

### A Note From Our Department Chair

Our Annual Report for 2019 reflects the continued dynamic growth of the department. Atrium Health Levine Cancer Institute (LCI) is still a new venture, innovating on a daily basis driven by the many demands for our programs and services. Thankfully, we are fortunate to have a dedicated group of teammates who strive to constantly improve in everything we do; they combine clinical efficiency with compassionate care.

The major event in the past year was our relocation to the 7th floor of the new LCI Building 2. This approximately 33,000 square feet of space is dedicated to our department and includes areas for patient care, research, education and administration. Most of our clinical activities at the Morehead location in Charlotte, NC, now take place here. To our knowledge, there is nothing else like it anywhere in the world. It includes, for example, a state-of-the-art gym for cancer rehabilitation and a special suite for acupuncture.

Our new home has allowed us room to grow, and we have experienced dramatic increases in all our patient care activities. Not only did we expand here but also in Pineville, where mid-year we opened a beautiful supportive oncology suite within a new medical office building. This has stimulated new opportunities for us to expand our footprint and realize the LCI vision of care delivery close to the patient.

These new facilities are allowing us to reach out in numerous areas of program development including a metabolic clinic, sexual dysfunction and prehabilitation for people facing the rigors of cancer surgery.

We are proud to have a systematic business planning process for all areas within the department, conscious of the fact that we must be wise stewards of the healthcare dollar. Part of that was a departmental retreat held in September where we came together as a group to examine our challenges and create a roadmap for the future. This was an outstanding event and importantly included feedback from patients and caregivers.

We were delighted to be one of the few cancer institutes in the United States to be recognized by the European Society of Medical Oncology (ESMO).

Philanthropy is essential to our continued success and we are fortunate that the 24 Foundation has renewed its commitment with a multiyear grant that provides generous and predictable support to our navigation and survivorship sections allowing us to plan for the years ahead. The dedication of the leadership and supporters of the 24 Hours of Booty fundraising event every July is truly inspirational.

We look forward to continued success in 2020.

Sincerely,

Declan Walsh, MD

Declan Walsh

Chair

Department of Supportive Oncology Atrium Health Levine Cancer Institute The Hemby Family Endowed Chair in Supportive Oncology With sincere appreciation, Supportive Oncology would like to acknowledge the generous philanthropic support and instrumental partnership provided by the following groups and countless individual donors:

### **Thank You to Sponsors:**

24 Foundation

The Leon Levine Foundation

**American Cancer Society** 

The Carolinas' Kickin' It Challenge

Healthcare Foundation of Cleveland County

Healthcare Foundation of Union County – Tickled Pink Fund

SherryStrong

### **Programmatic Partners:**

Carolina Breast Friends

YMCA of Greater Charlotte

Johnson & Wales University

**UNC-Charlotte** 

Charlotte Yarn

**Premier Yarns** 

Queens University of Charlotte

**UNC-Chapel Hill** 

### **Atrium Health Partners:**

Carolinas Rehabilitation

Carolinas HealthCare Foundation

Behavioral Health

Food and Nutrition Services

NorthEast Foundation

Spiritual Care Education

**Sports Medicine** 

Volunteer Services

**LiveWELL Carolinas** 

Sanger Heart & Vascular Institute

Family Medicine

Pharmacy

Pineville Foundation - Golf Tournament Fund









### **Table of Contents**

Administration	4
Supportive Oncology Medical Clinicians	11
Cancer Rehabilitation	13
Cancer Survivorship	17
Integrative Oncology	21
Oncology Nutrition	25
Oncology Palliative Medicine	27
Patient Navigation3	30
Psycho-Oncology	32
Senior Oncology	37
Research and Education	39
Awards and Recognition	55
Community Connection	59
Teammate Life6	52
Our Toom	5/1

### Department Administration and Structure

The Department of Supportive Oncology is an integrated, multidisciplinary team that provides support to Levine Cancer Institute patients through an array of innovative programs and services.

### Our hope is to decrease symptoms, improve health, facilitate recovery and nurture well-being.

### What is supportive oncology?

Supportive care in cancer is "the prevention and management of the adverse effects of cancer and its treatment. This includes management of physical and psychological symptoms and side effects across the continuum of the cancer experience from diagnosis through treatment to post-treatment care. Enhancing rehabilitation, secondary cancer prevention, survivorship and end-of-life care are integral to supportive care."

