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Japan Prize News
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JAPAN PRIZE

2026 Japan Prize Laureates Announced

Prof. Cynthia Dwork
Professor
Computer Science, Harvard University
USA

Prof. Shizuo Akira
Specially Appointed Professor
Center for Advanced Modalities and DDS (CAMaD),
The University of Osaka
Japan

Prof. Zhijian "James" Chen
Professor of Molecular Biology
University of Texas Southwestern Medical Center
USA

Fields Eligible for the Award:
Electronics, Information, and Communication

Contribution to leading research for building an ethical digital society, including differential privacy and fairness

The rapid digitalization of society has continued since the mid-1990s. We already enjoy many of the subsequent benefits of that development, from online administrative services to internet shopping. Recent years have seen the digital world continue to expand and become increasingly convenient, driven by the rise of generative artificial intelligence (AI). However, there are also increasing concerns about issues unique to digital society, namely, the handling of the personal information and other data we provide to improve convenience, and the potential harm that could arise.

Professor Cynthia Dwork constructed a rigorous framework that addresses these challenges by mathematically formalizing the principles of privacy protection, fairness, and decentralized trust, thereby elevating that framework into a discipline that scientifically addresses ethical issues in the digital society.

Prof. Dwork's 2006 publication on "differential privacy" was particularly significant as it made it possible to mathematically discuss the risks of personal information being leaked through the use of data. As far back as 1992, Prof. Dwork had already predicted the incoming flood of email, and proposed that a computational cost be implemented as a countermeasure. That idea has since been adopted widely under the concept of "Proof of Work (PoW)," which has become an essential part of the technological foundation that underpins the security of digital society.

Prof. Dwork is currently researching means of preventing discriminatory and biased decisions made by AI, an issue that is growing more important in our increasingly complex digital society.

Fields Eligible for the Award:
Life Sciences

Discovery of the nucleic acid sensing mechanism by the innate immune system

The ability to distinguish between "self" and "non-self" is a principle fundamental to the survival of all forms of life, from humans and other animals to plants and microorganisms. Our bodies are exposed to viruses, bacteria, and other pathogens on a daily basis, but our sophisticated immune systems are able to protect us by recognizing such pathogens as "non-self" before eliminating them.

The body's first line of defense is the innate immune system, which plays a crucial role in quickly detecting the invasion of pathogens and initiating a defensive response. However, how the innate immune system recognizes pathogens was a major mystery for many years.

A definitive answer to this question was provided by Professor Shizuo Akira and Professor Zhijian "James" Chen, who focused on the fact that pathogen-derived DNA and RNA have distinctive structures, and that they could be found inside cells in places they should not be. They went on to discover the sensor proteins responsible for recognizing such dangerous substances as foreign, and clarified the series of mechanisms by which that information is transmitted within cells to trigger an immune response.

These discoveries established the molecular basis of innate immunity and revolutionized our understanding of the entire immune system by showing that the innate immune system teaches the adaptive immune system how to react, e.g., with antibody-producing cells. Their research has led to the development of new vaccines and immunotherapies, and has provided vital insights that will contribute to the continued advancement of medical care and disease prevention in the future.

JAPAN PRIZE

The establishment of the Japan Prize was motivated by the Japanese government's desire to create an internationally recognized award that would contribute to scientific and technological development around the world. With the support of numerous donations, the Japan Prize Foundation received endorsement from the Cabinet Office in 1983.

The Japan Prize is awarded to scientists and engineers from around the world who have made creative and dramatic achievements that help progress their fields and contribute significantly to realizing peace and prosperity for all humanity.

Researchers in all fields of science and technology are eligible for the award, with two fields selected each year in consideration of current trends in scientific and technological development. In principle, one individual in each field is recognized with the award, and receives a certificate, a medal, and a monetary prize. Each Award Ceremony is attended by the current Emperor and Empress, heads of the three branches of government and other related officials, and representatives from various other elements of society.

Fields of Electronics, Information, and Communication

Achievement

Contribution to leading research for building an ethical digital society, including differential privacy and fairness

Prof. Cynthia Dwork (USA)
Born: June 27, 1958 (Age: 67)
Professor of Computer Science, Harvard University

Increased risk in exchange for a convenient digital society

Society has been rapidly digitalized through technological innovations such as the Internet, AI, and big data, and online interactions are becoming an increasingly large part of economic activity and daily life. The convenience and efficiency of digital life are built upon a vast amount of data and the analysis of that data. Data is collected everywhere, and because it contains personal and confidential information within that is accessible both directly or indirectly, there are growing concerns about that information leaking to others or being used for surveillance. (See Figure 1.)

