

GBMC

THE SANDRA & MALCOLM BERMAN
CANCER INSTITUTE
2018 ANNUAL REPORT





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LETTER FROM THE DIRECTOR

Berman Cancer Institute HEALTH...HEALTH

FRIENDS,

The Sandra and Malcolm Berman Cancer Institute at GBMC is an established leader in cancer care for our community. Through our integrative and multidisciplinary approach to treating patients with cancer, our program continues to improve and refine ways to provide the highest-quality care with the greatest possible patient experience. The Berman Cancer Institute is committed to providing all aspects of a patient's cancer care, including proper cancer screening and prevention programs, state-of-the-art diagnostic approaches, team-based treatment planning and care, access to the latest cutting-edge clinical trials, symptom management, survivorship, palliative care and social support. In recognition of these efforts, we have received a generous donation from the Herman & Walter Samuelson Foundation to name the medical directorship of the Berman Cancer Institute.

More important than our national accreditation, however, the Sandra and Malcolm Berman Cancer Institute continues to gain excellent feedback from our patients; we garner a 99th-percentile satisfaction rating. Simply put, national validation of the quality of the Berman Cancer Institute plus excellent patient ratings equals superior patient cancer care.

This year, we have organized several new programs and efforts to assist in the support of our patients. Our new symptom management program has provided our patients with seamless access to our nurses and nurse practitioners. We have accomplished this through expanded phone hours and prospective identification of patients who are likely to experience symptoms or have difficulties regarding their cancer treatment. Although some of our patients still require emergency room services, many patients can be seen in our office on the same day and be provided with care that would prevent them from having to utilize the hospital or emergency room.

The Berman Cancer Institute continues to enrich our collaboration with Gilchrist's Advanced Care Management program through direct access in our clinics for palliative and hospice care. This year, we are constructing a sophisticated Integrative Medicine Program that will provide our patients and families with information and services about evidence-based complementary medicine. This effort is being led by Dr. Delia Chiaramonte, who is board-certified in both Family Medicine and Hospice & Palliative Medicine, and is certified by the American Board of Integrative Holistic Medicine. These programs underscore the Berman Cancer Institute's commitment to the total care of our patients.



Paul Celano, MD, FACP, FASCO

“Our mission is to provide superior, compassionate and extraordinary care for every patient, every time.”

– Paul Celano, MD, FACP, FASCO

A major goal of the Berman Cancer Institute is to provide superior social support to our patients. This is being accomplished through a full range of services, including individual patient counseling, financial assistance and support during treatment. Our highly successful Legacy Chase event was held on September 29 at Shawan Downs, and raised funds to help provide these services. This year, Oncology Support Services received a generous gift from the Louis and Phyllis Friedman Foundation to underpin and expand our support services offerings.

Our multidisciplinary teams have continued to expand and provide excellent care to our patients. For example, our Gastrointestinal Cancer Tumor Conferences include surgeons, gastroenterologists, medical oncologists, radiation oncology, pathologists, genetics, clinical trial support, diagnostic and interventional radiology, palliative care and social support. All discussed cases are carefully assessed to provide the best possible diagnostic and treatment plan. Furthermore, our patients’ care is greatly personalized by our full-time gastrointestinal oncology nurse navigator.

The Berman Cancer Institute continues to serve as a community leader in providing our patients access to the latest cancer clinical trials. Our program offers nearly 60 clinical trials for all major cancers through our participation with the National Cancer Institute and the pharmaceutical industry. Our trials range from personalized targeted genetic therapies to immunotherapies. These trials have brought great excitement and hope to our patients. The Berman Cancer Institute clinical trials program has received national distinction as a High Performing Community Site by the National Cancer Institute.

It is with great sadness that I report the passing of Charlene Cohen, the wife of Dr. Gary Cohen, the founding director of the Sandra and Malcolm Berman Cancer Institute. She was a loving and vibrant force who made many contributions to our patients and staff at GBMC. Her spirit and presence will continue to resonate throughout the care of our patients. It is important to salute the efforts of our patients, their families and their loved ones on their journey to combat cancer. I also acknowledge the tireless efforts of the physicians, nurses, administration and all the staff of the Berman Cancer Institute and GBMC HealthCare in the care of our patients.

Paul Celano, MD, FACP, FASCO
Herman & Walter Samuelson Medical Director
Sandra and Malcolm Berman Cancer Institute
Greater Baltimore Medical Center





FEATURED PROGRAM

Gastrointestinal Oncology

The Gastrointestinal (GI) Oncology Multidisciplinary Program of the Sandra and Malcolm Berman Cancer Institute had a successful year of growth and progress in 2018. Patients experiencing a new upper GI (esophageal, pancreatic, small intestine, liver, biliary) or lower (colorectal, anal) cancer encounter a team-based approach to delivering high-quality, comprehensive cancer care. Our GI Oncology team looks to current research to direct our program while providing the gold standard in care. There are many examples of this team approach that we can highlight in 2018.

The GI Oncology Multidisciplinary Tumor Board meets regularly to discuss patients. The team includes surgery, radiation oncology, medical oncology, radiology, pathology, gastroenterology, interventional radiology, genetics, research and oncology nursing. Individual patients are discussed with feedback shared by each discipline. Patients find this process reassuring and it serves as a great communication tool.

In addition, our colorectal surgeons use “Early Recovery After Surgery” evidence-based pathways for our colorectal patients. These pathways employ best practices for patients before, during and after surgery. The surgeons, anesthesiologists, nurses, physical therapists and

occupational therapists all partner together to optimize patient outcomes. These protocols have patients up and moving more quickly after surgery. Research shows that patients experience less pain and shorter hospital stays when these pathways are utilized across the different disciplines.

2018 also led to the expansion of our GI Oncology program with the recruitment of a GI Oncology Nurse Navigator, **Amy Nahley, RN, MS, OCN**. The Nurse Navigator facilitates communication between the different specialty areas involved in the care of GI Oncology patients. Newly diagnosed GI cancer patients get necessary staging scans and definitive treatment in a timely manner. As an Oncology Certified Nurse (OCN), Nahley provides symptom management, care coordination and support to patients whether their treatment involves chemotherapy, radiation, surgery or a combination of modalities.

GBMC also launched an Upper GI and Hepatobiliary Cancer Multidisciplinary Clinic. The clinic serves as a “one stop shop” for patients. **Dr. Rina Patel**, a medical oncologist with a focus on gastrointestinal cancers, and **Dr. Arun Mavanur**, a surgical oncologist and director of Surgical Oncology at GBMC, lead this clinic. When a patient arrives at the clinic, he/she can see both specialists in one afternoon and connect to other resources such as Oncology Support Services, research, nutrition and nursing, when appropriate. The clinic provides multidisciplinary and personalized care.

