



ANNUAL REPORT 2015



The University of Tennessee

WEST
Cancer Center

Methodist Healthcare Family

WEST CANCER CENTER

OUR MISSION

Our mission is to provide the highest quality cancer care and clinical research throughout the cancer journey, while respecting the quality of life – physically, emotionally and spiritually.

OUR VISION

Our vision is to continually innovate, research and educate in order to advance the highest quality, compassionate, patient-centered and personalized cancer care.

OUR VALUES

Innovation: Our treatments include the latest state-of-the-art breakthroughs, researched and developed by our expert team of physicians and scientists.

Comprehensive: Our care is for the individual, as well as their loved ones. We're not just treating the disease – we're treating the entire person.

Family-focus: We're with you on this journey. We care for you and will be by your side – every step of the way.

Hope: Even in the midst of hardships and unforeseen trials, there is always hope. When you fight, you always have a chance.

Courage: It takes an inner strength to fight this disease. We will help you find it and channel it.

CANCER EXECUTIVE COUNCIL

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West Cancer Center,
Hematologist/Medical Oncologist

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Methodist Healthcare

Donna Abney

Executive Vice President,
Methodist Healthcare

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ON THE COVER



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FROM OUR

EXECUTIVE DIRECTOR

On behalf of West Cancer Center's faculty and associates, I am pleased to present our 2015 West Cancer Center Annual Report. This has been a year of remarkable and historic growth for our organization, as we continue to expand our services – and facilities – so that we may provide unparalleled cancer care and research for patients across the Mid-South. And while our achievements during the course of 2015 are numerous – spanning everything from advancements in clinical care to innovations in our own laboratories – they can be summarized by a single word: collaboration.

It is this focus on collaboration that serves as the heart of our new comprehensive cancer center, which officially opened in November 2015. A 123,000-square-foot facility, the new East Campus location provides our patients the opportunity for comprehensive treatment and care, all at one location. And while its physical attributes provide a spacious, soothing atmosphere for the almost 35,000 patients seen each year, its most notable feature is that it unites multiple specialties – including our Comprehensive Breast Center, Medical Oncology, Gynecologic Oncology, Radiation Oncology, Surgical Oncology and Thoracic Oncology – into a single point of outpatient care. No longer do patients have to visit multiple office locations for the often complex interventions needed for their cancer treatment. Rather, they can see their entire team of expert physicians, all on a single visit to our East Campus location. The net result is a collaborative environment that will both foster West Cancer Center's comprehensive approach to treatment and transform the delivery of oncology care in the Mid-South.

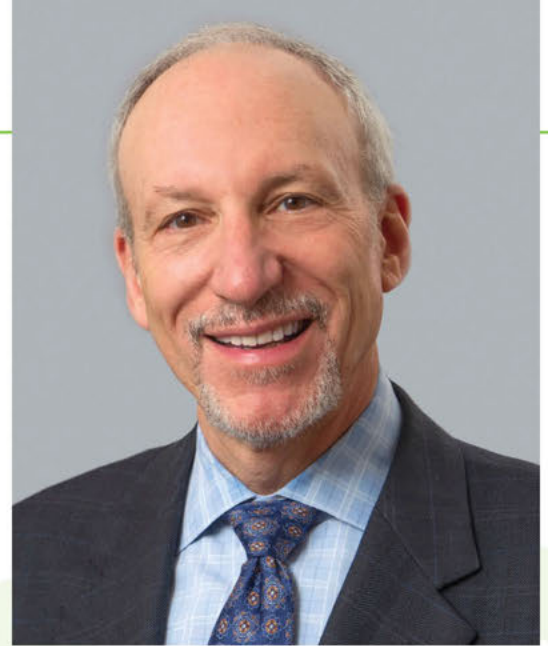
As we continue to expand our facilities and locations to better serve patients across the Mid-South, so must we continue to expand our investment in innovative cancer research in both the laboratory and clinical setting. Collaboration is an integral and necessary component of our translational science efforts, as our oncologists combine forces with the foremost cancer researchers at the University of Tennessee Health Science Center to effectively translate laboratory findings to leading patient care in the clinical setting. It is this focus on collaborative efforts that continues to energize the most important advancements in oncology research – both here in Memphis and across the world.

And while this spirit of collaboration has been a focal point for our organization this year, it has always been – and will always be – an integral component of West Cancer Center. It is this spirit of collaboration that fueled our partnership with Methodist Healthcare and the University of Tennessee Health Science Center almost five years ago, as we embarked collectively and steadfastly on a mission to combine the foremost experts in patient care, research and education in order to provide the best possible cancer treatment for patients. It is this same spirit of collaboration that continues to fuel the advancement of knowledge, nourish the discoveries of tomorrow, and support the lives of our patients and their loved ones. This is our charge at West Cancer Center, and thanks to the lifesaving and groundbreaking efforts of our faculty, we are well on our way to fulfilling this mission.

Sincerely,



Lee S. Schwartzberg, MD
Executive Director, *West Cancer Center*



Lee S. Schwartzberg, MD
Executive Director, *West Cancer Center*

FACILITIES UPDATE

Comprehensive Care: East Campus Opens

In November, West Cancer Center celebrated the historic Grand Opening of its new \$60.5 million East Campus location. Located at 7945 Wolf River Boulevard, the 123,000-square-foot facility is a tangible result of the innovative partnership between Methodist Healthcare, the University of Tennessee Health Science Center, and West Clinic, who joined together in 2012 to form West Cancer Center.

“This marks another milestone in the transformation of how we care for and treat our patients,” said Erich Mounce, CEO of West Cancer Center. “By physically combining the forces of our multidisciplinary teams into one facility, we are creating an environment that truly fosters collaboration and produces a unique understanding of what each specialty requires, allowing everyone to perform at their highest level.”

This state-of-the-art center, which houses both clinical and research services, delivers an opportunity for innovative drug therapy and cutting-edge research to be developed alongside perennial patient care, all in one facility. The wide range of multidisciplinary services that West Cancer Center provides is a result of the collective effort by our physicians and researchers to elevate the quality of cancer care in the Mid-South. For the first time, every aspect of cancer care is now available under one roof, resulting in the creation of a single treatment home for all stages of the cancer treatment journey.

Programs and services available at the new East Campus location include:

- Clinical Research Program
- Diagnostic and Interventional Radiology
- Genetics
- Gynecologic Oncology
- Head & Neck Surgery
- Hematologic Oncology
- Margaret West Comprehensive Breast Center
- Medical Oncology
- New Therapeutics (Phase I) Program
- Nutrition
- Pain Management
- Palliative Medicine
- Psychological Services
- Radiation Oncology
- Rehabilitation
- Surgical Oncology
- Survivorship Services
- Thoracic Surgical Oncology
- WINGS Supportive Care Division



Superior Precision: Elekta Versa HD™ and ExacTrac from Brainlab

Radiation Oncologists at West Cancer Center are now able to pinpoint tumors with sub-millimeter accuracy with the advanced Image Guided Radiation Therapy (IGRT) system – ExacTrac from Brainlab. With improved precision, ExacTrac enables Radiation Oncologists to deliver higher treatment doses within one millimeter of the tumor, significantly reducing the risk to neighboring healthy tissue and improving longer-term clinical results.

This technology is paired with Elekta Versa HD™, an advanced linear accelerator system. The Versa HD™ advances care by providing the flexibility to safely and efficiently deliver the full spectrum of conventional radiotherapy techniques, as well as the added versatility to deliver sophisticated linear accelerator-based stereotactic treatments – all within a single delivery system. Elekta’s innovative High Dose Rate mode leverages advances in flattening filter-free beam technology and provides maximum dose rates three times higher than previous generation linear accelerators. With the option to deliver conventional and high dose rates, Versa HD™ enables highly sophisticated therapies without comprising treatment times.

By streamlining treatment workflow, ExacTrac and Versa HD™ increase patient positioning efficiency and provide highly accurate solutions for stereotactic body radiotherapy treatment (SBRT) – a highly advanced and accurate treatment module now available to patients at West Cancer Center. With this form of treatment, Radiation Oncologists are able to deliver a greater dose of targeted radiation over the course of fewer treatments than conventional therapy.

West Cancer Center is one of only a few centers in the country that provides the Elekta Versa HD™ and ExacTrac from Brainlab pairing. This, according to Matthew Ballo, MD, Director of Radiation Oncology, signifies West Cancer Center and Methodist Healthcare’s commitment to providing patients with the most tailored treatment plans available. “West Cancer Center is committed to excellence in clinical care, focusing on cutting-edge research and quality medical education to constantly improve the way cancer patients are treated,” said Ballo. “From the moment we discuss the patient’s case in our multidisciplinary conferences to the day we start their treatment, we’ve tailored individual treatment plans to fit each patient’s needs. The ability to provide the unique applications of our Versa HD™ and the ExacTrac from Brainlab pairing are integral pieces to ensuring the most effective and precise therapy for patients requiring radiation treatment.”



