

Persistent, Aspiring, Noble, Diligent, Achieving

# SHSID | TIMES

September October 2024 Edition

## DANCING ON EDGES

& MORE STUDENT STORIES

OF ACCEPTANCE  
OF A SNOWSCAPE  
OF WHAT I CALL HOME  
OF BURNOUT  
OF IMAGINATION



# The *TIMES* Team

## **Editor in Chief**

Zane Lu

## **Vice Editors in Chief**

Aaron Xue  
Cecilia Lien  
Geoffrey Ku

## **Features Editors**

Evelyn Zhang  
Norah Cen

## **Managing Editors**

James Su  
Sophia Fang

## **Director of Digital Media**

Jaeah Lee

## **Creative Director**

Jaeah Lee

## **Director of Photography**

Coco Tan

## **News**

*Geoffrey Ku*  
Aeryn Tan  
Alison Yu  
Bella Chuai  
James Su  
Jeffrey Yang  
Liris Zheng  
Luca Chen  
Sophia Fang  
William Chen

## **English**

### **Literature**

*Maegan Huang*  
Andrea Lei  
Chloe Chan  
Chloe Xie  
Eason Liu  
Elaine Chen  
Evelyn Zhang  
Gabrielle Dai  
James Su  
Joyce Chow  
Letitia Lai  
Maggie Tang  
Melinda Dang  
Necla Asveren  
Richard Song  
Ryan He  
Sophie Jin  
Yunzheng Yang  
Pete Chen  
William Xu  
Xiaoxiao Xue

### **Chinese Literature**

*Norah Cen*  
Alison Yu  
Arianna Tang  
Bella Chuai  
Daniel Zhu  
Esther Lu  
Emma Li  
Iris Lan  
Joanna Jiang  
Teresa Zhao

## **Lifestyle**

*Sophia Fang*  
Andrea Lei  
Ariel Zhang  
Bella Chuai  
Chelsea Nam  
Chingmo Zhou  
Eason Liu  
Eleanor Ding  
Esat Celik  
Felix Zheng  
James Su  
Jennifer Kim  
Joyce Chow  
Kaika Kofutaka  
Maegan Huang  
Maggie Tang  
Michelle Pan  
Milly Wang  
Rainn Ji  
Ryan He  
Samantha Li  
Sophie Jin  
William Chen

## **Student Journal**

*Chelsea Nam*  
*Sabrina Lee*  
Annie Long  
Ariel Zhang  
Chingmo Zhou  
Chloe Chan  
Esat Celik  
Jeffrey Yang  
Jennifer Shin  
Jenny Lin  
Joyce Huo  
Kevin Luo  
Liris Zheng  
Maggie Tang  
Pete Chen  
Ryan He  
Sophia Fang  
Sophie Jin

## **Science and Technology**

*Owen Dustin*  
Celene Chu  
Chanyeon Hwang  
Henry Wang  
Joyce Huo  
Milly Wang  
Rainn Ji  
Sam Kim  
Sophie Jin  
Ronnie Zhou  
William Chen

## **Photography**

*Coco Tan*  
Andrea Yang  
Angelina Lin  
Charles Zhang  
Jason Xie  
Minnie Chen  
Nicole Ni  
Ryan He  
Sunny Chen  
Tom Ding  
Will Chen  
Yuto Nakashima

## **Design, Illustration, and Digital Media**

*Jaeah Lee*  
Aaron Xue  
Alison Yu  
Angela Xie  
Angelina Lan  
Aysheila Zhou  
Camilla Basco  
Cheer Yu  
Daniel Park  
Eleanor Ding  
Emily Fu  
Sabrina Lee  
Sophie Jin  
Vanessa Liu  
Rachel Zhao  
Ryan He  
Michael Xiang  
Minnie Chen  
William Chen  
Yuming Law  
Yunzheng Yang

Cover and Feature  
Photos by Minnie Chen  
and Yuto Nakashima

**Publicity Coordinator:** Ms. Shen, Chen Li  
**Supervisor:** Mr. Ma, Feng



## Letter From the Editor

We often describe the feeling of “living on the edge” as leaning back in a chair, teetering just before a fall, but catching yourself in time. The chair, in this case, however, represents life’s pivotal moments. Maybe you’re rushing to finish a task, catching up to the bus, or squeezing every second out of a dying 2% battery. But what if we didn’t just survive these moments? What if we danced on the edges instead and embraced the chaos to its fullest?

In this issue, *Dancing on Edges*, we bring you tales of students navigating these precarious thresholds. From learning to thrive under pressure to redefining what it means to fail, these tales offer glimpses into the transformative power of life’s unsteady moments. After all, as Charles Bukowski once said, “What matters most is how well you walk through the fire.” As you navigate the pages, you’ll discover how our writers find meaning, growth, and even joy amidst the tumult. Happy reading!

Sincerely,

A handwritten signature in black ink, appearing to read 'Zane Lu', written in a cursive style.

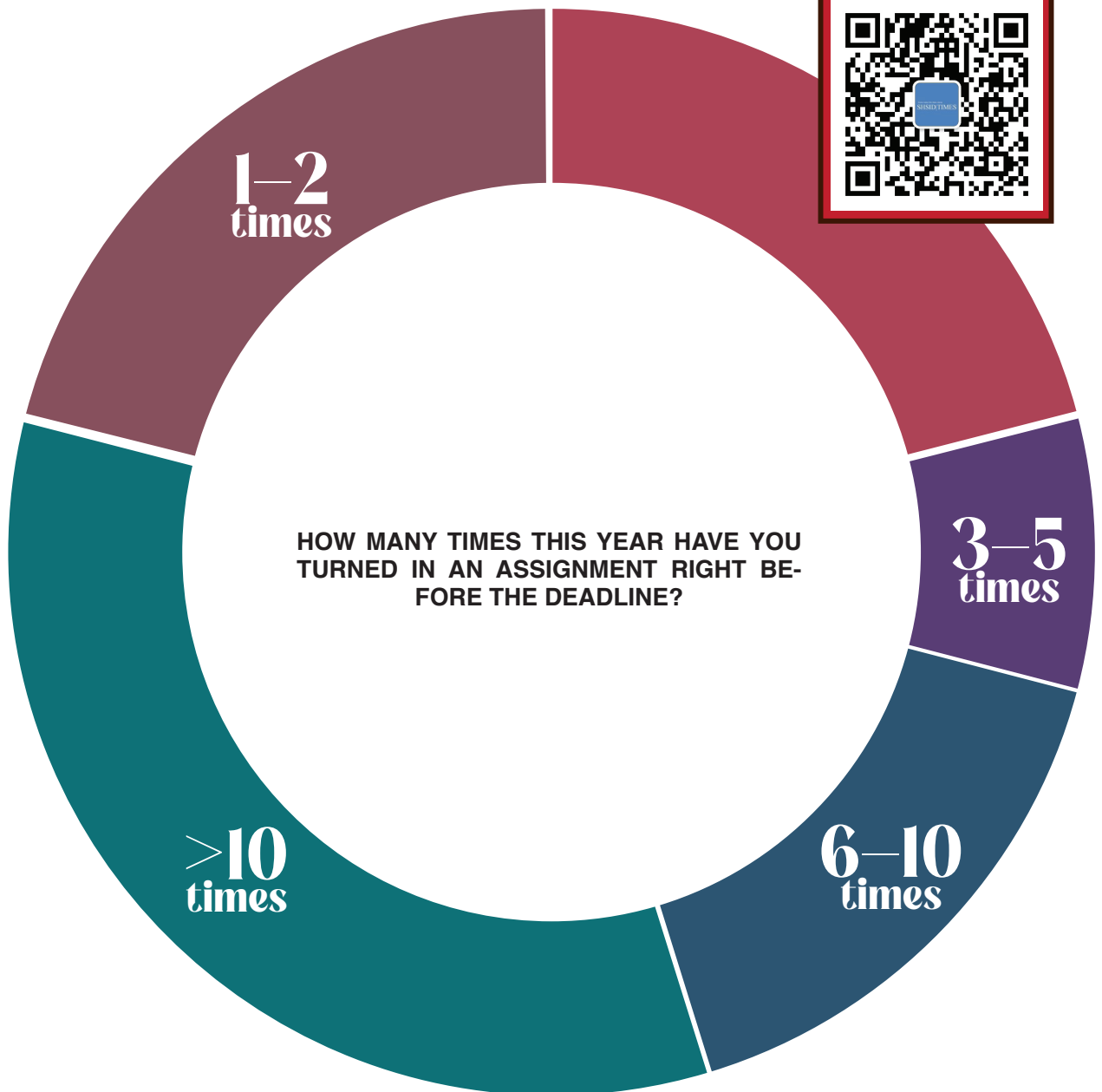
Zane Lu, Editor-in-Chief



# FORUM

The FORUM section is a space of discussion, reflection, and interaction for the readers and writers of *Times*. Whether it's comments, critiques, concerns, or other stories, this section seeks to highlight the importance of everyone's voices. To join FORUM, readers are welcome to submit either written or visual pieces or participate in the online polls on the *Times* official account. A collection of submissions and poll results will be featured in every printed edition to showcase the diverse ideas on campus.

**Follow SHSIDTimes on WeChat to participate in polls and for other ways to be a part of the magazine!**





# LETTERS

## A SIGN OF THE *TIMES*

Standing in the hallway, I stumbled upon a few editions of the very magazine you're holding right now—*SHSID | TIMES*—except those editions date back to 2010 (or perhaps even earlier). Reading their work, notably reviews of the then-latest iPhone 5 and a Maroon 5 concert—which, by the way, all happened over a decade ago—sparked something in me. School publications are not only a platform for students to showcase their exceptional work, but they are also a space for students, past and present, to express their feelings, findings, and whatever else shapes their school life. Flipping to the first page filled with editors' and designers' names, I felt a sense of familiarity, even though those unknown alumni had long since graduated from the very building I was standing in: the historic XianMian Building. Exploring these “historic” magazines truly helped me appreciate the honor of being a reader, contributor, and team member of the *SHSID | TIMES*. This, indeed, is a sign of the times. Who knows where this edition will end up a decade from now?

- Aaron Xue 11(3)





# PHOTOGRAPHY



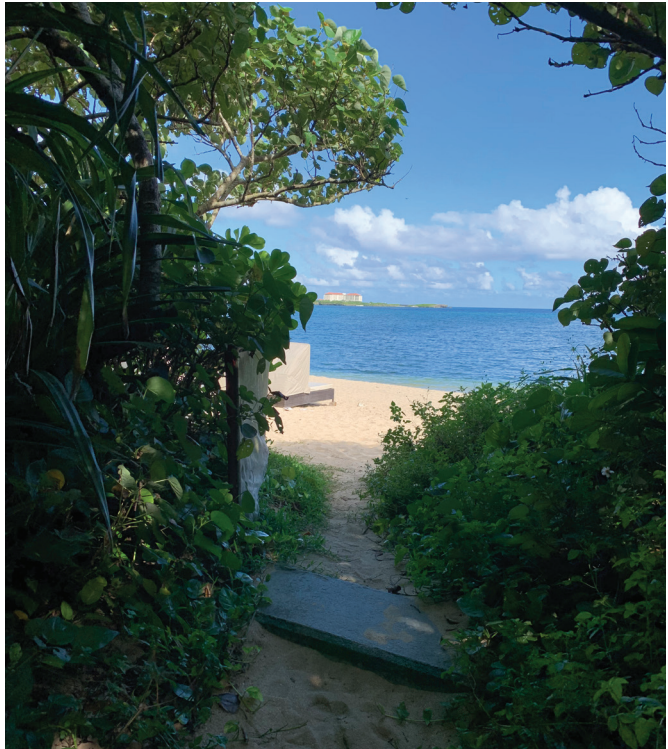
## 1 | Untitled

by Nicole Ni, Class 11(5)

Capturing the moments of beauty in daily life.







**2 | Okinawan Summer**  
by Aaron Xue, Class 11(3)

A glimpse of the warm breeze and clear waters.





