INTERNATIONAL PROGRAMS

extraordinary health care that’s changing our world

INTERNATIONAL HEALTHCARE SERVICES

University of Nebraska Medical Center | The Nebraska Medical Center
We’d like to welcome you to a very special place... a place where gifted, internationally renowned specialists have successfully treated adult and pediatric patients from every state in the United States and 42 countries. They come to the University of Nebraska Medical Center (UNMC) and The Nebraska Medical Center (TNMC) to receive the best available health care in the world and to be given the opportunity for a longer, healthier life. They are cared for with compassion and kindness, excellence and innovation.

Our international department facilitates the most advanced medical technology and treatment regimens by excellent, nationally and internationally renowned specialists and physicians, who are unquestioned leaders in cancer care and transplantation programs.

Our proudest achievement is the unparalleled customized care we provide our patients. Each year we help patients from dozens of countries. Should you decide to send your patients to us, we will provide excellent personalized services, which are extremely sensitive to all cultures and religions. Our compassionate and caring staff takes a special pride in treating all our patients with utmost care, dignity, respect and, of course, clinical excellence.

TNMC’s customized training and educational programs have benefitted healthcare professional from 24 countries, who visited our campus for training and development programs. These individuals have found their experiences at TNMC to be very valuable to them with their clinical practices in their home countries. Global healthcare arena provides an excellent basis for an exchange in healthcare professionals – our specialists have visited 26 partner institutions in 20 countries to provide on-site medical training and development. We welcome your healthcare and administrative teams to train at a very special place... a place where over 1,000 gifted and internationally acclaimed specialty physicians and 1,500 caring nurses treat adult and pediatric patients from all over the world.

In the pages that follow, you will learn more about our office of International Healthcare Services which customizes unsurpassed, specialized treatment programs for our international patients. You’ll also learn about our dynamic international training, education, research and strategic collaborative programs for healthcare professionals and medical institutions.

We are proud to have developed collaborative strategic partnerships with 123 healthcare institutions in 44 countries.

I look forward to your participation and continued support in building symbiotic, sustainable healthcare platforms, so that the patients in both our countries can be the ultimate beneficiaries of our professional training, education, research and patient-care programs.

Sincerely,

Nizar Mamdani, Executive Director
International Healthcare Services
University of Nebraska Medical Center  |  The Nebraska Medical Center
Leaders in Healthcare

Through our International Healthcare Services Department, we have established international collaborative partnerships with 123 institutions in 44 countries to help serve international patient needs and to provide effective customized training for healthcare professionals.

The United States has become the destination of choice for thousands of international patients who recognize they too can receive outstanding quality of specialty medical care provided in U.S. hospitals. Today’s global communications technology has stimulated exponential growth in awareness of medicine around the globe. Access to this information puts the targeted medical care available in the U.S. within reach of a growing number of individuals around the world, who want and need this care for themselves, their families and friends.

An increasing number of these well-informed individuals are selecting cancer care, transplant and neurology treatment programs of the University of Nebraska Medical Center (UNMC)/The Nebraska Medical Center (TNMC). TNMC’s is one of the busiest transplant and cancer care programs in the world and an international healthcare leader. An early pioneer in the advancement of lymphoma, peripheral stem cell, bone marrow and liver transplants, our reputation and success have rapidly developed under the leadership of world-renowned specialists. In fact, 176 physicians on the famed list, The Best Doctors in America: Central Region, practice here.

One of the Foremost Hospitals in the US for Cancer Care, Transplantation, Neurology and Neurosurgery

TNMC has been providing medical education and compassionate patient care since 1869. Our strengths in lymphoma, leukemia, breast cancer, pancreatic and gastrointestinal cancers, head and neck cancers, brain cancer, lung cancer, pediatric oncology and research have meant unmatched care for Nebraska, the USA and the world. We have treated people from all 50 states and more than 42 countries.

A staff of over 1,000 primary and specialty care physicians, along with 1,550 nurses and more than 3,000 therapists, technicians and others deliver the most comprehensive care and innovative medical treatment in the world. Together, they provide compassion, experience and dedication to care that can only be called extraordinary.
176 BEST DOCTORS IN AMERICA

AMERICA’S BEST HOSPITAL RECOGNITION

NO. 1 CONSUMER CHOICE AWARDS

TREATED PATIENTS FROM 50 US STATES AND 42 DIFFERENT COUNTRIES
For thirteen consecutive years, The Nebraska Medical Center has been named as the National Consumer Choice Award winner as a result of a large consumer study conducted by The National Research Corporation (NRC). The goal of the survey is to determine the best quality health care services.

Recognized by U.S. News & World Report as one of the best hospitals in 9 categories: Ear, Nose & Throat, Gastroenterology, Geriatrics, Nephrology, Neurology and Neurosurgery, Orthopedics, Pulmonology, and Urology.

Best Doctors of America - 176 physicians at The Nebraska Medical Center are recognized among the “Best Doctors of America”

National Comprehensive Cancer Network - The National Comprehensive Cancer Network (NCCN) is an alliance of the world’s leading cancer centers, working to develop national treatment guidelines for cancers based on the latest research. Fred & Pamela Buffett Cancer Center is one of the founding members.

National Cancer Institute (NCI) Designation - This designation recognizes the Fred & Pamela Buffett Cancer Center offers patients options for prevention, diagnosis and treatment and access to clinical trials not available elsewhere.

American College of Radiology - The American College of Radiology (ACR) recognizes the highest standards for quality practice in clinical imaging, personnel expertise and an ongoing commitment to quality improvement.

American College of Surgeons Commission on Cancer - This accreditation ensures patients receive comprehensive, state-of-the-art services provided by a multi-specialty team coordinating all aspects of cancer care.

Foundation for the Accreditation of Cellular Therapy (FACT) - The FACT accreditation demonstrates our commitment to quality in cellular therapy and blood and marrow transplantation and ensures our transplant program meets rigorous international standards.
• Magnet Status is awarded by the American Nurses Credentialing Center (ANCC) and is the highest level of recognition for excellence in nursing practice.

• Oncology Certified Nurses -Oncology Certified Nurses (OCN) working at The Nebraska Medical Center obtain certification in Oncology Nursing.

• Blue Distinction Center -First hospital in the state to receive the Blue Cross and Blue Shield of Nebraska, Blue Distinction Center for Complex and Rare Cancers. Only 88 other medical centers in the United States have earned the same distinction. Blue Distinction Centers for Complex and Rare Cancers were developed in strategic collaboration with the National Comprehensive Cancer Network (NCCN) and input from a panel of leading clinicians and professional organizations.

• University of Nebraska Medical Center has achieved recognition in the Edgerton Award Program at the level of Progress from the state of Nebraska, distinguishing the hospital’s commitment to quality management and corporate practices that are designed to grow and support excellence.
University of Nebraska Medical Center’s research led to the first peripheral stem cell transplant program in the United States in 1983 and set the standard for transplant treatment used throughout the world. TNMC has performed more than 7,500 bone marrow, peripheral stem cell and solid organ transplants since the beginning of the transplant program.

TNMC has been the driving force to establish a new method of World Health Organization classifying lymphoma, based on advances made in immunology and genetics. This has lead to targeted and better treatment programs for lymphoma.

Through our innovative efforts in liver/small bowel transplantation and the use of stem cell transplants for treating rheumatoid arthritis and multiple sclerosis, our patients continue to benefit from the latest clinical trials and investigational drugs tested at our facilities.

Our Lied Transplant Center is the first transplantation center in the world to bring together into one facility the solid organ and blood stem cell (bone marrow) transplantation programs; cancer and transplantation research; patient care and education and an innovative delivery system called Cooperative Care.

