MOFFITT CANCER CENTER’S MISSION IS TO CONTRIBUTE TO THE PREVENTION AND CURE OF CANCER.

Dear Friends,

We are pleased to share with you Moffitt Cancer Center’s 2021 annual report. You will see we have consolidated reports from key cancer center sectors in an exciting way to tell the story of the fight against cancer from multiple fronts.

Personalized cellular therapies bring the benefits of scientific discoveries closer to the patient. Richard Jennings was the 500th patient treated at Moffitt Cancer Center with a therapy called CAR T that reengineered his own T cells to fight cancer. With this infusion, he became the first patient at the cancer center to receive Abecma® after it became the first FDA-approved cell therapy for multiple myeloma. The rapidly developing field of immunotherapy shows much promise, and this landmark infusion tracks our progress toward becoming the world leader in cell therapies for cancer.

Supplier Diversity’s impact is evident in the construction of our new 10-story inpatient surgical hospital on the 20-acre east McKinley campus, scheduled to open in 2023. The cancer center committed to a supplier diversity goal of 15% over the span of this project, or $52 million, and the hospital is expected to exceed expectations. As a result, we are not only expanding our capacity for inpatient care but also creating an economic impact in the communities we serve.

The lack of diversity among clinical trial participants can result in minority populations missing opportunities for treatment at early stages of disease or losing access to potentially lifesaving treatment altogether. In another initiative focused on diversity and equity, Moffitt Cancer Center recognized the need to dedicate concentrated resources to addressing cancer’s undue burden on minority populations. The reorganized minority clinical trial enrollment efforts resulted in the RESPECT Program, for Reaching Out and Engaging Special Populations to Expand Clinical Trials.

Despite a challenging year on the part of the state of Florida, the legislative proposal to raise Moffitt’s percentage of the cigarette tax was included in the final tax package and signed by Gov. Ron DeSantis. This success has been years in the making and one we can all celebrate. Additionally, all Moffitt Cancer Center budget items remained intact and were approved by the governor.

This year the National Cancer Institute awarded the Lung Cancer Metabolism Working Group at Moffitt with a Research Program Project Grant providing more than $10.2 million over five years. The grant will support team research focused on investigating lung cancer metabolism across several programs, with the aim of developing new therapies to target molecular signatures in lung cancer.

And speaking of grants, we learned that the National Institutes of Health has again renewed our Cancer Center Support Grant, in recognition of the depth, breadth and high levels of collaboration in our basic, clinical, population and quantitative science.

Our progress is transforming how cancer is treated and perceived around the globe. The work at Moffitt Cancer Center is an investment for the future, and the future holds great promise as we work together in the fight against cancer.

Patrick Hwu
President and CEO

Timothy Adams
Chair, Institute Board of Directors

LeaderShip Message

NATIONAL CANCER INSTITUTE COMPREHENSIVE CANCER CENTER STATUS

Moffitt Cancer Center has once again been awarded the National Cancer Institute’s highest designation – Comprehensive Cancer Center – this time with its best ranking ever. Only 3% of cancer research institutions in the United States have received this prestigious designation. Comprehensive Cancer Center status reflects high impact, practice- and policy-changing clinical, basic and population science research, exceptional team science, scientific leadership, robust education programs, and research that is intentionally focused on benefiting the community and that addresses health disparities. Moffitt is the only NCI Comprehensive Cancer Center based in the state of Florida, which has the second highest burden of cancer incidence and death in the United States.

Moffitt first received NCI designation in 1998, five years after beginning its research enterprise. Moffitt was awarded Comprehensive Cancer Center designation in 2001 and has successfully been redesignated each renewal period. The new grant period will begin Feb. 1, 2022.
Drop by drop, the infusion into Richard Jennings’ vein on May 25 marked more than one milestone. For the 70-year-old from Sebastian, Florida, this was a new hope. Diagnosed with multiple myeloma in 2009, Jennings endured multiple types of chemotherapy and even a stem cell transplant – only to see the blood cancer return. With this infusion, Jennings became the first patient at Moffitt Cancer Center to receive Abecma® after it became the first FDA-approved cell therapy for multiple myeloma.

But to Jennings’ care team, this marked a different milestone: 500 Moffitt patients treated with a type of personalized therapy called CAR T that reengineers a patient’s own T cells to combat cancer. That’s a significant number in a short amount of time, just six years since Moffitt treated its first CAR T patient through a groundbreaking clinical trial.

Much like milestones that mark the distance toward a destination, Jennings’ landmark infusion tracks Moffitt’s progress toward a new goal: becoming the world leader in cell therapies for cancer.

“Our mission is to prevent and cure cancer, and I think cell therapies are going to be an extremely important way to do that.”

– Dr. Patrick Hwu

Leading the world in bringing these possibilities to patients will require Moffitt to build upon its current strengths – in clinical care, research and manufacturing of these promising therapies.

A PARADIGM FOR CLINICAL CARE

Moffitt’s expertise in delivering cell therapies to patients has a home on the hospital’s third floor and a champion in the physician-scientist who spearheaded its development. Frederick Locke, MD, is vice chair of the Blood and Marrow Transplant and Cellular Immunotherapy Department and co-leader of the Immuno-Oncology Program at Moffitt. He co-led a pivotal international clinical trial that resulted in the 2017 FDA approval of Yescarta®, the first CAR T therapy for patients with diffuse large B-cell lymphoma that recurred despite other treatments.

“When we first started treating patients on (that) clinical trial six years ago, we were amazed at how some patients’ lymphoma would just melt away,” observed Locke. “We now have patients, who had no other viable treatment options at the time, who are in ongoing complete remission six years later after a single infusion of CAR T cells.”

As amazing as those early patients’ response was, it came with a number of risks: fevers, neurologic symptoms, even an inflammatory response called cytokine release syndrome that, left unchecked, could be deadly. Monitoring for and treating these toxicities led Locke to spearhead a coordinated effort across the cancer center to develop treatment algorithms and...
WHAT ARE CELL THERAPIES?

Cell therapies improve a patient’s ability to fight cancer by collecting and modifying certain cells that make up the immune system before returning them to the patient via infusion. It’s a rapidly developing field, with many possible approaches using different elements of the immune system. Three types of cell therapy have come to the forefront:

• CAR T (chimeric antigen receptor T-cell) therapy. T cells gathered from the patient’s blood are modified by adding custom receptors on their surface. These receptors are designed to lock onto proteins expressed on the cancer cell’s surface. They work like a GPS unit to help identify, attack, and ultimately destroy the cancer cells. There are currently five FDA-approved CAR T products, all targeting blood cancers (lymphomas, leukemia, multiple myeloma).

• TCR (T-cell receptor) therapy. Closely related to CAR T, this therapy shows potential for cancers that harbor specific proteins within their cells rather than on the exterior. Instead of adding a new receptor to a patient’s T cells, TCR reengineers naturally occurring T-cell receptors to react to bits of these proteins held on the cancer cell’s surface.

• TIL (tumor infiltrating lymphocyte) therapy. Using surgically excised tissue, TIL gathers naturally occurring immune cells that have infiltrated the patient’s tumor. The most robust among these cells are multiplied and infused back into the patient. Gene editing using technologies like CRISPR only adds to the variations possible within each type of cell therapy. For example, genes can be added or removed to make T cells impervious to a cancer’s defense mechanisms.

specialized staff training, as well as to identify a centralized location for patient care.

The result is Moffitt’s Immune Cell Therapy (ICE-T) unit, opened in 2020. It has 12 inpatient beds and eight treatment bays for outpatient visits, including the preparatory chemotherapy needed to make room for newly super-charged immune cells. Patients come to the same place – and see the same care team – from start to finish of their cell therapy.

“When this allows us to develop stronger relationships with our patients and caregivers, which in turn allows us to better anticipate their needs, communicate better as a team and deliver the best evidence-based care and best outcomes for our patients,” said Crystal Mock, MSN, RN, MBA, the patient care manager of ICE-T.

“It’s really very important to have a specialized, multidisciplinary unit like ICE-T,” said Hwu. “It’s probably a paradigm for the best coordinated (cell therapy) unit in the country.”

A SAFE HAVEN FOR CLINICAL RESEARCH

The ICE-T unit is also the perfect setting for clinical research that can extend hope to even more patients. Care teams focused on delivering cell therapies can safely administer cutting-edge treatments only available to patients on clinical trials.

Currently, Moffitt is conducting 27 cell therapy clinical trials that may one day lead to FDA approvals and changes to standards of care for a variety of cancers. One worldwide randomized trial led by Locke recently reported top-line results showing CAR T could be a safe and more effective treatment for certain lymphoma patients when used earlier in their course of care. Others would expand cell therapies’ use to solid tumors, which cause the vast majority of cancer deaths each year. Among the examples:

• CAR T for ovarian cancer - A team of researchers led by Robert Wenham, MD, chair of Moffitt’s Gynecologic Oncology program, will launch a CAR T clinical trial this fall for patients with recurrent ovarian cancer. Based on discoveries from the laboratory of José Conejo-Garcia, MD, PhD, chair of Moffitt’s Immunology Department and co-leader of its Immuno-Oncology Program, this CAR introduces follicle stimulating hormone (FSH) into T cells. The genetically modified CAR T cells then seek out and destroy cancer cells expressing an FSH receptor protein found on a large number of ovarian cancer cells.

• TIL for non-small cell lung cancer - A research team led by thoracic oncologist Ben Creelan, MD, conducted a phase I pilot study among 20 Moffitt patients with metastatic non-small cell lung cancer. TIL therapy reduced tumor size in most patients, with two showing no evidence of disease on their scans more than a year and a half after treatment. “That is very rare in lung cancer,” said Creelan.

“Dr. Frederick Locke co-led a trial resulting in the FDA approval of Yescarta, the first CAR T therapy approved for adults with relapsed/refractory diffuse large B-cell lymphoma.”

“When we first started treating patients on (that) clinical trial six years ago, we were amazed at how some patients’ lymphoma would just melt away.”

– Dr. Frederick Locke

Dr. Robert Wenham

Dr. José Conejo-Garcia

Dr. Ben Creelan
TIL for melanoma and more – For more than a decade, Shari Pilon-Thomas, PhD, and surgical oncologist Amod Sarnaik, MD, have been developing clinical trials of TIL therapies, recently completing a fourth TIL trial in patients with metastatic melanoma. Some participants in earlier melanoma TIL trials continue to show complete response. The researchers are now applying what they’ve learned in expanding TIL cells from melanoma tumors to other cancer types, including sarcoma. Chemotherapy currently used to treat patients with metastatic sarcoma does not offer hope for long-term survival – but data from the Pilon-Thomas lab suggests TIL therapy is feasible for these patients. Adolescents and young adult sarcoma patients who have failed standard treatment are now being enrolled in an open phase 1 clinical trial to evaluate TIL therapy under the leadership of sarcoma surgeon John Mullinax, MD, and with the support of Iovance Biotherapeutics and the V Foundation.

CAR T for adults with ALL – Though often curable in children, acute lymphoblastic leukemia (ALL) is especially challenging to treat when it occurs in adults. Medical oncologist Bijal Shah, MD, led a phase 1 and phase 2 trial of CAR T among adults whose ALL failed to respond to standard therapies. “We are seeing complete responses in a large number of patients, many still in remission a year or more after their initial CAR T cell infusion,” said Shah. “This is very promising given the historically poor outcomes we have had in this setting.”

“Off-the-shelf” CAR T therapies – Using a patient’s own T cells to create custom CAR T treatment takes weeks, a wait that some cancer patients simply cannot survive. Researchers worldwide are working on “off-the-shelf” versions of CAR T using T cells from a healthy donor. These allogeneic CAR T therapies could be manufactured, stored and given to multiple patients with the same cancer diagnosis. Early stage trials of two different allogeneic CART approaches led by Locke and Shah recently reported encouraging results.

Clinical research strides like these would not be possible without a better understanding of the mechanisms at work – information that only basic science research can provide. Thankfully, Moffitt’s research laboratories are filled with scientists already focused on cell therapy. To further Moffitt’s leadership in cell therapies, Hwu said our laboratories will need to build upon work already being done in three key areas.

“We are seeing complete responses in a large number of patients, many still in remission a year or more after their initial CAR T cell infusion.”

– Dr. Bijal Shah

Cellular immunotherapy can be used to treat several different types of cancer. One specific therapy, CAR T, has proved to be successful in treating blood cancers, such as acute lymphoblastic leukemia and diffuse large B-cell lymphoma.
Researchers in Dr. Patrick Hwu’s lab share a common passion to use their scientific findings to create clinical trials leading to new cellular therapy treatment protocols.

“There are so many ways you can genetically manipulate the immune cells. That’s why I love cell therapy - there’s an almost infinite number of possibilities.”

