Masonic Cancer Center
2022 - 2027
Strategic Plan
As we embark on our recovery process from the ongoing impacts from COVID-19, the next five years will present unforeseen challenges as well as incredible opportunities. At the Masonic Cancer Center, we strive to reduce the cancer burden in Minnesota and beyond by engaging the research strengths of the University of Minnesota to pursue multi-disciplinary population, laboratory, translational, and clinical research. Our mission to improve outcomes in cancer treatment and care, expand our understanding of the disease and its prevention, and offer opportunities to collaborate with the greater community to benefit all has always been at the top of our minds throughout the last few tumultuous years.

I know many of you reading this plan are long-time friends and supporters of the Masonic Cancer Center. All of our members appreciate your help; we cannot solve the problem of cancer alone, and we would not exist without your support and advocacy. For those readers new to the Masonic Cancer Center, I hope this Strategic Plan sparks your interest in our work. More information can be found at cancer.umn.edu, and I welcome your comments or questions by email at ccinfo@umn.edu.

Sincerely,

Douglas Yee, MD
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INTRODUCTION

A centralized strategic plan enables leaders to develop a vision for the optimal future direction of their organization and the community they serve. The Masonic Cancer Center (MCC), University of Minnesota refreshed the 2018 Strategic Plan in 2022 for the 2022-2027 cycle to reflect their heritage of over 30 years of driving innovative research, translation, and catchment impact as well as to determine their path forward in the dynamic landscape of cancer treatment and research. With this updated strategic plan, the cancer center can now have more structured conversations around alignment, prioritization, and resource allocation for the key objectives and goals of the organization.

The strategic plan refresh, which took place from early spring to late 2022, was facilitated by an outside consulting firm and involved over 30 stakeholders from a variety of organizations and departments. A key objective was to create a cascading strategic plan structure, where prioritized efforts are aligned to groupings of programs and pillars in support of overall plan objectives:

A cascading strategic plan also develops associated key performance indicators (KPIs) to develop baselines, goals, and tracking to measure progress. Additionally, the MCC optimized committee governance structures to ensure plan deployment success.

Since the MCC is such a part of the ecosystem of healthcare, research, and cancer treatment, deliberate attention was given to ensuring plan alignment with the multiple partners, stakeholders, community members, and the National Cancer Institute’s (NCI) Cancer Center Support Grant (CCSG). This strategic plan should help drive the direction and daily activities that inform the once every 5-year CCSG renewal process. This document reflects the outcome of the MCC Strategic Plan refresh and 5-year plan moving forward.
1991 The UMN Board of Regents approved the establishment of a cancer center as part of the University’s Academic Health Center (AHC), naming John Kersey director.

1993 The cancer center takes a leading role in the NCI-funded Childhood Cancer Survivor Study, designed to track and minimize harmful long-term health effects of cancer and its treatment.

1996 With a lead gift of $5M from Minnesota Masonic Charities, the Masonic Cancer Research Building (MCRB) opened.

1998 The cancer center is designated a Comprehensive Cancer Center by the National Cancer Institute for cancer research, treatment, and education. Only 71 institutions in the U.S. hold this highest-level designation.

2007 Douglas Yee, MD, is named director of the UMN cancer center. A national expert in breast cancer research and treatment, Dr. Yee joined the University in 1999 and is only the second director, succeeding Dr. Kersey.

2008 Minnesota Masonic Charities donates a record-breaking $65M to the University for cancer research. The University of Minnesota Cancer Center is renamed, becoming the Masonic Cancer Center (MCC).

2013 UMN celebrates the opening of the new Cancer and Cardiovascular Research Building (CCRB) on the Twin Cities campus.

2014 NCI renews MCC’s designation as a comprehensive cancer center after a highly competitive and rigorous process, awarding MCC close to $20M over the next five years.

