

## FSO News

01 Population

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DEMOS 1/2021

# Women

## Foreword

2021 is a special year for equality: Switzerland is celebrating 50 years of the right to vote for women (7th February 1971), 30 years of the women's strike (14th June 1991) and 25 years of the Gender Equality Act (1st July 1996). The 1/2021 edition of the Demos newsletter focuses on **women**. In particular, it highlights their demographic attributes and their situation in the areas of education, academic career and politics.

Even on a purely demographic level alone, differences can be seen between women and men. More boys than girls are born in Switzerland and the majority of migrants are male. It could be concluded from this that women are in the minority. However, Switzerland's permanent resident population includes slightly more women than men.

Education is an important factor influencing quality of life as well as employment and career opportunities. How has education developed among women? Are there still gender differences in education completed at upper secondary or tertiary level?

Since the introduction of women's suffrage and voting rights, the proportion of women in politics has steadily increased. A reference criterion for the successful political inclusion of women is their participation in the decision-making processes of parliaments and governments.

All these explanations are enhanced by information boxes on various gender equality statistics with data on violence against women, progress of women's and men's employment, and the representation of women in research as well as in leadership positions.

I hope you enjoy reading this publication.

Fabienne Rausa, FSO

## The "leaky pipeline" at higher education institutions in Switzerland

**Between the first women's strike (1991) and the second women's strike (2019), the proportion of women among staff and students at Swiss universities increased steadily. However, the proportion of women continues to decrease with each possible career step within the higher education sector. This phenomenon which is known as the "leaky pipeline" remains a challenge for future generations of students when looking at appointments and promotions of female professors over the past 3 years.**

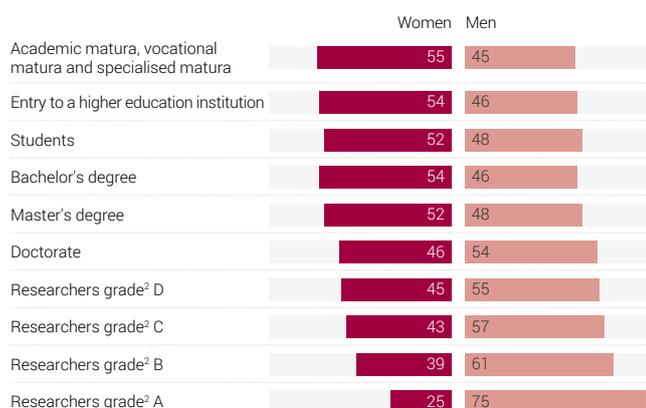
Higher education institutions are committed to the constitutional principle of equal opportunities, especially the actual equality between women and men. Since 2000, the Confederation has supported programmes to improve equal opportunities at universities and institutes of technology, universities of applied sciences and universities of teacher education. With the Confederation's contributions, these have developed a wide range of measures and projects to promote gender equality. While initial programmes targeted specific proportions of women, more recent programmes (from 2016 onwards) have been more practice-oriented and broader in scope; in addition to skills development and mentoring opportunities preparing for leadership functions, they aim to recognise and use diversity, inclusion and equal opportunities (DIEO) as a resource for higher education institutions and to share experiences between universities.<sup>1</sup> Until now, there has

<sup>1</sup> See the program 2021–2024 on diversity, inclusion and equal opportunities in higher education institutions, available in German: *Diversität, Inklusion und Chancengerechtigkeit in der Hochschulentwicklung 2021-2024* [https://www.swissuniversities.ch/fileadmin/swissuniversities/Dokumente/Forschung/Chancengleichheit/P-7\\_Chancengleichheit\\_2021-2024/P7\\_1\\_Ausreibung\\_2021-2024.pdf](https://www.swissuniversities.ch/fileadmin/swissuniversities/Dokumente/Forschung/Chancengleichheit/P-7_Chancengleichheit_2021-2024/P7_1_Ausreibung_2021-2024.pdf)

### Women and men with an academic career (UIT UAS UTE)<sup>1</sup> in Switzerland, 2019

In % (persons)

G1



<sup>1</sup> The higher education sector is not depicted in detail: Research institutes in the federal institutes of technology domain are not considered in these statistics.

<sup>2</sup> Grade: Seniority or step in the hierarchy among researchers in higher education institutions.

