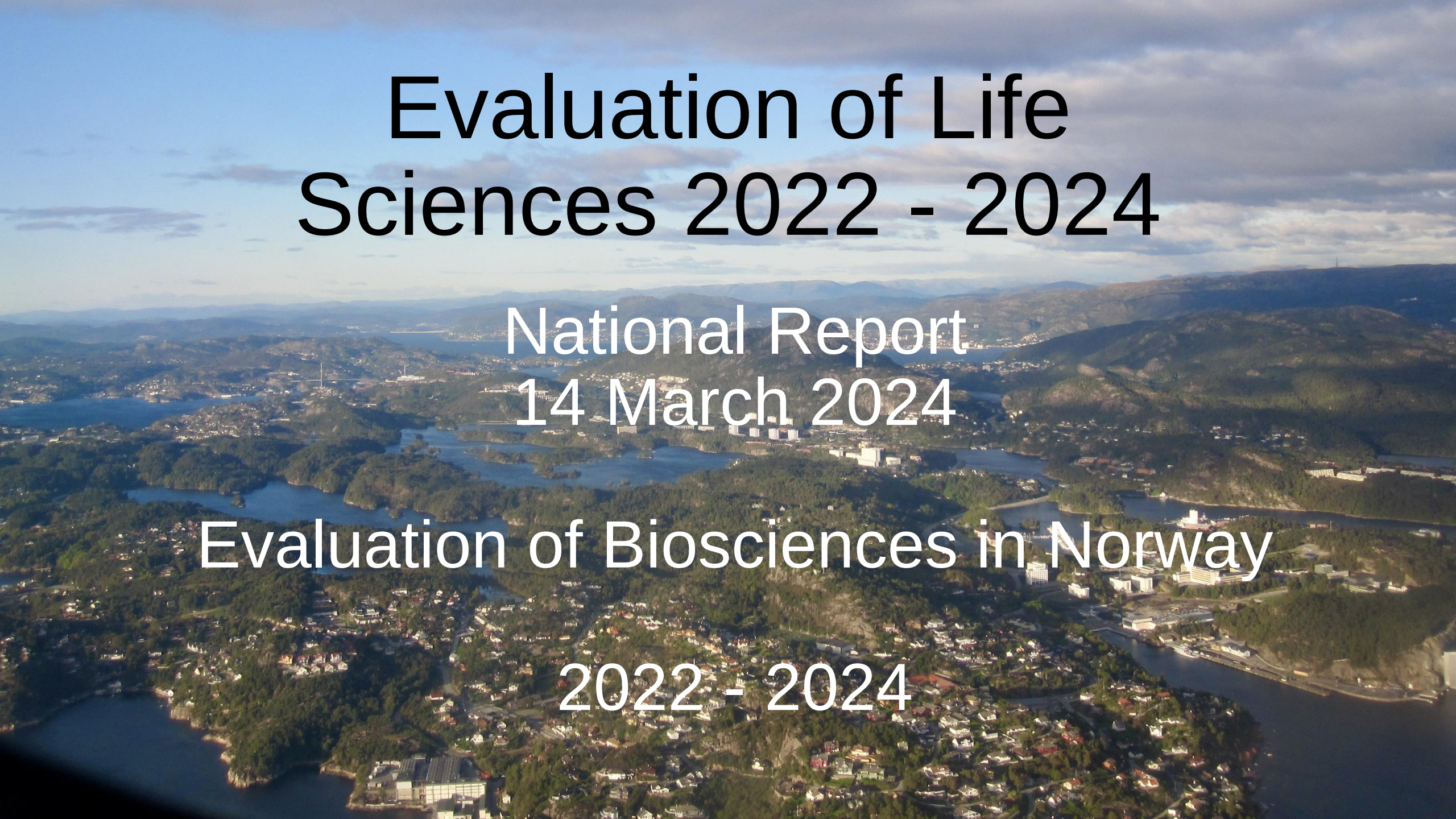

Evaluation of Life Sciences 2022 - 2024

National Report
14 March 2024

Evaluation of Biosciences in Norway

2022 - 2024

Three levels

The research in this evaluation covers approximately 15% of all university research in Norway and 18-19% of all research in Norwegian science institutes.

National

22 Administrative Units

97 Research Groups

Universities, Institutes, Museums

Fisheries and aquaculture

Ecological research

Biotechnology, food and non-food

technopolis group

National Evaluation panel

Professor Ivo F Sbalzarini
Professor Marianne Holmer
Professor Colin F Moffat

Geert van der Veen
technopolis group

Observer: The Research Council of Norway

Evaluation criteria

Administrative Units

1. Strategy, resources and organisation.
2. Research production quality and integrity.
3. Diversity and equality.
4. Relevance to institutional and sectoral purposes.
5. Relevance to society.

Research Groups

National Report

1. General observations on Norwegian biosciences.
2. Strengths and weaknesses of Norwegian biosciences research in an international context.
3. The general resource situation
4. Ph.D. training, recruitment, mobility and diversity.
5. Research cooperation nationally and internationally.
6. Societal impact and the role of research in society, including open science.
7. Recommendations.
8. Evaluation of Biosciences 2022 – 2024.

Findings: Positives

Norwegian biosciences research is generally considered good, with a few of the research groups evaluated as very good or excellent in an international comparison.

- Some excellent impact cases reaching out to society and industry.
- The research supporting regulation has a very direct societal impact.
- Excellent infrastructures (especially shared ones) and long-term data sets.
- Thirteen of the groups, distributed across the HEIs and Institute Sector, have outstanding organisational quality (score 5/5).
- High core funding for the universities (in international comparison).
- Good gender diversity at lower ranks.
- At the administrative unit level, there were examples of cooperation between the HEIs and Institute Sector.

Findings: Negatives

A few research groups were rated below the bar.

- Lack of strategy on all levels.
- Less focus and urgency on research dealing with global challenges and the United Nations Sustainable Development Goals.
- Talent pipeline problems ("inverted" personnel age pyramid).
- The proportion of Ph.D. candidates is low compared to international standards.
- Lack of diversity among faculty (both gender and cultural).
- Low international visibility.
- Lack of interdisciplinary collaboration (especially computing, AI).
- Museum collections at risk due to old and unsafe infrastructure.
- RCN grant acceptance rates too low.

Recommendations

Eight recommendations that could lead to increased quality and further impact :

- Make sure all administrative units in this research area have coherent and synergistic strategies and implement mechanisms to coordinate them on the national level. A national strategy on Biosciences could help.
- Create, through clear strategies, more direction and critical mass in the HEIs and Institute Sector as a whole, to achieve excellence in science.
- Increase incentives to use the core funding to win additional competitive funding.
- Generate incentives and programs to foster collaboration, both nationally and internationally.
- Continue the support for Research Infrastructures and optimise their use.
- Generate incentives and programs to make use of scientific results and increase economic and societal impact.
- Establish measures for a stronger talent pipeline, combining domestic education and hiring of international staff.
- Make use of science advisory boards to provide external review, advice and assistance with developing the strategies.

Closing comment

Research is generally of good quality, but the potential is bigger than is achieved right now.