MISSION
To create groundbreaking knowledge of benefit to society on living organisms and their function, evolution and interaction with the environment and use this knowledge to educate biologists at the highest international level and to provide consultancy to the authorities and business to benefit society.

VISION
The Department of Bioscience aims to be the leading biology department in Denmark. The Department will achieve this through excellent research, educating highly qualified biologists and by being the preferred consultancy partner for authorities and businesses for assignments on nature and the environment. We want to be known internationally for our high level of professionalism and to be an attractive workplace for employees and students.
Preface

The Department of Bioscience strategic plan has been conceived and written in cooperation between employees and management. The task was initiated in the winter of 2014-2015, at which time employees were given a draft strategy of the department’s core activities for consultation. Thus, an overall strategy was discussed and described. Subsequently, the department’s sections outlined scientific strategies for their work, and this document is a final product of both ongoing discussions and written contributions.

April 2016

Hans Brix and Peter Henriksen
Department Heads
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About this document:
Pages 4-11 provide a brief overview of the strategy. More detailed information is described in Appendix I-III, which include description of the organisation, employees and culture, and education statistics.
1 Overview

Organisation
The Department of Bioscience has 415 employees of which 332 are permanent employees and the majority of the remaining employees are Ph.D. students and postdocs. The department consists of two divisions in four locations. The locations Roskilde, Kalø and Silkeborg constitute BIOS RKS, and the BIOS AAR division is located on campus in Aarhus. Each division has a department head, and each location a deputy head of department. The department acts as one department in which management, committees and, in part, administration encompass all the places of work, while the sections are affiliated with the specific places of work. There are five sections in Roskilde, two in Kalø, six in Silkeborg and five in Aarhus.

Geographical location
In the year 2021, the department will be assembled in two geographical locations, as the units in Silkeborg and Kalø will relocate to Aarhus campus and the Roskilde unit will relocate to Emdrup campus. The department will be making plans for the relocations in the coming years.

Infrastructure
The department has a strong infrastructure that supports research, consultancy and teaching activities. We have well-equipped research laboratories and growth facilities, a marine biology field station in Rønbjerg by the Limfjorden, algae cultivation facilities in connection with the the Kattegatcenter, permanent field research sites in Kalø and Hylgum, experimental fields and greenhouses, stream and lake mesocosmos facilities, the research ship AURORA, a well stocked animal staple and a state-of-the-art experimental facility for experiments with fish under controlled conditions. In addition, the Department of Bioscience runs the research station Zackenberg in northeast Greenland.

Research
The department’s research areas cover most aspects of biology, spanning all biological levels from genes, physiological processes, individuals, populations and species to entire ecosystems. Strategic and applied research account for a large part of the research activities at the Department of Bioscience. Geographically, the department works from the tropics to the poles, but with greater focus on Danish conditions. The fact that the department is working with both basic and applied science provides unique opportunities for contributing to the university’s core activities: research, teaching, consultancy and talent development as well as a good foundation for building business collaborations.

About the strategy
The scientific strategy identifies six areas of strength that will constitute the department’s scientific flagships in the coming period. We describe the scientific goals as well as a number of initiatives to support the scientific goals. Overall, the scientific strategy must strengthen the core activities and the general objectives for respectively research, consultancy, teaching, talent development and business collaboration.
2 The Department’s strengths and weaknesses

The Department of Bioscience has a unique scientific scope and is one of the largest departments of biology in Europe. The department’s research, teaching and consultancy are linked to strong and active research groups. Several of the department’s research groups are part of the absolute world elite in their research field and have a strong international network, and the department has a good scientific infrastructure. Many groups hold a strong position in research-based consultancy and monitoring of the environment. The department hosts large national environmental databases containing monitoring data for freshwater, marine and terrestrial areas, which is a unique strength for the department in connection with research, consultancy, teaching and talent development.

