

Revolutionizing the Future of Cancer and Human Health Research

The Bruce and Ruth Rappaport Cancer Research Center

In the D. Dan and Betty Kahn
Human Health Building



TECHNION

Israel Institute of Technology

Situated in Haifa, the Technion-Israel Institute of Technology, founded in 1912, stands as Israel's oldest university, offering a wide array of degrees in science, engineering, and interdisciplinary fields to its diverse student body of over 15,000. Known for its groundbreaking research in areas such as energy, nanotechnology, and life sciences, the Technion hosts 18 academic faculties and over 60 research centers, playing a pivotal role in shaping both academic discourse and the socio-economic landscape of Israel.

With a rich history spanning a century, the Technion maintains its position as a globally recognized institution, consistently ranking among the top academic establishments worldwide. Its sprawling campus overlooking the Mediterranean serves as a hub for applied research, attracting renowned faculty members and fostering a culture of innovation and collaboration. Among its 565 faculty members are leaders in their fields, boasting numerous international honors and prizes, including three Nobel Prizes, and contributing significantly to the advancement of knowledge through their research endeavors..

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Research Without Boundaries

The Technion remains committed to widening the scope of scientific exploration by cultivating multidisciplinary research efforts and creating new environments in which scientists and researchers across multiple disciplines can join forces to address one of the most pressing human health challenges of our time — cancer.

According to the World Health Organization, cancer is a leading cause of death in the western world, accounting for nearly 10 million deaths in 2020 or nearly one in six deaths.

As one of the few technical universities in the world with a demonstrated ability to harness the combined benefits of multidisciplinary research, the Technion is in a unique position to make unprecedented contributions to the global scientific community as it races to advance our understanding of cancer, develop innovative tools and potential treatments, improve methods of early detection, and bolster prevention strategies. ■

Attacking Cancer from All Angles

It is now clear to both cancer biologists and oncologists that the complex and multifaceted nature of cancer must be addressed via cooperative research initiatives that facilitate and encourage collaboration, communication, and creativity amongst researchers.

The Bruce and Ruth Rappaport Cancer Research Center, which will be housed in the future D. Dan and Betty Kahn Human Health Building, is on the front line of this initiative. Equipped with the resources and collective expertise necessary to break free from the confines of narrowly focused research tracks found in other university hospitals, the Center is poised to improve outcomes for those affected by cancer.



At its core, the Center is a bustling hub of interdisciplinary collaboration where scientists from various disciplines — together with clinicians from a multitude of fields — work together to unravel the complexities surrounding cancer, and translate fundamental discoveries into new diagnostic tools and treatments. The Center is home to talented and motivated leaders in fields such as chemistry, physics, artificial intelligence, computer science, mathematics, biology, biomedicine, hematology, and oncology.

To bridge the gap between basic research and clinical oncology, the Center also connects oncologists and hematologists across five Technion-affiliated hospitals, including the Rambam Health Care Campus, home to the Joseph Fishman Oncology Center — a multidisciplinary cancer treatment center located across the street from the Ruth and Bruce Rappaport Faculty of Medicine and the future D. Dan and Betty Kahn Human Health Building. This optimal location enables a vital flow of information between the Center researchers and clinicians, creating invaluable potential for cooperative projects in cancer research.

To further foster cooperation between the Technion and other national and international scientific communities, the Center continues to initiate collaborations with premier cancer centers, such as the Moross Integrated Cancer Center at the Weizmann Institute of Science and Memorial Sloan Kettering Cancer Center in New York City. ■



Matching Unmet Clinical Needs

The Bruce and Ruth Rappaport Cancer Research Center thrives on the collective contributions of various groups and individuals.

As an interdisciplinary cancer research center, academic and research activities drive collaborative exploration, bringing together experts from diverse fields to decode cancer biology, identify therapeutic targets, and develop innovative treatments that align with the evolving challenges presented by various forms of cancer. This dynamic collaboration accelerates discovery, fostering an innovative environment where experts address multifaceted challenges, propelling groundbreaking advancements and offering hope for improved patient outcomes. The Center focuses on addressing unmet clinical needs, in order to solve some of the greatest global challenges facing the scientific community, as illustrated below:



Building on Success: A New Home for Human Health

To expand and enhance the research currently underway at the Bruce and Ruth Rappaport Cancer Research Center, new laboratories will be established in the soon-to-be-constructed D. Dan and Betty Kahn Technion Human Health Building.

