

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

2020



UNIVERSITY OF HELSINKI

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

PUBLISHED 21.4.2021

EDITORIAL BOARD

PÄIVI KUUPPELOMÄKI
JONAS LINDHOLM
TUULA SUNNARBORG
SOILE TAPIO

**TRANSLATION (SWEDISH AND
ENGLISH)**

LANGUAGE SERVICES.
UNIVERSITY OF HELSINKI

TABLE OF CONTENTS

Introduction by the rector	4
A changing university	8
Strategy period 2017–2020	14
Research	22
Education	34
Public engagement	47
A sustainable and responsible university	59
Staff	64
Finances	73
Services	80
Facilities	88
University of Helsinki Group	96
List of figures and tables	97
Background figures for graphs	100

INTRODUCTION BY THE RECTOR

For most of us, the year 2020 boils down to one word: corona. In mid-March, the University's operations changed radically. The premises were closed, teaching was transferred online and, as a rule, the University community started working and studying remotely. During this exceptional year, much had to be organised in new ways on short notice, including entrance examinations

The changes brought about by the pandemic were such that it was not possible to systematically prepare for them months in advance. However, the University never came to a standstill, but rather, the everyday work of both students and staff continued without interruption. We have fostered inclusivity in the University community in a goal-oriented manner during the last few years, and now these efforts are bearing fruit. The situation called for everyone to be flexible and go the extra mile in the face of new challenges. The University community showed its strength: by joining forces we continued onward. Teaching was provided and research was carried out, students graduated and public examinations of doctoral dissertations were held according to special arrangements, and University Services adapted to telecommuting.

The University formulated its new strategic plan through a communal effort by engaging the University community and listening to its friends outside the immediate academic community. In conjunction with this work, we also updated our values that constitute the basis for all our activities to now read: truth, Bildung, freedom and inclusivity. In the course of 2020, we launched discussion sessions within the University community on the significance of values in our everyday life. These discussions brought together, and continue to do so, members of the University community of all roles, faculties and units to reflect on this important issue.

In the exceptional circumstances, the importance of science was understood more clearly than before in society at large. As research-based knowledge became increasingly appreciated, the University's new strategic plan and vision became more topical. According to our strategic plan, which extends to 2030, our operations will be guided by our vision of "With the power of knowledge – for the world".

In addition to the pandemic, the University suffered another setback in May, when Rector Jari Niemelä went on a sick leave that continued until the end of the year. Fortunately, our cohesive team of vice-rectors was able to quickly update their duties in the new circumstances.

GLOBAL IMPACT IN INTERACTION

The University's vision during the strategy period 2017–2020 was "Global impact in interaction". The goal was to consolidate the University's position among the leading universities in the world. Even though we did not quite reach the goal of ranking among the 50 leading universities in the world, we are placed among the 100 best universities by the internationally esteemed ARWU Shanghai, NTU Taiwan and the Times Higher Education rankings.

One of the most important reforms of the strategy period was the education reform. The University's objective was to offer students internationally attractive degree programme of a broader scope that would better than before meet the competence demands and labour market needs of the future. Another education-related objective for the strategy period was the digital leap in teaching, which in fact took a huge final bound with the coronavirus pandemic. Thanks to the University's long-

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

term development efforts, the necessary educational technology as well as technical and pedagogical expertise in the exploitation of virtual solutions were already in place, which enabled the transfer of most teaching online almost overnight.

During the strategy period, the University also implemented reforms in support of interdisciplinarity. Network-like forms of collaboration spanning over unit boundaries include new, multidisciplinary degree programmes as well as research communities, such as the Helsinki Institute of Sustainability Science HELSUS, the Helsinki Institute of Life Science HiLIFE and the Helsinki Institute for Social Sciences and Humanities HSSH.

In 2018–2019, an international panel assessed the quality of research conducted at the University of Helsinki. The assessment results indicated that the scientific quality of research at the University of Helsinki is of a high international standard and that top-level research can be found on every campus. During the strategy period 2017–2020, the University also enhanced the conditions of international research. This meant investing in high-quality research infrastructures and open science, as well as in the development of recruitment and extensive digital resources.

During the last four years, the University of Helsinki has consolidated its role not only as an international top university in research and education, but also as an associate among its stakeholders and partners by increasing business collaboration and forging new partnerships. By end of the strategy period, the University's endeavours in creating a new model for strategic partnerships had resulted in international partnerships with Stockholm University, Peking University and the University of Edinburgh. The University also made a significant strategic initiative by joining the Una Europa alliance in 2019. This alliance brings us into closer collaboration with the oldest and most distinguished universities in Europe.

One of the most significant measures promoting public engagement was the #Researchmatters campaign

launched in 2018 to highlight the significance of research and research-based education for Finland and the whole world. The aim was to lobby both candidates and decision-makers before the parliamentary elections about the importance of research for society.

THE BEST FOR THE WORLD

The University of Helsinki is entering a new era, as our new strategy period is to begin at the beginning of 2021. Our aim is that by 2030 we will be an internationally acknowledged multidisciplinary hub of sustainability research and teaching, as we lead the way in building a more responsible world. Our aim is to be the best place to study, teach, work and conduct research. To succeed in this, we must be a healthy, equal and engaged University community.

**THE UNIVERSITY OF
HELSINKI EDUCATES
STUDENTS TO
BE FORCES FOR
CHANGE.**

One of our strategic choices is that knowledge and learning are for everyone. We want to make research-based knowledge available to society at large – that is why we promote open science and open-access data. Another aim is that in 2030, research-based knowledge will increasingly be used to support societal decision-making.

Like the rest of society, we are also preparing for life after the pandemic. The University's own post-coronavirus task force has drawn up a report presenting a vision for the future and the role of universities in the world after the pandemic.

Science, research-based education and expertise of a broad scope play a significant role in solving global challenges. This is our forte as a multidisciplinary university. The University of Helsinki educates students to be forces for change. We make a difference, boldly, with the power of knowledge. We steer society towards the future.

Sari Lindblom

Rector

KEY FIGURES IN 2020

31,600

DEGREE STUDENTS

1,941

INTERNATIONAL DEGREE STUDENTS

8,934

DEGREES

1.3

MILLION COMPLETED CREDITS

31,192

APPLICANTS IN MAIN ADMISSIONS

4,140

NEW STUDENTS

35,510

OPEN UNIVERSITY STUDENTS

8,120

EMPLOYEES, OF WHOM 4,717 ARE TEACHING AND RESEARCH STAFF

1,532

INTERNATIONAL STAFF MEMBERS, OF WHOM 1,320 ARE TEACHERS AND RESEARCHERS

10,664

PUBLICATIONS, OF WHICH 73% WERE PEER-REVIEWED

3,104

RESEARCH PROJECTS

74TH

IN THE 2020 ACADEMIC RANKING OF WORLD UNIVERSITIES (SHANGHAI RANKING)

9

ACADEMY OF FINLAND CENTRES OF EXCELLENCE AT THE UNIVERSITY OF HELSINKI, 7 OF WHICH ARE COORDINATED BY THE UNIVERSITY

10

ACADEMY PROFESSORS

9

RESEARCHERS PRIMARILY AFFILIATED WITH THE UNIVERSITY OF HELSINKI ON THE HIGHLY CITED RESEARCHERS LIST

121

INVENTION DISCLOSURES AND 47 PATENT APPLICATIONS

39,842

REGISTERED ALUMNI

42

MILLION PAGE VISITS ON THE HELSINKI.FI WEBSITE

18,000

INTERNATIONAL MEDIA HITS

16

OPERATIONS IN 16 LOCATIONS

ORGANISATION 2020



FACULTIES, SSKH AND JOINT OPERATIONAL UNITS

CITY CENTER CAMPUS	KUMPULA CAMPUS	VIKKI CAMPUS	MEILAHTI CAMPUS
FACULTY OF THEOLOGY	FACULTY OF SCIENCE	FACULTY OF BIOLOGICAL AND ENVIRONMENTAL SCIENCES	FACULTY OF MEDICINE
FACULTY OF LAW		FACULTY OF PHARMACY	
FACULTY OF ARTS		FACULTY OF AGRICULTURE AND FORESTRY	
FACULTY OF EDUCATIONAL SCIENCES		FACULTY OF VETERINARY MEDICINE	
FACULTY OF SOCIAL SCIENCES			
SWEDISH SCHOOL OF SOCIAL SCIENCE SSKH			
HELSINKI INSTITUTE FOR SOCIAL SCIENCES AND HUMANITIES HSSH	INSTITUTE FOR ATMOSPHERIC AND EARTH SYSTEM RESEARCH INAR		
HELSINKI INSTITUTE OF SUSTAINABILITY SCIENCE HELSUS			

DEGREE PROGRAMMES: 32 DOCTORAL PROGRAMMES IN FOUR DOCTORAL SCHOOLS, 63 MASTER'S PROGRAMMES AND 33 BACHELOR'S PROGRAMMES

INDEPENDENT INSTITUTES

HELSINKI INSTITUTE OF LIFE SCIENCE HILIFE	HELSINKI UNIVERSITY LIBRARY HULIB	OPEN UNIVERSITY
FINNISH MUSEUM OF NATURAL HISTORY	CENTRE FOR INFORMATION TECHNOLOGY	LANGUAGE CENTRE
HELSINKI COLLEGIUM FOR ADVANCED STUDIES HCAS	UNISPORT	NATIONAL LIBRARY OF FINLAND

A CHANGING UNIVERSITY

At the beginning of 2021, a new strategy period will begin at the University of Helsinki. We will be making a fresh start on many fronts: for the first time, the University's strategic plan will cover the next ten years and reflect the perspectives and expertise of the entire University community and its stakeholders. Moreover, the University and the surrounding society are facing new circumstances because of the coronavirus pandemic.

For the first time, the drafting process of the strategic plan, which began in January 2019, engaged the whole University community. In the course of the year, the University community had the opportunity to participate in the process by responding to an online survey, attending campus meetings to meet the rector and vice-rectors, as well as joining faculty-specific working groups and other committees. The University Board approved the strategic plan in February 2020. Later in the year, the strategic guidelines were translated into concrete measures in implementation plans, again with the help of the University community and their expertise. The University's important stakeholders, from its alumni to political decision-makers, were also involved in the drafting of the strategic plan.

The end result is a document reflecting the ideals of the broad University community and its stakeholders, a document behind which we can all stand. The strategic plan is based on the four values of the University – truth,

Bildung, freedom and inclusivity – which were also revised during the drafting process.

Our aim is that by 2030 we will be an internationally acknowledged, multidisciplinary hub of sustainability research and teaching, and will lead the way in building a more responsible world. This means that sustainability will be incorporated into all education provided by the University and into all activities of the University. Our aim is to achieve full carbon neutrality by 2030, which is not

a moment too soon. We need multidisciplinary knowledge, for example, for preserving biodiversity, curbing climate change and understanding global societal transformations. From the point of view of the future of our planet, we are at a critical point at this very moment.

One of our strategic choices is that knowledge and learning are for everyone. We want to make research-based knowledge available to society at large – that is why we promote open

science and open-access data. Another aim is that in 2030, research-based knowledge will increasingly be used to support societal decision-making. This requires us to continue to bolster the connection between research and teaching throughout the entire University. In practice, this enables all degree students to participate in the activities of the research community as part of their studies.

We also want to be the best place to study, teach, work and conduct research. To succeed in this, we must be

**THE STRATEGIC
PLAN IS BASED ON
THE FOUR VALUES
OF THE UNIVERSITY
– TRUTH, BILDUNG,
FREEDOM AND
INCLUSIVITY**

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

a healthy, equal and engaged University community. We will improve the opportunities of members of our community, staff and students alike, to influence the University's operations. We will strive to make the University known as an attractive employer both nationally and internationally. Moreover, an important aim is to secure the University's financial stability. We will continue to enhance our fundraising, and to safeguard the position of research, we will increase our research funding during the new strategy period.

At the time of preparing the strategic plan, Covid-19 had not developed into a pandemic, and its radical global consequences could not have been foreseen. Nevertheless, the strategic plan provides a solid foundation for the University to be able to face the pandemic and other, unpredictable forms of social turmoil: we are a multidisciplinary university of a broad scope conducting research ranked at a high international standard. We can serve society as a pioneer that introduces solutions, knowledge and understanding applicable to current and future challenges. We are not just reacting to change but are proactively promoting social progress.

DIGIVISION 2030 FOR HIGHER EDUCATION INSTITUTIONS

When the project "Vision for higher education and research in 2030" of the Ministry of Education and Culture was being implemented, digitalisation was identified as a common issue challenging all Finnish universities

and institutions of higher education. In February, led by Universities Finland UNIFI and the Rector's Conference of Finnish Universities of Applied Science Arene, all Finnish universities and universities of applied sciences signed a letter of intent on the promotion and joint planning of the Digivision 2030 project. The most important objective of Digivision 2030 is to open up national information resources to individuals and society at large. At the same time, pedagogical solutions will be developed to the advantage of learners, and institutions of higher education will be steered to become open communities managed through knowledge.

In the autumn, the steering group for Digivision drafted an application for funding from the Ministry of Education and Culture, which led to a special grant for digitalisation efforts as well as strategic funding for universities and universities of applied sciences from 2021 to 2024, totalling €37.8 million. Also in the autumn, the universities prepared a joint consortium agreement that is currently circulating the universities to be signed by the participants.

The universities in the project established a joint project office and recruited a project manager in October and November. The project office's first task has been to launch operations in collaboration with the universities. For this purpose, seven independent project packages have been set up, and currently, leaders for these packages are being recruited. Universities have appointed liaisons to the relevant working groups, which will begin operating in the spring of 2021.

MOST WIDELY-READ ONLINE NEWS 2020

CITIZEN SCIENCE DISCOVERS A NEW FORM OF THE NORTHERN LIGHTS

Working together with space researchers, Finnish amateur photographers have discovered a new auroral form. Named 'dunes' by the hobbyists, the phenomenon is believed to be caused by waves of oxygen atoms glowing due to a stream of particles released from the Sun.

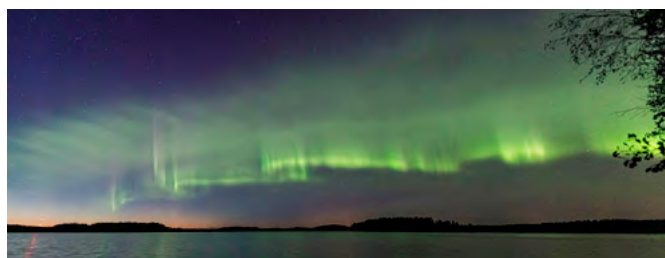


Photo: Karl Saari

<https://www.helsinki.fi/en/news/science-news/citizen-science-discovers-a-new-form-of-the-northern-lights>

The University of Helsinki is involved in the Digivision 2030 steering group and in the most important working groups. The project will offer significant opportunities for collaboration and cost savings to the University and its teachers and students through the development of digital solutions for teaching and learning as well as for student services.

AGREEMENT BETWEEN THE MINISTRY OF EDUCATION AND CULTURE AND THE UNIVERSITY OF HELSINKI FOR THE PERIOD 2021–2024

The instructions for agreement preparations issued by the Ministry of Education and Culture were based on the government programmes of Prime Ministers Rinne and Marin as well as the Ministry's vision for higher education and research in 2030. The rectors of Finnish universities met several times to formulate the joint objective of Finnish universities for 2030 to be included in the agreement. In the autumn, after a process with various stages, the Ministry decided on national special duties and degree targets.

The negotiations on the agreement took place in June. The parties agreed on the follow-up indicators of the agreement as well as strategic funding for measures supporting the implementation of the University's strategic plan. This funding turned out to be significantly smaller than expected. The Ministry decided on the funding based on the government programme as late as in December. The agreement between the Ministry of Education and Culture and the University of Helsinki for the period 2021–2024 was signed in January 2021.

INTERNATIONAL STRATEGIC PARTNERSHIPS AND ALLIANCES

International strategic partnerships and alliances enhance the University of Helsinki's impact as a global force. A situation such as the one created by the coronavirus pandemic turns traditional international collaboration upside down in many respects.

In times like these, the significance of strong partnerships is highlighted. Thanks to a shared objective and a strong connection, collaboration can be furthered and even accelerated, if necessary, even when physical mobility across borders is challenging. The prevailing situation also emphasises the importance of international collaboration: solutions to global problems such as the pandemic can only be found by joining the best forces across borders.

INTERNATIONAL STRATEGIC PARTNERSHIPS AND ALLIANCES ENHANCE THE UNIVERSITY OF HELSINKI'S IMPACT AS A GLOBAL FORCE

The Una Europa alliance brings the University into closer collaboration with the oldest and most distinguished universities in Europe. Together with Freie Universität Berlin, Alma Mater Studiorum Università di Bologna, University of Edinburgh, Uniwersytet Jagielloński w Krakowie, KU Leuven, Universidad Complutense de Madrid, and Université Paris 1 Panthéon-Sorbonne, the University of Helsinki is building "the university of the future" and

creating a truly European inter-university environment. The University of Helsinki has taken a prominent role in Una Europa: it leads the One Health focus area, chairs the Diversity Council and is one of the main architects of the Una Europa joint research strategy.

The 1Europe project of Una Europa, funded by Erasmus+, was launched in January in a kick-off session in Brussels. The project plans joint education programmes and modules. Of great significance to the alliance was the €2 million additional funding from the Horizon 2020 programme for a project focusing on reinforcing research collaboration between the Una Europa universities and

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

building a common Una Europa ecosystem of research and innovation.

The League of European Research Universities (LERU) continued its lobbying efforts, cooperation between member universities and its efforts to enhance the exchange of knowledge. Although all meetings were held online because of the pandemic, the network continued its active and successful operations.

The University of Helsinki has three strategic partners, Stockholm University, Peking University and the University of Edinburgh.

The partnership with Stockholm University includes two major research projects, the Arctic Avenue and the Baltic Bridge. Both projects aim at top-level research by combining strengths and joining forces, for example, in the form of research infrastructures.

Contacts with Peking University were maintained virtually. The annual summer school in the life sciences had to be postponed because of the pandemic, but scholars in many fields have held joint online seminars and teaching.

The partnership with the University of Edinburgh focuses on two spearhead fields: human genomics and forest sciences. In 2020, the two universities recruited eight doctoral students to be affiliated with both universities to further collaboration between research groups. Innovation and urban collaboration between the universities also took steps forward, as entrepreneurship among students was promoted and the MegaSense project was

piloted with the University and City of Edinburgh. Last but not least, the University of Edinburgh was selected as a benchlearning partner for the audit of the University's quality system.

NEW INTERNATIONAL INITIATIVES

While many traditional activities have been hindered by the pandemic, new opportunities have emerged. A good example is the University's ability to rapidly transfer to virtual mobility. In 2020, virtual mobility was piloted within the Una Europa alliance. Under the Virtual Mobility in Emergency pilot, University of Helsinki students were able to take courses in three Una Europa universities and vice versa. This pilot was significant for two reasons. First, during the term of the new Erasmus+ programme (2021–2027), short mobility periods, virtual mobility and blended learning opportunities will be emphasised alongside traditional exchange periods of a longer duration. Thanks to the pilot, the University of Helsinki is well positioned to enhance these new forms of mobility. Second, with the experience gained from the pilot, the University is able to launch virtual mobility with other partners of importance.

In October, the University of Helsinki announced its first Africa-focused programme for the period 2021–2030. The programme, which outlines the principles and direction of the University's Africa-focused activities, is founded on partnerships: the University wishes to build long-term partnerships that are equal and mutually beneficial for both parties. An important aspect is

MOST WIDELY-READ ONLINE NEWS 2020

A BREAKTHROUGH IN AI APPLICATIONS REQUIRES WELL-FUNCTIONING REGULATION

Is there a need for new regulatory mechanisms to cover damage caused by artificial intelligence, or do the existing liability rules suffice?

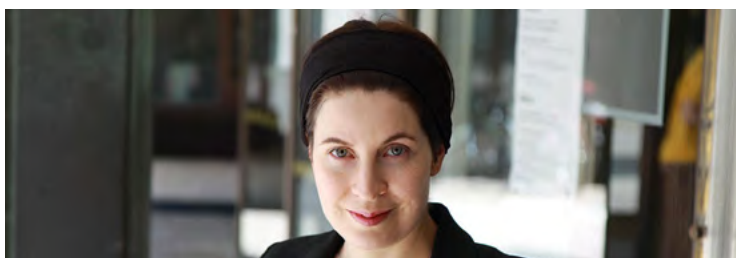


Photo: Petter Gröning

<https://www.helsinki.fi/en/news/society-economy/a-breakthrough-in-ai-applications-requires-well-functioning-regulation>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

the promotion of talents across borders. The aim is to increase researcher and student mobility and interaction and to create an increasingly global and inclusive classroom environment at the University of Helsinki. The programme also enhances collaboration with stakeholders. The aim is that, by 2030, the programme will have fostered not only new research initiatives, but also other forms of cooperation, such as education and business collaboration as well as education export.

QUALITY MANAGEMENT AND PREPARATION FOR THE UPCOMING AUDIT

The University's quality processes were strongly focused on the audit of its quality management system to take place in the autumn of 2021. The audit will be conducted by the Finnish Education Evaluation Centre (FINEEC). In November, the benchlearning component belonging to the FINEEC audit model was carried out with the University of Edinburgh. The benchlearning sessions, which were held online, centred on the theme of student and staff wellbeing. In October and November, the self-assessment component of the audit was launched with four online workshops. The workshops attracted some 200 members of the University community: degree students and doctoral students, academic staff, specialist and support staff, representatives of the University leadership, as well as representatives of stakeholders from outside the University.

Quality documents and communication material were reviewed to reflect the organisational changes that have taken place in the past few years. A separate operations manual has been replaced by the Flamma intranet and the Instructions for Students and Instructions for Teaching websites, which serve as the most important resources for the University's quality documentation. To support the above websites, navigators based on the Plan-Do-Check-Act model of continuous development were created for Flamma to assist members of the University community to find the most important quality management methods and their related guidelines for teaching, research, public engagement and support services. In addition, faculties, independent institutes and University Services devised similar navigators depicting their unit-specific operations for their own unit-specific

pages. In early 2021, an external review will be conducted for the sites and pages providing instructions, on the basis of which the instructions will be developed further from the point of view of quality management.

Quality management and quality issues were frequently communicated to the University community through news articles, information sessions and quality campaigns. A pivotal objective of quality-related efforts at the University is to enhance awareness of quality issues among the University community, with a focus on individual and collective continuous development.

STRUCTURAL DEVELOPMENT

The Helsinki Institute for Social Sciences and Humanities HSSH, bringing together scholars in these fields on the City Centre Campus, was launched in early 2020. Administratively, HSSH operates under the auspices of the Helsinki Collegium for Advanced Studies.

The working group for the structural development of the Open University published its final report in September. The working group proposed a plan for expanding the range of learning opportunities by 2022 so that studies offered by all faculties would be available at the Open University, collaboration with general upper secondary schools would be established on the national level, and the status of the Open University route in student admissions would be affirmed. The structural development of the Language Centre was also investigated in 2020.

The decade-long debate about transferring the National Repository Library from Kuopio to Mikkeli and integrating it with the National Library of Finland came to an end in October with the Ministry of Education and Culture deciding against the transfer. The decision was justified by the significance of the Repository Library for the vitality of the Kuopio region and by the fact that there were no compelling reasons for the transfer.

The Ministry of Justice launched negotiations about the establishment of a rule of law centre at the Faculty of Law, University of Helsinki. In February 2021 these negotiations were near completion.

STRATEGY REVIEW 2017–2020

STRATEGY PERIOD 2017–2020

The University of Helsinki Strategic Plan and the University's development efforts are based on its core duties of engaging in high-quality education and research, as well as in societal interaction and impact.

In its strategic plan for the period 2017–2020, the University stated that it wants to contribute to a better, sustainable world by taking an increasingly active role in the resolution of global problems.

The University committed itself to the vision “Global impact in interaction”, firmly believing that it could be achieved by intensifying cooperation with both established and new partners and stakeholders. The strategic plan underlined high-quality research and teaching in the production of new knowledge and know-how for the

benefit of humankind. “Forward and fresh thinking, an attentive and proactive attitude, and creative interaction will help the University of Helsinki to solidify its position among the foremost universities in the world.”

This chapter recapitulates the strategy period 2017–2020. The measures taken are described in detail in Appendix 1 of the Finnish version of this document. Appendix 1 is available only in Finnish.

The strategic plan set three major objectives: 1) a creative, international environment for learning and top-level research, 2) a focus on the student, and 3) resources for reform. The strategic objectives and the related development areas were featured in a strategic roadmap.

Figure 1. University of Helsinki strategic roadmap for 2017–2020.



A CREATIVE, INTERNATIONAL ENVIRONMENT FOR LEARNING AND TOP-LEVEL RESEARCH



Profiling and recruitment



High-level and high-impact research



Open science



High-level research infrastructure



International partnerships

“International competition between universities continues to intensify. Universities compete for researchers, students, research funding and donations, as well as for fame and recognition. The quality of research and teaching at the University, and the reputation thus achieved, will be increasingly decisive factors in the recruitment of new students and staff alike.

By 2025, the University of Helsinki aims to have established itself as a cutting-edge research and learning environment that attracts students, researchers and partners from all over the world. High standard infrastructures and extensive digital resources will enable creative work in the academic community. The University will bolster its key research areas by collaborating with its international partners.”

THE UNIVERSITY OF HELSINKI'S SUCCESSES IN 2017–2020

1. The University has succeeded in strengthening the profile of research, measured by success in high-profile funding rounds and the successful launching of new multidisciplinary, network-like research communities that span across unit boundaries in the research profile-building areas.
2. Investments in an internationally attractive employer image and relocation services have borne fruit.
3. The University has fared well in research assessments and other international evaluations.
4. The preconditions of business collaboration as well as funding acquired through such collaboration have improved significantly.
5. Business collaboration and communication with decision-makers and international audiences have resulted in visibility for research in the traditional media, social media and society at large.
6. Open science has become a genuine objective, and the University community is offered related support in their everyday work. Open access publishing has snowballed. Teaching in open science and the responsible conduct of research has become part and parcel of doctoral education.
7. The University's membership in the Una Europa alliance, three international partnerships, a number of cooperation projects in education as well as strong national partnerships have yielded new initiatives for both research collaboration and education.
8. The University has succeeded in national funding rounds for research infrastructures. Research infrastructures are being developed with a long-term approach.
9. New operational structures in the faculties have become well established.

AREAS OF FURTHER DEVELOPMENT

1. The operative practices of multidisciplinary, network-like research communities that span across unit boundaries need to be established, and adequate support services for them should be ensured.
2. As the promotion of open science will be one of the University's strategic choices for the strategy period beginning in 2021, development efforts in this area will continue. As far as open publishing is concerned, the University of Helsinki has only reached an average level nationally.
3. The University must focus on services and solutions for the assessment and promotion of the openness, visibility, impact and responsibility of its operations, and must continue to develop the application and awareness of these services and solutions. Impact

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

indicators are available for teaching, research and public engagement.

4. The University must continue to pay attention to the integration and wellbeing of its international staff and ensure multilingual services also in the future. The wellbeing of doctoral students and post-doctoral researchers continues to be an area of improvement.

FOLLOW-UP INDICATORS FOR THE SET OBJECTIVES

POSITION IN INTERNATIONALLY RECOGNISED RANKINGS

Objective: Ranks among the 50 leading universities in the world

Status at the end of the strategy period: The average position in rankings (2020: 91) continued to decline for the fourth consecutive year. A significant reason for this decline relates to the improved rankings of East Asian, particularly Chinese, universities. This does not, however, fully explain the University's downward trend, as it has gone down in the rankings of Nordic and European universities as well.

Table 1. Position in internationally recognised rankings.

Ranking	2016	2017	2018	2019	2020
Shanghai (ARWU)	56	56	57	63	74
QS	91	102	110	107	104
Times (THE)	91	90	99	96	98
Taiwan (NTU)	71	81	79	90	93
US News	91	81	92	87	86
Total	80	82	87	89	91

HIGH-QUALITY AND INTERNATIONAL PUBLICATIONS

Objective: +15% during the strategy period (3,043 publications)

Status at the end of the strategy period: The number of articles and books published in scholarly peer-reviewed publication channels classified on level 2 and 3 of the Publication Forum (JUFO) classification scheme rose by 24% during the strategy period. The above target was reached in 2019.

The growth rate was calculated from the 2019 results, as the publication figures for 2020 continue to be reported in the course of 2021.

Table 2. High-quality and international publications.

2016	2017	2018	2019	2020
2,845	2,953	2,880	3,283	3,039

OPEN ACCESS PUBLICATIONS

Objective: +40% during the strategy period (2,500 publications)

Status at the end of the strategy period: Open access publishing grew significantly from the situation preceding the strategy period (256%). The importance of open access publishing grew in our operating environment during the strategy period.

Table 3. Open access publications.

2016	2017	2018	2019	2020
3,452	5,025	5,844	6,364	5,162

RATIO OF INTERNATIONAL STAFF MEMBERS TO ALL TEACHING AND RESEARCH STAFF

Objective: 30%

Status at the end of the strategy period: The ratio of international staff members to all teaching and research staff has risen during the strategy period, but the target of 30% was not reached.

Table 4. Ratio of international staff members to all teaching and research staff.

2016	2017	2018	2019	2020
20.9%	22.5%	24.0%	25.4%	27.1%

CREDITS COMPLETED DURING STUDENT EXCHANGE

Objective: No numerical target was set.

Status at the end of the strategy period: The number of credits completed during student exchange has declined during the strategy period for two reasons: the ending of the transition period of the education reform and the pandemic. Normally the exchange period takes place at the final stages of bachelor's and master's

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

studies, but now students wanted to ensure that they would complete their degree before the deadline for degrees pursued in accordance with the old degree system in 2020. In the spring of 2020, marked by the pandemic, the University was able to organise 40% of the scheduled exchanges, which is an exceptionally high figure both nationally and internationally.

Table 5. Credits completed during student exchange.

Out/In	2016	2017	2018	2019	2020
Outgoing	21,383	20,701	20,151	18,872	17,352
Incoming	33,410	34,786	33,460	33,062	22,062
Total	54,793	55,487	53,611	51,934	39,414

FOCUS ON THE STUDENT



Competitive degrees



Interaction and learning in the scientific community



Digitisation of learning environments

“In the midst of great challenges and changes, political and social demands on universities will become more pronounced. Universities must be able to develop education further to meet the competence demands and labour market needs of the future. Today’s students will be solving tomorrow’s challenges. Digitalisation and technological advances in general will open up new opportunities for conducting research and offer novel methods for teaching and learning.

The University of Helsinki’s objective is that in 2025, the focus will be on the students. The University will offer its students competitive degree programmes and degrees of a broader scope than before. Right from the beginning of their studies, students will have the opportunity to participate in research.”

THE UNIVERSITY OF HELSINKI’S SUCCESSES IN 2017–2020

1. New learning outcomes-based degree programmes were established. The management of the programmes was developed in an increasingly student-oriented and knowledge-based direction.
2. Digital services for teaching and learning were significantly expanded and developed further while the development work took a student-oriented turn. This provided an excellent foundation for the rapid transition to remote teaching and remote examinations of doctoral theses at the outbreak of the 2020 pandemic.
3. The supervision and guidance of degree students was enhanced with a student-oriented approach. Degree programmes were offered supervision and guidance models, supervision and guidance-related functions were designed for information systems, and the needs of supervision and guidance were considered in the planning of education and the development of related services. The significance of planning studies was highlighted.
4. The University introduced the Studies service portal for students, which includes a digital platform for courses, information on available teaching, a tool for planning studies, and the Instructions for Students and Instructions for Teaching websites, which were reviewed for consistency and made available in three languages on the helsinki.fi website.

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

5. The supervision of doctoral students was upgraded, and thesis committees were introduced throughout the University.
6. The modernisation of teaching facilities has supported the adoption of digital solutions in education and enabled the increasing application of blended learning methods.

AREAS OF FURTHER DEVELOPMENT

1. The status of degree programmes needs to be clarified, and the planning of their teaching resources developed further.
2. The status, functionality and incentives of joint degree programmes between faculties need to be considered.
3. Sustainability is to be integrated as a theme running through all the degree programmes.
4. Students have been introduced to a research-based method of working, but only in a field-specific manner.
5. Employer representatives have actively participated in the operations of degree programmes, but only in a field-specific manner.
6. The provision of services must be developed with a student-oriented approach, across sectoral boundaries.
7. Teaching and learning facilities need to be developed so that services supporting learning are increasingly available both on site and online and that physical and digital services are both available in physical spaces.
8. The wellbeing and coping of doctoral students, as well as the integration and career tracking of international doctoral students must be enhanced.

FOLLOW-UP INDICATORS FOR THE SET OBJECTIVES

RESPONSE RATE FOR THE FINNISH BACHELOR'S GRADUATE SURVEY IN THE WHOLE TARGET GROUP

Objective: 75%

Status at the end of the strategy period: The response rate has been slightly declining. To achieve the target, the

University considered the possibility of linking the survey with the application process for degree certificates, which would lower the threshold for responding to the survey. However, this could not be prioritised during the strategy period.

Table 6. Response rate for the Finnish Bachelor's Graduate Survey in the whole target group.

2016	2017	2018	2019	2020
74%	67%	69%	65%	65%

NUMBER AND SHARE OF ATTENDING STUDENTS WHO HAVE COMPLETED AT LEAST 55 CR

Objective: No numerical target was set.

Status at the end of the strategy period: Efforts have been made to facilitate student progress, which has resulted in a slight increase in the number of completed credits. The end of the transition period of the education reform is also evident in the figures for 2020.

Table 7. Number and share of attending students who have completed at least 55 cr

	2016	2017	2018	2019	2020
Share	38.9%	40.3%	40.8%	40.8%	43.1%
Number	10,259	10,518	10,497	10,570	11,403

RATIO OF INTERNATIONAL MASTER'S STUDENTS TO ALL STUDENTS

Objective: 20%

Status at the end of the strategy period: The tuition fees introduced for students from outside the EU/EEA in 2017 have resulted in a slight drop in the number of international master's students. Some degree programmes have suffered from a lack of qualified applicants. There are a great number of Finnish students among the international applicants.

Table 8. Ratio of international master's students to all students

2016	2017	2018	2019	2020
8.4%	7.4%	7.1%	7.1%	7.1%

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

RATIO OF INTERNATIONAL DOCTORAL STUDENTS TO ALL STUDENTS

Objective: 35%

Status at the end of the strategy period: During the strategy period, the share of international doctoral students remained fairly stable and did not grow as expected. Increasing the international attractiveness of doctoral education, international collaboration projects and education offered in English remain development areas. There are, however, great differences between the doctoral schools. It is necessary to share good practices among doctoral programmes and faculties across fields in order for the share of international doctoral students to also increase on the City Centre Campus.

Table 9. Ratio of international doctoral students to all students.

2016	2017	2018	2019	2020
20.2%	20.4%	20.2%	21.3%	20.2%

COMPLETED DOCTORAL DEGREES

Objective: 490

Status at the end of the strategy period: The annual target during the strategy period was 490 doctoral degrees. Every year, the number of completed degrees oscillated around the maximum number of degrees defined in the agreement between the University and the Ministry of Education and Culture, with an upward trend towards the end of the strategy period. The transition to the new degree requirements was evident in the number of completed degrees when the transition period ended in 2020. On the whole, the number of completed doctoral degrees corresponded to the target set for the four-year period 2017–2020.

Table 10. Completed doctoral degrees.

2016	2017	2018	2019	2020
508	475	444	503	604

RESOURCES FOR REFORM



An open and innovative
operational culture



Development of human
resources



Versatile and flexible
funding

“The environment the University is operating in is in a state of upheaval, which requires that the University be able to continuously reform itself. Because of the tightening economic situation, the University must seek funding from various national and international sources. Hence, the University must be able to redirect its operations according to the changing environment.

The University of Helsinki’s objective is that in 2025, it will be acclaimed for its open and experimental culture. The staff will be offered opportunities for professional development to meet the changing needs of the operating environment. The University will be flexible in seeking funding from various sources.”

THE UNIVERSITY OF HELSINKI’S SUCCESSES IN 2017–2020

1. An experimental operating culture, educational technology and digital solutions as well as digital skills have generated flexibility. They also enabled the rapid transition to remote work at the outbreak of the coronavirus pandemic.
2. The University is accustomed to developing services with a customer-oriented and flexible approach. Service design has become a part of everyday life.
3. The University community experienced an improved sense of community during the strategy period. The effects of the exceptional circumstances of the year 2020 on the community spirit must be assessed for the long term. The significance of a community

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

spirit and inclusivity is understood, and they are promoted. Inclusive facility solutions have been put into practice on the campuses. Inclusive operating models were applied in the drafting of the strategic plan for the period 2021–2030. The University carried out concrete measures to enhance equality.

- 4. The consideration of career advancement has become part of the organisational culture. The practices of target and development discussions have been enhanced, and wellbeing at work is a purposeful objective in itself. Benchlearning has become an increasingly important form of skills development. The University has boosted leadership roles and support for them.
- 5. During the strategy period, sustainability and responsibility were increasingly highlighted and selected as key objectives in the next strategic plan.
- 6. The University established multidisciplinary operating models across unit borders that reformed the University and opened up new funding channels.
- 7. External funding grew favourably, international fundraising activities were launched, and the University succeeded in acquiring more international business funding than before. The support services for research funding applications have adopted a unit-focused approach.

AREAS OF FURTHER DEVELOPMENT

- 1. The University must continue to foster inclusivity and a multicultural, tolerant and humanely diverse community. The promotion of equality will continue, particularly on the campuses and in units.
- 2. The University has found it challenging to promote inclusion among students, especially because of the provision of remote teaching due to the pandemic.
- 3. Opportunities for communal engagement will continue to be maintained and increased.
- 4. The University will continue to support benchlearning as well as opportunities for career advancement for specialist and support staff.
- 5. In the development of services, the University will continue collaboration across boundaries.
- 6. As the University’s core funding has not increased in sync with other Finnish universities, funding reforms with decreasing financial resources will require prioritisation and the reallocation of resources.