IDENTIFYING NEW TARGETS FOR CELL THERAPIES

Cell therapies like CAR T and TCR rely upon identification of discrete targets on or within cancerous cells. Finding ways to act on these targets without affecting healthy cells is a key focus of several Moffitt research efforts. Among the examples:

- Daniel Abate-Daga, PhD, and his team are working to create CAR receptors for several targets they’ve identified in cancers as diverse as pancreatic and bladder cancer, as well as prostate cancer that has metastasized to bone or melanoma that has spread to the brain. They are also studying lymphocytes that spontaneously infiltrate tumors in melanoma, bladder, and pancreatic cancers. The goal is to isolate T cell receptors that react to proteins on the cancer cell’s surface for TCR gene therapy, and to optimize the quality of lymphocytes to be expanded for TIL therapies.

- Researchers in the lab of Marco Davila, MD, PhD, are focused on acute myeloid leukemia (AML). These cancerous blood cells have well-defined surface proteins that could be targeted by CARs. But other healthy, developing blood cells also exhibit the same proteins. Davila’s team is engineering safety mechanisms to ensure only AML cells are attacked. One approach is a CAR T therapy using two different CARs that target two separate proteins on AML cells. This CAR T only kills when both targets are triggered, thereby reducing damage to healthy cells.

- The Drug Discovery lab of Vince Luca, PhD, is working to generate antibodies that bind to markers found on triple-negative breast cancer cells but not on normal cells. These antibody fragments would ultimately be converted into new types of CARs by Hwu’s lab.

REPROGRAMMING IMMUNE CELLS AS ‘SUPER SOLDIERS’

Using gene editing technologies like CRISPR, it’s possible to remove any of an immune cell’s thousands of genes – or to insert new genes as well. One example from Hwu’s lab inserted a gene that helps the T cell overcome defensive substances created by the tumor. Hwu likens it to “putting a gas mask” on the T cells. “Those immune cells that are resistant can go in there and do their job.”

Researchers in Abate-Daga’s lab are also studying the biology of certain immune cells that straddle the divide between innate and learned responses to invaders in the body – so-called unconventional lymphocytes. By understanding how gamma/delta T cells work, they hope to engineer them to enhance their response to tumors.

UNDERSTANDING TUMOR MICROENVIRONMENT TO TAKE THE BRAKES OFF IMMUNE RESPONSE

A tumor doesn’t exist in a vacuum. The normal cells, molecules and blood vessels that surround and feed a tumor cell are called the tumor microenvironment. A tumor can change its microenvironment to protect itself against the immune system so that it can grow and spread. And it often plays upon the healthy body’s natural safeguards against immune system over-response.

Our immune cells are very powerful, explained Hwu. “It’s like having circulating tanks in our body – you don’t want those mortars going off accidentally. Our body has put many different braking molecules on immune cells throughout evolution. When you have cancer, you want to start to reverse some of that. One way to do that is by genetically manipulating immune cells outside of the body, before giving them back to the patient.”

Researchers in the lab of Paulo Rodriguez, PhD, noted that tumor cells turn down a specific signaling pathway called Notch 1 in T lymphocytes, which weakens T cell response against the tumor. They’ve created models to strengthen Notch 1 signaling – and hopefully the T cells’ antitumor response. The models could be deployed during cell therapy production, as T cells are multiplied before being returned to the patient.
Of course, the ultimate goal is to get these new discoveries from the laboratory to the patient. It takes sophisticated manufacturing facilities – currently under expansion at Moffitt.

**MANUFACTURING: THE FINAL STEP**

Moffitt’s Cell Therapies Core (CTC), housed on the McKinley campus, opened in 2013 with 10 specially certified clean sites nationwide selected by the National Institutes of Health to support advancement of diverse cell therapy research. Moffitt’s CTC was made possible in part through generous support from the Dr. Miriam & Sheldon G. Adelson Medical Research Family Foundation and Swim Across America. Under the direction of James J. Mulé, PhD, associate center director, Translational Science, Moffitt’s CTC became one of only five companies, innovation incubators, and other partners. The property provides ample room for future research and revenue to support research growth.

The cancer center is also creating a new “home” for a cell therapy innovation hub. In January 2020, Moffitt purchased a 775-acre property in Pasco County about 20 miles north of the Magnolia campus. Plans include developing a research park with collaborations with pharmaceutical and biotech companies, innovation incubators, and other partners. The property opens doors seeking personalized, compassionate care and hope. We are 100% focused on cancer care, and for our patients, this means better outcomes and the best chance for beating cancer.

With the growing number of cell therapies being developed, our CTC needed more space. An ambitious expansion project completed in April 2020 nearly doubled its size. And there is more growth in the works.

Plans are underway to create a Viral Vector Facility at Moffitt. Viral vectors are used to introduce new targeting receptors into T cells before they are activated and multiplied in a cell processing facility. The process is tedious and exacting. Few facilities nationwide can provide vector production, a bottleneck in delivering new cell therapies to current patients and developing future therapies. Moffitt plans to open its own viral vector facility as soon as 2023.

Having its own viral vector and cell processing facilities will help Moffitt realize another step toward its goal of world leadership in cell therapy – the ability to attract biotech partners to help move new therapies through the development and regulatory pipeline.

The Cell Therapies Core manufactures safe therapeutic cellular products in support of novel clinical studies and in compliance with FDA and other standards.

“Building out the viral vector lab, expanding the cell therapies facility and fostering a biotech hub puts us in a position to actually take the ideas that we generate and put them into play – to move them to clinical trials and rapidly bring them to patients,” said Hwu.

Patients like Richard Jennings are counting on us.

**2021 PATIENT ORIGIN**

<table>
<thead>
<tr>
<th>Patient Origin</th>
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<td>Pinellas</td>
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<td>Pasco</td>
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<td>Polk</td>
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<tr>
<td>Other Florida</td>
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<tr>
<td>Lee</td>
<td>3%</td>
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<tr>
<td>Other</td>
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<td>International</td>
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**2021 PATIENT CARE VOLUMES**

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<td>Beds</td>
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<tr>
<td>New Patients</td>
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<tr>
<td>Outpatient Visits</td>
<td>563,097</td>
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<tr>
<td>Admissions</td>
<td>10,268</td>
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<tr>
<td>Surgical Cases</td>
<td>12,345</td>
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<td>Patients seen</td>
<td>79,361</td>
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**2021 PAYER MIX**

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**12 MOST FREQUENT CANCER SITES**

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<th>Cancer Site</th>
<th>Percentage</th>
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<tr>
<td>Myeloma</td>
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<tr>
<td>Skin**</td>
<td>9.3%</td>
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<tr>
<td>Pancreas</td>
<td>3.9%</td>
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<tr>
<td>Hemeretic</td>
<td>8.0%</td>
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<tr>
<td>Kidney and Renal Pelvis</td>
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<td>Lung/Bronchus</td>
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<tr>
<td>Colon</td>
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<tr>
<td>Prostate</td>
<td>7.6%</td>
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<tr>
<td>Corpus Uteri</td>
<td>2.4%</td>
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<tr>
<td>Non-Hodgkin Lymphoma</td>
<td>6.7%</td>
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<tr>
<td>Other sites*</td>
<td>26.5%</td>
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*Includes analytic and non-analytic cases for accession year 2020. There were a total of 12,670 analytic and non-analytic cases for accession year 2020.

**Excludes basal cell and squamous cell carcinomas.**
Moffitt Medical Group (MMG) is Florida’s largest multidisciplinary medical group practice dedicated to world-class personalized cancer care.

MMG is committed to Moffitt Cancer Center’s mission to contribute to the prevention and cure of cancer. MMG members embrace superior quality in patient care, research, education and leadership. Mission-driven dedication and expertise inspire them to view challenges as opportunities and to embrace priority initiatives that will drive the best possible outcomes for patients and sustain Moffitt’s reputation as a leader in cancer care, education and research.

MMG is comprised of board-certified physicians, advanced practice professionals (APPs), and clinical researchers and supportive care providers who work together to give each patient a prompt, accurate diagnosis and individualized cancer treatment plan. Physician members include surgical oncologists, medical oncologists, radiation oncologists, diagnostic and interventional radiologists, internal and hospital medicine specialists, anesthesiologists, pathologists, cancer genomics specialists, supported by advanced practice professionals, oncology nurses and supportive care providers. APPs include advanced practice registered nurses, physician assistants, certified registered nurse anesthetists and anesthesiologist assistants.

Strategic recruitment is a priority that keeps MMG on pace with increasing volumes of patients and procedures. MMG’s recruitment strategy ensures not only that increasing numbers of patients can access cancer experts as quickly as possible, but also that Moffitt’s caring professionals can bond with the patient from the first visit throughout the length of their cancer journey. Strategic growth is critical to fueling future cancer discoveries by our clinical and translational researchers who are focused on creating new standards of care in individualized diagnostics, prognostics and therapeutics such as immunotherapy.

DIVERSITY, INCLUSION & EQUITY

In alignment with Moffitt’s culture of diversity, equity and inclusion, MMG has engaged two leadership teams: Women in Oncology and Faculty Diversity in Oncology. Both groups have identified opportunities through focus groups, surveys and literature reviews to engage MMG members in targeted programs to ensure diversity, inclusion and equity in recruitment, mentoring, leadership training, multilevel medical education and grant-funded research on health disparities.

FIRST CONNECT

After a cancer diagnosis, time is critical. In what could be the most frightening time of their lives, all new patients are offered rapid access to a Moffitt cancer expert within a day, which is faster than any other cancer hospital in the nation. Even before patients step in the door, planning for their personalized treatment quickly begins. This initiative, First Connect, evolved from an idea and resulting success by our Gastrointestinal Oncology team members. When they started calling patients before an appointment to tell them what to expect and invite questions, they were moved by the patients’ overwhelming response and sense of relief. Patients felt engaged, hopeful and less anxious. Initially conceptualized internally as “Project 24,” it targeted a team member response within 24 hours of a patient’s call. First Connect has been so successful that every department and program has put it into practice.
VIRTUAL VISITS

Virtual visits increased exponentially during the pandemic to support continuity of care while ensuring safety for patients, many of whom are immunosuppressed. No one, however, anticipated how popular they would be with patients. Virtual visits for surveillance and procedure follow-ups save patients time and travel, and they contribute to increased space and time for patients who needed on-site assessments.

What began as a stopgap measure, has, thus, become a value-added service with a high level of patient and provider satisfaction.

IMMUNOTHERAPY

Therapies that boost one’s immune system to better fight cancer are being used for many types of disease. Immunotherapies include T-cell transfer, immune checkpoint inhibitors, monoclonal antibodies, vaccines and immune system modulators. Moffitt’s Blood and Marrow Transplant and Cellular Immunotherapy (BMT CI) department is the top provider of CAR T Therapy in Florida and ran the clinical trials that precipitated FDA approval of one type of CAR T called Yescarta® to treat adults with diffuse large B-cell lymphoma. In the clinical trial, 42% of patients continued to have ongoing remission after just one CAR T-cell infusion, and 40% had no evidence of cancer at a median follow-up of 15.4 months. More than half of the patients enrolled in the trial were alive at 15.4 months, whereas median survival is about six months with existing therapy.

ARTIFICIAL INTELLIGENCE (AI)

AI and data science are advancing cancer research and precision medicine by interpreting large data sets such as clinical records, imaging and genomics through high-performance computing and increasingly advanced deep learning constructions that model neural networks. AI applications in oncology include detection and classification of tumors and their microenvironment, drug discovery and outcome prediction, with the promise of transforming cancer care. Using the natural language processing (NLP) algorithm called Bidirectional Encoder Representations from Transformers (BERT), Moffitt data scientists in Health Data Services (HDS) trained BERT using highly curated Cancer Registry data to answer two questions from a pathology report: “What organ contains the tumor?” and “What is the kind of tumor or carcinoma?” The results, presented at the American Association for Cancer Research Annual Meeting, showed BERT could determine the histology of a tumor with 96.7% accuracy and the tumor site with 92.9% accuracy. The HDS team plans to expand the NLP efforts to extract other key information from medical records for use in cancer care, research and matching patients to available clinical trials.

PROVIDER WELL-BEING

Moffitt’s Office of Well-Being is led by the chief wellness officer and the associate chief wellness officer. The program models the “gold standard” for assuring well-being through efforts in three domains: personal resilience, culture of wellness and efficiency of practice, also known as the Stanford Model of Professional Well-being/ Fulfillment: Initiatives in each domain, some previously launched and others in progress, aim to improve the provider experience. During fiscal year 2021, with the burden of the pandemic, providers were encouraged to “attend” the Virtual Provider Lounge for support, tips on work-life balance and open discussion. Workflow refinements for increased efficiency are an ongoing priority to reduce administrative burden and enhance work-life balance.

