notes:

1. Four Paper are still subjected to expression of concern (given under heading exceptions, 1,2,3,4)
2. Three papers were retracted just because of Publisher/Journal mistake and author were not responsible for the act. (given under heading exceptions, 1,2)
4. The reasons/concerns given with each paper was taken from Retraction watch database. No personal comment has been added toward the same.
5. Data has been curated to show only Biological Sciences papers reported in last one year on Retraction Watch database.

**Researchers with more than 1 entries:** Arun Kumar, Kailash C Gupta, Pradeep Kumar, Aditya B Pant Yogeshwer Shukla

**Researchers with more than 5 entries:** Rashmi Madhuri, Prashant K Sharma, Santanu Patra, Ekta Roy

**Total number of Papers tagged with falsification:** 4

**Total number of Papers tagged with manipulation:** 7

**Additional Note:** Though database has been selected carefully, author takes no responsibility for any mistake, for validation of information readers are requested to cross check the entries on <http://retractiondatabase.org>.

## Affiliated Institutes where research was performed

Indian Institute of Science, Indian Institute of Technology, Chennai, Bose Institute, All India Institute of Medical Sciences, Indian Institute of Technology Delhi.

**CSIR Labs:** IITR, IGIB, CIMAP, CDRI, NCL, NIIST

**DBT Labs:** National Institute of Immunology, Delhi, Regional Centre for Biotechnology, Haryana, International Centre for Genetic Engineering and Biotechnology, Delhi, Agharkar Research Institute, Pune, Institute of Life Sciences, Odisha.

**ICMR Labs:** National Institute for Research in Reproductive Health, NIRT

**ICAR – IIRRI**

**Central/State Univ:** Jamia Hamdard, BHU, King George's Medical University, MDU, Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Panjab University, South Asian University, University of Madras, Gauhati University, Annamalai University, Punjabi University, MKU, PGIMER, University of Allahabad, Central University of Rajasthan, Ajmer, Central University of Punjab, University of Kashmir, University of Jammu, University of Calcutta, University of Mysore

**Other Institutes:** Nirma University, Amity, Noida, Amrita Vishwa Vidyapeetham University, R C Patel Institute of Pharmaceutical Education and Research, R. C. Patel Institute of Pharmaceutical Education and Research, Bharathiar University, Jain Deemed to be University, Sri Jayadeva Institute of Cardiovascular Sciences and Research, Amrita Vishwa Vidyapeetham University, Kalyani University, Christian Medical College-Vellore, Barkatullah University, Integral University, Unilever Research Centre, KIIT University, KIIT University, Loyola college, U.P. Technical University, Uttarakhand Technical University, M.M. Joshi Eye Institute,

Hubli, TLM Community Hospital, Delhi, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Indian School of Mines, Dhanbad, Lady Hardinge Medical College, Ch. Devilal College of Pharmacy, Jagadhri, Jaipur, National University, Amar Shaheed, Baba Ajit Singh Jujhar Singh Memorial College of Pharmacy, Ropar, Punjab, Sinhgad Dental College and Hospital, Pune, Motilal Nehru National Institute of Technology, Allahabad, Himachal Pradesh Agriculture University, , Dr. D. Y. Patil University, Pimpri, Pune, Pandit Jawahar Lal Nehru Government Medical College, Chamba, Rajiv Gandhi Cancer Institute & Research Centre, Delhi, G.S.V.M. Medical College, Kanpur, Sam Higginbottom University of Agriculture, Technology and Sciences (SHUATS), Allahabad.

## Conclusion from Analysis

The names in the retraction watch list shows papers which have concerns about their content. There are many ways by which manipulations can be done(see on page 11) but after receiving responses of some authors it cannot be denied that not all authors of papers in the list were responsible for misconduct. Small mistakes, like skipping references, unintentional duplication of data/images, citing prior(currently) retracted work and error by Journal. What we should worried about is serious issues like falsification, image editing etc. Though we cannot avoid plagiarism but it is also not serious issue unless one has done it intentionally to much extent, simply copying some grammar line should be avoided to avoid retraction rate.

In the absence of strong regulations, these professors enjoy immunity of some kind and keep on repeating the same, creating their own world of research. Only UGC has publicly available guidelines, but they are restricted to plagiarism, they are not regulated as strongly as in other developed countries like U.S.

Everything written in Gazette "UNIVERSITY

GRANTS COMMISSION (PROMOTION OF ACADEMIC INTEGRITY AND PREVENTION OF PLAGIARISM IN HIGHER EDUCATIONAL INSTITUTIONS) REGULATIONS, 2018 dated 23rd July, 2018, says about plagiarism whereas USA's ORI include all kinds of scientific misconducts. India does not have any office like ORI, USA which becomes need of hour to see major development in science.

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**The searchable database of retracted papers launched by Retraction Watch shows 982 papers from India have been retracted so far. Of these, 330 have been retracted for plagiarism and, surprisingly, 118 papers for image duplication and/or manipulation. The number of papers retracted for image issues has suddenly increased since 2016, with 37 papers retracted in 2018 alone.**

**Published in The Hindu on July 13,  
2019**

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# PRESS RELEASE

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## Godavari Biorefineries Ltd. Earns USDA Certified Biobased Product Label(100% Biobased content) for NaturoBG® (1,3-Butylene Glycol),Acetic Acid Glacial and Crotonaldehyde.

*Godavari Biorefineries Ltd. has earned the U.S. Department of Agriculture (USDA) Certified Biobased Product label. The products, NaturoBG® (1,3-Butylene Glycol), Acetic Acid Glacial, Crotonaldehyde are now able to display a unique USDA label that highlights the percentage of biobased content.*

The following Godavari Biorefineries Ltd. products have earned the USDA Certified Biobased Product Label:

- Acetic Acid Glacial with 100% biobased content.
- NaturoBG® (1,3-Butylene Glycol) with 100% biobased content.
- Crotonaldehyde with 100% biobased content.

Third-party verification for a product's biobased content is administered through the USDA BioPreferred Program, an initiative created by the 2002 Farm Bill (and most recently expanded by the 2014 Farm Bill). One of the goals of the BioPreferred Program is to increase the development, purchase and use of biobased products.

The USDA Certified Biobased Product label displays a product's

biobased content, which is the portion of a product that comes from a renewable source, such as plant, animal, marine, or forestry feedstocks. Utilizing renewable, biobased materials displaces the need for non-renewable petroleum-based chemicals. Biobased products, through petroleum displacement, have played an increasingly important role in reducing greenhouse gas emissions that exacerbate global climate change.

