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The Florida Hospital Cancer Institute (FHCI) is proud to present our 2017 Annual Outcomes Report, including 2016 activities and Cancer Registry data.

### **VISION STATEMENT**

To achieve national recognition as a cancer institute that provides patient access to value-based, personalized care through highly specialized, comprehensive, and innovative destination programs.

#### Florida Hospital Cancer Institute Facts

- Accredited as an Academic Comprehensive Cancer Program by the American College of Surgeons Commission on Cancer.
- Received Quality Oncology Practice Initiative (QOPI) certification for medical oncology practices for quality care and outcomes.
- Research affiliations with the National Cancer Institute, National Clinical Trials Network, Moffitt Cancer Center, Sanford Burnham Prebys Medical Discovery Institute and universities throughout the United States, among others.
- One of the most experienced radiation oncology programs in Florida and accredited by the American College of Radiology (ACR) for quality.
- Performing more than 100 adult bone marrow transplants annually and accredited by the Foundation for Accreditation of Cellular Therapy (FACT) for quality.
- World leader in robotic prostatectomy, with Central Florida's first da Vinci® Surgical System.
- Certified by the American Society of Clinical Oncology's (ASCO) Quality Oncology Practice Initiative for quality in medical oncology.
- Accredited by the National Accreditation Program for Breast Centers (NAPBC) for excellence in breast cancer care.

Source: Florida Cancer Data Systems

## DEAR COLLEAGUES AND COMMUNITY MEMBERS

I joined Florida Hospital Cancer Institute a little more than a year ago to take us further down a path we'd clearly already started – becoming a world class oncology diagnostic and treatment center. I bring extensive experience in patient care, research and clinical trials, as well as 20 years in academia, and in 2016, I leveraged that background to enhance our comprehensive approach to care. I am pleased to share the year's achievements and outcomes with you in this report.

#### Some of the highlights include:

- Five-year survival rates that exceeded those measured in nine national cancer registries. For many tumor sites, survival rates were significantly higher at FHCI.
- Highly skilled physicians who continued to achieve international recognition for their work publishing papers in renowned journals, presenting at conferences and invited lectures around the world, and opening many new clinical trials for leading-edge treatments.
- Hosting 2016 Best of ASCO (American Society of Clinical Oncology), where the highest-rated peer reviewed papers were selected and later shared around the world.
- Screening nearly 56,000 Central Floridians for breast cancer and maintaining our focus on reaching underserved women.
- Diagnosing and/or treating 8,500 patients with cancer many local while others traveled from around the world for the best in care.

It is through our collective efforts at FHCI and with the continued support of our referring physicians that we're able to offer patients state-of-the-art care here in Central Florida.

Thank you for your trust and support. We look forward to continuing our work together as we become a nationally recognized leader in cancer care.

Warmly,

Mald four

Mark A. Socinski, MD Executive Medical Director Florida Hospital Cancer Institute Member, Thoracic Oncology Program



## **BLOOD AND MARROW TRANSPLANT**



#### Steven Goldstein, MD

Medical Director, Blood and Marrow Transplant Center Florida Hospital Cancer Institute

#### Rushang Patel, MD, PhD Shahram Mori, MD, PhD Juan Varela, MD, PhD

The Blood and Marrow Transplant Center (BMTC) is Central Florida's first and only comprehensive bone marrow transplant center for adults. BMTC offers:

- Autologous transplants (a patient's own marrow or stem cells are used)
- Allogeneic transplants (a donor provides the blood marrow or peripheral blood stem cells)
- Pre-transplantation evaluations
- Peripheral blood stem cell collections/apheresis
- Bone marrow collections
- Post-transplant care, including graft vs. host disease (GvHD) evaluation/management
- ECP treatment (Extracorporeal Photopheresis, used for GvHD and cutaneous T-cell lymphoma)
- Haplo Transplants (half-match transplant when no full match is available)
- Cord blood transplants

The program is accredited by the Foundation for the Accreditation of Cellular Therapy (FACT) and the National Marrow Donor Program (NMDP); participates in Cancer and Leukemia Group B (CALGB); and is part of the 10CBA protocol.

#### 2016 Highlights

- Performed 108 stem cell transplants.
- Achieved and maintains 100 percent annual reporting compliance with the Center for International Blood & Marrow Transplant Research (CIBMTR).
- Now hold every center of excellence designation available for blood and marrow transplant.
- Achieved excellent survival results which met or exceeded the national average for the last several years.
- Introduced several poster presentations at international transplant meetings by BMTC team.



## **BRAIN AND SPINE ONCOLOGY**



#### Herbert B. Newton, MD, FAAN

Medical Director, Brain and Spine Tumor Program Florida Hospital Cancer Institute Professor of Neurology and Neurosurgery (Retired) Ohio State University Medical Center & James Cancer Institute



#### **Melvin Field, MD**

Neurosurgical Director, Gamma Knife Center and Neuroscience Institute Associate Professor of Neurological Surgery University of Central Florida College of Medicine

The FHCI Brain and Spine Program specializes in the diagnosis and comprehensive management of primary brain and spinal tumors for adult and pediatric patients, complications of malignant/low-grade brain and spinal tumors, secondary metastatic cancer directly affecting the brain and spinal cord, neurologic manifestations of cancers elsewhere in the body, and treatment-related complications affecting the central and peripheral nervous system.

Among the advanced treatments used in the Brain and Spine Program is the Leksell Gamma Knife® Perfexion radiosurgery system. The non-invasive outpatient procedure is used to treat malignant and benign brain tumors while leaving surrounding tissue intact. The Florida Hospital Gamma Knife Center is the first and only facility of its kind in Central Florida to offer Gamma Knife radiosurgery. It has treated thousands of patients with a multitude of different brain lesions since the Center opened in 1996.

#### **Publications**

Wheeler LA, Manzanera AG, Bell S, Cavaliere R, McGregor J, Lo S, Grecula J, Newton HB, et al; "Phase II Multicenter Study of Gene Mediated Cytotoxic Immunotherapy as Adjuvant to Surgical Resection for Newly Diagnosed Malignant Glioma"; Neuro Oncology, 2016; Feb 2. Pii: now002. [Epub ahead of print].

Newton HB; "Handbook of Neuro-Oncology Neuro-Imaging, 2nd Edition"; Elsevier Medical Publishers/Academic Press, 2016.

#### **Book Chapters**

In Handbook of Neuro-Oncology Neuro-Imaging, 2<sup>nd</sup> Edition. Newton HB (Ed.). Elsevier Medical Publishers/Academic Press. Newton HB: Overview of brain tumor epidemiology (1:3-8); Overview of pathology and treatment of primary brain tumors (2:9-22); Overview of pathology and treatment of metastatic brain tumors (3:23-34); Overview of spinal cord tumor epidemiology (4:35-39); Overview of pathology and treatment of spinal cord tumors (5:41-54); Overview of pathology and treatment of intramedullary spinal cord metastases (6:55-58). Newton HB, Slone HW, Bourekas EC: Primary central nervous system lymphoma. (41:471-482); Bourekas EC, Newton HB, Slone HW: Chordomas and other skull base tumors (49:603-612); Newton HB, Slone HW, Bourekas EC: Papillary glioneuronal tumors. (51:635-642); Sun, Y, Newton HB: Neuroimaging of brain tumors in animal models of central nervous system cancer. (36:395-408).

#### **Lectures and Presentations**

**Newton HB,** Kettering Medical Center/Kettering Health Network, Neuroscience Symposium 2016, Kettering, OH, 1/20/2016: "Neuro-Oncology Update on Brain Tumor Patient Care: Genomics, Optune, and Immuno-Oncology."

**Newton HB,** Upper Midwest NF-2 Conference, Columbus, OH; 10/07/16: "The use of Bevacizumab (Avastin) for NF-2-related Schwannomas: Update."

**Newton HB,** Chair: Live from Scottsdale: "FAQ's and Best Practices in the Management of Glioblastoma," SNO Meeting 2016, Scottsdale, AZ; 11/19/2016.

**Newton HB,** GBM Case 2 Presentation: Live from Scottsdale: "FAQ's and Best Practices in the Management of Glioblastoma," SNO Meeting 2016, Scottsdale, AZ; 11/19/2016.

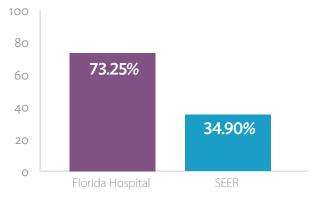
#### Awards

Newton HB, elected, "The Leading Physicians of the World," June 2016

### Brain and Spine Cancer Cases Five-Year Survival

Cases Diagnosed 2007-2013

A comparison of observed survival rates for brain and spinal tumors demonstrates a significantly higher five-year survival for FHCI patients when compared with the national average.



FHCI Tri-county vs. nine SEER registries (SEER = surveillance, epidemiology and end-results)

Sources: FHCI Cancer Registry; seer.gov CanQues

## **BREAST ONCOLOGY**



#### **Louis Barr, MD** Medical Director, Florida Hospital Cancer Institute Chair, Breast Program Leadership

As a leader in breast cancer treatment, FHCI employs a wide range of therapies, including surgery, radiation therapy, chemotherapy, hormonal therapy and targeted therapy. Our multidisciplinary approach provides comprehensive care that enables patients to coordinate appointments with different specialists within the same day and promptly receive coordinated treatment recommendations. Breast cancer care coordinators assist patients through every step of their treatments and offer moral support. After-care and support help patients transition back to their day-to-day lives. FHCI is an innovator in community outreach that has provided thousands of screenings to underserved women.

#### 2016 Highlights

- Mammography centers at Florida Hospital campuses screened 55,336 women.
- The Mobile Mammography bus team screened 3,698 of those women.
- Breast Cancer Care Coordinators assisted 4,379 patients, including the newly diagnosed patients and those referred for diagnostic imaging.
- Of the 55,336 women screened for breast cancer, FHCI recommended 5.2 percent be tested further based on findings. From those findings, cancer was detected in less than three out of 1,000 patients.

### **Publications and Presentations**

Caceres A, **Ivanov O**, Centers N, Wiercinski K, Buffington C; "The Effect of Risk-reducing Surgery on Sexuality in Patients with BRCA Mutations"; International Congress of Gynecology and Obstetrics, Barcelona, May 2016.

**Ivanov O**, Caceres A, Centers N, Wiercinski K, Buffington C; "Effects of Risk-reducing Surgery on Libido, Self-image and Psychological Status among BRCA Mutation Carriers"; American Society of Clinical Oncology (ASCO), Chicago, June 2016. (Oral Presentation, **Ivanov O** Presenter).

**Ivanov O**, Caceres A, Centers N, Wiercinski K, Buffington C; "Lifestyle Issues Affecting Health and Well-being of BRCA Mutation Carriers"; American Society of Clinical Oncology, Chicago, June 2016. (Online Abstract Publication).

**Ivanov O**; "Effects of Risk-reducing Surgery on Libido, Self-image and Psychological Status among BRCA Mutation Carriers"; Best of ASCO.

**Ivanov O**; "Targeted Radiation Therapy and IORT for Breast Cancer"; Breast Cancer Symposium, Las Vegas, November 2016. Keynote Speaker.

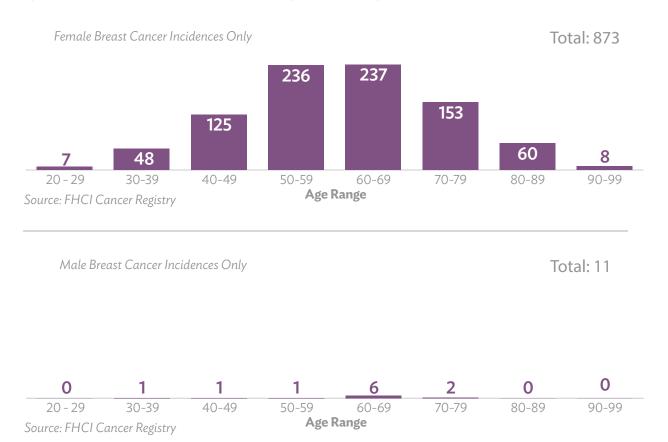
#### Research

Translational research continued through 2016 with collaboration by SA Litherland, PhD at FHCI and Anette Khaled, PhD at the University of Central Florida. The group is studying circulating tumor cells in the development of individualized therapy and is funded by the Breast Cancer Research Foundation.

#### **Breast Cancer Cases**

#### Age at Diagnosis by Gender

Approximately 54 percent of all female breast cancer patients at FHCI were diagnosed between ages 50 and 69. About 6 percent were under age 40 when diagnosed.



#### **Breast Cancer Cases**

Stage at Diagnosis by Gender

At FHCI, 873 new cases of breast cancer were diagnosed or treated. Nearly 80 percent of them were identified in early stages (0, I, II), demonstrating the continued effectiveness of building awareness through early screenings.

AJCC	м	Male		nale	Total Values		
STAGE AT DIAGNOSIS	NBR	(%)	NBR	(%)	NBR	(%)	
0	1	1	96	99	97	11.1	
1A	2	0.6	317	99.4	319	36.5	
1B	О	о	22	100	22	2.5	
2A	4	2.4	160	97.6	164	18.8	
2B	0	0	92	100	92	10.5	
3A	0	0	42	100	42	4.8	
3B	1	8.3	11	91.7	12	1.4	
3C	2	7.1	26	92.9	28	3.2	
4	0	0	32	100	32	3.7	
88	0	0	1	100	1	O.1	
99	0	0	50	100	50	5.7	
Any Others	1	7.1	13	92.9	14	1.6	
<b>Overall Totals</b>	11	1.3	862	98.7	873	100	

Source: FHCI Cancer Registry



#### First-course Surgery Type

By Stage at Diagnosis

Mastectomy was most often the first course of treatment for breast tumors in stage II, as where lumpectomy or no surgery was more likely the course of treatment chosen in stage I and below.

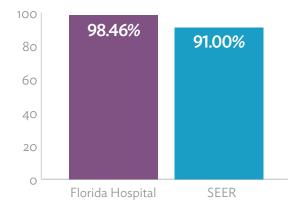
AJCC	None		Lumpectomy		Mastectomy		Total Values	
STAGE AT DIAGNOSIS	#	(%)	#	(%)	#	(%)	#	(%)
ο	4	4.1	55	56.7	38	39.2	97	11.1
1A	14	4.4	218	68.3	86	27	319	36.5
1B	0	0	16	72.7	6	27.3	22	2.5
2A	15	9.1	70	42.7	79	48.2	164	18.8
2B	8	8.7	37	40.2	47	51.1	92	10.5
3 <b>A</b>	5	11.9	6	14.3	31	73.8	42	4.8
3B	2	16.7	2	16.7	8	66.7	12	1.4
3C	2	7.1	5	17.9	21	75	28	3.2
4	29	90.6	1	3.1	2	6.3	32	3.7
Not Applicable This Morphology	1	100	0	0	0	0	1	0.1
Unknown Stage	22	44	12	24	16	32	50	5.7
Any Others	0	0	6	42.9	8	57.1	14	1.6
<b>Overall Totals</b>	102	11.7	428	49	342	39.2	873	100

Source: FHCI Cancer Registry

#### **Breast Cancer Five-year Survival**

Cases Diagnosed 2007-2013

Five-year survival rates at FHCI exceeded those of nine surveillances, epidemiology and end-results (SEER) registries.



