

Annual report of the Finnish Academy of Science and Letters

Activities in 2021 continued under the COVID-19 pandemic, which began near the beginning of the previous year. The pandemic affected all the activities of the Finnish Academy of Science and Letters, especially the planning and organizing of meetings and events. Similarly to 2020, we continued to conduct meetings online and using the so-called hybrid format when the circumstances allowed it. For example, the section meetings and the annual Spring Meeting took place as remote events, but the annual Autumn Meeting was held in hybrid format.

The office continued to follow the 2020 recommendations for remote work. The majority of the staff worked from outside the office, but so that there was always someone present at Mariankatu.

Meetings at Mariankatu were limited, and the COVID safety of the internal staff meetings was ensured. In any case, remote meetings became the prevailing practice.

The pandemic also affected the work opportunities of researchers financed by

Academy grants. During the year, it was possible to redirect the money awarded for travel simply by informing the Academy of the fact and, if the trip had to be cancelled entirely, the grant could be redirected to other forms of research work through a simple procedure.

GOVERNING BOARD AND SECRETARY GENERAL

The year 2021 was the 114th year of operation of the Finnish Academy of Science and Letters. The President of the Governing Board of the Academy in 2021 was Anna Mauranen and the Vice President was Kimmo Kaski. Pekka Ilmakunnas continued as Treasurer, Tuula Linna as Secretary of the Section of the Humanities and Juha Kinnunen as Secretary of the Section of Science. The ordinary members were Johanna Mappes, Jari Ojala, Heta Pyrhönen and Jukka Westermarck. The Governing Board held 8 meetings and 4 consultations

The statement by the Finnish Academy of Science and Letters, "Bending, but not breaking", was published in February 2021 in Finnish, Swedish and English. Summaries of the statement are also available in Arabic, Easy Finnish, English, Estonian, Farsi, Finnish, Inari Sámi, Kurdish (Kurmanji and Sorani), Northern Sámi, Russian, Skolt Sámi, Somali and Swedish



by email during the year. Pekka Aula continued as Secretary General.

The members of the Governing Board served during the year as trustees of the Emil Öhmann Foundation and the Hilkkka and Otto Brusiin Foundation.

The compositions of the committees and working groups set up by the Governing Board were as follows:

- Property Management Committee: Anna Mauranen (chairman), Kimmo Kaski, Pekka Ilmakunnas, Tuula Linna, Pekka Aula, and expert advisory members Anders Ekholm and Ralf Sunell. The secretary was Pekka Ilmakunnas.
- Prizes Committee: Anna Mauranen (chairman), Juha Kinnunen, Tuula Linna, Johanna Mappes, Jari Ojala and Jukka Westermarck. The committee's secretary was Leila Sarajärvi.
- Publications Committee: Risto Nieminen (chairman), Anna Mau-

ranen (vice chairman), Secretary General Pekka Aula, Kimmo Kaski, Heta Pyrhönen, Jari Eloranta, Jaakko Husa, Päivi Pahta, Tapio Salmi, Hannu Sariola and Erkki Tomppo.

- Ethics Committee: Tuula Linna and Juha Kinnunen.

The trustees of the Emil Aaltonen Fund were Pekka Ilmakunnas, Kimmo Kaski and the Secretary General, together with Olavi Nevanlinna, representing the Emil Aaltonen Foundation.

The members of the Selection Committee for the Section of the Humanities up until the Autumn Meeting 2021 were Heikki Halila, Marja-Liisa Helasvuo, Petri Karonen (chairman), Anne Kovalainen, Jari Lavonen, Outi Merisalo, Martti Nissinen and Päivi Pahta. Karonen, Lavonen and Pahta stepped down in the Autumn Meeting and Marja-Kristiina Lerkkanen, Pirjo

GOVERNING BOARD 2021

Member	Position	Term
Anna Mauranen	President, chairman of the Governing Board	2020–2021
Kimmo Kaski	Vice President, vice chairman of the Governing Board	2020–2021
Pekka Ilmakunnas	Treasurer	2019–2023
Tuula Linna	Secretary, Section of Humanities	2019–2023
Juha Kinnunen	Secretary, Section of Science	2019–2023
Johanna Mappes	member	2021 (2. term)
Jari Ojala	member	2021 (2. term)
Heta Pyrhönen	member	2021 (2. term)
Jukka Westermarck	member	2021 (1. term)

Markkola and Sirkka Saarinen were elected as new members of the Selection Committee.

The members of the Selection Committee for the Section of Science up until the Autumn Meeting 2021 were Kari Enqvist, Juha Kere (chairman), Erkki Korpimäki, Jouko Korppi-Tommola, Ilkka Norros, Vieno Piironen, Asla Pitkänen and Kristiina Wähälä. Korpimäki and Piironen stepped down in the Autumn General Meeting and Jyrki Heino and Kaisa Poutanen were elected as new members of the Selection Committee.

GRANTS

The Finnish Academy of Science and Letters distributed just over 2 million euros in grants in 2021. The majority of the grants were for young post-graduate researchers.

