



MBB department handbook 2023

Facts, principles, and guidelines

Background and purpose

This document summarizes the principles and guidelines that govern the way our department is run. Its purpose is two-fold: to inform all MBB employees about how the department works, and to serve as decision-making guidelines for those who are in leadership positions, at all levels.

This handbook is unfinished and incomplete and will evolve as we learn how to make our department the best it can be. It is revised and re-issued annually. Whenever we encounter a new challenge, we will seek a principled response, which we will codify in this document, so that we can refer to it when a similar situation arises in the future. We will seek periodic input from all relevant stakeholders.

Note: *this document describes the general guidelines to be followed at MBB. However, to protect the ability of the department to prosper scientifically, the chairperson can grant and impose exceptions to these guidelines at any time.*

Changes from 2022 version

- Key numbers updated for 2023
- Minor corrections in several places
- Added responsibilities of deputy/assistant chairpersons
- Addition of anticipated change in resource allocation 2024

Chapter 0 – What is MBB?

The aim of the department is to pursue research at the highest international level, as well as excellent undergraduate and graduate education, in all fundamental biomedical sciences.

Key numbers 2023

Overhead (INDI) 2023:	20,46% (research) and 49,08% (teaching)
Social fees, payroll taxes:	54,11% (55,96% holiday allowance incl.)
IT fee:	10 400 SEK/person/year
Client support (computers):	2 400 SEK/computer/year
Reading fee:	1 400 SEK/person/year
FM fee:	49 500 SEK/person/year (excl. SciLifeLab)
Rent:	3 085 SEK/m ² (Biomedicum)

Chapter 1 – Organization

Chairperson, deputy, and assistants

The department is led by a chairperson appointed by the KI president for a period of five years. From Sep 1, 2019, the chairperson is professor **Sten Linnarsson**.

Deputy head of department, professor **Björn Högberg** stands in for the head of department in his absence, with full decision-making authority. Björn is also responsible for the divisions of **Molecular Neurobiology** and **Molecular Metabolism** when it comes to:

- Signing agreements after review by the legal department, but not for decisions that can't be decided by Head of Department or agreements that are to be signed jointly with officials from the Central Administration.
- Signing green light and admission of doctoral students.

- Signing procurement documents, application for grants, letters of support for applications, ethics applications, letters of recommendation for docentur, time reports and financial reporting.
- Signing in Prisma

Professor **Gonçalo Castelo-Branco** is Assistant Head of Department with responsibility for the divisions of **Biomaterial, Genome Biology** and **Functional Genomics** with regard to the above responsibilities. In addition, the Assistant Head of Department is also responsible for signing documents regarding **scholarships** for the entire department.

Professor **Elias Arnér** is Assistant Head of Department for education; see below.

Administrative unit

The administration of finances, human resources, reporting etc. at the department is performed by

Carina Hammarström, head of administration

Natalia Persson Demin, head of finance

Anna Bengtsson-Jemt, financial assistant

Marjan Madani, financial assistant

Emina Dedic, financial assistant, grants management

Lina Rowland, head of HR

Linnea Holm, HR coordinator (maternal leave 50% until Aug 2023)

Anneli Svarén, HR administrator

Department council (*Institutionsrådet*)

MBB uses an open department council, where all staff and employees are invited. The department council meets twice a year, usually in the middle of each semester. Its purpose is advisory and participatory, and it provides an opportunity for the leadership to set out the agenda for the coming 6 – 12 months and receive feedback.

In addition to staff and employees of the department, the following representatives are invited:

- Student representatives

- Union representatives

Faculty and senate

Faculty

The Faculty consists of all the Principal Investigators. It is designed to ensure the quality of decision-making related to recruitment and promotion. The faculty performs these major tasks:

- Setting out the *principles and guidelines* for
 - recruitment of principal investigators at all levels
 - promotion of principal investigators
 - applications for docent
 - creation of new professorships
 - assessment of PIs
- Selecting a faculty chairperson, who then also serves as faculty representative in the Executive Council
- Providing its consent to recruitments and promotions of principal investigators – except professorships – after proposal from a unit
- Setting out the long-term scientific direction of the department

The 2023 chairperson of the Faculty is associate professor **Björn Reinius**.

