

Our self-evaluations

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Faculty of Science and Technology, Uppsala University

2024 Research Quality and Renewal and Review of Base Research Financing



Sources of information (all on the website)

- Program self-evaluations
- Department self-evaluations
- Base Data (provided centrally: bibliometrics, financial, personnel)
- Background information (faculty and department strategic plans)
- Notes on self-evaluations:
 - Programs and departments were given <u>length limits</u> for most answers. (Focusing and prioritizing was an explicit part of this process.)
 - Larger departments were given extra space.



Program self-evaluations

KoF/ÖB 2024 Faculty of Science and Technology Research Program Self-Evaluation

Research Program:	Systematic Biology
Department:	Department of Organismal Biology
Section:	Biology
Program Responsible	
Professor:	

Maintain and strengthen our research quality

Goals

- 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
 - o 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

1 General information

1.1 Process for creating this self-evaluation

Motivation: To emphasize that this is to be a collegial process and that all members of the program should be included.

The PIs had 4 meetings discussing the self-assessment, the format of working with the assessment, and filling out and discussing the assessment. The assessment was also discussed with the entire program, and then it was finalized by the acting PAP.

1.2 Core of the research program

Motivation: To understand the essence of the program so that its plans and activities can be better understood in that context.

We are united by theory and methods and explore the diversity of biological entities (species, genomic elements etc), study processes of diversification, and investigate major evolutionary events explaining the patterns we see among biological entities.

1.3 Personnel (data provided centrally)

Motivation: To understand the program's personnel distribution by career stage and gender. This data shows the number of FTEs (full-time equivalent) employees in each category.

	Faculty FTEs				Non-Faculty FTEs					
	Professor	Associate	Assistant	Total	PhD	Postdoc	Researcher	Other	Other	Total
		(UL)	(BUL)					Research		
Female	0.3	1.0		1.3	2.9		2.6	1.1		6.6
Male	0.8	2.8	0.7	4.2	2.1	1.0	2.5			5.6

1.4 Finances

1.4.1 Overall research funding in MSEK (data provided centrally) Motivation: To understand how a program is funded across the main sources of income. This data shows the Iono-term internal funding (ERSENST) we see a funding the search funding

	FFF+SFO Internal Research	Other Internal Research	Total Internal Research	External Research	Total Research	External Research %
2023	5.2	3.1	8.3	13.3	21.6	61%
2022	5.1	2.6	7.8	12.0	19.7	61%
Average	5.2	2.9	8.1	12.6	20.7	61%

1.4.2 Other internal research funding

Other internal funds include SciLife grants, and private foundations managed by the university for subject areas included in the program and for running the journal Symbolae Botanicae Upsalienses.

1.4.3 Basic funding expectations and policy for using internal resources

Motivation: To understand how programs use their internal resources to support members and activities. Our tenured faculty are 35-69% financed through FFF the rest coming from teaching, administration, or internal/external grants. FFF is also used for co-funding of grants and PhD students, administrative tasks, and lab maintenance/support. Non-tenured staff are financed by external grants, including tenure track staff. The PhD students are fully or partially funded by funds from outside the program. The studiestöd is used to co-finance PhD students that are also funded by external sources. More specific principles for allocation of money are being discussed in the program.

1.4.4 Use of internal research funds in MSEK (data provided centrally) Motivation: To understand how the program is using internal research fundi

	Faculty Salary	Non- Faculty Salary	Other Personnel Costs	Premises	Equipment Depreciation	Overhead	Running Costs	Total
2023	2.1 (34%)	1.7 (26%)	0 (0%)	0.7 (11%)	0.1 (2%)	1.3 (20%)	0.4 (6%)	6.3
2022	2.8 (40%)	1.4 (21%)	0 (0%)	0.9 (13%)	0 (0%)	1.4 (20%)	0.4 (6%)	6.9
Average	2.5 (37%)	1.5 (23%)	0 (0%)	0.8 (12%)	0.1 (1%)	1.3 (20%)	0.4 (6%)	6.6

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1.4.5 Personnel funding (data provided centrally)

Motivation: To understand how funding is used across different employment categories and genders. This data shows how staff are funded on average across internal and external research funding as well as teaching.

