

Statistics have shown that 1 in 6 deaths due to cardiovascular issues are related to stroke. And stroke is a leading cause of serious, long-term disability. Since stroke is a preventable and treatable disease, this does not have to be grim news, but should act as an encouragement for people to pay more attention to their health. And that's what World Stroke Day is all about. World Stroke Day is an annual event that emphasizes testing, education, and initiatives to improve and mitigate the damaging impact that stroke can have on people's lives worldwide.

#LEARNING

Tricks To Learn & Remember New Stuff

The benefits of spacing and retrieval practice have been confirmed over and over in studies in labs, classrooms, workplaces.

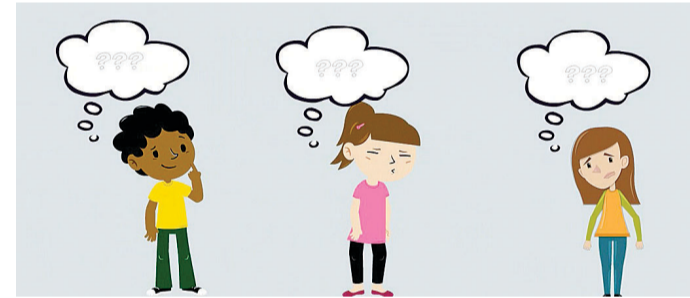


Combining two strategies—spacing and retrieval—practices is key to success in learning, says Shana Carpenter.

Carpenter, a professor of psychology at Iowa State University, is the lead author of a paper in *Nature Reviews Psychology* that examined more than 100 years of research on learning.

"The benefits of spacing and retrieval practice have been confirmed over and over in studies in labs, classrooms, workplaces, but the reason why we're showcasing this research is because these two techniques haven't fully caught on. If they were utilized all the time, we'd see drastic increases in learning," says Carpenter.

In the paper, Carpenter and her co-authors describe spacing as a strategy to learn in small doses over time. It's the opposite of cramming the night before an exam. In one study, medical students who received repeated surgery training over three weeks performed better and faster on tests two weeks and one year



later compared to medical students who had the same training all on one day. Carpenter says there isn't a universal rule about how much time to schedule between practice sessions. But research shows returning to the material after forgetting were highlighted in a recent conference. A few days after a lesson on fractions, the teacher asked her students to share whatever they could remember about fractions. It was an open-ended and communal activity.

"The more they talked, the more they started to remember, and those kids were excited to talk about fractions," says Carpenter. She shares another story of a middle school teacher who routinely projects practice questions from previous lessons on a screen. The students jot down responses on note cards and then check their answers on their own or discuss as a group.

Carpenter emphasizes the teachers in both examples did not grade the activities. Rather, they provided low- and no-stakes practice opportunities to help students learn and recognize mistakes as an important part of that process, which benefits students beyond the classroom.

"Learning how to learn is going to ensure that anywhere you go after the formal education years, you're going to know how to learn something and be successful," she says.

"Forgetting is a very natural thing; you can't stop forgetting even if you try, but you can slow down forgetting by using retrieval practice and spacing," says Carpenter. Carpenter says false beliefs about learning are part of the reason retrieval practice and spacing aren't used more widely.



