

IMPACT REPORT

2021 MMRF

Accelerating a cure for each and every multiple myeloma patient.



A YEAR IN REVIEW



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Your support fuels our work to accelerate the development of next-generation therapies, drive more precise treatment approaches from data, and empower patients with the information and resources needed to extend their lives.

The MMRF has always focused on a singular mission to accelerate a cure for each and every multiple myeloma patient. Over the past year, we have made significant advances in pursuit of that singular goal by maintaining our strong sense of urgency, focusing on driving innovation, and delivering results to the myeloma patients we serve.

This Impact Report outlines the tremendous progress made thanks to your commitment to the MMRF. Your support fuels our work to accelerate the development of next-generation therapies, drive more precise treatment approaches from data, and empower patients with the information and resources needed to extend their lives.

As we look to the year ahead, there is so much to be optimistic about for the myeloma community. We will continue to build on the many breakthroughs outlined in this report with a renewed energy knowing that there is still more work to do. On behalf of our entire organization, we thank you for standing with us as we get closer to a world free of multiple myeloma.

Sincerely,

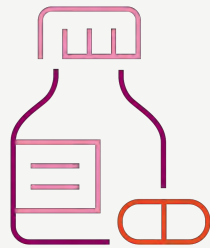
A handwritten signature in black ink that reads "Michael Andreini".

Michael Andreini

President & CEO

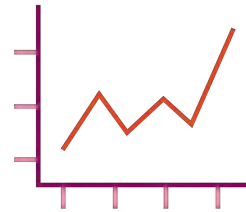
Multiple Myeloma Research Foundation

SINCE THE MMRF'S INCEPTION



15+ DRUGS

FDA approved



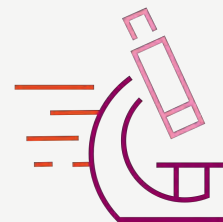
40% IMPROVEMENT

in 5-year survival rate



NEARLY 100

clinical trials opened



\$500M+

donated to research



ACCELERATING

the development of next-generation therapies through clinical trials and venture philanthropy.

The Multiple Myeloma Research Consortium®

The MMRF stands at the forefront of clinical research and fuels collaborative trials that evaluate innovative treatment approaches for patients at every stage of myeloma. We do this through the Multiple Myeloma Research Consortium® (MMRC®), a network of 21 leading cancer centers, where top myeloma researchers are aggressively investigating the most promising early-stage therapies. In the past year, the MMRC's collaborative research has advanced several trials including:

MYDRUGSM

MYDRUGSM is the first platform study in myeloma that evaluates targeted therapies against specific genomic alterations. Two sub-protocols were added to include Xpovio (Selinexor) and Blenrep (belantamab mafodotin) for patients who do not have

actionable mutations from genomic sequencing. A third subprotocol using Cotellic® (cobimetinib), an FDA-approved therapy for melanoma, was expanded to include a larger patient cohort based on promising results among MyDRUG participants who received the treatment.

Cevostamab

The Cevostamab trial is a multicenter study that is evaluating the safety, tolerability, pharmacokinetics (PK), and pharmacodynamics (PD) of Cevostamab, a bispecific antibody that targets specific surface markers on myeloma cells and T cells, as a single dose and in combination with other treatments in patients with relapsed or refractory multiple myeloma via intravenous (IV) infusion.

The Myeloma Investment Fund®

The Myeloma Investment Fund® (MIF®), the MMRF's venture philanthropy subsidiary, continues to advance cutting-edge research and attract promising new companies to the field of myeloma. With each investment, the MIF is also helping to catalyze the biotech and venture capital community to fund the most innovative research in myeloma. In 2021, new investments included Fortis Therapeutics, Inc., a biotech developing a novel antibody for the treatment of myeloma; Triumvira Immunologics, a biotech developing an innovative early-stage technology called (TAC)-T cell therapy; and CytolImmune Therapeutics, a clinical-stage immunotherapy company developing a novel class of natural killer (NK) cell-based cancer therapies. The MIF also made a follow on investment in Abcuro, Inc., a clinical-stage biotech developing a new immune checkpoint therapy for the treatment of autoimmune diseases and cancer. Through 2021, the MIF has invested in a total of eight companies and had the first two exits of companies in its portfolio. Tidal Therapeutics was acquired by Sanofi and NexImmune, the MIF's first investment, had a public offering in 2021. As the MIF continues to grow, the funds generated from each exit will be reinvested in new investments, feeding the clinical pipeline for years to come.

