ORLANDO REGIONAL
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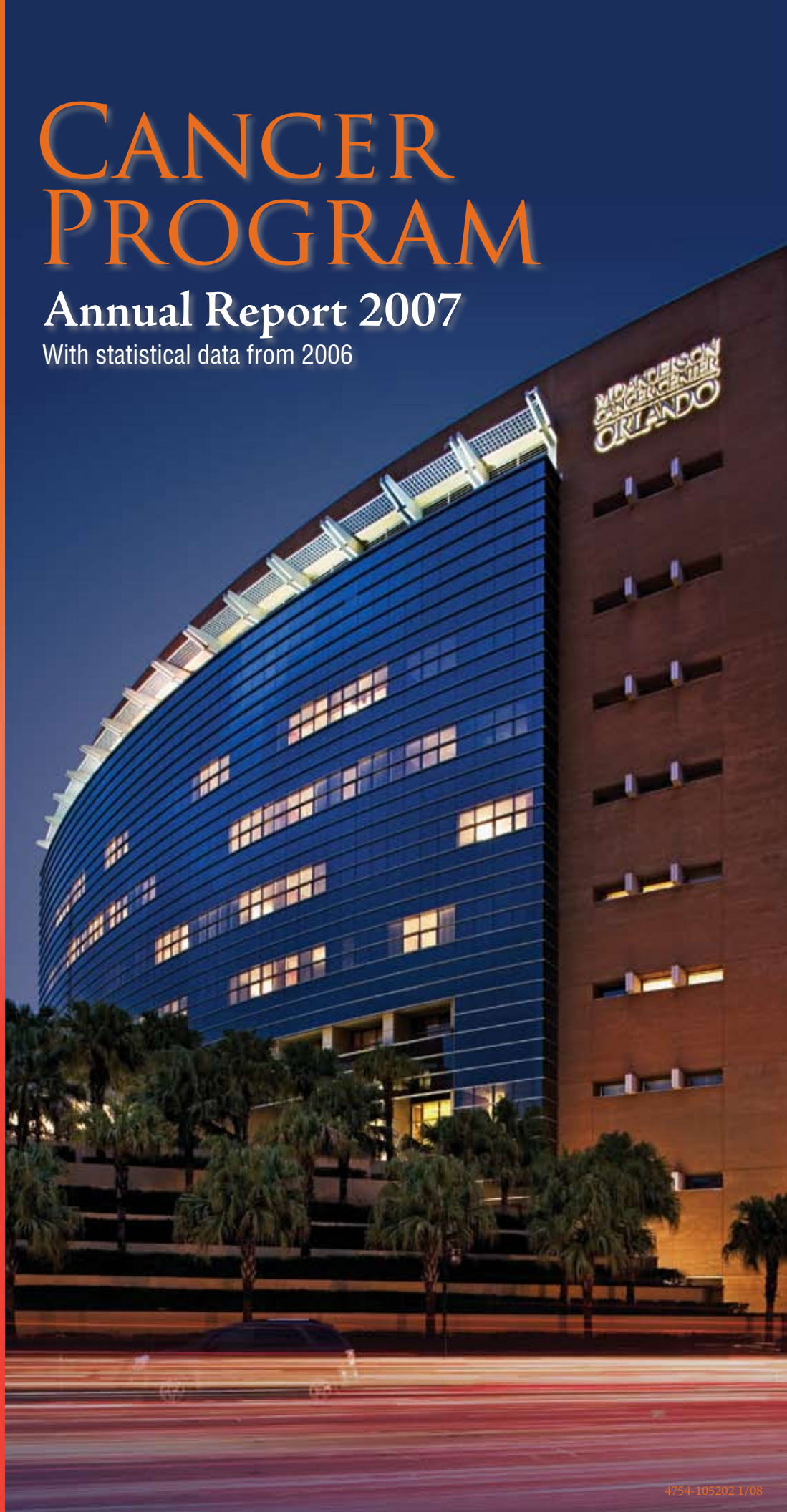
Cancer Program

Annual Report 2007

With statistical data from 2006



Orlando Regional Healthcare Cancer Program:

Arnold Palmer Hospital for Children

Winnie Palmer Hospital for Women & Babies

M. D. Anderson Cancer Center Orlando

Orlando Regional Medical Center

Dr. P. Phillips Hospital

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MD ANDERSON
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Cancer Program Overview

The Cancer Program at Orlando Regional Healthcare is comprised of M. D. Anderson Cancer Center Orlando, Orlando Regional Medical Center, Arnold Palmer Hospital for Children, Winnie Palmer Hospital for Women & Babies and Dr. P. Phillips Hospital.

M. D. Anderson – Orlando has established itself as a center of excellence in the provision of cancer care. It is affiliated with The University of Texas M. D. Anderson Cancer Center in Houston, which is consistently one of the top hospitals for cancer care and treatment. M. D. Anderson – Orlando's relationship with M. D. Anderson allows for expert consultation through teleconferencing capabilities for complex cases. This capability allows us to tap into the best minds in the country when it comes to treating cancer and doing cancer research. An increasing number of the physicians at M. D. Anderson – Orlando have trained at M. D. Anderson in Houston.

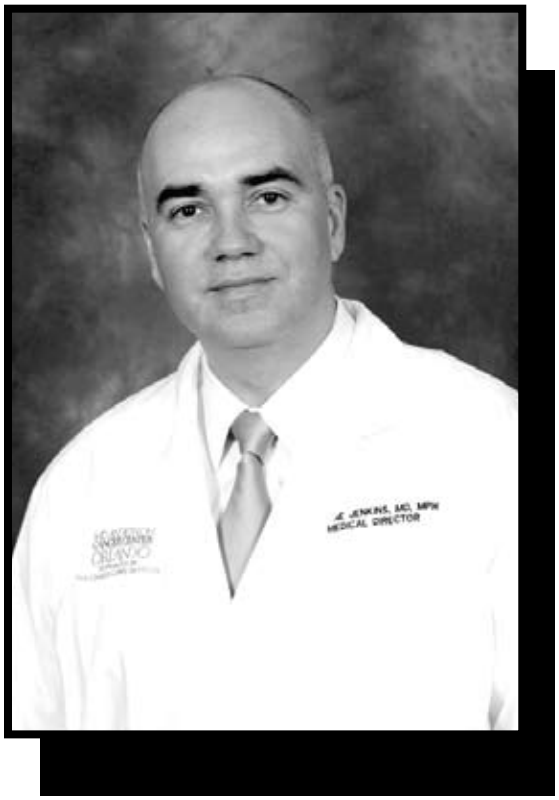
The cancer program is categorized as a teaching hospital cancer program and is accredited by the American College of Surgeons Commission on Cancer and The Joint Commission.

Physician Liaison Report

As the scope of the cancer program within Orlando Regional Healthcare grows, the challenge to provide the highest quality of care to patients seeking treatment for cancer at M. D. Anderson Cancer Center Orlando, Orlando Regional Medical Center, Arnold Palmer Hospital for Children and Dr. P. Phillips Hospital continues to be met.

Every year in each of these institutions, several thousand men, women and children of all ages receive treatment for the many conditions that fall under the heading of "cancer and blood diseases." At Arnold Palmer Hospital, the pediatric hematology and oncology program has seen an expansion of activity with the addition of Robert Sutphin, MD, pediatric hematologist/oncologist, and the approval of an affiliation with the national cooperative clinical research organization, Children's Oncology Group (COG). At M. D. Anderson – Orlando and ORMC, a new program focusing on head and neck cancers has been established with Thomas Shellenberger, MD, head and neck cancer surgeon, leading a large multidisciplinary team including medical oncology, radiation oncology, speech pathology, nutrition and other important support services needed in the care of these very complex patients.