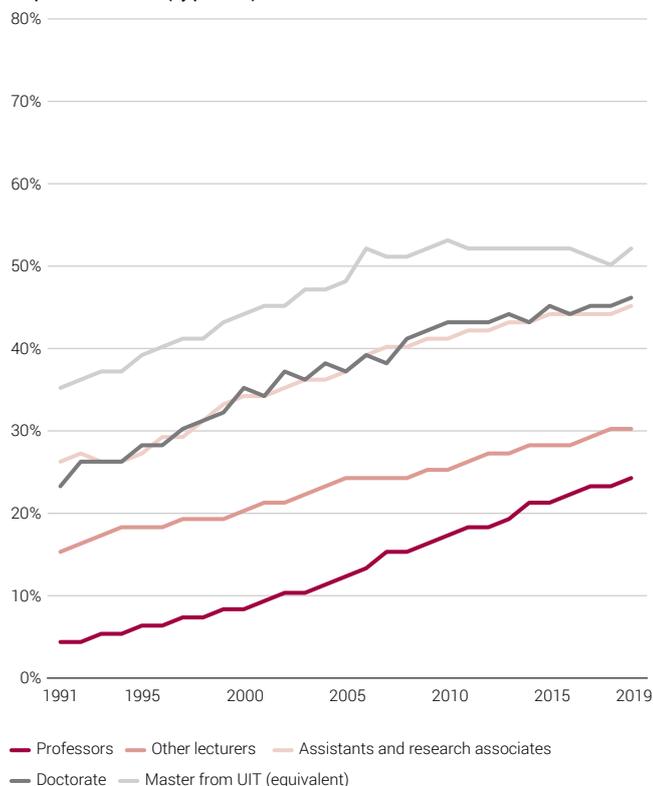
Source: FSO – SIHS

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### Development of the proportion of women with degrees equivalent to a master, doctorates, assistants and research associates, other lecturers and professors at UIT since 1991

G2

Proportion of women (by persons)



1991: 1st women's strike  
2019: 2nd women's strike

Source: FSO – SHIS

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been no official gender or DIEO monitoring to track developments over the long term and across universities, but rather selective studies such as this article<sup>2</sup>. These show that the proportion of women decreases with each possible career step within the higher education sector, a phenomenon also known as the “leaky pipeline” (see Graph G1 for the situation in 2019).

### Universities and institutes of technology UIT

Between the first women's strike (1991) and the second women's strike (2019), the proportion of women with degrees (equivalent to a master degree<sup>3</sup> and doctorates) and in personnel categories at the UIT steadily increased. In 1991, the proportion of women with degrees equivalent to a master was 35%; for doctorates, this figure was exceeded in 2002 and stood at 46% in 2019. For female UIT professors and other lecturers at the UIT, this figure has not yet been reached after almost 30 years (professors 2019: just under 25%, see graphic G2).

A look at the appointments of female and male professors at the UIT over the three-year period 2017–2019 in graphic G3 reveals that the number of men in general is predominant (male share: 68%), and the same also applies for doctorates between 2010 and 2019 (female share: 44%). The gender gap in appointments varies between the groups of departments (24–45%). In medicine and pharmacology, men are overrepresented and women account for less than a quarter (24.4%) of appointments, although women have accounted for 57% of doctorates since 2010. The human and social sciences come close to equality (55.2% compared with 44.8%), although here too 57% of doctorates in the last 10 years were awarded to women. In the exact and natural sciences, the proportion of women among appointments is just under 34%, while this proportion was around 17% among professors in 2019. One can therefore deduce that there has been an improvement in the representation of women in these disciplines. The same conclusion can be drawn in relation to technical sciences (31.1% compared with 18.2% in 2019). Only in this group of departments has the proportion of women among doctorates since 2010 been slightly lower (27%), than that of appointments.

A comparison of full-time equivalents (FTE) shows that female UIT lecturers (professors and other lecturers) are slightly less often employed on a part-time basis than men in both teaching and research, with a difference of under one hour. A larger difference is found among assistants and research associates at the UIT, with men working over 3 hours more in contractual working time, over 2 hours of which are in research and development.

<sup>2</sup> The data used have been taken from the Swiss higher education information system (SHIS).