All research groups are increasingly dependent on external funding, since both contract funds from the Ministry of Environment and Food of Denmark and the university’s basic income and education revenue are declining. At the same time, the department has an obligation towards the Ministry of Environment and Food of Denmark to maintain a broad competence profile within the disciplines specified in the contract with the ministry as well as competencies to cover all academic disciplines in biology training. The department mainly works with nature and the environment, and currently activities are only slightly geared towards business. This, depending on the political agenda, may make it difficult to obtain external funding from strategic funding sources. The geographical spread of the department’s employees into four places of work and the different framework conditions and cultural differences between the department’s divisions entail a number of challenges that require special attention in order to ensure the cohesiveness of the department.

The wide biological competencies in the department make it possible to expand existing research and consultancy areas and to further develop the biology programme according to the needs of society and to expand the department’s range of postgraduate courses. However, research, consultancy and education are subject to politically determined framework conditions that make it difficult to build and maintain a strong academic core in the research groups and to develop the educational assignments, even when the academic breadth and competencies exist. The decline in research funding, the reduction in education revenues and the reduction of contract funds from the ministries constitute a major challenge for the department in the years ahead.
3 Overall strategic objectives

The main objective of the Department of Bioscience is to maintain and strengthen its position as an internationally leading institution with excellent research, research-based consultancy and a relevant biology programme of the highest quality. The department should have a work environment that is characterised by mutual respect, recognition, responsibility and well-being.

Research
Research at the Department of Bioscience covers all biological levels, from genes, physiological processes, individuals, populations and species to entire ecosystems. The department aims to be an international leader in biodiversity and conservation biology, Arctic environment and ecosystems, aquatic biology and ecology, genetics and evolution, microbiology and zoophysiology.

Consultancy
The Department of Bioscience puts research-based knowledge on nature and the environment to use through independent consultancy to authorities and business. The department will maintain its position as the preferred consultant to the Danish authorities on issues on nature and the environment and will increase its participation in international consultancy activities based on strong strategic research.

Education
The department disseminates knowledge on biology through its programme and popular science. The department will offer a strong Bachelor's degree and Master's degree programme in biology with the possibility of specialising in most biology disciplines. The programme will be characterised by its academic, theoretical, experimental, analytical and field based content, and its relevance to society. Graduates from the Department of Bioscience will gain qualifications that can be widely used in the labour market. Traditionally, most graduates have been employed in knowledge-intensive business, public administration and secondary schools. In the future, an increasing number of graduates will be employed in the private sector.

Talent development
The department recruits highly qualified Danish and foreign Ph.D. students, postdocs, researchers and lecturers, and will educate talent, who can attain attractive positions at Danish and foreign universities, in public administration and private companies. The department will recruit top talent from at home and abroad for permanent academic positions. Further, the department contributes to capacity building abroad in countries with weak research infrastructure and inadequate environmental management.

Business collaboration
Collaboration is one of the means to meet the objectives of the strategy. The department has strong international collaboration with other knowledge institutions at home and abroad and will put extra effort into strengthening our collaboration with public and private companies in terms of research, consultancy and teaching. We will create a basis for joint research applications and new networks and for sharing research infrastructure and we will initiate collaboration on education, both in the form of project work in companies, business Ph.D.s/postdocs, and postgraduate courses for graduates.

Work environment
The department seeks to have dedicated and flexible staff, where the core values are freedom, creativity, and respecting the long-term perspective. We want a work environment characterised by recognition, trust and respect for everyone’s contributions, regardless of position, professional or geographical affiliation.
### 3.1 Strategy map for the Department of Bioscience

**Mission**

To create groundbreaking knowledge of benefit to society on living organisms and their function, evolution and interaction with the environment and use this knowledge to educate biologists at the highest international level and to provide consultancy to the authorities and business to benefit society.

**Vision**

The Department of Bioscience aims to be the leading biology department in Denmark. The Department will achieve this through excellent research, educating highly qualified biologists and by being the preferred consultancy partner for authorities and businesses for assignments on nature and the environment. We want to be known internationally for our high level of professionalism and to be an attractive workplace for employees and students.

**Stakeholders**

Employees, students, authorities, existing and future partners in research and business as well as funding bodies and the public around the university.