		Female		Male			
	Internal	External	Teaching	Internal	External	Teaching	
Professor	100%	0%	0%	36%	0%	64%	
Associate	57%	0%	43%	59%	4%	38%	
(UL)							
Assistant				0%	100%	0%	
(BUL)							
PhD	52%	32%	16%	23%	68%	9%	
Postdoc				8%	91%	1%	
Researcher	0%	97%	3%	0%	95%	5%	

1.4.6 Major infrastructure usage

Motivation: To understand what important infrastructure is being used and how much it costs and to support the faculty's ongoing work on developing an infrastructure policy

Infrastructure	Sharing	Location	Approximate Yearly Cost (MSEK)
SciLifeLab	National	Uppsala/Stockholm	0.4
NAISS	National	Linköping and elsewhere	
Uppsala University's natural history museum and the Botanical garden, Uppsala	UU	Uppsala	
Klubban Biological Station	Section	Fiskebäckskil	
Competence Center for Hidden Biodiversity EBC	EBC	Uppsala	

1.5 Other important comments

Motivation: To bring important and special issues to the view of the panel and department. We are the second smallest program in Biology based on FFF+SFO. The recruitment of a SciLife/Wallenberg fellow, and retainment of ERC Consolidator researchers have led to an exceptional top level research environment despite of the small internal funds.

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Program self-evaluations (highlights)

1. General Information

- 1.4.3 Basic funding expectations and policy for using internal resources
 - Many programs do not have policies
 - Can lead to frustration

3. Area 1: Research quality (process and quality)

- 3.3.3 Most <u>frequent</u> publishing channels & 3.3.4 Most <u>important</u> publishing channels
 - Contrast where programs <u>actually</u> publish with where they <u>should</u> publish
- 3.8 Reflections on research program size
 - Large programs might need to split, small programs might need to merge/close



Program self-evaluations (highlights)

8/9/10. Priorities 1 to 3

- 8.1 Support required
 - Money is limited \rightarrow one must fit within the program's own resources
 - One may require department support and one may require faculty support
- 8.2 Current status of the area at Uppsala
 - We need to avoid duplicating activities
- 8.2.1 Current and planned contributions to support the initiative
 - Funding from the program and department shows commitment
- 8.4.2 First steps that can be taken today
 - Get started on their most important priorities today
 - Progress here will be followed-up on before the priorities are funded



Department self-evaluation (highlights)

1. General Information

- 1.3.2 Research program sizes and research funding
 - How we are organized and should we change?

4. Area 2: Career paths (process only)

- 4.2.2 Balancing external recruitment vs. internal promotion
 - Balance new directions and external recruits with successful directions and promoting local researchers?
- 4.5 Balancing tenure-track (<u>Assistant Professor</u>) and non-tenure track (<u>Researcher</u>) recruitments
 - We have a large variation in what type of junior researchers programs hire
 - Is the balance we have appropriate? Are we using the tenure-track system well?



Department self-evaluation (highlights)

8-n. Priorities 1 to n

(Number of department priorities depends on department size)

- Each department is supposed to provide:
 - At least one priority <u>developed by the department</u> (to avoid programs having too much influence)
 - At least one priority <u>developed by a program</u> (to avoid the department having too much influence)
 - At least one priority that <u>can be accomplished with local resources</u> (to ensure the department can move forwards regardless of new funding)







Background information (Base Data)

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Base Data Worksheet

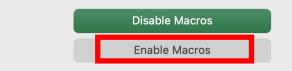
1. Open in Excel and enable macros



This workbook contains macros. Do you want to disable macros before opening the file?

Macros may contain viruses that could be harmful to your computer. If this file is from a trusted source, click Enable Macros. If you don't fully trust the source, click Disable Macros.

Learn about macros



2. Welcome tab warns you not to focus too much on the numbers

Welcome to the KoF/ÖB Base Data Analysis Graphs

This document exists to support the program and department self-reflections. The goal is to he understand how our own programs and departments operate and to see them in the broader con our sections.

To get started, go to the "Getting Started" tab below. Each tab following the "Getting Started" correspond to specific questions in the self-evaluation documents (both program and department

The risks with this data

This data shows that there is a wide diversity of how programs and departments operate, and both expected and appropriate. As a result, there are two risks in providing this data:

Risk 1: Focusing on the numbers. Every program and department could find a number that make look particularly strong or weak. The goal is not to defend the numbers or highlight them, but rat use this data to understand how we are operating and how we can improve.

Risk 2: Trying to figure out what is "best." Programs and departments operate in different conc and with different approaches, leading to different tradeoffs. This means there is no "best" way t organize and operate. The goal is not to move towards a single standard, but rather to use this da understand how we are operating and how we can improve.

Of course, if there are important issues that this data identifies, then you are encouraged to refle them in the self-evaluation.