The Nebraska Medical Center offers Advanced Treatment Options in Ocular Imaging Technology - Diagnosis and Management of Primary Intraocular Lymphoma.
An Outstanding Reputation for Excellence

As one of the busiest transplantation programs in the US, TNMC has established an outstanding reputation for expertise in treating a variety of diseases.

- More than 200 oncologists and basic scientists are working together at TNMC to find better ways to diagnose, treat and prevent cancer.
- For over 50 years, our scientists and physicians have been at the forefront of discoveries that have increased survivorship.
- Now among one of the world’s busiest and most successful, we were the first to create a combined liver/small bowel transplant program.
- We are one of the few transplant centers in the US offering pancreas and kidney/pancreas transplantation and one of the five most active.
- We’ve treated people from all 50 states and 42 different countries. Our strengths in Hodgkin’s and Non-Hodgkin’s Lymphoma, leukemia, breast cancer, pancreatic and gastrointestinal cancers, head and neck cancers, brain cancer, lung cancer, pediatric oncology and research have meant unmatched care for Nebraska, the USA and the world.

- Our oncology and transplant teams include nationally and internationally recognized physicians and specialists, many of whom have won national and international awards in cancer care and other research discoveries.
- Every year, thousands of well-informed U.S. and international patients select us for lymphoma treatment, bone marrow, stem cell and solid organ transplantation.
- TNMC’s liver transplant program has patient and graft survival rates that far exceed the national average in adult, pediatric, living-related donors, and reduced-size transplants.
Leadership is earned when a team achieves a reputation for excellence, innovation, caring and an impressive success rate. University of Nebraska Medical Center/The Nebraska Medical Center’s 1,000+ physicians representing every medical specialty are distinguished by treatment programs that consistently deliver health care options, reliability and positive results year after year.

176 physicians listed on *The Best Doctors in America*: Central Region practice at our institution. We are very fortunate to have on our staff, such nationally and internationally acclaimed specialists as, Dr. James Armitage, Dr. Julie Vose, Dr. Anne Kessinger, Dr. Philip Bierman, Dr. Gregory Bociek, Dr. Peter Coccia, Dr. Steven Hinrichs, Dr. Samuel Cohen, Dr. Kenneth Cowan, Dr. Alan Langnas, Dr. James O’Dell, Dr. David Mercer, Dr. Elizabeth Reed, Dr. Byers Shaw, Dr. Michael Sorrell, Dr. Craig Walker, Dr. Charles Enke, Dr. James Edney and many more. Please review our list of outstanding physicians on our website.

*Top: Dr. James O. Armitage  Bottom/Left: Dr. Julie M. Vose  Bottom/Right: Dr. Philip J. Bierman*
Dedication of our Nurses

The Nebraska Medical Center takes a special pride in our dedicated nursing and support staff, which is second to none and is recognized not only for their high level of expertise and professionalism, but also for their genuine friendliness, compassion and respect for the patient and family.

Our nurses know that there are simply no shortcuts to extraordinary care. Each of our dedicated staff of 1,550 registered nurses focuses on every detail of patient care, providing nothing less than superb nursing care. Our registered nurses to beds ratio is considered one of the nation’s best.

Specially trained oncology nurses triage and care for patients in inpatient, outpatient and emergency areas dedicated to cancer patients only. They provide this specialized care 24 hours a day, seven days a week. Our cancer care is seamlessly integrated with our renowned transplantation programs.

We are distinguished by our compassion. We understand how very difficult coping with cancer can be. What separates us from many treatment centers is our multidisciplinary approach in treating the whole patient and our complete dedication to doing everything we can to normalize a patient’s life before, during and after treatment. We believe cancer disease of the family, not just the individual, and we offer an extensive range of services for both. Classes, support groups, a resource library, and special programs and facilities help contribute to the comfort level and the completeness of our care.

It comes from within,  
This driving force as strong as life itself  
To treat the sick and heal the injured,  
To strive to cure and comfort when others cannot.  
As diverse as the people they serve,  
They are united by their uncompromising dedication  
To excellence, innovation and compassion.  
They are the nurses of The Nebraska Medical Center  
And The University of Nebraska Medical Center.  
The work they do and the results they achieve  
Can only be called... extraordinary.
The Lied Transplant Center, which opened in early 1999, is a world model for solid organ, bone marrow and stem cell transplants and cancer care. The center employs a unique approach to patient care called Cooperative Care.

This unique health care model pairs the patient and a care partner (usually a family member or friend) with physicians, nurses, nutritionists, pharmacists, therapists and others to provide comprehensive care, education and support. All care partners play an active and important role during and after a patient’s treatment and recovery period.

Care partners assist in administering medications, monitoring health changes, attending informational classes, providing emotional support and more. The Cooperative Care environment allows both patients and care partners to learn the skills and gain the confidence they will need before they return home. Cooperative Care helps contribute to more accurate diagnoses, more effective treatments, successful outcomes and faster recoveries, which together can result in greater patient satisfaction and lower health care costs. Our Lied Cancer Treatment Center is open for chemo therapy and professionally staffed 24 hours a day.

Care partners and patients stay in comfortable and attractive suites in a home-like setting. Each suite includes a private bedroom, separate sitting room, bathroom, kitchenette, two TV/VCRs, and high-speed Internet connections. The Center also includes the convenience of a resource center, an exercise room, laundry and dry cleaning, playrooms for children, room-service and a private dining room for our guests.
Fred & Pamela Buffett Cancer Center

Fred & Pamela Buffett Cancer Center facility is scheduled to open in 2017. Health care providers and researchers will work side-by-side in state-of-the-art, integrated facilities to speed up breakthroughs in the lab and ensure personalized patient care. The largest project ever on campus, the $323 million facility consists of a 252,000 square foot cancer research tower and 323,000 square foot clinical treatment facility which includes ambulatory and inpatient services.

As the only National Cancer Institute-designated cancer center in Nebraska, the Fred & Pamela Buffett Cancer Center provides the best in science and clinical practice.
International Patient Services

SERVICE BEYOND EXPECTATIONS
The office of International Healthcare Services (IHS) customizes all healthcare programs to meet the unique needs of each of our international patients. All arrangements for visits are handled through our office with courtesy and professionalism, helping patients and their families in accessing the superb care that is the signature of UNMC/TNMC.

REVIEW OF MEDICAL RECORDS AND CONSULTATIONS
Patients’ medical records can be faxed, mailed or electronically transmitted to IHS, along with applicable films and test results. Our physicians carefully review medical histories to determine the best course of treatment and whether it will benefit a patient to travel to Omaha to receive this treatment. When necessary, IHS will arrange preliminary telephone consultations or video-conferencing between patients, their personal physicians and our specialists. We then provide the fastest possible response regarding each patient’s selection to receive treatment at our facilities and, if selected, the length of time a patient needs to spend in Omaha.

DOCTOR APPOINTMENTS
We efficiently coordinate all scheduling of a patient’s medical treatments, follow-up health care visits and confirmation of the patient’s appointment schedule.
PATIENT COORDINATOR
With one phone call from a referring physician or patient, a patient care coordinator is assigned to organize all aspects of a patient’s visit, including appointments, scheduling, medical care, financial clearance, translation, transportation and lodging. A patient care coordinator personally assists each patient throughout his or her stay in Omaha. Upon request, the patient coordinator will also help with cultural and religious preferences. We are respectful to each patient’s cultural background and to concerns about living far from home.

UPDATING REFERRING PHYSICIANS
IHS keeps referring physicians informed about their patients’ care on a periodic basis throughout the treatment period. When a patient returns home, we regularly confer with the referring physician on the patient’s progress as well as on any necessary follow-up care.