The Faculty requires at least 50% members present for a quorum.

Senate

The department Senate consists of the full professors. It is designed to ensure the quality of decision-making related to recruitment of professors. The senate performs three major tasks:

- Selecting a Senate chairperson, who leads the meetings
- Creation of new professorships, in accordance with the principles and guidelines set out by the Faculty, after proposal from a professor or a unit head.
- Periodic review of the progress of non-professor PIs

The Senate requires 8 members present for a quorum.

The senate elects a chairperson by simple majority, with a mandate of one year. The same person can be elected chair for a maximum of three consecutive years.

The 2023 chairperson of the Senate is professor **Jesper Haeggström**.

In all their deliberations, the Faculty and Senate work in compliance with relevant laws and with full respect of relevant guidelines at the Karolinska Institutet (e.g. *Delegationsordningen*). Conflicts of interest are handled appropriately.

Executive council (Ledningsgruppen)

Consists of the department leadership and meets weekly to handle day-to-day issues. The leadership group is advisory and final decisions are taken by the chairperson. Current members are as follows:

Sten Linnarsson, Chairperson

Björn Högberg, Deputy head of department

Gonçalo Castelo-Branco, Assistant head of department

Carina Hammarström, Head of administration

Natalia Persson Demin, Head of finance

Lina Rowland, HR Manager

Additional participants are invited as needed, including (on rolling schedules) the following:

- Deputy chairperson for education
- Head of graduate education
- Head of undergraduate education
- Heads of unit
- Student representatives
- Postdoc representatives
- Faculty chairperson

Teaching unit

At MBB, almost everybody is involved in teaching one way or another, mainly in the medicine and biomedicine programs. Teaching is led and organized by the teaching unit:

Håkan Andersson (GUA, i.e. head of undergraduate teaching)

Bernhard Lohkamp (biomedicine)
Anurupa Nagchowdhury, administrator
Susie Björkholm, administrator
Jan-Olov Höög, professor

Graduate education – including admission, annual and half-time reporting, and dissertation – is organized by

Elias Arnér, head of doctoral education
Ulrika Marklund, deputy head of doctoral education
Victoria Balabanova, administrator

A Deputy Chairperson for education is appointed to support the chairperson in strategic matters concerning undergraduate and graduate education. The current deputy chairperson is professor **Elias Arnér**.

Units

MBB is organized into units, each led by a Head of unit appointed by the chairperson. Ideally, units consist of 4 – 7 independent PIs who are located together and are united by a research theme.

Unit heads receive delegation from the chairperson for many important responsibilities including those related to personnel, work environment and the economy. Some of these responsibilities can be delegated further to the PIs within the unit, but the unit head remains responsible for the overall health and success of the unit. In particular, unit heads are responsible for

- The long term scientific strategy of the unit
- The economy of the unit
- Monitoring the financials of individual PIs in the unit
- Use of resources received from the department
- Recruitment, support and mentoring of new PIs to the unit
- Rent for the lab and office space of the unit
- Approving all employment contracts (for permanent positions, the chairperson must also approve)
- Communicating department and KI matters to members of the unit, and communication issues arising in the unit to the department leadership

The detailed responsibilities are spelled out in the delegation document signed by each head of unit.

Units must hold regular PI meetings, chaired by the unit head, to discuss unit-wide issues. Normally, decisions are taken by consensus, but the unit head has final authority according to their delegation.

Units receive faculty funding (activity-based resource allocation) as detailed further below. The PIs of each unit assume a solidary financial responsibility. Any deficit at the unit level (*statsanslag*) must be covered by the unit members from their own funding. Any deficit of an individual PI must be covered primarily by that PI, but secondarily by the unit. It is the responsibility of the head of unit to monitor the finances of the unit as well as the PIs within the unit, to prevent the accumulation of deficits, and to remedy any deficits that do occur.

