The Division of Pediatric Hematology/Oncology at the Herman and Walter Samuelson Children’s Hospital of Sinai is on the frontline in the battle against pediatric cancers and sickle-cell disease. Dr. Joseph Wiley, Chief of the division and Chairman of the Department of Pediatrics says that the division participates in research designed to ultimately find cures for these diseases via the national Children’s Oncology Group (COG), a local Maryland Consortium, its Pediatrics Residency Program, and investigator-initiated protocols.

About 30-40 of the 12,500 new cases of childhood cancer diagnosed each year in this country are seen at Sinai’s Herman and Walter Samuelson Children’s Hospital, which is a member institution of the COG. The latter is a National Cancer Institute-sponsored group of nearly 2,000 pediatric oncologists and almost 200 institutions. All patients are registered in the National Tumor Registry and are eligible for about 130 open therapeutic protocols through the COG. Nearly 60 of these protocols are open and active at Sinai. Approximately 70% of the eligible patients who are offered entry typically consent to join a COG therapeutic trial.

The division also participates in biology trials, which are crucial to the development of therapies and interventional strategies for pediatric cancer patients. Blood, tissue, bone marrow and surgical specimens are collected and sent to research laboratories around the country, and contribute to a large body of research designed to improve the quality of the cancer therapies available for children.

In addition, the division is a member of a Maryland Consortium which includes Johns Hopkins Hospital, the University of Maryland Medical System, and Georgetown University. This consortium focuses on database registration and evaluation of treatment protocols for patients with sickle cell disease. The Children’s Hospital plays a major role in this consortium, entering as many patients on stroke and organ-damage prevention trials as Hopkins and more than four times as many patients as Maryland and Georgetown combined.

Participation in a clinical trial can provide significant benefits. The stroke prevention trials for example, have been stopped early because of the efficacy of the experimental intervention. All patients entered on these trials were eligible for and received the benefit of early access to an improved standard of care. In addition, patients entered on the organ-damage prevention trials receive benefits in the form of careful monitoring and NIH-sponsored improvement in care. Approximately 30-35% of children with sickle cell disease show evidence of central nervous system (CNS) injury by the time they are teenagers, and the silent infarct transfusion trial which monitors 6-12 year olds with sickle cell disease provides more frequent monitoring. The hope for this trial is to identify children at risk for eventual CNS injury and to design interventional strategies. Although participation in a clinical trial requires a greater time commitment from families, it provides greater access and availability of health care that is subsidized by the National Heart, Lung, and Blood Institute.

The Division of Pediatric Hematology/Oncology has been involved in a number of in-house clinical trials. One in particular examined a therapy for chronic immune thrombocytopenic purpura (ITP) patients using a monoclonal
antibody against B cells. This work demonstrated the efficacy of this therapy and has led to two national and international clinical trials that are now open, evaluating in a randomized comparative fashion the use of Rituximab in chronic ITP.

Finally, the Division of Pediatric Hematology/Oncology (http://www.lifebridgehealth.org/ths.cfm?id=1620) includes Kristen Britton, DO, a member of the COG Acute Myeloid Leukemia Committee that designs and analyzes clinical trials for acute myeloid leukemia; Jason Fixler, MD, an institutional principal investigator for many of the sickle cell trials; Ruth Luddy, MD, a long time member of the division and a member of the COG; and Revonda Mosher, NP, a member of the National Cooperative Group Structure for survivorship issues and late effects. In addition, Dr. Wiley is a member of the COG Bone Marrow Transplant and Non Hodgkin’s Lymphoma Subcommittees, and is a member of several national and international anti-fungal therapy networks, including the COG Anti-Fungal Subcommittee.

Some of the Clinical Trials Active in the Division of Pediatric Hematology/Oncology are:

High Risk B-precursor Acute Lymphoblastic Leukemia. (COG AALL0232) Principal Investigator (PI): Joseph M. Wiley MD

Standard Risk B-precursor Acute Lymphoblastic Leukemia. (COG AALL0331) PI: Joseph M. Wiley MD

A Phase III Randomized Trial of Gentuzumab Ozogamicin (Mylotarg) Combined with Conventional Chemotherapy for De Novo Acute Myeloid Leukemia (AML) in Children, Adolescents, and Young Adults. (COG AAML0531) PI: Joseph M. Wiley MD

A Randomized Trial of the European and American Osteosarcoma Study Group to Optimize Treatment Strategies For Resectable Osteosarcoma Based on Histological Response to Pre-operative Chemotherapy: A Phase III Intergroup Study. (COG AOST0331): PI: Joseph M. Wiley MD

Silent Infarct Transfusion Trial (SIT Trial) PI: Jason M. Fixler, MD

Pediatric Hydroxyurea Phase III Clinical Trial (a randomized double blind placebo controlled trial of hydroxyurea therapy in very young children). (BABYHUG) PI: Jason M. Fixler, MD

Frequently Asked Questions

Q: Where can I find forms for submission to the Institutional Review Board (IRB)?
A: http://lbhweb/lifebridgebody.cfm?id=822

Q: Should every Adverse Event be reported to the IRB?
A: The LBH IRB only requires submission of internal Adverse Event (AE) Reports when the event is serious, unexpected, and related or possibly related to a study drug, biologic, or device. Otherwise the AE should be documented and included in your annual report. For details see: http://www.lifebridgehealth.org/workfiles/irb/irb_guide_3.doc

“Anyone who has never made a mistake has never tried anything new”
Albert Einstein
Frequently Asked Questions (Cont’d)

Q: If I miss the submission deadline, can we still be on the agenda for the next scheduled Administrative Review Board (ARB) or IRB meeting?

