

Evaluation Package Part B: Quantitative data of the UoA

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Quantitative data of the UoA

In this part of the evaluation package, questions and tables are presented in three sections, which contain quantifiable information about the UoA in support of the statements made in Part A.

B1: Research output / Summary of the scientific results (A2)

B2: Research environment and infrastructure

B3: The impact of engagement and co-operation with society.

B1. Research Output / Summary of the scientific results (A2)

B1.1 Promotions and degrees

This section quantifies the development of scientific staff during 2017-2021 (stage 2), distinguishing total (T) and women (W).

| B1.1.1. Total number of doctoral degrees awarded and promotion of researchers | | | | | | | | | | |
|---|------|---|----|-----------|---|----|------|---|------|---|
| | 2017 | | 20 | 2018 2019 | | 19 | 2020 | | 2021 | |
| | Т | W | Т | W | Т | W | Т | W | Т | W |
| Doctoral degrees | | | | | | | | | | |
| Docent promotions | | | | | | | | | | |
| Professor promotions | | | | | | | | | | |
| TOTAL | | | | | | | | | | |

B1.2 Publications

Publications and other research output achieved during 2017-2021 (stage 2) to provide the publication profile of the UoA.

| Table B1.2.1: Tot | Table B1.2.1: Total number of scientific publications produced by the UoA. | | | | | | | | | | |
|--|--|------|------|------|------|-------|-------------------|--|--|--|--|
| Publication types | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Period average | | | | |
| Article in journal, peer reviewed | | | | | | | | | | | |
| Article in journal, not peer reviewed | | | | | | | | | | | |
| Article in journal, book review | | | | | | | | | | | |
| Monographs | | | | | | | | | | | |
| Article in journal, review (review articles) | | | | | | | | | | | |



| Table B1.2.1: Total number of scientific publications produced by the UoA. | | | | | | | | | | |
|--|------|------|------|------|------|-------|-------------------|--|--|--|
| Publication types | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Period average | | | |
| Edited book | | | | | | | | | | |
| Chapter in book | | | | | | | | | | |
| Conference paper (peer reviewed) | | | | | | | | | | |
| Conference paper (not peer reviewed) | | | | | | | | | | |
| Thesis, doctoral | | | | | | | | | | |
| Thesis, licentiate ¹ | | | | | | | | | | |
| Report | | | | | | | | | | |

¹⁾ Licentiate is a Swedish and Finnish academic degree at graduate level corresponding to approx. half of a Swedish PhD.

| Table B1.2.2. Aggreg | ate pub | lication i | nformati | on | | | |
|---|---------|------------|----------|------|------|-------|-------------------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Period average |
| Total number of publications in DiVA | | | | | | | |
| Total number of publications in DiVA, author fractionalized | | | | | | | |
| Number of publications in Web of Science | | | | | | | |
| Number of publications in Web of Science, author fractionalized | | | | | | | |
| Web of Science visibility (per cent of publications included) | | | | | | | |
| Journal Impact Factor | | | | | | | |
| Norwegian score | | | | | | | |
| Norwegian score fractionalized | | | | | | | |
| Publications ¹ in level 1, Norwegian list | | | | | | | |
| Publications ¹ in level 2, Norwegian list | | | | | | | |

1) Including journals, conferences and books



| Table B1.2.3.1 Citation | on indica | tors Web | o of Scie | nce | | | |
|---|-----------|----------|-----------|------|------|-------|-------------------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Period average |
| Total number of citations | | | | | | | |
| Number of citations, author fractionalized | | | | | | | |
| Citations per publication | | | | | | | |
| Share of publications not cited | | | | | | | |
| Share of publications among the 10 per cent most cited in the field ¹⁾ | | | | | | | |
| Share of publications among the 25 per cent most cited in the field ¹⁾ | | | | | | | |
| WoS H-index for the UoA 2014-2019 | | | | | | | |

