



Statistics for use in the evaluation of biosciences in Norway

Analysis of research personnel in 2013, 2017 and 2021

TALL

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Preface

This report presents statistics and indicators for research and development (R&D) personnel at department/institute level for the units in the Norwegian higher education and institute sectors which are included in the ongoing evaluation of biosciences¹ in Norway conducted by the Research Council of Norway (RCN). Conducting evaluations of Norwegian research is a key task of the Research Council of Norway (abbreviated RCN). Evaluations are reviews of how research fields, scientific disciplines and academic institutions are performing in the national and international context. R&D statistics have been part of the knowledge base in previous evaluations and will contribute with data also in the new round of evaluations started in 2022/2023 and over the next few years they will cover biosciences, natural sciences, mathematics, technology and medical and health science.

The main purpose of this report is to provide statistics and indicators on R&D personnel within biosciences. The R&D personnel statistics are based on individual data from the Register of Research Personnel at Statistics Norway. The report commissioned by the Research Council of Norway (RCN) and is produced in collaboration with the Nordic institute of innovation, research and education (NIFU), by senior advisor Kristoffer Rørstad and head of group/senior advisor Kaja Wendt at Statistics Norway. Statistics Norway is responsible for data on R&D personnel for the evaluated units, while NIFU conduct bibliometric studies.

Statistics Norway, 28 February 2023

Per Morten Holt

¹ In the official R&D statistics, the term biological sciences are used.

Abstract

The statistics and indicators presented in this report provide background data for the evaluation of biosciences conducted by The Research Council of Norway. Data are compiled by Statistics Norway and include data for 16 higher education units and 5 units belonging to the institute sector for the years 2013, 2017 and 2021.

2,876 people involved in bioscience R&D in 2021

In 2021, R&D personnel in the bioscience units of this evaluation amounted to 2,876 people. 1,591 in the higher education institutes and 1,285 in the institutes sector. There has been a growth in the number of R&D personnel from 2,516 in 2013. For the higher education sector, the growth was about 20 per cent, while the growth for the institute sector amounted to 7,5 per cent. The growth for the higher education sector was stronger from 2013 to 2017, than from 2017 to 2021. For the institute sector the growth was stronger in the last period.

Stable overall age structure, increase of personnel over 62 years

Among R&D personnel included in the evaluation the age structure has been rather stable from 2013 to 2021 with only a small increase. In the higher education sector, the average age was 42 years; for professors 58 years, for associated professors 49 years, for researchers/postdocs 39 years and for PhD-students 31 years. However, the share of R&D personnel over 62 years at professor level rose from 31 per cent in 2013 to 40 per cent in 2021. In the institute sector the average age was 45.3 years in 2013 and 46.5 years in 2021, while the overall share of R&D personnel older than 62 years rose from 6 per cent to 12 per cent from 2013 to 2021.

High proportion of female researchers within biosciences

Overall gender balance has improved from 2013 to 2021 among units in the evaluation: In the higher education sector 49 per cent of the R&D personnel are women (44 per cent in 2013). At professor level there is still a skewed gender balance with only 27 per cent women. Gender balance is better among the evaluated units than for the total of natural sciences 21 per cent women. In the institute sector there are 40 per cent women (36 per cent in 2013).

More than 1 of 3 have a foreign doctoral degree in the higher education sector

Among the R&D personnel (without PhD-students) for the evaluated units 35 per cent had a foreign PhD-degree. Among the professors, 26 per cent had a foreign PhD-degree, and the proportion is even higher for associate professors and researchers and postdocs, 31 and 44 per cent respectively. In comparison, the share of foreign PhD-degrees in the higher education sector was 14 per cent and within natural sciences 26 per cent. In the institute sector, 27 per cent of the researchers had a foreign PhD-degree in 2021.

Sammendrag

Statistikk og indikatorer for personalressurser som er presentert i denne rapporten bidrar med bakgrunnsdata for evalueringen av biovitenskap som gjennomføres av Norges forskningsråd. Statistikken er utarbeidet av Statistisk sentralbyrå og omfatter data for 16 enheter i universitets- og høyskolesektoren og fem forskningsinstitutter, for årene 2013, 2017 og 2021.

Nesten 2 900 forskere/faglige arbeidet med FoU innenfor biovitenskap i 2021

I 2021 utgjorde FoU-personale innenfor biovitenskap i alt 2 876 personer, 1 891 i universitets- og høyskolesektoren og 1 285 i instituttsektoren. Siden 2013 har antallet vokst med til sammen 14 prosent, hvorav 20 prosent i universitets- og høyskolesektoren og 7,5 prosent i instituttsektoren. Mens veksten var størst i første del av perioden (2013 til 2017) i universitets- og høyskolesektoren, var veksten sterkest i siste del av perioden for instituttsektoren.

Stabil gjennomsnittsalder, men en liten vekst i andelen over 62 år

Blant FoU-personalet har aldersstrukturen vært ganske stabil fra 2013 til 2021 med kun en liten økning. I universitets og høyskolesektoren var gjennomsnittsalderen 42 år; for professorer 58 år, for førsteamanuenser 49 år, for forskere/postdoktorer 39 år og for doktorgradsstipendiater 31 år.

Andelen professorer som var 62 år og eldre steg imidlertid fra 31 prosent i 2013 til 40 prosent i 2021. I instituttsektoren var gjennomsnittsalderen 45,3 år i 2013 og 46,5 år i 2021, mens den samlede andelen av FoU-personell over 62 fordoblet seg fra 6 til 12 prosent fra 2013 til 2021.

Høy kvinneandel blant personalet i biovitenskap

Den samlede kjønnsbalansen har forbedret seg fra 2013 til 2021 blant enhetene i evalueringen: I universitets- og høyskolesektoren var 49 prosent av FoU-personalet kvinner i 2021 (44 prosent i 2013). På professornivå var det fortsatt en skjev kjønnsbalanse med kun 27 prosent kvinner. Til sammenligning var kvinneandelen blant professorene innenfor fagområdet matematikk/naturvitenskap bare på 21 prosent. For de evaluerte instituttene i instituttsektoren var kvinneandelen 40 prosent i 2021 (36 prosent i 2013).

Flere enn 1 av 3 har en utenlandsk doktorgrad i universitets- og høyskolesektoren

Blant FoU-personalet (utenom stipendiatene) for de evaluerte enhetene i universitets- og høyskolesektoren hadde 35 prosent utenlandsk doktorgrad. Blant professorene hadde 26 prosent utenlandsk doktorgrad, og for førsteamanuensis og forskere og postdoktorer henholdsvis 31 og 44 prosent. Til sammenligning var andelen utenlandske doktorgrader totalt i universitets- og høyskolesektoren 14 prosent og innenfor matematikk og naturvitenskap 26 prosent.

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1. Introduction

This report presents statistics and indicators for research and development (R&D) personnel at department/institute level in the higher education and institute sectors for the units included in the ongoing evaluation of biosciences² in Norway conducted by the Research Council of Norway (RCN). Conducting evaluations of Norwegian research is a key task of the Research Council of Norway (abbreviated RCN). Evaluations are reviews of how research fields, scientific disciplines and academic institutions are performing in the national and international context. R&D statistics have been part of the knowledge base in previous evaluations and will contribute with data also in the new round of evaluations started in 2022/2023 and over the next few years they will cover biosciences, natural sciences, mathematics, technology and medical and health science. The main aim of the evaluation is to assess the quality of Norwegian bioscience research, assess the framework conditions for the research and the research's relevance to key areas of society. The evaluation will result in recommendations to the institutions, the Research Council and the ministries.³

The main intention of the report is to provide statistics and indicators on R&D personnel within biosciences. The R&D personnel statistics are based on individual data from the Register of Research Personnel at Statistics Norway.

The report includes an overview of R&D expenditure, by field of R&D in the higher education sector of the last 20 years. Finally, we present an overview of the Norwegian research and innovation system.

First, we present personnel statistics for the higher education sector. Then, the units are presented separately. In the higher education sector, a total of 16 units⁴ are included in the evaluation, while 5 units are included in the institute sector. The purpose of the overall figures and tables is to give an overview of the research population of all evaluation units in the higher education for all indicators chosen for this evaluation. With these figures, the units can be compared with each other and with the average of all units as benchmark figures.

1.1. The Norwegian research and innovation system

The Norwegian research and innovation system include many institutions with different roles. It is common to distinguish between three levels: the performing, the strategic and the political level. Extensive internationalisation also applies to Norwegian research and is increasingly important for all parts of the Norwegian R&D system.⁵

The performing level

At the performing level in Norway, there is the higher education sector (including university hospitals), the institute sector and the industrial sector. The higher education sector performed about one third of Norwegian R&D activity in 2021. There is a broad variety of institutions in the higher education sector, including universities, state university colleges and private higher education institutions. At the same time, research activity is concentrated, as universities, including university hospitals, accounted for more than 87 per cent of the higher education sector's total R&D expenditure in 2021. Compared with other countries, a relatively high share of Norwegian R&D is

² In the official R&D statistics, the term biological sciences are used.

³ For more information: <https://www.forskingsradet.no/tall-analyse/evalueringer/fag-tema/biovitenskap/>

⁴ The Register of Research personnel do not include the Computation Biology Unit at the University of Bergen, as administrative data are lacking, personnel are included in other departments. Department of Chemistry, Bioscience and Environmental Engineering, University of Stavanger was not established in 2013 of 2017, and figures of that unit are only included in 2021.

⁵ The presentation of this part is based on (The Research Council of Norway (2021): Science and Technology Indicators for Norway 2021.

performed by research institutes (20 per cent). The Norwegian institute sector is rather heterogenous in terms of institute size, profile, and legal status. The sector includes both public sector-oriented and industry-oriented institutes, of which the latter group plays an important role in carrying out contract research for Norwegian and foreign companies. Even though the industrial sector accounts for nearly half the R&D expenditure in Norway, the proportion of research performed in this sector is low compared with other countries.⁶ Given the resource-based structure of the economy, there are relatively few large R&D-intensive companies in Norway.

The strategic level

At the strategic level, there are several agencies that are important for Norwegian STI policy. The two most important players are the Research Council of Norway (RCN), which focuses on research and technological funding, and Innovation Norway, which focus on innovation. More than half of the budgetary funding for Norwegian R&D activity goes through the Ministry of Education and Research and the RCN. The RCN has more than 25 per cent of public R&D funding and receives funding from all 15 ministries. Innovation Norway encourages innovation at the regional and national level, with a focus on small and medium sized enterprises. SkatteFUNN, the R&D tax incentive scheme, is organised under RCN and has become a major tool for encouraging innovation by supplying tax credits for the R&D activity. In addition to RCN, Innovation Norway and SkatteFUNN, there are several other key players. SIVA encourages the development of science parks, incubators, and services to start-up firms. GIEK supplies long-term guarantees that encourage Norwegian industry to take part in more international trade and export. Enova, owned by the Ministry of Climate and Environment, encourages environmentally friendly production and consumption of energy and exploration of new sources of clean energy. Digdir (Norwegian Digitalisation Agency) aims to be the government's foremost tool for faster and more coordinated digitization of society. Finally, Norwegian Defence Research Establishment (FFI) aims to advance knowledge in artificial intelligence, additive manufacturing, quantum computing, nanotechnology, the Internet of Things, and autonomy.

The political level

The Norwegian research and innovation system can be characterised by considerable pluralism at the political level. According to the "sector principle", all 15 ministries (after the 2021 election) are responsible for financing both short term and long-term research within their respective sectors. Hence, public research funding and science policy involves extensive coordination. At the same time R&D funds are concentrated, as five ministries account for 85 per cent of total public R&D funding, based on government budget allocations. The most important one is the Ministry of Education and Research. This ministry also prepares the long-term plan for research and higher education and is responsible for coordinating research policy across ministries at the national level. 11 Other important contributors are the Ministries of Trade, Industry and Fisheries, Health Care Services, Climate and Environment, Local Government and Modernisation and Defence. The Research Council of Norway (RCN) also supplies advice to the government on STI policy and network governance between various actors in the STI system.

