

KoF/ÖB 2024

Faculty of Science and Technology

Department Self-Evaluation

Department:	
Section:	
Head of Department:	

Goals:

- Maintain and strengthen our **research quality**
 - Through program and department self-reflection on strengths and weaknesses
 - Through developing program and department priorities for the next 5 years
 - Through internal and external feedback on our performance and plans
- Strengthen our **collegial culture**
 - By involving all research staff in the process and ensuring everyone is aware of the results
 - By being respectful of everyone's time at the faculty, department, and program levels
 - By communicating clearly as to why we are doing this and how we expect everyone to contribute
- Improve our **internal understanding**
 - By collecting information on the different ways programs and departments are funded and operate
 - By collecting explanations of why we work that way and how it supports our research
- Improve our **resource usage**
 - By generating bottom-up prioritized research plans at the program, department, section, and faculty-levels
 - By allocating and re-allocating resources based our priorities and the potential to significantly improve research
 - By identifying opportunities for intra- and inter-program/department/section collaboration and re-organization

Introduction

Be sure to regularly [check the faculty KoF24 and ÖB page on the employee portal](#) for updates, clarifications, details, timelines, and answers to common questions.

Background on KoF and ÖB

This evaluation combines two processes: the university-wide Quality and Renewal (KoF) process and the faculty-level Review of Base Financing (ÖB). These are being combined to avoid significant duplication of effort. However, they have different goals which makes combining them a challenge. For example, the first three goals above are KoF-focused while the last is ÖB-focused. Most importantly, KoF is a reflective process where we strive to identify both our strengths and weaknesses, while ÖB is an evaluative process where we strive to identify the best opportunities for using our resources.

This causes an inherent concern: will admitting to weaknesses in KoF make us less likely to get resources from ÖB? While there is no way to completely eliminate this concern, this evaluation has been designed with the ÖB portion focusing on identifying Priorities to improve/strengthen/broaden research while the KoF portion focuses primarily on reflecting on our processes.

This provides the ability to be open about weaknesses while ensuring prioritization of high-quality ideas, as

1. Using Priorities allows us to identify concrete opportunities to improve our research, thereby allowing reflection on not just where we are currently excellent but where we can become better
2. By using an internal, bottom-up prioritization process at the program, department, section, and faculty-levels to identify the most promising and high-quality proposal for potential funding at each level.

Expectations

There is understandably a strong focus on the “new” funds that will be allocated as part of the ÖB process. However, these funds are small in comparison to the yearly budget, and the Faculty strongly encourages everyone to look to the four goals listed on the first page for the main value of this process. Please be aware that this report will be a public document and will be placed on the faculty website for all employees to access.

Time period

This evaluation pertains to the period since the last evaluation: 2019-2023 inclusive. Descriptions provided by the programs should cover the full evaluation period. However, centrally provided statistics on bibliometrics (2017-2021/2022) and financial data (2022-2023) cover slightly different time periods.

Responsibility

The Head of Department (HoD) has the overall responsibility for the department self-evaluations and the Program Responsible Professor (PAP) has the overall responsibility for program self-evaluations. This includes ensuring that the information provided is both sufficiently accurate and not misleading. It is important to be open, even about activities that are not as successful as we may wish.

The HoD/PAP is responsible for coordinating meetings with the appropriate people, collecting input, leading appropriately broad and inclusive discussions, prioritizing among suggestions, and summarizing and producing the final text. Most economic and HR data will be provided centrally, but for the information that needs to be collected locally, the HoD/PAP is responsible for coordinating with the appropriate people. The HoD is responsible for ensuring that the programs provide drafts to the department early enough that the department can use them as input to the department’s self-evaluation.

Panels

The panels will provide input on how programs and departments can improve, provide new perspectives on potential organizational changes across programs and departments, help in identifying good examples that can be shared across the faculty, and place our research quality in the international context. While this input is extremely helpful for identifying directions, decisions and prioritization will be done within the faculty using the panel’s feedback as one input.

Instructions

Base data

Base data such as bibliometrics, HR and financial data will be provided to you centrally.

Bibliometrics

Micro-field normalized citation counts require publications to be at least 2 years old to have stable citation statistics, that there are a sufficient number of publications to provide valid statistics, and that there is a sufficient coverage of the publications from the evaluated unit to be representative.

However, total publication volume and percent of publications in the Norwegian Model's Level 2 channels will be provided for 2017-2022. Please note that bibliometrics are based on the department-provided lists of people who were in each program at the end of 2023. This means that people who moved between programs or departments during the evaluation period will have their publications counted only in their program and department as of 2023. If this is of particular importance, it should be noted in the form.

Financial Data

Initial financial data is provided for 2022, with a later update for 2023. The data is extracted based the standard practice of each program having its own project group in the financial system. This means that employment figures may be incorrect if staff are paid from project groups in other departments or programs. Similarly, financial (income and expenses) are based on project groups. This means that if staff have moved between departments/programs or if departments/programs have split or merged, and the paying projects have not been moved accordingly, those income and expenses will be accounted to the previous department/program. To address this, departments will be given draft data which they can correct.

Please note that there are accuracy and practicality tradeoffs in both bibliometrics and financial data and that our goal is to achieve about 90% accuracy. If there are particular inaccuracies that meaningfully affect the evaluation, these should be described in the form.

Note

While it is understandable that every program and department will want to look as good as possible, this process is most valuable when everyone is open and honest. In particular, please try to avoid the following:

1. Activities (funding, projects, publications, hires etc.) that ended before the evaluation period or started after it should not be included. If it is extremely important to include activities that fall outside of the evaluated period (e.g., very recent recruitments that significantly affect future plans), the text must clearly indicate that the activity falls outside the evaluation period and why it is being included.
2. Cramming in more text by changing the font size, layout, margins, text box sizes, etc. will not be accepted. It is understood that the space limitations will lead to the need for careful prioritization.