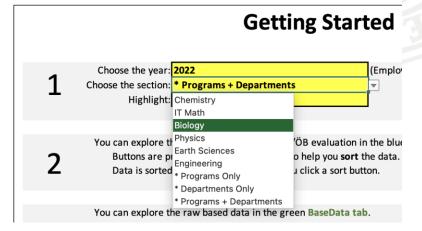
If you have any questions or comments, please first check the FAQ on the Faculty KoF webpage* a contact your Program Responsible Professor and/or Head of Department if they are not answere

Thank you for your efforts and contributions to this process, - The Teknat Faculty Leadership

*Faculty KoF webpage:

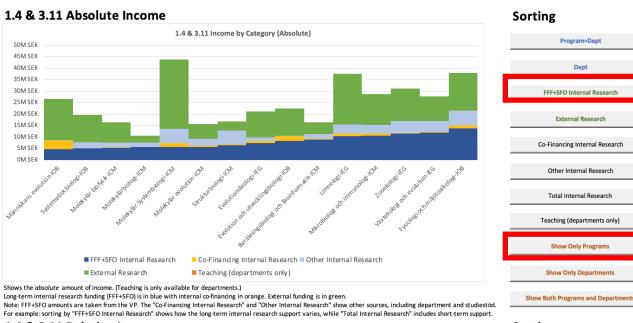
https://www.uu.se/en/staff/faculty/science-and-technology/the-facultys-research-evaluation---quality-and-renewal---kof24

3. Getting Started tab lets you choose the section to view

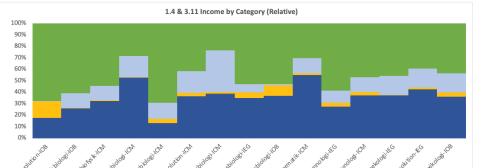




- The Income tab shows financial income to the departments + programs
 - Click the "Show Only Programs" button to show only programs
 - Click the "FFF+SFO Internal Research" button to sort by internal funding









Absolute income: useful for comparing size

Relative income: useful for comparing how they work



(Scroll down for top external funders)

- The **Personnel tab** shows the number and type of employes
 - Scroll down to see "Relative Faculty by Gender"
 - Click the "% Faculty (F)" button to sort by % of female faculty

% Tenured (T)

% Professor (T)

% Associate (T)

% Assistant (T)

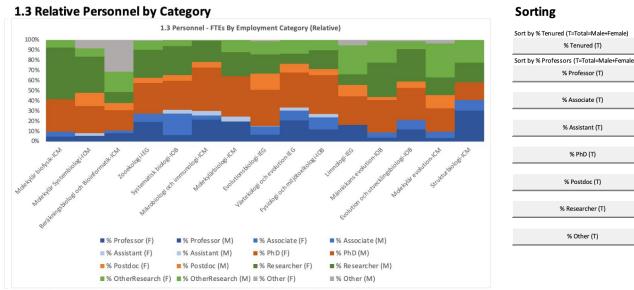
% PhD (T)

% Postdoc (T)

% Researcher (T)

% Other (T)

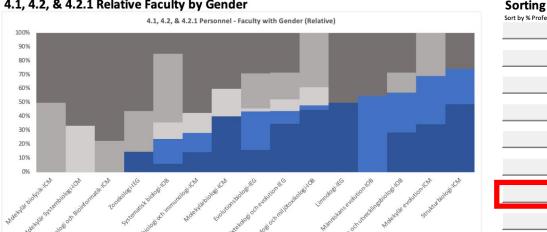
% Faculty (M)



Relative Personnel: useful for comparing how employment differs

Shows the relavite distribution of employees by category. This graph shows the difference in proportions of different types of employees ignoring the aboslute sizes Faculty are in blue, temporary researchers are in orange, and permanent researchers are in green. (Gender breakdowns are shown below to simplify. For example: sorting by "% Professor (T)" shows how the relative percentage of professors varies

4.1, 4.2, & 4.2.1 Relative Faculty by Gender



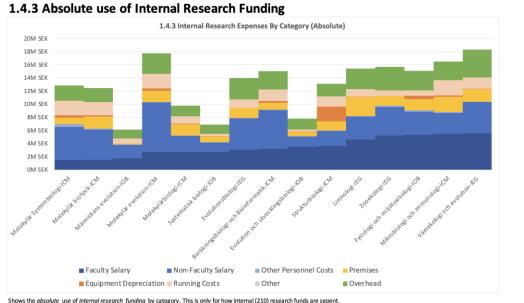
Sort by % Professors (Female) % Professor (F) % Associate (F) % Assistant (F) % Assistant (M) % Associate (M) % Professor (M) % Faculty (F)

Relative Faculty by Gender: useful for looking at male/female balance by tenure career stage.

