

# Public summary

The Institute of Biology Leiden (IBL) is one of the eight research institutes of the Faculty of Science at Leiden University. IBL's mission is to perform outstanding and internationally competitive research and teaching in biology from the molecular and cellular to the organismal and ecosystem levels. We foster a profound passion for scientific exploration and operate in a highly collaborative atmosphere to ensure interdisciplinary and cutting edge science and education. Our leading principle harnessing biodiversity for health shows our commitment to making significant contributions to two major societal themes, namely Biodiversity and Health. These themes are integral to the new strategy of the Faculty of Science, and well embedded in the broader Leiden hub for biodiversity research, as well as for the discovery and development of future medicines. At IBL, our scientists successfully translate new insights into applications in agriculture, environment, medicine and industry. We work within an inclusive and diverse environment, where scientists from over 30 nationalities collaborate, fostering a vibrant atmosphere for creative research and education.

## The strategic objectives of IBL are:

Perform outstanding research in the broad field of biology with clear thematic choices. While we are a broad biology institute, IBL specifically aspires to make the difference in selected research areas, which are reflected by the four leading research themes Evolution & Biodiversity, Development & Disease, Host-Microbe Interactions and Bioactive Molecules. These themes are coordinated by young talented staff, and form a strong and coherent network that connects the organismally oriented clusters Animal Sciences, Microbial Sciences and Plant Sciences.

Contribute to major societal challenges. IBL aims to perform highly competitive research that contributes to the United Nations Sustainable Development Goals. This encompasses various impactful areas, such as climate change-resilient crops and disease management (SDG 2 & 3), harnessing nature's resources to discover future medicines for disease prevention (SDG 3), enhancing the quality of life within urban environments (SDG 11), and safeguarding biodiversity (SDG 14 & 15). Through our research and teaching programs, as well as our dedicated Science Communication Department (SCS), we also actively contribute to lifelong learning opportunities (SDG 4).

Build a strong collaborative research environment. It is our ambition to play a central role in the Leiden ecosystem, to ensure thriving research and education. We collaborate intensively with the institutes of environmental sciences (CML), Naturalis Biodiveristy Center and the botanical gardens (Hortus botanicus) on biodiversity research, and with the institutes of chemistry (LIC), drug research (LACDR) and computer science (LIACS) on the discovery of novel medicines, in close association with the Leiden University Medical Center (LUMC) and the Leiden Bioscience Park (LBSP). Increasing resonance exists with the institutes of mathematics (MI) and physics (LION).

Inspire and train the next generation of scientists in an open science environment. At IBL, research and education are strongly intertwined, with over 400 BSc and MSc students performing high-profile research internships every year. Many of these students find their way into academia and industry. Furthermore, IBL is strongly dedicated to the training of PhD candidates and early stage postdoctoral researchers. We stimulate best practices in supervision and organize various activities for the personal development of our young scientists. Moreover, we strongly promote the ambitions of open science, sharing our knowledge, expertise and infrastructure with the broad scientific community.

For the coming years, we have identified the following strategic goals:

- Further intensify our multidisciplinary collaborative research at the local, national, and international levels, to maximise our scientific and societal impact as well as valorization;
- Further strengthen and integrate the Research Themes within the institute by recruitment of new staff and with stronger involvement of our PhD students and postdoctoral researchers;
- Continue the implementation of our recognition and rewards strategy, aimed at optimising employee satisfaction and well being in an inclusive working environment;
- Optimise the integration of new staff, promote the development of academic leadership and proactively engage with our employees to optimise their career perspectives;
- Promote optimal PhD trajectories, including time management, effective training opportunities and a healthy supervision culture;
- Translate our fundamental and applied research in collaboration with our academic, industrial and societal partners, to meet the major challenges currently imposed on society, such as declining biodiversity, increasing antimicrobial resistance and the consequences of climate change.