#LONE RANGER



Shailaza Singh
Published author, poet and a YouTuber

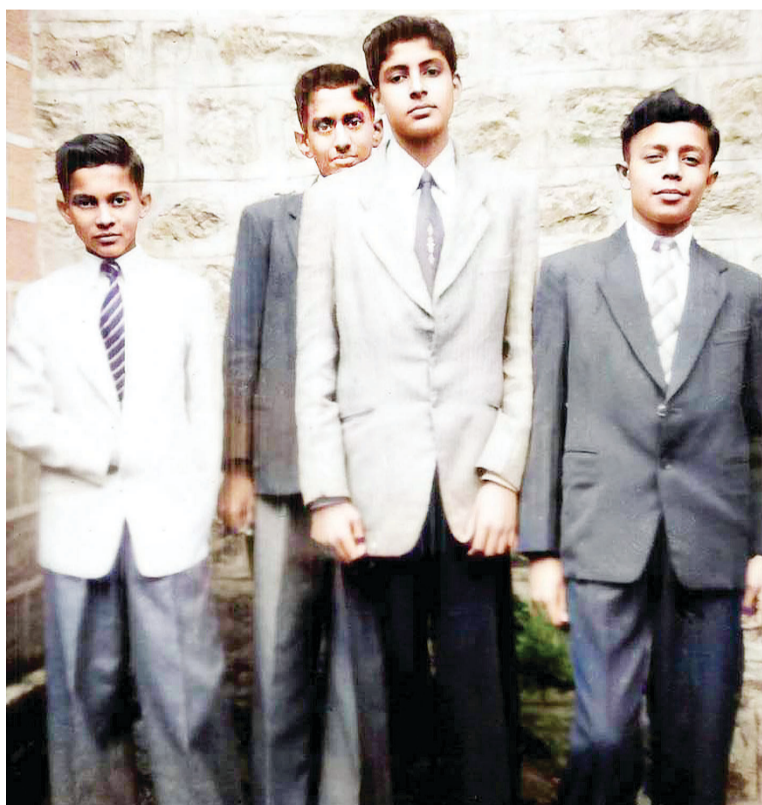
The very word IAS (Indian Administrative Service) brings to mind the image of corridors of power, a world where suited booted, distinguished people discuss the fate of India and the world in hushed whispers. At least that's what the movies show. If you ask most parents what IAS is, they will tell you it is their dream job for their children. For them, IAS is about honour, respect, clout and power; having a lifelong career, not marred by layoffs or recession or any such problems that plague the common man. I had once met an IAS coaching centre head who used to say, 'IAS to Godrej ki chaabi hai bacche. Ek baar haath aa gayi to saari duniya ke darwaze khul jaate hain'.

This is a man who has lived this for more than four decades.

Even after retirement, every day, he gets up in the morning, goes for a 4km long walk around the neighbourhood (earlier he used to frequent a little park close by but after COVID, he avoids it since the picket gate to the park is touched by many hands), comes back, reads newspapers, gets ready, eats breakfast, goes to Gita Mittal Career Development Centre (a unit of The Gita Mittal Foundation), where he works as a mentor for less privileged students for about four hours, comes back, has lunch followed by a small nap, wakes up with a cup of tea, goes for a walk, comes back, listens to music, sometimes goes out to meet friends or has his dinner and goes off to sleep. Without missing his power and clout even once. He is a retired chief secretary, who served without a blemish for three years. He lost his wife, his companion of fifty years, a couple of years ago.

When asked a question, he does not believe in answering immediately. He takes his time, writes down the points of his answer and then enumerates and explains his points one by one. While most of his age have adopted a lazy, laid-back lifestyle, developed potbellies and sometimes an apathy towards their very existence, Inderjit Khanna, an IAS and a retired chief secretary of