FHCI Tri-county area vs. nine SEER registries (SEER = surveillance, epidemiology and end-results) Sources: FHCI Cancer Registry; SEER.gov CanQues

## GASTROINTESTINAL, PANCREATIC AND HEPATOBILIARY ONCOLOGY



#### Ahmed Zakari, MD

Medical Director, Gastrointestinal Cancer Program Florida Hospital Cancer Institute Chief of Hematology/Oncology Division, Florida Hospital Assistant Professor, University of Central Florida College of Medicine



**John R. Monson, MD** Surgical Director, Colon and Rectal Surgery Florida Hospital Cancer Institute FHCI offers a comprehensive array of treatments and therapies for gastrointestinal, colorectal, pancreatic and hepatobiliary cancer, including minimally invasive surgeries, stereotactic body radiation that detects early or small tumors, and radioembolization therapy for large or multiple tumors. With 3-D technology, the Gastrointestinal, Pancreatic and Hepatobiliary Oncology team produces more accurate diagnoses. We perform more pancreatic surgeries than any other medical center in Florida.

The Gastrointestinal, Colorectal, Pancreatic and Hepatobiliary Oncology Centers of Excellence offer a wide range of multi-disciplinary specialists who provide clinical expertise and patient-centered care. FHCI's comprehensive approach also helps patients manage the emotional impact of cancer. FHCI is committed to education and treatment that improves the lives of our patients and their families.



Juan Pablo Arnoletti, MD, FACS

Chief of Surgical Oncology Chairman of the Gastrointestinal Cancer Leadership Committee Florida Hospital Cancer Institute Professor of Surgery, University of Central Florida College of Medicine

#### **Publications**

Atallah S, Zenoni S, Kelly J, Tilahun Y, **Monson JR**; "A blueprint for robotic navigation: pre-clinical simulation for transanal total mesorectal excision (taTME)"; Techniques in Coloproctology; August.

Monson JR, Arsalanizadeh R; "Surgery for Patients with Rectal Cancer-Time to Listen to the Patients and Recognize Reality"; JAMA Oncology; Dec. 22; doi: 10.1001/jamaoncol.2016.5380. [Epub ahead of print]

Xu Z, Berho ME, Becerra AZ, Aquina CT, Hensley BJ, Arsalanizadeh R, Noyes K, **Monson JR**, Fleming FJ; "Lymph node yield is an independent predictor of survival in rectal cancer regardless of receipt of neoadjuvant therapy"; Journal of Clinical Pathology; Dec. 8; pii: jclinpath-2016-203995; doi: 10.1136/ jclinpath-2016-203995. [Epub ahead of print.]

Bernardi MP, Bloemendaal AL, **Albert M**, Whiteford M, Stevenson AR, Hompes R; "Transanal total mesorectal excision: dissection tips using 'O's and 'triangles'"; Techniques in Coloproctology; November; 20(11):775-778. [Epub Oct 1.]

Atallah S, **Larach SW**, **Monson JR**; "Stereotactic navigation for TAMIS-TME"; Minimally Invasive Therapy & Allied Technologies; June 27; 1-7. [Epub ahead of print.] Atallah S, **Albert M**, **Monson JR**; "Critical concepts and important anatomic landmarks encountered during transanal total mesorectal excision (taTME): toward the mastery of a new operation for rectal cancer surgery"; Techniques in Coloproctology; May 17. [Epub ahead of print.]

Burke JP, **Albert MR**; "Laparoscopic complete mesocolic excision with central vascular dissection for splenic flexure tumor: video vignette"; Colorectal Disease; May 23; doi: 10.1111/codi.13387. [Epub ahead of print.]

Penna M, Hompes R, Arnold S, Wynn G, Austin R, Warusavitarne J, Moran B, Hanna GB, Mortensen NJ, Tekkis PP; "Transanal Total Mesorectal Excision: International Registry Results of the First 720 Cases"; TaTME Registry Collaborative [Atallah S and **Albert M];** Annals of Surgery; Oct 4. [Epub ahead of print.]

Atallah S, Maharaja GK, Martin-Perez B, Burke JP, **Albert MR**, **Larach SW**; "Transanal hemorrhoidal dearterialization (THD): a safe procedure for the anticoagulated patient?"; Techniques in Coloproctology; May 12. [Epub ahead of print.]

Atallah S, Tilahun Y, **Monson JR**; "Real-time stereotactic navigation for the laparoscopic excision of a pelvic neoplasm"; Techniques in Coloproctology; May 10. [Epub ahead of print.] Atallah S, **Albert M**; "The neurovascular bundle of Walsh and other anatomic considerations crucial in preventing urethral injury in males undergoing transanal total mesorectal excision"; Techniques in Coloproctology; April 12. [Epub ahead of print.]

Burke JP, Martin-Perez B, Khan A, Nassif G, deBeche-Adams T, Larach SW, Albert MR, Atallah S; "Transanal Total Mesorectal Excision for Rectal Cancer: early outcomes in 50 consecutive patients"; Colorectal Disease; Jan. 8; doi: 10.1111/codi.13263. [Epub ahead of print.]

**Monson JR**, Arsalanizadeh R.; "Transanal Total Mesorectal Excision (TaTME) and Quality of Rectal Cancer Surgery: Do we Really Know?"; Annals of Surgery; April 7. [Epub ahead of print.]

Hensley BJ, Cooney RN, Hellenthal NJ, Aquina CT, Noyes K, **Monson JR**, Kelly KN, Fleming FJ; Upstate New York Surgical Quality Initiative Collaborative; "Readmissions After Colectomy: The Upstate New York Surgical Quality Initiative Experience"; Diseases of the Colon and Rectum; May; 59(5):419-25; doi: 10.1097/DCR.00000000000566. Becerra AZ, Aquina CT, Mohile SG, Tejani MA, Schymura MJ, Boscoe FP, Xu Z, Justiniano CF, Boodry CI, Swanger AA, Noyes K, **Monson JR**, Fleming FJ; "Variation in Delayed Time to Adjuvant Chemotherapy and Disease-Specific Survival in Stage III Colon Cancer Patients"; Annals of Surgery Oncology; Oct. 13. [Epub ahead of print.]

Noyes K, Baack-Kukreja J, Messing EM, Schoeniger L, Galka E, Pan W, Xueya C, Fleming FJ, **Monson JR**, Mohile SG, Francone T; "Surgical readmissions: results of integrating pre-, peri- and postsurgical care"; Nursing Open; May 10; 3(3):168-178.

Aquina CT, Blumberg N, Probst CP, Becerra AZ, Hensley BJ, Noyes K, **Monson JR**, Fleming FJ; "Large Variation in Blood Transfusion Use After Colorectal Resection: A Call to Action"; Diseases in the Colon and Rectum; May; 59(5):411-8; doi: 10.1097/DCR.00000000000588.

Aquina CT, Probst CP, Becerra AZ, Hensley BJ, Iannuzzi JC, Noyes K, **Monson JR**, Fleming FJ; "High Variability in Nosocomial Clostridium Difficile Infection Rates Across Hospitals After Colorectal Resection"; Diseases in the Colon and Rectum; April; 59(4):323-31; doi: 10.1097/DCR.00000000000539. Aquina CT, Blumberg N, Becerra AZ, Boscoe FP, Schymura MJ, Noyes K, **Monson JR**, Fleming FJ; "Association Among Blood Transfusion, Sepsis, and Decreased Long-term Survival After Colon Cancer Resection"; Annals Surgery; Sept. 14. [Epub ahead of print.]

Iannuzzi JC, Aquina CT, Rickles AS, Hensley BJ, Probst CP, Noyes K, **Monson JR**, Fleming FJ. "Risk Factors for Postdischarge Venothromboembolism After Colorectal Resection"; Diseases in the Colon and Rectum; March; 59(3):224-9. doi: 10.1097/DCR.0000000000529.

Becerra AZ, Probst CP, Tejani MA, Aquina CT, González MG, Hensley BJ, Noyes K, **Monson JR**, Fleming FJ; "Evaluating the Prognostic Role of Elevated Preoperative Carcinoembryonic Antigen Levels in Colon Cancer Patients: Results from the National Cancer Database"; Annals of Surgery Oncology; May; 23(5):1554-61. doi: 10.1245/s10434-015-5014-1. [Epub 2016 Jan. 12.]

Noyes K, **Monson JR**, Rizvi I, Savastano A, Green JS, Sevdalis N; "Regional Multiteam Systems in Cancer Care Delivery"; Journals of Oncology Practice; Sept. 20; pii: JOPR013896. [Epub ahead of print.] Aquina CT, Probst CP, Kelly KN, Iannuzzi JC, Noyes K, Fleming FJ, **Monson JR**; "Groin hernia repair, surgeon volume and patient reported outcome measures (PROMs)"; Surgery; March; 159(3):980; doi: 10.1016/j.surg.2015.10.023. [Epub Nov. 14, 2015.]

Aquina CT, Probst CP, Becerra AZ, lannuzzi JC, Kelly KN, Hensley BJ, Rickles AS, Noyes K, Fleming FJ, **Monson JR**; "High volume improves outcomes: The argument for centralization of rectal cancer surgery"; Surgery. March; 159(3):736-48; doi: 10.1016/j. surg.2015.09.021. [Epub Nov. 11, 2015.]

Aquina CT, Becerra AZ, Probst CP, Xu Z, Hensley BJ, Iannuzzi JC, Noyes K, **Monson JR**, Fleming FJ; "Patients with Adhesive Small Bowel Obstruction Should Be Primarily Managed by a Surgical Team"; Annals of Surgery; September; 264(3):437-447.

Aquina CT, Probst CP, Becerra AZ, Hensley BJ, Iannuzzi JC, Noyes K, **Monson JR**, Fleming FJ; "The impact of surgeon volume on colostomy reversal outcomes after Hartmann's procedure for diverticulitis"; Surgery; July 6; pii: S0039-6060(16)30136-2; doi: 10.1016/j. surg.2016.05.008. [Epub ahead of print.] Kelly KN, Noyes K, Dolan J, Fleming F, **Monson JR**, Gonzalez M, Sevdalis N, Dozier A; "Patient perspective on care transitions after colorectal surgery";

Journal of Surgical Research; June 1; 203(1):103-12; doi: 10.1016/j.jss.2016.02.011. [Epub Feb 18.]

Glasgow SC, Morris AM, Baxter NN, Fleshman JW, Alavi KS, Luchtefeld MA, **Monson JR**, Chang GJ, Temple LK; "Development of The American Society of Colon and Rectal Surgeons' Rectal Cancer Surgery Checklist"; Diseases of the Colon and Rectum; July; 59(7):601-6; doi: 10.1097/DCR.00000000000606.

Garcia PL, Miller AL, Kreitzburg KM, Council LN, Gamblin TL, Christein JD, Heslin MJ, **Arnoletti JP**, Richardson JH, Chen D, Hanna CA, Cramer SL, Yang ES, Qi J, Bradner JE, Yoon KJ: "The BET bromodomain inhibitor JQ1 suppresses growth of pancreatic ductal adenocarcinoma in patient-derived xenograft models"; Oncogene 35: 833-45.

#### **Active Research Grants**

SA Litherland, **JP Arnoletti**, A Khaled; "Novel Actin Polymerization Inhibitor Test in Pancreatic Cancer Mixed Cell Reaction Culture System;" to test the effects of actin polymerization inhibition on pancreatic cancer CTC proliferation and apoptosis in MCR Culture System; Phi Beta Psi; November 2016-November 2017.

SA Litherland, **JP Arnoletti**, Xainlin Han; "Identification of altered lipids for early diagnosis of pancreatic cancer"; to identify and characterize the Lipidomics profile unique to pancreatic cancer to find potential therapeutic targets and biomarker signatures for malignancy and tumor staging; Florida Hospital Foundation; September 2016-August 2017.

### Teaching taTME

Transanal Total Mesorectal Excision (taTME) is a new minimally invasive approach to rectal cancer surgery. To date, 88 surgeons from 51 leading national and international centers have completed two-day trainings led by Drs. Albert and Atallah at Florida Hospital Orlando. The operative course trains experienced surgeons in live surgery and cadaveric and didactic sessions on a new technique using taTME.

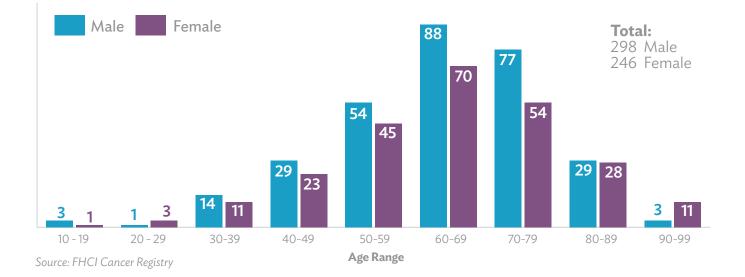
#### Liver and Pancreatic Cancer Cases

	Analytical	Non-analytical	Total
Liver	155	37	192
Pancreas	311	64	375

#### **Colorectal Cancer Cases**

Age at Diagnosis by Gender

In 2016, male and female patients diagnosed at FHCI with colorectal cancer were most likely to be 60 to 69 years old.



#### **Colorectal Cancer Cases**

Stage at Diagnosis by Age

Because of the growing trend of early screenings, patients were most commonly diagnosed with colorectal cancer at FHCI while in stage I of the disease.

AJCC STAGE AT DIAGNOSIS	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	All Others	Total Values
ο	0	0	1	9	9	5	3	0	0	27
1	1	3	10	19	40	25	8	0	1	107
2	0	1	0	0	0	0	0	0	0	1
2A	0	2	5	11	19	26	12	3	0	78
2B	0	0	1	0	5	5	2	0	0	13
2C	0	0	0	3	4	1	4	2	0	14
3	0	1	1	0	0	0	0	0	1	3
3A	0	0	2	5	8	7	1	1	0	24
3B	1	7	9	14	25	27	7	2	0	92
3C	0	3	1	7	12	7	5	1	0	36
4	0	1	0	2	2	2	0	0	0	7
4A	0	3	9	10	7	8	5	0	0	42
4B	0	2	4	6	14	4	2	3	0	33
99	2	2	9	13	13	14	8	2	2	65
Any Others	0	0	0	0	0	0	0	0	0	2
<b>Overall Totals</b>	4	25	52	99	158	131	57	14	4	544

Source: FHCI Cancer Registry

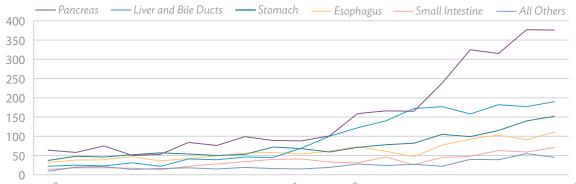
## GASTROINTESTINAL, PANCREATIC AND HEPATOBILIARY ONCOLOGY

#### **Upper Gastrointestinal Total Cancer Incidence**

By Tumor Site

#### Cases Diagnosed 1998-2016

There has been a steady rise in pancreatic cancer cases, with a dramatic increase from 2011 to 2016, which more than doubled during that period.

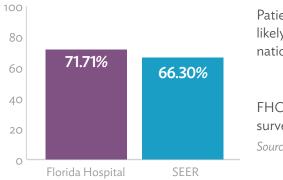


1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Source: FHCI Cancer Registry; Tri-county area

#### **Colorectal Cancer Five-year Survival**

#### Cases Diagnosed 2007-2013



Patients treated for colorectal cancer at FHCI were more likely to survive beyond five years when compared with nine national SEER registries.