Matthew Ballo, MD
Director of Radiation Oncology
West Cancer Center



Surgical Spotlight: Minimally Invasive and Robotic-Assisted Surgery

The development of minimally invasive surgery and its associated technology has arguably been the most impactful surgical innovation in decades. And while a traditional surgical approach is sometimes necessary for complex cases, there are an increasing number of diagnostic and surgical procedures that can now be implemented using less invasive techniques and significantly smaller incisions. At West Cancer Center, the Departments of Gynecologic Oncology and Thoracic Surgical Oncology are providing patients with the opportunity to benefit from minimally invasive and robotic-assisted surgery – decreasing patient discomfort and allowing for faster return to their normal activities.



Todd D. Tillmanns, MD
Gynecologic Oncologist
West Cancer Center

Robotic-assisted surgery has quickly become one of the fastest growing technologic advances in the treatment of gynecologic cancers. Recognizing the need for the most advanced surgical intervention for patients facing gynecologic malignancies – including uterine, ovarian and cervical cancers – West Cancer Center was the site of the first robotic-assisted hysterectomy and lymphadenectomy in the Mid-South. The procedure was

performed by Todd D. Tillmanns, MD, Gynecologic Oncologist, using the da Vinci® surgical system – a system that allows surgeons to operate through just a few small incisions. The da Vinci features a magnified 3D high-definition vision system and tiny wristed instruments that bend and rotate far greater than the human hand. This allows the surgeon to operate with extraordinary precision and dexterity, navigating the surgical field with the use of highly precise instruments all through a 1-2 centimeter incision.

In addition, the role of robotic-assisted and minimally invasive surgery has had profound implications in the treatment of patients with both benign and malignant



thoracic and esophageal diseases. The Department of Thoracic Surgical Oncology at West Cancer Center, led by Benny Weksler, MD, FACS, places a special focus on minimally invasive and robotic thoracic surgery for the treatment of lung cancer, esophageal cancer, benign esophageal pathologies, thymomas, myasthenia gravis, chest wall tumors and pleural disease. At Methodist University Hospital, Dr. Weksler and team utilize a da Vinci Xi robotic surgical system – the fourth generation of da Vinci systems optimized for complex four-quadrant surgery featuring revolutionary anatomical access, crystal clear 3DHD vision, and a platform designed to seamlessly integrate future innovations. Through the utilization of the sophisticated applications of the da Vinci Xi robotic surgical system, Dr. Weksler can not only assure patients of smaller incisions and less pain, but can also perform a higher volume of surgeries due to the efficiency created by the robotic device.



Benny Weksler, MD, FACS
Thoracic Surgical Oncologist
West Cancer Center



David Shibata, MD, FACS, FASCRS

*Deputy Director, West Cancer Center
Professor and Chair of Surgery, University of Tennessee
Health Science Center*

David Shibata, MD, FACS, FASCRS was named Chair of Surgery for the UTHSC Department of Surgery and Deputy Director of West Cancer Center in the summer of 2015. Prior to joining West Cancer Center and UTHSC, Dr. Shibata was a Professor of Surgery and Oncology at the University of South Florida Morsani College of Medicine, plus Senior Member and Chief of the Section of Colorectal Oncology at the H. Lee Moffitt Cancer Center and Research Institute in Tampa, Fla.



Multidisciplinary Model: A Focus for Collaboration

Dr. Shibata is an internationally recognized authority in the multidisciplinary management of colorectal cancer, bringing significant expertise in minimally invasive and robotic surgical approaches for the treatment and management of this disease. As Deputy Director at West Cancer Center, Dr. Shibata provides vast knowledge and proficiency relating to multidisciplinary management of not just colorectal, but all cancer types – a management that, according to Shibata, is critical for the practice of comprehensive cancer care. “This is really how cancer care needs to be done, in a multidisciplinary fashion,” said Shibata. “Patients need to have access to a team of cooperative and collaborative specialists in all areas of cancer care.” According to Shibata, this approach to cancer care not only benefits the patient tremendously, but it also challenges oncologists and other specialists to expand their knowledge beyond their particular area of focus.

Physician Scientist

In addition to his recognition as an expert in the clinical management of colorectal cancer, Dr. Shibata is also an accomplished clinical, translational and basic science research investigator. “Translational science is the wave of the future,” said Shibata. “Molecular technology is allowing us to select more exact patient therapy. We’re also leveraging that technology to predict the prognosis of patients and also the response to treatment of individual patients.” Acknowledging that we are just at the “tip of the iceberg” when it comes to our molecular understanding of tumor types and the application of this understanding to more targeted therapies, Dr. Shibata believes translational methodology is critical to all oncologists, regardless of their specialty. “From the immediate technical part, does that translational piece make an immediate difference? No,” said Shibata. “But, it’s really about understanding the whole and not just being a ‘technician,’ but a true oncologist.”

A Vision for Cancer Care in Memphis

The partnership formed by West Clinic, Methodist Healthcare and the University of Tennessee Health Science Center to form West Cancer Center was a major selling point in Dr. Shibata’s decision to join the faculty. “The fact that three major players are actually willing to come together to improve cancer care for the region was really important,” said Shibata. “Seeing that potential was a really big draw for me to come here.” Through these efforts, Dr. Shibata believes that Memphians will feel confident that they can receive world-class cancer care without having to travel outside of Memphis for treatment.

Yasser Khaled, MD

Program Director, Methodist Healthcare Blood and Marrow Transplant Program (BMT)

Yasser Khaled, MD, was named Program Director of the newly established Blood and Marrow Transplant Program, a collaboration between Methodist Healthcare, West Cancer Center and the University of Tennessee Health Science Center, in the spring of 2015. Prior to joining the partnership in Memphis, Dr. Khaled served as Medical Director of the Blood and Marrow Transplant Program at Florida Hospital in Orlando. With more than 20 years of experience in hematology and stem cell transplantation, Dr. Khaled has established Memphis' first Haploidentical Transplant Program.



Challenge Accepted

As the leader of the new Blood and Marrow Transplant Program, Dr. Khaled is faced with a challenge of building a world-class program from the ground up. During his tenure as Medical Director of the BMT Program at Florida Hospital, Dr. Khaled not only established the program as the second largest in volume of transplantations in the state, but was also one of only 15 programs nationwide that exceeded survival rates for transplant patients. Now in Memphis, Dr. Khaled looks forward to the challenge of building another outstanding program from the “ground up” as part of the integrated cancer center partnership – a challenge already reaping results in less than a year. “We have a great team that we’ve established in a very short time,” said Khaled. “We are ahead of schedule for all of the milestones we are shooting for.”

Breakthrough in Transplant: “Haplo”

Until Dr. Khaled's arrival at West Cancer Center, haploidentical transplantation – often referred to as “haplo” – was not available in Memphis. With the establishment of the BMT Program, patients now have access to this particular option, which involves matching a patient's tissue type, specifically their human leukocyte antigen (HLA) tissue type, with that of a related or unrelated donor. This – according to Khaled – has been one of the single most important advancements in the field of transplantation, exhibiting vast potential in the past five to six years alone. This is especially important for Memphis, as it provides African American patients – who account for 70% of Khaled's transplantations and who are less likely to find a full match due to their complex genetic makeup – with the chance of finding a “half match” donor. “Before the half match program, a lot of African Americans would die from leukemia because we couldn't find a donor that was suitable for them,” said Khaled. “Now with haplo, we can find donors for those patients.”

Finding the Balance

Dr. Khaled's research focuses on developing new strategies for the prevention of graft versus host disease – a complication in allogeneic stem cell or bone marrow transplant patients where the newly transplanted donor cells attack the transplant recipient's body. Through his research, Dr. Khaled and his team are looking at new strategies for the prevention of graft versus host disease, while also recognizing that the advent of haploidentical transplantation requires an even more delicate approach and science to the transplant process. “That's the holy grail of transplant. Can you really separate that graft versus leukemia affect from graft versus host disease,” said Khaled. “We cannot really at this point control it, but there is a lot of research to separate it so that you only get the graft versus leukemia without getting the graft versus host disease impact.”



Enrique Izaguirre, PhD, DABR

Director of the Medical Physics Program, West Cancer Center

Enrique Izaguirre, PhD, DABR, is an internationally recognized medical physicist expert in image guided radiation therapy; in vivo treatment monitoring for intensity modulated radiation therapy and stereotactic body radiotherapy; specialized treatment modalities such as radiosurgery and total body radiotherapy; and multimodality image guided brachytherapy. In addition to his role as Director of the Medical Physics Program at West Cancer Center, Dr. Izaguirre also serves as an Associate Professor of Biophysics and Radiation Oncology at the University of Tennessee Health Science Center.



Medical Physics

Dr. Izaguirre brings to West Cancer Center the expertise to implement a variety of advanced treatment modalities for patients undergoing radiation therapy. His medical physics work focuses on specialized care for patients requiring highly conformal irradiation (IMRT, SRS and SBRT), and advanced imaging modalities for malignancy visualization and motion management. He has extensive experience in developing and implementing new technologies to deliver new treatment protocols requiring specialized algorithms and techniques, such as CT-MRI guided HDR, SRS (linac and gamma knife), SBRT, and total body irradiation for bone marrow transplantation.