FINANCIAL HEALTH FY2021

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GRADUATE EDUCATION & TRAINING FY2021

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<th>Oncology Training Programs Operated by Moffitt</th>
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<th>Total Residents &amp; Fellows from USF</th>
<th>Moffitt Employed Fellows</th>
<th>Visitors (Total was reduced by the pandemic)</th>
<th>Medical Students</th>
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ACTIVE INTERVENTION STUDIES & ACCRUALS BY PHASE FY2021

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<td>37</td>
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<td>132</td>
<td>96</td>
<td>728</td>
<td>1289</td>
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MMG PHYSICIANS & APPS BY CLINICAL DEPARTMENT/PROGRAM FY2021

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<th>APPs (342)</th>
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FISCAL YEAR 2021

Departments and Programs

MOFFITT MEDICAL GROUP

Fiscal Year 2021

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Departments and Programs

MOFFITT MEDICAL GROUP

Fiscal Year 2021

Departments and Programs

MOFFITT MEDICAL GROUP
INTERNAL AND HOSPITAL MEDICINE (IHM)
IHM cares for Moffitt’s hospitalized patients with medical problems through the Division of Hospitalist Medicine, staffed by experienced attendings overseeing the practice of dedicated advanced practice professional hospitalists. Moffitt’s Urgent Care offers rapid assessment of referred or walk-in patients with new or deteriorating symptoms. The Section of Infectious Diseases developed guidelines that kept patients and team members safe through the COVID-19 pandemic and co-manages the sickest immunocompromised patients. The Ambulatory Medicine group consults on patients with medical complications of their cancer and its treatment. IHM supports our mission with oversight of patients in clinical trials at the McKinley campus and research in the medical complications of cancer with success in grant funding and publications.

MALIGNANT HEMATOLOGY

The faculty created a Translational Hematology Series of monthly lectures, which led to scientific collaboration among Malignant Hematology and with MMG and Research Institute faculty. The lectures, for the first time, provided a forum for Moffitt faculty to showcase their research, generating collaborations among faculty and with guest speakers, leading to grant submissions. The team expanded the outpatient clinic from the Magnolia campus to satellites and opened clinics at Wesley Chapel, where nearly 600 patients were seen, some of whom received further care at Magnolia, contributing to 14% growth in volumes over the prior year.

MALIGNANT HEMATOLOGY & CELLULAR THERAPY

Memorial Healthcare System Pembroke Pines, FL

Moffitt’s Malignant Hematology and Cellular Therapy (MH CT) at the Memorial Healthcare System, Pembroke Pines, FL, surpassed expectations with exponential growth since its inception in 2017. Total physician visits are up 9.4% and new patient visits are up 22.1% over the prior year, with total transplants up 17.5% versus the prior year. In fiscal year 2021 the MH CT team of Memorial added two physicians, and now consists of six, assisted by 13 advanced practice professionals.

NEURO-Oncology

Neuro-Oncology launched a robust integrated brain metastases/leptomeningeal disease program, expanding its reach by seeing melanoma and breast cancer patients at the McKinley campus, collaborating with Thoracic Oncology and developing clinical protocols for enhanced multidisciplinary care. The Neuro-Oncology team received funding for an R21, has an active R01, and two recently funded projects will be activated in fiscal year 2022. The Neurosurgical Oncology fellowship achieved Committee on Advanced Subspecialty Training accreditation, and the United Council for Neurologic Subspecialties-accredited Medical Neuro-Oncology fellowship successfully matched fellows for the next two years. The team leveraged virtual technology platforms to raise its profile and highlight new treatments for referring physicians. Faculty publications in peer-reviewed journals totaled 81, with 10 active grants.

PATHOLOGY

The Pathology Department is a critical driver of basic and translational research. Team science collaborations include pathology support and Cores for SPORE proposals in Thoracic, Cutaneous and Head and Neck-Endocrine Oncology. The team was awarded 10 grants as PI (an R01 among them) and 33 as co-PI (six R01s among them) in fiscal year 2021 and has a total of nine NIH-funded R grants. Pathologists are involved in 78.7% of clinical trials and in all trials requiring tissue specimens. Technology procurements in FY 2021 involved front-end automation for molecular NGS processing workflow, NGS methodology for HLA typing, an automated temperature monitoring system, an outreach program to perform HLA/molecular testing for a partner site and approval to purchase a high-throughput sequencer to meet increasing volumes. Pathology faculty train residents and medical students, and ACGME-accredited fellowship programs include Breast, GI Oncology, GU/GYN Oncology, Head and Neck-Endocrine and Surgical Pathology plus fellowship programs in hematopathology, cytopathology and molecular pathology.

RADIATION ONCOLOGY

The team launched services at Moffitt Cancer Center at Wesley Chapel, for exceeding projected volumes. A new research plan and a research retreat on personalization of radiotherapy in the new immunotherapy setting helped advance the Future of Radiation Therapy (FORT) initiative. The team implemented virtual rotation for 14 medical students; an alternative to traditional in-person rotation to circumvent barriers such as a pandemic, financial challenges or family responsibilities. More virtual initiatives were lectures, meet and greet sessions, and case conferences for residents and prospective residents in a national forum. A ViewRay unrestricted grant will support two investigator-initiated trials on personalization of radiotherapy in the neoadjuvant setting.

SARCOMA

Sarcoma faculty are engaged in educational activities with fellows, residents and students, and mentorship is integral to the program’s success. The team’s virtual Gastrointestinal Stromal Tumor (GIST) Day of Learning educated the public and highlighted Moffitt’s expertise in treating patients with GIST. The team exceeded clinical trial accruals over the prior year. Sarcoma faculty was awarded $8.3 million (total project costs) and submitted about $25 million. Faculty members had 45 publications in high-impact peer-reviewed journals. New hires included a surgical oncologist and two advanced practice professionals. The Sarcoma team continues to be a leader in the use of virtual visits.

THORACIC ONCOLOGY

The Thoracic Oncology team trains medical students, residents, fellows and visiting scholars, and focuses on educating minorities and responding to health care disparaties. Mentoring is key to successful faculty growth and to the team’s mission. “Through our multidisciplinary team, deliver cutting-edge cancer care, drive groundbreaking research and support education and mentoring a personalized-oncology approach for patients battling thoracic malignancies.” Virtual visits increased by 165% from the prior year. The Lung and Thoracic Cancer Education initiative provides advocacy, education and outreach to the lung cancer community. Research is an area of strength, and the Lung Cancer Center of Excellence drives translational research in screening/tobacco control, precision oncology and immuno-oncology. Through team science and partnership, faculty work to accelerate approval of cutting-edge therapeutics and drive novel findings into the clinic. In fiscal year 2021 grants exceeded $23.8 million, and 33 articles were published in peer-reviewed journals.
The Nursing Department has accomplished much this past year, the highlights of which are found within the following pages of the 2021 Nursing Annual Report, placed within the consolidated Moffitt Cancer Center Annual Report.

The start of fiscal year 2021 found Nursing still in the throes of a pandemic as staff continued to deliver the same quality care our patients expect at Moffitt Cancer Center. The Nursing Research Department members continued to assist the team to move their research ideas to research studies and the clinical specialists pressed on to support the nursing staff to implement evidence-based practice projects. Because space constraints make it impossible to include all the projects completed in fiscal year 2020, examples of the efforts can be found in this report.

“I want to say how proud I am of each member of the Nursing team,” said Jane Fusilero, MSN, MBA, RN, NEA-BC, vice president, Patient Care Services and Chief Nursing Officer. “This past year has not been easy; however, our nurses have shown up and gone above and beyond in delivering care to all of the patients at Moffitt. From the bottom of my heart, thank you for your efforts. You are so greatly appreciated.”

Jane Fusilero
Vice President, Patient Care Services
Chief Nursing Officer

In Appreciation of Nursing

Quality Care

All patient care areas monitor nursing care by tracking one or more nurse-sensitive quality indicators each quarter and compare the results to an external database for like areas. We utilize the National Database of Nurse Quality Indicators (NDNQI) for all our indicators except for extravasations in which we compare our results with other comprehensive cancer centers. NDNQI data for the last two quarters of fiscal year 2021 are not available yet, and is why calendar year 2020 is reported.

Areas that have scores lower than the national benchmark are asked to implement strategies to improve their results.

Moffitt’s goal is to have more than half of our care areas outperform the NDNQI benchmark and the benchmark for all comprehensive cancer centers.

The following graph illustrates the percentage of inpatient units that had a unit acquired pressure injury and/or pressure injury related to a medical device that was better than the NDNQI benchmark. As seen in the graph, the majority of the inpatient units performed better than the benchmark for all four quarters. A score of 100% indicates no units had pressure injuries related to medical devices.

The following graph illustrates the percentage of inpatient units that had a unit acquired pressure injury and/or pressure injury related to a medical device that was better than the NDNQI benchmark. The goal is to have more than 50% of the units outperform the benchmark.

Moffitt’s nursing program includes registered nurses, nurse practitioners and clinical nurse specialists. Many are certified in specialties such as oncology, critical care and radiology.
NURSE SENSITIVE OUTCOMES

The following graph illustrates the percentage of ambulatory areas that administer chemotherapy which resulted in an extravasation. Other cancer centers. We monitor established drugs with vesicant or irritant properties that result in an extravasation. This means we reported less extravasations than other cancer centers. We monitor established drugs with vesicant or irritant properties that result in an extravasation. We monitor established drugs with vesicant or irritant properties that result in an extravasation.

PATIENT EXPERIENCE

We continue to implement strategies to improve patient experience in our inpatient and ambulatory areas. Press Ganey administers our patient experience surveys and compares our results to its national database for like areas. Each area tracks quarterly results for at least four nurse-sensitive questions. Moffitt’s goal is to have more than half of our care areas outperform the Press Ganey mean or median benchmark. Areas that have scores lower than the national median benchmark are asked to implement strategies to improve their results. The percentages of inpatient and ambulatory areas scoring higher than the national benchmark for satisfaction with courtesy/respect by nurses, patient involvement in treatment decisions and responsiveness are shown in the following three graphs.

Coordinating Practice Council

- Implemented practice changes related to narcotic early administration warning
- Enhanced handoff communication strategies by:
  - Communicating patient positive screenings by piloting a flag system for addressing positive screenings in the clinic setting project initiated in GU and Head, Neck, Endocrine clinics
  - Utilize scripting for outpatient communication of wait times
  - PAT, Pre-Op, and PACU providing staff education on Hypothermia project
  - Discussing daily line wipes and fall risk at bedside handoff
  - Endorsed, educated and/or provided feedback related to development and implementation of:
    - Fall prevention strategies: modifying Transport Stability Scale and utilizing floor mats
    - Intimate partner violence screening in ambulatory settings
    - Use of cool/warm packs without an order

Informatics Council

- Supported the following initiatives in FY 2021:
  - Outpatient Blood Product PowerPlan
  - Fall Precautions documentation in View
  - Venipuncture documentation

Nursing Leadership Council

- Brought regular reports to entire team of managers on key task forces and initiatives including:
  - Chlorhexidine use for CLABSI/CAUTI prevention
  - COVID-19 updates/ COVID-19 vaccine updates
  - USP800 updates
  - PiEBP projects

Nursing Research & Innovation Council

- Approved five nursing research idea proposals and two EBP projects
- Externally disseminated three podium and 3 poster presentations at conferences
- Four EBP/PJ projects won Spirit of Moffitt Awards and six nursing research studies were published

Professional Growth and Advancement Council

- Celebrated Certified Nurse’s Day with PGA-created gift baskets made available at MCC, MKC and satellite campuses to certified nurses in March 2021
- Requested, and NEC approved, for all nursing units/departments to post plaques with the names of all certified nurses in respective departments, provided ordering information to all managers
- Offered nurse peer to peer networking via zoom in December 2020

Staff Nurse Advisory Council

- Organized and selected nurses for DA/Y Awards®
- Organized and selected medical assistant and oncology technicians for Sunflower Awards
- Participated in subcommittee for development and execution of the Compassion in Action Award, a new award to honor a compassionate nurse, nominated by peers
ADDRESSING ANXIETY IN BLOOD DRAW

Blood draws occur frequently for oncology patients to assess health and responsiveness to illness, but because of their treatment, their veins are difficult to access. As a result, patients are often anxious when their blood must be drawn. The nurses in the blood draw area at the McKinley Campus wanted to see if playing music before and during blood draw might help allay anxiety.

Using a scale of one to five, one being high anxiety and five being no anxiety, patients were asked to rate their anxiety during blood draw. Patients who listened to music during blood drawn reported an average score of 4.7, compared to an average score of 3.6 for those who did not.

Using a scale of one to three, one being the music was not helpful and three being it was very helpful, patients reported an average score of 2.8.