¹⁾ Only numbers for 2013-2018 available

| Table B1.2.3.2 Citatio | on and p | ublicatio | n indicat | ors Scop | ous | | |
|---|----------|-----------|-----------|----------|------|-------|-------------------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Period average |
| Average Field- Weighted Citation Impact (FWCI) | | | | | | | |
| Share of publications among the 10 per cent most cited in the field | | | | | | | |
| Share of publications among the 25 per cent most cited in the field | | | | | | | |
| Share of Scopus publications not cited | | | | | | | |
| Scopus visibility (per cent of publications included) | | | | | | | |
| Source Normalized Impact per paper (SNIP) | | | | | | | |
| Average SCImago Journal Rank (SJR) | | | | | | | |
| Scopus H-index for the UoA for 2014-2019 | | | | | | | |



| Table B1.2.4. Authorship | | | | | | | | | | |
|--|------|------|------|------|------|-------|-------------------|--|--|--|
| | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Period average | | | |
| Average no. authors per publication | | | | | | | | | | |
| Share of publications with international co- authors | | | | | | | | | | |
| Share of publications with national co- authors | | | | | | | | | | |

| Table B1.2.5. Role of key scholars | | | | | | | | | |
|---|------|------|------|------|------|-------|-------------------|--|--|
| | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Period average | | |
| Share of publications by the three most active authors ¹ | | | | | | | | | |

¹⁾ Most active authors are determined by calculating the number of authors contributions, that is if a researcher has been author or co-author to x number of publications, he or she has x author contributions. The number of author contributions of the 3 most active authors is then divided with all author contributions for the time period.

| Table B1.2.6. Productivity ¹ | | | | | | | | | | |
|--|------|------|------|------|------|-------|--------------------------|--|--|--|
| | 2017 | 2018 | 2019 | 2020 | 2021 | Total | Total/ Annual average | | | |
| Number of publications in relation to total funding (MSEK) (optional) | | | | | | | | | | |
| Number of publications in relation to FTEs | | | | | | | | | | |
| Number of citations in relation to FTEs | | | | | | | | | | |

¹⁾ FTE refers to time for research



B1.3 Patents

As well as engaging with society through contract research or education, researchers today sometimes patent their findings, commercializing these through multiple routes. These activities are listed in the table below for the years 2017-2021 (stage 2).

| B1.3.1. Patents ¹⁾ | | | |
|-------------------------------|-------------------|------------------------------|----------------------|
| Patent number ² | Short description | Person(s) involved at UoA | Date of registration |
| | | | |

¹⁾ Data should match information held by DiVA.

²⁾ Awarded patents only, not patent applications.

B2. Research environment and infrastructure

B2.1 Staff statistics

Provide information of the number of individuals and full-time equivalents (FTE) of the staff's research activity. The "T" columns show values for a total and "W" for women. The number of individuals and FTE is integrated over the whole year. FTE is only presented for 2017 and 2021.

| Table B2.1.1. Number of individuals and full-time equivalents of permanent research staff | | | | | | | | | | |
|---|----|-----------|---|------|---|------|---|------|---|---|
| Year | 20 | 2017 2018 | | 2019 | | 2020 | | 2021 | | |
| Staff 1) | Т | W | Т | W | Т | w | Т | W | Т | W |
| Professor | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Assoc. prof. | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Assist. prof. | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Lecturer | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Other research staff | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Total Individuals | | | | | | | | | | |
| Total FTE | | | | | | | | | | |

¹⁾ Professor denotes persons employed as full professors. Associate professor denotes staff qualified to act as principal advisor for PhD students (docent appointment or similar). Assistant professors denote the rest of staff with a PhD. Lecturers are teachers/researchers without a PhD. FTE refers to time for research.



| Table B2.1.2. Number of individuals and full-time equivalents of temporary research staff | | | | | | | | | | |
|---|----|-----|----|-----|----|-----|----|----|------|---|
| Year | 20 |)17 | 20 |)18 | 20 | 019 | 20 | 20 | 2021 | |
| Staff ¹ | Т | W | Т | W | Т | W | Т | W | Т | W |
| Guest professors | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Adjunct professors | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Assistant professor | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Post-Docs and research assistants | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Other research staff | | | | | | | | | | |
| FTE | | | | | | | | | | |
| PhD students | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Total individuals | | | | | | | | | | |
| Total FTE | | | | | | | | | | |

¹⁾ FTE refers to time for research

| Table B2.1.3. Number of individuals and full-time equivalents of other staff supporting research in UoA | | | | | | | | | | |
|---|----|----|----|----|----|----|----|----|----|----|
| Year | 20 | 17 | 20 | 18 | 20 | 19 | 20 | 20 | 20 | 21 |
| Staff ¹ | Т | W | Т | W | Т | W | Т | W | Т | W |
| Research assistant/ technician | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Administrator | | | | | | | | | | |
| FTE | | | | | | | | | | |
| Total individuals | | | | | | | | | | |
| Total FTE | | | | | | | | | | |

¹⁾ Fixed term and visiting research staff. Staff is included in the research output as well as in the bibliometric analysis. FTE refers to time for research.