Lastly, we are preparing to initiate new standards for our rectal cancer program to earn a certification as a National Accreditation for Rectal Cancer (NAPRC) site through the Commission on Cancer. Under the leadership of **Dr. Joseph DiRocco**, this multidisciplinary initiative will formalize many best practices that the Berman Cancer Institute already employs with rectal cancer patients and promote GBMC as a national leader in rectal cancer care.



Amy Nahley, RN, MS, OCN
Gastrointestinal Oncology Nurse Navigator

The Nurse Navigator provides symptom management, care coordination and support to patients whether their treatment involves chemotherapy, radiation, surgery or a combination of modalities.



Joseph DiRocco, MD, FACS, FASCRS
Medical Director, Gastrointestinal
Oncology; Colon & Rectal Surgeon



PHYSICIANS



Delia Chiamonte, MD, is Director of Integrative Medicine for Gilchrist and a member of GBMC's Advanced Care Management/Palliative Care team. She has recently joined our team after 10 years at the University of Maryland School of Medicine Center for Integrative Medicine, where she served as associate director and director of education. Dr. Chiamonte is a member of the Society for Integrative Oncology and has expertise in mind-body medicine, integrative stress management and integrative oncology.

Please call 443-849-6255 to schedule an appointment.



Arun Mavanur, MD, MS, FRCS, FACS, has been named the medical director of the Division of Surgical Oncology at GBMC. He is also the director of Surgical Oncology at Sinai Hospital of Baltimore. Dr. Mavanur has an interest in melanoma, hepatobiliary cancers, and pancreatic cancer. Dr. Mavanur completed his fellowship training in surgical oncology at the University of Pittsburgh Medical Center and has been in practice for more than 20 years.

Please call 410-601-8317 to schedule an appointment.

BALTIMORE MAGAZINE TOP DOCTORS 2018

GBMC has always been known for having outstanding physicians. Congratulations to the Berman Cancer Institute physicians chosen as the region's best doctors in *Baltimore* magazine for 2018.

- Robert Brookland, MD**, Radiation Oncology
- Paul Celano, MD**, Medical Oncology
- Neri Cohen, MD, PhD**, Thoracic Surgery
- Joseph DiRocco, MD**, Colon & Rectal Surgery
- Robert Donegan, MD**, Medical Oncology/
Hematology
- Francis Grumbine, MD**, Gynecologic Oncology
- Kimberly Levinson, MD**, Gynecologic Oncology
- Benjamin Lowentritt, MD**, Urology
- Arun Mavanur, MD**, Surgical Oncology
- Geoffrey Neuner, MD**, Radiation Oncology
- Karen Pitman, MD**, Head & Neck Surgery
- Francis Rotolo, MD**, General & Breast Surgery
- Lauren Schnaper, MD**, Breast Surgery
- Philip Shaheen, MD**, Hospice & Palliative
Medicine





ACCREDITATIONS

The Sandra and Malcolm Berman Cancer Institute at Greater Baltimore Medical Center received a full three-year Accreditation with Commendation Award in 2018 from the Commission on Cancer (CoC), a patient-centered care program of the American College of Surgeons (ACS). The CoC Accreditation is voluntary and GBMC must meet all 34 quality care standards to earn the accreditation.

The CoC Accreditation Program provides the structure for GBMC to continuously improve the quality of cancer care through a focus on prevention, early diagnosis, cancer staging, exceptional treatment, rehabilitation, lifelong follow-up, and end-of-life care. In addition, when patients receive their care at GBMC, they are educated on clinical trials and new treatment options, genetic counseling and patient-centered services including psychosocial support, a patient navigation process and a survivorship care plan that outlines what transpired during active cancer treatment and recommendations for follow-up and surveillance.

About the CoC:

Established in 1922 by the American College of Surgeons, the CoC is a consortium of professional organizations dedicated to improving patient outcomes and quality of life for cancer patients through standard-setting, prevention, research, education and the monitoring of comprehensive, quality care. Its membership includes Fellows of the American College of Surgeons.



CoC membership is composed of more than 100 individuals who either are surgeons representing the American College of Surgeons or representatives from the national professional organizations who are member organizations affiliated with the CoC. These individuals direct and coordinate the activities of the Commission through the Executive, Nominating, Accreditation, Advocacy, Cancer Liaison, Education,

Member Organization Steering, and Quality Integration committees and related subcommittees and workgroups.

For more information, visit: www.facs.org/cancer.

The Sandra and Malcolm Berman Comprehensive Breast Care Center at GBMC received the highest award possible through the National Accreditation Program for Breast Centers (NAPBC), a breast-specific program of the American College of Surgeons (ACS) in 2018. The NAPBC Accreditation is voluntary and GBMC must meet all 28 breast-specific quality standards to earn the accreditation.

The NAPBC Accreditation, like the CoC Accreditation, is managed through a multidisciplinary coordination approach, ensuring every patient receives individualized and precise treatment with the assistance of the evidence-based guidelines.

About the NAPBC:

Established in 2005 by the American College of Surgeons, the National Accreditation Program for Breast Centers (NAPBC) represents a consortium of national professional organizations dedicated to the improvement of the quality of care and monitoring of outcomes of patients with diseases of the breast. This mission is pursued through standard-setting, scientific validation and patient and professional education.

The NAPBC board of directors has worked diligently to ensure multidisciplinary leadership representation, and to include nationally recognized breast cancer quality performance measures in the NAPBC standards that serve as a platform for measuring quality improvement.

For more information, visit: www.facs.org/cancer.



Berman Cancer Center Institute management receives the accreditation with commendation award. Front row: Judy Bosley, RN; Dawn Stefanik, RN; Connie Herbold; Vanessa Stinson, CTR; Back row: Michael Stein; Brandon Costantino; Paul Celano, MD; Craig Randall, RTT



ONCOLOGY CERTIFIED NURSES

Oncology nursing certification is a voluntary process signifying that the practicing oncology nurse has experience and specialty knowledge beyond the entry level of nursing. Oncology Certified Nurse status awarded by the Oncology Nursing Society is a testament to excellence in the care of the cancer patient. Oncology nurses need to keep abreast of the rapid technological and scientific advances in cancer care and possess the knowledge and experience to provide high-quality care to maintain competent performance. Oncology Certified Nurses are better equipped to recognize problems and take action, as well as help promote and assure collaboration among their physician colleagues (who also attain specialty board certification). Certification provides both personal and professional benefits to the nurse, and provides confidence for the patient and their caregivers.