# TABLE OF

## Cover Story

- 1** **2024 Sports Meet: Race to Glory**  
*Experience the 2024 SHSID Sports Meet through our article highlighting key events and notable moments.*
- 5** **SHSID Rowing Stallions Interview: Rowing into the Spotlight**  
*Get to know nine amazing members of the much-celebrated SHSID Rowing team as Aaron and Chingmo ask some serious and not-so-serious questions.*

## News

- 11** **The Hsi Building: A Transformative Education Oasis**  
*Take a look inside the innovative new Hsi Building and get a glimpse of the incredible facilities and environment of the newest addition to our campus.*

## Lifestyle

- 15** **Science Fiction: Dancing on the Edges of Imagination**  
*One trip to Mars and a space elevator please.*
- 19** **Dancing on the Edges of A Snowscape**  
*Navigating through my identity and heritage, "I wonder to myself every now and then—was it ever that important?"*

## Special Feature

- 21** **Iridescent: Losing My Breath and Winning Happiness**  
*An interview exploring Kevin Luo's singing journey from karaoke to campus competitions.*



# CONTENTS

## Literature

- 23 Smell of Tea  
*Cats call and winds blow, but still I stand.*
- 24 Wings  
*Make me vibrant once more.*
- 25 Weightless  
*Have you ever had that feeling?*
- 27 Dancing on the Edges of What I Call Home  
*Taste the flavors of love, and stress, in what I call home.  
Experience a traditional holiday through a vivid and personal  
lense.*

## Student Journal

- 29 Dancing on the Edges of Acceptance  
*Finding a balance through expectations, challenges, and  
acceptance. This is my story of creating my path.*

- 31 Dancing on the Edges of Burnout: My Story  
*"We can broaden the road we are walking on only if we learn  
how to dance on the edges instead of hanging on them in distress."*

## Science and Technology

- 33 Butterfly Wings & Nature-Inspired Technology  
*An eye-opening look into nature's applications in technology.*
- 37 Will 3D Bio-Printing Revolutionize Organ  
Transplantation?  
*Exploring the potential of a groundbreaking advancement.*
- 41 The Nobel Prize in Physiology or Medicine  
2023: Advancements in mRNA Technology  
*& understanding what its impacts.*



# RACE TO GLORY

## 2024 Sports Meet

Written by: Pete Chen, Maggie Tang, Xiaoxiao Xue

Photos by: SHSID Media Group

Designed by: Rachel Zhao



On October 10, 2024, SHSID High School once again held its annual Sports Meet. As a large-scale tradition in the school, the event is historically known for its culmination of the Olympian spirit and sportsmanship along with its firm promotion and celebration of physical education in both the artistic and competitive aspects. Every year at the Sports Meet, students and teachers bask in the joy of fruitful exercise and friendly contests, and the Meet also efficaciously punctuates the first months of a new school year with a refreshing break from regular academic activities.

This year is a significant milestone for the school with the much-anticipated return of the outdoor track field. For the past few years, the original track had been removed to make way for the construction of new facilities and parking lots, leaving our athletes without a professional track. During this period, the annual Sports Meet was relocated to the Indoor Basketball Court and the Indoor Tennis Court. While these indoor stadiums were a valid alternative, many students and teachers alike expressed that they lacked the excitement and immersive experience of the traditional track. However, in 2024, following the completion of new construction and the HSI Building, the track field was finally rebuilt. This was met with great enthusiasm from both students and teachers, which they dubbed “The Return of the Track” because it allowed the Sports Meet to be held in the formal and exciting environment that so many people have missed.

The sports meet started with unique performances from each class of grades nine to twelve that focused on an individual sport to represent. They featured elaborate dances and eager representation from students, with fancy props to further convey each topic's distinct characteristics. Each grade covered a specific theme. Grade nine focused on Chinese traditional sports, while grade ten covered general sports that were well-known to the public. Grade eleven concentrated on different holidays while grade twelve presented different colleges. With different themes from each grade, students and teachers witnessed a variety of distinct performances with their creative approach that together created excitement for the later events.

After performances from each class, students from 龙吟社, SPDC, and ASB continued with their performances. Their dances varied from graceful to upbeat and comedic (but put together), and delivered a thoughtful and cheerful message about student cooperation and expression. To top it off, there was a singing per-









formance along with Principal Ma's speech: "Journey to the West" that told students what it meant to be brave and daring against obstacles and the importance of sportsmanship. After that, students were even more motivated to perform their best on sports meets and demonstrate the true spirit of sports.

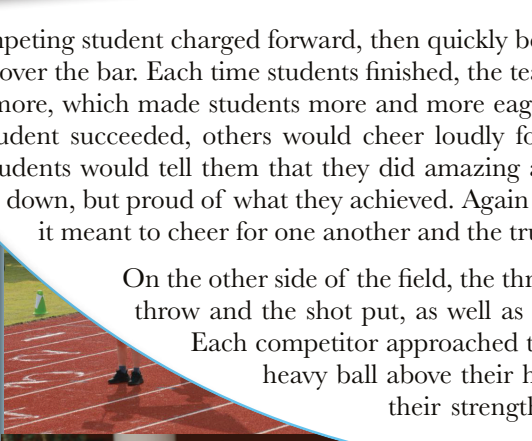
Of course, with the new track, activities involving running were the most looked forward to. Several running competitions varied based on the distance required to run, and among the many events, the relay race is, undoubtedly, the most thrilling. Teams from grades 9, 10, 11, and 12 alike lined up, each runner fully focused on their role, ready to give their all for their classmates. With batons being passed from one hand to another in seamless transitions, every sprint and leap was met with roars of encouragement from the audience. All the spectators cheered on with passion, encouraging not only their class but everyone as well, and every single athlete worked their hardest to cross the finishing line. At that moment, winning or losing didn't matter, it was the spirit that mattered. The teamwork displayed by each group and each student demonstrated our athletic pursuit and the perfect camaraderie that is unique to the art of sports.

Among the track events, Jumping made another thrilling event for students and teachers to watch.



Each competing student charged forward, then quickly bent their legs to jump high up in the air, soaring over the bar. Each time students finished, the teachers would increase the bar's height a little more, which made students more and more eager to know who would win. Every time a student succeeded, others would cheer loudly for them. Even when they didn't, other students would tell them that they did amazing and encourage them to not feel beaten down, but proud of what they achieved. Again and again, students demonstrated what it meant to cheer for one another and the true beauty of friendship.

On the other side of the field, the throwing events featured the medicine ball throw and the shot put, as well as the most diverse range of participants. Each competitor approached the event with determination, lifting the heavy ball above their heads, and preparing to hurl it as far as their strength and technique could manage. In the







process, a group of physics teachers gathered on the sidelines, offering moral encouragement while shouting scientific references, like “Increase your initial velocity!” and “Aim for a higher launch angle!”. In the end, the participants all cheered on the winners, demonstrating their sportsmanship and reflecting the moral of the Sports Meet itself.

While the track and field were the stars of the Sports Meet, many side events were also underway at the Meet. For example, the ASB held a Charity Fair next to the track and field, where clubs and other interested individuals offered unique products for purchase by other students. The revenue generated by the Fair and participants' hard work in salesmanship was donated to organizations like health centers, care centers for children with Autism, and primary schools needing financial support.

The cheerleading competition was also carried out, in which teams of dancers from each homeroom in grades 9 to 11 strived to make the best performances given 2 minutes on stage. This year's competition was an improvement from before as the competition was split into elimination and final rounds, giving more efficient use of the Grand Auditorium for the fiercer competition. After its glorious unveiling in 2021, ZhongXing building's special facilities came to the spotlight once more as laser shooting and ice skating events in the building were again held.

Looking back, the most remarkable aspect of this year's Sports Meet was the overwhelming level of participation across the student body. From the highly competitive events, like running, to the more casual ones, students from every grade and background eagerly took part. Whether it was relaying, throwing, or cheering from the stands, the spirit of the Sports Meet was evident in every corner of the track field. Teachers and staff also played an active role, not just in organizing and supervising but in encouraging students to step out of their comfort zones and embrace the challenges of the day. Some teachers even offered us with a unique performance, which we all loved! Students cheered for one another, regardless of which team or class they belonged to. For many, it was not about winning but about coming together as a school to celebrate health, effort, and the spirit of sportsmanship.



# ROWING INTO THE SPOTLIGHT

## AN EXCLUSIVE INTERVIEW WITH THE SHSID ROWING STALLIONS

Written by: Aaron Xue, Chingmo Zhou

Photos by: Ryan He, SHSID Rowing Team, Google

After the SHSID Rowing Stallions' successful performance at the 2024 Head of Shanghai River Regatta in September, we had the opportunity to sit down and chat with nine outstanding members of the much-celebrated rowing team over a Friday lunchtime.

**Congratulations on your recent major achievements, even only being established for about one year, you guys have won countless awards and recently did a lot of amazing stuff!**





## If you could use 3 words to describe rowing, what would they be?

**Brandon:** Intimidating. First of all, it takes a lot of courage to get into rowing. Continuing to pursue this sport is a challenge too.

**Chingmo:** Commitment. Rowing, compared to sports like basketball or football, is much more repetitive and quite tedious. It takes a lot of commitment to stay dedicated to the sport because we have to fight through the pain, the practices, and all the tough obstacles...it's just grinding. But at the end of the day, we're able to see the results of our hard work.

**Daniel:** Persistence. The rowing motion is simple yet hard. I practiced my rowing motion for a lot of years and it's still not perfect—our coach still has to perfect it to this day.

## Could you demonstrate the motion?

**Daniel:** It's hard to demonstrate here but we have a lot of videos and photos of our rowing in action.

**Alex:** You can sit on the ground and show us!

**David:** Yeah but you can't do the leg thingy.

## Haha it's fine, let's move to the second question. How do you succeed in this competitive sport? What does it take to be a successful rower?

**Mimi:** Just more and more training.

**Daniel:** It takes a lot of patience. In the first round of our competition, we didn't start off really well because we felt a bit rushed, so our first round's movements weren't that fluid.

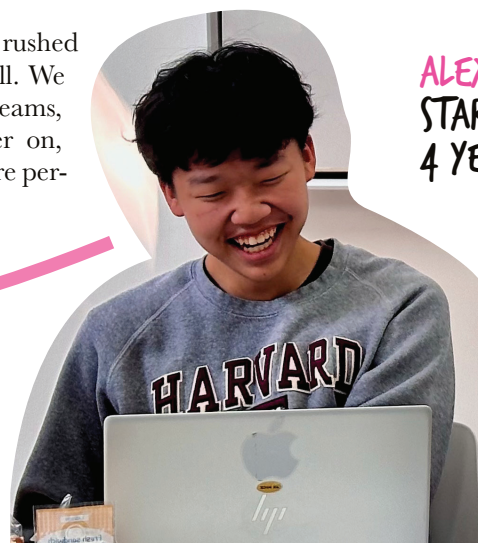
**David:** You need to be good under pressure and pain. For example, when you're competing, you might have something wrong with your boat or technique, which might cause some trouble. These things all tend to cause pressure on top of the pain that comes from exerting yourself a lot. Still, you need to perform well under these conditions.

## I'd like to know more about that first round that Daniel mentioned just now, where you guys faced some challenges.

**Daniel:** Yeah, we felt a bit rushed and did not cooperate that well. We felt that compared to other teams, we were underprepared. Later on, we realized that we needed more persistence and hard work.

**(CHINGMO):**  
STARTED ROWING  
1 YEAR AGO

**ALEX:**  
STARTED ROWING  
4 YEARS AGO



## As a newer sports team established only around a year ago, what was it like to start off from scratch and begin a new journey for the SHSID Stallions?

**Mimi:** Originally, we all came from different sports clubs, so cooperation was quite a challenging task amongst our team members. Later on, we were able to train under the guidance of a coach together, and with the help of our other co-captain and SHSID P.E. department, we were able to successfully set up this official rowing team and host weekly group trainings. Throughout this process, SHSID gave us a lot of support and it's clear that our school put a lot of emphasis on our team, despite rowing being a relatively newer sport.