The four answer sizes used are:

- Very short – 1.4cm tall box, approximately 250 characters
- Short – 3cm tall box, approximately 600 characters
- Medium – 4.7cm tall box, approximately 950 characters
- Long – 10cm tall box, approximately 2000 characters

Before submitting

[Check the KoF/ÖB webpage on the employee portal for any important updates.](#)

Hide instructions

Modify the “Instructions” style so all colored text is hidden in the submitted document. First, check that you have the “Show/Hide Formatting Marks” turned off then right-click on the style “Instructions”. First select “Modify” and then “Format” at the bottom left. Choose “Font” and turn on the “Hidden” option and click the OK button.

Navigation panel

To quickly navigate through the document, you can use the Navigation panel. To see the Navigation panel, click the “View” tab in the ribbon and then check the “Navigation Panel” checkbox in the “Show” button group. Or press ctrl+b and choose “Headings”. At the Navigation Panel you can also search for specific words or phrases.

Submission

Last day for submission is May 15, 2024. The way you submit the document will be informed later.

1 General information

Responsibility: HoD in discussion with department leadership.

1.1 Process for creating this self-evaluation

Instructions: Describe the process to generate this self-assessment, how it was collegial, and list which categories of employees (e.g., Professors, ULs, BULs, postdocs, PhDs, researchers, etc.) were significantly involved.

Motivation: To emphasize that this is to be a collegial process and the department should work to include a wide range of input.

(approximately 250 characters)

1.2 Personnel (data provided centrally)

Instructions: Data will be provided centrally either pre-filled in the form or in an external document. The data will include the number of personnel (FTEs) in each category at the end of 2023. Associate=UL, Assistant=BUL. Postdocs who are on stipend need to be listed separately in parentheses. (Example: if there are 4 postdocs on salary and 3 on stipend, please enter “4 (+3)”.) Other Research includes senior and guest professors, adjuncts, research engineers, etc. Other includes communications, direct research support administrators (not general or shared HR/financial support), project leaders, etc. MSc and BSc thesis students are not included.

Motivation: To understand the department’s personnel distribution by career stage and gender.

Responsibility: Data provided centrally; HoD to review to ensure no significant mistakes are made. Note that stipend postdocs are not present in the university salary system and will need to be manually accounted for if they are to be included. If this table is changed to add stipend postdocs, please note the changes in the “other important department-specific comments” section below as well.

	Faculty FTEs				Non-Faculty FTEs					
	Professor	Associate (UL)	Assistant (BUL)	Total	PhD	Postdoc	Researcher	Other Research	Other	Total
Female										
Male										

1.3 Finances

1.3.1 Overall research funding (data provided centrally)

Instructions: Data will be provided centrally either pre-filled in the form or in an external document. The data will include the amounts taken in million SEK rounded to one decimal place during 2022, with 2023 to be provided later. Total internal research funding is all government base research funding, including funds used for co-funding. Total external research funding is all external grant funding. FFF+SFO is the amount of FFF and SFO resources allocated. Other internal research funding is the difference between the total internal research funding and the FFF and SFO, which indicates approximately how much other internal research funding (e.g., co-funding, startbidrag, studiestöd, special funds from the vice rector, etc.) was taken in.

Motivation: To understand how a department is funded across the main sources of income.

Responsibility: Data provided centrally; HoD to review to ensure no significant mistakes are made.

	FFF+SFO Internal Research	Other Internal Research	Total Internal Research	External Research	Total Research	External Research %	Teaching	Teaching %
2023								
2022								
Average								

1.3.2 Research program sizes and research funding (data provided centrally to the programs)

Instructions: Data will be provided centrally either pre-filled in the form or in an external document. The data will list the research programs in the department and the number of FTE faculty (Prof/UL/BUL, but not adjunct or guests), as well as the internal funding (FFFs, SFOs, and other 210) and External (220 and 230) for 2023. These numbers should be taken from the data provided centrally to the programs.

Motivation: To understand the department’s research areas and relative sizes.

Research program	FTE Faculty	Internal (MSEK)	External (MSEK)

1.3.3 Basic funding expectations and policy for using internal resources

Instructions: Explain the standard funding distribution between internal research funding (FFFs, department resources, and other 210 funds), external grants, and teaching that faculty (Assistant, Associate, Professor) and non-tenure staff (researchers, adjuncts) receive. Describe the policy for distributing internal resources (FFFs, department resources, and other 210 funds, including studiestöd, startbidrags, and co-funding). Include a description of how faculty members at each level (Assistant, Associate, Professor) receive research support and are funded. Explain any implicit or explicit policies regarding holding external grants and allocation of internal resources. Include a brief overview of other uses of internal resources, for example: extra support for particular roles (e.g., PAP, FUAP), startup packages (for new faculty), allocation of studiestöd, department policies for FFFs or institution resources, funding of joint facilities/infrastructure, co-funding for grants, paying for PhDs/postdocs, etc. If these policies are left to the programs, describe what the department sees as strengths and weaknesses in having a different policies in the same department.

Motivation: To understand how departments view the use of internal resources and teaching to support members and activities.

(approximately 600 characters)

1.3.4 Use of internal research funds (data provided centrally)

Instructions: Data will be provided centrally either pre-filled in the form or in an external document. The data will include the breakdown (in %) of how internal money (all 210, e.g., FFF, SFO, co-funding, startbidrag, studiestöd, etc.) is used.

Motivation: To understand how the department is using internal research funding.

Responsibility: Data provided centrally; HoD to review to ensure no significant mistakes are made.

	Faculty Salary	Non-Faculty Salary	Other Personnel Costs	Premises	Equipment Depreciation	Overhead	Running Costs	Total
2023								
2022								
Average								

1.3.5 Personnel funding (data provided centrally)

Instructions: Data will be provided centrally either pre-filled in the form or in an external document. The data will include the average % funding for each employee category for each financial category for 2023. Internal includes FFFs, SFOs and other 210. External includes both 220 and 230. Stipend funded postdocs should not be included unless the salaries are paid through Uppsala. If there are no personnel in a particular category, leave the cell blank.

