Insights into VinFuture Prize



Contents

2023 Impressive	02
Statistics	
Learn more about	03
the Pre-Screening	
stage	
Prize Categories	04
A recap of	05
the VinFuture	
Foundation's May	
InnovaTalk webinar:	
ChatGPT and	
Beyond	
June InnovaTalk:	06
Carbon Capture and	
Storage Solution to	
Climate Change	
Congratulations	07
to the VinFuture	
Prize Distinguished	
Members	
Science Storytime	08
What to Expect	11

Dear Distinguished Scientists,

I am delighted to introduce the third newsletter of the year 2023 for the VinFuture Foundation. As you are reading this newsletter, the 2023 VinFuture Prize has entered the pre-screening round, which will take place from June $1^{\rm st}$ to September $16^{\rm th}$.

During this phase, our 12-member Pre-Screening Committee will meticulously evaluate the most impactful and award-worthy nominations, allowing us to proceed to the final round. The evaluation process will adhere to rigorous standards, ensuring scientific integrity, fairness, and transparency. Criteria such as the degree of scientific or technological advancement, the level of impact on people's lives, as well as the project's scale and sustainability, will be given utmost consideration.

I am pleased to inform you that a total of 1,389 nominations will be considered for the third award season. This remarkable number reflects the tireless efforts and expertise of distinguished scientists like yourselves, who have contributed to the success of the nomination process.

The nominations we received for the 2023 VinFuture Prize hail from respected scientists and organizations across 90 countries and territories, spanning six continents. It is worth noting that scientists from the Americas led the nominations with 30.3%, closely followed by Asia (28.6%), Europe (24.8%), Africa (9.5%), and Oceania (6.8%).

These nominations encompass a wide range of critical disciplines, including health and wellness, energy, environment, agriculture, climate change, and multidisciplinary artificial intelligence (AI) applications.

I would also like to take this opportunity to remind you that any nominations submitted after the May 15th deadline will be automatically forwarded for consideration in next year's season. If you require any assistance with the submission process or have any inquiries related to the Prize's categories, please feel free to contact our dedicated Secretariat at secretariat@vinfutureprize.org. We are here to provide you with the necessary support.

Once again, I express my deepest appreciation for your exceptional contribution to the 2023 VinFuture Prize. It is through the collective efforts of enthusiastic scientists like yourselves that we can identify and recognize groundbreaking projects that will shape the future and improve the lives of individuals worldwide.

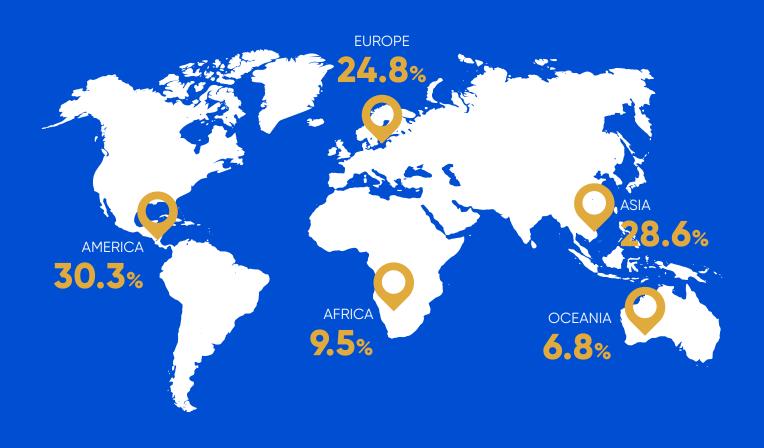
We hope you enjoy reading this newsletter, and thank you for your continued support in the development of the VinFuture Foundation and its Prize.