The American College of Surgeons (ACS) has a standard for Commission on Cancer (CoC) program accreditation related to oncology nursing. Standard 2.2 states that “oncology nursing care is provided by nurses with specialized knowledge and skills.” The CoC also expects that 25 percent of oncology nurses employed and/or contracted with the facility (including full-time and part-time) hold a current, applicable oncology nursing certification. Since certification can make such a difference for the nurse and the patient, the Cancer Institute has made a commitment to have all nurses obtain certification by the end of February 2020.



COMPASSIONATE CAREGIVER AWARD



John Adams, MD was the retired Department Chair of Pathology at GBMC when a friend of his, who was being taken care of at another institution, was diagnosed with terminal cancer. The way the bad news was delivered to her by her doctor was so cold and unemotional, it left her numb and offended.

Dr. Adams did some research on compassionate care and came across a program at Massachusetts General Hospital in Boston, Massachusetts, that promoted compassionate care among their clinical staff. The Schwartz Center Rounds was created by a young lawyer who had terminal lung cancer. He, too, was looking for the humanity in a medical community that would show compassion to him and other patients. Schwartz Center Rounds is a multidisciplinary forum for caregivers to discuss the difficult emotional and social issues of patient care. It is a safe place where they can share their feelings with others in a non-judgmental environment. Dr. Adams gave an endowment to GBMC Foundation to bring the Schwartz Center Rounds Program to our facility. After his death in 2014, GBMC

renamed the program the Dr. John Adams Rounds in his honor. We are no longer affiliated with the Boston program, although we continue with the same concept.

The program was chaired by Dr. Maria Pane in 2017 and 2018. Her team consisted of 15 members who reviewed all the nomination forms that were brought forth and scored them according to certain attributes. The goal is to identify those people who go above and beyond in their daily work to show compassion to others.

We are proud to say that several staff members at the Cancer Institute were nominated for the 2018 Compassionate Caregiver Award. They are: **Jennifer Burroughs**, Patient Services Coordinator (Medical Oncology); **Felicia Ford, BSN, RN, OCN, CMSRN** (Inpatient Oncology); **Sherard Lomax, RN** (Inpatient Oncology); **Sandy Roles**, Patient Services Associate (Radiation Oncology); **Stephanie Sanders, CRNP** (Gynecologic Oncology); **Susan Simeon, BSN, RN, OCN** (Medical Oncology); and **Karen Ulmer, MS, RN, CORLN** (Milton J. Dance Center).



BEHAVIORAL HEALTH

Integrative Medicine Services



The integrative approach can facilitate management of pain, anxiety, fatigue and other cancer-related side effects.

Integrative Medicine is a specialty focused on caring for the whole person (body, mind and spirit), using both conventional and complementary treatments, to help manage unpleasant symptoms and enhance physical and emotional wellness.

People with cancer are frequent users of complementary therapies. A study of more than 1,000 people with cancer found that 59 percent reported using integrative medicine or complementary therapies. They reported using integrative medicine for pain, anxiety, depression, stress management, insomnia, cancer recovery and more. The integrative approach can address these symptoms while enhancing positive coping, decreasing medication use and medication costs, and increasing satisfaction with care.

Dr. Delia Chiamonte, an integrative medical physician, has pursued extra training in areas such as mind-body medicine, integrative nutrition, herbs and supplement counseling, acupressure, positive psychology, cognitive behavioral techniques and more. Dr. Chiamonte has expertise in the integrative approach to the care of patients with cancer, and she uses both medications and non-pharmacologic techniques to enhance her patients' physical and emotional wellness. She works collaboratively with the patient and medical/surgical oncologists to craft an evidence-supported treatment plan that addresses each patient's unique symptom complex.

Consultation with Dr. Chiamonte is available to all patients receiving cancer treatment at GBMC. Available treatments include:

- Mind-body techniques such as guided imagery, relaxation exercises and mindfulness practices
- Therapeutic dialogue, including supportive therapy, cognitive behavioral techniques, positive psychology, EFT and more
- Integrative nutrition counseling
- Natural Medicine consultations
- Acupressure
- Guided journaling
- Referrals for acupuncture, massage and energy therapies
- Creation of customized integrative self-care plans

Future Plans

We look forward to growing our program! Over the next year we plan to expand our services to include seated massage, on-site acupuncture, yoga therapy, meditative movement and more.



Distress Screening

A focus on the health of our community

The Sandra and Malcolm Berman Cancer Institute at GBMC strives to meet the needs of our community, including behavioral and mental health needs. We have begun working directly with GBMC counselors through the GBMC Health Partners. Providing access for patients to see a psychiatrist at their primary care physician's office keeping the financial burden of these visits to a minimum. Quick, affordable access to services focused on behavioral health is a large problem nationally and this program is a great model for helping to reduce many of the barriers patients often face when needing mental health care. For patients who are struggling with addiction or who have tried and failed to quit tobacco use, our program has a direct referral process to get patients the help they need, including access to substance abuse counselors.

Patients who are starting chemotherapy are also provided a tool called a Distress Thermometer. The tool is a way for our social workers to proactively assess a patient's distress while allowing patients to indicate specifically what is causing their distress. This enables the Oncology Support Services team to address concerns before they become much larger issues and to connect our patients to services they need at a time when they can be most effective. When patients indicate that they have significant psychosocial distress such as severe anxiety or depression, our social workers either refer to the behavioral health counselors, if applicable, or to outside psychiatric services. The goal is always to help patients avoid any barriers that would prevent them from completing their treatments on time, as scheduled.

The hospital's strategic plan calls upon the Berman Cancer Institute to improve its approach to the behavioral health needs of its patients. In keeping with that goal, we have established metrics to help track progress towards making such improvements. One of the goals is to reduce patient distress by simply discussing some of the concerns that patients have — even before we administer the distress tool. The average distress score from July of 2017 to June of 2018 was 4.8 out of 10. By altering our approach, we have seen that score drop to 3.2. This ensures that our resources are going where they are needed most.

This effort is tied directly to our program's commitment to improving the health of our community, and to improving the health outcomes of our oncology patients. Our goal is always to meet patients where they are in their oncology journey and to treat the whole patient. As our program expands, we continue to renew our focus on improving the services we provide.