The University will continue to enhance business collaboration.

- 7. Sustainability will be highlighted as a social phenomenon and as a significant factor contributing to the University’s competitiveness and attraction. The University must ensure that it stays ahead of the competition in this respect.

FOLLOW-UP INDICATORS FOR THE SET OBJECTIVES

RATING IN THE WORKPLACE WELLBEING SURVEY

Objective: 3.7/5

Status at the end of the strategy period: The mean score of the responses to the workplace wellbeing survey has improved, although it has not reached the target level.

The workplace wellbeing survey is conducted at two-year intervals.

Table 11. Rating in the workplace wellbeing survey.

2015	2017	2019
3.38	3.42	3.57

COMPETITIVE INTERNATIONAL RESEARCH FUNDING

Objective: €50 million in 2020

Status at the end of the strategy period: the amount of competitive international research funding has increased slightly, although it has not reached the target level.

Table 12. Competitive international research funding. (€ million)

2016	2017	2018	2019	2020
29	28.4	34.0	34.2	34.7

FUNDRAISING RESULTS

Objective: €50 million during the strategy period (cumulatively)

Status at the end of the strategy period: At the end of the strategy period, income from fundraising amounted to €69.7 million, of which €30.1 million originated in donations and €39.6 million from the government’s

STRATEGY REVIEW 2017—2020 AND ANNUAL REVIEW 2020

matched funding scheme for private donations. After the great success of the previous campaign and the termination of the government’s matched funding scheme, there was a clear drop in major donations. Investments in the development of international fundraising have temporarily taken away resources from marketing. The number of donors grew as expected, as did donor satisfaction. The University boasts a solid foundation

for increasing fundraising activities both nationally and internationally.

Table 13. Fundraising results (€ million)

Fundraising	2017	2018	2019	2020
Yearly	16.6	6	2.2	5.4
Cumulative	16.6	22.6	24.8	30.2
Government's matched funding scheme for private donations	39.6			
Total				69.8

RESEARCH

Despite the coronavirus pandemic, researchers at the University of Helsinki continued their high-quality work in 2020. At the outbreak of the pandemic, access to research facilities and laboratories was restricted, and most facilities were closed for some time. During that period, only the most critical research ensuring the continuity of projects could be conducted on site. In the spring, ensuring research opportunities and providing supervision for doctoral students was particularly challenging, as was the situation of visiting scholars who had already arrived in the country. As summer approached, research activities fortunately picked up again.

In 2020, research and collaboration related to Covid-19 was very lively. Funders, both private and public, offered resources for this purpose, and researchers at the University succeeded in ensuring such funding thanks to the high standard of their work. In the spring, the government allocated significant funding for research and innovation. The University also received funding for research that has been and continues to be featured on the University's website.

In the face of the serious and life-changing pandemic, it must be noted that appreciation for science, research and education increased among both politicians and the general public.

TOP-QUALITY RESEARCH

The Academy of Finland's Flagship Programme promotes high-quality research and increases the economic and societal impact emerging from the research. The Flagship Programme encompasses 10 competence clusters, four of which were selected in the third call carried out in 2020. The University of Helsinki is involved in four flagships, two of which were selected

for the programme previously to be launched in the beginning of 2019, and two of which were selected in late 2020.

**THE UNIVERSITY
OF HELSINKI IS
INVOLVED IN FOUR
COMPETENCE
CLUSTERS OF
THE ACADEMY
OF FINLAND'S
FLAGSHIP
PROGRAMME**

The flagships that were launched previously include the Digital Precision Cancer Medicine Flagship iCAN, coordinated by the University of Helsinki and operated in partnership with the Hospital District of Helsinki and Uusimaa, and the Finnish Centre for Artificial Intelligence FCAI, coordinated by Aalto University and operated in partnership with

VTT Technical Research Centre of Finland.

The Digital Precision Cancer Medicine Flagship iCAN together with several other operators organised an idea competition, the Cancer Challenge, to support citizen engagement. The ideas collected will be used in the Horizon Europe programme to promote the EU's mission of fighting cancer. In 2020 the iCAN Patient and Citizen Advisory Board POTKU was established to support the flagship's active patient and citizen collaboration. At the end of the year, iCAN Scientific Director Kari Alitalo was awarded the honorary title of academician of science.

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

The European collaboration efforts of the flagship Finnish Center for Artificial Intelligence FCAI in the field of machine learning were enhanced when the European Laboratory for Learning and Intelligent Systems ELLIS, hosted by FCAI, received funding from the Horizon 2020 programme. In addition, FCAI agreed on cooperation with the computer graphics company NVIDIA. The popular online course Elements of AI was supplemented with the course Building AI, which provides a deeper understanding of artificial intelligence. In 2020, a course on the ethics of AI was also launched.

As a result of the third call of the Flagship Programme, the University of Helsinki is now involved in two competence clusters that were selected for the programme. The University of Helsinki is coordinating the Atmosphere and Climate Competence Center ACCC flagship, which includes the Finnish Meteorological Institute, the University of Eastern Finland, and Tampere University. Moreover, the University participates in the Gene, Cell and Nano Therapy Competence Cluster GeneCellNano for the Treatment of Chronic Diseases flagship, coordinated by the University of Eastern Finland, together with the University of Oulu, Aalto University and the Finnish Red Cross Blood Service.

In the course of 2020, the University was involved in nine Academy of Finland Centres of Excellence, seven of which are coordinated by the University of Helsinki. In 2020, the University hosted 10 Academy of Finland professors, and at the end the year, the Academy

appointed 10 new Academy Professors, seven of whom come from the University of Helsinki. The term of the new Academy Professors begins in 2021.

The European Research Council (ERC) granted four Starting Grants, one Advanced Grant and one Consolidator Grant to the University's researchers.

RESEARCH INFRASTRUCTURES

The review of the University's research infrastructure guidelines proceeded in cooperation between the research infrastructure committee and Research Services. The guidelines are expected to be completed in 2021.

The Academy of Finland organised two funding calls related to national research infrastructures: in the spring, a call for the redesign of the roadmap for Finnish research infrastructures, and in the summer, an additional FIRI 2021 call for funding. The University of Helsinki succeeded well in both funding rounds. A total of 12 University of Helsinki infrastructures were selected for the research infrastructure roadmap to be published in 2021. The University is the national coordinator of nine of the above infrastructures, which is the highest number of coordination duties among Finnish research organisations. The Academy selected a total 29 research infrastructures for the roadmap. In the FIRI 2021 call in

INTERNATIONALLY VISIBLE ONLINE NEWS 2020

OPEN SESAME! RESEARCHERS DISCOVERED THE SECOND 'KEY' USED BY THE SARS-COV-2 VIRUS TO ENTER INTO HUMAN CELLS

To efficiently infect human cells, SARS-CoV-2, the virus that causes COVID-19, is able to use a receptor called Neuropilin-1, which is very abundant in many human tissues including the respiratory tract, blood vessels and neurons. The breakthrough discovery was made by a German-Finnish team of researchers led by neuroscientists Mika Simons, Technical University of Munich and virologist Giuseppe Balistreri, University of Helsinki.

<https://www.helsinki.fi/en/news/health-news/open-sesame-researchers-discovered-the-second-key-used-by-the-sars-cov-2-virus-to-enter-into-human-cells>

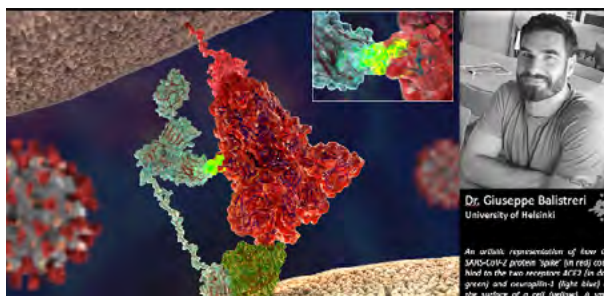


Photo: Dr. Balistreri and Seconddaystudios.com

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

the summer of 2020, ten University of Helsinki projects from seven different research consortia were granted funding for a total amount of roughly €4.6 million.

In 2020 and especially during the first half of the year, the coronavirus pandemic also affected the University's research infrastructures. As part of the necessary rearrangement of operations, the use of research infrastructures had to be restricted as far as access to research laboratories and working with research subjects was concerned. The restrictions were reviewed and updated regularly in collaboration with the University leadership and the research units.

OPEN SCIENCE AND RESEARCH

The coronavirus pandemic highlighted in an unprecedented manner the significance of the openness of science and research results in solving problems concerning humanity. Open research infrastructures, such as open publication channels and data repositories, played a key role in this process. The exceptional circumstances also significantly boosted the amount of openly available online teaching at the University of Helsinki.

The University signed two important declarations committing it to open science, namely DORA, the San Francisco Declaration on Research Assessment, and the national Declaration for Open Science and Research. The key recommendation of DORA underlines the need to primarily focus on qualitative assessment in the evaluation of researchers and their research. Another overarching theme of the declaration is that research outputs – publications, research data and software – and research impact should be assessed comprehensively. The Declaration for Open Science and Research 2020–2025 is a key result of the coordination of national efforts for open science that began in 2018, a comprehensive vision of the strategic objectives of open science and research. The declaration defines

guidelines for policies on open access in the following areas: scholarly publications, research data and methods, and educational resources and an educational culture supporting open scholarship.

In January, the Ministry of Education and Culture published its report on the evaluation of the openness of the operating culture of Finnish research organisations. In this evaluation, conducted at four-year intervals, the University of Helsinki was ranked on the highest level with eight other Finnish institutions of higher education. The evaluation included a survey targeted at the heads of research in the institutions asking them to name generally identified barriers to open science and to

assess their significance to their own activities.

The University of Helsinki appointed its own League of European Research Universities (LERU) Open Science Ambassador. The role of the ambassadors is to act as a liaison between their university and LERU in issues of open science and to advance the implementation of the recommendations of the LERU Open Science Roadmap at their own university.

**THE UNIVERSITY
SIGNED TWO
IMPORTANT
DECLARATIONS
COMMITTING IT TO
OPEN SCIENCE**

The theme of the University of Helsinki Open Science Award in 2020 was the openness of learning and teaching.

DEVELOPMENT OF DOCTORAL EDUCATION

A working group appointed by the rector began its work of reviewing and developing the operations and structures of doctoral education in accordance with the new strategic plan. The rector also appointed another working group to consider the status of grant-funded researchers in the University community. The aim of this working group is to clarify the practices related to grant-funded research agreements and to improve the monitoring and support of the work of grant-funded researchers.

BUSINESS COLLABORATION

Caution resulting from the pandemic was evident in funding granted by companies, as direct funding from business collaboration declined from the previous year. At same time, however, government funding for Business Finland grew, and University of Helsinki researchers received more funding from Business Finland than ever before. The drop in direct funding through business collaboration was compensated by Business Finland funding so that the total funding from these instruments exceeded the previous year's figure by €2.6 million. Seven new Business Finland projects were created, and two projects received special funding for RDI partnership networks from the Academy of Finland.

The Faculty of Agriculture and Forestry excelled in the development of business collaboration and innovation. With help from Research Services, the Faculty obtained almost €1 million from the City of Helsinki Innovation Fund. In addition, the Faculty of Pharmacy and the Faculty of Biological and Environmental Sciences initiated development efforts. In 2020 plans for the Viikki Innovation Platform were finalised, and the platform will launch in 2021.

COMMERCIALISATION

Helsinki Innovation Services Ltd (HIS) supports researchers in the commercialisation of their research results. At the end of 2020, there were 14 projects (19 in 2019) receiving Research to Business (R2B) funding from Business Finland at the University. Business Finland's funding for ongoing projects amounted to €7.3 million (€7.6 million in 2019) for the 2019–2021 period, depending on adherence to the project schedules.

The University received 121 invention disclosures, a record number up 22% from 2019 (99). The University continues to encourage the growth of invention disclosure numbers by raising awareness among researchers about commercialisation and its potential. In the spring,

the University launched the Your Idea 2020 campaign to boost the disclosure of inventions and ideas. The campaign continues until April 2021.

The number of first applications for a patent grew from five in 2019 to 11 in 2020. The portfolio consisting of patent families owned by the University is actively managed. The number of patent families in the portfolio increased to 47. Some patents have been commercialised through spinout companies and some are sold directly to clients. Patent families may also be revoked, should their commercialisation fail. In total, the number of individual patent applications was 47 (28 in 2019).

The University of Helsinki participated in the Slush startup and investor event, organised online, to present 10 spinouts and commercialisation projects in their final stages. The University of Helsinki participated for the sixth time in Slush with the aim of finding entrepreneurs and investors for spinouts based on research conducted at the University.

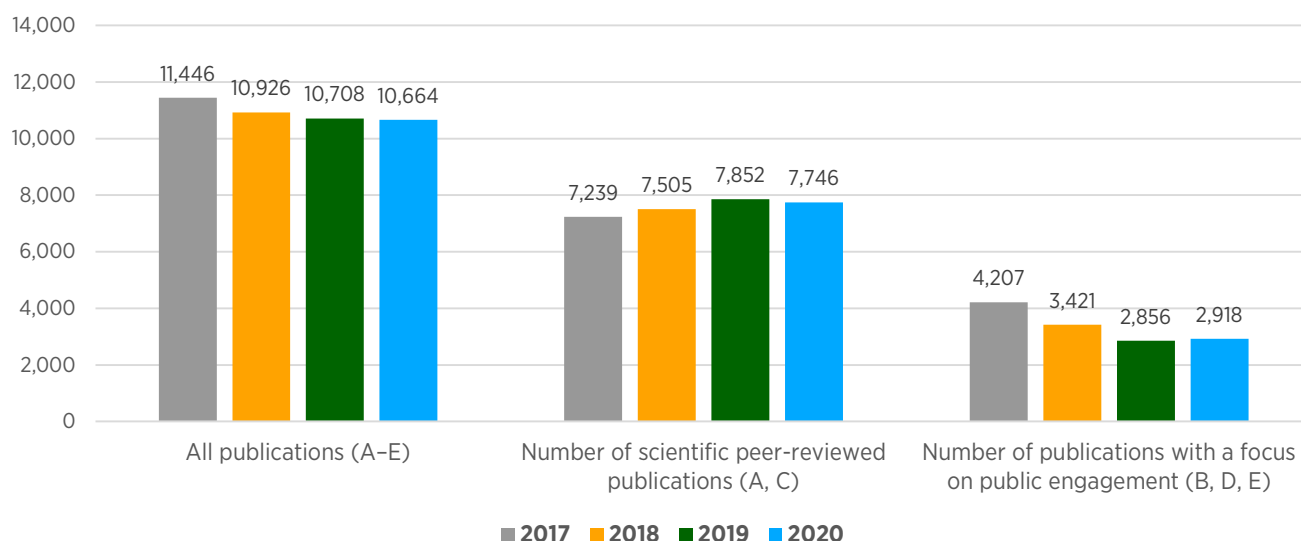
7,746

**PEER-REVIEWED
SCIENTIFIC ARTICLES
AND BOOKS**

PUBLICATIONS

In 2020 the University's researchers and teachers produced a total of 10,664 publications, of which 7,746 were peer-reviewed scientific articles and books, and 2,918 were publications focused on public engagement. The figure shows the development of publication numbers over the past four years.

The number of scholarly peer-reviewed publications went down by about 100 publications (1.4%) in comparison to the figure from this time last year. While the annual increase in the number of scholarly peer-reviewed publications that began in 2017 plateaued in 2020, their number was still above the mean for the three previous years. The average annual number of scholarly peer-reviewed publications at the time of compiling the statistics on 28 February has been about 7,500 in the last three years. The ratio of scholarly peer-reviewed publications to all publications in 2020 was 73%. The ratio has not changed from the year before.

Figure 2. Publication figures.

Situation on 28 February 2021, figures for previous years from the same reporting period.

The drop in the number of scholarly peer-reviewed publications from the previous years may in part be explained by the change in the classification of publication types by the Ministry of Education and Culture introduced in 2019, according to which editorials, book reviews and comments are classified as non-refereed publications even if they have been peer-reviewed.

The University of Helsinki plays an important role in public discussion. One way in which it does this is by producing non-refereed scientific papers as well as publications intended for either professional communities or the general public. Peer-reviewed publications also have a societal impact, but their primary audience consists of researchers in the field.

Table 14. Publication numbers according to the Ministry of Education and Culture classification of publication types.

Publication categories	2017	2018	2019	2020
Peer-reviewed scientific articles (A)	7,000	7,306	7,618	7,528
Scientific monographs (C1)	94	101	96	92
Edited scientific books, conference proceedings or special issues of journals (C2)	145	98	138	126
Non-refereed scientific articles (B)	1,247	900	960	1,104
Publications intended for professional communities (D)	1,983	1,738	1,260	1,149
Publications intended for the general public (E)	977	783	636	665

Situation on 28 February 2021, figures for previous years from the same reporting period.

There were 2,918 publications focused on public engagement, showing a slight increase (+2.2%) from the previous year. The share of publications focused on public engagement was 27%. In recent years, the number of publications focused on public engagement has totalled an average of roughly 3,500 at the time of compiling the statistics (average for 2017–2019), with a downward trend since 2017. The good result for the number of publications focused on public engagement in 2017 can probably be attributed to the collection of information at that time for the assessment of research, which typically also increases reporting on publications of this type.

The table lists the number of publications in accordance with the classification of publication types by the Ministry of Education and Culture

Whereas peer-reviewed scientific publications are reported fairly steadily each year, the reporting of publications focused on public engagement shows more annual variation. As is evident from the table, greater numbers of non-refereed scientific articles (+15%) and publications intended for the general public (+4.5%) were reported in 2020 than in the previous year. The reporting of publications intended for professional communities decreased by more than 100 publications (8.8%). The figures for this type of publication have been declining since 2017.

Table 15. Publication activity by campus.

Grouping	City Centre	Kumpula	Meilahti	Viikki
All publications (A–E)	4,848	1,631	3,520	1,893
Number of scientific peer-reviewed publications (A, C)	2,976	1,521	2,776	1,592
Share of scientific peer-reviewed publications (A, C)	61%	93%	79%	84%
Number of publications with a focus on public engagement (B, D, E)	1,872	110	744	301
Share of publications with a focus on public engagement (B, D, E)	39%	7%	21%	16%

Situation on 28 February 2021. The figures cannot be added up because co-authored publications may appear in figures for several campuses.

When examined by campus, the City Centre Campus produced the most publications (a total of 4,848), of which 61% were peer-reviewed scientific articles and books. However, of all the campuses, the City Centre Campus showed the greatest drop in the number of publications from the previous year. While Kumpula Campus also showed a drop in the number of publications from the previous year, Meilahti and Viikki Campuses produced slightly more publications in 2020 than in 2019.

The table shows publication activity by campus in 2020.

Researchers at the Faculty of Medicine published more than 2,500 peer-reviewed scientific articles. The next most active group were researchers at the Faculty of Science with more than 1,500 peer-reviewed scientific articles and researchers at the Faculty of Arts with more than 800 scholarly peer-reviewed articles and 100 scholarly monographs and edited books.

Relatively speaking, the Faculties of Theology, Law and Arts produce the largest numbers of publications focused on public engagement. In these faculties, the annual ratio of publications focused on public engagement to all publications is about 45%.

As publication numbers for 2020 will still be reported in the course of 2021, the final figures will not be available until the 2021 annual report. The annual number of pub-

lications after retrospective reporting has totalled more than 12,000. The annual percentage of retrospectively reported publications has varied from 7% to 10%, being approximately 7% for 2019. As the share of retrospectively reported publications has been slightly decreasing in the last few years, researchers have been more timely in reporting their publications to the University. The number of retrospectively reported publications focusing on public engagement is proportionally higher than the number of retrospectively reported peer-reviewed scientific publications.

JOINT PUBLISHING

A total of 43% of all University of Helsinki publications in 2020 were based on international cooperation. The number of international joint publications has remained the same from the previous year. The number of co-authored international peer-reviewed scientific publications was 4,206, or 54% of all peer-reviewed scientific publications, the share remaining at the same level as in the previous year.

The number of co-authored Finnish publications was 3,944 (37% of all publications). The co-authors of these publications include staff not only from the University of Helsinki, but also from other Finnish higher education institutions and research organisations. As for peer-reviewed scientific publications, 3,290 (43%) were

Table 16. Co-authored publications.

Publication type	2017	2018	2019	2020
International co-authored publications, all publication types	4,027	4,153	4,542	4,552
International co-authored publications, share of all publications	35%	38%	42%	43%
International co-authored publications, peer-reviewed scientific publications	3,707	3,941	4,254	4,206
International co-authored publications, share of peer-reviewed scientific publications	51%	53%	54%	54%
National co-authored publications, all publication types	4,611	4,504	3,829	3,944
National co-authored publications, peer-reviewed scientific publications	3,224	3,345	3,137	3,290

Situation on 28 February 2021, figures for previous years from the same reporting period.

based on Finnish cooperation. The share of publications resulting from national cooperation has increased slightly from the previous year, especially in the case of scholarly peer-reviewed publications.

The table shows the data on co-authored publications in a four-year time series.

HIGH-QUALITY AND INTERNATIONAL PUBLICATIONS

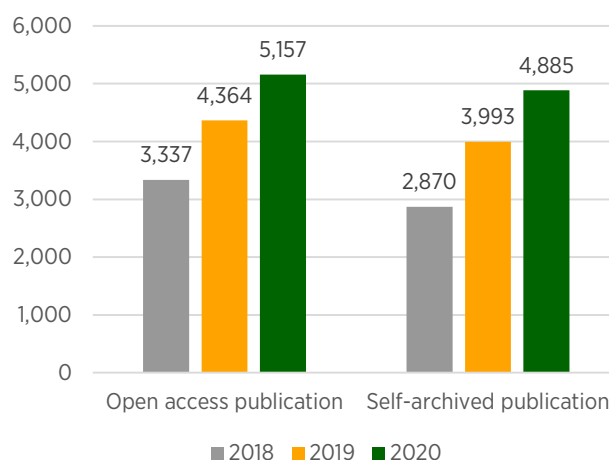
The publication channels of scholarly publications are rated according to the Publication Forum (JUFO) system¹, a rating and classification system supporting the quality assessment of research output which operates under the auspices of the Federation of Finnish Learned Societies. It should be noted that the Publication Forum is a national system and thus differs from other, for example, Nordic classifications.

In its strategic plan for 2017–2020, the University established a policy whereby the number of peer-reviewed scientific publications appearing in publications with the highest ratings in the Publication Forum classification will be monitored. The Ministry of Education and Culture confirms the Publication Forum levels of the reported output during the following year, but it can be estimated that some 3,040 publications produced at the University of Helsinki appeared in publication channels rated on the highest levels 2 and 3. This number accounts for about 39% of all scholarly peer-reviewed publications. The number of high-quality and international publications was slightly lower in 2020 than the reported publications at the same time in 2019, but their share of all scholarly peer-reviewed publications grew by one percentage point.

OPEN ACCESS PUBLISHING

The University of Helsinki's strategic plan for 2017–2020 asserted that the University will be a pioneer in the production and exploitation of open knowledge. In accordance with the University's principles of open access publishing, approved in 2017, all scientific publications produced at the University will, as a rule, be openly available and self-archived in the University's publication repository.

Figure 3. Open-access publishing of peer-reviewed scientific publications.



Situation on 28 February 2021, figures for previous years from the same reporting period.

Of the peer-reviewed scientific articles published in 2020, a total of 5,157 (69%) were reported as being openly available, and 4,885 (65%) of these were self-archived in the University's HELDA repository or another publication archive. Open access publishing has grown significantly in recent years, both in Finland and abroad. At the University of Helsinki, this growth has been supported by the self-archiving campaign and service of Helsinki University Library. The Ministry of Education and Culture has included open access publishing in the funding model for universities in 2021–2024.

The figure presents data on the open access publishing of scholarly peer-reviewed articles in a three-year time series.

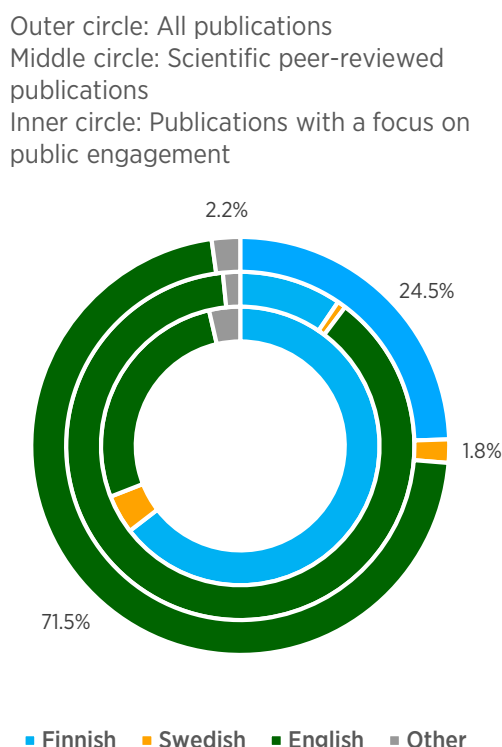
LANGUAGES OF PUBLICATION

In accordance with the University of Helsinki Language Policy, the University bears responsibility for international engagement and safeguards the position of the national languages (Finnish and Swedish) as languages of scholarship. The University strives for a functional multilingualism that promotes creative thinking and inclusivity.

The majority of all publications produced at the University are in English. In the data for 2020, the ratio of English-language publications to all publications was 72%, and to scholarly peer-reviewed publications as high as 88%.

¹ <https://julkaisufoorumi.fi/en>

Figure 4. Language distribution of publications in 2020.



Situation on 28 February 2021, figures for previous years from the same reporting period.

The language of publications focused on public engagement is far more often Finnish or Swedish than English, as about 64.5% of such publications were in Finnish and 4.5% in Swedish. The percentage of English-language publications focused on public engagement was 27.3 and 3.6 for other languages.

During the year, University of Helsinki researchers published not only in Finnish, Swedish and English, but also in, for example, German, Russian, French, Italian and Spanish.

The figure presents data on the language of publication by publication type.

HIGHLY CITED RESEARCHERS

Highly Cited Researchers (HCR), based on the Web of Science database and maintained by Clarivate Analytics, is a list of the top 1% of all researchers in their field, according to the number of citations by their peers. The HCR list is the most prominent ranking of researchers. A key indicator in the Shanghai ARWU ranking is the

number of the HCRs' primary affiliations with the university in question.

As stated in the recommendation for responsible bibliometrics, the focus in comparing and naming individual researchers should be on expert assessments, which is impossible in broad comparisons based solely on quantitative indicators, such as the HCR list.

The 2020 HCR list is based on articles and surveys published in scientific journals between 2009 and 2019. The number of ESI (Essential Science Indicators) fields in the list is 21, but HCR does not include researchers from the humanities. The Cross-Field category introduced in 2018 identifies researchers who would not make it to the HCR list in any individual field, but have a cross-field influence with an adequate number of highly cited papers across several different fields.

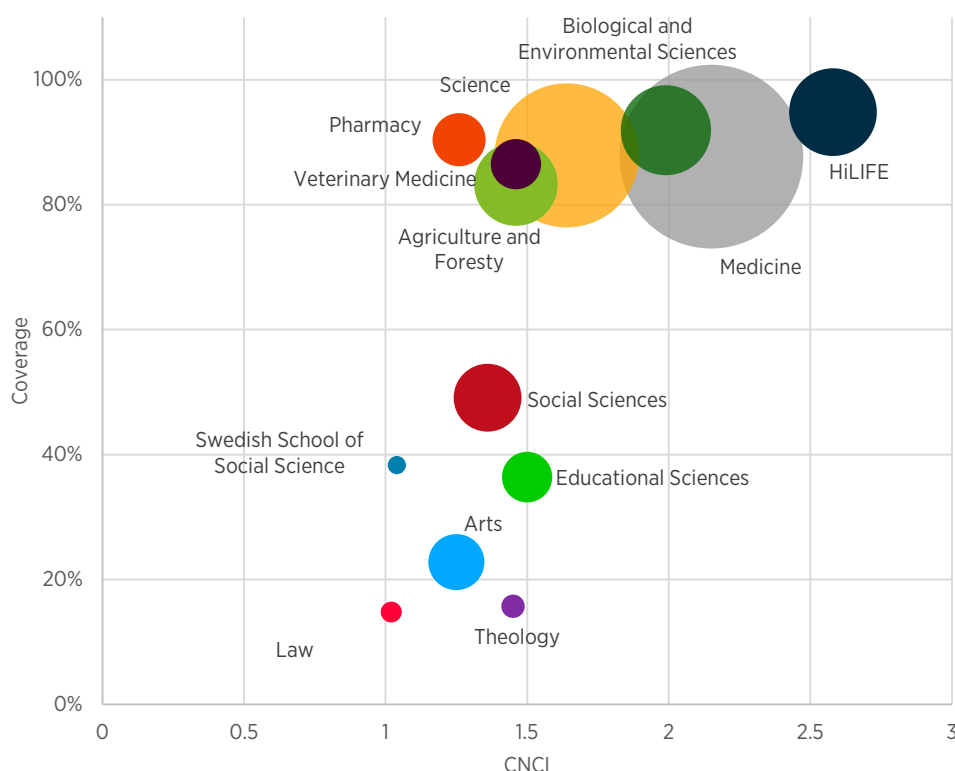
The total number of researchers from Finnish universities and research institutes (primary affiliations) on the HCR list in 2020 was 21, just as in 2019. Of these 21 researchers, 18 came from universities, and half of them (9) from the University of Helsinki, which is two less than in the previous year. In contrast with the last comparable year, 2018, there was a drop of five affiliations with the University of Helsinki.

The largest number of highly cited Finnish researchers in the ESI fields was in the geosciences: five researchers, four of whom represent the University of Helsinki. In the Cross-Field category, the number of Finnish researchers rose from three to five, two of whom are from the University of Helsinki.

Among the Nordic universities, the University of Helsinki's ranking for the number of primary affiliations dropped from the previous year's shared second place to a shared sixth place.

THE CITATION IMPACT OF FACULTIES IN RELATION TO THE WORLD AVERAGE

By linking the data on peer-reviewed unit-specific research publications with externally analysed data, it is possible to make a direct comparison to the world average, which, according to the definition, is always equal to one.

Figure 5. Faculty performance in relation to the world average and coverage of the material.

World average = 1. The figure also includes faculty/unit-specific coverage. CNCI data are derived from InCites®, © Copyright Clarivate Analytics® 2020. All rights reserved.

The faculties' peer-reviewed scientific articles in categories A1–A4 from 2017–2020 were analysed in the InCites database based on the Web of Science. In InCites, publications are normalised (Category Normalized Citation Impact, CNCI) by subject category, which allows for an unbiased view of the various publication and citation practices in different fields.

All faculties exceeded the world average. The following institutes attained the highest median score: Helsinki Institute of Life Science (HiLIFE), 2.58; the Faculty of Medicine, 2.15; and the Faculty of Biological and Environmental Sciences, 1.99. In 2017–2020 the overall impact score of the University's publications was 1.78.

The impact score of international co-authored publications was 2.17, and 1.99 for national co-authored publications. The impact score of other publications (1.03) was clearly lower.

This impact score is affected, in particular, by open access publishing. The impact of the University's open access publications (1.97) is clearly higher than that of its other publications (1.27). The difference is particularly

evident at HiLIFE (open access publications: 2.77; others: 1.67). At the Faculty of Law, where the number of publications is lower, the difference in impact is even greater to the advantage of open access publications (open access publications: 2.79; others: 0.43).

A field-specific analysis of the 21 ESI fields reveals that open access publishing has the greatest impact in fields with frequent international co-authored publishing, such as space research, physics, clinical medicine as well as molecular biology and genetics. In the two latter fields as well as in materials physics, publications not published as open access publications have slightly greater impact scores, while open access publications in all the other 19 ESI fields have higher numbers of citations. In the analyses, open access publications include publications under the DOAJ Gold, Other Gold, Green Published and Green Accepted classifications.

The coverage (findability in the citation database used) of different fields of science and, hence, different faculties varies significantly. HiLIFE has the best coverage with 94.8% of reported A1–A4 category publications. The Faculty of Law has the poorest coverage with 14.8%. As

poor coverage is strongly linked with the language of publication and field-specific citation conventions, faculties at the City Centre Campus, where Finnish-language publications are common, obtain lower coverage figures in international databases.

CLASSIFICATION OF RESEARCH PUBLICATIONS BY TOPIC AND COLLABORATION PARTNER

The assessment of research at the University of Helsinki, carried out between 2012 and 2016/2017, applied the classification of research topics based on the citation relationships of publications, developed by the Centre for Science and Technology Studies (CWTS)². The classification creates clusters of topics which aim to provide more descriptive information than before on the profiles of research publications at the University of Helsinki. According to the Academy of Finland's State of scientific research in Finland report, the most highly clustered publications have a clearly higher impact than other publications.

Topic-specific information about the University of Helsinki's publications in the Web of Science (2017–2020) can be obtained using the Citation Topics tool³ developed in collaboration between CWTS and InCites. The tool features 10 macro-topics. About half (50%) of the publications produced at the University are in the medical and life sciences. The second largest cluster includes the agricultural and forestry sciences, environmental sciences and ecology (16%). The share of social sciences is about 10%.

The publication clusters containing the highest number of publications and showing an especially high impact include particle physics and genome research, which involve research conducted through extensive international collaboration. Highly clustered topics in medicine include obstetrics and gynaecology, while nutrition in life sciences emerges as a highly clustered

topic. Other prominent clusters include astrophysics, the atmospheric sciences, polymer research, remote sensing, environmental sciences and forestry in the natural sciences. At the City Centre Campus, educational sciences and philosophy are particularly clustered.

The University of Helsinki actively participates in major international research collaborations that include partners from dozens of countries. When analysing publications with more than 100 authors, they account for almost 5% of the University's publications indexed in the Web of Science. Most of these publications represent collaborations in physics – particle physics and astronomy in particular – and the rest genome research and various fields of medicine.

**NATURE AND
SCIENCE PUBLISHED
A TOTAL OF 29
ARTICLES WITH AT
LEAST ONE AUTHOR
AFFILIATED WITH
THE UNIVERSITY OF
HELSINKI**

By analysing publications with at least 100 authors, we obtain information on the collaboration partners of the various subgroups of research clusters. In medicine, an especially prominent international collaboration partner is Karolinska Institutet, and in the agricultural sciences, the Swedish University of Agricultural Sciences. The French Centre national de la recherche scientifique (CNRS) emerges both in connection with the physical sciences and the

environmental sciences. In the social sciences, the eight most common collaboration partners were Finnish.

ARTICLES IN RESPECTED JOURNALS

In 2020 the multidisciplinary journals Nature and Science published a total of 29 articles with at least one author affiliated with the University of Helsinki.

The 23 articles published in Nature were in the fields of medicine, genetics, physics, ecology and botany.

The six articles published in Science represented geosciences, physics, biosciences, ecology and environmental sciences. Three of the above articles focused on Covid-19.

² <https://www.cwts.nl/>

³ <https://incites.help.clarivate.com/Content/Research-Areas/citationtopics.htm>

ONLINE VISIBILITY OF PUBLICATIONS

The online visibility of scholarly peer-reviewed publications – the attention paid to publications on social media (e.g., Twitter), news services and other online sources – was tracked using the Altmetric Explorer database.

The largest number of peer-reviewed publications found in the database were from faculties at Viikki, Kumpula and Meilahti Campuses (68–95% of publications found, depending on the faculty). The corresponding figures for the Faculty of Educational Sciences, the Faculty of Social Sciences and the Swedish School of Social Science ranged between 45% and 60%, and between 21% and 36% for the Faculty of Arts, the Faculty of Theology and the Faculty of Law. The differences in coverage are due to the fact that Altmetric Explorer mostly contains English-language article publications.

The analysis was based on 5,134 publications, of which 4,802 were mentioned in an online source tracked by the database. The total number of mentions was 104,906. In quantitative terms, the largest number of mentions were from Twitter (96,153) and news services (5,986). The publications that received the most mentions on Twitter were articles in the fields of medicine, environmental sciences and biological sciences which were mostly published in internationally renowned journals. The publications that received the most attention in international news services were from the fields of biosciences, psychology, medicine, environmental sciences, astronomy and physics.

In particular, articles on Covid-19 received international online attention. In addition, University of Helsinki articles on Covid-19 attracted attention in online services. On Twitter, four of the ten tweets that received the most attention were about the coronavirus pandemic. Of the ten articles produced at the University and noted by news services, three focused on Covid-19.

When examining the online visibility of publications, it is important to remember that there are no well-established tracking indicators and that those available do not take the field of the publication into account. Annual variation may be down to, for example, changes in the various visibility services.

PUBLICATIONS ON COVID-19

Publishing activities relating to the coronavirus pandemic began in February with some individual non-refereed publications. The number of monthly publications grew continuously until June, reaching 40 in total, of which about a third were peer-reviewed research or review articles. During the first half of the year, a special feature was the increasing use of letters to the editor. The reason for this in all likelihood is the speed of publishing, since publishers may publish this type of article based directly on the editor's evaluation. From July to December, the growth in the number of publications plateaued while, as expected, the number of peer-reviewed articles mainly remained higher than the peak in July.

The total number of publications was 244. The data was obtained by restricting the topic to coronavirus, the pandemic and the year 2020. A condensed classification

MOST WIDELY-READ ONLINE NEWS 2020

FINNISH RESEARCHERS HAVE DISCOVERED A NEW TYPE OF MATTER INSIDE NEUTRON STARS

A Finnish research group has found strong evidence for the presence of exotic quark matter inside the cores of the largest neutron stars in existence. The conclusion was reached by combining recent results from theoretical particle and nuclear physics to measurements of gravitational waves from neutron star collisions.