I remember we started off with around ten members. Now, we've grown to twenty members. Some of our members, like a few of us here today, started off with absolutely no prior rowing experience. Still, their passion helped them improve greatly—now, they all row really fast! That's why I really want to encourage more students to participate in rowing. As long as you have the passion, you can achieve great results.



# COVER STORY



## What was the highlight of your recent major competition, the Shanghai River Regatta?

**Chingmo:** The mixed-gender boat with me, Mimi, David, and Ellen: we started off rough in the first sprint, so we had to adjust and motivate each other. In the second sprint, we beat the other team. My highlight was definitely seeing how much we improved from our first race and just knowing that we can compete on a high level.

**David:** Since we already came to the competition, we did not want to leave without displaying our best potential. We used a lot of force and effort to perform better.

**Mimi:** It's true that we had a lot of pressure at first, but luckily there was a break between the two rounds. We discussed with other teammates and our coaches about our technique and tactics—Chingmo would yell some chants to indicate when to use strength and when to sprint. This helped us to become more organized and thus we also gained more confidence.

**Chingwei:** I was an alternate, so I was yelling at the side and cheering on our team. It was great for team bonding. I really wanted our team to do well, so I helped them with stretches too.

**Daniel:** A really important moment for me was when I chatted with the five-time Olympic gold champion Sir Steven Redgrave. I asked him how to balance life and studies, and it was a very memorable moment for me. His most important point was that studies always come first.

You guys had the chance to meet some incredible figures from the rowing world like five-time Olympic gold medalist Sir Steven Redgrave as well as professional rowers from Cambridge University. What was that like?

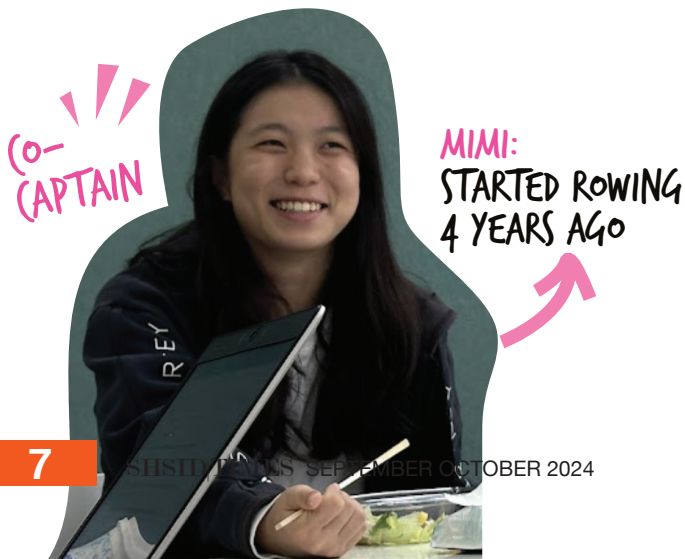
**David:** We met some rowers from Cambridge and took some pictures with them. It was really fun!

**Brandon:** I had a really unexpected experience: I took an Australian university rower on a *citywalk* for an hour. I was disappointed that I had to miss a part of the race, but I did gain a lot of inspiration from the rower. We took a look at 和平饭店 (Peace Hotel), took some pictures, and ate some 生煎包 (pan-fried buns)

**Daniel:** Do you want to explain how you got back to our competition area? Hahaha!

**Brandon:** I don't know if you should write this down, but I had to crawl through bushes to go back into the competition area.

**Chingwei:** That showed how much he wanted to watch our competition!







## What is your favorite thing about the sport?

**Mimi:** The connection with nature—you're always on a long and wide river. Apart from studying, it's a great form of relaxation.

**Alex:** You can compete with friends and also cooperate with them. When I'm bored, I can compete with my friends on different boats.

**Ryan:** Rowing taught me to have a lot of grit. It showed me the type of activity that needs frequent dedication...every step is a betterment for yourself.

## What are some future plans you guys have?

**Alex:** I'd like to have more competitions, since we currently have about 2 per year. Maybe we could also do some publicity or host activities here at school.

**Daniel:** We'd like more trainings at our own school gym.

## Alright! Why don't we let Chingwei take over and ask some questions that he prepared?

INTERVIEW CONTINUES  
ON NEXT PAGE

←  
**(HINGWEI:**  
STARTED  
ROWING 1  
YEAR AGO







## If you have, how would you describe your first time capsizing (when your boat flips over)? What were your thoughts going through that experience?

**Kingston:** I just went rowing this weekend, and when I tried to get on the boat, it capsized. My boats have capsized about four and a quarter times because one time was just my leg that fell into the water. It's always such a weird process, because you can feel like your boat is about to capsize, but you don't know how to balance the boat to prevent it.

**Chingwei:** It was my first rowing training on water. My boat capsized but I wasn't the one rowing it.



## People commonly say "Food is fuel". If you had to pick a pre-race snack or meal, what would it be and why?

**Daniel:** Monster Energy.

**Brandon:** A Snickers bar and Pocari Sweat.

**Mimi:** A banana.



## What is the weirdest superstition or race ritual you've seen someone do during a competition?

**Brandon:** I've seen people dip their hands in the water.

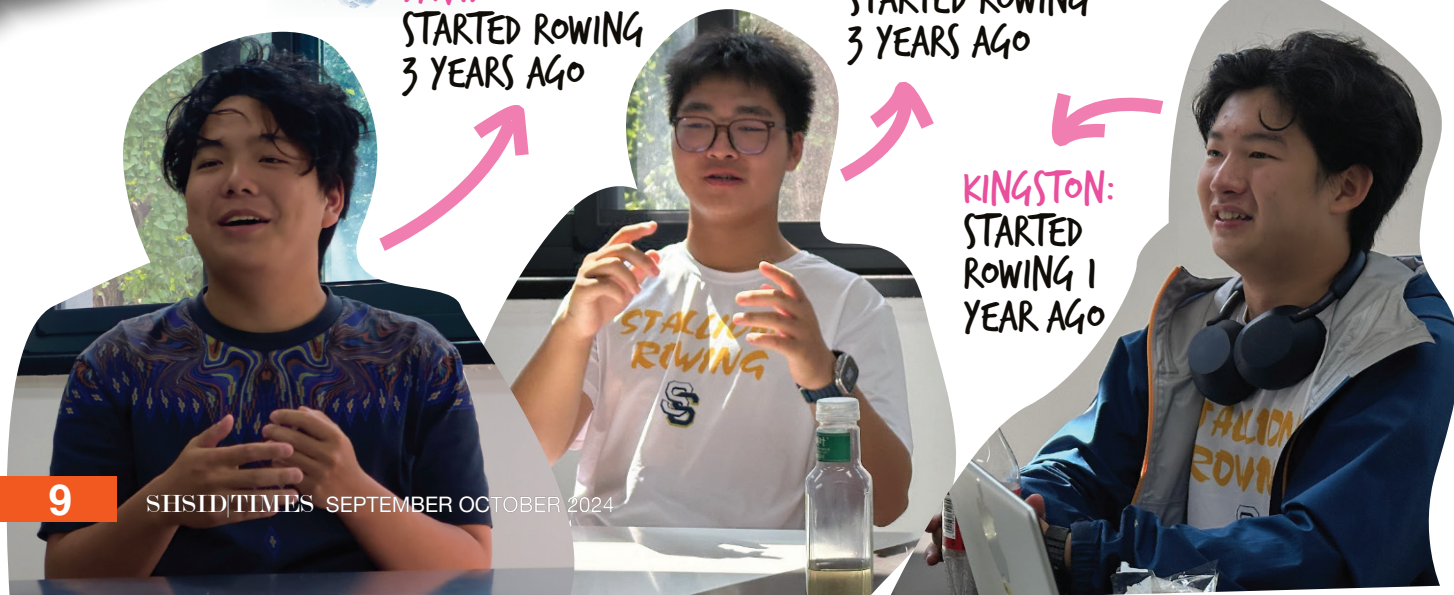
**Daniel:** There's been people that touch their boat and speak to it.

**Kingston:** Listening to music before rowing is pretty common.

**DAVID:**  
STARTED ROWING  
3 YEARS AGO

**DANIEL:**  
STARTED ROWING  
3 YEARS AGO

**KINGSTON:**  
STARTED  
ROWING 1  
YEAR AGO







### Last question. If you were given the opportunity to begin your rowing journey again, what age would you start at and why?

**Brandon:** Zero years old. You've got to start early.

**Mimi:** Middle school.

### To close off, is there anything else that anyone would like to share for our interview?

**Kingston:** I think rowing is not just a sport. We are a team and we get to meet a lot of new friends. It's very interesting and cool to meet new people.

**Daniel:** The most important thing for rowing is coopera-

tion. The overall pace for a sprint must be coordinated and you lose if you don't work well together.

**Alex:** There's something more important—direction. Rowing is a rare sport where your back is facing the endpoint, so it's important to have a good sense of direction too.

**Daniel:** Right...and safety first!

**Alright! Thank you guys so much.**

**Good luck to the SHSID Rowing Stallions!**





# The Hsi Building



## A Transformative Education Oasis

Written by: Liris Zheng

Photos from: Liris Zheng, SHSID Official Account



Three months into the academic year, the newly constructed HSI building at SHSID has garnered widespread praise and commendation from teachers and students.

Jason Wang, a fellow 7th grader, shared that the HSI building is “amazing and magnificent.”

But this sentiment is not limited to Jason. A November poll among primary and middle school students currently located in the HSI building revealed a majority preference for the new facility, with more than 70% believing it “improved” or “greatly improved” their school experience at SHSID.

Officially operational since August 2024, the HSI building is a new teaching structure intended for SHSID’s primary and middle school students. It is situated on the west side of Shanghai High School, encompassing a total construction area of 89,484.9 square meters, with 2 underground and 6 above-ground floors.

Beyond its impressive capacity, the building stands out for its multi-functionality. In addition to ordinary classrooms and faculty offices, it houses music and art rooms, scientific laboratories, conference spaces, well-equipped workshops, sports facilities, theaters, record-







ing studios, and libraries, among other amenities.

Indeed, this multifunctional and comprehensive design has greatly enhanced the efficiency of student life at SHSID.

When commenting on the new building's design, Chloe from class 7-5 exclaims, "We used to have to run all the way to the Yifu building when conducting experiments, but now it's just downstairs!"

According to Chloe, efficiency is far from the only benefit of the HSI building. She continues, "To me, the biggest highlight of this building is the cafeteria. Not only is it downstairs, but the entire design of the cafeteria is just so much cleaner, brighter, and, like, much more spacious and comfortable."

Her claims are echoed by her fellow classmate, Julian, also from 7-5, as he commended the cafeteria because "it is larger, it allows more friends to gather and talk, and the food is better." ▶

**The Hsi Building cafeteria (right)**

**"The high-quality 'campus complex' lived up to expectations, and we look forward to it having a more diverse future," articulated Ms. Xu Jing, teacher at the SHSID department of affairs.**

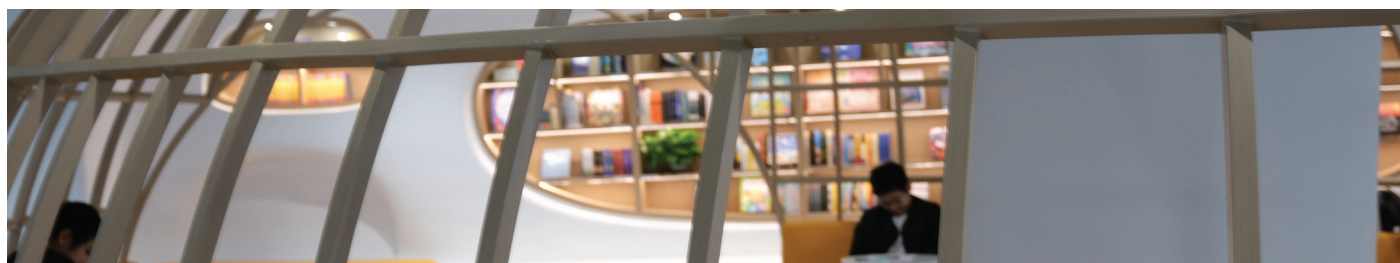




“After lunch, I love to sit in the library... it’s quiet there, and I can do my homework and read some books,” replied Claire from class 7-2, when asked about where she would usually spend her free time.

