FIVE GUIDING PRINCIPLES
FOR 2026-2030

DSE's four interdisciplinary research signatures are supported by five guiding principles that will shape the development of research at the department 2026-2030:

1. Disciplinary excellence and international research at the highest level
We will continue to strengthen our disciplinary research environments and their international connections as the foundation for research at the highest level. Scientific depth, strong international networks and collaboration with leading research environments strengthen research quality and provide access to knowledge, expertise, talent, and research infrastructure beyond the department.

2. Creating fertile ground for interdisciplinarity
DSE combines an unusual breadth of scientific disciplines within a relatively small and closely connected research environment. Physical proximity, shared research infrastructure and a strong tradition of interdisciplinary research and problem-oriented education create distinctive conditions for researchers from different fields to meet. We will build on these conditions to create fertile ground for new questions, collaborations and research directions to emerge across disciplinary boundaries.

3. Fundamental and applied research strengthen each other
We will maintain a strong interplay between fundamental and applied research. Fundamental research advances scientific understanding and provides the seedbed for future discoveries and applications by developing knowledge, methods and expertise whose relevance may extend far beyond the questions that originally motivated them. Applied research brings scientific knowledge into dialogue with concrete societal challenges and, in turn, generates new questions for fundamental research.

4. Research and education develop together
We will further develop DSE's strong tradition of bringing students close to active research and integrating contemporary scientific questions, methods and research infrastructure into education. Through problem-oriented project learning, students engage with open research questions and contribute new questions and perspectives back into research. Our longstanding tradition of research in science education and didactics provides a foundation for further developing this field and its contribution to teaching and learning in the natural sciences.

5. Innovation and Research in dialogue with society
We will bring scientific knowledge, methods and expertise into collaboration with hospitals, companies, authorities, and civil society. We will continue to strengthen opportunities for translating research into practical applications, including through patents, spinout companies and other forms of innovation. Through research collaboration, citizen science, public engagement and access to research infrastructure, DSE contributes to societal change while allowing societal challenges and needs to inspire new research questions, collaborations and directions.