Internationally Renowned Scientist and Researcher

Dr. Izaguirre is a world-recognized scientist in the field of preclinical imaging and micro irradiation. He developed the first solid state microSPECT-micro CT and the first dual gantry micro irradiator, the microIGRT. Both are currently used for the evaluation of novel therapies for cancer treatments. In addition, Dr. Izaguirre brought to the field of cell micro irradiation the real time image guidance concept to acquire correlated microbeam profiles and images of fluorescent labeled cell organelles. A leading scientist in real time clinical imaging instrumentation and dosimeters, his team also developed the first in vivo real time treatment monitoring system for IMRT and SBRT radiotherapy.

Biophysics Laboratory at the University of Tennessee Health Science Center

The Biophysics Laboratory, located in the Cancer Research Building on the campus of UTHSC, houses an advanced clinical instrumental prototyping laboratory, a 3D micro-device and micro sensor foundry, and a preclinical image guided micro irradiation facility to evaluate the therapeutic potential of novel chemo-radiotherapy cancer treatments. Under the leadership of Dr. Izaguirre, these specific research projects fall within three main areas of research designed to apply data from both clinical and laboratory settings to generate evidence-based novel cancer treatments and improve patient care: 1) Development of cutting-edge clinical devices; 2) Evaluation of novel chemo-radiotherapy cancer treatments; and 3) Radiotherapy Preclinical Trials. Dr. Izaguirre is striving to establish this program as a leader in the development and validation of paradigm shifting radiotherapy devices with the ability to translate preclinical evaluation of radiotherapy treatments into effective therapies for patients in the clinical setting.

Manjari Pandey, MD

Medical Oncologist, West Cancer Center

Manjari Pandey, MD, joined West Cancer Center in the fall of 2015. After her residency at the Johns Hopkins School of Medicine, Dr. Pandey completed her fellowship in Oncology and Hematology at West Cancer Center before joining the West Cancer Center faculty. With a focus on neuro-oncology, Dr. Pandey works with Matthew Ballo, MD, West Cancer Center's Director of Radiation Oncology, and in partnership with Semmes Murphey Clinic to develop West Cancer Center's Comprehensive Neuro-Oncology Program.



Specialty Focus: Neuro-Oncology

Dr. Pandey's focus on neuro-oncology is the result of both a clinical interest and an understanding of the vast potential – and need – for additional advancements in the treatment of brain cancer. “Neuro-oncology is a special niche within cancer in solid tumors. I think one of the big reasons I'm interested in it is because of how medicinal it is,” said Pandey. And while brain cancers represent only 2% of all solid tumors in adults, there is a growing need – especially in the Memphis market – for oncologists specifically focused on this field. “Here in Memphis, we see a surprising number of brain tumors. But we don't have many therapies for patients with brain tumors right now,” said Pandey. “These cancers are not that common, but it's an area with special needs.”

Importance of Survivorship

With a clinical focus on neuro-oncology, Dr. Pandey's research interests reflect a commitment to evaluating innovative therapies for brain cancers, specifically glioblastoma (GBM). In addition to researching the implications of immunotherapy – perhaps the biggest breakthrough in oncology in decades – West Cancer Center's Comprehensive Neuro-Oncology Program is also committed to research in the field of neurocognitive studies as well as survivorship services. “More and more we are realizing the importance of survivorship services, especially for brain tumors,” said Pandey. “The aspect of supportive care in the sense of help with cognitive issues, psychological issues, and caregiver systems – those things are all going to be a big deal for brain cancer patients.”

Accelerating Research in Memphis

“One of the best things about West Cancer Center is the way it's evolving. It started out as a private practice, but always focused on research,” said Pandey. “The collaboration with the university shows a dedication to research, to teaching. West Cancer Center is what is accelerating research in Memphis. No other group locally has been able to match our ability to put people on protocols or new clinical trials. In this area, West Cancer Center is the place to be.”



Daniel Powell, MD

Radiologist, West Cancer Center

Daniel Powell, MD, a Radiologist at West Cancer Center specializing in Interventional and Diagnostic Radiology, joined the West Cancer Center faculty in the summer of 2015 following the completion of his Interventional Radiology Fellowship at New York Presbyterian-Columbia Medical Center. In addition to bringing clinical expertise, Dr. Powell has been an active researcher in the field of Radiology and Oncology, having been named the grant recipient investigator of the Associate Trustees Mt. Sinai St. Luke's and Mt. Sinai Roosevelt Small Grant Award, as well as being named an FDA Investigational Device Exemption (IDE) approval holder.



Research Focus

With a focus on research throughout his medical training, Dr. Powell has been published in numerous publications, including the *Journal of Clinical Imaging* and the *Clinical Radiology* journal. During his fellowship, Dr. Powell was named the top reviewer for the *Journal of Vascular and Interventional Radiology* in 2013 and 2014. Since joining West Cancer Center, Dr. Powell's main research focus has been on the PET/CT character of post ablation lung cavities. "When we burn a tumor – whether it's lung cancer or spread of cancer to lung – and then we follow up four months later with a PET scan, it can be hard to tell whether there is recurrence of the cancer or just healing," said Powell. "So we are trying to get a sense of what those changes look like based on what patients have had in the past and what their biopsies have been."

Oncologic Opportunities

With a residency in Radiology and a fellowship focused on Interventional Radiology, Dr. Powell's experience and training presented a vast and varied patient population. When his fellowship was coming to an end, however, it was clear to Dr. Powell that the field of oncology provided a unique opportunity to apply his interventional background in a particular patient population where the need – and trend – for advances in interventional techniques was growing. "The future of Interventional Radiology tends towards what's called Interventional Oncology," said Powell.

Side-by-Side Interdisciplinary Care

A focus on interdisciplinary collaboration at West Cancer Center provides all specialists – like Dr. Powell – the unique opportunity to work side-by-side to develop the appropriate course of action from the moment patients are biopsied and staged throughout the remainder of their treatment. Dr. Powell – particularly through his focus on interventional work – also has the opportunity to collaborate with Medical Oncologists and other specialists beyond just the initial imaging and staging needs. "With interventional work, we can help move the patients towards care by providing even further diagnostic information," said Powell. "We can also advise oncologists where to biopsy and when to biopsy patients."

CLINICAL RESEARCH

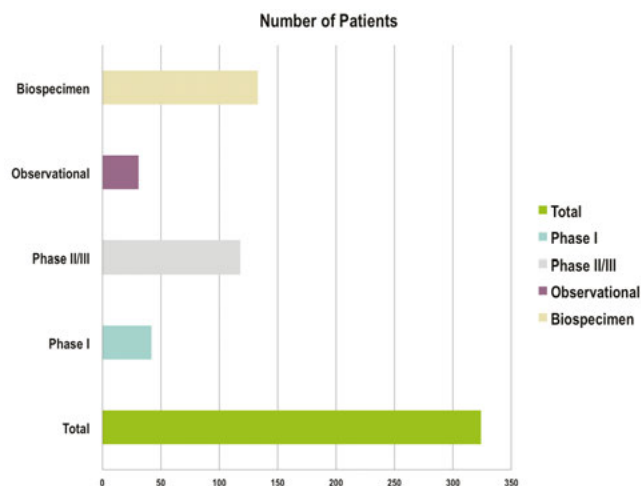
THE THERAPIES OF TOMORROW, TODAY

West Cancer Center's Research Program includes a large portfolio of clinical research studies that bring the latest advances in immuno-oncology and other targeted agents that reflect the best opportunities for patients to benefit from precision medicine. In 2015, West Cancer Center established our **Clinical Trial Database** tool on our website, www.westcancercenter.org. The tool provides the opportunity for both patients and physicians to search through our portfolio of clinical trial opportunities based on disease type, stage and status.

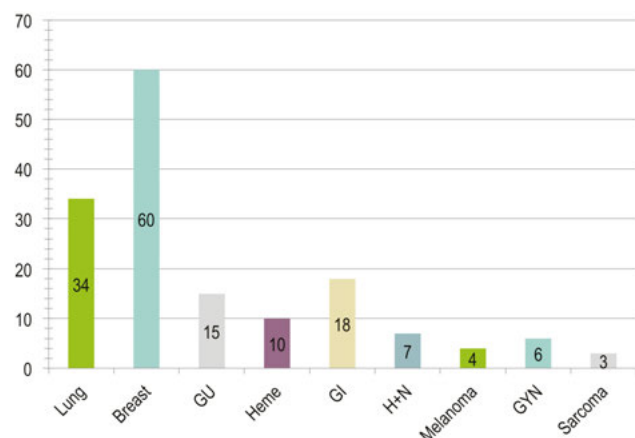
To view our new **Clinical Trial Database** and learn more about our Department of Research and Clinical Trials Program, visit www.westcancercenter.org/research.

Clinical Research Metrics

Total New Clinical Trial Patients in 2015



Total Clinical Trial Participation Accruals by Disease State



Total Therapeutic Clinical Trial accrual **increased by 4%** year-over-year.

There were **more than 2,000 visits** for Clinical Research trials at West Cancer Center in 2015.

