

ADVERTORIAL

MAKE YOUR DREAMS COME TRUE

Women of our country are becoming more independent every day by joining the workforce. The Fair & Lovely Foundation has been a part of this progress by helping them in their business start ups, vocational trainings and higher study scholarships. In 2015, Fair & Lovely Foundation, through a campaign named "Tomar shopno koro shotti (Make your dreams come true)", asked for applications from women who want to start their own business, receive vocational training or pursue higher education. FAL Foundation received more than 7000 applications from around the country. Based on their merit, a total of 357 applicants were selected. 350 of them received scholarship for higher education and vocational training, while 7 received financial support to start their own business. Today, we look at one of the inspirational stories of those recipients.

NIGAR SULTANA INVESTMENT CERTIFICATE RECIPIENT

When a dream, nurtured for years, becomes a reality, the feeling is beyond any explanation. Nigar Sultana is one of the lucky ones to have been able to experience that feeling. She had been persistently trying to make her dream come true. Despite several failed attempts, she did not give up. After every failure, she came back stronger, starting afresh. Finally, her relentless effort and dedication got the required support from Fair & Lovely Foundation. Today, Nigar Sultana is a successful entrepreneur.

Nigar Sulatana, who comes from an impoverished family in Dinajpur, always had the dream of starting a business of her own. With this dream, after completing her higher school studies, in the year 2000, Nigar moved to her sister's home in Dhaka. Seeing all the glittery fashion boutiques in the city, her dream only got stronger. Nigar says, "I didn't have the money or the training to start my own boutique then. Despite that, I did not lose hope, my dream was still alive. I knew I had to do it. My sister's landlady knew block designing. Since I didn't have the money for proper training, I started helping her out with block works which taught me a lot. I also learnt tailoring. Later, I bought some materials with borrowed money from my sister, with which I made some block dresses and sold them. In 2006, I got married. Soon after our wedding, my husband left his job. A new struggle ensued. For my family to survive, I had to use up my savings for the boutique. I couldn't even afford a sewing machine. Then, when my husband found a new job, I went back to making block dresses with a 10,000 taka investment. 6 months later, my husband left his job again, and I ended up using up all my investment for my family, once again. This is how things continued for the next few years. In the meantime, I became a mother. The financial crisis became so unbearable that we had to go back to our village. Later, in 2012, I borrowed 12,000 taka yet again to restart my business. However, I kept stumbling due to the lack of money. Finally, in 2015, I saw the ad of Fair & Lovely Foundation, "Tomar shopno koro shotti" campaign, and applied for it. I got selected and received 2 lakh taka to start my business. At present, my business is in full operation. Before receiving the donation, I had taken some loans. I have been able to pay back the whole



amount of loan with the profit I made with the contribution of Fair & Lovely Foundation. And today, I am free of any loan and am self-sufficient."

Nigar is no longer worried about financial crisis putting a pause in her business again. Now, she dreams of expanding her business. She hopes more women will get such career boosts in fulfilling their dreams.

PHOTO: COURTESY

NUMBERS

4

is the number of alleged members of banned militant outfit Jama'atul Mujahideen Bangladesh (JMB), who are held by police in Rangpur Sadar upazila. The arrested "militants" are: Belal Hossain, 46, son of late Joynuddin from Durgacharan village of Pargachha upazila; Ershad Alam, 28, son of Hobibor Rahman; Ashraf Islam, 23, son of Montazur Rahman village in Tangailpara upazila; and Al Amin, 20, son of Ismail Hossain from village Poshuakhapara in Pargachha upazila of the district. Three policemen were injured in blasts and law enforcers seized sharp weapons from their possession, Mizanur Rahman, superintendent of Rangpur police, told our Dinajpur correspondent adding that police are interrogating the arrestees.