<sup>3</sup> Degrees equivalent to a master at the UIT: Master (since 2003), diplomas and licentiates

### Appointments of university professors, 2017–2019

By university and sex

G3

University	Women	Men
Uni Basel	22	49
Uni Bern	44	102
Uni Fribourg	16	33
Uni Geneva	46	57
IHEID - Graduate Institute Geneva	3	3
Uni Lausanne	49	93
Uni Lucerne	5	12
Uni Neuchâtel	5	9
Uni St. Gallen	16	38
Uni Zurich	44	114
Uni della Svizzera Italiana	6	36
Swiss DistanceUni	4	3
EPF Lausanne	13	25
ETH Zurich	29	62

Promotions within the category "professors" have not been taken into account. The category "professors" comprises the following subcategories: full professors, extraordinary and associate professors, assistant professors with tenure track, assistant professors without tenure track. Differences to the universities' data are possible.

Source: FSO – SHIS-PERS (calculations)

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### Universities of applied sciences (UAS)

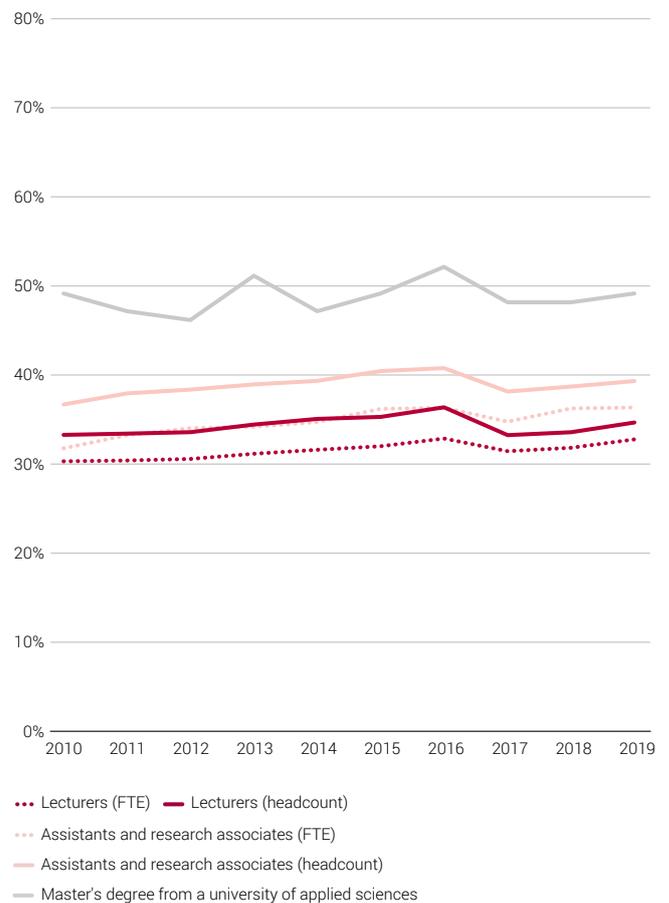
The UAS were established from the end of the 1990s. The statistical surveys at the Federal Statistical Office were set up from 2000 onwards. Due to changes in departments, the data on master's degrees are comparable for the UAS as a whole from 2010 onwards. The concrete planning of a position at a UAS within a university career has only begun in recent years and can be observed in the future. Academic staff at the UAS are mainly recruited from graduates of the UIT and UAS.

Graphic G4 shows the effect of different part-time employment on the proportion of women at the UAS when the calculation is based on FTE rather than on persons. Although the work-time percentage of women at the UAS has increased since 2003, the proportion of women among staff has not been able to catch up with the development of a balanced proportion found among master's degrees at UNI and UAS.

At the UAS, the imbalance in FTE is 3.5 hours for male UAS lecturers (lecturers with management responsibility and other lecturers) and over 4 hours for male UAS assistants and research associates. Teaching accounts for 1.3 hours of the latter and applied research and development for 2.4 hours.