Biobased products are cost-comparative, readily available, and perform as well as or better than their conventional counterparts, says Mr Samir Somaiya, "The USDA BioPreferred label demonstrates our commitment to sustainability through providing industries with bio based chemicals. It is another milestone in our journey to be the preferred source of sustainable products to our customers

worldwide. We are proud to add NaturoBG® (1,3-Butylene Glycol), Acetic Acid Glacial and Crotonaldehyde made from renewable resources to our portfolio."

"We applaud Godavari Biorefineries Ltd. for earning the USDA Certified Biobased Product label," said Kate Lewis, USDA BioPreferred Program. "Products from Godavari Biorefineries Ltd. are contributing to an ever expanding marketplace that adds value to renewable agriculture commodities, creates jobs in rural communities, and decreases our reliance on petroleum."

According to a report that USDA released in 2016, biobased products contributed \$393 billion to the U.S. economy in 2014 and support, directly and indirectly, 4.2 million jobs. In this report, the research team estimate petroleum



displacement of up to 6.8 million barrels in 2014.

The increased production of renewable chemicals and bio based products contributes to the development and expansion of the U.S. bio economy - where society looks to agriculture for sustainable sources of fuel, energy, chemicals, and products.

### About Godavari Biorefineries Ltd.:

Godavari Biorefineries Ltd is one of India's leading and sustainable biorefinery company producing, sugar, biofuels, chemicals, power, compost, waxes, and related products, using biomass as the primary feedstock.

The Company pioneered the utilisation of alcohol for manufacturing organic chemicals. Today, the Company's portfolio of speciality chemicals includes over 30 bio-based chemicals for use in demanding applications around the world that are specially engineered to address challenges and meet critical performance requirements for key markets.

The Company manufactures numerous agro-based chemicals and speciality chemicals that are used as intermediates or significant ingredients in several industries including adhesives, cosmetics, electronics, food & beverages, flavours, fragrances, oils and lubricants, pharmaceuticals, plastics and paints, textiles and leather.

The Company has a global pres-



ence with manufacturing facilities in Maharashtra and Karnataka and offices in Mumbai, Bengaluru, New Delhi, The Netherlands (Hoofddorp), and New Jersey.

### About the USDA BioPreferred Program and Certified Biobased Product label:

The BioPreferred Program is a USDA-led initiative that assists the development and expansion of markets for biobased products. The BioPreferred Program is transforming the marketplace for biobased products through two initiatives: mandatory purchasing requirements for Federal Agencies and Federal contractors and voluntary product certification and

labeling.

Biobased products span a diverse range of applications, such as lubricants, cleaning products, chemicals and bioplastics. The USDA Certified Biobased Product label communicates a product's biobased content. Expressed as a percentage, biobased content is the ratio of non-fossil organic carbon (new organic carbon) to total organic carbon in a product. New organic carbon is derived from recently-created materials. The total organic carbon in a product consists of new organic carbon and old organic carbon that originates from fossil carbon materials, such as petroleum, coal, or natural gas. More than 3,000 products have earned the USDA Certified Biobased Product label.

# NEWS: Govt & Industry

## **Institute of Life Sciences (ILS) developed antibodies against the Chikungunya virus**



Photo: Dr. Soma Chattopadhyay

The Institute of Life Sciences (ILS), which functions under the Department of Biotechnology, has entered into a non-exclusive license

for product commercialisation after having successfully developed antibodies against the Chikungunya viral (CHIKV) infection.

The antibodies were developed following decade-long research on the CHIKV infection at the ILS laboratory headed by Dr. Soma Chattopadhyay, a senior molecular virologist. In fact, Dr. Chattopadhyay has been selected for the Biotech Product, Process Development and Commercialisation Award 2019 by the Department of Biotechnology.

The ILS will partner with a biotechnology-based company for product commercialisation and marketing of antibodies in a 60:40 profit sharing basis.

“With no prior antibodies reported against CHIKV, Dr. Chattopadhyay’s group was the first to develop and characterize novel, highly sensitive and specific polyclonal antibodies against the non-structural proteins - nsP1, nsP3 and

nsP4 of CHIKV. Furthermore, her laboratory has also developed and characterized a monoclonal antibody against nsP2 of CHIKV,” said ILS in a statement.

## **Researchers from ICMR-NIRTH developed a more sensitive diagnostic test for Malaria**

A team of researchers from Indian Council of Medical Research’s Jabalpur-based National Institute of Research in Tribal Health (NIRTH) has identified a genetic sequence in the body of malaria parasite that promises to help develop a more sensitive diagnostic



NIRTH Team

Image Source: The Hindu Business Line

test for the disease.

Currently, tests used for diagnosing malaria are based on a gene, Histidine rich Protein 2 (HRP2), which is rich in an amino acid called Histidine. However, studies have shown that this gene is often absent in some strains of the malaria parasite. Consequently, significant levels of malaria infection were going undetected. Scientists across the world have been searching for new biomarkers that would be more effective.

Scientists at the NIRTH have found that an enzyme called glutamate dehydrogenase could offer a solution. “Our study provides scientific evidence for the conserved nature of glutamate dehydrogenase sequences in Indian isolates which can be used as a potential biomarker for diagnosis of malaria,” said Dr. Praveen Kumar Bharti, leader of the research team.

In the present study, the scientists looked at three genes: Glutamate dehydrogenase, lactate dehydrogenase and aldolase of *Plasmodium*

*falciparum*, a variety of malarial parasite that is the deadliest.

For this, they collected 514 blood samples of malaria-infected patients from the eight malaria-endemic states in the country, isolated DNA from them and amplified the three genes. The genes were then sequenced and nucleotide composition of the samples was compared. Among the three genes, nucleotide composition of glutamate dehydrogenase was almost the same across the samples.

Analysis of the protein structure of this gene revealed that it folded into similar protein structure across the samples, confirming that it could be a potential biomarker for malaria. “We are planning to correlate the level of parasites with that of expression of glutamate

dehydrogenase gene and their antigen levels in peripheral blood samples of malaria patients. We will then validate the sensitivity and specificity of the test,” explained Dr. Bharti.

## Project Manav- A new human atlas initiative has been launched

Manav has been initiated to create a unified database of molecular network of all the tissues in the human body and to derive a holistic picture of working of human body. The project named Manav has been launched by the Department of Biotechnology and Persistent Systems, a biotechnology company.



This mega project will collate and integrate molecular information on human tissues and organs that currently lies hidden in research articles in an unstructured and disorganized form. The project would utilize large biological community, both students and scientists, for extracting and adding the information from scientific literature at the level of cells and organs. The database would eventually help researchers in identifying gaps in current knowledge and help in future projects in diagnostics and





disease biology.

