

Information from R&D-statistics. November 2020.

## More than NOK 26 billion on R&D in the higher education sector

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**The R&D survey shows that Norwegian higher education institutions and university hospitals spent a total of NOK 26.3 billion on research and development (R&D) in 2019. That is NOK 3 billion more than in 2017, or 6 per cent growth in fixed prices. From 2015 to 2017, the corresponding growth was over 19 per cent. Labour costs accounted for most of the growth in absolute amounts, while capital expenditures costs had the strongest percentage growth.**

R&D expenditure in the higher education sector in 2019 by type of institution and source of funding. Mill. NOK.

Institution type	Public sources	Hereof The Research Council of Norway	Industrial sector	Other sources	Abroad	Hereof EU	Total
Universities	17 900	3 442	454	499	921	625	19 774
Specialized univ. institutions	1 169	107	33	317	21	12	1 540
State University Colleges	1 220	71	15	13	17	15	1 265
Health trusts (university hospitals)	3 332	287	115	261	48	26	3 756
Total	23 621	3 907	617	1 090	1 007	678	26 335
Share of total	90 %	15 %	2 %	4 %	4 %	3 %	100 %

Source: NIFU, R&D statistics

### Slight increase in other current expenditures

Labour costs make up the largest share of the sector's R&D expenditures<sup>1</sup> at 57 per cent. In 2019, these amounted to NOK 15 billion, almost NOK 2 billion more than in 2017. 2017 was the previous year with a full R&D survey in the sector. The share of wages and salaries has thus increased by one percentage point from 2017.

The R&D statistics show that other current expenditures increased less than the labour costs and accounted for one third of the R&D expenditures in 2019. Other current expenditures for R&D include electricity, rent, cleaning, technical and administrative support

functions as well as direct research operations, such as conference travels, journal subscriptions. Minor investments in infrastructure, such as laboratory equipment and software for PCs are also included. Expenditures on scientific equipment amounted to just under NOK 590 million in 2019, a real growth from 2017 approximately on a par with the increase in total R&D expenditure.

Capital R&D expenditures increased from NOK 1.7 billion to NOK 2.1 billion, corresponding to real growth of 16 per cent. Capital R&D expenditures related to the co-location of the Norwegian University of Life Sciences (NMBU) in Ås still constitute the largest share of these costs. In addition, there were large R&D expen-

ditures associated with the new life sciences building at the University of Oslo in 2019, while the medical and health sciences building at UiT Norway's Arctic University was almost completed.

### More funding from abroad: NOK 1 billion in 2019

In 2019, public funding made up close to 90 per cent of total R&D expenditures, or NOK 23.6 billion. Public funds include general university funds (GUF), The Research Council of Norway and external funding from public institutions. The share of GUF has decreased somewhat from 70.5 per cent in 2017 to just under 69 per cent in 2019.<sup>2</sup> The percentage growth from 2017 to 2019 was largest within funding from abroad, which accounts for NOK 1 billion of the higher education sector's total R&D expenditure, and funding from ministries, etc. which accounts for almost NOK 1.5 billion. Funding from the industrial sector, the Research

Council of Norway and counties and municipalities increased about as much as the total R&D expenditure, while funding from other national sources, funds, etc. increased less than the total.

### Two more universities since 2017

In recent years, there have been many mergers of educational institutions in the higher education sector. But the sector included 32 educational institutions and 6 health trusts both in surveys for 2017 and 2019. Two educational institutions have been granted university status since the previous survey in 2017: the University of South-eastern Norway and OsloMet - the metropolitan university. In 2019, Westerdal's Oslo ACT has become part of Kristiania University College, while the University College of Norwegian Correctional Service (KRUS) has been included in the R&D statistics for the first time.

Current expenditures on R&D in the higher education sector by field of R&D. 2015, 2017 and 2019. Fixed 2015-prices. Mill. NOK.



Source: NIFU, R&D statistics

## Natural sciences displayed the strongest growth

Medical and health sciences is still the largest field of R&D (FORD) in the higher education sector. In 2019, the current expenditures for medical and health sciences amounted to more than NOK 7.9 billion, or 34 per cent of the total. Almost half of this was performed at the university hospitals. Medical and health sciences is followed by the social sciences with just under NOK 6.2 billion, or 26 per cent. Here, the University of Oslo is the largest educational institution.