The value of an individual grant for post-graduate study was 25,000 euros. In all the cases in which a grant was awarded for pursuing a doctorate in Finland, an additional sum was paid directly to the university to compensate for the costs involved. This amounted to 1,600 euros in the case of a full year grant. No personal grants were awarded to Academy members. During the year, the Governing Board decided to increase the margin of distribution of grants, and this increase will be implemented in stages starting in 2022.

Applications for grants were reviewed by reviewers appointed by the Governing Board who are leading experts in their fields, and the final decisions were made by the Board in the light of the reviewers' recommendations. Attention was paid to the possible incompatibilities of both the reviewers and the decision-makers when

processing the grants of the funds and foundations administered by the Academy.

This was the 57th time that grants for scientific research were distributed by the Vilho, Yrjö and Kalle Väisälä Fund. Approximately 1.45 million euros (1.4 million in 2020) was awarded in grants and compensation payments to the universities. The Fund received a total of 247 (282) applications amounting to approx. 5.7 (6.4) million euros in all. Fewer grant applications for research visits were submitted.

Grants from the Väisälä Fund were awarded to 64 (59) applicants. These included 50 (49) post-graduate grants of 25,000 euros for full-time academic study for a duration of one year and 9 (10) grants for part of a year. No travel grants (3) were awarded in addition to post-graduate grants. However, 6 (1) grants were awarded for short-term visits abroad, totalling 17,890 (6,900) euros, of which one was granted in addition to a post-graduate grant.

The Eino Jutikkala Fund distributed grants for study in the humanities for the 14th time. The application fields under the Academy's Section of the Humanities are divided into two baskets, and this year applications in aesthetics, Finno-Ugric studies, philosophy, pedagogy, linguistics, psychology, art research, theology and religious studies were invited. This led to a total of 330 applications (299 in 2020), amounting altogether to roughly 8.4 (7.7) million euros. Due to the division, the statistics are not directly comparable between two consecutive years.

Eventually, 16 (16) grants were awarded from the Jutikkala Fund, totalling about 429,100 (439,000) euros, all of which were for the commencement of doctoral studies.

The Academy's Mathematics Fund distributed roughly 5,500 (10,500 in 2020)



Some of the Academy's monthly meetings in 2021 were streamed live from the meeting rooms of the Academy at Mariankatu, such as the evening dedicated to the humanities in October

euros in grants and awards, and the Emil Öhmann Foundation, which is administered by the Academy, distributed 48,450 (45,000) euros in grants. The Hilikka and Otto Brusiin Foundation distributes grants every second year: no grants were distributed in 2021 (30,000 in 2020). In addition, the Emil Öhmann Foundation awarded 1 (2) grantee a total of 3,000 (3 000) euros for financing short-term research in Berlin at the Finnish Institute in Germany.

In 2021 the Academy took part for the sixth year in the Säätiöiden post doc -pooli ("the Foundations' Post Doc Pool"). The sum awarded in 2021 was 200,000 euros. The grants awarded in 2021 amounted to 140,400 euros from the Väisälä Fund and 43,100 euros from the Jutikkala Fund. The

unawarded 16,500 euros was transferred to be awarded in 2022.

Similarly to 2020, the COVID-19 epidemic continued to impact the possibilities of grantees to carry out intended projects, especially where travel was involved, and it was decided that they could continue to postpone the use of travel grants simply by informing the Academy of the fact, without submitting a formal application. Similarly, it was possible to redirect the travel grants to other forms of research work if the trip had to be cancelled entirely. There was no instance of a grant for research work being cancelled or suspended due to the pandemic.

The Maupertuis Programme run jointly by the Finnish Academy of Science and

Letters, the Finnish Society of Sciences and Letters, the French Institute in Helsinki, the French Embassy to Finland and the French Ministry of Higher Education, Research and Innovation distributed 25 (24) international mobility grants for bilateral visits by researchers and experts.

PRIZES

The Finnish Academy of Science and Letters Academy Award 2021, a sum of 30,000 euros, was presented to Academician of Science Ilkka Niiniluoto for his substantial achievements in philosophy. He was also presented with Academy Medal No. 33.

The Finnish Academy of Science and Letters Prize for the Humanities, now awarded for the 11th time and amounting to 15,000 euros, was awarded to Kaius Sinnemäki, Associate Professor at the University of Helsinki.

The Academy's Väisälä Prizes 2021 were given to Professor Emilia Kilpua of the University of Helsinki and Associate Professor Christian Webb of the University of Helsinki. These prizes were now awarded for the 22nd time, and they are worth 15,000 euros each.

The Pro Scientia Prize was awarded to non-fiction writer Dr. Tiina Raevaara. The prize is awarded every two years to an advocate for science, i.e., a person or instance that has significantly promoted the role of science in society by speaking out, writing or engaging in other activities to the benefit of science. The prize is worth 10,000 euros and it was now awarded for the third time. In addition, the Pro Scientia Honourable Mention was awarded for the first time and given to Lasten tiedekysymykset ("Children's sci-

ence questions"), a section in Helsingin Sanomat newspaper.

