Behind the scenes, academic institutions, local health systems and a small group of doctors and researchers are finding ways to win the war on cancer. Some are conducting basic research; others are testing the research results in a clinical setting. Together, they are making advanced cancer treatments available to Milwaukee residents and attracting talented professionals to the region.

“In Milwaukee, people really get behind the research,” says Rimas Orentas, PhD, an associate professor of pediatrics at the Medical College of Wisconsin and co-investigator for a research project exploring immunotherapy for neuroblastoma, the most common childhood cancer. Basic cancer research is often supported by the National Institutes of Health (NIH), the National Cancer Institute (NCI) and other federal sources. Local monetary support enables doctors to conduct transitional research that brings laboratory research to a clinical setting.

Last year, the Children’s Research Institute, which is affiliated with Children’s Hospital of Wisconsin and the Medical College of Wisconsin, received a $1 million grant from the Midwest Athletes Against Childhood Cancer (MACC) fund to continue studying immunotherapy for neuroblastoma. Immunotherapy coaxes the person’s immune system into recognizing and destroying malignant cells without harming normal cells.

Based in Milwaukee, the MACC fund has contributed $27 million for pediatric cancer and related blood disorder research since its founding in 1976. “Without (local funding sources like) the MACC fund or the Breast Cancer Showhouse, things would move a lot slower,” Orentas says.

An attractive destination for researchers

The commitment to community-based research is what drew Dr. Michael Thompson, a hematologist and oncologist, to the Milwaukee area. Thompson joined ProHealth Care’s Regional Cancer Center last August after completing a fellowship at M.D. Anderson, a nationally recognized cancer center in Houston.

“I liked that the research infrastructure was already in place,” says Thompson, who has a special interest in relapsed myeloma, a bone marrow cancer for which there is currently no known cure.

Dr. Hendrikus Krouwer, a neuro-oncologist whose research is focused primarily on brain tumors, credits ProHealth Care for its support of clinical trials. “There are not a lot of barriers to overcome,” he says. “At larger organizations, the wheels turn slower.”

As medical director for ProHealth Care’s new Brain Tumor Treatment and Research Center at Waukesha Memorial Hospital, Krouwer is involved in a national cancer trial that is studying the usefulness of a drug to stop the growth of new blood vessels.

“The most aggressive and common malignant brain tumor is characterized by the formation of blood vessels,” explains Krouwer. “The drug shuts down the formation of new blood vessels by inhibiting growth. It’s an exciting study because it opens the possibility for better results for recurrent brain tumors.”

The patients’ demand for advanced treatment

Thompson says that community-based research has grown out of patients’ increasing demand for integrated medicine and access to cancer research trials.

“Discerning patients want clinical trials and technology,” says Thompson. “They don’t want to travel for treatment. Patients want to be able to get the best care where they live.”

Jan DeBartolo, director of clinical research for the Oncology Alliance, a private oncology practice with 12 offices throughout southeastern Wisconsin, agrees. “Participation in clinical trials offers patients treatment outside the standard of care and allows them to remain in their community,” she says. As a result, area health care systems and hospitals are committing more resources to local cancer research.

Since joining ProHealth Care last August, Thompson has helped initiate four studies involving relapsed myeloma. Two of the studies are funded by the Eastern Cooperative Oncology Group and the Wisconsin Oncology Network.

Dr. Peter Johnson, medical director of gynecology oncology at Aurora Health Care and assistant professor with the University of Wisconsin School of Medicine and Public Health, says that because cancer patients are seeking state-of-the-art health care, Aurora tries to offer all of its patients the opportunity to take part in clinical trials.

“Research helps expand the treatment options available for patients,” Johnson says, adding that it redefines the standard of care and improves the community at large.

A member of the Gynecological Oncology Group (GOG), Johnson’s research is focused primarily on randomized control trials. One of Johnson’s current research projects focuses on the study of proteins, their structure and functions for the early diagnosis of ovarian cancer.

Local funding promotes research as well

Aurora receives national funding for its participation in large-scale research studies. Johnson said initial funding for cancer research often comes from the health care system itself and charitable contributions from the Vince Lombardi Charitable Funds.

Partnering with other health care facilities, academic institutions and pharmaceutical companies is another important aspect of cancer research.
funding, says Robert Truitt, PhD, professor of pediatrics at the Medical College of Wisconsin and associate director of research at the Medical College of Wisconsin Cancer Center.

“It’s very difficult for a single institution to do everything by itself,” says Truitt, who collaborates with Orentas on the immunotherapy study for neuroblastoma. “Institutions work faster if they collaborate.”

Case in point is the Children’s Research Institute’s immunotherapy study. Researchers needed a tumor cell line to conduct their study, but stringent FDA requirements and the $500,000 needed to certify a new cell line made it cost-prohibitive. The solution was to partner with Baylor College of Medicine, which had a tumor cell line and agreed to share its research material.

Perhaps the best-known funding partnerships are the collaborations between pharmaceutical or biotechnology companies and health care providers.

“These companies are interested because they’re for-profit businesses,” Truitt says. “They’re interested in testing their products in clinical trials and they’re willing to provide (those products) to us at no cost.”

Seeking ways to increase access to care

The Milwaukee Regional Cancer Care Network, a regional partnership network comprised of Milwaukee-based health care providers and community-based organizations, was developed to collaborate on ways to increase access to cancer treatment by reducing economic, geographic, cultural and other barriers.

“We want to know what keeps people from seeking care early,” says Heidi Sykora, regional director of clinical oncology services at Wheaton Franciscan Cancer Care, which is a member of the network.

Before patient-perceived barriers can be eliminated, health care entities need to know what the barriers are, according to Lora de Oliveira, project coordinator for the network and executive director for Partnerships for Healthy Milwaukee. “We need to quantify them and make sure they’re real.”

Once the study is complete and patient-perceived barriers have been identified, the Milwaukee Regional Cancer Care Network will create models of care designed to overcome the barriers and improve the quality of cancer care in the Milwaukee area.

In addition to its impact on patient care, cancer research also has the potential to impact the community economically, generating high-paying jobs. Truitt notes that the Medical College is one of the top five employers in the area.

Cancer research also means laboratory space and additional health care facilities, according to Dr. Judy Tjoe, medical director of the Comprehensive Breast Health Center at Aurora Sinai Medical Center.

“Cancer research has the potential to attract talent from other states,” says Tjoe, because top-notch researchers want to work in well-known hospitals and research laboratories. In addition to creating employment opportunities and attracting distinguished medical professionals, cancer research draws patients to the community for treatment—a boon for the hotel and restaurant industry. It also reduces the number of people leaving the city to seek care.

“It brings up the standard of health care,” says Johnson. Cancer research outcomes may also help reduce economic strain on the community. With earlier access to more streamlined care, cancer patients stand a better chance for survival.

Sykora says Sykora: “Any time the quality of care is improved, the cost of care is improved in a positive way.”

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