Core facilities unit

Many of the core facilities at MBB are organized in a common unit, led by Annika Jenmalm Jensen. Currently, the unit has four facilities:

Facility	Director	Location
CBCS	Anna-Lena Gustavsson	SciLifeLab
HTGE	Bernhard Schmierer	Biomedicum, 9B
PSF	Tomas Nyman	Biomedicum, 8D
DDD	Per Arvidsson	SciLifeLab

Other facilities are co-located with research groups. For a comprehensive list, see <https://ki.se/en/mbb/core-facilities-at-mbb>.

Chapter 2 — Principal Investigators

Scientific research and teaching are the two core missions of the department. There are several categories of principal investigators at the department, with different expectations and responsibilities.

Definition (see also Appendix 3)

A principal investigator leads an independent research group, with personal responsibility for directing their research, managing their budget and their personnel. Specifically, every PI

- Has their own funding in accounts controlled by them
- Supervises students and postdocs
- Teaches undergraduates and/or doctoral students
- Publishes their own research, typically as last author
- Takes leadership responsibility at the department, and at KI
- Upholds the highest standard of ethical behavior
- Publically defends science and the truth

All PIs are expected to devote their full working time to research, teaching and other duties at the department. Minor outside engagements, as well as joint clinical appointments, will be allowed on a case-by-case basis. Subject to the rules on secondary occupations, part-time engagements that are complementary to research may also be allowed, for example: government service, scientific commissions of trust (e.g. the Royal Academy of Science, the Nobel Assembly or Foundation, or international scientific policy organizations), or commercial activities to translate research results.

However, full-time PIs should not accept a regular research position with another university or academic enterprise unless written permission is obtained from the chairperson. Such permission will only be granted exceptionally, for example if the outside engagement is minor (e.g. teaching a summer school), if it involves a university-level agreement between KI and the other institution, or for a short transition period when a PI is starting up or leaving.

Biträdande lektor / Researcher / Assistant professor

An Assistant professor (who may be employed as *Biträdande lektor* or *forskare*) is an early-stage investigator without a permanent position. Assistant professors are expected to

- Secure full external funding for their salary
- Develop their own line of research
- Establish themselves as leaders within their specific field
- Supervise doctoral students

Assistant professors are recruited on the initiative of a unit, or of the Senate. The recruitment process is led and managed by the unit head.

Final decision to recruit an Assistant professor is taken by the chairperson after approval by the Senate. A negative recommendation by the Senate will be overruled only exceptionally by the chairperson. The detailed expectations and requirements for recruitment of assistant professors are developed by the Senate.

Assistant professors are expected to have obtained (or be very likely to obtain) a substantial startup package from external sources, from the unit, or exceptionally from MBB. It's the Senate's job to ensure that all newly recruited PIs receive sufficient funding to ensure a fair chance of success. Each new assistant professor is assigned a mentor (lecturer or professor) from a different unit.

Senior Lecturer / Principal Researcher / Associate Professor (research track)

An Associate Professor¹ (who may be employed as Senior Lecturer or principal researcher / *senior forskare*) is an investigator with a permanent position. All Associate Professors are expected to

- Fund their salary primarily through external grants (see below)
- Pursue a successful and original line of research
- Be an international leader of their field
- Publish high-quality and groundbreaking research
- Supervise doctoral students
- Mentor Junior PIs if asked

A senior lecturer is expected to fully fund their own salary from external grants until they have reached a sufficient and sustainable level of research activity, typically no sooner than after ten years as PI. At that point, if the unit funding allows and with the agreement of the head of unit, part of their salary may be covered by faculty funds.

An exceptionally successful Associate Professor is expected to qualify for a professorship within about twelve years as PI. At any time, but normally no sooner than after ten years as PI, the Senate may propose that the department opens a professorship in a suitable subject. The

¹ A docent at any career stage is also titled *associate professor* in English, but for the purposes of their career are still treated according to their position. Docent is not a position, but a title indicating expertise and proficiency in teaching at a university.

detailed expectations and requirements for opening a professorship are developed by the Faculty (see **Appendix 4**), and are aligned with the general recruitment process at Karolinska Institute.