Over the course of the year, the Academy proposed candidates for the Balzan Prize, the Gad Rausing Prize, the Holberg Prize, the Keio Medical Science Prize, the Louis-Jeantet Prize, the Nils Klim Prize and Olav Thon Foundation's International Research Award for Mathematics/Natural Sciences and Medicine.

As for national awards, the Academy proposed candidates for the Alfred Korde- lin Prize, the State Award for Public Infor- mation, and the Kordelin Science Award of the Federation of Finnish Learned Soci- eties.

MEETINGS AND EVENTS

The Finnish Academy of Science and Letters held its themed monthly meetings in 2021 on the second Monday of each month, except for January and the summer months. Due to the COVID-19 pandemic, events were held entirely online, streamed live so that only the speakers and organiz- ers were present at the location and the audience was online, or using a hybrid for- mat where part of the audience was also physically present. These events gathered excellent audiences and the themes of the meetings aroused lively discussions over the video network. In January, the Acad- emy attended the Science Forum with a panel discussion entitled "Taistelusta totuudesta" ("The fight for truth"). In March, the monthly meeting was replaced by a virtual visit to Yleisradio, the Finnish Broadcast- ing Company.

- 16 Jan. Taistelusta totuudesta: Tiede ja valetieto ("The fight for truth: Science and disinformation") (Science Forum)

- Porthania, hall 1: live streaming online, speakers at the location
- 8 Feb. Taipuu vaan ei taitu (“Bending, but not breaking”). Symposium venue, Hotel Kämp: live streaming online, speakers at the location
 - 23 Mar. Virtual visit to the Finnish Broadcasting company Yle’s News and Current Affairs unit. Google Meets platform, everyone participating remotely
 - 25 May Tiedeneuvonta tänään ja tulevaisuudessa – kohti viisaampia päätöksiä (“Science advice today and in the future – towards wiser decisions”). Zoom platform, everyone participating remotely
 - 13 Sept. Evening for new members- Väisälä Hall of the Finnish Academy of Science and Letters: live streaming online, speakers mainly at the location
 - 11 Oct. Humanististen tieteiden arvostus ja vaikuttavuus yhteiskunnassa (“Appreciation and impact of the humanities in society”). Väisälä Hall of the Finnish Academy of Science and Letters: live streaming online, speakers mainly at the location
 - 8 Nov. Disinformation and COVID-19. Mirror Room, Hotel Kämp: live streaming online and some of the participants in the Mirror Room, speakers at the location
 - 13 Dec. Ilta matemaattis-luonnontieteellisille tieteille (“Evening dedicated to mathematics and science”). Valkoinen Sali: live streaming online and some of the participants in Valkoinen Sali, speakers at the location

Section meetings were held as remote events in March. Of the annual general meetings, the Spring Meeting in April was

held as a remote event and the Autumn Meeting in November had a hybrid format so that some of the participants were present at the venue. Over the course of the year, the Academy’s Jurisprudence Group held an event entitled “Oikeustutkimus 2021 – Oikeudenaloja vai temaattisia kokonaisuuksia?” (“Legal studies 2021 – branches of jurisprudence or thematic entities?”). The event took place on 13 October at Hotel Presidentti.

No audience events were held in connection with the Maupertuis Programme. Due to the epidemic, visits by distinguished French scientists could not be arranged.

In October, the Academy took part in a Nobel Prize discussion event together with other academies of science and Helsingin Sanomat newspaper. The event was streamed live from Sanoma House.

A list of meetings and events can be found in Appendix 1. Video recordings of the meetings can be viewed on the Academy’s website.

SCIENCE ADVICE

The year 2021 was the final year of the three-year Sofi (Science Advice Initiative of Finland) project. Sofi was a joint initiative by Finland’s four academies of science with funding from the Finnish Ministry of Education and Culture. Sofi was coordinated by the Finnish Academy of Science and Letters, and its mentor group consisted of the following Academy members: Academician of Science Eva-Mari Aro (University of Turku), Professor Marja Makarow (Biocentre Finland, later Academia Europaea), Academician of Science Ilkka Niiniluoto (University of Helsinki) and Chancellor Emeritus Kari Raivio (University of Helsinki). The chief

executive director of the project was Academician of Science Risto Nieminen (Aalto University).

Sofi had three main goals. The first of these, to develop and establish an organization responsible for coordinating science advice in Finland, was successfully achieved. From the beginning of 2022, Sofi's work will continue under the name and with funding from the Finnish Academy of Science and Letters. Sofi's second purpose was to strengthen dialogue between the scientific community and those responsible for decision-making within society. Among other things, Sofi developed two new models for transferring scientific knowledge to decision-making: Scientific red teams refer to interactive science advice dialogues between researchers and decision-makers. Phenomenon map, on the other hand, is a method used in producing reliable evidence syntheses corresponding to user needs. Sofi also designed an impact training package for researchers. Sofi pursued its third goal, to promote discussion concerning science advice and its future, for instance by organizing and actively taking part in meetings and events both in Finland and abroad. Sofi's publication entitled *Tieteen ja päätöksenteon vuorovaikutus eilen, tänään ja huomenna* (2021) presents the relationship between science and decision-making, science advice in practice and its trends of development.