Interventional Radiology

ELIMINATING THE “BLIND STICK”

Patients who come to Interventional Radiology usually need an intravenous placement for their procedure. It is often difficult to insert needles into oncology patients’ veins, requiring several sticks, which can be distressing for the patient. The interventional radiology nurses wanted to find a way to evaluate veins to gauge how difficult it might be to insert an intravenous needle and identify ways to make it easier to insert. They created a scale to help them identify “difficult sticks” and use technology to help make intravenous needle insertion easier. They believed this would improve patient satisfaction.

Patients were asked during a follow-up phone call how satisfied they were with their experience on a scale from one to five— one being very dissatisfied and five being very satisfied. The average baseline score was 4.13, but after implementing the new practice, the average score rose to as high as 4.49 in December 2020.

Supportive Care Clinic

FOLLOW-UP PHONE CALLS FOR IMPROVED SYMPTOM MANAGEMENT

Nurses in Supportive Care were receiving phone calls from newly established patients with questions about information covered in their initial visit, usually related to symptom management and pain management. Sometimes managing the symptoms and pain resulted in the need for extra clinic visits or hospitalizations. The nurses wondered if calling a patient after their first clinic visit and before their second visit would help symptom management and adherence to prescribed treatment regimens.

Based on a literature review the nurses decided to call the new patients five to seven days after their first clinic visit.

The nurses measured symptom management using the Edmonton Symptom Assessment Scale. A decrease in score indicates improved symptom management (less symptom burden). The symptom burden score fell from 22.39 at baseline to 16.0 at day 30.
NURSING RESEARCH

The Nursing Research Department supports clinical inquiry and advances the nursing profession through development of new knowledge. There are 2 nurse scientists who assist front-line nurses with researchable ideas through all stages of the research process.

In fiscal year 2021 the nurse scientists in the Nursing Research Department completed 6 studies, with 5 studies in proposal development and 2 active studies in data collection. Dissemination of research findings through manuscript publication is as important as completing the research process. Three completed studies are in manuscript preparation, and 4 manuscripts of completed studies have been accepted for publication. Additionally, the nurse scientists have assisted with writing 11 other manuscripts which have been published this year. Conferences are an additional venue to disseminate study findings. This fiscal year a poster was presented at an international conference and 2 studies were presented at a national conference.

AYA SPECIALTY NURSE

The Adolescent and Young Adult (AYA) program at Moffitt was established in 2011 for patients between the ages of 15 and 39. The primary mission of the program is to improve the cancer care experience and long-term effects for adolescent and young adults with cancer by ensuring all AYA patients and survivors have access to resources, services, and support that meet their unique needs. The AYA program leadership and team members are an essential part of the team that care for AYA patients. The monthly committee meetings bring complex cases for a multidisciplinary team case review and question and answer sessions at huddles and staff meetings across the approximately 36 inpatient and outpatient areas that care for AYA patients. The monthly committee meetings will provide an opportunity for the specialty nurses to network, bring complex cases for a multidisciplinary team case review and gain further expertise through journal club and guest speaker presentations. To assess if the new role and other strategies were successful in improving the comfort level of nurses in meeting the needs of the AYA patients, the survey will be repeated in fall 2021.

A subgroup of the AYA and Unity Partnership Committee (Mannis Stebbins, RN, George Ebanks, RN, Amber Skinner, MPH, Dana Johnson, RN, and Dianne Cirillo, RN) utilized the gap analysis, AYA Oncology NCCN guidelines and the AYA Program strategic goals to develop the roles and responsibilities of a direct care nurse with specialty AYA knowledge. The AYA specialty nurse will serve at least two years in the role, complete a series of designated training modules within 90 days of acceptance of the role as well as a 17-hour CEU course entitled Enriching Communication Skills for Health Professionals in Oncorefertility (ECHo). Through these education opportunities the AYA specialty nurse will learn about fertility preservation, sexual health, LGBTQIA+ and infertility, patient navigation, psychosocial support, research, social support/events and survivorship. The efforts aimed at addressing these goals are driven by a multidisciplinary committee consisting of the AYA Program leadership and team members with an interest in improving the AYA patient experience. Nursing has a significant presence in this group, including leading two subcommittees on fertility and education.

In fiscal year 2020, approximately 1,700 new AYA patients were seen in the ambulatory clinics with almost 900 inpatient admissions. Early estimates for fiscal year 2021 show a steady increase in those volumes for both outpatient and inpatient. Nurses play a pivotal role in educating and connecting the AYA patients with resources and services that address their unique needs, particularly timely fertility referrals, impact of cancer on identity and sexual dysfunction from treatment side effects, education on reproductive health and advocacy for genetic counseling and early survivorship referrals. A survey conducted in the fall of 2020 assessing staff nurse knowledge regarding the AYA Program and comfort in caring for this patient population revealed that a high percentage of the 258 respondents did not feel they had the knowledge to address these needs.

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resources and psychosocial resources for AYA patients. They will then share those resources with their home department staff as well as disseminate AYA updates and information. The AYA specialty nurse will be a clinical expert in the care of AYA patients, serve as a quality and change agent, be a peer consultant and serve as an educator to staff and AYA patients. The roles and responsibilities of the AYA specialty nurse were introduced during the April 8 Nursing Grand Rounds Raising AYA Awareness: Oncologic Care for the Young Adult Patient. Following the presentation and the formalization of an application process, the subgroup members offered unit-level question and answer sessions at huddles and staff meetings across the approximately 36 inpatient and outpatient areas that care for AYA patients. The monthly committee meetings will provide an opportunity for the specialty nurses to network, bring complex cases for a multidisciplinary team case review and gain further expertise through journal club and guest speaker presentations. To assess if the new role and other strategies were successful in improving the comfort level of nurses in meeting the needs of the AYA patients, the survey will be repeated in fall 2021.
Collaboration Leverages Expertise to Advance Cell Therapies

Researchers and clinicians at Moffitt Cancer Center and Kite Pharma, a Gilead company, have been familiar with one another’s work for years. Since Moffitt’s lead role in the pivotal ZUMA-1 trial beginning in 2015 for approval of Yescarta™, a chimeric antigen receptor T-cell (CAR T) therapy against refractory large B-cell lymphoma, the Innovation Office has been working to expand our interactions and move the needle together in our understanding of CAR T therapies. Starting in 2018, we’ve been focused on bringing projects to fruition that span a broad spectrum of research areas, including health economics and outcomes, translational laboratory projects investigating mechanisms and predictors of patient outcomes and novel clinical studies intended to advance cancer care and fill gaps in our current knowledge of cellular therapies.

Frederick Locke, MD, vice chair of Moffitt’s Department of Blood and Marrow Transplant and Cellular Immunotherapy and co-leader of the Immuno-Oncology Program, has played a key role in this relationship since its inception and sees opportunity for revolutionizing the impact cellular therapies have on cancer patients. “Tremendous strides have been made in leveraging and boosting the patient’s immune infrastructure to battle cancer, but I see the next phase of development hinging upon evaluating novel approaches, including product optimization, patient biomarkers and combination strategies, to safely improve durable remissions. Relationships between Moffitt and our industry collaborators, such as Kite, are critical in achieving this goal.”

We hope to continue this work together for many years to come, with Moffitt researchers continuing to add invaluable experience and knowledge and leading-edge perspectives on tailoring cellular therapies for the enduring benefit of cancer patients across a growing number of indications.

“…I see the next phase of development hinging upon evaluating novel approaches, including product optimization, patient biomarkers and combination strategies…”

- Dr. Frederick Locke
Modulation Therapeutics Files IND to Treat Metastatic Melanoma

Modulation Therapeutics, Inc., is a Moffitt startup and early stage company dedicated to creating new ways to target difficult-to-treat tumors, including uveal melanoma, as more than 98% of uveal melanoma patients do not respond to current standards of care and will die within 6-12 months of last treatment.

Due to promising basic laboratory and preclinical data, Modulation Therapeutics has received more than $10 million in funding from multiple NIH, NCI, SBIR/STTR grants and other sources to support its drug development platforms, including its lead drug candidate MTI-201. MTI-201 provides a safe, targeted, high-energy dose of cancer-killing radiation directly to the melanoma cancer cells and is chemically designed to clear the body rapidly through normal elimination routes. This molecule increases survival rates and, in some cases, cures melanoma lesions in preclinical models where standard agents have failed. MTI-201 kills metastatic melanoma tumors as a standalone therapy and also has potential in combination therapies.

Most recently the company filed an Investigational New Drug (IND) application for the radiotherapeutic MTI-201, a critical step in the FDA regulatory process. This is a major milestone reached by the Moffitt startup. The company anticipates working with Moffitt to start a phase 1 clinical trial in 2021. Charlie Shaw, associate director of Licensing stated, “The filing of the IND is a huge win for Modulation and Moffitt and brings Modulation one step closer to meeting the unmet needs for survival and quality of life in metastatic cancer patients.”

Modulation Therapeutics also is developing a first in class cyclic peptide coined MTI-101 for the treatment of multiple myeloma. The company currently has a license for the parent molecule which has been awarded a patent covering the intellectual property for both composition of matter and use in cancer in the U.S. and Europe.

innovation services business unit moves deals across the finish line

The Innovation Office is charged with forging industry alliances and licensing Moffitt Cancer Center’s technologies.

The Industry Alliance and Licensing deals are complex and affect many departments within the organization. Every successful office has a great support team. Innovation Services provides vital business development support to assist with moving partnership deals across the finish line. Innovation Services are involved in many facets of the deals ranging from perfecting title on intellectual property assets to affording Moffitt with appropriate protections. This highly innovative and skilled team is well positioned to provide greater support as the number of new alliances grow.
Leading Growth and Change – Together

The 2021 Business of Biotech conference, held March 25–26, was a great success with a turnout of more than 500 diverse individuals from various biotech companies, economic groups, universities and startups from around the globe coming together for the first virtual conference.

This year’s conference included two keynote interviews and four breakout sessions. Moffitt Cancer Center President and CEO Patrick Hwu, MD, began the conference by honoring this year’s two Moffitt Momentum Award recipients – U.S. Rep. Debbie Wasserman Schultz and U.S. Rep. Neal Dunn. Hwu was interviewed by former Sen. Connie Mack, touching on his first 100 days with Moffitt and building on its future success, in hopes to make Tampa Bay the cellular therapy capital of the world. The second keynote featured John Cleveland, PhD, executive vice president and center director of Moffitt. Cleveland was interviewed by Dr. Andrew Schermeier, and their discussion focused on areas in research that set Moffitt apart, like mathematical modeling and Moffitt’s cell therapy clinical research program as well as talent recruitment.
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Moffitt Cancer Center has long championed efforts to address diversity, equity and inclusion—in our workforce, our interactions with the business community and, most importantly, our relationship with our patients.

“For me, diversity is all about creating an environment that looks like the community we serve,” said B. Lee Green, PhD, vice president, Diversity, Public Relations and Strategic Communications. “We embrace our differences and also celebrate them.”

The value and necessity of Moffitt’s efforts stand in stark contrast to a year of tumultuous events and protests against long-standing racial inequities in all aspects of society. “Our aim is to provide improved access to cancer care for all,” said L. David de la Parte, Esq., executive vice president, General Counsel. “And if we can make discoveries around the mechanics of cancer in a particular minority population resulting in cures or preventions associated with those findings, then those are huge contributions to leveling an unlevelled playing field.”

Moffitt Diversity is leading the cancer center in enacting cohesive and unified efforts across the enterprise that embrace diversity, equity and inclusion as an essential business tool. We are striving to reflect the community Moffitt serves, reduce cancer disparities and meet the unique oncology needs in ways that are accessible, equitable and exceptionally personalized for all.

Leading Efforts that Embrace Equity

Leading Efforts that Embrace Equity

Dr. B. Lee Green

L. David de la Parte

The team member and leadership demographic data represents all individuals employed by Moffitt Cancer Center during the reporting period FY 2021 (7/1/20-6/30/21)
Language Services

COVID-19 COULD NOT STEAL OUR SMILE

During the COVID-19 pandemic we all had to make more than a few adjustments to stay safe and keep others safe. Getting used to only seeing half of people’s faces was one of them. Now imagine that you are deaf or hard of hearing, and you rely on facial expressions (or even lip reading) for understanding and communicating with others. In this scenario, a mask feels like an insurmountable barrier.

In American Sign Language, facial expressions convey both linguistic information and emotions. For example: raising your eyebrow indicates a question, and signers use their faces to express emotional content. During the pandemic it has become imperative for hospitals to find other types of facial protective equipment that would also facilitate communication for these patients: clear window masks. These masks are FDA-approved and were cleared with our Infection Control department.

At Moffitt, we made these masks available to patients and staff from the beginning of the pandemic. As supplies stabilized, they became part of the general hospital inventory and can be ordered directly from General Stores in all clinical areas.

