

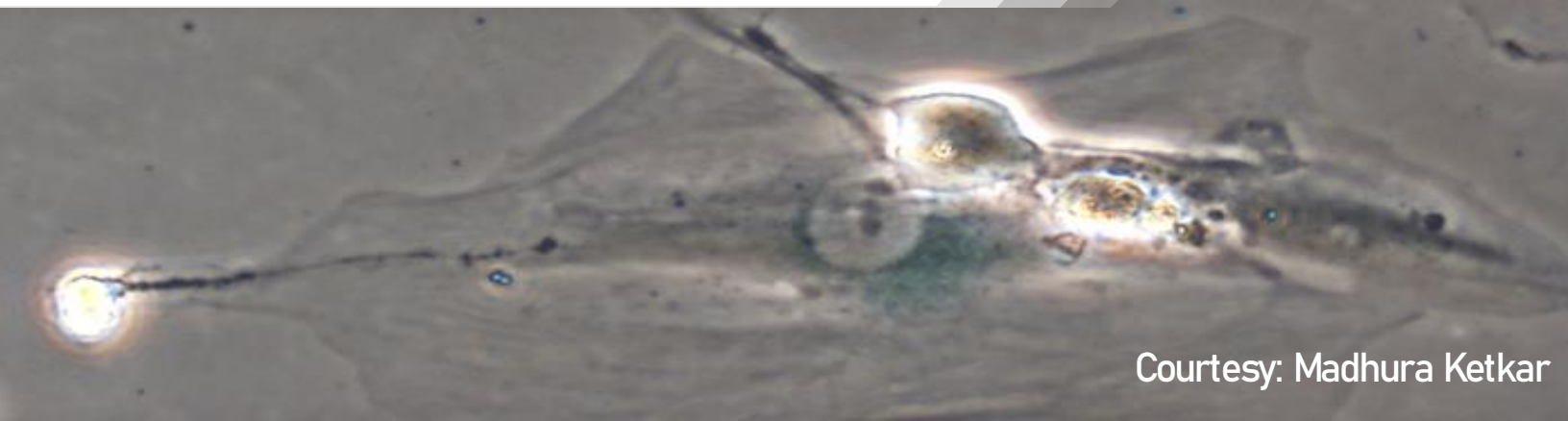
Dutt and Shilpee lab

Newsletter

March 2021



Therapy induced senescent glioblastoma patient sample in culture



Courtesy: Madhura Ketkar

Congratulations

THE HINDU

on Sunday

THE HINDU
SUNDAY, FEBRUARY 17, 2021

19

Tool to ease SARS-CoV-2 genome mutation analysis

The tool, designed by ACTREC, Tata Memorial Centre, is handy to analyse SARS-CoV-2 genome information uploaded to the GISAID database

By Prasad
An automated computational tool, 'Infectious Pathogen Detector' (IPD), developed by researchers at the Tata Memorial Centre, is handy to analyse SARS-CoV-2 genome information uploaded to the GISAID database.

The tool has been developed to perform the IPD tool. It does not require any special software. It can be used on a desktop computer, a laptop or a tablet. It is easy to use and can be used by anyone with a basic understanding of computer operations.

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Computer tool analysis revealed 13 mutant viruses across the SARS-CoV-2 genome that occur across 46,000+ non-synonymous sites across 128,000+ sequences.

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The Indian EXPRESS

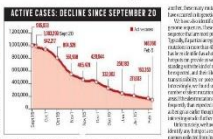
JOURNALISM OF COURAGE

EXPLAINED THE PANDEMIC

Covid-19: the case for caution

Although the numbers of coronavirus cases are falling in India, the risk of new mutations emerging is high. New research shows it is vital to look for these mutations in the Indian population with genome sequencing.

EXPERT EXPLAINS
Dr. Anil Dutt



While the numbers of coronavirus cases are falling in India, the risk of new mutations emerging is high. New research shows it is vital to look for these mutations in the Indian population with genome sequencing.

nature india

Software that helps analyse coronavirus genome for mutations

doi:10.1038/nindia.2021.32 Published online 17 February 2021

Researchers have developed a computational tool that can help a user identify various mutations across the genome of the novel coronavirus¹.

The tool, named 'Infectious Pathogen Detector' (IPD), can also detect and analyse genome sequences of various strains of viruses and bacteria in any kind of data, the researchers, from the Tata Memorial Centre in Mumbai, found.