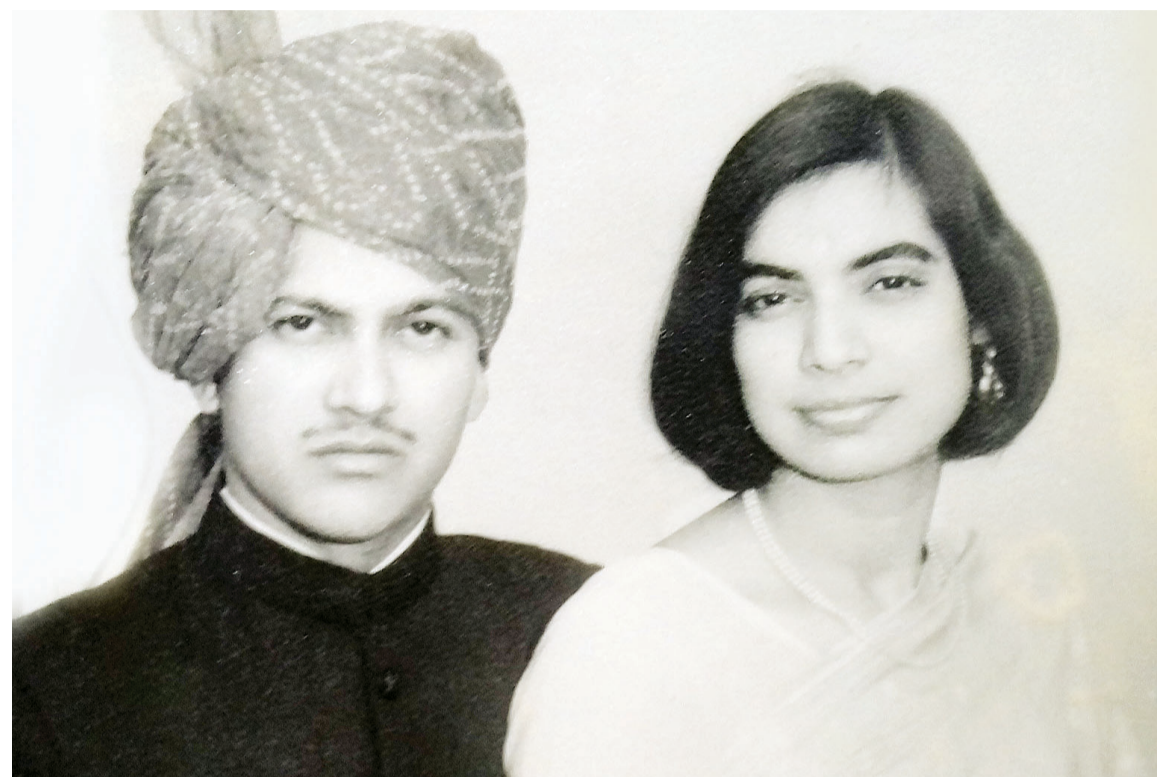
Rajasthan believes in living a methodical, dedicated, purposeful yet frugal life which is rare quality in the modern-day IAS circles. When you meet Inderjit Khanna for the first time, this slightly built man appears to be a quiet and dull sort. However, as one starts talking to him, one discovers the passion that lies deep within this quietish man. He talks about his trials, joys, frustrations, both personal and professional. All admirers, critiques are invited to come and have a heart-to-heart conversation with him. At 4:30 pm on 30 October 2022 at Sudharma, Chameliwala Marker, M.I. Road, Jaipur.



Inderjit Khanna with Mathai Joseph, Amitabh Bachchan, Santosh Chandrashekhar at Sherwood.

Why are capable, uncompromising always lonely at the end of the game? (...1)

They are honest to the core, they are excellent at their job, their rise to the top is phenomenal; yet somewhere despite their integrity, commitment and loyalty to the system, these people are often lonely.



Inderjit Khanna with his wife Yasmin.

Know the Enigma...

Mr. Inderjit Khanna, IAS, eminent scholar will bare his soul talking about his trials, joys, frustrations, both personal and professional. All admirers, critiques are invited to come and have a heart-to-heart conversation with him. At 4:30 pm on 30 October 2022 at Sudharma, Chameliwala Marker, M.I. Road, Jaipur.



IK in a horse jumping event in National Academy of Administration.

Amitabh was on a visit to Jaipur. I learnt this from a newspaper report. I sent a mail to his secretary asking if I could meet him. She promptly replied with the date and time. I met him at the Rambagh Palace Hotel on 23rd January. He was keen to know about the extent of contributions, not of the individuals but the total, and the stage of construction of the (girl's) dormitory (in Sherwood). Just as I was leaving, I asked if he would be able to visit our house. He readily agreed but requested that I may kindly come to the hotel the next morning around 6 a.m. and accompany him from there as otherwise his escort would not be able to guide him to our house. The next morning, he spent half an hour at our house with Yasmin, our granddaughter Annette and me. Annette was then three and half years old and was very excited to see him though at some stage she went off to sleep in Yasmin's lap. A fact that Amitabh affectionately mentioned later in a mail to me.

