STRATEGY 2030

MAX DELBRÜCK CENTER

Discovery for tomorrow's medicine

WHY ‘MDC 2030’?

When I became the scientific director of the Max Delbrück Center (MDC) in 2022, the institute was celebrating its 30-year anniversary, which afforded us a unique opportunity to reflect on its rich history and many accomplishments. Since its inception, the Max Delbrück Center has pioneered a new era in translational medicine, transforming molecular insights into clinical applications.

Commitment to excellence is the cornerstone of the Max Delbrück Center’s mission. Our scientists excel on the frontiers of knowledge, uncovering groundbreaking insights in biology. Ambition and innovation are inherent to our identity, and these traits promise a bright future.

Today, science is evolving at an unprecedented pace. Advanced technologies and artificial intelligence (AI) are revolutionizing our capacity to detect and treat disease. At the same time, the scientific community at large is recognizing that the academic tradition of individualistic enterprise is now a hindrance to fully capitalizing on these advancements. To keep pace with innovation, we must unite our diverse silos of ingenuity to work as one. We must adapt our discovery ecosystem to the emerging scientific environment.

The 30th anniversary proved an ideal timepoint for the Max Delbrück Center to reflect upon its successes and reposition for the future. To accomplish this, we embarked upon a year-long strategic planning process. This inclusive effort involved virtually everyone in our institute, igniting an institute-wide discussion about our past, present, and future.

We began by revisiting our mission to clearly define our purpose. As part of this process, we carefully examined how the Max Delbrück Center operates and imagined how we should function to best deliver on our mission.

This strategic plan outlines our ‘MDC 2030’ vision, detailing the many ways the Max Delbrück Center will adapt to our evolving scientific ecosystem, prioritize collaboration, and develop internal systems that value people, to propel scientific discovery. This achievement is credited to the members of the ‘MDC 2030’ Strategy Team and Sounding Board, who, as pictured in this strategy paper, shepherded this project to fruition.

The completion of this document is where our work really begins. Our next step is the actualization of this vision, holding ourselves to achieving clearly defined goals. We must remain steadfast in our pursuit of excellence, innovating, adapting, and thriving in an ever-changing world.

Ultimately, our vision is not just about the Max Delbrück Center. We have the capacity to unlock the many secrets of biology and, through this process, revolutionize healthcare for people around the world. We have a responsibility to be as good to others as we can possibly be. This is our vision and why we have developed ‘MDC 2030’.

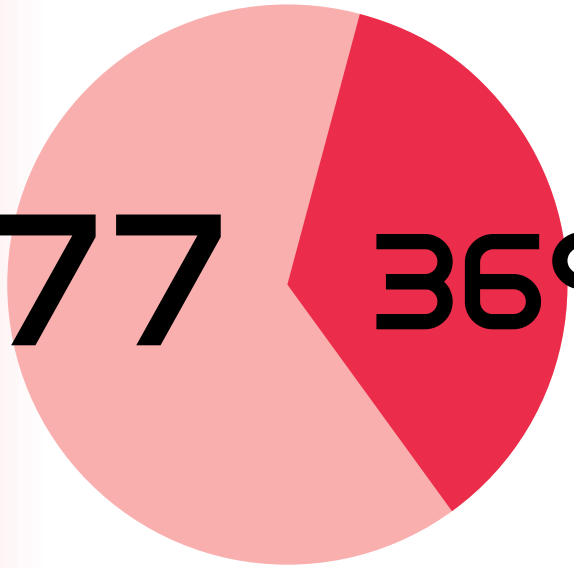
MAIKE SANDER, MD

Scientific Director
Max Delbrück Center

WHO WE ARE

1777

Employees and affiliated personnel



36%

from countries other than Germany

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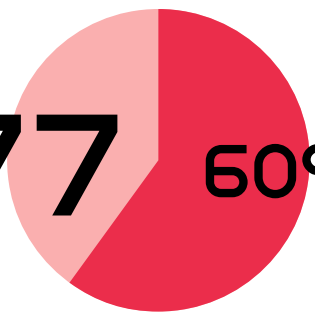


