TABLE OF CONTENTS

1. DIRECTOR’S REPORT
   Carl Freter, MD, PhD, FACP

2. CANCER COMMITTEE CHAIRMAN AND CANCER LIAISON PHYSICIAN REPORT
   Theresa Schwartz, MD
   Jula Veerapong, MD

3. COMMUNITY HIGHLIGHTS OF 2015: FREEDOM FROM SMOKING® CESSATION PROGRAM
   Kathy Klebert

4. CANCER SITE HIGHLIGHT: HIPEC PROGRAM

5. TUMOR REGISTRY

6. NEW FACES IN THE CANCER CENTER
   Dr. Veena D. Divecha, Radiology Oncology
   Dr. Grace Montenegro, Colorectal Surgery
   Dr. Mhd Nabeel Rajeh, Hematology Oncology
1 Director’s Report

Dear Friends and Colleagues in the Saint Louis University Cancer Center Community:

It is my pleasure this year to serve in the role as Interim Director of the Cancer Center and to present to you the Annual Report of the Saint Louis University Hospital Committee and the Saint Louis University Cancer Center.

I think it is fair to say that this has been an extraordinary year. We have seen many changes and are learning to work together with our SSM partners on behalf of our patients. I believe this is a special time for opportunity and growth.

We have continued to see increasing patient volumes, faculty recruitment, and the development of new programs, as well as research programs in both the clinical and scientific arenas. It has been gratifying to help develop several new patient resources including our Supportive Care Clinic, Lung Cancer and Lung Cancer Nodule Screening Clinics, and Women’s Sexual Health Clinic. These clinics will be working with our ongoing clinics in improving our level of care for our patients. My aspiration for the Cancer Center is to provide superlative care to each and every patient. We live in a rapidly changing environment in medicine and we need to be flexible, efficient, and imaginative in continuing to sculpt the structure of our Cancer Center, with our patients being the constant focal point, the light guiding us in all of our service to them.

This report contains the Cancer Committee and Cancer Center Liaison Physician reports, as well as other details of our patient centered improvements and our growing community and patient outreach activities. This report will also highlight some of our newest faculty and staff who have joined us in 2015. At the Saint Louis University Cancer Center, we will remain focused on our goal of providing superlative multidisciplinary patient centered care to all of our patients. Working together as a team, we are driven by our mission of providing superior scientific and therapeutic approaches for the prevention and treatment of cancer.

As a musician myself, I would also give a strong nod of support to our Music Therapy program in spreading music within our Cancer Center and beyond. May 2016 be a wonderful year for music in the Cancer Center!

On behalf of the Cancer Center, wishing you and your family a wonderful Holiday Season,

Sincerely,

Carl E. Freter, MD, PhD, FACP
Professor of Medicine
Director, Division of Hematology and Oncology
Rosalie Fusz Endowed Chair of Hematology
Interim Director, Cancer Center
Our team of specialists at the Saint Louis University Cancer Center pride ourselves on providing the highest levels of academic medicine, with a personalized, compassionate approach. As we look at our continued growth in 2015 and our exciting future, we are poised to enhance our already strong cancer center.

On September 1, we began a new era in exceptional care when SSM Health acquired Saint Louis University Hospital. Immediately, SSM Health announced a $500 million commitment to a new hospital and outpatient care center to be completed in 2020. This new facility will help the SLU Cancer Center offer our patient-centered approach to cancer care in a more personalized setting and provide the latest in technology.

For example, 2016 will see the construction of a new pavilion for our radiation oncology service. Clinical advancements include a new linear accelerator, CT simulator and the ability to provide high-dose brachytherapy.

These efforts promise a bright future to an already strong cancer program that in 2015 saw further accolades.

- We achieved accreditation by the National Accreditation Program for Breast Centers (NAPBC), a program of the American College of Surgeons noting the highest standards of care for patients with diseases of the breast.
- Our Center for Outpatient Blood and Marrow Transplant - the only one of its kind in the region and one of few in the nation – was re-certified by the Foundation for the Accreditation of Cellular Therapy (FACT) as a FACT-accredited Cellular Therapy Program.
- The SLUCare Center for Pancreatic and Biliary Diseases was named one of only 30 institutions in the nation named a National Pancreas Foundation (NPF) Center.