The S&T statistical infrastructure

The production of STI statistics has historically been distributed across different parts of Norway's statistical system. The official statistical agency, Statistics Norway, is a key pillar. Since 2022 the agency produces R&D and innovation statistics for all sectors, conducts evaluations and research and provides a macro and micro-data warehouse. R&D statistics for the government and higher education sector were produced by NIFU since the 1960s. From 2022 this responsibility was

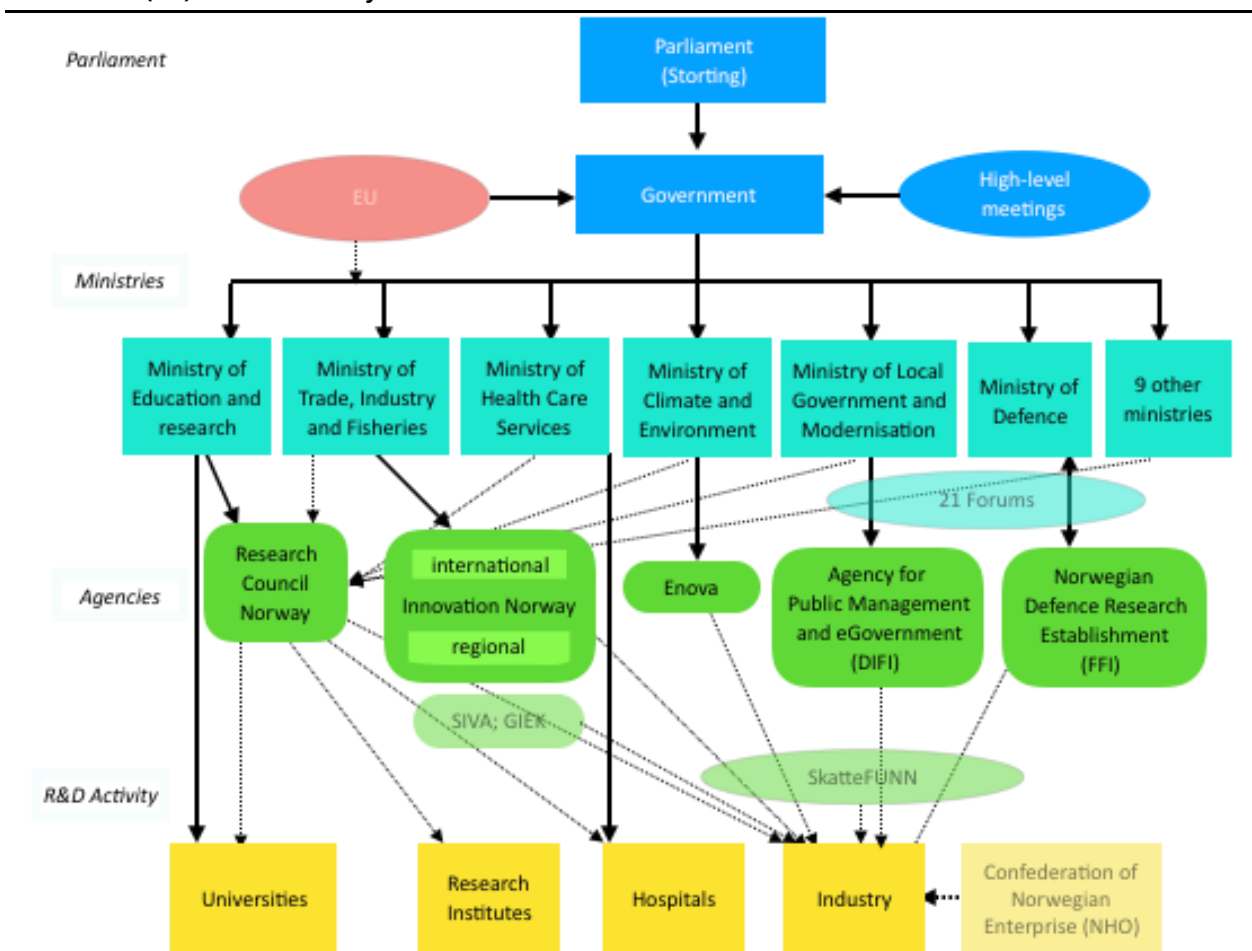
⁶ In international R&D statistics the Norwegian business enterprise sector includes the enterprises (here industrial sector) and in addition business-oriented institutes that primarily serve business. This is according to OECD guidelines (OECD, 2015, Frascati Manual).

transferred to Statistics Norway. NIFU's staff who produced the statistics also moved to Statistics Norway. In this way the quality of the statistics has been maintained. Statistics Norway is from 2022 responsible for reporting all STI statistics to Eurostat and the OECD.

Norway has recently undergone a transformation in digital support services to the research and higher education sector by reforming the key agencies. The Norwegian Directorate for Higher Education and Skills (HK-dir) was established in 2021 and is subordinate to the Ministry of Education and Research. The Directorate is a result of the merger of Diku (Norwegian Agency for International Cooperation and Quality Enhancement in Higher Education), Competence Norway, Universell and parts of Unit and the Norwegian Centre for Research Data (NSD) and has also been taking over tasks for the Norwegian Agency for Quality Assurance in Education (NOKUT). The Directorate has an overall, national responsibility for administrative tasks within higher education, higher vocational education and competence policy and gives advice to the ministry, implements the policy, and coordinates the tools. In 2022, an additional agency under the Ministry of Education and Research was established: Sikt – Norwegian Agency for Shared Services in Education and Research. Its main tasks are to provide access to high-quality infrastructure, sharing of data and high information security in the sector.

The figure provides a simplified picture of the organisation and the division of labour in the R&D and innovation system, including the international dimension (EU).

Figure 1.1. The Norwegian system of education, research and innovation. Main Science, Technology and Innovation (STI) actors in Norway¹



¹ SIVA–The Industrial Development Corporation of Norway. GIEK–The Norwegian Export Credit Guarantee Agency.

ENOVA: A state-owned enterprise for the restructuring of energy use and energy production.

SkatteFUNN: The Norwegian tax deduction scheme.

Source: The Research Council of Norway (2021): Science and Technology Indicators for Norway 2021.

2. Data and methods

2.1. R&D personnel data

Data on R&D personnel cover each department/research institutes for three years; 2013, 2017 and 2021. While the 2021-figures are the most relevant for the evaluation, figures from 2013 and 2017 are presented in order to show the development in the research population over a period of almost ten years. Statistics are also available for intermediate years. However, in order to reduce the amount of data presented, the analysis have been limited to these years. The statistics provide detailed information on these indicators:

- number of persons (researchers)
- share of women
- share of PhD-degrees
- share of foreign PhD-degrees
- average age
- share of persons above 62 years and older
- group of academic positions

In the higher education sector, the academic positions are grouped in these categories:

- professors (i.e., full professors),
- associate professors,
- researchers and postdoctoral fellows (postdocs)
- PhD-students

Other tenured staff (i.e., university lecturer, senior lecturer, head of department, docent, and dean) which constitutes a total of 267 persons are excluded from the data since these positions have teaching as their main task.

The position structure in the institute sector is very diverse, the personnel in this sector is therefore not split in different groups.

About the indicators:

- number of persons (researchers): gives the scope of research of each unit and the total population of the evaluation. This can be considered as an input indicator.
- share of women gives information on gender for each academic position for all units, and the average of the evaluated units. To promote gender balance is a top priority for ethical, legal, quality reasons. In the EU as well as in the Research Council of Norway it is a high priority task to ensure that the best research talents and a breath of perspectives are included.
- share of PhD-degrees, gives a measure for the level of PhD-holders for all positions and units. A high level of PhD-degrees among the R&D personnel can be a measure of high level of competence within a position group or a unit and provides information on the recruitment situation.
- share of foreign PhD-degrees, gives a measure of foreign researchers since most of the foreign PhD-holders in Norway are foreign researchers.
- average age provides information of the average age for all academic position, can be used to assess future recruitment needs.
- share of persons who are 62 years and older, provides information on the share of persons which have reached the age for contractual early retirement (AFP). The most common age for retirement in Norway is 67 years old. However, many professors at the universities work until

they are 70 years or older. A high level of R&D personnel over 62 years indicates that recruitment needs in the next few years.

- group of academic positions show the composition of the staff and comparisons can highlight whether the composition is biased on top (professor) level or starting level (phd-students).

A list of the units in the evaluation is presented for the higher education sector in Table 2.1 and the institutes sector in Table 2.2. The tables show how the administrative units correspond to the units in the Register of Research Personnel. In most cases, we have figures for all the units in the evaluations and on the same level. However, when data are missing, it is commented.

Table 2.1 Overview of the evaluated administrative units in the higher education sector. 2021

Institution	Administrative unit	Comments
Nord University	Faculty of Biosciences and Aquaculture	The whole faculty is included in this report
Norwegian University of Life Sciences	Faculty of Biosciences	The whole faculty is included in this report
Norwegian University of Life Sciences	Faculty of Chemistry, Biotechnology and Food Science	The whole faculty is included in this report
Norwegian University of Life Sciences	Faculty of Environmental Sciences and Natural Resource Management	The whole faculty is included in this report
Norwegian University of Life Sciences	Faculty of Veterinary Medicine	The whole faculty is included in this report
Norwegian University of Science and Technology	Department of Biology	The whole department is included in this report
Norwegian University of Science and Technology	Department of Biotechnology and Food Science	The whole department is included in this report
Norwegian University of Science and Technology	NTNU University Museum The Department of Natural History	The whole faculty is included in this report
UIT The Arctic University of Norway	Faculty of Biosciences, Fisheries and Economics	The whole faculty (all three departments) is included in this report
UIT The Arctic University of Norway	The Arctic University Museum of Norway	The department cannot be split, the Academy of arts are included in the figures in the report
University of Agder	Department of Natural Sciences	The whole department is included in this report
University of Bergen	Department of Biological Sciences	The whole department is included in this report
University of Bergen	University Museum of Bergen	Includes only the Department of Natural history in this report
University of Bergen	Computational Biology Unit	This unit is not included as an own unit in the registers of SSB, no numbers are available
University of Oslo	Department of Biosciences	The whole department is included in this report
University of Oslo	Natural History Museum	The whole museum is included in this report
University of Stavanger	Department of Chemistry, Bioscience and Environmental Engineering	Was established in 2018, hence only 2021 figures in this report

Source: Statistics Norway

An overview of the research institutes is presented in Table 2.2. In Register of Research Personnels, none of the institutes are split into smaller departments or group. Figures for the entire institute, are therefore included in the analysis.

Table 2.2 Overview of the evaluated administrative units in the institutes sector. 2021

Research institute	Comment
Institute of Marine Research	IMR was merged with NIFES in 2018 but is included in figures for all years. The whole institute is included, not only the research and advice programme.
Nofima	The whole institute is included in this report
Norwegian Institute for Nature Research	The whole institute is included in this report
Norwegian Polar Institute	The whole institute are included in this report, and not only the research department
SINTEF Industry	The whole institute is included in this report, and not only the research group of biotechnology and nanomedicine

Source: Statistics Norway

2.2. The Register of Research Personnel

The Register of Research Personnel at Statistics Norway is a part of the national R&D statistics. The register contains individual-level data on researchers/academic staff involved in R&D and higher administrative staff in the higher education sector and in the institute sector, including health trusts with and without university functions. It provides data on individuals employed in positions which require competence at the master's degree level or higher. Researchers in the higher education sector are identified by their position codes.

The register contains the following variables for each individual: name, nation identification number, age, gender, academic position, affiliation by institution, faculty, department, education (degree, field and year) doctoral degree (type, field, year, country), subject field (i.e., department field).

The main sources of information for this register are the higher education institutions, health trusts and the research institutes. From 2016 the data on the higher education sector is mainly obtained via the Database for higher education (DBH) at the Directorate for Higher Education and Skills (HK-directorate) which receive data from the higher education institutions.

2.3. R&D expenditure

In this report, current R&D expenditure are included. This, to show the research volume measured by expenditure. Current expenditure includes salary, other personnel, and other current costs, while investments for equipment and building costs are excluded. R&D expenditure are, together with personnel statistics an input indicator for resources to R&D.

2.4. Field classification in the higher education sector

In the official R&D statistics of the higher education sector, all university departments are assigned to one, and only one field of R&D (e.g., biological sciences, mathematics, informatics, and so on). In the R&D statistical questionnaire, each unit can classify the research in many fields. However, since the unit can only be assigned to one specific field, the largest field in this classification, will be the assigned field for the unit. This principle is called the maximum classification criteria and is used in the official figures of R&D statistics.

However, most university departments conduct research within several fields. Due to the above-mentioned principle of classification, this will not appear in the official R&D statistics. In some analysis, it is useful to show the entire width of research fields of the unit (from the R&D questionnaire) by specific field classification. In this evaluation, we will present figures using both methods. When the specific field classification is used, it will be specified.

In the official R&D statistics, we use the term biological sciences. This field contains the following subfields: biology, microbiology, cell biology, zoology fields, botany, plant physiology, fishery biology,

marine botany and biology and limnology. The term biosciences in this evaluation may have a broader scope than in the official R&D statistics.

3. Higher education sector

This part includes R&D personnel statistics for the units in the higher education sector. The first tables contain aggregated data and summary tables for the units which are included in the evaluation. Then statistics for each unit (i.e., university department) are presented.

3.1. Overall R&D personnel figures

R&D personnel or researchers within the evaluation units included almost 1,600 people working in the higher education sector in 2021. The number of researchers in these units increased with 20 per cent from 2013 to 2021. There was a larger increase from 2013 to 2017 than from 2017 to 2021 (Table 3.1). The units vary in size from 20-30 R&D personnel to more than 250. In 2013, the average number of R&D personnel in a unit was 94. In 2021, the average number of R&D personnel had increased to 114.

Biological sciences were the largest field of R&D with almost 40 per cent of total number of researchers in 2021 and had an increase in personnel at about 30 per cent since 2013.

Some of the departments have changed fields of R&D during the period. This is according to information from R&D survey. The reduction in unspecified natural sciences from 2017 to 2021 can be explained by two departments changed their field classification to unspecified agriculture and fisheries⁷. This also explains the growth of the unspecified agriculture and fisheries for the same period.