In his blog on 25th January 2009, after visiting Inderjit Khanna's house in Jaipur Amitabh wrote:

"Titch, walks in promptly by 6:30 to pick me up. He wishes for me to visit his modest home on my way to the airport. Why modest, I react, home is home. We all live in modesty. People may perceive differently on that, but born

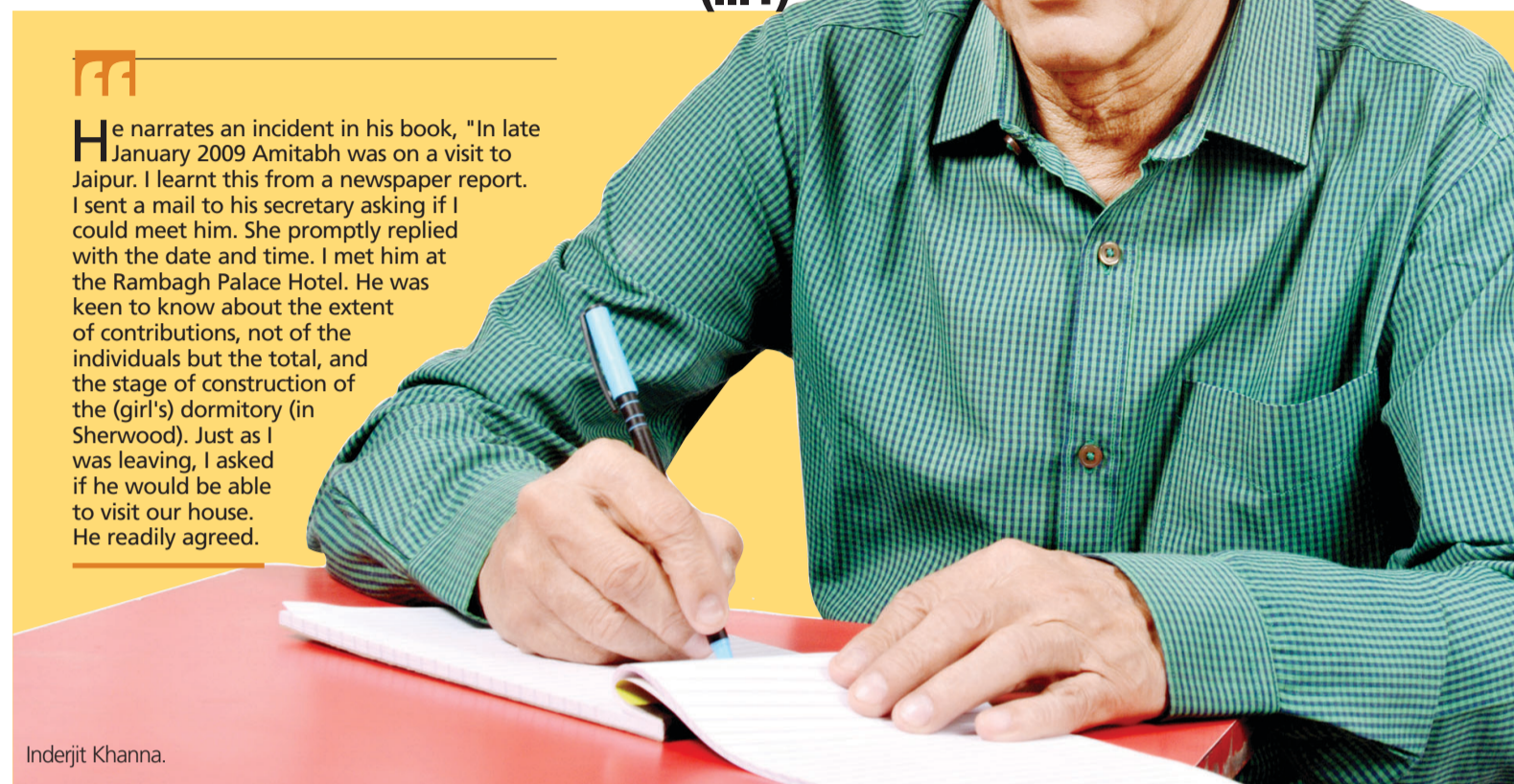
and brought up in small town middle class. I am not an alien that. My means may have improved, accepted, but the mind is still modest. I am more comfortable in such environs than perceived affluence. Titch's little and bubbly granddaughter runs up to greet me. She is considerably more effusive than our earlier meeting when they had come over to Mumbai. But soon after the pleasantries are over, she falls off to sleep in her grandmother's lap. Titch and I talk of several other matters. Other colleagues, the state of the nation, ethics, morals, Government insights; he being Chief Secretary for years in Rajasthan. "AND today has been a morning filled with memories of the past, nostalgia and the exchange of so many incidents from the Class of 1968 at Sherwood... if you remember we all got together in Sherwood in 2008 to celebrate 50 years of the Class of 1968... and such a wonderful time was spent at Nainital... Titch, pet name in School, Inderjit Khanna, Ravi Palsokar and John Kurrien were able to come across for the informal launch of the book written by Titch, who as you must all know was Inderjit, Chief Secretary, Rajasthan... Ravi Palsokar attained highest ranks in the Army and John has pursued academic excellence by his thought and writing prowess, among the many others that he is associated with... But a morning that was designed to be a few minutes went on for hours and it seemed it would never have wanted to end. And the most remarkable aspect being that all of us are either 80 or about to be in a few months... but we remembered each and every little detail of the years spent in Sherwood... those days were the 'Happiest Days of your Life'."