60%

identify as female

242

PhD Students

248

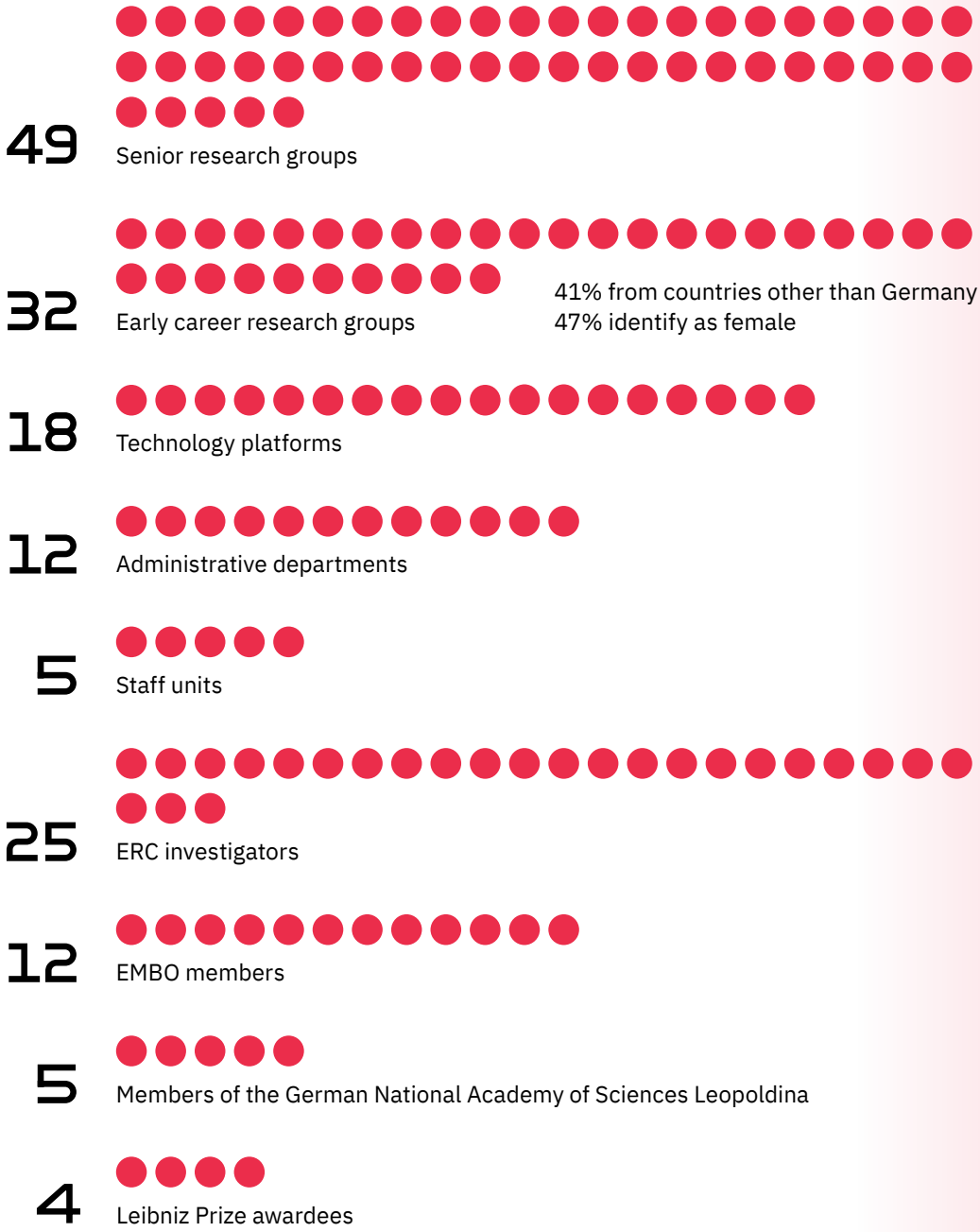
Postdoctoral Researchers

326

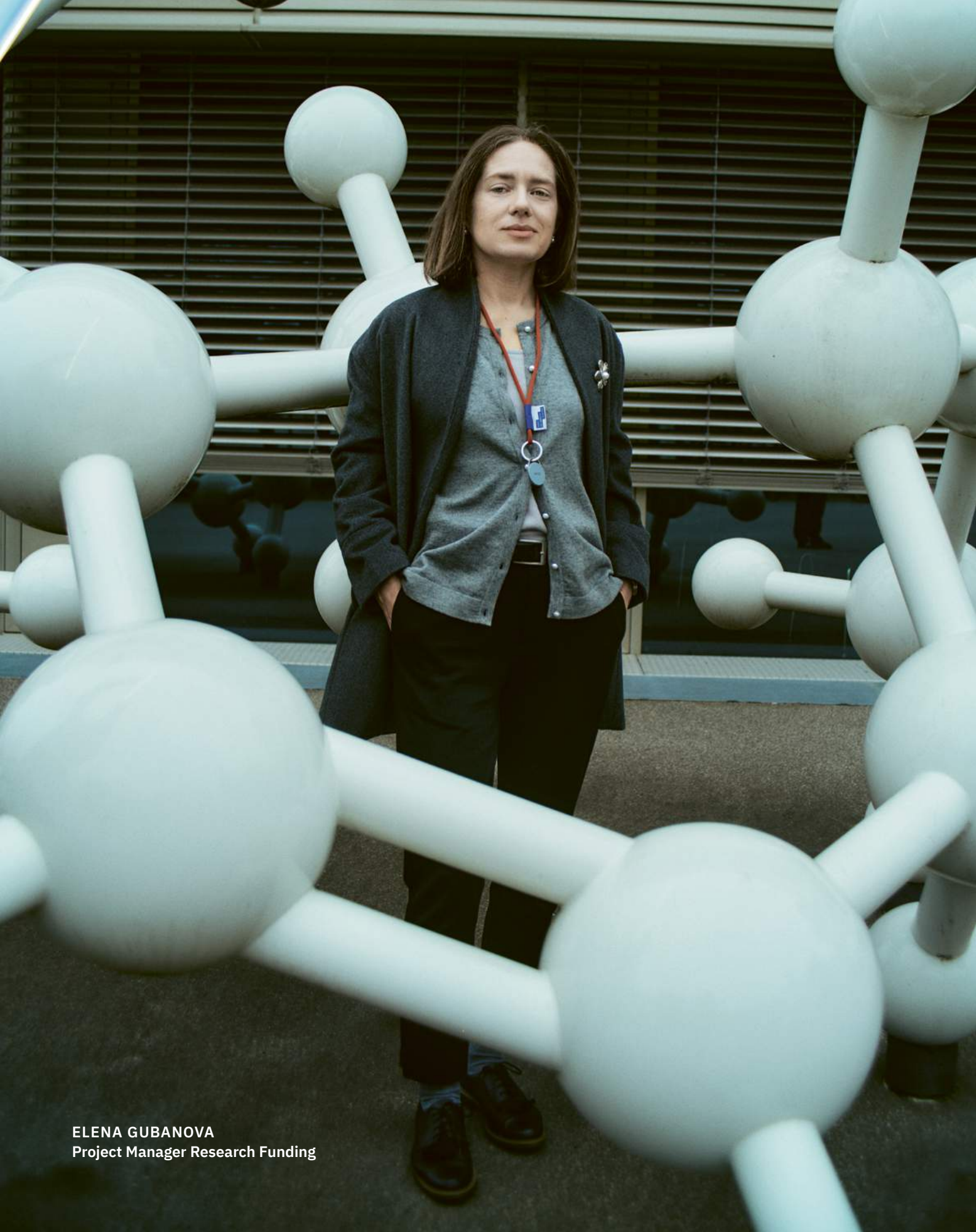
Administration and infrastructure

166

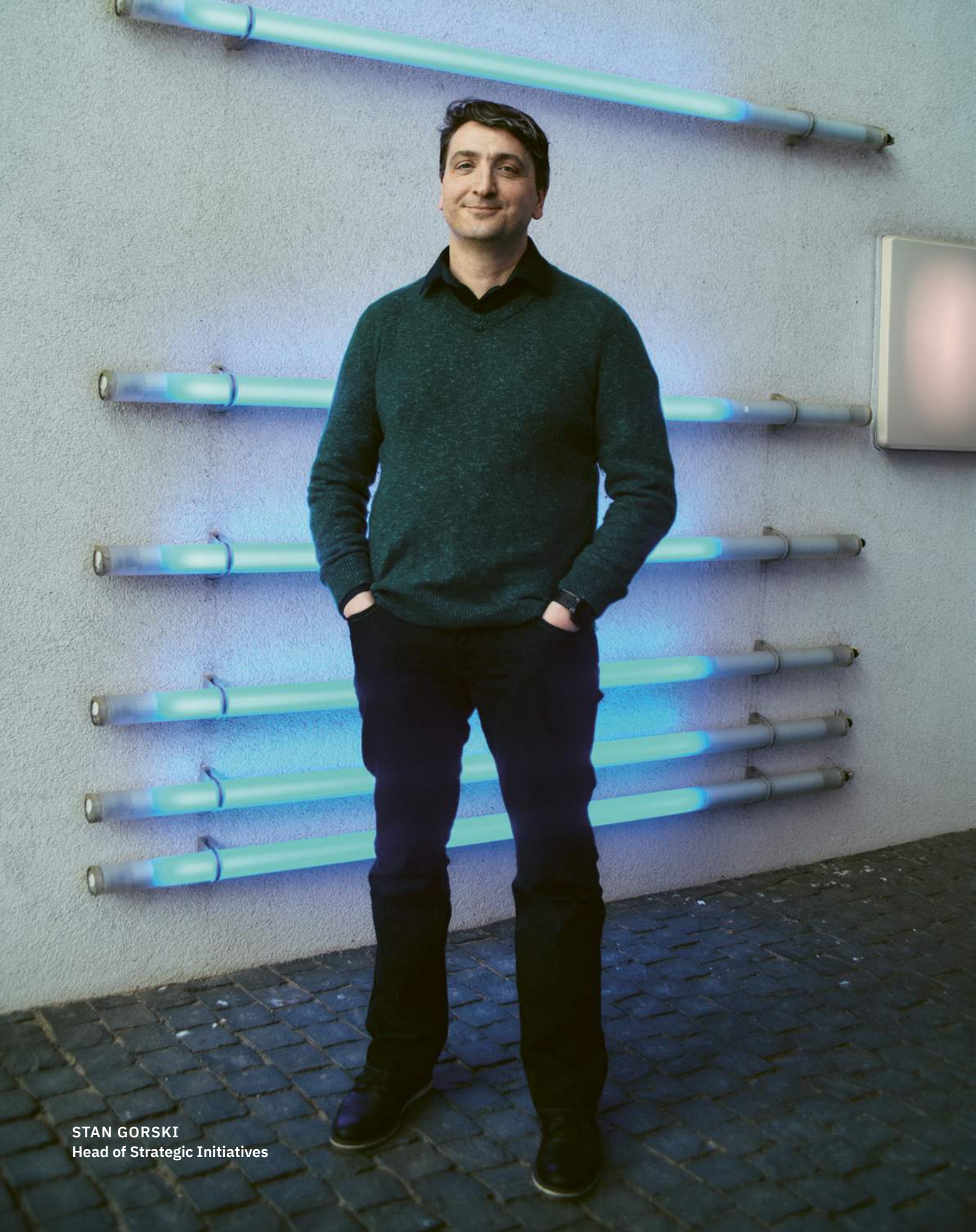
Technicians


49
Senior research groups
32
Early career research groups
41% from countries other than Germany
47% identify as female
18
Technology platforms
12
Administrative departments
5
Staff units
25
ERC investigators
12
EMBO members
5
Members of the German National Academy of Sciences Leopoldina
4
Leibniz Prize awardees

WHO WE ARE



ELENA GUBANOVA
Project Manager Research Funding



STAN GORSKI
Head of Strategic Initiatives

OUR MISSION AND VISION

Our mission is to transform tomorrow's medicine through our discoveries of today. We strive to deepen our understanding of biological mechanisms to develop innovative solutions that improve human health.

At the core of our mission is our passion for scientific discovery. Through our academic, clinical, and industrial partnerships, we aspire to transform our biological discoveries into clinical applications that detect, treat, and ultimately prevent disease. We harness interdisciplinary collaboration to decipher the complexities of disease at the systems level – from molecules and cells to organs and the entire organism. Our goal is to create a healthier future through sustainable research in an environment that inspires and nurtures diverse talent.

OUR VALUES

The Max Delbrück Center is a values-driven organization that seeks to expand human knowledge. Our values drive our actions.

We are ambitious.
We are not satisfied with incremental advances. Only with aspirational innovation will we solve the most intractable biological mysteries to improve human health.

We take risks.
To answer complex questions, we embrace the possibility of failure. Unbridled curiosity may not always generate progress, but progress cannot be made without it.

We are collaborative.
No single person, research group or institution has all the answers. By working together, we inspire each other and provide more powerful insights.