B2.2 Research funding

Sources of research funding and amounts given to the UoA annually during 2017-2021 (stage 2).

| Table B.2.2.1. External funding (money spent in SEK) | | | | | | | | |
|---|------|------|------|------|------|--|--|--|
| | 2017 | 2018 | 2019 | 2020 | 2021 | | | |
| Research Councils (VR, Forte, Formas etc.) | | | | | | | | |
| Swedish Foundations (e.g. Wallenberg, SSF, Vinnova, RJ, KK, Swedish Energy Agency etc.) | | | | | | | | |
| EU | | | | | | | | |
| Other public bodies (e.g. county councils, municipalities, etc.) | | | | | | | | |
| Direct external funding from industry | | | | | | | | |
| Others (please specify) | | | | | | | | |
| TOTAL | | | | | | | | |

| Table B.2.2.2. Total Research Funding | | | | | | | | |
|--|------|------|------|------|------|--|--|--|
| | 2017 | 2018 | 2019 | 2020 | 2021 | | | |
| External funding (from table B.2.2.1.) | | | | | | | | |
| Faculty funding (governmental funding) | | | | | | | | |
| Percentage external funding | | | | | | | | |
| TOTAL | | | | | | | | |

B2.3 Major national collaborations

Each UoA should record the number of major national activities undertaken with partners in Sweden during 2020-2021 by permanent research staff.

| Table B2.3.1 National networks and collaborations | | | | | | | |
|---|--|--|--|--|--|--|--|
| Number of collaborative institutions ¹ | | | | | | | |
| Number of funded national research consortia projects | | | | | | | |

 Research collaborations given here are limited to those with joint research grants in excess of 100 kSEK/year and/or joint publications with the UoA.



| B2.3.2 Name of national project granted and role of UoA | | | | | | | | |
|---|--------------|------------------------------|------------|--|--|--|--|--|
| Project title | Funding body | Role (co-ordinator/ partner) | Start year | | | | | |
| | | | | | | | | |

B2.3.3 Other major national activities according to the tradition of the research field $^{1)}\,$

¹ Please specify: scientific expeditions, field work etc. and list below including duration. Note that the table refers to activities and not research outputs as described in Table A2.2.

B2.4 Major international collaborations

Each UoA should record the number of major international activities undertaken with partners outside of Sweden during 2020-2021 by permanent research staff.

| Table B2.4.1 Number of International networks and collaborations | | | | | |
|--|--|--|--|--|--|
| Collaborative institutions ¹ | | | | | |
| Research visits abroad (one week to one month duration) | | | | | |
| Research visits abroad (of at least one month duration) | | | | | |
| Visiting researchers (one week to one month duration) | | | | | |
| Visiting researchers (of at least one month duration) | | | | | |
| Funded international research consortia projects | | | | | |

¹⁾ Research collaborations given here are limited to those with joint research grants in excess of 100 kSEK/year and/or joint publications with the UoA.

| B2.4.2 Name of international project granted and role of UoA | | | | | | | |
|--|--------------|------------------------------|------------|--|--|--|--|
| Project title | Funding body | Role (co-ordinator/ partner) | Start year | | | | |
| | | | | | | | |

B2.4.3 Other major international activities according to the tradition of the research field $^{1\!\mathrm{j}}$

¹⁾ Please specify: scientific expeditions, field work etc. and list below including duration.