The Masonic Cancer Center (the MCC) was founded in 1991 as the University of Minnesota Cancer Center and received its National Cancer Institute (NCI) designation in 1998, making it the first and only NCI-designated cancer center in the Twin Cities and one of only two in Minnesota and 51 institutions in the U.S. to hold that designation. It was renamed the Masonic Cancer Center in 2008 following a gift from the Minnesota Masonic Charities.

The MCC is made up of more than 600 physicians and researchers who create a collaborative research environment focused on the causes, prevention, detection, and treatment of cancer; applying that knowledge to improve quality of life for patients and survivors; and sharing discoveries with other scientists, students, professionals, and the public. Since its inception, the MCC has seen consistent growth of its membership and research base, enabling us to further advance our knowledge and enhance care for our catchment area—the communities and families we serve across Minnesota and beyond.

The MCC is organized into six programs that focus on specific scientific themes. Together, these programs emphasize the translational pipeline:

- Screening, Prevention, Etiology, and Cancer Survivorship
- Carcinogenesis and Chemoprevention
- Genetic Mechanisms
- Cell Mechanisms
- Immunology
- Transplant and Cellular Therapy
Several resources and organizational structures have been put into place to better connect basic programmatic research with the clinic. These resources include a Cancer Research Translational Initiative (CRTI) to increase the number of investigator-initiated translational trials at MCC and the formation of Translational Working Groups (TWGs) that bring together researchers, clinicians, and others in the oncology community to solve problems in organ-site-specific cancers. Several mechanisms have been implemented to increase the involvement of the community—particularly underserved populations in the catchment area—in clinical research.

MCC members come from three UMN campuses, 14 colleges, and multiple partner organizations. Clinical research and treatment partners include M Health Fairview UMN Medical Center, Clinics and Surgery Center, and Masonic Children’s Hospital. The MCC also leads the Minnesota Cancer Clinical Trials Network (MNCCTN), a state-funded initiative that collaborates with local health care organizations to bring cutting-edge cancer clinical trials to rural communities and improve cancer outcomes across the state. With a catchment area covering the entire state of Minnesota, the MCC and MNCCTN have created a network to bring the most advanced research efforts from bench to bedside across the state.

The Masonic Cancer Center also reaches all four corners of Minnesota via the Community Outreach and Engagement (COPE) program. COE’s mission is to reduce the burden of cancer in the state by engaging communities and providing them access to knowledge and information about cancer prevention, treatment, survivorship, and clinical research opportunities. COE also provides hands-on educational internship opportunities designed to give undergraduate students from Minnesota’s racial/ethnic minority and under-represented communities experience conducting cancer health disparities research.

A state-of-the-art Phase I clinical trial facility opens at UMN as a result of a multi-organizational partnership between UMN Health, UMN Physicians, MCC’s Clinical Trials Office, and UMN’s Clinical Translational Research Institute.

With $10M from Minnesota Masonic Charities’ Partners for Life campaign, the Masonic Cancer Clinic moves to the new, state-of-the-art University of Minnesota Health Clinics and Surgery Center.

The Minnesota Cancer Clinical Trials Network (MNCCTN) launches.

MCC is once again designated as a Comprehensive Cancer Center by NCI for our cancer research, treatment, and education, receiving an "Outstanding" recognition status—its highest to date.

Minnesota Masonic Charities accelerates its existing support of MCC with an expedited installment of $25M, launching UMN’s first-ever clinical trial through MNCCTN, the creation of the MCC Discovery Lab, and more.

MCC creates and hosts the first Cancer Center Community Impact Forum for community outreach and engagement professionals at cancer centers across the country.

MNCCTN celebrates 500 clinical trial enrollments.

MCC creates and hosts the first Cancer Center Survivorship Research Forum for clinicians, researchers, and survivors.

Collaboration between UMN Medical School, M Health Fairview, and MCC prompts the opening of the Developmental Therapeutics Clinic (DTC)—the first of its kind in the Twin Cities.
The Masonic Cancer Center serves as the hub for cancer research at the University of Minnesota. Our 600+ members apply their expertise to the broad problem of cancer with research dedicated to its causes, prevention, treatment, outcomes, and survivorship. The progress we’ve seen in reducing the burden of cancer across the state of Minnesota can be directly attributed to these research advances.