More information about Sofi's activities and heritage can be read at www.acadsci.fi/sofi/in-english

INTERNATIONAL ACTIVITIES

Contacts to international scientific organizations by the Finnish Academy of Science

and Letters took place mainly under the auspices of the Council of Finnish Academies (CoFA), in which the Academy's President was a member of the executive

The year 2021 was the final year of the three-year Science Advice Initiative of Finland project

committee and the Academy's Vice President acted as her deputy. The Secretary General was also a member of the executive committee, but without a vote. The Academy was represented on CoFA's International Affairs Committee (IAC) by its President Anna Mauranen, who also acted as chairman of the committee, and by Olavi Nevanlinna. The chairman of CoFA's Human Rights Committee was Jukka Kekkonen in the first part of the year, followed by Liisa Laakso as of 1 August.

The Finnish Academy of Science and Letters continued for the fourth year to be the academy chiefly responsible for CoFA's affairs. CoFA plays an important part in the reform of the Finnish system of academies of science and will be crucial in determining the direction this system will take in the future. Within the framework of their agreement, the academies of science will participate even more actively in developing the scientific community and its internationalization.

Through the medium of CoFA, members of the Finnish Academy of Science and Letters held positions of trust in several international scientific organizations: Mats Gyllenberg, Maija Tenkanen, Jukka



Young Academy Finland continued its work in 2021. The Finnish Academy of Science and Letters established Young Academy Finland in 2017 with the help of an endowment from the Emil Aaltonen Foundation. Young Academy Finland is an independent organization according to international convention

Seppälä and Pirjo Peltonen-Sainio in EASAC; Anna Mauranen, Ahti Salo, Mari Vaattovaara and Secretary General Pekka Aula in ISC; Mika Kajava in UAI; Jukka Kekkonen in the International Human Rights Network until August, followed by Liisa Laakso; Krista Varantola and Risto Kunelius in ALLEA; Mikko Hupa in EuroCASE; Jukka Seppälä and Mikko Hupa in SAPEA; and Liisa Laakso and Olli Vapalahti in IAP.

Discussions were held with the French Embassy and others regarding new forms of international cooperation, and several discussions were also held with academies of science in various countries during the year.

The Academy appoints members to various national committees. In the case of the Finnish National Committee of Arctic and Antarctic Research (SCAR, IASC), its representative in 2021 was Atte Korhola, with Juha Pekka Lunkka as his deputy, while the representative on the National Committee for Astronomy (IAU) was Karri Muinonen, and those on the National Committee for Radio Science (URSI) were Karri Muinonen and Esa Kallio, with Ilya Usoskin as the deputy. Kimmo Kahma was the representative on the National Committee for Marine Research (SCOR), Juha Pekka Lunkka on the National Committee for Quaternary Research (INQUA), Ilkka

Norros on the National Committee on Theoretical and Applied Mechanics (IUTAM) and Juha Pekka Lunkka on the National Committee for Geology (IUGS).

MEMBERSHIP

The Finnish Academy of Science and Letters had 826 Finnish members and 172 external members at the end of 2021.

Altogether 37 new Finnish members and 7 new external members were elected at the Spring Meeting on 23 April. Members were elected in accordance with the amendment to section 4 of the Academy's rules, approved in 2020, to allow a person of foreign nationality who is resident in Finland to also be elected as an ordinary member.

The new members elected to the Section of Science were Jouni Aspi (University of Oulu), Johan Bobacka (Åbo Akademi University), Ruizhi Chen (Wuhan University, China), Marjukka Kolehmainen (University of Eastern Finland), Mauri Kostainen (Aalto University), Tuomo Kuusi (University of Helsinki), Pekka Lappalainen (University of Helsinki), Tuomas Lappi (University of Jyväskylä), Robert van Leeuwen (University of Jyväskylä), Sabrina Mascalco (University of Helsinki), Tapio Mappes (University of Jyväskylä), Tomi Mikkola (University of Helsinki), Tommi Mikkonen (University of Helsinki), Taina Pennanen (Natural Resources Institute Finland), Juha Rinne (University of Turku), Frederick Stoddard (University of Helsinki), Hanna Tuomisto (University of Turku), Heikki Tuononen (University of Jyväskylä), Juha Vaara (University of Oulu), Ilpo Vattulainen (University of Helsinki) and Riitta Veijola (University of Oulu).

The new members elected to the Section of the Humanities were Jani Erola (University of Turku), Tomi Huttunen (University of Helsinki), Pekka Hämäläinen (University of Oxford, UK), Pasi Ihalainen (University of Jyväskylä), Niklas Jensen-Eriksen (University of Helsinki), Jutta Jokiranta (University of Helsinki), Janne Kaisto (University of Lapland), Kaisa Kotakorpi (Tampere University), Liisa Laakso (The Nordic Africa Institute, Sweden), Juha-Antti Lamberg (University of Jyväskylä), Matti Liski (Aalto University), Juha Raitio (University of Helsinki), Reetta Toivanen (University of Helsinki), Raisa Maria Toivo (Tampere University), Terhi Utriainen (University of Turku) and Olli-Pekka Vainio (University of Helsinki).