In addition, ethical and social issues are becoming increasingly serious as operations conducted to extract usable information from the reams of data available have led to discriminatory judgements being made by AI systems and to the algorithmic control of markets. Of particular concern are the strains on our political system and the capitalist economy spurred on by privacy violations and the erosion of the public nature of cyberspace, the benefits of which should be enjoyed by society as a whole rather than being monopolized by a few select companies and countries. Recent innovations in technologies such as generative AI have only exacerbated these problems.

Amending the inequitable distribution of information and lack of ethical responsibilities and ensuring social fairness are just some of the challenges faced by digital society that cannot be resolved easily using traditional legal frameworks and ethical standards.

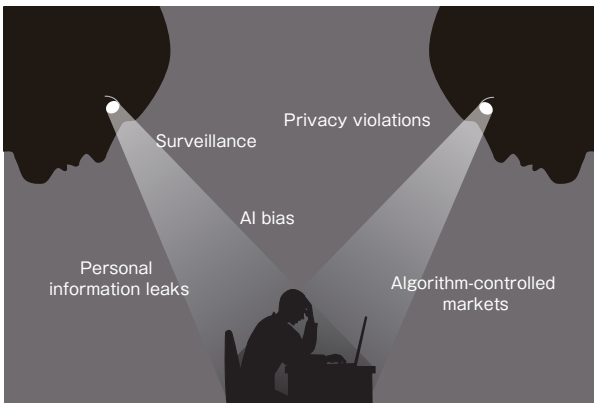


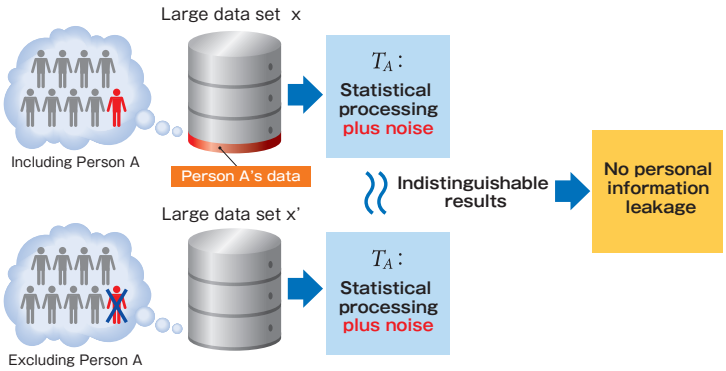
Figure 1: Concerns in a digital society
The public may be unknowingly subjected to AI and government manipulation, surveillance, and discrimination in cyberspace.

Differential Privacy – Evaluating personal information leaks

Prof. Dwork pioneered an entirely new academic field through the development of a mathematically rigorous theoretical framework for addressing ethical issues that arise in a digital society. Her 2006 proposal on “differential privacy” effected a particularly profound transformation in the way that personal information could be protected in the era of big data.

Differential privacy is a mathematical formulation guaranteeing that personal information within a set of data will not be revealed during analysis through presenting it in a way that it remains unchanged whether the data on a specific individual is included or not. (See Figure 2.) More importantly, it allows for the risk of personal information leaks to be evaluated mathematically before the public release of statistical data.

Furthermore, it has been shown that the intentional addition of a moderate amount of noise to the results of a statistical analysis can maintain its usefulness, and it can simultaneously ensure a result meets the desired standards for privacy protection, which has led to the use of this technique in various technologies and other products. Differential privacy has allowed companies and governments to obtain statistical information essential to the running of society



Mathematical basis for protecting personal privacy during big data analysis

This equation shows that the absolute value of the natural logarithm of the ratio of probabilities that the statistical algorithm TA (including noise addition) will output the same result for two data sets x and x’ will be below a threshold ε. The lower the value of ε, the stronger the level of privacy protection becomes.

$$\left| \ln\left(\frac{\Pr[T_A(x) = t]}{\Pr[T_A(x') = t]} \right) \right| \leq \epsilon .$$

Figure 2: Protecting personal information through “Differential Privacy”
If the results of statistical analysis of large data sets cannot be distinguished from each other when the content of x and x’ differ only by the inclusion or exclusion of a single individual’ s data, personal information about that individual cannot be extracted. In other words, the individual’ s personal information would be therefore protected. Based on this idea, the amount of additional “noise” needed to prevent the leakage of personal information during statistical analysis can be computed mathematically.

while protecting user privacy, and it has been adopted for use in various services offered by major global IT corporations such as Apple, Google, Meta, Microsoft and NTT Docomo, and it was also used during the 2020 US Census.