Community engagement in cancer research is essential to reducing cancer’s burden. We work within our catchment area—the state of Minnesota—through our three research site, in the Twin Cities, Duluth, and at the Hormel Institute in Austin, Minn., to engage community members and connect them with basic, translational, clinical, and population research on cancers prevalent in the state. The four leading causes of cancer death in Minnesota are: 1) lung and bronchus, 2) colorectal, 3) female breast, and 4) prostate.
MCC FACTS

EST. 1991  NCI DESIGNATED 1998

CATCHMENT AREA POPULATION:
5.7 million
MCC serves the entire state of Minnesota.

CATCHMENT AREA SIZE:
79,610 sq. mi
MCC’s catchment area covers approximately 2% of the entire US.

611 MASONIC CANCER CENTER MEMBERS

60%
of MCC members are affiliated with the University of Minnesota Medical School.

MCC MEMBERS COME FROM:

- 3 research sites across Minnesota
- 14 University colleges or schools
- 8 external Minnesota organizations

FROM 2019-2022, MCC REACHED:
16,320 people
with cancer wellness education

ANNUAL RESEARCH FUNDING:
$82 million

PAPERS PUBLISHED:
3,720 (2018 - 2022)

FIVE-YEAR THERAPEUTIC TRIAL ENROLLMENT:
1,813

FIVE-YEAR NON-THERAPEUTIC TRIAL ENROLLMENT:
28,476
The ability to partner and collaborate with groups that have different strengths and perspectives significantly contributes to the ability to further MCC’s mission objectives. The MCC is part of a robust partner and stakeholder ecosystem under the auspices of the University of Minnesota (UMN) and the UMN Office of Academic Affairs (OACA), which also houses other institutes and centers, including the Health Sciences Education Center and Institute for Engineering in Healthcare. Faculty members that are part of the MCC membership originate from the Medical School and other colleges and academic departments across the University of Minnesota. The Masonic Cancer Center also partners with various members of the broader community to drive our mission. Work is done directly with members of the greater Minnesota community and community partner organizations to engage in cancer research, education, and prevention programs. The majority of MCC clinical trials and medical faculty clinical activities are in partnership with the M Health Fairview health system. The Hormel Institute partners with MCC on the basic molecular mechanisms of cancer development research and finding better ways to prevent, detect, and treat cancer. Clinical trial expansion and outreach is performed in partnership with the Minnesota Cancer Clinical Trial Network (MNCCTN), which also includes organizations such as the Mayo Clinic, M Health Fairview, and the Hormel Institute.
MISSION

The University of Minnesota (University), founded in the belief that all people are enriched by understanding, is dedicated to the advancement of learning and the search for truth; to the sharing of this knowledge through education for a diverse community; and to the application of this knowledge to benefit the people of the state, the nation, and the world.

The University's mission, carried out on multiple campuses and throughout the state, is threefold:

- **Research and Discovery** - To generate and preserve knowledge, understanding, and creativity by conducting high-quality research, scholarship, and artistic activity that benefit students, scholars, and communities across the state, the nation, and the world.

- **Teaching and Learning** - To share that knowledge, understanding, and creativity by providing a broad range of educational programs in a strong and diverse community of learners and teachers, and prepare graduate, professional, and undergraduate students, as well as non-degree seeking students interested in continuing education and lifelong learning, for active roles in a multiracial and multicultural world.

- **Outreach and Public Service** - To extend, apply, and exchange knowledge between the University and society by applying scholarly expertise to community problems, by helping organizations and individuals respond to their changing environments, and by making the knowledge and resources created and preserved at the University accessible to the citizens of the state, the nation, and the world.

We are part of the larger mission of the University of Minnesota:

The University of Minnesota (University), founded in the belief that all people are enriched by understanding, is dedicated to the advancement of learning and the search for truth; to the sharing of this knowledge through education for a diverse community; and to the application of this knowledge to benefit the people of the state, the nation, and the world.