The new external members elected to the Finnish Academy of Science and Letters were Fuad Aleskerov (National Research University, Russia), Robin Dunbar (University of Oxford, UK), Kerstin Enflo (Lund University, Sweden), Nikolay Kasimov (Moscow State University, Russia), Janos Kertesz (Central European University, Austria), Joseph Krajcik (Michigan State University, USA) and Nageswari Shanmugalingam (University of Cincinnati, USA).

The Academy mourned the deaths of the following ordinary members during the year: Pirkko-Liisa Haarmann, Kalervo Hovi, Pentti Kauranen, Teuvo Kohonen, Jouko Koskikallio, Pentti Lempiäinen, Matti Luukkainen, Timo Riiho, Erkki Saxén and Atso Vormaa.

News was also received of the death of external members Horst Albach, Hermann Bausinger, Marek Grad, János Kornai, Assar Lindbeck, Jan Malý, Nickolay Moiseev, Harm Pinkster, Michael Stolleis, Jan Strelau and Sergej Zilitinkevich.

YOUNG ACADEMY FINLAND

The year 2021 was the fourth full year of operation for Young Academy Finland (YAF), founded with the aim of promoting science, especially from the viewpoint of young researchers who are just starting their careers. The Chair of its Board was Jenni Raitoharju. Young Academy Finland had a total of 81 members and 34 alumni.

Young Academy Finland was to a large extent made possible by the donation of a million euros in 2017 from the Emil Aaltonen Foundation to the Finnish Academy of Science and Letters for establishing YAF. A separate Emil Aaltonen Fund was set up as a result of this donation. Young Academy Finland works in association with the Academy. It issues its own annual report every year.

PUBLICATIONS

In 2021 the Finnish Academy of Science and Letters started publishing a series named *Annales Academiae Scientiarum Fennicae*. The Academy also published a Year Book in Finnish and in English. The Academy was in charge of the government grant allocated to the *Mathematica* series in 2021; the publisher of the series was the Finnish Mathematical Society.

The chairman of the Academy's Publications Committee was Risto Nieminen and the vice chairman Anna Mauranen. The other members were Secretary General Pekka Aula, Kimmo Kaski, Heta Pyrhönen, Jari Eloranta, Jaakko Husa, Päivi Pahta, Tapio Salmi, Hannu Sariola and Erkki Tomppo. The members presented themselves as candidates for the Publications Committee. The Publica-

tions Committee held one meeting during the year.

The Academy received a government grant of 73,000 euros (110,000 euros in 2020) for its publications in 2021, while the income from sales amounted to approx. 6,900 (approx. 25,500) euros. Exchange of the Academy's publications is managed by the Exchange Centre for Scientific Literature run by the Federation of Finnish Learned Societies. The Academy had 55 (290) overseas exchange partners at the end of the year, and a total of 143 (741) publications were sent out in this way.

A joint publishing committee was established in the beginning of 1996 to coordinate the publications of the Finnish Academy of Science and Letters and the Finnish Society of Sciences and Letters. The committee is elected for a three-year term, and a representative of the Academy or the Society is elected as chairman of the committee in alternating terms. The chairman for the term 2021–2023 is Jari Ojala who represents the Finnish Academy of Science and Letters.

STRATEGIC PLANNING

The core of the strategy of the Finnish Academy of Science and Letters is the idea of valuable science. Science has value, both in itself and as a source for creating further value for society, various communities and individuals. At the heart of this valuable science lies a quest for truth, education, equality and universal opportunities to live a good life. Valuable science is open to all, belongs to everyone, is independent and knows no boundaries. Valuable science is created by influential, communal, sustain-

able and constantly renewing science. During the year, three operative spearheads for 2022 were derived from the strategy, namely, secure underlying conditions for scientific work, evidence-informed decision-making, and reliable scientific knowledge.

COMMUNICATIONS

The main channels for the Academy's communications during the year consisted of its own electronic media, the use of which was enhanced as the COVID pandemic continued. The main forums were the Academy's website, Twitter account, Facebook pages, YouTube channel and LinkedIn account.

The Finnish Academy of Science and Letters started a blog in 2021. The purpose of the blog is to discuss topics and phenomena on the interface between science and society. The authors are members of the Governing Board of the Academy and other Academy members as well as other invited scientists.

In accordance with the strategy, these channels were used for communication with relevant target groups. Greater efficiency was achieved by using a press release service and adopting a more active attitude towards interest groups. Earned media monitoring continued with a media monitoring tool.

The second focus area was science communication, and particularly the areas of influencer communication related to research-based knowledge and science. The Academy was able to increase its public exposure from the previous year, especially in social media and trade journals. The joint communications group of the

Academy's CoFA, YAF and the Sofi project also continued its work during the year.

The communication environment has changed fundamentally over the last two years. Event communication has shifted to professional video productions, which were streamed live or distributed as recordings. The Academy's panel of COVID experts also produced videos for its communication and distributed them to a wide audience online. Some of the Academy's monthly thematic events in 2021 were streamed live online. The recordings of the meetings are for the time being available on the website of the Finnish Academy of Science and Letters.