Warmest regards,

Dr. Thai-Ha Le Managing Director



2023 Impressive Statistics



1389

Nominations

1070

Nominators are the World's Top 2% Scientists by citations **5264**

Total Nominators

90

Countries and territories

June 1st - September 16th

The 2023 VinFuture pre-screening round takes place from June 1st to September 16th and aims to enable the Committee to meticulously evaluate the most impactful and award-worthy nominations to proceed to the final round. To ensure scientific integrity, fairness, and transparency, the 12-member Pre-Screening Committee will assess the nominations according to a rigorous evaluation process based on the highest international standards and core criteria. These criteria include the degree of scientific or technological advancement, the level of impact on people's lives, as well as the project's scale and sustainability.

Learn more about the Pre-Screening stage

"It is quite a comprehensive process, but I can assure you it's done with rigidity and robustness."

- Prof. Alta Schutte, member of the VinFuture Prize Pre-Screening Committee.

Step 1.

Collecting
all submitted
nomination forms
in recent 3 seasons
for the review
process

Step 2.

Screening on eligibility and qualification by the external evaluators

Step 3.

Entering the Pre-Screening stage

After the Secretariat has completed the process of eligibility screening all nominations received, those qualified nominations will be forwarded to the Pre-Screening Committee.

Step 6.

Shortlist by the Pre-Screening Committee

Nominations that receive the highest scores and recommendations from the Pre-Screening Committee will be shortlisted and handed over to the Prize Council for further review and decision

Step 5.

Rigorous discussion by evidence

The Pre-Screening Committee would then host meetings for several months in order to further discuss their views by evidence and compare scoring

Step 4.

Review and Selection

Each nomination is reviewed by several members of the Pre-Screening Committee



Three additional special VinFuture Prizes valued at US\$500,000 each



Innovators from Developing Countries



Female Innovators



Innovators with
Outstanding Achievements
in Emerging Fields

Role of Nominators



Nominators are invited to nominate researchers, inventors, innovators in science, engineering, technology, or multi-disciplinary approaches to the VinFuture Prize.



Nominators contribute voluntarily to the development of science by nominating inventions to the Prize.



One nominator can make more than one nomination for each of the four prize categories, including the Grand Prize and three Special Prizes for Female Innovators, Innovators from Developing Countries, and Innovators with Outstanding Achievements in Emerging Fields.



A recap of the VinFuture Foundation's May InnovaTalk webinar: ChatGPT and Beyond

Artificial intelligence (AI) has rapidly revolutionized the way we live, work, and communicate. The latest phenomenon, ChatGPT from OpenAI, has become a tipping point that quickly spiked to over 100 million users in just two months, according to The Guardian, and has stunned the world with its ability to produce high-quality answers to complex topics. It has also left us puzzled by awkward hallucinations and made-up facts masqueraded in professional language. How to take advantage of available tools to elevate our human lives without creating more problems is still a complex puzzle that requires continuous discussions and debates.

Members of the panel included the Chair of the webinar – Dr. Xuedong Huang, an expert in the field of speech and language processing with 30 years of experience at Microsoft. Dr. Huang is Microsoft's Technical Fellow and Azure Al Chief Technology Officer. He is also a member of the VinFuture Prize Council. Recently, he became a member of the American Academy of Arts and Sciences.

The distinguished speaker of the webinar was Dr. Vinton Cerf – Vice President & Chief Internet Evangelist at Google; one of the Laureates of the 2022 VinFuture Grand Prize. He is widely known as one of the fathers of the Internet and his speech presented LLMs' remarkable ability to generate relevant content but also alternative facts.

The special guest of the webinar was Dr. Jianfeng Gao – Distinguished Scientist & Vice President at Microsoft Research. He is leading the development of Al systems for natural language processing, web search, vision language understanding, dialogue, and business applications. Dr. Gao focused on the concept of augmenting LLMs with a plug-and-play model to fill the functional gap for mission-critical tasks.

Representing the Vietnamese Sci-Tech community in Al field was Dr. Hung H. Bui – the Founder and CEO at VinAl, a former expert at Google DeepMind, Adobe Research, and Nuance Natural Language Understanding Lab, and Al Center at SRI International. Dr. Bui shared insights on the opportunities and challenges for LLMs development for low-resource languages.