The future of cancer treatment is not a one-size, fits-all approach. It is providing personalized care, specific to a patient’s needs. At the Saint Louis University Cancer Center, we practice that in the present by crafting individualized care plans treating the whole patient, and not just their cancer. As we look forward to our future, we are proud to be part of an exciting time that will play a critical role in cancer care for the St. Louis region.

Theresa Schwartz, MD  
Assistant Professor of Surgery  
Saint Louis University Cancer Committee Chair

Jula Veerapong, MD  
Assistant Professor of Surgery  
Saint Louis University Cancer Liaison Chair
3 Freedom From Smoking® Cessation Program

Saint Louis University has long recognized the need for assistance in smoking cessation and has taken steps to educate and provide resources to improve the chances for success. In September 2014, the Quality & Patient Safety Steering Committee at Saint Louis University set a practice-wide goal to assess patient’s tobacco use status and to provide tobacco cessation counseling for tobacco users. Saint Louis University has highlighted the Tobacco Use Cessation Counseling Best Practice Advisory (BPA) in EHR to address the need to be smoke-free with each time the patient is seen by a clinician. Even if the patient is a “former smoker,” they are assessed for relapse at each visit. In this way, patients that are actively smoking are consistently identified, assessed and assisted with appropriate smoking cessation referrals.

Tobacco use is the number one cause of preventable morbidity and mortality in the United States according to the CDC. Per statistics from the CDC and Missouri Department of Health and Human Services in 2013, the rate of adult smoking in Missouri was 20.6% (higher than the national average smoking rate of 17.8%).

Most smokers make several attempts before they able to successfully quit smoking. The American Lung Association cites that 70% of smokers want to quit. Smokers are twice as likely to quit when they combine the use of counseling and cessation medications. Even a brief intervention by a health care provider can make a major impact and act as an important motivator for attempting to stop smoking.

The smoking cessation program utilized by Saint Louis University is the American Lung Association’s “Freedom From Smoking®.” The program was designed in 1975 by the American Lung Association in collaboration with the American Thoracic Society and Congress of Lung Association Staff. The program was ranked the most effective smoking cessation program in a study by Fordham University Graduate School of Business. It has been proven to be medically and ethically sound, cost-effective and includes a comprehensive variety of evidence-based cessation techniques that are able to be replicated. The Freedom From Smoking® program is based on proven addiction and behavior change models. Participants learn to address the physical, mental and social aspects related to smoking. It has a positive focus and emphasizes better health by reducing long term smoking-related illness, disability and associated costs as well as decreased absenteeism and access to the knowledge and support of the American Lung Association. Participants experience immediate health benefits. Evaluation studies have shown that individuals who participate in Freedom From Smoking® are six times more likely to be smoke free one year later than those who quit on their own.

Tobacco use often requires repeated interventions and according to the American Lung Association an individual will on average attempt multiple times before successfully quitting tobacco. This fact underscores the need for continual assessment and referral to smoking cessation programs. Saint Louis University has had 95+ participants in the smoking cessation program since 2010. It is also noted that a few participants have gone on to quit smoking up to 2 years after completion of the Saint Louis University Cancer Center Freedom From Smoking® Class.

Saint Louis University Cancer Center offers smoking cessation classes at least four times per year and are currently provided free of charge with up to six weeks of nicotine replacement therapy (NRT) provided to those that are unable to afford it or for whom insurance does not cover. Expanding support by providing NRT and free
tobacco cessation classes helps to reduce financial barriers to seeking tobacco treatment. The American Lung Association reports that when used in combination with smoking cessation medication, up to 60% of participants report having quit smoking by the end of the program. The program is available to all patients, faculty, staff or students at Saint Louis University and members of the St. Louis community that are interested in quitting.
CANCER SITE HIGHLIGHT: HIPEC PROGRAM

SLU Hospital Only in the Region to Offer HIPEC Procedure

Surgeons at SSM Health Saint Louis University Hospital continue to see increased interest in hyperthermic intraperitoneal chemoperfusion or HIPEC. As the only cancer program in the St. Louis area performing the procedure, the Saint Louis University Cancer Center offers a unique option for cancer patients with spread of disease inside the abdomen, offering a procedure called cytoreductive surgery with or without HIPEC.