During the past two years, efforts to create a hematology/medical oncology fellowship program under Said Baidas, MD, program director, have resulted in an approved program. Two excellent trainees have been selected for the first class, as well as matching the first two choices for the second year of the fellowship program. The Cancer Research Institute, under the direction of Cheryl Baker, PhD, has added several research scientists who are rapidly establishing nationally recognized research programs in cancer biology, radiation biology and nano-biology. All great cancer centers emphasize at least three major areas: high quality patient care, education (professional, patient and community in nature) and research. The Orlando Regional cancer program, under the leadership of the Oncology Policy and Planning Committee, and with administration and guidance from M. D. Anderson – Orlando, can now be recognized among the very best in the state of Florida, the southeast United States and beyond.



Chairman's Report

The 2007 annual report for the cancer program at Orlando Regional Healthcare and M. D. Anderson Cancer Center Orlando is a beacon of hope for our cancer patients. This report illustrates the advances that are being made in which cures are more likely than ever. This mirrors statistics from the American Cancer Society where cancer mortality has declined for the second year in a row. The multidisciplinary care that is delivered at M. D. Anderson – Orlando provides the greatest chance at achieving these cures with the least risk of debilitating side effects. The staff and facilities are also of the caliber that this treatment is delivered in a caring environment where healing is enhanced.

This report signifies in the continued rise in the number of patients who receive care at M. D. Anderson – Orlando. The physicians who refer patients and the patients who choose to come to the center are indicative of the expanding reputation of the center. This continued growth in the number of patients requires an expansion of the facilities and staff that are described within this 2007 annual report. The challenge to recruit staff and physicians of the highest caliber is paramount in delivering the care that our patients expect and deserve – this challenge continues to be exceeded as illustrated by the quality of the programs that are being developed.

This past calendar year has been a resounding success for cancer delivery at Orlando Regional and M. D. Anderson – Orlando. We will continue to use every available resource to defeat cancer and will deliver even better results in 2008 and the years beyond.

D. Wayne Jenkins, MD
Chairman
Oncology Policy and Planning Committee

The Oncology Policy and Planning Committee

Leadership is the key element to an effective cancer program. The program's success is dependent on an effective multidisciplinary cancer committee, which at Orlando Regional Healthcare is known as the Oncology Policy and Planning Committee. It is this committee, working in close collaboration with the administrative team that is responsible for setting goals, planning, implementing, evaluating and improving cancer related activities in the Orlando Regional facilities that comprise the cancer program.

D. Wayne Jenkins, MD
Chairman
Radiation Oncology

Clarence H. Brown III, MD
Physician Liaison, ACoS
Medical Oncology/Hematology

Anne Peach, RN, MSN
COO, M. D. Anderson – Orlando

Dorothy Hardy
Executive Director
American Cancer Society

Jan Parrillo, MD
Family Practice

Cheryl Harrington, RN, MS, OCN
Patient Care Administrator – Oncology

David Panzer, MD
Radiology

Denise Fusselman, RN, MBA, OCN
Community Outreach/Education Coordinator

Theodore Hoff, MD
Neurosurgery

Cecilia Davis, CTR
Cancer Database

Vincent Giusti, MD
Pediatric Oncology/Hematology

Mary Rogers, RN, BSN, CPON
Associate Administrator of Children's Services

Michael Kahky, MD
General Surgery

Marie Mackey, RN, OCN
Outpatient Nursing Operations Manager

Nikita Shah, MD
Medical Oncology/Hematology

Andrew Sloman, MD
Pathology

Marshall Melcer, MD
Urology

Vicky Hajdenberg, PhD
Director, Clinical Research

Joe Winn, LCSW
Clinical Social Work

Judy Gygi, RHIA
Corporate Service Line
Manager, Cancer Program

New Physicians for 2007

Andreea Arsene, MD

Andreea Arsene, MD, earned her medical degree and a bachelor's in biology at St. John's University in Queens, New York. She earned her master's degree at St. John's University before attending medical school at the Ross University School of Medicine in Dominica, West Indies.

Dr. Arsene has been a principal investigator in several research studies, including an ongoing study at Orlando Regional Medical Center, entitled *A Comparison of Cancer Survival in Pre- and Post M. D. Anderson Cancer Center*. In 2006, Dr. Arsene completed a research study at ORMC, T*he Use of Thiazide Diuretics in Very Old Hypertensive Inpatients with Hyponaltremia*.

Dr. Arsene is a member of the Cancer Medicine Specialty Section at M. D. Anderson Cancer Center Orlando, and has been a member of the American Medical Association (AMA) since 2007.

Luke Bolek, MD

Luke Bolek, MD, serves as a member of the Nuclear Medicine Specialty Section with M. D. Anderson Cancer Center Orlando. Dr. Bolek is board certified in nuclear medicine and completed a fellowship in positron emission tomography.

Dr. Bolek served as chief resident and lead investigator of nuclear medicine at William Beaumont Hospital in Michigan and completed a one-year residency in family practice at Columbia St. Mary's Family Health Center in Milwaukee. He earned his medical degree from the Medical College of Wisconsin and graduated *magna cum laude* in biology from Carroll College in Waukesha, Wisconsin.

Before attending medical school, Dr. Bolek served as an investigator for phase III clinical drug trials for the Wisconsin Center for Clinical Research. While attending medical school, he served as a histology laboratory investigator in the Graduate School of Biomedical Science at the Medical College of Wisconsin.

Dr. Bolek is a member of the American Academy of Family Physicians and the Society of Nuclear Medicine, an affiliate member of the American Society of Nuclear Cardiology and a member-in-training of the Radiological Society of North America. He holds medical licenses in Iowa and Florida. Additionally, Dr. Bolek is fluent in English and Polish.

Alan N. Gordon, MD

A leader in the area of ovarian cancer research, Alan N. Gordon, MD, a board-certified gynecologic oncologist, serves as the Gynecologic Oncology Specialty Section leader at M. D. Anderson – Orlando.

Dr. Gordon completed a fellowship in gynecologic oncology from The University of Texas M. D. Anderson Cancer Center. He completed an internship and residency in gynecology and obstetrics from the Johns Hopkins University Hospital. He earned his medical degree from the Johns Hopkins University School of Medicine.

In 2001, Dr. Gordon was honored for excellence in teaching with the National Faculty Award from the American College of Obstetrics and Gynecology. He has served as a faculty member at the University of Arizona, Baylor College of Medicine, Vanderbilt University School of Medicine, University of Texas Southwestern Medical Center and Texas Tech University's Health Sciences Center.

Dr. Gordon performs minimally invasive surgery, using the da Vinci® Surgical System for endometrial cancers, cervical cancers and for the evaluation and resection of pelvic masses.

His research interests include ovarian cancer, especially evaluating new therapies for ovarian cancer and gestational trophoblastic disease, a group of several diseases involving the abnormal growth of cells inside a woman's uterus.

A principal investigator for several national studies, Dr. Gordon presents regularly at American Society of Clinical Oncology conferences and many international meetings. He has been senior author on a number of peer-reviewed articles dealing with ovarian cancer. Additionally, he serves on the editorial board for the journal *Gynecologic Oncology*.

He is a member of the American College of Obstetrics and Gynecology, Society of Gynecologic Oncologists, Felix Rutledge Society, International Society of Gynecologic Oncology, American Society of Clinical Oncology, European Society of Medical Oncology and the American College of Surgeons.

Mary B. Hart, MD

A nuclear medicine physician with M. D. Anderson Cancer Center Orlando, Mary B. Hart, MD, holds certification from the American Board of Internal Medicine and the American Board of Nuclear Medicine.

Dr. Hart fulfilled a residency in nuclear medicine at the University of Texas at San Antonio and Brooke Army Medical Center in Fort Sam Houston, Texas. She completed an internship and residency in internal medicine at Walter Reed Army Medical Center in Washington, DC. Dr. Hart earned her medical degree from Tufts University School of Medicine in Boston.

Before joining M. D. Anderson – Orlando, Dr. Hart served as co-director of nuclear medicine at Morton Plant Hospital in Clearwater, Florida, where she was a partner with Clearwater Imaging Associates. A former affiliate of H. Lee Moffitt Cancer Center in Tampa, Dr. Hart also served as assistant chief of Nuclear Medicine at Walter Reed Army Medical Center.