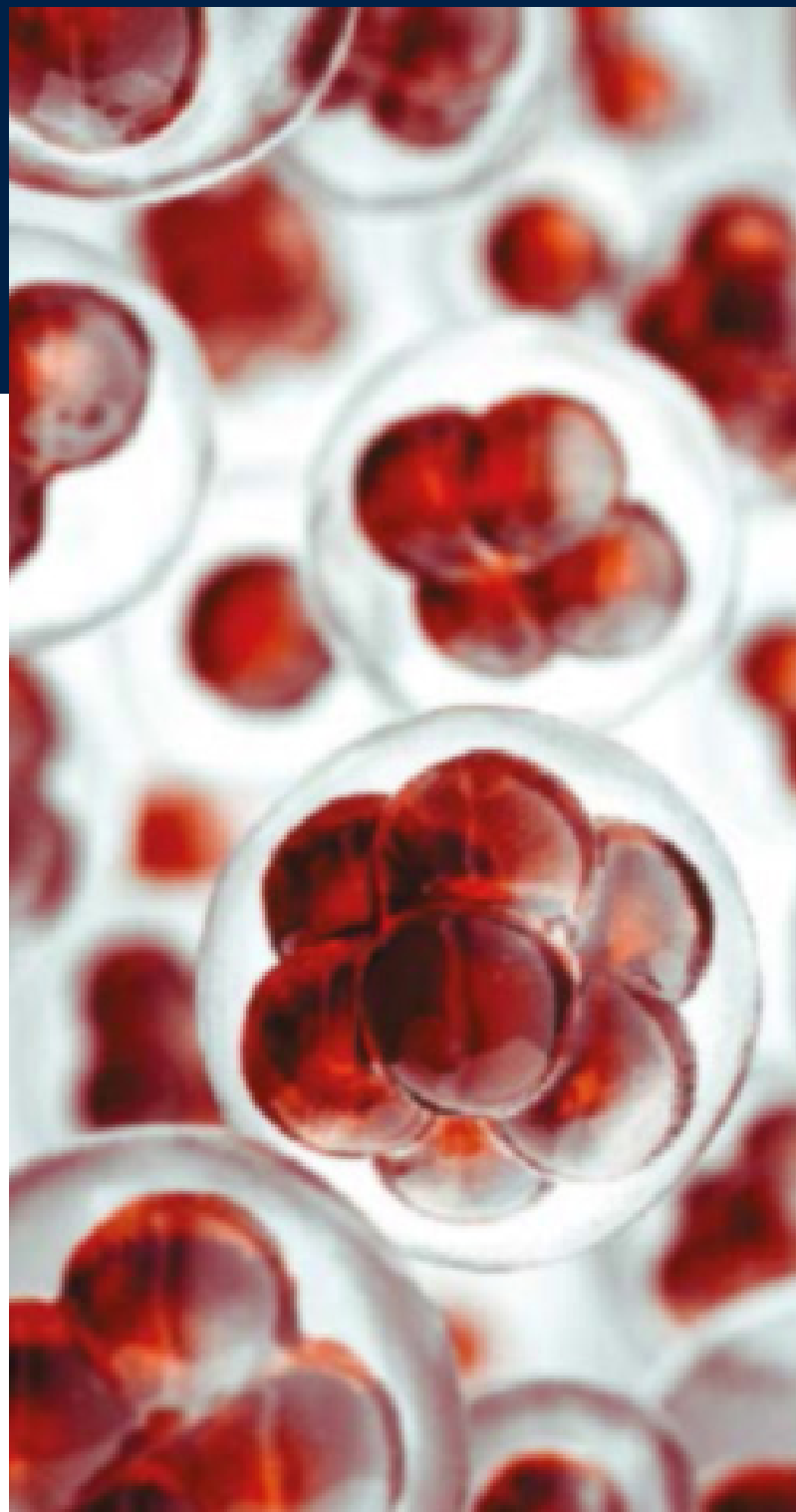
The new location will be the home to research teams, facilities, and equipment to advance research in areas such as genomics, metabolomics, imaging units, and state-of-the-art tools and other technologies. A lecture hall within the D. Dan and Betty Kahn Human Health Building will offer a platform for the Center's wide range of national and international programming and outreach initiatives. Situated in a leading academic university, the Center is strategically positioned to train the next generation of cancer scientists and physicians through broad scientific research programs while fostering an inclusive, egalitarian, and collaborative environment. ■



Investing in the Future of Cancer Care

Research is our strongest weapon in the fight against cancer, and the Technion's continued success in this endeavor is largely measured by the support it receives from our loyal friends across the globe. We present you with an opportunity to partner with our globally renowned scientists as they continue to navigate the complexities of cancer, and discover transformative treatment pathways with true potential to curb the staggering rate and prevalence of this complex collection of diseases.

Your support will fuel the research efforts of more than 70 principal investigators from 11 Technion faculties and five of the Technion's affiliated hospitals in both basic research as well as translational and clinical aspects of cancer research. Together, we can materialize a future where cancer is no longer a life-changing diagnosis. ■



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Three Crucial Areas

The Technion seeks your support in three crucial areas as we move closer to this reality:



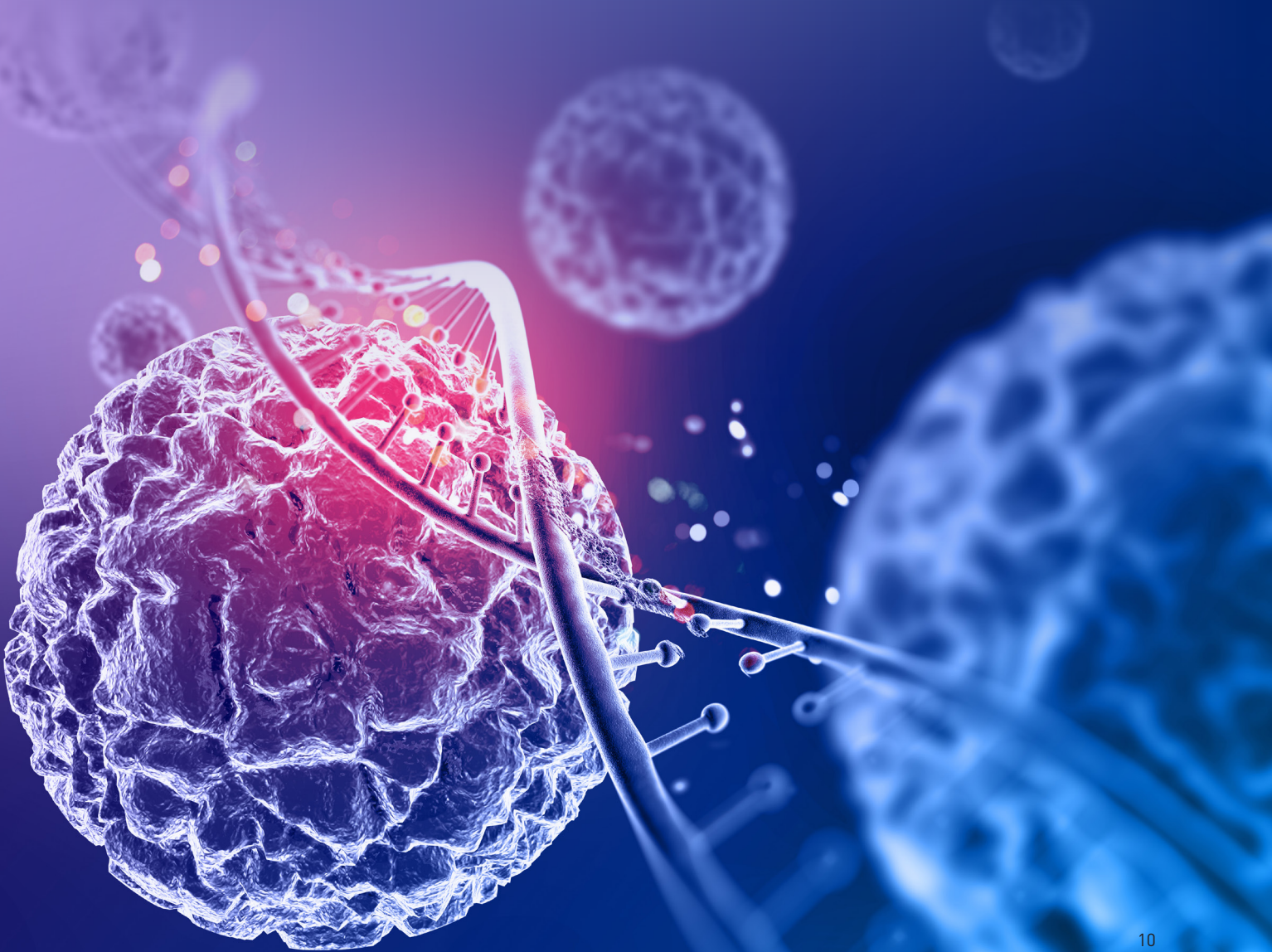
Faculty Recruitment Initiatives

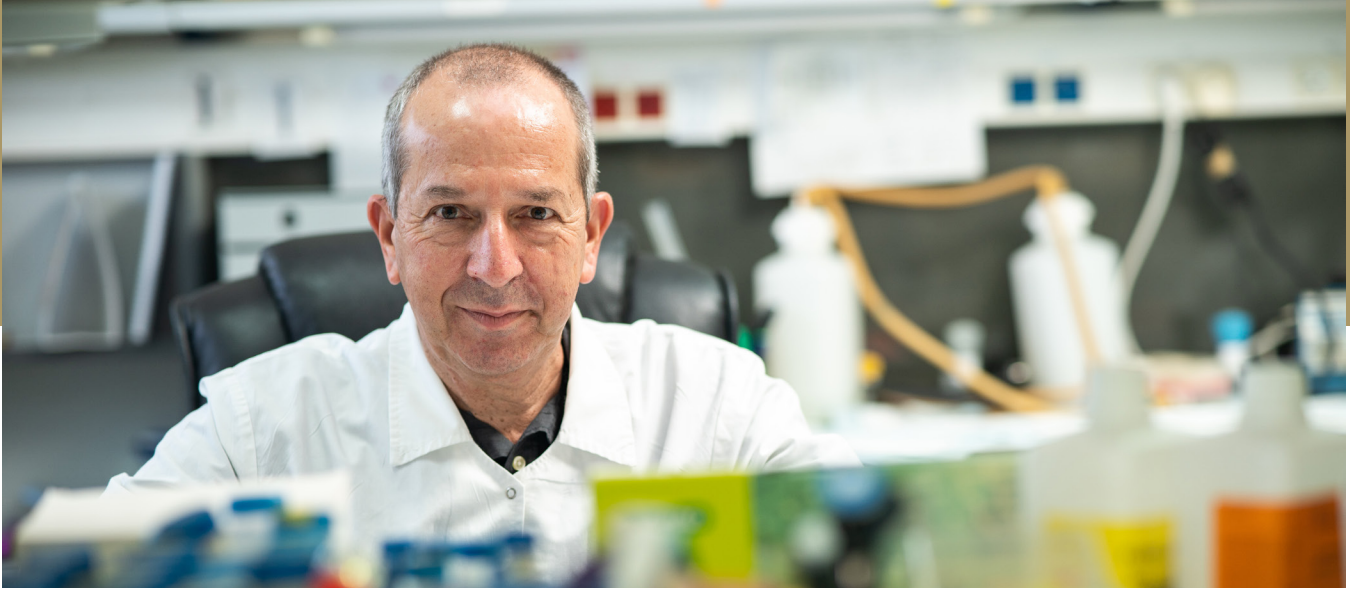


Academic and Research Support / Symposia



Expanding & Equipping Cancer Research Facilities





Professor Ami Aronheim, Dean of the Technion's Ruth and Bruce Rappaport Faculty of Medicine.