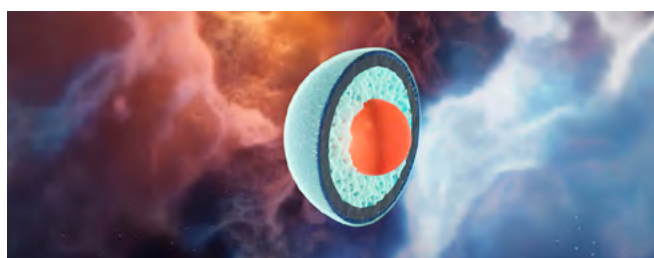
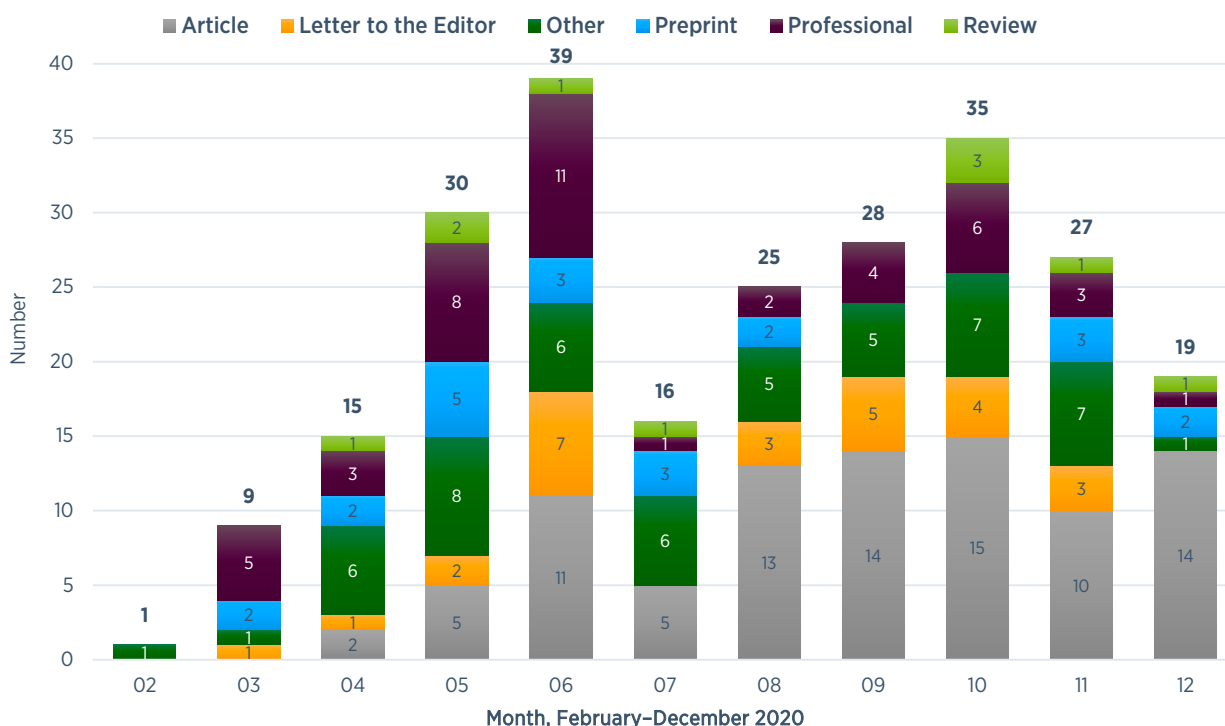


Photo: Jyrki Hökkänen, CSC-IT center for science

<https://www.helsinki.fi/en/news/science-news/finnish-researchers-have-discovered-a-new-type-of-matter-inside-neutron-stars>

Figure 6. Publications on Covid-19, monthly numbers of publications by publication type.

Sources: Microsoft Academic, Scopus, Tuhat.
 Class Other contains types: Commentary, Communication, Correspondence and Editorial.
 Class Professional contains domestic publications intended for professional communities.

of publication types was applied to categorise the publications by identifying their types with the help of the Web of Science database and the websites of the publications.

The graph presents publications on Covid-19 by publication type.

The primary collaboration partners in the analysed articles on Covid-19 were European universities and university hospitals, such as Karolinska Institutet and the University of London. It should be noted that as far as the fields of the publications are concerned, there were, besides medical articles, publications in the social sciences and law, as well as publications discussing environmental issues and the wellbeing of young people.

INTERNATIONALLY VISIBLE ONLINE NEWS 2020

GLOBAL CONSORTIUM OF SCIENTISTS INVESTIGATES CONNECTION BETWEEN LOSS OF SMELL AND TASTE AND COVID-19 WITH A SURVEY

Scientists from the Universities of Helsinki and Turku, Finland are part of a global consortium investigating the connection between the chemical senses and COVID-19. People with respiratory illnesses (including COVID-19) are urged to participate in a survey on smell loss.



Photo: Hanna Oksanen / University of Turku

<https://www.helsinki.fi/en/news/life-science-news/global-consortium-of-scientists-investigates-connection-between-loss-of-smell-and-taste-and-covid-19-with-a-survey>

EDUCATION

APPLICANTS AND STUDENTS ADMITTED TO THE UNIVERSITY

BACHELOR'S AND MASTER'S PROGRAMMES

In the spring 2020 joint application procedure, a total of 31,192 people applied for first-cycle (bachelor's) programmes as well as degree programmes in medicine and dentistry, and 1,825 people applied for Finnish- and Swedish-language master's programmes. A total of 4,678 students were admitted to the University of Helsinki through this procedure: 4,293 to bachelor's programmes and 385 to Finnish- and Swedish-language master's programmes. A total of 475 people applied to the University through the Open University route and the transfer application procedure, and 250 of these applicants were admitted. Applications to the University's English-language Bachelor's Programme in Science were accepted for the second time, and the number of applicants doubled from the previous year.

A total of 4,140 people (4,692 applications) applied for international master's programmes through the winter 2020 admission procedure, up 21% from the year before. The number of applicants has tripled from 2017 when the degree programmes were reformed. The University's master's programmes attract worldwide interest. Applications were received from 128 countries. After Finland, the most applications were submitted from Nigeria, China and India. Finns accounted for 24%. The percentage of applicants subject to a tuition fee, or non-EU and non-EEA applicants, was 63%. Of the students liable to pay a tuition fee, 81% applied for a grant, and 26 applicants received one. The University's own grant system covering tuition fees was offered for the third year. The University awards grants on academic grounds to the most suitable applicants.

International master's programmes admitted a total of 1,091 applicants, of whom 609 accepted the place offered to them. However, many new students were unable to begin their studies in the autumn as planned. Consequently, most international programmes offered students the opportunity to begin their studies a year later. In addition, thanks to a legislative amendment in force in 2020, new international students were allowed

Table 17. Applicants, admitted students and applicants who have accepted a place.

Admissions route	Applicants		Admitted		Applicants who have accepted a place	
	2019	2020	2019	2020	2019	2020
Joint admissions: bachelor's programmes and degree programmes in medicine and dentistry	27,531	31,192	3,672	4,293	3,445	3,720
Joint admissions: Finnish- and Swedish-language master's programmes	1,678	1,825	422	385	402	370
Winter admissions: multilingual and English-language master's programmes	3,494	4,140	839	1,091	462	609
English-language bachelor's programme	144	291	52	121	22	48
Open University route	235	311	147	168	115	134
Transfer applicants	132	164	69	82	58	70

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

to register for non-attendance during their first academic year if they were unable to begin their studies normally due to the coronavirus pandemic. The table contains statistics on applicants to bachelor's and master's programmes, admitted applicants, and those who accepted the place offered.

INCREASED INTAKE THROUGH THE MAIN ADMISSIONS PROCEDURE AND THE OPEN UNIVERSITY ROUTE

In the middle of the ongoing student admissions in the spring, the Ministry of Education and Culture asked Finnish higher education institutions to increase their student intake to counteract the impact of the coronavirus pandemic. The University of Helsinki announced that it would increase its intake by 428 students. Of these places offered to applicants, 314 were accepted. At the same time, the University also prepared to increase its student intake in 2021 and 2022.

DOCTORAL PROGRAMMES

Five application rounds for doctoral studies were organised in 2020. Because the November 2020 round had not yet been completed at the time of writing this report, the table contains information beginning from the November 2019 application round. Different options were available for application in each round, so the number of applications varied per round. In 2020 the University of Helsinki experimented, for the first time, with organising a summer application procedure in July for its own graduates. The programmes involved found the experiment successful.

The number of applicants for doctoral studies remained unchanged from the previous year. A total of 1,175

applications were received, 846 applicants were admitted and 799 students accepted the place offered to them. The number of applicants in the autumn was also affected by the simultaneous application procedure for salaried doctoral student positions.

The table shows the number of applicants, admitted students and those who accepted a place in the doctoral programmes.

STUDENT ADMISSIONS DURING THE PANDEMIC

THE UNIVERSITY OF HELSINKI INCREASED ITS STUDENT INTAKE TO COUNTERACT THE IMPACT OF THE CORONAVIRUS PANDEMIC

The year 2020 was highly exceptional for student admissions. It was the first time that certificate-based admission, planned through nationwide cooperation, was used for all education leading to a bachelor's degree as well as a Licentiate of Medicine or Dentistry degree. The spread of coronavirus in Finland also transformed student admissions. In March 2020, the vice-rectors for academic affairs belonging to Universities Finland (UNIFI) decided to establish a

pandemic group in the university sector for planning and implementing student admissions. The purpose was to harmonise practices in the university sector, promptly take the necessary nationwide decisions and adopt them at all universities, and have a joint approach to communicating about these decisions. The University of Helsinki was actively involved in the work of the pandemic group and followed the jointly agreed national guidelines.

Because no large-scale on-site entrance examinations could be organised, the vice-rectors for academic affairs decided that the examinations be implemented in two stages, of which the first was a selective remote

Table 18. Applicants, admitted students and applicants who have accepted a place in a doctoral programme

Applications to doctoral programmes	November	February	April	July	September	Total	
						2019	2020
Applications	36	209	234	36	660	1,178	1,175
Individual applicants	36	208	230	36	615	1,116	1,125
Admitted	30	183	135	35	463	847	846
Applicants who have accepted a place	29	182	127	35	426	816	799

examination. The final selection was based on the second examination, taken by a smaller group of applicants selected through the first stage. This enabled the universities to make their decisions in controlled circumstances, with some selection procedures implemented on campuses and others through various computer systems agreed jointly in advance. Because the Finnish matriculation examination had been organised in supervised conditions, some degree programmes also increased the certificate-based admission quota to prevent cheating.

The 2020 student admissions process was successfully completed through effective nationwide and intra-University collaboration and a community spirit. The collaboration also spanned several sectors: the Metropolia University of Applied Sciences provided universities with access to its digital entrance examination system, used throughout Finnish universities of applied sciences. The University of Helsinki community worked hard to carry out the entrance examinations and, given the circumstances, succeeded well.

In late spring and autumn, major changes were rapidly made to the admission processes as well as to the documents required of applicants to ensure that all admissions could be carried out despite the pandemic. The pandemic led to an increase in digital admissions solutions. For example, a more digital process was introduced in the joint application procedure for master's programmes, with clearer features and layout used on the application form. At the same time, more detailed instructions were added to the form. The new features facilitate the application process and

simplify the processing of applications and related attachments at the University's Admissions Services. The new application form was used for the first time in the application process that began in December. The possibilities of international electronic verification services also increased, which supports the digitalisation of the University's various admission processes.

APPLICANT MARKETING

COOPERATION WITH GENERAL UPPER SECONDARY SCHOOLS

The University organised new types of introductory courses in various fields to offer general upper secondary school pupils and others interested in academic studies the opportunity to get acquainted with them. The aim is to expand the provision of such courses in the coming years.

Due to the coronavirus pandemic, events aimed at general upper secondary schools, as well as a seminar for guidance counsellors and presentations for students, were moved online. An event presenting degree programmes to general upper secondary pupils (Tsekkaa Helsingin yliopisto!, or 'Check out the University of Helsinki') was organised for the first time in the autumn.

A chat service aimed at Finnish students was introduced to enable applicants to ask the University's student ambassadors about studying at the University.

In the spring, the University established an internal network to promote good practices for cooperation with

INTERNATIONALLY VISIBLE ONLINE NEWS 2020

ENIGMATIC SMALL PRIMATE FINALLY CAUGHT ON FILM IN TAITA, KENYA

The Taita mountain dwarf galago was first reported in 2002 but no more signs of it were found for almost 20 years.

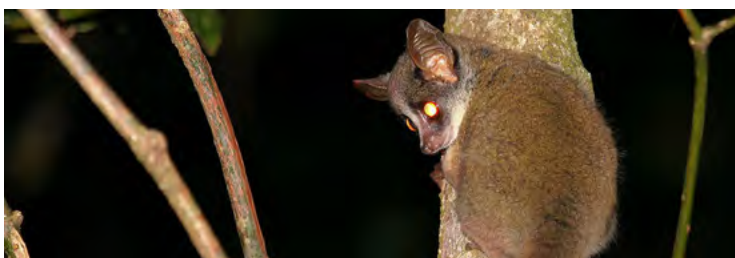


Photo: Hanna Rosti

<https://www.helsinki.fi/en/news/life-science-news/enigmatic-small-primate-finally-caught-on-film-in-taita-kenya>

general upper secondary schools. The network convened three times during the year.

Cooperation agreements were drawn up between the Open University and general upper secondary schools in both Helsinki and Lahti. In addition, the cooperation agreement with general upper secondary schools in Vantaa was extended to continue until further notice. These agreements provided general upper secondary school pupils with access to Open University studies, paid for by the cities in question.

TARGETED COMMUNICATIONS

As in previous years, degree programmes were successfully marketed to potential applicants. Applicant numbers increased in both the spring joint application procedure and the application procedures for international master’s programmes.

Doctoral students described their daily lives on Instagram during a ‘takeover’ campaign carried out together with the University’s international master’s programmes to increase the international visibility of doctoral education.

DEGREE STUDENTS

In 2020 the University had roughly 31,600 degree students. The total number of students remained largely unchanged. However, the rise in the number of students pursuing a master’s or doctoral degree continued.

The figure shows the trend in student numbers from 2012 to 2020 as well as the gender distribution of students.

Figure 7. Degree students.

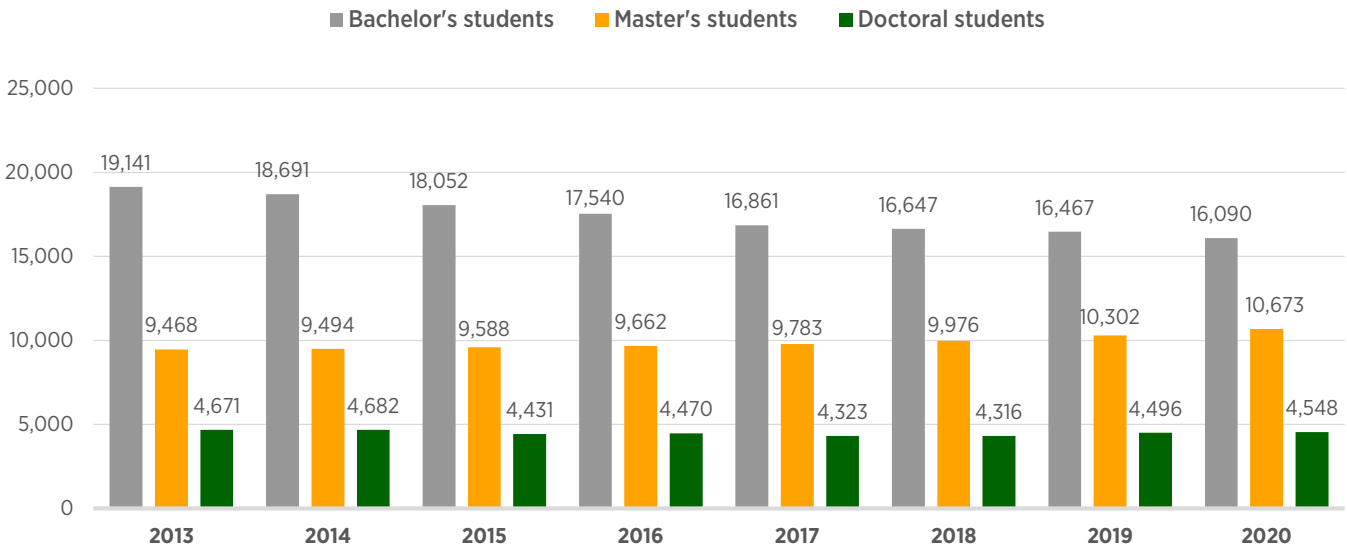
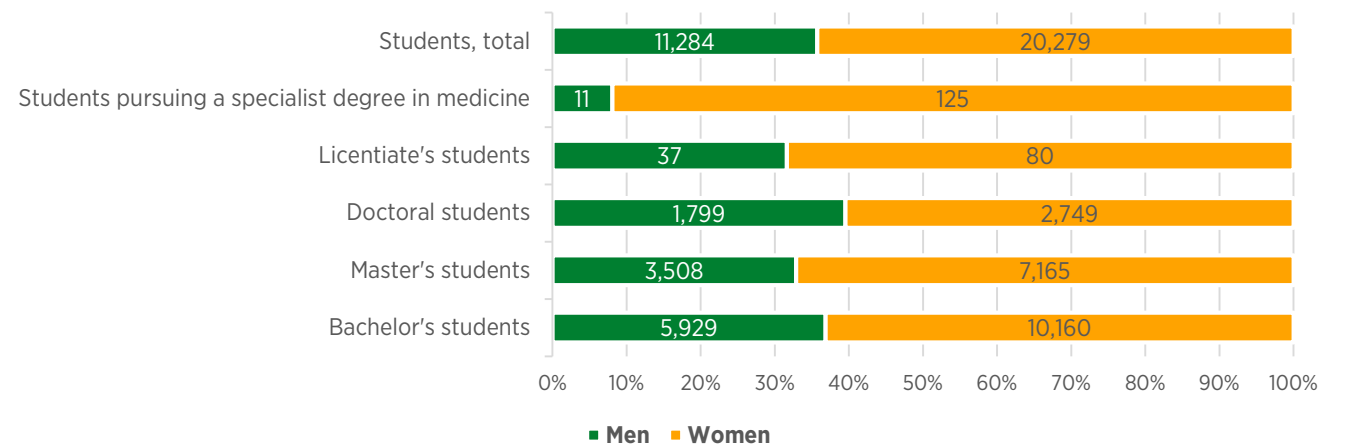


Figure 8. Gender distribution of students in 2020.



The transition period associated with the degree reform, which began in autumn 2017, came to an end in 2020. The original deadline was postponed from July to December. During this period, students who began their studies prior to autumn 2017 were able to either complete their degree in accordance with the old system or transfer to the new degree programmes to pursue their degree. More than 3,200 students pursuing a bachelor's degree and close to 3,900 students pursuing a master's degree transferred to the new degree programmes during the autumn term.

The shares of female and male students have remained unchanged in recent years. Women account for 65% of bachelor's and master's students, and 60% of doctoral students.

In 2020 the University of Helsinki had some 1,941 international degree students, or 6% of all students, showing no change from the previous year. Approximately 2,130 bachelor's and master's students reported Swedish as their native language, and some 1,930 demonstrated their proficiency in Swedish in conjunction with admissions. In addition, approximately 640 students held the right to complete a bilingual (Finnish and Swedish) degree. The total number of undergraduate students in the above groups who were receiving education in Swedish was approximately 2,800. Of doctoral students, 246 (5.4%) were native speakers of Swedish.

DEGREES

Due to the end of the transition period associated with the degree reform, an exceptionally high number of degrees were completed in 2020: 4,112 first-cycle (bachelor's) degrees, 4,168 second-cycle (master's) degrees and 604 doctoral degrees. One-third of the bachelor's and master's degrees completed in 2020 were awarded to students from the new degree programmes launched in 2017.

The figure shows the degree numbers as a time series.

The number of bachelor's degrees was well over the target of 3,000 degrees agreed with the Ministry of Education and Culture. With the exception of the Faculty of Theology, all faculties achieved the target set for bachelor's degrees. The median age of bachelor's graduates was 26 years, 63% were women, and at least 11% were proficient in Swedish. A total of 22% of bachelor's students completed their degree within the target duration and an additional 48% did so no more than one year later. The number of students completing their degree within the target duration has increased steadily from 2018 to 2020.

The number of master's degrees completed at the University of Helsinki increased by close to 1,500 from 2019. The quantitatively biggest increase was recorded in the arts and humanities, while the proportionally biggest increase was in computer science. All fields of education reached the targets agreed with the Ministry. When examining the three-year average, all fields except

Figure 9. Degrees in 2013–2020.

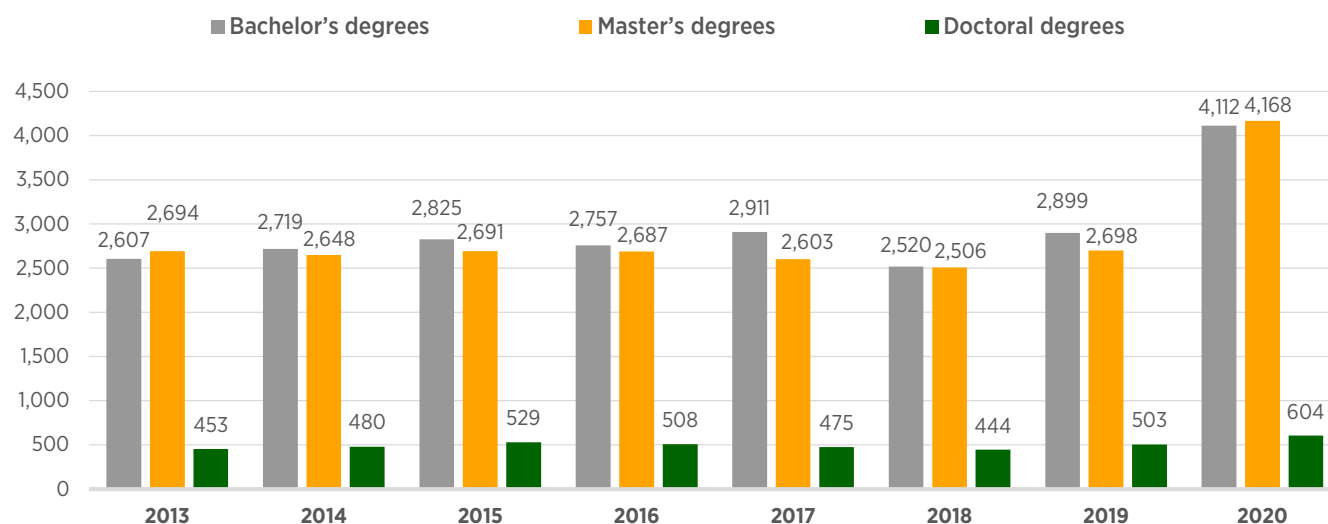
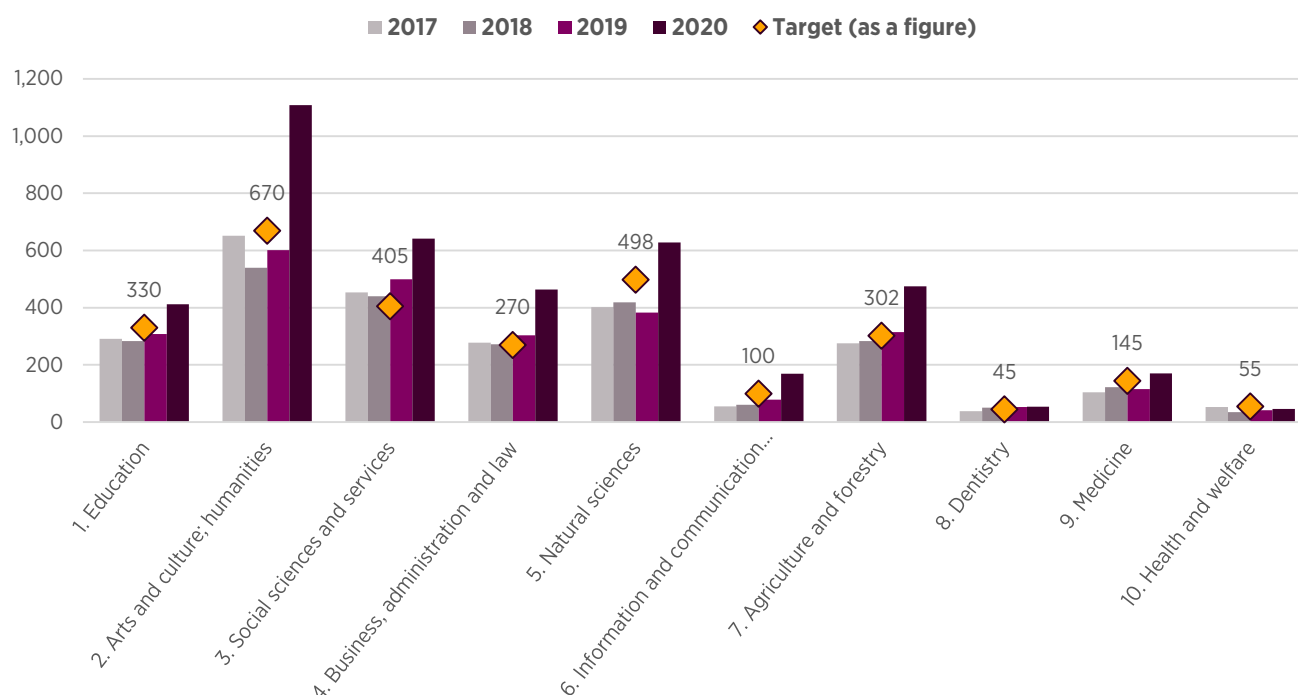


Figure 10. Master's degrees and related targets by fields of education in the funding model.**Table 19. Degrees, degree targets and ratio of outcomes to targets by faculty in 2020**

Faculty	Bachelor's degrees			Master's degrees			Doctoral degrees		
	Degrees	Targets	Outcome	Degrees	Targets	Outcome	Degrees	Targets	Outcome
Faculty of Theology	164	180	91%	235	160	147%	18	15	120%
Faculty of Law	549	270	203%	464	270	172%	22	16	138%
Faculty of Medicine	92	80	115%	340	278	122%	139	145	96%
Faculty of Arts	741	570	130%	841	485	173%	53	55	96%
Faculty of Science	600	400	150%	531	440	121%	80	72	111%
Faculty of Pharmacy	165	150	110%	46	55	84%	28	12	233%
Faculty of Biological and Environmental Sciences	258	155	166%	196	142	138%	78	55	142%
Faculty of Educational Sciences	556	442	126%	412	330	125%	40	20	200%
Faculty of Social Sciences	426	360	118%	578	350	165%	57	44	130%
Swedish School of Social Science	125	65	192%						
Faculty of Agriculture and Forestry	362	264	137%	454	248	183%	70	40	175%
Faculty of Veterinary Medicine	74	64	116%	71	62	115%	19	16	119%
Total	4,112	3,000	137%	4,168	2,820	148%	604	490	123%

the natural sciences, medicine as well as fields related to health and welfare achieved the degree targets. All faculties apart from the Faculty of Pharmacy fulfilled the targets for master's degrees. The median age of master's graduates was 29 years, 67% were women, at least 10% were proficient in Swedish and 8% were international students. A total of 19% of master's students completed their degree within the target duration and an additional 40% did so no more than one year later. The number of

master's degrees completed within the target duration has also increased after the launch of the new degree programmes.

The figure depicts master's degrees classified by fields of education in accordance with the Ministry of Education and Culture funding model. The table shows actual and target degree numbers by faculty. The following figures show degrees weighted in accordance with the

Figure 11. Bachelor’s and master’s degrees with the coefficients applied from the funding model for the term 2021–2024.

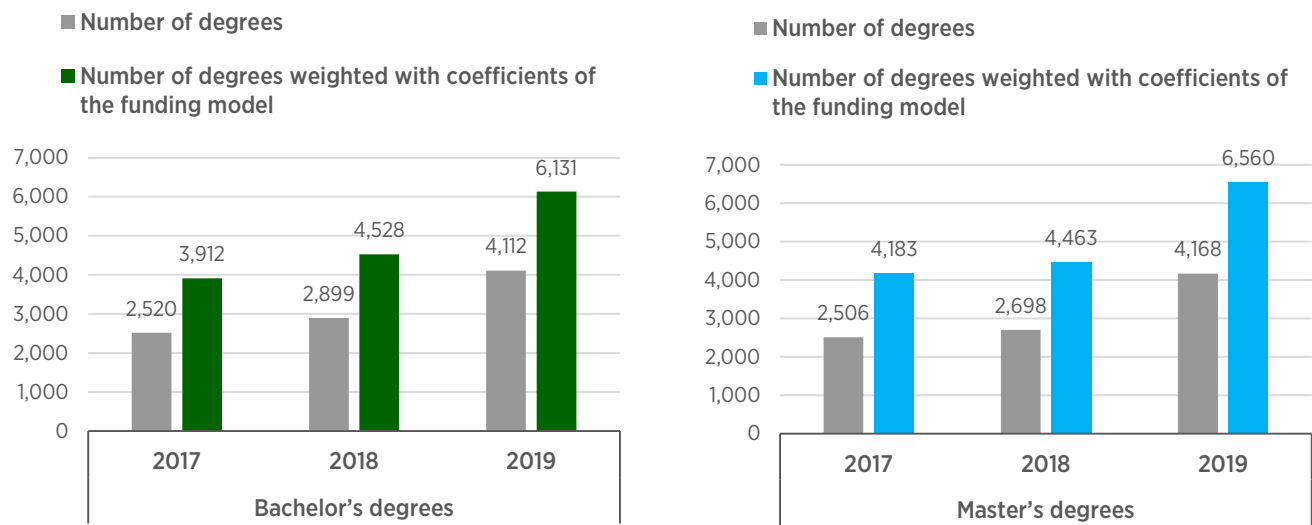
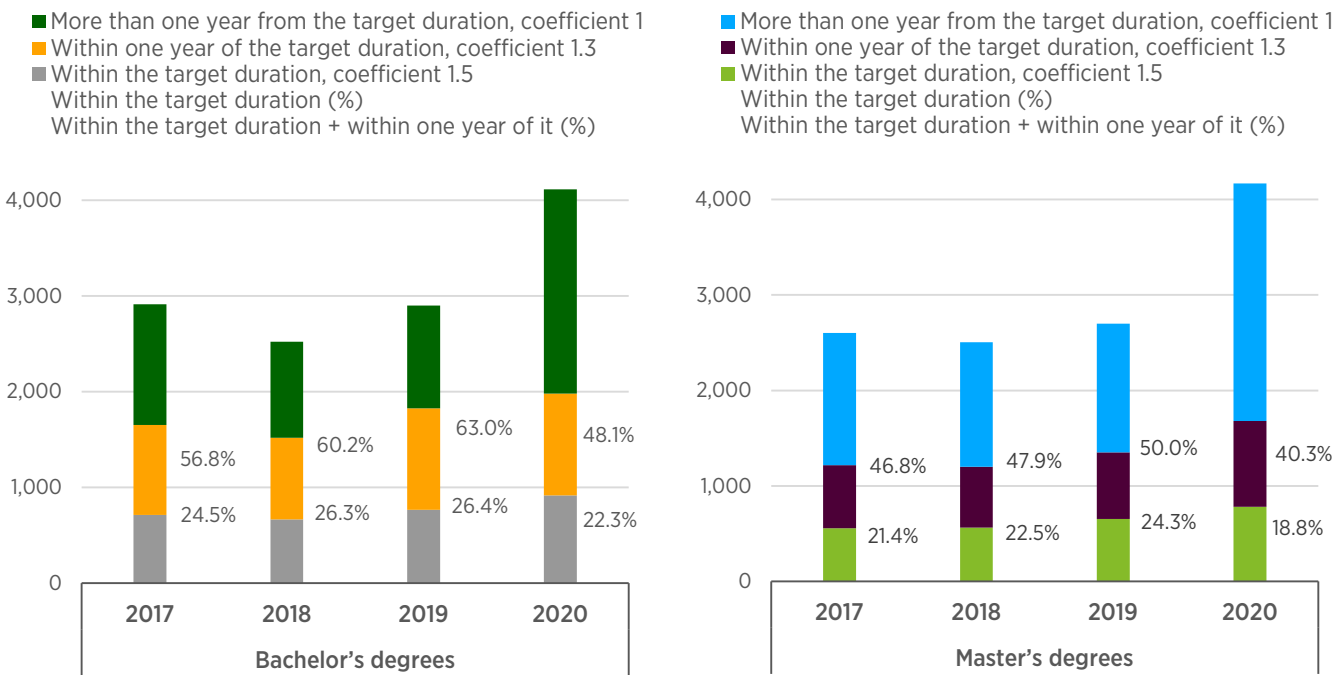


Figure 12. Bachelor’s and master’s degrees completed within the target duration.



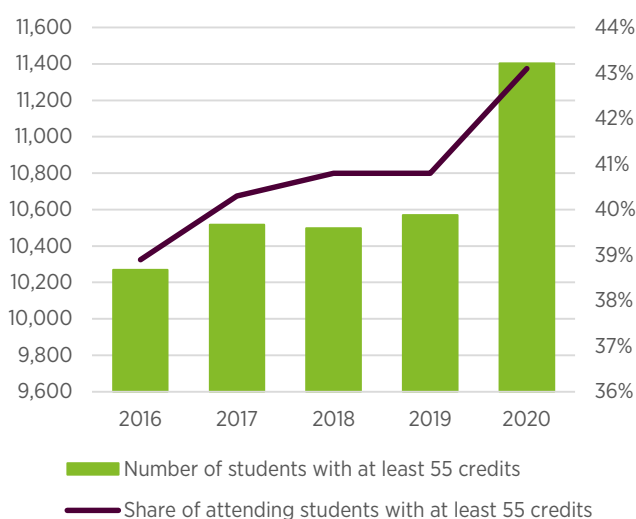
coefficients used in the Ministry of Education and Culture funding model as well as the numbers of bachelor’s and master’s degrees completed within the target duration.

The end of the transition period associated with the degree reform also affected the number of doctoral degrees because the provision on the expiry of studies also took effect regarding doctoral studies. The number of doctoral degrees rose by 100 degrees from the previous year, exceeding the target (490) agreed with the Ministry. The three-year average also exceeded the target (517). All faculties with the exception of the

Faculty of Arts and the Faculty of Medicine achieved the degree targets. The highest increase in the number of degrees was observed at the Faculty of Medicine. The median age of doctoral graduates was 37 years, 60% were women, 5.4% spoke Swedish as their native language and 20% were international students. The median duration of doctoral studies was seven years.

In addition, the University awarded 34 licentiate degrees and 16 postgraduate professional degrees of specialist in veterinary medicine.

Figure 13. Share of attending students who have completed at least 55 cr.



STUDYING AND STUDIES

CREDITS

In 2020 close to 1.3 million credits were completed at the University, up by approximately 176,000 credits from the previous year. The number of credits increased in both degree education and non-degree education. The increase in the number of credits completed by degree students was affected by the end of the transition period associated with the degree reform. The increase in the number of credits completed by non-degree students was at least partially due to the coronavirus pandemic which led to Open University studies being offered free of charge to those unemployed or temporarily laid off.

The number of students completing at least 55 credits per academic year rose, as did their share of attending students (see figure). This indicator will be removed from the university funding model in the coming period.

NEW PRACTICES DUE TO THE PANDEMIC

In March 2020, the University's coronavirus management group decided on a transition to remote teaching and studying as well as the provision of services through primarily remote means. The transition to remote teaching and studying commenced swiftly. The capacity of examination and teaching facilities was assessed and the facilities equipped in accordance with safety instruc-

tions. The Instructions for Students and Instructions for Teaching websites were continuously updated with practical information in Finnish, Swedish and English. The digitalisation of examination practices for doctoral theses was expedited, and new approaches were created for remote public examinations.

The faculty response centres were tasked with issuing field-specific instructions for contact teaching, among other things. As the pandemic continued after the summer, the teaching programme for the autumn was revised to meet the requirements of the special circumstances.

University students liable to pay a tuition fee were offered the opportunity to apply for a grant exempting them from the fee if their studies were delayed due to the pandemic. This grant, amounting to the tuition fee for an additional term, was awarded to 22 students.

STUDENT EXCHANGE

In January the exchange studies of University of Helsinki students commenced normally at almost all destinations. After March, some 40% of outbound and incoming exchange students suspended their exchange due to the pandemic. Decisions on suspending exchange studies and returning home primarily depended on the instructions of the partner universities and the state of the pandemic in each country. In the case of some universities, all incoming and outbound students returned home, while at others, some students completed their exchange, for example, through remote learning arrangements. In the autumn, approximately half the regular number of exchange students arrived in Helsinki, and the number of outbound exchange students was less than one-third compared to the previous autumn.

Although the year was exceptional due to the travel and other restrictions resulting from the pandemic, the University's decision to go ahead with some exchange agreements enabled students to study abroad and progress in their studies. Students gave positive feedback on the University's decisions, operations and services; praising, in particular, the payment of grants for exchange studies, the completion of remote studies and the flexibility of remote services. In addition, the exceptional arrangements with the partner universities and with numerous cooperation partners, such as the

Table 20. Top countries in student mobility 2020 (2019)

Country	From Finland	Country	To Finland
Sweden	30 (33)	Germany	138 (218)
Australia	28 (26)	Italy	81 (118)
Netherlands	27 (48)	Spain	53 (71)
United Kingdom	25 (58)	Belgium	38 (56)
France	30 (33)	France	138 (160)
Spain	25 (24)	China	37 (66)
South Korea	21 (?)	Russia	35 (48)
Belgium	17 (21)	United Kingdom	33 (43)
Italy	15 (35)	Czech Republic	25 (38)
Norway	13 (?)	Netherlands	19 (48)

Finnish Immigration Service and the Finnish National Agency for Education, functioned well.

The experiences of outbound exchange students (as recounted, for example, on Instagram) have been monitored exceptionally closely. The following post summarises the thoughts of many exchange students:

“When I look back on 2020, I will think of it not just as the year of a terrible pandemic, but also as my amazing exchange year.” [studyingabroad_uh #eevatrinitycollege](#)

The tables show the top student exchange destinations as well as outbound and incoming exchange students by faculty.

Table 21. Incoming and outbound exchange students by faculty. Mobility periods of more than three months completed by bachelor's and master's students.