Senior Lecturer (teaching track)

Full time teaching lecturers are expected to

- Fund their salary through teaching
- Pursue excellence in teaching
- Develop the curriculum and manage courses
- Mentor junior teachers as needed

Teaching lecturers typically also perform part-time research, often as part of a unit.

Professors

A professor is expected to

- Fund their salary through grants, teaching and research activity-based resource allocation
- Pursue a successful and original line of research
- Be an international leader of their field
- Publish high-quality and groundbreaking research
- Mentor Junior PIs if asked

A professor is expected to partially fund their own salary from external grants. If they have reached a sufficient and sustainable level of research activity, and if the unit funding allows and with the agreement of the head of unit, the remainder of their salary may be covered by faculty funds. Typically no more than 75% of their salary can be funded this way.

Chapter 3 – Resource allocation

The annual revenue of the department is about 400 MSEK, most of which comes in the form of external grants.

The department receives about 37 MSEK government funding based on research activity (based on the 2023 allocation). The total sum consists of contributions based on external grants (15,1 MSEK), bibliometry (14,3 MSEK), dissertations (1,1 MSEK), and 6,4 MSEK basic

funding (*basersättning*). Nearly all of these funds are distributed to the units.

In addition the department receives about 25 MSEK in internal grants from *Fakultetsnämnden* and *Infrastrukturrådet*, which go directly to individual PIs. This includes strategic grants, salary grants to junior PIs, and core facility funding.

Teaching is funded separately.

See also *Key numbers* above (Chapter 0).

How are the activity-based resources distributed?

The following procedure is used to calculate the activity-based allocation:

1. Of the department's total allocation, about 10% is set aside for department-wide expenses and initiatives; 90% is allocated to units.
2. The activity is calculated for each unit, and the total remaining activity of the department is allocated proportionately to the units.
3. From this total, for each division, the research (but not teaching) activity of part-time PIs is reduced to their fraction of (actual) employment; this also applies to senior professors and is prorated if the employment changes during the year. The deducted amounts are retained at the department level.

Starting in 2024, units consisting of at least two research groups will receive an additional allocation (the amount to be determined, but likely around 1 MSEK total).

Note that core facilities do not receive research activity-based resource allocation (but they do receive teaching activity).

How can the activity-based resources be used?

Activity-based resources are distributed to the units, who decide by consensus how to use the resources internally, but following the guidelines below. If consensus cannot be reached, the unit head makes the ultimate decision.

Note: it will often be the case that the total resources are insufficient to cover even the salaries of professors. Therefore, it's *necessary* to always budget funding for salaries when applying for grants.

Apart from salaries, the most important use of faculty funding is *co-financing* of grants that don't allow sufficient overhead costs. Faculty funding is the *only* substantial source of funds that can be used for this purpose.

Starting in 2021, rents are subsidized centrally at KI, and no additional rent subsidy is provided. Each unit is responsible for the rent of the space it occupies. MBB does not pay rent centrally for empty space. If a unit needs more or less space, it is the responsibility of the unit head to arrange the change, and any such change must be approved by the chairperson. Every group at MBB must be prepared to relocate if instructed by the chairperson. Note that (at Biomedicum) only multiples of half a quarter can be returned; any smaller change must be managed by relocation within and between units.

If for any reason empty space is created within a quarter, and does not belong to any unit, then the cost of that space will be split between the units in the quarter, in proportion to the fraction of the quarter they rent.