<table>
<thead>
<tr>
<th>Core activities</th>
<th>Strategic areas of focus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research</strong></td>
<td>Strengthen research excellence.</td>
</tr>
<tr>
<td></td>
<td>Maintain and stimulate research collaboration.</td>
</tr>
<tr>
<td></td>
<td>Increase the impact of research.</td>
</tr>
<tr>
<td><strong>Consultancy and other knowledge exchange</strong></td>
<td>Ensure and expand our position as consultant to the authorities on the environment and nature.</td>
</tr>
<tr>
<td></td>
<td>Ensure a solid research foundation for consultancy.</td>
</tr>
<tr>
<td><strong>Talent development</strong></td>
<td>Recruit and retain talent from home and abroad.</td>
</tr>
<tr>
<td></td>
<td>Strengthen the research programme.</td>
</tr>
<tr>
<td></td>
<td>Strengthen the scientific development and well-being.</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Ensure quality and a scientific research base in the programme.</td>
</tr>
<tr>
<td></td>
<td>Educate graduates to have strong and relevant competencies for a diverse labour market.</td>
</tr>
<tr>
<td></td>
<td>Streamline and improve the biology programme and reduce dropout rates.</td>
</tr>
<tr>
<td><strong>businesses collaboration</strong></td>
<td>Establish research collaborations.</td>
</tr>
<tr>
<td></td>
<td>Involve business in the education and in development of talent.</td>
</tr>
<tr>
<td></td>
<td>Profile the the department to the business community.</td>
</tr>
</tbody>
</table>

**Strategic areas of focus**

- Funding through the Finance Act (appropriations for education, basic funding for research, the relevant ministry’s funding for research-based consultancy to the authorities) and through competitive research grants and public procurement.
- Political intitiatives for university assignments (research,education and research-based consultancy to the authorities).
- Client needs (interests and needs of users of research, education and consultancy).
- Recruitment options.

**Values**

Quality, courage, curiosity, initiative, creativity, freedom, openness, respect, job satisfaction.
4 Scientific strategy

The scientific strategy for Bioscience is based on an analysis of the 10 disciplines that make up the department’s core research and, thus, the basis of our educational and consultancy activities (section 4.1). Based on this, we have identified six academic fields of excellence in which Bioscience has particularly strong expertise and conducts outstanding research (section 4.2).

4.1 Disciplines in Bioscience

The department works with ten disciplines:

- **Marine ecology**: We study human impact on the ocean and the global nutrient cycles and what role global climate change plays. We explore marine life at all biological levels, from genes of individual cells to the largest whales, and we work in all climate zones – from the Arctic to the tropics – and contribute to the global discussion of the state of the planet and its development. One area of focus is sustainable management of the marine environment and consultancy in connection with implementing domestic and European directives.

- **Freshwater ecology**: Our freshwater research focuses on gaining insight into the biological, physical and chemical processes in freshwater, including water and nutrient cycles in catchments, streams, wetlands and lakes. Our research aims to establish how stream and lake ecosystems function under natural conditions and how ecosystems are affected by e.g. pollution or climate change. Additionally, we work with measures (including restoration) to reduce the negative effects on the systems. One focus areas is the development of models for consultancy services in connection with the European Water Framework Directive, national laws and national action plans.

- **Zoophysiology**: We focus on how animals function and how they handle changes in the surrounding environment by regulating their body functions. We use state-of-the-art biomedical and de novo techniques to study how animals regulate their metabolism, oxygen transport, muscle performance and digestive systems through a suite of physiological and biochemical processes that are adapted to the surrounding environment. Another area of focus is how some animals use their sound production and auditory systems for echolocation and regulating movements when they navigate and hunt prey in total darkness.

- **Biodiversity**: We explore conditions in the environment that may explain patterns and dynamics of biodiversity on earth. This includes natural conditions in the soil, water and air as well as human influence on these conditions through nutrients, use of water and raw materials and emissions of hazardous substances. We study biodiversity patterns at the macro and local scale in both space as well as time by developing methods for measuring, assessing and statistical modelling of biodiversity in large multivariate datasets, through agent-based modeling of populations in dynamic landscapes and through development and use of advanced remote sensing and genome-based techniques such as the use of drones, lidar and eDNA.