I put that within quotes and in some prominence, because that was the name of the School Annual Play that we had participated in to some degree...

Story: The sister School of the past, nostalgia and the exchange of so many incidents from the Class of 1968 at Sherwood... if you remember we all got together in Sherwood in 2008 to celebrate 50 years of the Class of 1968... and such a wonderful time was spent at Nainital... Titch, pet name in School, Inderjit Khanna, Ravi Palsokar and John Kurrien were able to come across for the informal launch of the book written by Titch, who as you must all know was Inderjit, Chief Secretary, Rajasthan... Ravi Palsokar attained highest ranks in the Army and John has pursued academic excellence by his thought and writing prowess, among the many others that he is associated with... But a morning that was designed to be a few minutes went on for hours and it seemed it would never have wanted to end. And the most remarkable aspect being that all of us are either 80 or about to be in a few months... but we remembered each and every little detail of the years spent in Sherwood... those days were the 'Happiest Days of your Life'."



Ravi Palsokar, Amitabh Bachchan, Tich Inderjit Khanna and John Kurrien.



Inderjit Khanna.



Inderjit Khanna and Amitabh Bachchan performing a play in Sherwood College.

According to Titch, bonding with Amitabh is not only because of the time spent in school but also because of the very similar background of the two. Both Amitabh's and Titch's fathers were government employees and both the parents shifted to Delhi and things improved and hence frugality is a second nature to both. Inderjit Khanna's father would have to move out of it, why not stay in rented accommodation from the very beginning. A related issue. Why did he not invest in property? Again, his reply was simple. "I have three properties. They are our three children (Ronojit, Arohi, Inderjit). He used to say that for him and Ruby, it was much more important to educate their three children well, rather than invest, whatever little income they had, in buying prop-

erty."

Inderjit Khanna is an alumnus of St. Stephen's college. In his book he mentions an interesting story about his mathematics teacher Ranjit Bhatia who was a passionate athlete and also represented India in athletics in Rome Olympics in 1960. He writes:

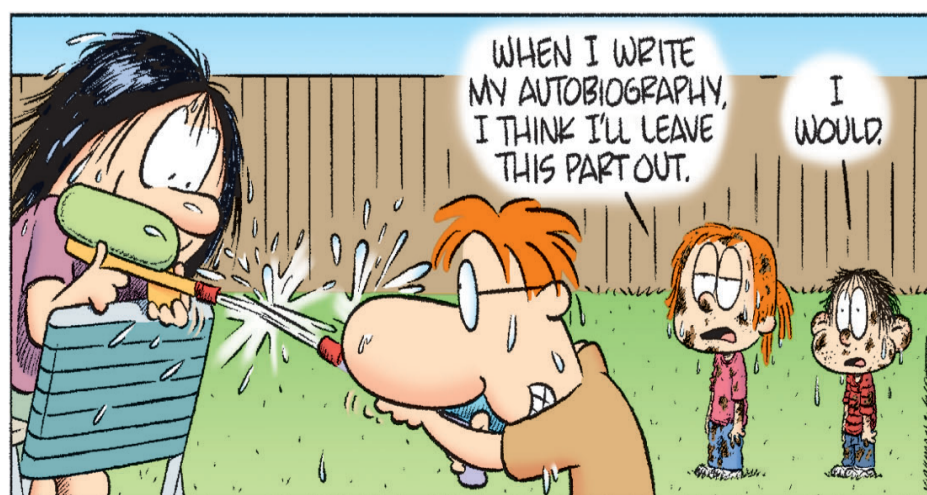
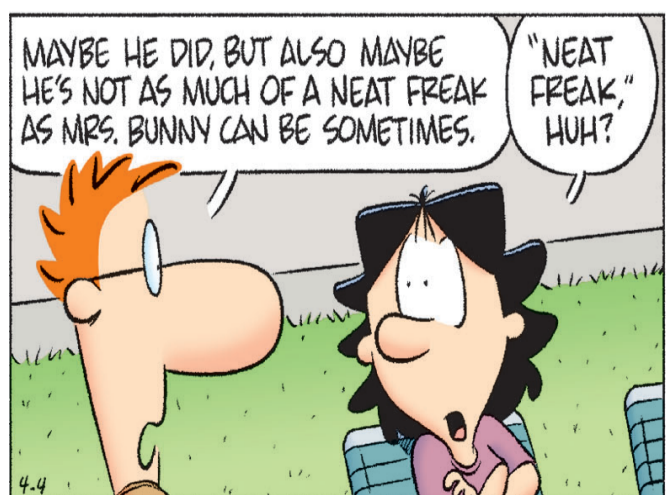
"Sometime in class I must have asked a question to which Ranjit did not have an answer at that time. A few months later while he was at Jabalpur participating in an athletic meet, he was possibly still thinking and searching for an answer to that question and he found the answer."

Inderjit says that Ranjit sent a postcard to his colleague Satish Mathur, who was also a math teacher on 11 February 1962 so that the latter could share the answer with him. His life in the National Academy of Administration (NAA) was not all work and no play. He reminisces: "To give an idea of the recreation aspect of our life at Mussorie was the occasional trip to Delhi on a long weekend and particularly the cost involved. Five of us would leave from the Academy gate on Friday around 5 p.m. in an ambassador taxi, reach Delhi around mid-night and return to Mussorie in the same taxi around 5 a.m. on Monday morning to be in time for PT class which began at 6 a.m. The cost per person for the round trip was a princely sum of Rs 50 per person. Somehow unbelievable today.

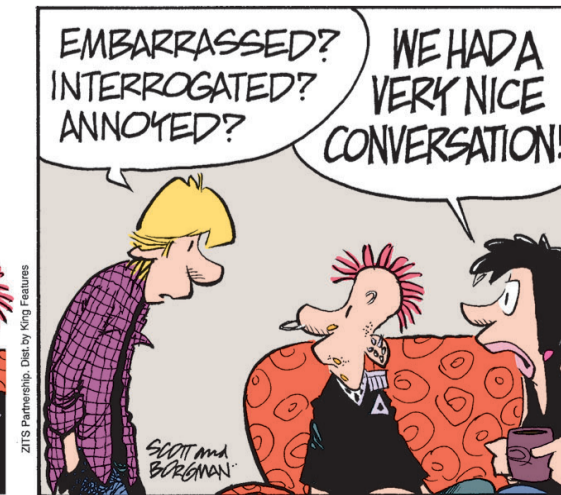
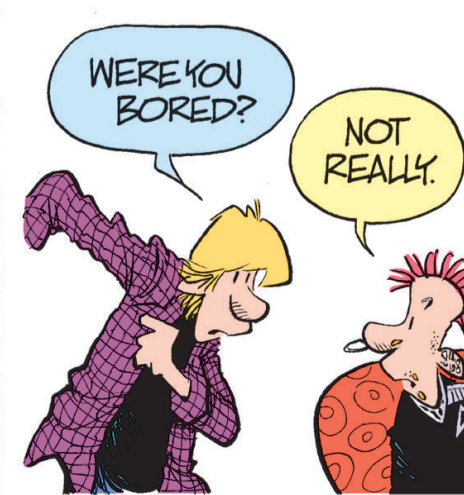
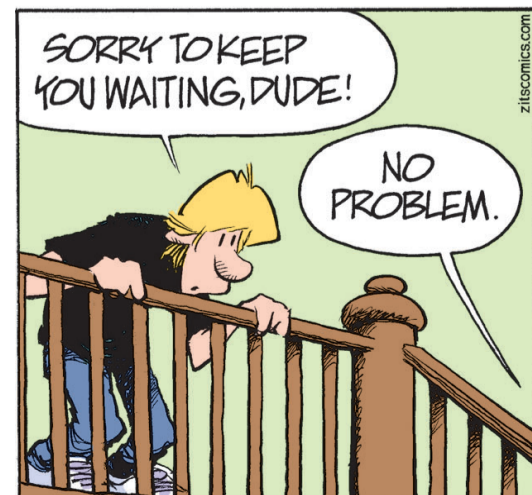
Inderjit Khanna taking tutorials.