Adopting the Proof of Work concept in cryptocurrency management

In 1992, Prof. Dwork had already predicted that the world would face a flood of spam email in the future, and gained attention for her proposal that a computational cost be implemented as a preventative mechanism. Her idea was that casual operations could be prevented by imposing a set amount of computational work and thereby incurring an economic cost when sending emails, creating transaction records, or performing other tasks. (See Figure 3.) This concept later came to be widely-known as “Proof of Work (PoW),” and it is used in the blockchain technology used for cryptocurrency systems, which first appeared in 2009. This demonstrated that reliable financial transactions are possible without a bank or other central administrator so long as the parties involved share a ledger of transactions made. In this way, an entirely new and egalitarian information sharing system was created.

Towards a secure and equitable digital society

In 2011, out of concern regarding the possibility that AI could make judgements based on societally inappropriate attributes such as race, gender, and age, Prof. Dwork began working on an algorithmic framework that would mathematically define and guarantee fairness called “Fairness through Awareness.” Prior to this, she built a framework that could more rigorously guarantee the security of encrypted communications called “Non-Malleable Security”.

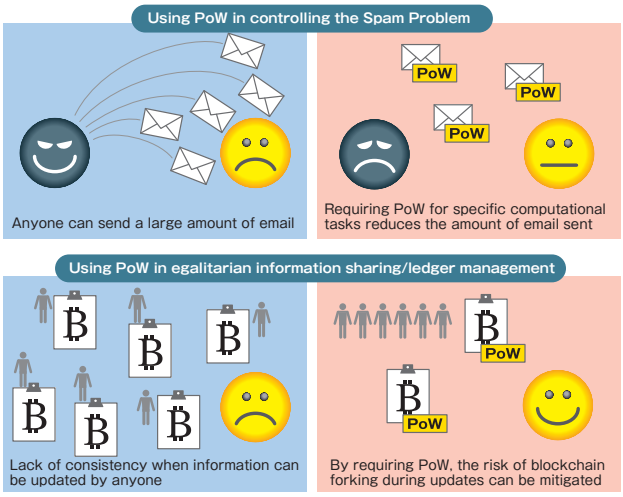


Figure 3: The role of Proof of Work (PoW)

Casual operations, whether malicious or not, can be prevented by requiring a set amount of computational work to be completed whenever emails are sent (top) or transactional records are created (bottom). This maintains order in a digital society.

These research projects spearheaded the exploration of the social and ethical risks underlying online economic activity and algorithm use that has grown with the continued development of information technologies, and offered a theoretical mathematics-based solution that could be harnessed before that growth could have a severely negative impact on society. It was not merely an abstract proposal, but is in fact already in wide use as the theoretical core that maintains the reliability of global information infrastructure and economic systems, all while continuing to protect the privacy and security of individual citizens. (See Figure 4.)

Prof. Cynthia Dwork is engaged in a wide range of collaborative research projects truly beneficial to society, and through that work, she has had a hand in the education of many talented individuals. Alongside these researchers, she will surely continue to be a driving force in protecting order in our increasingly complex digital society.

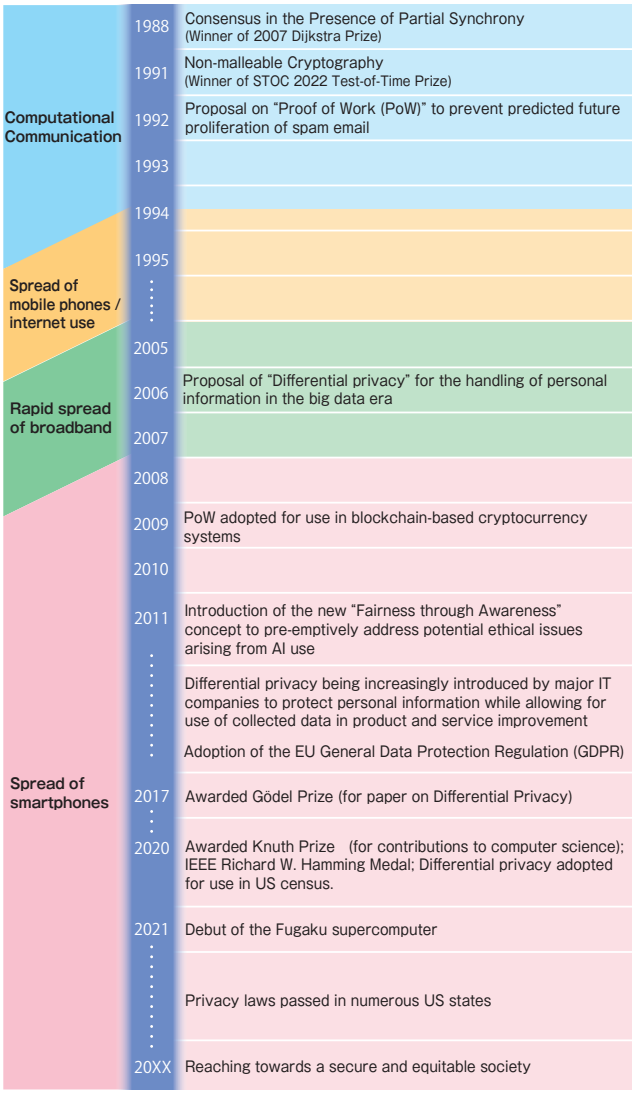


Figure 4: The development of digital society and Professor Dwork's achievements

As digital society began to take form at the beginning of the 1990s, Prof. Dwork foresaw the ethical issues that could arise in the near future, and built a theoretical foundation to prevent such issues through rigorous mathematical models. She is currently working on ethical issues arising from the emergence of AI society.