During 2015, **67 therapeutic clinical trials** were available at West Cancer Center, including **29 newly activated studies**.



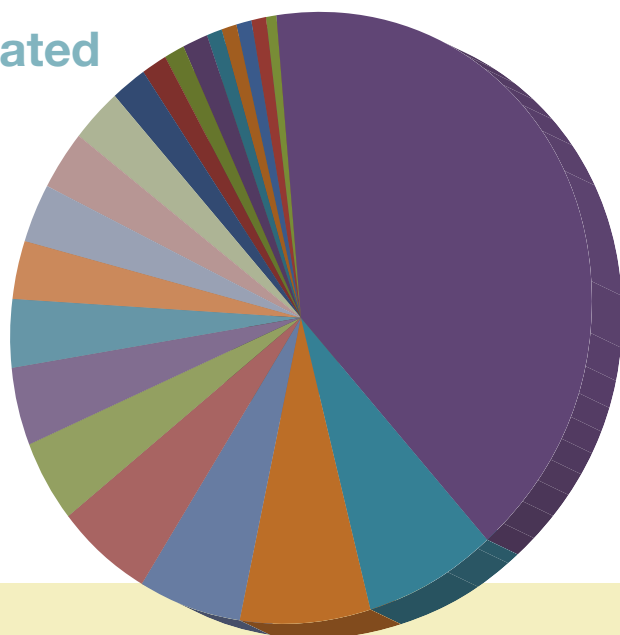
CLINICAL METRICS

AND THE PATIENTS WE SERVE

34,223 Total number of **patients treated** by West Cancer Center in **2015**

Highest Volume Cancer Types Treated in 2015 (New and Existing Cases)

- Breast Cancer: 7,414
- Lung Cancer: 1,359
- Uterine Cancer: 1,300
- Colorectal Cancer: 1,086
- Non-Hodgkin Lymphoma: 1,022
- Prostate Cancer: 790
- Ovarian Cancer: 763
- Cervical Cancer: 669
- Head and Neck Cancers: 583
- Leukemia: 571
- Rectal Cancer: 544
- Female Genital System Cancers: 527
- Multiple Myeloma: 341
- Renal Cancer: 245
- Melanoma: 235
- Pancreatic Cancer: 212
- Eye Cancer: 169
- Bladder Cancer: 161
- Hodgkin Lymphoma: 145
- Stomach Cancer: 121
- Brain Cancer: 114



10,416 Total number of **new patients** treated by West Cancer Center in **2015**

5,053 Cancer Cases

5,363 Non-Cancer Cases

Highest Volume of Newly Diagnosed Cases By Type in 2015

Type of Cancer	New Cases in 2015	Type of Cancer	New Cases in 2015
Breast Cancer	1,058	Non-Hodgkin Lymphoma	168
Gynecologic Cancers	818	Rectal Cancer	144
Lung Cancer	466	Pancreatic Cancer	89
Prostate Cancer	341	Eye Cancer	75
Colorectal Cancer	250	Renal Cancer	74
Head & Neck Cancer	192	Melanoma	66
Leukemia	171	Liver Cancer	61

SURGERY

Surgical Oncology Cases: **11,188**
Head and Neck Surgery Cases: **5,409**

Thoracic Oncology Cases: **2,871**

RADIATION ONCOLOGY

Total number of treatments delivered by Radiation Oncology: **26,057**

BLOOD & MARROW TRANSPLANT PROGRAM

Number of patients referred to Blood and Marrow Transplant Program: **106**
Allogenic Transplants Performed: **14** Autologous Transplants Performed: **30**

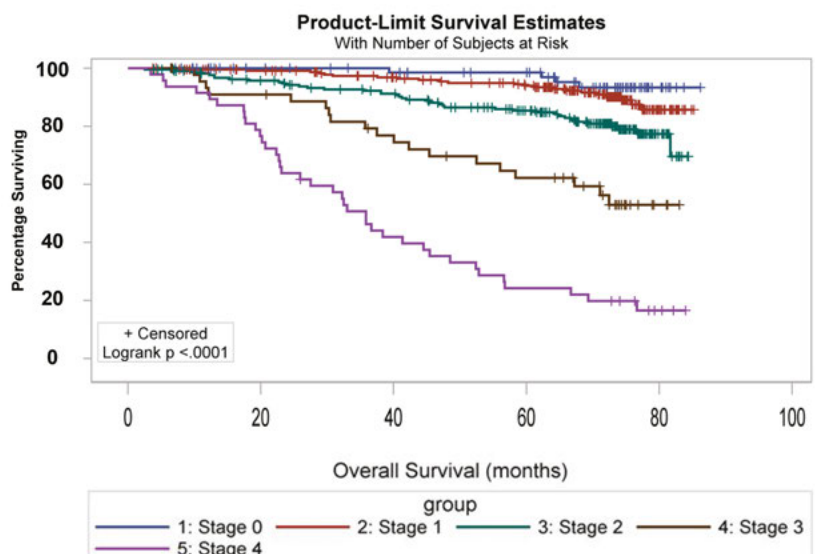
DIAGNOSTIC & INTERVENTIONAL RADIOLOGY

Total number of procedures performed by Diagnostic and Interventional Radiology: **59,642**

Outcomes Study: Breast Cancer Survival

In 2015, West Cancer Center's Clinical Integration team partnered with Vector Oncology, a leader in the delivery of care based oncology research, to evaluate comprehensive data on breast cancer survival for West patients. The data was evaluated over a seven year period (between 2007 and 2014) to determine qualification for data set parameters on a case-by-case basis.

"This was an extremely labor-intensive undertaking by our Clinical Integration team," said Lee Schwartzberg, MD. "The resulting data set provides an in-depth analysis that is in line with population studies, which allows us to compare our breast cancer outcomes to national data. It also further demonstrates our commitment to not only delivering top-quality research projects that generate real world evidence and insight, but also our determination to better our treatment protocols and outcomes for our patients."



SUPPORTIVE CARE

West Cancer Center leads research efforts for FDA approval

Cancer patients now have access to the latest drug therapy available for the prevention of chemotherapy-induced nausea and vomiting (CINV). Rolapitant (Varubi™), developed by Tesaro, Inc., was approved by the FDA in the fall of 2015. This is the latest in several FDA approvals surrounding supportive care for cancer patients and one of numerous FDA approvals with direct ties to research efforts here at West Cancer Center.

The drug received approval as a result of three phase III clinical trials led by an international research team that included Lee S. Schwartzberg, MD, Executive Director of West Cancer Center and internationally renowned leader in oncology research and supportive care. Dr. Schwartzberg was the lead author on the study, published in *The Lancet Oncology*, which demonstrated a significant reduction in CINV as a result of the introduction of Rolapitant into the medication regimen.

“The approval of Rolapitant signifies a major advancement in the field of oncology supportive care,” said Schwartzberg. “Chemotherapy has been – and remains – one of the primary treatment methods for cancer patients. To have a drug that helps lessen the uncomfortable side effects that come with this treatment method is truly groundbreaking for cancer patients across the country and all over the world.”

A world-renowned Medical Oncologist and Hematologist, Dr. Schwartzberg has been serving patients in Memphis and the Mid-South for almost 30 years, first with the West Clinic and now as the Executive Director of West Cancer Center. In addition to his numerous accolades for exceptional patient care, Dr. Schwartzberg is one of the world’s most respected experts in oncology research, focusing specifically on breast cancer, targeted therapy and supportive care. With more than 180 research papers published during his oncology career, Dr. Schwartzberg is leading efforts to establish West Cancer Center as a destination cancer center for both patients seeking innovative treatment options and scientists seeking a platform for groundbreaking research in oncology – an initiative that, according to West Cancer Center CEO Erich Mounce, is critical in the current oncology landscape.

“Dr. Schwartzberg’s work in supportive care has profound implications for cancer patients, all over the world,” said Erich Mounce. “This is another example of the groundbreaking work our West Cancer Center physicians and researchers are doing, every single day, right here in Memphis.”



Lee S. Schwartzberg, MD
Executive Director
West Cancer Center

“ This is another example of the groundbreaking work our West Cancer Center physicians and researchers are doing, every single day, right here in Memphis.”

ERICH MOUNCE
CEO, WEST CANCER CENTER

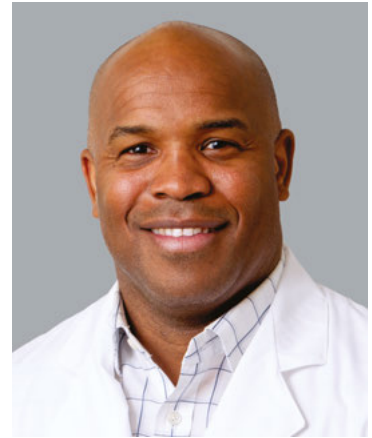
BENCH TO BEDSIDE

Collaboration for Translational Excellence

In 2015 alone, the FDA approved 45 new drugs and biological products. One-third of the approved drugs were for the treatment and management of cancer. Not only is the quantity of cancer drug approvals unprecedented, said Gregory Vidal, MD, PhD, Medical Oncologist and Physician Scientist at West Cancer Center, but it is also significant of the groundbreaking work resulting from the field of translational research and medicine.