In SHSID, it is always the pursuit of knowledge that intrigues the hearts of the students. Unsurprisingly, then, the new library has become a favored haven for many students and teachers alike.

On the outside, this library embraces the design concept of “Mystic Exploration,” incorporating natural elements such as forests and caves throughout its reading spaces, creating an aesthetically pleasing and enchanting atmosphere.



“I participated in the reading buddy activity here [in the library] with the first and second-grade students during the reading month of the fourth and fifth grades,” remarked Ms. Lu, head teacher of the class whose favorite place also happens to be the library, “...it [the library] is spacious and bright, with a strong sense of design.”

However, according to Ms. Lu, perhaps even more appealing than its aesthetic design is the library’s utilization of high technology. The self-service borrowing and returning machine, she claims, allows students to access books with the utmost convenience, which has

made the library’s operation “faster and more efficient.” Indeed, the entire borrowing process is done within an instant without the need for manual assistance.

Moreover, the rows of E-Ink Pad readers and Mac computers provided by the school allowed easy access to the internet, where students can enjoy an efficient and comfortable reading experience, providing support for the research of senior students.

There are many more special designs in the library, she continues. For example, the floor heating equipped at the sunken reading area, which can ensure

comfort to the students’ reading experience, especially at the rapid arrival of winter, and the modern book search system, which can help students find books quickly and without toil. Not to mention the “24-hour smart bookcases” set up on the first floor of Area A, where students can make reservations on the platform “without having to go to the library,” and the teachers will put the books in the cabinets “in time.”

“Students can take away their favorite books by swiping their campus cards. It is so convenient!” Ms. Lu sums it up quite perfectly.







“I really enjoy the new badminton court. Its new lights and better surface provide a pleasing environment for the player’s experience,” articulated Max, fellow student in grade 10, “the lighting for example, doesn’t make me “blind” when I’m playing badminton, unlike the old one.”

Although the HSI building serves as the teaching structure for primary and middle school students, other students also have the opportunity to witness the splendor of its structure; most prominently of its sports halls, including badminton, basketball, table tennis, and squash courts.

However, the sheer size and number of rooms in the building posed some initial challenges, as a fellow seventh-grader who prefers to remain anonymous puts down, “I love the new building! But it is sometimes too large. For the first few weeks of this semester, I often got lost in it.” Many also mentioned that the HSI building is too far away from the other buildings and the rest of the school, such as the parking lots and the art center.

Thankfully, the architectural designs of the building—the full development of the platform and corridors, which formed a seamless connection with the



existing campus buildings—solved this issue to a great extent, as the student continued, “But the corridors helped a lot. After a week or so, I was able to navigate across the buildings with much ease—even more efficient than the old building!”

The HSI building construction project encompassed so large a scale SHSID has never seen before. The project has achieved mass success, winning the hearts of the students and teachers alike. But this magnificence is only made possible through those who worked behind the scenes; the dedication of the construction workers, and engineers, and moreover, the school that is willing to spend much time and resources to construct such a complex and intricate project. Without them, the HSI building, or at least its contemporary success, would not have happened. Take a moment to appreciate their efforts.

As I ventured through the intertwining halls of the HSI building just days before writing this article, stumbling upon workshop after workshop with names I’d never heard of before, countless scientific laboratories stranger to my presence, I realized just how much more there is to be discovered about the HSI building, and spontaneously, how little this article could encompass. So I end with a high note to encourage my fellow schoolmates, in or out of the HSI building, to take a moment, stroll inside, and appreciate the fascinating beauty of the HSI building. ■



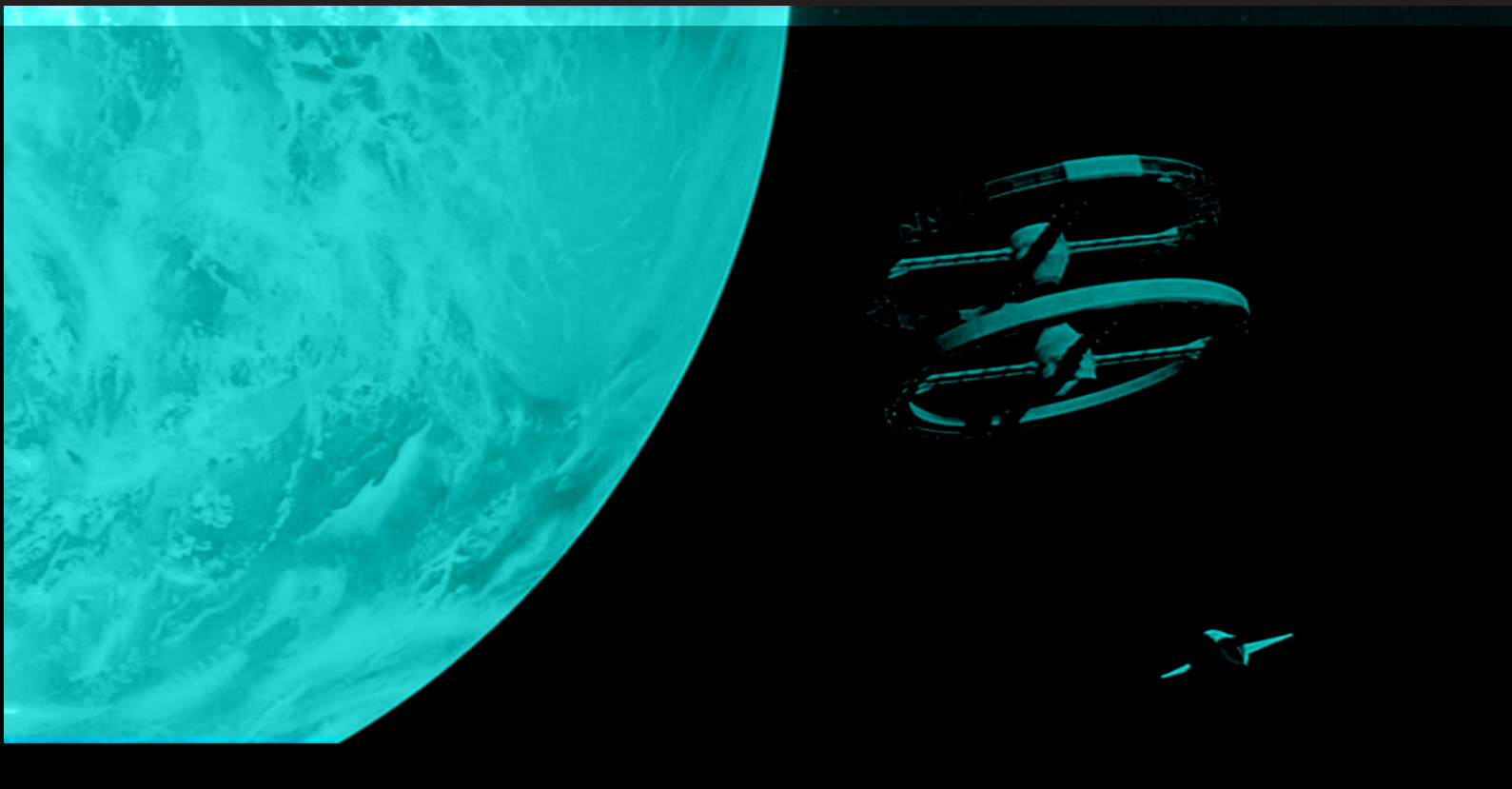


# SCIENCE FICTION: DANCING ON THE EDGES OF IMAGI- NATION

Written by: Sophia Fang  
Designed by: Erika Liao



In the vast, uncharted cosmos of human imagination, there exists a genre that stretches the boundaries of what is possible, explores the uncharted terrains of the human psyche, and dares to envision worlds far beyond the reach of our present reality. This is science fiction, a fascinating universe in which the past, present, and future merge and generate spectacular ideas. Whether it be authors who create a new reality with a brush of their pen or producers who help the audience visualize the unknown, the genre dances on the edge of human knowledge and reality itself.



## THE HISTORY OF SCIENCE FICTION

Science fiction gained momentum in the 20th century, marked by the emergence of influential figures like H.G. Wells, Isaac Asimov, and Arthur C. Clarke, whose works explored themes ranging from time travel to extraterrestrial life. In the latter half of the 20th century and into the 21st century, the genre diversified and embraced a wider range of themes and formats. The rise of cyberpunk in the 1980s, exemplified by works like William Gibson's "Neuromancer," brought a gritty and technologically focused edge to the genre. Meanwhile, feminist science fiction, represented by authors such as Ursula K. Le Guin and Octavia E. Butler, offered fresh insights into gender, identity, and societal norms. For example, Le Guin's "The Left Hand of Darkness" introduced a world where the inhabitants were ambisexual, challenging society's binary understanding of gender and the rigid distinctions between perceived

male and female behaviors. Furthermore, science fiction found new life in various mediums, especially television, with shows such as "Star Trek: Discovery" and "The X-Files". As a result, science fiction is one of the most popular genres in filmmaking.

## THE DEPICTION OF SPACE EXPLORATION

An integral part of science fiction, almost as basic context for the plot, is the development of the advanced human ability of space exploration. Many science fiction stories highlight the importance of scientific innovation and technological advancements in space exploration. Authors like Arthur C. Clarke envision advanced technologies like ion drives, space elevators,



and teleportation devices that propel humanity into the cosmos. Other stories like “The Martian” delve into the practicalities of surviving in harsh extraterrestrial environments while remaining resilient and hopeful. Even others take a more speculative approach, introducing concepts like time travel and interdimensional travel to explore space in non-traditional ways. Works like “Doctor Who” and “Interstellar” delve into these mind-bending concepts in creative ways, illustrating the advancement of human intelligence and the unlimited technological potential space exploration holds.

## DYSTOPIAN AND UTOPIAN VISIONS OF THE FUTURE


Science fiction works often serve as thought-provoking canvases, where the contrasting colors of dystopia and utopia are expertly blended to create intricate and captivating narratives. In dystopian aspects, we witness a darker side of space exploration, emphasizing the ethical and moral dilemmas that arise. Books like “Brave New World” depict a world where the public is provided with the opportunity of technological conditioning, genetic engineering, and abundant recreational drugs, only to show the audience the hidden hindrances that arise from these supposed technological benefits. Conversely, utopian elements offer glimpses of idyllic

futures marked by technological marvels, social harmony, and the triumph of human potential. For example, in movies like “Moon” and “Solaris,” the isolation and psychological toll of space travel are explored, as well as the consequences of unchecked technological progress. Science fiction authors combine innovations in both technology and society to create works that challenge the status quo and the audience’s imagination.

## CONTEMPORARY SCIENCE FICTION

In the 21st century, science fiction has engaged with pressing global issues and embraced diversity. Science fiction has always served as a conduit for human beings to express their curiosity and apprehensiveness towards new developments in the world, and digital technology is no exception. Contemporary science fiction delves into the intersection of technology and the human experience, reflecting our evolving relationship with the digital world. This connection also indicates the present concerns revolving around digital technology as it takes the world by storm: data privacy, artificial intelligence, and the oligopoly of tech giants. At the same time, science fiction keeps up with progress in society and celebrates inclusivity by featuring diverse characters, perspectives, and voices. Marvel’s “Black Panther” not only introduced a groundbreaking black superhero but also celebrated African culture and explored themes of identity, heritage, and social responsibility. It falls into the genre of Afrofuturism, a subgenre that combines





African diaspora culture with science and technology, allowing audiences to envision a future in which African culture thrives and plays a pivotal role in shaping the world.