Fields of Life Sciences

Achievement

Discovery of the nucleic acid sensing mechanism by the innate immune system

Prof. Shizuo Akira (Japan)

Born: January 27, 1953 (Age: 72)
Specially Appointed Professor
Center for Advanced Modalities and DDS (CAMaD),
The University of Osaka

Prof. Zhijian "James" Chen (USA)

Born: January 1, 1966 (Age: 60)
Professor of Molecular Biology
University of Texas Southwestern Medical Center

Activating the immune system through nucleic acid recognition

Humanity has survived to this day by fighting off pathogenic infections caused by viruses and bacteria. The mechanism that identifies pathogens in the body as "foreign" and defends the body is called the immune system.

The immune system has two sub-systems called the "innate immune system," in which the central role is played by macrophages and dendritic cells, and the "adaptive immune system," in which T cells and B cells play the central role. (See Figure 1.) Innate immune cells swiftly detect pathogens that have invaded the body, whereupon they produce cytokines and present pathogen-derived antigens on the surface of the cell. These two actions induce the adaptive immune system to activate cells with characteristics that match the pathogen, and to produce antigen-specific antibodies. Antibody-producing cells differentiate into memory cells that remain in the body for a long period of time, which allows them to rapidly produce antibodies and prevent infection whenever the same pathogen invades the body again.

It was already known that part of the immune response was the activation of the immune system by nucleic acids such as pathogen-derived DNA and RNA, but how that led to the activation of the adaptive immune system remained a major immunological mystery.

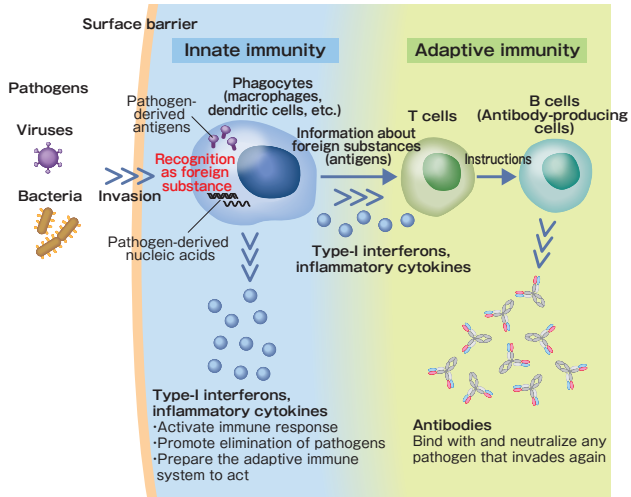


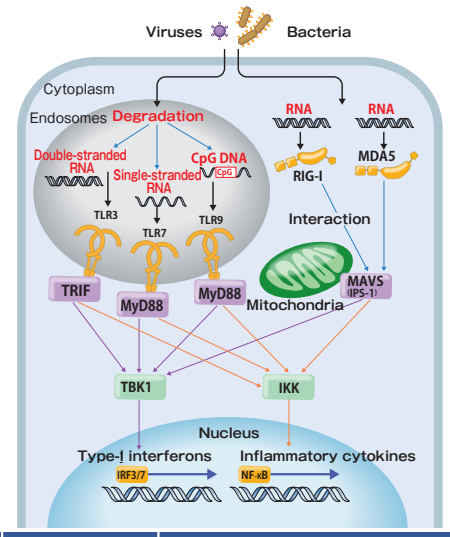
Figure 1: Mechanisms of the immune system

In the innate immune system, phagocytes recognize pathogen-derived nucleic acids as foreign substances, whereupon they release type-I interferons and inflammatory cytokines. This activates an immune response in the surrounding area, eliminating the foreign substance at the same time as it prepares for the adaptive immune system to begin working. This induces adaptive immunity; B cells are activated via T cells, and antibodies are produced.

Establishing the basic principles of nucleic acid recognition in innate immunity

Phagocytes ingest and degrade pathogens and play a central role in innate immunity, but how do they identify substances as pathogens? The end of the 20th century saw the publication of numerous studies that solved this mystery by showing that phagocytes have "sensors" that are able to detect pathogens. (See Figure 2.) A prime example of those sensors are the proteins called "toll-like receptors" or TLRs.