Faculty	Outbound 2019	Incoming 2019	Total 2019	Outbound 2020	Incoming 2020	Total 2020
Faculty of Theology	17	8	25	5	4	9
Faculty of Law	111	142	253	73	100	173
Faculty of Medicine	20	65	85	11	24	35
Faculty of Arts	111	156	267	73	92	165
Faculty of Science	48	209	257	29	137	166
Faculty of Pharmacy	10	67	77	3	60	63
Faculty of Biological and Environmental Sciences	35	116	151	23	77	100
Faculty of Educational Sciences	37	66	103	25	31	56
Faculty of Social Sciences	102	219	321	93	142	235
Swedish School of Social Science	10	19	29	8	22	30
Faculty of Agriculture and Forestry	64	164	228	36	101	137
Faculty of Veterinary Medicine	10	14	24	1	13	14
Language Centre	0	2	2	0	1	1
Total	631	1,165	1,796	380	804	1,184

GUIDELINES FOR ACADEMIC GUIDANCE AND SUPERVISION

In 2017 the rector decided on guidelines for University-level practices and duties with a view to enhancing student guidance and supervision. To implement these guidelines, a transition period extending until the end of 2020 was agreed with regard to bachelor's and master's programmes, and until August 2021 with regard to doctoral programmes. Faculties have outlined models for student guidance and supervision that are suitable for the fields of each degree programme. University Services is responsible for communication, advice and special guidance related to, for example, student and researcher exchange opportunities, traineeships and careers as well as the consultation and guidance provided by the University's counselling psychologists. The guidelines for academic guidance and supervision have also affected the information systems used in academic administration, for which tools have been developed to support the planning of studies as well as student guidance and supervision.

SWEDISH-LANGUAGE TEACHING AND STUDENT RECRUITMENT

The Swedish-language marketing events organised each autumn, Högskoledagen and Uni på väg, were moved online. The Uni på väg tour based on school visits was totally revamped, and the new concept can be used in the future as a more comprehensive student marketing

event. The Uni på väg concept was also piloted in Finnish-language general upper secondary schools.

In the development of bilingual degrees offered in Finnish and Swedish, the University launched an employment project to clarify the career relevance of bilingual studies from the student perspective. The goal is also to increase employer awareness of bilingual degrees.

In 2020 a total of 81 students completed a bilingual bachelor’s degree. From 2013 to the end of 2020, a total of 238 such degrees have been completed. The number of bilingual degrees has more than doubled in the past two years (37 in 2018, 54 in 2019, 81 in 2020), which has been especially evident at the Faculty of Law.

CONTINUOUS LEARNING AND OPEN TEACHING

In addition to degree students, roughly 42,000 individuals pursuing non-degree studies completed various forms of continuous learning at the University in 2020.

- A total of 3,229 people pursued postgraduate professional education, such as a specialist degree in medicine or dentistry.
- The University coordinated 10 professional specialist programmes which had 342 students. More than 3,026 credits were completed in professional

specialisation education, slightly more than in the previous year.

- The Open University had a record number of non-degree students, 35,510. Massive Open Online Courses (MOOCs) were taken by 27,273 active students, of whom 19,961 were new students.
- The right to complete non-degree studies was held by 3,303 students.

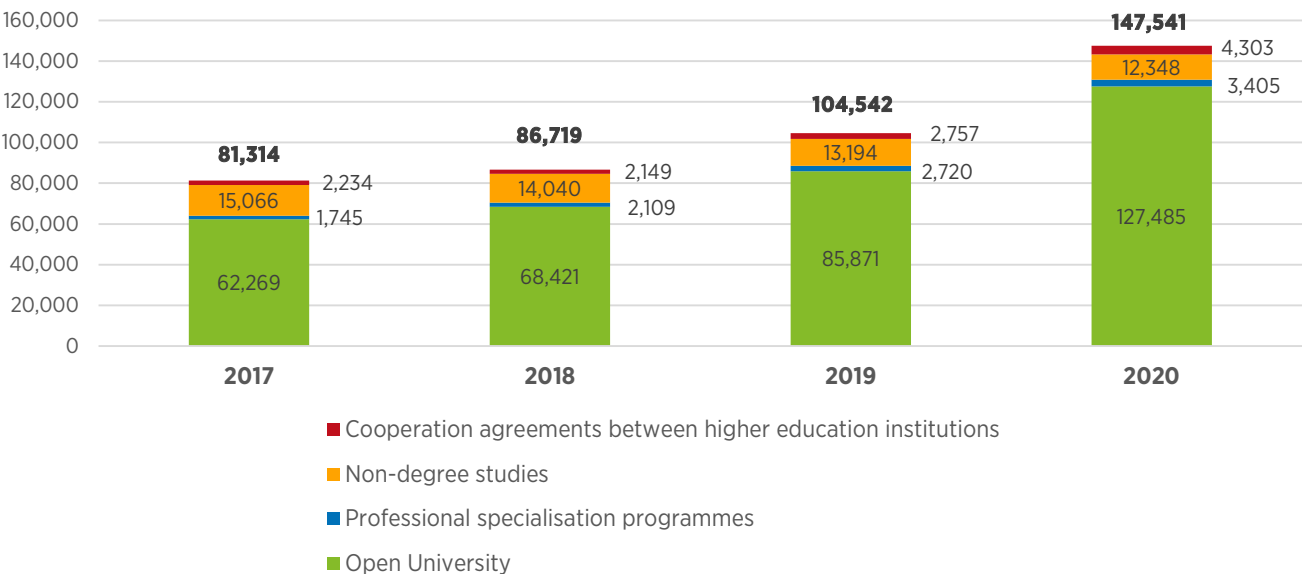
The figure shows the credits completed in continuous learning.

The project for continuous learning and its promotion had a busy year, which was also the last year of the project. A vision of continuous learning, formulated in 2020 together with members of the University community and the University’s stakeholders, was published in September. The vision is based on the following four foundations:

- Research-orientedness and the promise to provide Bildung are the cornerstones of continuous learning
- Continuous learning is for everyone
- The University of Helsinki is a trusted partner of employers
- Continuous learning is part of the everyday activities of the University

To expand the provision of continuous learning, each faculty held continuous learning workshops that explored opportunities for making degree studies openly

Figure 14. Credits for continuous learning.



available and generated ideas for new studies that would be of interest to employers.

The University considered it important to help promote equal opportunities in continuous learning and to support employment in the exceptional circumstances caused by the coronavirus pandemic. Consequently, in the autumn the studies offered by the University of Helsinki Open University were made available free of charge to those unemployed or temporarily laid off.

As for the continuous learning model, work continued in the area of financial and academic administration and guidelines, and cooperation was intensified in communications and marketing. For example, the varied MOOCs offered at Kumpula Campus attained good visibility through digital marketing.

The continuous learning website was revamped to present the diverse provision of continuous learning throughout the University. In addition, a redesign of the continuous learning website began, and the development of a search feature covering all learning opportunities commenced as part of the helsinki.fi website redesign project.

DEGREE PROGRAMME ACTIVITIES

The first four-year term of office of the bachelor's and master's programme directors and steering groups ended, and new directors and steering groups were appointed in the autumn. The directors beginning a new term of office are supported through orientation that commenced at the end of the year. Of the bachelor's and master's programme directors, 49 served in the same position in the previous term, whereas 45 are new to their role. Six of the directors have an international background.

DEGREE PROGRAMMES: CHANGE AND CONSOLIDATION

The University launched two new English-language master's programmes: the Master's Programme in Changing Education and the Master's Programme in Global Governance Law. The first English-language master's programme in pharmacy, the Master's Programme in Pharmaceutical Research, Development and Safety, was established in 2020, with teaching to begin in 2022. In addition, the Swedish-language Master's Programme in Culture and Communication was abolished.

THE UNIVERSITY LAUNCHED TWO NEW ENGLISH-LANGUAGE MASTER'S PROGRAMMES

QUALITY MANAGEMENT OF DEGREE PROGRAMMES

The degree programme steering groups monitor the programme operations each year. A new digital tool for documenting the current status of degree programmes was introduced for annual monitoring. This tool will serve both programme steering groups in operational planning and development, and faculties in knowledge management and

operational planning. Degree programme directors can also use the digital Oodikone tool to monitor student guidance, supervision and progress.

STUDENT FEEDBACK

Student feedback is part of the University's system of self-assessment and quality management of education. The information gained from feedback is used systematically in decision-making as well as in the management and development of teaching. The distribution of information on key observations and the measures taken are crucial parts of the feedback process, as are the monitoring and assessment of its impact. The University's student feedback group has promoted the systematic use of joint student feedback surveys as part of the quality management of degree programmes. At sessions aimed at the degree programme steering groups and the vice-deans for academic affairs, the

student feedback group teamed up with senior lecturers in university pedagogy to present the results of the HowULearn surveys, the National Bachelor Graduate Survey and career tracking surveys. In addition to these sessions, the student feedback group published a report incorporating the results of surveys conducted in the 2019–2020 academic year. The term of office of the student feedback group concluded at the end of 2020.

HOWULEARN

Bachelor's level HowULearn surveys were conducted as part of students' degree studies. The response rate varied by degree programme and survey. For the HowULearn 0 and 1 surveys conducted during the first year of studies, the response rate was at least 60% for more than half the degree programmes, but lower for the HowULearn 2 survey carried out in the spring of the second year or the autumn of the third year. In spring 2020, some degree programmes included in their HowULearn surveys statements concerning the remote teaching provided as a result of the coronavirus pandemic. The results have been presented in a report compiled by the student feedback group.

In addition to the HowULearn surveys, in the autumn the University piloted the HowUStudy course feedback survey developed by the Centre for University Teaching and Learning. The aim of this survey is to support interaction between students and teachers during courses and to offer course-level information for the enhancement of educational quality in degree programmes. The survey was piloted by teachers from the Faculty of Medicine, the Faculty of Educational Sciences and the Faculty of

Science. A decision on the further development of the HowUStudy survey will be made in 2021.

BACHELOR'S GRADUATE SURVEY

The National Bachelor's Graduate Survey is conducted centrally at all Finnish universities. Universities Finland (UNIFI) is responsible for the development of this survey. In 2020 the survey was sent to 4,287 students, comprising bachelor's graduates as well as medical students who had been authorised by the National Supervisory Authority for Welfare and Health to practise the medical profession. At the University of Helsinki, 2,805 students (65.4%) completed the National Bachelor's Graduate Survey. As in the previous year, the following statements received the highest average scores: 'The teaching was to a large extent of good quality' and 'I feel comfortable at my university'. The following statements had the lowest average scores: 'There was sufficient support available for the organisation of studies' and 'The feedback I received from the teaching staff has helped me with my studies'.

CAREER TRACKING SURVEYS

Finnish universities carry out nationwide career tracking surveys each autumn. The survey for master's graduates targets all those who completed a master's degree, a Bachelor of Science (Pharmacy) degree or a Bachelor of Arts (Education) degree in early childhood teacher education five years prior to the survey. The target group for the doctoral survey consists of doctoral graduates who completed their degree three years prior to the survey.

MOST WIDELY-READ ONLINE NEWS 2020

THE BASIC INCOME EXPERIMENT IN FINLAND YIELDS SURPRISING RESULTS

The results of the Finnish basic income experiment suggest that basic income does not increase employment, and that current employment services are appreciated more than previously thought. Heikki Hiilamo, Professor of Social Policy at the University of Helsinki, comments on the results.



<https://www.helsinki.fi/en/news/nordic-welfare-news/the-basic-income-experiment-in-finland-yields-surprising-results>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

The employment situation of respondents to the master's level survey was good in autumn 2019, five years after their graduation. The share of gainfully employed graduates in the entire workforce was 98%. The questions concerning the quality of employment and the correlation between the graduates' education and employment generally demonstrated a high level of satisfaction among the University of Helsinki's graduates. The respondents felt that their job requirements match their academic education (82%) and that they can use the knowledge and skills acquired at university in their job (83%). The majority (83%) were also satisfied with their degree in terms of their professional career. On the other hand, just 64% of the graduates felt that their education equipped them sufficiently for the job market. Variation between faculties was significant.

The employment situation of the doctoral graduates of 2016 was also good in autumn 2019. The share of gainfully employed graduates in the entire workforce was high (98%). The biggest portion (46%) of University of Helsinki doctoral graduates cited research as their main employment. The share of those working in private enterprises increased slightly in the 2010s. A total of 21% of the graduates of 2016 worked in companies. The university sector remained the biggest employer at 41%.

Doctoral graduates gave good ratings for the correlation between their education and jobs, with 86% of the respondents considering the requirement level of their work well matched with their education. A total of 88% said they can use the knowledge and skills they have learned. From a career perspective, 88% were satisfied with their degree.

INTERNATIONAL STUDENT BAROMETER (ISB)

The University has decided to conduct the International Student Barometer feedback surveys every other year until further notice. The results of the ISB survey that began in the autumn will be available in spring 2021. The University's own questions included in the survey explore international students' experiences of discrimination. The survey targets all international degree and exchange students and was now carried out for the fifth time. The previous surveys were completed in 2010, 2014, 2017 and 2018.

MOST WIDELY-READ ONLINE NEWS 2020

THE TRE SMEDER FOUNDATION DONATES ONE MILLION EUROS TO THE UNIVERSITY OF HELSINKI

The Stiftelsen Tre Smeder foundation has donated one million euros for the promotion of teaching and research in the social sciences at the University of Helsinki. The University has decided to allocate the funds primarily to Swedish-language teaching and research in the social sciences and to establish a Swedish-language professorship in economics.



Photo: Eilii Kilki

<https://www.helsinki.fi/en/news/teaching-studying-at-the-university/the-tre-smeder-foundation-donates-one-million-euros-to-the-university-of-helsinki>

PUBLIC ENGAGEMENT

In 2020 the coronavirus pandemic transformed interaction both within the University and more widely in society. There were restrictions on meeting in person, but interaction based on remote connections was lively. The University's new strategic plan led to the drawing up of a strategic communication and impact plan in cooperation with faculties, units and sectors. The communication and impact plan will support the implementation of the strategic plan and the achievement of its objectives.

THINK CORNER AS AN ARENA FOR IMPACT

The year 2020 was highly exceptional for Think Corner, whose operations are based on public events, meetings and collaboration. Due to the pandemic, Think Corner was closed to the public for half the year, and most events were moved online as of March.

The exceptional circumstances forced Think Corner to think of new programming formats and methods. The *Poikkeuslinjalla* programme, launched in March by Think Corner and the Faculty of Social Sciences, introduced a societal perspective from researchers to the coronavirus discussion. A new weekly Think Corner Live discussion programme was introduced in the autumn, with 14 live streams as well as videos and podcasts.

Highlights of the year also included the Helsinki Health Week programming series, and the discussion on coronavirus at an event focused on zoonoses on the very day the first coronavirus infection was diagnosed in Finland in January. The first two parts of the *Tiedekulmapokkari* ('Think Corner paperback') series, edited by Gaudeamus, were published. A total of 301 events were organised in 2020, reaching an audience of 60,000 people both on-site and through live streams.



The first Think Corner Live event of the fall was hosted by Ville Blåfield. Martti Koskeniemi, Tuuli Koivu and Janne Hukkinen as guests. Photo by Tommi Kervinen.

COMMUNICATIONS AND VISIBILITY

DIGITAL COMMUNICATIONS AND THE HELSINKI.FI WEBSITE

The helsinki.fi website is the University's most popular communications and customer service channel. In 2020 the website was viewed 42 million times and recorded 16.5 million visits, up 7% from the previous year. Of the visits, 28.5% were from outside Finland. Degree programmes and admissions-related information attracted particular interest, and Open University studies and remote learning opportunities also generated considerably more interest than before. As for research-related topics, visitors showed more interest in doctoral education than before.

The research- and teaching-related news items published on the University website attracted a record audience: they were read 4.3 million times, up 46% from the previous year. Topics related to Open University studies and coronavirus research were particularly popular, and health-related news were also popular.

The University launched a podcast series called *Utelias mieli* ('A curious mind') in which researchers talk about interesting topics in their field. As is typical of the genre, the podcast found its audience slowly but surely. The episodes were listened to 17,500 times in total.

A major redesign of the helsinki.fi website began in 2020. Despite the challenges and risks associated with the pandemic, the project proceeded almost according to schedule. Particular attention was paid to how the website meets the needs of the new strategic plan. The new site presents continuous learning opportunities more extensively, while teaching is given increasing prominence alongside research.

SOCIAL MEDIA

During the year, the University of Helsinki reached 86.3 million pairs of eyes through University-level social media channels. The public interacted with the University on social media 1.5 million times by clicking, liking, sharing or commenting on the University's posts. Visitors accessed the University's website through social media channels

386,000 times. New concepts to engage audiences, such as organising the University's annual celebration and other events, were successfully trialled on social media, which was reflected in increased interaction with the University (+9%).

The number of people following the University on social media increased. Statistics for the University's social media channels at the end of the year:

- Number of Facebook followers: 132,100 (+5%)
- Number of Facebook views: 49.7 million
- Number of LinkedIn followers: 117,100 (+11%)
- Number of LinkedIn views: 2.3 million
- Number of Instagram followers: close to 28,200 (+31%)
- Number of Instagram views: 24.8 million
- Number of Twitter followers: 44,000 (+21%)
- Number of Twitter views: 11.7 million

The number of people following the University on Facebook was exceptionally high, also in international terms.

FINNISH MEDIA COVERAGE

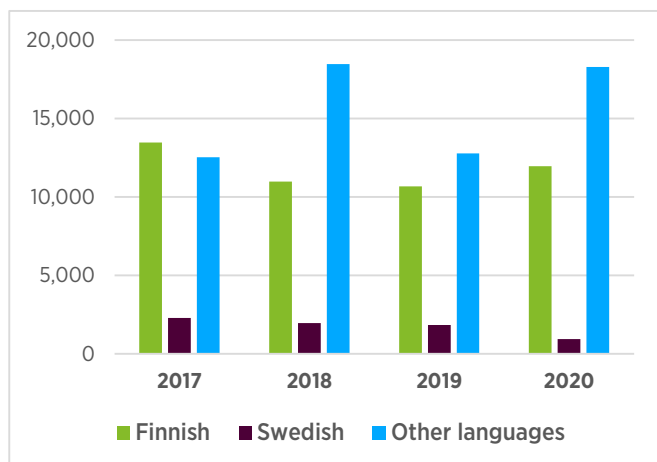
Research communications emphasised the key role of the University of Helsinki and researchers in addressing the medical, economic and societal challenges of the coronavirus pandemic. At its height in March and April 2020, as many as two-thirds of the University's Finnish media hits were related to the pandemic. The number of Finnish media hits increased on the annual level by 12% to close to 13,000 hits.

A Finnish-language list of coronavirus specialists, compiled for journalists, was viewed 4,480 times on the helsinki.fi website over a six-month period – 20 times the number of views for regular lists.

VISIBILITY IN INTERNATIONAL MEDIA

The number of international media hits increased by as much as 43% to more than 18,000 hits. The total reach of media hits was estimated as 73 billion contacts, twice the number for 2019.

The range of topics was wide even before the pandemic. Especially frequently reported topics included the dune-

Figure 15. Media hits 2017–2020.

like formations of Northern Lights, the fast and furious drivers of high-status cars, and hairy mammoths. The Elements of AI course and the new Ethics of AI course also received a great deal of attention.

After March 2020, media attention focused on coronavirus research, such as coronavirus sniffer dogs used in testing at Helsinki Airport. Dreams about coronavirus and a cure for hangover also received much media coverage. The hits do not include television or radio programmes or printed publications.

The coronavirus pandemic led to the cancellation of almost all visits by international journalists to the University. Whereas usually the University welcomes more than 100 journalists each year, the number was seven in early 2020 and just three in the autumn.

YLIOPISTO MAGAZINE – RESEARCH WITH LOVE

Due to the introduction of remote work arrangements, the distribution of the *Yliopisto* magazine to staff and students at campuses was reduced to the minimum necessary, and for most of the year the print run was a third smaller than usual (10,000 copies). As of issue No 3/2020, an electronic version of the latest issue was made available for free on the website.

The printed magazine has 2,850 subscribers, in addition to which the magazine is sent for free to 2,000 representatives of the University's stakeholders. In collaboration with the alumni team, issue No 7/2020 was sent with a special pull-out to 26,000 people registered with the Helsinki Alumni network, and a link to the digital version of each issue, which can be downloaded from the website, is sent to 27,500 alumni.

BRANDING AND MARKETING

The University monitors its reputation through regular surveys. According to a study carried out in the spring by T-media, the University has taken a major leap forward in terms of its reputation among the Finnish public. Assessments of the University are significantly more favourable, particularly in the dimensions of workplace, innovation and leadership. In addition, the University's known strengths – education and related services – now also include responsibility.

MOST WIDELY-READ ONLINE NEWS 2020

SOCIO-EMOTIONAL SKILLS PROTECT ADOLESCENT PUPILS FROM BURNOUT AND INCREASE ENGAGEMENT

Adolescents' wellbeing in school is supported by important socio-emotional skills, including curiosity, grit, resilience, as well as social skills and belongingness.



Photo: Filip Burkens on Unsplash

<https://www.helsinki.fi/en/news/education-news/socio-emotional-skills-protect-adolescent-pupils-from-burnout-and-increase-engagement>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

The *Kun koulu loppuu* reputation survey showed that the University of Helsinki remains the most popular university among Finnish general upper secondary school pupils. Pupils' willingness to recommend or apply to the University of Helsinki is high compared to other Finnish universities. According to the young people participating in this survey, the University should enhance its communication.

In the spring, the University of Helsinki and the Helsinki Central Hospital launched joint brand building work. In addition, joint vision and brand building efforts were initiated at Viikki Campus together with the City of Helsinki, the Finnish Environment Institute, Natural Resources Institute Finland and the Finnish Food Authority.

INTERNATIONAL UNIVERSITY RANKINGS

University rankings measure the amount and impact of research conducted at institutions of higher education, the quality of teaching, the reputation of the institutions in question among researchers and employers, as well as the extent of their international outlook. The rankings use different methodologies and focus on different issues.

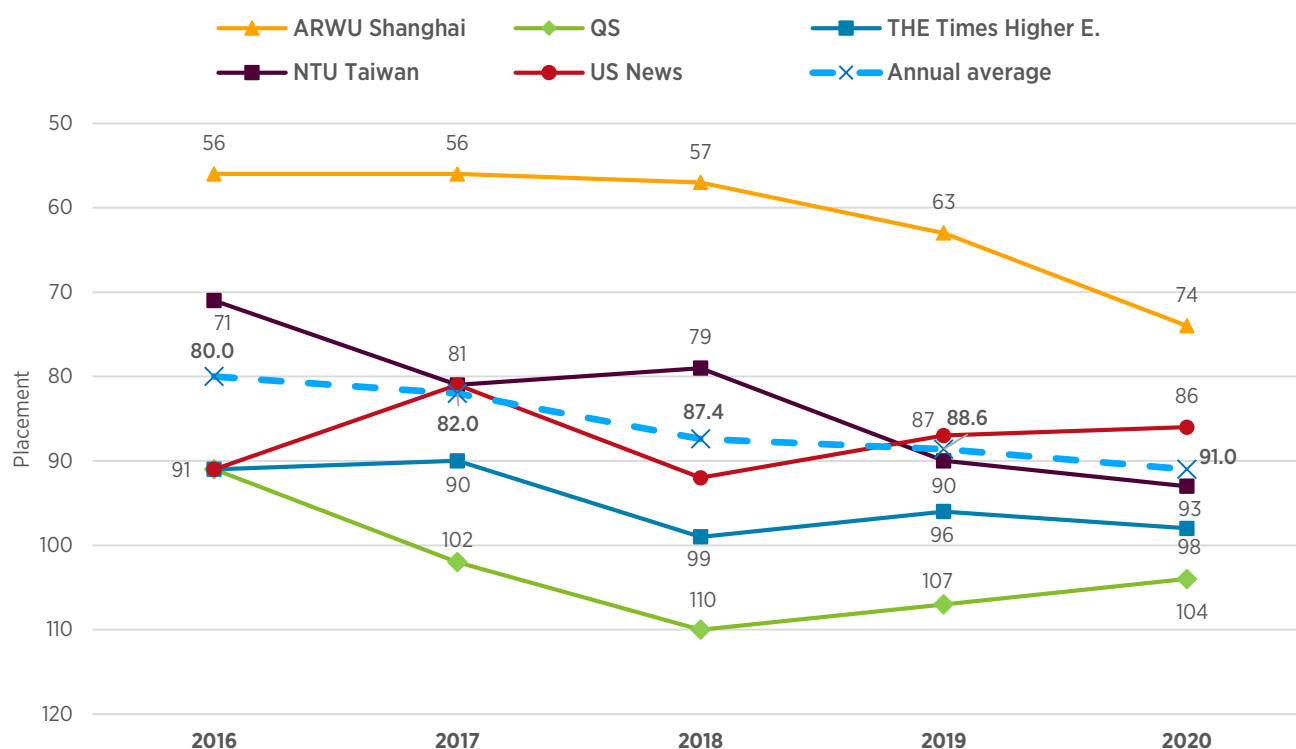
In the tables and figures in this subsection, the years mentioned refer to when the ranking was published, regardless of the year in the name of the ranking. Some rankings are named according to the year following the year of publication.

In 2020 the University of Helsinki's average result in five rankings dropped to 91.0, down 2.4 places from the previous year (Figure 16). The decline was primarily due to the Shanghai ranking. Based on the rankings, the University is still in the top 100, or the top one per cent of all universities in the world.

The University's average ranking result dropped for the fourth year in a row. A significant reason for this decline relates to the improved rankings of East Asian, particularly Chinese, universities. This does not, however, fully explain the University's downward trend, as it has gone down in the rankings of Nordic and European universities as well (see Table 22).

In the ARWU Shanghai ranking, the University of Helsinki was placed at No 74, down 11 places from the previous year. The University remained in sixth place among Nordic universities, as in the previous year. The drop was mostly due to the decline in the share of highly cited

Figure 16. University of Helsinki in university rankings and annual ranking averages 2016–2020.



STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Table 22. University of Helsinki in university rankings based on geographical area in 2020 (results for 2019 in brackets).

Ranking	World	Europe	Nordic countries	Finland
ARWU Shanghai	74 (63)	28 (22)	6 (6)	1 (1)
THE (Times Higher Education)	98 (96)	36 (34)	3 (2)	1 (1)
QS	104 (107)	36 (38)	5 (4)	1 (1)
US News	86 (87)	26 (26)	3 (3)	1 (1)
NTU Taiwan	93 (90)	30 (28)	4 (4)	1 (1)
Average of five rankings	91.0 (88.6)	31.4 (29.2)	4.2 (3.8)	1 (1)

researchers (HiCi) as well as the decline in the relative share of articles published in the *Nature* and *Science* journals. However, the indicator for the number of publications showed a slight increase.

The THE (Times Higher Education) ranking placed the University at No 98, a drop of two places. Among the Nordic countries, its ranking dropped from second to third place. Of the indicators with the most weight, the indicator for research declined the most. The four other indicators also saw a decline.

In the QS ranking, the University climbed three places to No 103, but dropped from fourth to fifth place among its Nordic neighbours. The University achieved better results in the indicators for the student/teacher ratio as well as the share of international students and staff. The ranking weakened in both reputation factors (academic reputation and reputation assessed by international employers, Table 23) and in the citation indicator representing the impact of research.

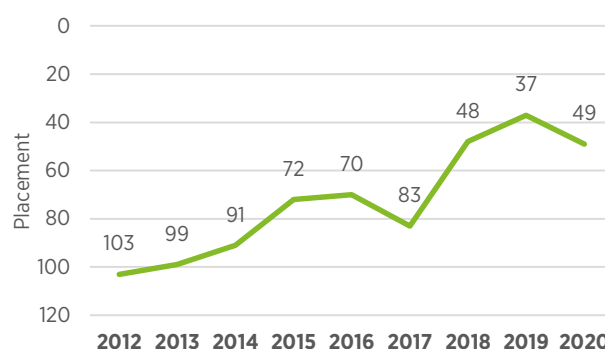
The US News ranking placed the University at No 86, up one place. The University's ranking among its Nordic peers remained at No 3. The University's result improved in both reputation indicators (global and regional, i.e.,

European, reputation), but declined in the indicators for top-level publications and citations.

In the NTU Taiwan ranking, the University placed 93rd, down three places. Its ranking among the Nordic universities remained steady, at No 4. The Taiwan ranking is based solely on bibliometric data concerning publications. The drop is due to the decline in the number of high-quality publications and the share of related citations, although the total numbers of all publications and citations increased.

The common trend visible in all five rankings is the decline in performance concerning indicators that describe top-level publications.

In the THE Employability ranking (Figure 17), the University placed at No 49, down 12 places. The University still ranks at No 1 among Nordic universities, but the gap to its nearest competitor has been closing. The ranking represents the views of employers in various countries concerning the employability of university graduates. No Finnish employers are represented among the assessors.

Figure 17. University of Helsinki in the THE Employability ranking, which measures the employability of graduates.**Table 23. University of Helsinki in the reputation surveys of various rankings 2015–2020.**

Ranking	2015	2016	2017	2018	2019	2020	Change 2019–2020
THE Reputation	81–90	119	115	101	117	101–125*	same interval
QS Academic Reputation (only Research)	92	94	92	106	99	103	–4
QS Employer Reputation	192	177	218	184	146	195	–49
US News Global Research Reputation	115	123	123	130	132	127	5
US News Regional (Europe) Research Reputation	..	..	37	37	33	31	2

* NB! In 2020 the University of Helsinki no longer received detailed information on its placement in the THE Reputation ranking, unlike in 2016 to 2019.

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Organisations conducting reputation surveys – THE, QS and US News – base their results on questionnaires sent to selected researchers. Reputation indicators also affect the results of overall rankings as sub-indicators.

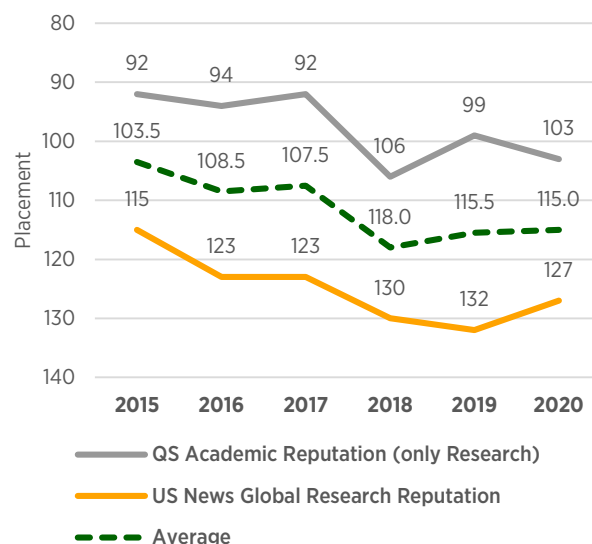
The University of Helsinki's place in the THE overall reputation ranking has varied between 101 and 125; in 2020 it was placed at No 117 (Table 23). In the QS, the University's academic reputation dropped four places to No 103, and in the QS indicator representing employer reputation in various countries, the University dropped 49 places to No 195. This indicator varies considerably on a yearly basis.

In the US News ranking, the University's global research reputation climbed five places to 127. US News also publishes separate regional reputation rankings. In Europe, the University of Helsinki's research reputation went up two places to No 31.

Figure 18 shows the development of the University's reputation based on the QS and US News indicators as well as their average. The QS reputation survey gives the University of Helsinki systematically better results than the US News survey. In both surveys, however, the University's research reputation has, on the whole, seen a slight decline.

The University's results in reputation rankings have been systematically poorer than in equivalent overall rankings (Table 24). In 2020 the difference was, on average, 24.5 places. Because reputation rankings also affect the

Figure 18. University of Helsinki research reputation from 2015 to 2020 in the QS and US News ranking surveys.



results of general rankings, it can be surmised that the University's ranking results would be better if the overall rankings were based solely on objective indicators rather than taking the results of reputation rankings into account.

The University of Helsinki performs fairly well in subject-specific rankings. Of the subjects in which it carries out teaching and research, roughly 60% are ranked in the top 100 (Table 25). The results for all subjects can be accessed on the University's public ranking websites.

Table 24. Comparison of the University of Helsinki's placement in overall rankings and equivalent reputation rankings 2016–2020.

Ranking	2016	2017	2018	2019	2020
QS overall ranking	91	102	110	107	104
THE overall ranking	91	90	99	96	98
US News overall ranking	91	81	92	87	86
QS Reputation 'calculated overall'	111	117	122	108	121
THE Reputation Overall	119	115	101	117	113
US News Global Research Reputation	123	123	130	132	127
Difference between QS overall ranking and QS Reputation	-20	-15	-12	-1	-17
Difference between THE overall ranking and THE Reputation	-28	-25	-2	-21	-15
Difference between US News overall ranking and US News Reputation	-32	-42	-38	-45	-41
Difference between the overall ranking and reputation, average	-26.5	-27.4	-17.2	-22.5	-24.5

* The QS 'calculated overall' has been derived by weighting QS Academic and Employer Reputation placements according to their relative weights used by QS in its overall ranking (ratio 4:1, i.e., corresponding weights here are 0.8 and 0.2).

Table 25. Number and share of scientific fields from the University of Helsinki in the top 100 of field-specific rankings 2019–2020.

Ranking	UH conducts teaching and research in 2019, number of fields	UH conducts teaching and research in 2020, number of fields	UH in the top 100 in 2019, number of fields	UH in the top 100 in 2020, number of fields	(UH in the top 100 in 2019) per (UH conducts teaching and research, number of fields), %	(UH in the top 100 in 2020) per (UH conducts teaching and research, number of fields), %	Change 2020–2019, % points
THE Subjects	10	10	5	5	50.0%	50.0%	0.0%
Taiwan Subjects	25	25	14	15	56.0%	60.0%	4.0%
ARWU Shanghai Subjects	31	31	19	19	61.3%	61.3%	0.0%
US News Fields, Subjects	23	30	15	20	65.2%	66.7%	1.4%
QS Fields, Subjects	38	38	21	21	55.3%	55.3%	0.0%
Total	127	134	74	80	58.3%	59.7%	1.4%

THE HELSINKI ALUMNI COMMUNITY – REMOTE BUT ACTIVE

In early 2020, alumni were still able to participate in and meet each other at alumni events. Alumni Day was organised in late February with the theme of ‘An enquiring mind, a learning community’. The theme of continuous learning was discussed during morning sessions on various campuses and in the Helsinki Alumni magazine. The theme of the evening session was ‘Hooked on learning’. An alumni recruitment campaign was also organised in the spring.

As of April, all alumni events were moved online. The remote events proved popular, and the digital leap in alumni activities was successful. During the year, more than 40 alumni events were organised, with close to 2,400 alumni participating in them. In addition, alumni participated actively in Faculty activities, serving on various committees, mentoring students and speaking at events.

Helsinki Alumni Hub, an interactive online community for alumni, was developed in 2020 and will be launched in early 2021. Alumni also contributed to the development of the hub. In the future, Helsinki Alumni Hub will make it easier for alumni to find relevant information and services as well as each other. It will also enable new types of international alumni activities.

The ThinkLetter Alumni newsletter was published ten times in Finnish and Swedish and five times in English. All

faculties also sent their own newsletters to alumni. At the end of the year, there were 39,842 registered alumni, i.e., members of the Helsinki Alumni community (at the end of 2019 the number was 34,384).

FUNDRAISING

The donations made in 2020 to the University of Helsinki’s *Maailman parhaaksi* (Best for the World) fundraising campaign totalled €5.3 million.

After the outbreak of the coronavirus pandemic, the University launched a campaign to raise funds for research on coronavirus. More than 700 individuals, companies and communities supported this research with a total sum of over €335,000.

International fundraising activities were an important area of development. In February the University organised a high-profile Think Talks stakeholder event on climate change at the Reform Club in London and met with alumni and foundations who play a crucial role in fundraising. The Religion, Conflict and Dialogue project strengthened donor relations and sought new cooperation partners from the United States. A survey on the wider potential of fundraising in the US market was also conducted in the spring. In 2020 the Baltic Bridge venture carried out in cooperation with Stockholm University expanded to include climate scientists, and related fundraising activities were prepared. In the autumn, the University strengthened its international fundraising by hiring specialists for international alumni activities and fundraising.

The government's matched funding scheme also became a focus of fundraising in 2020 and for the coming years. This scheme allocated a total of €33 million to universities in autumn 2020 based on criteria related to the impact of research, and a further €67 million will be allocated in autumn 2022 based on the funds raised in accordance with the matched funding scheme. The University of Helsinki acquired €2.4 million in donations eligible for matched funding as of 15 June 2020.

The Giving Day campaign in the autumn highlighted the University's veterinary research, particularly from the perspective of the 'One Health' concept for the promotion of both human and animal health. The campaign received positive attention and attracted donations from new sources. A popular information session on legacies and bequests was again organised in connection with the International Legacy Giving Day, this time on the theme of medical research.

The University of Helsinki appreciates its donors and hopes to continue developing the varied activities of its donor community, Club Giraffe. In remote sessions in the autumn, members of the donor community discussed the ability of individuals and societies to withstand disturbances and crises and explored the topic of responsible investment. Also taking place online was the traditional gala for donors and grant recipients, which celebrated supporters of the University of Helsinki and those who have received a grant or an award based on donations.

STAKEHOLDER RELATIONS AND PARTNERSHIPS

The coronavirus pandemic affected the University's cooperation with decision-makers in various ways. Planned events and sessions had to be cancelled or moved online, but the societal significance of scholarly research as well as the connection between research and decision-making received new emphasis. The University also used its new #Researchmatters campaign to highlight the role of research in Finland's crisis tolerance and how research can produce solutions to acute problems, while also providing expertise for the long term.

In the spring, the results of academic coronavirus and pandemic research proved to be of interest to both decision-makers and the public, underlining the significance of the broader expertise provided by the University. Researchers working at the University's Faculty of Medicine worked both on the front line of the crisis and in multidisciplinary cross-campus specialist groups set up by ministries, such as the independent Covid-19 scientific panel established to provide support after the crisis as well as the working group led by Vesa Vihriälä and set up by the Ministry of Economic Affairs and Employment and the Ministry of Finance.

