

Mizutani Foundation for Glycoscience

Annual Report 2021 and Grant Offer for 2022

Aim

The Mizutani Foundation for Glycoscience, on the basis of its global policy, awards grants to glycoscientists worldwide for innovative basic and applied research proposals, supports international exchanges of researchers in the field of glycoscience and also relevant meetings and their hosting organizations, aiming to promote glycoscience and contribute to the welfare of humankind.

Major Activities

The Foundation conducts the following activities in order to achieve the above goals.

1. Worldwide award of research grants for innovative basic and applied research proposals in the field of glycoscience
2. Assistance in international exchanges between Japanese and overseas glycoscientists
3. Contribution to glycoscience-related meetings and their hosting organizations
4. Conduct other activities necessary to achieve the aims of the Foundation

Organization

Chairperson : Ken Mizutani

Trustees : Tomoya Ogaya, Toshisuke Kawasaki, Koji Kimata,
Kunihiko Suzuki, Yasuo Suzuki, Masaki Yanagishita

Auditors : Takayasu Kishi, Nobuhiro Takeuchi

Councilors : Yukishige Ito, Tatsurou Irimura, Tamao Endo, Makoto Kiso,
Yuji Shimojima, Akimi Suzuki, Naoyuki Taniguchi,
Shoko Nishihara, Yousuke Funakoshi

Secretary General : Eriko Hagiya

Research Grant Awarded in 2021

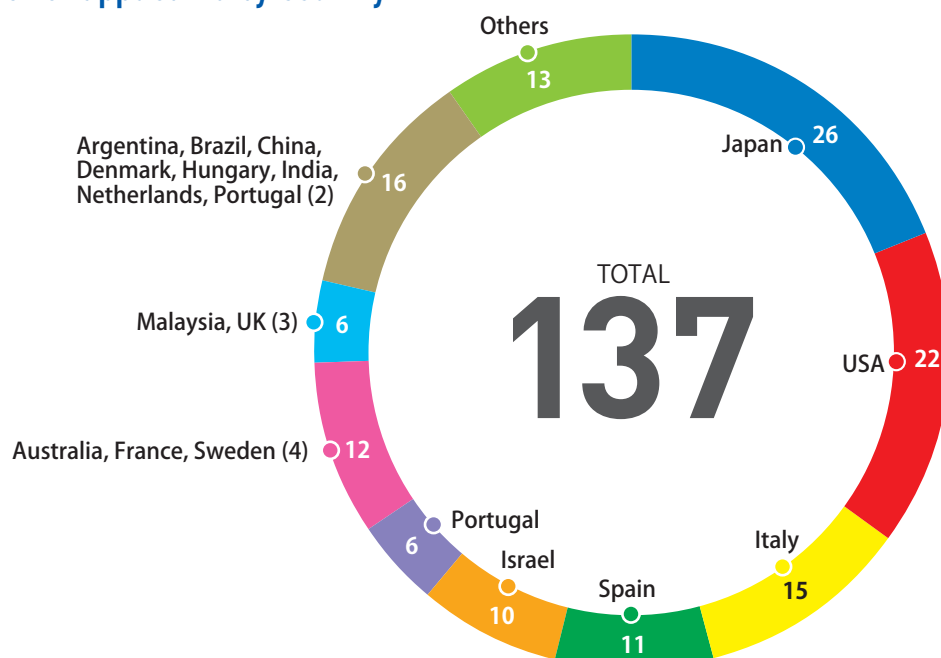
Mizutani Foundation for Glycoscience received 137 research grant applications from 32 countries in 2020.

After careful evaluation for scientific and social merit, potentiality and feasibility, the Foundation decided to award the grants of approximately 70 million yen in total to the following 15 projects.

Grant recipients (in alphabetical order)