“Over the past four years, we have performed more than 60 HIPECs and almost 20 cytoreductions without chemotherapy,” says Jula Veerapong, MD, SLUCare surgical oncologist who specializes in HIPEC at SLU Hospital. “That type of volume is very strong and has led to outstanding patient outcomes.”

In fact, data at SLU Hospital is comparable to larger national programs with a zero percent 60-day mortality rate.

“HIPEC is truly a unique service that we offer the region and has helped many patients who otherwise had no options,” says Dr. Veerapong.

Those limited options are due to peritoneal surface malignancies, a subset of cancers that spread inside the abdomen with few medical or surgical options. Cytoreductive surgery involves removing all visible tumors and HIPEC involves circulating chemotherapy heated up 107 degrees Fahrenheit to directly target cancer cells.

“We make a midline incision in the abdomen and remove every tumor growth visible to the naked eye,” says Dr. Veerapong. “We then temporarily close the incision and insert inflow and outflow tubes for heated chemotherapy which targets microscopic disease. “

As the chemotherapy is applied, Dr. Veerapong and his colleagues physically massage or agitate the patient’s abdomen for up to 90 minutes as the chemotherapy is circulating from the perfusion machine.

“Current thinking is that heat enhances the tumor killing activity of the chemotherapy itself,” says Dr. Veerapong.

The theoretical benefits of HIPEC include increased tissue penetration for enhanced tumor destruction, treatment of microscopic disease and floaters, and more favorable pharmacokinetics. Moreover, advantages include optimal treatment timing (chemotherapy can be delivered at the time of surgery as opposed to waiting for wound healing), direct cytotoxic effects of administering chemotherapy to cancer cells, the ability to safely
deliver higher concentrations of chemotherapy compared to intravenous delivery, and the ability to break down scar tissue (from prior surgery) to ensure that all peritoneal surfaces are treated.

“There is retrospective data to support the use of HIPEC in certain diseases like pseudomyxoma peritonei, appendiceal cancer, and mesothelioma. There are also randomized control trials in the use of HIPEC in colorectal cancer,” says Dr. Veerapong.

The data for HIPEC in ovarian cancer patients is evolving. The best outcomes are in those patients who have had their tumors completely removed,” he says. “There are ongoing randomized trials. This represents the start of treatment for patients with carcinomatosis.”

Dr. Veerapong says the treatment is appropriate for selected patients. “It depends on the tumor type and how advanced the disease is,” he says.

Cancer that has spread to the lining surfaces of the peritoneal (abdominal) cavity from appendiceal cancer, primary colorectal cancer, mesothelioma, ovarian cancer, primary peritoneal cancer, certain sarcomas, and pseudomyxoma peritonei – often grouped under the moniker of peritoneal carcinomatosis – are examples of such types that are treated at Saint Louis University Hospital.

Historically, treatment for some of these conditions has not been good, with low cure rates and adverse side effects from traditional chemotherapy. With HIPEC, Dr. Veerapong feels it is an alternative for patients who otherwise may not have many options.
5 TUMOR REGISTRY

The Tumor Registry is an essential component to an American College of Surgeons, Commission on Cancer approved cancer program. As part of a Commission on Cancer approved program, the registry complies with the strict standards of the Commission under the guidance of the SSM Health Saint Louis University Hospital Cancer Committee. The Tumor Registry Staff is composed of three Certified Tumor Registrars who receive extensive training in the collection, management, analysis, and dissemination of information on cancer patients. The registry provides the data that the Cancer Committee uses to continue to monitor and improve the cancer program at SSM Health Saint Louis University Hospital. The registry is part of the Health Information Management Department and collects vital information on all patients' that are diagnosed and treated at the hospital. In 2014, the registry accessioned a total of 1213 cases, with 1033 of those being analytic; receiving their first course of treatment here at SSM Health Saint Louis University Hospital.