By Rick Kirkman & Jerry Scott

BABY BLUES



ZITS



By Jerry Scott & Jim Borgman

#ANIMALS

Penguin Feathers



The hierarchical arrangement of the feathers themselves provides water-shedding qualities

Researchers believe they've found a new way of dealing with the problem of ice build-up. Their inspiration came from the wings of Gentoo penguins, who swim in the ice-cold waters of the South Polar Region with pelts that remain ice-free even when the outer surface temperature is well below freezing.

Ice build-up on power lines and electric towers brought the northern US and southern Canada to a standstill during the Great Ice Storm of 1998, leaving many in the cold and dark for days and even weeks. Dealing with ice build-up typically depends on techniques that are time consuming, costly, and/or use a lot of energy, along with various chemicals.

"We initially explored the qualities of the lotus leaf, which is very good at shedding water but proved less effective at shedding ice," says Anne Kietzig, an associate professor in chemical engineering at McGill University and the director of the Biomimetic Surface Engineering Laboratory.

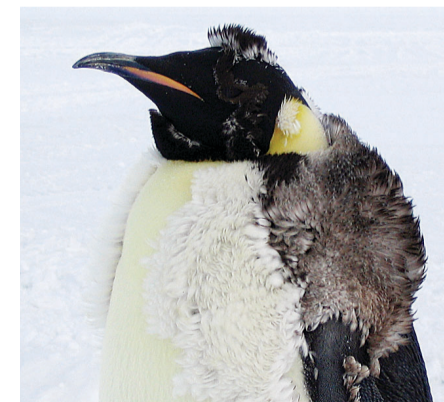
"It was only when we started investigating the qualities of penguin feathers that we discovered a material found in nature that was able to shed both water and ice."

"We found that the hierarchical arrangement of the feathers themselves provides water-shedding qualities, while their barbed surfaces lower the adhesion of ice," explains Michael Wood, a recent PhD graduate who worked with Kietzig, and is a co-author of the paper in *ACS Applied Materials Interfaces*. "We were able to replicate these combined effects through a laser-machined woven wire mesh."

The researchers carried out wind-tunnel testing of surfaces covered by the steel mesh and found that the treatment was 95% more effective at resisting ice build-up than an undeposited sheet of polished stainless steel. Because there are no chemical treatments involved, the new approach provides a potentially maintenance-free solution to ice build-up on wind turbines, electric towers, and power lines, as well as drones.

"Given the number of regulations in place in passenger aviation and the risks involved, it is unlikely that airplane wings will ever be simply wrapped in metal mesh," adds Kietzig.

"It is, possible, however, that the surface of plane wings may one day incorporate the kind of texture that we are exploring, and that de-icing will occur thanks to a combination of traditional de-icing techniques working in concert in wing surfaces that incorporate surface texture inspired by penguin wings."



write@arbit@rashtradiot.com