FHCI Tri-County vs. nine SEER registries (SEER = surveillance, epidemiology and end-results). Sources: FHCI Cancer Registry; SEER.gov CanQues



#### Robert W. Holloway, MD, DHc, FACOG, FACS

Medical Director, Gynecologic Oncology Program Florida Hospital Cancer Institute Professor of Obstetrics & Gynecology, University of Central Florida Clinical Professor of Obstetrics & Gynecology, Florida State University



#### James E. Kendrick, MD, FACOG

Director of Clinical Operations, Gynecologic Oncology Program Florida Hospital Cancer Institute Associate Professor of Obstetrics & Gynecology, University of Central Florida Clinical Associate Professor of Obstetrics & Gynecology, Florida State University



#### Sarfraz Ahmad, PhD, FABAP, FACB

Director of Clinical Research, Gynecologic Oncology Florida Hospital Cancer Institute Professor of Medical Education, University of Central Florida Professor of Clinical Sciences, Florida State University The Florida Hospital Gynecologic Oncology (FHGO) Program at FHCI is internationally recognized for excellence in clinical research, innovation in robotic surgery and treatment, and novel collaborative laboratory investigations of translational research. Surgeons from around the world have attended Florida Hospital's advanced robotic training courses and physician observations. FHGO's seminal research publications, which focus on robotic surgery outcomes, are widely quoted in peer-reviewed scholarly literature. Patients have access to the most advanced oncologic therapies because of affiliations with the National Cancer Institute's Gynecologic Oncology Group (GOG) / NRG Oncology, several university research centers and industrysponsored research consortiums.

#### 2016 Highlights

- Florida Hospital has been ranked within the top 15 hospitals in the nation by the U.S. News & World Report for Gynecology during the past five years.
- Dr. Robert W. Holloway received the Castle Connolly "Top Doctors" Recognition Award.
- Data monitoring, analyses and final manuscript writing was completed on the FDA Investigational Device Exemption study "Detection of Sentinel Lymph Nodes in Patients with Endometrial Cancer Undergoing Robotic-Assisted Staging: Comparison of Isosulfan Blue and Indocyanine Green Dyes with Fluorescence Imaging" (Drs. Holloway, Ahmad, Brudie, Kendrick).
- Faculty appointments were maintained at the UCF College of Medicine (Drs. Finkler, Holloway, Kendrick, Brudie, Ahmad, Gubbi, Wisner) and the Florida State University (FSU) College of Medicine (Drs. Finkler, Holloway, Kendrick, Brudie, Ahmad).
- Drs. Ahmad, Brudie, Holloway and Kendrick served as reviewers for several peer-reviewed, national/international scientific journals (e.g., Gynecologic Oncology, British Journal of Cancer, International Journal of Gynecological Cancer, Archives of Obstetrics and Gynecology, Journal of Robotic Surgery, Journal of American College of Surgery, Surgical Endoscopy, Indian Journal of Experimental Biology, Tumor Biology, Clinical & Translational Oncology, etc.).

- Regularly hosted numerous international visiting surgeons and young scholars for clinical activities, including surgery and gynecologic oncology clinic, which also collected course tuition to Florida Hospital to support the Office of International Development.
- Several other medical, undergraduate and high school students from Florida institutions regularly participated as volunteers during short-term research and clinical rotation/elective requirements to gain gynecology/ oncology surgical and research experience.



#### Peer-reviewed Published Research Articles

Backes F, Elnaggar AC, Farrell MR, **Brudie LA, Ahmad S**, Salani R, Cohn DE, **Holloway RW,** Fowler JM, O'Malley DM. Peri-operative outcomes for laparotomy compared to robotic surgical staging of endometrial cancer in the elderly. A retrospective cohort. *International Journal of Gynecological Cancer* 2016; 26: 1717-1721.

**Brudie LA**, Khan F, **Radi MJ**, **Ahmad S**. Serous carcinoma of endometrium in combination with neuroendocrine smallcell: A case report and literature review. *Gynecologic Oncology Reports* 2016; 17: 79-82.

Brudie LA, Khan F, Radi MJ, Yates MM, Ahmad S. Malignant melanoma arising in a mature teratoma: A case report with review of the recent literature. *Gynecologic Oncology Reports* 2016; 16: 47-50. Holloway RW, Gupta S, Stavitzski NM, Zhu X, Takimoto EL, Gubbi A, Bigsby GE, Brudie LA, Kendrick JE, Ahmad S. Sentinel lymph node mapping with staging lymphadenectomy for patients with endometrial cancer increases the detection of metastasis. *Gynecologic Oncology* 2016; 141: 206–210.

Sankpal UT, **Ingersoll SB, Ahmad S, Holloway RW**, Bhat VB, Simecka JW, Daniel L, Smith-Barbara P, Vishwanatha JK, Basha R. Association of Sp1 and survivin in epithelial ovarian cancer: Sp1 inhibitor and cisplatin a novel combination for inhibiting epithelial ovarian cancer cell proliferation. *Tumor Biology* 2016; 37: 14259-14359.

Sert BM, Boggess JF, **Ahmad S**, Jackson AL, **Stavitzski NM**, Dahl AA, **Holloway RW**. Robotic vs. open Type III radical hysterectomy: A multi-institutional experience for early-stage cervical cancer. *European Journal of Surgical Oncology* 2016; 42: 513-522.

#### Research Abstracts Published and Presented at Scientific Meetings

Holloway RW, Ahmad S, Kendrick JE, Bigsby GE, Brudie LA, Ghurani GB, Stavitzski NM, Gise JL, Ingersoll SB, Pepe JW. A prospective randomized trial comparing colorimetric and fluorescent imaging for pelvic sentinel lymph node mapping in endometrial cancer. Late Breaking Abstract (Scientific Plenary Presentation) at the 47<sup>th</sup> Annual Meeting on Women's Cancer of the Society of Gynecologic Oncology (SGO), March 19-22, 2016, San Diego, CA (LBA # 2).

McCourt CK, Powell M, Tenney ME, Kushner DM, Rotmensch J, **Kendrick JE,** Warshal DP, Deng W, Saltzman JN, Dizon DS. A phase II evaluation of ixabepilone in the treatment of recurrent/persistent carcinosarcoma of the uterus: An NRG/ Gynecologic Oncology Group study. *Journal of Clinical Oncology*. 2016; 34: Suppl. 1, Abstr. 5585.

Takimoto EL, Ahmad S, Wisner KPA, Gise JL, Stavitzski NM, Brudie LM, Kendrick JE, Holloway RW. Comparison of sentinel lymph node mapping to standard pelvic lymphadenectomy in patients with grade 1 and 2 endometrial cancer. Poster Presentation at the 47<sup>th</sup> Annual Meeting on Women's Cancer of the Society of Gynecologic Oncology (SGO), March 19-22, 2016, San Diego, CA (Abstr. # 303).

#### Invited Lectures and Training Programs

**Dr. Robert W. Holloway**, Invited Speaker, 15<sup>th</sup> Annual Meeting on Gynecologic Oncology, Chinese Medical Association and Chinese Society of Gynecologic Oncology (CSGO), March 10-13, 2016, Guangzhou, China.

**Dr. Robert W. Holloway**, Scientific Plenary Session Speaker at the 47<sup>th</sup> Annual Meeting on Women's Cancer of the Society of Gynecologic Oncology (SGO), March 19-22, 2016, San Diego, CA.

**Dr. Lorna A. Brudie**, Invited Speaker at the 4<sup>th</sup> Biennial Miami Robotics Symposium, organized by the Baptist Health South Florida "Robotic Management of Advanced Endometriosis," April 7-9, 2016, Miami, FL.

**Dr. Robert W. Holloway**, Invited Speaker, 68<sup>th</sup> Annual Congress of the Japanese Society of Obstetrics & Gynecology (JSOG), April 21-24, 2016, Tokyo, Japan.

**Dr. Sarfraz Ahmad**, Invited Guest Speaker at Seminar Series & Grand Rounds of the Institute for Cancer Research, University of North Texas Health Science Center, May 4-5, 2016, Fort Worth, TX. Drs. Sarfraz Ahmad and Robert W. Holloway, Invited Delegates at the Robotic Registry Consensus Conference, organized by the Institute for Surgical Excellence (Washington, D.C.) and Florida Hospital Nicholson Center (Sept. 22-23, 2016), Celebration, FL.

**Dr. Robert W. Holloway**, Guest Academic Lecture at the 14<sup>th</sup> International Medical Scientific Conference for Students & Young Doctors, Medical University of Pleven, Pleven, Bulgaria.

**Dr. Robert W. Holloway**, Invited Speaker & Liver Robotic Surgery Performed at the International Symposium of Complex Gynecology at the 9 de Juhlo Hospital (Dec. 9-12, 2016), Sao Paulo, Brazil.

#### Awards/Honors/ Recognitions

Ahmad S; Clinical Chemist Recognition Award; American Association for Clinical Chemistry (AACC); Washington, D.C.

Takimoto EL; Florida Society of Clinical Oncology (FLASCO) Travel Award to attend the Annual Meeting of the Society of Gynecologic Oncology (SGO); Riverview, FL.

#### Educational and Scholarly Research Collaborations

Active collaboration with Drs. Floor J. Backes and Jeffrey M. Fowler at Ohio State University on survival outcomes analysis and translational research studies on uterine malignancy (**Drs. Holloway, Ahmad, Brudie**).

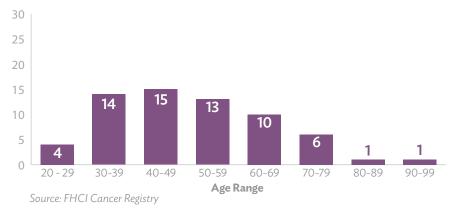
Collaboration with Gonul Kurt, PhD, RN, from Gulhane Military Medical Academy, School of Nursing in Ankara, Turkey.

Mentored Florida medical students, including those from UCF, FSU and Nova Southeastern University during clinical rotations/electives (**Drs. Holloway, Ahmad, Kendrick, Brudie**).

### **Cervical Cancer Cases**

Age at Diagnosis

About 65 percent of patients diagnosed with cervical cancer at FHCI in 2016 were 30 to 59 years old. The disease was infrequently diagnosed in patients younger than 30.



### **Cervical Cancer Cases**

Stage at Diagnosis

Nearly 24 percent of cervical cancer patients were diagnosed at stage III of the disease.

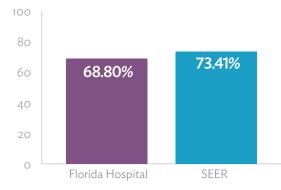


## **Cervical Cancer**

Five-year Survival

Cases Diagnosed 2007-2013

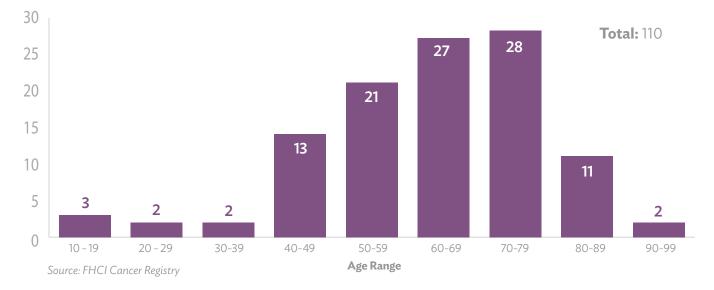
The five-year survival rate for cervical cancer patients treated at Florida Hospital exceeded that measured in nine national cancer registries.



FHCI Tri-County vs. nine SEER registries (SEER = surveillance, epidemiology and end-results) Source: FHCI Cancer Registry, SEER.gov CanQues

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**Ovarian Cancer Cases** Age at Diagnosis Of ovarian cancer patients diagnosed at FHCI in 2016, 50 percent were between ages 60 to 79.



#### **Ovarian Cancer Cases**

#### Stage at Diagnosis

In 2016, ovarian cancer was most frequently diagnosed in the late stages. About 51 percent of 109 ovarian cancer patients were diagnosed with advance stage III disease.

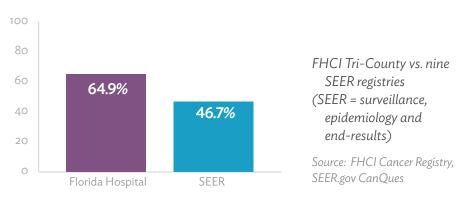


#### **Ovarian Cancer**

Five-year Survival

Cases Diagnosed 2007-2013

The five-year survival rate for ovarian cancer patients treated at Florida Hospital significantly exceeded that measured in nine national cancer registries.

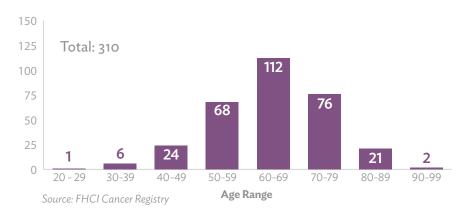


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#### **Uterine Cancer Cases**

#### Age at Diagnosis

About 36 percent of patients diagnosed with uterine cancer at FHCl in 2016 were ages 60 to 69, making this the most common age range for this type of cancer. Another 25 percent were diagnosed between the ages of 70 to 79.



#### **Uterine Cancer**

Five-year Survival

Cases Diagnosed 2007-2013

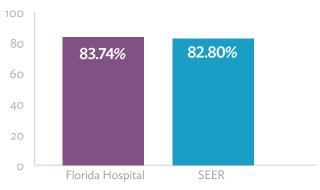
The five-year survival rate for patients with uterine cancer treated at FHCI was about equal to those measured by nine national cancer registries.

### **Uterine Cancer Cases**

#### Stage at Diagnosis

Because of the popularity of uterine cancer screenings, 60 percent of all patients diagnosed at FHCI in 2016 were in stage I of the disease, which increases their likelihood of survival.





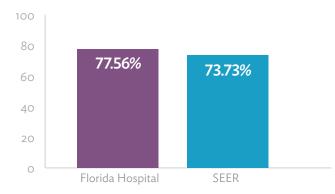
FHCI Tri-County vs. nine SEER registries (SEER = surveillance, epidemiology and end-results) Source: FHCI Cancer Registry, SEER.gov CanQues

#### **Gynecologic Cancers**

Five-year Survival

Cases Diagnosed 2007-2013

Five-year survival rates for patients with gynecologic cancers treated at FHCI exceeded those measured by nine national cancer registries.



Gynecological = cervical, uterine and ovarian FHCI Tri-County vs. nine SEER registries (SEER = surveillance, epidemiology and end-results)

Source: FHCI Cancer Registry, SEER.gov CanQues

### **Gynecological Cancer Surgeries**

Robotic Procedures vs. Total Procedures

Cases diagnosed 2006-2016

Robotic surgeries continued to represent the greatest number of surgical procedures used to treat patients with gynecologic cancer at FHCl, representing nearly 59 percent in 2016.



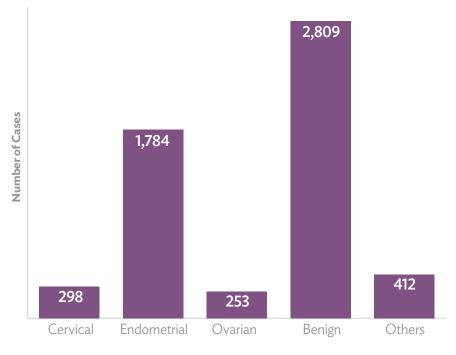
\* <8 months data

Source: Florida Hospital Gynecologic Oncology Database.

#### Gynecologic Oncology Robotic Surgery

By Cancer Type

Robotic surgery was more often used to treat endometrial cancer than any other gynecologic cancer. FHCI reached a milestone in 2016, treating more than 5,500 gynecology and gynecological oncology cases robotically.

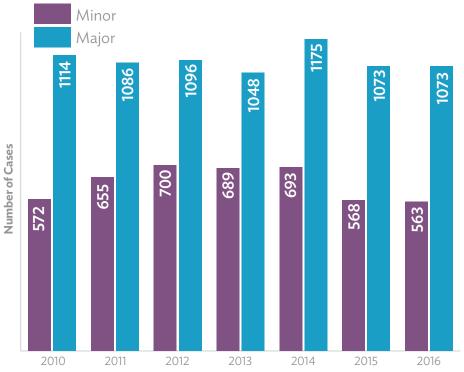


Source: Florida Hospital Gynecologic Oncology Database.

### Gynecologic Oncology Surgery Cases

2010-2016

Nearly six out of 10 cases required major surgery, a trend that has remained consistent for seven years.