NCCN DISTRESS THERMOMETER FOR PATIENTS

	YES	NO	Practical Problems	YES	NO	Physical Problems
	<input type="checkbox"/>	<input type="checkbox"/>	Child care	<input type="checkbox"/>	<input type="checkbox"/>	Appearance
	<input type="checkbox"/>	<input type="checkbox"/>	Housing	<input type="checkbox"/>	<input type="checkbox"/>	Bathing/dressing
	<input type="checkbox"/>	<input type="checkbox"/>	Insurance/financial	<input type="checkbox"/>	<input type="checkbox"/>	Breathing
	<input type="checkbox"/>	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	<input type="checkbox"/>	Changes in urination
	<input type="checkbox"/>	<input type="checkbox"/>	Work/school	<input type="checkbox"/>	<input type="checkbox"/>	Constipation
	<input type="checkbox"/>	<input type="checkbox"/>	Treatment decisions	<input type="checkbox"/>	<input type="checkbox"/>	Diarrhea
			Family Problems	<input type="checkbox"/>	<input type="checkbox"/>	Eating
	<input type="checkbox"/>	<input type="checkbox"/>	Dealing with children	<input type="checkbox"/>	<input type="checkbox"/>	Fatigue
	<input type="checkbox"/>	<input type="checkbox"/>	Dealing with partner	<input type="checkbox"/>	<input type="checkbox"/>	Feeling swollen
	<input type="checkbox"/>	<input type="checkbox"/>	Ability to have children	<input type="checkbox"/>	<input type="checkbox"/>	Fevers
	<input type="checkbox"/>	<input type="checkbox"/>	Family health issues	<input type="checkbox"/>	<input type="checkbox"/>	Getting around
			Emotional Problems	<input type="checkbox"/>	<input type="checkbox"/>	Indigestion
	<input type="checkbox"/>	<input type="checkbox"/>	Depression	<input type="checkbox"/>	<input type="checkbox"/>	Memory/concentration
	<input type="checkbox"/>	<input type="checkbox"/>	Fears	<input type="checkbox"/>	<input type="checkbox"/>	Mouth sores
	<input type="checkbox"/>	<input type="checkbox"/>	Nervousness	<input type="checkbox"/>	<input type="checkbox"/>	Nausea
	<input type="checkbox"/>	<input type="checkbox"/>	Sadness	<input type="checkbox"/>	<input type="checkbox"/>	Nose dry/congested
	<input type="checkbox"/>	<input type="checkbox"/>	Worry	<input type="checkbox"/>	<input type="checkbox"/>	Pain
	<input type="checkbox"/>	<input type="checkbox"/>	Loss of interest in usual activities	<input type="checkbox"/>	<input type="checkbox"/>	Sexual
	<input type="checkbox"/>	<input type="checkbox"/>	Spiritual/religious concerns	<input type="checkbox"/>	<input type="checkbox"/>	Skin dry/itchy
				<input type="checkbox"/>	<input type="checkbox"/>	Sleep
				<input type="checkbox"/>	<input type="checkbox"/>	Substance abuse
				<input type="checkbox"/>	<input type="checkbox"/>	Tingling in hands/feet

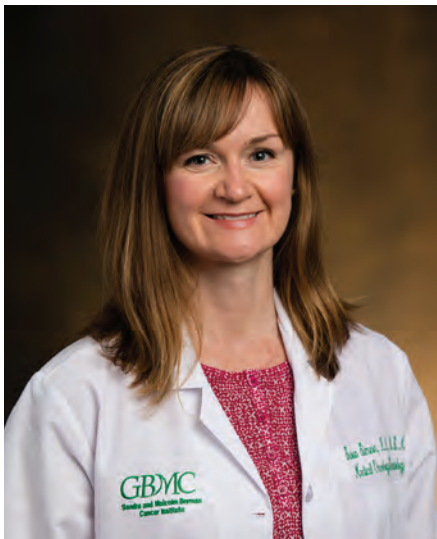
Other Problems: _____



PROGRAMS

Symptom Management

This year, the Berman Cancer Institute implemented a formal program to address cancer patients' symptoms and side effects from treatment. Under the leadership of **Bonnie Pesacov, RN, BSN** and **Susan Simeon, RN, BSN, OCN**, the Oncology Symptom Management Program offers patients the opportunity to speak with an oncology nurse and have their symptoms triaged for severity. If their symptoms are emergent, patients will be instructed to go to the Emergency Department. If their symptoms can be addressed in the outpatient setting, however, patients can come to the cancer center and receive timely treatment from certified oncology nurses who are familiar with their disease and symptoms. As part of this effort, Medical Oncology phone access was expanded to 7:30 a.m. to 4:30 p.m. Monday through Friday. Additionally, the infusion center schedule availability was revamped to allow for urgent symptom management appointments. On average, we are treating 25 patients per month through this program, reducing unnecessary time spent in the ED and potentially preventing costly hospital admissions.



Susan Simeon, RN, BSN, OCN



Bonnie Pesacov, RN, MS, AOCN, CBCN



On average, we are treating 25 patients per month through this program, reducing unnecessary time spent in the ED and potentially preventing costly hospital admissions.

Examples of Patient Symptom Management

1. Fever greater than 100.4°
2. Chills with or without fever after receiving recent chemotherapy
3. New shortness of breath/dyspnea on exertion
4. New bleeding (nose, tarry stools, urine)
5. Mouth sores making it difficult to eat or drink
6. Uncontrolled nausea and vomiting (not responding to home medications)
7. Diarrhea not controlled by home medications (unresponsive to Imodium/Lomotil)
8. New abdominal pain with or without constipation
9. New swelling in arms or legs
10. Redness or tenderness of port site
11. Swelling, pain, redness at peripheral IV site
12. New rash
13. Need for increased pain management or new site of bone pain
14. Dysuria or urinary frequency
15. Excessive fatigue
16. Excessive thirst
17. Dizziness or vertigo
18. Weakness of arms or legs
19. Neurologic issues (double vision, headache)



CLINICAL PROGRAMS

Head & Neck Survivorship

Head and neck cancer accounts for approximately 4 percent of all cancers diagnosed in the United States. An estimated 64,690 people will develop head and neck cancer this year. A projected 13,740 deaths will result from head and neck cancer in 2018. Sites of head and neck cancer include cancers of the larynx, lip and oral cavity, nasal cavity and sinuses, pharynx and salivary glands. Tobacco use, substantial alcohol use and infection with the human papillomavirus each increase the risk of developing a cancer of the head and neck.

Many cancers of the head and neck can be cured, especially if diagnosed at an early stage. Development of a treatment plan must take into account not only eradicating the cancer, but also preserving the function of adjacent nerves and structures. The primary treatment options are surgery, radiation therapy, chemotherapy and targeted therapy. Treatment options depend on the site and stage of cancer, potential side effects of treatment, and the patient's health and treatment preference. Most patients are treated with a combination of treatment modalities.

Nearly a decade ago, the Institute of Medicine report, *From Cancer Patient to Cancer Survivor: Lost in Transition*, highlighted the unique issues facing all cancer survivors as well as the demand for direction with respect to quality survivorship care. Surviving head and neck cancer comes at a cost. Treatment of head and neck cancer often leads to both acute and late effects, which can be very debilitating. Some of the most common effects of treatment include dry mouth, dysphagia (difficulty swallowing), dysgeusia (alteration in taste perception), pain, weight loss, musculoskeletal dysfunction, fatigue and emotional distress. Persistent disfigurement and disability may increase depression and psychological distress. Clinicians caring for survivors of head and neck cancer must assess for, and treat, both acute and late effects of treatment throughout survivorship.