The discussion attracted nearly 240 attendees, including scientists, academic researchers, inventors, and entrepreneurs in science and technology from across the world.

Read more at: https://vinfutureprize.org/2023/05/19/is-chatgpt-ready-for-the-world-ai-experts-discuss-loopholes-and-potential-solutions/



The VinFuture Foundation's June InnovaTalk: Carbon Capture and Storage Solutions to Climate Change

The third webinar of the InnovaTalk series in 2023 was held from 9:00 to 10:30 am on June 28, 2023, in Hanoi, Vietnam (GMT+7). The purpose of the webinar was to explore carbon capture and storage solutions for climate change. Our expert panel consisted of leading technology experts who shared their knowledge and insights on the widespread efforts to reduce carbon emissions.

The webinar was chaired by Prof. Daniel Kammen, James and Katherine Lau Distinguished Professor of Sustainability at the University of California, Berkeley (USA) and Member of the VinFuture Prize Council. The Distinguished Speaker was Mr. Andrew Revkin, Director of the Initiative on Communication Innovation and Impact, Columbia Climate School, Columbia University (USA).

Special Guests included Prof. Nguyen Thi Kim Oanh, Emeritus Professor at the Asian Institute of Technology (Thailand); Prof. Stuart Licht, Professor Emeritus of Chemistry, George Washington University, and Founder of CarbonCorp and Carbon International (USA); and Mrs. Nguyen Thi Bich Thuy, former Chief of Staff of World Energy Council Vietnam (WEC Vietnam) and Director of Ecofes Advanced Energy Company Limited.

The webinar saw active participation from almost 200 attendees, including local and foreign scholars and specialists, who engaged in insightful and vigorous discussions. The success of the webinar serves as a reminder that the urgency of the climate change crisis is not solely an issue for authorities to address but rather a call to action for all members of society.





Congratulations to the VinFuture Prize Distinguished Members

Dr. Vinton Cerf, Laureate of the 2022 VinFuture Grand Prize

Congratulations to Dr. Vinton Cerf on officially becoming the 2023 IEEE Medal of Honor recipient

Dr. Vint Cerf, Laureate of the 2022 VinFuture Grand Prize, one of the "founding fathers" of the Internet, Vice President and Chief Internet Evangelist for Google, was recently bestowed the Medal of Honor from Institute of Electrical and Electronics Engineers for co-creating the Internet architecture and providing sustained leadership in its phenomenal growth in becoming society's critical infrastructure.

The IEEE Medal of Honor, established in 1917, is the highest IEEE award, given to an individual who has made an exceptional contribution(s) or an extraordinary career in the IEEE fields of interest. It is sponsored by the IEEE Foundation.



As of May 19th, 2023



As of May 29th, 2023

Dr. Katalin Karikó, Laureate of the 2021 VinFuture Grand Prize

Congratulations Dr. Katalin Karikó, Laureate of the VinFuture Grand Prize 2021, on receiving the Honorary Doctorate of Science degree from Harvard University.

Recently, Harvard University awarded six honorary degrees to recipients including a Nobel laureate, an actor, a biochemist, a historian, a co-founder of Radio Bilingüe, and a decorated military leader. Among the recipients was the esteemed Dr. Karikó, who was recognized for her groundbreaking work with messenger RNA and its potential. Her innovation has played a pivotal role in the development of the COVID-19 vaccines and holds promise for the treatment of many other diseases.

Furthermore, in May, Dr. Karikó was honored with an Honorary Doctorate of Science degree by both Princeton University and Brandeis University.

The VinFuture Prize team is honored to extend our warmest congratulations to Dr. Katalin Karikó on these well-deserved recognitions.