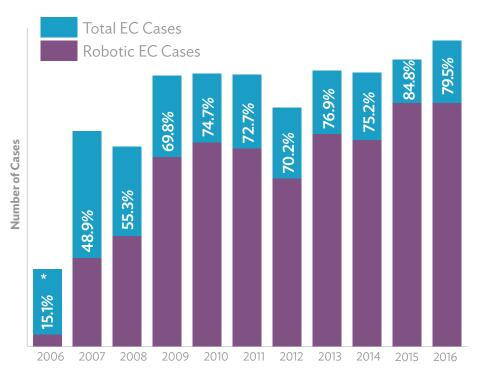


Source: Florida Hospital Gynecologic Oncology Database.

#### Gynecologic Oncology Robotic Surgery

for Endometrial Cancer July 2006 - December 2016

Nearly 80 percent of endometrial cancer cases were treated using robotic surgery in 2016 at FHCI, about the same number treated in each of the last several years.



\* First 6-months date since the initiation of Robotics Program Source: Florida Hospital Gynecologic Oncology Database.



## HEAD AND NECK ONCOLOGY



#### Henry Ho, MD

Co-Director, Head and Neck Cancer Program Florida Hospital Cancer Institute President, The Ear, Nose, Throat and Plastic Surgery Associates, PA Associate Professor, Otolaryngology, University of Central Florida College of Medicine Associate Professor, Surgery, Florida State University College of Medicine



#### J. Scott Magnuson, MD

Co-Director, Head and Neck Cancer Program Florida Hospital Cancer Institute Chief Medical Officer, Florida Hospital Nicholson Center Professor of Otolaryngology Head and Neck Surgery, University of Central Florida College of Medicine Medical Director, Head and Neck Surgery, Celebration Heath Director, Robotic Head and Neck Surgery, Florida Hospital Nicholson Center for Robotic Surgery Florida Hospital Nicholson Center Global Faculty Board Member

Physicians at the FHCI Head and Neck Cancer Program treat more head and neck cancer cases than any other care center in Florida. Our multidisciplinary approach, supported by video-conferenced tumor boards and biannual journal clubs, ensures that patients receive leadingedge, evidenced-based care. Our team offers a complete array of diagnostic and therapeutic options, from free-flap reconstruction and minimally invasive skull base surgery to the latest in chemoradiation therapy and clinical trials. As a leader with a visionary approach to cancer care, the Head and Neck Cancer Program consistently strives to improve patient care and treatment outcomes.

In 2016, 348 cancer patients treated by the Head and Neck Care Coordination Program received education, care coordination and support through their treatment and beyond. More than 53 patients attended our support group.

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#### **Publications**

Haughey BH, Sinha P, Kallogjeri D, Goldberg RL, Lewis Jr, JS, Piccirillo JF, Jackson RS, Moore EJ, Brandwein-Gensler M, **Magnuson JS**, et al; "Pathology-based Staging for HPVpositive Squamous Carcinoma of the Oropharynx"; Oral Oncology. Nov 2016:62:11-19. Doi: 10.1016/j. oraloncology. 2016.09.004.

Sanders E; "A Comparison of Clinical Outcomes between HPV+ and HPV-Squamous Cell Carcinomas of the Oropharynx"; ORL-Head and Neck Nursing, 34 (2):11-15, 2016 (Manuscript).

Ruddy BH, **Ho H**, Sapienza C, Lehman J; "Cases in Head and Neck Cancer, A Multidisciplinary Approach"; Plural Publishing, 2016.

Manzi V, **Ho H**; case report, "Non-Functional Lingual Thyroid presenting with Severe Obstructive Sleep Apnea"; Acta Oto-Laryngologica Case, 2016, Reports, Vol. 1, No. 1, 8-11.

Sanders E; abstract, "Thyroid Disorders and Management: Focus on Thyroid Cancer"; The Society of Otorhinolaryngology and Head - Neck Nurses Update 40:11 (220), 2016.

#### Presentations

**Magnuson, JS**; "Functional Outcomes in Transoral Surgery: Comparison to Nonsurgical Strategies"; 9<sup>th</sup> Annual Transoral Surgery for Head and Neck Cancer, Phoenix, AZ; Feb 24-27.

Ho H, Sanders E; "Head and Neck Cancer with Special Emphasis on HPV Disease and Robotic Surgery"; Florida Society of Clinical Oncology (FLASCO), Moffitt Cancer Center, American Academy of Physicians Assistants (AAPA) and The Leukemia and Lymphoma Society (LLS); Moffitt Cancer Center, Feb. 26.

**Dr. Henry Ho**; guest lecturer; "Head and Neck Cancer Overview"; University of Central Florida College of Medicine Otolaryngology Interest Group, March 1.

**Ho H**; "Thyroid Masses (Advanced Track)"; 6<sup>th</sup> Annual ENT for the PA-C CME Conference, Wyndham Grand Orlando Resort, April 1.

**Ho H**; "Diagnosis and Work-up of the Head and Neck Cancer Patient (Advanced Track)"; 6<sup>th</sup> Annual ENT for the PA-C CME Conference, Wyndham Grand Orlando Resort, April 1.

**Magnuson JS**; Moderator; "Robotic Surgery for Oropharyngeal and Laryngeal Cancer"; American Head & Neck Society's 9<sup>th</sup> International Head & Neck Cancer Conference, Seattle, WA; July 16-20. Crawford J, White HN, Chung TK, Moore E, Jackson R, Kendall L, Carroll W, Rosenthal E, **Magnuson JS**; Presenters; "Transoral Robotic-assisted Surgery for Head & Neck Squamous Cell Carcinoma: 5-Year Survival Analysis"; American Head & Neck Society's 9<sup>th</sup> International Head & Neck Cancer Conference, Seattle, WA; July 16-20.

Magnuson JS; Speaker; "Advanced Procedures with TORS: Lesson for Mastery of Dissection"; 6<sup>th</sup> International Robotic Surgery Symposium; Seoul, Korea; Oct. 15-16.

Magnuson JS; Speaker; "Advanced Procedures with TORS: Management of Oropharyngeal Carcinoma in the HPV Era"; Kingham Cancer Center; Darlinghurst, Australia; Nov. 22.

## HEAD AND NECK ONCOLOGY

#### Head and Neck Cancer Cases

Site by Gender

At FHCl in 2016, women were nearly four times more likely to be diagnosed with thyroid cancer, the most common type of head and neck cancer. Other head and neck cancers affected men more frequently.

Site	Male	Female	Total
Thyroid Gland	48	183	231
Tonsil	50	3	53
Larynx	36	7	43
Skin	20	11	31
Base of Tongue	27	3	30
Other Parts of Tongue	19	8	27
Parotid Gland	10	7	17
Lymph Nodes	9	5	14
Floor of Mouth	9	2	11
Oropharynx	9	2	11
Other/Unspecified Parts Of Mouth	7	3	10
Other Oral Cavity	6	3	9
Nasopharynx	3	3	6
Lip	3	1	4
Hypopharynx	4	0	4
Nasal Cavity & Middle Ear	0	4	4
Gum	0	3	3
Palate	2	1	3
Connective Subcutaneous Other Soft Tissue	3	0	3
Other Salivary Glands	2	0	2
Accessory Sinuses	1	1	2
Pyriform Sinus	1	0	1
Trachea	0	0	0

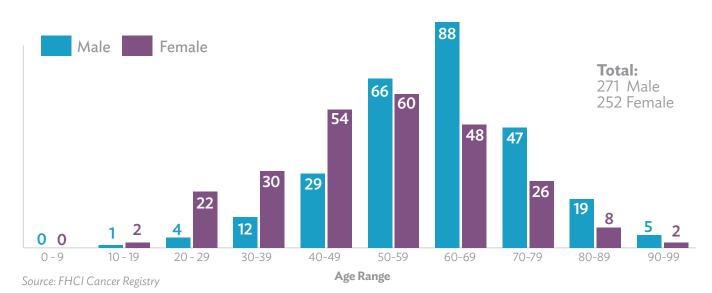
\*Gender Unknown in one case. | Source: FHCI Cancer Registry

## HEAD AND NECK ONCOLOGY

#### Head and Neck Cancer Cases

Age by Gender at Diagnosis

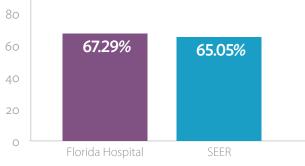
Overall, men were only slightly more likely to be diagnosed with head and neck cancer than women. Women were generally diagnosed at an earlier age than men.



#### Head and Neck Cancers

Five-year Survival Cases Diagnosed 2007-2013

Five-year survival rates for head and neck cancer at FHCI exceeded the averages of nine national cancer registries.



100

Head and neck cancers include oral, cavity, pharynx and larynx FHCI Tri-County vs. nine SEER registries (SEER = surveillance, epidemiology and end-results)

Sources: FHCI Cancer Registry; SEER.gov CanQues

## **PEDIATRIC ONCOLOGY**





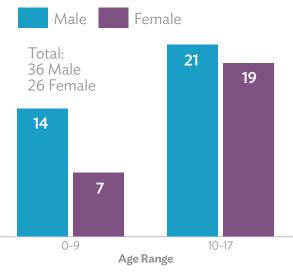
**Fouad Hajjar, MD** Medical Director, Hematology/Oncology Children's Center for Cancer and Blood Diseases

The Children's Center for Cancer and Blood Diseases offers hematology and oncology care for patients with sickle cell disease, thalassemia, bleeding disorders, coagulation problems, various cytopenias, leukemia and other childhood cancers. As a Children's Oncology Group (COG) affiliate, we can offer leading-edge clinical trials.

#### **Pediatric Cancer Cases**

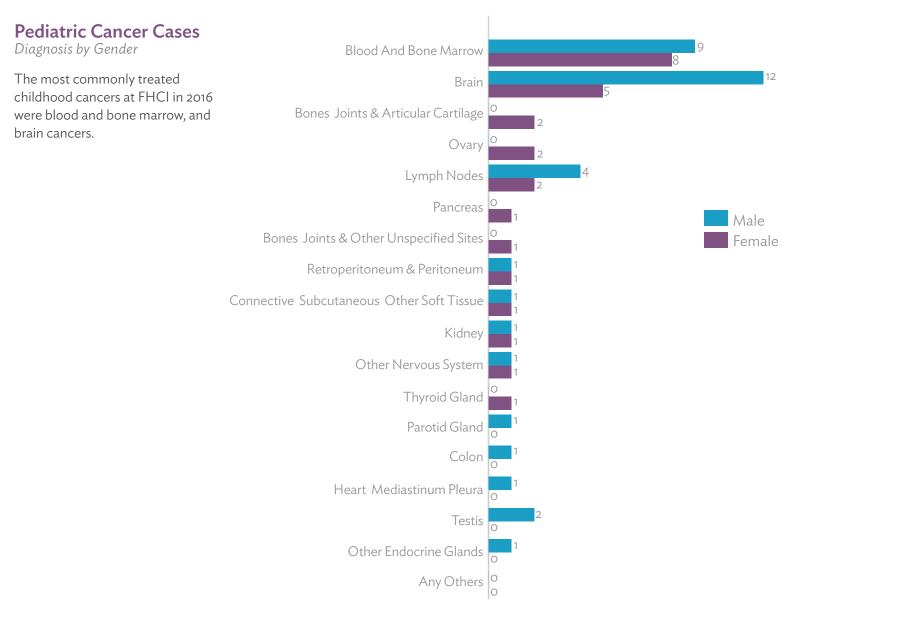
Age at Diagnosis by Gender

After accidents, cancer is the second leading cause of death in children ages one to 14. About 1,190 children younger than 15 years old are expected to die from cancer in 2017. In 2016, FHCI specialists treated 61 children with cancer.



Source: FHCI Cancer Registry

## PEDIATRIC ONCOLOGY



Source: FHCI Cancer Registry

## **RADIATION ONCOLOGY**



**Matthew Biagioli, MD, MS** Medical Director Florida Hospital Cancer Institute

Florida Hospital Cancer Institute offers extensive expertise and experience in a wide range of radiation treatment modalities. With its focus on evidence-based medicine, the team uses a disease-specific approach that ensures patients are evaluated by physicians with expertise in the appropriate discipline of oncology. Available treatments include External Beam Radiation Therapy, Intensity-Modulated Radiation Therapy, Stereotactic Body Radiation Therapy, Volumetric Modulated Arc Therapy, Gamma Knife®, intra-cavity and interstitial brachytherapy.

Florida Hospital Radiation Oncology is one of the few programs in the country to offer MRI-based brachytherapy for prostate cancer/gynecological malignancies, which enables optimal targeting of radiation and reduces the dose to critical structures. The physician team collaborates with specialists in surgery, medical oncology, neurosurgery, otolaryngology, gastroenterology, genitourinary and gynecology to improve patient outcomes.

#### **Publications**

Cordova JS\*, **Kandula S**\*, Gurbani S, Zhong J, Tejani M, Kayode O, Patel K, Prabhu R, Schreibmann E, Crocker I, Holder CA, Shim H, Shu HK; "Simulating the Effect of Spectroscopic MRI as a Metric for Radiation Therapy Planning in Patients with Glioblastoma"; Tomography. 2016 Dec;2(4):366-373. \*Co-first authors

Patel KR, Burri SH, Asher AL, Crocker IR, Fraser RW, Zhang C, Chen Z, **Kandula S**, Zhong J, Press RH, Olson JJ, Oyesiku NM, Wait SD, Curran WJ, Shu HK, Prabhu RS; "*Comparing Preoperative With Postoperative Stereotactic Radiosurgery for Resectable Brain Metastases: A Multiinstitutional Analysis*"; Neurosurgery, 2016 Aug;79(2):279-85.

Schumacher AJ, Lall RR, Lall RR, Iii AN, Ayer A, **Sejpal S**, Liu BP, Marymont M, Lee P, Bendok BR, Kalapurakal JA, Chandler JP; "*Low-Dose Gamma Knife Radiosurgery for Vestibular Schwannomas: Tumor Control and Cranial Nerve Function Preservation After* 11"; Gy. J Neurol Surg B Skull Base. 2017 Feb;78(1):2-10. doi: 10.1055/s-0036-1584231. Epub 2016 May 31.

Keller A, Ismail R, Potrebko P, Pepe J, Wu M, Saigal K, **Biagioli M, Shridhar R**, Holloway R, Field M, Rao NG; "Role of Gamma Knife Radiosurgery for the treatment of brain metastases from gynecological cancers"; Cureus, 2016 Dec 31;8(12): e947.

#### Lectures / Presentations

Kandula S; Stereotactic Body Radiation Therapy (SBRT): Less is More, Current Trends in Oncology Care Lectures, November, Daytona Beach.

**Kandula S**; SBRT Interview for Florida Hospital Marketing TV, February.

**Carrascosa L**; Radio interview, Radiation oncology True Beam update WNZF radio.

**Carrascosa L**; Speaker, Florida Hospital Flagler True Beam open house event.

**Carrascosa L**; Speaker, Colorectal Cancer Presentation.

**Carrascosa L**; Speaker, Update in Radiation Oncology, Oncology Primer, May.

**Carrascosa L**; Speaker, Flagler County Relay for Life.

## THORACIC ONCOLOGY



#### Mark A. Socinski, MD

Executive Medical Director Member, Thoracic Oncology Program Florida Hospital Cancer Institute



#### Tarek Mekhail, MD, MSc, FRCSI, FRCSEd

Medical Director, Thoracic Cancer Program Associate Executive Director of Clinical Research Florida Hospital Cancer Institute



#### Joseph Boyer, MD

Surgical Director, Thoracic Cancer Program Director of Minimally Invasive and Robotic Surgery Florida Hospital Cancer Institute The FHCI Thoracic Cancer Program has received national recognition for its multidisciplinary approach to diagnosing and treating lung and esophageal cancers, mesothelioma, and other cancers involving organs within the chest wall. FHCI is one of the most active participants in lung and esophageal clinical trials in the nation.

