

STORIES OF CREATIVITY

**Creative Capital
of Canada**

STORIES OF CREATIVITY IN WATERLOO REGION

How do you solve problems? Have you ever used creativity to solve them? We bet you have without even realizing it! Solving problems using creativity takes bravery, hard work, resilience, and collaboration. It produces more interesting products, art, and discoveries that change the world for the better.

Waterloo Region has a long history of coming up with new products, ideas, and inventions. And there is a large and growing group of people who believe that all of that creativity makes us the Creative Capital of Canada. Are you familiar with the creative debuts that all started in our own backyard?

UNIVERSITY OF WATERLOO



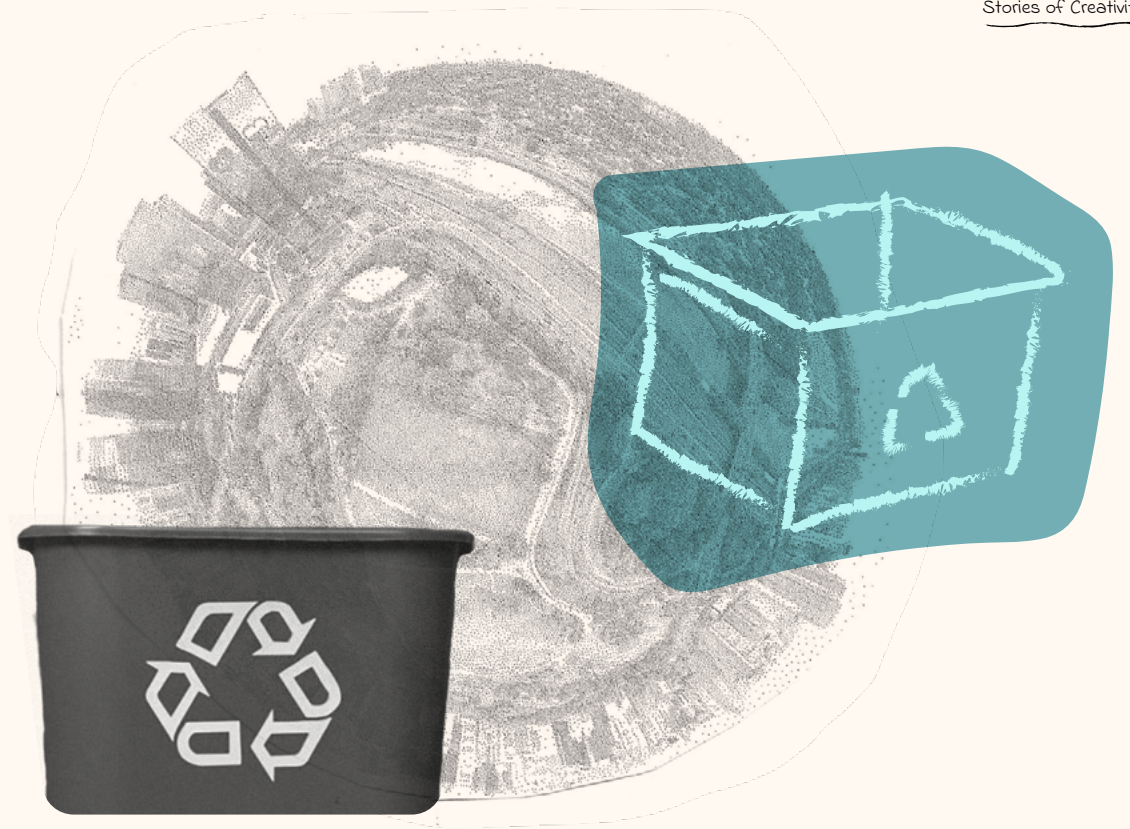
The Campus Centre in 1961.

This is not just another university. UW is a world leader in computer science and engineering because those who founded it had a different perspective on what was important. Rather than focusing on acquiring knowledge, they were interested in helping students do something with their knowledge. University of Waterloo was one of the first schools in the world to allow students to own their Intellectual Property (IP). That resulted in the creation of the many tech companies that call Waterloo Region home - including BlackBerry. When we created UW, we created our future success.



This office building in Waterloo is not only Canada's first Zero Carbon Building, it is also a great example of the brilliance that can be achieved through collaborative ideation. Evolv 1 is a 104,000-square foot urban office space designed to have a net-positive impact on the environment. It achieves this goal not through new inventions but by applying existing technology in different ways. It also requires a fostered culture of sustainability with all of its tenants. Creativity is helping all of us to do more with less.