LANGUAGE INTERPRETATION
We provide interpreters to facilitate communication with our physicians, nursing staff and other hospital personnel. Interpreters in a wide variety of languages, plus signing, are available on request.

INTERNATIONAL AIR AMBULANCE
When requested, IHS will oversee arrangements for international jet ambulance services to bring patients to our hospital. Local helicopter ambulance service is also available.

COST ESTIMATES, FINANCING AND BILLING
After our physicians have reviewed a patient’s medical history, we provide advance estimates for all charges. IHS financial counselors will handle deposits and assist patients with other financial matters before, during and after their visit, including the completion of financial and other forms to facilitate settlement of a patient’s medical expenses. We also provide notary services.

We are here for you for whatever your patient’s needs may be...
BUSINESS AND RESOURCE CENTER
IHS, in cooperation with The Lied Transplant Center, offers international patients and their families the complimentary use of an on-site resource center. This facility has a small library and is equipped with a fax machine, copier and computers with e-mail, Internet and World Wide Web connections. Guest services staff will be on hand to help locate web sites or chat rooms of medical interest to patients.

THE LIED TRANSPLANT CENTER
ACCOMMODATIONS
Upon special request and subject to availability, we will arrange for a patient’s accommodations at The Lied Transplant Center’s inpatient suites located within the hospital facility. All suites consist of two rooms and include not only many of the comforts of home, but numerous amenities and are Internet-ready to serve the medical, business and personal needs of patients. A guest services coordinator and chef are on staff at the center.

ACCOMMODATIONS
IHS helps patients and their families find long- or short-term accommodations that best suit their individual preferences and budgets. We will arrange for discounted rates at local hotels or apartments when reservations are made through our office. Our coordinator will assist in procuring requested VIP accommodations.

LOCAL TRANSPORTATION
An IHS representative will greet patients and their families at the Omaha airport and accompany them in a limousine to their living quarters. We will provide limousine transportation to the airport after a patient’s recovery period and help arrange other transportation needs in Omaha.

TRAVEL
IHS assists patients and their family members with travel arrangements to our facilities, including air transportation to Omaha. In addition, at the patient’s request, we can help with necessary paper work to obtain travel visa.

SPECIAL DIETS
We are sensitive to patients’ and their families’ special dietary needs and restrictions and will, in coordination with the medical staff, provide suggestions for healthful and satisfying meals.

CONCIERGE SERVICES
On request, our staff will make arrangements or reservations for restaurant, entertainment, sightseeing, shopping and golf excursions.

EXECUTIVE PHYSICALS AND OTHER MEDICAL SERVICES
We offer several comprehensive physical check-up options for international executives. One- or two-day physicals are tailored to meet the time constraints of busy executives and their families. Any special tests or appointments with our physicians can also be scheduled at the same time as an executive physical.

PUBLICATIONS
IHS keeps patients and their physicians informed of the latest medical advances at our facilities and of any additions to our services.

HEALTH INFORMATION WEBSITE
International physicians, healthcare providers, patients and their families can learn about the latest health news and information by visiting the IHS Website at http://www.unmc.edu/international. The IHS Website will include a health library, prescription drug encyclopedia, important medical links and health care articles.
PERSONALIZED PATIENT PACKAGE

Our comprehensive, personalized international patient package includes:

• Details of our treatment program
• Description of our admission policy
• A copy of our policies in a patient’s native language
• Explanation of our requirement for deposit and payment of medical expenses
• A blank form for the patient’s medical history, which will be used for a pre-treatment evaluation by our physicians
• Estimate of the duration of treatment for specific types of procedures
• A guide for patients on procedures for scheduling medical services, whether for physician appointments, diagnostic testing or inpatient care
• A list of non-medical related services such as assistance with travel arrangements, air and ground ambulance, transportation to and from the airport, hotel arrangements and other personal services
• Information on the availability of translators or signers and other associated services
• Background information on our medical center, its comprehensive services and other pertinent medical information
• Information on the city of Omaha

Downtown Omaha, Nebraska
Over the past decade, we have established international collaborative partnerships with 123 institutions in 44 countries.

Hundreds of international patients have chosen to come to our institution for specialized care, especially for complicated cancer cases, lymphomas, transplantation and neurology.

Our office of International Healthcare Services (IHS) opens doors for international institutions and individual physicians to create strategic international collaboration programs with University of Nebraska Medical Center/The Nebraska Medical Center. With a unique combination of pioneering medical innovation, advanced treatment options, technical know-how, research and exchange programs, problem solving skills and resourceful solutions, we provide the best strategic partnership programs in the medical sector. Our International Professional Strategic Collaboration Programs offer distinctive benefits to our global partners, including no cost customized training programs:

**PATIENT REFERRALS**

We assure our international partners that their patients will receive the very best in medical care. Our collaboration can offer these patients the possibility of an extended life or a cure, under the care and treatment of medical teams headed by internationally respected physicians and specialists.

**CONSULTING COLLABORATIONS**

Early detection of cancer is a major step toward a successful outcome. It’s a sad fact that often when an international patient arrives for treatment in the U.S., the disease has reached an advanced stage and limited treatment options may be available. Through our Collaboration programs, we work closely with our international partners to determine the most appropriate treatment plans, and to prevent potentially dangerous time delays. As early as a patient’s first visit, you can contact TNMC through the International Healthcare Services immediately via video-conferencing, telephone or fax to discuss
the diagnosis. The individual or institution’s physician-counterpart will retain complete independence over a patient’s treatment programs, but can greatly benefit from the discussions and experience of our renowned physicians and the latest treatment options available. Our specialists will be available for consultation with your patient on an ongoing basis throughout the course of treatment, and we can arrange for patient visits to our facilities in Omaha for further tests, evaluation and treatment, when necessary. Our mutual alliance will help provide your patients with the very best medical care from the onset of their diagnosis.

**PERSONALIZED CARE FOR YOUR PATIENTS**
With your call as a referring physician, IHS will assign a patient-care coordinator to organize all aspects of your patient’s visit to our facility.

**ELECTRONIC REFERRAL AND 2ND OPINION CONSULTATION**
As our strategic Collaborator, you’ll be able to consult with the finest specialists at TNMC. We offer extensive referral, consultation and video-conferencing programs utilizing state-of-the-art technology for transferring patient history and patient test data.

**THE BEST TECHNOLOGY**
TNMC establishes strategic alliances with international institutions by providing tele-health programs which transmit medical information and images among locations via secured Internet platforms. Our program makes possible the exchange of real-time interactive diagnosis and electronic consultations for a wide variety of medical specialties. This technology allows specialists at TNMC to study patient reports and histories, pathology slides, X-rays and other radiological images from our international collaborating physicians. Our institutional and individual healthcare professionals have an excellent opportunity to participate in the medical, research, educational and economic benefits derived from developing tele-health programs with us. TNMC is one of only a few U.S. medical institutions providing such extensive, high-tech services to physicians and medical institutions around the world.

**TELE-EDUCATION OPPORTUNITIES**
In collaboration with University of Nebraska College of Medicine, we have developed creative tele-education programs which can be customized for our international partners. Our programs will provide the latest, most advanced medical, research, educational and economic information available.

International Healthcare training participants from India (top) and from Saudi Arabia (left)
VENUES FOR CLINICAL STUDIES
When new procedures and equipment are developed by TNMC research teams, qualified strategic collaborative partners can participate with us in conducting clinical trials.

EDUCATIONAL EXCHANGE PROGRAMS
We provide rewarding educational, physician-exchange and student-exchange programs for our international partners.