Motivation: To understand how funding is used across different employment categories and genders.

Responsibility: Data provided centrally; HoD to review to ensure no significant mistakes are made.

	Female			Male		
	Internal	External	Teaching	Internal	External	Teaching
Professor	%	%	%	%	%	%
Associate (UL)	%	%	%	%	%	%
Assistant (BUL)	%	%	%	%	%	%
PhD	%	%	%	%	%	%
Postdoc	%	%	%	%	%	%
Researcher	%	%	%	%	%	%
Other Research	%	%	%	%	%	%
Other	%	%	%	%	%	%

1.3.6 Major infrastructure support

Instructions: Identify the five most significant research infrastructures supported by the department from the department's perspective, which may or may not coincide with the programs' own prioritization. For this purpose, infrastructures are resources that are too expensive for an individual PI to afford and are therefore organized and funded as shared resources. Specify the level of sharing (program, department, university, national, or international) and whether it is located at Uppsala or elsewhere. Provide the approximate amount spent to support the infrastructure directly by the department (e.g., from department funds and not from the programs' own funds or FFFs) and by others in the department (e.g., program funds and PI grant expenditures) as x.xM SEK. Infrastructure costs should not include travel to the infrastructure (as travel for research is not infrastructure-specific) nor salary time while using the infrastructure (as research time is not infrastructure-specific), but can include salary costs of engineering staff and explicitly agreed upon in-kind salary contributions. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may list up to nine significant research infrastructures.)

Motivation: To understand what important infrastructure is being supported by the department and how much it costs.

Responsibility: HoD in discussion with programs, economic administrator for costs.

Infrastructure	Sharing	Location	Dept. Funding	Prog/PI Funding

1.4 Other important comments

Instructions: Explain any important issues not addressed above or misrepresented by the above data that need to be clarified for the panel to give valuable feedback. If the department has an important role in supporting the university or nation, such as a mandate from the government or university, please describe it here. Please keep these precise and relevant.

Motivation: To bring important and special issues to the view of the panel and faculty.

(approximately 250 characters)

2 Follow up on goals set in the last evaluation

Responsibility: HoD in discussion with department leadership.

2.1 Reflections on accomplishments and setting goals this time

Instructions: Reflect on whether the goals from the last evaluation (ÖB Section D1 for programs and KoF17 Section 1b for departments) were appropriate in retrospect, what has been accomplished towards them since the evaluation, and what we can learn from them about setting effective goals this time. The previous evaluations will be made available online to support this reflection for the programs, departments, and panels.

Motivation: Try to learn from what we did last time to be able to set more effective goals this time.

(approximately 600 characters)

3 Area 1: Research Quality (evaluation of outcomes and processes)

Responsibility: HoD in discussion with department leadership.

3.1 Top external funding sources (data provided centrally)

Instructions: Data will be provided centrally either pre-filled in the form or in an external document. The data will include the top funding sources for 2022. (2023 will be provided later in the process.)

Motivation: To see the amount of external funding brought in and where it comes from.

Funding Agency	2022	2023

3.2 Reflections on external funding

Instructions: Reflect on what the department generally expects from its staff (at the postdoc, researcher, Assistant, Associate, and Professor levels) in regards to applying for and receiving external funding, how the department communicates those expectations, how the department supports staff in applying for funding through feedback and mentoring, and what opportunities and challenges the department sees in the future for continued and new external funding. Describe initiatives the department takes to form consortia to apply for larger grants and what groups in the department organize those initiatives. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 800 characters.)

Motivation: Connect how the department works with external funding to the achieved funding results.

(approximately 600 characters)

3.3 Reflections on encouraging and supporting major excellence grants

Instructions: Describe the initiatives and support the department provides for applying for major excellence grants such as ERC, KAW project, and KAW scholar. Reflect on how these are communicated and how successful they have been in producing, prioritizing, and improving applications. Describe who is targeted, what criteria are used to assess if particular applicants are competitive, and how feedback is provided.

Motivation: Learn how the department works to encourage applying for the most prestigious grants.

(approximately 600 characters)

3.4 Department level PhD students (data provided centrally)

Instructions: Data will be provided centrally either pre-filled in the form or in an external document. The data will include the number of active PhD students, the gender balance, the number admitted/graduated, and the net study time at graduation during the evaluation period.

Motivation: To see the overall graduate student education throughput and the

	2018	2019	2020	2021	2022
Active					
Gender (f/m)					
Admitted					
Graduated					
Net study time at graduation					

3.4.1 Reflections on PhD student trends

Instructions: Reflect on the trends shown in the data for PhD students for the department as a whole over the past 5 years. Comment on both the absolute numbers today and the relative changes over time, as well as the gender balance and whether and why the net study time deviates significantly from the standard 4-years (5-years with 20% teaching or service).

Motivation: Understand the department’s overall PhD situation and the department’s perspective on it.

(approximately 600 characters)

3.5 Department bibliometrics for 2017-2021/2022 (data provided centrally)

Instructions: Data will be provided centrally either pre-filled in the form or in an external document. The data will include:

- PP(top10%): Percent of publications in the top 10% most cited. For comparing across fields, we use the Leiden Ranking CWTS database to first compute similarity clusters (micro-fields) for all included publications. For each Uppsala publication, the citations for that paper are then compared to the other papers in the same micro-field from the same year. These mean-normalized citation statistics are then used to identify the subset of top 10% cited publications. This means that each publication is compared against similar publication in its own micro-field of similar topics, which does a good job of adjusting for differences across and within fields.
- Coverage percent: The Leiden Ranking CWTS database does not include all publications, and is based on data from the Web of Science database. In particular, conference publications are not included. The coverage in Web of Science will be included and departments or programs with low coverage should specifically reflect on the relevance of coverage when discussing the bibliometrics.
- Note: for the micro-field statistics to be reliable, we need at least two years of citations and a sufficient number of publications. This limits our statistics to providing aggregates over 2017-2021.
- Norwegian Model: The Norwegian Model provides a ranking of publication channels of high prestige generated by expert review. In this model, roughly 20% of publication channels are included in the highest category, Level 2. For this model, we report the percent of publications from the program/department that are in Level 2.
- Total publications: All articles, articles in anthologies, monographs, and conference papers are included in total statistics, with the number fractionalized to the number of Uppsala authors. (E.g., a publication with 1 of 4 authors from Uppsala will count as 0.25.)