Dr. Hart served on the faculty of the Uniformed Services University of the Health Sciences in Bethesda, Maryland as an assistant professor and teaching fellow. She practiced internal medicine at the Kimbrough Army Community Hospital in Fort Meade, Maryland, and at Darnall Army Community Hospital in Fort Hood, Texas. A Major in the United States Army from 1983 to 1993, Dr. Hart was awarded a Meritorious Service Medal and Army Commendation Medal.

She is a diplomate of the American Board of Internal Medicine, American Board of Nuclear Medicine and the International Society of Clinical Densitometry. Dr. Hart is a member of several organizations, including the Society of Nuclear Medicine, American College of Nuclear Physicians, Radiological Society of North America, American Academy of Molecular Imaging and the Florida Medical Association.

Additionally, Dr. Hart frequently speaks to physician and community groups and is sought out by the media as an expert on Positron Emission Tomography (PET), PET-CT, bone density evaluation, prostate cancer and thyroid disease. Dr. Hart is fluent in English and French.

Robert J. McDonald, MD, FACNP

Robert J. McDonald, MD, FACNP, is a member of the Nuclear Medicine Specialty Section at M. D. Anderson – Orlando. He holds board certification from the American Board of Nuclear Medicine and is a diplomate of the National Board of Medical Examiners.

Dr. McDonald has practiced nuclear medicine for more than 15 years. For the past seven years, he served as medical director of nuclear medicine at Southwest Florida Regional Medical Center & Radiology Regional Center in Fort Myers. Additionally, he has practiced nuclear medicine in Portland, Oregon and in Southern California.

He fulfilled a residency in nuclear medicine at the University of California Irvine Medical Center in Orange, California and an internship at Brown University - Roger Williams General Hospital in Providence, Rhode Island.

Dr. McDonald earned his medical degree from the Medical College of Virginia at Virginia Commonwealth University in Richmond and a bachelor's in biology from Virginia Polytechnic Institute and State University in Blacksburg.

He has been a principal investigator in numerous clinical radiopharmaceutical trials and has served as an industry consultant. Additionally, Dr. McDonald has published articles in professional and peer-reviewed journals and often speaks at medical conferences around the country. He has also appeared on local radio and television to discuss various nuclear medicine topics.

Dr. McDonald is a fellow of the American College of Nuclear Physicians as well as a member of the Society of Nuclear Medicine, American College of Nuclear Physicians, Academy of Molecular Imaging and the Lee County Medical Society. He is a past president of the Pacific Northwest chapter of the Society of Nuclear Medicine and is a current member of the governing council of the southeast chapter.

Robert M. Sutphin, MD

A member of the Pediatric Hematology/Oncology Specialty Section at M. D. Anderson Cancer Center Orlando, Robert Sutphin, MD, is board eligible in pediatric hematology/oncology.

Dr. Sutphin completed his fellowship in pediatric hematology and oncology at The University of Texas M. D. Anderson Cancer Center in Houston and his pediatric residency at Arnold Palmer Hospital for Children. Dr. Sutphin earned his medical degree from Joan C. Edwards School of Medicine at Marshall University in West Virginia and his bachelor's at Midwestern State University in Texas.

Dr. Sutphin's research interests include the development of novel therapeutic agents, cancer immunology and notch signaling in leukemia. He has written articles and presented on these topics at annual meetings of the American Society of Hematology and the American Society of Pediatric Hematology/Oncology.

For 10 years Dr. Sutphin served the United States Air Force as a medical laboratory technician/instructor. He was bestowed a Commendation Medal with one Oak Leaf Cluster and named Sheppard Air Force Base Junior Instructor of the Year.

Dr. Sutphin's professional affiliations include memberships in the American Academy of Pediatrics, American Society of Hematology, American Society of Pediatric Hematology Oncology and the American Society of Clinical Oncology.

Jessica M. Vaught, MD

Jessica M. Vaught, MD, a laparoscopic gynecologic surgeon, is a member of M. D. Anderson Cancer Center Orlando's Gynecologic Cancers Specialty Section, where she works closely with a team of medical and radiation oncologists to treat women with complex gynecologic conditions as well as gynecologic cancers. She is board certified in obstetrics and gynecology.

Using minimally invasive techniques, including the da Vinci® Surgical System, Dr. Vaught's laparoscopic specialties include total hysterectomy, fertility sparing myomectomy, removal of ovaries and ovarian cysts, and surgery for chronic pelvic pain, including the removal of endometriosis.

Dr. Vaught also serves as a gynecologic surgeon at Orlando Regional Medical Center and Winnie Palmer Hospital for Women & Babies where she trains obstetric and gynecological (OB/GYN) residents in laparoscopic surgical techniques.

She joins the center from the Women's Surgery Center in Bethesda, Maryland. Dr. Vaught fulfilled a residency in OB/GYN at the George Washington University Medical Center, in Washington, DC, where she also served as an assistant clinical professor of obstetrics and gynecology and also trained OB/GYN-l residents in laparoscopic techniques. In 2005, she was named chief resident of the year at Holy Cross Hospital, one of three facilities affiliated with George Washington's residency program.

Dr. Vaught graduated *cum laude* from Bowling Green State University in Ohio with a bachelor's in biochemistry and earned her medical degree from the University of Cincinnati's College of Medicine.

She has been published in *Obstetrics and Gynecology* and was a presenter at the American College of Obstetricians and Gynecologists' Annual Meeting in 2006. She is a Junior Fellow of the American College of Obstetricians and a member of the American Association of Gynecologic Laparoscopists.

In her spare time, Dr. Vaught has participated in medical missionary trips to Brazil, Haiti and Guatemala.

Cancer Research Institute

Description of CRI Research Expertise and Future Development

Under the direction of Cheryl H. Baker, PhD, the Cancer Research Institute (CRI) is a collaborative effort between the medical and research staff of M. D. Anderson Cancer Center Orlando. The CRI bridges basic and translational cancer research, carrying out testing and validation of new drugs and products that may eventually enter clinical trials and focuses on cancer biology with an understanding of the metastatic potential that can be significantly altered or controlled by newly discovered approaches.

The translation of basic research findings to clinical applications is paramount for the progress in clinical medicine as applied to the treatment of patients with cancer. A significant challenge in the past of bridging the gap between the laboratory bench and the patient clinic is the traditional lack of interaction between physicians and scientists. This hurdle is overcome with the unique relationship CRI investigators enjoy with the M. D. Anderson – Orlando physicians, nurses, physicists and clinical research team, allowing for seamless transmission of ideas, energy and discovery flowing from the bench to bedside and back. This relationship is a key mechanism for shepherding pre-clinical trial results to Phase I and subsequently Phase II–IV clinical trials at M. D. Anderson – Orlando. It is anticipated that this approach will have a positive impact on the prevention, diagnosis, treatment and ultimately, the cure and quality of life of cancer patients.


PHILIP ARLEN, PH
CANCER RESEARCH IN
SIGMA
ANITI LIMAYE
CANCER RESEARCH INSTITUTE

Current CRI Scientists/Staff

- **Cheryl Baker, PhD**, director, trained at The University of Texas M. D. Anderson Cancer Center in Houston and Children's Hospital/Harvard Medical School in Boston. Dr. Baker holds joint appointments with M. D. Anderson, University of Central Florida (UCF) College of Medicine and the UCF Burnett School of Biomedical Sciences. Dr. Baker collaborates with faculty at UCF and M. D. Anderson. Dr. Baker is the recipient of an industry agreement/grant with CovX, Tavistock Life Sciences Company in San Diego and numerous external grant agencies.

- **Philip Arlen, PhD**, senior investigator, Endowed Chair of the Patricia and David Schwartz (first Endowed Chair to be received by Orlando Regional Healthcare/ M. D. Anderson Cancer Center Orlando). Dr. Arlen trained at UCLA and UCF, and collaborates extensively with faculty at UCF. Dr. Arlen holds joint appointments with UCF College of Medicine and the UCF Burnett School of Biomedical Sciences. Dr. Arlen is leading the CRI development of tumor immunology, vaccine and immunotherapy programs.