## PERSONAL OPINIONS

I enjoy multiple aspects of science fiction: the intricate themes, moral dilemmas, technology-focused nature, and above all, the “fiction” aspect of the genre. My favorite book in the genre, *Ender’s Game*, is quite a classic, and I love it for its combination of complex characterization, scrutiny of intelligence and leadership, and fast-paced plot. Being inside Ender’s head was a truly unique experience that words cannot express, and the plot twist at the end of the book both took me by surprise and left me hungry for more. The first book in this series serves as a detailed character analysis of Ender while the later books tackle broader themes such as empathy, understanding, redemption, and the value of truth in historical narratives.

Throughout history, science fiction has been used to express the human desire to breach the unknown and envision the future. As we continue to dance on the edge of what is known and what is yet to be discovered, science fiction remains our steadfast partner, ever beckoning us to push the boundaries of what humanity can achieve.





# Dancing on A the Edges of SNOWSCAPE

Written by: Samantha Li  
Photos from: Google





**“We’re not born conformists, but life has a way of molding us into beautifully tragic puzzle pieces that fit snugly into society’s existential jigsaw.”**

As I tailored my in-game persona, my friend from New York curiously remarked, “Why did you make your character white?” It was a complex situation. In a world where we often seek validation from external sources, it’s easy to embark on a frantic search for labels. We carefully curate our Instagram profiles, add extra sugar to our coffee, and even conform to society’s idea of the “ideal” appearance by dyeing our hair chestnut, all in the hopes of gaining fleeting validation.

This was my first encounter with the concept of people being categorized by race. We’re not born conformists, but life has a way of molding us into beautifully tragic puzzle pieces that fit snugly into society’s existential jigsaw. From that moment on, I was no longer my plain, simple self. This would open a door for many more labels to come in order for others to see and recognize me. From the moment I stepped into the world, like everyone else, I was given a script to follow, roles to play, and expectations to meet. We all dance to the rhythm of societal norms, and we become masterful mimics, perfecting the art of conformity. Prior to that day, I never thought my best friend’s blonde hair would mark her as a different type of human to me. I couldn’t fathom the division, and hundreds more to come, that would set me apart from the rest of the world just so I could be accepted by it. At that time, my seven-year-old world was confined to Minnesota, often referred to as the Nordic hub of America. To understand the homogenous heritage of the “Land of 10,000 Lakes,” you need to know that St. Olaf University, just an hour’s drive from my home, sent its students back to Norway, their supposed “hometown,” every year.

Minnesota had woven a unique sense of identity around me, much like a surfer navigating the waves of Lake Superior. As I gazed at my character’s fair complexion on the screen, I couldn’t help but find the whole situation somewhat absurd. I had grown up in a state so culturally uniform that even my virtual self had adopted the Minnesota way of life. For years, I had molded digital personas that mirrored the whiteness of a Scandinavian snowscape, all the while remaining blissfully ignorant of my own Asian heritage, that everybody else except me seemed to see. I wonder to myself every now and then—was it ever that important?





# Iridescent: Losing My Breath and Winning Happiness

Interview with Kevin Luo

Layout by: Aaron Xue

## 1 How did your journey in singing begin, and what motivated you to participate in karaoke competitions back in eighth grade?

Officially, my singing journey began when I chose to enter the 8th grade karaoke competition, which is when I first discovered my singing potential. But before that, I've always wanted to perform. I was attracted to recognition and the chance to express myself, and this continues to motivate me.

When I made up my mind to sing, the 2020 art festival had already ended. When the opportunity suddenly came in March the next semester, I seized it. Originally, I was heavily anxious about whether my performance would be successful. But I kept telling myself that this was my shot, and that I wasn't going to throw it away (Hamilton reference, yes). To this day, I'm still grateful that I didn't bail out in the five weeks between sign-up and the actual competition.

## 2 Can you share some memorable moments from your early experiences such as during the karaoke competition and how they influenced your passion for singing?

I would say that all the art festivals I watched during middle school motivated me to eventually want to join them. I remember the flashing lights and the confidence of the participants, which was truly contagious. When I built up enough passion to enter the karaoke competition, I remember going down to the ZTB lecture hall an hour before the actual performance and trying to imagine what it was like to make an official performance for the first time. I would practice standing straight and try not to fall over, which later proved to be insanely difficult as my entire body was trembling when I was singing. But after my performance ended, I was able to survey the audience properly; that was when I saw the smiles of the audience and heard the cheers. This alone made the entire challenge one of the most precious memories in this entire career.

## 3 Over the years, you've participated in events like 校园十大歌手 (Top 10 Singers competition) and the art festival. What challenges did you face? How did you overcome them to continue pursuing your passion?

When I was younger, I failed a lot at singing. I still remember my 5th grade music finals, which was one of my biggest failures singing. We had to form groups and perform a song with the ukulele, and everyone had to sing. As a child, I always found it hard to control my voice. So, on that performance, I lost control and instead attracted the hatred of my groupmates. That was probably the first major setback I had in singing.

Generally, I would always fret over what song to choose for my performance. I would worry about whether the theme of the song matched with my morals while being unsure about whether the melody and beat would keep the audience awake. I would also worry about whether I would be accepted by the audience, as my failure at singing in primary



school really discouraged me at first. Though this fear became less prevalent, I would still be bothered by it while choosing songs and designing my performance.

Another challenge was when I tried to sing for the Top 10 Singers (校园十大歌手) competition in 10th grade. I admit that I was way too ambitious when I chose “KICK BACK”, but I wanted to experiment with my voice and determine the extent to which it could go. That accompanied a massive failure—I lost my breath on the final lyrics of the chorus, and the fact that some of the other members of the audience, as well as a few of my friends, were unpleasantly surprised by my song choice made me even more self-conscious. I’ve gotten over this too, but I continue to fret over my song choice.

#### 4 How do you choose the songs you perform, and what factors influence your song selection for competitions and talent shows?

I choose my songs according to three factors: my mood, the overall mood of my target audience (which can change), and whether the song I have in mind conveys that mood well with its rhythm and lyrics. For example, for the 2022 art festival, I chose “In The End” by Linkin Park, which was a song conveying the helplessness one experiences from extreme injustice. I admit that, at that time, the theme mattered less than it does now. But it partially conveyed the disbelief and self-disappointment I experienced after I failed the Top 10 singers competition, and it was definitely a song that was able to resonate with its audience.

For the 2023 art festival, I chose “Iridescent”, which is a less popular song from Linkin Park. The theme centered around reigniting hope, which I felt was an extremely important. I’ve heard a lot about the disappointing results of college applications (which I heavily disagree with because I know that they are not disappointing at all), and I’ve seen and felt the stress that the inevitable application season has inflicted upon my classmates. I wanted to convey through “Iridescent” that no matter what hardship we face, whether it be exams or college applications, we don’t need to let it extinguish our happiness or overwhelm us. This message manifests particularly well with what I think are the central lyrics of the song: “Remember all the sadness and frustration, and let it go”.

I contend that performance, especially singing, is a form of media that limits the extent to which you can express a message due to duration and adherence to rhythm. But I know that the emotion I wish to convey has been successfully received for the majority of my performances—this gives me the most satisfaction.



The smell of tea it twines my heart to a temple. World around me spinning with delight, the deep resonance of church bells make me shiver.

I walk around the dusty abandoned church, observing the obsolete pillar that had once been encompassed by people's prayers, its soul has gone dormant for long, not one being remember to come and visit.

Only left the slim, grey cat that wanders along the church accompanying the pillar. They share their minds of loneliness and void. They see no light in life, but the continuous darkness that leads them to death.

The flowers out the church all withered, drooping down their backs, with no strength to stand. They compel for whom that stand the longest, the one that is last conquered by the wind.

The cat gives out a low cry of whimper once a while, as if for adding some pleasure for the church and its "old friend". The old voice of the pillar echos in my mind, greeting me with its hoarse trembling voice.

A cool, light breathe swift away from my body, washing away the anxiety and pain, bringing a wisp of chill across my spine, making me feel as if I was holy and alone in a world nobody known.

The wind whirled curling up the dead dry leaves. The echos of bells brought me back to the present.

# Smell of Tea

Written by: Chloe Chan  
Designed by: Erika Liao, Aaron Xue



# WINGS

Written by: Maegan Huang

Photos from: Bing

then slips away from my horizon, emptiness  
settles, birds in a nest prying for another  
glimpse at the sole soul i see  
churning in my world as the city flashes  
the city burns under the harsh glare  
by me, behind me, through me as  
though i don't exist without the  
vibrant paint i bathe in, paint scorching my skin,  
my throat, as words incoherent: their flimsy smile, that  
awkward goodbye, as they all see me  
as if i lost my mind.

but i am a bird, my wings  
broken and stomped upon and the city burns me  
down with its careless stare because all i  
need to do is to get up and soar when i couldn't  
even breathe when the acid is all over me  
in my throat, my eyes, as i try prying myself open  
to let the paint in to just color me  
once more  
make me vibrant again





“But is the silent,  
unknown passing of  
one’s experiences a  
tragedy?”

# Weightless

Written by: Necla Asveren  
Designed by: Erika Liao, Aaron Xue



One can never cross the same river twice, and yet we always wish to do so, to become unmoving stones in the clear waters of a never-stagnating pool, forever submerged in an unchanging past. We often believe that to be the case, too. A last time always implies a next, we want to break free from the repetitive monotony of every period in our lives, and one can only truly notice the passing of something once the last vestiges of it are gone.

Throughout your life, you were carried and passed through many hands. Perhaps this began when your mother carried you for the nine months it took for your humanity to form, then the first doctor or nurse who held you for a short few, so very crucial seconds and passed you back to your mother again. From then you were carried and held in your parents' arms, maybe your proud grandparents' as well, and then there was a last moment in time before you took your first step when forgotten blood may have thrummed beneath the skin of your small ears, when months of instinctual learning finally gave way to your first great act of humanness, and you took your first, stumbling steps. A part of you died that day too, because when you took your first step, you left behind some elusive, fuzzy part of yourself in its place.

How many times were you held as a child, even after you could walk, because you fell just far enough into sleep during a family gathering that you could hear the warm chatter of laughter and needed to be carried to bed, or could not drag your aching feet another step, or wanted to see the world from a higher place, or so many other reasons which seemed to mean everything in the moment? Of course, we don't know, but in one instance you might have wanted to be let down. Since you're not so little anymore and it's about time you develop some distance between yourself and your parents, you didn't really consider you would ever get so big. You couldn't possibly fathom that one day your mother or father might groan as they set you down on the ground again, remark about how it felt like just yesterday that you were born - maybe they're starting to get old too - and never pick you up again. A part of you was lost when that happened, one that was still so very naïve and excited to grow up, still light enough to scoop up into your arms. It stayed behind so you could keep looking for it in the future, so you had the space to reach inside and scatter more grains of yourself along the way.

So what fills in the empty spaces left as we break ourselves apart? What fills us when we have barely lived but so much of us has died at every step?

I'm too heavy for my parents to pick up now and I haven't spoken to my first friends in years, I promised my elementary school classmates that I would keep in contact after moving to China but I never did. I've forgotten so many things and thought that there would be more chances when there were none, and we are all constantly hemorrhaging experiences and moments and pieces of


the world that are in us, yet we still grow more burdened. How are we supposed to live like this? How are we supposed to live when tomorrow always comes, when the people we cherish are always becoming strangers, when pens run out of ink and we never recognize we have peaked until it's all behind us?

But is the silent, unknown passing of one's experiences a tragedy? If only we'd known it was the last time, we would have valued it more, or would we have failed to see the wonder in simply living?

There was a last time your father or mother could pick you up, and you couldn't possibly imagine that it was the last. It was, though, and something grand ended when your feet touched the ground again. It wasn't something so tangible as your first steps, but for a short moment a bit of you broke off, and in its place, there was the weight of what you had lived instead of what was lost. You didn't notice anything had changed, maybe your parents didn't either, yet in that moment you relished the feeling of weightlessness, held onto them tightly, let life crowd out that small part of you. In that moment, you might have smiled.