- On-line Exchange Programs: Our extensive programs make use of the latest technology to provide our international collaborative partners access to advanced health care education and medical technology.

- Fellowships and Exchange Programs in the U.S.A.: We offer your specialists, medical staff, administrators and others the opportunity to learn the many aspects of medical and administrative operations by spending, as little as two weeks to a maximum of six months, as observers at the various medical specialties within our institution. They can also take advantage of our extensive medical library and research materials, and have access to our vast on-line research capabilities. We also offer limited positions in various fellowship programs on a merit basis.

- Remote Training Programs: We provide specialized training programs at our partners’ facilities. Such missions can be meaningful in training large numbers of your medical staff. We can customize a wide variety of programs since UNMC is a fully accredited, highly respected academic medical center with colleges of Medicine, Nursing, Pharmacy, Dentistry, Allied health, Public Health and Ophthalmology.

- Research Programs: Our international programs present dynamic opportunities for global cooperative efforts in research. Joint research activities can be arranged at our transplant and other research facilities. Limited research programs can take place at our renowned UNMC Eppley Cancer Center/ Fred & Pamela Buffett Cancer Center, a founding member of the prestigious National Comprehensive Cancer Network (NCCN). Our team of researchers can also participate in research projects organized by our collaborative partners at their facilities.

NO-COST TRAINING PROGRAMS
We have developed special, no-cost training programs for qualified international collaborative partners in developing countries. Please contact Nizar Mamdani, Executive Director, IHS, for details on all our no-cost and for-fee programs.
Second Opinion & Tele-Pathology

We offer Electronic Tele-Pathology and 2nd Opinion consultation services. These services allow healthcare colleagues to utilize over 50 sub-specialties at our pathology and genetics facilities. You are welcome to obtain consultation, pathology reviews and recommendations for treatment for the most complicated cases in collaboration with our world renowned specialists.

TNMC’s Second Opinion services also provide a remote tele-health consultation. The Second Opinion may, in some special cases, be the first step to facilitate a patient referral to TNMC.

The process is secure, quick and convenient; you will receive a professional Second Opinion from our renowned Specialists and Pathologist in a matter of a few days, and with a discounted cost.

TELE-PATHOLOGY

Our Tele-Pathology service will allow you to immediately send digital Images for the review to our world renowned multi-specialty pathology experts and seek a 2nd opinion within minutes, without added processing time and cost associated with preparing a second cut of slides. Specimens would no longer need to be sent to our department.

The cutting edge technologies used at TNMC helps pathologist to experience the benefits of digital pathology, including tele-pathology, image analysis, rich media reports, virtual tumor boards and remote 2nd opinions. The system integrates silos of information such as, the Laboratory Information system, radiology images, gross images, online references, and differential patient information with digital images of pathology slides. These features provide the necessary information to make an objective diagnosis.

The services we provide include: quality assurance cases, second opinion cases, complete consultation cases.
LYMPHOMA
Since its founding 25 years ago, specialists and researchers at The University of Nebraska Medical Center program have been pioneers in the field and are recognized internationally for a number of ground-breaking advancements, such as the study and introduction of autologous transplantation by James Armitage, MD, Margaret A. Kessinger, MD, Julie Vose, M.D. and their colleagues.

The UNMC Stem Cell Transplantation program has been ranked as one of the busiest adult and pediatric Stem Cell Transplantation programs in the world. The program, which was established in 1983, has been recognized internationally for pioneering autologous transplantation for lymphoma, using peripheral stem cells as an alternative rescue product; conducting ground-breaking transplant studies; and performing transplants in alternate settings other than traditional inpatient hospital units. Patients with lymphoma who come to UNMC may live locally or may be referred to us from all across the country and other countries of the world. Patients come for consultation, initial diagnosis, standard chemotherapy, participation in clinical research trials, or Bone Marrow/Stem Cell Transplant (autologous or allogeneic).

• UNMC was one of the first to successfully use a patient’s own stem cells as a viable treatment for Lymphoma. And the center’s scientists have developed numerous new drugs, helped create WHO’s current Lymphoma Classification System and is a leading International research centers.

• UNMC oncologists have completed more than 4,000 stem cell transplants, treating patients from every continent around the world.
UNMC researchers were major contributors (along with researchers from five other institutions) in the findings which showed that diffused large B-cell lymphoma, the most common form of non-Hodgkin’s lymphoma, are actually two distinct diseases.

UNMC researchers helped develop the diagnostic breakthrough with Burkett’s lymphoma. Difficulties in the distinction between Burkett’s lymphoma and diffused large-B-cell lymphoma may be resolved by the use of gene-expression patterns. This study is detailed in The New England Journal of Medicine (June 2006).

UNMC introduced treatment with SGN-35, the first Hodgkin’s Lymphoma treatment approved by FDA since 1977. As one of the hospitals participated in the clinical trials for SGN-35, Nebraska Medical Center oncologists saw the promising results first hand: 73% of the patients had their tumors shrink or disappear. The treatment is a monoclonal antibody with chemotherapy attached to it. It works by delivering the chemotherapy directly to the cancer cells and bypasses the normal, healthy cells. The targeted “smart bullet” approach lessens the side effects of the chemotherapy.

UNMC oncologists have completed more than 4,000 stem cell transplants, treating patients from every continent around the world.

The Nebraska Lymphoma Study Group, one of the only efforts of its kind in the country, brings together the Center’s pathologists and oncologists with others in the community to determine the best treatment for patients.

UNMC’s Julie Vose, M.D.-Professor & N/M Harris Oncology Professorship, has been elected president of the American Society of Clinical Oncology (ASCO) for a one-year term beginning in June 2015. Dr. Vose will take office as president-elect during the ASCO annual meeting in Chicago in June 2014.

Stem Cell and Bone Marrow Transplantation

University of Nebraska Medical Center is celebrating a significant milestone this year. The Bone Marrow and Stem Cell Transplant Program at University of Nebraska Medical Center, known for its innovation and success in stem cell transplantation, celebrated its 25-year anniversary in 2011.

The program was founded in 1983 by James Armitage, M.D., Editor-in-chief of The ASCO Post, hematologist/oncologist at UNMC and Shapiro Professor of Medicine, world renowned for his clinical research in lymphoma and bone and stem cell transplantation. Drawing patients from across the country and around the world, the Bone Marrow and Stem Cell Transplant Program is ranked as one of the busiest adult lymphoma and pediatric programs in the country. The program averages 150 transplants a year and has performed more than 4,000 transplants since its founding.

The first of these revolutionary achievements was the study and introduction of autologous transplantation by Dr. Armitage and his colleagues at University of Nebraska Medical Center, which served as the starting point and foundation for the program’s success.

Another milestone in the field of bone marrow and peripheral stem cell transplantation was the development of stem cell transplantation, which was introduced in 1984 by Margaret Kessinger, M.D., hematologist/oncologist at UNMC. The use of peripheral blood-derived stem cells, as opposed to bone marrow-derived stem cells, has become the standard of care for transplantation. This has helped improve outcomes for autogolous transplant patients, contributed to much quicker recovery times and decreased infection rates. Peripheral blood-derived stem cell transplant is similar to bone marrow transplant except the cells are collected from those circulating in the blood rather than bone marrow. Bone marrow is the spongy tissue found inside the bones. It produces the body’s blood cells and cells of the immune system. The blood cells of the bone marrow, white blood cells, red blood cells, platelets and others, all come from one type of cell called the stem cell.