- **Maen Abdelrahim, PhD,** senior investigator, trained at Texas A&M University, and has collaborated extensively with James L. Abbruzzese, MD, a medical oncologist at M. D. Anderson. Dr. Abdelrahim holds joint appointments with M. D. Anderson, UCF College of Medicine and the UCF Burnett School of Biomedical Sciences. Dr. Abdelrahim is currently working with Gregory Pennock, MD, and Patrick Kupelian, MD, (M. D. Anderson – Orlando) to initiate one of the first investigator-initiated Phase I clinical trials at M. D. Anderson – Orlando. Dr. Abdelrahim is a recipient of a grant from the Bankhead-Coley Foundation.

- **Santhi Konduri, PhD**, research scientist, trained at M. D. Anderson and Roswell Park National Cancer Institute. Dr. Konduri collaborates extensively with George Bobustuc, MD, (M. D. Anderson – Orlando). Dr. Konduri holds joint appointments with M. D. Anderson, UCF College of Medicine and the UCF Burnett School of Biomedical Sciences.

- **Justin Summy, PhD**, senior scientist, trained at M. D. Anderson. Dr. Summy collaborates extensively with scientists at M. D. Anderson and has received numerous honors for his molecular biology work on cancer. Dr. Summy holds joint appointments with UCF College of Medicine and the UCF Burnett School of Biomedical Sciences.

- **Jimmie Colon, MS**, senior research associate, received his masters in molecular biology from UCF. Mr. Colon is actively collaborating with Wayne Jenkins, MD, (M. D. Anderson – Orlando) and Sudipta Seal, PhD, (UCF professor) in the field of nanotechnology, which has led to CRI's first filed patent.

- **Arati Limaye, MD, MS**, research associate, received her medical degree in India and her masters in molecular biology from UCF. Dr. Limaye has joined the PhD program at UCF, Dr. Baker and Dr. Arlen serve as her mentors. Dr. Limaye will be one of the first PhD graduate students to receive her PhD from the joint UCF/M. D. Anderson – Orlando graduate program.

- **Rafael Madero, MD**, research associate/fellow, received his medical degree from Columbia and works extensively with Tom Shellenberger, PhD, MD, (M. D. Anderson – Orlando). Dr. Madero is the lead scientist at the CRI in the area of head and neck cancer.

- **Melissa Donigan** is a UCF PhD graduate student, under the direct mentoring of Dr. Baker. Ms. Donigan is actively collaborating with the Colon and Rectal Clinic of Orlando (Joseph Gallagher, MD, and Andrea Ferrara, MD). Ms. Donigan, along with Dr. Limaye, will receive her PhD from the UCF/M. D. Anderson – Orlando joint graduate program.

- **Beth Isley**, research associate, performs dual roles as the CRI lab manager and research assistant to the CRI scientists. Mrs. Isley joins the CRI team after years of research at Duke University.

- **Jorge Rios**, animal facility manager. Mr. Rios is in charge of the husbandry and treatment of large and small animals housed in the licensed animal facility at the CRI.

- **Donna Schade** is the administrative assistant and oversees the business operations of the CRI.

CRI Research Activities

The CRI is performing cutting-edge cancer research activity in programs such as those listed below:

Industry-coordinated drug testing and validation – A collaborative approach with industry partners to test and provide feedback for drug efficacy.

Nanoparticle drug delivery – This technique utilizes nanoparticles to target drug delivery to tumor cells, increasing drug effectiveness and minimizing toxicity.

Orthotopic animal models – A superior model for many tumor sites where cancerous cell growth is studied within the organ of origin.

Radiation treatment – The use of radiation delivery using imaging modalities for accuracy and precision.

Immunology – The use of oral vaccines as anti-cancer agents and advancing the field of immunotherapy.

Areas of Cancer Research Investigation

- Bladder
- Brain
- Breast
- Colon
- Gynecologic
- Head and Neck
- Lung
- Melanoma
- Pancreas
- Prostate
- Renal

CRI Manuscripts and Publications

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CRI Funding

The CRI scientists have submitted and received numerous grants.

Source	Amount	Status	Duration
Fraternal Order of Eagles Grand Aerie/ Art Ehrmann Cancer Fund	$60,000	Awarded	One year with requests for renewal
Fraternal Order of Eagles Local Aerie/ Art Ehrmann Cancer Fund	$5,000	Awarded	One year with requests for renewal
Phi Beta Psi Sorority at the University of Central Florida	$3,000	Awarded	One year with requests for renewal
Florida Department of Health (DOH) Office of Public Health Research Bankhead Coley Cancer Research	$209,520	Awarded	Two years
American Society of Clinical Oncology (ASCO)	$30,796	Awarded	One year
Tavistock Life Sciences – CovX San Diego, CA	$160,000	Awarded	One year
Patricia and David Schwartz Endowed Chair	$1,000,000	Awarded	Endowment
US Surgical Training Labs	$20,000	Awarded	Continuous
American Cancer Society	$681,859	Pending	Four years
Elsa U. Pardee Foundation	$163,830	Pending	One year
Cancer Research and Prevention Foundation	$80,000	Pending	Two years
American Lung Association	$30,000	Pending	One year
Thoracic Surgery Foundation for Research and Education (TSFRE)	$60,000	Pending	Three years
Research Foundation of ASCRS	$40,000	Pending	One year
Susan G. Komen Foundation	$600,000	Pending	Three years
American Association for Cancer Research (AACR)	$100,000	December 2007	Two years
NIH R21	$200,000	February 2008	Two years

Cancer Medicine

The Cancer Medicine Department began in July of 2005 with the addition of Mary Busowski, MD, to the staff at M. D. Anderson Cancer Center Orlando. Recognizing that the acute needs of cancer patients required a full-time physician available to triage and treat patients, Dr. Busowski began to see patients with urgent ambulatory needs. Since that time, under the direction of Dr. Busowski, Cancer Medicine has grown to incorporate a full complement of Internal Medicine as well as Palliative and Supportive Care services for patients undergoing treatment at M. D. Anderson – Orlando.

General Internists, operating within a cancer center that provides comprehensive care of cancer patients, have gained recognition as the demand for Cancer Medicine's services has continued to grow. Palliative care and symptom management have been incorporated into Cancer Medicine for broader services that cover both inpatient and outpatient needs. Cancer Medicine physicians are board-certified internists with knowledge of general internal medicine combined with a unique understanding of the interaction of cancer pathophysiology, treatments and underlying comorbidities. Cancer Medicine physicians communicate clinical exam findings and clinical impressions with referring oncologists, surgeons and radiation oncologists in order to promote continuity of care and facilitate streamlined patient care.

With the expansion of surgical services, Cancer Medicine physicians have been actively involved in the pre-treatment evaluation and perioperative medical management of high-risk patients. The Internal Medicine Pre-treatment Assessment Clinic (IMPAC) evaluates patients prior to cancer treatment or surgery. Under Dr. Busowski's direction, IMPAC has provided a detailed history and physical exam with emphasis on identifying perioperative risk factors and recommending evidence-based strategies to optimize medical therapy and reduce perioperative morbidity.

Secondary purposes of Cancer Medicine are education, research and staff development. Cancer Medicine physicians actively participate in research collaboratives to promote the growing body of evidence that supports and determines standards of care for patients with cancer. Dr. Busowski has regularly presented continuing education to both nursing and medical personnel. The growth of this exciting sub-specialty of Internal Medicine operating within the cancer center will continue to assure that our patients receive the excellent standard of care that is in keeping with the mission of M. D. Anderson – Orlando.