## DANCING



Chuseok is such a stressful holiday.

That's what I think as I roll the bright pink Trident bubble gum to the back of my mouth. The flavor's all gone, but at least it's something to chew on. Grandma won't be happy— she thinks anything that enters the mouth before her classic buchimgae is an obscenity.

I watch as my cousins dip their fingers into the bright red of the kimchi mom brought. They make a face. Too sweet and not enough garlic, they say. We watch as my grandmothers soak the kimchi in their homemade red pepper sauce, cradle the limp cabbages as they try to save them from what they call a blasphemy. Would anyone believe us if we say this is what we eat and love back home? Mouths open wide and teeth anticipating, my friends and I would shred the cabbage that is too-sweet-and-with-not-enough-garlic in the colder months of Shanghai. But here, they're considered a profanity— piece by piece, the cabbages are painted a deeper shade of red as they slosh their handmade garlic sauce into the container.

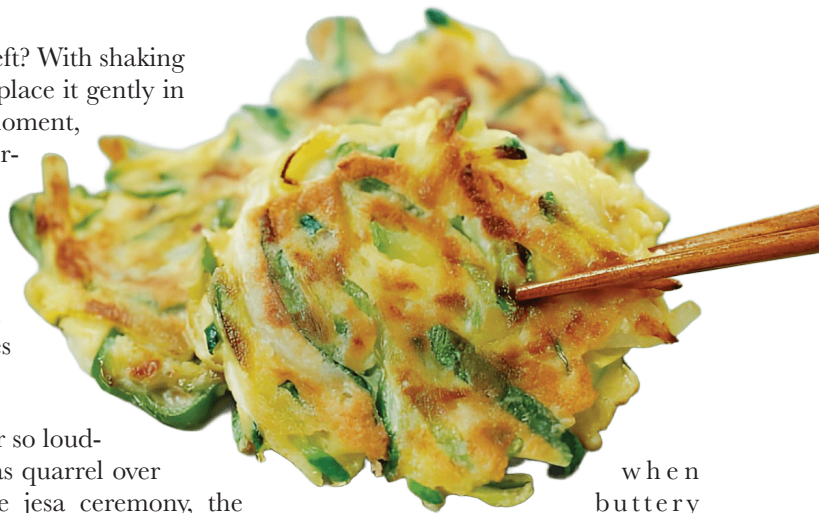
My nose momentarily fills with the fine grains of red pepper, and the nauseating heat of the kitchen is immediately worsened with the awful spice. I walk out of the kitchen, not having a clue of what to do or where to be. I think of Shanghai and the streets that turn so beautiful around this time of the year, the trees mute with the coming of colder winds. London Plane trees with a touch of yellow to their leaves. My grandfather is calling me, and the shrill voices of my aunts fill my ears again. He wants me to help set up the jaesasang, the shrine for which we pay respect to our ancestors. I freeze. Is there a certain rule as to how the food should



# ON THE EDGES OF what i call home

Written by: Victoria Park  
Photos from: Google

be placed? Should the bowl of rice be put on the right or the left? With shaking hands, I pick up the plate with three pears he hands me and place it gently in the middle of the table. The shrill voices stop talking for a moment, and I can feel the eyes grinding into my back. Only the soft whirring of the fan fills the air now, with the occasional blow of steam from the rice-cooker. Mom hurries over and slides the pears to the edge of the table. Always put the fruits at the edge of the table, they will eat it last after their meal, she whispers as she whisks away into the kitchen. There is the soft sound of someone clucking their tongue in disapproval, and all noises resume as if nothing had happened.



The fan whirrs ever so loudly again, the grandpas quarrel over they should start the jesa ceremony, the scent thickens in the room, and my body feels as though when it is about to collapse from the gut-wrenching guilt it is holding in. I run out of the house, gripping the glass cup in hand. The colder autumn air greets my face, cools it down. The season had already smeared everything in its path with its orange paint, blurring all boundaries—it is always during this time of the year when the earth and the sky seems to be one for once. In the end, I always find myself in these familiar Korean streets. Unexpected tears blur my eyes for a second, and for the first time in my life, the magnolia trees look like the London Plane trees I love so dearly.

I stand between the sky and earth, the magnolia and London Plane trees, and find myself a space in the middle. Giddy with the sudden relief from the iron clench of the guilt and confusion, I dance between the borders—their sharpest edges seem to have dulled the slightest bit. I look up at the heartbreakingly beautiful autumn sky and spit out the Trident from the back of my mouth. Wash everything down with grandma's shikhye, the rice punch she makes for me every year without fail. Once, a long time ago, we made bonds drinking bottles of it down, wrapped in the newfound radiance of mid-January. I am ready for her buchimgae now.

Would anyone believe us if we say this is what we eat and love back home?



# Dancing on the Edges of Acceptance

Written by: Annie Long  
Photos from: Bing

*When you turn to face yourself in the mirror, do you like yourself?*

When I stand to face my own reflection, gaze into my very own eyes, and peel my skin open layer by layer. Am I supposed to like what I'm seeing?

I've hardly ever had answers to anything. I didn't know if I should've chosen to buy this brand of cereal or another, if I should've chosen this shirt or another, or if I should've walked this path or another. The answers in my mind were too extreme, too boring, too effortless, too wrong.

I wanted to balance on a thin string, I wanted everything to be perfect. My cereal shouldn't be too sweet or too plain, my shirt shouldn't be too unadorned or too extravagant, and the path that I chose shouldn't be too distant or astray from the correct path. My goal was to never fall off the edge of that string, to never lose that perfect balance. One step should follow another, none of them falling one inch from that string. Shrieks pierced through my ears and through my brain from both sides of the string, both sides compelled me to step off the string. I was compelled to find a balance, to ignore the voices that glided through my mind.

In reality, however, I could never find that perfect balance. I could never walk a distance without falling or tilting. My steps, wandering in the mist, never found the balance they aimed for.

Numerous voices have bound me to a string that I fail to even see myself.



Like that time, when I was at practice. Along with a dozen other girls, I jumped and ran until I was drenched in my own sweat. My hair stuck to my flushed and warmed cheeks like a second layer of skin and my feet were tingling around, numb from all that running. I grabbed a flask of water and joined my coach on a bench. And so my coach talked to me. She told me that I could never play as well as a boy. She told me that we, as girls and as women, are born weaker. She told me that it was just the way that nature worked and that there wasn't anything we could do about it. I was confused, and all I wanted to do was to prove her wrong. I felt the need to be as good as any boy could be. I felt the pressure to live against her prejudice and assumptions.

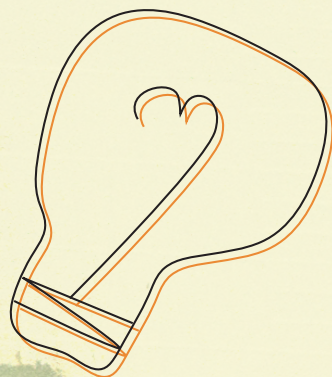
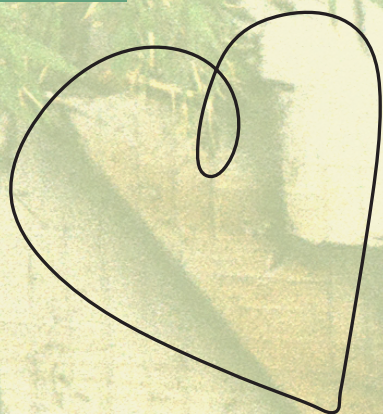
Like that time, when a man who hardly knew anything about me suddenly noticed me. I stood in front of my wardrobe, trying to choose a shirt that would be fitting for the occasion. I was going to have dinner with a man I lived under a roof with for years but hadn't shared a meal alone with until then. My hands brushed past the silky white fabric of my floral dress and landed on a more simplistic choice. I snatched a simple sports shirt along with my sweatpants as I ran to my father, jumping and spinning. For the first time, his eyes scanned me from head to toe. For the first time, he seemed to have some sort of reaction after seeing me. For the first time, he asked me, "Why are you not wearing a dress?" I chose the wrong attire and the wrong side of the string to tilt to. While one end of the string screamed comfort, the other screeched for acceptance. I didn't know which way to tilt.

I never found a way to walk a distance without tipping to one side of the string. I never even found that correct string that I was supposed to walk on.

*Does this correct and flawless path even exist at all?*



Hey,  
Burnout is O.K.



Written by: Sabrina Lee  
Designed by: Erika Liao, Aaron Xue

Looking around the campus, I cannot help but think that so many of us are all on our own edges. In the intense academic atmosphere that we all experience, we are encouraged to challenge ourselves. While it has become the norm that students should try always try their hardest, I feel that the common expectation for students to follow this norm often blinds them from seeking their true purpose of trying. Yes, we know that many of us want to get good grades and possibly get into a prestigious college. But this should not be our only goal. How are we so sure that this is a route for true happiness?

At the beginning of high school, like many of us, I did not have a clear goal. The uncertainty of thinking about future career paths scared me, and I thought I had no choice but to try and nail everything. Things did not change much even after I found my passion in the arts. Not only was I unsure about the specific field of art I wanted to dive into, many people around me also doubted my choice, saying I won't be able to find a stable job. As I tried to push myself to be the best in academics, arts, and extracurricular activities, I felt myself falling apart. The more I pushed myself, the more I felt like I was falling off the edge. Everything felt like an exhausting test rather than a process that would lead to something. The fact that I did not know what goal I was heading to made me feel lost and scared, which eventually led me to think that everything I was doing was meaningless. This greatly influenced my relationship with friends and family, as my attitude towards people completely shifted. I was always irritated, and the fact that I couldn't figure out the exact reason for my feelings irritated me even more. I became impatient and paranoid to both my parents and my friends—constantly thinking that they might stop liking me for being surrounded with negative energy around me all the time. The more I pushed the people

D  
A  
N  
C  
I  
N  
G  
M  
I  
T  
H  
N  
O  
S  
T  
R  
E  
S  
S  
O  
U  
T  
B  
R  
O  
U  
G  
H  
O  
U  
T

MY  
STORY



away from my life, the lonelier I became. That's when I realized that I was burning out.

Burnout can be a scary word. It sounds as though you are a match that cannot bring back the flame after burning till the end. When I first realized that I was having a burnout, I felt like it meant that all of my potential to succeed is used and gone. I felt defeated—like I wasn't strong enough to keep up with my own life. However, when I came to notice the fact that one's energy is finite, I learned to cope and recover. It took me a while to realize that I just needed some time to take care of myself—when I did, it felt like I was really just given a chance to take a break from everything. When my mom noticed that I was struggling, she suggested I take a step back from all the tasks that were stressing me out and to think about the reason behind why I put in so much effort for my grades. I was lucky to have someone to tell me that because it actually did help a lot. As I tried to find my true passion that would make all my efforts worth it, I started thinking about the lifestyle that would be my ultimate goal. Where do I want all these efforts to lead me to? What kind of life am I dreaming of, and what do I want to do in that life? During this time, I realized that I like to communicate with people around me and enjoy exploring my interest in psychology; combining this with my passion for fine arts, I could narrow down my career path. During the burnout, I felt like I was walking through a dark cave with no end, no light. Narrowing down on my goal for the future was the first step that made me see the light in the cave—although the workload I had to do was practically the same, having a clear purpose of doing them made them feel less stressful. I was starting to see myself being more relaxed and optimistic.