The idea emerged from the success of “Smart India hackathon”, a nationwide contest in which large number of engineering students are being encouraged to find solutions to the pressing problems. In the same way, Manav will engage biology students to build their skills in reading scientific literature and deepen their understanding of biological system.

In this public-private venture, DBT and Persistent Systems will invest Rs 13 crore and Rs 7 crore respectively. The project will be executed by Indian Institute of Science Education and Research (IISER) and National Center for Cell Sciences (NCCS) based at Pune. While the institutes will train students, the technology platform and data management will be provided by

the private partner. Students and faculty from DBT Star colleges and Biotechnology Information network system (BTIS) network will also be involved.

The project team is in talks with other scientific agencies such as the All India Council of Technical Education, Council of Scientific and Industrial Research (CSIR), University Grants Commission and Indian Council of Medical Research (ICMR) for possible collaboration.

The project will be executed in four steps. First will be creation of a robust online data annotation platform. Second step would involve data annotation and curation by students on the platform. Evaluation of generated data and model by faculty and then senior scientists for quality check would con-

stitute third step. Finally, integration of data, model building and visualization.

## Dr Ranjana Aggarwal appointed Director of CSIR-NISTADS

Prime Minister Narendra Modi has appointed Dr Ranjana Aggarwal, Professor, Department of Chemistry, Kurukshetra University as the new Director of Council of Scientific and Industrial Research - National Institute of Science Technology and Development Studies (CSIR-NISTADS), New Delhi.

NISTADS is one of the CSIR Institutes under the Central Government and the Prime Minister serves as its President. Dr Harsh Vardhan, Cabinet Minister for Science and Technology is the Vice-President of the premier research body.

The appointment of Dr Ranjana Aggarwal has been made for a tenure of six years. This prestigious institute is devoted to a study of var-



ious aspects of interaction among science, society and state and exploring continuously the interface between Science, Technology and Society.

Prof Aggarwal obtained her B.Sc., M.Sc. and PhD degrees from Kurukshetra University and then after carrying out postdoctoral research on erythromycin biosynthesis at Cambridge University, UK. She joined her Alma mater in 1995 as lecturer. Subsequently, she worked in many well known European Labs such as Cambridge University, Trinity College Dublin, and University of Trieste. She is actively collaborating with scientists of USA, Spain and Ireland. Presently she is Professor of Chemistry and Director, Women's Studies Research Centre at Kurukshetra University.

Her research interests consists of design and synthesis of azaheterocycles, involving green reagents, of therapeutic interest as anticancer, anti-inflammatory, antimicrobial and photodynamic agents. Recently she has been granted a research grant of Rs 20 lakh by Haryana State Council for Science and Technology to develop new leads to treat cancer by targeting DNA. Her research contributions have been acknowledged in the form of awards notably Commonwealth Fellowship (2003-2004), Dr. Basudev Banerji Memorial Award (2014) by Indian Chemical Society and Prof S S Katiyar Endowment Award (2015) by Indian Science Congress. As Director Women's Studies Research Centre she has is actively engaged in capacity build-

ing programs, promotion of Gender sensitization and skill development particularly among rural women.

Kurukshetra University Vice-Chancellor Dr Kailash Chander Sharma congratulated Prof Aggarwal and wished that under her guidance CSIR-NISTADS will set new milestones. He said that it is a great moment for Kurukshetra University as the first Women Director of CSIR laboratory, Dr Lakshmikantam was also an alumnus of Kurukshetra University. Incidentally, both these women scientists have obtained their PhD degrees from Chemistry Department of this University.

## A stick-on patch is now designed to take blood pressure readings from deep inside your body

Sheng Xu and his team at the University of California, San Diego, who are working on a patch that can continuously measure someone's central blood pressure—the pressure of blood coursing beyond your aorta, the artery in your heart that delivers blood to all the different parts of the body. It could make it a lot easier to monitor heart con-

ditions and keep an eye on other vital organs like the liver, lungs, and brain.

The silicon elastomer patch works by sending out ultrasonic waves that penetrate the skin and reflect off the wearer's tissues and blood. Those reflections are sent back to the sensor, and then to a laptop that processes the blood pressure data (for now, at least, the patch must be wired to a laptop and a power source, too). It is the first known wearable device that can sense deep below the surface of the skin.

A study on Xu and his colleagues'



work, published last week in Nature Biomedical Engineering, found that the patch could continuously and accurately monitor central blood pressure when placed on different parts of the body, though putting it on the neck was most effective. In the study, they compared it to a noninvasive and useful (but hard to operate) device called a tonometer, which places a pressure

sensor on the skin; the differences between the two devices' results were a fraction of what's considered to be the acceptable range for error with a standard blood pressure device.

It's also much less invasive than the current gold standard for measuring central blood pressure, which uses a catheter with a sensor on it that's inserted near the heart. One of the researchers' next steps is to test their patch against such a catheter to see how it measures up.

**It could make it a lot easier to monitor heart conditions and keep an eye on other vital organs like the liver, lungs, and brain.**

**It's also much less invasive.**

**The silicon elastomer patch works by sending out ultrasonic waves that penetrate the skin and reflect off the wearer's tissues and blood.**

## 15 young students get BIRAC- SRISTI Gandhian young technological Innovation (GYTI) awards in Delhi

To encourage innovation among young researchers, 15 students were awarded BIRAC-Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI) awards in life science technologies and SRISTI-GYTI awards for students in other disciplines of engineering on Saturday at Vigyan Bhawan, New Delhi. These students were conferred awards by vice president, M Venkaih Naidu. Union minister of health and family welfare, Dr Harsh Vardhan was the guest of honour.

**15 entrepreneurial ideas at the university level from across India will be nurtured for 2 years in-situ with a grant of Rs 15 lakhs.**

These awards, under the overall umbrella of Honey Bee Network, are designed to encourage technology students to think of pushing tech frontier.

Prof Anil Gupta, founder, Honey Bee Network, SRISTI, while welcoming the distinguished guests, mentioned that the BIRAC-SRISTI Gandhian young technological Innovation (GYTI) awards are given every year to some of the most promising technologies being developed by the students in life sciences, biotechnology, agriculture, medical devices etc. SRISTI-GYTI awards are given to students in other engineering disciplines.



## Sanofi : FDA approves Dupixent® (dupilumab) for chronic rhinosinusitis with nasal polyposis

The U.S. Food and Drug Administration (FDA) has approved Dupixent® (dupilumab) for use with other medicines to treat chronic rhinosinusitis with nasal polyposis (CRSwNP) in adults whose disease is not controlled. CRSwNP can be a debilitating condition, with many patients opting for systemic steroids or nasal surgery which often cannot control this disease. Moreover, CRSwNP often occurs in combination with severe asthma.