- **Terrestrial ecology**: We study the interactions between plants, animals, fungi, micro-organisms and the surrounding environment. The research premise is that nature is stressed by the production of feed, food and biofuel as well as industrial plants and construction. This directly affects nature, which is further affected by nutrients disbursed by wind from cultivated land. The research includes laboratory and field studies as well as field observations, often coupled with modelling, e.g. in order to improve risk assessment and decision sup-
port. Additionally, we study naturally occurring and commercially propagated insects for use in biological control and pollination. Our research areas include, among others, methods/forms of cultivation for increasing the populations of beneficial organisms by improving conditions and reducing threats.

Environmetal impacts of agriculture
We conduct research and provide consultancy on environmental impacts of e.g. pesticides, additives, genetically modified organisms (GMOs), nitrogen and phosphorous, reduced tillage, fallowing etc. Through laboratory and field studies as well as modelling, we study how current and modified farming practices affect the load on nature and the environment and we conduct monitoring as part of the National Monitoring Programme for Water and Nature (Nationale Overvågningsprogram for Vand og Natur (NOVANA)). The aim is to follow the impact on, state and development of nature and the environment and to contribute to the basis for regulations and legislation. We are working towards developing research on optimising conservation tillage, e.g. in order to optimise methods for using crop residues for weed control and biotopes for beneficial organisms and increasing the soil’s carbon pool.

Microbiology
Our research addresses the role of microbes in natural and human environments and their interaction with higher organisms. We study microbial nutrient cycles and community structures, microbial physiology and evolution using biochemical, molecular and genomic techniques. One area of focus is the marine environment. Among other things, we work with microbial life in the deep biosphere kilometers below the seabed, we examine the composition of microbial communities and microbial nutrient cycles, and we explore the discovery of electrical conductive cable bacteria. Other research areas are microbial symbiosis and bacterial biofilm.

Genetics
Among other things, we explore the composition and function of genetic material and the evolutionary changes that occur by chance or as a result of natural selection. We are working to identify adaptation and evolution of the genetic material itself, study which genes and genetic products are activated by certain conditions, and we explore the role these genes play e.g. in development and evolutionary adaptation. Studies of the genetic materials from various organisms reveal kinship both within and between species and allow us to understand the relationship between genetic material and the characteristics of an organism. Genetic studies further contribute to understanding inbreeding in small populations of animals and plants and opportunities to adapt to future environmental changes.

Evolution
We aim to increase our understanding of the evolution of life and living organisms’ adaptation to the surrounding environment and the stressors it is exposed to. We study evolutionary biology with particular focus on evolutionary adaptation to stressors and climate change, the interaction of organisms, and population biology focusing on genetic structure and local adaptation. Our research contributes to understanding how genetic and plastic mechanisms together with population historical parameters enable or prevent adaptation to natural and anthropogenic environmental changes and to understanding the evolutionary interactions between animals, plants and micro-organisms.

The Arctic
Our research and consultancy deals with the effects of transboundary pollution and climate change on ecosystems, society and the environment. The major areas of focus are Arctic biodiversity and carbon exchange between the atmosphere and the terrestrial and marine areas, respectively, as well as the underlying biological, chemical and physical processes. We also work with the effects of exploitation of raw materials, particularly for the purpose of providing consultancy to the authorities of Greenland and coordinating national and international programmes for environmental monitoring, etc.
4.2 Scientific strenghts

In the coming years, we will strengthen the following areas, which will constitute the department’s academic flagships. The areas of strength derive from existing strong academic environments in which we conduct world-class research.

Aquatic biology and ecology

Global climate change is putting water resources, the aquatic environment and aquatic organisms under increasing pressure. The department has a unique research environment at top international level in the field of aquatic biology and ecology. Our competencies cover a wide spectrum, from the biology of organisms to modelling water and nutrient cycles from land to sea. Focus areas for research include human impact on species, the environment and the global nutrient cycle, the effects of global climate change, biological, chemical and physical processes in and around the aquatic environment, assessment of water quality, and the ecological status and the effects of measures that can be used to manage and reduce the loss of carbon, nutrients and pollutants to the aquatic environment as well as the loss of endangered species. Our research is supported by a strong infrastructure, including the research ship Aurora and stream and lake-mesocosms facilities. The strong and broad research profile is the basis of three national topic centers under the Ministry of Environment and Food of Denmark’s national monitoring programme, NOVANA.