THE BLUE BIN



This is the recycling program that kicked off one of the most environmentally conscious protocols known by humankind today - and it was created in Kitchener by Nyle Ludolph. The system is relatively simple, easily adopted by thousands of cities around the world, but the fact it started with one person observing that much of what we think is garbage isn't garbage at all.



BAUER HOCKEY SKATES

Back in the 1970s, Canada was in the middle of a hockey war with Russia. The stakes were high: the winner would earn the right to claim the title of the greatest hockey nation in the world. Despite this dispute, there was no question about who made the greatest hockey skates; that was Canada, thanks to Bauer Skates in Kitchener. The best players in the game, including Russians, came to a factory on Victoria Street to have their Bauer Supreme skates custom-fitted.

GRAND RIVER CONSERVATION AUTHORITY



Grand River Conservation Authority – The first watershed management program in Canada – reverted the Grand River from being a polluted, dirty body of water to a healthy and beautiful space that is now home to Bald Eagles. Engineers studied the land and noticed that nature had once kept a healthy

balance in the ecosystem. Such an observation led them to learn how to achieve the same balance through engineering. Observing and experimenting to find other tools to duplicate nature... those are creative steps we can all learn from.

BLACK BERRY

Research In Motion created the first smartphone called BlackBerry in Waterloo, which changed our methods of communicating for good. Without this first innovation, we wouldn't have such now ingrained platforms like Instagram. But BlackBerry wasn't the first invention of its founder Mike Lazaridis. In fact, it was just the eventual outcome of a whole series of ideas, experiments, failures, and smaller successes. No one else could have invented BlackBerry, because no one else had tried so many other things first, never giving up.



STARCROSS

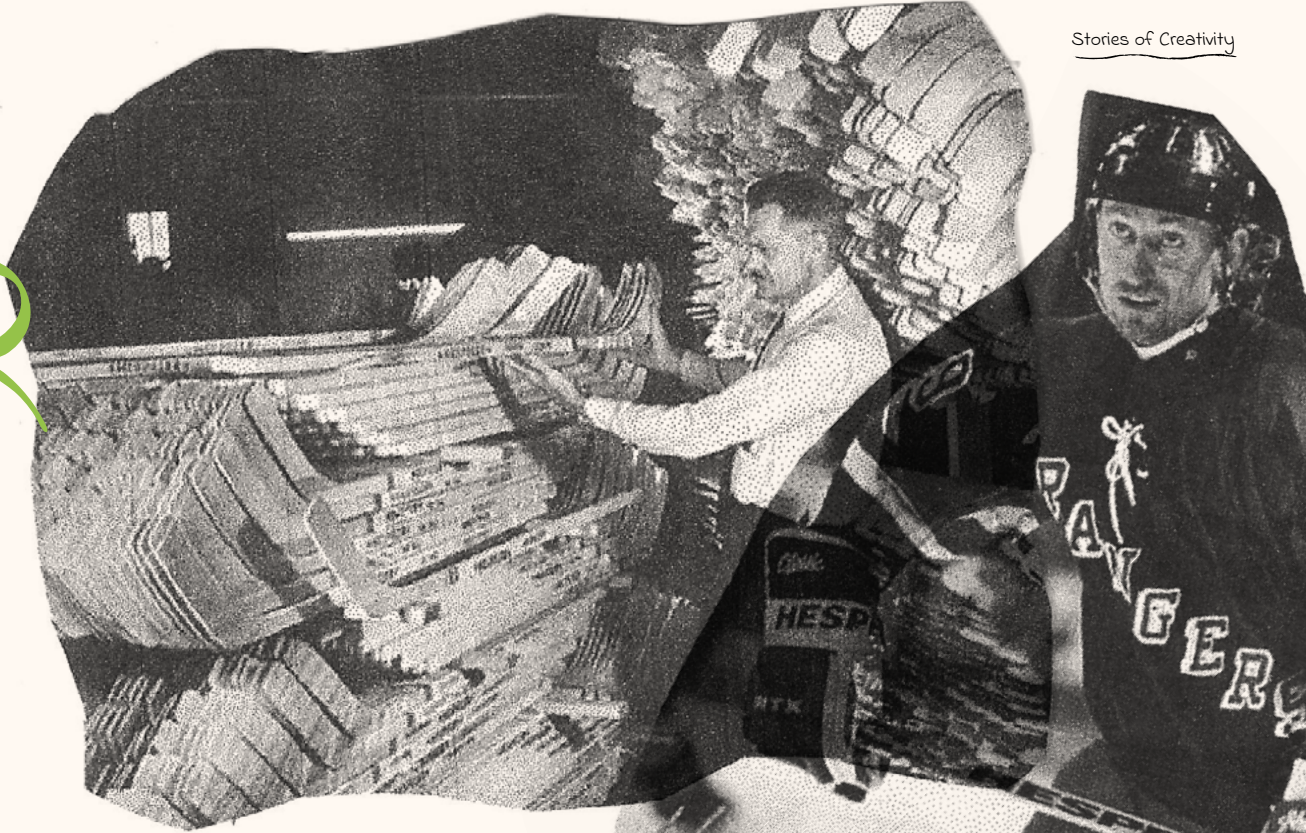
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CHICKEN