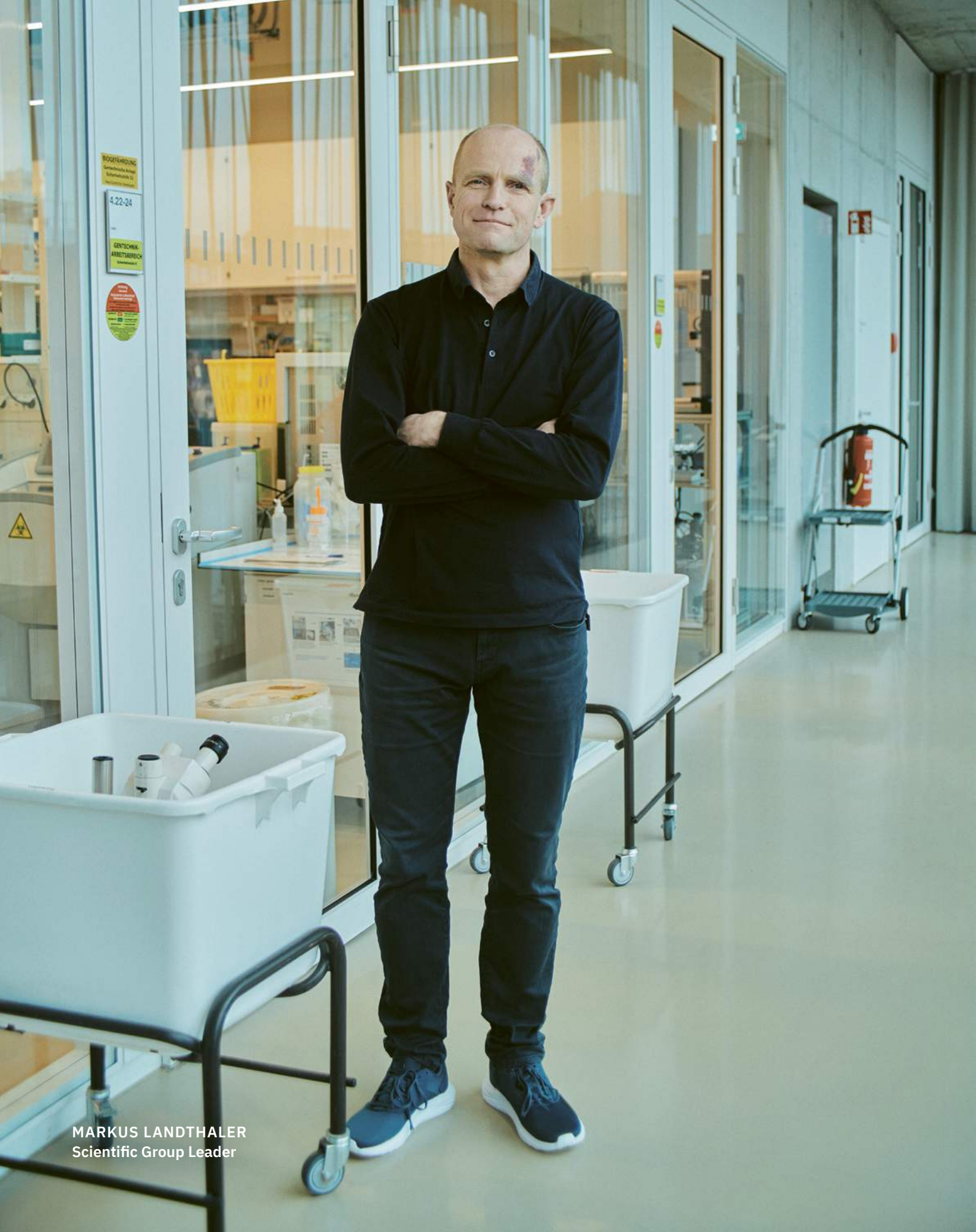
We evolve to learn.
The life sciences are dynamic, and we constantly revise our approaches, partnerships, and ways of thinking to innovate in this ever-changing ecosystem.

We lead with integrity.
Exceptional science thrives on a mindset of honesty and transparency. We commit to open and truthful communication based upon ethical principles and always take responsibility for our actions.

We are inclusive.
We treat each other with respect, nurture the next generation of scientists, foster an environment where individual expression is welcomed, and acknowledge and counter our biases to promote diversity.

We are one community.
The success of our scientific mission requires expert administrative and operational support. We acknowledge everyone's contributions and jointly celebrate our successes.

ANA POMBO
Scientific Group Leader



MARKUS LANDTHALER
Scientific Group Leader

OUR MISSION

To transform tomorrow's medicine through our discoveries of today.

OUR VALUES

- → We are ambitious.
- → We take risks.
- → We are collaborative.
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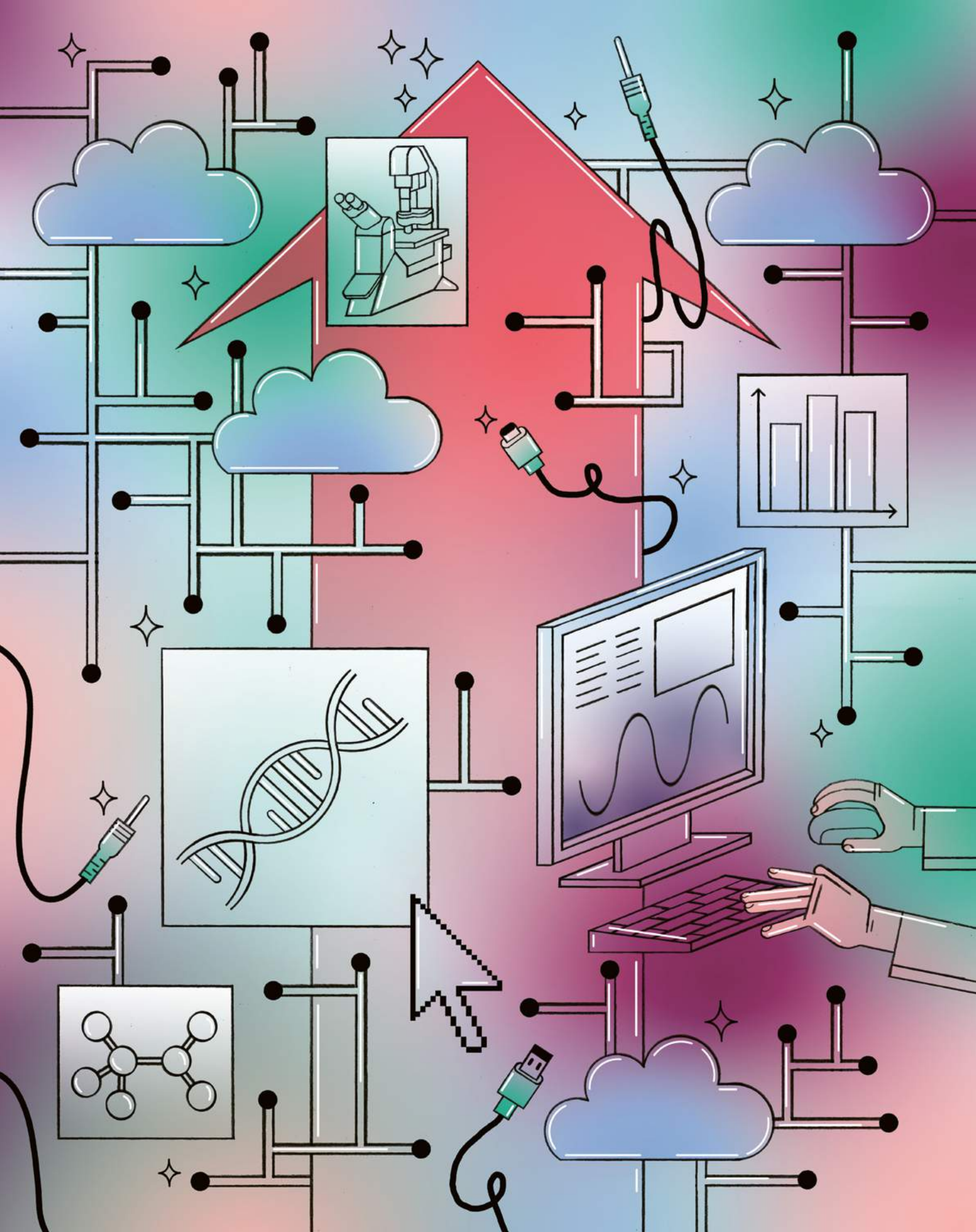
OUR STRATEGIC FIELDS

- → Our science
- → Our impact
- → Our community
- → Our people
- → Our organization



OUR SCIENCE

Our research explores the complex interactions within human biology to better understand health and disease. To gain novel insights we adopt an interdisciplinary strategy, integrating experimental and clinical data to pinpoint disease mechanisms. By leveraging innovative experimental approaches and data science, we aspire to advance our understanding of the causes of complex diseases. This holistic approach is poised to catalyze new methods for detecting, treating, and ultimately preventing disease.