Our mission is to reduce cancer’s burden in Minnesota and throughout the world.

We fulfill our mission by engaging the research strengths of the University of Minnesota to pursue multi-disciplinary population, laboratory, translational, and clinical research. We employ a diverse workforce to drive cancer research to achieve the goals of improving outcomes in cancer treatment and care, expanding our understanding of the disease and its prevention, and offering opportunities to collaborate with the greater community to benefit all.
VISION

The Masonic Cancer Center is the preferred academic research hub for those seeking the best precision cancer treatment, clinical trials, and prevention measures informed by research from world-renowned experts and performed by top clinicians. The MCC attracts and retains an exceptional workforce drawn to our academic excellence, equitable and collaborative environment, and focus on nurturing and developing the next generation of cancer researchers.

We are part of the larger vision of the University of Minnesota:

In all of its activities, the University strives to sustain an open exchange of ideas in an environment that:

- embodies the values of academic freedom, responsibility, integrity, and cooperation;
- provides an atmosphere of mutual respect, free from racism, sexism, and other forms of prejudice and intolerance;
- assists individuals, institutions, and communities in responding to a continuously changing world;
- is conscious of and responsive to the needs of the many communities it is committed to serving;
- creates and supports partnerships within the University, with other educational systems and institutions, and with communities to achieve common goals; and inspires, sets high expectations for, and empowers the individuals within its community.
## Strategic Pillars and Priority Areas

### Our Mission
- Engage the research strengths of the MCC and UMN
- Enhance DEI integration across the MCC
- Utilize community and provider input to inform all MCC activities
- Proactively develop and retain the next generation of leadership, faculty, and staff

### Outcomes
- Catchment engagement
- Sponsored research funding
- Therapeutic interventional trial enrollement
- Investigator-initiated therapeutic interventional trials

### Strategic Pillars and Priority Areas

<table>
<thead>
<tr>
<th>Reduce the cancer burden</th>
<th>Drive research discovery</th>
<th>Accelerate the path to cures</th>
<th>Enable research excellence</th>
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</thead>
<tbody>
<tr>
<td>Impacting the patient experience</td>
<td>Core research program development</td>
<td>Promote and facilitate clinical research translation</td>
<td>Financial stewardship and growth</td>
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<td>Addressing unique catchment challenges</td>
<td>Support, promote, and integrate areas of developing research</td>
<td>Optimize clinical trial deployment</td>
<td>Provide leading shared resources</td>
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<tr>
<td>Engaging catchment community and care providers</td>
<td></td>
<td></td>
<td>Partnership cultivation and collaboration</td>
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Strategic Pillars and areas for the cascading strategic plan shown on page 10 were formulated based on a combination of interviews, reviews of previous strategic plans, ecosystem partner objectives, NIH/CCSG criteria, an inventory of current state activities, and future state objectives. The themes that resonated were:

- **Embed key aspects of the mission and vision throughout the strategic plan:**
  - Engage the research strengths of the faculty
  - Enhance Diversity, Equity, and Inclusion (DEI) integration
  - Utilize catchment and care provider input into MCC activities
  - Proactively develop and retain the next generation of new faculty and staff

- **Reduce the cancer burden by engaging catchment community and care providers:**
  At the end of the day, the research and innovations originating from the cancer center should be driving meaningful change in the community. Impact may be immediate or take dozens of years, but it is a driving objective for the cancer center. Reducing the cancer burden is a team effort, and MCC is thoroughly committed to driving change in partnership with the community, health care providers, and other partners.

- **Drive research discovery:** The MCC has a legacy built around innovation in understanding and treating hematologic malignancies. This pillar represents the strong cancer research legacy of the MCC and the current top research programs but also the future direction of research that needs to be supported and nurtured. The current research programs of focus include Carcinogenesis & Chemoprevention (CC), Cellular Mechanisms (CM), Genetic Mechanisms (GM), Immunology (IM), Screening, Prevention, Etiology and Cancer Survivorship (SPECS), and Transplant and Cellular Therapy (TCT).