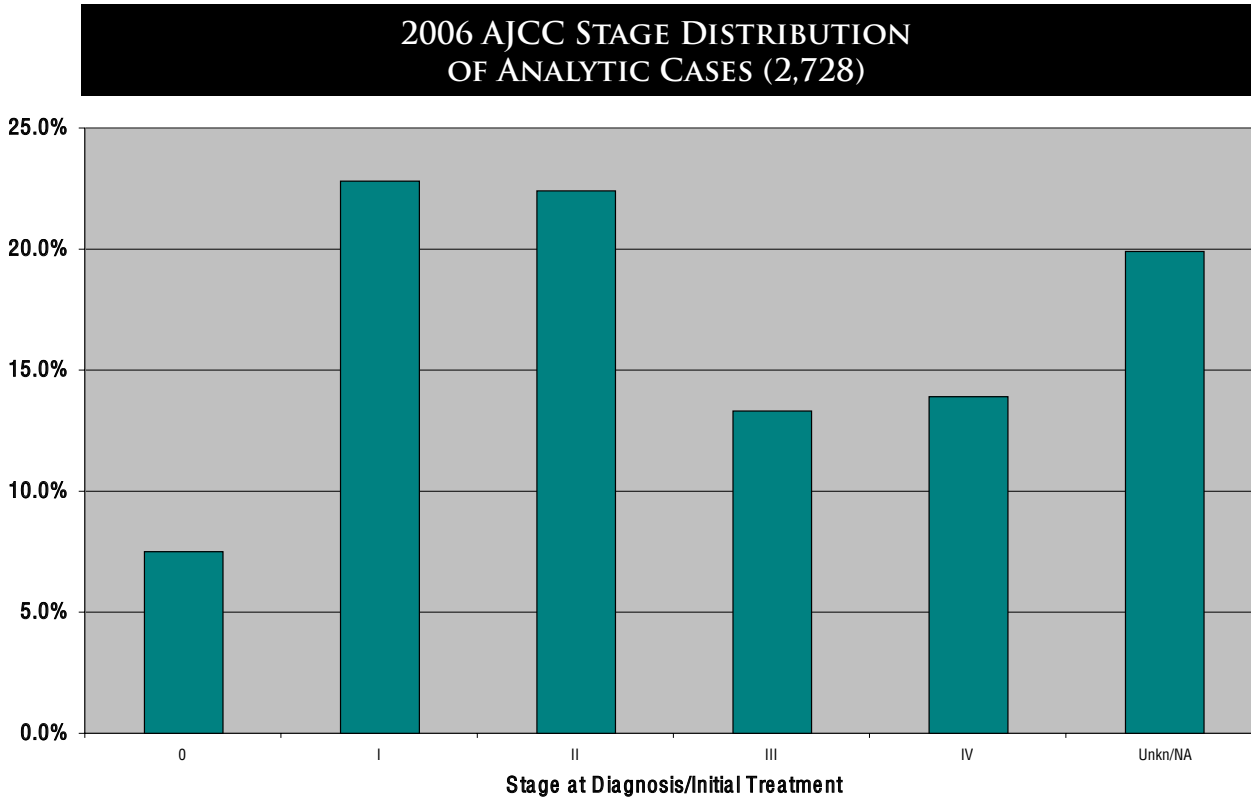
Mary Busowski, MD
Cancer Medicine
M. D. Anderson Cancer Center Orlando

Cancer Registry Report

The Cancer Registry is essential to the success of the cancer program at Orlando Regional Healthcare. The registry is staffed with six certified tumor registrars, three team members that perform case finding, two team members that perform follow up and a cancer conference coordinator. The registry team identifies all patients diagnosed and/or treated with a reportable neoplasm, maintains a database of demographic, site-specific treatment information and annually does long-term follow up on all patients in the registry to monitor health status and treatment outcomes.

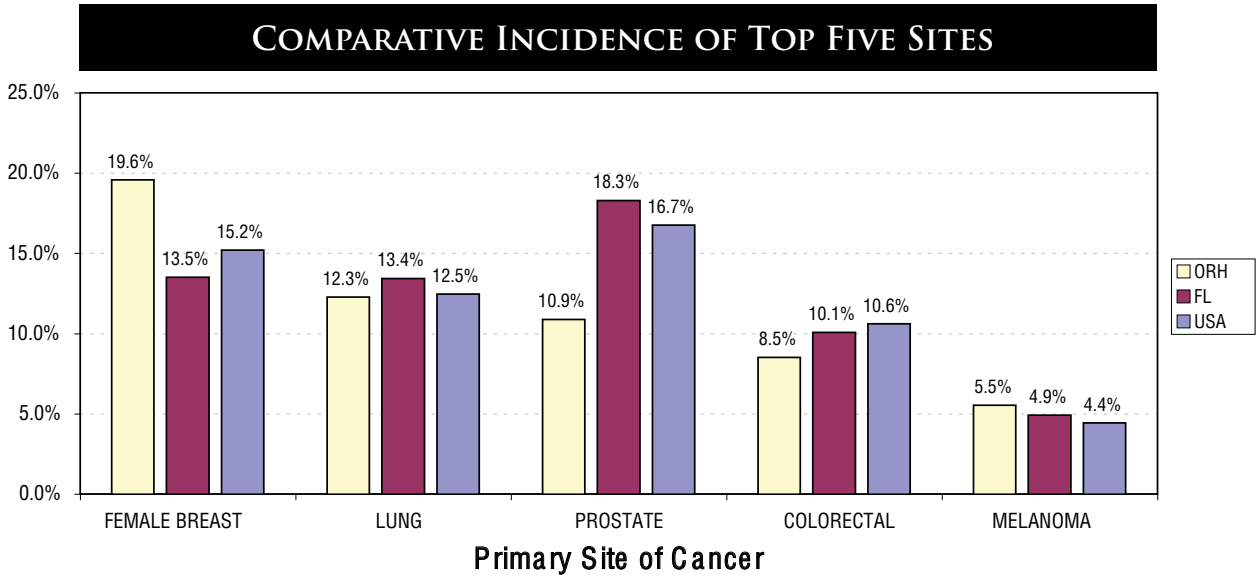
Since its reference date in 1991, the registry has accessioned data on 42,299 patients. In 2006, a total of 3,682 new cases were accessioned into the database, of these 2,728 were analytic (diagnosed and/or treated at Orlando Regional). This compares to 2,751 last year. Of the remaining cases for 2006, 954 presented with recurrent or progressive disease after their first course of treatment elsewhere. These figures do not include patients who were seen here only for a second opinion.

Comparing this total by gender, 1,939 of these cases were female and 1,743 were male. Of the total cases, 2,728 were analytic. Of these analytic cases, 206 (7.5 percent) were non-invasive, 623 (22.8 percent) were Stage I; 613 (22.4 percent) were Stage II; 363 (13.3 percent) were Stage III; 379 (13.9 percent) were Stage IV; and 544 of the cases, the stage was unknown or not applicable. In most instances where the stage was coded as Unknown/NA, the stage was not applicable. Leukemia, brain tumor, multiple myeloma and unknown primary are coded as not applicable.



The top five sites for cancer continue to be female breast, prostate, lung, colorectal and melanoma. There were 533 cases (19.6 percent) of female breast cancer which continues to be the primary site of greatest incidence, followed by lung cancer (12.3 percent) with 335 cases, prostate cancer (10.9 percent) with 296 cases, colorectal cancer (8.5 percent) with 232 cases and melanoma (5.5 percent) with 151 cases. The remaining 1,181 cases (43.2 percent) were other primary sites.

Each year the Cancer Registry compiles data on the top five sites seen by the Cancer Program and compares this data to Florida and also to national data. As seen in the graphs, Orlando Regional's Cancer Program diagnoses and treats a greater percentage of female breast cancer and melanoma cases to our overall cases than occurs within the state and nationally. The percentage of colorectal and prostate cancer cases diagnosed and treated at Orlando Regional is lower than that shown for the state and nationally; whereas, the percentage of lung cancer cases is consistent with the national data and less than that demonstrated by state data.



The higher incidence of breast cancer may be due to an increasing number of elderly patients, increased emphasis on educating women to perform monthly self-exams and have regular mammograms. The higher incidence of melanoma may be due to living in Florida and increased exposure to the sun while enjoying outdoor activities, sports and work as well as through education and outreach, which encourage monthly body checks to note skin changes.

The lower incidence of prostate cancer is attributed to diagnosis in outpatient settings, use of non-Orlando Regional laboratories and treatment in urologists' offices.

Data from the Cancer Registry is submitted to the Florida Cancer Data Systems and the National Cancer Data Base. These agencies use the data to evaluate cancer trends, design and evaluate cancer control programs, recommend policy and research at state and national levels.