Our strategic goals

- Integrate insights from mechanistic and high-throughput approaches.
- Bolster expertise in emerging fields.
- Integrate analyses across model systems to drive clinical translation.

Today's healthcare faces numerous challenges, including aging populations with comorbidities, a shortage of methods for early disease diagnosis and precise treatments, and rising healthcare costs. However, we find ourselves at an inflection point, at which new technologies and approaches present significant opportunities to address these challenges. To fully leverage these advancements, we must adopt a holistic and integrated approach – systems medicine.

Systems medicine is an interdisciplinary, integrative field that investigates the complexities of human health and disease by examining how biological systems are interconnected. It acknowledges that diseases can be multifactorial, transcending organ and tissue boundaries and disrupting communication pathways that maintain organismal homeostasis. Systems medicine exploits the insights of biology, genetics, physiology, mathematics, computer science, and engineering to understand the underlying mechanisms of bodily processes. This approach, in turn, affords us unprecedented insight into the mechanisms of disease, enabling us to develop innovative, personalized, and predictive healthcare strategies.

The Max Delbrück Center's approach to systems medicine will integrate studies in cellular models, animal models and humans with advanced predictive data science to define causality in disease processes. Our approach will provide insight into the drivers of disease and identify functionally validated targets to precisely treat diseases at their earliest stages.

Develop an integrated systems medicine approach

Organisms maintain homeostasis through interactions between tissue-resident cells and systemic signals from the immune, nervous, endocrine, and other systems, including the vasculature and the microbiome. Science at the Max Delbrück Center is focused on deciphering how these interconnected systems operate at various scales. Cardiovascular dysfunction, immune diseases, neurological diseases, and cancer are all multifactorial. Our scientists seek to understand the fundamental processes that underlie these diseases.

To gain a more comprehensive understanding of the interplay among individual components within biological systems, the Max Delbrück Center has established a highly successful Medical Systems Biology program. This program encompasses expertise in high-throughput technologies for molecular-level data acquisition and advanced computational methodologies for the simulation and analysis of complex interactions within biological systems.

The Max Delbrück Center's future systems medicine strategy builds upon our expertise in cutting-edge technologies for the analysis of genes, transcripts, proteins, and metabolites. Our constantly evolving scientific technology platforms play a critical role in this work, pushing technologies further to afford research teams the most advanced tools. In addition, our scientists are developing novel ways to integrate data from genomics, transcriptomics, proteomics, metabolomics, imaging, clinical analyses, and other domains, thus enriching our ability to understand complex biological systems and mechanisms of disease.

Our approach entails the integrated analysis of human samples, human organoid models, and model organisms. The discovery process involves iteratively examining how disruptions in these models influence molecular signatures with the goal to identify disease mechanisms, diagnostic markers, and therapeutic targets.

In the coming years, the Max Delbrück Center will leverage innovative technologies and data science to identify molecular signatures that precede disease symptoms. This shift towards an early-stage analysis of disease will facilitate the development of approaches for early detection and proactive interventions, well before disease progression. These advancements will minimize disease burden on patients and healthcare systems alike.

Furthermore, we will scale technologies to analyze samples from human cohorts and conduct functional screens in human organoid models. Our scientific technology platforms provide critical infrastructure to advance this work. Utilizing our analytic capabilities to develop clinical applications requires expertise from clinical medicine, data science, and industry. We will create technology hubs in which interdisciplinary teams from the Max Delbrück Center, partner institutions, and industry can innovate collaboratively.

Integrating clinician scientists into the discovery process is essential for us to deliver on our mission. We will expand existing collaborations with the Charité – Berlin's academic medical center – and seek additional national and international partners. To strengthen our impact in cardiovascular disease, we have created a satellite institute together with Heidelberg University, the Helmholtz Institute for Translational AngioCardioScience (HI-TAC). Based in Heidelberg / Mannheim, this institute will serve to leverage Heidelberg University's clinical and research strengths in the cardiovascular field to facilitate translational efforts in conjunction with the Max Delbrück Center.

Expand expertise in emerging fields

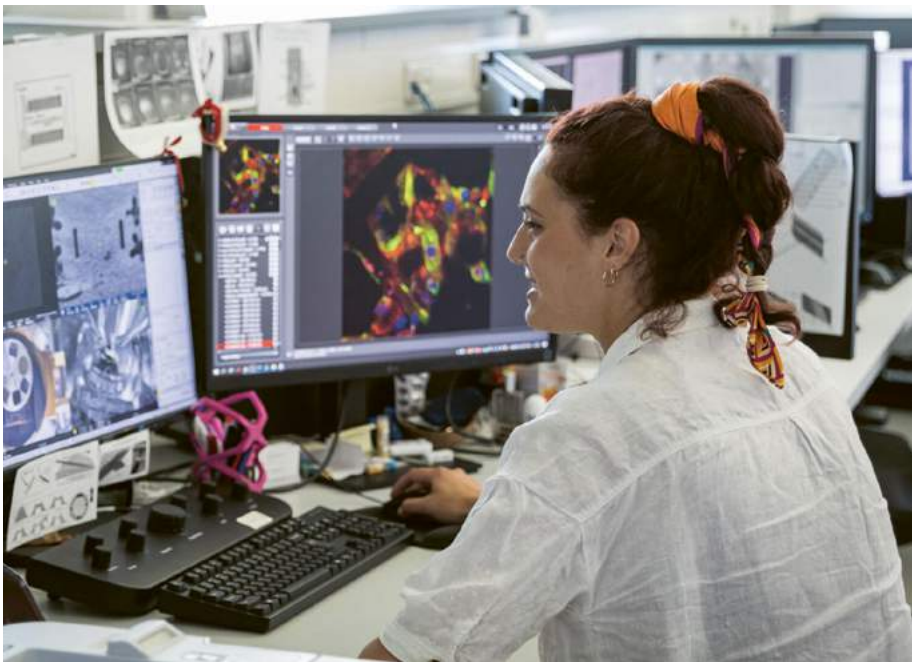
The Max Delbrück Center has a proven track record of using AI-based methods to analyze molecular-level data and images. New approaches in AI, including large-scale foundational models for

language, images, and multimodal architectures, have the potential to change the study of complex biological phenomena. Our scientists are advancing these new approaches through initiatives in the Helmholtz Association. We will capitalize on this opportunity to enhance our capacity for deconvoluting intricate molecular interactions and predicting their role in distinguishing between states of health and disease.

Explainable machine learning approaches are pivotal to add transparency to complex AI models. By providing insights into informative features and their connections, explainable methods can pinpoint the molecular mechanisms that underlie predictions. Furthermore, explainable approaches can mitigate biases and/or limitations within machine learning models, enhancing their robustness and fairness. We will strengthen our expertise by expanding our collaborations within Berlin, the Helmholtz Association, and beyond. Together, we will develop powerful and accurate models that can be reliably adopted into clinical practice.

The development and swift application of new technologies to clinical questions constitutes one of the Max Delbrück Center's many strengths. We have made significant strides in advancing technologies related to genomics and proteomics, enabling us to map cellular processes with remarkable detail and accuracy. Combining cutting-edge imaging techniques with comprehensive molecular analysis methods, we can now profile samples within their spatial environments, allowing us to explore interactions between individual cells with unprecedented clarity and precision. With the expertise in our imaging innovation center, we will further develop our ability to visualize these processes in complex tissue structures and integrate atomic- and molecular-level structural information derived from cryo-electron microscopy and crystallography.

Recent approaches from the fields of bioengineering and synthetic biology have bridged the gap between basic science and clinical application. These rapidly growing fields are developing new methods to design, modify, and create new biological components, affording us the opportunity to advance cellular therapies. With targeted recruitment, we will acquire expertise in these emerging fields. This expansion of our research portfolio will broaden our capacity to apply approaches from bioengineering to modify cellular and molecular pathways for therapeutic applications.



IAN ERIK MEREDYTH STEWART
PhD Student

JULIA SMIRNOVA
Postdoctoral Researcher

Leverage preclinical models and first-in-human studies for clinical translation

The Max Delbrück Center has long-standing expertise generating sophisticated animal models and analyzing their phenotypes at the cellular and organismal levels. In support of this research, we operate a preclinical research center at which cellular, physiological, metabolic, and behavioral features can be characterized in extensive detail. Comprehensive animal phenotyping illuminates the complex interactions between cardiovascular, respiratory, immune, and nervous systems.