That can include patients going through chemotherapy. But the connection wasn’t made until a chance encounter with a Moffitt Cancer Center physician at a local farmer’s market where Samson was promoting her products. The two exchanged information, connecting Sampson with our Supplier Diversity Office. Canviiy ultimately secured a partnership with the cancer center in March 2018. One of Canviiy’s first partnerships, Sampson said it helped set her company on a path for international success.

Moffitt Cancer Center has reported approximately $157,734,760 in diversity spend over the last five years. These efforts have earned both regional and national recognition for the cancer center’s supplier diversity commitment and leadership accountability.

“We embrace our differences and also celebrate them.”

- Dr. B. Lee Green

Supplier Diversity

WORKING WITH A WIDE RANGE OF SUPPLIERS IS MORE THAN GOOD BUSINESS

Supplier Diversity’s impact is especially evident in construction of our new 10-story hospital on the McKinley East campus. The cancer center committed to a supplier diversity goal of 15% over the span of this project, or $52 million. As of June 2021, over 60% of that goal had been met. To date, over $9 million in contracts have been awarded to veteran-owned businesses, with more than $10 million in awarded contracts with women-owned businesses and nearly $6 million with African American and Hispanic American-owned businesses.

But Supplier Diversity’s efforts aren’t limited to construction. A line of hair care products found in Moffitt’s Magnolias Hair Salon is a case in point.

Sampson launched her organic health and wellness brand Canviiy (pronounced kan-vē) in 2015 when she couldn’t find a suitable remedy for scalp irritations triggered by common styling processes. Formulated with help from an organic chemist, the line includes all-natural solutions that help revitalize, repair and nourish scalp and skin irritations.

“This is not a rare condition,” Sampson said. “Not only do women who have extensions and color have these scalp conditions, so do others who simply have sensitive skin.”

In addition to complex medical issues, clinicians must weigh a patients’ cultural, ethnic and religious backgrounds in determining appropriate and individualized care plans. Earlier this year we noticed visitors bringing food to their hospitalized family member. We investigated further and learned that the patient had not been offered a medically approved diet in concordance with her religious beliefs. The Moffitt Diversity team identified this as an opportunity to improve delivery of culturally competent medical care.

We met with dietitians, clinical staff and the Sodexo cafeteria management team to identify possible solutions. Since patients often have medically restricted diets as part of their therapy, we wanted to coordinate the medical needs with the logistics of the care delivery. The team developed culturally appropriate menus that met the medical requirements for the patient’s recovery. The cafeteria management team then worked on food sourcing options from local and national vendors that are packaged in adherence with religious guidelines to ensure integrity.

Culturally Competent Care

EXPANDING DIET OPTIONS SUPPORTS CULTURALLY COMPETENT CARE

Moffitt now offers patients a range of dietary options that meet specific medical and cultural needs. For example, clinicians have the option to order a kosher clear liquid diet for post-operative patients. Similar diets were arranged for other ethnic and religious backgrounds including Hindu, vegetarian, halal and kosher meals. The dietary orders were incorporated into the existing order entry system, and education was offered to clinicians and staff.

This small initiative represents coordination of multiple cancer center team members from various departments to improve culturally competent care delivery.

DIVERSITY

Supplier Diversity Outreach Efforts Fiscal Year 2021

<table>
<thead>
<tr>
<th>Supplier Diversity Outreach Efforts Fiscal Year 2021</th>
</tr>
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<tbody>
<tr>
<td>23 Vendor outreach events</td>
</tr>
<tr>
<td>18 New diverse suppliers added to the cancer center's supply chain and received their 1st purchase order</td>
</tr>
<tr>
<td>157 New registered diverse suppliers</td>
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Supplier Diversity Spend Fiscal Year 2021

<table>
<thead>
<tr>
<th>Supplier Diversity Spend Fiscal Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>$185,338,420 Total spend with diverse suppliers over the last 5 years (2017-2021)</td>
</tr>
<tr>
<td>91.1% Percentage increase in Diversity spend over the last 5 years (2017-2021)</td>
</tr>
<tr>
<td>13.4% Percentage of total Moffitt expenditures with certified diverse suppliers</td>
</tr>
<tr>
<td>$51,084,064 Total Moffitt expenditures with certified diverse suppliers</td>
</tr>
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</table>
Engaging Team Members
NETWORKS ORGANIZE AROUND SPECIFIC ASPECTS OF DIVERSITY

Last year’s protests against systemic racism were draining for many Black Americans, including Moffitt team members like Jason Grundy.

“For me, it was hard to go to the office every day and to stay focused on work,” said Grundy, a manager in Moffitt’s financial offices. “I needed an outlet.” Grundy’s informal networking with other Black team members led to the Black Empowerment Alliance at Moffitt (BEAM).

For over a decade, team members have had the opportunity to create voluntary, employee-led groups called Team Member Engagement Networks (TMENs). The groups organize around targeted dimensions of diversity such as age, race, ethnicity or LGBTQ+ identity. Membership is not limited; allies and advocates are welcome.

“We understand that when team members feel like they belong and are comfortable, they are going to be at their best,” said Cathy Grant, senior director of Moffitt Diversity. “These team members are also more inclined to provide thoughts and opinions on how to improve the cancer center and the experiences of our team members and patients.”

Research shows that employees with a voice in their organization are happier and more productive. With Moffitt’s increasingly diverse population, it makes sense the Diversity team would find a way to make those voices heard.

Two longstanding TMENs continue to grow. GenerationM focuses on young professionals. Unity@Moffitt provides an outlet for LGBTQ+ team members, its input helped establish Moffitt as a Leader in LGBTQ Healthcare per the Human Rights Foundation Campaign, a biannual distinction Moffitt has earned nine times.

With BEAM and new groups focused on Asian, Latinx and team members with disabilities in development, the program’s structure is evolving. All TMENs will come under the guidance of Executive Vice President/Chief Financial and Administrative Officer Yvette Tremonti and each group’s executive sponsor.

“I always want us to be on the forefront and to serve as an example,” Tremonti said. “The more of these networks we have the more representation we have for all team members in our organization. TMENs provide Moffitt team members with another resource and it’s a powerful one.”

<table>
<thead>
<tr>
<th>Diversity programs and community-based events are integral to TMENs</th>
<th>86%</th>
<th>TMEN participants said TMENs support cancer center values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,233</td>
<td>Team members participate in a TMEN</td>
<td></td>
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AN ACCELERATION OF EQUITY PROGRESS

While Moffitt Cancer Center’s commitment to equity has always been steadfast, efforts made in the wake of our country’s collective reckoning of persistent racial injustice have resulted in unprecedented progress in our pursuit of racial equity.

Progress is evident in how we as workers and caregivers speak about the impacts of race. Dialogue was sustained in every facet of the organization, and 3,218 team members participated in a series of all workforce Town Halls on the topic of advancing Racial Justice.

We shifted to data-driven diversity insights with the launch of the Workforce Diversity Dashboard, a real-time repository of workforce demographics. Trending and predictive analysis of our human capital by social identity characteristics enables more accurate recruitment, retention and advancement of team members.

In the wake of the murder of George Floyd, understanding how to support our team members, in particular those who identify as Black/African American, was a priority. A novel assessment on diversity, equity and inclusion, called the Me@Moffitt Survey provided over 7,300 unique comments revealing that while diversity is valued, opportunities exist to improve.

The building of communities with sustained focus on issues of importance to a demographic group is a vital area of progress. See the description of our new Team Member Engagement Networks (page 42).

With a focus on health disparities, Moffitt’s MRI and MMG faculty assembled for a retreat on diversity, equity and inclusion. Topics included community outreach efforts, minority recruitment into clinical trials, and the recruitment, mentoring and retention of diverse faculty.

The Moffitt Diversity team received approval to proceed with a new Impact 2028 Support Plan focused on Equity. The Enterprise Equity Support Plan was developed with input from leaders and team members from across the cancer center, representing diverse roles. Three lines of effort were identified in this process: “Enabling Unity of Effort,” “Reflecting the Community” and “Widening Moffitt’s Doors.” The Enterprise Equity Support Plan’s efforts will set the equity roadmap for the cancer center.

Despite these initiatives, we must remain even further committed to accelerating efforts to support equity and inclusion.
MOFFITT CANCER CENTER
FY2021 ANNUAL REPORT

COMMUNITY BENEFIT

Fiscal Year 2021, Moffitt Cancer Center completed its second year of the 2020–2022 Implementation Plan.* As required, the Implementation Plan was approved and adopted by Moffitt’s Hospital Board on Sept. 25, 2019. The content below summarizes some of the progress made toward addressing the Implementation Plan goals during July 1, 2020, to June 30, 2021.

CANCER SCREENING
Moffitt Cancer Center offers community members opportunities to receive a cancer screening at no cost to help improve screening behaviors and provides health education on cancer risks and information on cancer screening.

GOAL: Provide increased and/or improved screening and prevention services for lung cancer, breast cancer, prostate cancer, and colorectal cancer

• Screening vouchers were utilized by 442 uninsured individuals who meet specific criteria for lung, breast, prostate and colorectal cancer screenings.
• In collaboration with the Digital Innovation Office at Moffitt, Community Outreach, Engagement & Equity embarked on a project with Akido Labs to review our voucher screening program and with the aim of improving the cancer center’s reach and impact.
• Community Screening Activities

Moffitt’s M-POWER outreach team provides free health education on cancer topics, including cancer prevention and screening recommendations.

GOAL: Increase awareness and education of cancer prevention and screening

• 69 health education events specific to a cancer type.
  Number of people reached: 1,903

  CANCER TYPE  EVENTS  PEOPLE REACHED
  Breast cancer  25  480
  Skin cancer  11  93
  Cervical cancer  10  290
  Lung cancer  8  383
  Colorectal cancer  8  300
  Prostate cancer  5  258
  General Cancer screening & prevention  2  43

HEALTH CARE NAVIGATION
Moffitt Cancer Center Patient Navigators offer individualized assistance to patients, families and caregivers to help overcome system barriers and work directly with the clinical team to coordinate care.

GOAL: Expand navigation services to certain complex patient populations in the ambulatory setting and provide augmented patient support across the cancer continuum while meeting key performance indicators

Number of clinics staffed with navigators: 7
Between July 1, 2020 – April 30, 2021, navigation services assisted patients in the following clinics:

- Respiratory Oncology
- Gastrointestinal Oncology
- Neuro-Oncology
- Head & Neck Oncology
- Sarcoma/IAVA
- Gastrointestinal Oncology (started in 2021)
- Endocrine Oncology (started in 2021)
- Gynecologic Oncology (started in 2021)

By the end of 2021, five more clinics will be included in the patient navigator program.

- Malignant Hematology, Cutaneous Oncology, Breast Oncology, Senior Adult Oncology and Moffitt at International Plaza
- Navigated patients had favorable satisfaction scores (94.6%) on the question “Degree to which your care was coordinated among your caregivers.”
- Treatment retention rate among navigated patients increased from 52% in FY 2020 to 55% in FY2021

Moffitt provided virtual outreach events with information on clinical trials through professional community presentations on clinical trial fundamentals, health events, and community/agency collaborations geared toward diverse communities.

CHARITY CARE
Total cost of services incurred by Moffitt to provide medical services to patients who are unable to pay:
$27,789,672

MEDICAID SHORTFALLS
The Medicaid program pays Moffitt less than it costs the organization to provide care to its Medicaid patients:
$26,976,890

COMMUNITY HEALTH IMPROVEMENT SERVICES
Cost of activities, events, and in-kind donations carried out to improve the health of the community, beyond patient care:
$1,058,183

HEALTH PROFESSIONS EDUCATION
Cost associated with clinical education and training for physicians and medical students not including government funding:
$15,442,993

COMMUNITY BENEFIT OPERATIONS
Costs associated with community benefit strategy and operations, including assigned staff and community health needs assessment costs:
$56,226

COMMUNITY BUILDING ACTIVITIES
Cost of developing community-building programs and partnerships that address the root causes of health problems and offer the expertise and resources of the health care organization:
$30,048

HPV VACCINATION
GOAL: Increase awareness and education of HPV-associated cancers and vaccination uptake
Moffitt Cancer Center organized the HPV Elimination – Leading Progress Statewide (HELPs) on March 4, 2021. This event targeted providers and health care professionals to increase awareness and leverage expertise to create strategies and identify resources associated with HPV-related cancer elimination, vaccination and cervical cancer screening.