### **Benefits of Supportive Care**

- · Alleviation of symptoms and complications of cancer
- · Prevention or reduction of treatment toxicities
- Improved communication between patients and caregivers
- · Increased tolerance, and thus benefits, of active therapy
- · Easing of the emotional burden for patients and caregivers
- · Psychosocial support for cancer survivors

Source: mascc.org/about-mascc



Department Chair, Declan Walsh, MD and Administrative Director, Beth York, MA, LPC

Department Structure

163 TEAMMATES

### **30 MEDICAL STAFF**

(physicians and advanced practice providers)

Administration	
Research	
Cancer Rehabilitation	
Cancer Survivorship	
Integrative Oncology	
Oncology Palliative Medicine	0
Oncology Nutrition	
Patient Navigation	
Psycho-Oncology	
Senior Oncology	



### New Location at Atrium Health Carolinas Medical Center Campus

In March of 2016, Atrium Health, in partnership with The Leon Levine Foundation, announced a joint investment of \$150 million to construct LCI Building 2, a seven-story, 260,000 square-foot expansion of Levine Cancer Institute on the Carolinas Medical Center campus in Charlotte, NC.

The new addition houses apheresis technology, thoracic oncology, a 60-bay infusion center, vascular and blood drawing services and an on-site pharmacy. The entire 7th floor suite of LCI Building 2 is dedicated to providing supportive oncology services and replaces our location on 711 East Morehead Street in Charlotte.

### Construction

In December of 2016, the construction crew broke ground on LCI Building 2 to begin the project. Before the last beam of steel was placed in March of 2019, the beam was placed in the lobby of the neighboring Carolinas Medical Center for teammates and patients to sign. The project concluded in May of 2019, and LCI Building 2 began seeing its first patients the same month.



LCI President Dr. Derek Raghavan is shown leaving one of the final signatures on the last steel beam to be placed in LCI Building 2. Photo credit: Rodgers Builders



Members of the LCI Supportive Oncology leadership team are shown checking out their new space on the 7th floor of LCI Building 2 shortly before construction finished.

### Move to LCI Building 2

With the completion of LCI Building 2 in May of 2019, we said farewell to the friendly confines of 711 East Morehead (right) and moved to our new accommodations on the 7th floor of LCI Building 2 (below). The Center for Supportive Oncology contains all the services patients enjoyed at our former location along with some new ones, like our state-of-the-art oncology rehabilitation gym and our oncology palliative medicine infusion suite.



### Welcome to the new Center for Supportive Oncology!



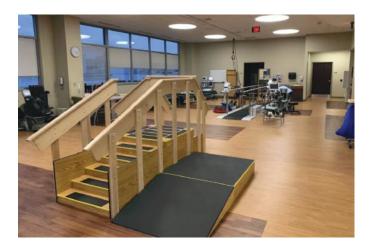
### 7th Floor Suite Design Features

The 7th floor of LCI Building 2 is devoted entirely to supportive oncology services and is the largest amount of square footage devoted to supportive oncology in the world. Features of the floor include a suite of conference rooms that overlook the Charlotte skyline; these rooms host administrative meetings, support groups, classes and other activities. There are nourishment stations with beverages and snacks positioned throughout the suite for use by patients, visitors and staff.

In addition to the rehabilitation gym and palliative medicine infusion suite, the space houses an acupuncture suite and spaces for massage therapy and healing touch.



 $The \ reception \ area \ of \ the \ Center for \ Supportive \ Oncology \ located \ on \ the \ 7th \ floor \ of \ LCI \ Building \ 2.$ 





 $Features\ of\ the\ rehabilitation\ gym\ at\ LCI\ Building\ 2\ include\ weighted\ machines,\ treadmills,\ stationary\ bikes,\ ellipticals,\ technology\ to\ assist\ gait\ training,\ an\ activities\ of\ daily\ living\ suite\ and\ private\ rooms\ for\ individualized\ treatment.$ 



Each of the four bays in the infusion suite features its own television as well as additional seating for guests. They can also provide privacy if needed.



The palliative medicine infusion suite is dedicated to administering blood products, electrolyte and hydration therapies, and medications to ease pain and nausea caused by cancer treatment.