In 2000, Prof. Akira revealed that a TLR called TLR9 recognizes bacterial DNA, and in 2002, he revealed that TLR7 recognizes single-stranded viral RNA. In addition, he contributed to the overall understanding of how TLR signaling works by elucidating downstream molecules such as adaptor proteins, kinases, and transcription factors. These discoveries demonstrated for the first time the fundamental



Symbols used in figure above	Name	Function
	Sensor	Recognizes viral/bacterial DNA and RNA
	Adaptor protein	Binds to sensors and transmits information it receives to other molecules
	Kinase	An enzyme that turns substrates on or off through phosphorylation
	Transcription factor	Activates cytokines and other immune-related genes

Figure 2: Sensors and signaling used for nucleic acid recognition in the innate immune system

Phagocytes ingest pathogens that have invaded the body and detect pathogen-derived nucleic acids in the phagocytic endosomes and cytoplasm. TLRs on the endosomal membrane detect double-stranded viral RNA(TLR3), single-stranded RNA (TLR7), and unmethylated CpG sequences specific to bacterial DNA (TLR9), while RIG-I and MDA5 detect viral RNA in the cytoplasm. These sensors use adaptor proteins and kinases to activate transcription factors, which results in the production of type-I interferons and inflammatory cytokines.

principles through which innate immunity works: by directly identifying pathogen-derived nucleic acids and triggering an immune response.

Prof. Akira also genetically modified mice to clarify the roles of RIG-I and MDA5, which detect viral RNA in cytoplasm, and the molecules that act downstream of them. He discovered that pathogen-derived DNA in cytoplasm is detected not by TLRs but by distinct sensors that induce the immune response, which laid the foundation for research into the DNA response system that was later developed and clarified by Prof. Chen and other researchers. (Further explanation below.)

These discoveries have advanced our understanding of immune-system-related diseases to a significant extent. Furthermore, identifying the mechanisms by which nucleic acids activate the innate immune system led to the development of nucleic-acid-based adjuvants (substances used in vaccines to enhance an immune response) and provided a molecular foundation for the mRNA vaccines developed during the COVID-19 pandemic.

The cGAS-STING pathway: sensing cytoplasmic DNA

The research of Prof. Akira established the fundamental principles through which nucleic acids are recognized in the innate immune system. However, the key unsolved point in that framework was the sensor that detects pathogen-derived DNA in cytoplasm. Prof. Chen was able to provide a clear answer to that as-yet unresolved puzzle, and in doing so, he pushed research into innate immunity to the next stage.

In 2013, Prof. Chen identified a sensor protein that detects cytoplasmic DNA called cGAS. (See Figure 3.) He went on to unravel the cGAS-STING pathway, through which cGAS detects DNA and produces cGAMP, which then triggers an immune response via a protein called STING. This pathway was thus revealed to be an important defense mechanism against infection by DNA viruses.

The cGAS-STING pathway also plays a role in triggering an immune response through detecting DNA abnormalities in cancer cells. This pathway can currently be artificially activated using small molecules, and investigations are actively underway into how this pathway can be targeted in cancer immunotherapy.

It was later discovered that bacteria also use a DNA recognition system similar to cGAS when detecting phage virus infections. This illustrates that the mechanism of sensing nucleic acids to initiate immune responses is an evolutionarily conserved defense strategy that is universal.

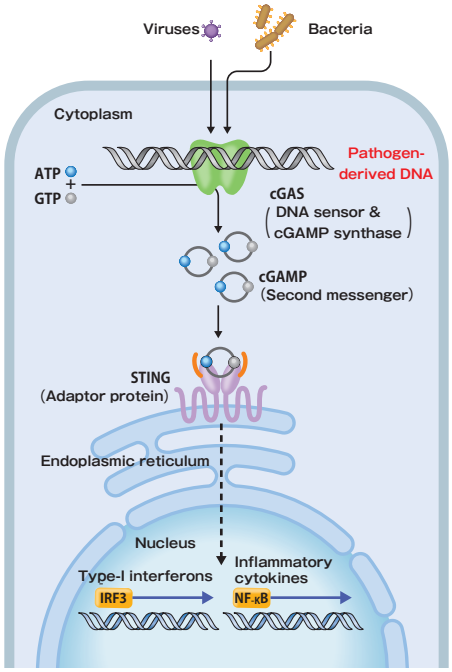


Figure 3: The cGAS-STING pathway

When pathogen-derived DNA exists in cytoplasm, it is detected by cGAS, which produces the second messenger cGAMP. cGAMP then binds to STING and activates it, which induces the production of type-I interferons and inflammatory cytokines.