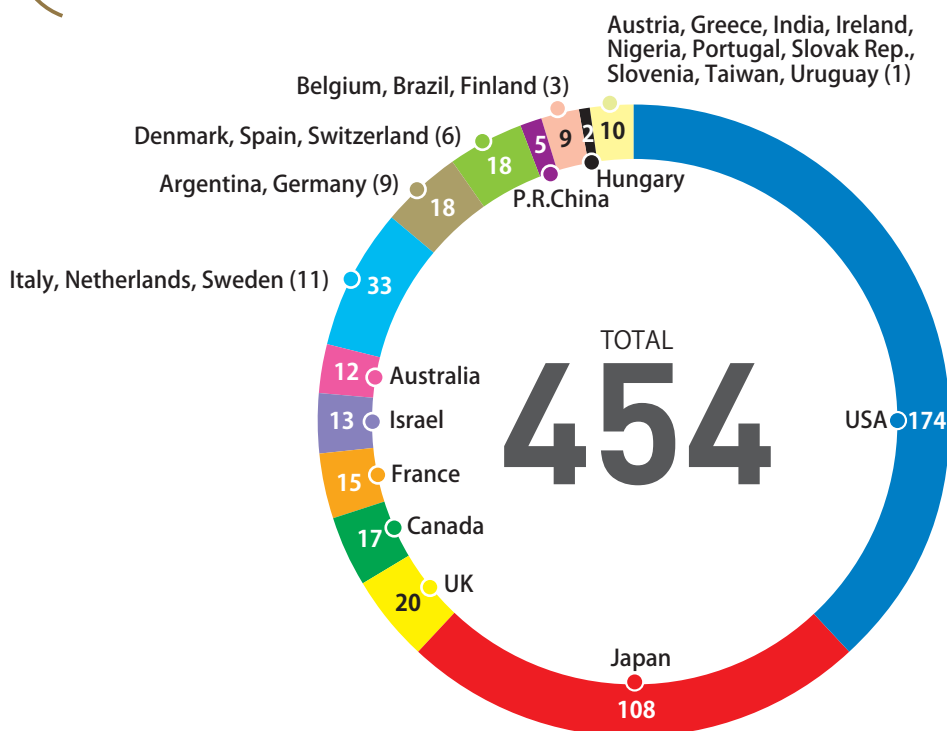
1. **Aharoni, Asaph** Weizmann Institute of Scienc, Israel
Fucosyltransferases and sustainable production of high-value natural products
2. **Bel, Shai** Bar-Ilan University, Israel
Determining How Colonic Goblet Cells Control Mucus Glycosylation
3. **Fass, Deborah** Weizmann Institute of Science, Israel
Structural Analysis of O-glycosylated Domains During Mucin Supramolecular Assembly
4. **Hirai, Go** Kyushu University, Japan
Development of novel mechanism-based inhibitors for glycohydrolases
5. **Kajihara, Yasuhiro** Osaka University, Japan
Elucidation of glycan functions by a new semi-synthetic method of glycoproteins
6. **Matthijs, Gert** KU Leuven (University of Leuven), Belgium
DHRSX deficiency - A novel CDG and a new facet of dolichol metabolism?
7. **Narimatsu, Yoshiki** Copenhagen University, Denmark
Display of the Human Mucinome with Defined O-Glycans by Gene Engineered Cells
8. **Sumida, Tomomi** Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan
Screening and characterization of novel glycoside hydrolases from deep sea
9. **Suzuki, Jun** Kyoto University, Japan
Identification and functional analysis of glucosylceramide scramblase
10. **Takahashi, Takeshi** Central Institute for Experimental Animals, Japan
Improved human xenograft in NOG mice by manipulating receptors for glycans
11. **Tanaka, Katsunori** Tokyo Institute of Technology, Japan
In Vivo Patrolling and Therapeutic Molecules by Glycan Pattern Recognition
12. **Trincherà, Marco** University of Insubria, Italy
Novel diseases reveal glycosylations affecting human specific brain functions
13. **Uchimura, Kenji** CNRS, University of Lille, France
Regulation of amyloid clearance by heparan sulfate remodeling
14. **Yi, Wen** Zhejiang University, China
Regulation of Epidermal Growth Factor Receptor Signaling by O-GlcNAcylation
15. **Zhao, Yan** Iowa State University, United States
Synthetic Glycan-Processing Catalysts for Modern Glycomics

Number of applicants by country



Mizutani Foundation for Glycoscience invited research grants for twenty eight times and received 4,074 applications from 59 countries. After careful evaluation by the selection committee, the Foundation approved 454 projects of 30 countries and awarded a total of approximately 2,155 million yen to them.

Grant recipients 1993-2021



Number of applicants by country 1993-2021

Country	Applicants	Country	Applicants	Country	Applicants	Country	Applicants
USA	1,434	Switzerland	43	Poland	11	Turkey	3
Japan	590	Finland	41	Taiwan	11	Cuba	2
UK	244	Brazil	36	Mexico	10	Iceland	2
Italy	198	India	34	Slovak Rep.	10	Serbia&Montenegro	2
Australia	190	Belgium	30	Korea	8	Tanzania	2
Canada	143	Russia	23	Thailand	7	Costa Rica	1
Israel	137	Denmark	20	Uruguay	7	Estonia	1
Sweden	119	Hungary	18	Croatia	6	Iran	1
Spain	113	Austria	16	Czech Rep.	6	Jamaica	1
France	104	Greece	13	Singapore	6	Kenya	1
Germany	93	Ireland	13	Pakistan	5	Peru	1
Netherlands	76	Norway	13	Chile	4	Saudi Arabia	1
Argentina	69	Malaysia	12	South Africa	4	Sri Lanka	1
Portugal	56	New Zealand	12	Slovenia	4	Uganda	1
P.R.China	51	Nigeria	11	Bulgaria	3		
Total							4,074
Country							59

The 29th Research Grant Offer for 2022

Mizutani Foundation for Glycoscience invites grant applications for basic and applied studies in the field of glycoscience.

Eligibility

- An applicant must
- 1) have a doctor's degree or its equivalent
 - 2) have a documented capability of performing independent studies
 - 3) be a member of a research institute where he or she can carry out the proposed project.

Previous grant recipients who were awarded prior to 2017 are eligible.