How many eggs can a chicken lay? Well, before the Starcross 288 chicken - not that many. But agricultural researcher Donald McQueen Shaver bred a hen that could lay 288 eggs a year. That type of chicken became the leader in the production of eggs everywhere.



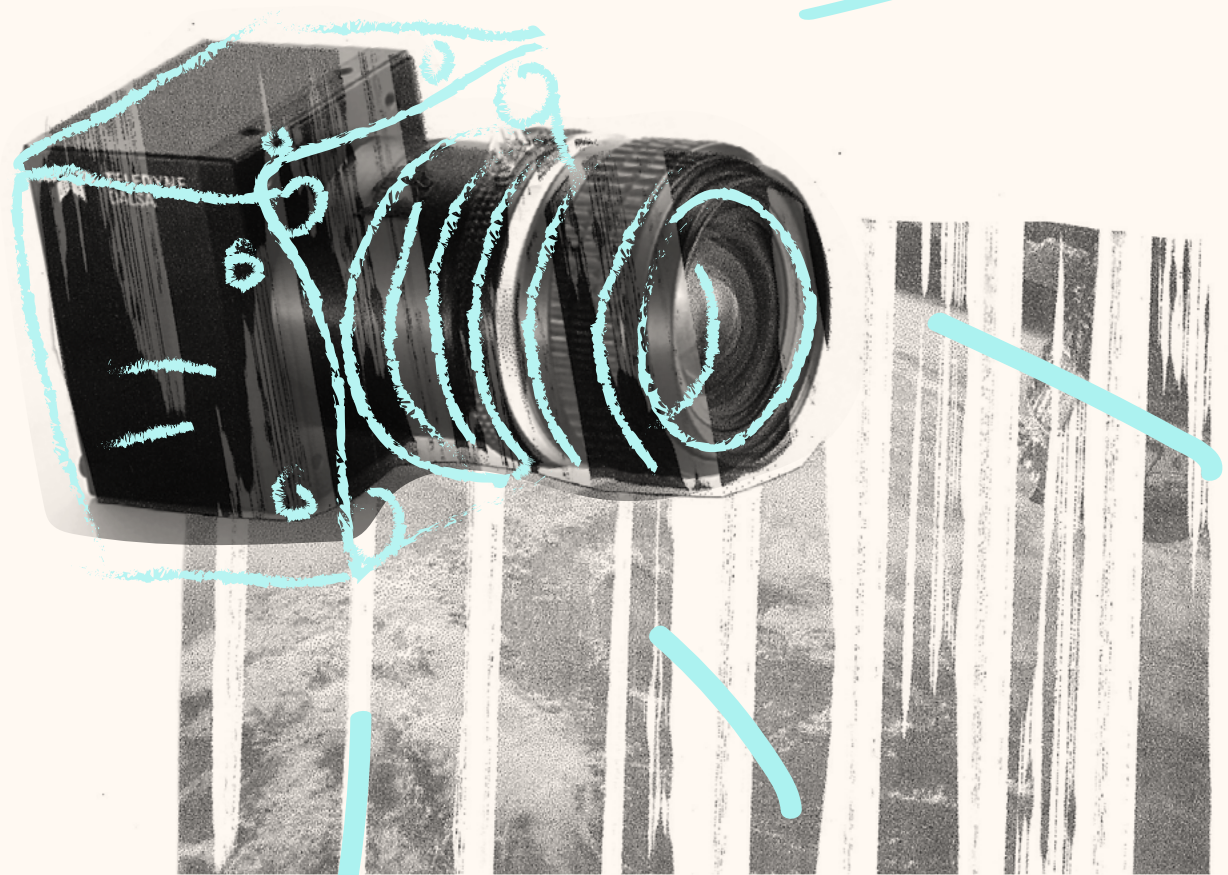
HESPELER HOCKEY STICKS



This is a real "don't give up" story. The Hespeler Hockey Stick company created the first 2-piece hockey stick... but it wasn't easy. The company filed over 90 patents before finding just the right way to build the stick that would revolutionize the game. Hespeler was one of the biggest brands in professional hockey, and its sticks were used by everyone from Bobby Hull to Wayne Gretzky, the latter being the hall-of-famer who bought the brand himself.

TELEDYNE DALSA

From Waterloo Region to Mars, the Teledyne DALSA company invented the technology that powers Google Earth and the pictures we see from the Mars Rover. This is yet another story that teaches us that, if we are going to dream, we must dream big. Who knows where it will take us.



Electrohome invented a machine that looked like a living room table and did what the Internet does today. A team of people with big imaginations collaborated and built it 30 years before the Internet was around.



Credit: ottawamagazine.com.
 Credit: torontopubliclibrary.ca



Graeme Ferguson, Roman Kroitor, Robert Kerr, and William C. Shaw were high school students at GCI when they started thinking about ways to make huge movie screens. They were just kids from Waterloo Region who were willing to try and fail and try again. Eventually, they went on to invent IMAX, which let people watch movies that were 6 storeys tall.

FORM-FITTING UNDERWEAR

A company in Galt made the first form-fitting underwear that was guaranteed not to shrink; the company promised to replace any that did. Use your own creativity and imagination to picture what they might have looked or felt like!



The driving programs you have taken, or will take, were first created here in Waterloo Region. Could the idea in your head change the way people do things for years to come? Maybe. As the saying goes: "It's always impossible... until somebody does it."



DRIVERS EDUCATION

AMERICAN WOMAN