“Dupixent is the first FDA approved medicine for adults with chronic rhinosinusitis with nasal

polyposis, and the only approved therapy shown to shrink nasal polyp size and also improve the signs and symptoms of the associated chronic rhinosinusitis. In fact, approximately three-quarters of patients treated with Dupixent no longer required either corticosteroids or surgery, the current standards of care,” said George D. Yancopoulos, M.D., Ph.D., President and Chief Scientific Officer at Regeneron. “Importantly, many patients with CRSwNP also suffer from asthma, and Dupixent was shown to improve lung function in these patients as well. This approval further reinforces that IL-4 and IL-13 are key drivers of type 2 inflammation, and we continue to study Dupixent in other type 2 inflammatory diseases, including eosinophilic esophagitis, and food and environmental allergies.”

The FDA evaluated the CRSwNP Dupixent application under Priority Review, which is reserved for medicines that represent potentially significant improvements in efficacy or safety in treating serious conditions.

Data from Dupixent clinical trials have shown that inhibiting IL-4

and IL-13 helps address the type 2 inflammation that plays a major role in CRSwNP, asthma and atopic dermatitis.

---

**Dupixent is a fully-human monoclonal antibody that inhibits the signalling of interleukin-4 (IL-4) and interleukin-13 (IL-13), two proteins that play a central role in type 2 inflammation.**

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Dupixent comes in a 300 mg pre-filled syringe for patients with CRSwNP. It is given as a subcutaneous injection every other week at different injection sites. Dupixent is intended for use under the guidance of a healthcare professional and can be given in a clinic or at home by self-administration after training by a healthcare professional.

In addition to CRSwNP, Dupixent is approved in the U.S. for use with other asthma medicines for the maintenance treatment of moderate-to-severe asthma in certain patients aged 12 years and older whose asthma is not controlled with their current asthma medicines; and to treat patients aged 12 years and older with moderate-to-severe atopic dermatitis (eczema) that is not well controlled with prescription therapies used on the skin (topical), or who cannot use topical therapies.



## Acer Therapeutics Receives Complete Response Letter from U.S. FDA for use of EDSIVO™ (celiprolol) in vEDS Patients



Acer Therapeutics Inc. (Nasdaq: ACER), a pharmaceutical company focused on the acquisition, development and commercialization of therapies for serious rare and life-threatening diseases with significant unmet medical needs, today announced it has received a Complete Response Letter (CRL) from the U.S. Food and Drug Administration (FDA) regarding its New Drug Application (NDA) for EDSIVO™ for the treatment of vascular Ehlers-Danlos syndrome (vEDS). The CRL states that it will be necessary to conduct an adequate and well-controlled trial to determine whether celiprolol reduces the risk of clinical events in patients with vEDS. Acer plans to request a meeting to discuss the FDA's response.

## IIT Hyderabad fabricates device for early diagnosis of heart attack delivery systems (ENDS)

**A cardiac biomarker — cardiac troponin I — that is widely used for early diagnosis of acute heart attack can now be detected in about three minutes and even when present at very low concentration. And the detection can be done at bedside. This has become possible with the development of a microfluidic device by a team of researchers from the Indian Institute of Technology (IIT) Hyderabad.**

Commercially available assays have limitations in terms of both sensitivity and time taken for detection. These assays cannot detect when the biomarker is present at concentrations below 0.02 nanogram per ml and take a long time for detection. In contrast, the microfluidic device developed by a team led by Prof. Renu John from the Department of Biomedical Engineering at IIT Hyderabad can detect the biomarker even when the concentration is as low as 0.005 nanogram per ml.

“Our device can detect the biomarker over a wide range — from 0.005-100 nanogram per ml,” says

Prof. John. Serum samples from patients were used for testing the device. The results were published in the Journal of Materials Chemistry B.

The researchers have successfully integrated the microfluidic device with chitosan-coated nickel vanadate nanospheres to enable rapid detection and better sensitivity.

The outer surface of the nanospheres is first coated (functionalised) with the antibody that binds to the biomarker. Since the nanospheres have greater surface area, more antibodies are present on the surface thus increasing the chances and ability to bind to the biomarker. The functionalised nanospheres are then coated on the working electrode that is present in the microfluid device chip.

“The integration of the nanospheres which detect the biomarker with the compact microfluidic device speeds up the detection process,” says Nawab Singh from IIT Hyderabad and first author of the paper.

“When the patient's serum is introduced into the microfluidic device, the biomarker present in the serum binds to the antibodies present on the nanospheres. This causes a change in the current flow at a microampere level,” explains Prof. John. “The electrochemical response of the sensor changes in response to a change in the concentration of the troponin I biomarker causing a change in the current flow.”



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Since the microfluidic device can be made tiny, detection of the bio-maker can be made right at bedside.

“This is a proof-of-concept work. We have to undertake large trials involving many patient samples before it can be used commercially,” says Prof. John.

## Radiant's acquire majority stake in Max Healthcare and promoter Abhay Soi appointed as Chairman

Max India promoters receive an advance of INR 361 crore from KKR for a 4.99% stake in merged entity; funds have been used for deleveraging Radiant Life Care Private Limited (“Radiant”), a leading Indian hospital management company promoted by Abhay Soi and backed by KKR, has completed the previously announced acquisition of a 49.7% stake in Max Healthcare Institute Limited (“Max Healthcare” or “MHC”) from South Africa-based hospital operator Life Healthcare. Abhay Soi will now lead Max Healthcare as Chairman



of its Board and Executive Council.

Radiant's stake acquisition is one of several steps that will eventually result in Mr. Soi and KKR together acquiring a controlling stake in Max Healthcare by combining the health care assets of Max Healthcare, Max India Limited (“Max India”), and Radiant to create the largest hospital network in North India. As part of the transaction, Max India's promoters have received an advance of INR 361 crore (US \$52.2 million) from KKR in exchange for a 4.99% stake in the merged entity.

Max India's promoters have used the funds for deleveraging purposes. Analjit Singh, Founder & Chairman of Max Group, said, “Max Healthcare and Radiant possess complementary sets of capabilities in running healthcare establishments and KKR brings with it extensive global experience in healthcare investments and capabilities in prudent financial management. Radiant-KKR are the

best suited partners to further the culture of clinical and service excellence that Max Healthcare has become known for.