During the most recent Commission on Cancer (COC) survey, the Cancer Registry was given commendations for its initial submission to the NCDB of 2005, 2004 and 2003 data error free and for each year between survey abstracting 90 percent of cases within six months.

Our follow-up rate from reference date to present is 83 percent on the COC-established standard of 80 percent or greater. The follow-up rate for the past five years is 90 percent on the COC established standard of 90 percent or greater.

In May 2007, the Cancer Registry purchased Oncolog Cancer Registry software. It offers modules which have allowed for efficiencies in responding to data requests. This data is used by physicians to benchmark outcomes, to determine concordance with treatment protocols, for research purposes, to project accruals for clinical trials and by administrators to demonstrate the value and need for new services, programs and technologies.

Cancer Conferences 2007

Multidisciplinary cancer conferences, which include physicians and allied health professionals, are an important component of patient care. Multiple conferences are held each week. These conferences provide a forum for pre-treatment options at a time when management of the patient can be influenced by discussion. Some of these conferences are dedicated to disease-specific teleconferences with The University of Texas M.D. Anderson Cancer Center.

A total of 843 cases covering the major sites at Orlando Regional Healthcare were presented in 2007. This is a 17.4 percent increase over the number of cases presented in 2006, when 718 cases were presented. Ninety-nine percent of the cases presented were prospective.

Site of Disease	# Cases
Breast	111
Colorectal	50
GI	8
GU	82
GYN	12
Head & Neck	201
Lymphoma/Leukemia/Myeloma	101
Melanoma	22
Neuro	38
Palliative	5
Sarcoma	9
Thoracic	199
Unknown	5
Total Cases	843

2006 Primary Sites of Cancer for Orlando Regional Healthcare Cancer Program

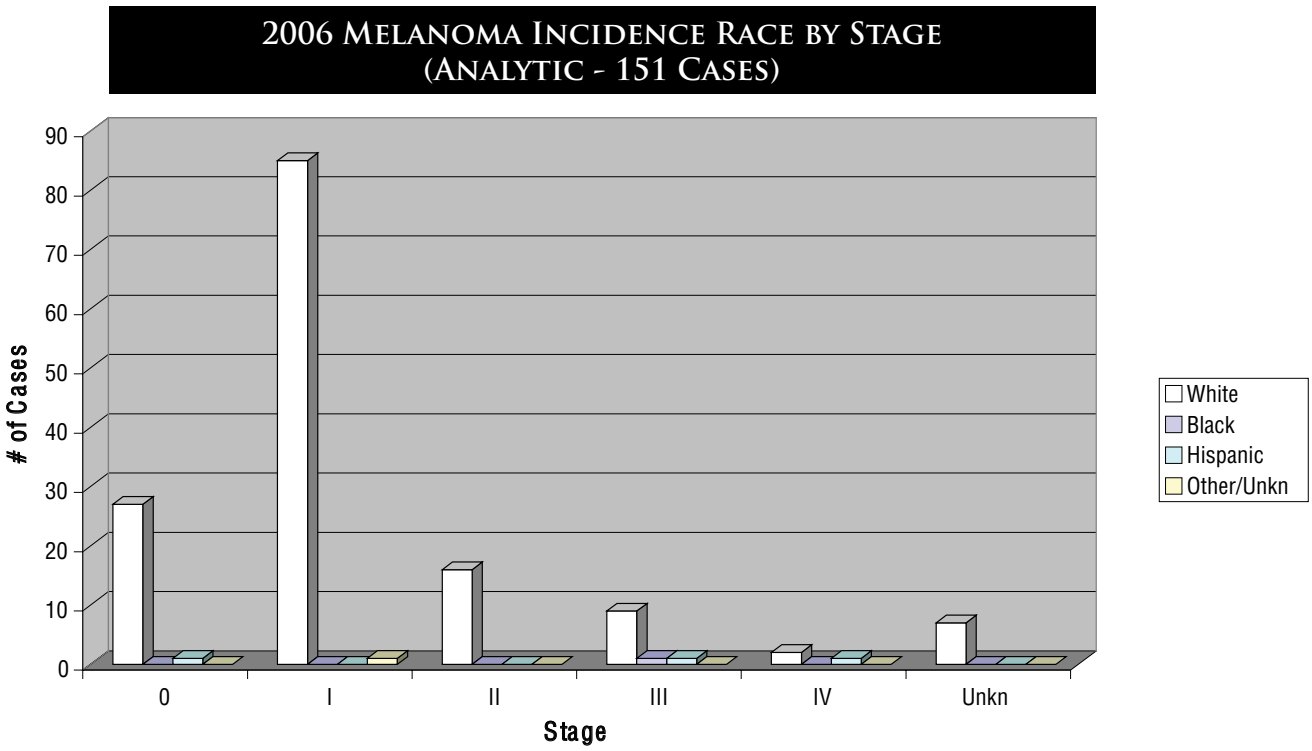
PRIMARY SITE 2006	CASES	CLASS OF CASE		SEX		STAGE AT DIAGNOSIS					
		Analytic	Non-Analytic	Male	Female	0	I	II	III	IV	UNK/NA
Lip, Oral Cavity, Pharynx:											
Lip	3	2	1	3	0	0	2	0	0	0	0
Tongue	40	30	10	29	11	0	4	2	5	17	2
Floor of Mouth	8	6	2	4	4	0	1	1	0	3	1
Palate	1	1	0	0	1	0	0	0	0	1	0
Other Mouth	9	7	2	4	5	0	3	2	0	2	0
Parotid/Salivary Glands	4	3	1	2	2	0	1	1	0	1	0
Tonsil	18	14	4	18	0	0	1	2	5	6	0
Oropharynx	2	1	1	0	2	0	0	1	0	0	0
Nasopharynx	9	8	1	7	2	0	0	0	3	5	0
Pyriform/Hypopharynx	6	3	3	5	1	0	0	0	1	2	0
Other Oral/Pharynx	9	4	5	6	3	0	0	0	0	0	4
Digestive Organs:											
Esophagus	31	24	7	28	3	0	1	5	8	8	2
Stomach	45	38	7	30	15	0	9	3	9	13	4
Small Intestine	7	7	0	4	3	0	1	1	0	1	4
Colon	204	146	58	92	112	9	30	40	36	24	7
Rectum and Rectosigmoid	108	86	22	60	48	2	21	19	22	12	10
Anus, Anal Canal	15	13	2	7	8	0	2	7	1	0	3
Liver	35	28	7	23	12	0	7	3	2	4	12
Intahepatic Bile Ducts	3	3	0	3	0	0	0	0	1	1	1
Gallbladder	2	1	1	1	1	0	1	0	0	0	0
Other Biliary	11	9	2	7	4	0	1	5	0	2	1
Pancreas	65	53	12	36	29	0	3	9	3	28	10
Respiratory and Intra thoracic System:											
Nasal Cavity/Middle Ear/Access Sinus	10	8	2	5	5	0	0	0	1	3	4
Larynx	19	12	7	12	7	2	3	2	4	0	1
Lung and Bronchus	413	335	78	232	181	0	78	16	93	116	32
Bone, Joints and Articular Cartilage:											
Bone and Joints	15	10	5	10	5	0	3	0	0	1	6
Hematopoietic Reticulo endothelial:											
Multiple Myeloma	49	31	18	29	20	0	0	0	0	0	31
Lymphoid Leukemia	55	20	35	34	21	0	0	0	0	0	20
Myeloid Leukemia	67	44	23	36	31	0	0	0	0	0	44
Other Leukemia	4	2	2	4	0	0	0	0	0	0	2
Myleodysplastic Syndrome	21	12	9	11	10	0	0	0	0	0	12
Skin:											
Melanoma	230	151	79	124	106	28	86	16	11	3	7
Other skin	7	6	1	4	3	0	2	1	2	0	1
Retroperitoneum and Peritoneum:											
Retroperitoneum	4	4	0	1	3	0	1	0	0	1	2
Peritoneum, Omentum, Mesentery	5	4	1	1	4	0	0	0	0	0	4