Grant

As much as 7,000,000 yen may be requested. In principle, a grant will be approved for one year. However, if desired, the period can be extended up to one year with the approval of the Foundation. The total budget for grants is 70,000,000 yen per annum. No more than 10% of the grant may be used for indirect costs (overheads), and no part of the grant may be used for stipends of the principal and/or collaborative investigators.

Selection

The applications will be reviewed by the selection committee consisting of specialists appointed by the Foundation based on followings.

- 1) Glycoscience field
- 2) Originality
- 3) Scientific and social merit
- 4) Feasibility

Application

An applicant must

- 1) make registration on our website, (<https://www.mizutani.or.jp/grant/apply.html>)
We open registration page from July 1st, 2021.
- 2) submit application documents as a single ZIP file.
(Please obtain application guidelines and forms from our website in your preferred format.)

Deadlines

September 1, 2021 (Japan Time). Selection Outcome will be notified to the applicants no later than February 20, 2022, and the successful proposals will be funded in March 2022.

The Protection of Personal Information: The Foundation will use personal information obtained in relation to the Research Grant for administrative purposes.

International Conferences

Mizutani Foundation for Glycoscience offers grants to the organizers of international conferences to promote exchanges between Japanese and foreign glycoscientists.
In the fiscal year 2020, we supported following conferences.

Exchange Program

- | | |
|---|--|
| 1. International Symposium on Microbial Glycoconjugate Synthesis and Catabolism | Tokyo, Japan, 3/9-13, 2020
(Postponed for one year) |
| 2. Gordon Research Conference Glycolipid and Sphingolipid Biology | Ciocco, Italy, 3/22-27, 2020
(Postponed for one year) |
| 3. The 7th International Conference on Plant Cell Wall Biology | Hokkaido, Japan, 6/22-26, 2020
(Postponed for one year) |
| 4. The 2020 Proteoglycan Gordon Research Conference | New Hampshire, USA, 7/12-17, 2020
(Postponed for two years) |

Grant for Domestic Conferences in Japan

This grant is for organizers of domestic conferences held in Japan.
We supported following conferences in the fiscal year 2020.

Domestic Conferences in Japan

- | | |
|-------------------------------|------------------------|
| 1. 第21回関西グライコサイエンスフォーラム | 大阪、5/23, 2020 (1年延期) |
| 2. 第34回日本キチン・キトサン学会大会 | 福井、8/27-28, 2020 |
| 3. 第14回東北糖鎖研究会 | 宮城、8/28-29, 2020 |
| 4. 日本応用糖質科学会 2020 年度大会 | 長野、9/10-11, 2020 |
| 5. 第52回日本結合組織学会学術集会 | 愛知、9/19-20, 2020 |
| 6. 第18回糖鎖科学コンソーシアムシンポジウム | 東京、10/6-7, 2020 (1年延期) |
| 7. 第14回多糖の未来フォーラム | 東京、11/7, 2020 |
| 8. 第39回日本糖質学会年会 | 東京、11/21-22, 2020 |
| 9. 糖鎖科学中部拠点フォーラム「若手の力」と糖鎖科学講義 | 愛知、1/22, 2021 |
| 10. 第11回グライコバイオロジクス研究会 | 愛知、1/28, 2021 |

Grant Application Guidelines for Glycoscience Meeting

The Mizutani Foundation is to contribute to the welfare of mankind through promotion of scientific exchange between Japanese and foreign glycoscientists by contributing international conferences on glycoscience.

Proposals should be made with a proposal letter addressed to Mr. Ken Mizutani, Chairperson of the Foundation and an application format by the chairperson of the meeting.

After the meeting, please submit us a report of the meeting (the form is available from our website) within one month.

Our total yearly budget is JPY 5,000,000 and we expect to support approximately 20 conferences every year.

The deadline date by which the application must be submitted

Due to taking the time to review, the complete application must be emailed by deadline (Japan time).

2021						2022						2023														
Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Sorry. As for conferences held in 2021 and Jan. 2022, you cannot apply for the grant any more.																			
				Nov.		Feb.	Mar.	Apr.	May	Jun.																
Application Deadline : 11/30						Conferences held in Feb. - Jun. 2022																				
						Mar.					Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.									
							Application Deadline: 3/31					Conferences held in July 2022 - Jan. 2023														
															Nov.			Feb.	Mar.	Apr.	May.	Jun.				
															Application Deadline: 11/30						Conferences held in Feb. - Jun. 2023					

1. November, 30 : For the meetings planned to be held in next February, March, April, May, and June
2. March, 31 : For the meetings planned to be held in this July, August, September, October, November, December and next January



Mizutani Foundation for Glycoscience

Marunouchi Center Bldg. 9F
 1-6-1 Marunouchi, Chiyoda-ku, Tokyo 100-0005 Japan
 Phone: 81-3-3211-0861 / Fax: 81-3-3211-0862
 E-mail: info@mizutanifdn.or.jp
 URL: <https://www.mizutanifdn.or.jp/>