The Academy continued to develop and adopt network-based communications media and collaboration platforms for its in-house communication.

FINANCES AND PROPERTY MANAGEMENT

The Property Management Committee, the advisory body of the Governing Board on financial matters, consisted of Anna Mauranen, Kimmo Kaski, Pekka Ilmakunnas, Pekka Aula and Tuula Linna. Anders Ekholm and Ralf Sunell served as expert advisors. The Academy's assets were managed in accordance with the investment strategy for the Academy itself, its funds and the foundations under its administration. This strategy was updated in 2021.

The total value of the investments held by the Academy and its various funds at the end of 2021 was approximately 241 million euros (197 million euros at the end of the previous year), with a further sum of more than 5 million euros held by the foundations under the Academy's administration.

These investments, comprising portfolios of shares and bonds, shares in Vaisala Oyj, and alternative investments, were managed by Nordea and Evli. All the offices in the property at Mariankatu 5 are owned directly by the Academy, while otherwise most of the Academy's property investments are in eQ unit trusts. The other alternative investments are in private equity funds, principally the Hamilton Lane Club Fund.

In spite of the uncertainty caused by the COVID-19 pandemic, stock prices continued to rise in the course of the year. The total return on assets, including dividends, interests, rents and changes in property values, but excluding the Vaisala Oy shares, was about 20% (about 6% in the previous year). Vaisala Oyj shares increased in value especially towards the end of the year, so that the overall returns for the year were approx. 25% (16% in the previous year).

The auditor of the Academy's accounts and administrative procedures in 2021 was Professor, KHT auditor Markku Koskela, with KHT auditor Riku Kärnä as his deputy.

STAFF

The Academy's Secretary General was Professor Pekka Aula. The Administrative Manager was Leila Sarajärvi, the Administrative Secretary Nina Rapelo and Science Communicator Klaus Elfving. The Administrative Assistant was Suvi Salmi until October, followed by Emilia Lähde as from October. The temporary Scientific Coordinator of the panel of COVID experts in January was Rosa Rantanen. The Science Secretary (50%) of Young Academy Finland (YAF) was Katja Kujanpää until 31

May, Johanna Ketola 1 June – 30 August and Riikka Hiltunen (50%) as from 1 October. The project "Meet a Researcher" was led by Kim Krappala as of 1 August. The Academy Secretary at CoFA under the Academy's administration was Arto Miettinen and the Science Secretary was Veera Launis. The Secretary General acted as administrative head of the CoFA secretariat. Jaakko Kuosmanen held the position of Academy Secretary at Sofi, the joint project of the academies of science, with Nanna Särkkä as Science Communicator.

The Administrative Manager attended training meetings concerning the employment legislation and personnel management and also seminars related to their field. The Administrative Secretary attended training meetings on communications, publications and grant processes. In addition, the staff attended information sessions and seminars arranged by cooperative work organizations and first aid training. A project focusing on staff wellbeing and the organization and development of work was launched during the year.

The Academy paid salaries or fees to a total of 32 persons during the year.

OTHER ACTIVITIES

The Governing Board proposed members for several working groups and bodies by request. The Finnish Academy of Science and Letters has representatives in many institutions and organizations both at home and abroad.

President Anna Mauranen was a member in the International Affairs Forum for Higher Education and Research set up by the Ministry of Education and Culture for the term 2020–2023.



The Spring Meeting featured the discussion “Multidisciplinary study of the human mind” between Academicians of Science Ilkka Niiniluoto and Riitta Hari, recipients of the Academy Award in 2020 and 2021

The Academy is a member of the Federation of Finnish Learned Societies. It was represented on the board of the Federation by Arto Haapala (deputy Elina Ikonen) and Anna Mauranen (deputy Kimmo Kaski).

Pekka Ilmakunnas represented the Academy at the Federation’s spring meeting in March and the autumn meeting in September, and Risto Nieminen was its representative on the steering committee of the Federation’s publishing forum.

The Academy was represented on the Board of Directors of the Alfred Kordelin Foundation by Jukka Seppälä (deputy Keijo Hämäläinen) and Hannu Riikonen (Mari Vaattovaara). Its representatives in the Foundation’s sections for science were Sami Pihlström (deputy Tuomas Forsberg) and Eija Kalso (Hilkka Soininen). Its representative in the section for public education was Markku Löytönen (Risto Nieminen), and in the section for literature Heta Pyrhönen (Marjatta Palander). Ville Luk-

karinen (Annika Waenerberg) was the representative in the section for arts.

The Academy's representatives on the Finnish Zoological and Botanical Publishing Board were Jaana Bäck and Jukka Jernvall, while Tapio Raunio represented the Academy in the Foundation for Foreign Policy Research. The Academy's representative in the Finnish Foundations' Post Doc Pool was Anna Mauranen, with Kaisa Nyberg as her deputy, and Secretary General Pekka Aula served as the Academy's representative on the national LUMA Advisory Board. Anna Mauranen was nominated by the Academy as a member of the Board of Directors of the Finnish Research Impact Foundation.