(Scroll down for non-faculty by gender and non-tenured researchers)

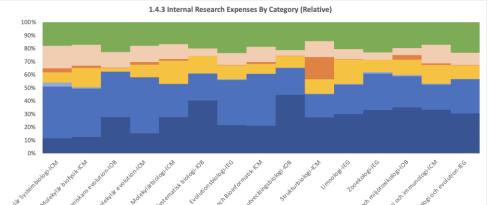


• The Internal Research Use tab shows how internal funding is used



For example: sorting by "Equipment Depreciation" shows how the total amount paid for equipment from internal research funds are sepent.

1.4.3 Relative use of Internal Research Funding





Sorting



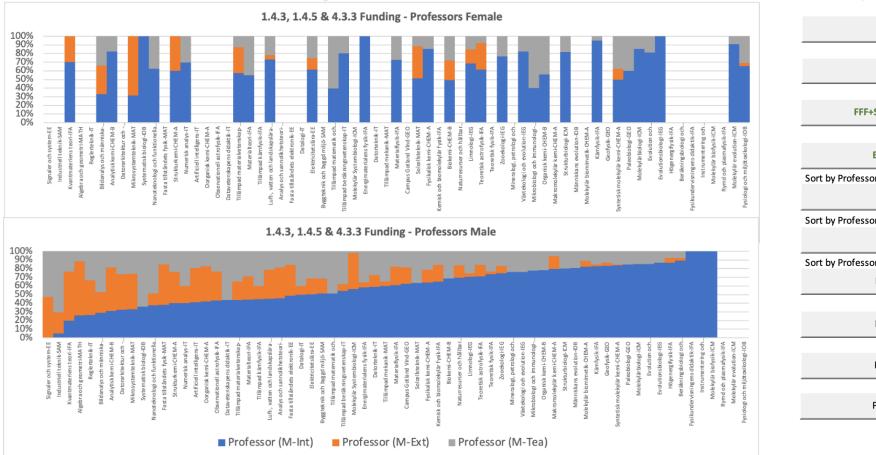
Absolute use of internal research funding: useful for size

Relative use of internal research funding: useful for seeing how they work



- The Staff Funding tab shows staf funding across internal/external/teaching
 - Females are on the top graph and males on the botom
 - Scroll down to see other staff categories
 - Go back to the Getting Started tab and choose "Programs Only" to see all programs in the faculty for comparison

1.4.3, 1.4.5 & 4.3.3 Professor Funding



Shows how Professors (female top, male bottom) are funded across internal research funds, external research funds, and teaching. For example: sorting by "Professor (F-Tea)" shows how funding of Professors varies as a function of how much teaching female Professors do.

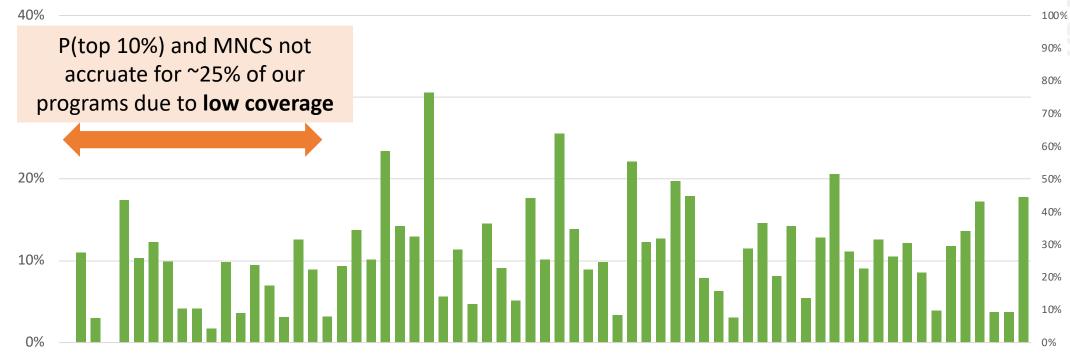




Bibliometrics tab

Percent of publications in the 10% cited PP(top 10%)

Percent of publications in the analysis (coverage)



- PP(top 10%) and MNCS do not cover 27% of our programs
- We include Norwegian Model % Level 2 for all programs
- Panel should consider these statistics and the publication venues for each program
- Remember: The goal is impact. Bibliometrics are not the only measure of scientific breakthroughs!



Panel

- Use this to understand the context for the programs and departments
- Remember the warnings:

Risk 1: Focusing on the numbers. Every program and department could find a number that makes them look particularly strong or weak. The goal is not to defend the numbers or highlight them, but rather to use this data to understand how we are operating and how we can improve.

Risk 2: Trying to figure out what is "best." Programs and departments operate in different conditions and with different approaches, leading to different tradeoffs. This means there is no "best" way to organize and operate. The goal is not to move towards a single standard, but rather to use this data to understand how we are operating and how we can improve.