The multidisciplinary team at the Milton



The head and neck multidisciplinary pretreatment session includes our team of oncology speech pathologists, social workers, dietitians, nurse specialists, head and neck cancer patients and their loved ones with the goal of providing education and counseling on cancer effects, sequelae of treatment, rehabilitation, recovery and survivorship through coordinated, compassionate care.

J. Dance, Jr. Head and Neck Center at GBMC has made survivorship care and resources a priority. The center was made possible by the generosity and foresight of Jeanne Vance and Milton Dance, following his own experiences with throat cancer. They experienced the same fearful thoughts, sadness, anger and self-doubt that many cancer patients and their families do. They came to realize that no one should endure these feelings alone, without understanding and a helping hand. It was these very same feelings that motivated Jeanne Vance to take action in laying the groundwork for the Milton J. Dance, Jr. Head and Neck Center. The Milton J. Dance, Jr. Head and Neck Center was established to provide support services to head and neck cancer patients and their loved ones. The professionals at this center, including physicians, social workers, speech-language pathologists, nurses and dietitians follow the patients from diagnosis through treatment, rehabilitation, recovery and ongoing survivorship.

The multidisciplinary team at the Milton J. Dance Jr. Head and Neck Center have made efforts to meet the needs of head and neck cancer survivors. In addition to oncologic surveillance by the treating physicians, patients are also followed by the various professionals on the multidisciplinary team at scheduled intervals. At these visits, team members assess and address the spectrum of physical

and functional, emotional and practical challenges that may develop after head and neck cancer treatment. Voice and swallowing therapy, nutritional counseling, symptom-management strategies, and identification and connection to community resources are among the services available to survivors. The center has two ongoing support groups for head and neck cancer survivors. The center's Patient and Family Support Group is open to all head and neck cancer survivors and has met monthly for over 35 years, providing an informal and supportive atmosphere in which to share common treatment experiences, coping strategies and emotions. The Laryngectomy Support Group meets on a quarterly basis and covers topics related to life after a total laryngectomy. It allows participants an opportunity to connect with other laryngectomees and their families, to share tips and discuss experiences.

The center sponsored a Head & Neck Cancer Survivorship educational event in December. The event was open to patients, providers and caregivers to provide education and information regarding survivorship services available through the Milton J. Dance, Jr. Head & Neck Center and in the community. A survey regarding unmet needs was given to patients and caregivers to help the center guide future initiatives and improvements to survivorship care.



CLINICAL PROGRAMS CONTINUED

Clinical Trials

The Oncology Clinical Trials Program of the Sandra and Malcolm Berman Cancer Institute at GBMC has been providing state-of-the-art clinical trial treatments to more than 2,500 oncology patients battling cancer for over three decades.

The Oncology Clinical Trials program offers more than 60 trials to our patients for many different cancer diagnoses, including, but not limited to, breast, lung, gastrointestinal, gynecological, lymphoma, head and neck, melanoma and genitourinary cancers. The program is an active member of The National Cancer Institute (NCI) oncology cooperative groups, including Eastern Cooperative Oncology Group/American College of Radiology Imaging Network (ECOG/ACRIN), NRG Oncology which includes National Surgical Adjuvant Breast and Bowel Project (NSABP), Radiation Tumor Oncology Group (RTOG) and the Gynecologic Oncology Group (GOG). Additionally, our Clinical

Trials program has established collaborative relationships with many major pharmaceutical clinical trial efforts working in conjunction with the NCI and FDA.

This year the Berman Cancer Institute was selected by the National Clinical Trials Network (NCTN) Leadership Committee to participate in the High-Performance Site Initiative (HPSI). This initiative is targeted to those sites that have been identified by the NCTN Leadership as “High Performing Sites” based on accrual, site participation and high level of data quality across the entire NCTN.

We are excited that in 2018, the clinical trials department added two new staff members, Karen Oakjones-Burgess, RN, BSN, CCRC, Research Nurse, and Kathryn Tower, CMA, Clinical Research Associate. They join our outstanding team led by Judy Bosley, RN, BSN, CCRP, along with Pamela Nickoles, RN, BSN, CCRP, and Clinical Research Associates Melissa Loomis, CCRP, and Steven Schmitt, BS, CCRP.

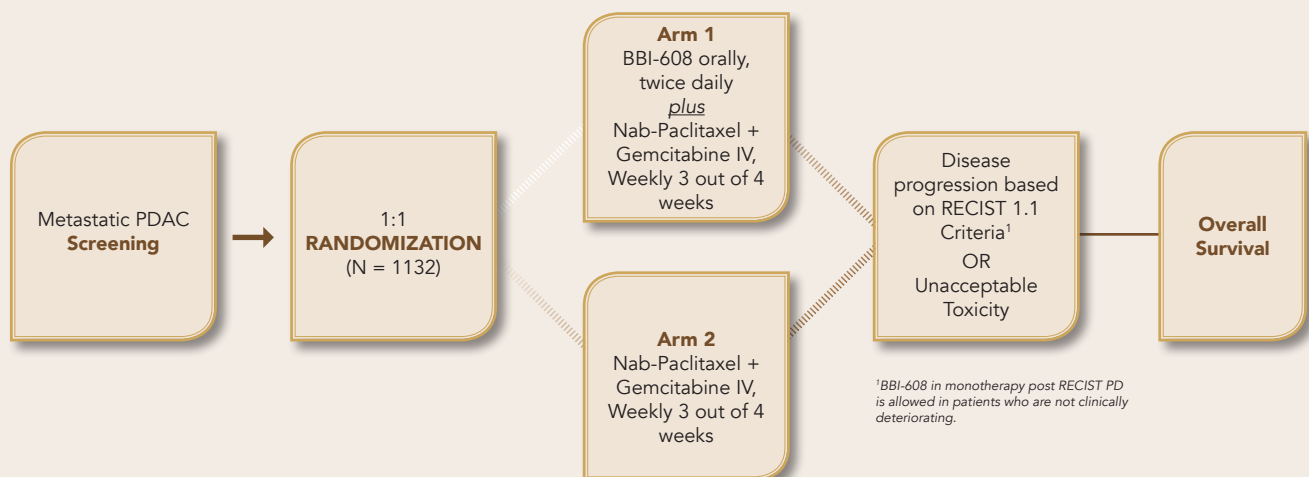
The clinical trials team at GBMC provides excellent research support to our physicians as well as superior care to our patients.