I know that I'm probably leaving many of you guys with an unsolved problem. Not everyone gets to take a break (especially in the academic environment that we are in), and not everyone knows what they want to do in the future. While I can assure you that it is normal to be lost about those things as a student, I would also like to give a small suggestion. When I say, "specify your goal for the future," I'm not talking about figuring out your dream college or dream job. Rather than thinking about what you want to do, start digging deeper by considering how you want to live. Do you want to live a life where you can encounter many new people? Or do you prefer to live quietly? After setting a dream lifestyle that you would like to live in, picture yourself in that life. What do you think is the most important thing for you to do currently in order to achieve that? Yes, I know, it would be great to reach the best at everything. However, it is important to know yourself and your limit beforehand because there is a limited amount of stress that we can handle, just like how a bowl would overflow if there's too much water poured into it. Burning out can be a common issue among students, especially in high school. Although it is very easy to feel that the burnout you are going through right now is going to last forever, it is important to keep in mind that it is a reversible condition. Take your time, take a break, and look to your fu-

ture. What is your true passion or desire that motivates you to keep on going? We can broaden the road we are walking on only if we learn how to dance on the edges instead of hanging on them in distress.

"Rather than thinking about what you want to do, start digging deeper by considering how you want to live."



I was starting to  
see myself being more  
relaxed and optimistic



# Butterfly Wings & Nature- Inspired Technology

Written by: Owen Kustandi  
Photos from: Google, Owen, Aaron





When we think of butterflies, the first thing that comes to our mind is the brilliant colors and patterns found on their wings. Some would say that butterflies are just naturally “beautiful”; however, there is more than what meets the eye. Unlike the green pigment, chlorophyll, that makes plants green, butterflies are able to create a mosaic of colors by simply choosing the directions in which they perceive light, giving them the ability to complete all the colors of the rainbow! Such a unique discovery can be implemented in our daily life.

Butterflies have complex patterns on their wings, which are made out of scales that overlap with each other. The wings of butterflies are not colored by pigments but are instead created by the scattering of light within tiny structures that is invisible to the naked eye. By the use of scanning electron microscopy (SEM), researchers have discovered that the wings of butterflies are made out of fan-like scales that are arranged in a random manner, which form air gaps, as shown in Fig 1. The different positions of these scales lead to light being scattered at different angles and different colors formed. To be more specific, the size of a scale would affect the shade, while the thickness of the air gap would influence how vivid the color is. In other words, butterflies can change their color depending on which angle the light is shone onto their wings and tuning the “air gaps” between their scales.

Structural coloration relies heavily on the structure of a material to create desired appearances. As the coloration of butterfly wings does not make use of dyes and pigments which contain harmful chemicals, it not only has high durability but is also highly environmentally friendly.

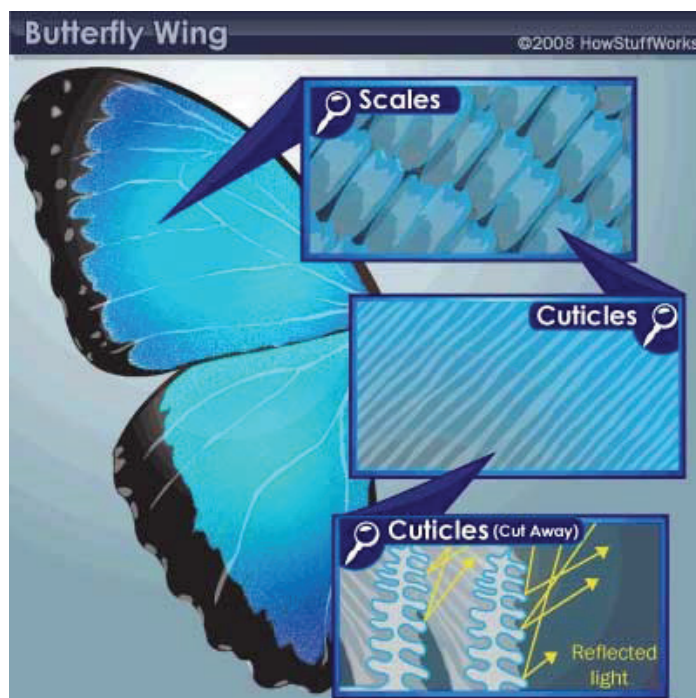


Fig 1: Structure and scales of a butterfly wing

Thus, the understanding of how butterflies can manipulate the color of their wings can lead to further inspired solutions and applications in our natural world. For example, the particles found in the scales of butterfly wings can be used in hair coloring sprays. While omitting the complex mechanisms behind controlling the specific color a person’s hair is dyed with, it is possible for us to develop an environmentally friendly way of coloring our hair. Modern hair coloring sprays contain chemicals that are harmful to the environment and not good for the hair. ▶



A technological application of the structural coloration of butterflies is in medical sensors to track neurodegenerative diseases. Traditional medical sensors require one to poke, pierce or strap wires and monitors into one's organs or skin. However, if medical sensors were to utilize the structural coloring of butterflies and their sensitivity to light, it would make the device more lightweight, practical and even low-cost. Recently, the structural color of the Morpho Menelaus butterfly wing has inspired the design of a wearable biosensor to detect neurodegenerative disease.

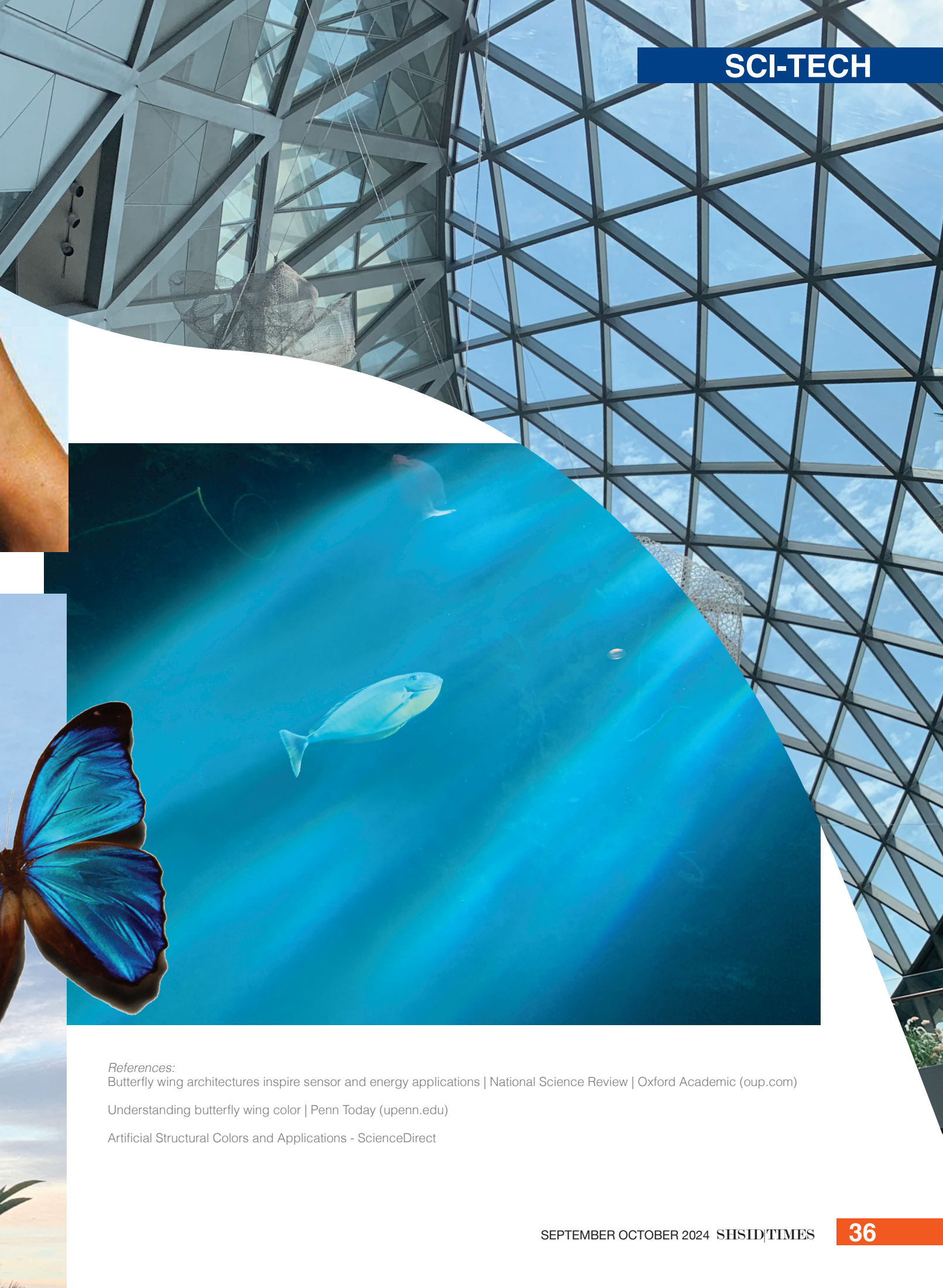
In conclusion, the structural coloring of butterfly wings is remarkable, as it does not make use of any pigments and instead utilizes light. It has inspired inventions in both technological and cosmetic industries, such as hair coloring sprays and biomedical sensors. As of right now, there has been ongoing research on further implementations of this unique characteristic of butterfly wings. Stay tuned for more amazing discoveries on what nature could bring to our lives. ■



*Fig 2: Normal hair spray containing harmful chemicals*







*References:*

Butterfly wing architectures inspire sensor and energy applications | National Science Review | Oxford Academic (oup.com)

Understanding butterfly wing color | Penn Today (upenn.edu)

Artificial Structural Colors and Applications - ScienceDirect



# Will 3D Bio-Printing

Written by: Henry Wang  
 Photos from: Google

In the modern era, numerous patients face severe diseases necessitating organ transplantation, with the majority of transplant organs sourced from donations. This unfortunate reality results in patients succumbing while waiting for a suitable organ match. Even in cases of successful transplantation surgery, patients must continue taking rejection-suppressing drugs throughout their lives, and the transplanted organs have a limited lifespan. Scientists have tirelessly worked to address these challenges, exploring various strategies, including using organs from different species.

The most recent breakthrough occurred on October 20, 2021, when surgeons at York University’s Langone Medical Center achieved a groundbreaking milestone. They successfully transplanted a genetically modified pig kidney into a human recipient within a mere 54 hours, with no signs of rejection. This remarkable success has sent ripples of excitement through the scientific community.

Yet, a more promising technology is now making its way into the public eye, advancing into the clinical trial stage: biological 3D printing. 3D bioprinting, a subset of tissue