#### 2016 Highlights

- Welcomed Mark Socinski, MD, the Executive Medical Director of FHCI, a known lung cancer expert as part of the Thoracic Cancer Team.
- Opened 11 new clinical trials, with 24 patients enrolled in thoracic cancer trials.
- Presented 253 cases at 47 thoracic cancer conferences with 96 percent multidisciplinary team approach.
- Re-Launched the Lung Cancer Screening & Prevention Program.
- Community Partnership with American Lung Association for Lung Expo and Lung Force Run/Walk.
- Achieved zero percent discharge mortality rate for lobectomies for lung cancer and low incidence of major complication rate 9.2 percent compared with national rates (1.5 and 9.6 percent, respectively).
- Esophagectomy for esophageal cancer completed with zero percent discharge mortality rate.

### **Publications**

Wakelee H, Zvirbule Z, De Braud F, Kingsley CD, **Mekhail T**, Lowe T, Schütte W, Lena H, Lawler W, Braiteh F, Cosgriff T, Kaen D, **Boyer M**, Hsu J, Phan S, Novello S; "Efficacy and Safety of Onartuzumab in Combination with First-Line Bevacizumab - or Pemetrexed-Based Chemotherapy Regimens in Advanced Non-Squamous Non-Small-Cell Lung Cancer"; Clin Lung Cancer Oct. 2016; pii: S1525-7304(16)30241-8. doi: 10.1016/j. cllc.2016.09.013. [Epub ahead of print].

Waterhouse D, Horn L, Reynolds C, Spigel D, Chandler J, **Mekhail T**, Mohamed M, Creelan B, Blankstein KB, Nikolinakos P, Mccleod MJ, Li A, Waxman IM, Aanur N, Agrawal S, Richardet E; "P2.33: Safety Profile of Nivolumab Administered as 30-Minute (MIN) Infusion: Analysis of Data from Checkmate 153: Track: Immunotherapy"; J Thorac Oncol. Oct. 2016;11(10S): S236. doi: 10.1016/j. jtho.2016.08.104. No abstract available.

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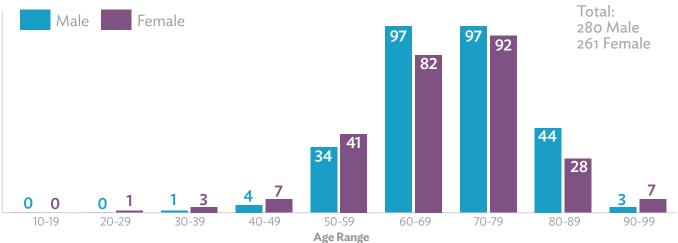
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## THORACIC ONCOLOGY

#### Lung Cancer Cases

Age at Diagnosis by Gender

In 2016, FHCI diagnosed lung cancer in 541 patients. In 68 percent of cases, the disease was detected in patients who were 60 to 79 years old.



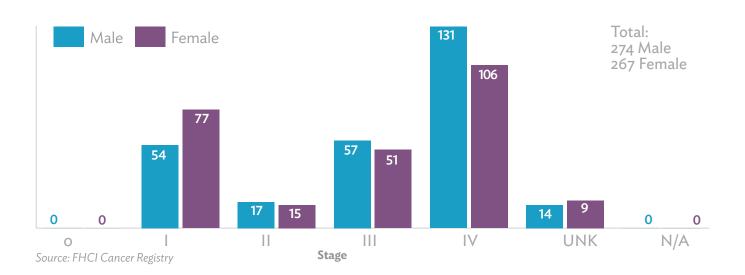
Source: FHCI Cancer Registry Chart depicts number of patients.

#### THORACIC ONCOLOGY

#### Lung Cancer Cases

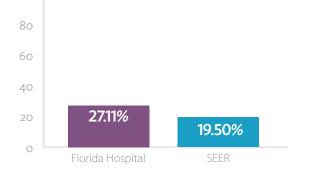
Stage by Gender at Diagnosis

In both men and women, lung cancer was most often diagnosed in advanced stage IV at FHCI in 2016. But of those patients who were diagnosed in early stage I, the majority were female.



#### Lung Cancer Cases

**Five-year Survival** *Cases Diagnosed 2007-2013* Five-year survival for patients treated at FHCI significantly exceeded nine national cancer registries.



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FHCI vs. nine SEER registries (SEER = surveillance, epidemiology and end results, part of Centers for Disease Control and Prevention). Source: FHCI Cancer Registry; SEER.gov CanQuest



#### Lung Cancer Primary Procedures

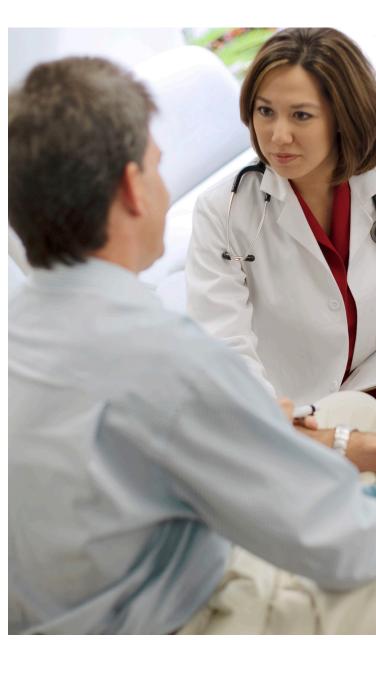
	PROCEDURE	n	D/C MORTALITY RATE
	Lobectomy	97	0.0%
S	Bilobectomy	3	0.0%
NO	Pneumonectomy	20	0.0%
E	Wedge (s)	13	0.0%
RESECTIONS	Segmentectomy	31	0.0%
~	Sleeve	7	0.0%
	Mediastinal Mass	2	0.0%
	Mediastinoscopy	40	0.0%
ES	Chamberlain	3	0.0%
BIOPSIES	Pleural/Chest Wall Bx	6	0.0%
BIC	Mediastinal LN	5	0.0%
	Mediastinal Mass	3	0.0%
	Pericardial Window	9	22.2%
	Other	1	0.0%
	Overall Total	240	

Source: FHCI Thoracic Surgery Database

#### Robotic Procedures Case Breakdown

Minimally Invasive Oncologic Procedures							
Procedure	n	D/C Mortality Rate					
Lobectomy	43	0.0					
Bilobectomy	1	0.0					
Wedge Resection (s)	5	0.0					
Segmentectomy	1	0.0					
Mediastinal Mass	4	0.0					
Overall Total	54	0.0					

Source: FHCI Thoracic Surgery Database





#### **Vipul Patel MD, FACS**

Medical Director, Global Robotics Institute, Celebration Health Medical Director, Florida Hospital Cancer Institute Urologic Oncology Program Professor of Urology, University of Central Florida



#### **Carlos Alemany, MD** Hematology Oncology

Medical Director, Genitourinary Oncology Florida Hospital Cancer Institute



#### Inoel Rivera, MD, FACS Uro-oncology Leadership Com http://micropoetry.com/ mittee Chai Urologic Oncology Program Florida Hospital Cancer Insti http://micropoetry.com/ tute

FHCI's oncology team includes some of the country's leading experts in urologic cancer. They use the latest in diagnostic technology and advanced surgical techniques, including MRI Fusion Biopsy, to customize patient treatment plans. FHCI pioneered robotic prostate surgery, which now accounts for more than 85 percent of all radical prostatectomy in the United States. The team is highly skilled in the use of the da Vinci® Surgical System - a less invasive, robotic-assisted procedure that has revolutionized the surgical process.



#### **Publications**

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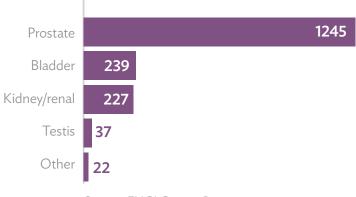
#### Awards

Vipul R. Patel, MD was awarded the Dr. B. C. Roy National Award for Eminent Medical Person

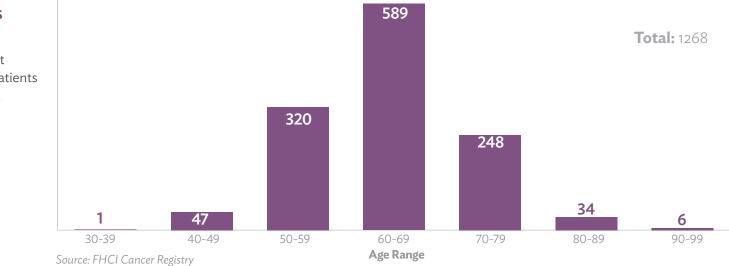
#### **Genitourinary Cancer**

Case Incidence

Prostate cancer remained the most treated type of cancer at FHCI, with 1245 new cases in 2016.



Source: FHCI Cancer Registry

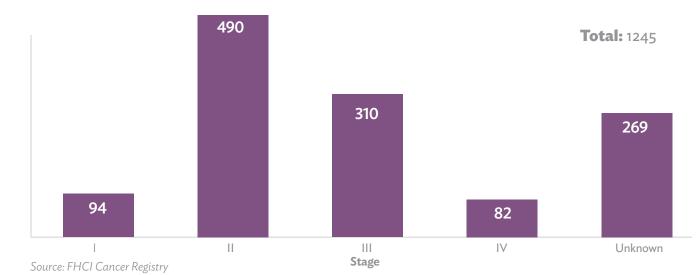


### Prostate Cancer Cases

Age at Diagnosis

The most common age range at diagnosis for prostate cancer patients at FHCI was 60 to 69 years old.

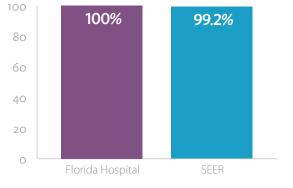
**Prostate Cancer Cases** Stage at Diagnosis Almost 40 percent of prostate cancer patients at FHCI in 2016 had stage II disease at diagnosis.



#### **Prostate Cancer**

**Five-year Survival** Cases Diagnosed 2007-2013

The five-year survival rate for prostate cancer is one of the highest of all cancer types due to the success of early screening efforts and effective treatment options. In 2016, five-year survival for patients treated for prostate cancer at Florida Hospital was 100 percent.

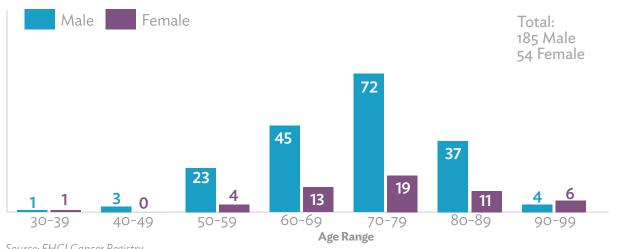


FHCI vs. nine SEER registries (SEER = surveillance, epidemiology and end results, part of the Centers for Disease Control and Prevention). Source: FHCI Cancer Registry; SEER.org Can Ques

#### **Bladder Cancer Cases**

Age at Diagnosis

In 2016, FHCI specialists most often diagnosed bladder cancer in patients who were 70 to 79 years old.

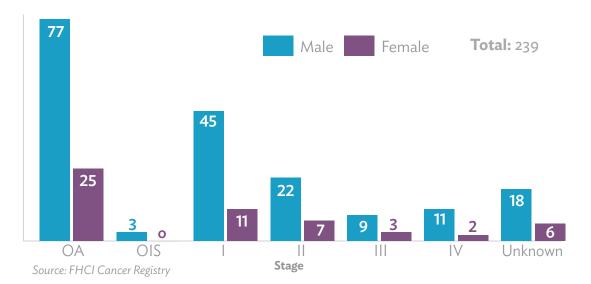


Source: FHCI Cancer Registry Chart depicts number of patients.

#### **Bladder Cancer Cases**

Stage at Diagnosis by Gender

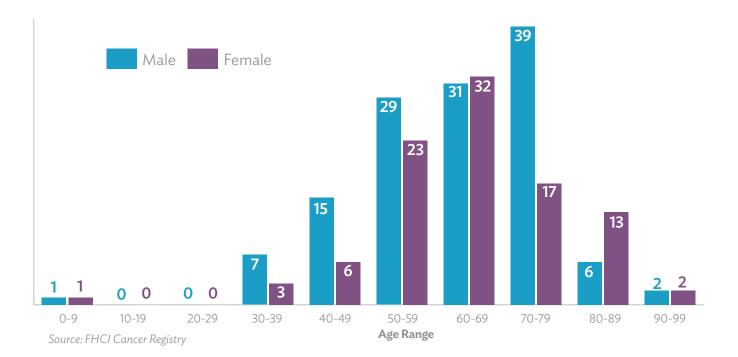
Regardless of gender, patients were most often diagnosed with bladder cancer in stage 0 in 2016 at FHCI, but overall the disease was detected in men three times more frequently than in women.

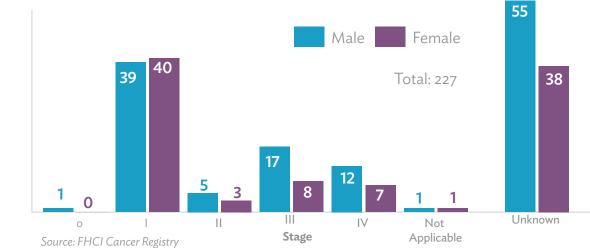


#### **Kidney Cancer Cases**

Age at Diagnosis by Gender

Based on the 227 new cases of kidney cancer diagnosed at FHCI in 2016, men were 34 percent more likely to develop the disease.



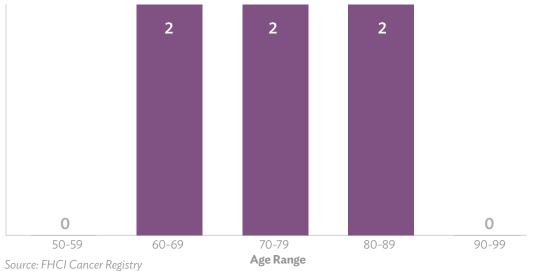


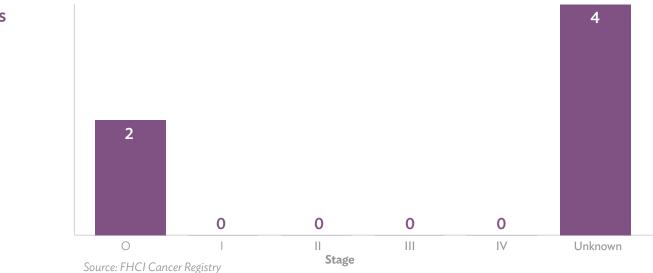
#### **Kidney Cancer Cases**

Stage at Diagnosis by Gender

At FHCI in 2016, kidney cancer was most frequently diagnosed in both men and women at stage I.

**Penile Cancer Cases** Age at Diagnosis All cases of penile cancer diagnosed at FHCI occurred in men at the ages of 60 to 89.





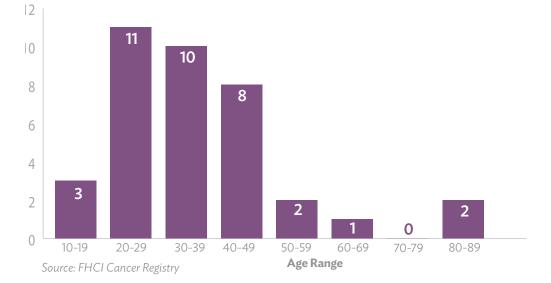
## Penile Cancer Cases

Stage at Diagnosis

#### **Testicular Cancer Cases**

Age at Diagnosis

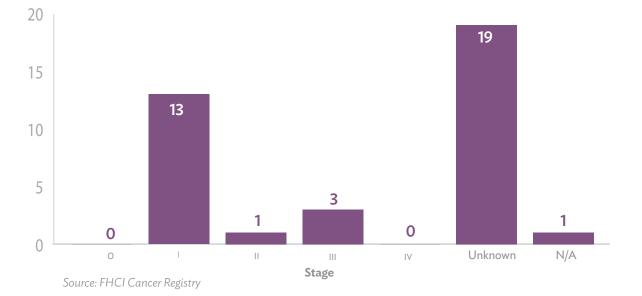
The majority of the 37 patients diagnosed with testicular cancer at FHCl in 2016 were 20 to 39 years old at the time of diagnosis.