Another welcome addition to our program is a new clinical trial management system, SignalPath. This system is designed to be used at the point of care, enabling the clinical research team to focus on our patients while achieving our research goals more efficiently. Communication between the clinical trials team and the physicians is enhanced and allows for greater multidisciplinary care for our patients on clinical trials.

The oncology clinical trials program offers a range of opportunities, from prevention and screening to the latest cancer treatments using personalized genetic targeting and immunotherapies for all stages of disease. Example of these studies are illustrated by the following clinical trials.

CanStem111P: Phase III Study of BBI-608 plus nab-Paclitaxel with Gemcitabine in Adult Patients with Metastatic Pancreatic Adenocarcinoma.

THE CANSTEM111P TRIAL





The purpose of this study is to find out whether it is better to receive treatment with nab-paclitaxel and gemcitabine, a standard chemotherapy regimen, given in combination with a new drug, BBI-608, or to receive treatment with nab-paclitaxel and gemcitabine alone for pancreatic cancer. To do this, half of the patients in this study will receive nab-paclitaxel with gemcitabine and BBI-608 and the other half will receive nab-paclitaxel with gemcitabine alone.

BBI-608 is a newly discovered drug that may treat cancer by targeting cancer stem cells. Cancer stem cells are highly malignant cells that are believed to be responsible for the growth, relapse and spread of many cancers, including cancers of the pancreas. This study drug has been used in other research studies, and information from these studies suggests that this drug may be a potential treatment for pancreatic cancer.

Evaluation of the PapGene test to detect ovarian and endometrial cancers

GYNECOLOGIC CANCER RESEARCH STUDY FOR WOMEN

With Cancer Diagnosis or High Cancer Risk

What is the goal of the study?

To determine how well the PapGene test detects indicators of gynecologic cancers

What will you be asked to do?

- Provide a blood sample (one time)
- Have a pap smear test (one time)
- Have a Tao Brush specimen collection (on time)

Who is eligible?

- Women having surgery for diagnosed or suspected ovarian cancer
- Women having surgery for diagnosed or suspected endometrial cancer
- Women having surgery due to family risk factors, or are BECA 1/2 positive
- Women who are post-menopausal with abnormal bleeding and having a biopsy or hysterectomy surgery
- Some volunteers known to not have cancer will be included as well

The purpose of this trial is to determine the sensitivity and specificity of the PapGene test for detecting characteristic oncogenic mutations indicative of GYN cancers in women with diagnosed gynecologic tumors and in women who are at high risk to develop gynecologic tumors. The results from this study will be used to design definitive clinical trials to determine the ability of this new platform to save the lives of women at increased risk of developing ovarian cancer due to genetic predisposition.

Multidisciplinary Conferences

The Sandra and Malcolm Berman Cancer Institute prioritizes multidisciplinary cancer care for all patients. Multidisciplinary cancer care means that experts from all disciplines involved in the care of a patient with cancer work closely together to diagnose, treat and assist each patient. This includes review of each patient's treatment plan at multidisciplinary tumor boards, communicating and coordinating care through GBMC's electronic medical record, and involving additional support and therapies as needed in a collaborative and informed manner during each phase of treatment. Team members include medical oncologists, surgical oncologists, radiation oncologists, pathologists, radiologists, rehabilitation specialists, registered dietitians, social workers, clinical trials nurses and genetic counselors, all dedicated to developing the best treatment plan for each individual patient, utilizing the NCCN guidelines.

An essential component of this mission is our multidisciplinary tumor boards. With separate tumor boards for breast cancer, lung cancer, urologic cancer, gynecologic cancer, head and neck cancer, and gastrointestinal cancer, each patient can be assured that their treatment options will be reviewed by a team of experts focused directly on their care.

By including, from the onset, the entire care team in the development and review of treatment plans, GBMC's cancer experts can easily work together and speak with one voice with the patient, their caregivers and their other medical providers to offer the best possible care.





SERVICES

SUPPORT SERVICES

Boutique Salon & Wellness Center
 Chemotherapy Educational Sessions
 Eden Energy Therapy
 Pet Therapy
 Financial Counseling
 Financial Support for Eligible Patients
 Genetic Counseling
 High-Risk Breast Cancer Screening Program
 Lymphedema Rehabilitation Services
 Music Therapy
 Nutrition Counseling
 Oncology Certified Nurses
 Ostomy Care
 Ostomy Support Group
 Pain Management
 Palliative Care Program
 Psychosocial Support for Patients and Families
 Survivorship Program
 Cancer Registry
 Transportation Assistance

MEDICAL ONCOLOGY & HEMATOLOGY

Chemotherapy, Including Biotherapy/
 Immunotherapy
 Infusion Center
 Inpatient Unit
 Leukemia, Lymphoma-Hodgkin's and
 non-Hodgkin's Lymphoma, Multiple
 Myeloma and Myelodysplastic Syndrome
 Management of Red Cell, White Cell,
 Leukocyte and Platelet Disorders
 Targeted Therapies

The Boutique Salon & Wellness Center now offers therapeutic massage services to patients, visitors and employees. Appointments upon request, and are available any Monday from 9 a.m. to 3 p.m. Call for more information and special employee pricing: Lynne Caddick or Lisa Palmer, 443-849-8700, lcaddick@gbmc.org



SURGICAL ONCOLOGY

Breast
 General
 GI/Colorectal
 GYN
 Head and Neck
 Hepatobiliary
 Intracranial
 Melanoma
 Sarcoma
 Thoracic
 Urologic

RADIATION ONCOLOGY

Breast HDR Brachytherapy
 CT Simulator
 Electron Therapy
 High Dose Rate (HDR) Brachytherapy
 IGRT
 IMRT
 IORT
 Prostate Brachytherapy
 Rapid Arc
 Respiratory Gating
 Stereotactic Ablative Radiotherapy
 Stereotactic Radiosurgery (SRS)

SPIRITUAL CARE

Advance Directive Counseling
 Caregivers Support Group
 Chapel
 Spiritual Support Team
 Spiritual/Religious Resources

COMMUNITY PARTICIPATION

Cancer Coalition: Baltimore County/
 Health Departments
 American Cancer Society
 Look Good, Feel Better
 Relay for Life
 Komen Maryland
 The Red Devils
 HopeWell Cancer Support
 Zaching Against Cancer
 Ulman Cancer Fund for Young Adults
 Leukemia & Lymphoma Society
 Cancerve
 Lung Cancer Alliance

COMMUNITY OUTREACH

Community Cancer Education
 Maryland Cancer Control Plan Steering
 Committee
 Screenings for Prostate, Skin and
 Oral Cancer
 Baltimore County Public School System

CLINICAL TRIALS

Breast
 Gastrointestinal
 Genitourinary
 Gynecologic
 Head and Neck
 Leukemia/Lymphoma/Myeloma
 Lung
 Melanoma and Skin



PHYSICIAN ANNUAL STUDY

Lung Screening

The Greater Baltimore Medical Center has a strong commitment to the early detection of all cancers. Lung cancer is the leading cause of cancer death in the United States. Most lung cancers can potentially be cured by surgery if found contained within the lungs. Unfortunately, almost 90 percent of patients with lung cancer die of their disease because it has already spread beyond the lungs. Smoking is the cause for nearly 85 percent of lung cancers. Along with increasing age, lung cancer risk increases with the amount and length of time a person smokes.