B2.5. Participation in scientific community

UoAs activities undertaken during 2017-2021 (stage 2) that illustrate high quality leadership interactions with their scientific peers.

| B2.5.1 Participation in academic community | Total Number |
|---|--------------|
| Plenary or keynote talk at international conferences | |
| Assignment as expert in research councils and foundations | |
| Assignment as expert evaluator for position of professor, associate professor (docent) and lecturer | |
| Assignment as opponent for PhD thesis | |
| Assignment as member of examination board for PhD thesis | |
| Assignment as editor or member of editorial board for journal | |
| Assignment as reviewer for international journal | |
| Member of national scientific councils | |
| Member of international scientific councils | |
| Chair of program committee (international conferences) | |
| Member of program committee (international conferences) | |

B2.6 Recruitments

Number of recruited research staff, total (T) and women (W) during 2017–2021.

| B2.6.1 Recruitments | Total Number | | |
|---|--------------|---|--|
| | Т | W | |
| Recruitments with doctoral degree from another Swedish university | | | |
| Recruitments with a doctoral degree from outside Sweden | | | |
| Recruitment with doctoral degree from own university | | | |
| TOTAL | | | |

B3. The impact of engagement and co-operation between research and society

This section presents activities related to co-operation between research and society and the impact of such activities. It includes the unit's general approach to enabling impact and engagement from its research, and also specific examples of impacts that have been underpinned by research undertaken by the UoA.



B3.1 PhD degrees

The number of doctoral degrees (PhD) earned within the UoA 2017-2021 (stage 2) when the awardee was employed externally. Number of total (T) and number of women (W) are recorded per year.

| Table B3.1.1. Number of doctoral degrees awarded to students externally employed | | | | | | | | | | |
|--|-----------|---|----|------|---|------|---|------|---|---|
| | 2017 2018 | | 18 | 2019 | | 2020 | | 2021 | | |
| | Т | W | Т | W | Т | W | Т | W | Т | W |
| Doctoral degrees | | | | | | | | | | |

B3.2 Major research related to co-operation with society

Activities regarding research related to co-operation with society should be entered into one of the three categories in the table below. Table 3.2.1 lists mobility between academia and non-academic society, such as exchanged lectures with external (non-academic) organizations, the engagement of adjunct professors, and externally financed PhD students in collaborative research projects with partners from industry or other organizations in society. Table 3.2.2 includes the number of publications co-authored with individuals outside of academic institutions, and popular publications aimed at the general public. Table 3.2.3 counts the number of external partners of the UoA divided between SME, large enterprises, and nonindustrial partners. Table 3.2.4 summarizes the amount of in kind funding from industry and non-industrial organizations in society.

| Table 3.2.1: Number of mobility between academia and society | | | | | | | | | |
|---|--------------------------|--|--|--|--|--|--|--|--|
| | 2017 2018 2019 2020 2021 | | | | | | | | |
| Collaborative doctoral students ¹⁾ | | | | | | | | | |
| Temporary research positions outside university ²⁾ | | | | | | | | | |
| Adjunct researchers | | | | | | | | | |

¹⁾ Number of doctoral students in the UoA who are financed by non-academic external partners. Note that this does not mean doctoral students who are financed by any non-academic funding body, but students who are financed by external partners of the UoA (e.g. industry or public sector organizations).

²⁾ Permanent UoA personnel who leave the university for non-academic society.



| Table 3.2.2: Number of outreach activities (publications) | | | | | | | |
|---|------|------|------|------|------|--|--|
| | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Scientific publications with representatives from society (not academia) | | | | | | | |
| Popular science publications (popular science magazines, including those on the internet) | | | | | | | |
| Share of publications under open access | | | | | | | |

Table 3.2.3: Number of collaborative Organizations (please provide description in A3.1.)

| | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|------|------|------|------|------|
| Partners from industry (SME) ¹⁾ | | | | | |
| Partners from industry (non SME) | | | | | |
| Partners from society excl. industry and academia | | | | | |

1) Enterprise with no more than 250 employees and an annual turnover not exceeding 50M €.

| Table 3.2.4: Indirect external funding (in MSEK) | | | | | | | |
|--|------|------|------|------|------|--|--|
| | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Indirect funding from non-industrial organizations in society (in kind ¹⁾) | | | | | | | |
| Indirect external funding from industry (in kind) | | | | | | | |

1) Value of working hours done by external partners, value of equipment, databases, software, laboratories etc. that external partners provide in joint research projects.

B3.3 Other activities (optional)

Here it is possible to describe other activities related to co-operation between research and society and the impact of such activities.