Faculty Recruitment Initiatives

The single most important asset of the Bruce and Ruth Rappaport Cancer Research Center is its faculty members, the backbone of the Technion and its world-class research.

Attracting the brightest minds in science and engineering is what ultimately advances the Technion's global reputation as a leader in education and research. Technion leadership continues to prioritize the recruitment of faculty members who are at the forefront of scientific discovery.

Competition for top researchers is fierce worldwide. Faculty recruitment challenges are further exacerbated as Israeli university salaries are regulated by the government and set according to rank and seniority. To improve its competitive advantage, the Technion offers attractive recruitment startup packages outside

of financial incentives, such as state-of-the-art, fully customized laboratories and equipment, as well as a budget to hire necessary research staff. While Technion scholars are primarily motivated by a passion for research and academic life, a decision to join an academic institution will inevitably be influenced by considerations of the prestige of the university, research opportunities, finances, and overall quality of life.

The Center has established a dedicated and diverse search committee to lead faculty recruitment efforts. A campaign is currently underway to recruit talented and established faculty members from all relevant disciplines

who strive to make an impact on cancer research.

The Center is actively working to fill a variety of positions, from the ranks of assistant, associate, and full professor, to brilliant cancer researchers who exhibit strong individual excellence and proven capabilities to work in a collaborative environment. Recruited faculty are expected to lead independent research groups and play an active role in teaching and mentoring.

The Center plans to recruit six faculty members

in the next five years, with the goal of hiring two senior faculty members and four young professors.

Support of faculty recruitment will enable the Center to offer generous startup packages to faculty members of the highest caliber who form the very foundation that transformative cancer research is built upon. Your support will have a direct impact on the Technion's ability to make extraordinary contributions to cancer research, both today and well into the future.



Funding Opportunities

\$800,000 CAD

A gift of \$800,000 CAD will support the construction of, and name, a new professor's laboratory for a period of at least 15 years.

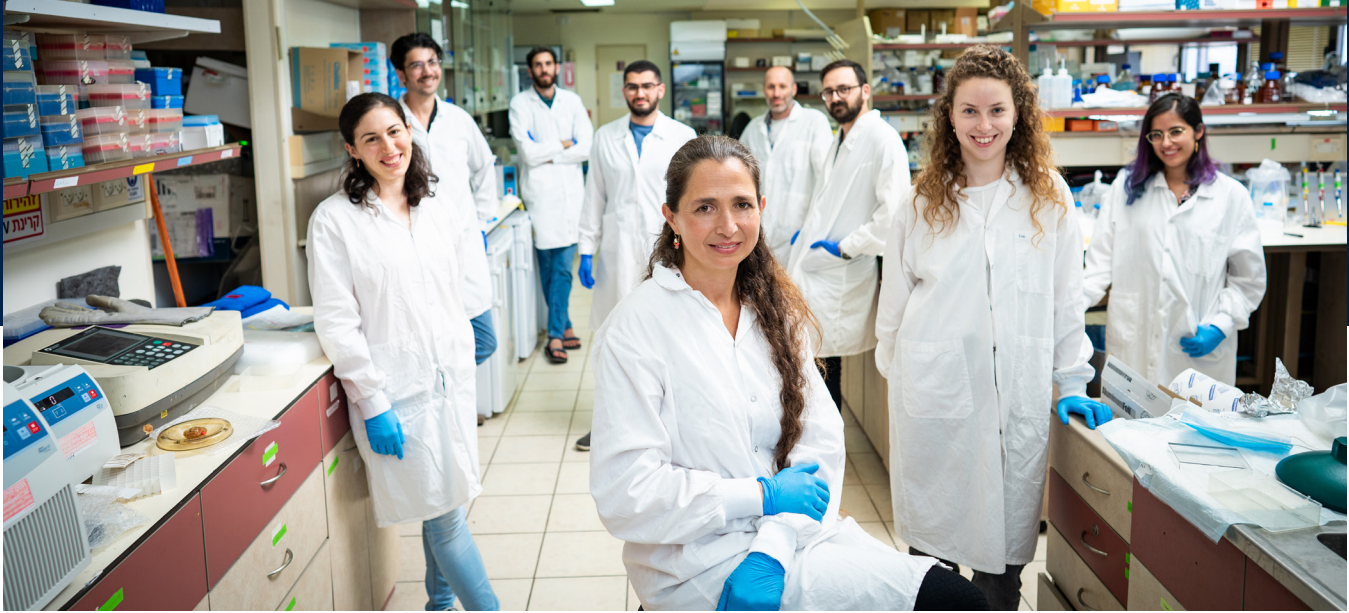
\$160,000 CAD

Gifts of a minimum of \$160,000 CAD to support faculty recruitment are welcome and will make a significant impact on the future of the Bruce and Ruth Rappaport Cancer Research Center.

This faculty recruitment fund will enable the Center to attract top-ranking faculty candidates by providing the laboratory infrastructure our researchers require to succeed on the front lines of cancer research.