Soft Tissue:											
Soft Tissue (incl Heart)	55	48	7	25	30	0	9	13	2	7	17
Breast:											
Breast	657	539	118	6	651	142	152	153	52	20	20
Female Genital Organs:											
Vulva	22	16	6	0	22	10	3	0	2	0	1
Vagina	1	1	0	0	1	1	0	0	0	0	0
Cervix Uteri	50	28	22	0	50	0	12	4	4	3	5
Corpus Uteri	79	61	18	0	79	1	35	5	4	7	9
Uterus, NOS	6	4	2	0	6	0	0	0	0	0	4
Ovary	46	24	22	0	46	0	4	0	12	6	2
Other Female Genital NOS	4	4	0	0	4	0	1	0	1	1	1
Male Genital Organs:											
Prostate	422	296	126	422	0	0	1	242	25	14	14
Testis	16	10	6	16	0	0	5	2	2	0	1
Other Male	6	4	2	6	0	0	0	0	1	0	3
Urinary Tract:											
Kidney and Renal Pelvis	126	89	37	80	46	3	54	5	9	14	4
Bladder	70	24	46	54	16	5	3	7	3	6	0
Other Urinary Organs	9	4	5	7	2	3	0	0	1	0	0
Eye, Brain and Other Parts of the Central Nervous System:											
Eye and Orbit	3	0	3	1	2	0	0	0	0	0	0
Brain	71	55	16	36	35	0	0	0	0	0	55
Other Nervous System	1	1	0	0	1	0	0	0	0	0	1
Benign/Borderline Intracranial/CNS	120	100	20	37	83	0	0	0	0	0	100
Thyroid and Other Endocrine Glands:											
Thyroid	91	78	13	26	65	0	49	9	12	6	2
Other Endocrine (incl Thymus)	6	5	1	4	2	0	0	0	0	0	5
Hodgkins/NonHodgkins:											
Hodgkin's Disease Nodal	24	17	7	14	10	0	1	9	4	2	1
Hodgkin's Disease Extranodal	1	1	0	0	1	0	1	0	0	0	0
Non-Hodgkin's Lymphoma Nodal	139	99	40	70	69	0	17	21	21	34	6
Non-Hodgkin's Lymphoma Extra-nodal	38	27	11	20	18	0	15	7	0	5	0
Waldenstrom's Macroglobulinemia	2	0	2	1	1	0	0	0	0	0	0
Mesothelioma											
Mesothelioma	5	4	1	4	1	0	0	0	1	0	3
Kaposi Sarcoma											
Kaposi Sarcoma	6	4	2	6	0	0	0	0	0	0	4
Other/Unknown:											
Other Ill Defined Sites	10	4	6	4	6	0	0	0	0	0	4
Unknown Primary	62	55	7	32	30	0	0	0	0	0	55
Total	**3682**	**2728**	**954**	**1743**	**1939**	**206**	**623**	**613**	**363**	**379**	**544**

Focus Study: Melanoma

Since 1950, the incidence of melanoma in the United States has increased by over 600 percent, far outpacing all other malignancies. Thankfully, the majority of cases at diagnosis is limited to skin involvement only and is treated successfully with surgery. However, while 85 percent of Caucasians diagnosed with melanoma present with local (cutaneous only) disease, only 60 percent of African-American patients with melanoma have only local disease. Twenty-five percent of African-Americans present with lymph node involvement at diagnosis (compared to 10 percent of Caucasian patients), and 15 percent have widespread (metastatic) disease at diagnosis (compared to 5 percent of Caucasian patients). This is likely related to a higher incidence of plantar melanoma, a more virulent form of melanoma, in the African-American population. One African-American patient at M. D. Anderson Cancer Center Orlando in 2006 presented with locally advanced (nodal involvement) disease; two Hispanic patients presented with advanced disease (See Table 1).

Table 1



It is estimated that 59,940 people will be diagnosed with melanoma in the United States this year. Melanoma represents approximately four percent of all malignancies diagnosed in both men and women, but the incidence is slightly higher in males, approximately 55 percent of cases. (See Table 2, p. 22) In Florida, it is estimated that 4,380 people will be diagnosed with melanoma this year. In keeping with national trends, 53 percent of the newly diagnosed patients with melanoma at Orlando Regional Healthcare were males, with a peak incidence in the sixth and seventh decades of life (See Table 3, p. 22).

Table 2

2006 Orlando Regional Healthcare Melanoma Incidence Age vs Sex

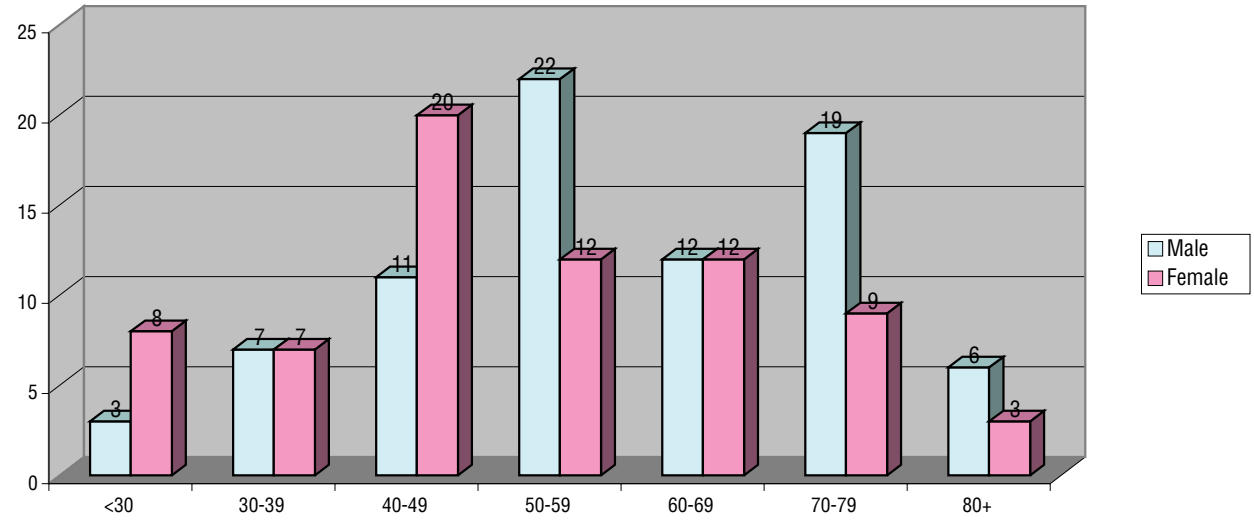
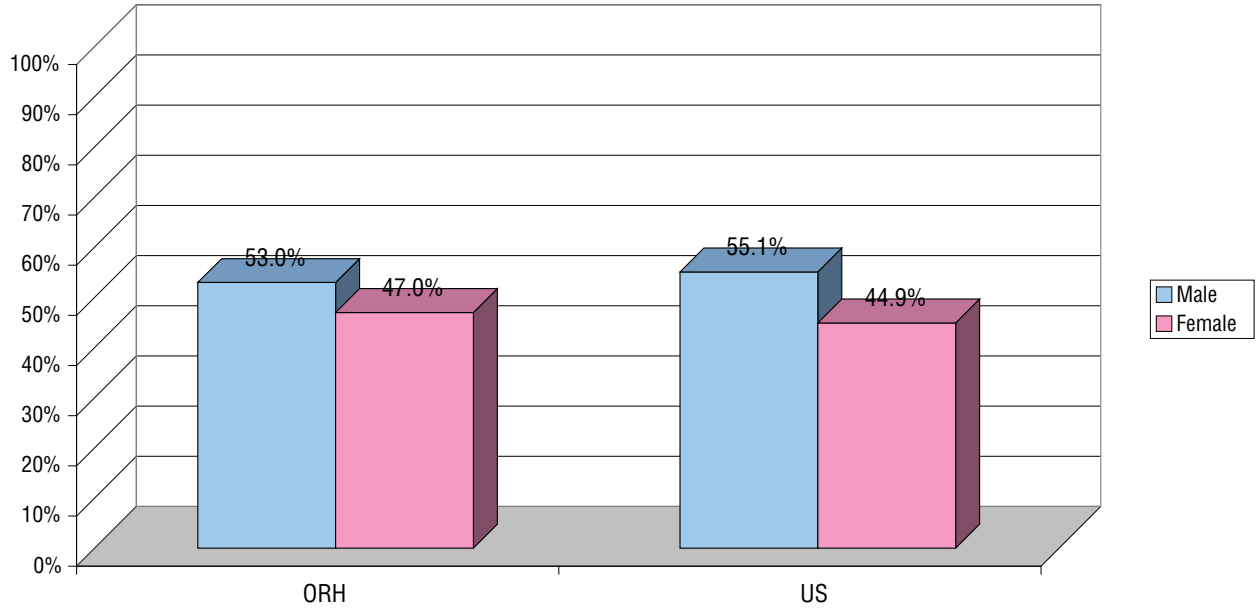