Testicular Cancer Cases

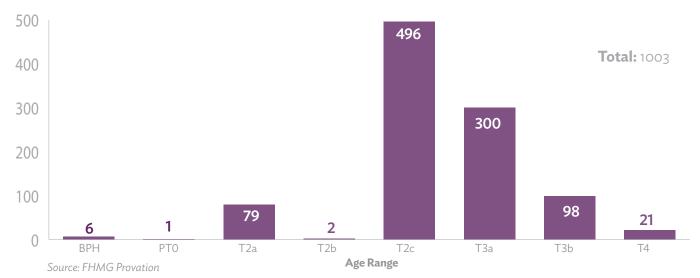
Stage at Diagnosis

About 35 percent of patients with testicular cancer were in stage I of the disease when diagnosed at FHCI.



#### Radical Prostatectomy Cases

Stage at Diagnosis FHCI performed 1,003 radical prostatectomy cases in 2016, with the majority pathologically staged as T2c. Of the 1,003 cases, 648 lymph node dissections were performed, and 29 were found to have positive lymph node involvement. Another 61 cases were found to have persistent cancer, and 13 patients reported having a diagnosis of biochemical recurrence.



## **CANCER REHABILITATION**



Julie Sexton Administrative Director

FHCl introduced a Cancer Rehabilitation program in 2012 to help patients manage stress and avoid the physical declines often associated with cancer treatments. The Outpatient Cancer Rehabilitation program includes physical therapy, occupational therapy, speech therapy, audiology services, massage therapy and medical fitness. Clinicians are specifically trained to treat patients who have cancer.

Research has shown that therapeutic interventions decrease cancer-related fatigue, improve range of motion, maintain or increase strength, reduce anxiety, improve balance to decrease the risk for falls, and maximize quality of life.

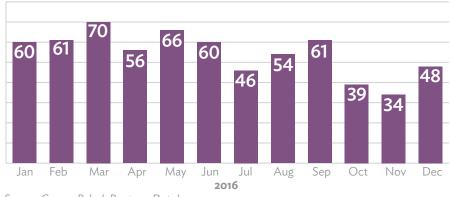
The program's goals are to begin rehabilitation at diagnosis in order to assess the functional baseline, prevent or decrease physical deficits that may result from cancer treatments, and serve as a resource to patients throughout treatment to maximize quality of life.

#### 2016 Highlights

- Expanded cancer rehabilitation services to two new clinics in Winter Garden and Waterford Lakes, increasing total to 17 outpatient rehabilitation locations and the treatment of 655 patients.
- Ranked in the top 75<sup>th</sup> percentile in Press Ganey patient satisfaction score.
- Ongoing presence of outpatient physical therapists and occupational therapists at monthly Breast Tumor Boards.

#### **Referrals to Cancer Rehabilitation**

Referrals to cancer rehabilitation grew 19 percent, reaching 655 patients.



Source: Cancer Rehab Program Database

## RESEARCH



**Carlos Alemany, MD** Medical Director Clinical Research

Bryan Allinson, MBA, Senior Director, Research Institute
Susan Coakley, MHA, CCRP, Director, Clinical Research and Regulatory
Lorraine Hickson, MRA, CCRP, Manager, Clinical Research and Regulatory for Celebration Hospital

**Cameron Richardson, RN, BSN, OCN**, Clinical Research Nurse Manager, Translational Research and NCI Strategy

Felipe Valerio, CCRC, CCRA, DHA, New Study Acquisition Coordinator, Blood and Marrow Transplant & Urologic

**Robin Kangas, RN, MSN, CCRP**, Clinical Research Operations Manager, Center for Interventional Endoscopy

Cancer studies give patients direct access to promising new therapies, including the newest drugs in development, precision medicine approaches, immunotherapy and diagnostics. Studies can identify new and better ways to prevent and treat cancer and improve the quality of life during and after treatment. The majority of clinical research comes at no additional cost to participants.

Two of the most promising approaches in research today are precision medicine and immuno-oncology:

• Research in immuno-oncology unlocks the body's natural ability to attack and fight off cancer, re-programming the immune system so that it recognizes and destroys cancer cells, which under normal circumstances may be able to evade an immune system attack.

• Research in precision medicine studies includes discovery, development, optimization and long-term outcomes of the individual variability in a patient's genes, environment and lifestyle. Precision medicine provides a means for Florida Hospital physicians to tailor treatments such as immunooncology, surgical oncology, radiation oncology and other modalities.

Cancer research is managed by the Florida Hospital Research Institute in close collaboration with the Florida Hospital Cancer Institute and Florida Hospital Medical Group. Cancer researchers have access to a dedicated clinical research unit, wet laboratory, research magnetic resonance imaging, research IT infrastructure, investigational drug services and tissue processing. FHRI is accredited by the Association for the Accreditation of Human Research Protection Programs.

Cancer research continues to provide access to more than 200 clinical trials at any given time for both adult and pediatric patients with solid and circulating tumors. The centralized clinical research office provides comprehensive and valuable support to more than 70 investigators with all aspects of research and clinical trial operations. The clinical research department is comprised of research nurses, data managers, research assistants, regulatory coordinators and biostatisticians.

#### **Current Research Affiliations**

Cancer research at Florida Hospital includes the newest and most innovative studies. Sponsors and collaborators include:

- National Cancer Institute
  - National Institute of Health Clinical Center
- National Clinical Trials Network
  - Alliance for Clinical Trials in Oncology
  - Alliance Foundation Trial, LLC
  - Alliance Foundation Trials Biorespository Washington State University
  - Alliance Foundation Trials Central Imaging Core Lab Ohio State University
  - Blood and Marrow Transplant Clinical Trials Network

#### RESEARCH

- Center for International Blood and Marrow Transplant Research
- Children's Oncology Group
- Eastern Cooperative Oncology Group-ACRIN
   Cancer Research Group
- National Heart, Lung and Blood Institute
- National Marrow Donor Program
- NRG Oncology
- Children's Oncology Group
- GOG Foundation Trials
- Radiation Therapy Oncology Group
- Southwest Oncology Group
- Breast Cancer Trials, Australia and New Zealand
- Cancer Center of South Florida
- Crescent City Physicians
- Fraternal Order of Eagles
- Germain Breast Group
- Indiana University
- Mastering Breast Cancer Initiative, LLC
- Marshall University
- Mayo Clinic
- Medical College of Wisconsin
- Mercy Medical Center
- Michelangelo Foundation
- Monongalia General Hospital
- Moffitt Cancer Center
- NSABP Foundation, Inc.
- Ochsner Health System
- Phi Beta Psi
- Sacred Heart Health System
- Sanford Burnham Medical Discovery Institute
- Sanford University of South Dakota Medical Center
- Sarah Cannon Research Institute
- Sarasota Memorial Hospital
- Sidney Kimmel Comprehensive Cancer Center

- Sky Foundation
- SOLTI
- St. Luke's University Health Network
- Stony Brook University
- Tennessee Valley Gynecology Oncology
- University of Arizona
- University of Central Florida
- University of North Carolina
- University of Pittsburgh
- University of South Alabama
- University of Tennessee Cancer Institute
- Tulane University Health Sciences Center
- Washington University School of Medicine
- Women's Cancer Care
- Industry/pharmaceutical-sponsored trials

#### **Examples of research affiliations**

Florida Hospital completed a successful Phase 1 study as the primary site in the world with sponsor Genelux. Ovarian cancer remains the most lethal gynecologic malignancy due to resistance to traditional methods. There is an unmet medical need to develop new innovative therapy approaches. Our research with Genelux demonstrates the ability of GL-ONC1 investigational new vaccine to preferentially locate, colonize and destroy tumor cells in more than 30 different human tumors, including ovarian cancer.

Florida Hospital and Moffitt are partnering to study the impact of immunotherapy on cancer patients.

#### 2016 Highlights

- Over 1,900 patients enrolled in oncology trials.
- Over 2,100 patients enrolled in 200 unique oncology trials including blood and marrow transplant, gynecologic oncology, interventional endoscopy related to cancers, pediatric oncology, urologic oncology, observational studies and translational research.

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## CANCER REGISTRY DATA

The cancer statistics included in this report are the result of work completed by the Florida Hospital Cancer Registry team, which collects a comprehensive data set for each newly diagnosed cancer patient. This data set includes information about patients' presenting symptoms, diagnostic work-ups, clinical and pathologic stages, treatments, and lifelong follow-up activities. Data are collected according to Cancer Program Standards established by the American College of Surgeons Commission on Cancer, as well as the Florida Cancer Data Systems (FCDS), the state's central registry. Data collected are disease-specific and standardized to ensure accurate information that can be compared with national and state outcomes for each type of cancer.

#### Cancer Cases Diagnosed in 2016

National Comparison of the Select Cancer Sites to FHCI Tri-county Area

Estimated Cancer Cases from the American Cancer Society Cancer Facts & Figures 2016

Breast cancer was the most commonly diagnosed cancer nationally in 2016 and the second-most common in Florida. At FHCl, prostate cancer made up almost 19 percent of cases diagnosed and treated, whereas breast cancer accounted for about 13 percent.

D. income City	Florida	Hospital	Flo	rida	National		
Primary Site	Cases	%	Cases	%	Cases	%	
Breast	1,091	12.8%	16,770	138%	246,660	14.6%	
Lung	761	8.9%	17,360	14.3%	224,390	13.3%	
Prostate	1,595	18.7%	13,310	11.0%	180,890	10.7%	
Colorectal	652	7.7%	9,710	8.0%	134,490	8.0%	
Bladder	317	3.7%	5,940	4.9%	76,960	4.6%	
Non-Hodgkin's Lymphoma	268	3.1%	5,370	4.4%	72,580	4.3%	
Corpus Uteri	339	4.0%	3,940	3.2%	60,050	3.6%	
Melanoma	213	2.5%	6,200	5.1%	76,380	4.5%	
Leukemia	253	3.0%	3,930	3.2%	60,140	3.6%	
Cervix	86	1.0%	1,050	0.9%	12,990	0.8%	
All Others	2,934	34.4%	37,660	31.1%	539,680	32.0%	
Total Cases	8,509	100.0%	121,240	100.0%	1,685,210	100.0%	

Tri-county area includes Orange, Osceola and Seminole counties.

Sources: American Cancer Society, Cancer Facts & Figures 2016; FHCI Cancer Registry

#### Spanish, Nos; Hispanic, Nos; Latino, NOS Unknown Whether South Or Central Non-Spanish Puerto Rican Spanish Or Not American-Not Brazil Race (%) (%) (%) # # # (%) # # (%) WHITE 84.1 11.1 2.4 0.9 0.7 BLACK 98.3 0.2 0.3 **AMERICAN INDIAN ALEUT ESKIMO** 92.9 7.1 CHINESE 92.3 7.7 JAPANESE **FILIPINO** HAWAIIAN KOREAN VIETNAMESE THAI **ASIAN INDIAN OR PAKISTANI ASIAN INDIAN** 94.4 5.6 PAKISTANI **NEW GUINEAN OTHER ASIAN PACIFIC ISLANDER** $\bigcirc$ $\bigcirc$ OTHER 47.9 42.7 2.4 1.9 4.7 UNKNOWN 73.3 9.2 1.7 2.5 12.5 **OVERALL TOTALS** 84.9 10.5 2.1 0.8 0.9

#### FHCI Patients - Race by Ethnicity

Source: FHCI Cancer Registry tri-county area

Me	xican	Cu	ban	Dom Rep	inican oublic	Other	Spanish	Spanish O	Surname nly	All O	thers	Total	Values
#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)
16	0.2	19	0.3	6	0.1	6	0.1	14	0.2	1	0	7086	83
0	0	1	0.1	0	0	1	0.1	0	0	0	0	928	10.9
0	0	0	0	0	0	0	0	0	0	0	0	14	0.2
0	0	0	0	0	0	0	0	0	0	0	0	13	0.2
0	0	0	0	0	0	0	0	0	0	0	0	3	0
0	0	0	0	0	0	0	0	0	0	0	0	20	0.2
0	0	0	0	0	0	0	0	0	0	0	0	3	0
0	0	0	0	0	0	0	0	0	0	0	0	5	0.1
0	0	0	0	0	0	0	0	0	0	0	0	13	0.2
0	0	0	0	0	0	0	0	0	0	0	0	3	0
0	0	0	0	0	0	0	0	0	0	0	0	49	0.6
0	0	0	0	0	0	0	0	0	0	0	0	18	0.2
0	0	0	0	0	0	0	0	0	0	0	0	2	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	45	0.5
0	0	0	0	0	0	0	0	0	0	0	0	4	0
0	0	0	0	1	0.5	0	0	0	0	0	0	211	2.5
0	0	0	0	1	0.8	0	0	0	0	0	0	120	1.4
16	0.2	20	0.2	8	0.1	7	0.1	14	0.2	1	ο	8538	100

#### FHCI Patients - Race by Ethnicity continued

#### FHCI Primary Cancer Site Table

Male genitourinary cancer was the most commonly diagnosed cancer at FHCl in 2016, with prostate cancer representing about 97 percent of those diagnoses.