- **Accelerate the path to cures:** Successful clinical intervention and cancer treatment is dependent on the translation of innovative research into Phase 1 clinical trials and eventually new standards of care. A high priority of the MCC is the translational support for researchers to connect with clinicians in creating new therapeutic interventional Phase 1 trials and products. Once research has entered the clinical trial stage, the MCC has a focus on making sure those clinical trials are successfully deployed with our health system partners.

- **Enable research excellence:** To succeed with MCC goals, infrastructure must be in place and optimized. Core enabling activities include: Continuing DEI integration into MCC culture and operations, fostering community engagement for MCC research programs and clinical trials, championing fiscal stewardship to fund the priorities of the MCC, continuing to grow training and mentoring programs to develop and retain the next generation of cancer researchers, providing best-in-class shared resources to enable cutting edge research, and growing partner relationships to effectively deliver on common goals in addressing cancer.

These Reduce, Drive, Accelerate, and Enable themes became the foundational strategic pillars of the cascading plan as they represent the priority areas of focus for the MCC. The cascading strategic areas of prioritized focus were also developed using the same methodology as for the pillars and are described in more detail in the strategic pillar sections of this document.
KEY PERFORMANCE INDICATORS

Key Performance Indicators (KPIs) were developed to codify and quantify objectives of the strategic plan. At the highest level of the cascading plan, these KPIs include:

- **Catchment engagement**: This aggregate measure captures the direct impact of MCC activities on the catchment community. This aggregate measure is made up of cancer screenings, cancer wellness education events, cancer research and mass awareness campaigns, and non-therapeutic study enrollment.

- **Sponsored research funding**: MCC membership receives cancer research grant funding in a very competitive environment. This measure is an indicator of the research merit and innovation that is being generated by the membership.

- **Therapeutic trial enrollment**: A key function of a NCI-designated cancer center is to enroll patients in clinical trials that could lead to new standards of care. Developing new trials, getting them approved, and successfully creating awareness for potential participants about these trials all contribute to successful trial enrollment. Although these trials also have a direct impact on the catchment community, increased trial enrollment is an important enough objective to track as an elevated KPI to ensure visibility and accountability at the highest level of the organization.

- **Investigator-initiated trials (as a percentage of all clinical trials)**: A comprehensive matrixed cancer center has the advantage of being able to develop a robust pipeline of clinical trials from its own researchers (investigators). The MCC has a legacy of developing therapeutic trials based on research that originated from its membership. This KPI was selected as one of the top four measures for the strategic plan because it is a priority for the MCC to continue that legacy.
As part of the cascading strategic plan, MCC efforts will prioritize driving the established goals. A series of KPIs were developed for each pillar to measure important areas of focus for the 2022-2027 Strategic Plan, both to develop historic baselines and to establish 2027 goals. As this process involved the development of new metrics that did not have available historical data, the nearly completed list of KPIs and 2027 goals is included below:

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Key Performance Indicator</th>
<th>2027 Target (per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce the Cancer Burden</td>
<td>Non-therapeutic trial / study enrollment</td>
<td>6,400</td>
</tr>
<tr>
<td></td>
<td>Cancer screenings (facilitated by the MCC)</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Public awareness: •Cancer wellness education •Research awareness •Mass awareness campaigns</td>
<td>23,700</td>
</tr>
<tr>
<td></td>
<td>Non-therapeutic trial / study enrollment inclusivity</td>
<td>Increase</td>
</tr>
<tr>
<td></td>
<td>Policies influenced</td>
<td>In development</td>
</tr>
<tr>
<td></td>
<td>Education and career development—number of trainees participating in MCC programming</td>
<td>Increase</td>
</tr>
<tr>
<td>Drive Research Discovery</td>
<td>Total sponsored research funding</td>
<td>$103M</td>
</tr>
<tr>
<td></td>
<td>Collaborative papers published (inter-programmatic and intra-programmatic)</td>
<td>5 percent</td>
</tr>
<tr>
<td>Accelerate the Path to Cures</td>
<td>Interventional therapeutic trial enrollment (#)</td>
<td>444</td>
</tr>
<tr>
<td></td>
<td>Investigated initiated trials: percent of total trials</td>
<td>30 percent</td>
</tr>
<tr>
<td></td>
<td>Investigated initiated trials: number newly opened</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Interventional therapeutic trial total activation timeline</td>
<td>120 days</td>
</tr>
<tr>
<td></td>
<td>Number of patents, products, and licenses</td>
<td>Increase</td>
</tr>
<tr>
<td>Enable Research Excellence</td>
<td>Additional philanthropic funding</td>
<td>$10M</td>
</tr>
<tr>
<td></td>
<td>MCC membership inclusivity</td>
<td>Increase</td>
</tr>
</tbody>
</table>
REDUCE THE CANCER BURDEN BY ENGAGING CATCHMENT COMMUNITY AND CARE PROVIDERS