Table 3

2006 Melanoma Incidence by Sex US vs. Orlando Regional Healthcare



Five year survival rates are on the rise, owing both to early detection of disease and more effective treatments (particularly in the adjuvant setting). In the period from 1996-2002, five year survival in Caucasian patients increased to 93 percent, up from 82 percent in 1975-1977. Improved five-year survival is evident in the African-American population as well, from 58 percent in 1975-1977 to 75 percent at present.

A total of 151 patients with newly diagnosed melanoma were treated at Orlando Regional in 2006. Eighty-seven percent of patients had disease confined to the skin only (Stages 0-II). Ten patients (six percent of the population) had nodal involvement, and three patients (two percent of the population) presented with metastatic disease.

Treatment of cutaneous disease is primarily surgical; when possible, regional lymph nodes are sampled for staging and therapeutic purposes. Lymphoscintigraphy and sentinel lymph node sampling have significantly reduced surgical morbidity in melanoma, and these are now considered standards of care. Interferon-alfa-2b remains standard therapy in the adjuvant setting, but trials with different schedules of this agent and newer agents such as pegylated interferon are ongoing. Metastatic melanoma remains a treatment challenge, but trials with promising agents are ongoing, including several at Orlando Regional (See Table 4).

Table 4

Orlando Regional Healthcare Treatment of Melanoma by Stage of Disease at Diagnosis (151 Cases)

Treatment modalities	Stage 0	Stage I	Stage II	Stage III	Stage IV	Unknown	Total
Surgery(S)	28	86	16	2	0	5	137
Chemo©	0	0	0	0	1	0	1
S + R	0	0	0	1	0	1	2
S + C	0	1	0	4	0	0	5
S + B	0	0	0	1	0	0	1
S + R + C	0	0	0	1	0	0	1
Not Treated	0	0	0	1	2	1	4
Total	28	87	16	10	3	7	151

In comparison to data from the National Cancer Database (NCDB), the five-year survival rate among patients with melanoma (all stages) at Orlando Regional was superior. Overall, five-year survival rates at Orlando Regional approached 86 percent in all patients compared to 76 percent nationwide. Most strikingly, Orlando Regional's five-year survival in Stage IV patients was nearly three-times the national average. (See Table 5)

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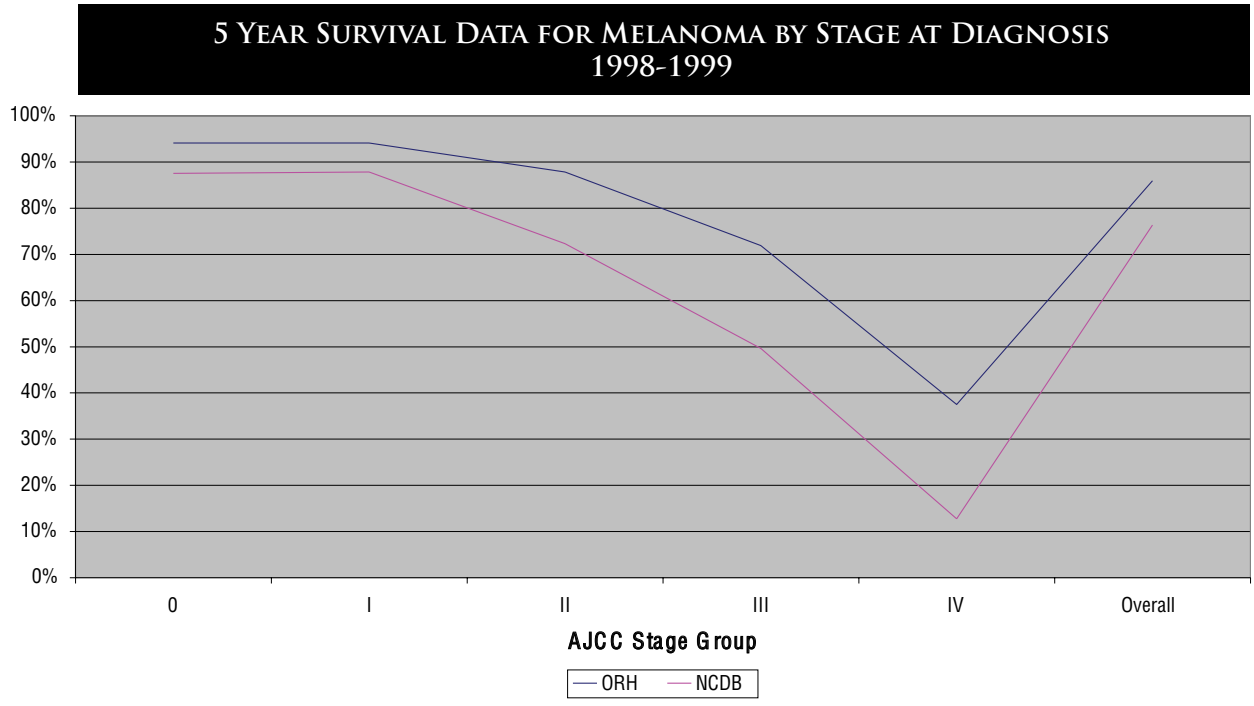
Table 5



Glossary

Accession - Entry of a case into the registry by the year in which the patient was first diagnosed or received their first course of treatment at M. D. Anderson Cancer Center Orlando, Dr. P. Phillips Hospital, Arnold Palmer Hospital for Children or Orlando Regional Medical Center.

American College of Surgeons (ACoS) - An association of surgeons that ensures patient access to high quality and effective care.

American Joint Commission on Cancer (AJCC) - A type of classification and staging of cancer to determine treatment more appropriately, evaluate cancer management more reliably and to compare statistics reported on regional, state and national basis. The Cancer Registry staff documents the stage of the disease using the AJCC staging system. The stages are: O, I, II, III, IV or Unknown.

Analytical (A) - Describes cases of cancer that were initially diagnosed and/or received their first course of treatment at one of the above listed facilities.

Commission on Cancer (CoC) - A branch of the American College of Surgeons that surveys and accredits cancer programs.

Florida Cancer Data Systems (FCDS) - Florida Cancer Data Systems is Florida's statewide, population-based cancer registry and has been collecting incidence data since 1981.

Histology - Histology is the study of microscopic structure of tissue.

National Cancer Data Base (NCDB) - The National Cancer Data Base is a joint project of the American College of Surgeons Commission on Cancer and the American Cancer Society. The goal of the NCDB is to present an annual summary of care that patients diagnosed and treated for cancer receive at hospitals and centers throughout the country.

Non-Analytical (NA) - Non-Analytical describes cases of cancer that are diagnosed and treated elsewhere and receive subsequent care at one of the facilities listed above. Also includes cases that were treated more than four months after diagnosis or cases first diagnosed at autopsy.

Prospective Cases - Prospective cases are cases that are newly diagnosed and treatment is not yet initiated or discussion of additional treatment or adjuvant treatment is needed. These types of cases also include treatment planning for recurrence or progression of disease and discussion of supportive or palliative care.

Stage - Stage is the extent of cancer shown through exams, tests or surgery. The stage of disease is recorded using the AJCC staging system; Tumor, Nodes and Metastasis (TMN); and SEER staging.

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