The tool, they say, will help understand the genome variability and evolution of the coronavirus within various populations, paving the development of therapies for COVID-19.

www.oncotarget.com **Oncotarget, Advance Publications 2021**

Molecular characterization of lung squamous cell carcinoma tumors reveals therapeutically relevant alterations

Asim Joshi^{1,4}, Rohit Mishra¹, Sanket Desai^{1,4}, Pratik Chandrani^{2,4,5}, Hitesh Kore¹, Roma Sunder¹, Supriya Hait^{1,4}, Prajish Iyer^{1,4}, Vaishakhi Trivedi^{2,4}, Anuradha Choughule^{2,4}, Vanita Noronha^{2,4}, Amit Joshi^{2,4}, Vijay Patil^{2,4}, Nandini Menon^{2,4}, Rajiv Kumar^{3,4}, Kumar Prabhash^{2,4} and Amit Dutt^{1,4}



**Such accomplishments definitely called for a
Celebration!!!**





Happy Birthday





Fan Throated Lizard

Madhura



“There’s a whole universe within!”

Supriya

In conversation with...

General Facts

1. By birth, my name is : Risha Khandelwal
2. Pals call me : Risha
3. I was born on : October 9th, 1987
4. My childhood was spent at : Barshi in Solapur District, Maharashtra



Personal Life

1. *Can you describe any one ever-lasting memory about your childhood?*

Growing in a joint family of almost 30 people (during my childhood) in an ancestral Rajasthani home, every day was beautiful. So, it is very difficult to pick one memory.

But if I have to pick one, I must say this... We all used to wait for Sunday mornings for some TV series like Shri Krishna, Shaktimaan etc. I, along with more than 30 people used to sit in the same room for more than two hours enjoying the same TV shows. I really miss that simplicity and well synchronized common family time.

2. *How was your college life? And, what did you enjoy the most?*

I have done my B.Sc. biotechnology from Vidhya Pratishthan, Baramati (VSBT) and MSc from Raison College, Nagpur. At both places, I had great teachers. Dr Rajesh Sharma who is himself running the VSBT institute as a director now, was so much open to science discussion that he used to hold extra class on Sundays to teach and discuss many things apart from the syllabus. I miss those classes! We could talk to him anytime and who actually created interest in me to pursue science. Even in Nagpur, many of the times during my 1-hour long college bus journey, I used to enjoy discussing science with Dr Swapna Khare for which we both used to look forward to. Apart from that, I was always surrounded by wonderful friends on whom I could always count on. I enjoyed our late-night group studies, our vibrant discussions on various topics and of course our lake walks.

3. *As a child/teenager, what did you aspire to become in life? Any reasons associated with it?*

My childhood was spent in a small town with my traditional family background and lack of / easy access to internet. So, I had a very limited exposure to many of the interesting career choices, that I know today. From the beginning, I was deeply interested in biological sciences. So, according to my knowledge that time, I wanted to become a Doctor.

4. *Would you like to state a person or an event that has inspired/influenced your life?*

My Mom and Dad! They always inspired me to study and pursue my dreams. They have given me complete freedom of time as well as choice in every aspect of my study and career. Their open minded and broader thinking towards my life has made me come this far.

5. *Do you have any hobbies or passion apart from research?*

I used to sketch and paint in my graduation days, for which I do not get time now! But currently I love travelling, watching Animated/ Sci-Fi movies which I can do along with my loved ones.

Science and Philosophy

1. *In your opinion, what is research?*

For me research is the pursuit of knowledge through solving unresolved mysteries with thorough understanding of the problem, unbiased and holistic mind, patience and perseverance.

2. *Why did you choose to apply in Dr. Amit Dutt's laboratory?*

After thoroughly enjoying the basic research in my PhD, I wanted to channelize my efforts and expertise in solving currently relevant scientific problems. Since I was working on apoptosis mechanism, I naturally got inclined towards cancer biology. I was also motivated to join here seeing various project's going on in the lab which join basic life sciences with currently relevant applications.

3. *What has kept you motivated to pursue research?*

A constant satisfaction of learning new things and being able to keep moving closer towards doing something beneficial for the society has kept me going on in research.

4. *Can you describe in brief your experiences of your tenure? And, what are your future plans?*

I worked initially with Bhasker related to Tongue Cancer and now I am going to pursue the role of FGFR2 as candidate for therapy on Cervical cancer. I have learnt a lot so far and now I am even more curious to explore in the field!!!! First of all, I am very thankful to Sir, for giving me this opportunity. All the lab members helped me with my initial efforts to understand the field as well as initiating wet lab work. Overall, it has been wonderful six months filled with lot of learning, discussions, understanding the lab settings. My future plan includes to stay connected with science for sure!