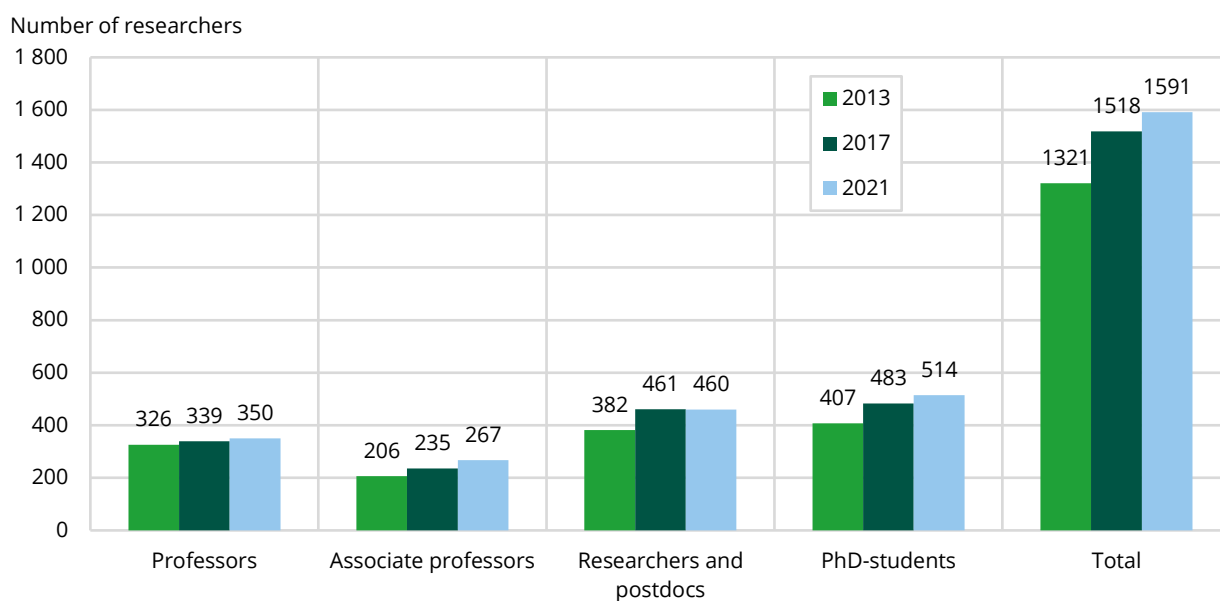
Table 3.1 Number of researchers participating in the bioscience evaluation in the higher education sector by fields. 2013, 2017, 2021

Fields	2013	2017	2021	Growth 2013-2021
Biological sciences	471	555	615	31
Unspecified natural sciences	418	517	332	-21
Unspecified agriculture and fisheries	156	80	228	46
Biotechnology	70	139	160	9
Veterinary medicine	174	176	160	-8
Economics	32	51	61	91
Humanities and arts			35	
Total	1,321	1,518	1,591	20

Source: Statistics Norway

⁷ Unspecified major fields of R&D can include several fields and is used when units have not specified the fields of R&D in the R&D questionnaire.

Figure 3.1 Total number of researchers in the higher education sector by academic positions in 2013, 2017 and 2021. Units in the bioscience evaluation

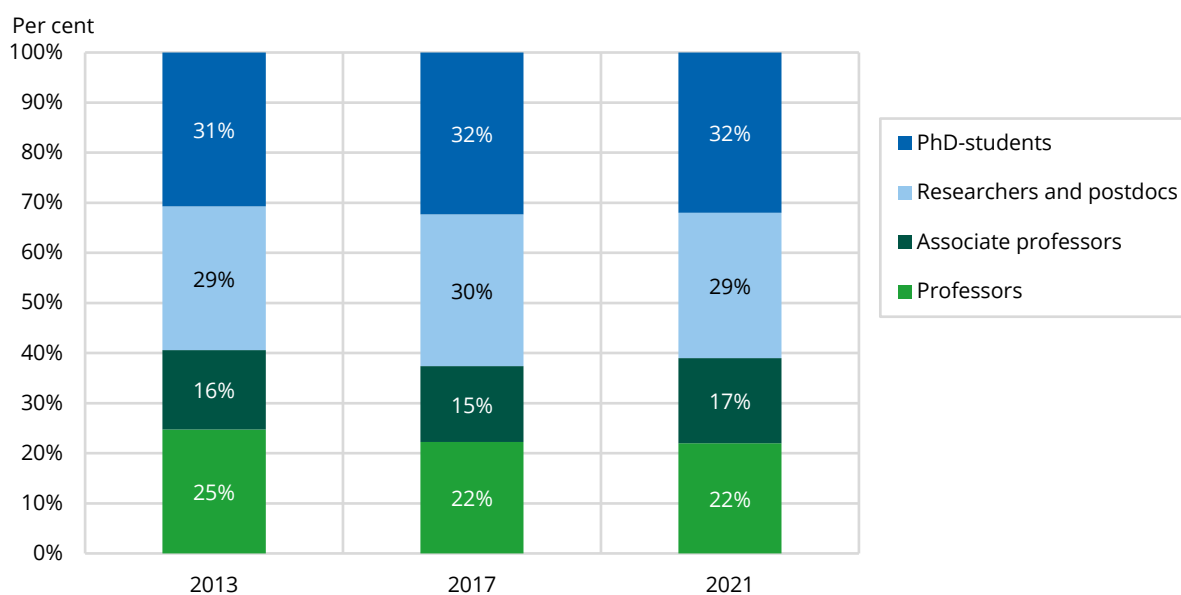


Source: Statistics Norway

In total, there were 350 professors, 267 associate professors, 460 researchers/postdocs and 514 PhD-students included in the higher education sector evaluation units in 2021. In general, the number of researchers increased since 2013, most for the PhD students and the associate professors.

The share of position groups varies among the units (Figure 3.2 and Table 3.4). In 2021, professors account for about 22 per cent and associate professors 17 per cent. However, researchers and postdoctoral and PhD students are the largest groups and account for 29 and 32 per cent respectively.

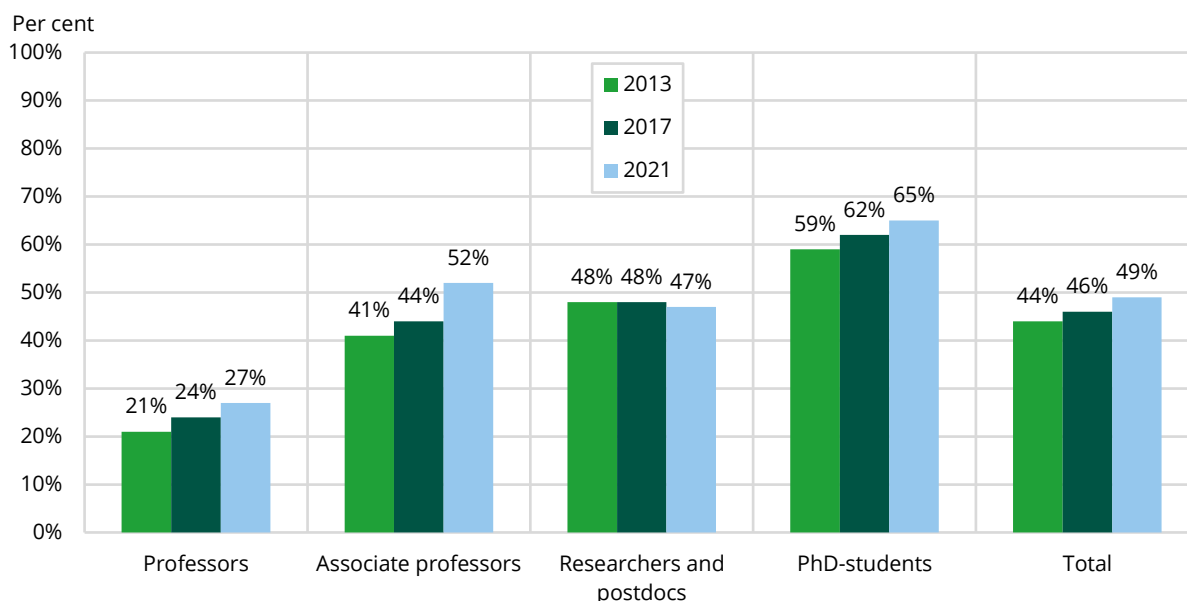
Figure 3.2 Share of researchers by academic positions at university departments in 2013, 2017 and 2021. Units in the bioscience evaluation.



Source: Statistics Norway

Overall, there is gender balance with 49 per cent women among the researchers (Figure 3.3) in 2021, and the share of women increased from 44 per cent in 2013.

Figure 3.3 Share of female researchers by academic position in 2013, 2017 and 2021. Units in the bioscience evaluation

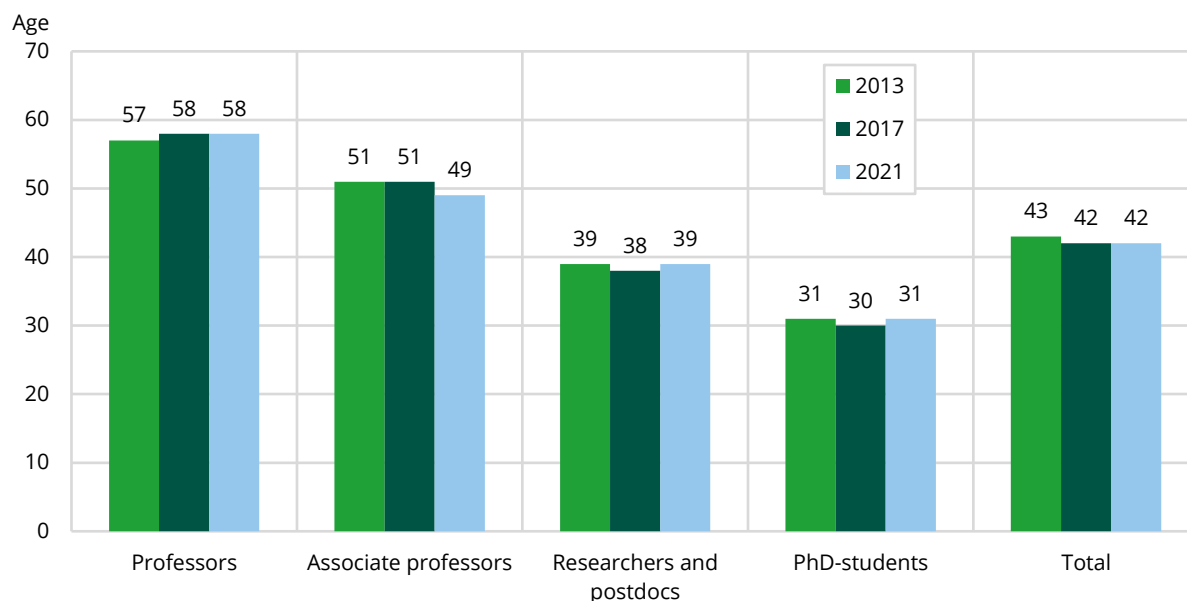


Source: Statistics Norway

The gender balance varies among the research groups, and for PhD-students, women are in majority with a share of 65 per cent in 2021. Among researcher and postdocs and associate professors, women account for about the half of the population. However, female professors in 2021 account for just 27 per cent, but the share increased since 2013 when female professors only accounted for about 21 per cent.

Data for the entire higher education sector is presented in connection with the tables, later in this chapter.

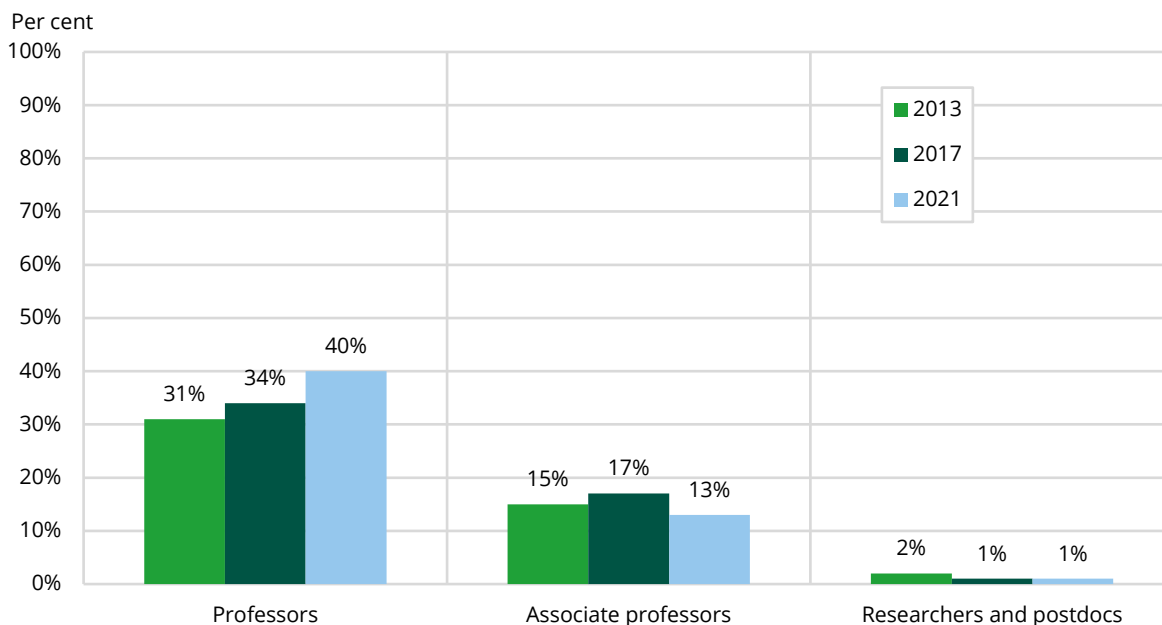
Figure 3.4 Average age of the researchers by academic position in 2013, 2017 and 2021. Units in the bioscience evaluation



Source: Statistics Norway

The average age of the total research population of the university departments (in this evaluation) was 42 years in 2021, the same as in 2017, while it was 43 years in 2013. Overall, the average ages have been quite stable for all positions among the period. The average age for professor was 58 years for both 2017 and 2021, while the average age in 2013 was 57.