\$1.6 million CAD to
4.7 million CAD

Gifts ranging from \$1.6 million CAD to \$4.7 million CAD will support the recruitment of a young, mid-career, or senior faculty member to the Center. The faculty member will be known as a [Donor Name] Fellow for a period of five years and acknowledge this support in all publications and correspondence. ■



Academic and Research Support

Joint Interdisciplinary Ph.D. and Postdoctoral Researchers

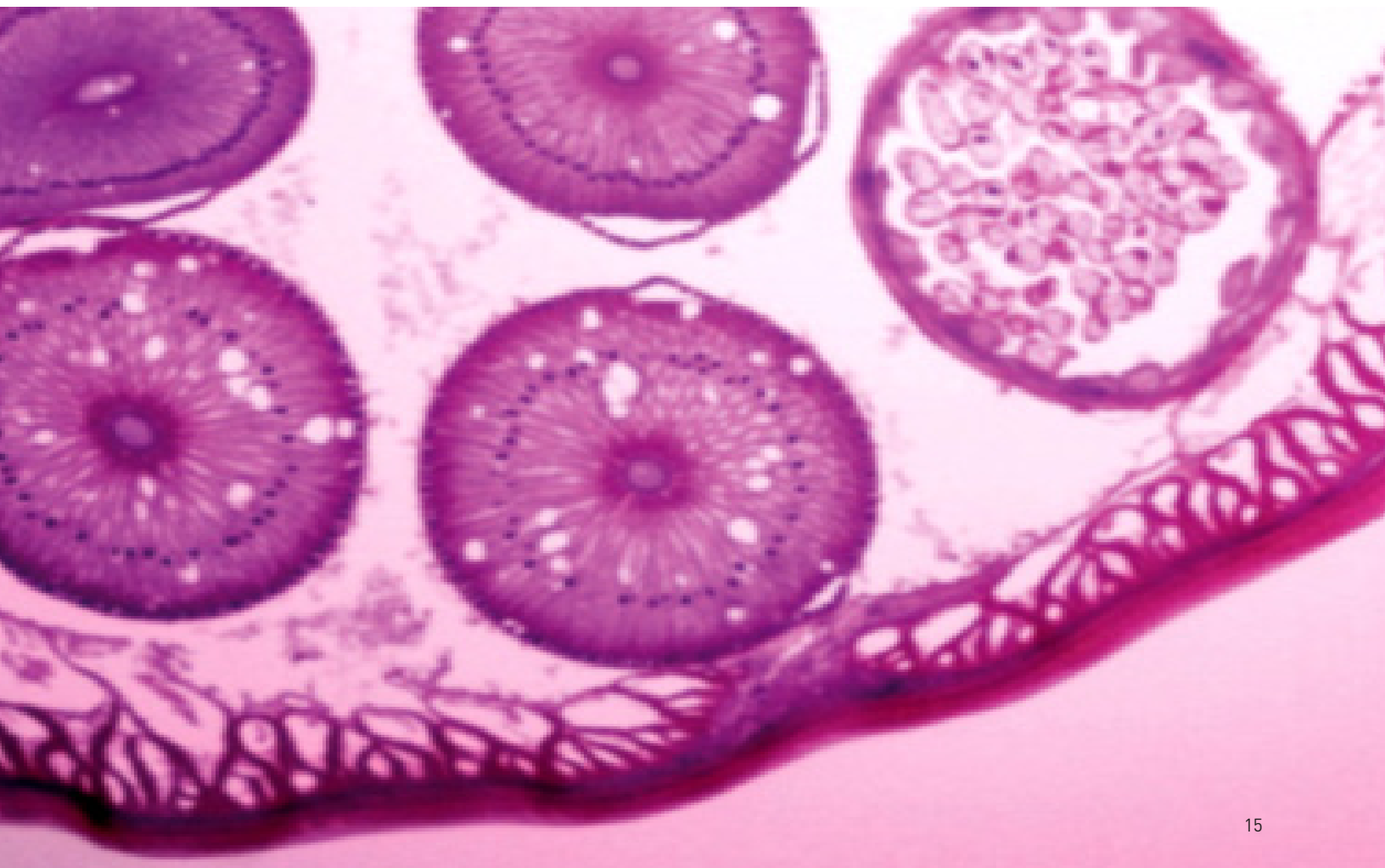
The Center offers unique cancer training opportunities to both Ph.D. and postdoctoral researchers.

The Center's leadership believes that the next generation of cancer researchers must be trained in multiple disciplines and strive to cultivate a broad spectrum of knowledge. To facilitate this objective, the Center has established a joint Ph.D. and postdoctoral training program that will provide young researchers with the opportunity to conduct cancer-focused interdisciplinary research projects under the supervision of two mentors from various fields of study. Postdoctoral researchers and graduate students are central to the Center's research objectives. On the path

to becoming independent cancer researchers, postdocs bring new energy and innovative ideas into projects while graduate students impart their own unique set of fresh perspectives. The collaborative spirit among these groups creates a vibrant research environment, where ideas flourish, experiments thrive, and groundbreaking discoveries emerge, collectively advancing the frontiers of knowledge. In today's academic climate, recruiting and retaining exceptional postdoctoral researchers and graduate students is increasingly difficult. Not

only does the Technion face strong competition from other top-tier universities, but lucrative opportunities in the commercial sector are prompting some students to reconsider the value of an advanced academic degree. Studying for a doctorate requires complete dedication to one's studies for three to five years, making it extremely difficult to hold a job while pursuing an advanced degree. Almost every student at the Technion depends on financial assistance to pursue their education. Fellowships can make a difference. This significant financial backing can persuade students to choose the Technion for their graduate studies over other top schools. Financial support encourages students to extend their academic careers, not cut those careers short due to financial hardship, ultimately leading to significant research output.