Physicians and researchers have also been extensively involved in the study and use of colony stimulating factors, also called growth factors. Growth factors are drugs that are used to stimulate the growth of cells before the
collection of stem cells and are used during and after transplant. “By being able to stimulate and increase the growth of stem cells after transplant, today we are seeing decreased infections, lower death rates, fewer transfusions and reduced recovery time in the hospital,” says Dr. Vose.

• Other important treatment advancements that have had a significant impact in improving the outcomes for patients, says Dr. Vose, include improvements in supportive care techniques, anti-rejection medications and the ability to prevent and treat complications, especially infections.

BMT Clinical Trials
• The program is also part of the National Institutes of Health/National Cancer Institute Bone Marrow Transplant Clinical Trials Network. This is a consortium of 16 transplant centers across the country that collaborate on clinical trials in order to derive data from a larger population of patients and to allow for greater sharing of information between centers. Through this network, doctors can study and refine their techniques to diagnose, treat and follow patients to provide them with optimal care.

• “There’s no program like ours at University of Nebraska Medical Center in the region”, notes Theresa Franco, Executive Director of the Cancer program. “We have experienced physicians focused around specific diseases, an investigational mentality and pioneering treatments. We have built this program on total commitment, total expertise and total engagement of our patients and families.

LEUKEMIA

University of Nebraska Medical Center offers promising leukemia treatment, such as blood and marrow transplantation, as an option for patients. The medical center is recognized by the National Cancer Institute (NCI) Designation and National Comprehensive Cancer Network (NCCN) as one of the nation’s leading leukemia treatment centers.

• New leukemia treatments, developed in clinical trials in partnership with the University of Nebraska Medical Center, become available to patients and are part of comprehensive approach to cancer care.

• The UNMC Leukemia Team provides consultations and second opinions as well as state-of-the-art treatment. Treatment may be a standard treatment or participation in a clinical research trial.

• The UNMC Leukemia Team offers a full spectrum of bone marrow and stem cell transplantation options, including mini transplants, unrelated donor transplants and cord blood transplants. (The UNMC Leukemia Team works together closely with a referring oncologist or primary care provider to customize your treatment according to your needs and preferences)
OTHER CANCER CARE PROGRAMS
UNMC offers patients the most comprehensive cancer treatment options. For the best possible outcome in cancer care, the medical center is the place to begin cancer treatment for:

• Breast Cancer
• Gastrointestinal (GI) Cancers
• Lung Cancer
• Head and Neck Cancers
• Multiple Myeloma
• Pediatric Cancers
• Prostate Cancer
• Gynecological Cancers
• Blood and Marrow Transplantation
• Brain and Spinal Cord Tumors

A multidisciplinary approach to care is having a whole team of specialists review each case and agree on the best course of treatment. A patient’s primary care physician will appreciate the comprehensive approach to care and communication with the team of specialists. UNMC focuses on a multidisciplinary approach to care with nationally recognized programs in:

• Surgical Oncology
• Chemotherapy and Medical Treatment
• Radiation
• Clinical Trials

When the treatment is successful and the cancer is in remission, the Survivorship Program exists to transition each patient back into the care of their primary care physician in their home countries. Beyond the treatment of cancer, physicians at the medical center treat the emotional and physical needs of each patient as well. Cancer support services are available to help patients maintain emotional and financial health while getting cancer treatment.

EPPLEY CANCER CENTER/
FRED & PAMELA BUFFETT CANCER CENTER

• The UNMC’s Fred & Pamela Buffett Cancer Center/Eppley Cancer Center exists as a partnership between the The Nebraska Medical Center (TNMC) and its clinical teaching hospital, University of Nebraska Medical Center in Omaha.

• The mission of the UNMC is to coordinate basic and clinical cancer research, patient care and educational programs and to facilitate the application of new knowledge about the diagnosis, treatment and prevention of cancer.

• In a true spirit of collaboration, the goal of the cancer center is to combine research and educational excellence from UNMC colleges and institutes around the world to offer outstanding clinical expertise and state-of-the-art facilities maintained by The Nebraska Medical Center. Patients from across the country and around the world visit this cancer center to receive innovative treatment from some of the top specialists in the world.

• Established in 1983, the center is honored to be one of only 64 centers in the country to receive the National Cancer Institute (NCI) designation. University of Nebraska Medical Center is the first hospital in Nebraska to receive the Blue Distinction Center for Complex and Rare Cancers from Blue Cross and Blue Shield of Nebraska. Only 88 other medical centers in the United States have earned the same distinction. Blue Distinction Centers for Complex and Rare Cancers were developed in strategic collaboration with the National Comprehensive Cancer Network (NCCN) and input from a panel of leading clinicians and professional organizations. University of Nebraska Medical Center is proud to be a founding member of the NCCN.
PEDIATRIC ONCOLOGY

In the United States alone, more than 13,000 children are diagnosed with cancer each year. One in 300 will be boys. One in every 333 girls will develop cancer before their 20th birthday. Cancer remains the leading cause of death after accidents in children younger than 15 years in the United States. More than 100,000 person-years of life are lost to childhood cancer each year.

Childhood cancer has been a model for improvements in diagnosis and treatment of malignancy. Over the past 20 years, death rates have declined and five-year survival rates have improved dramatically. Acute lymphoblastic leukemia (ALL) is the most common of all childhood cancers and its survival rate has improved from 50 percent in the mid 1970s to 90 percent currently.

• At UNMC, the Pediatric Oncology/Hematology Program has healthcare specialists who collaborate with an extended team of case managers, nurses, social workers, child life specialists, education support personnel and data managers.

• Pediatric transplants are another component of the Bone Marrow and Stem Cell Transplant Program. Started by Peter Coccia, M.D., hematologist/oncologist at University of Nebraska Medical Center, in 1987, the program has performed more than 335 transplants. Transplants in the pediatric population are normally reserved for patients with more aggressive disease and is far less common than adult transplants. The majority of pediatric transplants are performed on patients with acute lymphoblastic leukemia. More than 80 percent of these patients will be cured with conventional chemotherapy, says Al Grovas, M.D., hematologist/oncologist and clinical director for the Pediatric Bone Marrow and Stem Cell Transplant Program, leaving about 20 percent of patients who will need a stem cell transplant. “The knowledge curve has risen steadily since the first pediatric transplant in 1987,” says Dr. Grovas. “And with that, improved success rates have followed suit.”
SOLID ORGAN TRANSPLANTATION
The University of Nebraska Medical Center carved out a reputation for excellence 25 years ago through its pioneering liver transplant program.

- About 240 U.S. hospitals performed organ transplants in 2013, while the number of available livers, kidneys, hearts and other organs has remained almost static over the past six years. University of Nebraska Medical Center is home to one of the most reputable and well-known transplant centers in the country. As one of the busiest centers in the Midwest, our patients benefit from the experience and expertise of our transplant team. Our solid organ volume continues to rank us among the top transplant centers in the US and internationally. University of Nebraska Medical Center, UNMC’s hospital partner, continues to perform large numbers of kidney and liver transplants and is a national leader in transplanting intestines.

- UNMC’s past Chancellor Harold Maurer said “the medical center has won international recognition for transplantation and generated pride”. The hospital transplants five organs, including hearts. Maurer said transplant hospitals are all over the country. “People go to the best place with the best results,” he said.

- UNMC celebrated its 40th anniversary of Kidney Transplant Program by performing over 5,000 (including 3146 Just Kidney) transplants. We also celebrated 25 years for our Liver Transplant Program, completing more than 2,600, 3,020 liver transplants and 397 small bowel transplants. We are one of the first centers and pioneers in Bone Marrow and Stem Cell Transplants. We are only one of the four US institutions for pediatric and adult Intestinal and Small Bowel Transplants. We have been recognized for Outstanding Stroke and Cardiovascular Care in 2011 for a second consecutive year.