- 260 attendees, representing 19 U.S. cities, 13 U.S. counties and Canada
- Online HPV Education Campaign hosted on Facebook Live and LinkedIn, totaling over 656,300 social media impressions
- Four strategic themes to address HPV-related cancers were identified: individual actions, practice/systems changes, provider/patient/parent communications and data needs

Community Benefit Financials

YEAR – July 1, 2019 to June 30, 2020
Moffitt Cancer Center’s Community Benefit initiative supports patients, families and clinicians through advancing cancer prevention, early detection, clinical care and research, especially for those at-risk populations disproportionately impacted by cancer.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FISCAL YEAR 2021</th>
<th>CHANGE FROM PREVIOUS YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Community Benefit Dollars</td>
<td>$73,155,039</td>
<td>$30,642,899</td>
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MOFFITT CANCER CENTER
Respect for Clinical Trial Inclusion

Research is pivotal to Moffitt Cancer Center’s mission to contribute to the prevention and cure of cancer. But our mission cannot be fulfilled without addressing cancer’s undue burden on minority populations. The lack of diversity among clinical trial participants can result in minority populations missing opportunities for receiving treatment at early stages of disease or losing access to potentially lifesaving treatment altogether.

For example, Blacks have the highest death rate and shortest survival rate of any group in the United States for most cancers, yet ProPublica found that in trials for 24 out of the 31 cancer drugs that were approved in the past three years, less than 5% of the participants were Black.

“If your clinical trial predominately enrolls white men, then the data that you obtain from the trial may not reflect how the treatment will perform in females or minority populations,” said Hatem Saliman, MD, medical director of the Clinical Trials Office at Moffitt.

In 2020, Moffitt Cancer Center recognized the need to dedicate concentrated resources to addressing this issue. Minority clinical trial enrollment efforts were reorganized under Eric Haura, MD, associate center director of Clinical Science, and Susan Vadaparampil, PhD, MPH, associate center director of the Office of Community Outreach, Engagement & Equity. And expertise was expanded on cultural, financial, and other barriers to participation of minorities on clinical trials.

This reorganization resulted in the RESPECT Program, for Reaching and Engaging Special Populations to Expand Clinical Trials. This program focuses on bringing together providers, researchers, clinical trial coordinators, social workers, and other key Moffitt team members to ensure every patient is educated about clinical trials and offered an opportunity to enroll whenever possible.

One of the important goals of the program is to include clinical research trial information in all Moffitt outreach efforts - whether that’s a community event or education provided for health care providers in diverse communities. Clinical trial recruiting efforts in minority, women, the elderly, and other underrepresented populations are being targeted to the unique sociocultural and linguistic needs of these diverse populations.

As this annual report went to press, Dr. Kedar Kirtane was appointed the inaugural physician director for the Engagement of Special Populations in Clinical Trials, and he will co-chair the multidisciplinary RESPECT committee.

Meanwhile, Moffitt continues to bring its researchers and patients together for increased awareness and understanding. Since 2018, the Patient Researcher Forum Program has provided opportunities for select patients to tour Moffitt labs and meet researchers studying their type of cancer. By sharing stories of their cancer journey, the patients inspire - and accelerate - the researchers’ forums. Held virtually during the pandemic, the forums will soon return to in-person meetings.

Cancer Center Support Grant

Twenty years ago, Moffitt Cancer Center became the first in Florida to be designated as a Comprehensive Cancer Center by the National Cancer Institute (NCI). This recognition of Moffitt’s scientific excellence came with a Cancer Center Support Grant (CCSG), a base level of NCI funding for the infrastructure that’s key to discovery and development of more effective approaches to prevent, diagnose and treat cancer.

Once attained, NCI comprehensive status and CCSG dollars are not permanently assured. Every five years, centers must apply to renew their grant and status. The formal written, data-driven and peer-reviewed grant application is followed by an intensive in-person review from a site visit team of leaders in the field and by NCI staff.

Moffitt’s CCSG site visit was conducted this May, albeit in a much different format due to COVID-19. Virtual presentations via Webex replaced the in-person visit by NCI-selected experts. During the tightly scheduled virtual visit, each research program had just 10 minutes to tell its story, followed by 10 minutes for questions. “That may be the life’s work of 25 people in the program,” explained Brian Springer, MHA, vice president and associate center director of Research Administration. “Imagine assembling all they’re doing into a 10-minute talk or 12 pages of a report. If you don’t get the point across, you can wind up not being evaluated as highly as you’d hoped.”

John L. Cleveland, PhD, center director and principal investigator for Moffitt Cancer Center’s CCSG, said the experts’ specific questions were superbly answered by the cancer center’s program leaders. “We did everything we could to ensure a top score, and we did just that,” said Cleveland. “We received the cancer center’s best score to date and solidified the fact that we are an exceptional cancer center that is passionate about our mission.”
Data Drives Discovery

To accelerate the discovery of tomorrow’s cancer therapies, Moffitt is focusing on high-quality data – electronic medical records, biobanking systems, patient information, cancer registry data, survival information – and ways to mine and integrate that data for research and clinical purposes. Work is now underway on the cancer center’s next-generation, cloud-based advanced analytics platform, designed to replace its legacy data warehouse. Moffitt Cancer Analytics Platform (MCAP) houses information of more than half a million Moffitt patients, combining molecular data with clinical data from their medical records and self-recorded information like patient lifestyle and family history. The goal is to also add imaging data into the mix, and federal dollars are being sought to assist in the buildout of that aspect of MCAP.

But assembling high-quality data is just one step toward discovery of new therapies.

“Over time, we’ve realized we needed to work more with unstructured data, like the text of an electronic medical record,” said Dana Rollison, PhD, vice president and chief data officer. “These reports are generated from dictation, unstructured data, like the text of an electronic medical record,” said Dana Rollison, PhD, vice president and chief data officer. “These reports are generated from dictation, to certain therapies and optimize personalized care plans. The department will also focus on automating tasks to reduce human error and better allocate limited medical resources.

“We are giving priority to work that can be directly translated, not just ‘pie in the sky’ ideas,” said El Naqa. “We want ideas that are translatable to the clinic and that will have an impact on patients’ care.”

“We are in this for the long haul,” said Rollison. “The goal is for Moffitt to be the most digitally enabled cancer center in the world.”

Clinical Research Expands

Moffitt Cancer Center’s clinical research operations are the largest in Florida, with more than 600 active clinical interventional trials (with 1,091 treatment trial accruals) and over 100 observational studies (with 27,537 observational accruals) in fiscal year 2021. In 2020, new leadership was named for these efforts.

Eric Haure, MD, is now the associate center director of Clinical Science. In this role, Haure provides strategic vision in developing physician-led laboratory science, as well as scientific oversight of Moffitt’s clinical research operations, including Moffitt’s Clinical Trials Office and Clinical Research Unit. He provides guidance and mentorship to investigators throughout the institution while also fostering cutting-edge team science and clinical research opportunities with our affiliates and partners. This extends the cancer center’s reach, bringing clinical trial opportunities to even more patients.

Under Haure’s direction, Nikhil Khushalani, MD, has taken on a new role as assistant center director of Clinical Research Review & Partnerships. He provides oversight of Moffitt’s clinical trial scientific review operations and works closely with Jennifer I. Vidrine, PhD, assistant center director of Research Strategic Partnerships, to expand our clinical research offerings to our affiliates and partners.

One example of such partnerships opened this February near Orlando. The Moffitt Cancer Center-AdventHealth Clinical Research Unit is a specialized facility for early drug development, clinical trials and research located at AdventHealth Celebration. Its Executive Medical Director, George Simon, MD, has more than 20 years of clinical oncology translational research experience, including eight years with Moffitt as director of mesothelioma research.

“The goal is for Moffitt to be the most digitally enabled cancer center in the world.”

- Dr. Dana Rollison
Grants Help Drive Cures

Grant dollars are the lifeblood of any research effort. Moffitt Cancer Center’s research prowess is reflected in its $121,032,125 of total grants in fiscal year 2021.

Some grants come from non-government sources, but the bulk are from the National Cancer Institute within the National Institutes of Health (NIH), the largest public funder of biomedical research globally.

Recently, a team of Moffitt investigators received a five-year $10.2 million NIH grant to develop new therapies for lung cancer. This Research Program Project Grant (P01) will support four projects focused on lung cancer metabolism across several programs, including Cancer Biology and Evolution, Molecular Medicine and Immuno-Oncology. Principal investigators for the P01 grant are Elsa Flores, PhD, department chair of Molecular Oncology, and Eric Haura, MD, thoracic medical oncologist and associate center director of Clinical Science.

“We see about 1,800 new lung cancer patients each year in our thoracic clinic. We are seeing what works and what doesn’t,” said Haura. “We know improvements can be made to appropriately apply standard of care treatments and by developing new, more targeted therapies, but first we need to improve our understanding of the basic biology of lung cancer disease progression. These four projects will help our team do just that.”

Dr. Eric Haura

Ovarian Cancer: A Research Priority

Women in Moffitt Cancer Center’s 15 surrounding counties are diagnosed more frequently with ovarian cancer than women throughout the state of Florida or the nation.

This rare cancer has no methods for early detection and is more often deadly among minority populations, making it a research priority.

An article published February 2021 in the esteemed scientific journal Nature outlines how Moffitt researchers discovered a mechanism by which certain types of immune cells regulate anti-tumor activity in ovarian cancer.

Investigators in the lab of José Conejo-Garcia, MD, PhD, co-leader of the Immuno-Oncology Program, looked at tumor samples from 534 ovarian cancer patients. They found that patients with better outcomes had tumors with a higher infiltration of antibody-producing B cells. Notably, the B cells in these tumors predominantly produced a type of antibody that inhibits a signaling pathway known to contribute to ovarian cancer development. Their discovery could lead to new approaches to immunotherapies for ovarian cancer.

Another development from the Conejo-Garcia lab, a new version of CAR T therapy that targets endocrine receptors found exclusively on certain cells of the ovary, is making its way through regulatory processes of the U.S. Food and Drug Administration.

Ovarian cancer is also a research focus for Shelley Tworoger, PhD, associate center director of Moffitt Cancer Center’s Population Science Division. Tworoger serves as a principal investigator for the Ovarian Cancer Cohort Consortium and is a leader of ovarian cancer research efforts in the Harvard Nurses’ Health Studies. She coordinates an international group of scientists looking for novel factors associated with ovarian cancer risk and survival.

Tworoger’s recent publications include a paper in the Journal of the American Medical Association that looked at possible ovarian cancer risk associated with use of talcum powder in the genital area; an International Journal of Cancer article studying pre- and post-diagnosis physical activity levels and survival rates for ovarian cancer; and an International Journal of Epidemiology study of early life exposure to tobacco smoke and ovarian cancer in adulthood.

Dr. Shelley Tworoger
Dr. José Conejo-Garcia
As researchers globally spent the past year working to understand and contain the COVID pandemic, Moffitt Cancer Center investigators broadened their focus to study COVID’s impact on cancer patients.

Their research efforts include:

- A study of 1,200 adults in Hillsborough County who had not received COVID vaccines to determine the level of immunity to the virus within our community. “We can use the information to evaluate the effectiveness of public health measures, monitor trends in the development of immunity and identify high-risk populations in our area,” said Anna Giuliano, PhD, lead investigator for the study and founding director of the Center for Immunization and Infection Research in Cancer.

- A study of 1,200 cancer patients who received COVID vaccines, to determine their effectiveness in producing antibodies that protect against infection in this immunosuppressed population. This study is led by Giuliano and Jeffrey Lancet, MD, chair of the Malignant Hematology Department, which treats many of the study participants.

- A smaller study of cancer patients who tested positive for COVID-19 to examine immune response to the virus. This study, led by hematologist Lubomir Sokol, MD, PhD, is limited in size due to the fact that the cancer center was able to provide COVID vaccination for patients beginning Jan. 12, 2021.

- A year-long study of the psychosocial impacts of COVID on patients with cancer. “We would like to know the immediate and long-lasting effects of this pandemic on delays and changes in cancer care and psychological distress, and ultimately its impact on cancer survival and outcomes,” said Shelley Tworoger, PhD, associate center director of Population Science. Tworoger co-leads the study with Erin Siegel, PhD, director of Moffitt Cancer Center’s Total Cancer Care Study. “We will track cancer patients over time to get answers directly from them.”

“We would like to know the immediate and long-lasting effects of this pandemic on delays and changes in cancer care...”

- Dr. Shelley Tworoger

One in 20 cancers is caused by an all-too-common infection with the human papillomavirus (HPV). Understanding HPV, its related cancers and the vaccines to stop it are the life work of Anna Giuliano, PhD, a globally recognized leader in HPV research and founding director of the Center for Immunization and Infection Research in Cancer (CIIRC) at Moffitt Cancer Center.

In June of 2020, Giuliano’s research was instrumental in securing FDA approval for expanded use of the HPV vaccine against certain head and neck cancers. “We have the opportunity to eliminate up to six HPV-related cancers in our lifetime, starting with cervical cancer,” said Giuliano. “But we need to achieve high vaccine coverage and more widespread participation in cervical cancer screening and treatment programs.”