### **ESMO** Designation

This fall, the European Society for Medical Oncology (ESMO) honored Levine Cancer Institute as North Carolina's only Designated Centre of Integrated Oncology and Palliative Care. ESMO only bestows this honor on "cancer centers which provide comprehensive services in supportive and palliative care as part of their routine care" and who achieve a "high standard of integration" in doing so. Care is a team effort at LCI, whose supportive oncology team works in concert with the medical oncology team to provide the highest level of care for all patients. LCI joins only four other cancer centers in the United States as well as over 200 sites worldwide to be so recognized. The ESMO designation is valid for three years.



Declan Walsh, MD; Latoya Spencer, DNP, RN; Beth York, MA; and Derek Raghavan, MD

### Familiar Faces in Different Spaces

In addition to the move to our flagship facility, supportive oncology launched newly remodeled and expanded locations at our supportive oncology hubs at LCI - Pineville and LCI - University City. We are excited to continue to serve these communities in our new spaces but with the same world class service patients expect.

### New Location at Pineville Medical Plaza II

In June of 2019, Atrium Health opened the doors of the new Pineville Medical Plaza II located on the campus of Atrium Health Pineville.



Photo credit: Rodgers Builders

### Construction

In March of 2018, the construction crew broke ground on Pineville Medical Plaza II, a four-story medical office building. It is a 148,000 square-footage expansion adjacent to the existing Medical Plaza. The new addition houses Levine Cancer Institute on levels one and two. Services offered include clinical trials, radiation therapy, hematology, infusion, laboratory, medical oncology, surgical oncology and supportive oncology.



Latoya Spencer looking at the new Pineville workspace.



Entrance into the new Pineville Supportive Oncology Suite, located on the 1st floor of Pineville Medical Plaza II.

### Supportive Oncology Suite Design Features

The dedicated 1st floor suite of Supportive Oncology provides palliative medicine, genetics, cancer survivorship, psycho-oncology and integrative oncology services. Features of the suite include two large consult rooms for support groups, classes, meetings and other activities. There are nourishment stations with beverages and snacks throughout the suite for patients and visitors. There is also space for an acupuncture suite, massage therapy and healing touch. The project concluded in June of 2019, and patients began enjoying the new space immediately. The supportive oncology space in Pineville is designed to support local cancer patients, as well as their caregivers, during their cancer journey by offering many of the same services they can receive at LCI - Morehead but closer to where they live.



The Supportive Oncology Pineville acupuncture suite features two big screen televisions and sound to play relaxing spa visuals and music.



Both consult rooms feature seating for intimate one on one sessions or large groups, classes, virtual classes or meetings.

### New Services in Pineville:

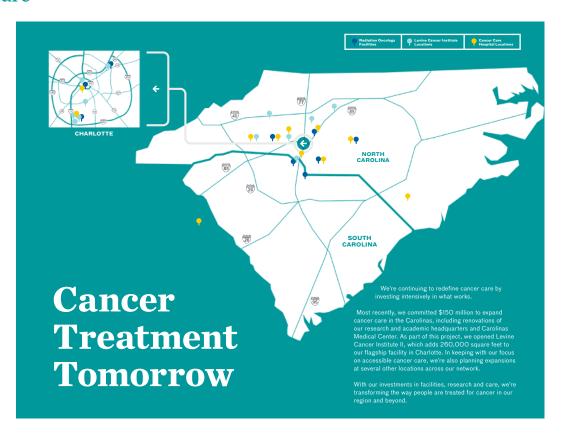
- Acupuncture
- Cancer Survivorship Medical Clinic
- Healing Touch
- Integrative Oncology

- Massage Therapy
- Psychology
- Senior Oncology

### **Cancer Care Without Walls**

In keeping with the LCI philosophy of world class cancer care for every community, our department has worked to develop programs across the region, beginning with foundational services like social work and nutrition while building up to subspecialty medical care delivered both in person and virtually.