Motivation: Provide an overview of how the department is performing that is reasonably comparable to other programs and departments.

	2017-2021	2017	2018	2019	2020	2021	2022

CWTS Leiden (Web of Science) coverage percent							
Micro-field normalized citation score							
Level 2 in the Norwegian model (up to year 2022)							
Total publications (up to year 2022)							

3.5.1 Reflections on bibliometric trends

Instructions: Reflect on the statistics shown in the central micro-field normalized bibliometric information for the department as a whole over the past 5 years. If the department's coverage is low, comment on why that is, and reflect on the Norwegian model statistics instead. Comment on both the absolute performance and relative changes over time.

Motivation: Understand the department's overall publication output and the department's perspective on it.

(approximately 600 characters)

3.6 Reflections on research program sizes

Instructions: Research programs require a reasonable size to be large enough to drive a research direction while not being so large that shared priorities and directions become difficult to achieve. Reflect on the range of research program sizes in the department and how the current sizes help or hinder research. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 800 characters.)

Motivation: A reasonable number of faculty members is required for research programs to achieve their purpose of providing a collegial environment that can develop and support diverse ideas and knowledge around a shared core research direction. For research programs with very few faculty, or very many, it is important to reflect on how this can be achieved.

(approximately 600 characters)

3.7 Reflections on cooperation across the section

Instructions: Reflect on how the department cooperates with others within its section (e.g., regular joint meetings/discussions, specific projects/initiatives, teaching collaboration, etc.) and how that cooperation could be strengthened, or, if the cooperation is unlikely to yield benefits, how it should be reduced. For sections with a single department, reflect instead on how cooperation within the department.

Motivation: Understand how the department works within its section and what it sees as the benefits.

(approximately 600 characters)

3.8 Reflections on teaching and promoting good research ethics

Instructions: Reflect on the department's initiatives and challenges with regards to teaching and promoting good research ethics. Describe how the formal and informal initiatives the department takes to teach and

promote good research ethics across all staff are working, and what particular challenges the department faces in this regard.

Motivation: Understand how the university's priority for ensuring good research ethics is addressed.

(approximately 250 characters)

3.9 Reflections on creating and ensuring research freedom

Instructions: Reflect on the department's initiatives and challenges with creating and ensuring opportunities for research freedom. Describe how the formal and informal initiatives the department takes to create opportunities for research freedom across all staff are working, and what particular challenges the department faces in this regard.

Motivation: Understand how the university's priority for ensuring research freedom is addressed.

(approximately 250 characters)

3.10 Reflections on what is working well

Instructions: From the above, reflect on what is working well and should be continued over the next 5 years. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 1200 characters.)

Motivation: Require departments to identify where current activities are successful. This will provide the panel with insights into our own self-assessment.

(approximately 950 characters)

3.11 Reflections on what needs to be improved

Instructions: From the above, reflect on what needs to be improved over the next 5 years. Please focus on areas that need improvement and do not list areas that could be improved but where it is not needed. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 1200 characters.)

Motivation: Require departments to identify where they feel that they need to invest. This will both provide the panels with insights into our own self-assessment as well as help us improve.

(approximately 950 characters)

4 Area 2: Career Paths (evaluation of processes)

Responsibility: HoD in discussion with department leadership.

4.1 Career stage distribution implications and plans for the next 5 years

Instructions: Describe the implications of the current distribution of faculty across career stages (e.g., Assistant, Associate, Professor from Section 1) for the department currently and in the next 5 years. In particular, identify up-coming faculty retirements and/or recruitments and discuss how the department plans to work with those changes to maintain the department's core strengths as well as evolve in new directions. Identify programs that may require particular planning or efforts during this time.

Motivation: Provide perspective on the current status and planned future changes in personnel in the department.

(approximately 600 characters)

4.2 Process for identifying the need for faculty recruiting

Instructions: Describe how the department works to identify the need to recruit new faculty members, including who is involved and how such discussions are initiated. Be sure to clarify which activities and responsibilities the department takes and which the research programs take.

Motivation: Recruitments define the research direction for the next several decades. Therefore, taking care in how we identify the direction and finding the best people is the most important thing we can do to enable future success. This question encourages reflection on how structured the department is in this process.

(approximately 600 characters)

4.2.1 Balancing renewal and continuation in faculty recruiting

Instructions: Discuss how the department works to balance recruiting in the directions where there are already significant research activities (e.g., "replacing" a professor upon retirement) vs. identifying new directions. Include who is involved in the discussions, how formalized the discussions are, and what challenges the department faces in balancing. Be sure to clarify which activities and responsibilities the department takes and which the research programs take.

Motivation: It is easy to see the motivation for continuing in the same research direction based on previous success, but research is constantly developing and we need to continually re-evaluate where we should focus. This question encourages reflection on how the department works with that difficult balance.

(approximately 600 characters)

4.2.2 Balancing external recruitment vs. internal promotion

Instructions: Discuss how the department works to balance external recruiting with promoting existing staff. For example: when a program responsible professor retires, how does the department decide whether to recruit a new professor externally or assign the role to a promoted professor? Describe who is involved in the

discussions, how formalized these discussions are, and what challenges the department faces in balancing these. Be sure to clarify which activities and responsibilities the department takes and which the research programs take.

Motivation: The idea of bringing in a star is always appealing, but must be balanced with our responsibility to help develop our younger faculty into stars. This question encourages reflection on how (and how formally) the department considers this tradeoff.