PHOTO: STAR FILE



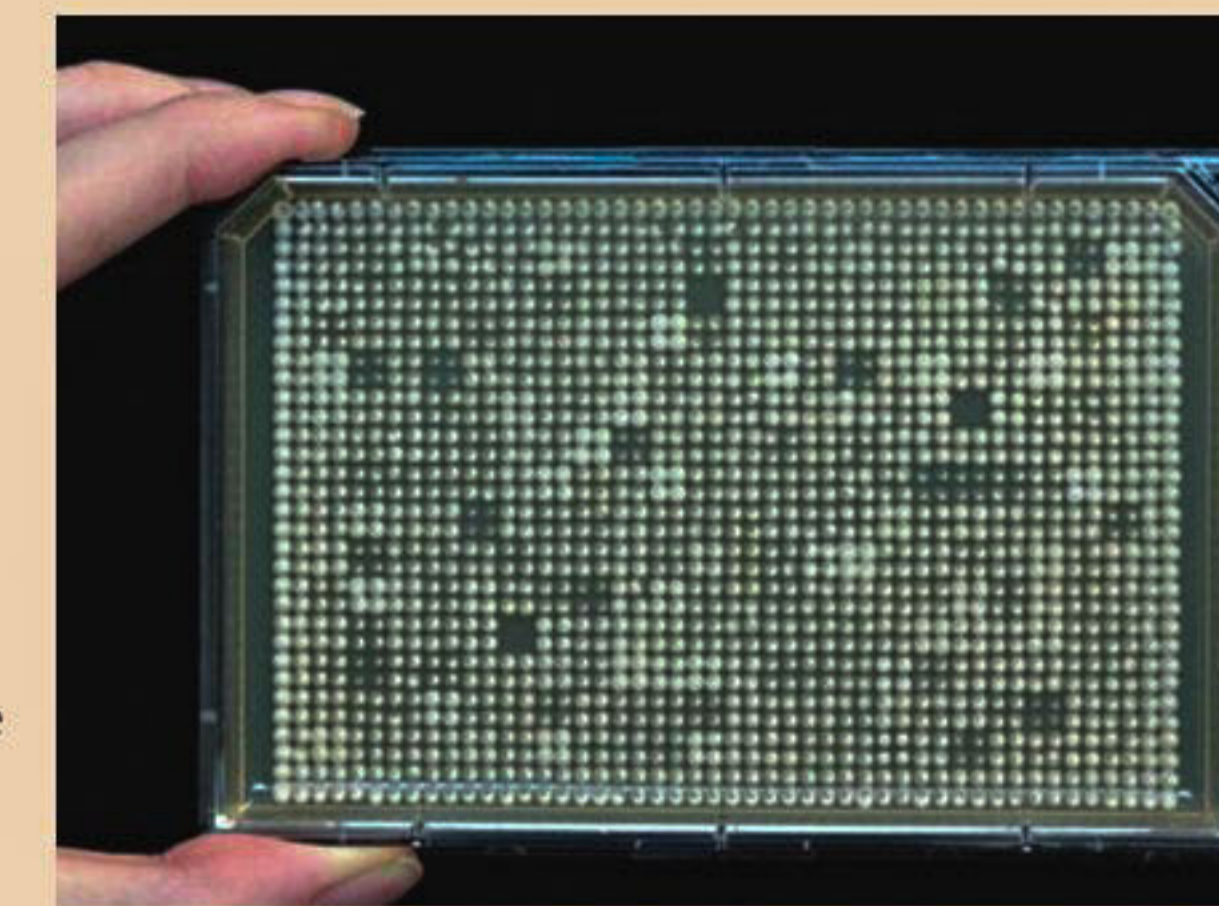
QUIRKY SCIENCE

BAD GENES AREN'T ALWAYS BAD

We usually think of mutations as errors in our genes that will make us sick. But not all errors are bad, and some can even cancel out, or suppress, the fallout of those mutations known to cause disease. Little is known about this process -- called genetic suppression -- but that's about to change as University of Toronto researchers begin to lay out the general rules behind it.