The merger and the future planned expansion will provide the scale that MHC needs for profitable growth at a time when healthcare margins are being tested. I also want to thank our outgoing JV partner Life Healthcare for being supportive participants in MHC's growth and progress.” Mohit Talwar, Vice Chairman of Max Group, said, “The combination of Max Healthcare-Radiant will give shareholders the opportunity to benefit from the performance of the third largest hospital chain in a rapidly growing Indian healthcare market. It will also allow Max India to focus on enhancing shareholder value creation by growing our other businesses and seeding new ones.” Abhay Soi, Chairman Radiant Life Care and Max Healthcare, said, “I am happy to have been able to complete the acquisition of Life's stake in Max Healthcare as a first

step towards integration of the two companies, and fortunate to have a PE firm such as KKR backing us in our journey. We believe we have all the wherewithal to grow our business organically and inorganically during this challenging phase for the healthcare sector. Our interests are also very aligned with our Prime Minister's vision of strengthening brand India globally by focusing on the 5 T's of tourism, tradition, technology, trade and talent." Sanjay Nayar, Member & CEO of KKR India, added, "We are excited about building Max Healthcare into an outstanding company governed by world-class board members and standing for the highest standards of clinical outcomes.

Presently, Radiant has two iconic facilities in its portfolio namely: BLK Super Specialty Hospital, Delhi and Nanavati Super Specialty Hospital, Mumbai.

Max Healthcare has 14 facilities in North India, offering services in over 30 medical disciplines. Of this, 11 facilities are located in Delhi & NCR and the others in Mohali, Bathinda and Dehradun. The Max network includes state-of-the-art tertiary care hospitals in Saket, Patparganj, Vaishali, Shalimar Bagh, Mohali, Bathinda and Dehradun, secondary care hospitals at Gurgaon, Pitampura, Noida & Greater Noida and an out-patient facility and speciality centre at Panchsheel Park.

## **Pfizer Nabs Array Biophar-**

## **ma in \$11.4 Billion Takeover of Cancer Drug Specialist**

Pfizer Inc. said it has agreed to acquire Array Biopharma (ARRY - Get Report) in an all-cash deal that values the cancer drug specialist at around \$11.4 billion.

Pfizer will pay \$48 per share for Array, a 62.2% premium to its closing price, pegging the value of the group, including debt, at \$11.4 billion. Pfizer said the deal, once closed later this year, will dilute its 2019 earnings by between 4 cents and 5 cents a share. The transaction will be largely neutral to 2020 earnings, Pfizer said, before adding to its bottom line in 2021.

Oncology takeovers have dominated the pharmaceutical sector this year, with Eli Lilly & Co. (LLY - Get Report) paying \$8 billion in cash for cancer drug specialists Loxo Oncology (LOXO) in January and Bristol-Myers Squibb Co. (BMY - Get Report) agreeing to buy Celgene Corp. (CELG - Get Report) in a deal that values the group at \$74 billion just a few days earlier.

Array specializes in developing and bringing to market so-called targeted small molecule drugs for patients with cancer and other diseases, and currently has several drugs in scores of clinical trials, including one in advanced trials for colorectal cancer.

## **AbbVie makes \$63 billion bid for Botox maker Allergan**

The maker of the global blockbuster immune disorder treatment Humira will pay \$120.30 in cash and a portion of AbbVie stock for each Allergan share.

"This is a transformational transaction for both companies and achieves unique and complementary strategic objectives," said AbbVie CEO and Chairman Richard Gonzalez in a prepared statement Tuesday. "The combination of AbbVie and Allergan increases our ability to continue to deliver on our mission to patients and shareholders."

The maker of the global blockbuster immune disorder treatment Humira will pay \$120.30 in cash and a portion of AbbVie stock for each Allergan share. That amounts to \$188.24 per share, or a 45% premium to Allergan's recent closing price.

AbbVie shareholders will own 83% of the specialty drug company combination after the deal's completion, while Allergan shareholders will have a 17% stake.

Gonzalez will remain chairman and CEO at AbbVie. Two members of Allergan's board, including chairman and CEO Brent Saunders, will join AbbVie's board once the deal closes.

### Biovet to invest Rs. 200 cr to expand Karnataka plant

Biovet will invest Rs. 200 crore as part of its expansion plans to meet the growing demand of vaccines, especially for the Foot and Mouth Disease (FMD) and Brucellosis.

It has started work on expanding the FMD vaccine manufacturing facility in Malur, Karnataka.

Biovet promoter Krishna Ella said: “Expansion of our FMD vaccine facilities to deliver 200 million doses is an important step to increase our contribution to meet the shortage of this vaccine in the country.”

The Bengaluru-based company will construct a new Brucella vaccine production facility at the Malur site to produce 100 million doses a year. It will make Biovet the world’s largest manufacturer of this vaccine, he said.

### IIL invests Rs 75 crore in new plant in Telangana

Biologicals company Indian Immunologicals Ltd (IIL) on Monday announced the ground-breaking of a new Sterile Filling Facility (SFF)

at its manufacturing plant in Phase III of Genome Valley, Karkapatla, Ranga Reddy District, Telangana. With this investment of Rs 75 crore in the upcoming filling facility, Indian Immunologicals Limited expects to increase its capacity to supply lifesaving vaccines such as the Anti-Rabies Vaccine (ARV) – Abhayrab™.



Dr K Anand Kumar, managing director, IIL said, “The expansion at Karkapatla plant is in line with our mission and will help meet the growing requirements of critical vaccines.”

IIL has 4 manufacturing facilities at various locations – Karkapatla, Telangana – Human Vaccines & Animal Health Formulations; Ooty, Tamil Nadu – Anti Rabies production unit; Hyderabad, Telangana – Human Biologicals Unit (Gachibowli) and animal vaccines unit; Dargaville, New Zealand – New Bovine Serum. IIL exports various Human and animal vaccines to over 50 countries and currently employs around 1,300 people.

### Scott Gottlieb Joins Pfizer Board Weeks After Departing from FDA

Months after Scott Gottlieb stepped down from his role as commissioner of the U.S. Food and Drug Administration (FDA), he found himself back in the world of pharma as a member of Pfizer’s board of directors.



The former commissioner will certainly be a strong asset for that company with his knowledge of the regulatory landscape in the United States, as well as his insights into hot-button political issues such as drug pricing. Gottlieb was tapped to serve on two different board-level committees, the Regulatory and Compliance Committee and the Science and Technology Committee.



Pfizer Chief Executive Officer Albert Bourla said Gottlieb, who is also a physician, has a strong understanding of the needs of patients, as well the “rapidly changing dynamics of biopharmaceutical research and development.”

In an announcement on Twitter, Gottlieb said he was honored to be joining the board of directors at Pfizer and working with the company to “promote medical innovation, advance patient care and secure access to better healthcare outcomes for families around the world.”