Often referred to as “bench-to-bedside,” translational research provides the key link between the work of basic scientists and the treatment of patients in the clinical setting. This methodology has had profound ripple effects in the field of oncology in a relatively short timeframe. “Previously – even just ten to fifteen years ago – we were focusing on basic science and early discovery in the lab,” said Vidal. “More and more, we recognized that there should be some experts in between who transition the basic science into clinical work.”

Vidal’s background as a Physician Scientist provides a dichotomy that allows him to essentially live with “one foot in each world” – treating patients within our clinics, while also devoting time to research through collaboration with researchers at the University of Tennessee Health Science Center (UTHSC). This dual approach creates a unique space for translational efforts, as Physician Scientists can use both their scientific background and clinical expertise to not only understand how basic science can lead to important drug discovery, but also how they can address their clinical findings from a basic science perspective. Translational research has perhaps had the most profound impact on the growing field of precision medicine, where treatment is targeted based on the genetic make-up and particular pathways driving cancer cell growth.



Gregory Vidal, MD, PhD
Medical Oncologist
and Physician Scientist
West Cancer Center

And while these translational efforts have led to the advancement of numerous targeted therapies, it is especially critical in Vidal’s ongoing research for Triple Negative Breast Cancer (TNBC), where the availability for precision medicine is non-existent. “Triple Negative Breast Cancer patients are the group that is most lacking in terms of therapies,” said Vidal. “Currently there are no targeted therapies in the triple negative space.”



Gustavo Miranda-Carboni, PhD
University of Tennessee
Health Science Center

Through his collaboration with Gustavo Miranda-Carboni, PhD, at UTHSC, Vidal is looking at the particular biomarker that can recognize a more aggressive subtype of TNBC. “Our focus is getting tissue from women with TNBC from many different races and looking at the more aggressive versus non-aggressive types to try and see whether or not our biomarker – which we have a lot of preclinical evidence for – causes this more aggressive subtype,” said Vidal. Understanding and identifying this particular biomarker creates an opportunity for TNBC patients to benefit from targeted therapies that can essentially “block” the identified pathway that leads to the spread of aggressive TNBC. If we can do that, said Vidal, then we can target that particular biomarker for more effective treatment outside of the current chemotherapy standard of care.

Through West Cancer Center’s research efforts in translational medicine, the bench-to-bedside methodology comes full circle – producing not only important breakthroughs in the laboratory setting, but also providing reassurance to patients that they are receiving the most individualized and tailored treatment for their unique diagnosis. “Through this collaboration,” said Vidal, “we can offer our patients – here in Memphis – the best level of care.”



COLLABORATION

FOR CLINICAL CARE

Multidisciplinary Clinic: A Progressive Model of Care

With the opening of the new East Campus location in November, West Cancer Center united multiple specialty services into a single outpatient point of care. The unity of these specialties into a single location creates an opportunity to provide true, multidisciplinary care in the clinical setting. A further manifestation of this model of care is the establishment of a new Multidisciplinary Clinic – a clinic that will provide patients the



convenience of seeing all of their specialty providers within a single consultation area in the dedicated Multidisciplinary Clinic space on the second floor of our East Campus location.

“The Multidisciplinary Clinic will be a place where our patients will be seen by specialists

including Medical Oncology, Radiation Oncology and Surgical Oncology, as well as Supportive Services,” said Martin Fleming, MD. “In that manner, we can provide the truly comprehensive care that our patients really need.”

Fragmentation of care has been a long-standing barrier for patients – an issue exacerbated by factors related to socioeconomic disadvantages that plague a large percentage of the market’s population. With the opening of the East Campus location – and the Multidisciplinary Clinic – West Cancer Center is working to alleviate the pressures faced by many of our patients by providing a collaborative model of care within a single outpatient site. The convenience of uniting these services geographically coupled

with a collaborative, multidisciplinary approach to cancer treatment results in a truly transformative model of care for patients – and physicians – across the Mid-South.

Multidisciplinary Cancer Conferences

As part of its commitment to collaborative care, West Cancer Center faculty participate in multiple cancer conferences throughout the year – providing an opportunity for physicians across specialties to evaluate individual patient cases to develop a collective recommendation for their treatment.

In 2015, West Cancer Center’s Multidisciplinary Conferences evaluated and provided recommendations for almost 1,000 individual patient cases. Conferences held in 2015 include:

- Head & Neck Conference
- Breast Cancer Conference
- Gastrointestinal/Hepatobiliary (GI) Conference
- Cutaneous (Melanoma) Conference
- Lung Cancer Conference
- Gynecological Cancer Conference
- Malignant Hematology Conference
- Sarcoma Conference
- Genitourinary (GU) Conference



Precision Care: Leadership in Comprehensive Molecular Profiling

As the understanding of cancer's genetic origins and corresponding mutations continues to expand, so does West Cancer Center's imperative to apply these understandings to the individualized treatment plans for each patient's

specific mutational profile. This understanding represents a significant paradigm shift in the treatment of this disease: no longer is cancer a disease with a "blanket" treatment plan. Rather, each treatment plan has the potential to be as individualized as the genome sequencing of each patient. At West Cancer Center, our expert physicians continue to advance the field of precision oncology through the offering of comprehensive molecular profiling and the establishment of our Molecular Tumor Board.

In 2014, West Cancer Center adopted a policy of Comprehensive Molecular Profiling (CMP) for first line metastatic cancer. CMP was provided by one of two commercial providers with multi-omic platforms, including immunohistochemistry, in-situ hybridization, Next-Gen Sequencing (NGS) and RNAseq. NGS panels ranged between 44 genes probed for hot-spot mutations and 592 genes with whole exome coverage. However, with the implementation of this CMP policy and the resulting accumulation of vast data, faculty at West Cancer Center were faced with a daunting task: How can we ensure that the data translates to utilization in the clinical setting and ultimately benefit our patients?

This simple question birthed the establishment of West Cancer Center's Molecular Tumor Board – one of the first Molecular Tumor Boards created by a cancer center in the United States. With the ultimate goal of providing clinical practice guidance following CMP, the Molecular Tumor Board reflects a multidisciplinary approach to the individualized treatment plans of first line metastatic cancer patients. This protocol created a process where CMP results were first reviewed by a single physician to select potentially actionable reports for discussion. The Molecular Tumor Board reviewed actionable CMP reports in conjunction with patient's clinical history and made consensus recommendations to the treating physician. In addition, charts were also reviewed to determine clinical utility of the Molecular Tumor Board's recommendations.

As a result of this Molecular Tumor Board, almost 1,250 CMP reports have been reviewed, with lung (306 reports) colorectal (247 reports) and breast cancer (146 reports) being the most prevalent cancer sites represented. Of the CMP reports reviewed, almost 40% were selected for additional review and profiling, and almost 50% of those additionally reviewed and profiled reports resulted in actionable, clinical recommendations by the Molecular Tumor Board. Clinical recommendations resulting from thorough review by West Cancer Center's Molecular Tumor Board include clinical trial participation, as well as standard therapy and non-standard therapy approaches, including therapy approved for a different disease setting.

This model, according to Ari VanderWalde, MD, MPH, Director of Clinical Research at West Cancer Center, shows promise as a means to provide clinical guidance in a substantial fraction of patients and is particularly useful in identifying patients for West Cancer Center's growing clinical trials program. Moreover, it represents that – through collaboration in a progressive, multidisciplinary setting – patients are able to directly benefit from the expanding field of precision oncology.



EDUCATION

West Cancer Center Hematology and Oncology Fellowship Program

In partnership with UTHSC, West Cancer Center is developing the next generation of world-class Hematologists and Oncologists through the Hematology and Oncology Fellowship Program. A versatile program with a dual focus on both patient care in the clinical setting and research in the academic setting, Fellows at West Cancer Center spend three years honing their skills and preparing for their future as a physician scientist. The highly competitive program is led by Alva B. Weir, III, MD, Medical Oncologist and Hematologist at West Cancer Center.

Fellow Spotlight: Eric Wiedower, MD

Eric Wiedower, MD, is a third year fellow at West Cancer Center. Elected Chief Fellow, Dr. Wiedower provides not only administrative support, but also serves as the liaison between Fellowship participants and West Cancer Center faculty. In July 2016, Dr. Wiedower will join the faculty in official capacity as a Medical Oncologist and Hematologist. As his Fellowship graduation date approaches, Dr. Wiedower reflects on his time as a Fellow at West Cancer Center and the important lessons that will continue to influence his career as a physician.

On why West Cancer Center was the perfect match for his Fellowship:

A dual focus on both the clinical care and translational research was, according to Dr. Wiedower, a huge selling point for the Fellowship at West Cancer Center. With an expertise in clinical practice and patient care coupled with a focus on research in the academic setting, Dr. Wiedower knew that his time at West Cancer Center would set him up for long-term success as an oncologist. “The versatility of this program was very important. I knew that this program would offer me so much and would allow me to be successful in whatever career track I took.”