Appendix 1 | Units

Name	Head	Location
Medical systems bioengineering	Björn Högberg	Biomedicum, 9B
Chemistry I	Roman Zubarev	Biomedicum, 9A
Biochemistry	Elias Arnér	Biomedicum, 9A
Medical inflammation biology	Rikard Holmdahl	Biomedicum, 9D
Chemistry II	Jesper Haeggström	Biomedicum, 9A
Genome biology	Per Moberg	SciLifeLab
Molecular metabolism	Camilla Koolmeister	Biomedicum, 9D
Molecular neurobiology	Patrik Ernfors	Biomedicum, 6C
Vascular biology	Ulf Eriksson	Biomedicum, 6D
Teaching unit	Håkan Andersson	Biomedicum, 9D
Core facilities unit*	Annika Jenmalm-Jensen	

*CBCS, HTGE, PSF, DDD

Appendix 2 | Principal investigators²

Title	Name	Location	Unit
Professor	Jussi Taipale	Biomedicum, 9B	Medical systems bioengineering
Professor	Björn Högberg	Biomedicum, 9B	Medical systems bioengineering
Assoc. Prof.	Björn Reinius	Biomedicum, 9B	Medical systems bioengineering
Professor	Molly Stevens	Biomedicum, 9B	Medical systems bioengineering
Assoc. Prof.	Ana Teixeira	Biomedicum, 9B	Medical systems bioengineering
Professor	Roman Zubarev	Biomedicum, 9A	Chemistry I
Assoc. Prof.	Katja Petzold	Biomedicum, 9B	
Professor	Elias Arnér	Biomedicum, 9A	Biochemistry
Professor	Rikard Holmdahl	Biomedicum, 9D	Medical Inflammation Research
Professor	Jesper Haeggström	Biomedicum, 9A	Chemistry II
Professor	Jiri Bartek	SciLife Lab	Genome biology
Professor	Oscar Fernandez-Capetillo	SciLife Lab	Genome biology
Assoc. Prof.	Simon Elsässer	SciLife Lab	Genome biology
Assist. Prof.	Bennie Lemmens	SciLife Lab	Genome biology
Professor	Nils-Göran Larsson	Biomedicum, 9D	Mol metabolism
Assoc. Prof.	Joanna Rorbach	Biomedicum, 9D	Mol metabolism
Assoc. Prof.	Anna Wredenberg	Biomedicum, 9D	Mol metabolism
Professor	Ernest Arenas	Biomedicum, 6C	Mol neuro
Professor	Patrik Ernfors	Biomedicum, 6C	Mol neuro
Professor	Gonçalo Castelo-Branco	Biomedicum, 6C	Mol neuro
Assoc. Prof.	Jens Hjerling-Leffler	Biomedicum, 6C	Mol neuro
Professor	Sten Linnarsson	Biomedicum, 6C	Mol neuro
Assoc. Prof.	Ulrika Marklund	Biomedicum, 6C	Mol neuro
Professor	Per Uhlén	Biomedicum, 6C	Mol neuro
Assist. Prof.	Onur Dagliyan	Biomedicum, 6C	Mol neuro
Professor	Ulf Eriksson	Biomedicum, 6D	Vascular
Assoc. Prof.	Lars Jakobsson	Biomedicum, 6D	Vascular
Lecturer	Bernhard Lohkamp	Biomedicum, 9D	Teaching
Lecturer	Håkan Andersson	Biomedicum, 9D	Teaching

² This is the official list of principal investigators at MBB. Future new PIs will be added to the list only after approval by the Faculty and the Chair.

Appendix 3 | The Principal Investigator role

A principal investigator is an independent group leader, who

- Is entrusted by the chairperson and head of unit to lead a research group
- Participates in the development of the unit and department
- Follow the goals and vision of the Karolinska Institutet
- Pursues their own line of research, actively and with excellent quality
- Publishes their research independently and typically as senior author
- Has adequate funding of their own, mostly external, and shows the potential to secure additional funding long-term

The role of PI comes with the overarching responsibility and decision-making authority for their research group, including scientific, teaching and administrative matters. This responsibility includes not entering into any significant commitments not supported by the unit head and chairperson.