Arctic environment and ecosystems

The department and the integral interdisciplinary Arctic Research Center has an international leading role in Arctic research, education and consultancy relating to the impact of climate change on Arctic nature and the society. We play a leading role in providing consultancy to the authorities of Greenland on environmental issues related to mining activities and nature conservation. We provide original research that supports both current and future consultancy tasks on critical loads and impacts of hazardous substances, oil, metals and radioactive substances in the Arctic environment. We are a domestic and international leader in the study of wildlife health and medicine, toxicologic effects of pollution (including physiologically based pharmacokinetic modelling), analyses of time series (pollution), studies of zoonoses and the effects on the immune system and the relation to human health in the Arctic. The department has a central role in research, monitoring and talent development of the effects of climate change on the Arctic ecosystems and communities, e.g. through cutting-edge research on the regulation of carbon exchange between the atmosphere and Arctic terrestrial and marine areas. We run the interdisciplinary and internationally acclaimed research station, Zackenberg, and we are a key member of the Arctic Science Partnership.

Biodiversity and conservation biology

The department holds a strong position in international biodiversity research and is a national leader in research-based consultancy and knowledge exchange on evidence-based and cost effective conservation and management of biodiversity in Denmark. Our research focuses on how ecological framework conditions, historical conditions, natural processes and anthropogenic changes of nature and the environment affect our surrounding biodiversity. We explore the underlying evolutionary, ecological and geographical mechanisms and work on understanding human impact on biodiversity and ecosystems. Particular focus is on how current climate change and other global anthropogenic environmental changes affect biodiversity. We have expertise in biogeography and macro-ecology, ecology of birds and mammals, plant biodiversity, plant-insect interactions, pollination biology, population ecology, community genetics and vegetation ecology, phylogeny and taxonomy, nature conservation (incl. wildlife management and rewilding), eco-toxicology, critical loads, ethno-ecology and ecological geography. Our tools are experiments, field observations, GIS, remote sensing, telemetry, eDNA, risk assessment, risk modelling, decision support systems and eco-informatics.
Genetics and evolution

The department is a leader in evolutionary genetics and population genetics, with particular focus on genetic variation and evolutionary adaptation, the evolutionary development of genes and genomes, and how processes that result in the loss of genetic variation affect the development of populations. We also lead internationally in evolutionary biology with particular focus on evolutionary adaptation to stressors and climate change, the interaction of organisms, and population biology focusing on genetic structure and local adaptation. We use and develop methods in experimental evolution, functional genomics and the latest sequencing techniques to impart new knowledge on gene-environment interactions and molecular evolution. Our research contributes to understanding how genetic and plastic mechanisms together with population historical parameters allow or prevent adaptation to anthropogenic environmental changes and to understanding the evolutionary interactions between animals, plants and microorganisms.

Microbiology

Microbiological research addresses the role of microbes in natural and anthropogenic environments and their interaction with higher organisms, including life in extreme environments such as clouds, glaciers and exoplanets. We develop and use cutting-edge biochemical, molecular and genomic techniques to study microbial nutrient cycles and community structures, microbial ecophysiology and evolution. Recent highlights include the discovery of electrically conductive cable bacteria in marine and freshwater sediments and the study of microbial life in the deep biosphere kilometers below the seabed. The department encompasses the basic research center, Center for Geomicrobiology, and two ERC-grants within these areas. We are the world leader in developing microsensors for studying chemical gradients at microscale in natural and anthropogenic systems. The research is fundamentally basic science, but is of great relevance for the development of new biosensors and enzymes and for biogas production, waste water treatment, biofilters, biofilm and off-shore oil production.