о ,	Total	Total Class		Sex AJCC Stage								
Primary Site	Total	Analytical	Non-Analytical	 Male	Female	0	1			l IV	UNK	N/A
All sites	8509	6780	1729	4520	3989	380	1702	1391	1205	1194	1589	1048
Oral cavity	230	198	32	181	49	0	11	22	27	110	49	11
Lip	5	4	1	4	1	0	0	0	0	1	4	0
Tongue	70	61	9	54	16	0	4	7	10	34	15	0
Oropharynx	16	11	5	14	2	0	0	0	0	9	7	0
Hypopharynx	6	4	2	6	0	0	0	0	1	4	1	0
Other	133	118	15	103	30	0	7	15	16	62	22	11
Digestive system	1642	1329	313	943	699	61	309	273	320	320	330	29
Esophagus	106	65	41	92	14	5	13	11	24	21	32	0
Stomach	150	116	34	86	64	3	28	17	22	39	39	2
Colon	419	353	66	225	194	25	67	71	108	79	69	0
Rectum	233	181	52	141	92	8	44	43	60	27	51	0
Anus/anal canal	36	29	7	12	24	1	4	4	12	1	14	0
Liver	186	150	36	117	69	0	52	23	29	24	37	21
Pancreas	372	308	64	196	176	15	75	79	40	108	55	0
Other	140	127	13	74	66	4	26	25	25	21	33	6
Respiratory system	834	673	161	452	382	0	176	61	144	340	106	7
Nasal/sinus	6	5	1	2	4	0	1	1	0	0	1	3
Larynx	57	47	10	47	10	0	8	9	5	24	10	1
Lung/bronchus	761	614	147	398	363	0	166	51	139	312	90	3
Other	10	7	3	5	5	0	1	0	0	4	5	0
Blood & bone marrow	509	287	222	294	215	0	3	1	3	5	6	491
Leukemia	253	161	92	152	101	0	3	1	3	5	6	235
Multiple myeloma	137	85	52	74	63	0	0	0	0	0	0	137
Other	119	41	78	68	51	0	0	0	0	0	0	119
Bone	21	13	8	12	9	0	3	2	0	6	9	1
Connect/soft tissue	29	22	7	12	17	0	3	3	5	5	13	0

Source: FHCI Cancer Registry

#### FHCI Primary Cancer Site Table continued

	Total	Class Sex			ex	AJCC Stage						
Primary Site		Analytical	Non-Analytical	Male	Female	o	I	II		IV	UNK	N/A
Skin	228	138	90	112	116	72	45	12	22	11	61	5
Melanoma	213	125	88	103	110	72	44	12	19	9	57	0
Other	15	13	2	9	6	0	1	0	3	2	4	5
Breast	1091	906	185	13	1078	104	380	291	105	47	164	0
Female genital	607	530	77	0	607	4	244	42	155	64	91	7
Cervix uteri	86	65	21	0	86	0	26	8	21	12	17	2
Corpus uteri	339	313	26	0	339	1	194	15	60	25	41	3
Ovary	136	114	22	0	136	0	21	13	61	20	21	0
Vulva	17	13	4	0	17	3	3	0	2	2	7	0
Other	29	25	4	0	29	0	0	6	11	5	5	2
Male genital	1642	1321	321	1642	0	2	183	581	327	105	441	3
Prostate	1595	1278	317	1595	0	0	171	580	323	105	416	0
Testis	39	35	4	39	0	0	12	1	4	0	21	1
Other	8	8	0	8	0	2	0	0	0	0	4	2
Urinary system	620	499	121	415	205	137	151	42	40	50	195	5
Bladder	317	242	75	234	83	129	59	32	12	16	69	0
Kidney/renal	284	241	43	172	112	2	91	10	28	33	118	2
Other	19	16	3	9	10	6	1	0	0	1	8	3
Brain & cns	327	246	81	139	188	0	0	0	0	0	1	326
Brain (benign)	21	14	7	12	9	0	0	0	0	0	0	21
Brain (malignant)	122	108	14	66	56	0	0	0	0	0	0	122
Other	184	124	60	61	123	0	0	0	0	0	1	183
Endocrine	306	280	26	80	226	0	138	14	18	18	58	60
Thyroid	244	234	10	53	191	0	138	14	18	18	56	0
Other	62	46	16	27	35	0	0	0	0	0	2	60
Lymphatic system	312	243	69	170	142	0	54	47	35	108	64	4
Hodgkin's disease	44	30	14	22	22	0	5	13	9	11	6	0
Non-hodgkin's	268	213	55	148	120	0	49	34	26	97	58	4
Unknown primary	87	74	13	43	44	0	0	0	0	0	0	87
Other/ill-defined	24	21	3	12	12	0	2	0	4	5	1	12

Number of cases excluded: 29

This report EXCLUDES CA in-situ cervix cases, squamous and basal cell skin cases, and intraepithelial neoplasia cases

# Accredited by the American College of Surgeons Commission on Cancer

The American College of Surgeons Commission on Cancer (CoC) is a consortium of professional organizations dedicated to improving survival and quality of life of patients with cancer through standard setting prevention, research, education and the monitoring of comprehensive care. More than 50 leading cancer-care organizations, including the American Cancer Society, are partnered with the CoC on patient-centered initiatives. Across the United States, more than 1,500 cancer programs are CoC accredited, and more than 70 percent of cancer patients receive care at CoC accredited programs. Florida Hospital has been a continually accredited CoC program since 1989, demonstrating an important commitment to providing all patients with access to services from diagnosis through treatment, rehabilitation and survivorship care.

The National Cancer Database (NCDB) collects data from CoC-accredited cancer programs nationwide. The repository allows programs to compare patient characteristics, cancer types, treatment and outcomes with similar programs. The National Quality Forum (NQF) has identified and endorsed quality metrics reported as indicators of quality oncology care. Based on these indicators, the CoC measures cancer program performance with current CoC quality reporting tools – the Cancer Program Practice Profile Reports, or CP<sub>3</sub>R. By comparing adherence to and consideration of standards of care for specific tumor site populations at quarterly Comprehensive Cancer Committee meetings, quality improvement opportunities that aid in diminishing disparities in care are initiated. No patient identifiers are collected to generate the CP<sub>3</sub>R.

Data are collected currently for breast, colon, rectum, gastric, lung, cervix, ovary, endometrium, and bladder cases. To date, thresholds of compliance with providing or considering specific indicators are in place for breast, colon, rectum, gastric and lung primary tumor sites. The 2014 summary report released by the NCDB in April 2017 provides a performance report for Florida Hospital compared to National and Florida results, as well as those of cancer programs in the same CoC category, such as Florida Hospital – Academic Comprehensive Cancer Programs (ACAD). More information on the CP3R process and CoC accreditation is available at http://www.facs.org.

# FHCI CANCER PROGRAM PRACTICE PROFILE REPORTS

#### **Performance Rates**

Site	Measure	CoC Benchmark Compliance Percentage Rate	National Percentage	Florida Percentage	Same Type CoC Program (Academic Comprehensive Cancer Program) Percentage	FHCI Percentage
Bladder	BL2RLN - At least 2 lymph nodes are removed in patients under 80 undergoing partial or radical cystectomy (Surveillance)	Not Applicable	93	92.2	95	100
Breast	BCS - Breast conservation surgery rate for women with AJCC clinical stage 0, I, or II breast cancer (Surveillance)	Not Applicable	64.6	62.9	63.2	61.6
Breast	nBx - Image or palpation-guided needle biopsy (core or FNA) of the primary site is performed to establish diagnosis of breast cancer (Quality Improvement)	80	92.6	89	9239	83.5
Breast	HT - Tamoxifen or third generation aromotase inhibitor is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1c or stage IB-III hormone receptor positive breast cancer (Accountability)	90	93.5	89.6	93.6	90.2
Breast	MASTRT - Radiation therapy is considered or administered following any mastectomy within 1 year (365 days) of diagnosis of breast cancer for women with >= 4 positive regional lymph nodes (Accountability)	90	90.6	85.2	91.6	96.6
Breast	BCSRT - Radiation is administered within 1 year (365 days) of diagnosis for women under the age of 70 receiving breast conservation surgery for breast cancer (Accountability)	90	93	88.1	93	93.7
Breast	MAC - Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cN0, or stage IB - III hormone receptor negative breast cancer (Accountability)	Not Applicable	92.8	89.6	92.2	85.9
Colon	ACT - Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC stage III (lymph node positive) colon cancer (Accountability)	Not Applicable	89.9	81.7	89.4	75.6
Colon	12RLN - At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer (Quality Improvement)	85	91.4	90.1	93.2	93.5
Rectum	RECRTCT - Preoperative chemo and radiation are administered for clinical AJCC T3N0, T4N0, or Stage III; or Postoperative chemo and radiation are administered within 180 days of diagnosis for clinical AJCC T1-2N0 with pathologic AJCC T3N0, T4N0, or Stage III; or treatment is considered; for patients under the age of 80 receiving resection for rectal cancer (Quality Improvement)	85	89.2	87.4	89.2	94.1

#### Performance Rates continued

Site	Measure	CoC Benchmark Compliance Percentage Rate	National Percentage	Florida Percentage	Same Type CoC Program (Academic Comprehensive Cancer Program) Percentage	FHCI Percentage
Gastric	G15RLN - At least 15 regional lymph nodes are removed and pathologically examined for resected gastric cancer (Quality Improvement)	80%	58.1	52.5	65.8	75
Lung	10RLN - At least 10 regional lymph nodes are removed and pathologically examined for AJCC stage IA, IB, IIA, and IIB resected NSCLC (Surveillance)	Not Applicable	42.9	39.1	47.4	50
Lung	LNoSurg - Surgery is not the first course of treatment for cN2, M0 lung cases (Quality Improvement)	85%	92.9	91.6	92.3	97.5
Lung	LCT - Systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is considered for surgically resected cases with pathologic lymph node- positive (pN1) and (pN2) NSCLC (Quality Improvement)	85%	93.2	92.8	92.5	95.8
Cervix	CERRT - Radiation therapy completed within 60 days of initiation of radiation among women diagnosed with any stage of cervical cancer (Surveillance)	Not Applicable	80.2	87	79.5	61.5
Cervix	CERCT - Chemotherapy administered to cervical cancer patients who received radiation for stages IB2-IV cancer (Group 1) or with positive pelvic nodes, positive surgical margin, and/or positive parametrium (Group 2) (Surveillance)	Not Applicable	89	92.8	89.4	95.2
Cervix	CBRRT - Use of brachytherapy in patients treated with primary radiation with curative intent in any stage of cervical cancer (Surveillance)	Not Applicable	73.8	76.3	78.4	93.8
Endometrium	ENDCTRT - Chemotherapy and/or radiation administered to patients with Stage IIIC or IV Endometrial cancer (Surveillance)	Not Applicable	83.3	76.7	87.2	91.4
Endometrium	ENDLRC - Endoscopic, laparoscopic, or robotic performed for all Endometrial cancer (excluding sarcoma and lymphoma), for all stages except stage IV (Surveillance)	Not Applicable	75.2	80.4	73.4	71.6
Ovary	OVSAL - Salpingo-oophorectomy with omentectomy, debulking/ cytoreductive surgery, or pelvic exenteration in Stages I-IIIC Ovarian cancer (Surveillance)	Not Applicable	71.9	72.7	71.9	70

As of 10.20.2017 | Source: National Cancer Data Base

## **CENTER FOR INTERVENTIONAL ENDOSCOPY**



**Robert Hawes, MD** Medical Director Institute for Minimally Invasive Therapy



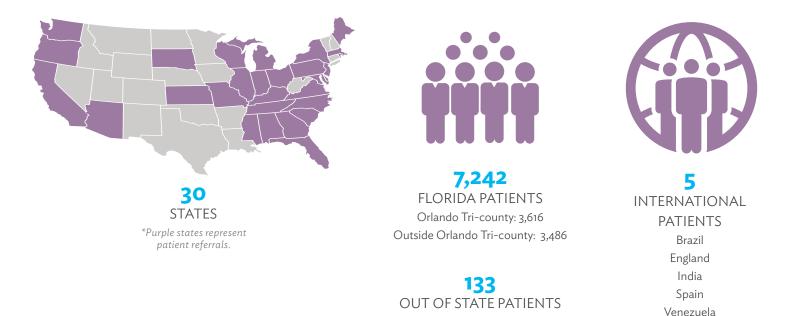
**Shyam Varadarajulu, MD** Medical Director Center for Interventional Endoscopy Since the founding of the Center for Interventional Endoscopy (CIE) in 2012, significant progress has been made in fulfilling its core mission: to provide high-quality clinical care, conduct cutting-edge clinical research, and train the next generation of endoscopists. In 2016, CIE performed 7,242 complex endoscopic procedures and, for the third consecutive year, retained its status as the largest volume EUS unit in North America. Endoscopic Retrograde Cholangiopancreatography (ERCP) volume exceeded 1,400, and 500 endoscopic mucosal resection procedures were performed.

CIE's research portfolio remains robustly vibrant with 14 ongoing randomized trials and six prospective clinical studies evaluating cutting-edge endoscopic interventions or novel technology. Faculty published 42 peer-reviewed manuscripts with four abstracts selected for podium presentations at the Digestive Diseases Week and the Pancreas Club Annual Meeting. The team published research findings in high-impact journals, such as the *Annals of Surgery* and *GUT*, and was recognized with awards at the United European Gastroenterology Week, Vienna, and the Pancreas Club Annual Meeting.

Entering its sixth year, CIE is moving into the next phase of its mission: initiation of novel procedural services, evaluation of new techniques in clinical trials, and integration of digital technology in endoscopic education. This is part of the team's strong commitment to excellence in clinical care and innovation in clinical endoscopy.

#### **Patient Referral Statistics**

Patients are referred to CIE for expert care from across the United States and internationally. In 2016, patients were referred from 30 states, two U.S. territories and five countries. More than 50 percent of patients treated at CIE originated from outside the Orlando tri-county area.



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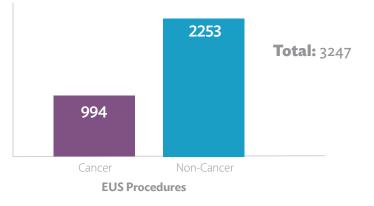
#### **Status of Active Clinical Trials**

ACTIVE CLINICAL TRIALS	Sponsor	Design	Current Enrollment
Minimally invasive surgery vs. endoscopy randomized trial for symptomatic walled-off pancreatic necrosis	Florida Hospital	Randomized	64
On-site vs. off-site evaluation of cholangioscopy-guided biopsies of the bile duct	Florida Hospital	Randomized	38
Trial comparing endoscopic ultrasound (EUS) guided biliary drainage and endoscopic retrograde cholangiopancreaography (ERCP) for malignant distal biliary obstruction	Florida Hospital	Randomized	4
Trial comparing fully covered, self-expanding metal stent and plastic stents for EUS-guided drainage of walled-off necrosis	Florida Hospital	Randomized	52
Trial comparinig covered metal and plastic stents for preoperative biliary decompression in pancreatic cancer	Florida Hospital	Randomized	28
Trial comparing two FNB and FNA needles for EUS-guided sampling of solid pancreatic masses	Florida Hospital	Randomized	26
Stent vs. indomethacin for preventing post-ERCP pancreatitis: The SVI Trial - a multicenter randomized non-inferiority clinical trial of rectal indomethacin alone vs. indomethacin and prophylactic pancreatic stent placement for preventing post-ERCP pancreatitis in high-risk cases	MUSC - NIH	Randomized	26
Trial comparing the use of single-operator peroral cholangioscopy-guided laser lithotripsy vs. endoscopic balloon sphincteroplasty for removal of difficult bile duct stones	Florida Hospital	Randomized	25
Trial examining the impact of pancreatic duct stent placement in patients with acute necrotizing pancreatitis in the prevention of walled-off necrosis	Florida Hospital	Randomized	1
Trial evaluating prophylactic octreotide to prevent post-duodenal endoscopic mucosal resection (EMR) and ampullectomy bleeding	Florida Hospital	Randomized	33
Trial comparing Captivator tissue cassettes vs. no cassettes for EMR in esophageal carcinoma	Florida Hospital	Randomized	18
Trial evalauating the safety of endoscopic resection of large colorectal polyps	VA Medical Center	Randomized	46
Trial comparing celiac plexus neurolysis and radiofrequency ablation for palliation of pain in pancreatic cancer	Florida Hospital	Randomized	0
Lipidomics, proteomics and volatile organic compounds biomarkers in bile and serum	Florida Hospital	Prospective	181

#### CENTER FOR INTERVENTIONAL ENDOSCOPY

#### **Cancer-related Endoscopic Ultrasound Procedures**

Of the 3,247 total endoscopic ultrasound procedures performed at FHCI in 2016, more than 60 percent were non-cancerous.



Source: Florida Hospital Medical Group Provation



# **ONCOLOGY CLINICAL PERFORMANCE IMPROVEMENT**



#### Rose Fan Ting Yue, BSN, RN, LHCRM, CPHQ

Project Manager Clinical Performance Improvement Florida Hospital Cancer Institute At FHCI, quality care refers to the entirety of a patient's experience. The core mission of our Quality Improvement Initiative is to continuously improve research, training and patient care. We achieve this with a comprehensive review and evaluation process. Members of our Quality Improvement team use data to analyze, assess and improve the structure, function and outcomes of the entire system. The Quality Improvement team, along with tumor-site leadership, use the data to set goals, measure performance, and analyze patient outcomes to improve care.



**Meiling Wu, MSN, RN, BSN, MSN** Project Manager Clinical Performance Improvement Florida Hospital Cancer Institute



Westley Sheng Clinical Quality Improvement Coordinator Clinical Performance Improvement Florida Hospital Cancer Institute

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#### **ONCOLOGY CLINICAL PERFORMANCE IMPROVEMENT**

#### **Quality Oncology Practice Initiative Accreditation Standards**

Overall Quality Measures Score Data collected 2013-2016

For the fifth consecutive year, FHCI Medical Oncology reached national accreditation standards adopted from American Society of Clinical Oncology-Quality Oncology Practice Initiative. FHCI also achieved program certification for the second time.