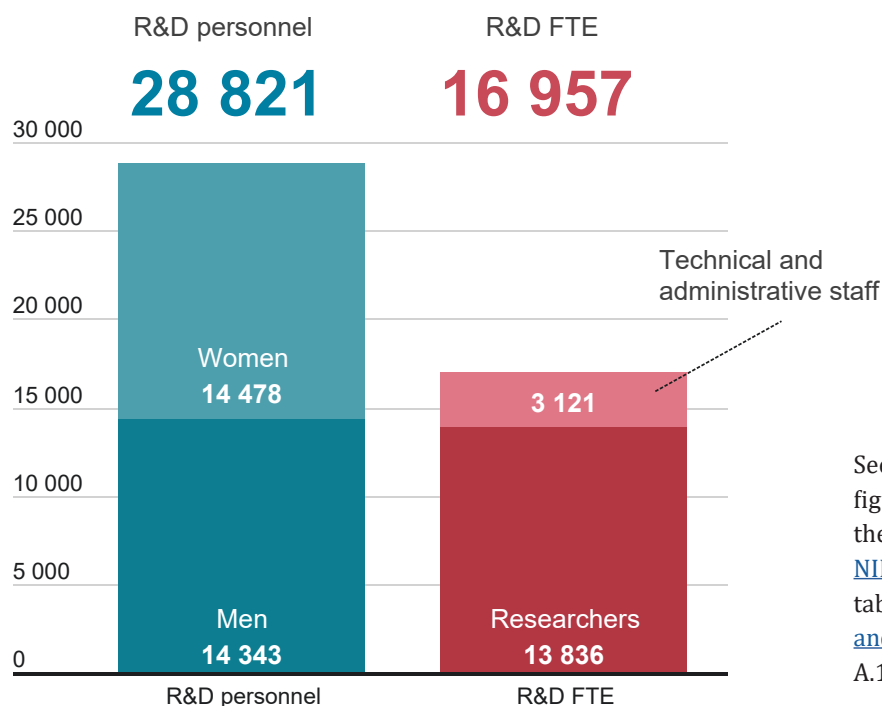
In absolute figures, current expenditures on R&D increased within all fields of R&D in 2019. Measured in fixed prices, natural sciences had by far the strongest increase (12 per cent). Current expenditures within this field amounted to more than 4.3 billion in 2019. Many higher education institutions have increased their R&D efforts within natural sciences, and the University of Oslo displayed the strongest growth. This is also by far the largest institution for this field. The current R&D expenditures for social sciences increased by 6 per cent, on a par with the total R&D expen-

ditures. Agricultural and veterinary sciences, on the other hand, had a real decline of 3 per cent from 2017, accounting for just under 2 per cent of the total current expenditures on R&D in 2019. The Norwegian University of Life Sciences is now the only higher education institution with R&D within this field, but the increased R&D activities at this institution was rather seen within social sciences and natural sciences. In the statistics, all units are assigned one field of R&D according to which field the respondent declares to be dominant.

## Researchers perform more R&D FTE's

In the higher education sector, more than 28,800 researchers participated in R&D activities in 2019, about 1,800 more than in 2017. More than half of the researchers are now women. In total, just under 17,000 R&D full-time equivalents (FTE's) were carried out in 2019. The researchers accounted for more than 13,800 of these. In addition, there are R&D FTE's performed by technical-administrative support staff, which decreased slightly compared to 2017.

Number of R&D personnel by gender and number of R&D full-time equivalents (FTE) by personnel classification in the higher education sector. 2019.



See more details and download figures on R&D activities within the higher education sector at [NIFU's R&D statistics bank](#) and tables from the [Norwegian Science and Technology report](#) (A.7 and A.12, in Norwegian only).

Source: NIFU, R&D statistics

## Notes

1. FO GUF, the share of R&D is based on time use surveys. For external funding, R&D shares are stated by the respondents.
2. Internal funds are categorized as other national sources both years (previously categorized as part of GUF in national presentations).

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### About

NIFU and statistics Norway prepare total figures for Norwegian R&D activity annually. In the higher education sector and health trusts (from 2017), there is a main survey every two years (odd years), while there are annual surveys in the industrial sector and the institute sector. NIFU is responsible for the higher education sector and the institute sector, while Statistics Norway is responsible for the industrial sector. NIFU compiles the data into national totals for Norway. The statistics are compiled in accordance with the OECD guidelines in the so-called Frascati manual and are included in the OECD and Eurostat databases for Science & Technology.

The national R&D statistics for Norway are published by:

NIFU <http://www.nifu.no> and the Research Council of Norway <http://www.forskningsradet.no>

In the R&D statistics bank, users may choose tables and data for downloading: <http://www.foustatistikbanken.no>

Detailed statistics for the industrial sector are published by Statistics Norway <http://www.ssb.no>

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