(approximately 600 characters)

4.3 Ensuring competitive faculty candidates

Instructions: Describe what the department does to ensure that there are enough competitive candidates for each faculty position. For example: How does the department identify promising candidates and encourage them to apply, and who is responsible for those activities? What does the department do if there are too few strong candidates or too poor a gender balance in the applicant pool? Be sure to clarify which activities and responsibilities the department takes and which the research programs take.

Motivation: Having competitive and diverse (in terms of gender, research focus, educational background, etc.) candidates in a recruitment significantly increases the likelihood that we will hire excellent researchers. However, we do not always get this result, and more frequently than we wish, we end up with candidate lists that lack diversity in either educational background (e.g., the top candidates may all have educational backgrounds from Uppsala University or Sweden) or gender. This question encourages the department to identify what concrete actions it is taking to attain sufficiently many strong candidates, and how it can handle the situations where this does not occur.

(approximately 600 characters)

4.4 Ensuring competitive non-faculty candidates (PhDs, postdocs, researchers, adjuncts)

Instructions: Describe what the department does to ensure that there are enough competitive candidates for each non-tenure position. For example: How does the department work/contribute towards identifying promising candidates and encouraging them to apply, and who is responsible for those activities? What is done if there are too few strong candidates or too poor a gender balance in the applicant pool? How does the difficulty in evaluating educational credentials for foreign vs. Swedish students affect recruiting? Be sure to clarify which activities and responsibilities the department takes and which the research programs take.

Motivation: Having competitive and diverse (in terms of gender, research focus, educational background, etc.) candidates in a recruitment significantly increases the likelihood that we will attract excellent researchers. However, we do not always get this result, and more frequently than we wish, we end up with candidate lists that lack diversity in either educational background (e.g., the top candidates may all have educational backgrounds in Uppsala or Sweden) or gender. This question encourages the department to identify what concrete actions it is taking to obtain sufficiently many strong candidates, and how it handles the situations where this does not occur.

(approximately 600 characters)

4.5 Balancing tenure-track (Assistant Professor) and non-tenure track (researcher) recruitments

Instructions: Describe how the department uses the tenure-track (Assistant Professor/BUL) and non-tenure track (researcher and adjunct) employment categories and what motivates these choices. If the department has very many or very few of either category, reflect on what benefits there might be to changing the balance and what obstacles there are to doing so.

Motivation: Our tenure-track system is designed to provide a career path for young researchers and an opportunity for us to take risks on people with limited track records. However, the potential permanent commitment of a faculty position and the age-limit for applying make these positions difficult to motivate in some cases. This question encourages the department to reflect on how it is assessing these risks and whether the resulting balance is beneficial in the long run.

(approximately 600 characters)

4.5.1 Career paths for non-tenure-track permanent staff

Instructions: Describe how the department works with long-term career paths for non-tenure-track permanent staff (researchers and adjuncts). In particular, how is long-term financing handled and how do staff in these positions affect tenure-track recruiting decisions.

Motivation: This question encourages the department to reflect on what it does to help build the careers for permanent staff who do not have tenure-track positions. This is important as an imbalance in support can lead to non-tenure-track employees feeling undervalued.

(approximately 600 characters)

4.6 Career support

4.6.1 Addressing Swedish/English language barriers

Instructions: Describe how the department works with language challenges, in particular with regards enabling staff to be able to teach introductory (Swedish-language) courses and participate in department-, faculty-, and university-level leadership roles. Describe how these challenges are addressed for current employees and how they are described during recruitment.

Motivation: Understand how we balance the need for Swedish-speaking staff with the challenges of recruiting and retaining staff and encourage the department to reflect on how it can work with the implicit Swedish language requirement at leadership levels.

(approximately 250 characters)

4.6.2 Career support activities for non-tenure-track staff (beyond standard employee dialogs)

Instructions: Describe the activities for supporting non-tenure-track (PhDs, postdocs, researchers, adjuncts, etc.) staff in their careers and development. For example: financial support for personal development, mentoring, grant assistance, feedback, career planning, help with job searches, etc.. Explicitly address what support is provided for obtaining the docent and distinguished teacher qualifications for post-PhD staff. Specify

if activities are informal (e.g., expected as part of advising/mentoring) or formal (e.g., part of a regular process).

Motivation: Provide details as to how the department works with career development for non-tenured staff and encourage the department to reflect on whether it is providing the right type and amount of support.

(approximately 600 characters)

4.6.3 Career support activities for tenure-track staff (beyond standard employee dialogs)

Instructions: Describe the activities for supporting tenure-track staff (Assistant Professors/BULs) in their careers and development. For example: financial support for personal development, startup packages, mentoring, grant assistance, feedback, career planning, co-advising, etc. Include discussions of support for promotion (Assistant to Associate) as well as docent and distinguished teacher qualifications. Specify if activities are informal (e.g., expected as part of advising/mentoring) or formal (e.g., part of a regular process). If the department has very few staff in this category, please reflect on why that is and if that is something the department wishes to address.

Motivation: Provide details as to how the department works with career development for tenure-track staff and encourage the department to reflect on whether it is providing the right type and amount of support.

(approximately 600 characters)

4.6.4 Career support activities for tenured staff (beyond standard employee dialogs)

Instructions: Describe the activities for supporting tenured staff (Associate and Professor) in their careers and development. For example: financial support for personal development, mentoring, grant assistance, feedback, career planning. Include discussions of support for promotion (Associate to Professor) as well as docent and distinguished teacher qualifications. Specify if activities are informal (e.g., expected as part of advising/mentoring) or formal (e.g., part of a regular process).

Motivation: Provide details as to how the department works with career development for tenured staff and encourage the department to reflect on whether it is providing the right type and amount of support.

(approximately 600 characters)

4.7 Reflections on what is working well

Instructions: From the above, reflect on what is working well and should be continued over the next 5 years. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 1200 characters.)

Motivation: Require departments to identify where current activities are successful. This will provide the panel with insights into our own self-assessment.