Teams led by Professors Brenda Andrews, Charles Boone and Frederick Roth, of the Donnelly Centre and the Department of Molecular Genetics, in collaboration with Professor Chad Myers, of the University of Minnesota-Twin Cities, have compiled the first comprehensive set of suppressive mutations in a cell, to be published in Science on November 4. Andrews, Boone, Roth and Myers also work together as members of the Genetic Networks program of the Canadian Institute for Advanced Research (CIFAR). Their findings could help explain how suppressive mutations combine with disease-causing mutations to soften the blow of a disease, or even completely protect against it.

It's a curious bit of biology that's only come to light as more healthy people have had their genomes sequenced.



Among them are a few, and extremely lucky folks, who dodge the bullet and remain healthy, displaying disease resilience, despite carrying catastrophic mutations that cause debilitating disorders, such as Cystic Fibrosis or Fanconi anemia. How could this be?

"We don't really understand why some people with damaging mutations get the disease and some don't. Some of this could be due to environment, but a lot of could be due to the presence of other mutations that are suppressing the effects of the first mutation," said Roth, who is also a Senior Scientist at Sinai Health System's Lunenfeld-Tanenbaum Research Institute.

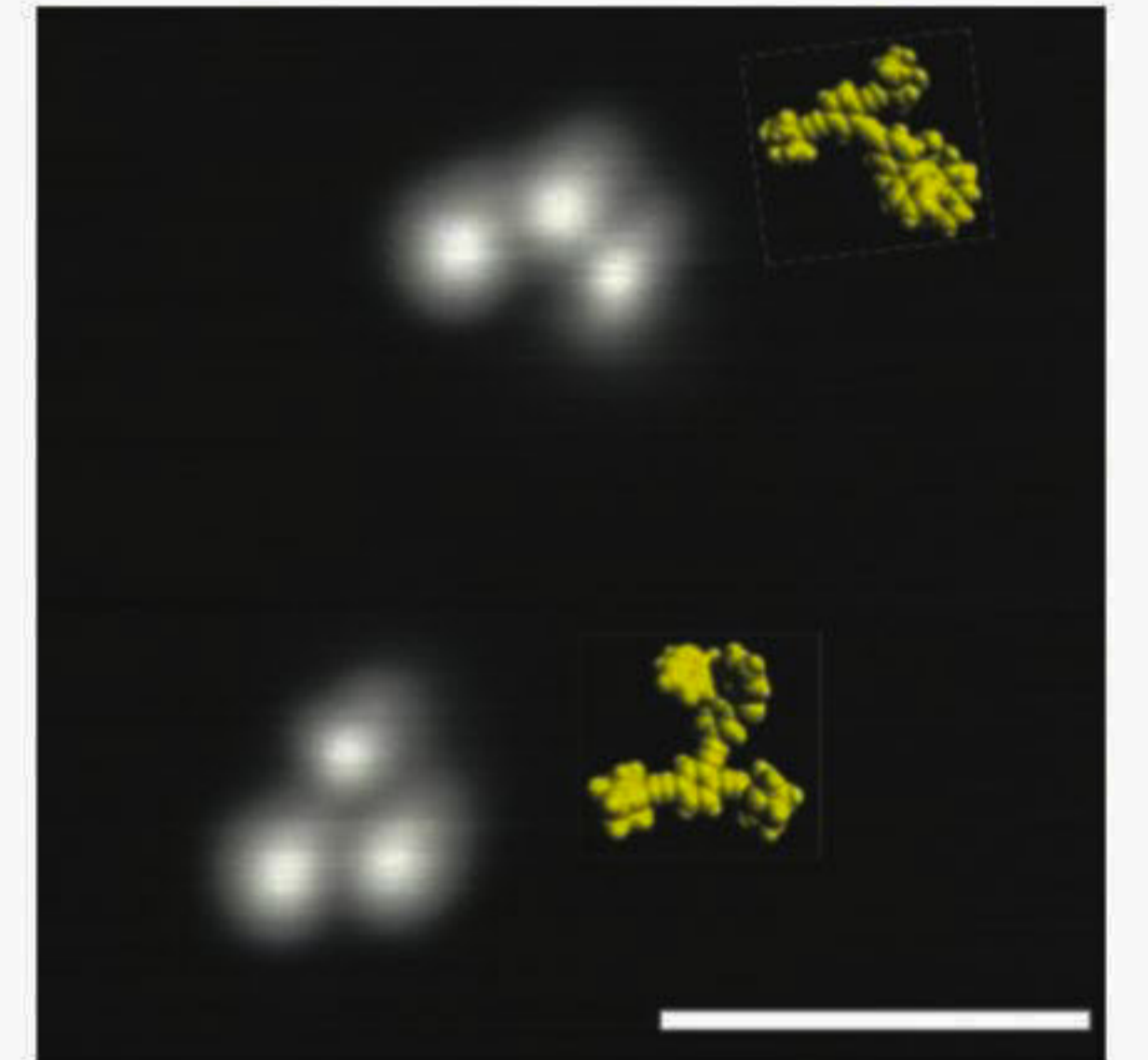
LIGHT DRIVES SINGLE-MOLECULE

The Rice lab of nanocar inventor and chemist James Tour synthesized light-driven nanocars six years ago, but with the aid of experimental physicists in Austria, they're now able to drive fleets of single-molecule vehicles at once.

A report on the work appears in the American Chemical Society journal ACS Nano.

"It is exciting to see that motorized nanoroadsters can be propelled by their light-activated motors," said Tour, who introduced nanocars in 2005 and motorized them a year later. "These three-wheelers are the first example of light-powered nanovehicles being observed to propel across a surface by any method, let alone by scanning tunneling microscopy."

Rather than drive them chemically or with the tip of a tunneling microscope, as they will do with other vehicles in the upcoming international NanoCar Race in Toulouse, France, the researchers used light at specific wavelengths to move their



nanoroadsters along a copper surface. The vehicles have rear-wheel molecular motors that rotate in one direction when light hits them. The rotation propels the vehicle much like a paddle wheel on water.