Figure 3.5 Share of researchers aged 62 years and older by academic position in 2013, 2017 and 2021. Units in the bioscience evaluation

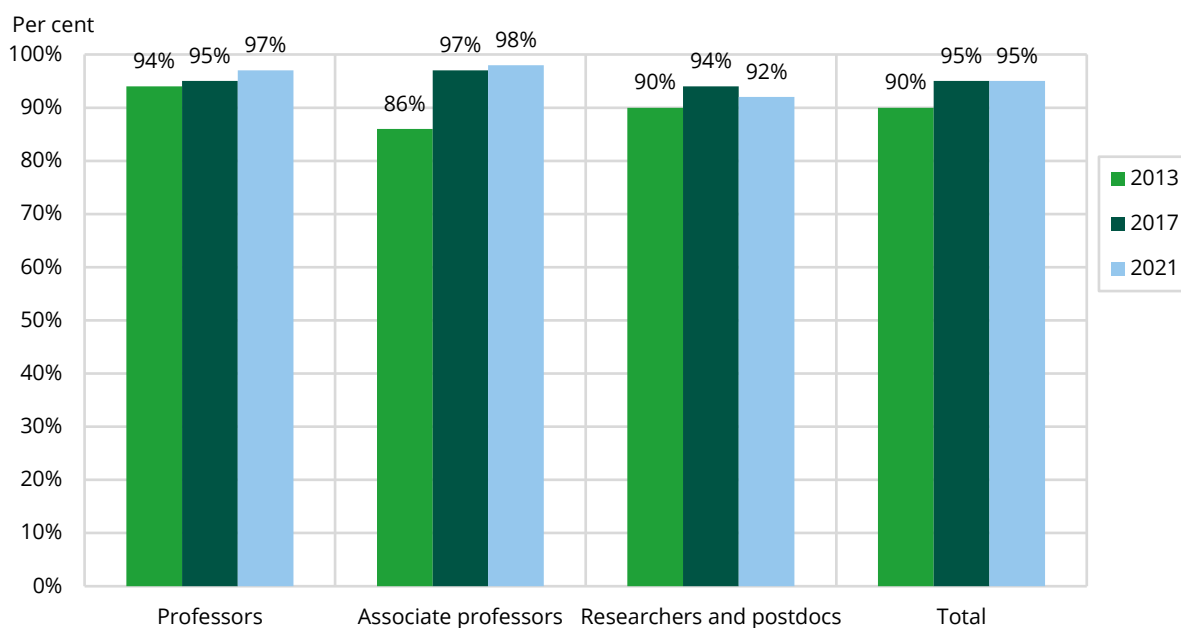


Source: Statistics Norway

Some of the staff are reaching the retirement age, which is 67 years in Norway. However, it is possible to retire at 62 years Figure 3.5 shows that 40 per cent of the professors in 2021 were 62 years or older, and this share increased from 31 per cent in 2013 to 34 per cent in 2017. For associate professors, only 13 per cent were 62 years or older.

Almost all professors and associate professors have a PhD (Figure 3.6), and the PhD-density among these personnel increased since 2013.

Figure 3.6 Share of researchers with PhD-degree by academic position in 2013, 2017 and 2021. Units in the bioscience evaluation

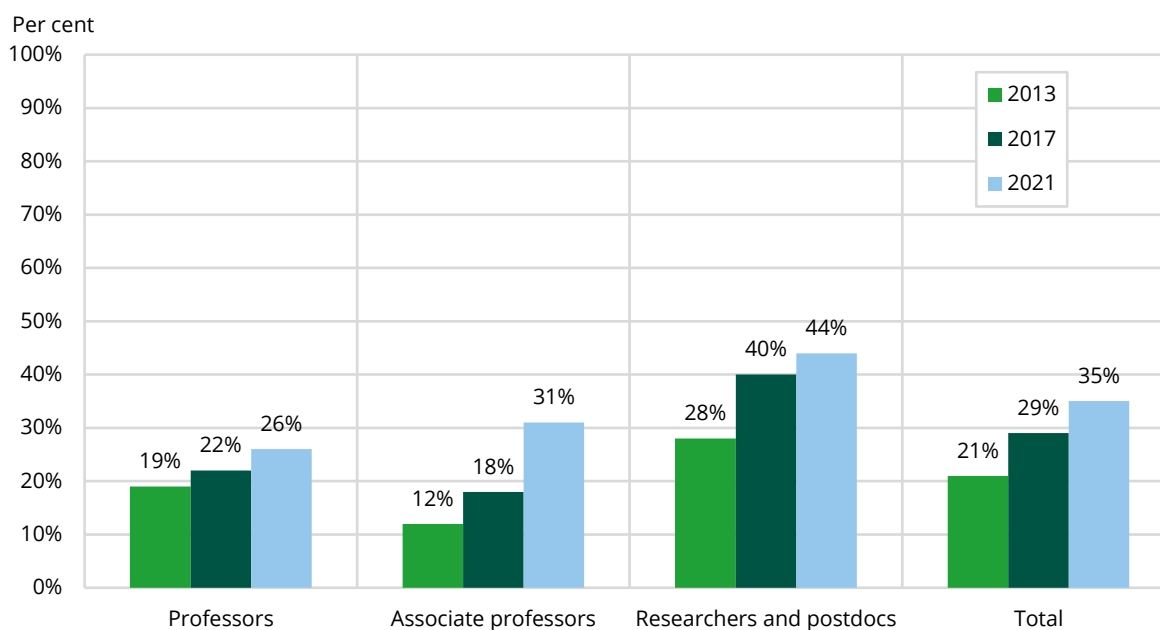


Source: Statistics Norway

Most of the foreign PhD-degree holders are foreign researchers. Based on this, it can be assumed that foreign researchers account for 35 per cent of the population in 2021, and foreign researchers increased for all academic positions as well since 2013. Among professors, 26 per cent are foreign citizens, while the share is 31 per cent among associate professors. Researchers and postdoc have the highest share of foreigners with about 44 per cent. As we use foreign PhD-degree as an indicator for foreign citizenship, we are not able to estimate the share of foreign PhD-students. However, from the official statistics on awarded doctoral degrees, 43 per cent of awarded doctoral degrees were foreigners and as much as 63 per cent were foreigners within mathematics and natural sciences.

In addition to the researchers with a foreign PhD-degree, there are researchers with a non-Norwegian citizenship who complete their doctoral degree in Norway. The actual number of foreign researchers is hence higher than what is presented here. However, as we do not have data on citizenship in the Register of research personnel, the presented numbers are estimates on foreign citizenship.

Figure 3.7 Share of researchers with foreign PhD-degree by academic position in 2013, 2017 and 2021. Units in the bioscience evaluation



Source: Statistics Norway

In the following Tables 3.2–3.8 data for each of the units included in the bioscience evaluation from the higher education sector are presented together with some overall figures for the higher education sector.

Table 3.2 Researchers in units included in the bioscience evaluation by main field of R&D. Higher education sector. 2013, 2017, 2021

Institution	Department	Field of R&D in 2021	2013	2017	2021
Nord University	Faculty of Biosciences and Aquaculture	Biotechnology	32	66	86
Norwegian University of Life Sciences	Faculty of Biosciences	Unspecified Agriculture and Fisheries	81	121	91
Norwegian University of Life Sciences	Faculty of Chemistry, Biotechnology and Food Science	Unspecified natural sciences	81	100	112
Norwegian University of Life Sciences	Faculty of Environmental Sciences and Natural Resource Management	Unspecified Agriculture and Fisheries	167	135	137
Norwegian University of Life Sciences	Faculty of Veterinary Medicine	Veterinary medicine	174	176	160
Norwegian University of Science and Technology	Department of Biology	Biosciences	94	122	113
Norwegian University of Science and Technology	Department of Biotechnology and Food Science	Biotechnology	38	73	74
Norwegian University of Science and Technology	NTNU University Museum				
UIT The Arctic University of Norway	The Department of Natural History	Biosciences	21	26	30
UIT The Arctic University of Norway	Faculty of Biosciences, Fisheries and Economics	Biosciences/Economics	183	238	251
UIT The Arctic University of Norway	The Arctic University Museum of Norway	Humanities and arts	13	14	35
University of Agder	Department of Natural Sciences	Biosciences	18	23	32
University of Bergen	Department of Biological Sciences	Biosciences	119	124	166
University of Bergen	University Museum of Bergen	Biosciences	19	23	23
University of Oslo	Department of Biosciences	Biosciences	231	226	176
University of Oslo	Natural History Museum	Biosciences	50	51	61
University of Stavanger	Department of Chemistry, Bioscience and Environmental Engineering	Unspecified natural sciences			44
Total			1,321	1,518	1,591

Source: Statistics Norway

Table 3.2 shows the number of researchers in the evaluated units for the years 2013, 2017 and 2021, by field in 2021. There was a growth of 20 per cent from 2013 to 2021. This is below the growth of the higher education sector in total. Overall, there was a growth in the total number of researchers in the higher education sector of 35 per cent from 2013 to 2021. The evaluated units had a growth of 5 percentage points below the total from 2013 to 2017 and 9 percentage points below from 2017 to 2021.

The table also include a column for the units' fields of R&D based in the maximum classification criteria (see section 2.4). Most of the units, a total of eight, are classified as biosciences (i.e., most of their research are within biosciences). In addition, two units are classified as biotechnology, one as veterinary medicine, while two units are either unspecified agricultural sciences or unspecified natural sciences. At last, one unit each are classified as economics and humanities and arts.

Table 3.3 Number of researchers by academic positions and university department in 2021

Institution	Department	Professors	Associate professors	Researchers and postdocs	PhD-students	Total
Nord University	Faculty of Biosciences and Aquaculture	13	24	15	34	86
Norwegian University of Life Sciences	Faculty of Biosciences	16	6	44	25	91
Norwegian University of Life Sciences	Faculty of Chemistry, Biotechnology and Food Science	22	13	35	42	112
Norwegian University of Life Sciences	Faculty of Environmental Sciences and Natural Resource Management	41	20	33	43	137
Norwegian University of Life Sciences	Faculty of Veterinary Medicine	31	48	37	44	160
Norwegian University of Science and Technology	Department of Biology	27	9	37	40	113
Norwegian University of Science and Technology	Department of Biotechnology and Food Science	9	12	23	30	74
Norwegian University of Science and Technology	NTNU University Museum The Department of Natural History	4	6	14	6	30
UIT The Arctic University of Norway	Faculty of Biosciences, Fisheries and Economics	69	51	43	88	251
UIT The Arctic University of Norway	The Arctic University Museum of Norway	9	8	11	7	35
University of Agder	Department of Natural Sciences	6	15	5	6	32
University of Bergen	Department of Biological Sciences	42	17	53	54	166
University of Bergen	University Museum of Bergen	5	8	6	4	23
University of Oslo	Department of Biosciences	34	11	69	62	176
University of Oslo	Natural History Museum	15	9	22	15	61
University of Stavanger	Department of Chemistry, Bioscience and Environmental Engineering	7	10	13	14	44
Total		350	267	460	514	1,591

Source: Statistics Norway

In Table 3.3 the total number of researchers at the evaluated institutions are presented by position group. Overall PhD-students is the largest group, but their relative size differs among the units. At the Faculty of Veterinary Medicine, the Department of Natural sciences, and at the University Museum of Bergen the number of associate professors is larger than the number of PhD-students. At the Faculty of Environmental Sciences and Natural Resource Management the number of full professors is almost as high as the number of PhD-students. There is considerable variance in the unit's size. Some of the units have only about 30-40 researchers while the largest have more than 250 researchers. The largest unit, The Faculty of Biosciences, Fishery and Economics, consists of three university departments. The average size of the units are 99 researchers.