Zoophysiology

Zoophysiological research addresses how animals function under different living conditions. The department is a world leader in studying respiratory and metabolic physiology in animals with particular focus on the functioning of the respiratory organs, impacts of temperature on metabolism, regulation of gastrointestinal absorption of nutrients, gas-binding proteins’ adaptation to the environment, as well as cardiovascular regulation. We are also leaders in animals hearing and active use of sound in echolocation in a world with increasing noise pollution, and we have great expertise in stress physiology with special emphasis on hypoxia, cold, heat and drought tolerance, often in the context of elevated levels of xenobiotics and aquaculture. The research is mostly basic science, but also includes studies of animals in aquaculture, ecotoxicological studies, effects of underwater noise on e.g. the behaviour of whales, the effects of global warming and the development of animal models in clinical medical research.
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Appendix I  Description of the organisation

The department consists of two divisions, BIOS RKS (Roskilde, Kalø and Silkeborg) and BIOS AAR (Aarhus), each with their own department head. The department acts as one department in which management, committees and, in part, administration cut across the localities, while the sections are associated with the place of work. Roskilde has five sections, Kalø two, Silkeborg six, and Aarhus has five.

Management
The day to day management team consists of the department heads, the four deputy heads of department and the secretariat manager. The management team is responsible for preparing, coordinating and following up on strategy and action plans. The day to day management team plans and coordinates activities at the departmental level with the aim of creating results by setting the direction and framework. ‘The expanded management team’ consists of the day to day management team and the section managers. It plans new initiatives for the development of the department.

Secretariat
The secretariat consists of the administrative staff in the department. The secretariat staff primarily works with assignments related to the place of employment, but several functions are performed across the locations, e.g. web activities, studies administration, fundraising support and secretarial support to various committees.

Sections
The sections are based on academics and geographics. The sections are composed so that they have a critical mass that makes it possible to create an inspiring and stimulating academic environment. The sections consist of a section manager, a number of permanent employees (VIP, AC-TAP and TAP) and a number of Ph.D. students, postdocs and graduate students. Each section has a number of project groups that work closely with project groups in their own section as well as project groups in other sections. Current sections are:

Roskilde: Applied marine ecology and modelling
Marine biodiversity and experimental ecology
Arctic environment
Arctic ecosystem ecology
Marine mammal research

Kalø: Fauna ecology
Biodiversity

Silkeborg: Stream and wetland ecology
Marine ecology
Lake ecology
Soil fauna and ecotoxicology
Plant and insect ecology
Catchment science and environmental management

Aarhus: Aquatic biology
Microbiology
Genetics, ecology and evolution
Ecoinformatics and biodiversity
Zoophysiology
Academic networks

The main task of the academic networks is to stimulate academic collaboration across sections and places of employment. Academic networks are established and dissolved as needed and are based on academic interests and volunteerism. These are the current academic networks:

- Arctic ecology
- Blue corridors between sea and land
- Biodiversity
- Drones for gathering data and analysis of data collected by drones
- Fauna ecology
- Lab technician network
- Marine research and consultancy
- Plant-insect interactions
- Ecotoxicology

Committees

The department has a number of committees, all geared towards coordinating activities across the department’s sections and localities. The following briefly describes the committees’ areas of responsibility. The committees’ compositions and mandates can be seen on the department’s intranet, Biosphere.

Occupational Health and Safety Committee (LAMU)
The committee plans, heads and coordinates work with occupational health and safety at the localities. The committee analyses health and safety measures, advises on solving specific health and safety issues and follows up on whether safety work is proactive and preventive. Each locality also has a local occupational health and safety organisation (AMO).

Liaison Committee (LSU)
The committee works to ensure that management and employees work together on implementing the department’s strategy and objectives. Among other things, the committee involves the employees in this work and helps create the best possible working conditions for a healthy working environment.

Departmental Council
The council aims to ensure the development of ideas, quality, transparency and legitimacy of all decisions on academic issues and to ensure the department’s academic and social identity and coherence.

Ph.D. Programme Committee
The primary task of the committee is to academically assess applications for admission to the biology research programme. In addition, committee members are responsible for organising Ph.D. defenses and participating in qualification exams, and the chairman is responsible for managing the day to day research training in biology.