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“MMRF’s capabilities and expertise around myeloma and the MIF investment will help to ensure Tidal is able to succeed in bringing our technology into the clinic. Myeloma patients will have access to this drug in clinical trials. We hope that this ultimately leads to market approval and better outcomes for myeloma patients.

– Ulrik Nielsen, CEO, Tidal Therapeutics





Research Fellow Awards for 2021

The MMRF's Research Fellow Award Program is available to young investigators at not-for-profit academic institutions in the United States and abroad. Researchers must hold a PhD, MD, or equivalent degree and be at the post-doctorate, clinical fellow, or junior faculty level. With awards ranging from \$100,000 to \$1 million, we advance innovative research that seeks to learn more about myeloma's biology and identify potential biomarkers for drug development. At the same time, our grants ensure that expert researchers continue to apply their talents to accelerating cures for myeloma. To date, the MMRF has funded more than 400 research grants at over 140 research institutions around the globe. The 2021 grants focused on better understanding predictors of disease progression and resistance to treatment, as well as the exploration of a novel immune target.

Praneeth Sudalagunta, PhD

Moffitt Research Institute | Tampa, FL
A Multiomic Approach to Reversing
Therapy Resistance in Multiple Myeloma

Francesca Cottini, MD

Ohio State University | Columbus, OH
The role of CD56 signaling in escaping
from immune surveillance of NK cells

Travis Johnson, PhD

Indiana University | Indianapolis, IN
Deep learning-based identification of
progression-associated myeloma cells



DRIVING

research to deliver more personalized treatment approaches for patients through data.

Leveraging CoMMpassSM Data and Building Upon its Legacy

The MMRF has collected thousands of patient samples and made them available to researchers through our groundbreaking CoMMpassSM study—the most comprehensive longitudinal genomic study ever conducted in myeloma and one of the largest genomic datasets of any cancer. CoMMpass has yielded incredible insights that have transformed our understanding of myeloma and how it is treated. We are now building on that legacy via our Immune Atlas and MMRF CureCloud research programs.

Immune Atlas

Launched in 2020, the Immune Atlas is a research project that is complementing the genomic and clinical data in CoMMpass with immune profiling of the same patients, creating standards and generating robust immune data to further advance precision medicine approaches. In a recent immune analysis of bone marrow samples collected from newly diagnosed myeloma patients whose disease

had either progressed within 18 months (fast-progressors) or had failed to progress within 4 years of diagnosis (non-progressors), investigators found that there were important differences in the bone marrow immune microenvironment between these two patient populations prior to treatment. The findings suggest that the presence and activity of key immune cell populations in the bone marrow of myeloma patients may influence clinical outcomes.

These observations will be explored further and expanded upon in ongoing Immune Atlas studies comprising a larger number of CoMMpass samples. The expanded studies will provide investigators with critical information on how patient immunity changes during treatment and during clinical response and relapse.

The MMRF CureCloud®

The MMRF CureCloud®—a first-of-its-kind direct-to-patient registry that collects genomic and clinical information—aims to drive precision treatments for each and every myeloma patient. It is also designed to help researchers discover new targets for myeloma and form hypotheses for clinical trials, and aid patients and their physicians in making more informed, data-driven decisions.

Since the start of 2021, we have been focused on patient enrollment in CureCloud and building out data visualization modules that will provide contextual information for patients and their clinicians to optimize patient care by looking at aggregated data from similar patient cohorts. To speed enrollment and make the greatest impact for researchers and all patients, we are working to ensure the composition of CureCloud is reflective of the entire myeloma community through partnerships with cancer treatment centers that serve diverse populations across the United States. These “CureCloud Champion” sites include six major cancer hospitals: Emory, Hackensack, Karmanos, Ochsner, UT Southwestern, and WashU. To date, we have enrolled 818 patients in CureCloud, surpassing our goal of 750 enrollments by the end of 2021.