### Sites for Care



- Atrium Health Blue Ridge Valdese
- Columbus Regional Healthcare System Donayre Cancer Care Center
- Lancaster Radiation Therapy Center
- LCI Albemarle, a facility of Carolinas Medical Center
- LCI Ballantyne, a facility of Carolinas Medical Center
- LCI Cleveland, a facility of Atrium Health Cleveland
- LCI Cleveland Radiation Therapy Center
- LCI Concord, a facility of Carolinas Medical Center
- LCI Gaston
- LCI Huntersville, a facility of Carolinas Medical Center
- LCI Lincoln, a facility of Atrium Health Lincoln
- LCI Monroe, a facility of Atrium Health Union
- LCI NorthEast Radiation Therapy Center

- LCI Pineville Medical Oncology
- LCI Pineville Radiation Therapy, a facility of Atrium Health Pineville
- LCI Rock Hill
- LCI Rowan
- LCI Rutherford, a facility of Atrium Health Cleveland
- LCI SouthPark, a facility of Carolinas Medical Center
- LCI Stanly Radiation Therapy Center
- LCI Union Radiation Therapy Center
- $\bullet$  LCI - University City, a facility of Carolinas Medical Center
- LCI University City Radiation Therapy Center
- Levine Cancer Institute 1 and 2
- Rock Hill Radiation Therapy Center
- St. Luke's Infusion Center

### **Supportive Oncology Clinicians**



**Donna Baldassare, DO** Oncology Palliative Medicine



Chasse Bailey-Dorton, MD, MSPH
Integrative Oncology, Chief



Sarah Blake, MS, PA-C Oncology Palliative Medicine



Paulomi Campbell, PhD Psycho-Oncology, Psychology



**Anthony Caprio, MD** Senior Oncology, Geriatrics



Rebecca Edwards, MSN, RN, AGPCNP-BC Oncology Palliative Medicine Advanced Practice Provider, Chief



Sarah Galloway, PhD Psycho-Oncology, Psychology



Rebecca Greiner, PhD, PA-C Integrative Oncology Medicine



**Daniel Haggstrom, MD** Senior Oncology, Medical Oncology



**James B. (JB) Hall, MD** Cancer Survivorship Medical Clinic, Gynecologic Oncology



Jennifer Hartzell, PsyD, ABPP-CN Cancer Rehabilitation, Neuropsychology



Raghava Induru, MD Senior Oncology, Medical Oncology



**Bruce Kennedy, MD** Oncology Palliative Medicine



**D. Will Litchford, MD**Psycho-Oncology, Psychiatry

### **Supportive Oncology Clinicians**



**Victoria Lopez, MD** Oncology Palliative Medicine



**Armida Parala-Metz, MD** Oncology Palliative Medicine Senior Oncology, Chief



**Charles Mitchell, DO**Cancer Rehabilitation, Physiatry



**Shenita Spencer-Moore, MD** Oncology Palliative Medicine



**Jennifer Pope, MD**Cancer Survivorship Medical Clinic,
Adult Survivors of Childhood Cancer



**Terrence Pugh, MD**Cancer Rehabilitation, Physiatry



**Vishwa Raj, MD** Cancer Rehabilitation, Chief Physiatry



**Omar Rana, DO** Psycho-Oncology, Psychiatry



**Thomas Rapisardo, MD** Survivorship



**Alicia Romeo, MD** Psycho-Oncology, Psychiatry, Geriatric Psychiatry



**Jai Singh, MD** Cardio-Oncology



**Beth Susi, MD** Oncology Palliative Medicine



Jessica Turner, MSN, RN, AGPCNP-BC Oncology Palliative Medicine

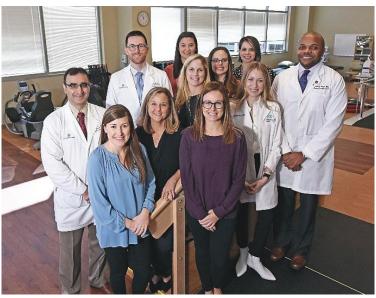


Samuel Zimmern, MD Cardio-Oncology

The cancer rehabilitation program aims to deliver services to people throughout the cancer care continuum. Rehabilitation can provide appropriate supportive care interventions to maintain or restore function, maximize independence, reduce symptom burden and improve quality of life for cancer survivors.