### Development of the proportion of women per person and on the basis of FTE for lecturers, assistants and research associates and for degrees equivalent to a master since 2010 at the universities of applied sciences

G4



Source: FSO – SHIS

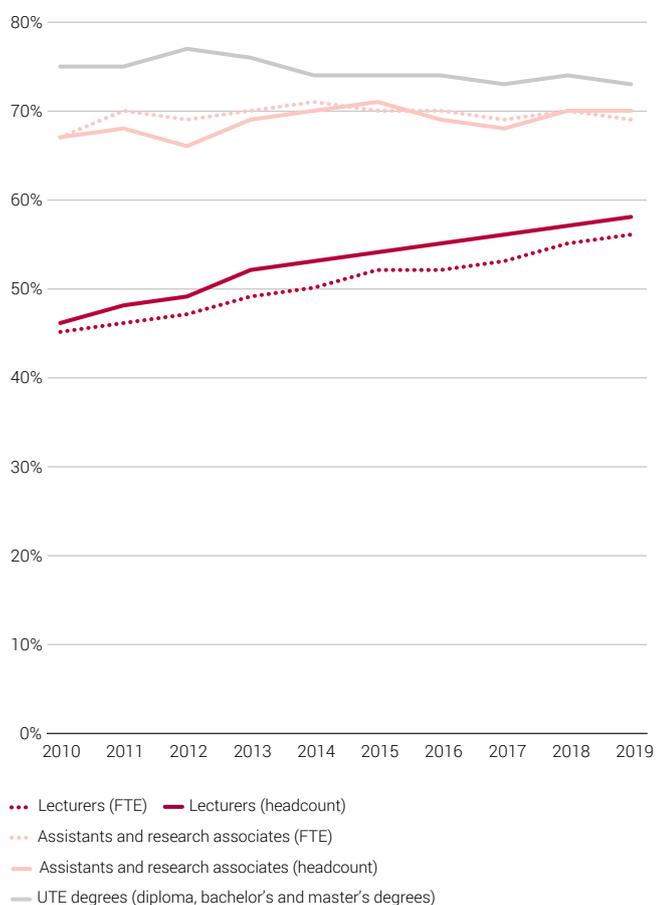
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### University of teacher education UTE

The need for a specialisation in education has required a separate type of higher education institution in many places, which is sometimes integrated into a UAS. The deviation in the proportion of women by FTE and per person for UTE lecturers (lecturers with management responsibility and other lecturers) can be seen in chart G5. For assistants and research associates, it can be seen that the proportion of women by FTE and per person has grown closer together in recent years (66–71%). Since the academic staff of the UTE is made up of graduates from all types of higher education institutions and the UTE degree types differ in their objectives, for the sake of completeness the proportion of women is shown as 73–77% for all UTE degree types (diploma, bachelor, master). The increase in the proportion of women among UTE lecturers to over 50% is based on an increase in both lecturers with management responsibility (2019: 47%) as well as among other lecturers (2019: 57%).

## Development of the proportion of women per person and on the basis of FTE for lecturers, assistants and research associates and for degrees since 2010 at the universities of teacher education

G 5



Source: FSO – SHIS

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At the UTE, the higher FTE of men results in a surplus of 2 hours for UTE lecturers and less than 1 hour for UTE assistants and research associates. The higher work-time percentage among men stands at 2 hours in UTE teaching and less than 1 hour at the UTE in applied research and development.

## Generation replacement

The age distribution between the sexes can indicate whether there are opportunities for a change in the “leaky pipeline” in the coming years due to retirements. In general, the age of staff in the three types of higher education institution has increased in almost all staff categories over the last ten years (2010–2019)<sup>4</sup>.

<sup>4</sup> Age distributions for the three types of higher education institution can be found on the respective sub-pages on higher education staff: [www.statistics.admin.ch](http://www.statistics.admin.ch) → Look for statistics → Education and science → Educational staff → Tertiary education – Higher education institutions

With reference to the highest staff category, female professors and lecturers with management responsibilities are generally younger than their male colleagues. There is a difference of 3 years at the UIT and UAS (UIT median age: 48 compared with 51 years and UAS median age: 50 compared with 53 years) and at the UTE 2 years (52 compared with 54 years).

## Conclusion

The “leaky pipeline” can be seen in all three types of higher education institutions. The greater presence of one sex is not only a snapshot, but may also have a consolidating impact on role models which are also still conveyed by universities. Depending on the type of higher education institution, this may also result in a brain drain among women.

Although women are much more strongly represented than men at the UTE, lecturers with management responsibilities are an exception. In view of the high median age of lecturers with management responsibilities and the upcoming generation replacement associated with this, it will be interesting to see in the next few years whether the “leaky pipeline” in this category will be first closed at the UTE.

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