To learn more, visit MMRFCureCloud.org



 **Ochsner Health**

 **Karmanos**
CANCER INSTITUTE
Wayne State University

 **Hackensack Meridian**
Hackensack University
Medical Center

UT Southwestern
Medical Center


Washington
University
in St. Louis

 **EMORY**
UNIVERSITY

SPOTLIGHT: OCHSNER HEALTH

Ochsner Health is a not-for-profit health system based in the New Orleans metropolitan area of Southeast Louisiana where 42% of the population is Black. Its flagship hospital, Ochsner Medical Center, has been ranked the number one hospital in Louisiana for the past decade. In October 2021, we launched a collaboration with Ochsner Health to drive awareness and educate its diverse patient and physician network about myeloma and provide access to the CureCloud research study. As part of this work, we have developed cobranded CureCloud materials that are disseminated among Ochsner's constituents and are planning a series of joint patient education events.

The Effectiveness of COVID-19 Vaccines in Myeloma Patients

In order to more fully understand how COVID-19 and its vaccine interacts with myeloma patients' immune systems, we are collaborating with the Dana-Farber Cancer Institute (DFCI) on its IMPACT research study (Immune Profiling with Antibody-based COVID-19 Testing). The study is investigating changes in patients' immune systems that may occur as a result of prior COVID-19 exposure or due to vaccination in the context of their myeloma treatment. We are also supporting a study conducted by The Blood and Marrow Transplant Clinical Trials Network (BMT CTN) to understand the safety, efficacy, and durability of responses to COVID-19 vaccines in patients with hematological malignancies who have received cellular therapies.





patients with information and resources to improve outcomes and extend their lives.

2021 Patient Education Programming

Held five (5) Patient Summits and nine (9) Patient Webinars that provide further guidance in understanding myeloma with an in-depth look at lab work, supportive care, smoldering myeloma, and other timely topics.

Held four (4) Expert Sessions. Our Expert Sessions feature discussion and insights into key clinical advancements and hot topics in myeloma, including a Q&A with myeloma experts.

Held two (2) Facebook Live sessions hosted by Craig E. Cole, MD, and Amy Pierre, RN, MSN, ANP-BC. “Multiple Myeloma Awareness and Healthcare Disparities” occurred in April and “FAQs on Multiple Myeloma Precursor Conditions in the Black Community” occurred in October.

Produced a new patient toolkit booklet on precursor conditions and created a collection of one-page infographics called “Fast Facts in Myeloma” that include images and patient-friendly text to answer important questions about different aspects of having and managing myeloma.

SPOTLIGHT: NATIONAL BLACK CAUCUS OF STATE LEGISLATORS

With Black patients making up 20 percent of the approximately 32,000 people diagnosed with myeloma annually in the United States, we recognize the need to support the early diagnosis of and standard of care treatment for Black patients and other underserved communities. To support this work, we launched a partnership with the National Black Caucus of State Legislators (NBCSL)—the nation’s premier organization exclusively representing and serving the interests of African-American state legislators—where the MMRF serves as a member of its corporate roundtable. Partnering with NBCSL has been a crucial step in the MMRF’s journey to build trust and credibility within the Black community.

Patient Navigation Center

The Patient Navigation Center (PNC) enables myeloma patients to connect with patient navigators –who have professional clinical training in oncology –for guidance, information, and support. Patients and family members can connect with a patient navigator via phone, email, or online web form.

Visit: <https://themmrf.org/resources/patient-navigator-center/>



Reaching out to the Patient Navigation Center exceeded my expectations in terms of thoroughness and timeliness.

The information I received was so detailed, comprehensive, and much appreciated.

Myeloma Patient



MMRF Patient Navigators

Erin Mensching, RN, BSN, BA, OCN
Grace Allison, RN, BSN, OCN, RN-BC
Brittany Hartmann, RN, BSM

Contact

PatientNavigator@themmrf.org
888-841-6673

Myeloma Mentors®

The Myeloma Mentors® program provides patients and caregivers the opportunity to connect one-on-one with trained mentors. These mentors provide personal experiences to help inform, activate, empower and support other patients and caregivers in the myeloma community, no matter their disease state.

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My Mentor was wonderful to talk with, wish I'd reached out sooner. Really helped to put my mind at ease. We still keep in touch.