To leverage our expertise in preclinical models for advancing systems medicine, we will adopt an integrated strategy of defining and validating mechanisms across different systems, including humans, human organoids, and animal models. This entails measurements across scales to trace causality from molecules to cells, organs to organisms, up to entire populations.

Through a clinical research unit operated jointly by the Max Delbrück Center and Charité, we possess the capacity to initiate first-in-human studies, aimed at investigating our insights in humans. Ultimately, these efforts will serve to validate our discoveries for the development of mechanism-based treatments.

OUR IMPACT

To advance systems medicine, we must increase our innovative collaborations across scientific fields. As our goal is the expedited development of clinical applications, in partnership with clinician scientists and industry, the MDC is committed to fostering a research culture that transcends disciplinary boundaries and champions team science. To further our mission, we will intensify our active engagement with the public and policymakers and increase our global sphere of influence.

Our strategic goals

- Foster a collaborative research environment that transcends disciplinary boundaries.
- Accelerate the translation of scientific discoveries into clinical applications.
- Maximize the positive societal impact of our research.
- Increase international outreach and visibility.

Impactful life sciences research translates fundamental discoveries into clinical applications that improve human health and wellbeing. As a member of the Helmholtz Association, the Max Delbrück Center receives generous funding from the German government to advance innovation at the intersection of basic discovery and clinical translation. Fully capitalizing on this opportunity requires a team science approach, embracing the possibility of failure, and thinking big.

The autonomy of investigator-led research groups has traditionally been the cornerstone of academic research, sparking creativity that has resulted in fundamental breakthroughs. However, as science and technology have evolved, an academic system that exclusively incentivizes and rewards individual achievement over collaborative success is a model that can now hinder interdisciplinary science.

For systems medicine to transform healthcare, approaches from different fields, including computational modeling and data analytics, need to be leveraged to identify fundamental drivers of disease. Innovation in systems medicine necessitates both the spark of individual creativity as a guarantor of transformative research and the collaborative approach inherent to interdisciplinary science.

Our goal is to build a dynamic, self-organizing scientific community that safeguards group autonomy and empowers individuals, but also incentivizes team science, and fully integrates clinicians and industry partners. We will develop inter-institutional strategic partnerships to expand our influence and impact. Moreover, to raise greater awareness of our endeavors, we will intensify efforts to engage with the public and principal stakeholders.

Promote interdisciplinary science

Understanding complex biological mechanisms requires novel, interdisciplinary approaches. Regardless of scale, interdisciplinary collaboration ignites original ideas and drives innovation. The Max Delbrück Center aims to rewrite the book on how to conduct team science while preserving individual creativity.

To succeed, we will foster both internal and external collaborations. We will identify opportunities for bolstering internal synergies with a bottom-up strategy, offer incentives for 'grand challenge' projects based on innovative ideas, and motivate our scientists to assume leadership roles in national and international projects involving interdisciplinary science.

With our longstanding track record of collaboration with the Charité, the Max Delbrück Center already has clinicians embedded, positioning us to drive interdisciplinary innovation. We will further strengthen our alliances with local partner universities and institutes by developing interdisciplinary training programs, and through joint recruitments. Areas of interest for strategic partnerships include clinical medicine, bioengineering, data science, and biological disciplines that complement our existing biomedical expertise.

Accelerate clinical translation

Translating research discoveries into clinical applications is a complex, multi-step process that requires collaboration between scientists, clinicians, industry partners, and patients. To facilitate the rapid translation of research advancements, the Max Delbrück Center in collaboration with the Charité, operates its own experimental clinical research center, which is conducting investigator-initiated clinical trials based on novel approaches developed at the Max Delbrück Center.

We will strengthen our clinical impact by more closely embedding clinicians into our scientific endeavors, creating an integrated ecosystem with partners at the Berlin Institute of Health@Charité and Charité. By developing cutting-edge technologies and gaining deep molecular insights, the Max Delbrück Center will function as the engine for innovation in the Berlin biomedical ecosystem.

To maximize our impact on human health, we will increase efforts to commercialize our discoveries. This will be achieved by more closely involving technology transfer experts in our research, expanding our innovation and commercialization office, and supporting validation projects and the creation of spin-off companies. We will also build industry alliances to engage in co-development projects and joint training programs for early-career scientists.

KATRIN ROSSWOG
Head of Finance Department

MICHAEL HINZ
Helmholtz Network Climate-Friendly Construction

Enhance societal engagement

Community engagement is a fundamental component of building public trust in biomedical research. Building this trust requires frequent and continued dialogue between scientists and society. Scientists have an obligation to inform the public about their research, its objectives, and relevance to healthcare. We must therefore establish a continuous collaboration with local, national, and international communities to foster a broader understanding of what we do, and why it matters to them. Conversely, engaging with the public helps us understand their perceptions of our work, and importantly, allows the outside community to see us as public servants of them.

As part of its community engagement, the Max Delbrück Center conducts educational programs for local schools and hosts cross-cultural arts and science initiatives. To raise our scientists' awareness of the importance of public support for research and to enhance their ability to effectively communicate the value of their work, we offer a communication training program to our early-career researchers.

We will strengthen our public exchanges by supporting citizen science projects and developing innovative public and patient engagement strategies. We will also partner with policymakers at the national and European level to ensure funding and regulatory frameworks support our mission. Frequent communication with our stakeholders will ensure they are informed about our progress.

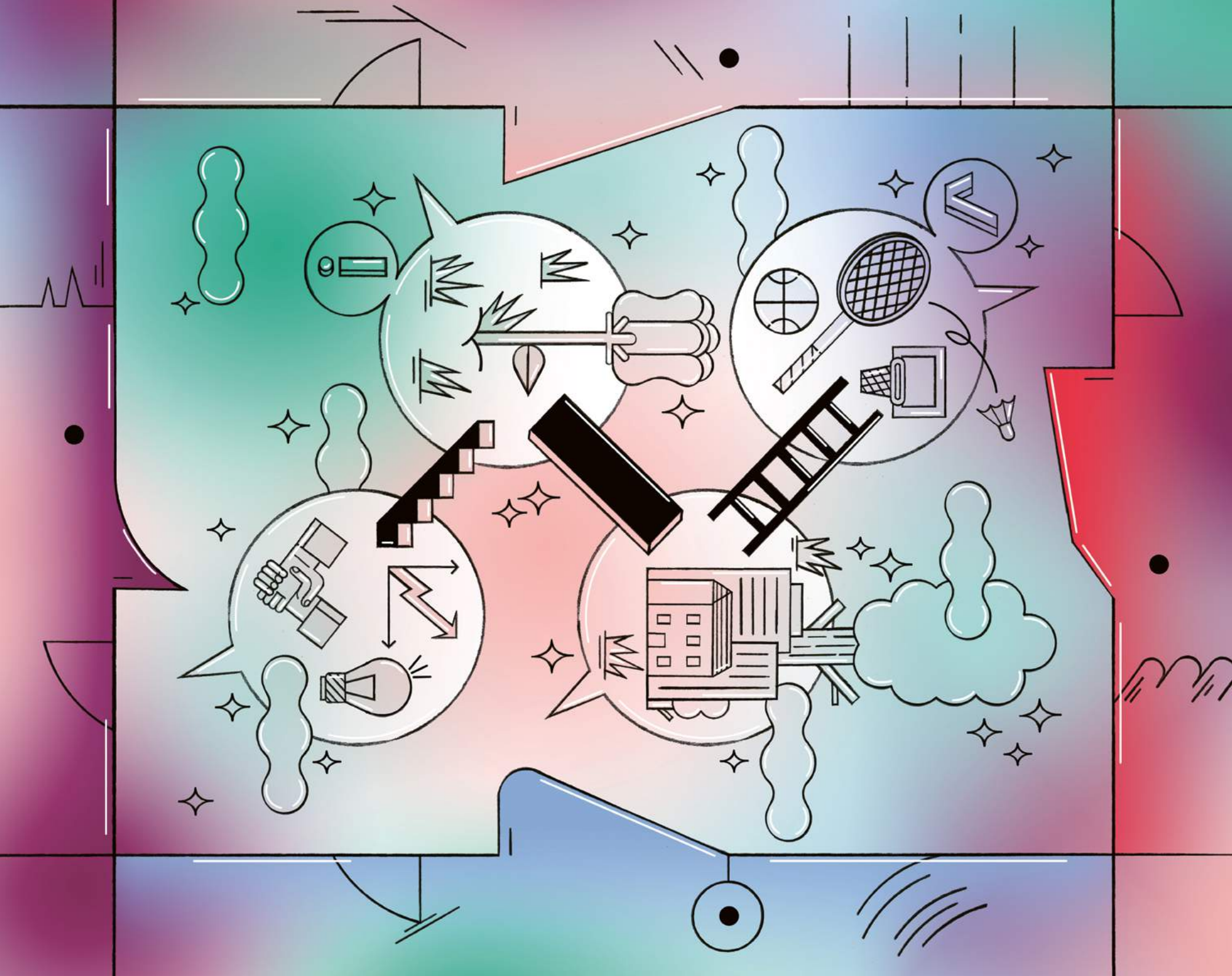
Increase international reach

The Max Delbrück Center is globally engaged with scientific connections around the world and a highly international research workforce. Our diverse teams, with their rich mix of backgrounds and perspectives, create a culture of open exchange and innovation that propels scientific discovery.