“The Masonic Cancer Center is conducting cutting-edge research to prevent cancers from ever occurring, and we’re doing so in partnership with communities across Minnesota. We’re focused on serving everyone who calls Minnesota home to achieve broad health equity in prevention and screening—because early detection saves lives—as well as treatment and survivorship, and we’re working to make new discoveries, translate those findings into new practices and policies, and improve patients’ quality of life. For example, we are looking at how tobacco causes cancer, and we are creating and assessing innovative treatments and policies that can reduce the health burden from tobacco. Our researchers are also looking at other environmental and lifestyle factors—like the foods Minnesotans frequently eat—that can increase the risk for cancer and exploring new ways to mitigate these risks.”

—Dorothy Hatsukami, PhD, Associate Director for Cancer Prevention and Control
The objectives related to reducing the cancer burden were designed to focus on a universal patient experience. A simplified framework illustrates the first strategic area of this pillar and its resulting tactics:

**Prevention**

- Early detection and diagnosis includes the modalities that facilitate catching cancer before it enters a non-treatable stage. These include screening mechanisms such as blood testing, biopsies, and imaging (e.g. mammography).
- Clinical intervention relates to the treatment of cancer once it is identified.
- Survivorship and end of life captures how to live with cancer once it has been treated and successfully put in remission, or when intervention has been unsuccessful and palliative measures must be considered.

Organizing efforts around the patient experience allow for researchers and program leads to put their work in a context that is familiar to the catchment community.

Another strategic area of focus is addressing challenges, such as health inequalities related to local populations and environmental impact issues, that are particularly unique to Minnesota.

<table>
<thead>
<tr>
<th>Strategic Area</th>
<th>Example Tactics</th>
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</thead>
<tbody>
<tr>
<td>Impacting the Patient Experience</td>
<td>Strengthening translation support for non-therapeutic trial / study enrollment and policy development.</td>
</tr>
<tr>
<td></td>
<td>Increasing underrepresented minorities’ (URM) enrollment in studies using expanded culturally tailored cancer education campaigns and patient navigators.</td>
</tr>
<tr>
<td></td>
<td>Increasing community access to cancer screenings using enhanced community, government, and provider partnerships and programs.</td>
</tr>
<tr>
<td>Addressing Unique Catchment Challenges</td>
<td>Improving screening rates for HPV and more in underrepresented populations.</td>
</tr>
</tbody>
</table>
“The Masonic Cancer Center is doing detailed basic and applied research to understand how tumor cells and the immune system interact. This information is important to develop new ways to use white blood cells as cancer cell killers for therapy. Specifically, we’re studying what blocks T cells from invading and killing cancer cells—and how we can overcome these blocks. This work involves detailed imaging technologies, genetic manipulation of human and mouse T cells, and sophisticated mathematical modeling. Our researchers hope to leverage newly-discovered mechanisms to better design adoptive cell therapies for the successful treatment of solid tumors.”