The University also brought its research-based knowledge to the fore in other contexts related to global

MOST WIDELY-READ ONLINE NEWS 2020

FINLAND CONTINUES ITS QUEST TO TEACH 1% OF THE WORLD THE BASICS OF AI – OPEN ONLINE COURSE BUILDING AI PUBLISHED

A new open online course by the University of Helsinki and technology company Reaktor explains the algorithms behind AI. Building AI is a sequel to Elements of AI, the international phenomenon that has been voted the world's best computer science course.



Photo: REAKTOR

<https://www.helsinki.fi/en/news/data-science-news/finland-continues-its-quest-to-teach-1-of-the-world-the-basics-of-ai-open-online-course-building-ai-published>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

challenges. The preparation of the government's Africa strategy was supported, for example, with a researcher consultation. In late 2020, researchers and stakeholders were brought together at the Thinkfest event to discuss opportunities for a fair and sustainable social transformation.

In 2020 many projects related to research and education policy also progressed. The University published its vision for continuous learning in sync with the government's continuous learning reform. Similarly, members of the University community helped influence the government's RDI roadmap and education export roadmap.

The University lobbied both the government and the European Union regarding economic policy. In Finland, the national special duties of universities were discussed.

The University communicated broadly with the League of European Research Universities (LERU) on the significance of research, innovation and education budgets and on increasing related contributions to long-term funding frameworks. In addition, the University lobbied on this matter in Finland, stressing its concerns about the cuts to basic research funding in the EU's research and innovation framework, Horizon Europe.

The University made strong lobbying efforts concerning the Next Generation EU recovery fund, influencing the focus areas of Finland's national recovery programme and the allocation of related funding. The University also proposed three internationally competitive projects for funding from the Sustainable Growth Programme for Finland. The projects to be funded will be selected in 2021.

The coronavirus pandemic and the ensuing travel restrictions affected the number and organisation of events and meetings in Brussels. The University's rector and a number of researchers participated virtually as speakers in the European Commission's annual European

Research and Innovation Days. Individual meetings and discussions on key future EU strategies (e.g., the strategies for biodiversity, artificial intelligence, EU/Africa relations and the development of the European Research Area and the European Education Area) also took place with civil servants and politicians from EU institutions.

The planning and development of the University's internal EU activities began in 2020. Concrete development measures for increasing lobbying have been proposed in accordance with the objectives of the next strategic period. The development efforts focus on drawing up the University's EU action plan. This plan, to be completed in

late 2021, will support long-term and systematic lobbying related to the EU's research and education policy.

The University's senior leadership met with business leaders almost as actively as usual. Negotiations with Metsä Group commenced to conclude a partnership agreement for closer cooperation. In the area of education, business collaboration was undertaken, for example, in the form of the business collaboration network established by the new HELSUS Co-creation Lab and the Master's

Programme in Data Science. The University Services' cooperation model, particularly for handling key corporate relations, remained in place. The model was found to facilitate cooperation with companies and to harmonise the University's external image.

REGIONAL COOPERATION IN THE HELSINKI METROPOLITAN AREA

The University continued its close cooperation with the City of Helsinki by increasing existing collaboration, particularly in the area of innovation, but also by creating new forms of collaboration. The University and the City began to operate a joint innovation hub for research, teaching and companies at Viikki Campus. The overall value of this three-year project is approximately €2

THE PLANNING AND DEVELOPMENT OF THE UNIVERSITY'S INTERNAL EU ACTIVITIES BEGAN IN 2020

million, half of which comes from the City of Helsinki Innovation Fund, and the other half from the University.

In Meilahti, cooperation focusing on the Health Capital Helsinki project continued with the establishment of the Health Incubator. Collaboration was also prepared in the NeuroBiodesign project. In Kumpula, cooperation took place with the Finnish Center for Artificial Intelligence FCAI, which is included in the Academy of Finland Flagship Programme, as well as in the area of ethical artificial intelligence and with the Urban Sense and Hope projects. The City of Helsinki launched preparations for relocating the Helsinki School of Natural Sciences to Kumpula Campus. At the City Centre Campus, the University’s visibility in the cityscape was discussed, and education scientists, among others, cooperated closely with the City’s representatives.

The second term of the Urban Academy began in early 2020 with the establishment of a new strategic management group, in which the partner organisations are represented by the rectors of the University of Helsinki and Aalto University as well as the mayors of Helsinki, Espoo and Vantaa.

The cooperation was spearheaded by a total of seven postdoctoral researchers funded by the cities as well as a new co-development model for urban research cooperation built around them, and also included strategic development of the research cooperation between the universities and cities. The topics explored by the postdoctoral researchers included segregation, immigration, demography, urban economy, sustainable

urban systems, the development of residential areas and digital cities. The Urban Academy also coordinated the meetings and other activities of the Myllypuro monitoring project (2017–2027).

One of the key duties of the Urban Academy and the Helsinki Institute of Urban and Regional Studies Urbaria was to enhance the research cooperation between the University and the cities of Helsinki, Espoo and Vantaa, particularly at the strategic level.

The Urban Academy partners organised morning coffee sessions to discuss current topics of urban development from the perspectives of practical development work and research-based knowledge. The speakers at all sessions included both researchers and urban developers and planners. In addition, a new seminar series on the future of the Helsinki Metropolitan Area was launched to explore issues considered relevant by the cities involved.

The City of Helsinki and the University also cooperated actively to address the shortage of early childhood education teachers and to attract and retain international professionals. Topics emphasised in the area of early childhood education included the significance of conversion training projects, a common commitment to making the field more attractive, a sufficient intake of students and the provision of funding.

In 2020 a new strategic plan was prepared for Think-Company, a home base for academic entrepreneurship. The project entitled ‘International talent accelerating growth’ enhanced the ecosystem for international talent

MOST WIDELY-READ ONLINE NEWS 2020

AN AMINO ACID ALLEVIATES HANGOVER SYMPTOMS

Recently completed research demonstrates that L-cysteine, an amino acid marketed as a food supplement, reduces hangover symptoms.



Photo: Uni material/bank

<https://www.helsinki.fi/en/news/science-news/an-amino-acid-alleviates-hangover-symptoms>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

in the Helsinki Metropolitan Area and developed cooperation between those who play a key role in attracting such talent, helping them resettle and retaining them, and promoted related coordination. The project aims to attract, in particular, international specialists working in fields suffering from a shortage of staff to companies in the Helsinki Metropolitan Area and to support the internationalisation of companies.

In 2020 the University invested considerably in collaboration throughout the Helsinki Metropolitan Area and concluded cooperation agreements with the cities of Espoo and Vantaa.

THE UNIVERSITY OF HELSINKI ELSEWHERE IN FINLAND

The University of Helsinki operates not only in the Helsinki Metropolitan Area but also in 10 other locations. In Vaasa, students can complete a bilingual (Finnish and Swedish) Bachelor of Laws degree as well as a Master of Laws degree.

Of the University's research stations, the Tvärminne, Lammi and Kilpisjärvi stations of the Faculty of Biological and Environmental Sciences were brought under a single director. The Hyytiälä and Värriö stations focused on climate and forest research. In Lahti and Mikkeli, the University coordinates university consortia, while the Ruralia Institute operates under the University Consortium of Seinäjoki. The Saari Clinic of the University's Veterinary Teaching Hospital in Mäntsälä offers basic veterinary services and out-of-hours services.

LAHTI UNIVERSITY CAMPUS

The Lahti University Campus (previously Lahti University Consortium) comprises research and teaching by the University of Helsinki and the Lappeenranta-Lahti University of Technology LUT. LUT is the most important regional cooperation partner of the University of Helsinki. The universities, together and separately, strengthen

the attractiveness of Lahti among experts and students as a town where universities cooperate effectively with the business sector and promote the dynamism of the area. The cooperation network includes not only the city, higher education institutions and companies, but also general upper secondary schools.

The strategic partnership agreement signed by the universities encourages the development of their joint operations, including joint research projects, recruitment and possibilities related to teaching. Research and

teaching conducted by the University of Helsinki in Lahti focuses mainly on biological and environmental sciences, but the University also participates in teaching and research in social sciences and arts in the Lahti region. Many research projects include business operators in the area. The research conducted in the region provides solutions to topical environmental issues.

The significance of science and research education is increasing in the Lahti region. In 2020 the Päijät-Häme LUMA Centre

organised virtual club and camp activities, reaching an increasing number of children and adolescents. Furthermore, the Lahti Junior University concept was launched as a collaboration between the City of Lahti, the University of Helsinki, LUT and the LAB University of Applied Sciences. The Open University and the City of Lahti Educational and Cultural Services have experimented with offering Open University studies as part of general upper secondary school education.

Over a period of two years, the ESR-funded thesis accelerator project led by the coordination unit of the Lahti University Campus created a model for offering services to companies, with a focus on student theses.

Higher education institutions in the Lahti region again cooperated to organise Lahti Science Week, during which the University's research and development projects in the region were extensively presented. The Match Made in Lahti event and the Venture Program were organised for students in cooperation with the business

**THE UNIVERSITY OF
HELSINKI OPERATES
NOT ONLY IN
THE HELSINKI
METROPOLITAN
AREA BUT ALSO
IN 10 OTHER
LOCATIONS**

community. Several webinars were also organised, showcasing the University's research activities.

MIKKELI UNIVERSITY CONSORTIUM

The Mikkeli University Consortium is a network-like university consortium established by Aalto University, the University of Helsinki and LUT University which focuses on the themes of sustainability transformation, change in entrepreneurship, and digital transformation.

The Consortium helped prepare the innovation ecosystem agreement between the City of Mikkeli and the Ministry of Economic Affairs and Employment.

The steering group of the Mikkeli University Consortium approved a new strategy entitled *Kestävän suunnan rakentaja* ('Moving in a sustainable direction') in the summer. The key idea of the strategy is to seek learning-related solutions through inclusivity and community as well as to create multidisciplinary research initiatives.

A Science Trail concept associated with research and science education was prepared in collaboration with the City of Mikkeli, and the plan will be taken forward through experiments. In the Etelä-Savo region, a project entitled *Koulutusportti* ('Education Gateway') was launched in cooperation with all regional upper secondary education, higher education and liberal adult education institutions to develop study paths, institutional cooperation and visibility. The Ruralia Institute participates in this project as the Mikkeli University Consortium's representative. Three universities cooperated in preparing a new model for business collaboration.

The Ruralia Institute developed public engagement in numerous projects. The most significant themes included entrepreneurship education, the vitality of rural population centres and sustainable and responsible tourism.

The Ruralia Institute concluded a research partnership with the Suur-Savon Sähkö electric utility company to investigate multi-locality as a regional phenomenon. The Mikkeli University Consortium developed cooperation particularly with LUT University, which was reflected not only in local cooperation projects such as Carbon free South Savo, but also in international application processes, including the EU's Green Deal.

The Mikkeli Unit of the National Library of Finland is responsible for digitising, storing and developing the resources of the National Library, in addition to which it

promotes domestic and international cooperation in the field. In 2020 the National Library made digitised newspapers and magazines from 1930–2018 available for online use to the researchers and students of 15 higher education institutions. The Tutkain project (2020–2022), prepared together with the Kopiosto copyright organisation, enables the utilisation of copyrighted newspaper material for three years in artistic and scholarly research as well as in teaching research methods,

regardless of time and place. In 2020 the downloading of digital material from the National Library's website increased by 15%. The majority of this material consists of newspapers and books at digi.kansalliskirjasto.fi.

A new concept ('Louhos') for researchers is being planned to bring together all researcher services differing from traditional customer service. The aim is to expand the use of research resources, diversify the Library's research-related expertise and increase partnerships in various projects. To serve as the basis for development, the Digital Open Memory project (European Union Regional Development Fund and its Leverage from the EU 2014–2020 programme) collected information from researchers who use the National Library's digital resources. The aim was to obtain information on researchers' needs and wishes concerning both the use of these resources and research cooperation.

**IN 2020 THE
DOWNLOADING
OF DIGITAL
MATERIAL FROM
THE NATIONAL
LIBRARY'S WEBSITE
INCREASED BY 15%**

A SUSTAINABLE AND RESPONSIBLE UNIVERSITY

The University of Helsinki helps to create a more sustainable society through its core duties and sustainable day-to-day operations. The University produces new knowledge to generate sustainable wellbeing and resolve global challenges, and educates responsible professionals capable of changing the world. To build a more sustainable future, the University cooperates with other social actors and has incorporated the theme of sustainability into its partnerships. The University enhances sustainability on its campuses and systematically adopts more sustainable and responsible practices to transform its day-to-day operations.

SUSTAINABILITY AND RESPONSIBILITY COMMITTEE

Set up by the rector, the Sustainability and Responsibility Committee continued its work of developing, monitoring and reporting on the sustainability and responsibility of the University's operations. The committee consists of specialists developing the University's sustainability and responsibility efforts, representatives of faculties and sectors, and student members.

In the autumn, the committee established temporary sustainability and responsibility groups to explore the University's carbon footprint, responsible procurement, network operations, and sustainability and responsibility training. The groups were tasked with surveying the University's current efforts in the field by theme, and proposing preliminary goals and measures for the development of operations. The groups' work laid the foundation for the sustainability and responsibility programme to be drawn up in 2021.

HELSINKI INSTITUTE OF SUSTAINABILITY SCIENCE

The Helsinki Institute of Sustainability Science HELSUS promotes high-quality and interdisciplinary research and education in sustainability science. It is a unit operated by its member faculties. The HELSUS operations continued to grow, and by the end of 2020, the institute had close to 500 researchers and teachers from various faculties as members.

HELSUS promoted research and education in sustainability science particularly by developing a sustainability course for the University as a whole and by supporting new multidisciplinary research initiatives. In addition, HELSUS initiated international collaboration with other European institutes of sustainability science and strengthened cooperation with the Ministry of the Environment.

SUSTAINABILITY RESEARCH

The University launched a significant number of research projects with the potential to promote sustainable development in the long term. Publications produced at the University and associated with the UN's Sustainable Development Goals (SDG) pertain, in particular, to research on education (SDG 4), climate (SDG 13) and land ecosystems (SDG 15). The University accounts for 0.6% of all SDG articles associated with these goals in the SciVal system¹.

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

HELSUS strives to promote interdisciplinary research particularly on five themes: research on the Arctic region, sustainable urban studies (shared theme with the Helsinki Institute of Urban and Regional Studies Urbaria), research on the Global South, research on sustainable production and consumption, and theoretical and methodological research on sustainability science. New research initiatives in sustainability science were supported by funding the writing of multidisciplinary project applications (seed funding) and by encouraging researchers to increase the societal impact of research and research collaboration funding.

HELSUS also continued the previously consolidated Viikki Sustainability Research Seminar series, organised together with Natural Resources Institute Finland and the Finnish Environment Institute. In this monthly seminar, researchers from the three organisations present the latest research on the shared theme of sustainability from various perspectives, incorporating both human and environmental sciences. The themes for 2020 related to new research on the environmental, health and wellbeing effects of nature-based solutions in cities, the significance of land use for mitigating climate change, sustainable agricultural solutions, the environmental effects of microplastics, and local energy solutions.

SUSTAINABILITY TEACHING

The University of Helsinki addresses perspectives of sustainable development as part of several degree programmes, courses and modules. Themes related to sustainable development are taught at almost all facul-

ties, from the Faculty of Biological and Environmental Sciences to the Faculty of Arts. The University's degree programmes associated with sustainability have been popular: the multidisciplinary Master's Programme in Environmental Change and Global Sustainability has received the highest number of applications among the University's multilingual and foreign-language degree programmes for several years now.

In the spring term, the rector, vice-rectors, the Centre for University Teaching and Learning, HELSUS and a wide-ranging group of some 160 research, teaching and other staff as well as students from various faculties and degree programmes launched the planning of a new University-level sustainability course. The planning was based on a literature review on sustainability teaching drawn up by HELSUS and also included interviews with specialists, virtual workshops and a student survey. Teaching material was produced by various work groups. The aim was to create a voluntary and optional bachelor's level sustainability MOOC (Massive Open Online Course), worth three credits and piloted in the spring term 2021. In the future this course will consist of a three-credit section to be completed by all students and a two-credit section specific to each degree programme or faculty.

An integral part of sustainability and responsibility relates to supporting continuous learning, which enables working graduates to promote a fair sustainability transformation in the job market. A related initiative involved the 'Sustainability as an organisational resource' module on sustainability issues. This pilot project was developed by the University of Helsinki, the Open University and the

MOST WIDELY-READ ONLINE NEWS 2020

CLIMATE CHANGE RECASTS THE INSECT COMMUNITIES OF THE ARCTIC

Through a unique research collaboration, researchers at the University of Helsinki have exposed major changes taking place in the insect communities of the Arctic. Their study reveals how climate change is affecting small but important predators of other insects, i.e. parasitoids.



Photo: Tuomas Kankkari

<https://www.helsinki.fi/en/news/sustainability-news/climate-change-recasts-the-insect-communities-of-the-arctic>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

University of Helsinki Centre for Continuing Education HY+. The project brings together leading responsibility specialists and offers research-based knowledge and tools for management and leadership in the 2020s and for addressing the challenge of enhancing sustainability in organisations.

Sustainability training was also developed with national and international partners. The creation of three study programmes on sustainability began within the international Una Europa framework. The University of Helsinki is responsible for the micro-credentials aimed at all bachelor's graduates who wish to improve their knowledge of sustainability topics. A joint bachelor's programme and a continuous learning certificate are also being created.

The Climate University, developed cooperatively by Finnish higher education institutions, is a network of 18 universities and universities of applied sciences led by the University of Helsinki. It aims to develop climate and sustainability teaching at Finnish higher education institutions. The network published a programme of nine online courses that anyone can complete to develop skills necessary to transform the world.

A PARTNER FOR A MORE SUSTAINABLE WORLD

The University of Helsinki chairs the national working group on sustainable development and responsibility set up by Universities Finland (UNIFI). The group's work culminated in November with the publication of UNIFI's theses on sustainable development and responsibility, which had been developed in a workshop by more than 400 members of the academic community. The theses contain ambitious recommendations for measures related to the teaching, research, administration and social impact of universities as well as their funding model.

In 2020 sustainability researchers from the University of Helsinki participated, in particular, in the work of three Finnish science panels: the Nature Panel, the Finnish Climate Change Panel and the Expert Panel on Sustainable Development. The University also hosts the secretariat of the Finnish Climate Change Panel. HELSUS coordinates the Expert Panel on Sustainable

Development together with Natural Resources Institute Finland and the Finnish Environment Institute. The main goal of this panel is to bring scientific perspectives and ethical considerations to political decision-making and to generate public discussion on sustainability transitions so that both environmental and human wellbeing are taken into account in a socially just way.

In the spring, the University joined the new international Climate Alliance network. This multidisciplinary network will strengthen the University's cooperation with other leading climate research universities throughout the world. The key duties of the network include identifying high-impact methods of distributing research-based knowledge about climate change, as well as increasing cooperation with decision-makers and companies.

The first HELSUS Co-Creation Lab concluded in May after contributing to the completion of 11 master's theses. The lab partners included UPM-Kymmene, Valio, Outotec and the Ministry of the Environment. The purpose of the Co-Creation Lab is to help master's students find thesis topics and acquire cross-disciplinary skills in multidisciplinary groups, establish partnerships with practitioners and provide solutions to the multidisciplinary challenges of sustainable development. HELSUS also launched the Science-Policy Forum in cooperation with the Ministry of the Environment to produce more research-based knowledge in support of decision-making and enhance the social impact of sustainability science.

Despite the coronavirus pandemic, sustainability and responsibility were highlighted in several University of Helsinki events organised in 2020. The Helsinki Institute of Sustainability Science HELSUS organised many events. In addition, research seminars continued as before, with participant numbers increasing as the seminars were moved online. The Brown Bag lunch seminar, organised at three-week intervals, was held nine times, the Viikki Sustainability Research Seminar seven times, and the Global South Encounters seminar series six times. HELSUS also organised an event entitled *Arktinen arki III – luontaiselinkeinojen kestävyys* ('Day-to-day life in the Arctic III – Sustainable natural livelihoods'). Teaming up with the Helsinki Centre for Data Science HiDATA, HELSUS held a seminar on the links between data science and sustainability science, considering how multidisciplinary research can meet societal knowledge needs.

SUSTAINABILITY AND RESPONSIBILITY IN ACADEMIC DAY-TO-DAY LIFE

The operational culture of the University of Helsinki is being developed in a socially, ecologically and financially sustainable and responsible direction. Information on social sustainability and, in particular, equality and diversity can be found in the Staff section of this review.

CARBON FOOTPRINT

The University continued its efforts to reduce the carbon footprint of its operations by promoting the implementation of the three objectives detailed in Society's Commitment to Sustainable Development approved in 2015. The University has committed to reducing energy and water consumption in its buildings by 10% and producing at least 5% of the energy consumed in a renewable way on site by 2025. In addition, it has committed to promoting low-emission and healthy commuting.

The University's carbon footprint, covering climate emissions associated with building energy consumption and air travel, was reduced from 2019 by approximately 30%. This was primarily due to a reduction in air travel and building energy consumption. Air travel emissions dropped from 4,603 Co₂e tonnes in 2019 to 647 Co₂e tonnes in 2020. In spring 2020, the University deployed the emissions report added to Hansel's Procurement Pulse tool, which can be used to assess the carbon footprint of procurement based on purchase invoices.

Electricity and heat consumption measured in University buildings was reduced by approximately 13%, and water consumption by roughly 34% from 2019. The reduction of water and energy consumption is largely attributable to most of the University community working and studying remotely due to the pandemic-related restrictions, especially in the spring and the latter part of the year. The exceptional circumstances restricted the operations of cafeterias and UniSport on the campuses. In addition, 2020 was an exceptionally warm year, which reduced the need for heating energy.

In 2020 a total of 2,922 MWh of renewable heat and electric energy was produced in connection with University buildings, which is equivalent to approximately 1.7% of the energy consumed in all University buildings. The solar power plants operating in University buildings in Viikki and the City Centre made a new record in 2020 when they generated more than 1 GWh per year. The student building at the Tvärminne Zoological Station as well as the Lammi Biological Station were heated almost entirely with renewable solar and geothermal heat as well as wood chips.

Electricity generated by hydropower with an output of 2 MW was acquired for University buildings, which corresponds, together with the solar power produced in the buildings, to some 22% of the electricity consumption. Renewable electricity accounted for around 4% of purchased regular electricity. The share of renewable energy in power procurement was similar to 2019. The amount of renewable electricity procured in 2021 will approximately double when compared to 2020 when the University will buy 4 MW of electricity with guarantees

MOST WIDELY-READ ONLINE NEWS 2020

THE NATURAL "HIMALAYAN AEROSOL FACTORY" CAN AFFECT CLIMATE

Large amounts of new particles can form in the valleys of the Himalayas from naturally emitted gases and can be transported to high altitudes by the mountain winds and injected into the upper atmosphere.



Photo: Federico Bianchi

<https://www.helsinki.fi/en/news/science-news/the-natural-himalayan-aerosol-factory-can-affect-climate>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

of origin evidencing that it has been produced by solar power, wind power and/or hydropower.

The commitment to sustainable commuting was promoted by supporting cycling. The bike park in the courtyard at Haartmaninkatu 3 was revamped, with 40 frame locking bike racks installed. During the summer and winter kilometre challenge, members of the University community cycled a total of more than 200,000 kilometres and decreased carbon dioxide emissions by over 35 tonnes. Software facilitating remote working and studying was widely introduced.

RESPONSIBLE INVESTMENT ACTIVITIES

The principles for responsible investment activities approved by the University are founded on the principles of responsible investment supported by the United Nations and pertain to matters related to the environment, society and corporate governance in terms of investments. The University applied these principles in completing the reform of investment activities by reinvesting approximately one half of the listed securities. With regard to unlisted investments, the development of investment objects and processes continued, for example, in conjunction with the listing of one such object.

The reforms have significantly improved the responsibility of investments from the perspective of the University, its cooperation partners, Finnish society and sustainable development. Also significant for the University was the fact that the diversification of investments improved and costs decreased, which will in turn boost risk management and prospective yield. In addition, the exceptionally positive development of unlisted investment objects led to an excellent annual return.

In terms of cooperation partners and society at large, the University focused particularly on implementing the principle of transparency, for example, by publishing information on investment activities, interacting with stakeholders and appearing actively in the media. Sustainable development was given strong emphasis by continuing to withdraw investments in fossil fuel producers so that, by the end of the year, their weight was zero. Particular attention was also paid to how asset managers

promote biodiversity, for example, by excluding certain companies and influencing their operations.

OTHER THEMES OF SUSTAINABILITY IN ACADEMIC DAY-TO-DAY LIFE

On-campus gardening, or the Student Union's urban gardening, took place on all University of Helsinki campuses. The activities are aimed at the University's undergraduate and postgraduate students as well as staff. In addition to the gardening efforts in the Centre Centre and Viikki, the renovation of Chemicum's green roof in Kumpula involved the replacement of roof plants, while the environment was redesigned to better suit campus gardening. In Meilahti, campus gardening was on hold due to renovations outside Haartmaninkatu 3.

The University of Helsinki has been a Fairtrade University since 2013. Remote events and remote working reduced official meetings in 2020, but the University of Helsinki remains committed to the Fairtrade University scheme. The coffee and tea served at official University events and in staff coffee machines are always Fairtrade products. More sustainable day-to-day operations were supported by UniCafe's decision to stop serving beef as of February.

Waste sorting was further developed in University buildings through several projects. To reduce mixed waste, a preliminary plan was drawn up to enhance opportunities for sorting in offices, lobbies and break rooms. Separate sorting stations piloted in a few lobbies and break rooms received positive feedback. In December, instructions were completed for the design of waste management facilities and the determination of container sizes, and a tendering process was initiated for the purchase of containers. Containers for collecting plastic waste were ordered for a few buildings, and a plan for launching the collection of plastic was made for the other buildings. Other measures promoting the circular economy included the deployment of a new equipment register and a trial of loaning laptops to students in the Centre Centre and Viikki.

STAFF

In conjunction with drawing up the plan to implement the strategic plan, the Board of the University of Helsinki confirmed in June the University's human resources policy, according to which we implement the strategic plan as an employer that manages its human resources responsibly. Elements of the HR policy include long-term human resources planning and transparent employment principles, principles for recruitment, meaningful work and continuous learning, supportive supervisory work, a diverse, open and equal community, as well as occupational wellbeing and work-life balance.

The year was extraordinary for the staff of the University of Helsinki. Due to the global coronavirus pandemic, we transitioned to working mostly over remote connections in the spring. The transition to telecommuting was rapid and required staff to quickly and broadly adapt to using related tools. The ways of working changed in an instant, challenging the University as an employer and its staff in an unprecedented manner.

Working mostly remotely has demonstrated many benefits associated with the use of digital tools. Reliance on remote meetings eliminates time spent needlessly travelling between campuses. Many teams and groups have adopted a new way of using electronic tools for communication, which has served to even boost the sharing of knowledge and cooperation. Over remote connections, University- and unit-level events have garnered significantly larger audiences than before. Consequently, it can already be stated that many good practices will continue to be employed in everyday activities also after the exceptional circumstances.

In May and June, the University of Helsinki conducted a survey to explore staff experiences of the circumstances. Based on the survey results, experiences of telecommuting were varied, but specialist and support staff in

particular identified several benefits in terms of scheduling and focusing on work. The need for support and inclusivity in the work community as well as the central role of supervisors in relation to occupational wellbeing were also highlighted in responses to the survey. The survey results have been utilised in supporting inclusivity and occupational wellbeing, as well as planning practices for the post-coronavirus era.

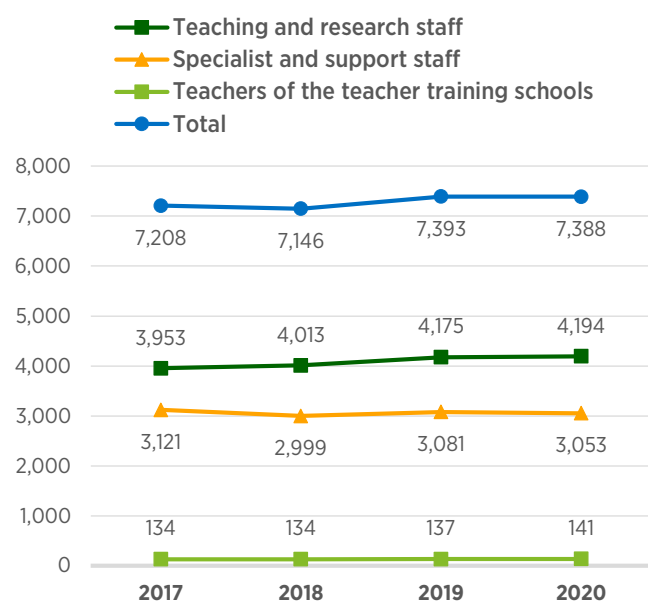
Staff have provided positive feedback on communications in the coronavirus period at the University of Helsinki. For example, the information sessions organised at regular intervals for members of the University community have guaranteed the dissemination of up-to-date information and provided opportunities to ask questions.

SIZE AND STRUCTURE OF STAFF

At the end of 2020 the number of University staff measured in full-time equivalents (FTE) was 7,388. This shows a moderate decrease of 4.6 FTEs (0.1%) compared to the previous year. The largest decrease, 27.4 FTEs (0.9%), was seen among specialist and support staff, while teaching and research staff grew by 19.2 FTEs (0.5%) and the staff of the teacher training schools by 3.6 FTEs (2.6%).

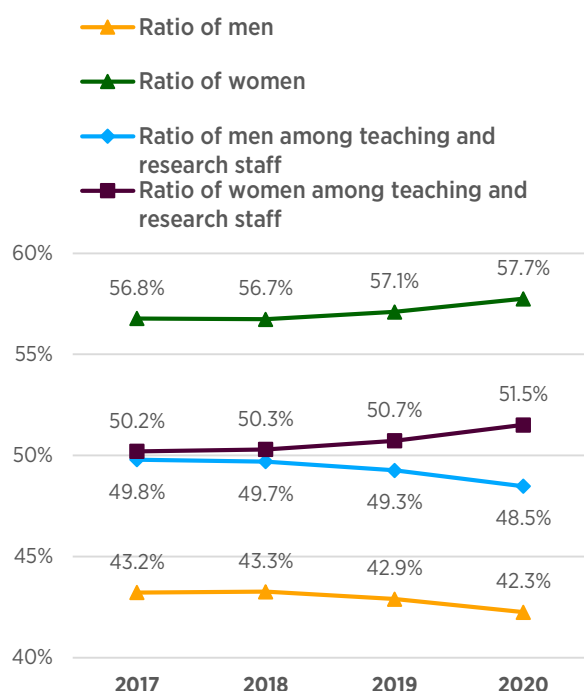
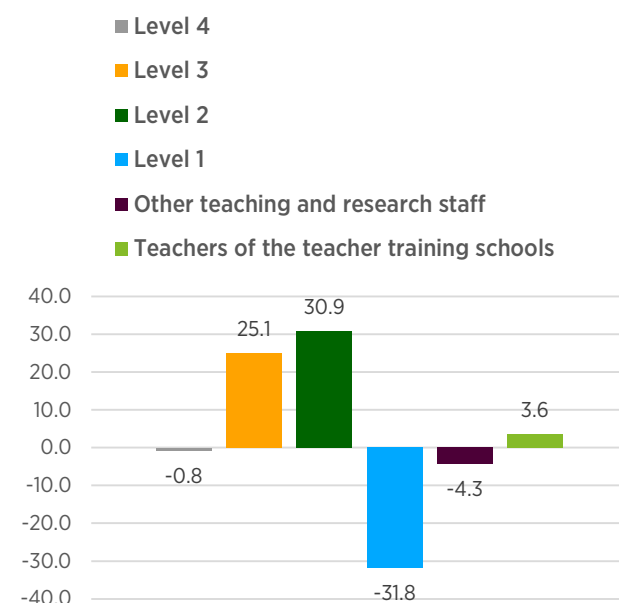
In the case of teaching and research staff, growth was particularly pronounced among assistant/associate professors and university lecturers (level 3) as well as postdoctoral researchers (level 2), while the number of FTEs decreased for doctoral students (level 1) and hourly paid teaching. In the case of specialist and support staff, growth was seen in the administrative staff and IT

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Figure 19. Full-time equivalents at the University of Helsinki by staff group 2017–2020.

staff. Correspondingly, the highest decrease was seen in support staff for teaching and research.

In December 2020 the number of staff was 8,120. Teaching and research staff comprised 4,717 employees, specialist and support staff 3,248 employees, and teaching staff at the teacher training schools 155 employees.

Figure 20. Ratio of men and women of all staff as well as of teaching and research staff.**Figure 21. Change in FTEs for the teaching and research staff and training school teachers 2019–2020.**

In line with previous years, both the share and number of FTEs among international staff continued to grow, with an increase of 72 FTEs compared to 2020. This is primarily due to the FTE increase of the teaching and research staff.

In December 2020 women accounted for 57.7% and men for 42.3% of all staff. Among the teaching and research staff, women accounted for 51.5% and men for 48.5%.

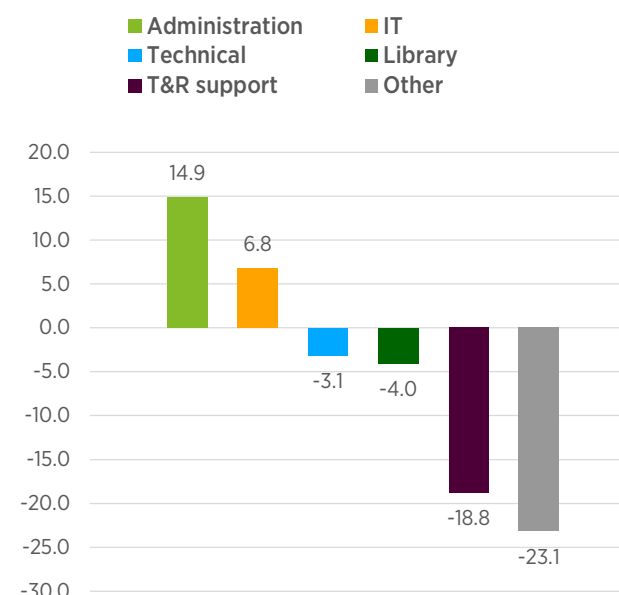
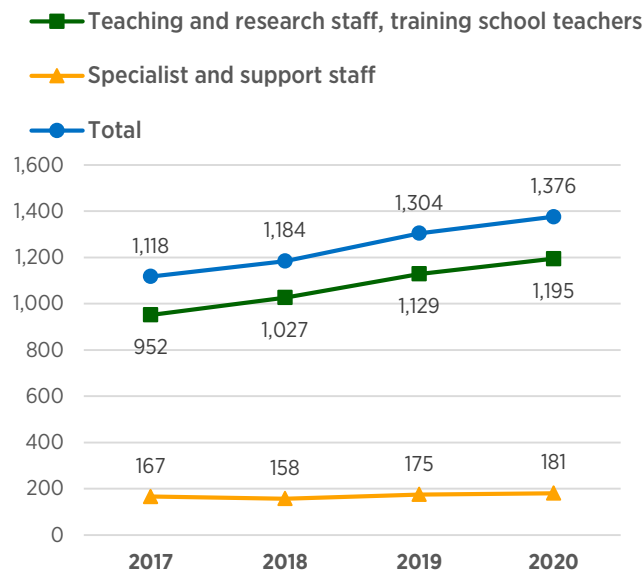
Figure 22. Change in FTEs for specialist and support staff 2019–2020.

Figure 23. FTEs for international staff by staff group 2017–2020.



HUMAN RESOURCES PLANNING AND STAFF RECRUITMENT

HUMAN RESOURCES PLANNING

In the new human resources policy, the starting point for implementing the strategic plan is long-term human resources planning and transparent employment principles. Other focus areas guiding human resources planning include principles for recruitment, meaningful work and continuous learning, supportive supervisory work, a diverse, open and equal community, as well as occupational wellbeing and work-life balance.

These focus areas of the human resources policy guide the units' human resources planning, the development of staff competence as well as measures related to occupational wellbeing in the short and long term. In human resources planning, the new strategy period commencing in 2021 was taken into consideration.

The development of the human resources structure and human resources planning in operational units were made a more integral part of operations management. Cooperation between the operators key to the human resources planning process was intensified and the realisation of the plan monitored with an increasingly goal-oriented approach. Furthermore, the human

Figure 24. Change in FTEs for the international teaching and research staff and training school teachers 2019–2020.

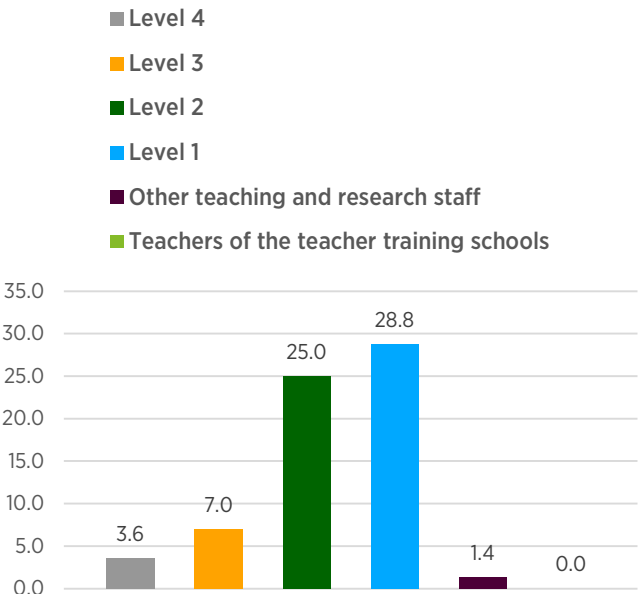
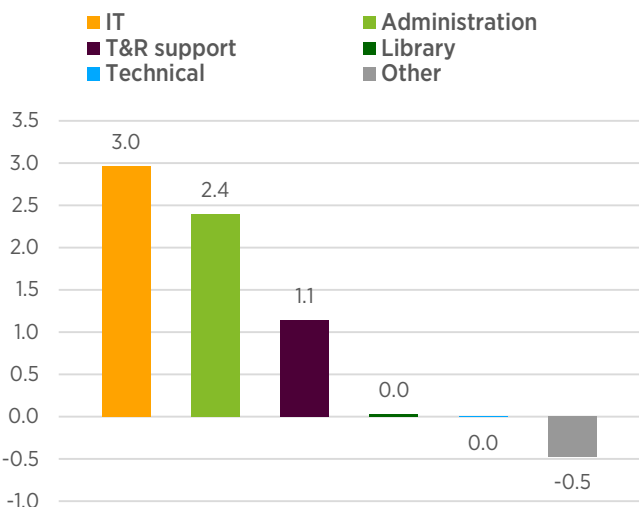


Figure 25. Change in FTEs for international specialist and support staff 2019–2020.



resources planning process was standardised. Short-term human resources planning responded to the exceptional circumstances brought about by the coronavirus pandemic by adopting an extensive recruitment permit procedure.