Competition for a Technion postdoctoral fellowship — the gateway to a research career — is intense, involving a multi-stage selection process in which candidates compete for positions and the opportunity to work under the direction of leading researchers.



Funding Opportunity

\$633,000 CAD

A gift of \$633,000 CAD annually for a four-year period will support and name the Ph.D. and Postdoctoral Research Fund. Your support will empower the Center to sustain this vital interdisciplinary research initiative. ■



Symposia

Symposia are highly effective pathways for the dissemination of groundbreaking cancer research, while fostering collaboration and knowledge exchange across scientific communities around the world. The new auditorium in the D. Dan and Betty Kahn Technion Human Health Building will serve as a dynamic platform, setting the stage for researchers, clinicians, and world-leading experts to share their latest findings, discuss emerging trends, and explore new directions in the field of cancer research. As participants engage in meaningful discussions, forge collaborations, and absorb diverse perspectives, the Center will emerge as an invaluable platform for knowledge sharing, ultimately directing the future of cancer research and its transformative impact on improving patient care and outcomes.

The Center will organize national and international symposia annually to engage diverse audiences at the international, national, and internal levels.

Funding Opportunities

\$175,000 CAD

A donation of \$175,000 CAD annually for a five-year period will support gatherings and events hosted by the Center in its existing facilities and in a few years, in the new auditorium. This generous gift will be acknowledged in all symposia marketing materials and public literature.

\$15,000 CAD

Gifts of a minimum of \$15,000 CAD for general support of the academic and research activities of the Bruce and Ruth Rappaport Cancer Research Center are welcome.



Enhancing Research Facilities and Infrastructure

Top-level facilities are indispensable for cancer research, providing state-of-the-art equipment, cutting-edge technologies, and optimal infrastructure to create an environment where innovative experiments can flourish.

The new D. Dan and Betty Kahn Technion Human Health Building will be the future home of the Center. With an expected completion date of early 2027, the new five-story building will span more than 150,800 ft² and include expansive laboratory space, and a 220-seat auditorium for lectures and seminars. Each of the research laboratory floors will cover approximately 13,000 ft². A typical laboratory floor will also include offices for researchers and administrative staff, a meeting room, restrooms, storage rooms, and maintenance rooms. In addition to the impressive laboratory space, the building will house the Biomedical Core Facility (BCF). The BCF will be the go-to place for researchers, bringing together

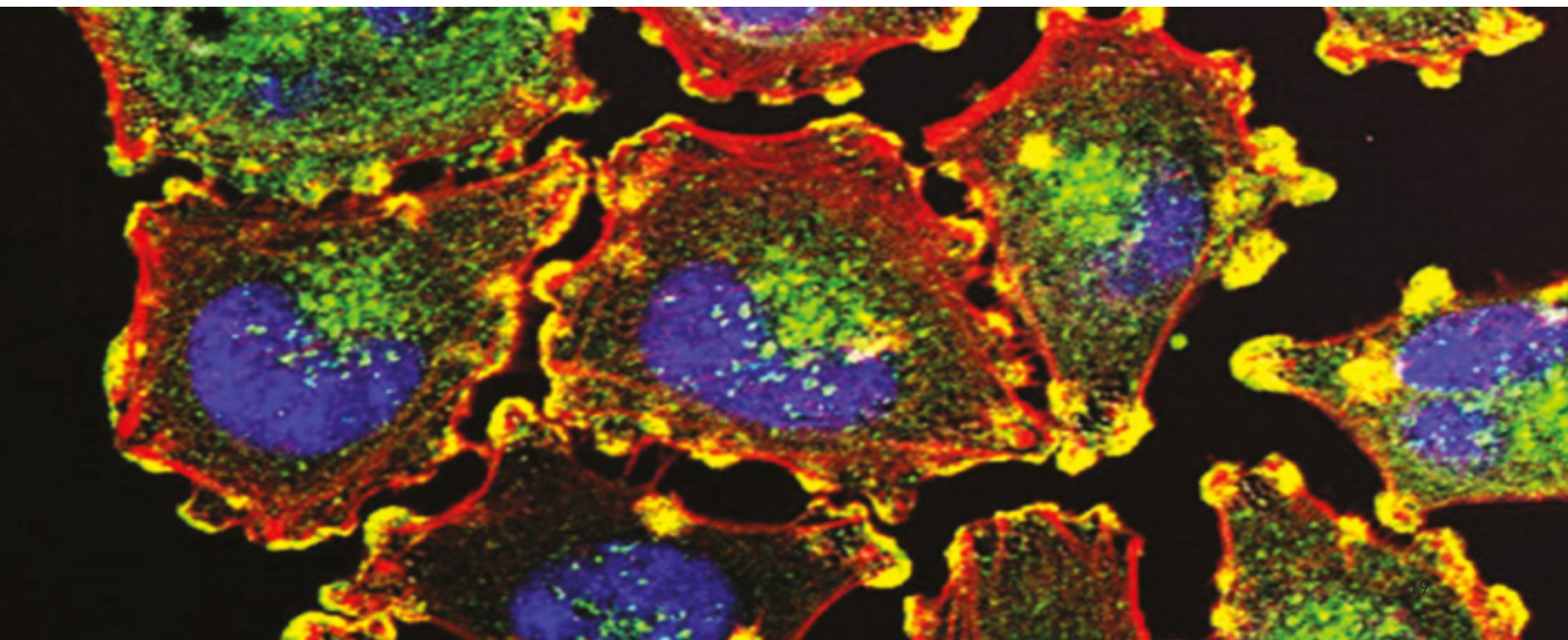
technology and expertise to support the Technion's objective of facilitating research without boundaries. Over the years, the Technion has committed to providing the highest level of resources to all scientists, and has invested in both advanced instruments and highly trained personnel to operate the equipment.