### **Highlights**

- Opening of Cancer Rehabilitation Clinic and Gym in LCI Building 2
- Addition of three physical therapists and an occupational therapy assistant
- Multiple symposia presented at the American Congress of Rehabilitation Medicine (ACRM) Conference



Cancer Rehabilitation Team





Cancer Rehabilitation Gym in LCI Building 2

### **Physiatry Clinic**

The physiatry clinic is for people at any point in their cancer treatment. Patients receive a comprehensive evaluation of physical and cognitive impairments caused by cancer or its treatments. Our clinicians are trained in cancer-related rehabilitation and coordinate a treatment plan with other rehabilitation professionals.

36% increase in physiatry visits



Figure 1: Total physiatry clinic visits, 2018-2019



\_ Patient Quote

Excellent care and great people.

They played a major role in my cancer journey.



### **Neuropsychology Clinic**

Clinical neuropsychology captures changes in cognition and behavior that significantly impact patient functioning. Evaluation for the cancer survivor provides a better understanding of precisely how an individual has been impacted by their disease and focuses on optimizing function and quality of life.

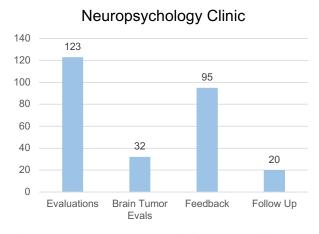


Figure 2: 2019 Neuropsychology clinic volume by visit type

### Cognitive Rehab Clinic Visits 250 200 150 140 100 50 54 35 2018 2019 New Evaluations ■ Return Treatments

Figure 3: 2018-2019 Cognitive Rehab clinic volume

53% increase in Cognitive Rehab visits

### Lymphedema Clinic

The lymphedema clinic serves patients at any point in their cancer treatment who are experiencing swelling due to a compromised lymphatic system from surgery, radiation therapy and/or chemotherapy.

### Lymphedema Clinic

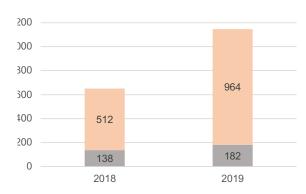
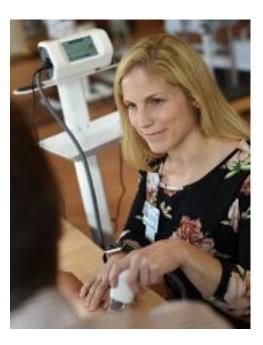


Figure 4: Total Lymphedema clinic visits 2018-2019

274% growth in lymphedema visits



Brittany Lorden, MHS, OTR/L provides therapy for a patient in the lymphedema clinic



Patient Quote

Dr. Hartzell is very knowledgeable, informative and caring.

I was delighted with this clinic.

### **Speech Language Pathology**

Speech language pathology services are provided at LCI Building 2 and LCI - Morehead Head and Neck Clinic. At LCI Building 2, cognitive rehabilitation focuses on attention, problem solving, executive function and memory. Services provided at Head and Neck include evaluation for dysphagia, speech and voice, Fiberoptic Endoscopic Evaluation of Swallowing (FEES), Modified Barium Swallow (MBS) study, pre-laryngectomy education, post-laryngectomy care and voice prosthesis education.

### Head and Neck Therapy Visits

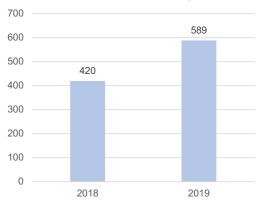
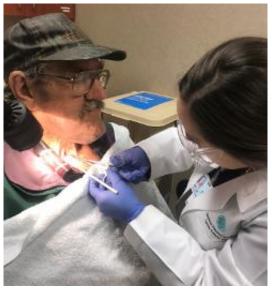


Figure 5: Speech visit volume in LCI - Morehead

40% increase in SLP Head and Neck visits



Della Franklin, MSP, CCC-SLP with a patient in the Head and Neck Clinic at LCI - Morehead

### New Therapy Services

Head and Neck Clinic 2018-2019

With the opening of the Cancer Rehabilitation Gym, we added traditional occupational and physical therapy services to the cancer rehabilitation program. Occupational and physical therapy focus on activities of daily living, mobility, balance, muscle weakness, fatigue and sensory issues.



