

PROGRESS REPORT: ADVANCES IN MPN RESEARCH

Since 2011, the cornerstone of CR&T's research strategy has been our commitment to the Richard T. Silver, MD Myeloproliferative Neoplasm (MPN) Center at Weill Cornell Medicine in New York City. In November 2018, Silver Center investigators presented their research at the Annual Meeting of the American Society of Hematology (ASH) in San Diego.

Eleven abstracts represented the work of 27 Weill Cornell investigators. This included collaborations between Silver Center researchers and experts in other fields who were presenting their first MPN-related research. Such interdisciplinary studies are crucial, because these blood cancers can cause a wide range of complications, including joint pain, heart disease, and strokes.

Exploring the Role of Interferon in the MPNs

CR&T's founder and Medical Director, Richard T. Silver, MD, and other investigators have shown that interferon can slow, or even stop, the progression of the MPNs. However, we still have much to learn about how this therapy works.

Dr. Silver, together with Ghaith Abu Zheinhah, MD and their colleagues at the Center, have been conducting a comprehensive study of the use of interferon in more than 300 patients with polycythemia vera (PV), an MPN that causes the bone marrow to produce too many red blood cells. In some patients, PV progresses to myelofibrosis, a more severe MPN that causes scarring of the bone marrow. At the ASH meeting, the investigators presented research that demonstrated for the first time that interferon is more effective than other treatments in preventing the development of myelofibrosis. CR&T is deeply grateful to The Applebaum Foundation for funding this initiative.

A satellite meeting focused on the work of the MPN Interferon Initiative, a major international research collaboration that



Silver MPN Center staff, including Drs. Richard T. Silver (3rd from left) and Joseph M. Scandura (2nd from right).

seeks to deepen our understanding of how and why interferon works and how it can be used most effectively to treat the MPNs. A Silver Center team led by Joseph M. Scandura, MD, PhD, the Center's Scientific Director, is participating in this initiative. Dr. Scandura presented an update on his team's research, which aims to determine which MPN cells are targeted by interferon.

Jakafi and Weight Gain

Early research showed that some patients who took ruxolitinib (Jakafi), an FDA-approved therapy for myelofibrosis and PV, gained weight. For those who were underweight and weakened by disease, this was considered a positive development. However, Silver Center investigators, led by Dr. Scandura, have shown that healthier MPN patients also gained weight.

In a study of 100 patients, 80 percent experienced increased appetite, resulting in significant weight gain. In many, body mass increased and blood cholesterol was elevated. Further, a study of animal models showed that ruxolitinib blocks leptin, a hormone that helps control appetite. Since obesity and high cholesterol can further increase the risk for cardiovascular disease in MPN patients taking ruxolitinib, it is important that their physicians provide dietary counseling.

MESSAGE FROM THE PRESIDENT



Happy New Year! This issue of *CR&T News* is our first publication of 2019. It's a good time to assess how far we've come over the past year, which marked CR&T's 50th Anniversary.

Since 1968, we have invested more than \$15 million in research that has contributed to major advances in the fight against cancer. Thanks to your generosity, we raised nearly \$850,000 in 2018. Among other projects, we will continue to invest in the Richard T. Silver, MD Myeloproliferative Neoplasm (MPN) Center at Weill Cornell Medicine – ensuring that it becomes the world's leading center dedicated to MPN research and patient care. As our cover story shows, Silver Center investigators are making significant contributions to basic and clinical research.

Investing in the Future

This is a great tribute to our founder, Dr. Richard T. Silver, and to the leading cancer experts who comprise our Medical Advisory Board. But we also are determined to attract a new generation of leaders, both at CR&T and in the medical community. To this end, we welcomed two new board members, AJ Shiekman and Tim Silver, in 2018. Over the past three years, AJ and Tim have worked tirelessly to create a new Young Professionals group. Thanks to their efforts, the group filled two tables at our 2018 Hall of Fame Dinner. These talented young volunteers are bringing new ideas and expertise to CR&T. In short, they are our future.

On the medical side, CR&T committed \$200,000 over two years to enable Ghaith Abu Zheinhah, MD, an exceptionally gifted Hematology/Oncology Fellow, to move to the next phase of his career at the Silver Center. Dr. Abu Zheinhah is a co-author of

two papers presented at the 2018 ASH meeting, and a finalist in the Weill Cornell/New York-Presbyterian 15th Annual Fellow Award in Research Competition. This award is given to fellows within the Weill Cornell Department of Medicine who have performed outstanding research. Under the mentorship of the Silver Center's Scientific Director, Dr. Joseph Scandura, Dr. Abu Zheinhah will continue to pursue innovative research and provide the highest quality of care to MPN patients.

At our 50th Anniversary gala, I spoke about an old college friend, Nick Vojnovic, who was diagnosed with myelofibrosis. In 2016, Nick was told that he had only three months to live unless he received a bone and stem cell transplant – but no one in his circle was the right genetic match. His only hope was Be the Match, the national bone marrow registry.

Miraculously, out of a database of 29 million potential donors, one person – a young woman named Caroline Gomez – was a match. In January of 2017, Nick had his transplant. And on November 13, 2018, I, together with a group of our fraternity brothers, was thrilled to welcome him to our anniversary gala.

People like Nick are the reason why I, like all of you, am committed to fulfilling CR&T's mission. Until every person who is diagnosed with cancer can look forward to a healthy future, we will keep on fighting. As we begin a new year of progress, I want you to know how grateful we are for your support, and to assure you that we are doing all we can to build a world without cancer.