“Gottlieb joins Pfizer as the company dives deeper into oncology, following its acquisition of Array BioPharma earlier this month, as well as its recent reorganization into three separate business units that include an established medicines business, a consumer healthcare business and the innovative medicines business.

During his two-year tenure at the FDA, Gottlieb aggressively supported the approval of new branded drugs, as well as generics. Additionally, he tackled multiple public health problems, including the opioid epidemic that has been sweeping the country and vaping. Gottlieb stepped down from his role at the FDA, in part, due to the travel commitments that kept him away from his young family.

## Broad Institute Researchers Use Novel Field-Ready CRISPR Platform to Detect Plant Genes



SHERLOCK technology is a new CRISPR-based platform that is rapid and portable and enables detection and quantitation of plant genes to support a variety of agricultural applications. Additional advantages, including the ability to process crude plant extracts with minimal nucleic acid sample preparation required are described in a research article published in *The CRISPR Journal*, a new peer-reviewed journal from Mary Ann Liebert, Inc., publishers. [Click here to read the full-text article free on The CRISPR Journal website through July 24, 2019.](#)

Feng Zhang, from the Broad Institute of MIT and Harvard (Cambridge, MA) and Massachusetts Institute of Technology (Cambridge),

and coauthors Omar Abudayyeh, Jonathan Gootenberg, and Max Kellner, from the Broad Institute, MIT, and Harvard Medical School (Boston, MA) present the recently developed nucleic acid detection system called SHERLOCK in the article entitled “Nucleic Acid Detection of Plant Genes Using CRISPR-Cas13.” The platform overcomes many of the limitations of current nucleic acid detection systems and provides single-molecule sensitivity and single-nucleotide specificity with high multiplexing capability.

The paper describes how the refined CRISPR-based tool SHERLOCK was applied for the first time in plants. SHERLOCK has the potential to be an important tool in agriculture for the rapid detection of pathogens or pests and in plant breeding. SHERLOCK is easy to use, portable and field-ready, and low cost. It can generate a fluorescent or colorimetric readout when Cas13 recognizes the target nucleic acid sequence.

Rodolphe Barrangou, PhD, Editor-in-Chief of *The CRISPR Journal* states: “This is a great example of the expansion of CRISPR-based technologies beyond genome editing per se, with the use of novel Cas molecular machines for the flexible detection of DNA sequences of interest. The applications extend beyond diagnostics and the authors show here how this can be broadly applied in agriculture.”

## Indian engineer who made breathing device to prevent deaths of newborn babies wins Innovation Award in UK

Nitesh Kumar Jangir, who created Saans as a breathing support device to tackle avoidable deaths of premature babies from respiratory distress syndrome due to a lack of immediate access to complex medical equipment, received his award in the People category alongside 14 other innovators from across the 53 member-countries of the Commonwealth.

“In countries like India, with er-

atic electricity supply and limited resources at public hospitals, this neonatal breathing support equipment can be used without any complex training. So, anyone, anywhere can use this device and deliver crucial support to premature babies,” he explained.

“This award will go a long way in upscaling this device across the Commonwealth countries, for use in similar conditions in regions like Africa,” he said.

It’s a wonderful feeling when a doctor writes to you and tells you that your device saved the life of a neonate. Thank you, everyone, who is supporting our cause. @BIRAC\_2012 @gatesfoundation @CCAMP\_Bangalore @ficci\_india @OlsonKristian1 @CAM-TechMGH @AbhaySinghKr @MADevImpac pic.twitter.com/aXjJcytZIU

Coeo Labs (@CoeoLabs) November 14, 2018

The Bangalore-based electronics engineer is the co-founder of Coeo

Labs, a medical device company with a vision to prevent preventable deaths in the field of emergency and critical care.

Saans, which has been in circulation for the past three months across district hospitals of India that lack neonatal ICU facilities as well as at medical colleges, has been in development for four years.

The innovation awards are divided along five thematic categories -- improving the lives of people; boosting prosperity; protecting the planet, promoting peace; and building partnerships for development in the Commonwealth.

The selection process was based on the impact or potential of the innovations to advance one or more of the 17 Sustainable Development Goals in Commonwealth countries and some of the other winners came from countries in the Caribbean and Africa and from Australia and Canada.





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Contact: [viswanadham@ikpknowledgepark.com](mailto:viswanadham@ikpknowledgepark.com)  
Call: 79896 46563



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13<sup>th</sup> Annual Convention of  
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20<sup>th</sup> - 22<sup>nd</sup> December, 2019

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Mode of Presentation : Oral / Poster

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Department of Biotechnology

Department of Biotechnology at VFSTR was established in the year 2006. It fosters quality education, placements and industrial training to students. Further, it supports the rural development activity by promoting the cultivation of medicinal plants and mushrooms to the local farmers. Department is very well established with COE, animal cell culture facility, bioprocess laboratory, plant tissue culture lab, animal house, clean room, biogas plant (gas feeding to hostel kitchen) and an ample strength of students (600 no.) and faculty. The department is supported by DST FIST and 10 research projects to the tune of Rs. 2.00 crores. NMPB, New Delhi recommended Medicinal herbal garden at our Campus. Department offers B.Tech (Biotech and Bioinformatics), B.Tech. (Hons), M.Tech and Ph.D. Programs.

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Department of BIOTECHNOLOGY



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# NOTIFICATIONS

## **NIPGR Scientist Positions**

Aruna Asaf Ali Marg, P.O. Box No. 10531,  
New Delhi-110067

National Institute of Plant Genome Research, New Delhi is an Autonomous Research Institution funded by the Department of Biotechnology, Ministry of Science & Technology, Govt. of India, to pursue research on various aspects of plant genomics. The Institute is also in the process of establishing a NIPGR Translational Centre at Biotech Science Cluster, NCR, Faridabad. NIPGR invites applications from Indian Citizens for filling up the vacant posts on Direct Recruitment basis, as detailed below.

Post: Scientists II, V, VII (ONE POST EACH)

Applicant should have excellent academic credentials along with the track record of scientific productivity evidenced by publications/patents/products in the frontier areas of Plant Biology such as, Computational Biology, Genome Analysis and Molecular Mapping, Molecular Mechanism of Abiotic Stress Responses, Nutritional Genomics, Plant Development and Architecture, Plant Immunity, Molecular Breeding, Transgenics for crop improvement and other emerging areas based on plant genomics.