The following members were serving on the research councils of the Academy of Finland at the end of 2021: Sami Pihlström, Petri Karonen and Petri Kuoppamäki on the Research Council for Culture and Society, Reko Leino and Petri Pellikka on the Research Council for Natural Sciences and Engineering, and Esa Korpi, Kristiina Kruus, Jussi Kukkonen, Heli Peltola and Ursula Schwab on the Research Council for Biosciences, Health and the Environment. Reko Leino, Sami Pihlström and Ursula Schwab also acted as the chair of their respective council. In addition,

Kimmo Nuotio was chair of the Strategic Research Council.

Pekka Ilmakunnas represented the Academy at the Annual General Meeting of the Mariankatu 5–7 property company in March. Pekka Aula sits on the board of the property company.

Pekka Aula was the Academy's representative at the annual meeting of the Finnish Zoological and Botanical Publishing Board in March, and at the spring and autumn meetings of the Association of Finnish Foundations. Pekka Ilmakunnas represented the Academy at the shareholders' meeting of Vaisala Oyj in April, and Kimmo Kontula was a patron of the StarT Project of LUMA Centre Finland. Maria Lähteenmäki represented the Academy on the Programme Committee of the Science Forum, and Pekka Aula in its steering group.

In 2020–2021, the Finnish Academy of Science and Letters took part in a project aiming to determine the current state and development of Finnish science diplomacy. The project was carried out in conjunction with Frisky & Anjoy Oy and financed by the Finnish Government as part of its analysis, assessment and research activities. A report on the project was published in spring 2021.

APPENDIX 1 MEETINGS AND EVENTS IN 2021

16 January: Panel discussion Taistelu totuudesta: Tiede ja valetieto (“The fight for truth: Science and disinformation”)

- part of the programme of Science Forum 2021
- Streamed live from the University of Helsinki on Unigrafia’s own platform
- The discussion was led by Secretary General Pekka Aula. The panellists were Academician of Science Ilkka Niiniluoto (University of Helsinki) and Senior Researcher Salla-Maaria Laaksonen (University of Helsinki).
- The recording is available for the time being at www.acadsci.fi

8 February: Thematic meeting: Taipuu vaan ei taitu (“Bends, but does not break”) publication event

- Hybrid: live from the Symposium venue of Hotel Kämp, platform provided by FLIK video production service
- Publication of the statement issued by the panel of COVID experts at the Finnish Academy of Science and Letters
- Those present at the studio were Academician of Science Risto Nieminen (Aalto University), Professor Anna Mauranen (Finnish Academy of Science and Letters), Editor-in-Chief Kaius Niemi (Helsingin Sanomat) and State Secretary, Adjunct Professor Pilvi Torsti.
- Video greetings and questions were sent in by: Director Mika Aaltola (Finnish Institute of International

Affairs), Professor, loneliness researcher Niina Junttila (University of Turku), Youth Agenda 2030 group, Executive Director Anne Palm (Wider Security Network WISE). The event was hosted by Journalist Piia Pasanen.

- The recording is available for the time being at www.acadsci.fi

15 March: Section meetings

23 March: Virtual visit to the Finnish Broadcasting company Yle’s News and Current Affairs unit

- Google Meet platform
- Marcus Ziemann, Corporate Communications Professional and Journalist introduced us to the studios and their technology, in addition to rapid response news. Several Yle reporters were present and the discussion was lively.
- Sarita Blomqvist, Digital Producer at Mediadesk described the world of news: How are news produced online? What tools are used to monitor activities and what information is used in the news layout?
- Ville Laakso, Science, health and lifestyle producer talked about science news and news planning. Where do science news come from? What choices are made?
- Jonas Jungar, Head of Journalistic Standards and Ethics of the news in Swedish, talked about his study on “fluff news”. How does social media challenge the newsroom? What even is news?
- Jenni Müller, Head of Audience Insight at News and Current Affairs studied what media consumers think of us. What do we actually know about media consumption?

- Jarno Koponen, Yle News Lab's Head of AI & Personalization talked about where journalism is headed. How is artificial intelligence used in the news and how will following the news change in the future?
- Mika Hentunen, US Correspondent contacted us from Washington. He works in an environment where science is systematically questioned and exploited for personal agendas. He led us in a discussion about the restoration of discipline in science during the Biden administration.
- The visit was organized for the members of the Finnish Academy of Science and Letters and Young Academy Finland.

23 April: Spring Meeting

- The Finnish Academy of Science and Letters awarded the Academy Award and Medal No. 33 to Academician of Science Ilkka Niiniluoto (University of Helsinki).
- Discussion of the 2021 Academy Award winner with Academician of Science Riitta Hari, who won the award in 2020, entitled "Ihmisielen monialainen tutkimus" ("Multidisciplinary study of the human mind"). The recording is available for the time being at www.acadsci.fi
- Regular items were discussed and decided in the Spring Meeting.