How these discoveries have contributed to medical research

It is evident that the research efforts of Professor Shizuo Akira and Professor Zhijian "James" Chen have complemented each other in clarifying how nucleic acids are recognized in innate immunity. (See Figure 4.) Their discoveries transformed our overall grasp of innate immunity, significantly advanced our understanding of infectious diseases and immunology, and have opened new avenues of study for vaccine research.

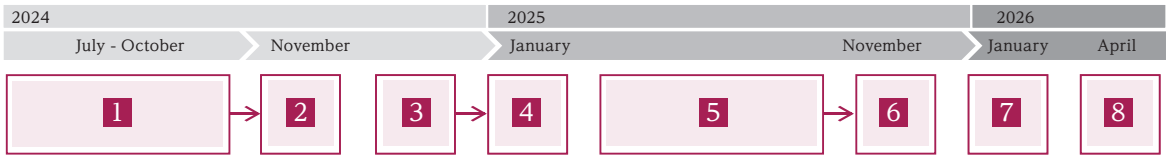
Their research has directly contributed to improving the health and welfare of humanity, and it is already being used in vaccine development and other aspects of medical care. Their research is expected to lead to even more innovative applications in the treatment of autoimmune diseases and cancer in the future.

	Prof. Shizuo Akira's Research	Prof. Zhijian Chen's Research
2000	Identification of TLR9, which recognizes bacterial DNA	
2002	Discovery of RNA-like compounds (imidazoquinoline compounds) which activate immune response via TLR7	
2005	Identification of MAVS (IPS-1) downstream of the RIG-I and MDA5 pathway in cytoplasmic virus response	Identification of MAVS (IPS-1) downstream of the RIG-I and MDA5 pathway in cytoplasmic virus response
2006	Clarification of the role of cytoplasmic RIG-I and MDA5, which recognize different viral RNAs	
2013		Discovery of cGAS, which recognizes cytoplasmic DNA, and clarification of the cGAS-STING pathway

Figure 4: Major achievements by these two researchers that clarified the mechanisms of nucleic acid recognition

Nomination and Selection Process

- Every November, the Field Selection Committee of The Japan Prize Foundation designates and announces two fields in which the Japan Prize will be awarded two years hence. At the same time, the Foundation calls for over 16,000 nominators, strictly comprised of prominent scientists and researchers from around the world invited by the Foundation, to nominate the candidates through the Web System. The deadline for nominations is the end of January of the following year.
- For each field, a Selection Subcommittee conducts a rigorous evaluation of the candidates' academic achievements. The conclusions are then forwarded to the Selection Committee, which conducts evaluations of candidates' achievements from a wider perspective, including contributions to the progress of science and technology, and significant advancement towards the cause of world peace and prosperity, and finally the selected candidates are recommended for the Prize.
- The recommendations are then sent to the Foundation's Board of Directors, which makes the final decision on the winners.
- The nomination and selection process takes almost two years from the time that the fields are decided. Every January, the winners of that year's Japan Prize are announced. The Presentation Ceremony is held in April in Tokyo.



1 Consider the eligible fields for the 2026 Japan Prize (Board of Directors)
Electronics, Information, and Communication
Life Sciences

2 Determine the eligible fields for the 2026 Japan Prize (Board of Directors)

3 Invite the nominations

4 Closing of the nominations

5 Japan Prize (Selection Committee)
Electronics, Information, and Communication (Selection Subcommittee)
Life Sciences (Selection Subcommittee)

6 Selecting the Laureates of the 2026 Japan Prize (Board of Directors)

7 Announce the Laureates of the 2026 Japan Prize

8 The 2026 Japan Prize Presentation Ceremony

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President, RIKEN
Former President, The University of Tokyo

Deputy Chairperson

Hiroyuki Mano
President
National Cancer Center

Members

Mariko Hasegawa
President, Japan Arts Council
Professor Emeritus
The Graduate University for Advanced Studies, SOKENDAI

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Vice Program Director, Fundamental Quantum Science Program,
TRIP (Transformative Research Innovation Platform), RIKEN
Professor Emeritus, Kyoto University

Masayuki Matsushita
Director
The Japan Prize Foundation

Yasutaka Moriguchi
Director, The Japan Prize Foundation
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University of Tsukuba

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Director, Keio University Regenerative Medicine Research Center

Tatsuya Okubo
Presidential Advisor, The University of Tokyo
Professor, School of Engineering, The University of Tokyo
Director
Center for Strategic Promotion of Green Transformation, The University of Tokyo

Hiroto Yasuura
Vice-Director-General, National Institute of Informatics,
Inter-University Research Institute Corporation,
Research Organization of Information and Systems
Professor Emeritus, Kyushu University