The last date of on-line submission of application is July 29 2019, 5.30 p.m. The downloaded hard copy of the application, addressed to the "Director, National Institute of Plant Genome Research, Aruna Asaf Ali Marg, Post Box No. 10531, New Delhi – 110067", should reach on or before August 02, 2019. The submission of on-line application as well as hard copy of on-line application along with testimonials/certificates is mandatory.

Apply Online: [http://223.31.159.15/nipgr\\_recu2/nipgr\\_recu.php](http://223.31.159.15/nipgr_recu2/nipgr_recu.php)

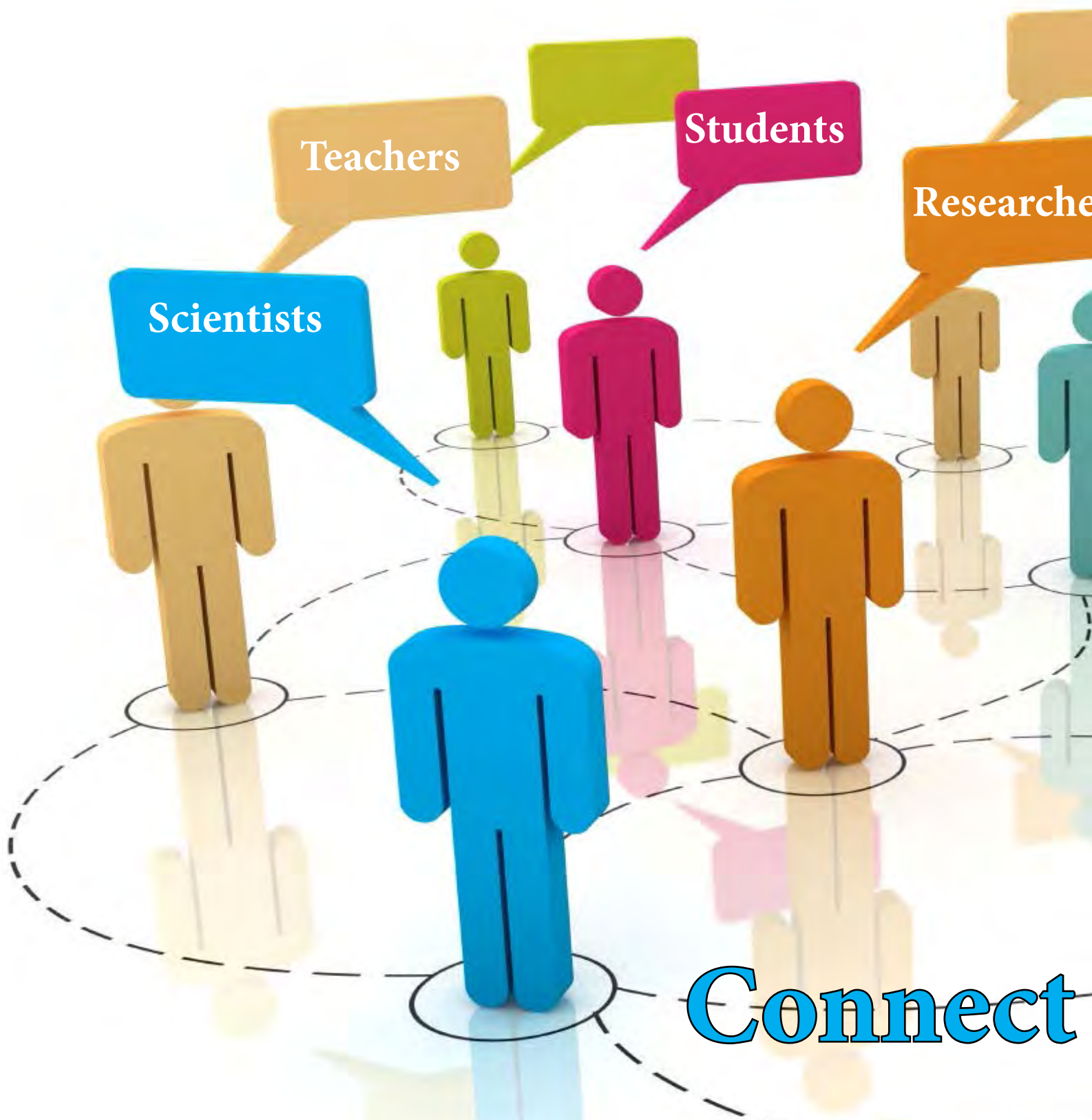
## **Jamia Millia Islamia** (A Central University) NAAC Accredited Grade "A"

Jamia Nagar, New Delhi-110025

Applications on the prescribed form are invited for the following Teaching positions in Jamia Millia Islamia so as to reach in the Office of the Recruitment & Promotion Section, 2nd Floor, Registrar's Office, Jamia Millia Islamia, Jamia Nagar, New Delhi-110025 on or before 17.07.2019 during working days between 10:00 A.M. to 04:00 P.M (Friday upto 12:00 Noon). Application form, advertisement and qualifications are available on Jamia's website <http://jmi.ac.in> Those who have applied earlier for these positions advertised vide Advt. No. 03/2018-19 dated 22.05.2018 need not apply again. Their candidature will be considered provided that they fulfil the advertised qualifications. However, candidates may submit their updated information for inclusion in their previously filled application form.

Department of Biotechnology

- (i) One Associate Professor
- (ii) One Assistant Professor



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**COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR)  
Anusandhan Bhawan, 2 Rafi Marg, New Delhi-110001**

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**Position 2 – Scientist H/ Outstanding Scientist - Socio-Economic Ministry Interface**

The incumbents will manage CSIR's technology portfolio and take new initiatives and develop new policies for connecting with industry, Socio-Economic Ministries and other stakeholders as per the responsibility assigned. They will be responsible for: (i) developing Technology Strategy for CSIR, its positioning in technology space in diverse areas, along with the targets to be achieved; (ii) helping CSIR laboratories in developing the domain specific technology strategy, and associated outcome driven road map to achieve the targets planned (of technology development and deployment); (iii) connect with industry / cluster of industry and socio-economic ministries for technology need assessment and technology commercialization.