- UNMC also celebrated a significant milestone in 2011, by pulling together patients, physicians and medical staff to mark the 100th heart transplant performed since the program was re-established in 2005. With the continued growth and expansion of the cardiac failure team and the Heart

Transplantation Program it is not hard to imagine the celebration for the 200th heart transplant will be here very soon.

- In a significant complement to our Multi Organ Transplant Program; Dr. Alan Langnas, professor of surgery-transplant at UNMC and chief of the Transplant Center at University of Nebraska Medical Center has been elected to serve as the American Society of Transplant Surgeons (ASTS) president through July 2014 (ASTS is composed of about 2,000 transplant surgeons, physicians, scientists, advanced transplant providers and allied health professionals.)
INTESTINAL TRANSPLANTATION
In 1990, UNMC transplantation specialists were among the first to recognize patients suffering from the complications of intestinal failure and began performing liver and intestinal transplants. In 1993, we became one of the first medical centers to perform isolated intestinal transplants. In 2000, we formalized our Intestinal Rehabilitation Program, providing a successful alternative for selected patients suffering from intestinal failure. Today, UNMC is one of a few facilities with expertise in intestinal failure and one of the busiest programs in the United States. Innovation, solid outcomes and high patient survival rates have distinguished our center as a leader in intestinal transplants.

• UNMC is one of the original Medicare-designated centers to perform multivisceral (transplanting multiple organs of the digestive system) and intestinal transplants for pediatric and adult patients in the nation.

Intestinal Rehabilitation Program
• The Nebraska Medical Center formally developed the Intestinal Failure Program in 2000 to provide consultation, management and long-term follow-up to adults and children with intestinal failure and short-bowel syndrome. Today, the program treats patients from all over the world and has gained global recognition for its innovative and multidisciplinary approach to the care of these individuals.

• Our program provides a multidisciplinary team approach to intestinal failure and offers patients focused and customized care. Specialists on our team have expertise in hepatology, gastroenterology, psychology, child life and surgery for both adult and pediatric patients. Continuity of care is accentuated with specially-trained transplant nurse coordinators, social workers, nutritionists, pharmacologists and patient financial counselors, as well as volunteer services.

• We provide some of the most comprehensive outpatient and follow-up care in the country, helping our outcomes and survival rates exceed national averages. Our intestinal failure team provides extensive support and education to patients and their families throughout the transplant journey, and even after they return home.

SURGICAL ONCOLOGY
UNMC has a robust surgical oncology program offering patients unique treatment options not available elsewhere. The program offers a comprehensive approach to cancer care with the largest number of fellowship-trained surgical oncologists in the Midwest.

Breast cancer Radio Active Seed
What used to begin with the sometimes painful placement of a wire in the patient’s breast to mark the location of the tumor can now be done with a much more precise and less painful method.

Doctors call it radioactive seed localization, or RSL. The process uses a thin needle to place a tiny radioactive seed directly on the cancerous lump. It acts as a beacon on which the surgeon can hone in; removing the lump, the seed and ideally, cancerous tissue in the margins around the lump.

This procedure is less painful and allows patients to avoid the likelihood of a second operation to clear more cancer. The seed is the size of a pencil lead. The location of the tumor is mapped. This procedure also allows the scar to be placed in a cosmetically preferable place. The radiation in the seed is not dangerous. It gives off only enough radiation to act as a marker for the surgeon. There is no chance of causing any radiation damage.

Partial Breast Irradiation (PBI)
Intrabeam is low-energy radiation therapy, which has been FDA approved, offers two advantages to traditional radiation therapy. First, it provides a targeted dose of radiation therapy to the surgical site at the time of surgery, rather than delivering total breast radiation. Secondly, it may eliminate the six-week daily regimen of radiation therapy that normally accompanies lumpectomy without compromising the outcome. University of Nebraska
Medical Center is one of only 13 hospitals in the country approved to use Intrabeam. MammoSite® 5 day targeted radiation therapy is a direct radiation treatment option for some early-stage breast cancer patients. After removing a breast cancer tumor, a balloon catheter is placed inside the breast. Targeted radiation therapy is delivered directly to area where cancer is most likely to recur, allowing a full course of radiation to be delivered in just five days.

**Intraperitoneal Hyperthermic Chemotherapy (HIPEC)**
A treatment called Intraperitoneal Hyperthermic Chemotherapy (HIPEC) or hot chemo is available at UNMC. This approach is well-suited for treating cancer in the abdominal cavity since the organs and inner abdominal wall are at risk, and the cancer cells can spread from one area to another. After removing the visible tumors, surgeons actually close the abdomen, and fill the abdominal cavity with the heated chemo and bathe all the organs with the solution, to kill the microscopic cancer cells which almost certainly still remain.

**ROBOTIC SURGERY**
The robotic surgical system combines robotics and computer-enhanced technology with the skill and expertise of our physicians to provide patients a minimally invasive alternative to surgery that is more accurate and precise than ever before.

University of Nebraska Medical Center is one of the nation’s leaders in the use of robotic surgery and was one of the first sites in the country to acquire the technically advanced robotic da Vinci™ Surgical System. This sophisticated technology provides surgeons with intuitive control, range of motion and incredible precision and accuracy, while minimizing the impact on the body. Through 3-D visualization the surgeon is able to perform intricate tasks through small ports about the size of a dime as opposed to a large incision. For the patient, this means improved outcomes, fewer complications, less recovery time and less discomfort after surgery.
INNOVATIONS IN EYE TREATMENT-
PROLIFERATIVE DIABETIC RETINOPATHY

The Truhlsen Eye Institute offers state-of-the-art eye care in many eye subspecialties as well as routine prescription and optical shop services.

• One of its new laser is helping experts at the Institute provide better treatment for eye diseases. This advanced laser can prevent blindness for some patients with serious conditions.

• “This new laser with yellow light is currently the only one of its caliber in the U.S., and there’s only one other being used in the world right now,” said Quan Dong Nguyen, M.D., the McGaw Memorial Endowed Chair in Ophthalmology and the director of the Truhlsen Eye Institute.

• The Institute provides treatment from the laser for Proliferative Diabetic Retinopathy, the most severe stage of eye disease caused by diabetes. “This laser is the most cutting-edge laser device available today,” said Diana Do, M.D., associate professor of ophthalmology and director of the Carl Camras Center for Innovative Clinical Research at the Truhlsen Eye Institute.

• The laser provides treatment for various rare eye diseases, including retinal vein occlusion, neovascular glaucoma, and retinal tears. In addition, with micropulse application capability, it also can be combined with other therapies to treat diabetic macular edema, the most common cause of moderate vision loss for diabetes patients.

• University of Nebraska Medical Center also offers Advanced Treatment Options in Ocular Imaging Technology - Diagnosis and Management of Primary Intraocular Lymphoma.

Quan Dong Nguyen, M.D.,
McGaw Memorial Endowed Chair in Ophthalmology and
the director of the Truhlsen Eye Institute.
Neurology Recognitions

- Gold Seal of Approval from the Joint Commission: the first nationally certified stroke center in the state of Nebraska
- The American Heart Association and the American Stroke Association Get With The Guidelines® Stroke Performance Achievement - Gold Plus award
- Neurosurgery is ranked by US News and World Reports as One of the Nation’s best hospitals in Neurosurgery in 2013. UNMC’s Neurosurgery department is made up of several programs which cover entire spectrum of neurosurgical disorders. Dedicated specialists have interests and fellowship training in a full range of disorders that cause pain and disability.
  - Degenerative disk disease
  - Fractures
  - Herniated and ruptured disks
  - Spinal cord tumors
  - Spinal stenosis
  - Spine injury
Epilepsy Program

- University of Nebraska Medical Center was rated one of The Best Hospitals in the country by US News and World Reports in 2012-2013 for its Neurology and Neurosurgery program. We have a very active and successful Epilepsy program in the world. Other specialties include: Brain and Spine tumors, Memory Disorder (Alzheimer’s disease & Dementia), Movement Disorders (Parkinson Disease), Multiple Scleroses), Neurosurgery, Neuromuscular Disorder, Pain management, Psychology and Neuropsychology.