STAFF RECRUITMENT

In 2020 the focus was on measures strengthening the University's image as an employer. The University's public website was developed to attract skilled professionals, expanding content targeted at international experts and

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

developing the website to better serve both international researchers and their families. Internal communication targeted at specific University audiences was enhanced in cooperation with University communications, increasing the visibility of employer-related content. The Board of the University confirmed the human resources policy of the University of Helsinki and its set of six principles, which were highlighted also in internal communication throughout the year. At the University of Helsinki, 'human resources policy' means the principles for implementing the University's strategic plan in the area of human resources management. In addition to democratic decision-making, these principles are firmly based on the University's values – truth, *Bildung*, freedom and inclusivity – as well the general principles of openness, equality and non-discrimination.

Attention was paid also to the development of supervisors' recruitment skills. A coaching package targeted specifically at the supervisors of specialist and support staff provided support and developed skills needed throughout the recruitment process. The package included self-study material and webinars.

The Ministry of Education and Culture awarded a two-year project grant to the University of Helsinki, which was used to launch HEI LIFE, a project focused on integrating international staff of higher education institutions. The national project coordinated by the University of Helsinki also has Tampere University and the University of Turku participating, as well as, through three sub-projects, a number of regional higher education institutions. The sub-project coordinated by the University of Helsinki focuses on creating services for

the spouses of international staff.

Staff opportunities for career development were strengthened and described in more detail. The career model for university lecturers and clinical instructors was approved, with some faculties adopting the model. The deployment of the model continues so that it can be introduced at all faculties during autumn 2021. In connection with confirming the career model, the principles for ensuring research-intensive periods at regular intervals for employees in permanent teaching and research positions were clarified. The purpose of research-intensive periods is to enhance career advancement opportunities also in positions which involve an exceptionally large amount of teaching duties.

In 2020 the career and professional development opportunities for specialist and support staff were described in more detail. A comprehensive selection of content and tools for career planning, on-the-job learning as well as enriching and developing one's professional duties was compiled in the University's intranet. Material was collected for supervisors on how to support employees' career advancement.

The coronavirus period was reflected in recruitment in many ways. In the spring, a comprehensive recruitment permit procedure was introduced at the University, encompassing all staff. The purpose of the procedure was to anticipate the financial effects of the coronavirus crisis. As a rule, all recruitments and interviews were organised remotely in 2020, utilising digital tools. With the help of digital platforms, recruitment and orientation was successful in spite of distances. The restrictions on

INTERNATIONALLY VISIBLE ONLINE NEWS 2020

SYPHILIS MAY HAVE SPREAD THROUGH EUROPE BEFORE COLUMBUS

Columbus brought syphilis to Europe – or did he? A recent study conducted at the University of Zurich now indicates that Europeans could already have been infected with this sexually transmitted disease before the 15th century. In addition, researchers have discovered a hitherto unknown pathogen causing a related disease.



Photo: Oronen/Casagrande

<https://www.helsinki.fi/en/news/life-science-news/syphilis-may-have-spread-through-europe-before-columbus>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

entry into Finland, valid in the coronavirus year, have had a particular effect on the recruitment of international researchers. Regardless, a positive trend in the number of international staff continued also last year. The University of Helsinki is an attractive workplace, which has stood out, for example, in the marked growth of the users following the University's LinkedIn page for specialist recruitment. In the beginning of the year, the page had 3,422 followers. A year later, the figure was 6,914.

To support and clarify leader recruitment, related processes and operators were described. In 2020 directors were selected for 96 bachelor's and master's programmes through an internal call for applications for a four-year term commencing in 2021.

In the second half of the year, a preliminary survey was launched on redesigning the current recruitment system by the end of 2023.

SKILLS DEVELOPMENT

The principle of continuous learning guides competence development. The focus of staff skills development is linked with the common goals of the University. Staff have been encouraged to develop their skills, taking into consideration both the demands of their current position as well as career advancement and future needs. The goals of skills development and the mode of implementation are agreed with the supervisor, and employees are encouraged to discuss them in more detail at least in conjunction with the annual target and development discussions.

In 2020 a significant leap was taken with regard to employees' digital skills. The transition of various collaboration methods and teaching online took place very rapidly, and related skills were boosted by a range of training offerings, clinics and peer learning methods.

The staff training available was used to support the effective utilisation of the digital environment and interactive work, leadership and supervisory efforts, skills associated with project-based work, engagement and facilitation skills, cultural skills, first-aid skills and language skills. Employees involved in teaching were specifically supported in developing their skills in

university pedagogy and the effective use of educational technology. The enhancement of wellbeing and inclusivity was promoted by developing communication and interaction skills, as well as by supporting self-management and coping in the exceptional circumstances. At University Services, a new coaching package was organised for training internal coaches and developing a coaching-oriented approach to work. In addition, skills needed in research and administrative duties were also developed. In 2020 orientation practices were made increasingly effective and related materials updated. New orientation materials were compiled for supervisors. In the University intranet, the different support forms and events as well as remote orientation were communicated to members of the University community by staff group.

While staff skills were supported in terms of themes determined earlier, various coaching and training offerings as well as University-level orientation sessions were transferred online, tailoring into them a great deal of content necessitated by the exceptional circumstances. Remotely held sessions were also recorded to increase their accessibility. A positive aspect of this change was that these events were easier to attend also from University units located outside the Helsinki Metropolitan Area, also saving time otherwise spent on travelling between campuses. From the perspective of accessibility and international staff, a lot of consideration was given to the languages of events. More events than before were held in English, in addition to which there were a number of events held according to the 'Simply trilingual' concept.

DEVELOPMENT OF MANAGEMENT, LEADERSHIP AND SUPERVISORY WORK

A rapid transition to telecommuting as the primary method of working took place in March, transferring work and interaction mainly online. The transition had significant effects on management, leadership and supervisory work. A range of training sessions, events and other University-level and unit-specific support measures were quickly organised to support supervisors. Event recordings and materials were compiled, increasing the accessibility of the events.

In LeadershipARENA events targeted at University leadership, the discussion revolved around the University's new values, maintaining wellbeing throughout the community in the exceptional circumstances and managing innovation. In the autumn, the inaugural forum for future leadership was organised with the help of the rector. The forum included joint discussions on what University community leadership will look like in the coming years and what it requires from leaders. The first meeting of the forum was a pilot for which participants had been chosen by Viikki and Kumpula Campuses, certain independent institutes and University Services. In addition, a career handbook was drawn up to support leadership at the University, helping employees reflect on their leadership potential and successes in leadership positions. The amount of personal and group coaching increased due to the demands placed on leadership and management by the exceptional year.

In the 360-degree feedback system for management, leadership and supervisory work, the responsibility for the feedback process was transferred to internal University specialists. In the future, personal feedback discussions will be primarily held by internal University coaches.

The University's supervisor coaching supported particularly coaching-oriented and interactive leadership that relies on, among other things, a goal-oriented approach, the sharing of responsibilities, the availability of the supervisor to employees and the building of trust. In addition to more long-term supervisor coaching, on offer were brief thematic supervisor coaching sessions, which were used to strengthen skills needed in challenging supervisory situations as well as recruiting specialist and support staff. In addition, engaging leadership was supported specifically in the realisation of values and implementation plans. Online coaching was also available to supervisors, including group meetings in addition to independent study. The purpose of this coaching was to support peer learning, or benchlearning, and the sharing of experiences. Supervisor coaching was organised in Finnish and English.

The promotion of project leadership and management at the University through training continued. Coaching related to project leadership was organised relying increasingly on the University's own specialists.

OCCUPATIONAL WELLBEING AND INCLUSIVITY

A survey carried out in May and June explored the views of members of the University of Helsinki community concerning the impact of the exceptional circumstances on their work. A total of 2,490 individuals responded to the survey, making the response rate for University staff as a whole 28.6%.

ACCORDING TO 72% OF THE RESPONDENTS, THEIR TEAM OR GROUP MEMBERS HAD SUPPORTED AND ENCOURAGED EACH OTHER DURING THE CRISIS

A total of 41% of the respondents stated that telecommuting had had a positive effect on their occupational wellbeing. However, some had found it challenging to work in the exceptional circumstances. Teaching and research staff found the exceptional circumstances more stressful than specialist and support staff. International staff too felt stressed by the transition to exceptional circumstances.

The role of supervisors was considered crucial for occupational wellbeing. Most of the respondents said that their supervisor had supported their work in the exceptional circumstances. Specifically, 48% of the respondents stated that their supervisor had paid attention to their workload and coping skills, and 48% of the respondents said that they had received sufficient feedback from their supervisor.

Respondents underlined the need for support from the work community and for inclusivity in the exceptional circumstances. According to 72% of the respondents, their team or group members had supported and encouraged each other during the crisis. Moreover, 57% of the respondents had experienced a sense of collegiality and inclusivity in their immediate work community while telecommuting.

Most of the respondents said that they had developed good practices or approaches that had helped them cope in the exceptional circumstances. A total of 45% of the respondents felt they had achieved a digital leap in the new circumstances.

The survey also explored good practices relating to the respondents' everyday duties. Many had enjoyed regular virtual coffee breaks with their colleagues. Some had had walking meetings and routinely kept in touch with their co-workers by phone, for instance. Online meetings for several dozen people were organised more frequently than before.

Survey results were utilised in supporting occupational wellbeing especially in the exceptional circumstances, in addition to which the results are to be used when deploying the good practices adopted after the exceptional circumstances are over. A compilation of support measures for occupational wellbeing was made for supervisors and staff based on the survey results. In the exceptional circumstances, a range of independently useable materials and information on practices that support occupational wellbeing, the coping of the occupational health staff and supervisory work have been produced, in addition to which opportunities for discussion among the staff have been provided in the form of webinars.

The new contract period for occupational healthcare commenced in the beginning of 2020. One of the key goals for the period is to create standardised occupational healthcare processes and practices for all University employees. On the basis of the current situation, the services have been developed to better support employees' fitness for work. In addition to statutory occupational health services, staff have access

to extensive medical services. The digital occupational health services were expanded in 2020, with the new services introduced including symptom surveys, more extensive remote appointment services, virtual appointments with occupational physiotherapists and occupational psychologists, as well as an easy-to-access chat service in support of mental health. Staff coping is also supported with groups focused on mental resources and matters related to the musculoskeletal system.

45%
**FELT THEY HAD
ACHIEVED A DIGITAL
LEAP**

In 2020 internal coaches were trained at the University and an operating model was established for internal coaching. With the internal coaches, members of the University community have the chance to reflect on questions pertaining to their work and careers. The network of the University's internal workplace mediators was boosted by training more internal mediators. Workplace mediation can help in solving problems related to interaction that hinders work in the work community.

MOST WIDELY-READ ONLINE NEWS 2020

VIDEO GAMES HELP PROCESS TURNING POINTS IN LIFE

In video games, religion and spirituality are used to establish a narrative that challenges the player's moral compass and serves as a tool of criticism. According to a religious scholar working on a doctoral thesis focused on games, games also offer unique experiences of enchantment and inclusivity.



Photo: Mostphotos

<https://www.helsinki.fi/en/news/language-culture/video-games-help-process-turning-points-in-life>

A new four-year occupational safety period began in 2020. Both new delegates and people with longer experience in the field were elected as occupational safety delegates and members of the campus committees in the occupational safety organisation. A comprehensive orientation programme was designed and implemented for the operators active in the new period, put into practice in 2020 under the direction of the occupational safety officer. The goals of the new period are based on the University's strategic choices. One of the goals of occupational safety efforts is the promotion of inclusivity, which was actively carried out with the entire University community already in the first year of the period. The other goals are mainly centred on physical safety and security, such as the safety and security of properties and laboratories, in which development efforts were scarcer due to the telecommuting transition. The telecommuting recommendation was reflected in the reduction of disruptions relating to occupational safety and security. An afternoon session on job satisfaction was organised as a webinar with the Equality and Diversity Committee. In the session, a work community award was presented to the business col-laboration team of Research Services. The occupational health and safety committee continued operations by promoting the implementation of the new strategic plan and by serving as one of the committees invited to the self-assessment related to the University's quality audit.

ETHICAL GUIDELINES WERE DRAWN UP FOR THE UNIVERSITY

Ethical guidelines were drawn up for the University, guiding everyday work both at the University and with stakeholders. The University-wide ethical guidelines provide written instructions pertaining to fundamental topics, such as human rights, academic freedom, equality and sustainable operations. The ethical guidelines describe in more detail what kinds of activities the University's shared values can encompass in the community's everyday work. Additionally, an online course on the University's ethical guidelines, to be completed individually or in groups, was designed.

PROMOTING EQUALITY AND DIVERSITY

The exceptional circumstances impacted the University's equality and diversity activities in 2020, with events, planned for the spring, being cancelled. Then again, combinations of events were successfully held online in the autumn. For example, the afternoon seminar on job satisfaction and the Minna Canth-themed equality event were merged under a theme exploring experiences of inclusivity and recovering from the exceptional circumstances, allowing the two phenomena to support each other and provide for more depth. The University's Helsinki Pride event was also postponed to the autumn, realised under the theme

MOST WIDELY-READ ONLINE NEWS 2020

LIISA NIEMINEN GRANTED THE MAIKKI FRIBERG EQUALITY AWARD

The Maikki Friberg Equality Award 2020 was granted to Docent and University Lecturer Liisa Nieminen from the Faculty of Law. Nieminen was acknowledged for her dedication to the realisation of equality at the University.



Photo: Petter Gröning

<https://www.helsinki.fi/en/news/teaching-studying-at-the-university/liisa-nieminen-granted-the-maikki-friberg-equality-award>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

of ‘Courageous icons at the University’ according to the ‘Simply trilingual’ concept.

A substantial number of applications were received for the Maikki Friberg Equality Award. The award has been presented annually at the University of Helsinki since 1996 to parties who distinguish themselves in the promotion of equality and diversity.

In the spring, the Equality and Diversity Committee initiated the drafting of the new equality and diversity plan by engaging the entire University community in the process through a survey. In the autumn, the committee met several times to discuss the implementation of the plan from different perspectives. Among other new topics was the highlighting of sustainability and responsibility. Groups focused on inclusion, language use and accessibility operating under the committee contributed actively to these efforts.

In addition to inclusion, this year’s activities were marked by an anti-racist focus. An expert opinion on measures associated with the prevention of racism was heard in a committee meeting. The latter theme will be promoted further in the next period. The committee discussed, among other topics, the current situation relating to the

prevention of inappropriate behaviour and harassment at the University.

International efforts to promote equality and diversity continued actively in the Equality, diversity and inclusion group of the League of European Research Universities (LERU) where discussions touched on, for example, the gender-related effects of the exceptional circumstances. Participation in the operations of the Una Europa alliance was a new important activity, with the promotion of physical and virtual mobility as one objective. The Equality and Diversity Committee chairs the Una Europa Diversity Council, beginning the term with the establishment of three Action Groups and, among other things, by defining the term diversity in relation to the Council’s activities.

The committee also continued to actively comment on efforts related to the University’s strategic plan for 2021–2030, in addition to which the audit of the University’s quality system was launched by initiating a self-assessment procedure and related commenting. The term of the committee’s membership drew to a close, with new members and their deputies elected, also updating the committee’s mission for the next term.

MOST WIDELY-READ ONLINE NEWS 2020

UNWANTED BEHAVIOUR IN DOGS IS COMMON, WITH GREAT VARIANCE BETWEEN BREEDS

All dog breeds have unwanted behaviour, such as noise sensitivity, aggressiveness and separation anxiety, but differences in frequency between breeds are great. Various unwanted behaviour traits often occur simultaneously.



Photo: Marta Reinartz/Pixabay

<https://www.helsinki.fi/en/news/life-science-news/unwanted-behaviour-in-dogs-is-common-with-great-variance-between-breeds>

FINANCES

In 2020 government funding for Finnish universities was increased on the national level by €40 million and an index increase for the funding in accordance with the Universities Act was reinstated. This measure ended the period of cuts targeted at the higher education sector that began in 2015. However, the increase does not cover the cuts or increase in costs realised in the same period. The cuts affecting the higher-education sector decided by the government in 2015 total €570 million for 2016–2020, taking into account the effect of the index suspension.

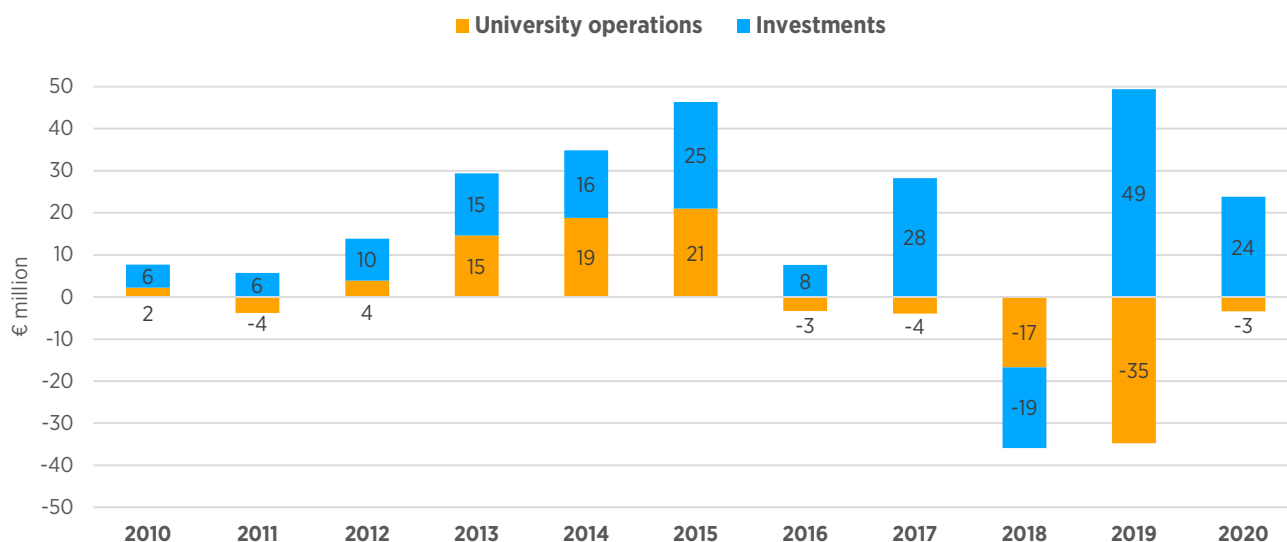
In terms of University finances, the coronavirus pandemic affected both income and costs. The fourth supplementary government budget awarded a total of €67 million to universities, of which €62 million was allocated to increasing student intake and €5 million to continuous learning. In addition, calls for applications for external funding included calls specifically related to the novel coronavirus. At the same time, restrictions to

operations reduced income from business activities and especially from customer payments. Costs were reduced as travel, among other activities, was almost entirely curtailed from March to the end of the year. While the University's operating result improved considerably from 2019, it was still €3.4 million in deficit.

The total income of the University of Helsinki was €694 million. The government funding of the University of Helsinki based on the Universities Act was €400 million, an increase of €13 million from the year before. The nominal value of the core funding awarded in 2020 by the government to the University of Helsinki was still €46 below the funding awarded in 2015.

In 2021 the government funding awarded to the University of Helsinki totals approximately €401 million, taking into account the funds allocated for 2021 in the supplementary budget for 2020. The funding for 2021 includes an increase according to the university index,

Figure 26. Results 2010–2020 (€ million).



STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

but the total is reduced by the University's poorer success in the funding model for Finnish universities of the Ministry of Education and Culture. The funding for 2021 also includes more instalments earmarked by the ministry, which is why less funds will be available for the University's basic operations than in 2020.

In the financial statement of the University of Helsinki for 2020, the surplus was €20 million. The accounting profit for investment activities and fundraising amounted to €24 million. Income from investment activities totalling €9.3 million was allocated to the University's operating activities, including the instalments to the Future Development Fund, the 375 Future Fund and the University of Helsinki Funds. Further financial information is available in the University of Helsinki financial statements and other financial publications: <https://www.helsinki.fi/en/university/financial-statements>.

SURPLUS/ DEFICIT FOR THE PERIOD

The University of Helsinki's operating deficit was €3.4 million. Investment activities generated a surplus of €24

million, of which €12 million was the result of changes to the current value of the investment assets. The University's overall result for 2020 was positive, showing a surplus of €20 million. While the University of Helsinki's operating activities recorded a deficit for the fourth year running, the result improved markedly from 2019.

INCOME

In 2020 the University of Helsinki's total income amounted to €694 million, an increase of €11 million

(1.6%) compared to the previous year. The University's total income is composed of core funding, external funding and the income from investment activities and fundraising. The revenue stated in the University's financial statement, or the income from operations, was €674 million. The University's revenue includes government funding awarded by the Ministry of Education and Culture in accordance with the Universities Act, also known as core funding, and external funding. The core funding

was €400 million, including €1.1 million for additional student places in accordance with the supplementary government budget. In the supplementary budget, a total of €9.6 million was allocated to the University of

**THE UNIVERSITY'S
TOTAL INCOME
IS COMPOSED OF
CORE FUNDING,
EXTERNAL FUNDING
AND THE INCOME
FROM INVESTMENT
ACTIVITIES AND
FUNDRAISING**

Figure 27. Income 2010–2020 (€ million).

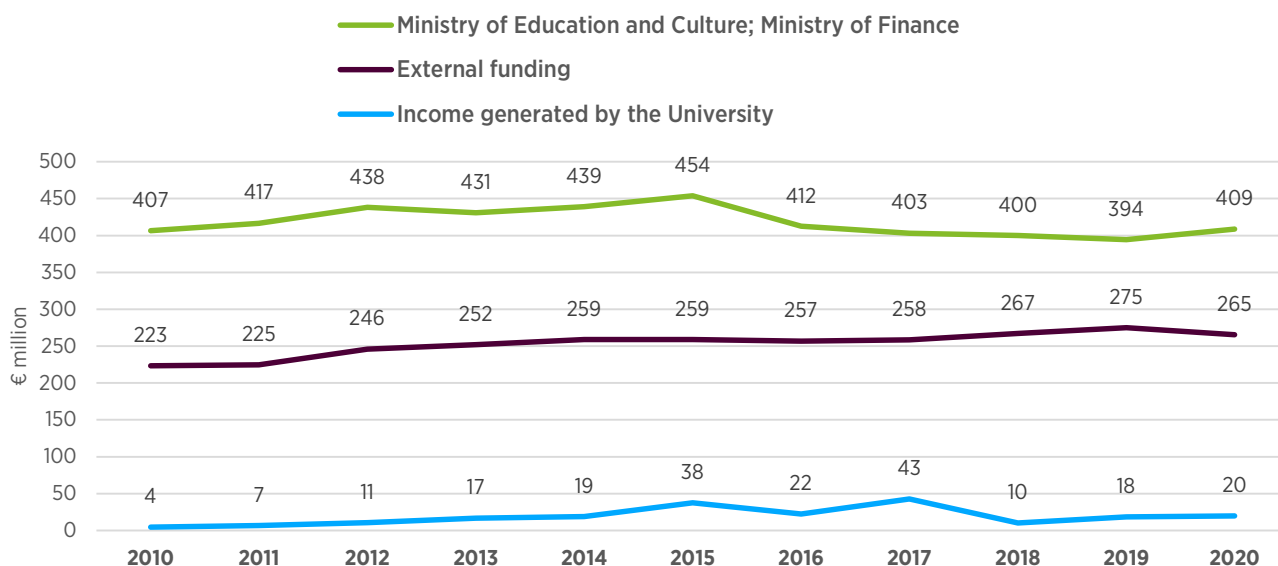
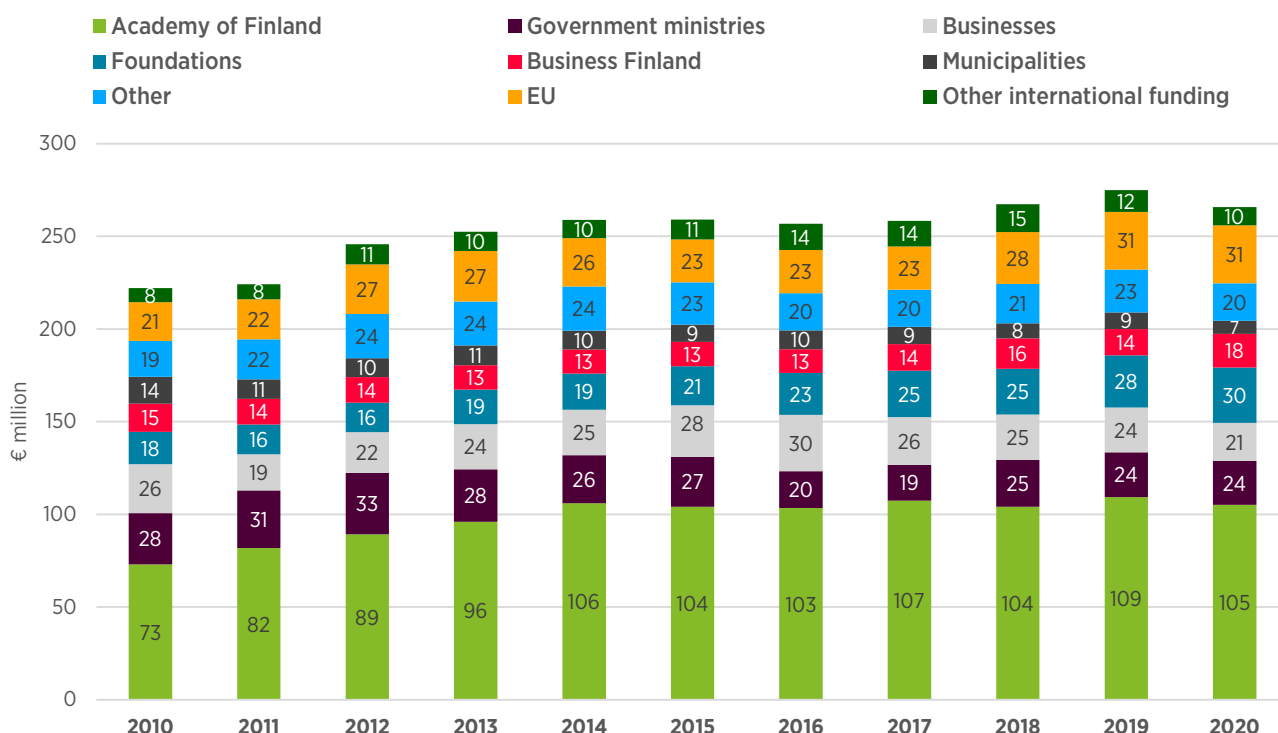


Figure 28. External funding, excluding Ministry of Finance's funding for teacher training schools (€ million).

Helsinki, of which €8.5 million will be spent and entered as income for funding additional educational offerings in the coming years. Core funding was €13 million (3.5%) above the level in 2019, constituting 58% of the University's overall income.

Income from external funding comprised €275 million, or 40% of the total income, including a total of €3.6 in investment aid granted by the Academy of Finland. In the financial statement, investment aid is not included in the revenue. The amount of external funding decreased

by €9.6 million (–3%) from the previous year. Of the external funding, €203 million (74%) was research funding and €62 million (26%) other external funding. The amount of research funding was the same as in 2019, but other external funding was reduced, mostly due to the exceptional circumstances brought about by the pandemic.

The most important source of external research funding for the University is the Academy of Finland. The funding awarded by the Academy of Finland decreased by

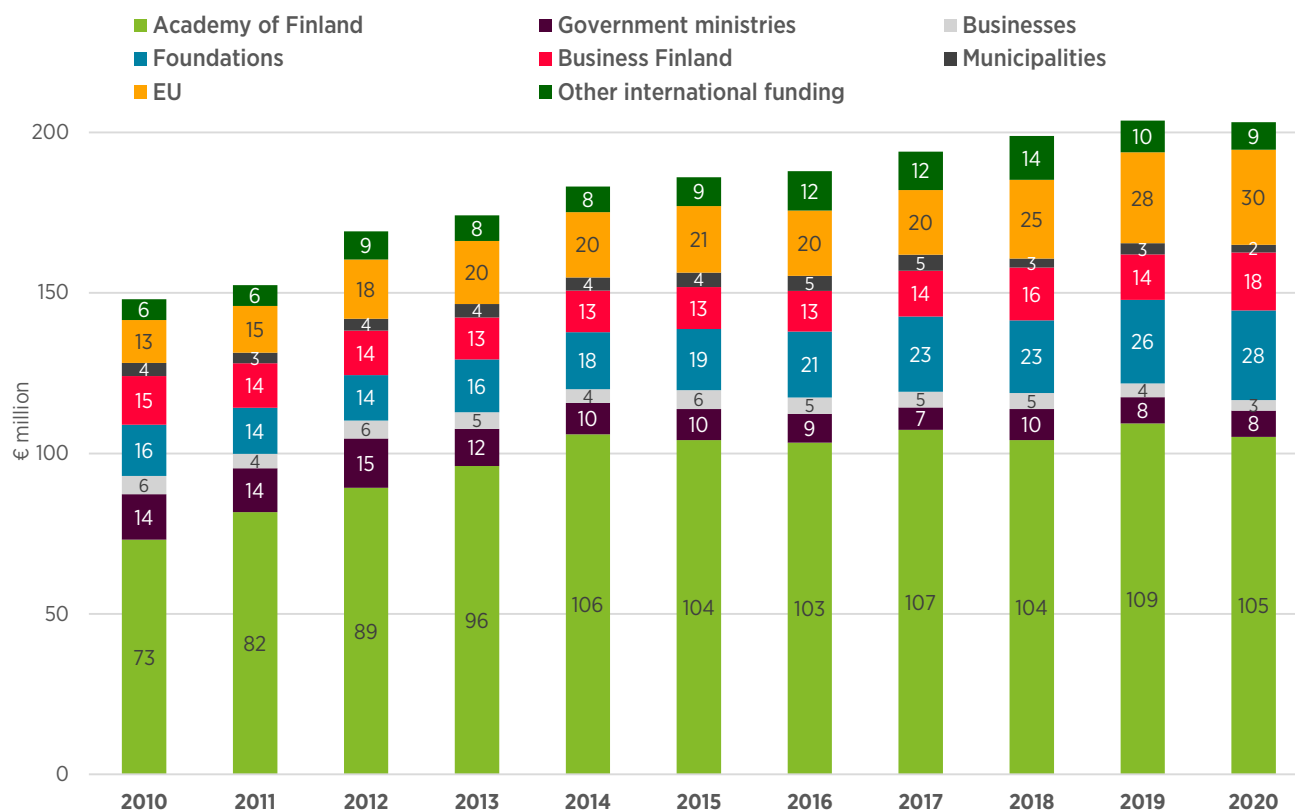
MOST WIDELY-READ ONLINE NEWS 2020

UNIVERSITY OF HELSINKI PUBLISHES ITS FIRST REPORT ON RESPONSIBLE INVESTMENTS

In 2019 the listed investments of the University of Helsinki generated a return of nearly 22%. The share of fossil fuel producers in the investment portfolio fell substantially to under 1% of the total value of the portfolio.



<https://www.helsinki.fi/en/news/sustainability-news/university-of-helsinki-publishes-its-first-report-on-responsible-investments>

Figure 29. External research funding (€ million).

approximately €4 million, totalling €105 million. The reduction was mainly due to the funding period of some Academy of Finland Centres of Excellence coming to a close. The share of Academy of Finland funding of all research funding awarded to the University of Helsinki was 52%. EU research funding increased by €1 million from the year before, totalling €30 million. EU funding

was awarded particularly to the Faculty of Agriculture and Forestry. Research funding awarded by Finnish funds and foundations increased by €2 million, totalling €28 million. The increase was partly attributable to funding granted to the Faculty of Science. Research funding awarded by Business Finland increased by €4 million, totalling €18 million. The increase was partly

MOST WIDELY-READ ONLINE NEWS 2020

UNIVERSITY OF HELSINKI SPINOUT COMPANY NANOFORM TO GO PUBLIC

In the early 2000s, a technology that enables the production of small drug particles was developed at the Electronics Research Laboratory of the University of Helsinki. Less than five years ago, a nanotechnology company called Nanoform Finland was founded on the basis of this technology. Now, the company is contemplating going public.



Photo: Susan Heikkinen

<https://www.helsinki.fi/en/news/science-news/university-of-helsinki-spinout-company-nanoform-to-go-public>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

attributable to funding granted to the Helsinki Institute of Life Science (HiLIFE).

In 2020 the University was granted a total of €203 million in external research funding, of which €166 million originated in Finland and €38 million abroad, the latter accounting for 19% of external research funding, the same as in 2019.

Income from investments and fundraising as well as income from the University of Helsinki Funds totalled €20 million, with income from investment activities being €10 million. Income from the University of Helsinki Funds totalled €7 million and income from fundraising €3 million.

COSTS

The total expenditure of the University of Helsinki was €686 million, a decrease of €22 million (–3%) from 2019. Staff costs totalled €430 million, with an increase of 0.7% from the year before. Facility costs fell slightly (1.5%) to a total of €88 million. Other operating costs totalled €146 million, a reduction of 16.2% compared to 2019. The cost reduction was attributable particularly to reductions to operations caused by the coronavirus situation, which affected, among other things, travel, conference organisation, laboratory operations, research station operations and UniSport operations.

Figure 31. Cost distribution in 2020.

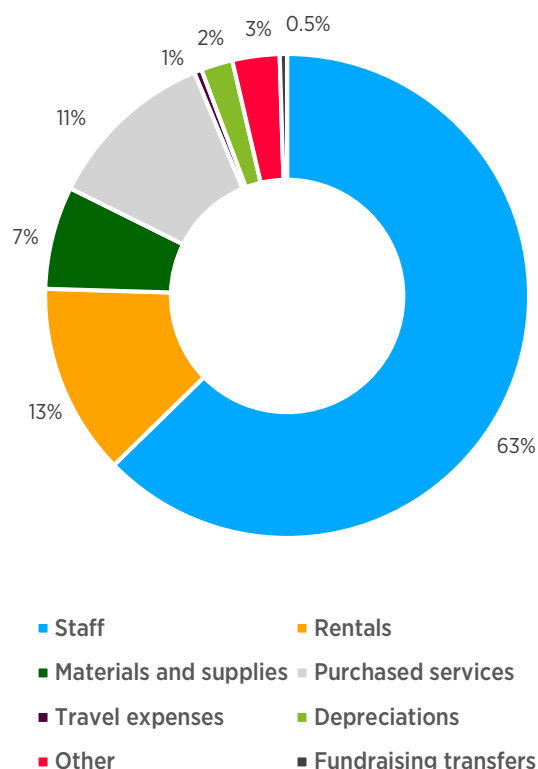
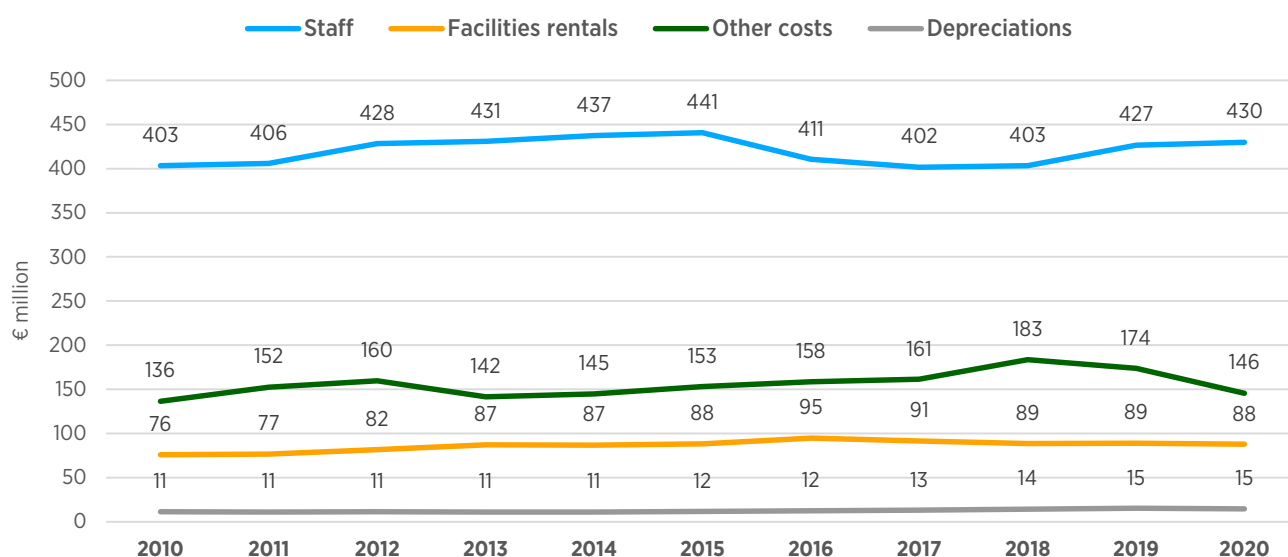


Figure 30. Operating costs 2010–2020 (€ million).