(approximately 950 characters)

4.8 Reflections on what needs to be improved

Instructions: From the above, reflect on what needs to be improved over the next 5 years. Please focus on areas that need improvement and do not list areas that could be improved but where it is not needed. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 1200 characters.)

Motivation: Require departments to identify where they feel that they need to invest. This will both provide the panels with insights into our own self-assessment as well as help us improve.

(approximately 950 characters)

5 Area 3: Collaboration and Outreach (evaluation of processes)

Responsibility: HoD in discussion with department leadership.

Collaboration and outreach (“samverkan” in Swedish) should be interpreted to mean activities that reach outside of the university to non-academic partners. Specifically, academic collaborations with other research organizations within academia should be considered part of our research and not collaboration and outreach for this evaluation. To help with this section, here is a partial list of the types of collaboration and outreach that we are striving to achieve:

- Joint research projects, student/PhD/postdoc/researcher/faculty exchanges/sabbaticals, etc.
- Advising/consulting, spreading research results/insights, popular science outreach and publications, press interviews, expert panels, etc.
- Interactions with industry, government, schools, society, media, etc.
- Academic entrepreneurship, including creating, joining, and advising startups and companies, etc.
- Feedback of external ideas, challenges, relevant questions, etc., into program(s) or departments.

5.1 Successful forms of collaboration and outreach enabled by the department

Instructions: Provide up to five specific examples of collaboration and outreach activities connected to the department’s research that are particularly important from the department’s perspective. These examples should be ones that the department, beyond the programs, has explicitly contributed to enabling through its efforts or policies. Under “Example and connection” describe the activity and person or organization with whom the collaboration or outreach took place. (e.g., “Expert advice on SUBJECT for COMPANY”, “Popular science book on SUBJECT aimed at AUDIENCE”, or “Interview on PROGRAM about SUBJECT”.) Specify the value to the program (e.g., “exposure to new challenges and issues that COMPANY experience on a practical level” or “making the SUBJECT expertise of our researchers visible to the nation”) and the value to the partner (e.g., “insight into how COMPANY can model the physical properties from the chemical composition” or “addressing public concern over the impact of SUBJECT on the environment”). Keep in mind the broad range of collaboration and outreach listed above. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to nine examples.)

Motivation: Provide a list of specific examples of collaboration and outreach activities to motivate the self-reflection below and to serve as a source of examples for others.

1	Example and partner	
	Value to the program	
	Value to the department	
2	Example and partner	
	Value to the program	
	Value to the department	
3	Example and partner	
	Value to the program	
	Value to the department	
4	Example and partner	
	Value to the program	
	Value to the department	
5	Example and partner	
	Value to the program	

	Value to the department	
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5.1.1 What is the department doing to support and strengthen these types of collaborations?

Instructions: Describe what the department is doing to both support the development of new collaborations and what it is doing to strengthen the existing ones. For example: policies, initiatives, seminars, meetings, incentives, etc.

Motivation: Reflect on what specific initiatives are being taken that have contributed to the results we are proud of.

(approximately 600 characters)

5.2 Challenges in collaboration and outreach

Instructions: Describe what the department sees as its challenges in collaboration and outreach (e.g., financial support, research vs. collaboration/outreach prestige, mismatches between research level and partners' needs, etc.) and what the department can do or is doing to address them.

Motivation: Reflect on what makes collaboration and outreach difficult and how the department is actively approaching this challenge.

(approximately 600 characters)

5.3 How are collaboration and outreach integrated into the department's management?

Instructions: Describe how and where collaboration and outreach are addressed in the department's management structure. Is this an appropriate level of integration for the importance the department puts on this type of connection?

Motivation: This question encourages us to reflect on how seriously this issue is being considered based on how tightly integrated it is into the management structure.

(approximately 250 characters)

5.4 What support would be helpful at the section/faculty/university level?

Instructions: Describe what support (if any) would be helpful to coordinate and/or provide at the section/faculty/university level. Also comment on any coordination/support that is currently done at the section/faculty/university level that would be more effectively handled locally.

Motivation: Some issues are broad enough that addressing them together makes sense, while in other cases doing so leads to more overhead than it is worth. This question encourages the department to reflect on whether there are opportunities here to be more efficient.

(approximately 600 characters)

5.5 Reflections on what is working well

Instructions: From the above, reflect on what is working well and should be continued over the next 5 years. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 1200 characters.)

Motivation: Require departments to identify where current activities are successful. This will provide the panel with insights into our own self-assessment.

(approximately 950 characters)

5.6 Reflections on what needs to be improved

Instructions: From the above, reflect on what needs to be improved over the next 5 years. Please focus on areas that need improvement and do not list areas that could be improved but where it is not needed. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 1200 characters.)

Motivation: Require departments to identify where they feel that they need to invest. This will both provide the panels with insights into our own self-assessment as well as help us improve.

(approximately 950 characters)

6 Area 4: Connection between Research and Teaching (evaluation of processes)

Responsibility: HoD in discussion with department leadership.

The types of connections between research and teaching that we are striving to achieve include, but are not limited to:

- Activities that lead to a scientific approach and student progression in learning how to apply the scientific method within courses and throughout education programs
- Teachers who are active researchers take opportunities to develop their pedagogical skills
- Researchers who are active teachers and take opportunities to develop their pedagogical skills
- Students being trained to find, use, and evaluate research results
- Students being active in on-going research projects
- Integration of research results, methods, and facilities in teaching

6.1 Main teaching areas

Instructions: List the most important teaching programs, course packages, or contract/continuing education that the department is responsible for. Specify the level (e.g., bachelor's or master's), approximately how many courses the department teaches in the program, and the number of full-time students in the program each year.

Motivation: Explain where the department's teaching is focused.