The U.S. Preventive Services Task Force now recommends that adults between 55 and 80 years old who are at high risk for lung cancer be screened annually with a low-dose computed tomography (CT) scan. High-risk is defined as people who have a history of heavy smoking (one to two packs of cigarettes over 15 to 30 years) and who are either current smokers or who quit in the past 15 years. The task force has determined that low-dose CT scans can find early stage lung cancer and prevent death.

GBMC now utilizes the EPIC electronic medical record system to assist in determining high-risk patients for lung cancer by having a best practice advisory (BPA) built into the system to alert primary care providers, pulmonologists and oncologists that a patient is at high risk and may benefit from low-dose CT scan screening. All high-risk patients are formally counseled regarding the risks and benefits of lung cancer screening.

Our Physician Study for 2018 is our Lung Screening Best Practice Advisory that is generated through EPIC, according to **Dr. Paul Celano**. Dr. Celano stated Medicare now covers lung cancer screenings with low-dose CT scans once a year for those patients that meet the specified criteria. Dr. Celano added that 1,135 patients were eligible and 441 received imaging.

Lung Cancer Screening Criteria

LUNG CANCER SCREENING CRITERIA
Our patients must be:

- 55-77 years old
- CURRENTLY smoke **or** QUIT in the last 15 YEARS
- Have at least a **30-PACK-YEAR** smoking history
 - 2 packs per day X 15 years = 30 pack-year history

CANCER REGISTRY DATA

COLON CANCER STAGE BY AGE

STAGE	UNDER 20	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90 AND OVER	TOTAL N	TOTAL %
0	0	0	0	0	0	0	0	1	0	1	< 1%
I	0	0	0	1	13	54	62	34	4	168	24%
II	0	0	0	1	8	26	32	18	5	90	13%
III	0	0	1	5	17	35	50	20	4	132	19%
IV	0	0	3	4	40	87	102	61	10	307	43%
UNK	0	0	0	0	2	2	2	3	0	9	1%

COLON CANCER STAGE BY GENDER

STAGE	MALE	FEMALE
0	<1%	<1%
I	8%	16%
II	5%	7%
III	9%	10%
IV	19%	24%



CANCER REGISTRY DATA

GBMC 2017 Cancer Sites

PRIMARY CANCER SITE	ANALYTIC CASES*	NON-ANALYTIC CASES**	ALL 2017 CASES
HEAD AND NECK			
ORAL CAVITY	43	3	46
PHARYNX	42	4	46
SALIVARY GLAND	10	0	10
LARYNX	24	2	26
NASAL CAVITY/SINUS	3	0	3
OTHER	0	0	0
DIGESTIVE SYSTEM			
ESOPHAGUS	13	4	17
STOMACH	13	3	16
COLON/RECTOSIGMOID	108	12	120
RECTUM	39	4	43
ANUS/ANAL CANAL	7	2	9
LIVER	8	9	17
PANCREAS	33	8	41
OTHER	19	5	24
RESPIRATORY SYSTEM			
LUNG/BRONCHUS	149	20	169
OTHER	7	0	7
BLOOD & BONE MARROW			
LEUKEMIA	37	5	42
MULTIPLE MYELOMA	28	3	31
OTHER	9	0	9
BONE			
CONNECTIVE/SOFT TISSUE	2	0	2
CONNECTIVE/SOFT TISSUE	9	1	10
SKIN			
MELANOMA	27	7	34
OTHER	10	2	12
BREAST			
FEMALE GENITAL			
CERVIX UTERI	13	12	25
CORPUS UTERI	71	7	78
OVARY	24	8	32
VULVA	9	1	10
OTHER	5	0	5
MALE GENITAL			
PROSTATE	132	38	170
TESTIS	1	1	2
OTHER	0	0	0
URINARY SYSTEM			
BLADDER	21	8	29
KIDNEY/RENAL	69	10	79
OTHER	8	2	10
BRAIN & CNS			
BRAIN (BENIGN)	28	3	31
BRAIN (MALIGNANT)	10	2	12
OTHER	2	0	2
ENDOCRINE			
THYROID	66	3	69
OTHER	11	2	13
LYMPHATIC SYSTEM			
HODGKIN'S DISEASE	8	3	11
NON-HODGKIN'S	72	10	82
UNKNOWN PRIMARY			
OTHER/ILL-DEFINED	24	5	29
OTHER/ILL-DEFINED	27	3	30
TOTALS	1667	257	1924

* Analytic Cases: Patients either diagnosed or diagnosed and/or received a portion of first course treatment at GBMC.

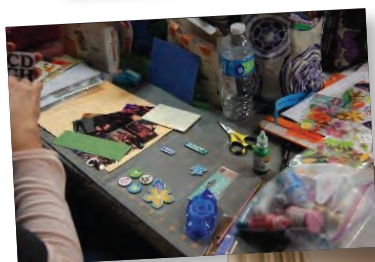
** Non-Analytic Cases: Patients received first course treatment elsewhere and presented to GBMC with recurrence or progression.



COMMUNITY INVOLVEMENT

Scrapbooking

2018 saw yet another successful scrapbooking fundraiser. With more than 80 participants, 12 vendors and many volunteers, the event raised over \$4,800 including gift donations. Oncology Support Services accepted \$4,595 to be used to directly help cancer patients at the Berman Cancer Institute.



2018 Cancer Survivorship



More than 400 patients, family and staff gathered at Martin's Valley Mansion to celebrate National Cancer Survivor Day in June. This was the 27th annual GBMC Cancer Survivor Celebration.

John Chessare, MD, president and CEO of GBMC HealthCare, started the program with his opening remarks, followed by six GBMC cancer survivors and their oncologists sharing their inspirational stories.

Approximately 180 cancer survivors stood for recognition and received a vase with flowers provided by Flowers for Powers. Musical entertainment included a DJ and a special performance by renowned beatboxer Shodekeh and cellist Wade Davis.

Oncology Support Services Manager Brandon Costantino invited all survivors to join GBMC at the Legacy Chase event in September. This year's theme: Hats, Horses and Hope.

Paint Your Pet event

Friday, June 1, GBMC staff and patients participated in a Paint Your Pet fundraiser night by painting a custom sketch of their pet. \$625 was raised for Oncology Support Services.