The Max Delbrück Center is a founding partner for EU-LIFE, an alliance of leading life sciences research institutes across Europe. Through this partnership, we strive to strengthen European research excellence by sharing best practices and shaping science policy. Recently, we initiated a collaboration with NOVA University Lisbon, Portugal, to establish a medical systems biology institute in Lisbon. A future goal will be to expand our programmatic collaborations into North America, Asia, and Africa.

Our graduate program draws global talent, with 65% of students coming from abroad, representing 52 different nations. Select graduate student positions are allocated for bilateral exchange in medical systems biology with New York University, USA and the MRC Human Genetics Unit in Edinburgh, UK, and for imaging and data science with the Weizmann Institute of Science in Rehovot, Israel. We will explore further international educational partnerships in fields aligning with our scientific objectives.

Our trainees and early-career faculty rise to leadership positions in academia, industry, and other areas around the world. By establishing a vibrant alumni network, we will keep alumni engaged with developments at the Max Delbrück Center and provide networking opportunities. We will unite our community, and inspire alumni to contribute mentorship and support, enhancing our global impact.



OUR COMMU-NITY

The Max Delbrück Center is committed to fostering an environment that nurtures creativity, innovation, diversity of thought, and openness to experimentation. This supportive culture encourages joint problem solving and recognizes that we can learn from failure. Emphasizing inclusivity will enrich our community's academic and social fabric. In addition, transforming campus Berlin-Buch into a modern, interactive, and lively campus underscores our commitment to community engagement, scientific excellence, and sustainability.

Our strategic goals

- Align our community around a shared mission and strategic direction.
- Cultivate clear, transparent, and engaging communication to foster understanding and collaboration.
- Promote a culture of inclusiveness and respect that encourages initiative and learning.
- Develop a vibrant campus that enriches the academic and social experience.

The scientific excellence to which we aspire requires commitment, passion, creativity, and an enduring dedication from every colleague. Promoting a high-performance culture and an inspiring work environment is key to our success.

To achieve these goals, we must actively nurture a vibrant research ecosystem, in which an unwavering dedication to excellence, ambitious science and collaboration unifies a supportive community that inspires a collegial sense of belonging. This culture empowers individuals and interdisciplinary teams, driving experimentation, adaptation, and success. Within this ecosystem, we will create an appealing work environment that supports communication and community.

Unite under one mission

Nurturing scientific excellence from diverse minds maximizes our capacity to solve key health challenges. To achieve this, we must unite all members of the Max Delbrück Center community, including scientists and administrative staff, under one mission.

This approach will support curiosity-driven discovery research throughout the entire institution. It will also provide a North Star to inspire our people, deliver innovative solutions, and facilitate a sense of common identity that breaks down barriers for collaboration. Building a united community will encourage contribution, empowerment, and ownership. This cohesive culture will instill a collective *getting things done together* spirit that promotes initiative and collaboration, while acknowledging each contribution from every colleague.

To enhance networking and collaboration across the Max Delbrück Center and with partner institutions, we will expand and refine our scientific dialogue. This initiative will strategically overhaul seminars, scientific interest groups, workshops, and symposia. Our aim is to foster stronger ties across diverse research areas, catalyze new collaborations, and proactively identify emerging scientific fields. These forums will be intentionally designed to bridge the geographical divide between our Berlin-Buch, Berlin-Mitte and Heidelberg/Mannheim sites, facilitate meaningful exchanges between trainees and faculty, and spark interdisciplinary collaborations.

Effective administration streamlines processes to accelerate discovery, enabling scientific progress. To harness our community's diverse strengths and expertise, we will enhance dialogue between science and administration through 'Science for All' townhalls, community days, and other interactive forums.

Communicate with purpose

We will never take communication for granted and must constantly refine how we share our thoughts with colleagues, stakeholders, funders, patient groups, and policymakers. We recognize that talking about our science and work enhances innovation, creates new collaborative opportunities, and builds community.

To maximize internal communication and intellectual exchange, we will implement bilingual practices and interdepartmental exchange programs throughout the organization, connecting our diverse workforce in science and administration. Sharing information about our projects and work will increase transparency and trust.

MAIKE SANDER
Scientific Director

PHILIPP MERTINS
Head of Proteomics Technology Platform

Create a supportive environment

Supportive environments foster innovation, creativity, and social cohesion. We strive to provide a safe and supportive environment for every member of our diverse community, focusing on mutual respect, inclusiveness, mental health, and psychological safety. We provide dedicated support for international families.

To bolster interdisciplinary and intersectional success, we will foster a culture that empowers people, embraces feedback, and supports the ability to learn from our mistakes. We will also implement an inclusive reward system that honors individuals who take initiative and recognizes team achievements.

Build a living campus

Our working environment significantly influences our success. As we mark thirty years since the Max Delbrück Center's founding, we acknowledge the rich history of campus Berlin-Buch. We are committed to transforming it into a dynamic living campus that facilitates active social and work interactions, honoring its legacy while embracing the future.

With its exciting architecture and community spaces, the Max Delbrück Center's Berlin-Mitte site melds a culture of excellence with an inspiring working environment. We will upgrade facilities at our main Berlin-Buch campus, including extending food and coffee service hours, creating attractive and interactive meeting places, developing accessible indoor and outdoor recreation and sports areas, and providing on-campus childcare tailored to the scientific life.

Inspired by libraries of the future in major European cities, we will create spaces where people can meet, collaborate, and problem-solve. These spaces will be accessible to both employees and visitors.

To improve sustainability and facilitate exchange, we will increase group density in each building, boosting collaboration at campus Berlin-Buch and our other facilities. We will actively connect investigators from various locations, incentivize inter-campus collaborations, and provide temporary spaces for scientists from other locations for collaborative work.

OUR PEOPLE

Attracting the best talent is pivotal for our success. That means creating a welcoming and nurturing environment, in which everyone can thrive. We will augment the support for early-career scientists and expand professional growth opportunities for all of our staff. We must also embrace and expand the diversity of our community. Everyone should feel they belong at the Max Delbrück Center.

Our strategic goals

- Position the Max Delbrück Center as a desired destination for top talent.
- Foster and support a diverse faculty.
- Equip early-career researchers with the skills needed for diverse scientific careers.
- Enhance opportunities for growth and professional development of our staff.
- Prioritize our people's wellbeing.

People are the Max Delbrück Center's most valuable asset. We recognize that great science is the product of a collaborative mindset, diverse perspectives, and teamwork between excellent scientists and support staff at every level. Diversity in people and teams is crucial to achieve our scientific mission.

The Max Delbrück Center is an international, multicultural, and interdisciplinary research institute, and we are proud of our pioneering spirit. To foster an agile culture that promotes joint problem-solving across the organization, we will create opportunities for professional and personal development for all our employees and create a supportive, stimulating environment that allows everyone to excel.

Attract talent to Berlin

Berlin is a vibrant and international city and home to a growing number of renowned research institutes and biotech start-ups. The city has an exciting energy that powers highly innovative science. The Max Delbrück Center is a key player in this life sciences landscape, offering the resources, environment, and partners to fuel scientific achievement and attract talent from around the world.

This powerful ecosystem is a tremendous asset for our researchers, particularly those who embrace novel technologies and seek out interdisciplinary collaborations. Our scientists benefit from close interactions with local institutions, including the Charité, Berlin Institute of Health@Charité, Technische Universität Berlin, Freie Universität Berlin, Humboldt-Universität zu Berlin, and numerous science institutes.

Berlin also offers exciting job opportunities, both inside and beyond the health sector, making it particularly attractive for couples. And with its wealth of parks, playgrounds, social and cultural gathering points, affordable childcare and international schools, the city welcomes families.

To leverage these many assets, we will develop recruitment strategies that capitalize on the many opportunities the Max Delbrück Center and Berlin offer to scientists, staff, and families.