25 May: Tiedeneuvonta tänään ja tulevaisuudessa – kohti viisaampia päätöksiä ("Science advice today and in the future – towards wiser decisions")

- Zoom platform
- The event was produced with Sofi (Science Advice Initiative of Finland)

and consisted of a presentation of the project. In addition to Sofi's Academy Secretary Jaakko Kuosmanen and Science Communicator Nanna Särkkä, the project was presented by members of the Academy who played an active role in the Phenomenon map project, namely, Professors Kimmo Alho and Katariina Salmela-Aro.

- The international significance of science advice was discussed by Academician of Science Risto Nieminen, Chief Executive Director of Sofi
- The event welcomed comments and questions from the audience and fostered an open atmosphere.

14 September: Thematic meeting: Evening for new members

- Hybrid event; remote participation. Studio production from Mariankatu using a virtual platform provided by Roast Creative
- During the evening, we were briefly introduced to members who had joined us in the last two years. Klaus Elfving, Science Communicator interviewed some ten new members from 2020–2021. We heard the latest news from various scientific disciplines, from AI research to social neuroscience and research on interaction and play.
- Two presentations by members were also given at the event. Professor Liisa Laakso (Nordic Africa Institute) presented the relationship between science and democracy in the African countries and Professor Sabrina Maniscalco (University of Helsinki, remote participation) talked about the world of quantum physics and its significance.

- Afterwards, there was plenty of time for discussion and questions from the audience about the themes of the presentations. The discussion was led by President Anna Mauranen.
 - The event was bilingual: both Finnish and English were used.
 - The recording is available for the time being at www.acadsci.fi
- 11 October: Thematic meeting: Ilta humanistisille tieteille (“Evening dedicated to the humanities”)**
- Hybrid event; remote participation. Studio production from Mariankatu using a virtual platform provided by Roast Creative
 - In the monthly meeting in October, the Prize for the Humanities was awarded to Associate Professor Kaius Sinnemäki (University of Helsinki), followed by a discussion on the appreciation and impact of the humanities in society.
 - Kaius Sinnemäki made a presentation of thanks and took part in the panel discussion. Introductions to the theme of the evening were heard from panellists Professor Jari Ojala (University of Jyväskylä, remote participation) and Academy Professor Anu Wartiovaara (University of Helsinki).
 - The discussion was led by President Anna Mauranen.
 - Interesting perspectives on the topic were also heard in the form of video interviews. Those participating in the event through video interviews were Susanna Pettersson (Nationalmuseum), President Mikko Mäntylä (Slush) and Chancellor Kaarle Hämeri (University of Helsinki)
- The names of the grantees of the Eino Jutikkala Fund and the Emil Öhmann Foundation were announced.
 - The recording is available for the time being at www.acadsci.fi
- 13 October: Seminar of the Jurisprudence Group “Oikeustutkimus 2021 – Oikeudenaloja vai temaattisia kokonaisuuksia?” (“Legal studies 2021 – branches of jurisprudence or thematic entities?”)**
- 14 October: Great Nobel event**
- The event was organized in cooperation with other academies of science and Helsingin Sanomat and broadcast live from Sanoma House.
 - The event featured expert-led presentations of the 2021 Nobel laureates and their research topics, achievements and their significance.
 - The event was broadcast live and the recording is available for the time being at www.academies.fi
- 8 November: Thematic meeting Disinformaatio ja korona (“Disinformation and COVID”) and the Autumn General Meeting**
- Hybrid event; remote participation. Studio production in the Mirror Room of Hotel Kämp using a virtual platform provided by Rajupaja
 - The monthly meeting focused on the production, dissemination and credibility of scientific knowledge, especially in times of crisis.
 - The Academy’s Pro Scientia Prize and Pro Scientia Honourable Mention were awarded at the event. The Prize was given to non-fiction writer Tiina

Raevaara and the Honourable Mention to Lasten tiedekysymykset (“Children’s science questions”), a section in Helsingin Sanomat newspaper. The award was received on behalf of Helsingin Sanomat by the section editor, journalist Juha Merimaa.

- The panellists were Professor Juhani Knuuti (University of Turku), Tiina Raevaara, Olli Vapalahti (University of Helsinki). The panel discussion was led by President Anna Mauranen.
- The recording of the monthly meeting is available for the time being at www.acadsci.fi
- Regular items were discussed in the Autumn Meeting.

13 December: Thematical meeting Ilta matemaattis-luonnontieteellisille tieteille (“Evening dedicated to mathematics and science”)

- Hybrid event at Valkoinen Sali on Aleksanterinkatu in Helsinki. Only

some grantees and members were invited due to the limited capacity. Everyone else participated via remote connection.

- The Väisälä Prizes 2021 were awarded to Professor Emilia Kilpua (University of Helsinki) and Associate Professor Christian Webb (University of Helsinki). They gave presentations on their fields and research.
- President Anna Mauranen announced the names of the grantees of the Vilho, Yrjö and Kalle Väisälä Fund.
- A presentation was given by Professor Nikolay Kuznetsov (Saint Petersburg State University and University of Jyväskylä) entitled Hidden attractors in science and technologies.
- The President’s watch was passed on from Anna Mauranen to Kimmo Kaski.
- Musical performances ordered from Primo events service were heard in the beginning and at the end.
- The recording is available for the time being at www.acadsci.fi