- UNMC provides advanced treatment for patients to treat Epilepsy. At its Level-4 epilepsy center, it offers the most advanced medical and surgical treatments and diagnostic measures for Epilepsy, for both adults and children. Its well trained and dedicated team offers comprehensive Epilepsy care for people with even the toughest seizure disorders. With advanced tools and technology such as Magnetoencephalography (MEG), we are able to noninvasively diagnose and localize many types of epilepsy that eluded treatment in previous eras.

- UNMC is one of only about a dozen clinical sites in the country to have a MEG scanner. This technology is the best thing that has happened to neurosciences in a long time,” said Dr. Singh, former director of the MEG Center at UNMC. MEG will also allow doctors to explore and gain a better understanding of other neurological and psychiatric diseases like depression, schizophrenia, autism, dementia, Alzheimer’s disease and Parkinson’s disease.

- UNMC provides epilepsy therapies to patients that were not available in even as recently as two years ago, with a large number of those involving multiple-stage approaches, where intracranial EEG electrodes are placed for the most precise localization and resection of epileptic tissue. We also provide other surgical services, including Vagus Nerve Stimulator (VNS) implantation, and more traditional epilepsy surgeries such as Temporal Lobectomy. Availability of implantable brain stimulators and drug delivery devices are on the horizon.

Resective Surgery

- The surgical treatments of Epilepsy available to each patient depend on the particular case. The goal of surgery is to disrupt or remove the brain circuits that are responsible for seizures while persevering as much brain tissue as possible in an effort to protect speech, language, memory and movement.

Stroke

- Stroke Center is accredited and recognized in the state for quality stroke care and continuing education. Our specialists, nurses and medical technicians are dedicated to continuing stroke treatment and education in their specialties. As a result, patients may indicate fewer complications while at the hospital and are able to leave the hospital sooner.

PAIN MANAGEMENT

A combination of therapies including medical interventions, psychological interventions, self-help, physical therapy or surgery may be used. The medical center uses the newest, most advanced and comprehensive approaches to managing acute or chronic pain.

A story of success

In early 2010, the then 60-year-old Walt Slobotski experienced debilitating pain that altered his daily life. Everyday tasks were becoming unmanageable and even something as simple as lifting his arm to shave in the morning was painful. Furthermore, he was unable to play golf. Fast forward to the present and Slobotski is just as active as he has ever been thanks to treatment and pain management by Madhuri Are, MD, pain management specialist. In January 2010, he experienced what he thought was neck pain, but after seeing his primary care physician, he found out the pain stemmed from his back. He tried physical therapy, but it wasn’t helping. The pain persisted and intensified.
“I had to crawl down the steps backwards to get into a car to go to the emergency room – the pain was that bad,” he said. “I even had to be pushed in a wheel chair for a while.” On a scale of 1-10, with 10 being the most severe, Slobotski rated his pain a 9.5. He then went and saw a physician at another hospital. The diagnosis they gave him was a compression fracture.

Slobotski sought a second opinion and was referred to UNMC by a family member. Edward Faber, MD, oncology, diagnosed Slobotski with multiple myeloma. In multiple myeloma, a group of plasma cells (myeloma cells) become cancerous and multiplies, raising the number of plasma cells to a higher than normal level. Since these cells normally make proteins (antibodies), the level of abnormal proteins in your blood also may go up.

While in the process of scheduling another appointment, Faber told Slobotski to stick around and that another specialist would be calling him about his pain. “I said I’d do that, but the other hospital told me they couldn’t do anything for me, because I waited too long,” Slobotski recalled.

Instead of a phone call, the cancer pain specialist met Slobotski in person that same day. “I thought, ‘wow, this is different – I don’t have too many doctors come see me,’” he said. “And that was my first introduction to Dr. Are. She had reviewed my MRI and said she could help me, but we have to move fast.”

Dr. Are discussed treatment options with Slobotski that would help him return to his active lifestyle he once had.

“He’s an active man and wanted to maintain that lifestyle, so we discussed kyphoplasty to help stabilize the fracture he had at the L1 vertebrae,” Are said. During a kyphoplasty, the physician first inflates a balloon-like device in the bone to make space. The space is then filled with cement to create stability. Are also performed ablation of a tumor in Slobotski’s spine, which also helped alleviate pain.

“I remember waking up in the recovery room after the surgery and there was an immediate pain relief,” Slobotski said. In fact, one of Slobotski’s first questions to Are after the procedure was “when can I start golfing?” Slobotski continues to see Are for treatment and management of neuropathy in his feet that has occurred as a side effect from his chemotherapy treatment. Thanks to the care he received at UNMC, Slobotski continues doing everything he loves to do, including hitting the links. “I would say I can do, anything now that I used to do,” he said. “Thank goodness for Dr. Are and thank goodness for the oncology department at the med center.
Since 1959, Munroe-Meyer Institute has provided statewide services to individuals with developmental disabilities, physical disabilities, and special healthcare needs. In the past ten years, major advances have been made in the area of genetics and prevention of certain types of birth defects, such as spina bifida. The Institute is dedicated to the research necessary to continue prevention and treatment of genetic disease. MMI’s commitment can be seen in the significant advances made at the Center for Human Molecular Genetics.

The Pediatric Feeding Disorders Program provides an interdisciplinary approach to the assessment and treatment of feeding disorders. Our feeding team includes experts from medicine, psychology, nursing, nutrition, speech and/or occupational therapy, and social work. The interdisciplinary team works with you to develop specific goals for your child’s feeding behavior. Feeding behaviors are objectively measured and treatment decisions are data based. Outcomes are assessed regularly throughout the program. A primary goal is to establish feeding patterns, which can be maintained by the caregivers in the home and in other environments. Thus, caregiver training is an essential component to the success of the program.

Program goals

- The Munroe-Meyer feeding disorder programs are Individualized, Observable and measurable. Examples of those goals are: to increase total oral intake to 50% of needs, Increase food variety by 8 new foods, increase acceptance of solid food items to 80% and to decrease in appropriate mealtime behavior to one per minute or less.

Results

- Based on the data we collect on our programs, the program outcome results showed that 90% of the goals set are accomplished by discharge, 80% of patients meet the majority of their set goals (at least 80%).

Cost comparison

- In a cost comparison on the funds needed to secure nutrition needs for patients whom benefit from our feeding disorder program and tolerate oral feeding, against those whom remain dependant on G-tube feeding and TPN. The results show the following:

<table>
<thead>
<tr>
<th>Time</th>
<th>G-tube cost</th>
<th>Pediatric feeding disorder program/ MMI</th>
<th>Saving/ Child</th>
<th>Saving / 20 Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Yrs.</td>
<td>$83,621</td>
<td>$55,620</td>
<td>$28,001</td>
<td>$1,400,050</td>
</tr>
<tr>
<td>5 Yrs.</td>
<td>$189,629</td>
<td>$55,620</td>
<td>$134,009</td>
<td>$6,700,450</td>
</tr>
</tbody>
</table>
In a study published on the Saudi Medical Journal, aiming to observe the pattern of inflammatory bowel diseases (IBD) among the people of Western region of Saudi Arabia and to correlate the findings with published data.