Professor Omar M. Yaghi and Professor Thuc-Quyen Nguyen

Congratulations to Professor Omar M. Yaghi and Professor Thuc-Quyen Nguyen on being awarded the 2023 Exner Medal from Austria

Professor Omar M. Yaghi, the 2021 VinFuture Prize Laureate for Innovators with Outstanding Achievements in Emerging Fields, and Vietnamese-American scientist Thuc-Quyen Nguyen, Co-Chair of the VinFuture Prize Pre-Screening Committee, have recently been awarded the Wilhelm Exner Medal 2023 for pioneering research on metal-organic frameworks (MOFs), and for valuable contributions directly impacting the future economy through the development of organic solar cells, respectively.



As of June 6th, 2023

Science Storytime

Dr. Katalin Karikó: Doing Science is Like the Rock Band Players

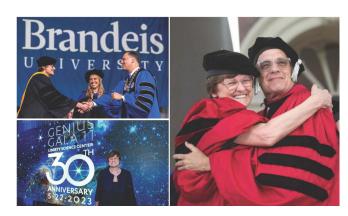
Dr. Katalin Karikó, 2021 VinFuture Grand Prize Laureate, emphasized the message that with hard work and perseverance, people can fulfill their dreams regardless of their backgrounds. She also stressed the significance of scientific awards from developing nations, which could capture attention on both local and global scales.



- You have been traveling around the world to promote the importance of science. What is your motivation for doing this? What are your main messages, or the most important messages, you want to convey to the audience in many countries, because the situation varies by country?
- **Dr. Katalin Karikó:** I want to emphasize to today's scientists that I started in a very small town with 10,000 people. My parents were not professors. My parents had an elementary school education. You don't have to be born in some special place. You don't have to be rich to pursue these goals. You can be just as myself, we lived in a house that had no running water.

It is very important that as a child, you have to even recognize what you like. If you really like to be in the spotlight, you should be an actress or actor. If you like that people will tell you what to do, you might have to go to the military. They will tell you what to do. But if you want to think about something, figure it out, or solve a problem, then science is for you. It is so much fun. Sometimes I wonder if I still get paid for having all of this fun.

I would emphasize for even the older ones that mental and physical health is above all. So I always exercise – every morning I go running. You have to select something which you enjoy so that physically you are healthy, and mentally. I am very lucky because at age 16, I learned how to handle stress, because that's what ruins many people's lives.



I would emphasize for those who are starting their career that does not compare themselves to others, because you will find that you will work harder, and you are not advancing as much. Every time you run into problems or something, you always have to ask what I could do. So, if your paper gets rejected, and your grant turned down, you have to read carefully and learn what you should do. You should change, and make it clearer what your goals are.

- Since you have traveled to many countries, I would like to ask about the situation in developing countries, because in developing countries, it's more difficult than in some developed countries. What do you think about the importance of investing in and promoting science in developing countries?
- **Dr. Katalin Karikó:** In every country, it is important to invest in science, because science is helping innovation and helping the country to emerge and have higher living standards. Smart people are everywhere. If they cannot get a chance to get educated well enough, they will get lost in society. We need all of these people. I have to say that those people, who are coming from less developed countries are fighters, are working harder because they learned.

That's how they were raised as children. They learned that hard work is part of life and they won't give up so easily. Whether they are working inside that country or whether they go abroad, the best thing is if they would go abroad, they come back and bring all of this knowledge and help the country, like in the case of Vietnam or Hungary, they would go back and help those who are there, educate and modernize the system.

Read more: https://vinfutureprize.org/2023/06/20/dr-katalin-kariko-doing-science-is-like-the-rock-band-players/



Professor Alta Schutte: Where There Is a Will, There Is a Way!

Professor Alta Schutte, who has accumulated vast experience working in both South Africa and Australia, provides insightful ideas on the multifaceted challenges and opportunities that come with conducting scientific research in countries at various stages of development. As a forward-thinking scholar and an esteemed member of the VinFuture Prize Pre-Screening Committee, she expresses her optimism regarding the potential for collaboration among scientists from diverse regions to address complex global issues that require interdisciplinary expertise and collective action.