Recruit new faculty

The Max Delbrück Center provides its faculty with core funding, access to state-of-the-art facilities and advanced technology platforms. This exceptional support serves as a beacon for attracting the best talent as it allows our scientists to pursue highly ambitious science.

The recruitment of the most talented early-career faculty has been a key driver of our success. Their development and advancement is our paramount responsibility. We are deeply committed to mentoring our early-career faculty in every aspect of their professional development. Simultaneously, we are enhancing the transparency of tenure decision criteria.

We take pride in our commitment to diversity, as evidenced by the composition of our early-career faculty: 47% originate from outside Germany and 41% identify as female. However, our senior faculty still lacks this diversity. Recognizing a need

FREDERIKE COSIMA OERTEL
Scientific Group Leader

HEIKE GRAßMANN
Administrative Director

for improvement, we are committed to enhancing faculty diversity, especially at the senior level. Our strategy encompasses two main approaches: strategic recruitment aimed at attracting diverse senior-level talent and fostering the development and promotion of our outstanding early-career faculty. This dual approach underscores our comprehensive commitment to enriching diversity across our institution.

Train tomorrow's scientific leaders

The Max Delbrück Center is dedicated to training early-career researchers to become top-tier scientists. Our institute provides all trainees with a robust foundation for development, steeped in scientific ambition, cutting-edge methodologies, and exemplary mentorship. With its structured curriculum, our graduate program offers comprehensive training to equip students with the requisite skills they need for all facets of a successful career in science.

This program includes training in not only the most current and competitive scientific methodologies, but also training in power skills including effective writing, oral presentation, critical thinking, and leadership development. Each student receives dedicated support from a faculty mentoring committee. Likewise, postdoctoral researchers are offered a variety of training opportunities through our postdoc office.

As scientific career paths have become increasingly diverse, trainees must develop many transferable skills to prepare for this evolving job market. We have already begun adapting our graduate student and postdoc training programs to support flexible professional growth. We will continue to revise these programs to offer a need-based curriculum and individual development plans to best prepare trainees for their many career options. To enhance the training experience and provide networking opportunities, we will facilitate connections between our current trainees and our alumni.

Create training opportunities for an agile workforce

With more than 600 staff in all support areas ranging from animal caretakers and technicians to administrative and senior management staff, our administration supports our scientific mission. To be successful, we must attract top talent in every area, from science to administration.

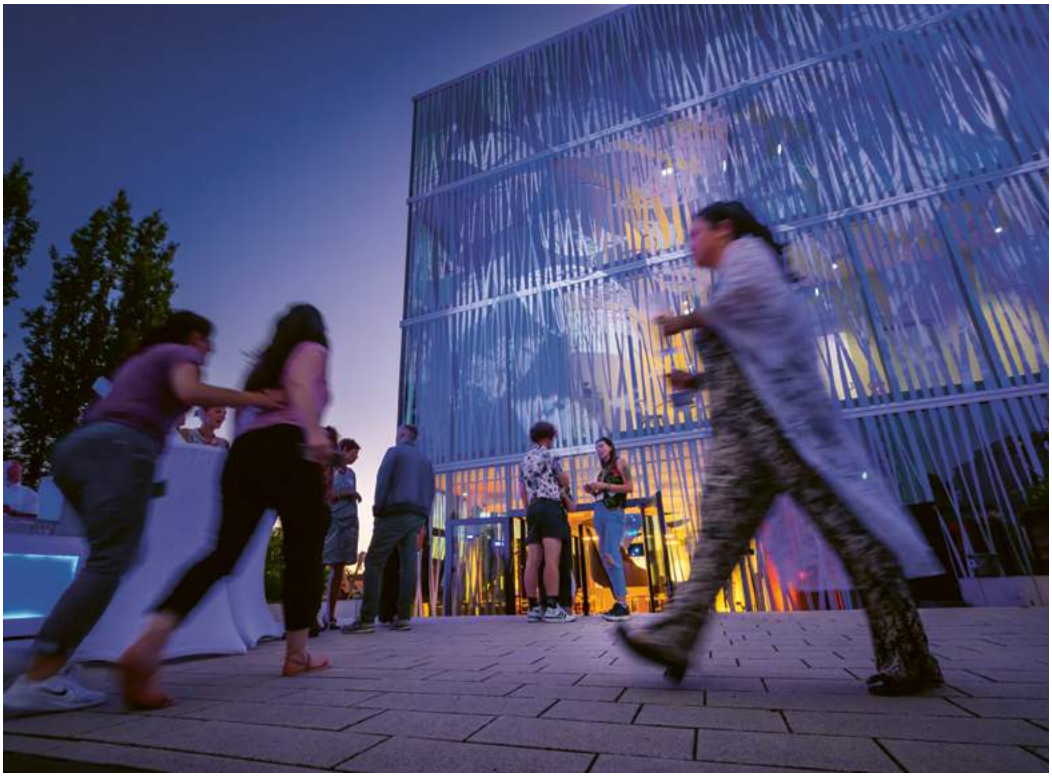
We are fortunate to have a highly skilled scientific and administrative workforce, supported in part by permanent contracts to most staff and select non-faculty scientists. This stability is a key asset, safeguarding institutional knowledge and expertise. Simultaneously, the Max Delbrück Center promotes continuous training to navigate fast-paced technological, professional, and cultural advances, ensuring our employees can grow their careers and continue to meet emerging challenges.

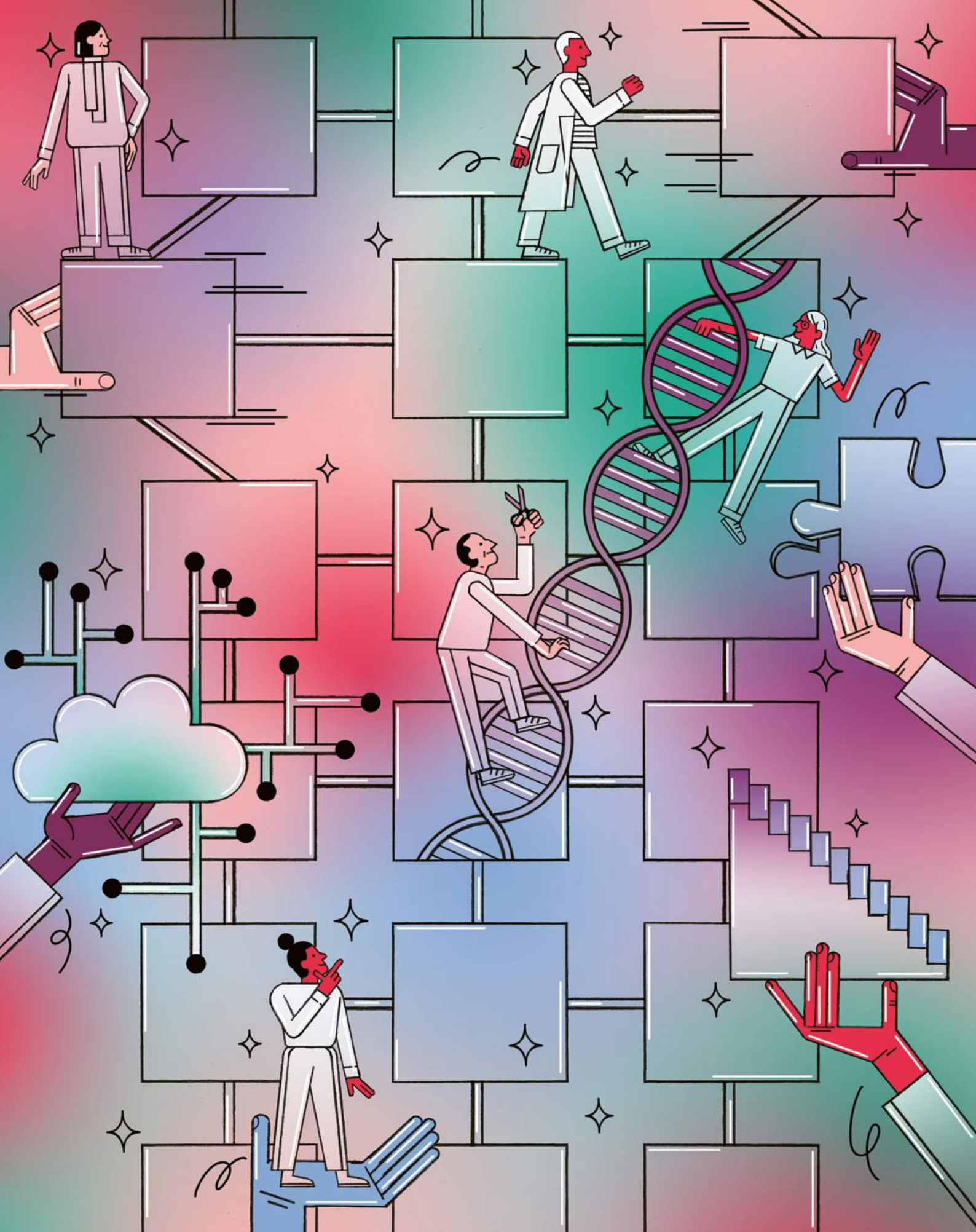
To support professional growth, we will expand upskilling and reskilling opportunities for scientific and administrative staff. Specifically, we will focus on enhancing our staff's digital competencies, helping all employees streamline processes for more efficient administration. These skill development opportunities will help our staff remain adaptable and resilient, support individuals as they assume new responsibilities, and promote role mobility for our permanent scientists and scientific support staff.