SOURCES OF INCOME BY CAMPUS

The ratio between core and external funding of the faculties varies by unit. External funding accounts for 68% at Meilahti Campus, 57% at Kumpula Campus and 50% at Viikki Campus. The ratio is the lowest on the City Centre Campus, where external funding accounts for 33% of all income. External funding accounted for 55% of the total funding of research institutes and 18% of the total funding of service institutes. Independent research-focused institutes comprise the Helsinki Collegium for Advanced Studies, the Helsinki Institute of Life Science (HiLIFE), the Finnish Museum of Natural History (Luomus) and the doctoral schools, while service institutes comprise the Language Centre, the IT Centre, UniSport, the Open University, the National Library of Finland and Helsinki University Library.

GOVERNMENT FUNDING FOR UNIVERSITIES

Since 2012, government funding has been distributed according to a core funding formula based on performance criteria. The share of governmental core funding granted to the University of Helsinki is 23.2% in 2021 (23.7% in 2020). The figure shows the government funding for the University of Helsinki and other Finnish

Figure 32. Faculty income sources by campus (€ million).

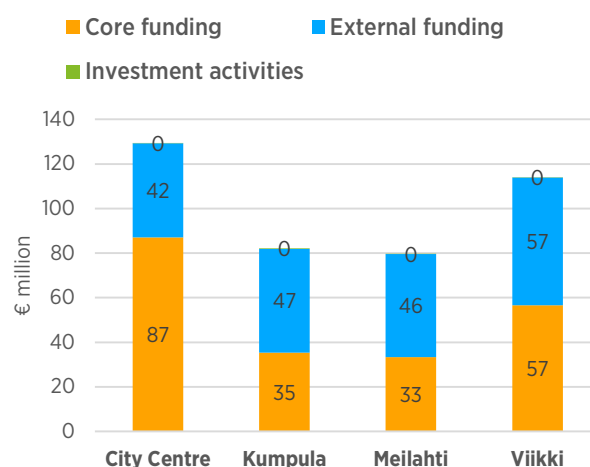


Figure 33. Independent institute income (€ million).

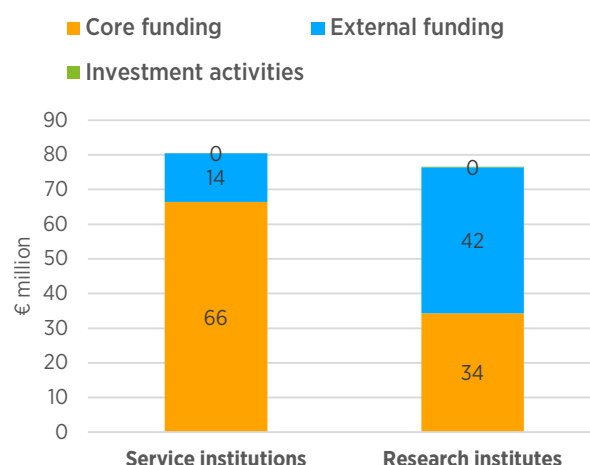
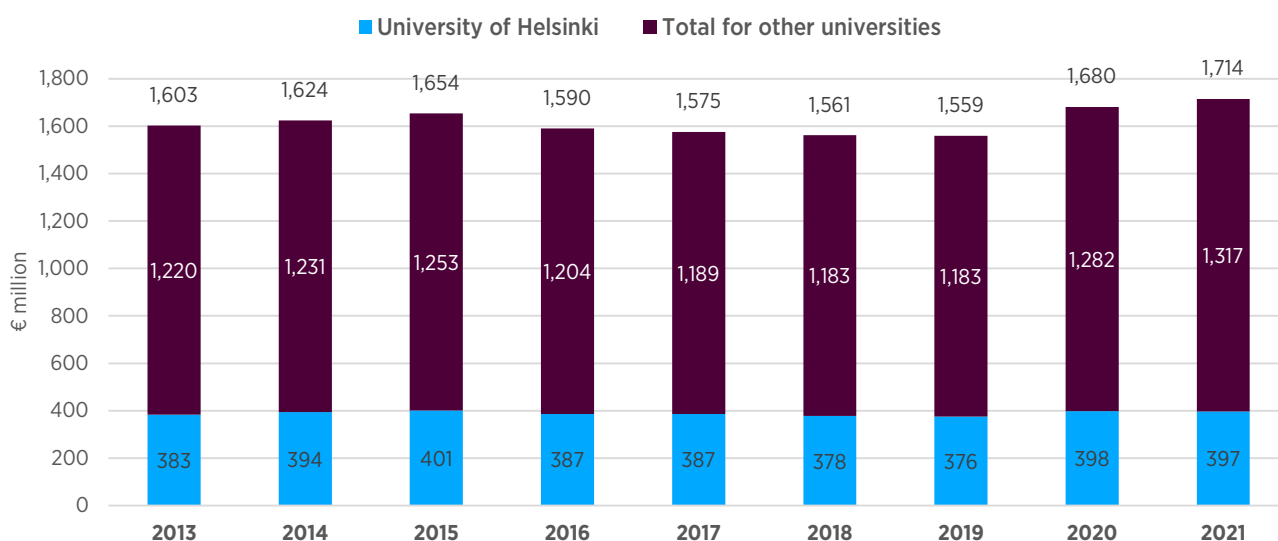


Figure 34. Government funding for universities 2013–2021 (€ million).



STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

universities based on the funding formula as a time series.

The share granted to the University of Helsinki declines by 0.5 percentage points (€1.1 million). The table on the next page shows the factors that influenced the amount of core funding granted to the University. The funding received in 2021 depends on the results achieved in 2017–2019.

Compared to 2020, the share granted to the University of Helsinki based on the criteria pertaining to education in the funding model decreased in the areas of first-cycle degrees, second-cycle degrees and student feedback. The ratio of research grew from 29.4% to 29.9%. In the area of research, the share of publications and other competitive research funding grew, but the share of doctoral degrees and international competitive research funding decreased.

Table 26. The University of Helsinki's share of the university funding model by performance criteria 2017–2021.

Funding model performance criterion	2017	2018	2019	2020	Weight of criterion 2017–2020	2021	Weight of criterion 2021–
Master's degrees	18.3%	18.0%	18.0%	17.6%	13%	16.0%	19%
Bachelor's degrees	19.6%	19.4%	19.6%	19.7%	6%	19.3%	11%
Credits completed at the Open University, professional specialisation programmes, non-degree studies	19.3%	18.9%	18.4%	17.9%	2%	19.2%	4%
Employed students with completed master's degrees	12.9%	18.4%	18.3%	17.9%	2%	17.9%	2%
Student feedback (2015–2019)	16.8%	16.8%	17.5%	16.9%	3%	16.7%	3%
Credits based on cooperation **						7.1%	1%
Graduate tracking **						20.0%	2%
Students who have completed at least 55 credits *	19.9%	19.0%	18.8%	18.7%	10%		
International student exchange *	17.6%	17.9%	18.1%	17.2%	2%		
International students with completed master's degrees *	18.4%	16.8%	17.5%	16.9%	3%		
Education total	18.7%	18.3%	18.3%	18.0%	39%	17.3%	42%
Doctoral degrees	31.6%	29.0%	29.0%	28.5%	9%	27.1%	8%
Publications	28.9%	30.6%	29.8%	29.8%	13%	30.2%	14%
International funding	35.5%	35.4%	35.6%	35.3%	3%	34.3%	6%
Other competitive research funding	26.6%	27.5%	28.3%	28.3%	6%	28.8%	6%
International teaching and research staff *	26.5%	26.3%	26.1%	25.7%	2%		
Research total	30.0%	29.8%	29.6%	29.4%	33%	29.9%	34%
National duties	42.5%	42.5%	42.5%	42.5%	7%	33.2%	9%
Field-specific share *	16.9%	16.9%	16.9%	16.9%	9%		
Strategic funding ***	25.2%	23.0%	22.6%	20.9%	12%	18.5%	15%
Education and science policy targets, total	26.3%	25.9%	25.7%	25.0%	28%	24.0%	24%
University of Helsinki's share total	24.5%	24.2%	24.1%	23.7%	100%	23.2%	100%

* Discontinued performance criterion

** New performance criterion

*** More strategic funding could be awarded

SERVICES

The comprehensive transition to telecommuting caused by the coronavirus pandemic took place at one go and suddenly in March. As telecommuting began, remote meetings and digital collaboration platforms quickly became part of the routine for the University community. The wellbeing of the community was safeguarded through good flow of information and mutual support.

However, many things required rethinking and reorganisation, including entrance examinations, examination practices and remote public examinations of doctoral theses. At the same time, the transition relieved some urgency, as a number of previously planned events particularly in the beginning of the transition and travel to a large extent throughout the rest of the year were cancelled. Crisis management continued throughout the year. Various public services, such as museums, libraries, Think Corner and learning centres temporarily quieted down to an unparalleled degree.

The end of the transition period associated with the education reform was reflected in service volumes. The number of requests to register completed studies grew by 20% from 2019, while the number of service requests and contacts to Teaching and Learning Services grew by 25% (amounting to 290,000 service requests).

The intensification of operations and an agile approach to them were promoted, for example, by expanding the utilisation of robotics, as well as through process work and lean projects. Enterprise architecture efforts were

promoted and project management boosted by enhancing the preparedness of project management groups to manage comprehensive projects. Both measures are aimed at increasing the manageability and transparency of operations. Project management was increasingly linked to implementing the strategic plan and planning operations. The Act on Information Management in Pub-

lic Administration (906/2019) required the establishment, by the end of the year, of an information management model that defines and describes information management. However, the implementation was postponed to spring 2021. The determination of responsibilities required by law was promoted in cooperation with other higher education institutions, in addition to which information was classified and descriptions of operational processes were drawn up.

**THE WELLBEING OF
THE COMMUNITY
WAS SAFEGUARDED
THROUGH
GOOD FLOW OF
INFORMATION AND
MUTUAL SUPPORT**

INTERNAL COMMUNICATION

Almost overnight, the coronavirus pandemic upended the focus of University communications, placing communication to the University community front and centre. Communication was carried out from a number of perspectives and on several topics: from crisis communication to instructions and from supporting inclusivity to interactive information sessions. Guidelines and instructions pertaining to University staff in the exceptional circumstances were centralised on a frequently updated public webpage under the helsinki.fi website. The Finnish-language version of the page

was viewed 460,000 times from March to December, while the English-language version was viewed more than 100,000 times in the same period. The only page to garner more views than the coronavirus information page was the main page of the helsinki.fi website.

The information sessions of the University leadership targeted at the entire community were extremely popular, with the first session held on 16 March reaching nearly 6,600 viewers and its recording another 15,000 viewers. The information sessions held in the autumn had an audience of nearly 3,000 each.

Teaching and studying were also robustly supported through the Studies, Instructions for Students and Instructions for Teaching websites, while the Flamma intranet functioned well as a channel for up-to-date communication. From March to December, Flamma news were viewed more than 644,000 times, an increase of almost 90% from last year. In addition to information concerning the coronavirus situation, members of the University community were interested in news items related to practical work, University operations and the lifting of restrictions.

In a survey on the exceptional circumstances conducted among staff in the spring, coronavirus-related communication was found to be useful and appropriately timed. On a scale of 1 to 5, the usefulness of communication received a score of 3.9, while the score given for its timeliness was 3.8.

DEVELOPMENT OF THE DIGITAL SERVICE ENVIRONMENT

TRANSFORMING SERVICE OPERATIONS

In May 2020, the director of administration appointed a group for the transformation of service operations to assess the effects of the coronavirus pandemic on service practices and to propose guidelines for the development of services. In its work, the group focused on the service operations that are the responsibility of University Services, Helsinki University Library and the IT Centre.

As its final product, the group strove to describe a University-level objective for a future service model from the perspective of both service users and providers as well as the competencies required by the model. The aim is to develop services increasingly comprehensively, with electronic services, customer service and back office functions offering users a seamless service experience. The group also identified a number of competencies to be developed which the organisation needs to achieve the objective. The final report serves as the basis for a development programme for the services that are undergoing digital transformation, part of a project aimed at strengthening the management of digital development efforts at University Services.

MOST WIDELY-READ ONLINE NEWS 2020

CELIAC DISEASE MIGHT BE CURED BY RESTORING IMMUNE TOLERANCE TO GLIADIN

Celiac disease affects 0.3–2.4% of people in most countries world-wide, and approx. 2% in Finland. Celiac patients suffer from a variety of symptoms, typically intestinal complaints, such as diarrhea, but are often symptom-free. Immunologist Tobias Freitag co-developed and tested nanoparticles containing gliadin for the immunomodulatory treatment of celiac disease in Professor Seppo Meri's research group at the University of Helsinki, in collaboration with industry.

<https://www.helsinki.fi/en/news/health-news/celiac-disease-might-be-cured-by-restoring-immune-tolerance-to-gliadin-0>

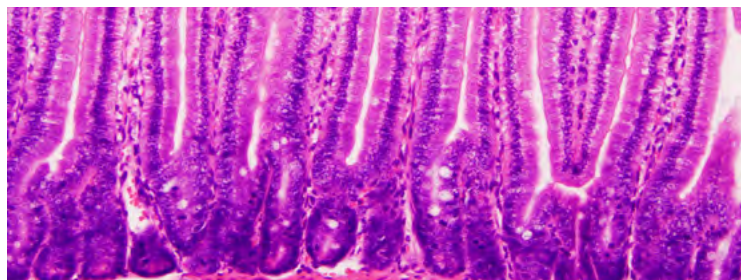


Photo: Tobias Freitag

STRENGTHENING THE MANAGEMENT OF DIGITAL DEVELOPMENT EFFORTS

Early in 2020, a project to strengthen the management of digital development efforts at University Services was launched to support service development. To implement the project, a team of developers specialised in digital solutions was assembled from all University Services sectors, the IT Centre and Helsinki University Library. The project's goal is to boost shared management in digital development and help University Services reach a new level in utilising digital solutions in its services.

In the project, management practices on the University Services level that support the digitalisation of services will be developed, for example, by determining the goals for the development of digital services in the development programme for the services that are undergoing digital transformation, establishing practices for monitoring overall costs and planning investments, employing the University's software application portfolio and project model in an increasingly systematic manner, and drawing up a shared model for the operative steering of digital development. The tasks included in the project were divided into sub-projects which were launched in the late autumn.

DIGIHUB

DigiHub is a coworking space and competence community of some 200 individuals that promotes the customer-oriented and open development of digital services at the University. For the purposes of peer learning, the DigiHub community is organised into competence teams based on various topics, which include service design, lean management, analytics, product ownership and technology.

During the year these competence teams organised a total of 18 events, which garnered 661 attendees. Due to the pandemic, the teams transitioned smoothly from the

co-working space to working over remote connections. Inclusivity across team boundaries was engendered particularly by DigiHub events, whose attendance numbers grew by nearly 200 compared to the year before.

DEVELOPMENT OF ACADEMIC ADMINISTRATION SYSTEMS

In 2020 several system-related projects were advanced, with the Studies and Instructions for Teachers services deployed in the spring. The deployment of the new system for academic administration (Sisu) progressed so that the goal is to replace Oodi as a whole with Sisu as the master system in spring 2021. Measures related to the third stage of the Sisu project were prepared in the autumn to ensure in 2022 and 2023 that Sisu features will be utilised as comprehensively as possible in the everyday activity of degree programmes, students and teachers.

BY THE END OF 2020, A TOTAL OF 859 SUPERVISION GROUPS HAD BEEN ESTABLISHED IN SISU

A project for enhancing the visibility of guidance and supervision models has supported the deployment of features related to personal study plans (PSP) as well as guidance and supervision in the Sisu academic administration system. In addition, instructions to support guidance and supervision as well as their availability have been developed in the project.

The Sisu system supports the establishment of many types of supervision groups, from supervisor–student pairs to solutions in which an entire class of students constitutes a single group with several supervisors. By the end of 2020, a total of 859 supervision groups had been established in Sisu, while the number of supervisors in the system was almost 500. The groups enable PSP supervisors to access their students' plans and related comments, applications and decisions, and to comment on the plans.

In the digitalisation of doctoral education, the focus was on supporting the deployment of the Thessa system, which serves as a key tool for doctoral students, supervisors and thesis committees to make the planning and monitoring of doctoral theses easier and increasingly

systematic. In addition, preparations were made to introduce the Sisu academic administration system in doctoral education.

EDUCATIONAL TECHNOLOGY

The coronavirus pandemic increased the usage rate of educational technology services. The number of logins in Moodle grew nearly five-fold from 2019, while the usage of the plagiarism recognition system Urkund grew by 50%. The growth was particularly pronounced in June when the system was utilised in support of the digital entrance examinations.

In 2020 the digital leap in education project awarded funds to a total of 17 new degree programme-specific development projects whose efforts were divided into three main themes: the development of teachers' digital teaching skills, the development of assessment, and continuous learning. The projects mainly produced digital learning materials as well as MOOCs and other online courses. In addition, collaboration with other universities and other external parties as well as, to a certain degree, teachers' support and training needs arising from the transition to remote instruction received more emphasis than before in the projects.

UNIVERSITY SERVICES

The year began with a tight budget, but costs decreased slightly from the previous year due to the restrictions brought about by the pandemic (in the case of travel and outsourced services in particular), generating a profit in

the end. The costs/working hours to be directly assigned to the faculties and independent institutes continued to rise (73 FTEs in 2020). Full-time equivalents increased by roughly 25 compared to 2019, with the largest increase seen in Administrative Services (15 FTEs), largely attributable to the recruitment of staff for a fixed term for the University Museum's relocation project.

In spite of the transition to telecommuting, user satisfaction with University Services increased further according to a survey conducted in spring 2020. Overall satisfaction with University Services (on a scale of 0 to 10) rose to 7.0 (mean score, previous results: 6.3 in 2019, 5.4 in 2018, 4.7 in 2017). Satisfaction in services improved on all campuses (Meilahti 6.9, City Centre 6.8, Kumpula 7.5, Viikki 6.7). However, more uniformity of quality in the implementation of services and between different services is still needed.

Of note was the fact that while the survey was conducted in late April, roughly a month after the first pandemic-related restrictions, comments relating to the change in the provision of services were not emphasised in the written feedback.

The transition to electronic communication tools has required adaptation from both service providers and users, including the academic community. At the same time, the situation has, quite surprisingly, accelerated digitalisation. For example, the transition to web-based training in Research Funding Services has even improved interaction and the focus on content through, among other things, small group discussion and chat-based discussion platforms.

MOST WIDELY-READ ONLINE NEWS 2020

THE FINNISH COVID DOGS' NOSE KNOWS!

According to the preliminary tests, trained scent detection dogs seem to be quick in performing the new task and might even be more sensitive than many of the tests that are now on the market.



Photo: Susanna Paavilainen

<https://www.helsinki.fi/en/news/health-news/the-finnish-covid-dogs-nose-knows>

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

The independence of webinars from the geographical location of participants has enabled the participation of much wider audiences, while recording webinars for a fixed period has made it possible for people to attend at a time better suited to them, which has also been realised in practice. Transitioning to web-based interaction has also lowered the threshold for reaching out when people have questions or something to negotiate. In terms of research funding, it can be said that the practices used in the exceptional circumstances have increased the efficiency of services in terms of both content and quantity, and that new practices are likely to be preserved, to a certain extent, in the post-pandemic era.

YPA-Help was established as a digital advice channel, expanding in the spring to cover all faculties. In 2020 the utilisation of a ticketing system (service management system) was also promoted at University Services. In the autumn, preparations were made to integrate travel management and guidance into the YPA-Help service.

Moreover, the responsibilities of internal communication at University Services were clarified in 2020. Telecommuting posed challenges to increasing the capacity for international activities.

At the City Centre Campus, support was provided for the launch of the Helsinki Institute of Social Sciences and Humanities.

The management of research funding was transferred to the SAP Fiori system.

HELSINKI UNIVERSITY LIBRARY SERVICES

Helsinki University Library celebrated its 10th anniversary. While the uniformity of the library system is now a matter of course, the administrative decisions which merged the campus libraries are still relatively

recent. Due to the coronavirus situation, the anniversary celebration was postponed to 2022 when the 10th anniversary of the main library in Kaisa House can be celebrated at the same time.

The Library had to respond to the changing circumstances of the coronavirus situation, basing its operations on the notion that access to scholarly material for the purposes of study and research had to be ensured also in challenging circumstances. Members of the University community were provided with the opportunity to reserve and collect from Kaisa House materials held at all of the campuses.

The Library acquired more electronic materials and

invested more in its digital services, including a chat service. Many events organised by the Library, including guidance in information retrieval as well as sessions on researchers' data management and open publication, were transferred online to a greater degree than before. Specialists held webinars on, for example, altmetrics. In September the Library released to the University community a Moodle course on bibliometrics and the tools for assessing publishing activity, which is

intended for anyone in need of information on assessing publishing activity and responsible bibliometrics.

The service platform of Helka, the Library's user interface, was replaced in 2020 after a sizeable project carried out in 2019 and 2020. The new system also required the polishing and redesigning of processes.

The Library serves as the service hub for open access publishing at the University. In collaboration with Financial Services, the Library investigated the costs, monitoring and funding of open access publishing. The Library organised a self-archiving campaign to ensure open access to the publications of members of the University community, also covering the fees for the open publication of 1,067 articles and 127 monographs.

**THE LIBRARY
SERVES AS THE
SERVICE HUB FOR
OPEN ACCESS
PUBLISHING AT THE
UNIVERSITY**

By the end of 2020, the Helda Open Books (HOB) collection of open access resources included 137 individual works. The purpose of the collection is to openly publish academic works relevant to research and teaching, as well as classics of different fields of science. Editori, a publishing platform for open journals and series developed by the Library, hosted eight journals, in addition to which the platform has been used for trialling the practices of scholarly publishing.

February saw the celebration of the opening of Helsinki University Press (HUP), a scholarly publisher specialised in open access publications established collaboratively by Gaudeamus and the Library. Over the year, HUP published research monographs, article collections and scientific journals. A steering group was appointed for the publisher in December 2020.

IT SERVICES

The IT Centre adapted its operations rapidly to the new situation caused by the coronavirus pandemic. This was particularly evident in its efforts to support users with comprehensive telecommuting instructions and the provision of new services for large-scale telecommuting. For example, the number of visits to the Helpdesk instruction website grew on the annual level from almost 740,000 visits to more than 900,000 visits. The increase in remote meetings was met by increasing the capacity for Zoom meetings and VPN connections. Comprehensive instructions were drawn up and a range of training organised for Zoom users.

Remote connections were developed also in terms of the virtual desktop connection (VDI), through which users gain access, for example, to a powerful workstation located at the University and several scientific specialist programs. The measures taken simplified and enabled safe and secure telecommuting for the University community. Based on the feedback received, the tools for telecommuting and remote instruction as well as related support functioned very well in the exceptional circumstances.

In the circumstances, the University’s entrance examinations also required special IT arrangements which were successfully carried out thanks to active cooperation between various parties.

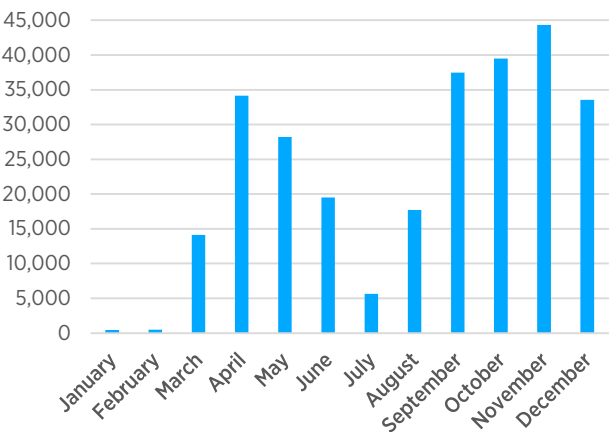
The importance of information security is emphasised in telecommuting. In 2020 an information security test for the University community was carried out as a pilot project. The test is aimed at increasing awareness of information security among the community and, consequently, mitigating potential information security threats in increasingly digital environments.

Investments in the development of the reliability and capacity of the IT infrastructure were made, for example, by completing the backbone network reform and redesigning the public network. Local computing and storage infrastructures for research were expanded with both donations and funds invested by the units. The deployment of modern application development techniques was promoted, for example, through a container service and the management of application programming interfaces (APIs).

The development of Unitube, the University’s new video uploading service continued and was put into production in spring 2020. The redesign introduced many features suggested by users, such as the transfer of videos between series, user group management and descriptions for video licence details.

The feedback from customers to the customer support was outstanding. The skills of customer service specialists were developed, new practices adopted and campus-specific services developed. A new service concept was introduced in Meilahti, a joint procurement process was adopted in the City Centre, campus collaboration continued in Kumpula and brainstorming

Figure 35. The monthly number of Zoom meetings grew exponentially over the year, from 459 meetings held in January to more than 44,000 meetings in November.



for development efforts was initiated in Viikki. As the use of self-service tools is expanded, the availability of support staff for more demanding support requests increases. A competitive bidding process for an AI-based service provided by Helpdesk was carried out, with the service to be entered into production in 2021.

The utilisation of the information in the University's application portfolio increased markedly in 2020. Many support services base their activities on the information available in the portfolio, whose utilisation was further developed to increase its usability. The quality of the information has improved and comprehensiveness increased.

LANGUAGE CENTRE AND LANGUAGE SERVICES

The coronavirus pandemic affected all services of the Language Centre's Language Services unit in the form of numerous changes and an increase in service requests.

From mid-March, the entire administrative staff of the unit, including translators and language revisors, transferred to telecommuting only, while the provision of training services continued in the form of remote instruction. Since most of the staff had already been telecommuting one or two days per week, the transition was smooth. In the end, transitioning to online meetings and workshops as well as the increased use of shared cloud platforms streamlined processes to a certain extent. The

practice of meeting remotely also with clients and other stakeholders was also successfully adopted.

LANGUAGE REVISION

The number of revised pages grew by roughly 14% from the previous year, for which a likely contributing factor is the increase in the time researchers had for writing during the pandemic. In fact, the vast majority of the more than 65,500 pages revised were scholarly articles intended for international publications.

A total of 44 freelance revisors worked at Language Services, encompassing a comprehensive range of disciplines, while the three permanently employed in-house revisors focused mainly on revising English-language translations and on quality assurance by, for example, organising joint training sessions in which participation was possible over remote connections also for the international networks of Language Services. The team found this expansion of international collaboration extremely rewarding.

Feedback on language revision was praised in terms of both service and revision, with the speed of the service being acknowledged in particular.

TRANSLATION

Language Services employed four full-time English translators and four full-time Swedish translators as well as a translation coordinator. Compared to the previous year, the number of Swedish translators decreased by one,

MOST WIDELY-READ ONLINE NEWS 2020

SMALL LANGUAGES ARE IN DANGER

There are 7,000 languages in the world, and it is possible that only 15% of them will be passed on to the next generation.

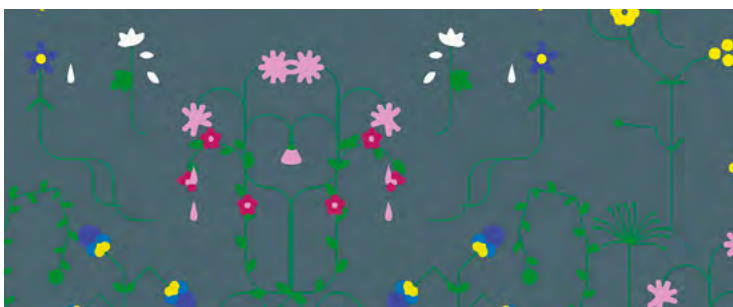


Photo: Ulla Sainio. Source: Yliopisto magazine

<https://www.helsinki.fi/en/news/language-culture/small-languages-are-in-danger>

which resulted in busy periods and the accumulation of a backlog; the Swedish translators also carry out their own language revision of all translations into Swedish, which further contributes to the accumulation of backlog. Over the year, nearly 10,000 pages of administrative and communication content was translated at the unit. In addition to the full-time translators, Language Services employed 20 freelance translators in 2020, translating texts into eight languages.

Collaboration between the translation teams and especially the Communications and Community Relations sector intensified further, as the progress of the pandemic engendered a great deal of crisis communication content, which was translated in the spring also outside regular working hours. A language consultation channel established on the Teams co-working platform for Communications and Community Relations and Language Services was piloted in the spring and adopted for permanent use in the autumn. Alongside other terminology work, the teams began, in cooperation with the language revision team, drawing up a language manual for the University community with the intention of releasing it on Flamma in spring 2021.

The translation process was described to the University community in an entry to the Behind the scenes article series on Flamma whose comments reflect the feedback received from the community on the translation services: “Thank you very much for seamless cooperation and your expertise.”

LANGUAGE TRAINING

The biggest change in training services was the transfer of the Finnish for Foreigners courses open to all, organised by Language Services since 1991, to the Open University in August. That the courses were free of charge to international University employees was possible thanks to course fees charged from external students, but as the organisation of the courses had accrued losses for Language Services in recent years, a decision was made to relinquish the courses, with the Open University happy to take up the responsibility.

This transfer decreased the total number of organised training offerings to 121 courses (150 in 2019), of which 74 were commissioned by doctoral schools, 13 were open to all staff, 20 were tailored by commission to faculties/units and 14 were the courses in Finnish as a second language held in the spring.

The rapid transition to remote teaching in March was something of a shock to both the 28 teachers and their 1,788 students, but the massive digital leap was

taken successfully, as ongoing courses were carried out to the end in the spring. In the autumn, remote instruction had become almost routine. The opportunity to complete training also highlighted the significance of inclusivity in the exceptional circumstances, as the following course feedback illustrates: “I very much looked forward to this course every week because it was a way of seeing and interacting with other people. In this way I think the exceptional situation was actually a motivation. Teaching worked well online.”

**“THANK YOU
VERY MUCH
FOR SEAMLESS
COOPERATION AND
YOUR EXPERTISE.”**

FACILITIES

High-quality and appropriate facilities support the implementation of the University's strategic plan and long-term operational development. Facilities, infrastructures and related services must effectively support University operations. The central objectives of the facilities programme approved by the Board of the University for the strategy period 2017–2020 were concerned with the management, use, maintenance and development of facilities, as well as the implementation of the investment plan. It is essential to keep University-controlled buildings in good shape and safe to use through systematic renovation activities as well as appropriate and sufficient maintenance. Sustainability, responsibility and energy efficiency are important starting points in facility planning.

The implementation of the investment programme continued, with the goal of gradually reducing the scope of facilities. Between 2015 and 2020, the area used for the University's core duties has decreased by approximately 29,000 m² in net floor area. A facilities programme for the new strategy period 2021–2030 was drawn up and approved in the autumn. The central goal of the new programme is the development of attractive and flexible facilities that support concentration and encounters as well as related services. When drafting a vision for the University's facilities and campuses in 2040 during the strategy period, a long-term target for the number and location of campuses and facilities will be determined.

The Facilities and Properties sector operates as part of University Services, coordinating duties related to property and facility management as well as providing related services and carrying out related tasks. The duties of University of Helsinki Property Services Ltd (HY247) include facility cleaning, repairs and maintenance, property development, porter and security services, as well as furnishing and transport services.

The Facilities and Properties sector and HY247 have continued developing service operations together.

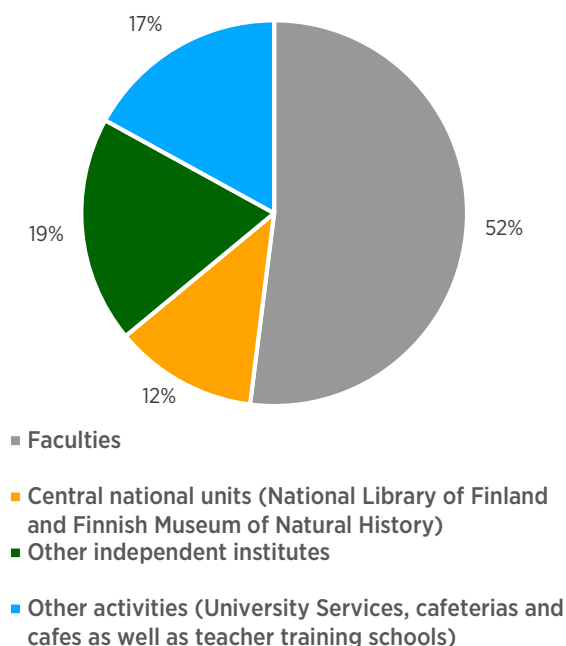
The leases concluded with the University of Helsinki Group are based on the net rent principle, which means that the rent includes triple net rent, real estate taxes, insurances and the owner's overhead costs. Facility costs for operations, utilities and user services are covered by the University. The internal rent paid by University units covers all of the above costs.

In 2020 particular emphasis was put on measures required by the coronavirus crisis and the development of digital services. In addition, the planning and preparation of repairs and renovation were carried out in close cooperation with the leadership, staff and students of various units.

FACILITIES AND FACILITY USE

In 2020 the University of Helsinki leased altogether 517,625 m² of net floor area from various property owners, 443,143 m² of which were used for University operations. Facilities not used for University operations included apartments, subleased facilities, car parks, as well as facilities under renovation and vacant facilities.

Most of the University's facilities were located in Helsinki, the City Centre Campus being the largest campus, while less than 10% of the facilities were located elsewhere in Finland. Actual operational facilities were found in 16 localities, in addition to which there are small unmanned seismographic stations and other similar facilities in 20 localities.

Figure 36. Share of facility use by unit during year 2020.

The share of facility use by unit is described in the figure.

The University operates mainly in facilities owned by the University of Helsinki Group, with more than 90% of facilities rented from properties directly owned by the Group or incorporated properties.

The tables list the facility owners as well as the distribution of facilities by campus and facility category.

These tables cover all facilities, including apartments and accommodation facilities, car parks, sublet facilities, as well as facilities under renovation and unused facilities.

CHANGES IN FACILITY USE AND FACILITY DEVELOPMENT

The coronavirus pandemic had a significant impact on the University's facility use in 2020. Most buildings had to be closed, while teaching was transferred online and staff worked mostly remotely. The staff and student cafeterias operating on University premises were closed for most of the year, and a significant drop was also seen in the use of libraries as well as sports and event facilities.

Among other things, the closure and reduced use of facilities was reflected in lower water consumption and reduced cleaning needs. At the same time, cleaning was

Table 27. Facility owners.

Owners	2020	
	NFA (net floor area)	%
Helsinki University Properties Ltd	319,276	61.7%
University of Helsinki Funds	142,322	27.5%
Real estate and housing companies	22,595	4.4%
State (Senate Properties)	4,770	0.9%
Others	28,662	5.5%
Total	517,625	100.0%

NFA = net floor area
Net floor area is the indoor net floor area of a space, including lightweight partition walls. Net floor area is used for comparing entities and is a common term in lease agreements.

Table 28. Facilities by campus.

Campus	2020	
	NFA (net floor area)	%
City Centre Campus	196,615	38.0%
Meilahti Campus	70,874	13.7%
Viikki Campus	143,488	27.7%
Kumpula Campus	55,382	10.7%
Elsewhere in Helsinki	4,459	0.9%
Elsewhere in Finland	46,807	9.0%
Total	517,625	100.0%

Table 29. Facilities by facility category.

Tilaluokka	2020	
	NFA (net floor area)	%
Office facilities	110,649	21.4%
Teaching and research facilities	98,006	18.9%
Special facilities	66,904	12.9%
Social and staff facilities	27,072	5.2%
Storage facilities	62,976	12.2%
Common facilities	22,986	4.4%
Dining and kitchen facilities	12,100	2.3%
Housing and accommodation	12,740	2.5%
Traffic and technical facilities	104,193	20.1%
Total	517,625	100.0%

intensified in the facilities whose use continued. The procedures implemented during the pandemic include the cleaning of contact surfaces such as door handles, level surfaces and switches at more frequent intervals than usual.

In December 2018 the Board of the University set a goal of relinquishing facilities by 60,000 m² in net floor area, and in 2020 the total net floor area used by the

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

University decreased by approximately 8,500 m². A total decrease of approximately 29,000 m² was achieved between 2016 and 2020. In practice, this has been implemented through a number of facility rearrangements and removals. Increasingly efficient work facilities that support inclusivity have been built on all campuses. For example, University Services has set the goal to have all staff working primarily at flexible workstations and in multipurpose offices. By the same token, the permanent effects of the pandemic on research, teaching, study and work practices are not yet known, and surveys on new ways of operating will be launched with various units.

Facility reductions have been implemented in close cooperation with units on the basis of operations. Moreover, University-level savings will only be realised after freed-up facilities have been leased or after the sale of properties by the University of Helsinki Group. To enable a range of facility arrangements, some facilities must be kept as temporary substitute premises and in reserve. At the end of 2020 the total area of unused net floor area in all facilities available to the University was approximately 9,900 m² (1.9%).

As a whole, the University's facility use became increasingly efficient per full-time equivalent (FTE). In 2020 the ratio of facilities used for University operations was 42.9 m² in net use/FTE, while the corresponding

figure for office space was 10.5 m² in net use/FTE. For 2019 the corresponding figures were 43.6 m² in net use/FTE and 10.5 m² in net use/FTE. Net use here denotes space used without taking into account shared spaces.

The tables illustrate facility reductions by campus and the trend since 2015. Figures on University use only include facilities used for the University's basic operations.

During the year, a facilities programme for 2021–2030 was drawn up. The Board of the University approved the programme in September. In accordance with the new strategic plan and the facilities programme supporting it, the goal is to ensure seamless cooperation and inclusivity also in construction projects. The faculties subjected to the greatest facility-related changes have established facilities committees, with whom any relevant changes are planned. Projects are steered to achieve operational goals with the help of construction committees specific to large individual projects and cooperation with users.

The Facilities and Properties sector has participated in the University's digital leap in education project, with the objective of modernising teaching facilities to better support learning. On every campus, there are plans to redesign facilities into open, adaptable and interactive learning environments, taking into account

Table 30. Facility reductions by campus and the trend since 2015, all facilities.

Campus, all facilities	2015	2018	2019	2020	Change 2015–2020	%
City Centre Campus	204,352	197,999	197,498	196,615	–7,737	–4%
Meilahti Campus	106,513	82,128	82,673	70,874	–35,639	–33%
Viikki Campus	157,492	143,855	143,664	143,488	–14,004	–9%
Kumpula Campus	57,231	55,369	55,382	55,382	–1,848	–3%
Elsewhere in Helsinki	6,516	4,457	4,459	4,459	–2,057	–32%
Elsewhere in Finland	47,255	46,573	47,629	46,807	–448	–1%
Total	579,358	530,380	531,306	517,625	–61,733	–11%

Table 31. Facility reductions by campus and the trend since 2015, in University use.