Currently housed in the Bruce and Ruth Rappaport Faculty of Medicine, the BCF will be moved to, and expanded in, the new D. Dan and Betty Kahn Technion Human Health Building. It will serve as an arsenal of advanced instrumentation and other resources that are indispensable for conducting the kind of frontline biomedical studies that characterize

the Center. The Biomedical Core Facility serves the research community at large, and is an economic solution to battle the high costs of purchasing and maintaining essential instrumentation that is beyond the means of an individual researcher or group of investigators. Furthermore, the BCF is staffed by a team of expert researchers in various fields who actively contribute to experimentation, planning, and analysis in collaboration with research groups.

In contrast to the traditional laboratory setup, in which researchers work in isolated sections, the upper floors of the D. Dan and Betty Kahn Human Health Building will feature an innovative open space research laboratory model. This open layout will epitomize the boundless approach to research that the Center represents. While the needs of each individual research group will be fully addressed, the design concept will enhance multidisciplinary collaboration, pooling the use of advanced pieces of equipment among multiple researchers, and encourage communication and collaboration across academic disciplines.

Your support will enable the Technion to accelerate the pace of innovation and discovery by breaking free from the conventional lab arrangements of the past. Your contributions will support the capital needs of the D. Dan and Betty Kahn Human Health Building and directly enable researchers to carry out all stages of experimentation, including design, execution, and data analysis.



Funding Opportunities

**\$1,36 million+
CAD**

In addition, gifts toward construction of the new D. Dan and Betty Kahn Human Health Building of \$1,36 million CAD and above will be recognized by naming the following facilities:

\$1.6M CAD

AUDITORIUM
(220 SEATS)

\$3.2M CAD

AUDITORIUM FLOOR,
incl. RECEPTION AREA

\$4.8M CAD

RESEARCH
LABORATORY FLOOR

\$9.5M CAD

BIOMEDICAL
CORE FACILITY

\$160,000

The D. Dan and Betty Kahn Human Health Building Capital Fund will allow the Technion to provide direct support to the general capital or maintenance needs of the new facility. Gifts of \$160,000 CAD and above are welcome to support this fund. ■

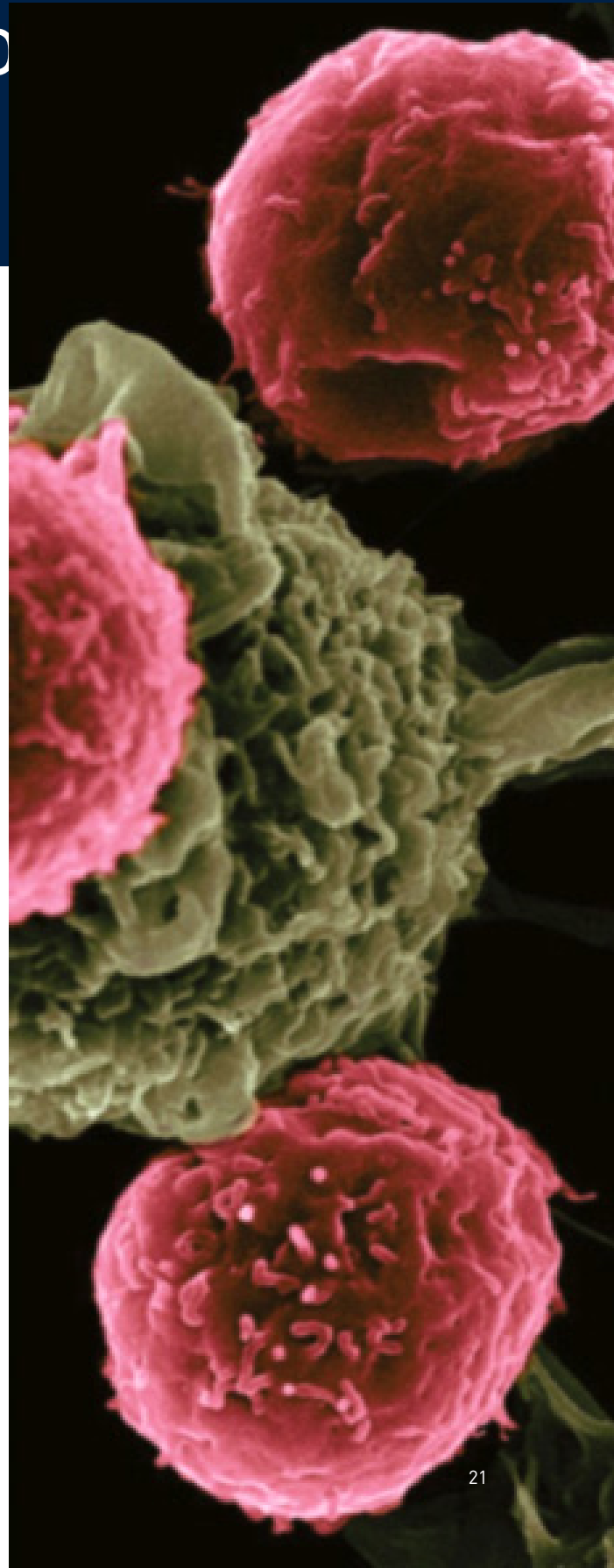
Donor Recognition

The highest form of donor recognition bestowed by the Technion is inclusion in the President's Circle.