Myeloma Patient

2021 BY THE NUMBERS

4,828

Total number of patient/caregiver cases managed

3,216

Total number of registrants from educational programs

1,142

Total number of Patient Education Toolkits delivered

4.9/5

Patient satisfaction rating from surveys



FINANCIALS

2021 FINANCIALS

22,000

Supporters

\$42.4M

Raised

\$33M

Spent on research and related programming

2020 FINANCIALS

19,000

Supporters

\$27.1M

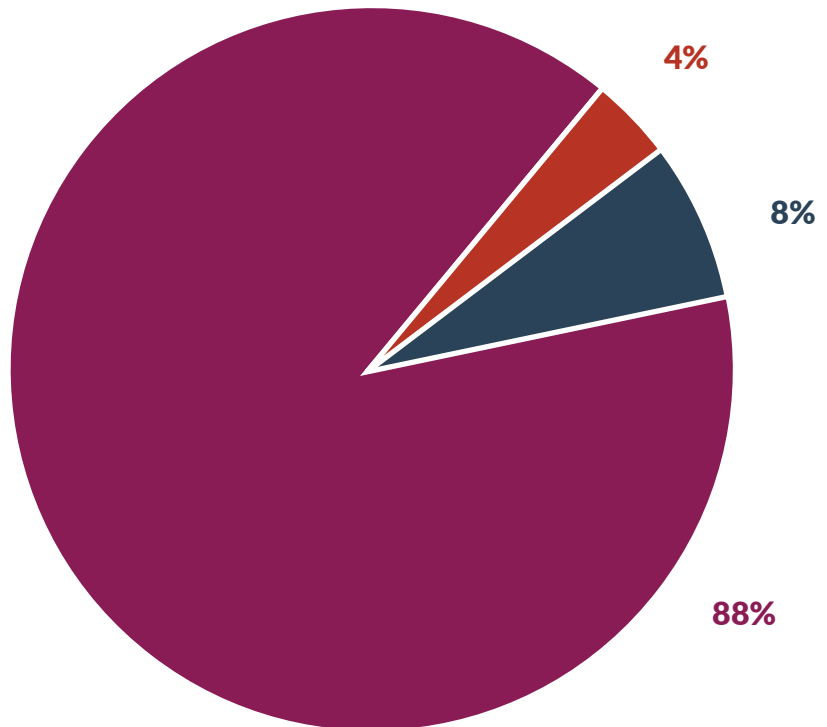
Raised

\$24M

Spent on research and related programming

PROGRAM SPENDING RATIO

-  Research and Programming
-  Fundraising
-  Management





About the Multiple Myeloma Research Foundation® (MMRF)

A pioneer in precision medicine, the Multiple Myeloma Research Foundation® (MMRF) seeks to accelerate a cure for all multiple myeloma patients by relentlessly pursuing innovations that accelerate the development of precision treatments for cancer. Founded in 1998 by Kathy Giusti, a multiple myeloma patient, and her twin sister Karen Andrews as a 501(c)(3) nonprofit organization, the MMRF has created the business model around cancer from data to analytics to the clinic. The MMRF identifies barriers and then finds the solutions to overcome them, bringing in the best partners and aligning incentives in the industry to drive better outcomes for patients. Since its inception, the organization has collected thousands of samples and tissues, opened nearly 100 trials, helped bring 15+ FDA-approved therapies to market, and built CoMMpass, one of the largest genomic datasets for any cancer. Today, the MMRF is building on its legacy in genomics and is expanding into immunotherapy, as the combination of these two fields will be critical to making precision medicine possible for all patients. The MMRF has raised over \$500 million and directs nearly 90% of the total funds to research and related programs. To learn more, visit www.themmr.org.



PLATINUM

GuideStar 2021
Seal of Transparency



17 YEARS

with four stars (highest ranking)
from Charity Navigator



“BEST IN AMERICA”

Seal of Excellence from the
Independent Charities of America



A+ RATING

from Charity Watch



**HEALTHCARE HERO
AWARD FOR INNOVATION**

from The Hartford Business Journal



OUR MISSION

To accelerate a cure for each and every multiple myeloma patient.

Multiple Myeloma
Research Foundation

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TheMMRF.org