Campus, in University use	2015	2018	2019	2020	Change 2015–2020	%
City Centre Campus	182,880	181,072	175,228	173,968	–8,912	–5%
Meilahti Campus	57,418	54,062	55,485	55,733	–1,686	–3%
Viikki Campus	135,483	122,403	121,820	114,939	–20,544	–15%
Kumpula Campus	54,189	52,611	52,500	52,360	–1,829	–3%
Elsewhere in Helsinki	160	160	160	0	–160	–100%
Elsewhere in Finland	42,341	45,469	46,502	46,143	3,803	9%
Total	472,471	455,776	451,696	443,143	–29,327	–6%

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

contemporary needs associated with acoustics, lighting and furnishing as well as ensuring sufficient electrical fittings for lecture rooms.

Open interaction has been promoted by developing campus-specific meeting points where events targeted at both the University community as a whole and the public can be organised. When using facilities open to all, the security perspective must also be taken into consideration, as well as a new kind of zoning of operations.

The modernisation of technical building services, as well as centralised instrument maintenance, laboratory and cold storage services enable the development of a strategically important research infrastructure for the University. In laboratory facilities, the focus was on centralising research infrastructures and supporting their shared use. In 2020 a new centralised equipment maintenance facility was completed in Biomedicum, as was a cryogenic storage facility in Biocenter 2. Indeed, experts of the Faculties and Properties sector and HY247 have closely participated in planning the acquisition of research infrastructures and preparing the necessary

facility alterations. HY247 carried out several projects to develop waste management on University premises.

TEACHING FACILITIES

In 2020 there were 269 individual teaching facilities available through the centralised booking system. Their mean usage rate was 41%, a marked reduction from the rate of 79% in 2019, which was caused by the coronavirus pandemic. An almost comprehensive transition to remote teaching took place as early as in the spring term of 2020, and the use of teaching facilities by external parties ended almost entirely in mid-March.

Due to the renovation of the Main Building, the teaching facilities in the Unioninkatu side of the building were out of use throughout the year. The City Centre Campus had the highest usage rate, 44%, while the corresponding rates were 41% for Kumpula, 32% for Meilahti and 36% for Viikki.

A facility's rate is considered to reach 100% when it is in use 1,000 hours per year (approximately 7 h/d, 5 d/w and 28 w/y).

Table 32. Facility costs, old classification –2019 (€1,000).

Facility costs	2017		2018		2019		2020		Change 2019–2020
Capital rents and maintenance charges	75,539	69%	74,154	66%	74,186	67%	75,111	67%	1.2%
Property services	12,420	11%	14,400	13%	15,287	14%	9,658	9%	–36.8%
Total rental costs	87,959	80%	88,554	79%	89,473	80%	84,769	76%	–5.3%
Facility services	13,412	12%	14,442	13%	14,910	13%	10,449	9%	–29.9%
Total facility costs	13,412	92%	102,996	92%	104,383	94%	95,218	85%	–8.8%
Ancillary services *	8,346	8%	8,645	8%	6,849	6%	16,233	15%	137.0%
Inclusive total cost of facilities	109,717	100%	111,641	100%	111,232	100%	111,451	100%	0.2%

* Includes depreciation for equipment acquisitions
Property services = maintenance costs for building
Facility services = essential user services
Ancillary services = additional services for users

Table 33. Facility costs, new classification 2020– (€1,000).

Facility costs	2019		2020		Change 2019–2020
Capital rents and maintenance charges	74,186	67%	75,111	67%	1.2%
Operating costs	8,720	8%	9,658	9%	10.8%
Utility costs	11,330	10%	10,449	9%	–7.8%
User services and other costs *	16,996	15%	16,233	15%	–4.5%
Total facility costs	111,232	100%	111,451	100%	0.2%

* includes depreciations

FACILITY COSTS

The total facility costs for the University's basic operations were approximately €111.5 million. Two-thirds of the costs consist of triple net rent and maintenance charges for property owners, in addition to which the costs include costs for operations, utilities and user services. Until 2019 facility costs were categorised into property services, facility services and related services in addition to triple net rent and maintenance charges. For the sake of clarity and to make it possible to compare different years, the facility costs for 2019 are itemised in the table according to both the old and new categories.

Facility costs are internally charged from the University's units by dividing actual costs equally between different buildings by locality. Facility-specific costs are calculated by facility type, while the internal leases are charged for net floor area, including the value of shared corridors, lobbies and other similar spaces. On the open market, a lease is generally charged by net floor area. For example, the corresponding internal rent of an office space in Helsinki paid for by the University units was approximately €20 per 1 m² of net floor area per month. These prices are not, however, directly comparable with those of external facilities, since the University's internal rent also includes the costs for operations and user services of the facilities in a broader manner.

The largest individual item in maintenance costs was property management and upkeep services at €4.9 million, while repairs and replacements amounted to €4.4 million. The largest item in utility costs was heating

at €5.2 million, while the largest item for user services was cleaning services at €6.6 million. The costs for user services also included a depreciation of furnishing and equipment acquisitions (€2.5 million). The total for Helsinki Property Services Ltd invoicing in 2020 was €19.1 million.

ENERGY AND WATER CONSUMPTION

From 2019 the properties owned by the University of Helsinki Group have been parties to the national Energy Efficiency Agreement for the Property Sector (2017–2025). The agreement obliges the Group companies to implement measures that will reduce energy consumption in their properties and make it possible to apply for energy aid from Business Finland to carry out savings measures. A central goal in completed renovations has been the enhancement of energy efficiency and the promotion of renewable energy production on site.

The weather-adjusted heat consumption of University buildings increased by approximately 7% compared to 2019. Electricity consumption decreased by approximately 4% and water consumption by approximately 34%. The latter reductions are attributable largely to most of the University community working and studying remotely due to the pandemic-related restrictions, especially in the spring and the latter part of the year. Furthermore, the exceptional circumstances

MOST WIDELY-READ ONLINE NEWS 2020

A SMART JUMPSUIT PROVIDES INFORMATION ON INFANTS' MOVEMENT AND DEVELOPMENT

A new innovation makes it possible, for the first time, to quantitatively assess children's spontaneous movement in the natural environment.



Photo: Sampsa Vanhatalo

<https://www.helsinki.fi/en/news/health-news/a-smart-jumpsuit-provides-information-on-infants-movement-and-development>

restricted the operations of cafeterias and UniSport on the campuses.

The pandemic reduced electricity consumption particularly in the case of consumer electricity, that is electricity consumed through lighting and wall sockets. Electricity consumption associated with technical building services, including ventilation, is the largest item in overall electricity consumption. Telecommuting had no effect on the electricity consumption of technical building services, since the status of building systems was left unchanged to take into consideration employees potentially working on the premises in the exceptional circumstances. For the same reason, the circumstances had an insubstantial effect on the consumption of heating energy.

In 2020 measures taken to improve energy efficiency in University properties amounted to savings of 577 MWh. A total of approximately €319,000 in energy aid was granted by the government in support of the measures, more than the total for 2017–2019 (€240,000). Measures to reduce building energy consumption were determined through several building-specific energy reviews, which were carried out in Biocenter 3 as well as Buildings A, B and C in Viikki, the Metsätalo building, Ratakatu 6 and Haartmaninkatu 3. The biggest savings were achieved through the repairs and renovation of the Saari Clinic as well as the renovation of Snellmaninkatu 10.

In 2020 preparations were underway for several renewable energy projects, including a plan to install solar panels on the Chemicum roof in 2021. Feasibility studies for adopting geothermal heating were carried out as part of renovation planning for the Hyytiälä Forestry Field Station, the Kilpisjärvi Biological Station and the main building of the Tvärminne Zoological Station, as well as the residential buildings on Hakalantie at the Viikki Research Farm. In the case of Info Centre Korona in Viikki, the studies covered, in addition to geothermal heating, opportunities to utilise a geothermal heating system in cooling the building. Preparations for a biopower plant at the Viikki Research Farm proceeded according to plan.

DEVELOPMENTS BY CAMPUS, LARGE PROJECTS

In 2020 the number of ongoing large-scale renovations was 11, while a total of 24 smaller construction projects with a budget under €1 million were completed. The renovations of the Main Building and Info Centre were carried out in compliance with the RTS environmental classification. A LEED certificate survey was conducted for the project to construct a new building in Kumpula for the Helsinki Upper Secondary School of Natural Sciences, in addition to which a related low-carbon construction pilot was launched.

CITY CENTRE CAMPUS

The planning of the first stage of the Main Building renovation and related work continued on the Unioninkatu side, while the renovation of the Aleksanterinkatu side commenced. The renovation of the facilities in the low annex on the Yliopistonkatu side was completed. The planning of the second renovation stage was initiated in close cooperation with the Faculty of Theology and other users of the Main Building, with the aim of redesigning the teaching and work facilities, relocating the University Museum exhibition to a more accessible space, roofing the courtyard, replacing the technical building services as well as improving accessibility, safety and security. Since the cafeterias in the Main Building were closed as of the summer due to the renovation, the capacity of the cafeteria space in Porthania was increased and the serving facilities redesigned to boost the smooth provision of services.

The planning and building permit process for the end facades of Porthania was initiated. The equipment of the large lecture rooms in Porthania was supplemented for electronic examinations, while additions were made to AV equipment for remote instruction, remotely held public examinations and other events.

The functional concept of Learning Centre Aleksandria as a venue dedicated to students, learning and encounters, as well as related facility use, were developed. In the future, operations in support of learning and teaching will be centralised in Aleksandria. Aleksandria is involved in a University-level project for the development of learning spaces launched in 2020.

The planning of the renovation of Snellmaninkatu 10 continued in cooperation with the Faculty of Social Sciences, part of whose operations will relocate to the facilities from Metsätalo. The renovation of the building commenced, in addition to which the project to develop the work environment in Unioninkatu 37 was completed and the planning of the actual renovation continued in cooperation with the Faculty. Additionally, the work environment development project surveyed the future of Unioninkatu 35.

Similar projects targeted at Metsätalo and Topelia facilities were advanced with the Faculty of Arts. Facility planning for Metsätalo was initiated. In both buildings, a fit-for-purpose and versatile work environment is being planned in cooperation with the Faculty. The development of new learning environments continued in cooperation with the Faculty. The cafeteria in Metsätalo was renovated into a more pleasant and attractive student and staff cafeteria whose facilities are open to students also in the evening outside service hours. As part of the Faculty's facility development and centralisation efforts, reorganisation was carried out in the C section of Topelia, while repairs to accommodate the disciplines of phonetics and cognitive science, relocating from Siltavuorenpenger, were initiated.

The facility planning for and the development of teaching and self-access facilities in the Siltavuorenpenger 1–9 city block launched in 2019 continued. Based on the process, a decision was made on facility arrangements pertaining to the Faculty of Educational Sciences that make it possible to relinquish the Siltavuorenpenger 10 property. The process to sell the building was initiated.

Thorough condition surveys were conducted in the Old Minerva, Athena and Psychologicum buildings, on the basis of which it was possible to determine the measures required to ensure that the buildings are healthy and safe, to be taken into consideration in future repairs and alteration projects.

The construction of teaching facilities for subject teacher training in wood and metal crafts, the first stage of the facility redesign at Siltavuorenpenger, commenced in December. The process to choose the designers for the renovation of Siltavuorenpenger 5 was initiated.

KUMPULA CAMPUS

In Kumpula, a teaching facility development project encompassing the entire campus was carried out in close cooperation with users, resulting in a comprehensive concept plan for teaching facilities in which the remodel-

elling of the large auditorium in Physicum into a terraced room fit for group work and large group teaching was chosen as the initial project.

The renovation of Chemicum's green roof involved the replacement of roof structures and plants, while the environment was redesigned to better suit on-campus gardening.

The planning of the new building for the Helsinki Upper Secondary School of Natural Sciences to be constructed at Pietari Kalmin

katu 5 was initiated. The board of Helsinki University Properties Ltd approved the project plan in December. The goal is for the school to begin operating in Kumpula in the autumn term of 2023, at which time the renovation of the teaching facilities on the campus will have been completed and the teaching facilities of the University buildings will also be available to the school.

Town planning for the undeveloped area along Kustaa Vaasan tie continued in cooperation with the City of Helsinki and Senate Properties.

MEILAHTI CAMPUS

The construction work of the final stage of the project carried out in stages in Haartmaninkatu 3 was completed. The steeply inclined auditorium-like Amfi room with its standing room, originally built for teaching in pathology, was renovated into a teaching and meeting facility featuring new AV equipment. In

THE PLANNING OF THE NEW BUILDING FOR THE HELSINKI UPPER SECONDARY SCHOOL OF NATURAL SCIENCES WAS INITIATED

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

addition, the safety of Haartmaninkatu 3 was improved and its building automation and control systems were redesigned.

The construction work in the Haartmaninkatu 1 project, focused on operations relocating from the Dental Clinic, continued throughout 2020. In the early autumn, it was found that the construction will be delayed and completed only in late February 2021, postponing the relocation from the Dental Clinic to the new facilities until spring 2021.

VIIKKI CAMPUS

The implementation of the roughly year-long first stage of the repairs and renovation of Info Centre Korona commenced in the late summer, due to which University Services facilities were relocated to Biocenter 1 where most of these operations will remain permanently. The planning of the second stage of the Info Centre project, with facilities planned for the IT Centre, commenced.

The planning of facilities for a new electron microscope on the first floor of Biocenter 1 and the Natural Resources Institute Finland operations on the 5th floor of the B-wing and the 6th floor of the C-wing of Biocenter 1 commenced.

The remodelling of the lobby in Building A was completed in the spring and the passage to the meeting centre in the late autumn.

The stables of the Viikki Manor and the Viikki bedrock shelter were vacated in cooperation with the University

Museum, after which the bedrock shelter was converted into a civil defence shelter.

Projects focused on technical building services in Viikki include the cooling of the transforming station at Building C, which was completed in early 2020, and the building automation and control systems in Biocenter 3, for which planning was initiated. In addition, various facility alterations and repairs were carried out in Biocenter 3.

UNITS ELSEWHERE IN FINLAND

A framework plan on the use of and demand for buildings at Tvärminne was drawn up together with users. In the plan, the repairs and renovation of the main building and researcher dormitory, among others, are defined as projects to be completed in 2021–2026.

The renovation and expansion of the production animal clinic building in Mäntsälä was completed in the summer.

A new teaching and accommodation building is being planned for the Hyytiälä Forestry Field Station and atmospheric sciences, to replace the accommodation buildings A, B and C, which were built in the 1970s. On the basis of a proposal that was chosen through a competitive dialogue procurement procedure, the development stage was initiated in cooperation with the architect studio that submitted the winning proposal and the company that will carry out the construction. The goal is to construct a wooden building with a long life cycle that will also serve as a living lab for multidisciplinary research and teaching.

MOST WIDELY-READ ONLINE NEWS 2020

THE WOODEN BUILDING PROJECT FOR THE HYYTIÄLÄ FORESTRY FIELD STATION IS PROGRESSING

A new building is being planned for the Hyytiälä Forestry Field Station of the Faculty of Agriculture and Forestry, University of Helsinki, located in Juupajoki, to be constructed from wood. The design phase is to begin in 2020, while the construction phase can begin after an investment decision has been made, estimated to be in 2021.



Photo: Arkitehdit Rudanko + Kanikkunen

<https://www.helsinki.fi/en/news/life-science-news/the-wooden-building-project-for-the-hyytiala-forestry-field-station-is-progressing>

UNIVERSITY OF HELSINKI GROUP

The objective of the University of Helsinki Group is to support the strategy, operations and stability of the University of Helsinki, while creating conditions for operations not enabled by the University’s core and external funding.

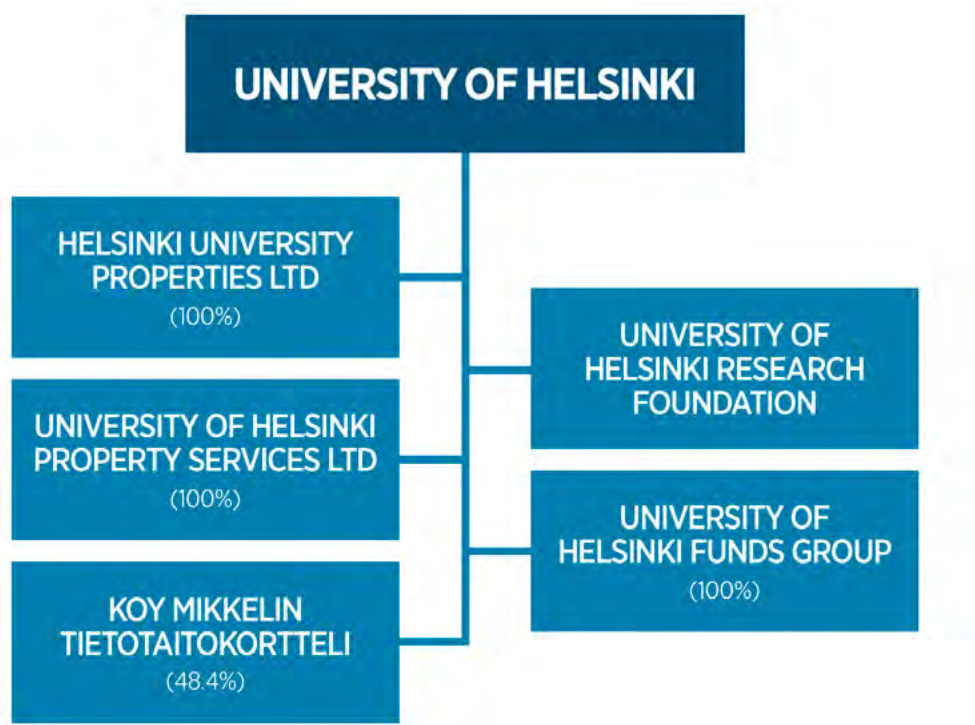
The Group strengthens the University’s ability and freedom to conduct science, to experiment and to have an impact.

In addition to the University of Helsinki’s securities portfolio, University assets are managed by the University of Helsinki Funds Group and Helsinki University Properties Ltd, including its subsidiaries. The Group’s assets consist mostly of properties, securities and limited companies.

The Group has a total staff of approximately 9,800 employees and an overall income of €1.0 billion, while its balance sheet amounts to €1.8 billion. In 2020 the Group’s returns were €15.9 million, with an equity ratio of 77.3%.

The University of Helsinki Group is comprised of (see the figure)

- University of Helsinki (parent entity)
- Helsinki University Properties Ltd
- University of Helsinki Property Services Ltd
- University of Helsinki Funds Group
- University of Helsinki Research Foundation
- Funidata Oy
- Joint-stock property company KOy Mikkelin tietotaitokortteli



LIST OF FIGURES AND TABLES

LIST OF FIGURES

Figure 1. University of Helsinki strategic roadmap for 2017–2020	14
Figure 2. Publication figures	26
Figure 3. Open-access publishing of peer-reviewed scientific publications	28
Figure 4. Language distribution of publications in 2020	29
Figure 5. Faculty performance in relation to the world average and coverage of the material.....	30
Figure 6. Publications on Covid-19, monthly numbers of publications by publication type.....	33
Figure 7. Degree students.....	37
Figure 8. Gender distribution of students in 2020	37
Figure 9. Degrees in 2013–2020	38
Figure 10. Master's degrees and related targets by fields of education in the funding model.....	39
Figure 11. Bachelor's and master's degrees with the coefficients applied from the funding model for the term 2021–2024	40
Figure 12. Bachelor's and master's degrees completed within the target duration	40
Figure 13. Share of attending students who have completed at least 55 cr.....	41
Figure 14. Credits for continuous learning	43
Figure 15. Media hits 2017–2020	49
Figure 16. University of Helsinki in university rankings and annual ranking averages 2016–2020.....	50
Figure 17. University of Helsinki in the THE Employability ranking, which measures the employability of graduates. 51	
Figure 18. University of Helsinki research reputation from 2015 to 2020 in the QS and US News ranking surveys.52	
Figure 19. Full-time equivalents at the University of Helsinki by staff group 2017–2020	65
Figure 20. Ratio of men and women of all staff as well as of teaching and research staff.....	65
Figure 21. Change in FTEs for the teaching and research staff and training school teachers 2019–2020	65
Figure 22. Change in FTEs for specialist and support staff 2019–2020	65

Figure 23. FTEs for international staff by staff group 2017–2020	66
Figure 24. Change in FTEs for th	66
2019–2020	66
Figure 25. Change in FTEs for international specialist and support staff 2019–2020	66
Figure 26. Results 2010–2020 (€ million)	73
Figure 27. Income 2010–2020 (€ million)	74
Figure 28. External funding, excluding Ministry of Finance's funding for teacher training schools (€ million)	75
Figure 29. External research funding (€ million)	76
Figure 30.Operative costs 2010–2020 (€ million)	77
Figure 31. Cost distribution in 2020	77
Figure 34. Government funding for universities 2013–2021	78
Figure 32. Faculty income sources by campus (€ million)	78
Figure 33. Independent institute income (€ million)	78
Figure 35. The monthly number of Zoom meetings grew exponentially over the year, from 459 meetings held in January to more than 44,000 meetings in November	85
Figure 36. Share of facility use by unit during year 2020	89

LIST OF TABLES

Table 2. High-quality and international publications	16
Table 3. Open access publications	16
Table 4. Ratio of international staff members to all teaching and research staff	16
Table 1. Position in internationally recognised rankings	16
Table 5. Credits completed during student exchange	17
Table 6. Response rate for the Finnish Bachelor's Graduate Survey in the whole target group	18
Table 7. Number and share of attending students who have completed at least 55 cr	18
Table 8. Ratio of international master's students to all students	18
Table 9. Ratio of international doctoral students to all students	19
Table 10. Completed doctoral degrees	19
Table 11. Rating in the workplace wellbeing survey	20
Table 12. Competitive international research funding (€ million)	20
Table 13. Fundraising results (€ million)	21

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Table 14. Publication numbers according to the Ministry of Education and Culture classification of publication types	26
Table 15. Publication activity by campus	27
Table 16. Co-authored publications	27
Table 17. Applicants, admitted students and applicants who have accepted a place	34
Table 18. Applicants, admitted students and applicants who have accepted a place in a doctoral programme	35
Table 19. Degrees, degree targets and ratio of outcomes to targets by faculty in 2020	39
Table 20. Top countries in student mobility 2020 (2019)	42
Table 21. Incoming and outbound exchange students by faculty. Mobility periods of more than three months completed by bachelor's and master's students	42
Table 22. University of Helsinki in university rankings based on geographical area in 2020 (results for 2019 in brackets)	51
Table 23. University of Helsinki in the reputation surveys of various rankings 2015–2020	51
Table 24. Comparison of the University of Helsinki's placement in overall rankings and equivalent reputation rankings 2016–2020	52
Table 25. Number and share of scientific fields from the University of Helsinki in the top 100 of field-specific rankings 2019–2020	53
Table 26. The University of Helsinki's share of the university funding model by performance criteria 2017–2021	79
Table 27. Facility owners	89
Table 28. Facilities by campus	89
Table 29. Facilities by facility category	89
Table 30. Facility reductions by campus and the trend since 2015, all facilities	90
Table 31. Facility reductions by campus and the trend since 2015, in University use	90
Table 32. Facility costs, old classification –2019 (€1,000)	91
Table 33. Facility costs, new classification 2020– (€1,000)	91

BACKGROUND FIGURES FOR GRAPHS

Figure 2. Publication figures.

Publication figures	2017	2018	2019	2020
All publications (A–E)	11,446	10,926	10,708	10,664
Number of scientific peer-reviewed publications (A, C)	7,239	7,505	7,852	7,746
Number of publications with a focus on public engagement (B, D, E)	4,207	3,421	2,856	2,918

[Back to the figure](#)

Figure 3. Open-access publishing of peer-reviewed scientific publications.

	2018	2019	2020
Open access publication	3,337	4,364	5,157
Self-archived publication	2,870	3,993	4,885

[Back to the figure](#)

Figure 4. Language distribution of publications in 2020.

Publication language	All publications	Scientific peer-reviewed publications	Publications with a focus on public engagement
Finnish	24.5%	9.5%	64.50%
Swedish	1.8%	0.8%	4.50%
English	71.5%	88.1%	27.30%
Other	2.2%	1.6%	3.60%

[Back to the figure](#)

Figure 5. Faculty performance in relation to the world average and coverage of the material.

World average = 1. The figure also includes faculty/unit-specific coverage. CNCI data included herein are derived from InCites, © Copyright Clarivate Analytics® 2020. All rights reserved.

Faculty	CNCI 2017–2020	Coverage 2017–2020	Publications 2017–2020
Faculty of Medicine	2.15	88%	8,937
Faculty of Science	1.64	88%	5,512
Faculty of Biological and Environmental Sciences	1.99	92%	2,147
Faculty of Agriculture and Forestry	1.46	83%	1,847
Faculty of Educational Sciences	1.5	36%	675
Faculty of Social Sciences	1.36	49%	1,215
Faculty of Veterinary Medicine	1.46	87%	667
Faculty of Pharmacy	1.26	90%	750
Faculty of Arts	1.25	23%	833
Faculty of Theology	1.45	16%	145
Faculty of Law	1.02	15%	116
Swedish School of Social Science	1.04	38%	88
HiLIFE	2.58	95%	2,043

[Back to the figure](#)

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Figure 6. Publications on Covid-19, monthly numbers of publications by publication type.

Month, February–December 2020	Article	Letter to the Editor	Other	Preprint	Professional	Review	Grand total
02			1				1
03		1	1	2	5		9
04	2	1	6	2	3	1	15
05	5	2	8	5	8	2	30
06	11	7	6	3	11	1	39
07	5		6	3	1	1	16
08	13	3	5	2	2		25
09	14	5	5		4		28
10	15	4	7		6	3	35
11	10	3	7	3	3	1	27
12	14		1	2	1	1	19
Grand total	89	26	53	22	44	10	244

[Back to the figure](#)**Figure 7. Degree students.**

Education level	2013	2014	2015	2016	2017	2018	2019	2020
Bachelor's students	19,141	18,691	18,052	17,540	16,861	16,647	16,467	16,090
Master's students	9,468	9,494	9,588	9,662	9,783	9,976	10,302	10,673
Doctoral students	4,671	4,682	4,431	4,470	4,323	4,316	4,496	4,548

[Back to the figure](#)**Figure 8. Gender distribution of students in 2020.**

Education level	Men	Woman	Ratio men	Ratio woman
Bachelor's students	5,929	10,160	36.9%	63.1%
Master's students	3,508	7,165	32.9%	67.1%
Doctoral students	1,799	2,749	39.6%	60.4%
Licentiate's students	37	80	31.6%	68.4%
Students pursuing a specialist degree in medicine	11	125	8.1%	91.9%
Students, total	11,284	20,279	35.8%	64.2%

[Back to the figure](#)**Figure 9. Degrees in 2013–2020.**

Education level	2013	2014	2015	2016	2017	2018	2019	2020
Bachelor's degrees	2,607	2,719	2,825	2,757	2,911	2,520	2,899	4,112
Master's degrees	2,694	2,648	2,691	2,687	2,603	2,506	2,698	4,168
Doctoral degrees	453	480	529	508	475	444	503	604

[Back to the figure](#)

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Figure 10. Master's degrees and related targets by fields of education in the funding model.

Field of education type	2017	2018	2019	2020	Target (as a figure)
1. Education	291	283	308	412	330
2. Arts and culture; humanities	652	540	601	1,108	670
3. Social sciences and services	454	440	499	642	405
4. Business, administration and law	278	272	303	464	270
5. Natural sciences	402	419	383	628	498
6. Information and communication technologies as well as engineering and technology	55	61	78	169	100
7. Agriculture and forestry	276	283	315	475	302
8. Dentistry	38	51	53	54	45
9. Medicine	104	122	116	170	145
10. Health and welfare	53	35	42	46	55

[Back to the figure](#)**Figure 11. Bachelor's and master's degrees with the coefficients applied from the funding model for the term 2021–2024.**

Bachelor's degrees	2017	2018	2019
Number of degrees	2,520	2,899	4,112
Number of degrees weighted with coefficients of the funding model	3,912	4,528	6,131

Master's degrees	2017	2018	2019
Number of degrees	2,506	2,698	4,168
Number of degrees weighted with coefficients of the funding model	4,183	4,463	6,560

[Back to the figure](#)**Figure 12. Bachelor's and master's degrees completed within the target duration.**

Bachelor's degrees	2017	2018	2019	2020
Within the target duration, coefficient 1.5	712	664	764	917
Within one year of the target duration, coefficient 1.3	941	854	1,061	1,061
More than one year from the target duration, coefficient 1	1,258	1,002	1,074	2,134
Within the target duration (%)	24.5%	26.3%	26.4%	22.3%
Tavoiteajassa + vuoden sisällä tavoiteajasta (%)	56.8%	60.2%	63.0%	48.1%

Master's degrees	2017	2018	2019	2020
Within the target duration, coefficient 1.5	558	563	656	783
Within one year of the target duration, coefficient 1.3	660	638	694	898
More than one year from the target duration, coefficient 1	1,385	1,305	1,348	2,487
Within the target duration (%)	21.4%	22.5%	24.3%	18.8%
Within the target duration + within one year of it (%)	46.8%	47.9%	50.0%	40.3%

[Back to the figure](#)

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Figure 13. Share of attending students who have completed at least 55 cr.

Number / Share	2016	2017	2018	2019	2020
Number of students with at least 55 credits	10,270	10,518	10,497	10,570	11,403
Share of attending students with at least 55 credits	38.9%	40.3%	40.8%	40.8%	43.1%

[Back to the figure](#)**Figure 14. Credits for continuous learning.**

Type of right to study	2017	2018	2019	2020
Open University	62,269	68,421	85,871	127,485
Professional specialisation programmes	1,745	2,109	2,720	3,405
Non-degree studies	15,066	14,040	13,194	12,348
Cooperation agreements between higher education institutions	2,234	2,149	2,757	4,303
Total	81,314	86,719	104,542	147,541

[Back to the figure](#)**Figure 15. Media hits 2017–2020.**

Language	2017	2018	2019	2020
Finnish	13,480	10,994	10,684	11,967
Swedish	2,296	1,956	1,851	937
Other languages	12,538	18,485	12,774	18,299

[Back to the figure](#)**Figure 16. University of Helsinki in university rankings and annual ranking averages 2016–2020.**

Ranking publication year	ARWU Shanghai	QS	THE Times Higher E.	NTU Taiwan	US News	Annual average
2016	56	91	91	71	91	80
2017	56	102	90	81	81	82
2018	57	110	99	79	92	87.4
2019	63	107	96	90	87	88.6
2020	74	104	98	93	86	91

[Back to the figure](#)**Figure 17. University of Helsinki in the THE Employability ranking, which measures the employability of graduates.**

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020
Placement	103	99	91	72	70	83	48	37	49

[Back to the figure](#)**Figure 18. University of Helsinki research reputation from 2015 to 2020 in the QS and US News ranking surveys.**

Placement	2015	2016	2017	2018	2019	2020
QS Academic Reputation (only Research)	92	94	92	106	99	103
US News Global Research Reputation	115	123	123	130	132	127
Average	103.5	108.5	107.5	118.0	115.5	115.0

[Back to the figure](#)

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Figure 19. Full-time equivalents at the University of Helsinki by staff group 2017–2020.

Staff group	2017	2018	2019	2020
Teaching and research staff	3,953	4,013	4,175	4,194
Specialist and support staff	3,121	2,999	3,081	3,053
Teachers of the teacher training schools	134	134	137	141
Total	7,208	7,146	7,393	7,388

[Back to the figure](#)**Figure 20. Ratio of men and women of all staff as well as of teaching and research staff.**

Group	2017	2018	2019	2020
Ratio of men	43.2%	43.3%	42.9%	42.3%
Ratio of women	56.8%	56.7%	57.1%	57.7%
Ratio of men among teaching and research staff	49.8%	49.7%	49.3%	48.5%
Ratio of women among teaching and research staff	50.2%	50.3%	50.7%	51.5%

[Back to the figure](#)**Figure 21. Change in FTEs for the teaching and research staff and training school teachers 2019–2020.**

Staff subgroup	Change (FTE)
Level 4	–0.8
Level 3	25.1
Level 2	30.9
Level 1	–31.8
Other teaching and research staff (hourly paid)	–4.3
Teachers of the teacher training schools	3.6

[Back to the figure](#)**Figure 22. Change in FTEs for specialist and support staff 2019–2020.**

Staff subgroup	Change (FTE)
Administration	14.9
IT	6.8
Technical	–3.1
Library	–4.0
T&R support	–18.8
Other	–23.1

[Back to the figure](#)**Figure 23. FTEs for international staff by staff group 2017–2020.**

Staff group	2017	2018	2019	2020
Teaching and research staff, training school teachers	952	1,027	1,129	1,195
Specialist and support staff	167	158	175	181
Total	1,118	1,184	1,304	1,376

[Back to the figure](#)

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Figure 24. Change in FTEs for the international teaching and research staff and training school teachers 2019–2020.

Staff subgroup	Change (FTE)
Level 4	3.6
Level 3	7.0
Level 2	25.0
Level 1	28.8
Other teaching and research staff (hourly paid)	1.4
Teachers of the teacher training schools	0.0

[Back to the figure](#)**Figure 25. Change in FTEs for international specialist and support staff 2019–2020.**

Staff subgroup	Change (FTE)
IT	3.0
Administration	2.4
T&R support	1.1
Library	0.0
Technical	0.0
Other	-0.5

[Back to the figure](#)**Figure 26. Results 2010–2020 (€ million).**

Result	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
University operations	2	-4	4	15	19	21	-3	-4	-17	-35	-3
Investments	6	6	10	15	16	25	8	28	-19	49	24
Total	7.72	1.92	13.85	29.39	34.89	46.33	4.31	24.27	-35.91	14.58	20.38

[Back to the figure](#)**Figure 27. Income 2010–2020 (€ million).**

Income	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Ministry of Education and Culture; Ministry of Finance	407	417	438	431	439	454	412	403	400	394	409
External funding	223	225	246	252	259	259	257	258	267	275	265
Omat tuotot	4	7	11	17	19	38	22	43	10	18	20

[Back to the figure](#)**Figure 28. External funding (€ million).**

Source of funding	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Academy of Finland	73	82	89	96	106	104	103	107	104	109	105
Government ministries	28	31	33	28	26	27	20	19	25	24	24
Businesses	26	19	22	24	25	28	30	26	25	24	21
Foundations	18	16	16	19	19	21	23	25	25	28	30
Business Finland	15	14	14	13	13	13	13	14	16	14	18
Municipalities	14	11	10	11	10	9	10	9	8	9	7
Other	19	22	24	24	24	23	20	20	21	23	20
EU	21	22	27	27	26	23	23	23	28	31	31
Muu ulkomainen rahoitus	8	8	11	10	10	11	14	14	15	12	10

[Back to the figure](#)

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Figure 29. External research funding (€ million).

Source of funding	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Academy of Finland	73	82	89	96	106	104	103	107	104	109	105
Government ministries	14	14	15	12	10	10	9	7	10	8	8
Businesses	6	4	6	5	4	6	5	5	5	4	3
Foundations	16	14	14	16	18	19	21	23	23	26	28
Business Finland	15	14	14	13	13	13	13	14	16	14	18
Municipalities	4	3	4	4	4	4	5	5	3	3	2
EU	13	15	18	20	20	21	20	20	25	28	30
Other international funding	6	6	9	8	8	9	12	12	14	10	9

[Back to the figure](#)**Figure 30. Operative costs 2010–2020 (€ million).**

Cost type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Staff	403	406	428	431	437	441	411	402	403	427	430
Facilities rentals	76	77	82	87	87	88	95	91	89	89	88
Other costs	136	152	160	142	145	153	158	161	183	174	146
Depreciations	11	11	11	11	11	12	12	13	14	15	15

[Back to the figure](#)**Figure 31. Cost distribution 2020.**

Expenditure type	2020
Staff	63%
Rentals	13%
Materials and supplies	7%
Purchased services	11%
Travel expenses	1%
Depreciations	2%
Other	3%
Fundraising transfers	0.5%

[Back to the figure](#)**Figure 32. Faculty income sources by campus (€ million).**

Campus	Core funding	External funding	Investment activities
City Centre	87	42	0
Kumpula	35	47	0
Meilahti	33	46	0
Viikki	57	57	0

[Back to the figure](#)**Figure 33. Independent institute income (€ million).**

Erilliset laitokset	Core funding	External funding	Investment activities
Service institutions	66	14	0
Research institutes	34	42	0

[Back to the figure](#)

STRATEGY REVIEW 2017–2020 AND ANNUAL REVIEW 2020

Figure 34. Government funding for universities 2013–2021; Imputed core funding based on the funding model of the Ministry of Education and Culture (€ million).

University	2013	2014	2015	2016	2017	2018	2019	2020	2021
University of Helsinki	383	394	401	387	387	378	376	398	397
Total for other universities	1,220	1,231	1,253	1,204	1,189	1,183	1,183	1,282	1,317
Total for universities	1,603	1,624	1,654	1,590	1,575	1,561	1,559	1,680	1,714

[Back to the figure](#)**Figure 35. The monthly number of Zoom meetings grew exponentially over the year, from 459 meetings held in January to more than 44,000 meetings in November.**

Month	Number of meetings
January	459
February	507
March	14,102
April	34,161
May	28,215
June	19,505
July	5,653
August	17,690
September	37,464
October	39,514
November	44,329
December	33,535

[Back to the figure](#)**Figure 36. Share of facility use by unit during year 2020.**

Facility user	Share
Faculties	52%
Central national units (National Library of Finland and Finnish Museum of Natural History)	12%
Other independent institutes	19%
Other activities (University Services, cafeterias and cafes as well as teacher training schools)	17%

[Back to the figure](#)