Table 3.4 Share of researchers by academic positions and university departments in 2021

Institution	Department	Professors	Associate professors	Researchers and postdocs	PhD -students
Nord University	Faculty of Biosciences and Aquaculture	15	28	17	40
Norwegian University of Life Sciences	Faculty of Biosciences	18	7	48	27
Norwegian University of Life Sciences	Faculty of Chemistry, Biotechnology and Food Science	20	12	31	38
Norwegian University of Life Sciences	Faculty of Environmental Sciences and Natural Resource Management	30	15	24	31
Norwegian University of Life Sciences	Faculty of Veterinary Medicine	19	30	23	28
Norwegian University of Science and Technology	Department of Biology	24	8	33	35
Norwegian University of Science and Technology	Department of Biotechnology and Food Science	12	16	31	41
Norwegian University of Science and Technology	NTNU University Museum The Department of Natural History	13	20	47	20
UIT The Arctic University of Norway	Faculty of Biosciences, Fisheries and Economics	27	20	17	35
UIT The Arctic University of Norway	The Arctic University Museum of Norway	26	23	31	20
University of Agder	Department of Natural Sciences	19	47	16	19
University of Bergen	Department of Biological Sciences	25	10	32	33
University of Bergen	University Museum of Bergen	22	35	26	17
University of Oslo	Department of Biosciences	19	6	39	35
University of Oslo	Natural History Museum	25	15	36	25
University of Stavanger	Department of Chemistry, Bioscience and Environmental Engineering	16	23	30	32
Total		22	17	29	32

Source: Statistics Norway

Table 3.4 show the relative share of the different position groups at the higher education units of the evaluation. The lowest share of PhD-students can be found the Department of Natural sciences at University of Agder and at the University Museum of Bergen; both with less than 20 per cent of PhD-students. The highest share of full professors is at the Faculty of Environmental Sciences and Natural Resource Management where they make up 30 per cent of total staff.

Table 3.5 Share of female researchers by academic positions and university department in 2021

Institution	Department	Professors	Associate professors	Researchers and postdocs	PhD-students	Total
Nord University	Faculty of Biosciences and Aquaculture	8	38	33	41	34
Norwegian University of Life Sciences	Faculty of Biosciences	31	33	50	56	47
Norwegian University of Life Sciences	Faculty of Chemistry, Biotechnology and Food Science	14	54	43	69	48
Norwegian University of Life Sciences	Faculty of Environmental Sciences and Natural Resource Management	29	40	30	67	43
Norwegian University of Life Sciences	Faculty of Veterinary Medicine	19	83	43	80	61
Norwegian University of Science and Technology	Department of Biology	22	44	51	73	51
Norwegian University of Science and Technology	Department of Biotechnology and Food Science	33	58	48	70	57
Norwegian University of Science and Technology	NTNU University Museum The Department of Natural History	0	0	50	50	33
UIT The Arctic University of Norway	Faculty of Biosciences, Fisheries and Economics	35	53	49	64	51
UIT The Arctic University of Norway	The Arctic University Museum of Norway	56	50	64	57	57
University of Agder	Department of Natural Sciences	33	60	60	83	59
University of Bergen	Department of Biological Sciences	31	47	60	61	52
University of Bergen	University Museum of Bergen	40	50	83	50	57
University of Oslo	Department of Biosciences	24	45	43	69	49
University of Oslo	Natural History Museum	13	22	36	67	36
University of Stavanger	Department of Chemistry, Bioscience and Environmental Engineering	29	40	38	57	43
Total		27	52	47	65	49

Source: Statistics Norway

Table 3.5 presents gender balance at the different institutions by share of female researchers among the different position groups. For the higher education sector in total, the share of women among full professors is 34 per cent, and within natural sciences the share is 21 per cent. Among the units in the evaluation the share is in between these figures at 27 per cent.

For associate professors the share of women for the total higher education sector matches the share of the evaluated units at 51 per cent and 52 per cent respectively. For natural sciences at national level the share of women among associate professors is lower at 39 per cent.

Table 3.6 Share of professors, associate professors and postdoc/researchers with PhD-degree in 2021

Institution	Department	Professors	Associate professors	Postdoc/ Researchers	Sum
Nord University	Faculty of Biosciences and Aquaculture	100	100	87	96
Norwegian University of Life Sciences	Faculty of Biosciences	100	100	95	97
Norwegian University of Life Sciences	Faculty of Chemistry, Biotechnology and Food Science	95	100	97	97
Norwegian University of Life Sciences	Faculty of Environmental Sciences and Natural Resource Management	100	100	88	96
Norwegian University of Life Sciences	Faculty of Veterinary Medicine	97	100	86	95
Norwegian University of Science and Technology	Department of Biology	89	100	95	93
Norwegian University of Science and Technology	Department of Biotechnology and Food Science	100	100	83	91
Norwegian University of Science and Technology	NTNU University Museum The Department of Natural History	100	100	86	92
UIT The Arctic University of Norway	Faculty of Biosciences, Fisheries and Economics	94	94	93	94
UIT The Arctic University of Norway	The Arctic University Museum of Norway	100	88	82	89
University of Agder	Department of Natural Sciences	100	100	100	100
University of Bergen	Department of Biological Sciences	98	100	96	97
University of Bergen	University Museum of Bergen	80	100	100	95
University of Oslo	Department of Biosciences	100	100	93	96
University of Oslo	Natural History Museum	100	89	91	93
University of Stavanger	Department of Chemistry, Bioscience and Environmental Engineering	100	90	77	87
Total		97	98	92	95

Source: Statistics Norway

Table 3.6 show that in sum 95 per cent of the professors, associate professors and postdoc/researchers holds a PhD-degree. All these academic positions require a PhD, so this is somehow expected. For the Norwegian higher education sector, including PhD-students, in total the share is 50 per cent.

Table 3.7 Share of professors, associate professors, and postdoc/researchers with foreign PhD-degree in 2021.

Institution	Department	Professors	Associate professors	Postdoc/ Researchers	Sum
Nord University	Faculty of Biosciences and Aquaculture	62	38	47	46
Norwegian University of Life Sciences	Faculty of Biosciences	19	33	36	32
Norwegian University of Life Sciences	Faculty of Chemistry, Biotechnology and Food Science	27	8	51	36
Norwegian University of Life Sciences	Faculty of Environmental Sciences and Natural Resource Management	20	30	27	24
Norwegian University of Life Sciences	Faculty of Veterinary Medicine	10	15	22	16
Norwegian University of Science and Technology	Department of Biology	37	78	59	53
Norwegian University of Science and Technology	Department of Biotechnology and Food Science	33	17	43	34
Norwegian University of Science and Technology	NTNU University Museum The Department of Natural History	0	50	43	38
UIT The Arctic University of Norway	Faculty of Biosciences, Fisheries and Economics	28	24	40	29
UIT The Arctic University of Norway	The Arctic University Museum of Norway	11	50	55	39
University of Agder	Department of Natural Sciences	17	27	80	35
University of Bergen	Department of Biological Sciences	12	47	42	31
University of Bergen	University Museum of Bergen	40	75	50	58
University of Oslo	Department of Biosciences	35	36	46	42
University of Oslo	Natural History Museum	33	44	64	50
University of Stavanger	Department of Chemistry, Bioscience and Environmental Engineering	71	40	54	53
Total		26	31	44	35

Source: Statistics Norway

As mentioned in the introduction part, a foreign PhD-degree is an indicator of foreign citizenship, since most of the researchers with a foreign PhD-degree, will also be a foreigner. Among the evaluation units, 35 per cent of the research personnel had a foreign doctoral degree. This is a higher share than in the total higher education where 14 per cent have a foreign doctoral degree and this is also higher than within natural sciences at 26 per cent. Among the professors, 26 per cent have a foreign doctoral degree, and the share is even higher for associate professors and researchers and postdocs, 31 and 44 per cent respectively.

Table 3.8 Average age of researchers by professors, associate professors, researchers and postdoc, and share of professors 62 years and older, in 2021

Institution	Department	Professors	Associate professors	Researchers and postdocs	Share of full professors 62 years and older
Nord University	Faculty of Biosciences and Aquaculture	55.8	49.8	42.1	15
Norwegian University of Life Sciences	Faculty of Biosciences	59.8	48.3	39.7	38
Norwegian University of Life Sciences	Faculty of Chemistry, Biotechnology and Food Science	58.5	47.8	36.7	36
Norwegian University of Life Sciences	Faculty of Environmental Sciences and Natural Resource Management	56.1	52.0	39.6	27
Norwegian University of Life Sciences	Faculty of Veterinary Medicine	60.5	49.3	40.5	58
Norwegian University of Science and Technology	Department of Biology	58.4	48.6	35.9	48
Norwegian University of Science and Technology	Department of Biotechnology and Food Science	57.2	43.8	36.7	33
Norwegian University of Science and Technology	NTNU University Museum The Department of Natural History	50.5	46.2	38.1	0
UIT The Arctic University of Norway	Faculty of Biosciences, Fisheries and Economics	57.5	48.1	38.8	38
UIT The Arctic University of Norway	The Arctic University Museum of Norway	59.0	53.0	44.2	56
University of Agder	Department of Natural Sciences	62.2	50.5	39.8	67
University of Bergen	Department of Biological Sciences	58.6	47.9	38.7	40
University of Bergen	University Museum of Bergen	59.0	44.5	42.3	40
University of Oslo	Department of Biosciences	57.7	44.9	38.1	44
University of Oslo	Natural History Museum	56.6	51.2	38.7	47
University of Stavanger	Department of Chemistry, Bioscience and Environmental Engineering	58.0	45.1	35.7	43
Total		58.0	48.5	38.6	40

Source: Statistics Norway

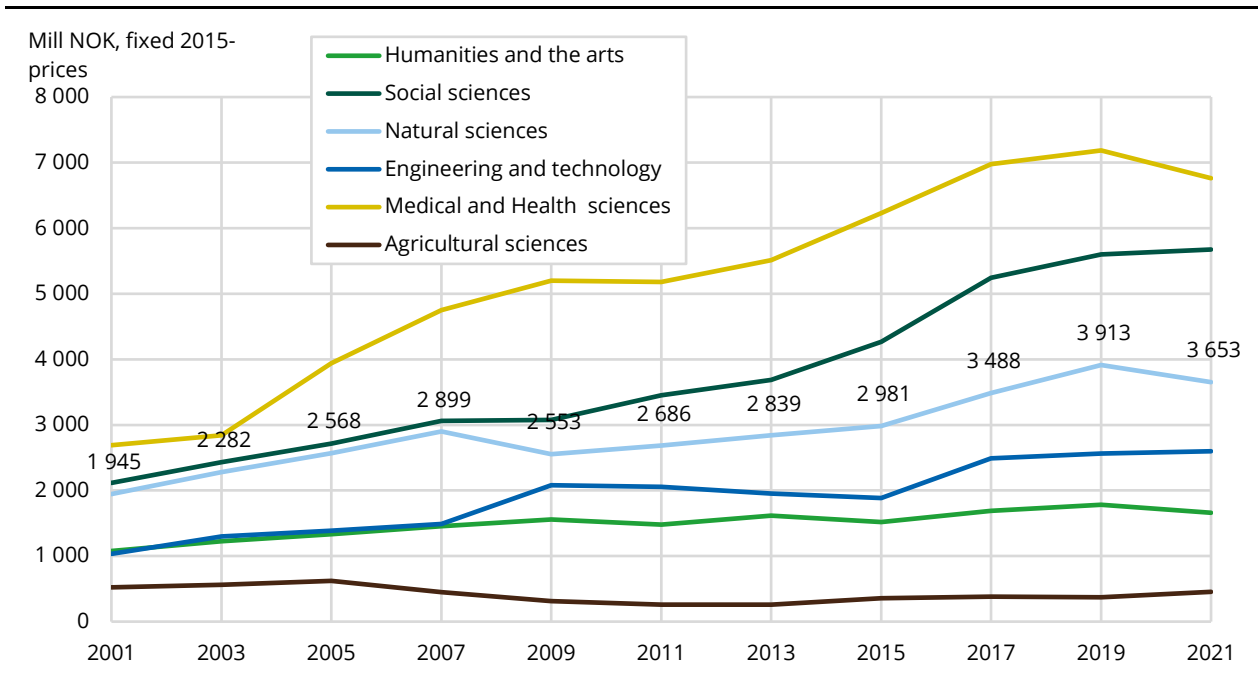
Average age of researchers in the evaluation units were 58 years for full professors, 48.5 years for associate professors and 38.6 years for researchers and postdocs. For the higher education sector in total, the corresponding figures were respectively 56.0, 47.8 and 44.7 years old.

The R&D personnel in the evaluated units are younger than for the total of the higher education sector: They are around a year younger at the professor levels and for the group of researchers and postdocs about 6 years younger.

3.2. R&D expenditure in the higher education sector 2021

R&D expenditure can be a measure for input to the research system. In 2021, current R&D expenditure in the higher education sector amounted to 24,3 billion NOK, which is about 1/3 of total R&D in Norway. This was a decrease of about 670 million NOK compared to 2019. R&D expenditure in natural sciences amounted to about 4.27 billion NOK in 2021. Figure 3.8 displays fixed prices, that are adjusted for inflation. While the expenditure in natural sciences had a growth for about 88 per cent from 2001 to 2021, the total growth was 122 per cent in the same period. Social sciences had the largest growth in this period of almost 170 per cent, followed by engineering and technology and medicine and health sciences, both fields with a growth of about 150 per cent.