Do you know the song? "da, da, dadadadada, da, da, dadada"...Lenny Kravitz? The Guess Who?... Never mind... Give it a YouTube search and listen! That opening guitar riff was composed at a roller skating rink in Waterloo. The band The Guess Who was on a break because of a broken guitar string. As the guitar player tuned up the new string, he started fiddling with random notes. The rest of the band paid attention and..."da, da, dadadadada..." was born. You should pay attention to all kinds of random things, because your creativity can make *random* very *relevant*.



PERIMETER INSTITUTE



Want to think big? Like Big Bang big? Lucky for you, there is a world-famous quantum physics institute in Waterloo Region: Perimeter Institute. Stephen Hawking came all the way from England to spend time at the renowned centre. You just have to take the 101!

NOBEL PRIZES



In recent years, Waterloo Region was home to two people who won the Nobel Prize. In 2016, Duncan Haldane, a visiting researcher at the Perimeter Institute, won the Nobel Prize in physics. And, in 2018, Donna Strickland, a faculty member at UW, also won for physics. If anyone questions how far you can go, tell them you can go far because you're coming from Waterloo Region.

THE REKLAWS



Jenna and Stewart Walker are from Cambridge, Ontario. They are brother and sister, but they are also The Reklaws, a country singing duo who, in 2018, won the Rising Star Award at the Canadian Country Music Association Awards, and performed at the Grey Cup. In 2019, they were nominated for a Juno award. That sounds pretty impressive for an overnight success... except that it wasn't overnight, and they

aren't done trying. They had formed their band six years earlier, and that was only after performing at their family's adventure farm as kids. If you ask, they will tell you that they are pretty sure they've had way more failures than successes so far, but their never-stop-trying attitude only means you should stick around – they plan on adding more hits to their Wikipedia page.

JUSTIN BIEBER

The Biebs is from Stratford Ontario and now owns a home on the outskirts of Cambridge. We all know his story; that he started out performing on the streets of Stratford, and was discovered by Usher via a YouTube video. We could list all his awards, but you don't have time for that because you too could do great things through the kind of focus and work ethic displayed by Justin Bieber. You have talent, but you still need to put in the sweat.