On life as a Fellow:

“Our job as a Fellow is to be a sponge and just absorb everything,” said Wiedower. “Part of being a Fellow is learning how to learn. There is so much data – and

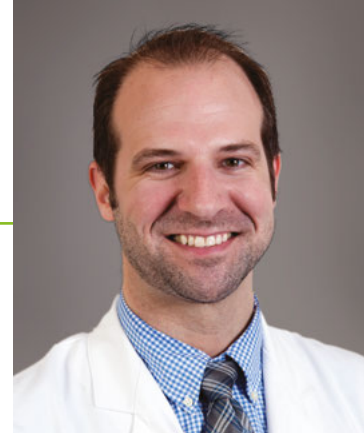
information – that one has to digest, so you really have to learn how to dissect the articles and figure out how you can apply these findings clinically.”

On the most impactful patient experience during his Fellowship:

“There are always patients that will stand out with physicians in oncology. One in particular was a patient that was very sick in the hospital. She passed away – she had been in the hospital for a long time. It hit everyone when she passed, but hearing her family being thankful for everything – despite their loss; thanking us for this extra time with their loved one, that really validates what we are doing. Even if we can’t always cure the patient, we can give them that extra birthday, or allow them to go to that graduation, or just more quality time with their family. That is everything.”

On joining West Cancer Center full-time in 2016:

After a lifetime of education and training, Dr. Wiedower is excited to join the faculty as a Medical Oncologist and Hematologist. And it is his three years as a Fellow that have prepared him for the task of providing both innovative and compassionate care to his future patients. “It’s everyone’s worst fear to meet an oncologist,” said Wiedower. “We are the physician that nobody wants to meet. But part of our duty is to convey to patients that we are absolutely the best person they could have met in their situation.”



Eric Wiedower, MD
Chief Fellow
West Cancer Center

West Cancer Center Symposia: Synergy for Improvement in Clinical Care

Mirroring a commitment to education in an academically focused clinical setting, West Cancer Center hosts several symposia and meetings throughout the year. With topics ranging from Primary Care to Robotic and Minimally Invasive Surgery, specialists from across the Mid-South region are invited to collaborate with West Cancer Center faculty on topics that directly impact clinical and patient outcomes. Symposia hosted in 2015 include:

- Forum on Cancer for Primary Care Providers
- West Cancer Center Research Symposium
- Annual West Cancer Center Oncology Symposium
- Memphis Robotic and Minimally Invasive Surgery Society Annual Symposium
- Surgical Oncology Symposium

SYMPOSIUM

Annual West Cancer Center Symposium – Multidisciplinary Solid Tumor Care: Collaborating for the Cure

In November, West Cancer Center hosted its 1st Annual West Cancer Center Symposium – Multidisciplinary Solid Tumor Care: Collaborating for the Cure. Featuring internationally renowned cancer experts and researchers, the conference was chaired by Lee S. Schwartzberg, MD, and included speakers from the country's leading cancer institutions, in addition to local faculty from West Cancer Center.

“This conference provides an opportunity for collaborative and interactive discussion on topics that directly impact the patients we serve,” said Schwartzberg. “In an age where rapid progress is taking place in cancer care and research, it is imperative that we collaborate and share our knowledge with others in the field. Our experts at West Cancer Center enjoyed the opportunity to welcome these prestigious speakers, as well as our colleagues throughout the region, to this informative event.”

With sessions focused on lung cancer, breast cancer and melanoma, the ACCME accredited event included discussions on newly available data, as well as optimal therapeutic approaches for these types of cancer. Participants were updated on practice-changing discussion and information that had immediate impact on clinical outcomes, including optimal therapeutic approaches for patients with non-small cell lung cancer, new clinical trial data and emerging treatment options for patients with melanoma, and optimal therapeutic strategies for managing patients with breast cancer. The 2nd Annual West Cancer Center Symposium will take place in November 2016.



SPOTLIGHT

2015 CONFERENCE SPEAKERS

Jeffrey Bradley, MD
Washington University School of Medicine

Axel Grothey, MD
Mayo Clinic

Sara Hurvitz, MD, FACP
UCLA Jonsson Comprehensive Cancer Center

Tari King, MD, FACS
Dana Farber/Brigham and Women's Cancer Center

Timothy Kuzel, MD
Northwestern University

Rodney Landreneau, MD
Allegheny General Hospital

Mark Pegram, MD
Stanford University

Neal Rosen, MD, PhD
Memorial Sloan Kettering Cancer Center

Merrick Ross, MD
MD Anderson Cancer Center

Mark Socinski, MD
University of Pittsburgh

Julia White, MD
The Ohio State University

SCIENTIFIC OUTPUT

287 The number of combined abstract presentations, publications and posters West Cancer Center faculty participated in for **2015:**

174 Published Articles **86** Abstract Presentations **27** Posters

Publication and Presentation Highlights

West Cancer Center faculty members engage in meaningful collaboration with their industry peers each year, sharing their insight and findings at international conferences as well as through publications, presentations and posters. Featured in prestigious publications – such as *The Lancet Oncology* journal, the *Journal of the National Comprehensive Care Network*, and ASTRO's *Practice Radiation Oncology* journal – and at the leading oncology meetings – including ASCO's Annual Meeting and the Annual International Papillomavirus Society Meeting – our faculty members are among the world's premier thought leaders and innovators in oncology care and research.

Lee S. Schwartzberg, MD was the lead author on a phase III study titled "Safety and efficacy of rolapitant for prevention of chemotherapy-induced nausea and vomiting after administration of moderately emetogenic

chemotherapy or anthracycline and cyclophosphamide regimens in patients with cancer: a randomised, active-controlled, double-blind, phase 3 trial," published in *The Lancet Oncology* journal. This particular study led to FDA approval of Rolapitant™ for the treatment of chemotherapy-induced nausea and vomiting.



Ari VanderWalde, MD,
MPH, MBioeth

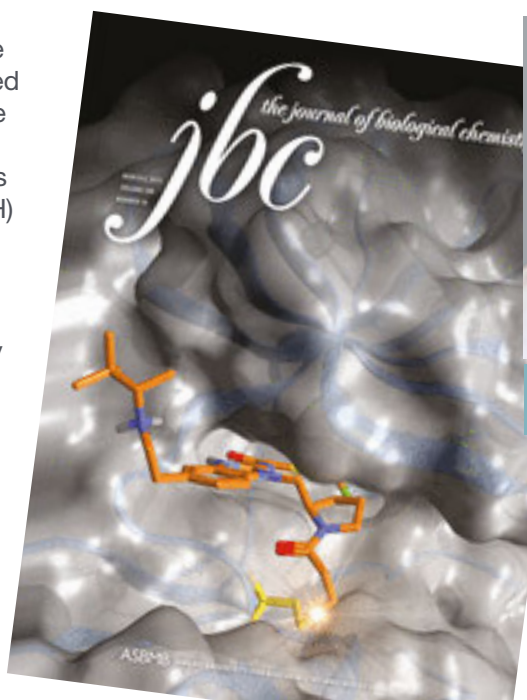


Michael G. Martin, MD

Ari VanderWalde, MD, MPH, MBioeth, and **Michael G. Martin, MD**, were authors on a study, published in the *Journal of the National Comprehensive Cancer Network*, titled "Next-Generation Sequencing and In Silico Analysis Facilitate Prolonged Response to Pazopanib Patient with Metastatic Urothelial Carcinoma of the Renal Pelvis."

Eric Wiedower, MD's abstract presentation, "The Addition of Rituximab to Chemotherapy Decreased Rates of Primary Surgery for Gastric Diffuse Large B-Cell Lymphoma without increasing Early Mortality," received Abstract Achievement Awards at the 57th American Society of Hematology (ASH) Annual Meeting and the ASH Meeting on Hematologic Malignancies.

Lawrence Pfeffer, PhD was an author on a study published in *The Journal of Biological Chemistry* titled "The oncogenic microRNA-21 inhibits the tumor suppressive activity of FBXO11 to promote tumorigenesis".



Lawrence Pfeffer, PhD

Intramural Grants Awarded for Research

Reflecting a commitment to the advancement of oncology care through innovative research, West Cancer Center awards intramural grants each year to researchers whose projects serve both the needs of the Mid-South community and overall research initiatives at West Cancer Center. In 2015, West Cancer Center was pleased to

award four intramural grants, each valued at \$50,000. The grants awarded were among the more than 20 proposals received by West Cancer Center for its annual grant awarding process.

West Cancer Center explores funding opportunities that support the mission and vision of West Cancer Center's Department of Research. The Executive Council of West Cancer Center – comprised of leaders from the partnership institutions – reviewed the applications and selected the four recipients.

“Our city's attribution as a ‘medical hub’ is an apt description, as we are home to some of the foremost leaders in cancer research at UTHSC,” said Lee S. Schwartzberg, MD. “West Cancer Center was very pleased to award grants to this prestigious group of researchers and physicians who demonstrated our mission to advance oncology care and research.”