Education Committee
The committee, in dialogue with the department’s permanent scientific staff and the board of studies, plans the courses offered by the department. The committee also discusses the strategy for developing the education provision.

Research Committee
The committee is an advisory committee that examines the department’s research strategy, research issues and research strategic initiatives to develop and position the department.
Consultancy Committee
The committee is an advisory committee that deals with the framework for the department’s research-based consultancy and public sector consultancy and the strategic measures aimed at developing and positioning consultancy at Bioscience.

Business Committee
The committee’s primary task is to strengthen collaboration with public and private businesses and create the basis for joint research applications and new networks. Another task is to strengthen collaboration on education, both through internships and business Ph.D.s and postdocs.

Information Committee
The committee’s main task is to update and develop the department’s external communication. This mainly concerns the website in relation to the selected audience.

Organisational chart
Appendix II Employees and culture

Employees

The department has a permanent staff of approximately 330 people distributed in the various job categories as shown below. In addition, there are approximately 90 Ph.D. students.

Composition of permanent staff at the Department of Bioscience during 2011-2015, shown as FTEs.

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Gender ratio (m/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>19</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>(92/8)</td>
</tr>
<tr>
<td>Associate professor/ Senior researcher/Senior advisor</td>
<td>108</td>
<td>106</td>
<td>112</td>
<td>99</td>
<td>92</td>
<td>(79/21)</td>
</tr>
<tr>
<td>Lecturer/Researcher/Postdoc</td>
<td>34</td>
<td>44</td>
<td>48</td>
<td>53</td>
<td>56</td>
<td>(71/29)</td>
</tr>
<tr>
<td>Research assistant</td>
<td>3</td>
<td>9</td>
<td>13</td>
<td>13</td>
<td>9</td>
<td>(65/35)</td>
</tr>
<tr>
<td>Technical administrative staff (TAP)</td>
<td>157</td>
<td>167</td>
<td>169</td>
<td>162</td>
<td>149</td>
<td>(51/49)</td>
</tr>
<tr>
<td>Total</td>
<td>321</td>
<td>351</td>
<td>369</td>
<td>352</td>
<td>332</td>
<td></td>
</tr>
</tbody>
</table>

* Gender ratio of permanent staff at the Department of Bioscience in 2015 based on FTEs. Blue: men; Brown: women.

Employee culture

The department’s management sets the direction and framework and coordinates collaboration throughout the department. With four geographically separate places of work and a wide span of tasks, management faces particularly high demands. The department’s management must be coaching and supportive, and the sections, projects, academic networks and committees, together with the supporting TAP functions, are the pillars of the organisation. Employees are expected to be responsible for planning and performing their work within the accepted and agreed upon framework, and each employee is assumed to actively take on the responsibility of solving tasks related to the department as a whole.

The department of Bioscience emphasises self-management, commitment and understanding of the department as a whole. Each employee is expected to be aware of goals and strategies, to support efficient research, public sector consultancy, teaching and talent development and to actively take responsibility for solving tasks in cooperation with other employees. Our culture should be inquisitive and encouraging, and the highest priority is given to contributing constructively for the benefit of the entire department as well as the individual.

Read more in ‘Organisationsbeskrivelse, Institut for Bioscience’.
Appendix III  Education statistics

The department offers a Bachelor’s and a Master’s degree in Biology. The figures below show the development of student admissions, dropout and output in the previous years as well as during the strategy period.

**Student admissions**

Development in admissions of undergraduate and graduate students to the biology programme in the period 2008-2015 and expected future admissions according to the dimensioning.

**Dropout**

Student dropout rates for undergraduate and graduate students in the biology programme, shown as dropout in percentage for each year after 2 years in the period 2008-2013, and the goal for student dropout in the strategy period.
Duration of the study programme

Average duration of the study programme (months) for the bachelor's and master's degree programmes in biology for the period 2011-2015 and the goal for reducing the duration of the study programme in the strategy period.

Output

The output of graduated bachelor's and master's students from the biology programme in the period 2011-2015.

Gender distribution

The distribution of graduated bachelor's and master's students from the biology programme in the period 2011-2015.