The team led by Tour and Leonhard Grill, a professor at the University of Graz and formerly at the Fritz-Haber-Institute, Berlin, used wavelength-sensitive modified motors invented by Dutch scientist Bernard Feringa, who shared this year's Nobel Prize in chemistry for his molecular machine.

Source: Sciencedaily.com

FIVE THINGS

5 WAYS TO PREPARE FOR WINTER

NAZIBA BASHER

Winter is coming. No, seriously. It is coming, and while we're very excited about finally letting go of the unbearable Dhaka heat and humidity, the cold waves can take quite a toll on our bones. To make sure that we can enjoy the chilly winter breezes, there are a few ways we can prepare ourselves. Here are five ways you can prepare yourself for winter (it is, in fact, coming.):

1

Moisturise regularly: The first sign of winter's toll on your body is when your skin begins drying up. Eventually, you are left with flakes of skin here and there all over you for the entire month. The only way you can fix this is by moisturising thoroughly. Whether with baby oil, moisturising creams, or cocoa butter, make sure you splash some on yourself after your shower to keep your skin smooth and silky.

2

Get your winter shopping done: There is only one season in the world that makes me enjoy shopping-- and that is, obviously, winter. Badrudoza market is your best bet when you want to shop in bulk in the most affordable prices. Cozy up with turtle necks, wrap arounds, pashminas and spend a warm and fashionable season this year.

3

Spice up your food: The one thing that gets me through winter is warm and spicy soup. Any spicy food actually can warm up your insides within minutes of consumption. So when the winter hits full throttle, make sure you visit the *pitha* (rice cake) stands to devour some *chitai* and *morich bharta*.

4

Boost your humidity: You can start by getting yourself a good humidifier. These little magic-machines can help keep your room warm and humid during the bone-chilling cold waves that hit during the winter months.

5

Heat up your blood: Work out to warm up-- the best advice for winter. You can run, jog, or even just do household chores-- moving around keeps your blood flowing and at a good regulated temperature.

With these little tips, you can be sure to have spirited winter that involves less shivering and more warm cups of tea, pitha stands, and street-side gossip!



PHOTOS: KAZI TAHISIN AGAZ APURBO