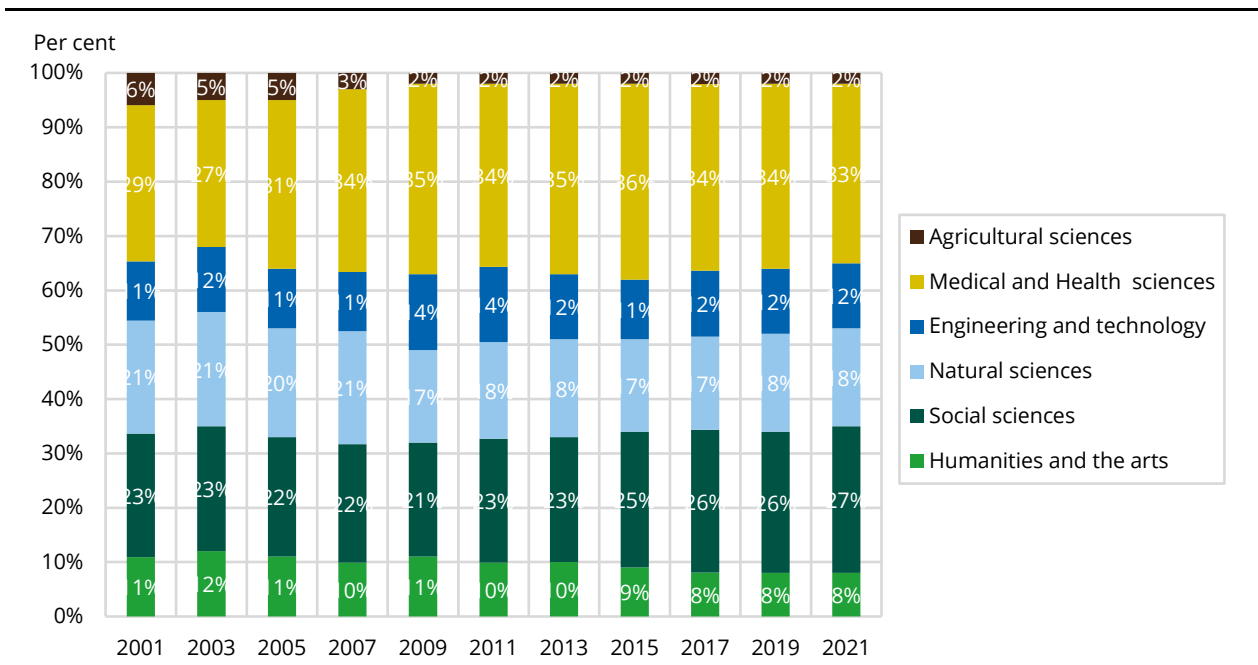
Figure 3.8 Current expenditure on R&D in the higher education sector by fields of R&D. 2001–2021. Mill. NOK, fixed 2015-prices



Source: Statistics Norway

In the whole twenty-year period, natural sciences have been the third largest field of R&D. In the beginning of the period, natural sciences accounted for about 21 per cent of the total R&D and have slowly decreased to about 17-18 per cent in 2009 and remained at this level until today.

Figure 3.9 Current expenditure on R&D in the higher education sector by fields of R&D. 2001–2021. Share of R&D of total R&D

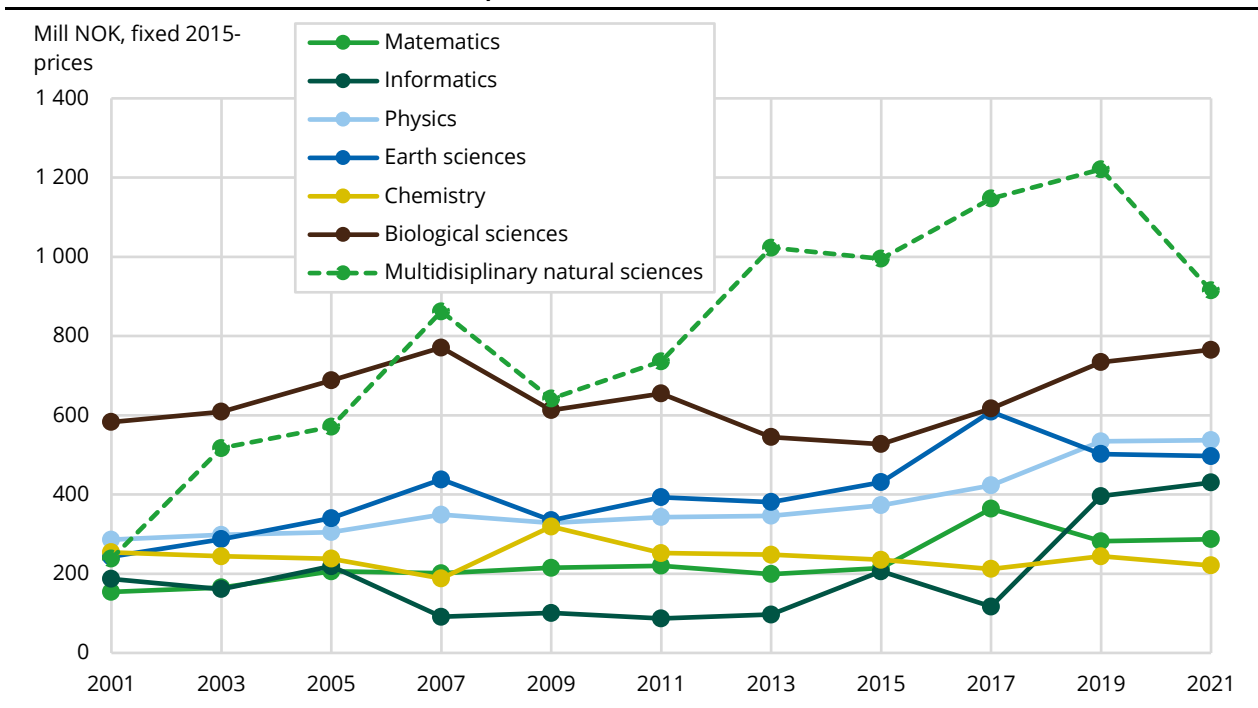


Source: Statistics Norway

If we look into the fields of natural sciences, the biological sciences (dark brown line in Figure 3.10) are the largest field and have been so in the whole period. Based on the university departments' field of R&D classifications, biological sciences amounted to almost 900 million NOK in 2021. This number accounts for about 21 per cent of the total R&D within natural sciences. But in the

beginning of the period (2001), biosciences accounted for 30 per cent. Hence biological sciences have been reduced in favor of other fields. However, the multidisciplinary field account for more than any other field, with a total amount of more than 1 billion NOK in 2021. The reduction from 2019 to 2021, can be explained by changes of fields for two departments from natural sciences to agricultural sciences.

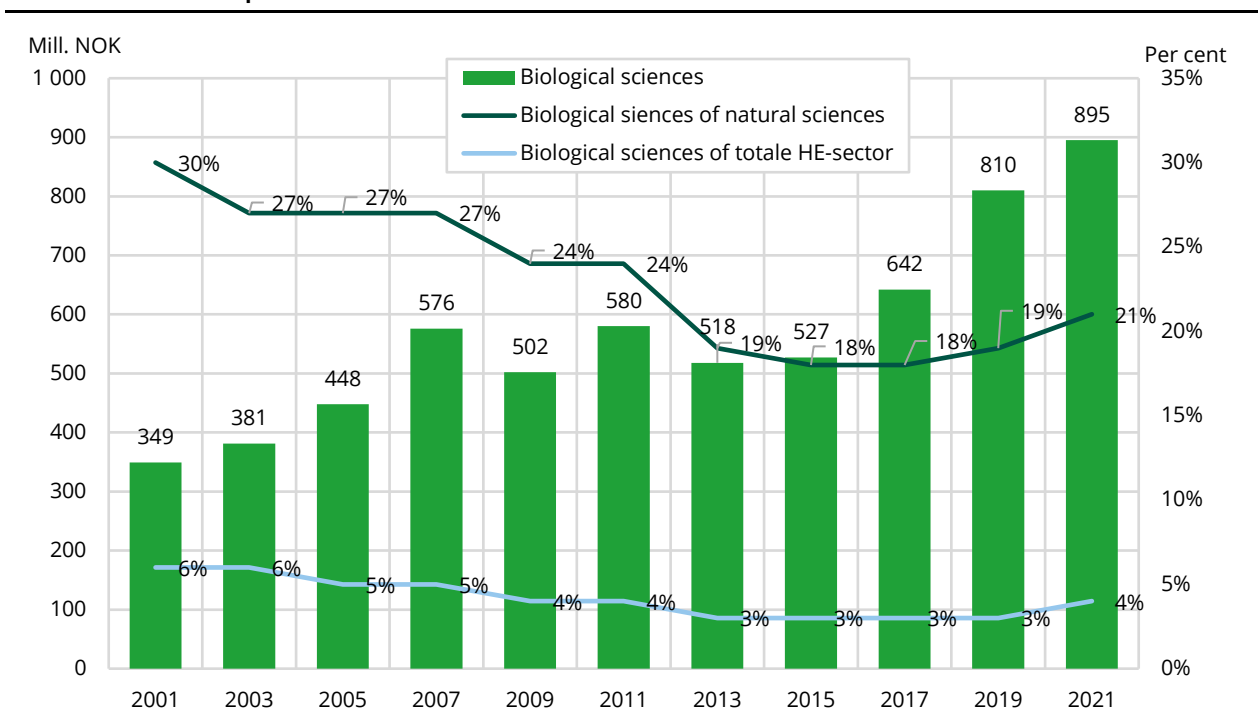
Figure 3.10 Current expenditure on R&D within natural sciences in the higher education sector by fields of R&D. 1991–2021. Mill. NOK fixed 2015-prices



Source: Statistics Norway

We can also compare the development within the field biological sciences with the natural sciences and the total higher education sector (see Figure 3.11). Comparing bioscience to the whole sector, the field has also lost ground since. In the beginning of the period, biosciences accounted for about 6 per cent in 2001, while the share is about 4 per cent today (2021). However, biosciences have had a positive trend compared to the total natural sciences since 2015.

Figure 3.11 Current expenditure on R&D within biosciences in the higher education sector, share of bioscience of natural sciences and share of biological sciences of the total higher education-sector. 2001–2021. Mill. NOK and per cent.

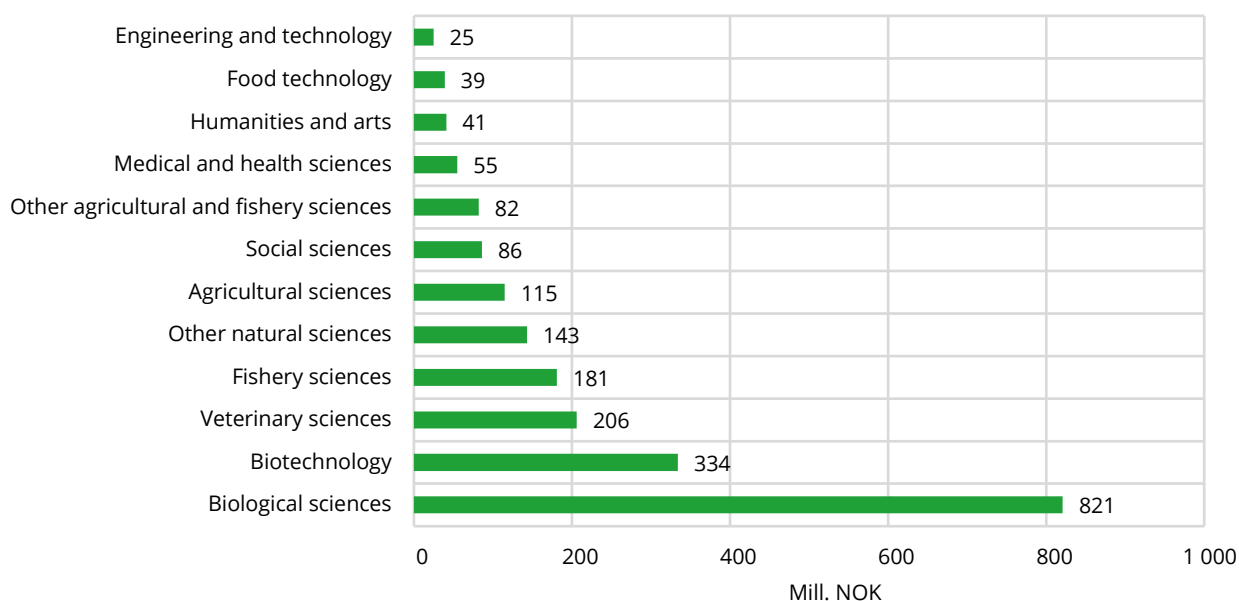


Source: Statistics Norway

3.3. R&D expenditure for the evaluated units in the higher education sector

The evaluated administrative units performed R&D for total 2.1 bill. NOK in 2021. In Figure 3.12 and Figure 3.13 we present R&D activity within all fields from the survey, in the specific field classification. See further explanation about field classification in Chapter 2.4. Most of the R&D the units have conducted were within natural sciences, about 45 per cent, and most of the research was within bio sciences. Further, about 28 per cent of the R&D were within engineering and technology (mostly biotechnology). However, R&D within all fields of R&D are represented, but social sciences, medical and health sciences and humanities and arts, accounted for only 8,5 per cent of the total R&D of the units.