A: Any new applications submitted after the deadline will be placed on the agenda for the following month’s ARB or IRB Meeting. Exceptions may be granted if patient welfare is an issue. The 2008 schedules and deadlines are now listed on the Department of Research website.

To access the ARB schedule:
http://www.lifebridgehealth.org/workfiles/arb/2008_ARB_Meeting_Schedule_1.doc

To access the IRB (A) schedule:
http://www.lifebridgehealth.org/workfiles/irb/irb_a_schedule_2008.doc

To access the IRB (B) schedule:

Harvesting the Web

Research Shows How Genetic Mutation Causes Epilepsy in Infants
http://www.news-medical.net/?id=30249
Medical Research News, September 2007

Research at the Howard Florey Institute in Melbourne, suggests that a single gene mutation may cause epilepsy in infants. Infants are more susceptible to seizures because their brains are developing at a rapid rate, making their brains more “excitable”. Their neurons are growing and making new neuronal connections, which can disrupt normal brain activity. Infants have protective mechanisms in their brains to control this excitability. However, a single gene mutation was found that inhibits a specific ion channel from functioning correctly, resulting in at least one form of epilepsy.

Greater Knowledge from Battlefield Tragedies
http://www.aamc.org/newsroom/reporter/june07/military.htm
AAMC Reporter: Gregg Siegel, June 2007

Wartime Research is providing a new understanding of Traumatic Brain Injury (TBI) sustained on the battlefields of Iraq. Col. G. Ling, MD, PhD, a neurosurgeon at the Uniformed Services University notes that blasts throw off many types of energy, and it is unknown which types damage the brain. Ling and his colleagues found that a blast can cause nerve degeneration patterns similar to those seen in some degenerative nerve disorders. They also found that the impact of pressure waves alone are different than those of a full blast, suggesting that a “force x” in the area of explosion causes the most damage to the brain. Identifying these forces may allow development of more effective helmets that can prevent TBI.

IRB Tips: I Didn’t Know That!

Please watch the expiration date for your study. An e-mail is sent to the research coordinator from the IRB two months prior to expiration. If the continuing renewal is not received by the expiration date, the study will be suspended.

Informed consent documents must be translated into the written native language for study subjects who do not understand English.

The use of an outside Central IRB (CIRB) by an LBH investigator for review of a research study involving human subjects must be approved by the LBH IRB, and requires a signed written authorization.
Breast Cancer Research

The Breast Research Team at the Alvin & Lois Lapidus Cancer Institute is offering several clinical trials for patients with breast cancer. Dr Cristina Truica, the principal investigator has lead clinical trials in breast cancer for more than 5 years and is very excited by the new studies currently available. She chose to do research in breast cancer to help other women, because breast cancer is the leading cause of death among women ages 40-55 years and is the most common cancer in women throughout the world. “I see too many young mothers who cannot see their children grow up. This is heartbreaking. We need more research, and more effective and less toxic treatments.” Please contact Judy Bosley at 410-601-4392 for more information about any of the following clinical trials:

Phase III Trial of Bisphosphates as Adjuvant Therapy for Primary Breast Cancer (SWOG 0307)

Bone Metastases are very common in patients with Breast Cancer. Up to 60-80% of patients with metastatic breast cancer will eventually develop signs of bone involvement. Bone metastases include complications such as pain, pathological fractures, and spinal cord compression. Zoledronate, Clodronate, and Ibandronate are a group of medications known as Bisphosphonates. These medications have an effect on bone resorption and mineralization. All of these drugs may delay or prevent bone metastases in patients with nonmetastatic breast cancer. It is not yet known whether Zoledronate is more effective than Clodronate or Ibandronate in treating breast cancer. This randomized phase III trial is studying Zoledronate to see how well it works compared to Clodronate or Ibandronate in treating women who have undergone surgery for stage I, stage II, or stage III breast cancer.

Phase III Randomized Study of Neoadjuvant Therapy Comprising Exemestane Versus Letrozole Versus Anastrozole in Postmenopausal Women with Estrogen Receptor Positive Stage II or III Breast Cancer (ACOSOG Z1031)

This phase III clinical trial is studying Exemestane, Letrozole, and Anastrozole to compare how well they work in treating postmenopausal women who are undergoing surgery for stage II or III breast cancer. Estrogen can cause the growth of breast cancer cells. Hormone therapy using Exemestane, Letrozole, or Anastrozole may fight breast cancer by lowering the amount of estrogen the body makes. Giving any one of these drugs before surgery may make the tumor smaller and reduce the amount of normal tissue that needs to be removed. It is not yet known whether Exemestane, Letrozole, or Anastrozole is more effective in treating breast cancer.

Program for the Assessment of Clinical Cancer Tests (PACCT-1): Trial Assigning Individualized Options for Treatment: The TAILORx Trial

This phase III study compares adjuvant combination chemotherapy and hormonal therapy to adjuvant hormonal therapy alone, and attempts to determine the best individual therapy for women who have node-negative, estrogen-receptor positive breast cancer by using a special test (Oncotype DX), and whether one is better than the other for women who have an Oncotype DX recurrence score between 11 and 25.