Those are among the goals of the PREVENT HPV Cancers Act of 2021, filed by U.S. Rep. Kathy Castor on March 4 - International HPV Awareness Day. Crafted with background from Moffitt Cancer Center and Giuliano, Castor’s bill aims to increase HPV vaccination in adolescents and adults, increase the number of women screened and treated for cervical cancer and fund research to improve screening and treatment modalities for HPV-related cancers.

Moffitt Cancer Center also marked International HPV Awareness Day by redubbing outreach and education efforts:

- Preventive Medicine special issue. Giuliano served as guest editor of the international scientific journal’s March 4 edition, From Science to Action to Impact: Eliminating Cervical Cancer. Said Giuliano, “Our intent was to inspire action globally and accelerate progress toward this attainable goal.”

- HPV Elimination – Leading Progress Statewide. This annual meeting of more than 200 health care providers and stakeholders discussed strategies toward achieving HPV-related cancer elimination and was virtually hosted by Moffit’s CIIRC and the Office of Community Outreach, Engagement & Equity.

- Facebook and YouTube HPV Awareness Summit. This summit was produced in partnership by Moffitt, AdventHealth and the HPV Alliance, and provided an online HPV education event geared toward reducing stigmas often associated with the virus and the cancers it can cause.

In May, the cancer center turned attention to a little-recognized casualty of the COVID-19 pandemic: the plummeting number of childhood vaccinations, especially HPV immunization. In a national call to action, Moffitt joined 70 other National Cancer Institute-designated cancer centers in urging physicians, parents and young adults to get HPV vaccination back on track.

“HPV vaccination is cancer prevention,” said Giuliano. “Now is the time to catch up on missed doses and prevent future cancers.”

“HPV vaccination is cancer prevention. Now is the time to catch up on missed doses and prevent future cancers.”

- Dr. Anna Giuliano

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- HPV Elimination – Leading Progress Statewide. This annual meeting of more than 200 health care providers and stakeholders discussed strategies toward achieving HPV-related cancer elimination and was virtually hosted by Moffit’s CIIRC and the Office of Community Outreach, Engagement & Equity.

- Facebook and YouTube HPV Awareness Summit. This summit was produced in partnership by Moffitt, AdventHealth and the HPV Alliance, and provided an online HPV education event geared toward reducing stigmas often associated with the virus and the cancers it can cause.

In May, the cancer center turned attention to a little-recognized casualty of the COVID-19 pandemic: the plummeting number of childhood vaccinations, especially HPV immunization. In a national call to action, Moffitt joined 70 other National Cancer Institute-designated cancer centers in urging physicians, parents and young adults to get HPV vaccination back on track.

“HPV vaccination is cancer prevention,” said Giuliano. “Now is the time to catch up on missed doses and prevent future cancers.”

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- Dr. Anna Giuliano

One in 20 cancers is caused by an all-too-common infection with the human papillomavirus (HPV). Understanding HPV, its related cancers and the vaccines to stop it are the life work of Anna Giuliano, PhD, a globally recognized leader in HPV research and founding director of the Center for Immunization and Infection Research in Cancer (CIIRC) at Moffitt Cancer Center.

In June of 2020, Giuliano’s research was instrumental in securing FDA approval for expanded use of the HPV vaccine against certain head and neck cancers. “We have the opportunity to eliminate up to six HPV-related cancers in our lifetime, starting with cervical cancer,” said Giuliano. “But we need to achieve high vaccine coverage and more widespread participation in cervical cancer screening and treatment programs.”

Those are among the goals of the PREVENT HPV Cancers Act of 2021, filed by U.S. Rep. Kathy Castor on March 4 - International HPV Awareness Day. Crafted with background from Moffitt Cancer Center and Giuliano, Castor’s bill aims to increase HPV vaccination in adolescents and adults, increase the number of women screened and treated for cervical cancer and fund research to improve screening and treatment modalities for HPV-related cancers.

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- Dr. Anna Giuliano
The Moffitt Cancer Center Foundation marked its most successful year of fundraising in 2021, at a time that was highlighted by countless challenges and uncertainties.

“As I look back on this challenging year, I am so impressed by our Moffitt family of supporters who have stood with us and helped bring hope to the thousands of patients who continued to seek care at our facilities,” said Maria Muller, president of the Moffitt Foundation. “It is remarkable how deeply our donors care about curing cancer, and with each gift, they’re making an impact.”

Gifts to the Moffitt Foundation increased from $17.3 million in fiscal year 2020 to $33.8 million in fiscal year 2021.

TRANSFORMATIVE GIFT FROM MARK AND CINDY PENTECOST

The most transformative gift of 2021 was a donation of $10 million from the family of It Works! founder Mark Pentecost to establish a research center at Moffitt dedicated to finding a cure for multiple myeloma. Mark and Cindy Pentecost became supporters of Moffitt Cancer Center after he received life-changing treatment for his own battle with the rare blood cancer. In 2018, the Pentecost family gave Moffitt $3 million to help fund new innovations in myeloma research.

The Pentecost family’s latest gift is aimed at finding a cure for multiple myeloma and establishing a new standard of care for patients. The newly formed Pentecost Family Myeloma Research Center at Moffitt will facilitate cutting-edge translational research, leveraging expertise from across the cancer center to make significant progress within the next 10 years.

FROM RESEARCH TO REALITY

The dollars raised by the Moffitt Cancer Center Foundation play a critical role in funding research at Moffitt. Donations often provide seed funding to launch innovative studies that can lead to much larger federal grants. That transition from seed funding for small investigative studies to large, multi-pronged grants can result in the next big research breakthrough – translating to life-changing treatments for our patients.

Moffitt is at the very forefront of cancer centers worldwide in pioneering advances thanks to donor-funded research projects, such as:

- Discovering cellular therapies via the Moffitt Cell Therapies Core. This internal resource seeks to develop new technologies for the translation of cellular therapies, provides education, training and regulatory assistance in support of scientists and clinicians committed to careers in cellular therapies, and produces the highest quality cellular products for immunotherapy clinical trials.
- Tackling health disparities through partnerships. These efforts are aimed at ensuring equitable health outcomes and the elimination of cancer health disparities among Blacks/African Americans. Thanks to the George Edgecomb Society (GES), this includes funding research in breast, colon and prostate cancers – all of which disproportionately affect Black/African American men and women. Gifts also supported the recruitment of the first GES Research Scholar, who focuses on cancer health disparities and obesity research, and the creation of the GES Speaker’s Bureau to meet the unique education needs of the Black/African American community.
- Creating treatment vaccines designed to help the body’s immune system recognize, target and destroy cancerous cells. Moffitt continues to distinguish itself as a world leader in the development of novel immunotherapy treatments, capitalizing on the natural power of the body’s immune system to defend itself against the growth and spread of cancerous cells. The Breast Oncology Department, for example, has developed innovative clinical trials for vaccines that offer new ways to treat various types and stages of breast cancer and improve patient outcomes.
- Integrating mathematical modeling into the treatment and understanding of cancer. Moffitt’s Integrated Mathematical Oncology Department is aiding the development and testing of new treatment strategies as well as facilitating a deeper understanding of why some treatments fail.

Philanthropy gives Moffitt researchers the resources needed to push beyond conventional thinking and develop the kind of care our patients need today.

MOFFITT FOUNDATION Reaches Record-Breaking Milestone

In Seeking to Eliminate Cancer Burden

FOUNDATION FUNDRAISING FY2021

<table>
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“I am so impressed by our Moffitt family of supporters who have stood with us and helped bring hope to the thousands of patients who continued to seek care at our facilities.”

Maria Muller
David Frazer likes to talk about the logo for the Sunshine Project. It is an orange and yellow sun with spikes that make it look like it is rising upward. And in fact, at its very core, the Sunshine Project is a beacon of light for pediatric cancer patients and their families as they fight a disease that is the leading cause of death among children.

needed to jumpstart pediatric cancer research to make real organization she helped create and decided in 2005 that it when NPCF co-founder Melissa Dunkel took stock of the more therapeutic treatments for childhood cancers. It began Project consortium, which focuses on finding less toxic and patients under the age of 18.

NPCF is unique in that the Sunshine Project allows Moffitt to research and educational efforts at Moffitt each year, the consortium is examining the use of immunotherapy in pediatric sarcomas: osteosarcoma, Ewing sarcoma and fusion positive rhabdomyosarcoma. Another trial underway by pediatric sarcomas: osteosarcoma, Ewing sarcoma and fusion positive rhabdomyosarcoma. Another trial underway by institutions like Duke Health, Cleveland Clinic, MD Anderson Cancer Center, Children’s Hospital at Vanderbilt, Johns Hopkins University and others, and has seven phase 1 or phase 2 trials underway. For the first time in its history, Moffitt has opened trials for patients with three of the deadliest pediatric sarcomas: osteosarcoma, Ewing sarcoma and fusion positive rhabdomyosarcoma. Another trial underway by the consortium is examining the use of immunotherapy in pediatric glioblastoma, with pediatric brain tumors now the leading cause of cancer-related deaths in children in the U.S.

“It is hope, inspiration, warmth, comfort, resolve,” said Frazer in a staccato rhythm, imparting just how important these qualities can be when you’re fighting a disease that will claim nearly 2,000 young lives this year. Frazer is CEO of the National Pediatric Cancer Foundation (NPCF), which has provided funding to Moffitt for the last 13 years to coordinate the Sunshine Project, a research network of 30 cancer centers and pediatric hospitals across the United States.

As the Moffitt Cancer Center Foundation gives thanks for the many thousands of donors who support patient care, research and educational efforts at Moffitt each year, the NPCF is unique in that the Sunshine Project allows Moffitt to conduct a lot of work behind the scenes to improve pediatric cancer care around the world even though it rarely treats patients under the age of 18.

With funding from the NPCF, Moffitt administers the Sunshine Project consortium, which focuses on finding less toxic and more therapeutic treatments for childhood cancers. It began when NPCF co-founder Melissa Dunkel took stock of the organization she helped create and decided in 2005 that it needed to jumpstart pediatric cancer research to make real progress in helping a population that is dramatically smaller in size compared to adult cancer patients and has never gotten the same amount of research attention and brainpower.

Dunkel was able to get the ear of Dr. Douglas Letson, a Moffitt specialist in a cancer called sarcoma, which occurs in the bones and soft tissues – often in children and young adults. While her organization excelled at raising funds, she remembers pitching the need for collaboration to move cancer research for children more quickly through the system. What evolved was a strategic partnership based on best practices and efficiency, with Moffitt providing the compliance and clinical research infrastructure to make the collaboration work.

Today, Dr. Damon Reed leads the collaboration. He is the director of the Adolescent and Young Adult Program at Moffitt and principal investigator with the Sunshine Project. “We share. We collaborate. We have everyone at the table,” said Reed.

The collaboration now draws research partners from institutions like Duke Health, Cleveland Clinic, MD Anderson Cancer Center, Children’s Hospital at Vanderbilt, Johns Hopkins University and others, and has seven phase 1 or phase 2 trials underway. For the first time in its history, Moffitt has opened trials for patients with three of the deadliest pediatric sarcomas: osteosarcoma, Ewing sarcoma and fusion positive rhabdomyosarcoma. Another trial underway by the consortium is examining the use of immunotherapy in pediatric glioblastoma, with pediatric brain tumors now the leading cause of cancer-related deaths in children in the U.S.

“We share. We collaborate. We have everyone at the table.” – Dr. Damon Reed

“Because of Yamoah’s research mentors, prostate cancer “found him” – a fortunate turn of events in many ways. He quickly noticed a disparity in prostate cancer outcomes for African American men and began working to understand the issue. “I began to recognize that there was a problem on the African continent and the islands – in the Bahamas, Jamaica and surrounding areas,” he said. “Basically, I saw that men of African origin did have a huge problem with prostate cancer."

This discovery coupled with the experiences he had traveling around the world led Yamoah to commit himself and his life’s work to addressing problems like disparities in prostate cancer. As he explained, “Ninety percent of the world’s problems only have 10% of the resources assigned to them. If you look at oncology, it’s the same thing. And so, for me, it just felt like there was some form of injustice in that. You want to have equitable care, to have equitable research. You want to have research that impacts the entire globe – entire populations of patients that are needing it.”

It is that drive to achieve health equity that inspired the creation of the George Edgecomb Society (GES) at Moffitt and the work of dozens of scientists and physicians like Yamoah. It also inspired the generous support of donors in the last year, who made record-breaking contributions to the society, which was founded by the cancer center to honor George Edgecomb, Hillsborough County’s first African American judge.