HEY LOCAL.CA

There have been plenty of amazing breakthroughs in tech - Facebook, Instagram, and Amazon, to name a few. Most of these have given us access to the world and, in return, they have become global giants. The convenience factor is something that helps all of us, but it's time to start getting back to supporting and building local connections... in a new, just-as-convenient way. That is a big, big job, but HeyLocal.ca has started to accomplish it right here in Waterloo Region. HeyLocal is a marketplace that makes it easier for local shoppers to buy the things that they need from local businesses all online. Most importantly, it keeps jobs and profits within the community. It all started because a few people observed and considered the big picture - much like a great photographer, whose interest isn't in the most glaring focal point everyone's already looking at, but rather in drawing intricacies out of the shadows.



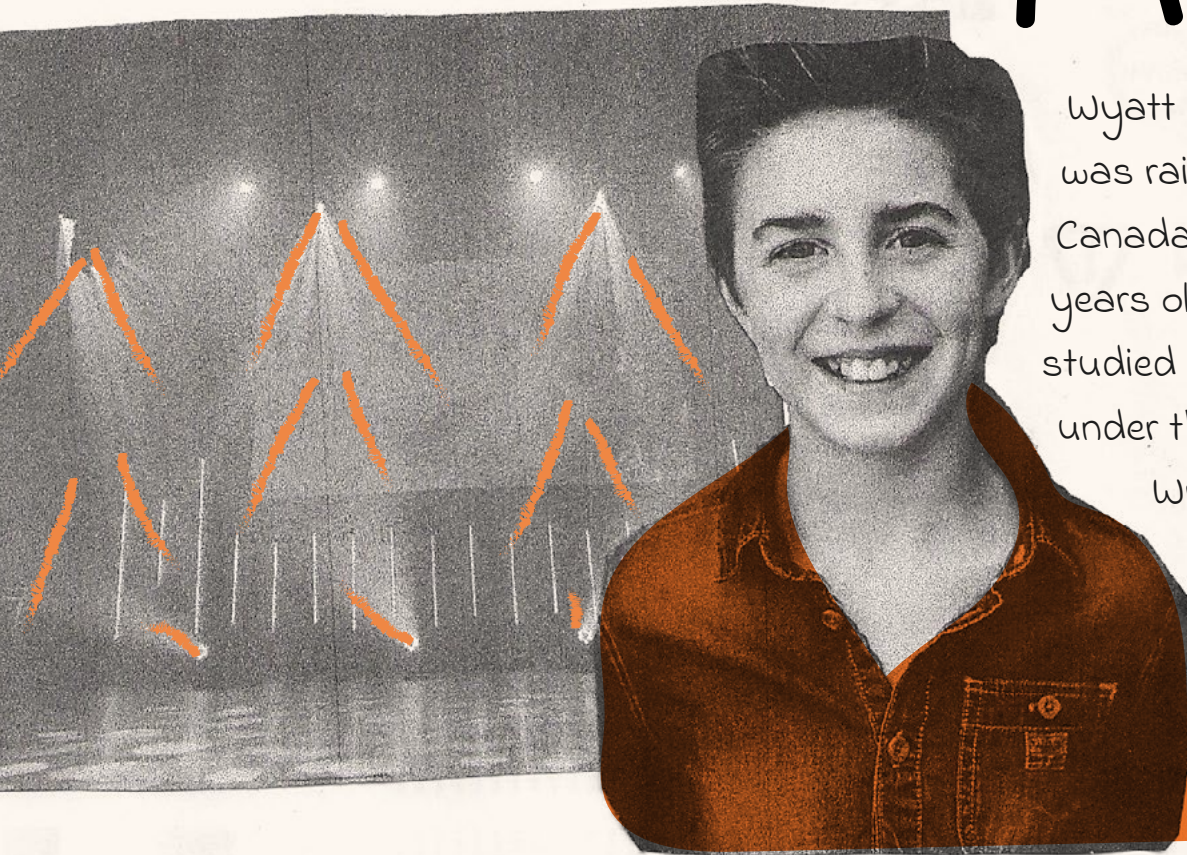
COMMUNITY

CREATIVE YOUTH IN WATERLOO REGION

As a part of the #CreativeCapitalofCanada, we are responsible for passing the "Creative Baton" to a new generation of creative talent who call Waterloo Region home.

It's paramount that we also instill within the youth in this region the confidence and pride to be studying in a community full of creativity. Below are a few success stories surrounding youth from the Creative Capital of Canada to help motivate and inspire.

WYATT MOSS



Wyatt Moss was born in Los Gatos, California, but was raised and currently lives in Waterloo, Ontario, Canada. His parents say that, when Wyatt was 2 years old, all he did was dance around the house. He studied at Bojangles Dance Arts in Kitchener, ON under the supervision of Ms. Melanie and Ms. Nikki.