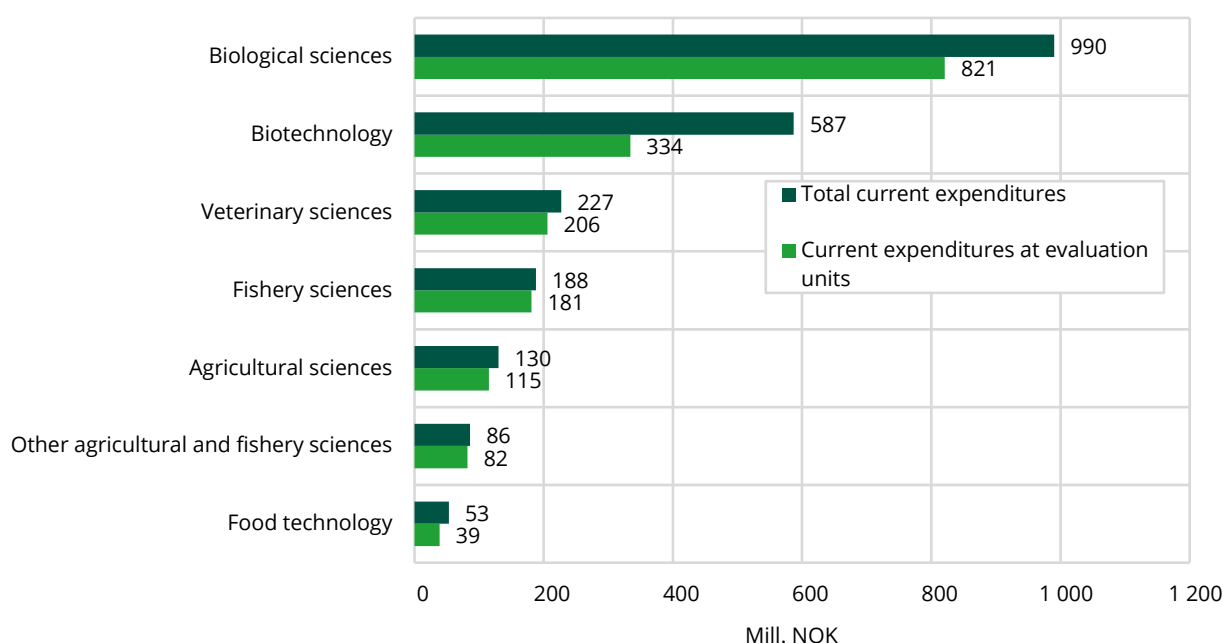
Figure 3.12 Current R&D expenditure by fields among units evaluated. Special field classification. Mill. NOK. 2021



Source: Statistics Norway

Figure 3.13 shows the amount of R&D expenditure among evaluated units within selected fields (which is relevant for the bio sciences) reported in the R&D survey (i.e., specific field classification). A total of 1.8 bill. NOK was spent on these fields among all units in the higher education sector in 2021. The units included in the evaluation of biosciences accounted for almost 80 per cent of this amount (1.8 of 2.3 bill. NOK). The figure does also present the total current expenditure by fields. From this, we can see that most of the R&D within fields, are covered by the evaluated units. In biological sciences, 83 per cent in of the R&D expenditure (821 of 990 mill NOK) is covered. However, the units cover less in biotechnology (57 per cent), but almost all R&D within veterinary sciences, the fishery sciences, agricultural sciences are covered by the evaluated units.

Figure 3.13 Current R&D expenditure within relevant fields in total and among units evaluated. Specific field classification. Mill. NOK. 2021



Source: Statistics Norway

4. The institute sector

In this evaluation, five research institutes from the Norwegian institute sector are included in the analysis. These are:

- Institute of Marine Research
- The Norwegian food research institute Nofima
- Norwegian Institute for Nature Research
- Norwegian Polar Institute
- SINTEF Industry

In the following part of this report, the personnel statistics of these research institutes will be presented aggregated for the group of institutes (Table 4.1-4.3) and for each institute separately (Table 4.4-4.8). The presented indicators are the same as for the higher education sector, except that for the research institutes we will present the researchers in one group only, as the research institutes do not have one standard classification of positions.

4.1. R&D personnel and gender balance in the institute sector

In 2021, a total of 1,285 researchers were employed at the five research institutes that are included in the evaluation of biosciences. Since 2013, the population has had a growth of about 8 per cent. Most of the growth can be linked to Institute of Marine Research and Norwegian Institute for Nature Research, while Nofima had a decrease in the population of researchers. It must be mentioned that only a small part of SINTEF Industry is included in the evaluation, but we are not able to exclude the parts that are not included. In 2018, the National Institute for Nutrition and Seafood Research (NIFES) was merged with the Institute of Marine Research. However, NIFES are included in figures for 2013 and 2017 for comparison reasons.

The gender balance is satisfactory among the evaluated units in the institute sector. Female researchers account for about 40 per cent of the total of the group in 2021, this is an increase from 26 per cent in 2013. While more than half of Nofima's researchers are women, women account for only 32 per cent at SINTEF Industry. At the rest of the institutes, female researchers account for about 40 per cent in 2021. For the institute sector in total there are 51 per cent women and 49 per cent men.

Table 4.1 Number of researchers and share of female researchers in 2013, 2017 and 2021

Institute	Number of researchers			Share of female researchers		
	2013	2017	2021	2013	2017	2021
Institute of Marine Research	354	354	396	35	39	41
Nofima	217	198	204	53	53	52
Norwegian Institute for Nature Research	159	173	200	30	32	40
Norwegian Polar Institute	82	97	90	35	43	37
SINTEF Industry	383	337	395	28	30	32
Sum/average	1,195	1,159	1,285	36	39	40

Source: Statistics Norway

Table 4.2 is showing the share of researchers with a PhD-degree and share of researchers with a foreign PhD-degree, for each institute and the average number. In average almost 80 per cent of all researchers are doctoral degree holders, and the intensity of PhD-degrees, have increased since 2013, when 69 per cent in average had a PhD-degree. The table indicates that the researchers are highly qualified, and the majority of the researchers have a PhD-degree.

On average about 27 per cent of the researchers hold a foreign PhD-degree. Since most of the researchers with foreign degrees most likely are foreigners, this indicator is also an indicator of

foreign researchers. About 40 per cent of the researchers in the Norwegian Polar Institute are foreigners, and for the other institutes about one fourth are foreigners.

Table 4.2 Share of researchers with PhD-degree and share of researchers with foreign PhD-degree. 2013, 2017, 2021

Institute	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Institute of Marine Research	70	81	84	12	19	23
Nofima	67	74	77	12	17	21
Norwegian Institute for Nature Research	69	76	76	15	19	25
Norwegian Polar Institute	65	69	77	40	42	41
SINTEF Industry	72	77	80	22	22	25
Sum/average	69	75	79	20	24	27

Source: Statistics Norway

The average age of the researchers is show in Table 4.3. The average ages of researchers at all institutes are quite similar ranging from 44.6 at SINTEF Industry to 47.6 at the Norwegian Institutes for Nature Research. The total average is 46.5 years the five institutes in 2021.

The table do also show the share of researchers that are 62 years and older for each institute. In the Institute of Marine Research, 14 per cent are 62 years and older, and for the rest of the institutes except SINTEF, the share accounts for about 11 to 13 per cent.

Table 4.3 Average age of researchers and share of researchers that are 62 years and older. 2013, 2017, 2021

Institute	Average age of researchers			Share of researchers 62 years and older		
	2013	2017	2021	2013	2017	2021
Institute of Marine Research	46.4	47.4	46.9	9	13	14
Nofima	44.4	45.6	46.6	5	5	11
Norwegian Institute for Nature Research	47.6	48.5	47.6	8	14	13
Norwegian Polar Institute	44.6	44.0	46.8	1	4	12
SINTEF Industry	43.4	44.7	44.6	6	7	9
Sum/average	45.3	46.0	46.5	6	9	12

Source: Statistics Norway

4.2. R&D personnel data in the institute sector per institute

More detailed statistics for each institute are provided in the following tables.

Table 4.4 Institute of Marine Research. 2013, 2017, 2021

Indicator	2013	2017	2021
Female researchers	124	138	162
Male researchers	230	216	234
Total researchers	354	354	396
Share of female researchers	35	39	41
Share of researchers with PhD-degree	70	81	84
Share of female researchers with PhD-degree	66	80	81
Share of male researchers with PhD-degree	72	81	86
Share of researchers with foreign PhD-degree	12	19	23
Average age, all researchers	46.4	47.4	46.9
Average age, female researchers	41.9	44.0	44.1
Average age, male researchers	48.8	49.6	48.8
Share of researchers 62 years or older	9	13	14

Source: Statistics Norway

Table 4.5 Nofima. 2013, 2017, 2021

Indicator	2013	2017	2021
Female researchers	115	105	107
Male researchers	102	93	97
Total researchers	217	198	204
Share of female researchers	53	53	52
Share of researchers with PhD-degree	67	74	77
Share of female researchers with PhD-degree	71	75	80
Share of male researchers with PhD-degree	63	73	73
Share of researchers with foreign PhD-degree	12	17	21
Average age, all researchers	44.4	45.6	46.6
Average age, female researchers	42.2	44.3	46.2
Average age, male researchers	46.7	47.1	47.0
Share of researchers 62 years or older	5	5	11

Source: Statistics Norway

Table 4.6 Norwegian Institute for Nature Research. 2013, 2017, 2021

Indicator	2013	2017	2021
Female researchers	47	56	79
Male researchers	112	117	121
Total researchers	159	173	200
Share of female researchers	30	32	40
Share of researchers with PhD-degree	69	76	76
Share of female researchers with PhD-degree	62	80	75
Share of male researchers with PhD-degree	71	74	76
Share of researchers with foreign PhD-degree	15	19	25
Average age, all researchers	47.6	48.5	47.6
Average age, female researchers	42.6	43.5	43.6
Average age, male researchers	49.7	50.9	50.1
Share of researchers 62 years or older	8	14	13

Source: Statistics Norway

Table 4.7 Norwegian Polar Institute. 2013, 2017, 2021

Indicator	2013	2017	2021
Female researchers	29	42	33
Male researchers	53	55	57
Total researchers	82	97	90
Share of female researchers	35	43	37
Share of researchers with PhD-degree	65	69	77
Share of female researchers with PhD-degree	69	74	85
Share of male researchers with PhD-degree	62	65	72
Share of researchers with foreign PhD-degree	40	42	41
Average age, all researchers	44.6	44.0	46.8
Average age, female researchers	43.0	40.8	45.9
Average age, male researchers	45.5	46.5	47.3
Share of researchers 62 years or older	1	4	12

Source: Statistics Norway

Table 4.8 SINTEF Industry. 2013, 2017, 2021.

Indicator	2013	2017	2021
Female researchers	109	100	126
Male researchers	274	237	269
Total researchers	383	337	395
Share of female researchers	28	30	32
Share of researchers with PhD-degree	72	77	80
Share of female researchers with PhD-degree	65	71	69
Share of male researchers with PhD-degree	75	79	85
Share of researchers with foreign PhD-degree	22	22	25
Average age, all researchers	43.4	44.7	44.6
Average age, female researchers	39.3	41.5	41.3
Average age, male researchers	45.0	46.0	46.1
Share of researchers 62 years or older	6	7	9

Source: Statistics Norway

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Appendix A: Tables

Biosciences and Aquaculture, Nord University

Table A.1 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	10	12	13	10	8	8
Associate professors	8	17	24	38	29	38
Researchers and postdocs	6	13	15	50	38	33
PhD-students	8	24	34	63	54	41
Total	32	66	86	38	36	34

Source: Statistics Norway

Table A.2 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors		92	100	40	50	62
Associate professors	88	100	100	25	24	38
Researchers and postdocs	67	92	87	17	46	47
Total	83	95	96	29	38	46

Source: Statistics Norway

Table A.3 Average age and share of researchers aged 62 years and older, by academic position and share with temporary position

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors		52.0	55.8	20	17	15	
Associate professors	44.6	50.9	49.8	0	12	21	4
Researchers and postdocs	47.8	37.7	42.1				73
PhD-students	29.6	29.6	30.3				100
Total	43.8	40.8	41.7	6	6	8	53

Source: Statistics Norway

Faculty of Biosciences, Norwegian University of Life Sciences

Table A.4 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	20	31	16	20	35	31
Associate professors	9	12	6	11	33	33
Researchers and postdocs	28	46	44	57	48	50
PhD-students	24	32	25	54	66	56
Total	81	121	91	42	48	47

Source: Statistics Norway

Table A.5 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	10	13	19
Associate professors	89	100	100	0	0	33
Researchers and postdocs	93	91	95	21	33	36
Total	95	96	97	14	21	32

Source: Statistics Norway

Table A.6 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	57.5	59.2	59.8	35	35	38	
Associate professors	58.7	54.8	48.3	33	33	17	
Researchers and postdocs	39.6	40.0	39.7				48
PhD-students	31.4	32.4	30.0				100
Total	43.7	44.4	41.2	12	12	8	51