Recipients include:

Marko Radic, PhD, Department of Microbiology, Immunology and Biochemistry, UTHSC – Awarded \$50,000 for his project, titled “Design and Testing of Autologous Immunotherapies for Breast Cancer.” Dr. Radic will collaborate with Dr. Tiffany Seagroves in the Cancer Research Building at UTHSC to develop models of chimeric antigen receptor T-cells (CAR-T cells) that can preferentially bring T-cells directly to tumors to fight breast cancer.

Ramesh Narayanan, PhD, Department of Medicine, Division of Hematology and Oncology, UTHSC – Awarded \$50,000 for his project, titled “Lead Optimization and Mechanistic Evaluation of Novel Selective Androgen Receptor Degraders (SARDs).” Dr. Narayanan will perform this project from his lab in the Cancer Research Building to develop novel, bioavailable endocrine therapies for use in prostate cancer.

Ilana Graetz, PhD, Department of Preventative Medicine, UTHSC – Awarded \$50,000 for her project, titled “Use of Web-Based App to Improve Outcomes for Ovarian Cancer Surgery.” Dr. Graetz will work closely with Todd Tillmanns, MD, Gynecologic Oncologist at West Cancer Center, and Vector Oncology, a research company specialized in outcomes-based research, to develop and test a web-based tool to allow patients to communicate more effectively with their medical support network following what is often extensive surgery for ovarian cancer that can have high re-admission rates.

Noam VanderWalde, MD, Department of Radiation Oncology, UTHSC – Awarded \$50,000 for his project, titled “Secondary Analysis of Older Adult Accrual on Radiotherapy Cooperative Studies.” Dr. VanderWalde, in collaboration with group physicians and statisticians, will lead a project determining disparities of care in clinical studies between older adults and younger adults with cancer.



COMMUNITY OUTREACH

A Commitment to Community:

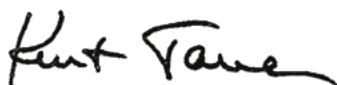
Kurt Tauer, MD, *Chief of Staff*

It is no secret that the Memphis area faces a vast and varied set of socioeconomic hurdles. These socioeconomic implications are manifested in numerous health concerns that plague the Memphis market and produce alarming disparities in outcomes, especially pertaining to cancer. As a result, West Cancer Center is faced with a daunting task: how do we equip the community with the necessary resources to alleviate the barriers that produce these alarming disparities? And how do we ensure that everyone who faces this terrifying diagnosis is provided the level of compassionate and innovative care needed to fight this disease?

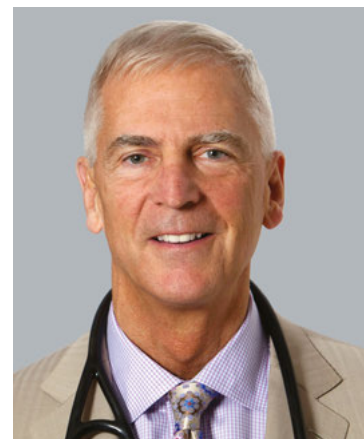
Since the doors of West Clinic opened in 1979, we have been committed to providing every single patient – regardless of their ability to pay – with the highest quality and most innovative care available to combat cancer. This commitment is furthered through our formalized Community Outreach initiatives, which provide a cohesive and comprehensive approach to eliminating barriers to care, while also equipping the population with the information to empower them to take control of their health.

As Memphians, we are called to serve our neighbor. As physicians, it is our imperative to provide each and every single patient with the tools they need to fight this disease and preserve their life. At West Cancer Center, our Community Outreach program is systematically closing the gap in both disparate access and outcomes, as we continue to serve, empower and fight alongside those facing this disease.

Sincerely,



Kurt Tauer, MD
Chief of Staff, *West Cancer Center*



Kurt Tauer, MD
Chief of Staff
West Cancer Center

In **2015**, West Cancer Center provided

\$17 MILLION

in care to the uninsured and underinsured in the Mid-South.

Thanks to grant funding support by the **Susan G. Komen Foundation**, West Cancer Center has screened almost **700** women who would have otherwise not had access to these services.



This includes not only screening mammography, but also diagnostic and ultrasound services.

Spotlight on Community Outreach: “Grassroots” Advocacy

The Memphis area faces a vast and varied set of socioeconomic hurdles. From poverty and blight to social and economic barriers, these challenges combine forces to produce a population where 53% live off a household income of less than \$50,000, compared to 49% nationwide. In the midst of these community challenges, West Cancer Center is faced with the daunting task of equipping the community with the necessary resources to alleviate the barriers that produce the alarming disparities in cancer outcomes. This question – and task – is one that Keesha Green faces, every single day.



As Community Outreach Coordinator, Keesha Green serves as the figurative bridge between the community and West Cancer Center. With a focus on efforts surrounding breast cancer and overall breast health and wellness, Green and the Community Outreach team have built a grassroots, boots on the ground approach to breaking the cycle and eliminating the myths around this disease – equipping the community with the resources they need to empower them to take control of their own health. This approach, according to Green, also helps address the comprehensive health care needs of the patient.



Keesha Green
Community Outreach Coordinator
West Cancer Center

“We are closing the loop to make sure we are taking care of the person as a whole – comprehensively – rather than just focusing on those with a breast cancer diagnosis,” said Green. “Closing the loop” can mean anything from providing women with information on the importance of self-exams and screenings to helping eliminate barriers – like lack of transportation – to ensure these women are able to go to their screening and diagnostic appointments. “We can provide screenings,” said Green, “but if you don’t have transportation, how do you access this service?”

With an emphasis on providing women not only the necessary resources but also a central point of contact for their breast health, Green has fine-tuned a seamless model for navigation through the complex system of health care – a system that becomes even more complex in the field of oncology. “More often than not, if you just pass the patient off and provide them with a phone number – without a contact or individual to help them – they may not follow through,” said Green. “To eliminate the possibility of them getting lost in the system, we provide them with a direct point of contact so that they have a true navigator – and partner – that helps them through the system.”

The success of this model has created breast as a “pilot” program for all future areas of focus in West Cancer Center’s Community Outreach efforts, which will include cervical, prostate, colon and lung cancers in 2016. With a focus on education, navigation and individual follow-up, West Cancer Center – and Green – believe that the model can have an immediate impact on the alarming disparities plaguing Memphis and its surrounding areas. This, according to Green, is what West Cancer Center is all about.

“If you are able to help someone, you do it. There’s no question about it. That is what we are all charged to do, and at West Cancer Center, we take hold of that. We’re giving back the way that we should.”



Lisa Wallace



A trip to the emergency room for what was thought to be a gallbladder issue was the beginning of a profoundly altered life course for Lisa Wallace.

At six o'clock that morning, Lisa received the news from Linda Smiley, MD, Gynecologic Oncologist at West Cancer Center, that it was more than a gallbladder issue: it was stage 3C ovarian cancer. West Cancer Center immediately went to work – placing Lisa on their treatment protocol, while also encouraging Lisa to undergo preemptive screenings and even genetic testing. The latter was hugely important, as it revealed that she was not only positive for the BRCA1 gene mutation, but also tested positive for lynch syndrome.

“That was huge, because I now know that I have the lynch mutation, which makes me more susceptible to diseases like colon cancer,” said Lisa. “As a result, my family underwent genetic testing, and many of my family members also tested positive. This knowledge was empowering.”

Following surgery and chemotherapy, Lisa rang the bell in June of 2015 – a long-standing tradition that symbolizes the end of cancer treatment. Building her strength throughout the summer and early fall, Lisa was getting back to her normal routine – a routine that would once again be disrupted just five months later.

“Around Thanksgiving, I just started feeling not right,” said Lisa. A CAT scan revealed that not only had her cancer returned, but it had also spread to her brain. With surgery out of the equation, Lisa was discharged from the hospital on Christmas Eve, with plans to begin radiation treatments under the care of Matthew Ballo, MD, Director of Radiation Oncology.

As Lisa began her radiation therapy, Dr. Ballo presented another treatment option to her – one that had just been approved for the treatment of glioblastoma (GBM). Approved by the FDA in 2015, Optune™ is a wearable, portable cap-like device that uses low intensity electric fields to inhibit cancer cell replication and destroy cancer cells. And while the treatment had been approved and designated for those with newly diagnosed or recurrent GBM, Dr. Ballo went to work to ensure that Lisa could be approved for trial participation.

“There was one day during this process of getting approved for the device that I got really discouraged. Then I arrived home, and on my doorstep was the paperwork from the Optune manufacturer, Novocure – I had been approved for the device and trial opportunity,” said Lisa. “It was a sign from God. Don’t give up.”

Today, Lisa is gaining strength and staying active thanks to her golden retriever, Molly. In addition to her support system, Lisa is thankful to her team of physicians – physicians whose collaborative, compassionate and relentless care has saved her life. And while Lisa continues to face the uncertainties of her disease, she is encouraged by the clinical trial and research opportunities available to her at West Cancer Center.

“When you’re faced with your own mortality, you will do everything you can to stick around,” said Lisa. “You will do whatever you can. I would encourage patients to always ask for trials – there may be a time that you can benefit from clinical research, or when that may be your only option.”