This extraordinary honor is awarded by the University to its most devoted friends upon reaching the milestone of the equivalent of \$10 million USD in support. Donors who provide the equivalent of \$1 million USD in support and above are bestowed the title of Technion Guardian and are honored by physical and digital plaques situated in a most prominent central campus location.

Gifts starting at the equivalent of \$100,000 USD will be listed in the President's Report, the official annual report of the Technion. Gifts are listed in one printed version of the report and then in perpetuity in the online version; listings appear when gifts reach 50% completion.

Donors to the D. Dan and Betty Kahn Human Health Building Capital Fund will receive an annual report containing updates on construction plans, research, faculty, and students, until completion of construction.





Members of the Bruce and Ruth Rappaport Cancer Research Center

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Faculty of Materials Science
and Engineering

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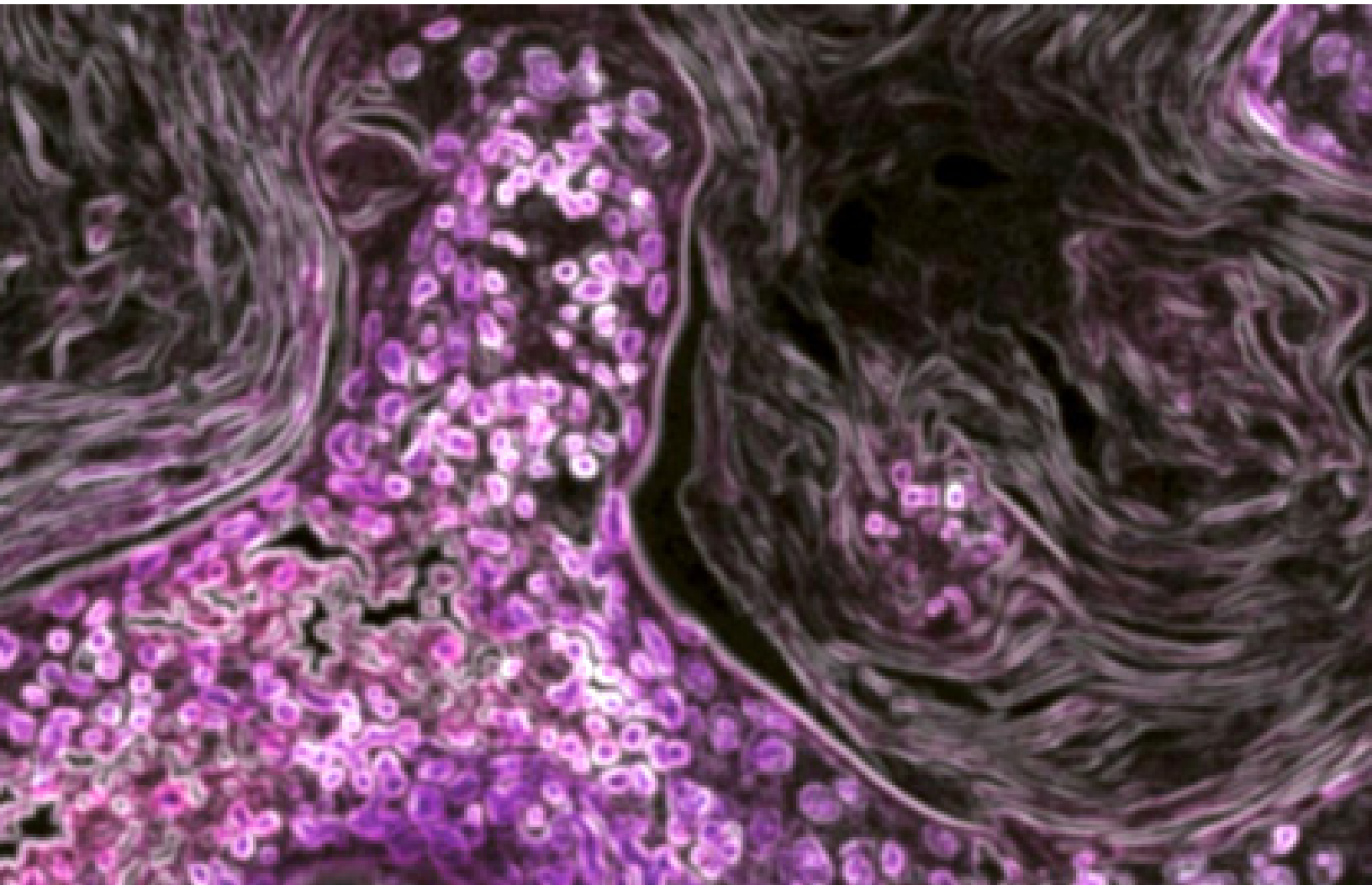
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Thank You

Thank you for your consideration and support.

Together, we can push the boundaries of research, fuel discovery, and ultimately reimagine the future of cancer care. Partnerships with loyal friends like you are the backbone of scientific achievement. Your commitment will ensure continued success on the front line of revolutionary cancer research.



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