Thomas M. Silver
President

Progress Report (continued from page 1)

New Collaboration on MPNs and Other Blood Cancers

An abstract presented at the ASH meeting reported on a collaboration between Silver Center investigators and the heads of Weill Cornell's lymphoma/myeloma program and hematopathology department. Their review of the Center's patient database showed that the coexistence of MPNs and other types of blood cancers was higher than expected. The cancers that were most likely to occur alongside the MPNs were chronic lymphocytic leukemia (CLL), the most common leukemia in adults, and multiple myeloma, a cancer of the plasma cells. Interestingly, about half of the patients were diagnosed with an MPN before the other blood cancer, and half with the lymphoid malignancy first.

The team is now establishing an international consortium to study the molecular causes of the co-occurrence of these

two disease types and to evaluate patients' responses to MPN and lymphoma treatments.

Launching New Clinical Trials

Finally, 2018 saw the launch of seven new MPN clinical trials at the Silver Center: four for myelofibrosis; one for PV; two for essential thrombocythemia; and one for chronic myeloid leukemia. All will be conducted in collaboration with major pharmaceutical partners. To learn about studies that are recruiting participants, please visit <https://silvermpncenter.weill.cornell.edu/research-and-clinical-trials/myeloproliferative-clinical-trials>.

CR&T is proud of its role in the Silver Center's growth, and deeply grateful to our donors and friends, who make our support possible.



50th ANNIVERSARY H

Commemorating Five D



Honorees and presenters (from left): Dr. Richard T. Silver, Raphael Miranda, Alan Hobson, Congressman Mark DeSaulnier, and Tom Silver



Board memb

On November 13, more than 200 guests came together to celebrate CR&T's 50th Anniversary at New York City's Essex House. Always a very special evening, the Cancer Survivors Hall of Fame Dinner celebrated three extraordinary individuals who have contributed to the fight against cancer. **Congressman Mark DeSaulnier** received the Humanitarian Award for his commitment to improving doctor-patient communication, ensuring that patients and their families have the tools they need to cope with a cancer diagnosis. **Alan Hobson**, our Cancer Survivor honoree, not only reached the summit of Mount Everest, but successfully battled against leukemia and squamous cell carcinoma. We also were proud to present a special award to **Richard T. Silver, MD**, who founded CR&T in 1968 and who is internationally renowned for his contributions to blood cancer research.



CR&T Young Professionals



Dr. Silver rec

ALL OF FAME DINNER

Decades of Achievement



Hosts Kasia McCormick (left) and Amanda Johns Perez



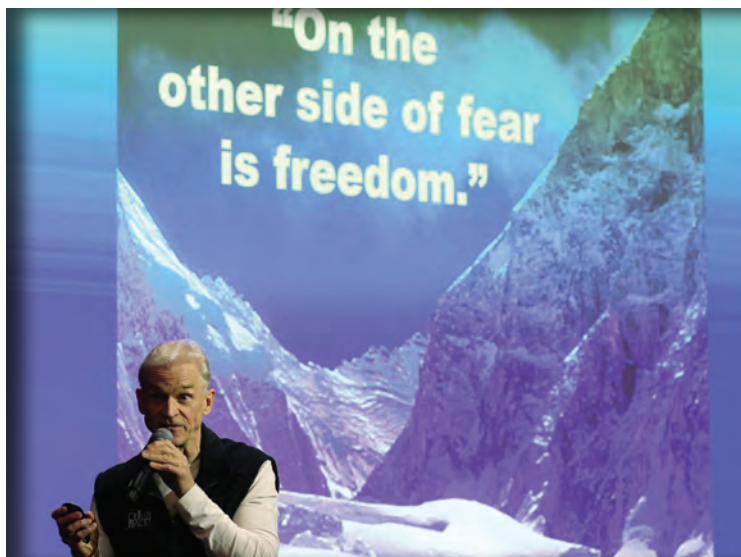
The Schuster family and guests

Raphael Miranda, Emmy Award-winning NBC 4 meteorologist and a longtime friend of CR&T, served as master of ceremonies. CR&T's president, **Thomas Silver**, acknowledged the Dinner Committee Co-Chairs, **Anne Templeton** and **Barbara Silver**, for their hard work and dedication to CR&T's mission. He also thanked the Board of Directors and Medical Advisory Board for their vision and commitment to CR&T. "Most importantly," he told the audience, "I want to thank you – our friends and supporters. You are our family, and we look forward to the day when our family comes together to celebrate our victory over cancer."

A highlight of the evening was a special 50th Anniversary video, in which friends and volunteers spoke about the organization's achievements and what CR&T means to them. View the video at <https://youtu.be/57DL0DR5NbU>. To view more photos, please visit <https://2018halloffamedinner.shutterfly.com>.



Adam Silver presents the Founder's Award from son Adam and Dr. Mark Pasmantier



Alan Hobson in action

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CR&T's work would not be possible without the generous support of our donors and grantors. We are deeply grateful for their commitment to our mission. The list below comprises supporters who provided gifts of \$500 or more in 2018. For the complete list, please visit www.crt.org.

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Wednesday, October 23, 2019

Belfer Research Building · Weill Cornell Medical College
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CR&T is proud to sponsor this full-day event for patients, their families and friends. Learn about the latest developments in MPN research and treatment from distinguished physician-researchers.

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Visit www.crt.org and click on the Symposium tab
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CR&T NEWS

Cancer Research & Treatment Fund, Inc. (CR&T)

500 E. 77th Street, Suite 1001
New York, NY 10162
Phone: 212-288-6604
Fax: 212-288-7704
Email: brosenstein@crt.org
www.crt.org

ABOUT CR&T

Since 1968, CR&T has funded the world's most promising physician-scientists, equipping them with the resources to advance the treatment of various types of blood cancers, including myeloproliferative neoplasms (MPNs), leukemia, non-Hodgkin's lymphoma, Hodgkin's disease and multiple myeloma, as well as other common cancers, such as breast and lung cancer.

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