Source: Statistics Norway

Faculty of Chemistry, Biotechnology and Food Science, Norwegian University of Life Sciences

Table A.7 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	20	21	22	25	24	14
Associate professors	5	5	13	40	40	54
Researchers and postdocs	21	41	35	48	41	43
PhD-students	35	33	42	71	61	69
Total	81	100	112	52	44	48

Source: Statistics Norway

Table A.8 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	95	95	35	33	27
Associate professors	80	100	100	0	0	8
Researchers and postdocs	95	100	97	33	29	51
Total	96	99	97	30	28	36

Source: Statistics Norway

Table A.9 Average age and share of researchers aged 62 years and older, by academic position 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	53.7	56.7	58.5	20	38	36	5
Associate professors	53.4	54.8	47.8	0	40	8	15
Researchers and postdocs	37.0	36.0	36.7				77
PhD-students	28.4	29.7	28.9				100
Total	38.4	39.2	39.3	5	10	8	64

Source: Statistics Norway

Faculty of Environmental Sciences and Natural Resource Management, Norwegian University of Life Sciences

Table A.10 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	50	41	41	26	22	29
Associate professors	29	17	20	45	35	40
Researchers and postdocs	44	32	33	36	16	30
PhD-students	44	45	43	64	56	67
Total	167	135	137	42	33	43

Source: Statistics Norway

Table A.11 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	96	100	100	16	27	20
Associate professors	100	100	100	10	18	30
Researchers and postdocs	93	97	88	23	28	27
Total	96	99	96	17	26	24

Source: Statistics Norway

Table A.12 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position	
	2013	2017	2021	2013	2017	2021	2021	
Professors	55.3	55.5	56.1	22	29	27	2	
Associate professors	50.8	54.2	52.0	10	18	25		
Researchers and postdocs	39.0	40.1	39.6	0	0	3	79	
PhD-students	32.1	31.4	31.4	2	0	2	100	
Total	44.1	43.7	43.8	9	11	13	51	

Source: Statistics Norway

Faculty of Veterinary Medicine, Norwegian University of Life Sciences

Table A.13 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	40	35	31	23	20	19
Associate professors	48	46	48	58	72	83
Researchers and postdocs	43	47	37	67	66	43
PhD-students	43	48	44	70	69	80
Total	174	176	160	55	59	61

Source: Statistics Norway

Table A.14 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	93	97	97	13	11	10
Associate professors	96	98	100	8	15	15
Researchers and postdocs	88	94	86	9	17	22
Total	92	96	95	10	15	16

Source: Statistics Norway

Table A.15 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	58.0	58.9	60.5	38	37	58	
Associate professors	51.4	51.5	49.3	15	20	8	8
Researchers and postdocs	40.6	39.1	40.5	5	2	3	65
PhD-students	33.1	31.1	31.4				100
Total	45.7	44.1	44.5	14	13	14	45

Source: Statistics Norway

Department of Biology, Norwegian University of Science and Technology

Table A.16 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	21	21	27	19	19	22
Associate professors	7	11	9	29	27	44
Researchers and postdocs	31	43	37	26	40	51
PhD-students	35	47	40	51	62	73
Total	94	122	113	34	43	51

Source: Statistics Norway

Table A.17 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	90	90	89	29	29	37
Associate professors	71	100	100	14	55	78
Researchers and postdocs	94	95	95	23	40	59
Total	90	95	93	24	39	53

Source: Statistics Norway

Table A.18 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	58.6	58.4	58.4	14	33	48	
Associate professors	50.6	50.0	48.6	0	18	22	11
Researchers and postdocs	38.9	38.7	35.9	3	2	0	70
PhD-students	30.1	28.7	29.8				100
Total	40.2	39.3	40.1	4	8	13	59

Source: Statistics Norway

Department of Biotechnology and Food Science, Norwegian University of Science and Technology

Table A.19 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	10	9	9	10	22	33
Associate professors	3	10	12	33	70	58
Researchers and postdocs	10	20	23	70	75	48
PhD-students	15	34	30	53	65	70
Total	38	73	74	45	63	57

Source: Statistics Norway

Table A.20 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	30	33	33
Associate professors	100	100	100	33	10	17
Researchers and postdocs	100	80	83	30	35	43
Total	100	90	91	30	28	34

Source: Statistics Norway

Table A.21 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	57.2	52.9	57.2	30	33	33	
Associate professors	46.7	47.6	43.8	0	20	8	
Researchers and postdocs	40.4	36.0	36.7	0	0	4	70
PhD-students	28.1	28.9	30.1				100
Total	40.5	36.4	37.7	8	7	7	62

Source: Statistics Norway

NTNU University Museum The Department of Natural History, Norwegian University of Science and Technology

Table A.22 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	3	3	4			
Associate professors	5	7	6	0	14	0
Researchers and postdocs	10	7	14	30	29	50
PhD-students	3	9	6	67	67	50
Total	21	26	30	24	35	33

Source: Statistics Norway

Table A.23 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	0	0	0
Associate professors	80	100	100	0	29	50
Researchers and postdocs	70	57	86	30	43	43
Total	78	82	92	17	29	38

Source: Statistics Norway

Table A.24 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	54.7	49.0	50.5	33	0	0	
Associate professors	55.0	44.4	46.2	60	14	0	17
Researchers and postdocs	45.4	48.9	38.1	20	14	0	71
PhD-students	28.0	27.2	30.7				100
Total	46.5	40.2	39.9	29	8	0	57

Source: Statistics Norway

Faculty of Biosciences, Fisheries and Economics, UIT The Arctic University of Norway**Table A.25 Number of researchers and share of women, by academic position in 2013, 2017 and 2021**

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	53	63	69	21	30	35
Associate professors	42	53	51	43	42	53
Researchers and postdocs	35	51	43	54	51	49
PhD-students	53	71	88	57	56	64
Total	183	238	251	43	45	51

Source: Statistics Norway

Table A.26 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	85	87	94	13	24	28
Associate professors	83	96	94	14	13	24
Researchers and postdocs	86	98	93	20	47	40
Total	85	93	94	15	28	29

Source: Statistics Norway

Table A.27 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	57.1	58.3	57.5	38	32	38	3
Associate professors	47.5	49.2	48.1	7	8	10	2
Researchers and postdocs	39.0	37.5	38.8	6	0	0	63
PhD-students	32.4	31.5	31.5				100
Total	44.3	43.8	43.3	14	10	12	47

Source: Statistics Norway

The Arctic University Museum of Norway, UiT The Arctic University of Norway

Table A.28 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	2	3	9	50	33	56
Associate professors	5	5	8	40	40	50
Researchers and postdocs	3	2	11	0	50	64
PhD-students	3	4	7	33	25	57
Total	13	14	35	31	36	57

Source: Statistics Norway

Table A.29 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	67	100	0	0	11
Associate professors	60	100	88	0	20	50
Researchers and postdocs	67	100	82	67	100	55
Total	0	0	0	20	30	39

Source: Statistics Norway

Table A.30 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	53.5	60.3	59.0	50	67	56	
Associate professors	57.2	58.4	53.0	40	40	38	
Researchers and postdocs	41.7	41.0	44.2	0	0	9	36
PhD-students	39.0	30.0	31.7				100
Total	48.8	48.2	47.5	23	29	26	31

Source: Statistics Norway

Department of Natural Sciences, University of Agder

Table A.31 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	3	2	6	0	0	33
Associate professors	9	15	15	44	47	60
Researchers and postdocs	3	3	5	67	33	60
PhD-students	3	3	6	67	100	83
Total	18	23	32	44	48	59

Source: Statistics Norway

Table A.32 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	0	0	17
Associate professors	78	100	100	0	13	27
Researchers and postdocs	100	100	100	33	33	80
Total	87	100	100	7	15	35

Source: Statistics Norway

Table A.33 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age		Share of researchers 62 years or older			Share with temporary position	
	2013	2017	2021	2013	2017	2021	2021
Professors	61.0	63.0	62.2	33	50	67	17
Associate professors	50.8	49.6	50.5	11	20	20	7
Researchers and postdocs	38.0	35.3	39.8				100
PhD-students	33.0	27.7	29.3				100
Total	47.4	46.0	47.0	11	17	22	41

Source: Statistics Norway

Department of Biological Sciences, University of Bergen

Table A.34 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	36	35	42	25	29	31
Associate professors	10	11	17	20	27	47
Researchers and postdocs	32	36	53	50	58	60
PhD-students	41	42	54	59	60	61
Total	119	124	166	43	48	52

Source: Statistics Norway

Table A.35 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	97	100	98	22	14	12
Associate professors	80	100	100	10	18	47
Researchers and postdocs	97	100	96	34	47	42
Total	95	100	97	26	29	31

Source: Statistics Norway

Table A.36 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age		Share of researchers 62 years or older			Share with temporary position	
	2013	2017	2021	2013	2017	2021	2021
Professors	56.9	58.0	58.6	28	31	40	
Associate professors	54.8	48.8	47.9	30	18	12	12
Researchers and postdocs	37.1	37.8	38.7				62
PhD-students	29.3	30.0	31.1				100
Total	41.9	41.8	42.2	11	10	11	54

Source: Statistics Norway

University Museum of Bergen, University of Bergen

Table A.37 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	4	4	5	0	25	40
Associate professors	9	10	8	33	40	50
Researchers and postdocs	2	3	6	50	100	83
PhD-students	4	6	4	75	50	50
Total	19	23	23	37	48	57

Source: Statistics Norway

Table A.38 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	75	100	80	25	25	40
Associate professors	56	70	100	22	40	75
Researchers and postdocs	50	100	100	50	67	50
Total	60	82	95	27	41	58

Source: Statistics Norway

Table A.39 Average age and share of researchers aged 62 years and older, by academic position. 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	62.3	62.8	59.0	75	50	40	
Associate professors	51.8	53.0	44.5	33	40	0	
Researchers and postdocs	54.0	42.3	42.3	50	0	0	33
PhD-students	32.8	33.0	32.8				100
Total	50.2	48.1	45.0	37	26	9	26

Source: Statistics Norway

Department of Biosciences, University of Oslo

Table A.40 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	41	44	34	17	20	24
Associate professors	8	6	11	50	50	45
Researchers and postdocs	99	105	69	46	47	43
PhD-students	83	71	62	58	68	69
Total	231	226	176	45	48	49

Source: Statistics Norway

Table A.41 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	98	100	100	17	23	35
Associate professors	75	83	100	25	17	36
Researchers and postdocs	90	94	93	36	53	46
Total	91	95	96	30	43	42

Source: Statistics Norway

Table A.42 Average age and share of researchers aged 62 years and older, by academic position 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	58.1	59.4	57.7	37	41	44	
Associate professors	51.1	50.5	44.9	25	17	9	
Researchers and postdocs	37.4	36.2	38.1	1	0	0	70
PhD-students	30.0	29.9	29.3				100
Total	38.9	39.1	39.2	8	8	9	63

Source: Statistics Norway

Natural History Museum, University of Oslo

Table A.43 Number of researchers and share of women, by academic position in 2013, 2017 and 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	13	15	15	15	7	13
Associate professors	9	10	9	11	20	22
Researchers and postdocs	15	12	22	47	33	36
PhD-students	13	14	15	31	86	67
Total	50	51	61	28	37	36

Source: Statistics Norway

Table A.44 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2013, 2017 and 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	85	87	100	23	27	33
Associate professors	89	90	89	22	30	44
Researchers and postdocs	80	67	91	47	42	64
Total	84	81	93	32	32	50

Source: Statistics Norway

Table A.45 Average age and share of researchers aged 62 years and older, by academic position 2013, 2017, 2021 and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	60.0	58.1	56.6	38	33	47	
Associate professors	48.3	50.2	51.2	11	0	22	
Researchers and postdocs	40.8	43.8	38.7	0	8	0	68
PhD-students	33.8	29.5	29.2				100
Total	45.3	45.3	42.6	12	12	15	49

Source: Statistics Norway

Department of Chemistry, Bioscience and Environmental Engineering, University of Stavanger

Table A.46 Number of researchers and share of women, by academic position in 2021

Academic positions	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	.	.	7	.	.	29
Associate professors	.	.	10	.	.	40
Researchers and postdocs	.	.	13	.	.	38
PhD-students	.	.	14	.	.	57
Total	.	.	44	.	.	43

Source: Statistics Norway

Table A.47 Share of researchers with PhD-degrees and share of foreign PhD-degree, by academic position in 2021

Academic positions	Share of researchers with PhD-degree			Share of researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Professors	.	.	100	.	.	71
Associate professors	.	.	90	.	.	40
Researchers and postdocs	.	.	77	.	.	54
Total	.	.	87	.	.	53

Source: Statistics Norway

Table A.48 Average age and share of researchers aged 62 years and older, by academic position and share with temporary position in 2021

Academic positions	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	.	.	58.0	.	.	43	
Associate professors	.	.	45.1	.	.	10	
Researchers and postdocs	.	.	35.7	.	.		77
PhD-students	.	.	30.9	.	.		100
Total	.	.	39.8	.	.	9	55

Source: Statistics Norway

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