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National Institute of Informatics,
Inter-University Research Institute Corporation,
Research Organization of Information and Systems
Professor Emeritus, Kyushu University

Deputy Chairperson

Hiroshi Imai
Dean, Professor
Faculty of Mathematical Informatics, Meiji Gakuin University

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Waseda University

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Professor, Graduate School of Frontier Sciences, The University of Tokyo

Akihisa Tomita
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National Institute of Information and Communications Technology (NICT)
Professor Emeritus, Hokkaido University

Tomohiko Uyematsu
Director, Specially Appointed Professor
Tokyo Shibuya Study Center, The Open University of Japan
Professor Emeritus, Institute of Science Tokyo

Specialist

Masato Okada
Professor
Graduate School of Frontier Sciences, The University of Tokyo

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Kyosuke Nagata
President
University of Tsukuba

Deputy Chairperson

Yukiko Gotoh
Professor
Graduate School of Pharmaceutical Sciences,
The University of Tokyo

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Distinguished University Professor
Advanced Research Initiative, Institute of Integrated Research, Institute of Science Tokyo

Kenya Honda
Professor
School of Medicine, Keio University
Team Director
RIKEN Center for Integrative Medical Sciences

Yasunori Kanaho
Executive Director
University of Tsukuba

Shigeru Kuratani
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Senior Visiting Scientist
RIKEN Center for Biosystems Dynamics Research
Honorary Scientist, RIKEN

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Takeshi Omasa
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Graduate School of Engineering, The University of Osaka

Teppei Shimamura
Professor
Medical Research Laboratory, Institute of Integrated Research, Institute of Science Tokyo

Keiko Sugimoto
Team Director
RIKEN Center for Sustainable Resource Science

Hiromi Watanabe
Senior Research Technician
Institute for Extra-cutting-edge Science and Technology,
Avant-garde Research (X-star),
Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Specialist

Hiroyuki Aburatani
Senior Research Fellow
Research Center for Advanced Science and Technology, The University of Tokyo

(Names listed in alphabetical order. Titles and positions are valid as of January 2026)

Eligible Fields for the 2027 Japan Prize

Areas of Physics, Chemistry, Informatics, and Engineering

Resources, Energy, Environment, and Social Infrastructure

Background and Rationale:

Scientific and technological development have expanded humanity's living space and increased our free time, and have also helped to reduce casualties from natural disasters and other such events. However, there are still people on this planet who have yet to be freed from the yokes of poverty and scarcity. In addition, the right to live in peace is threatened by the adverse impacts of climate change caused by population growth and increased human activity, the continuous decline in biodiversity, and the deteriorating international situation caused by uneven distribution of resources.

Nevertheless, hopes are high that we will be able to solve such global issues through building a carbon-neutral society and circular economy, and becoming nature-positive. An essential step in achieving these goals will be to develop innovative elemental technologies that allow us to harness energy sources (including non-traditional sources), and mineral and water resources, and technologies that improve material circularity, all while improving overall efficiency and reliability. In addition, the world needs advanced observational and prediction technologies to reduce the risks posed by earthquakes, heavy rainfall, floods, and other natural disasters.

A number of steps must be taken to promote the transition to a sustainable society that contributes to the well-being of all people. It is important to design new residential and transportation systems tailored to both urban and rural areas, to gain a better understanding of human behavior, communication, and trust-building, and to build social systems for the next-generation that utilize these elements to ensure people can live safe and fulfilling lives.

Eligible Achievements:

The 2027 Japan Prize will be awarded to breakthroughs in the creation, innovation or dissemination of science and technology in the fields of Resources, Energy, Environment, and Social Infrastructure, thereby contributing significantly to solving social issues and to building a peaceful and sustainable society.

Areas of Life Sciences, Agriculture, Medicine, and Pharmacology

Medical Science and Pharmacological Science

Background and Rationale:

In recent years, medicine and pharmacology have made remarkable advances, contributing to the treatment of previously intractable diseases and greatly extending healthy life expectancy. Our deeper understanding of life's phenomena at the molecular and cellular levels has borne fruit in innovative therapeutic and diagnostic methods, including the application of genomic data in medicine, gene and cell therapies, next-generation vaccines, drug delivery systems, and imaging technologies. The very concept of medical treatment is being transformed. New therapeutic modalities utilizing cutting-edge technologies, together with advances in foundational methods such as *omics* and single-cell analyses, have enabled more precise investigation of disease onset and progression. The accelerating pace of data-driven research using vast medical and biological datasets, combined with the integration of artificial intelligence (AI) and information science, is opening new paths spanning every stage from elucidation of disease mechanisms to improvements in prognosis and implementations of personalized medicine.