“When you’re faced with your own mortality, you will do everything you can to stick around. You will do whatever you can.”

LISA WALLACE
 PATIENT
 WEST CANCER CENTER

PHILANTHROPY

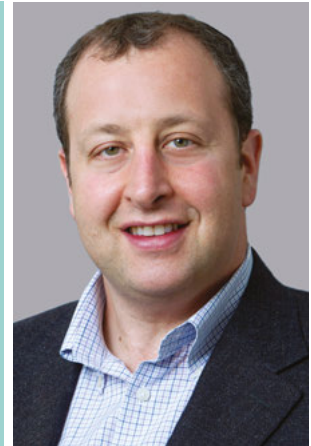
THE UNIVERSITY OF TENNESSEE/WEST INSTITUTE FOR CANCER RESEARCH

The University of Tennessee/West Institute for Cancer Research is a not-for-profit public charity dedicated to raising funds for adult cancer care and research. The UT/West Institute solicits grants from government agencies, foundations and individuals to be utilized to broaden cutting-edge research programs, develop novel cancer treatments and therapeutics, and strengthen comprehensive, patient-focused care in all sectors of our community.

Campaign Highlights

More than \$2.25 million in donations committed by West Cancer Center physicians and leadership

“This nearly universal support and generosity is significant of the dedication and investment by our own physicians and senior administration to advancing the mission of West Cancer Center,” said Bradley Somer, MD, Medical Oncologist and Physician Leader for the UT/West Institute Capital Campaign. “These funds are absolutely critical to not only providing our own patients with the best care and most innovative therapies possible, but also to advancing the understanding of cancer on a much larger scale. The work we are doing here in Memphis really has a global impact, and our senior leaders and physicians recognize and embrace that.”

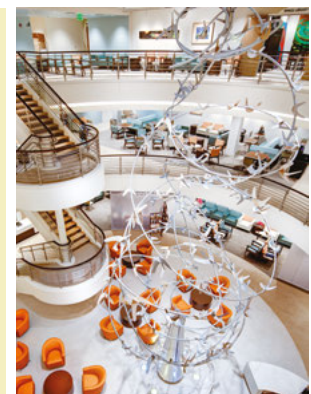


A multi-million dollar gift from Jack and Betty Moore for Women's Cancer Research

The gift also named the Margaret West Comprehensive Breast Center in honor of West Clinic's founder, William H. West, MD, who lost his mother, Margaret, to breast cancer.

A \$500,000 gift from the Kemmons Wilson Family Foundation

The Kemmons Wilson Family Foundation is a Memphis based non-profit organization founded by Kemmons Wilson, the founder of Holiday Inn, and his wife, Dorothy Wilson. This gift made possible the atrium sculpture, "Murmation," at our new East Campus location, and also supports ongoing research in breast and women's cancers.



PHILANTHROPY

FUNDRAISING EVENT SPOTLIGHT:

FIGHT ON

In 2014, West Cancer Center introduced The Bluff City Blues 100-Ride to Fight On as the signature fundraising event for the UT/West Institute, the fundraising arm of the cancer center. One of the largest cycling events in the region, the annual event raised the necessary funds to support patient care, research and education, while also providing a premier cycling event for cyclists across Memphis and the entire Mid-South region. With more than \$1,000,000 in funds raised between the events in 2014 and 2015, the Ride to Fight On was both a celebration of patients and survivors and an affirmation of West's dedication to compassionate and innovative cancer care and groundbreaking research.

As a result of the growing success of the Ride to Fight On platform, the annual fall event will expand in 2016 to include a full suite of events for all levels of fitness enthusiasts. Spread over the weekend of September 17-18, 2016, the Weekend to Fight On will include cycling events, a 5K run/walk, and a 1-mile Tribute Walk on Saturday, as well as the Fight On: WINGS Polo Classic on Sunday. All funds raised from the Weekend to Fight On will be used for discovery, innovation and advancement in the field of adult cancer research and patient education, care and support.



More than **\$500,000** raised by the 2015 Ride to Fight On cycling event



DONOR SPOTLIGHT:

Jack and Betty Moore

In 2015, the University of Tennessee/West Institute for Cancer Research was the recipient of a multi-million dollar gift by Jack and Betty Moore for Women's Cancer Research. This personal gift to the Capital Campaign was made in honor of West Clinic's founder and the Moore's brother-in-law, William H. West, MD, who lost his mother to breast cancer. The gift renamed West's and Methodist Healthcare's Breast Centers to the Margaret West Comprehensive Breast Center.

"Jack and I are thrilled to contribute to West Cancer Center's vision for helping others in our great community," said Betty Moore. "After losing his mother to breast cancer, Bill's mission became very clear: to provide world-class cancer treatment and research in his hometown of Memphis. This remains the foundation of West Cancer Center today, and we are proud to honor Bill's meaningful work and legacy with this gift."

This gift provides funds to support research and initiatives within the UT/West Institute's Center of Excellence in Women's Cancers. "There is rapid progress taking place in the world of cancer research, but there is much more work to do," said Lee S. Schwartzberg, MD. "Thanks to the generosity of donors like Jack and Betty, we are developing the resources



necessary to translate discoveries into impactful treatment, right here in Memphis."

Dr. West's vision for providing world-class cancer care in his hometown became a reality in 1979, when the doors of West Clinic officially opened. Today, West Cancer Center's dual focus on both innovative research and compassionate patient care is a reflection of not only the foundation created by Dr. West, but also the legacy of the woman who inspired him to pursue a career in oncology.

"Bill and I are truly humbled by this generous gift in honor of Bill's work and in recognition of his mother's legacy," said Carole West, Betty's sister and wife of Dr. West. "We are extremely appreciative of what this gift will mean for those impacted by cancer and all who walk through the doors of West Cancer Center in search of help and healing."

WINGS Supportive Care Division

As West Cancer Center continues an era of unprecedented growth, the needs of our patients continue to grow as well. In an effort to accommodate this progress, the UT/West Institute and WINGS Cancer Foundation combined forces in 2015 to create the new WINGS Supportive Care Division within the UT/West Institute structure.

Building on WINGS Cancer Foundation's legacy of support and generous contribution to cancer patients, survivors and the community, the UT/West Institute combines the foremost leaders in research and scientific innovation with numerous care support team members, volunteers and donors to ensure West Cancer Center patients not only receive the most innovative and effective care, but also the most compassionate.

The WINGS Supportive Care Division provides a comprehensive platform to address the holistic needs of our patients – whether it is spiritual support, nutritional and wellness services, or access to screening services for the underserved in our community. Together with our dedicated WINGS volunteers and generous benefactors, the WINGS Supportive Care Division provides our patients the support and resources they need for their cancer journey and beyond at no additional cost to the patient.



ACCREDITATIONS



National
Comprehensive
Cancer
Network®

The National Comprehensive Cancer Network® (NCCN) is a not-for-profit alliance of the world's leading cancer centers devoted to patient care, research and education. The NCCN promotes the importance of continuous quality improvement and recognizes the significance of creating clinical practice guidelines appropriate for use by patients, clinicians and other health care decision-makers. West Cancer Center is one of only 29 member institutions worldwide to receive this accreditation.



Commission
on Cancer®

The Commission on Cancer® (CoC) is a consortium of professional organizations dedicated to improving survival and quality of life for cancer patients through standard-setting; prevention; research; education; and the monitoring of comprehensive quality care. Methodist Healthcare, a partner of West Cancer Center, has been accredited by the CoC since 1966.



The National Committee for Quality Assurance (NCQA) is a private, not-for-profit organization dedicated to improving health care quality. West Cancer Center is the only accredited oncology practice in the Mid-South and one of only nine nationwide to achieve Level Three certification as a patient centered specialty practice from the NCQA.



The Foundation for Accreditation of Cellular Therapy (FACT) establishes standards for high quality medical and laboratory practice in cellular therapies. Organizations that achieve FACT accreditation have a foundation of high quality practices that result in cell products and patient care that are sought after by physicians and patients. West Cancer Center received FACT accreditation for autologous transplants in November of 2013.



QOPI Certification Program

Quality Cancer Care: Recognizing Excellence

ASCO's Quality Oncology Practice Initiative® (QOPI) is an oncologist-led, practice-based quality assessment and improvement program. West Cancer Center was one of the first sixteen practices nationwide to receive this recognition and remains one of only 287 practices nationwide to receive QOPI certification.



The Joint Commission accredits and certifies more than 20,500 health care organizations and programs across the United States. Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects a commitment to meeting certain performance standards. West Cancer Center has been a Joint Commission accredited organization since April of 2013.

FACULTY LISTING

Medical/Hematologic Oncology

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Arnel Pallera, MD *
Arun Rao, MD
Benton Wheeler, III, MD *
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David Portnoy, MD *
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Scott Baum, MD *

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Clinical Psychology

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* Denotes NCCN Clinical Practice Guidelines in Oncology Panel Members



OUR LOCATIONS

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The University of Tennessee

WEST
Cancer Center

Methodist Healthcare Family

For more information about our services and locations, visit us at www.westcancercenter.org.