Wyatt expresses himself through jazz, and it's because of the dance style's high energy, contemporary, and lyrical approach that he is able to convey emotional stories.

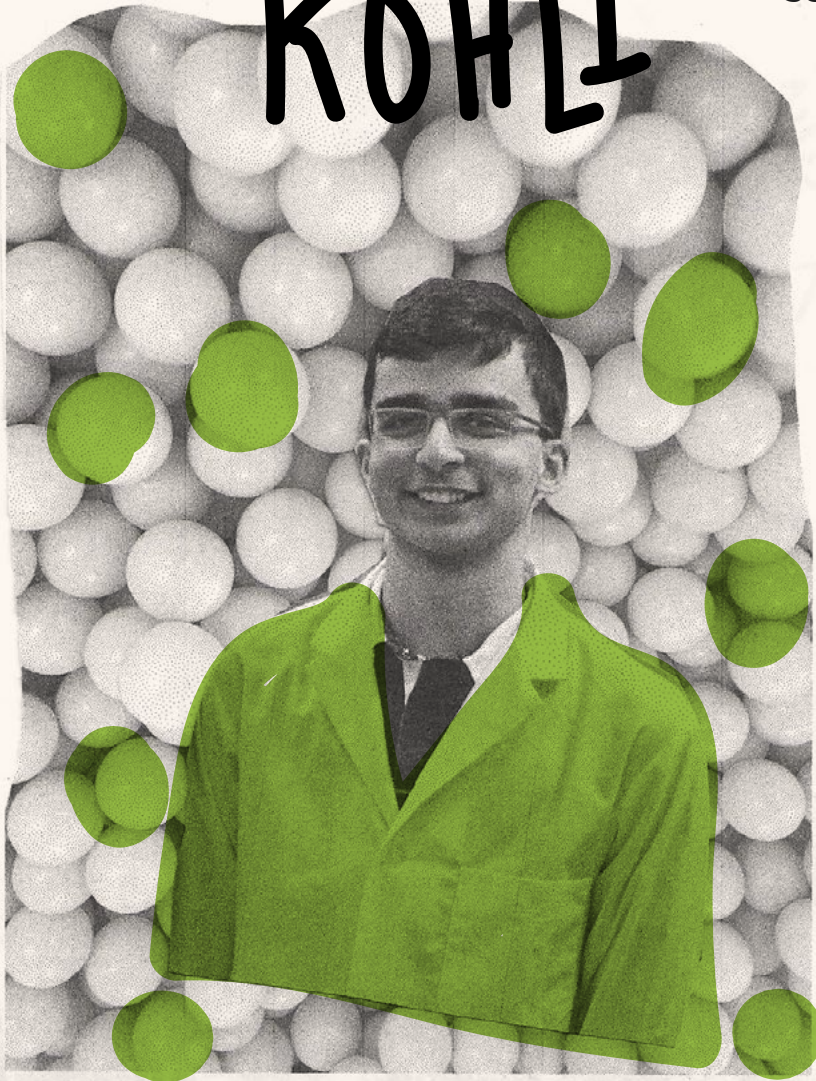
With all of his creative practice, Wyatt Moss is known today for his lead in *Billy Elliot* at Stratford Festival, and on national stages, as he was recognized as the perfect fit for *The Hockey Sweater*.



LESLIE KAY

Leslie Kay is the creator of the DisneyBound blog about fashion and all things Disney. Today, DisneyBound has over half a million followers across all social channels. The blog title has become a worldwide pop culture verb. She has published a book in partnership with Disney and is a partner in the online fashion brand Cakeworthy.

SAJEEV KOHLI



Waterloo teen Sajeiv Kohli, a Grade 12 student at Sir John A. Macdonald Secondary School, had a very "sticky" idea for a science project. His research focuses on developing a new way to use nanoparticles to deliver targeted treatment for cancer and other diseases.

He compares a nanoparticle entering the bloodstream to jumping into a sticky ball pit. The jumper would get covered in balls, similar to how protein in the blood sticks to the nanoparticle and blocks its ability to deliver a targeted treatment.

Sajeiv's experiment is to attach antibodies to the nanoparticle, which attracts "good" proteins matching receptors on the target cell, ultimately using the protein to boost its targeting ability.

His research won first place at an international science competition held in Boston in June, following his win at the national competition. The top award at the International BioGENEius Challenge came with a cash prize of \$7,500.