Building on the academic foundations of medicine and pharmacology, closer collaborations with and among the information sciences, materials sciences, and biomedical engineering are expected to stimulate novel ideas and technological innovations leading to outcomes that significantly enhance human health and welfare.

Eligible Achievements:

The 2027 Japan Prize in the fields of Medical Science and Pharmacological Science will be awarded to outstanding achievements that have contributed, or are expected to contribute, through innovative elucidation of disease mechanisms and better disease prevention, diagnosis, treatment, and prognosis, to the advancement of human health and society.

Fields Selection Committee for the 2027 Japan Prize

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Kohei Miyazono
Visiting Professor
The University of Tokyo

Vice Chairperson

Kazuhito Hashimoto
President
Japan Science and Technology Agency

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Professor and Vice President, Teikyo University
Visiting Researcher, Graduate School of Medicine, The University of Tokyo

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Vice President, The Engineering Academy of Japan
Former Representative Director, President, ENEOS Research Institute, Ltd.

Erina Kuranaga
Professor, Graduate School of Pharmaceutical Sciences, Kyoto University
Professor, Graduate School of Life Sciences, Tohoku University

Tadahiro Kuroda
University Professor, Office of University Professors,
The University of Tokyo
Chancellor, Prefectural University of Kumamoto

Yukiko Motomura
Special Visiting Professor
Faculty of Life and Medical Sciences, Doshisha University

Toru Nakano
Professor Emeritus
Osaka University

Taikan Oki
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Graduate School of Engineering, The University of Tokyo

Nobuhiro Tsutsumi
Project Professor
The University of Tokyo

Naonori Ueda
Deputy Director
RIKEN Center for Advanced Intelligence Project
Research Professor (Visiting Fellow)
NTT Communication Science Laboratories

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(Names listed in alphabetical order. Titles and positions are valid as of November 2025)

Schedule (2027-2029)

The fields of research eligible for the Japan Prize for the years 2027 to 2029 can be found in the table below.
The fields are rotated in a three-year cycle, and the Field Selection Committee annually announces the eligible fields for the coming three years.

Areas of Physics, Chemistry, Informatics, and Engineering

Year	Eligible Fields
2027	Resources, Energy, Environment, and Social Infrastructure
2028	Materials Science and Production
2029	Electronics, Information, and Communication

Areas of Life Sciences, Agriculture, Medicine, and Pharmacology

Year	Eligible Fields
2027	Medical Science and Pharmacological Science
2028	Biological Production, Ecology/Environment
2029	Life Sciences

Projects of the Foundation

For the further development of science and technology...

In addition to selecting and awarding the Japan Prize, the Japan Prize Foundation is engaged in projects designed to contribute to the development of science, technology, and society, including the offering of research grants for the training of young scientists, and our "Easy-to-understand Science and Technology Seminars" aimed at the children who will lead the coming generations.

JAPAN PRIZE

The creation of the Japan Prize was motivated by the Japanese government's desire to "contribute to the development of science and technology worldwide by establishing a prestigious international award." The Japan Prize was established in 1983 with a cabinet endorsement and is supported by numerous private donations.

The award honors scientists and researchers from around the world, recognizing individuals who have contributed significantly to the peace and prosperity of humankind through original and outstanding achievements that have greatly advanced the progress of science and technology.

Researchers working in all fields of science and technology are eligible to receive the Japan Prize. Each year, it is awarded for achievements in two fields, which are selected by considering recent developments in science and technology. As a general rule, one award is given for each field and each laureate receives a certificate of merit, a prize medal, and prize of 100 million yen.

The Presentation Ceremony is held annually in the presence of Their Majesties the Emperor and Empress of Japan and is also attended by the Prime Minister, the Speaker of the House of Representatives, the President of the House of Councillors, the Chief Justice of the Supreme Court, numerous government ministers, and eminent figures from various other areas.

Research Grants

The Heisei Memorial Research Grant Program is named after Their Majesties the Emperor Emeritus and Empress Emerita, who have been interested in the research activities of young scientists and have encouraged them for many years.

The Foundation primarily provides research grants to scientists under 45 years of age. The Foundation annually selects four to eight scientists engaged in research that transcends the boundaries between different fields and disciplines and contributes to solving social issues. They are then provided with grants worth five to ten million yen.

The Heisei Memorial Research Grant was established as a means of expressing our profound appreciation to their Majesties the Emperor Emeritus and Empress Emerita for their great generosity in granting this award.

(Applicants must belong to a research organization in Japan to be eligible for a grant.)

"Easy-to-Understand Science and Technology Seminars"

The Foundation holds various seminars for students and other members of the public. These seminars are conducted by experts who use plain language to explain the advanced technologies commonly used in everyday life.

More than 300 seminars have been held since the program was launched in March 1989.