Position the Max Delbrück Center as the premier workplace

While inspiring and exciting, the unwavering commitment to our scientific mission can feel all-consuming. As individuals, we must balance our obligations at work with our home lives. That is why the Max Delbrück Center is deeply committed to supporting the wellbeing of our employees.

In recent years, we have developed on-campus programs and services that promote our employees' physical and psychological health and facilitate the integration of work-family commitments. We will routinely reassess these programs and increase their visibility to attract and retain talent. Through our mission to conduct innovative research and our commitment to our people's wellbeing, we will ensure that the Max Delbrück Center continues to be one of most attractive places to work, anywhere.





OUR ORGANI-ZATION

The pursuit of scientific excellence requires a commitment to organizational efficiencies, continual process improvement, transparent decision-making, and the development of effective leadership at all levels. In this spirit, the Max Delbrück Center has embarked upon a process improvement plan to establish benchmarks that will measure our success. To this end, we aspire to a culture within which leadership is developed, feedback is embraced, and sustainability is paramount. Furthermore, we are committed to the most transparent and reproducible research standards, open science, and a revision of research assessment. These measures will assure our long-term success and impact.

Our strategic goals

- Support leadership development at all levels.
- Establish effective scientific governance.
- Encourage and support joint problem-solving by science and administration.
- Strengthen organizational effectiveness through continuous process improvement.
- Implement and uphold best scientific practices.
- Promote transparency, accessibility, and collaboration in scientific research.
- Commit to sustainability.

For every successful organization, long-term success requires purpose-driven governance, a shared value system, individual empowerment, effective communication, transparent policies, processes and procedures, and a commitment to excellence. Furthermore, a research institute must foster an environment that inspires innovation, upholds integrity, rewards achievements equitably, and promotes dialogue across all organizational levels. Finally, embracing open science and sustainability ensures that research practices are accessible, reproducible, and environmentally conscious.

We commit to constantly optimizing the Max Delbrück Center, so it can drive scientific innovation and readily adapt to an ever-changing environment. Purpose-driven leadership, effective scientific management, and administrative efficiency are crucial to our success. We will refine our internal processes, enhance decision-making efficiency, streamline communication, and create a culture of transparency.

Promote ethical leadership

The Max Delbrück Center has established guidelines outlining core leadership principles crucial to our success. It is essential that we integrate these guidelines in our daily practices. Effective leadership demands self-awareness, accountability, integrity, and a genuine respect for others – qualities that can be developed through coaching but must ultimately be inherent to every aspect of our institutional culture.

To better equip leaders throughout the institution, we will expand our leadership training and coaching programs for both scientists and staff, utilizing resources mostly through the Helmholtz Association but also other organizations. Additionally, to support early-career faculty, we will provide personalized leadership development programs, tailored to their individual needs.

To enable leadership to effectively evaluate its promotion of a positive culture across the Max Delbrück Center, we will gather organizational feedback through external departmental reviews and satisfaction surveys. For our leaders, we will implement comprehensive 360-reviews, anchored in our values, that offer insightful feedback from reporting staff, peers, and supervisors.

Evolve our scientific governance

Effective organizational structures rely on clear roles, established policies, and effective communication channels to facilitate sound decision-making and streamlined processes. At the Max Delbrück Center, the Supervisory and Scientific Advisory Boards, the Scientific and Administrative Directors, and the Scientific Council guide our scientific direction and ensure our institution remains aligned with our core mission.

Our mission is powered by 53 core research groups and 28 affiliated groups, which form the institute's foundational units — the beating hearts where excellence and creativity thrive. Complementing our research groups, 18 scientific technology platforms facilitate complex projects that rely on cutting-edge technologies and expertise.

Given the Max Delbrück Center's size, effective management necessitates a collective governance model, with a group of senior leaders supporting the Scientific Director. We are currently developing these academic roles, drafting policies, procedures, and standards for their selection, tenure, and assessment. Committed to transparency and accountability, we aim to clearly define their responsibilities, authority, and metrics to assess success.

SOFIA KIRKE FORSLUND-STARTCEVA
Scientific Group Leader

LISA SPATT
Technician

Enhance collaboration between science and administration

While scientists are celebrated as the primary drivers of our scientific achievements, the contributions of essential support staff, who facilitate our organizational administration, are equally important. Working closely with our scientists, our administrative professionals ensure seamless collaboration across research and administrative functions, whether in regulatory compliance, contracting, or facilities management. The strength of our science directly reflects our administrative staff's competence.

To enhance our effectiveness, we will empower staff across administrative departments to team up with scientists to define, address, and overcome challenges. By fostering closer collaboration and cultivating a culture that rewards initiative for all administrative and support staff, we will further improve our organization.

Develop transparent processes to optimize efficiency

Excellent research is propelled by strong scientific management and seamless administrative support. To ensure efficient operation, we will enhance efforts to develop standardized policies and processes. Comprehensive training programs for both new and existing employees will be implemented to ensure widespread dissemination. We will also leverage technology to streamline workflows, enhance communication, and cultivate a collaborative culture that encourages teamwork and sharing of best practices. These measures will help new employees excel in their roles and promote a culture of fairness and accountability. Regular performance assessments, guided by defined, objective criteria, will enable us to monitor the effectiveness of our initiatives.

Support good scientific practices

Strong science is built on honesty, integrity, transparency, and trust. At the Max Delbrück Center, our highest priority is rigorous and ethical research conduct, precise reporting, and reproducibility. To uphold these core values, we offer educational programs on research ethics, data management, and contemporary methodologies. Additionally, we are committed to supporting our scientists with best practices by developing secure, efficient systems for storing, managing and sharing data, thus safeguarding its integrity, reproducibility and accessibility.

Redefine scientific assessment and commit to open science

Interdisciplinary collaboration requires a cultural shift from solely single investigator-led research to team science, involving scientists from different groups and disciplines. This shift requires a more collaborative and inclusive scientific ecosystem that values a diversity of contributions and encourages the free sharing of knowledge to accelerate discovery and innovation.

To facilitate these changes, the Max Delbrück Center will redefine performance indicators, including career advancement evaluations, promotions and tenure decisions, to acknowledge and reward contributions to team science. We will also recognize and value diverse research outputs, moving beyond traditional metrics such as publication in high-impact journals.

In addition, to accelerate the pace of discovery and maximize societal impact, we commit to open science, ensuring that researchers and the public can freely access and contribute to scientific knowledge. Embracing open science practices is critical to build public trust. By joining the Coalition for Advancing Research Assessment (CoARA), the Max Delbrück Center has committed to improving its research assessment practice, including recognizing open science contributions.

Engage in sustainable development

Recognizing the interdependence of human health and environmental sustainability, the Max Delbrück Center is dedicated to conducting research in a manner that mitigates rather than exacerbates the existential threats posed by climate change. Rooted in the Sustainable Development Goals of the United Nations and in accordance with the principles of the German government's sustainability program, we have developed an ambitious concept with clear objectives and actionable strategies for climate protection and sustainable development.

We have committed to significantly reduce our energy consumption and to transition to renewable energy sources within the next decade or sooner, thereby continuously reducing our environmental impact. We will refine operations of our institute by implementing sustainable practices in infrastructure and organizational development, research processes, human resources, procurement, and mobility.

Our actions will help mitigate risks and bolster competitiveness in the face of challenges such as resource scarcity, rising energy costs, and heightened competition for skilled personnel. By unifying excellent research, sustainable development and environmentally conscious working practices, the Max Delbrück Center seeks to be a model for a successful, attractive, and socially responsible research institution.

HOW WE DEVELOPED ‘MDC 2030’

Mission 1

‘MDC 2030’ team members 30

‘MDC 2030’ workshops & meetings 22

Retreats 2

Surveys 6

6 External stakeholder interviews

>100 Contributors

Members in ‘MDC 2030’ chat channels >800

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Discovery for tomorrow’s medicine