Teaching program, course package, or contract/continuing education	Level	Courses Taught	Full-time students

6.2 Successful research/teaching connections enabled by the department

Instructions: Provide up to five specific examples of how research has been incorporated into teaching activities or strengthened courses, and/or how teaching activities have been incorporated into the research activities that are particularly important from the department's perspective. These examples should be ones that the department, beyond the programs, has explicitly contributed to enabling through its efforts or policies. Under "Example" describe the connection (e.g., "lab exercise using the facility X that exposes students to research technique Y"). Under "Course Info" specify the course name, program, level (introduction/advanced), and the approximate number of students taking it each year. Describe the value to the teaching experience from the research connection (or vice versa). (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to nine examples.)

Motivation: Provide a list of specific examples of teaching/research connections to motivate the self-reflection below.

1	Example	
	Course Info	
	Value to teaching/research	
2	Example	
	Course Info	

	Value to teaching/ research	
3	Example	
	Course Info	
	Value to teaching/ research	
4	Example	
	Course Info	
	Value to teaching/ research	
5	Example	
	Course Info	
	Value to teaching/ research	

6.2.1 What is the department doing to support and strengthen these types of connections?

Instructions: Describe what the department is doing to both support the development of new connections and what it is doing to strengthen the existing ones. For example: policies, initiatives, seminars, meetings, incentives, etc. Remember that these connections can go both ways.

Motivation: Reflect on what specific initiatives are being taken that have contributed to the results we are proud of.

(approximately 600 characters)

6.3 Challenges in connecting research and teaching

Instructions: Describe what the department sees as its challenges in connecting research and teaching (e.g., financial support, research vs. teaching prestige, mismatches between research- and teaching-levels, etc.) and what the department can do or is doing to address them.

Motivation: Reflect on what makes connecting research and teaching difficult and how the department is actively approaching this challenge.

(approximately 600 characters)

6.4 How are research and teaching connections integrated into the department's management?

Instructions: Describe how and where supporting connections between teaching and research is addressed in the department's management structure. Is this an appropriate level of integration for the importance the department puts on this type of connection?

Motivation: This question encourages us to reflect on how seriously this issue is being considered based on how tightly integrated it is into the management structure.

(approximately 250 characters)

6.5 What support would be helpful at the section/faculty/university level?

Instructions: Describe what support (if any) would be helpful to coordinate and/or provide at the section/faculty/university level. Also comment on any coordination/support that is currently done at the section/faculty/university level that would be more effectively handled locally.

Motivation: Some issues are broad enough that addressing them together makes sense, while in other cases doing so leads to more overhead than it is worth. This question encourages the department to reflect on whether there are opportunities here to be more efficient.

(approximately 600 characters)

6.6 Reflections on what is working well

Instructions: From the above, reflect on what is working well and should be continued over the next 5 years. (Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 1200 characters.)

Motivation: Require departments to identify where current activities are successful. This will provide the panel with insights into our own self-assessment.

(approximately 950 characters)

6.7 Reflections on what needs to be improved

Instructions: From the above, reflect on what needs to be improved over the next 5 years. Please focus on areas that need improvement and do not list areas that could be improved but where it is not needed.

(Departments with more than 200 employees – IT, Physics and Astronomy, Chemistry Ångström, and Earth Sciences – may provide up to 1200 characters.)

Motivation: Require departments to identify where they feel that they need to invest. This will both provide the panels with insights into our own self-assessment as well as help us improve.

(approximately 950 characters)

7 5-year Priorities

Instructions: Identify, describe, and motivate specific Priorities that have a high likelihood of meaningfully strengthening or meaningfully broadening research over the next 5 years. The Priorities should be well-motivated and have sufficiently developed plans that it is clear what needs to be done to accomplish them and how to evaluate if they are successful. The Priorities can cover a wide range of activities with the overall goal of strengthen research, and do not need to require additional expenses. These can include, but are not limited to:

- Strengthening existing areas (e.g., to adapt to future challenges in the field or are necessary to maintain high quality, including by investing in new equipment, facilities, or staff, etc.)
- Investing in new areas (e.g., to adapt to changes in the field or new developments, by including investing in new equipment, facilities, or staff, etc.)
- Changing research organization by splitting, merging, closing, or moving research programs/departments (e.g., to improve collaboration or use of facilities or resources, etc.)
- Changing research policies (e.g., to address funding/co-funding, multi-disciplinary work, or recruiting, etc.)
- Changing research support (e.g., to improve grant success rates, recruiting, management, adoption of new techniques/technologies, etc.)

Building upon existing strategic plans is encouraged and co-funding/support from the program or department is expected to demonstrate commitment to the plan. There will be a yearly lightweight follow up process to see what progress has been made for each Priority with an opportunity to revise/change them as needed. The goals are to both ensure that we follow up on our stated Priorities and that we always have clear Priorities at each level in the faculty.

To ensure that all departments have a similar prioritization burden regardless of their size, the number of Priorities each department is allowed is determined by the formula $2 + \text{roundup}(\text{programs}/4)$, as follows:

Priorities per Department:

- 104 Matematiska institutionen 3
- 106 Inst f informationsteknologi 5
- 113 Inst f fysik och astronomi 6
- 120 Inst f materialvetenskap 4
- 122 Inst f elektroteknik 3
- 124 Inst f samhällsbyggn o ind tek 3
- 130 Inst f kemi - BMC 3
- 139 Inst f kemi - Ångström 4
- 146 Inst f ekologi och genetik 3
- 148 Inst f organismbiologi 3
- 152 Inst f cell- och molekylärbiol 4
- 161 Inst f geovetenskaper 4

To encourage the departments to both identify overarching departmental priorities and prioritize among their programs' Priorities, the department's chosen Priorities must include at least 1 Priority developed by the department and at least 1 Priority developed by a research program. The department is free to choose how to balance the remaining Priorities among department-identified Priorities and program-identified Priorities. In addition, to encourage the department to identify Priorities that can be addressed locally, at least 1 Priority

must be something that can be accomplished locally (within the department's and/or programs' own resources) and does not require faculty resources.

Duplicate the form below for each of the department's allocated Priorities and identify which come from programs and which can be accomplished using local department and program resources.