—David Largaespada, PhD, and Collaborators David Masopust, PhD and David Odde, PhD
The Masonic Cancer Center has a strong legacy of research innovation. The Drive Research Discovery pillar formalizes the MCC’s commitment to research innovation in the ongoing development of the six core research programs:

- Transplant & Cellular Therapy
- Immunology
- Screening, Prevention, Etiology & Cancer Survivorship
- Cellular Mechanisms
- Genetic Mechanisms
- Carcinogenesis & Chemoprevention

The Drive Research Discovery Pillar also supports and promotion of new and developing prioritized areas of cancer research:

- Functional Genomics
- Survivorship
- Aging
- Virology
- Physical Sciences
- Global Health
- Biomarkers
- Health Equity
- Environmental Impact

<table>
<thead>
<tr>
<th>Strategic Area</th>
<th>Example Tactics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Research Program Development</td>
<td>Targeted faculty recruitment in key areas to promote research goals.</td>
</tr>
<tr>
<td>Support, Promote, and Integrate Areas of Developing Research</td>
<td>Prioritize health equity and cancer and aging research in pilot project investments.</td>
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</table>
Masonic Cancer Center researchers play a key role in designing and developing drugs that inform future treatment strategies. This type of research—translational research—is conducted initially in labs and specifically intended to later be used in clinical facilities to help patients. At the MCC, our Cancer Research Translational Initiative (CRTI) has facilitated the translation of TriKE GTB-3550, a cancer therapy that uses special killer cells to attack cancer cells. The first generation TriKE was developed to study its effects on a specific set of drug-resistant leukemias in a first-in-human trial. Thanks to that trial, different MCC research teams have since developed (1) a more potent second-generation TriKE and (2) used lessons from this process to create a special TriKE that examines the response of drug-resistant solid tumors such as prostate cancer and sarcoma. What’s more, CRTI has helped build strong partnerships, including with GT Biopharma who licensed the TriKE platform from the University of Minnesota and are supporting ongoing and future clinical trials.”

—Emmanuel Antonarakis, MD, Associate Director for Translational Research
A key role that an NCI designated cancer center plays is that of translating research into clinical (interventional therapeutic) trials and products that could create new standards of care. Once these trials are approved, patients must successfully be enrolled and be optimally engaged in the prescribed trial. Accelerating the path from research to potential cures is a key priority for the MCC and is reflected as the third strategic pillar. The two strategic areas for this pillar are:

- Promote and facilitate clinical research translation. This reflects the prioritized focus to work with the research programs and guide faculty through the process of translating their research into successful Phase 1 trials and/or products, which includes connecting basic science researchers with their clinical care counterparts to develop trials that address patient needs in an innovative way and navigating researchers through the trial approval process.

- Optimize clinical trial deployment. This priority reflects the ongoing commitment of the MCC to always be perfecting clinical trial deployment operations to provide a world-class experience for patients, care providers, industry partners, and the community at large.

<table>
<thead>
<tr>
<th>Strategic Area</th>
<th>Example Tactics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote &amp; Facilitate Clinical Research Translation</td>
<td>Increasing translation support services to provider earlier phase translation coaching and clinician-to-scientist coordination.</td>
</tr>
<tr>
<td></td>
<td>Dedicating staff to promote industry partner development collaborations.</td>
</tr>
<tr>
<td>Optimize Clinical Trial Deployment</td>
<td>Creation of a clinical trial fast track team to streamline approval processes and enable trials to enroll patients sooner.</td>
</tr>
<tr>
<td></td>
<td>Development of innovative care provider collaboration models to optimize the patient experience.</td>
</tr>
</tbody>
</table>
“Our goal at the Masonic Cancer Center is to ensure Minnesota has a continuous, robust, and diverse cancer workforce. In the last decade, all demographic groups in Minnesota have grown steadily—but, in that time, our state has added five times as many people of color as non-Hispanic white residents. It is therefore imperative that our trainees reflect our changing demographics to best reduce our state’s cancer burden. To broaden participation, we have several NCI-funded programs that attract and train high school, college, and post-baccalaureate students drawn from groups typically under-represented in cancer research and patient care.”