In that retrospective study, All colonic biopsies were reviewed which were received, and processed at the Histopathology Department of King Abdul-Aziz University Hospital, Jeddah, Kingdom of Saudi Arabia, from January 2002 to July 2007. Ethical approval was obtained from the Bioethical and Research Committee. The results showed that there were 711 colonic biopsies received during this period. One hundred and twenty-two patients were diagnosed with ulcerative colitis (UC). There were 65 males and 57 females. The age ranged between 4-73 years. Most of the UC patients presented in adolescence, and in the adult age. Crohn’s disease (CD) was diagnosed in 15 patients, 7 males and 8 females. The age ranged from 1-40 years. Most of the cases were seen in the adult age group.

The conclusion indicated that IBD is certainly one of the major serious colonic lesions in our society, which should be thoroughly investigated by the combined efforts of clinicians and pathologists. We also conclude that gastrointestinal tuberculosis and infective colitis should always be investigated before suggesting the specific diagnosis of IBD. We recommend a broad based epidemiological study, simultaneously involving clinicians, and pathologists, to document the characteristics of this disease in our society.

- The life saving (temporary) alternative is Parenteral nutrition (PN) is feeding a person intravenously, bypassing the usual process of eating and digestion.

<table>
<thead>
<tr>
<th>Time</th>
<th>TPN + G-tube cost</th>
<th>Pediatric feeding disorder program/MMI</th>
<th>Saving/Child</th>
<th>Saving / 20 Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Yrs.</td>
<td>$229,621</td>
<td>$55,620</td>
<td>$174,001</td>
<td>$8,700,050</td>
</tr>
<tr>
<td>5 Yrs.</td>
<td>$554,629</td>
<td>$55,620</td>
<td>$499,009</td>
<td>$24,950,450</td>
</tr>
</tbody>
</table>

Infection is a common cause of death in these patients, with a mortality rate of approximately 15% per infection, and death usually results from septic shock. Fungal blood infections from TPN are especially common in patients getting TPN. As well, Blood clots: Chronic IV access leaves a foreign body in the vascular system, and blood clots on this IV line are common. Death can result from a clot that starts on the IV line but breaks off and goes into the lungs. This process is called a pulmonary embolism.

- The MMI provides Follow up through Tele-health: During tele-health, therapists from the clinic will provide services to patients and their families via a secure internet computer connection. Patients and their families can attend appointments in their home. They will need a computer, internet connection, and a computer camera.

- Tele-health services are critical for two reasons. First, these services will help ensure that patients maintain the progress they made during her day treatment admission. It is proven by experience that children who do not receive follow-up services following day treatment do not maintain the gains the made during day treatment as well and have more difficulty making progress. Second, these services allow patients to increase their oral intake to 100% of her nutritional needs and progress to a more age-typical eating pattern.
UNIVERSITY OF NEBRASKA MEDICAL CENTER
The University of Nebraska Medical Center (UNMC) is recognized nationally and internationally as a leader in research, education and patient care. UNMC had its beginnings nearly 140 years ago as a college of medicine. Today, UNMC’s academic units offer quality education to medical students from across the U.S. and around the world. Direct teaching affiliations are with The Nebraska Medical Center, the Veterans Administration Medical Center and eight community hospitals. Students have access to facilities totaling 2,800 teaching beds.

The **College of Medicine** offers the doctor of medicine degree and graduate medical education in 17 specialties and 12 subspecialties, including family practice.

The **College of Dentistry** offers the doctor of dental science, dental hygiene degrees, and graduate work in seven specialty areas.

The **College of Nursing** offers a four-year bachelor of science in nursing, both for full-time students and registered nurses, seeking a bachelor’s degree. Nurses also may pursue a master’s degree, a post-master’s certificate for graduates seeking additional professional development and a doctoral degree.

The **College of Pharmacy** offers a doctor of pharmacy degree – one of the first in the nation to offer this program – emphasizes knowledge of medication and patient care. The College of Pharmacy provides drug and health information to more than 30 rural pharmacies through a computerized health information network. The pharmacy graduating class of 2013 achieved a 100 percent first-time pass rate on the national pharmacy board exam. This is the fifth consecutive year COP students have had a 100 percent pass rate.
The School of Allied Health Professions offers bachelor’s degrees, post-baccalaureate certificates and professional master’s degrees in 11 specialties, including physical therapy and medical technology. The 187 graduates from all SAHP programs obtained a 96 percent first-time pass rate on licensure and certification examinations.

The College of Public Health partnered with faculty in the College of Pharmacy to develop Doctor of Pharmacy/Master of Public Health dual-degree program. COPH faculty also offers several programs delivered online: Master of Public Health in Public Health Practice, Biostatistics, and Environmental and Occupational Health, and a Master of Science in Emergency Preparedness.

Information Technology became a member of In Common, which enables UNMC faculty, staff and students to use their UNMC ID and password to log into other members’ systems such as the National Center for Biotechnology Information, Cayuse for NIH grant proposal forms and the e2Campus Emergency Notification system.

IT can assist our collaborative partner institutions in support for electronic medical records, cloud storage, accounts receivable reporting, inventory management, expanded wireless access, enhancements to ADIS, improvements in Sponsored Programs, Adverse Events reporting, IRB security, online subsystem reporting, event and training registration, COBRA and direct insurance billing, alumni website, Grid card access for email, Unnamed investment in grants and the UNMC website enhancements.

Graduate Studies and Research Opportunities: UNMC offers graduate study and research programs in anatomy, biochemistry, microbiology, pathology, pharmaceutical sciences, pharmacology, physiology and biophysics.
UNMC’s Munroe-Meyer Institute for Genetics and Rehabilitation includes a center for the diagnosis and treatment of children and adults with developmental, genetic, physical and emotional handicaps and disabilities. The institute also features the state’s only comprehensive genetics laboratory. Areas of specialization include fetal health, genetic counseling, clinical diagnosis, chromosome analysis and amniocentesis. The Department of Internal Medicine at the University of Nebraska Medical Center is represented by more than 100 faculty members, including MDs and PhDs. Faculty members may also be affiliated with University Medical Associates’ primary care clinics and the Omaha Veterans Administration Medical Center. In addition to administration, the department of internal medicine includes 12 sections in general internal medicine and 11 additional subspecialties, including, cardiology; diabetes, endocrinology, and metabolism (DEM); dermatology; gastroenterology and hepatology; general internal medicine; geriatrics and gerontology; infectious diseases; nephrology; neurology; oncology and hematology; pulmonary and critical care medicine; and rheumatology and immunology. Internal medicine offers research opportunities, a medical residency program and continuing medical education programs.

The UNMC Eppley Cancer Center/Fred & Pamela Buffett Cancer Center is the only National Cancer Institute-designated cancer center in a six-state region. The cancer center is also a founding member of the prestigious National Comprehensive Cancer Network (NCCN), an alliance of 17 leading cancer centers in the United States. The basic research component of the cancer center is the Eppley Institute for Research in Cancer and Allied Diseases, which was founded in 1963. Researchers are studying how environmental factors affect cancer development and what mechanisms control cell growth. Basic and clinical researchers unite to develop new diagnostic tests and treatments for cancer.

UneMed Corporation: Transferring innovations in medical technology to the marketplace is an important part of UNMC’s research and public service missions. UNMC’s UneMed Corporation serves as an intermediary between the medical center and industry through research collaborations, joint ventures, new company startups and other industrial relationships.