COMMUNITY INVOLVEMENT CONTINUED

Legacy Chase

The 18th annual Legacy Chase at Shawan Downs had more than 8,000 attendees come together to celebrate cancer survivors and enjoy a day of horse racing and time with family and friends. More than \$200,000 was raised and will go toward oncology services at the Sandra and Malcolm Berman Cancer Institute.



Community Outreach 2018 Annual Report

- Screened nine men for prostate cancer.
- Screened 30 participants for skin cancer; one advised to seek follow-up; and three were recommended for biopsy.
- Screened nine participants for oral cancer; 0 were advised to seek follow-up (no cancer diagnosis).
- Screened 16 participants with voice screenings at the Milton J. Dance, Jr. Head & Neck Center, with no diagnosed cancers.
- Supported numerous outreach events, including the Senior Expo, Blood Cancer Awareness Month display, HopeWell Cancer Support Reach Out and Run, the Red Devils PJ5K, and the American Cancer Society Outrun Cancer 5K. Also, fundraisers to support the Cancer Institute team were carried out (Scrapbooking Event, Paint Your Pet, Patient Support and Legacy Chase Jeans Days). Health fairs were conducted at Baltimore County Government Employees, Social Security Administration, Blakehurst Retirement, McCormick and Senior Expo.
- Provided oncology support programs/services, including monthly Look Good Feel Better sessions (28 participants), monthly Head & Neck Cancer Support Group (207) and quarterly Laryngectomy Group (59). In all, 294 patients and their families participated in the above activities this year, with an average of 25 per month. A Caregiver Celebration held in November supported more than 33 participants. Over 400 survivors and family members attended the Annual Cancer Survivor Celebration event.
- Two symposiums were organized for the community and GBMC physicians and staff (Breast Health for Physicians Caring for Women Symposium and a Melanoma Symposium).
- The Legacy Chase event draws thousands of staff and members of the community to partake in an activity-filled day, and all proceeds benefit oncology patient support at GBMC.

IN 2018, SUPPORTED NUMEROUS OUTREACH ACTIVITIES, HEALTH FAIRS AND COMMUNITY EVENTS:

Blakehurst Retirement Health Fair: April 20

HopeWell Cancer Support Reach Out and Run: April 22

Social Security Administration Health Fair: May 2

GBMC Employee Health Fair: May 3

Towsontown Festival: May 5-6

McCormick Health Fair: May 7

Annual Survivorship Celebration: June 10

American Cancer Society Outrun Cancer 5K: Aug. 5

Baltimore County Employees Health Awareness Day: Sept. 12

Cockeysville Senior Center Health Fair: Sept. 24

GBMC Legacy Chase: Sept. 29

Senior Expo: Oct. 3-4

PJ5K (The Red Devils): Oct. 7

Cancer Caregiver Event: Nov. 13-16



COMMITTEES

CANCER COMMITTEE

Paul Celano, MD (Chair, Medical Director, Cancer Institute)

Jennifer Billiet, MGC (Genetics)
Bishal Bista, PharmD (Pharmacy)
Judy Bosley, RN (Clinical Trials Mgr/Coord)
Robert Brookland, MD (Radiation Oncology)
Neri Cohen, MD, PhD (Thoracic Surgery)
Brandon Costantino (Oncology Support)
Brittney Davis, LMSW (Psych Coord)
Robert Donegan, MD (Medical Oncology)
Nathan A. Dunsmore, MD (Pathology)
Ari Elman, MD (Medical Oncology)
Sara Fogarty, DO (Breast Surgery/ACoS Liaison)
Suzi Ford (American Cancer Society)
Clair Francomano, MD (Genetics)
Dorothy Gold, LCSW-C (Psych Coord)
David Goldstein, MD (Urology)
Courtney Hartman (IT)
Amanda Henderson, RN (Inpatient Nursing)
Connie Herbold (Practice Mgr/Ca Conference Coord))

Alan Kimmel, MD (Rehabilitation)
Felicity Kirby, RN (Survivorship Coord)
Kim Levinson, MD (GYN/Onc)
Barbara Messing, SLP (H&N Center)
Virginia Moratz, OTR (Rehabilitation)
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Geoffrey Neuner, MD (Radiation Oncology)
Robert Palermo, MD (Pathology)
Karen Pitman, MD (H&N Surgeon)
Craig Randall, RTT (Radiation Oncology)
Francis Rotolo, MD (ACoS Liaison)
Laura Schein (Community Outreach)
Lauren Schnaper, MD (Breast Surgery)
Philip Shaheen, MD (Palliative Care)
Dawn Stefanik, RN (Outpatient Infusion Services)
Michael Stein, MHSA (Executive Director/Ca Program Admin)
Vanessa Stinson, CTR (Cancer Registry Quality Coord)
Karen Ulmer, RN (H&N Nursing/Qual Impr Coord)

Breast Program Leadership Committee

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Jennifer Billiet, MGC (Genetics)
Judy Bosley, RN (Clinical Trials)
Paul Celano, MD (Medical Director, Cancer Institute)
Brandon Costantino (Oncology Support)
Madhu Chaudhry, MD (Medical Oncology)
Judy Destouet, MD (Radiology)
Robert Donegan, MD (Medical Oncology)
Clair Francomano, MD (Genetics)
Connie Herbold (Practice Mgr)
Alan Kimmel, MD (Rehabilitation)
Felicity Kirby, RN (Survivorship Coord)
Virginia Moratz, OTR (Rehabilitation)
Alex Munitz, MD (Radiology)
Angela Murrell, NP-C (Breast Surgery)
Geoffrey Neuner, MD (Radiation Oncology)
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Kruti Patel, MD (Radiation Oncology)
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Francis Rotolo, MD (Breast Surgery)
Lauren Schnaper, MD (Director, Breast Care Center)
Sheri Slezak, MD (Plastic Surgery)
Michael Stein, MHSA (Exec Director/Ca Program Admin)
Vanessa Stinson, CTR (Cancer Registry)

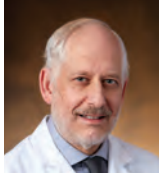


GBMC's Cancer Committee oversees the quality, performance improvement, safety and clinical effectiveness of the care provided at the Sandra and Malcolm Berman Cancer Institute. Furthermore, it ensures that the Berman Cancer Institute maintains a Commendation level of accreditation through the Commission on Cancer.





SANDRA & MALCOLM BERMAN CANCER INSTITUTE LEADERSHIP TEAM



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Herman & Walter Samuelson Medical
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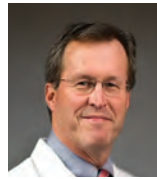
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GBMC

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OF SURGEONS



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Quality Cancer Care: Recognizing Excellence