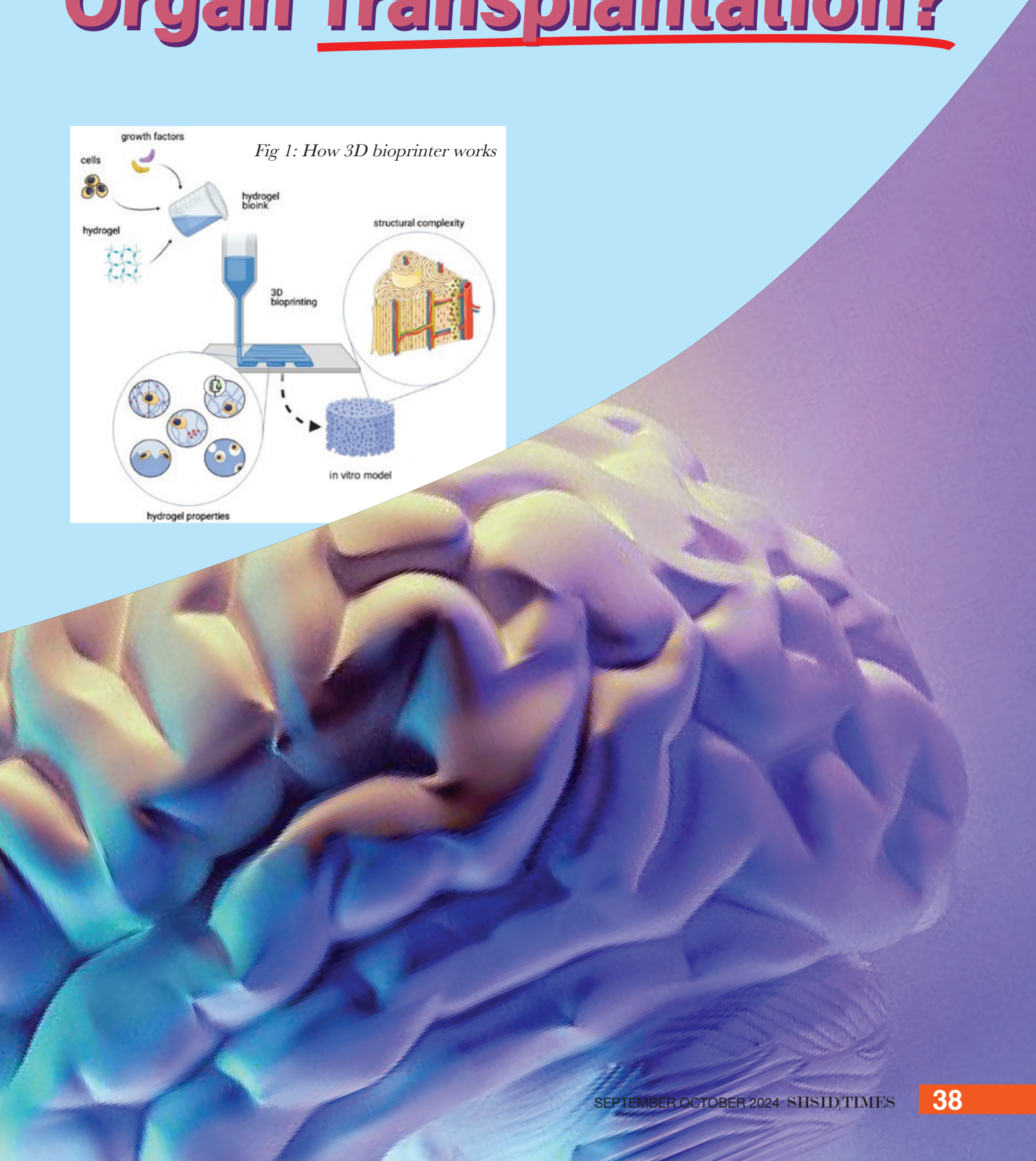
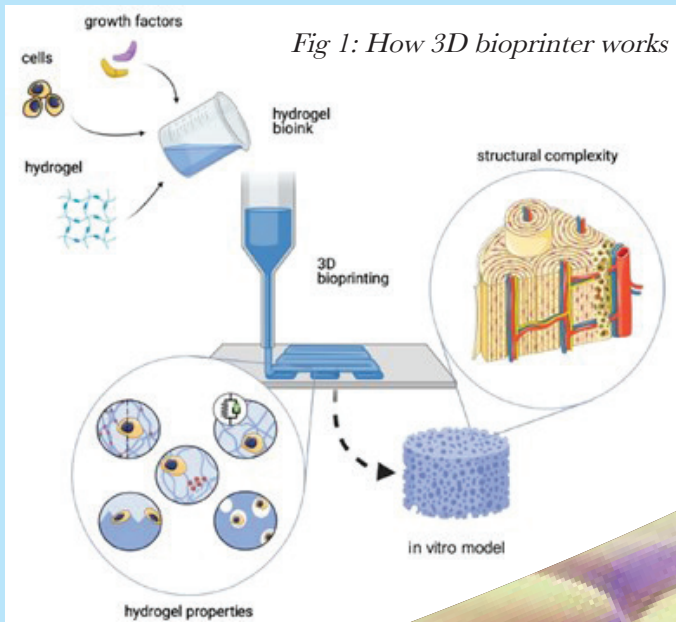
engineering, stands as an emerging interdisciplinary field. Its ascent signifies a transformative shift in medical science, transitioning from traditional organ transplantation into a new era of manufacturing tissues and organs.

3D bioprinting involves the precise deposition of bio-ink via bioprinter to create biological organs outside the body. These organs can be directly implanted into the human body or cultivated in an in vitro bioreactor before implantation, allowing them to develop and function within the body. This innovative technique leverages medical imaging technologies like computed tomography and magnetic resonance imaging to generate digital 3D models of human organs through specialized software and finite element analysis. Then, the 3D bioprinter would achieve biolink deposition based on the developed model. Bioink, the critical component, contains stem cells that can be derived from the patient’s own stem cells. This inherent compatibility with the patient’s body eliminates ethical concerns and source limitations often associated with donated organs. ▶





# Revolutionize Organ Transplantation?

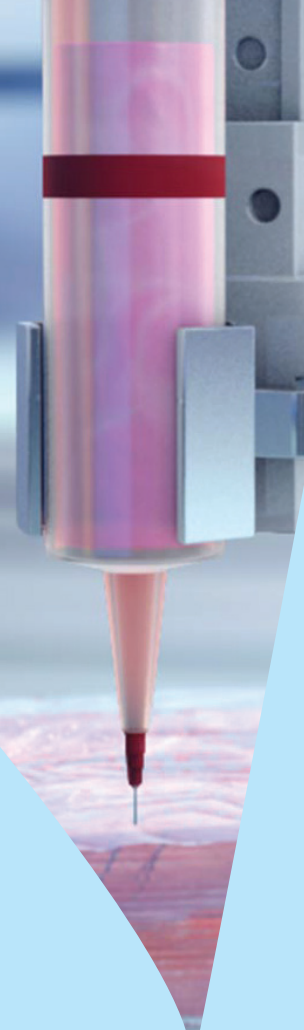




3D bioprinting uses a 3D bioprinter to directly construct living biological organs with bioink (including stem cells, biomaterials, cytokines, etc.) outside the body. The bioengineered organs can be now transplanted or cultivated in vitro before implantation, allowing for the growth and regeneration of organ tissue cells within the recipient's body. The process begins with the acquisition of human organ data through medical imaging technologies like computed tomography (CT) and magnetic resonance imaging (MRI). Subsequently, 3D modelling and mechanical finite element analysis software are employed to create 3D organ models. The bioprinter then uses these model data to precisely deposit bioink, resulting in the formation of a complex-shaped biological organ tailored to specific mechanical and physical microenvironments. The use of the patient's own stem cells in the bioink ensures superior compatibility with the recipient's body and alleviates ethical and supply constraints associated with donated organs.



*How 3D bioprinting technology works!*





Encouragingly, there have been instances of patients leading everyday lives with bioprinted organs. In a notable case, 3D Bio Therapeutics announced in June 2022 that a 20-year-old woman, born with a small and misshapen right ear, received a 3D-printed ear implant crafted from her own cells (Fig. 2).

Nevertheless, challenges remain in the clinical application of bioprinted organs due to the intricacy of human organ systems and the lag in medical device standards and regulatory specifications. Despite these hurdles, scientists are steadily progressing, and 3D bioprinting is poised to become one of the most effective solutions to the organ transplant shortage. The future is here! ■

*Works Cited:*

Cao, X., Ge, W., Wang, Y., Ma, M., Wang, Y., Zhang, B., Wang, J., & Guo, Y. (2021a). Rapid fabrication of  $\text{mg/nh4po4h2o/SRHP04}$  porous composite scaffolds with improved radiopacity via 3D printing process. *Bio-medicines*, 9(9), 1138. <https://doi.org/10.3390/biomedicines9091138>

Cao, X., Ge, W., Wang, Y., Ma, M., Wang, Y., Zhang, B., Wang, J., & Guo, Y. (2021b). Rapid fabrication of  $\text{mg/nh4po4h2o/SRHP04}$  porous composite scaffolds with improved radiopacity via 3D printing process. *Bio-medicines*, 9(9), 1138. <https://doi.org/10.3390/biomedicines9091138>

Lewns, F. K., Tsigkou, O., Cox, L. R., Wildman, R. D., Grover, L. M., & Poologasundarampillai, G. (2023). Hydrogels and bioprinting in bone tissue engineering: Creating artificial stemcell niches for in vitro models. *Advanced Materials*, 1–10. <https://doi.org/10.1002/adma.202301670>

Toghyani, S., Khodaei, M., & Razavi, M. (2020). Magnesium scaffolds with two novel biomimetic designs and MGF2 coating for bone tissue engineering. *Surface and Coatings Technology*, 395, 125929. <https://doi.org/10.1016/j.surfcoat.2020.125929>

Xu, D., Xu, Z., Cheng, L., Gao, X., Sun, J., & Chen, L. (2022). Improvement of the mechanical properties and osteogenic activity of 3D-printed polylactic acid porous scaffolds by nano-hydroxyapatite and nano-magnesium oxide. *Heliyon*, 8(6). <https://doi.org/10.1016/j.heliyon.2022.e09748>



*Fig 2: A 3D-printed AuriNovo™ “living” ear  
(Source: <https://3dbiocorp.com/science-and-technology/>)*



# The Nobel Prize in Physiology or Medicine 2023: Advancements in mRNA Technology

Written by: Kevin Wang  
 Photos from: Google

The previous 2023 Nobel Prize in Physiology or Medicine was awarded to Katalin Karikó and Drew Weissman for their significant contributions to the field of messenger RNA (mRNA) technology. This recognition acknowledged their pivotal work that has reshaped the landscape of medical genetics and revolutionized disease management.

Messenger RNA (mRNA) is a fundamental component of gene expression, responsible for transmitting genetic instructions from DNA to the cellular machinery that synthesizes proteins. While the importance of mRNA has long been understood, the laureates' work has substantially expanded its application.

Over the course of several decades, Dr. Karikó and Dr. Weissman conducted research that enhanced the stability and efficacy of mRNA molecules, thus facilitating their broader utilization.

The most widely recognized application of mRNA technology has been in the development of vaccines. The Pfizer-BioNTech and Moderna COVID-19 vaccines, both based on mRNA, have emerged as exemplars of this in-



Fig 2: Katalin Karikó and Drew Weissman received the Noble Prize for their scientific work

(Source: <https://penntoday.upenn.edu/news/katalin-kariko-and-drew-weissman-penns-historic-mrna-vaccine-research-team-win-2023-nobel>)





novation. They achieved remarkable efficacy rates and were developed with exceptional speed.

The vaccines function by employing engineered mRNA sequences to encode specific viral proteins. Once administered, these sequences instruct cells to produce benign fragments of the virus, stimulating the immune system to identify and remember them. Consequently, individuals inoculated with these vaccines gain a heightened immune response when exposed to the actual virus.

Beyond the immediate context of COVID-19, mRNA vaccines have set a precedent for the accelerated development of vaccines against various infectious diseases.

The impact of mRNA technology extends beyond vaccines. Researchers are actively exploring its potential in treating conditions such as cancer, genetic disorders, and autoimmune diseases. mRNA therapies offer precise targeting at the genetic level, potentially addressing the root causes of these conditions.

In the field of oncology, mRNA therapies offer the prospect of personalized medicine. By customizing mRNA sequences to an individual's genetic makeup, medical practitioners can develop treatments that selectively target malignant cells while preserving healthy tissue. This level of precision promises more effective and less cytotoxic cancer therapies.

The Nobel Prize awarded to Dr. Karikó and Dr. Weissman underscores the transformative potential of mRNA

technology in medicine. As research and development efforts persist, we anticipate further breakthroughs in the treatment of previously refractory diseases, continuous evolution in vaccine technology, and the potential to mitigate genetic disorders at their genetic origins.

The laureates' contributions are emblematic of the capacity for scientific discovery and innovation to shape the future of medicine. Their pioneering research has not only offered respite during a global health crisis but has also ushered in an era where the boundaries of scientific understanding define the limits of progress. The Nobel Prize for mRNA recognizes their outstanding contributions to science, reminding us of the boundless potential inherent in human ingenuity. ■

*References:*

<https://www.nobelprize.org/prizes/medicine/2023/press-release/>  
<https://www.nobelprize.org/prizes/medicine/2023/advanced-information/>  
<https://www.nature.com/collections/bieheeeddf>  
<https://www.nytimes.com/2023/10/02/health/nobel-prize-medicine.html>







**SHSID|TIMES**  
September October 2024

Shanghai High School International Division  
400 Shang Zhong Road  
Shanghai, China 200231  
Website: [www.shsid.org](http://www.shsid.org)