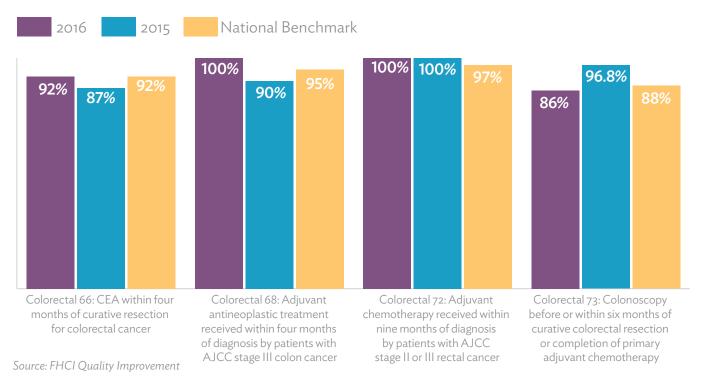


Source: FHCI Quality Improvement

#### **ONCOLOGY CLINICAL PERFORMANCE IMPROVEMENT**

#### Quality Oncology Practice Initiative

Colorectal Cancer Measures Score Cases diagnosed 2015-2016



#### **Focus Study**

The Quality Improvement team has continued to conduct all quality studies according to the standards of the American College of Surgeons' (ACoS) Commission on Cancer (CoC) program, American Society Clinical Oncology's (ASCO) Quality Oncology Practice Initiative (QOPI), National Accreditation Program for Breast Centers (NAPBC) and American College of Radiology (ACR). In addition, the Quality Improvement team launched focus studies in 2011 to improve patient care, comparing its performance with national standards and evidencebased practice guidelines. Cancer sites addressed by the focus studies included pancreas and bladder. Annual monitoring provides a reference for progress.

#### Pancreatic Cancer Focus Study

Surgical Treatment FHCI Compared to National Standards Cases diagnosed in 2012-2014

In 2014, FHCI pancreatic surgical treatments outperformed the national benchmark in 30-day readmission percentages and other key measures.

Pancreatic Surgical Measures	FHCI 2014	FHCI 2013	FHCI 2012	National Benchmark
Average OR time (mins)	497	500	254	≤600 mins
Estimate Blood loss (median, mL)	300	500	450	≤1000mL
Transfusion (%, pt)	24%	19%	36%	≤45%
Lymph node resected and examined (Mean, LN)	15	14	14	10
≥10 Lymph node resected and examined (%, pt)	74%	81%	75%	50%
Margins Microscopically involve (%, pt)	15%	22%	10%	20%
Stay (median, days)	9	14	18	≤(9-21)
30 Days re-admission (%, pt)	17%	31%	23%	≤(23%-33%)
30 days mortality (%, pt)	2	0%	8%	≤2%
1-year survival rate (%, pt)	35%	36%	30%	28%

Source: FHCI Quality Improvement

#### Bladder Cancer Focus Study

Surgical Treatment FHCI Compared to National Standards Cases diagnosed in 2013 - 2014

FHCl performed well in many key measures when compared with 2014 national benchmark standards, including the range of length of stay for FHCl patients undergoing radical cystectomy, which was significantly shorter than the benchmark.

Bladder Measures	FHCI 2014	FHCI 2013	National Benchmark
Range OR Time (mins)	100-513	70-502	≤110-598 mins
Median OR Time (mins)	313	303	≤292 mins
Range LOS (days)	1 to 20	3 to 19	≤4-48 days
Intraoperative Complication	39%	39%	≤39%
30 Days re-admissions	11%	31%	≤12%

Source: FHCI Quality Improvement

#### **Tumor Boards**

A total of 2,511 cases were presented at 373 Tumor Boards in 2016, and 99.7 percent of those presented were prospective. Most Tumor Boards (342) were available through video conference at multiple satellite locations. All tumor boards are available for video conference upon request.

#### Journal Clubs

Two Head and Neck Journal Club programs, with co-moderators Henry Ho, MD, and Lee Zehngebot, MD, were held on March 31 and on Sept. 29. Three Urology Journal Club programs, with co-moderators Vipul Patel, MD; Jeffrey Brady, MD; and Inoel Rivera, MD, were held on March 10, Aug. 18 and on Nov. 3.

#### Best of American Society of Clinical Oncology (ASCO<sup>®</sup>) Annual Meeting

The FHCI's Best of ASCO<sup>®</sup> 2016 Annual Meeting is a two-day program licensed by the American Society of Clinical Oncology.

Program directors: Tarek Mekhail, MD; Louis H. Barr, MD; and Matthew Biagioli, MD. Invited faculty speakers: Michael B. Atkins, MD, Georgetown-Lombardi Comprehensive Cancer Center; Toni K. Choueiri, MD, Dana-Faber Cancer Institute; Steven M. Horwitz, Memorial Sloan Kettering Cancer Center; Clifford A. Hudis, MD, Memorial Sloan Kettering Cancer Center; David H. Ilson, MD, Memorial Sloan Kettering Cancer Center; Shaji Kumar, MD, Mayo Clinic College of Medicine; Sudish C. Murthy, MD, Cleveland Clinic; Derek Raghavan, MD, Levine Cancer Institute; Ayalew Tefferi, MD, Mayo Clinic College of Medicine; Victor G. Vogel, MD, Geisinger Health System; and Everett E. Vokes, MD, University of Chicago Medicine & Biological Services. Faculty speakers from FHCI – Tarek Mekhail, MD, and Ravi Shridhar, MD; Hyatt Regency Grand Cypress, Orlando, FL, June 18-19, 2016.

#### **Oncology Grand Series**

March: "Multi-Disciplinary Treatment of Soft Tissue Sarcoma" with moderator Tarek Mekhail, MD, and speakers J. Pablo Arnoletti, MD, Matthew Biagioli, MD, and Sebastian de la Fuente, MD.

August: "Systemic Immunotherapy of Melanoma from Advanced Inoperable Disease to Adjuvant Arena" with moderators Tarek Mekhail, MD, and Mark Socinski, MD, and guest speaker John M. Kirkwood, MD, University of Pittsburgh Cancer Institute. Speaker panel: Raul Castillo, MD, and Lee Zeghnebot, MD.

October: "Finding Value in Colon Cancer" with moderator Ahmed Zakari, MD, and guest speaker John L. Marshall, MD, Georgetown University Medical Center. Speaker panel: Sam Atallah, MD, and John Monson, MD.

December: "Informed Decision Making in Advanced NSCLC: Matching Treatment to Patient" with moderator Tarek Mekhail, MD, and speaker Mark Socinski, MD.

# **ONCOLOGY NURSING**

#### 2016 Highlights

- FHCl oncology patients were cared for by 33 oncology-certified nurses (adult-patient care), two certified pediatric oncology nurses, and 16 certified pediatric nurses.
- There were 92 nurses certified through the FHCI Chemotherapy Workshops for Oncology Nurses.
- In 2016, 284 nurses were re-certified through the 90-minute FHCI Chemo Blitz sessions held 27 times at seven Florida Hospital locations.
- There were 144 nurses who attended FHCI's Oncology Nursing Conference.
- The National Pediatric Chemotherapy and Biotherapy Provider Course was completed by 26 nurses.

#### **Oncology Inpatient Discharges**

by Campus

Campus	Oncology Inpatient Discharges
Florida Hospital Orlando	4,183
Florida Hospital Altamonte	980
Florida Hospital Apopka	18
Florida Hospital East Orlando	472
Florida Hospital Winter Park	621
Florida Hospital Kissimmee	252
Florida Hospital Celebration	1,580
Total	8,106

Source: Florida Hospital Research



## PATIENT SUPPORT AND COMMUNITY OUTREACH

#### **Cancer Resource Libraries**

A team of 70 volunteers staff the FHCI Cancer Resource Libraries – providing patients, healthcare professionals and the community access to more than 400 pamphlets, books and DVDs focused on cancer and its treatment, side-effect management, support and coping, self-esteem and prevention. The libraries also feature CancerHelp interactive computers with touch-screen navigation for easy access to the latest information from the National Cancer Institute.

#### Black Men's Health and Wellness Expo

Free prostate cancer screenings were offered at this year's Black Men's Health and Wellness Expo, along with education materials about prostate cancer and early detection.

#### Head and Neck Cancer Awareness Week

In April, the Head and Neck Program again participated in the national Head and Neck Cancer Awareness Week to raise awareness and offer risk assessments.



# **COMMUNITY PARTNERSHIPS AND EVENTS**

FHCI supported and participated in several community health events through key partnerships: American Cancer Society's National Cancer Survivors Day American Lung Association's Cars for the Cure American Lung Association's Fight for Air Climb American Lung Association's Lung Force Expo Orlando American Lung Association's Lung Force Run/Walk Black Men's Health and Wellness Expo Bone Marrow Transplant Reunion City of Orlando Wellness Expo Colorectal Cancer Awareness Month – Employee Events Corporate and Employee Health Fairs Florida Hospital Pink Army Campaign Florida Hospital Pink on Parade 5K Florida Hospital Pink Out Campaign Get Your Rear in Gear 5K – Colorectal Cancer Awareness Head & Neck Screening Event



# **PHILANTHROPY -** GENEROSITY HEALS

#### **About Florida Hospital Foundation**

Florida Hospital is one of America's largest community-based healthcare systems, providing exceptional healthcare. We create excellence through partnerships with thousands of people who give in different ways. Generosity has been part of our legacy since Florida Hospital was founded in 1908. Join us as we continue to dedicate ourselves to the great purpose of providing hope and healing for people in our community and beyond. We invite you to experience how Generosity Heals.

Community support helps strengthen oncology services at Florida Hospital Cancer Institute (FHCI) and ultimately supports Florida Hospital's mission to extend the healing ministry of Christ. In 2016, more than \$1.5 million was raised for FHCI through Florida Hospital Foundation. These gifts were used to develop clinical and translational research initiatives and comprehensive oncology programs, as well as to help uninsured and underserved patients.

Through the support of generous donors and community partners, FHCI achieved notable successes in 2016, including the launch of a Creative Arts Therapies Program offering monthly support groups as well as complimentary individual sessions for oncology patients. The program includes both music and art therapies to provide an innovative, evidence-based approach to symptom management and emotional support. Our creative arts therapists use live music and art media during the therapy process, improving a cancer patient's overall quality of life and wellbeing – physiologically, emotionally, neurologically and spiritually.

Community contributions supported 1,897 cancer patients through financial assistance, and 1,876 women received scholarships allowing them to have screening mammograms and further diagnostic testing for breast cancer. Donor support helped to provide Navigation & Education Software, allowing patients and caregivers access to diagnosis, treatment and survivorship education from an online platform. Other contributions allowed us to conduct innovative cancer research, offer support through our Cancer Resource Libraries, and facilitate image recovery through our Eden Spa.

#### **Fundraising Accomplishments**

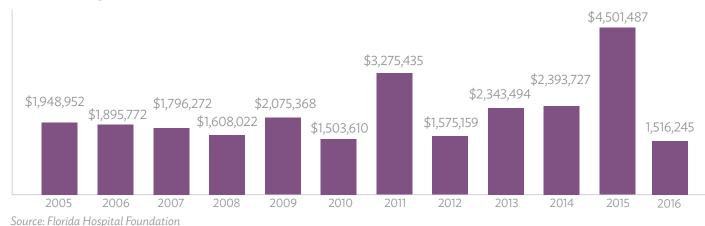
- Total Raised = \$1,516,245
- 70 donors contributed \$1,000 or more

Funding Sources	Oncology Inpatient Discharges
Planned Giving	\$750,000
Major Gifts	\$255,631
1908 Society (employee giving)	\$207,834
Annual Fund	\$168,790
Events	\$85,984
Grants	\$48,006
Total	\$1,516,245

Source: Florida Hospital Foundation

#### **PHILANTHROPY -** GENEROSITY HEALS

#### Fundraising Trend for FHCI: 2004-2016



THANK YOU TO OUR GENEROUS DONORS!

#### Recognized for cumulative giving in 2016

#### HUMANITARIAN

Gift of \$500,000 - \$999,999 Joyce M. Bates

#### CENTURION

Gift of \$100,000 - \$249,999

Runway to Hope and The NeJame Family

#### LEADER

Gift of \$50,000 - \$99,999 Petals of Hope Foundation

#### **INVESTOR**

Gift of \$25,000 - \$49,999 Diana J. Boyce Comprehensive Energy Services, Inc. Eugene and Deborah Curcio The FINFROCK Family of Companies Market Traders Institute, Inc. Todd and Shelly Morgan Sanford Airport Authority Track Shack of Orlando Melissa Vosburg Inc. Peter and Linnae Williams Women's & Girls' Cancer Alliance

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Gift of \$10,000 - \$24,999 Dr. Pablo Arnoletti Bucs Care Foundation, Inc. Dr. Analia Castiglioni Deloitte Services, LP Delta Delta Delta Alumni Association Dorothy's Family The Susan G. Komen Breast Cancer Foundation, Inc. Langan Engineering and Environmental Services Little Diversified Architectural Consulting, Inc. Jason and Ronni Mendelsohn Phi Beta Psi Sorority Roberts Family Fund

**PATRON** Gift of \$1,000 - \$9,999

#### **PHILANTHROPY -** GENEROSITY HEALS

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Mr. Larry Buchanan Jazlyn A. Zombo

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#### **Your Legacy**

As a donor and friend supporting Florida Hospital Cancer Institute, you're making an investment in the future of cancer care. Financial contributions directly impact the lives of those battling cancer and assist our expert clinical team by providing necessary cutting-edge technology to address and advance treatment options.

We hope you will consider a contribution and leave a legacy of hope and healing at Florida Hospital Cancer Institute. For more information about ways to give, contact Florida Hospital Foundation at 407-303-2784 or via email to FoundationInfo@FLHosp.org.

## **2016 LEADERSHIP**

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Leslie Aldrich, MBA, FHCI Administrative Director

Judith Allen, Director, Pharmacy Infusion

Bryan Allinson, Senior Director, Cancer Research

Dr. Carlos Alemany, Medical Director, Urologic Oncology; Associate Director, Clinical Research

Dr. Juan Pablo Arnoletti, Chief, Surgical Oncology; Chair, Gastrointestinal Cancer Leadership Committee

Andrew Bair, Vice President, Winter Park Memorial Hospital

Dr. Louis Barr, Associate Director, Chair, Breast Cancer Leadership Committee; Chair,

Comprehensive Cancer Committee

Kay Barnett, Director of Business Development

Dr. Matthew Biagioli, Medical Director, Radiation Oncology

Vicki Chilcott, Vice President, Florida Hospital Medical Group

Paula Daniel, Director of Nursing-Orlando

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Dr. Steven Goldstein, Medical Director, Bone Marrow Transplant Program

Kathy Grover, Senior Vice President, Clinical Services

Rob Herzog, Vice President, Research Operations

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Dr. Joseph Ma, Pathology and Neuropathology

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Jillyan McKinney, Director, Strategic Planning

Dr. Tarek Mekhail, Medical Director, Thoracic Cancer Program

Pierre Monice, Vice President, Florida Hospital Altamonte

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Meiling Wu, RN, MSN, BSN, MSN, Quality Improvement

Dr. Thomas Ward, Diagnostic Radiology

Dr. Francisco Contreras, Diagnostic Radiology

Dr. Peter Pernicone, Pathology Shaun Wethington, RN, Palliative Holly Myers, Rehabilitation Julie Sexton, Rehabilitation Cathy Stankiewicz, RN, BSN, Oncology Nora VandenBrink, RN, OCN,

Oncology Nurse Educator

#### **For More Information**

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www.FloridaHospitalCancer.com