Prioritization at the faculty level: For prioritization at the faculty level, each section is allocated a number of Priorities determined by the formula $1 + \text{roundup}(\text{programs}/5)$. This is to provide a manageable number of proposals for consideration at the faculty level, and to ensure that the departments and sections only send in their most important Priorities. The departments in each section are free to choose their own prioritization process, but they are very strongly encouraged to use their collective domain expertise to review all department-level Priorities together and choose the ones that will most strengthen the section as a whole.

Priorities per Section:

- Mathematics and Computer Science 4
- Physics 4
- Technology 4
- Chemistry 3
- Biology 4
- Earth Sciences 2

Motivation: Identifying Priorities encourages strategic analysis and medium-term planning within the department, and makes it easier for the section, faculty, and panel to understand the department's own assessments of their needs and opportunities. Requiring at least one of the Priorities to come from programs encourages the department to engage in a meaningful discussion about the programs' own Priorities as well as the department's own.

Responsibility: HoD in discussion with department leadership.

8 Priority 1 of N

8.1 Description of the Priority

Instructions: Provide the department name (since these will be collected at the section/faculty level) and the program name (if this is a program Priority), the title of the Priority, and whether it may require department support (Yes/No) and/or faculty support (Yes/No).

Department:				
Program:				
Title:				
Support:	May require department support:	[Yes/No]	May require faculty support:	[Yes/No]

8.1.1 Goal

Instructions: Specify the goal of the Priority, for example, to strengthen a specific existing activity or start a new one.

8.1.2 Expected meaningful research improvement

Instructions: Provide a description of the research that investing in this Priority will accomplish over the next 5 years. Explain how it has the potential to significantly strengthen or broaden the program for program proposals or department for department proposals. Specifically, this should go beyond continuing or slightly enlarging current activities by having a clear description of what change it will accomplish.

Motivation: The overall goal is to strengthen our research. As a result, the Priority should deliver meaningful improvements in research quality and/or breadth.

(approximately 950 characters)

8.1.3 Implementation plan

Instructions: Provide a brief description of specifically what is planned to be done over the next 5 years to realize the potential of this Priority. For example: new hires, investments in equipment, starting collaborations, closing down existing activities, moving resources from existing activities, etc. Use the limited space provided here to discuss the most important aspects of how this activity will be carried out.

Motivation: For a Priority to be credible, there must be a plausible plan and what needs to be accomplished must have been thought through. It is understood that these plans will change over the next 5 years, however.

(approximately 950 characters)

8.1.4 What previous accomplishments indicate a high likelihood of success?

Instructions: Describe what recent (last 5 years) accomplishments make it clear that there is a good chance of success in this project. Use specific examples (e.g., grant X, collaboration Y, paper Z) and explain how those recent accomplishments are evidence of having the competencies needed to be successful in this project.

Motivation: For a Priority to be credible, the expertise and track record needed to support it must be present.

(approximately 600 characters)

8.2 Current status of the area at Uppsala University

Instruction: Describe the current status of the area at Uppsala University as a whole. Include any existing funding, support, staff, and success in this area. Explicitly identify any overlap with other existing activities at the program(s), department, section, faculty, and/or university levels.

Motivation: To avoid duplicating efforts, it is important to understand the local Uppsala context when enhancing existing activities or starting new efforts. As part of the evaluation process, the panel will try to identify synergies between proposed Priorities.

(approximately 250 characters)

8.2.1 Current and planned contributions to support the initiative

Instructions: Describe the current (already in-place and on-going) and planned contributions to this goal from the local level (from the program for program proposals, from the department for department proposals, and from both the program(s) and department, as appropriate, for program proposals selected by the department). For example, co-funding, in-kind support, shared funding of facilities, transfers of FFFs, etc.

Motivation: Evidence of financial commitment from the local environment strongly supports the proposal as being important. Conversely, if the local environment is unable or unwilling to support it, the importance to the environment as a whole is much weaker.

(approximately 250 characters)

8.3 Strategic value

8.3.1 Strategic value of the area in the global context

Instruction: Describe the importance of the area in the global context. For example: fundamental challenges in research; new developments in research; societal challenges and priorities; global impact and importance.

Motivation: To ensure consideration of the larger context.

(approximately 250 characters)

8.3.2 Strategic value of the area at the next level

Instruction: Describe the importance of the area to the department (for program proposals) and for the section and faculty (for department proposals). For example: synergies with other activities, connections to teaching

and collaboration, both currently and potential for new ones, etc. Explain the value of this activity beyond any overlapping ones identified above.

Motivation: To ensure that there is awareness of where this activity fits in at the next level up in the organization. This is particularly important if support is to be requested at that level.

(approximately 250 characters)

8.4 Contributions needed for success

Instructions: Identify what contributions are needed for success in terms of time, expertise, resources, facilities, staff, etc. Explicitly include estimates of financial resources needed and where they will come from.

Motivation: To ensure the costs and resources required have been thought through, and that they are reasonable given the scope of the benefit.

(approximately 250 characters)

8.4.1 Success indicators

Instructions: Describe specific results that will indicate success in 5 years. For example: increases in publications in top venues X and Y, publications in new field Z, strengthened or new collaborations with university A, new hires in B, new grants from C, etc.

Motivation: To ensure that the local- and faculty-levels will be able to assess whether this Priority was successful at the next evaluation so that we develop a positive cycle of following up on our strategic planning.

(approximately 250 characters)

8.4.2 First steps that can be taken today

Instructions: Describe the first concrete steps needed to move in this direction that can be taken today. These should be clear enough that they can be followed up on in a year to see what progress has been made. Identify initial activities that can be started locally to enable progress to help motivate further support for the larger goal. In the exceptional case where no steps can be taken today, explain why a Priority has been chosen that cannot be started.

Motivation: To ensure that there is a clear idea of how to get started and enable easy follow-up of how the Priority is progressing.

(approximately 250 characters)