The reference date for the registry at SSM Health Saint Louis University Hospital is January 1, 1997. The reference date refers to the date that all cases must be included in the registry before a program can be accredited by the American College of Surgeons-Commission on Cancer. Since that time, 19,574 cancer cases have been added to the registry. The registrars use oncology data software to access a broad range of information that can be categorized by demographics, site of cancer, stage of cancer, sex, race, gender, and treatment. This data is utilized by physicians, researchers, nonprofits and government agencies to study and improve the effectiveness of cancer care. The hospital is required to submit data to the Missouri State Registry and the NCDB, a national database sponsored by the American College of Surgeons Commission on Cancer. This data is compiled with data from other registries and used to pinpoint increases and decreases in cancer incidence nationwide. The registry data is also used for internal quality improvement studies, to analyze outcome of treatment, community outreach, and to set goals for growth and improvement in the cancer program.

The registry continues to have as its goal to expand the acquisition of the most current and accurate data and to expand its uses in the effort to improve the quality of patient care here at SSM Health Saint Louis University Hospital.
NEW FACES IN THE CANCER CENTER

VEENA D. DIVECHA, MD, RADIOLoGY ONCOLOGY

Dr. Divecha is a radiation oncologist at SSM Health Saint Louis University Hospital and an associate professor of radiation oncology at Saint Louis University School of Medicine.

A SLUCare physician, she returns to St. Louis after spending seven years at St. Francis Medical Center in Cape Girardeau, MO, where she gained profound knowledge in current radiation oncology evidence based practices in the MD Anderson-affiliated program. Prior to that, Dr. Divecha was established in the St. Louis area from work at St. Anthony’s Medical Center and Christian Hospital.

Dr. Divecha completed her residency at the University of Kansas Medical Center and her internship at the University of Kentucky after graduating from the Adichunchanagiri Institute of Medical Sciences in India. Additional training included time with MD Anderson Cancer Hospital and St. Jude’s Research Hospital.

GRACE MONTENEGRO, MD, COLORECTAL SURGERY

Dr. Montenegro is a colon and rectal surgeon at SSM Health Saint Louis University Hospital and an associate professor of surgery at Saint Louis University School of Medicine.

She is board certified by the American Board of Surgery and has clinical and research interest in anorectal disease, high resolution anoscopy, rectal cancer and inflammatory bowel disease.

A SLUCare physician, Dr. Montenegro comes to St. Louis from Pennsylvania, where she completed her fellowship at St. Vincent Heath Center in colon and rectal surgery after a minimally-invasive colorectal surgery fellowship at Lankenau Medical Center. Prior to that, Dr. Montenegro’s residencies were with George Washington University School of Medicine and St. Vincent’s Hospital and Medical Center. She is a medical school graduate of St. George’s University School of Medicine with degrees from the University of Notre Dame and George Washington University,

MHD NABEEL RAJEH, MD, HEMATOLOGY ONCOLOGY

Dr. Rajeh brings his oncology expertise to the Center for Outpatient Blood and Marrow Transplantation at SSM Health Saint Louis University Hospital as an associate in the division of hematology and medical oncology at Saint Louis University School of Medicine.

He comes to St. Louis from Syria, where he founded the country’s first bone marrow transplant program with the Syrian Stem Cell Transplantation Group in 2012. Prior to that, he was with an oncologist with Sinan Hospital Damascus and Shamee Hospital Damascus while directing the Private Outpatient Cancer Center in Damascus.
Dr. Rajeh’s fellowship was at Henry Ford Hospital in Detroit, MI after a residency in internal medicine at Wayne State University. He is a graduate of the Damascus University School of Medicine and a specialist in liquid hematologic malignancy and bone marrow transplantation.

He is board certified by the American Board of Internal Medicine and is a member of the American Society of Hematology, the American Society of Medical Oncology, the European Society of Medical Oncology, the European Hematology Association and the Syrian Medical Oncology Society.