—Christopher Pennell, PhD, Associate Director for Cancer Education and Training
Addressing the cancer burden through research, community programs, and clinical trials requires a solid foundation to drive success. The Enabling pillar is about recognizing and prioritizing the tremendous work that MCC faculty and staff undertake to ensure the success of the other three pillars:

<table>
<thead>
<tr>
<th>Strategic Area</th>
<th>Example Tactics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catchment Community Engagement Integration</td>
<td>Foster channels, such as “fireside chats” and community advisory boards, for bi-directional communication between the catchment community and the Core Research Programs and Translational Working Groups to inform future research.</td>
</tr>
<tr>
<td>DEI Integration</td>
<td>Increase URM representation in faculty and staff using programs to increase more diverse candidates in the recruiting pipeline.</td>
</tr>
<tr>
<td>Financial Stewardship and Growth</td>
<td>Using formal strategic planning and deployment best practices to prioritize and utilize resources in the most effective manner. Increasing fundraising activities to support new and developing areas of research and community-based programs.</td>
</tr>
<tr>
<td>Promote Cancer Career Growth and Development</td>
<td>Promoting cancer research career awareness and excitement by supporting K-12 educators with curriculum materials and training.</td>
</tr>
<tr>
<td>Provide Leading Shared Resources</td>
<td>Introduce emerging technologies to facilitate innovative research.</td>
</tr>
<tr>
<td>Partnership Cultivation and Collaboration</td>
<td>Actively work with the Minnesota Cancer Clinical Trial Network, Minnesota Health Department, MHealth Fairview, and other organizations on strategic program partnerships.</td>
</tr>
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</table>

“Finding innovative ways to connect with the community and share exciting research and wellness education is critical to making a real dent in the cancer burden Minnesotans bear. To expand that work, in 2021 our Community Outreach and Engagement team launched a brand new series called Fireside Chats—an interactive program that provides cancer education and builds relationships with Minnesotans across the state. One attendee said this about a January 2022 chat led by Dr. Rahel Ghebre, gynecologic oncologist and associate director of diversity, equity, and inclusion for MCC: ‘I attended Dr. Rahel Ghebre’s Fireside Chat in January (I’m an 18-year cervical cancer survivor), and was motivated to be proactive with my health and make a long overdue visit to my primary physician. That in turn led to a referral for a mammogram and breast cancer diagnosis. Eight months, one surgery, and 20 radiation treatments later...I am here healthy. What can you say about something that impacted your life in a way that allows you to still have life?’”

—Kiara Ellis, MSW, Director, Community Outreach and Engagement
The Masonic Cancer Center continually strives to be the preferred academic research hub for those seeking the best precision cancer treatment, clinical trials, and prevention measures informed by research from world-renowned experts and performed by top clinicians. The 2022-2027 Strategic Plan represents the focused and organized structure, goals, and associated tactics from which we aim to fulfill this vision. A key artifact of the strategic plan that was newly developed in 2022 is the cascading pillar structure, which can be seen in its entirety on page 11:

This structure reflects our ongoing commitment to reduce the cancer burden for all Minnesotans, drive research discovery, accelerate the path to cures, and enable research excellence through all the work our faculty, staff, clinicians, partners, and collaborators undertake. We look forward to investing in these areas, monitoring our progress, and holding ourselves accountable to ensure we are executing our plan. We will provide updates to our oversight boards and partners along the way.

I extend my sincerest thanks to our Masonic Cancer Center leadership, faculty, and staff as well as our patients, partners, supporters, and all other collaborators who were instrumental in developing this strategic framework to guide our activities for the next five years. Solving the problem of cancer is a collaborative effort, and your expertise, contributions, and insight have laid the groundwork for even more ambitious goals and objectives in the years to come.

With sincere thanks,

Douglas Yee, MD
Director, Masonic Cancer Center, University of Minnesota
APPENDIX: PARTICIPANTS

The following participants were directly involved in the shaping of the strategic plan, which was facilitated by consulting support from Forum Solutions LLC:

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