After completing his medical residency and earning his PhD from Mount Sinai in New York, Dr. Kosj Yamoah set out to determine where he would make his mark. “I wanted to pursue a medical scientist program to both see patients and do research, and I was really looking for my niche in terms of being a scientist,” said Yamoah, a physician scientist who is now an associate member in the Department of Radiation Oncology at Moffitt Cancer Center. “I would take a lot of trips to East Africa, including Burundi, Rwanda and Ghana, as well as to Mumbai in India to figure out what’s going on, and I realized that chronic diseases such as cancer were also a big problem in these regions of the world.”

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For Victor Young, the impetus to support health equity research was similarly very personal. “Cancer is something that you hear about, but it’s not close to you,” said Young, who is vice chair of the Moffitt Medical Group Board of Directors. “And then, all of a sudden, I had six family members in less than three years who were diagnosed with cancer, including my mother.” Young also helped facilitate treatment at Moffitt for an employee in his 30s, diagnosed with a brain tumor.

Young committed a $500,000 gift to the George Edgecomb Society, which will be used to fund the research of Yamoah, who is a prior recipient of grant funding from the GES.
In 2020, that’s exactly what the Foundation team did by moving forward with its mission despite the pandemic stifling efforts. On Oct. 24, Miles for Moffitt celebrated its 15th anniversary in a whole new virtual way — showing a stronger than ever commitment to courage and hope. The team rallied to produce a virtual Miles for Moffitt event that drew 4,000 participants from 44 states and raised more than $1 million to support cancer research at Moffitt. Participants could choose the course and activity that inspired them to reach their goal of propelling us toward a cancer-free world. By registering as an individual or as a team, participants ran, walked, biked, swam or simply clicked their way toward helping save lives and bringing hope to all who have been touched by cancer.

“Though not in person, we continued to show our support for those battling cancer by celebrating our survivors and honoring those we have lost while remaining constant in our search for a cure,” said Maria Muller. Organizers knew with a virtual fundraiser, it’s important to stay connected. Participants used #MilesForMoffitt all summer long to share stories and participate in weekly challenges and activities. On event day, a Facebook live send-off hosted by 10 Tampa Bay’s Allison Krooff and Wayne and Fonda Huizenga, the Couch Family Foundation, the Anthony R. Abraham Foundation, the Lynch Family and Bristol Myers Squibb.

MILE$ FOR MOFFITT

“Move for What Matters” is the mantra of Miles for Moffitt. In 2020, AutoNation, the largest automobile retailer in the United States, served once again as presenting sponsor of Miles for Moffitt for the fifth consecutive year. This, despite the challenges faced due to the COVID-19 pandemic. AutoNation’s cash registers charity program, the AutoNation employee team raised $42,000 to benefit cancer research. To date, AutoNation has raised more than $575,000 for cancer research at Moffitt. In 2017, they received a Miles for Moffitt award for the team with the largest number of participants. As part of their Miles for Moffitt sponsorship, AutoNation has also donated over 40 iPads to Moffitt’s Adolescent and Young Adult program.

Enduring Support from AutoNation

In 2020, AutoNation, the largest automobile retailer in the United States, served once again as presenting sponsor of Miles for Moffitt for the fifth consecutive year. This, despite the challenges faced due to the COVID-19 pandemic. AutoNation’s cash registers charity program, the AutoNation employee team raised $42,000 to benefit cancer research. To date, AutoNation has raised more than $575,000 for cancer research at Moffitt. In 2017, they received a Miles for Moffitt award for the team with the largest number of participants. As part of their Miles for Moffitt sponsorship, AutoNation has also donated over 40 iPads to Moffitt’s Adolescent and Young Adult program.

Expanding Our Reach

NEW HOSPITAL TO INCREASE ACCESS FOR PATIENTS AND OPPORTUNITIES FOR DONOR GIVING

When Don Futrell began the oversized task of planning for the creation of a new expansion hospital at Moffitt Cancer Center, there was an ever-present timer by his side, ticking off the days before completion. “It’s amazing to me the sheer volume of patients that come through our doors,” said the Vice President of Planning, Design and Construction. “There is a never-ending flow that takes place for patients and families seeking our help.”

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In fact, Moffitt anticipates a 65% increase in new patients over the next 10 years and a 33% increase in cancer surgeries.
generous donors, as well as naming opportunities to further enhance the facility in ways that will appeal to patients and families who often spend long days at the hospital, said Futrell. “We’re counting on our donors.”

**RECOGNIZING OUR DONORS**

“There are a variety of public spaces and areas of landscaping that can be enhanced by donor support,” said Maria Muller, president of the Moffitt Foundation. “These are important touches that can add to the patient experience or provide a respite for families needing a quiet place to rest and gather their thoughts.”

One of those areas is the rooftop garden, situated just off the patient floors on level three. “Without leaving the building you can go outdoors and enjoy some sunshine,” Muller said. “Similarly, donor support is being sought for a water feature and enhanced landscaping along the edge of the facility, as well as walking paths and other quiet areas.”

Inside the grand entrance of the new hospital, the Moffitt Foundation will be introducing a new digital donor recognition display that will honor its many supporters and pay tribute to the institution’s mission and vision. In addition, more than $300 million in naming opportunities are placed throughout the campus – from expansive lobbies and private waiting areas to sophisticated surgery suites and a conference center.

“We wish to partner with philanthropists who share our vision,” said Muller. “This hospital will serve hundreds of thousands of people over time, and we have the opportunity to contribute to making this the most positive experience possible.”

More information about naming opportunities is available online and by connecting with the Individual and Family Giving team at the Moffitt Foundation at 813-745-1403.
On the federal side, Moffitt is watching closely to see how President Biden will formulate his approach to cancer, given his personal commitment to this issue. Moffitt’s CEO, Dr Patrick Hwu, who previously worked with then-Vice President Biden on the Cancer Moonshot initiative, has conducted a series of meetings with current White House staff to offer his expertise in cancer prevention, immunotherapy and other areas, and looks forward to playing a role in the formulation of new federal cancer initiatives.

Moffitt has also been active in urging Congress to prioritize various measures to reduce cancer mortality, especially after the COVID pandemic disrupted research efforts and caused tens of millions of missed cancer screening visits. Moffitt faculty developed several pieces of legislation now being considered by Congress, including a measure aimed at eliminating cervical cancer and other HPV-linked cancers; as well as proposals to improve outcomes for veterans with cancer, provide funding to build new cancer facilities, and increase cancer screening and prevention efforts in underserved communities.

The cancer center’s Speak Out for Moffitt Advocate Committee, an eight-member volunteer group chaired by Jennifer Moffitt, PhD, has been working with Moffitt’s Office of Community Outreach, Engagement and Equity on proclamations with local governments throughout our 15-county catchment area to raise awareness for important cancer issues.

Although our patients, caregivers and team members weren’t able to travel to Tallahassee for Moffitt Day at the Capitol this year, Speak Out for Moffitt advocates gathered at the McKinley campus and via Zoom to welcome the 34 Cure on Wheels cyclists who made the 325 mile journey from Tallahassee to Tampa to raise awareness and funds for cancer research at Moffitt.

On the state side, Moffitt, with state Rep James and Esther King and Bankhead Coley biomedical research programs were also fully funded at $10 million each in which Moffitt participates in.

Despite the state of Florida facing an initially projected $2 billion revenue shortfall heading into the 2021 legislative session, Moffitt Cancer Center had a very successful legislative outcome. DeSantis signed the state’s $101.5 billion General Appropriations Act into law on June 2. The governor exercised his line item veto authority by vetoing $26.5 million out of $37.5 million until 2024. This is a bondable source of revenue that Moffitt has historically used to build and expand and will be instrumental to our future needs. This success has been years in the making and one we can all celebrate.
Welcome, New Leaders

As the annual report for fiscal year 2020 went to press Moffitt Cancer Center announced that PATRICK HWU, MD, had been appointed executive vice president and chief operating officer effective Nov. 10, 2020. Much has taken place during the first year of his tenure, including announcements of the following new executives in fiscal year 2021:

Santosh Mohan, MMCI, CPHIMS, FHIMSS, Vice President, Digital

In this newly created position Mohan is responsible for launching the Digital organization within Moffitt’s Center for Digital Innovation. Mohan has more than 15 years of digital health and health information technology experience. He previously served as managing director of the Innovation Hub at Brigham and Women’s Hospital where he led digital transformation. His prior work includes product development at Cerner Corporation, platform ecosystem partnerships at athenahealth and management consulting at The Advisory Board Company and Stanford Health Care. Mohan holds a master’s degree in clinical informatics from Duke University’s Fuqua School of Business and a bachelor’s degree in bioinformatics from Vellore Institute of Technology in India.

Sabi Singh, Executive Vice President, Chief Operating Officer and President, Moffitt Hospital

Singh is responsible for overseeing Moffitt’s clinical operations and ensuring a world-class patient experience across our clinical campuses. Singh brings more than 25 years of professional and leadership experience to this role. Prior to joining the cancer center, he served as the chief operating officer of the University of Iowa Hospitals & Clinics. He also spent four years as the associate hospital director for clinical service lines and two years as assistant vice president for operations excellence and quality and safety. Singh joined University of Iowa Hospitals & Clinics in 2005 and established the Office of Health Care. Singh holds a master’s degree in clinical operations research from Western Michigan University and a bachelor’s degree in management and public sector enterprises. Since 1992, Singh has served as an investment banker to Moffitt and several other health care systems. Singh earned his bachelor’s degree in accounting from the University of Florida and an MBA in finance and strategic planning from the Wharton School of the University of Pennsylvania.

Henry Reyes, Vice President of Partnership Development

He leads the Strategic Alliances team, which focuses on partnering with providers, hospitals and health systems to develop relationships that broaden Moffitt’s reach and offer enhanced access to National Cancer Institute-designated services and expertise. Reyes spent 13 years with J.P. Morgan Securities as a managing director in the Public Finance Investment Banking Group. He spent five years as the national head of public finance with Raymond James and Associates and 15 years in public finance with Citigroup. He has led the structuring and capital raising plans for over $50 billion in financings for health care systems, infrastructure projects and public sector enterprises. Since 1992, Reyes served as investment banker to Moffitt and several other health care systems. Reyes earned his bachelor’s degree in accounting from the University of Florida and an MBA and an MPA in management and public sector enterprises. Reyes is responsible for overseeing Moffitt’s clinical operations and ensuring a world-class patient experience across our clinical campuses. Singh brings more than 25 years of professional and leadership experience to this role. Prior to joining the cancer center, Singh served as the chief operating officer of the University of Iowa Hospitals & Clinics. He also spent four years as the associate hospital director for clinical service lines and two years as assistant vice president for operations excellence and quality and safety. Singh joined University of Iowa Hospitals & Clinics in 2005 and established the Office of Health Care. Singh holds a master’s degree in clinical operations research from Western Michigan University and a bachelor’s degree in management and public sector enterprises. Since 1992, Singh has served as an investment banker to Moffitt and several other health care systems. Singh earned his bachelor’s degree in accounting from the University of Florida and an MBA in finance and strategic planning from the Wharton School of the University of Pennsylvania.

Terrence Wright, Vice President of Facilities and Support Services

Bringing over 30 years of experience in health care facilities operations, Wright has facility management responsibilities over teams in business operations, food services, environmental services, parking and transportation, security, safety and emergency management and quality integration. Before joining Moffitt, Wright was the director of Facilities Management & Construction at Saint Joseph Medical Center in Joliet, Illinois. Prior to that, he served in a variety of facility, design and construction roles within the public and private health care sectors, having managed a portfolio of projects in excess of $1 billion. Wright holds an MBA from Webster University and a bachelor’s degree in mechanical engineering from University of New Mexico. He holds certifications including Healthcare Safety Professional, Facilities Management Administrator and Healthcare Construction. His professional affiliations include the American Society for Health Care Engineering.

THERESE A. ANGEL

Executive Vice President, Chief Operating Officer and President, Moffitt Hospital

Sabi Singh

Henry Reyes

Terrence Wright
## MOFFITT CANCER CENTER LOCATIONS

<table>
<thead>
<tr>
<th>MOFFITT CANCER CENTER</th>
<th>MOFFITT MALIGNANT HEMATOLOGY AND CELLULAR THERAPY</th>
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<tbody>
<tr>
<td>12902 USF Magnolia Drive, Tampa, FL</td>
<td>At Memorial Healthcare System</td>
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<tr>
<td>MOFFITT CANCER CENTER AT INTERNATIONAL PLAZA</td>
<td>801 North Flamingo Road, Pembroke Pines, FL</td>
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<td>4101 Jim Walter Boulevard, Tampa, FL</td>
<td>MOFFITT MEDICAL GROUP RADIATION ONCOLOGY</td>
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<tr>
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<td>MOFFITT CANCER CENTER AT WESLEY CHAPEL</td>
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