The Directorates will be part of CSIR Headquarters and would work very closely with DG, CSIR and other Laboratory/Institute Directors to achieve the targets. They will be located at New Delhi

**How to Apply:** Applications/nominations with detailed bio-data alongwith list of publications/ patents etc. may be sent separately for each post through email or by post to Director General, Council of Scientific and Industrial Research (CSIR), Anusandhan Bhawan, 2, Rafi Marg, New Delhi-110001. A brief bio-data in the proforma given below may also be sent. The last date of the receipt of applications is **31/07/2019**. Fax: 011-23710618; Email: [dgcsir@csir.res.in](mailto:dgcsir@csir.res.in) or [dg@csir.res.in](mailto:dg@csir.res.in)





Department of Biotechnology  
Ministry of Science & Technology  
Government of India

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## **Call for Letter of Intent in the area of “Genome Engineering Technologies and Their Applications”**

The Department of Biotechnology (DBT), Govt. of India invites **Letter of Intent** in the area of “Genome Engineering Technologies and Their Applications” in the following Categories:

- A. **Development of New Methods, Tools, Processes for Genome Editing.**
- B. **Establish Accessible Platforms Facilities on Emerging Genome Editing Technologies for Research & Development and Applied Use.**
- C. **Improvement of Existing Genome Editing Technology Platforms.**
- D. **Development of New Applications of Existing Genome Editing Technologies - such as CRISPR/Cas, TALEN & other emerging approaches, to modify gene expression and its validation that can significantly advance research and development in Human Health, Agriculture & Plant Productivity, Animal Health, Bioenergy & Environmental Research etc.**

***Preference will be given to multi-disciplinary, multi-institutional network projects and efforts aiming to develop novel technologies or applying known technologies to specific unmet needs.***

Interested applicants are requested to submit **Two (2) hard copies** of the **Letter of Intent** in the above mentioned format to **Dr. Onkar N. Tiwari, Scientist ‘E’, Department of Biotechnology, R. No. 506, 5<sup>th</sup> Floor, Block-3, CGO Complex, Lodi Road, New Delhi 110003**, and also by email (in MSWORD and PDF format) at [onkar.dbt@nic.in](mailto:onkar.dbt@nic.in) & [genome@dbt.nic.in](mailto:genome@dbt.nic.in)

PIs of the shortlisted Letter of Intent will be invited to submit full proposal through DBT epromis.

**Last Date for Submission of Letter of Intent: 31<sup>st</sup> July 2019.**

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# **Biotechnology Industry Research Assistance Council (BIRAC)**

**(A Govt. of India Enterprise)**

## **REQUEST FOR EXPRESSION OF INTEREST (REOI)**

**Biotechnology Industry Research Assistance Council (BIRAC), a not-for-profit, Section 8, Govt. of India Enterprise is inviting REOI on or before 31<sup>st</sup> July 2019 from eligible firms to engage as a “Consultancy for Enabling and Training personnel at TTOs (Technology Transfer Offices)” for its Innovate in India program entitled Industry-Academia Collaborative Mission for Accelerating Discovery research to Early Development for Biopharmaceuticals - “Innovate in India (i3) Empowering biotech entrepreneurs & accelerating inclusive innovation”**

**Kindly visit BIRAC website ([www.birac.nic.in](http://www.birac.nic.in)) for more information and relevant details.**

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Last date for receipt of printout of online applications : 29-07-2019





## Biotechnology Industry Research Assistance Council

(A Govt. of India Enterprise)

*Invites proposals*  
for



Establishment of  
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for  
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SPARSH is the social innovation program of BIRAC aimed towards finding innovative solutions to society's most pressing social problems through biotechnological interventions.

SIIP (Social Innovation Immersion Program) is one of the components of SPARSH scheme under which a pool of "Social Innovators (SIIP Fellows)" is being created who could identify and address the social problems by biotechnological means. The program shall be implemented through SPARSH Centres.

Under the present call, proposals are invited from interested agencies for establishment of SPARSH Centres in following thematic areas:



Maternal and Child Health



Ageing and Health



Food and Nutrition



Waste to Value



Combating environmental pollution



Agri-Tech (including reducing post-harvest losses)

### How to apply?

Proposals are required to be submitted **online only**. For RFP document and other details regarding submission of proposals, please log on to BIRAC **website** ([www.birac.nic.in](http://www.birac.nic.in))

For Queries, Please Contact:

GM & Head (Investment), E- mail: [investment.birac@gov.in](mailto:investment.birac@gov.in)  
Sr. Manager (Investment), E- mail : [sgandhi.birac@nic.in](mailto:sgandhi.birac@nic.in)

**LAST DATE FOR SUBMISSION OF PROPOSALS**

**15<sup>th</sup> August, 2019**

## CSIR-IICT Recruitment for Scientist Post

Principal Scientist : PS-12 1 post (UR) 13

Last Date to Apply Online: 30th July 2019

Last Date to Apply Hard Copy: 14th August 2019

More Info: <https://www.iictindia.org/career/careerDetail/46>



## Highlights

- Network with mentors and peers working in the field of Life Sciences
- Panel discussion with policy makers on Post Doc issues
- Special emphasis on academic, nonacademic and industry job search
- Panel discussion with funding agencies
- Workshops on grant writing, interview skills and science communication

## Speakers

- |                                |                                     |
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| L. S. Shashidhara (IISER Pune) | Shannon Olsson (NCBS)               |
| Mukund Thattai (NCBS)          | Smita Jain (IndiaBioscience)        |
| Sanjeev Galande (IISER Pune)   | Subhra Priyadarshini (Nature India) |

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**Register before 15th July 2019**

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- Flash talks
- Oral presentations
- Poster presentations
- Panel discussions
- Plenary talk



# DELHI - NCR REGIONAL Young Investigators' Meeting



REGISTRATION DEADLINE: 30<sup>TH</sup> JUNE 2019  
REGISTRATION FEES: INR 3000



ISSN: 2454-6968, RNI No. UPENG/2013/54102

UNITE, COLLABORATE FOR A BETTER TOMORROW

For more details visit: <https://indiabioscience.org/meetings/regional-yim-delhi-ncr>

The Delhi NCR region harbours several excellent research institutes and Universities. Several young faculty and scientists are working in these institutions on various different biological systems. Interdisciplinary research is essential to unravel new mechanisms in biological systems. Hence it is important for the cross talk to happen between scientists from various disciplines and institutions. This meeting aims to bring all the researchers on a common platform to discuss and share their work, network and collaborate. It will enable intellectual exchange among the scientists across different scientific disciplines. There will be group discussions, poster presentations and mentor talks.

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## MEETING HIGHLIGHTS

- Enhancing Interaction of Young Investigators (YI) in biology research across Delhi and NCR.
- Helping each other in sharing resources and platforms
- Accelerating collaboration among researchers
- Enhancing institutional strengths
- Translating ideas into products

## MEETING FORMAT

- Mentor talks
- Networking sessions
- Poster Presentations
- Panel Discussions
- Special Talk on Science Communication

6<sup>TH</sup> - 7<sup>TH</sup> AUGUST 2019  
NATIONAL INSTITUTE OF PLANT  
GENOME RESEARCH, NEW DELHI