The independence of the principal investigator comprises, particularly relative to the unit head and chairperson:

- Independence in scientific matters such as planning and executing their research, and publishing their findings according to good scientific practice
- Independence concerning the selection of group members, within the group's budget means, legal requirements and KI regulations
- Independence in applying for grants, including external grants as main applicant
- Access to lab and office space and common facilities on an equal basis with other investigators, and within their budgetary means

The overall financial responsibility of a PI comprises the following responsibilities:

- For the total finances of the group, both grants, donations and commissioned research, that has been provided to the group

- For any necessary co-financing, indirect costs and costs that are incurred because of relocations, dismissal, etc.
- To ensure an accurate allocation of costs to projects and accounts
- To regularly create and revise a comprehensive budget for the group, in consultation with the economy and HR units
- To keep the head of unit appraised of the development and results of the group, as well as any deviations, at bi-annual follow-up meetings
- That any costs certified by the PI are budgeted or agreed in advance with the head of unit
- To know, understand and follow the financial framework of KI and the department.

Principal investigators may approve and certify costs (invoices) up to a limit set in the delegation document. Costs associated with their individual person, including closely related individuals and legal entities, must always be certified by the immediate supervisor.

The personnel responsibility of the PI includes:

- Developing a good leadership role that promotes the enjoyment of work and a healthy working environment
- Ensuring that staff are given adequate information and the opportunity for dialogue
- The responsibility for recruitment and salary negotiation, in consultation with unit head, chairperson and HR. Permanent appointments always require the approval of the chairperson.
- Ensuring that each employee in their group is given an annual performance management review and salary discussion
- Responsibility for introduction of new employees, and orderly layoffs
- Ensuring that a rehabilitation plan is created in case of health absence
- Ensuring the necessary continuing education of group members
- Complying with all work environment-related obligations according to law, by delegation from the chairperson after the necessary training.

- Striving to eliminate discrimination based on gender, ethnicity, belief, disability, sexual orientation, or age.
- Being responsible for gender equality within the group

A newly appointed PI is assigned a senior mentor (normally a professor at a different unit) to support leadership development³.

Formal delegations assigned to the PI according to this document can be retracted, in full or in part, at the request of the unit head or chairperson.

³ If you are not newly appointed but still would like a mentor, this will of course also be supported.

Appendix 4 | Criteria for new professorships

These minimal eligibility criteria were adopted by the Senate in 2020 and are subject to revision by the Faculty. They are meant to set a bar of excellence for the department. For any proposed new professorship, the Senate must discuss the totality of the proposal, upholding the highest academic standards.

1. Applicants must have contributed to significant discoveries and publications both as first and last author. Focus will be on quality and independent research.

Assessment criteria:

- 1.1. The applicant must have an excellent publication track record with at least 10 publications in top quality international journals as senior author.

2. Applicants must have a strong track record of research activity, a future research project of excellent quality, and a very good plan for integration at MBB.

Assessment criteria:

- 2.1. Have a strong track record of leading and publishing research of excellent quality at international level.
- 2.2. Have an innovative research plan matching the research area, vision and research goals of MBB.

3. Applicants must have a strong track record of grants and a solid financial plan.

Assessment criteria:

- 3.1. Strong experience in successfully competing for research grants at national and international level during the last eight years.
- 3.2. Ongoing research grants at the time of incorporation to the department sufficient to support own salary and an ability to obtain long-term sustainable funding.

4. Applicants must be well-recognized research leaders at national and international levels.

Assessment criteria:

- 4.1. Be recipient of National and /or international awards.
- 4.2. Personal invitations as speakers and moderators at recognized international conferences and symposia.
- 4.3. Organizer of international conferences and symposia.
- 4.4. Editor or member of editorial boards for leading international scientific journals.
- 4.5. Substantial referee assignments for leading international scientific journals.
- 4.6. Research grants: Assignments as evaluators at national and international levels
- 4.7. Leading assignments in international research organizations and / or scientific advisory boards of universities or research centers
- 4.8. Research positions: Evaluator in job appointments at universities or research institutes.
- 4.9. Assignment as faculty opponent at national or international universities.

5. Applicants must have made significant efforts in postgraduate and postdoctoral education.

Assessment criteria:

- 4.1. Main supervisor of at least 2 doctoral students, who have completed their dissertation.
- 5.2. Main supervisor of at least 5 postdoctoral students, who completed their training.
- 5.3. Responsible for courses and programs in postgraduate education.
- 5.4. Demonstrated experience in teaching.