"My advice to other women is that firstly, it is possible to have a career in science and be a mother. Be strict with how you manage your time (for instance, I never work on a Saturday or Sunday to make time for them), communicate this clearly with your family, and believe that where there is a will there is a way. I have often seen young women with small children being far more productive in research than those without, as they are more efficient in managing their time and are highly driven to be successful," she said.

Read more: $\frac{https://vinfutureprize.org/2023/05/02/professor-alta-schutte-where-there-is-a-will-there-is-a-way/$

Professor Mônica Cotta: Strive to Excel in Scientific Endeavors and Maintain Honesty

In a recent interview, Professor Mônica Cotta (University of Campinas, Brazil), a Member of the VinFuture Prize Pre-Screening Committee, shared her passion for physics and her shift towards nanomaterials in her research career. She emphasized the importance of family support and proposed initiatives to address the challenges faced by female scientists.

"It's not about what you do, but rather how well you do it. Science needs quality; bad science can actually do much harm, as history shows. Strive to excel in your scientific endeavors and maintain honesty in your interactions with others. These principles have guided me, and I don't actively think about leadership. Yet, somehow, people recognize something commendable in me which I attribute to adhering to my principles and staying true to myself," she said.









Professor Soumitra Dutta's trip to Hanoi

On June 14th, Professor Soumitra Dutta, Dean of the Saïd Business School at Oxford University, originator of the Global Innovation Index (GII), and a member of the VinFuture Prize Council, unveiled the outcomes of the aforementioned VIIR Industry Innovation Research Report at VinUni University.

VIIR was established with the aim of providing a comprehensive perspective on industry innovation for Vietnam, revolutionizing the evaluation of innovation by considering not only the national ecosystem but also innovation at the industry and organizational levels. This is the first research project of its kind in Southeast Asia and the only one in Vietnam that comprehensively evaluates industry-level innovation. The project focuses on three selected industries: healthcare, hospitality/tourism, and retail commercial leasing.

During his working trip in Vietnam, Professor Dutta also visited the administration office of the VinFuture Foundation and had a brief exchange with its staff. He expressed his excitement for participating in the series of events during the Award Ceremony Week which will be in this December.

Photos courtesy of VinUniversity.







WHAT TO EXPECT

DATE & TIME:

July 19th, 9:00 - 10:00 AM Paris/Berlin time (GMT+2), which corresponds to July 19th, 2:00 - 3:00 PM Hanoi time (GMT+7)

TOPIC:
Understanding Medication-Gut Microbiome



CHAIR:

Professor Pascale Cossart, Pasteur Institute, Perpertual Secretary of the Academy of Sciences (France) and Member of the VinFuture Prize Council



KEYNOTE SPEAKER:

Dr. Nassos Typas - Group Leader and Senior Scientist, European Molecular Biology Laboratory (Germany)



SPECIAL GUEST FROM VIETNAM:

Dr. Chung The Hao - Wellcome International Training Fellow, Oxford University Clinical Research Unit (Vietnam) The VinFuture Foundation's July InnovaTalk webinar for 2023: Understanding Medication–Gut Microbiome Interactions.

The upcoming July InnovaTalk webinar, presented by the VinFuture Foundation, will feature a panel consisting of distinguished experts in the field. These experts include a pioneering cellular microbiologist who has made significant contributions to our understanding of how bacteria infect and survive within host cells, a member of the European Academy of Microbiologists who currently leads a research group at the European Molecular Biology Laboratory (EMBL), and a Postdoc Scientist who is currently a Wellcome International Training Fellow at Oxford University Clinical Research Unit based in Vietnam.



LOCATION:

via **Zoom**



AUDIENCE:

Research students, scientists, inventors, and entrepreneurs in science and technology across the world.



LANGUAGE:

English with Vietnamese translation provided.



Please help spread the information to your network and let us know if you have any question by emailing us at secretariat@vinfutureprize.org

SUBMIT YOUR NOMINATION AT:

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Thank you very much for your support!

From the VinFuture Foundation