Joanna Lankford, PT, DPT provides physical therapy

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Activities of Daily Living Suite in LCI Building 2

### Physical Therapy Visits 600 509 500 400 300 200 122 100 New Evaluations Return Treatments

Figure 6: 2019 Physical Therapy visit volume

### Occupational Therapy Visits

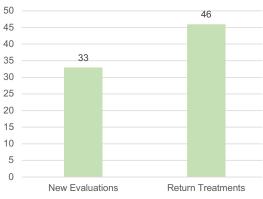


Figure 7: 2019 Occupational Therapy visit volume

### **Regional Therapy Services**

Atrium Health and Carolinas Rehabilitation have 4 inpatient rehabilitation hospitals and over 20 ambulatory clinics throughout the region. Occupational, physical and speech therapy are provided to address functional impairments caused by cancer or its treatment.



### Inpatient Rehabilitation Volume

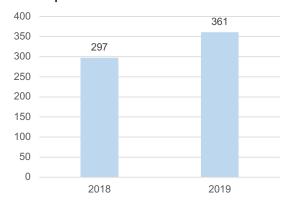


Figure 8: Total inpatient admissions to Carolinas Rehabilitation's Oncology Rehabilitation Program, 2018-2019

### Outpatient Therapy Visits - All Locations

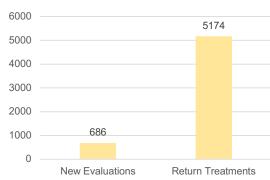


Figure 9: Total 2019 outpatient therapy visits (occupational, physical and speech therapy) across 20 regional sites

### **Patient Outcomes**

The Patient Specific Functional Scale (PSFS) is used to measure patient improvement following rehabilitation. In 2019, 91% of patients made clinically significant gains in function between initial therapy consult and final therapy visit.



Figure 10: Point change on the PSFS outcome tool

There are more than 600,000 people in North Carolina who have a history of cancer. Many have unmet survivorship needs and are at increased risk of health problems months, years and even decades after treatment is complete.

The aim of the Survivorship Section is to improve quality of life, long-term health and coordination of care for cancer survivors.

### **Patient Story**



Audrey and her family

My story with cancer started in 2003 when I was just 13 years old and discovered a lump, which turned out to be Stage 2 Hodgkin's lymphoma. Instead of the usual teen summer activities of playing sports and going to the pool, my days were filled with endless trips for scans and testing, intense chemotherapy, radiation therapy and symptom management.

One of the biggest blessings to come out of my first battle with cancer was my passion and desire to become an oncology nurse. It was in conversation with one of our advanced practice providers that I first heard about survivorship care plans. I was quickly scheduled to see a physician who took the time to explain to me the research that had been done on long-term survivorship, specifically in Hodgkin's patients.

Based on my prior treatments, I was at an increased risk for secondary breast cancer and would need to be screened every six months – rotating between mammograms and MRIs. In 2016, a routine MRI showed something suspicious, which was later found to be ductal carcinoma in situ (non-invasive breast cancer). I underwent a double mastectomy with sentinel lymph node biopsy and reconstruction.

With the breast cancer being the focus for the past few years, it was time to get back on track with my other high-risk screening. Due to the type of chemotherapy I had received – along with the chest irradiation – I needed to be closely monitored for late cardiac effects. The timing was perfect as the cardio-oncology clinic had just opened at the supportive care center. My physician there, Samuel Zimmern, MD, carefully reviewed my history, including any issues I had, and I was set up for the necessary testing. At a follow-up appointment a few weeks later, he confirmed my tests were all normal, reviewed screenings going forward and sent me on my way!



Patient Quote

### A survivorship care plan saved my life.

### **Audrey Snoor**

Registered Nurse, Levine Cancer Institute Hodgkin's lymphoma survivor, diagnosed at age 13 Breast cancer survivor, diagnosed at age 27



I am now almost 16 years out from my Hodgkin's diagnosis and already two years from the breast cancer. I am back to yearly follow-ups and thanks to my surgery, I have much less frequent screening requirements.

I quite literally owe my life to Dr. Chasse Bailey-Dorton and the survivorship care plan she developed for me. The team at the center for supportive care advocated for me and made sure I was well-informed through the development of my survivorship care plan. It scares me to think how different my story could have been. Had I not been informed about the risks and delayed effects of my treatment as a teenager I could have easily gone through life feeling okay. Who knows when the breast cancer would have been caught and how different the prognosis could have been?

Having worked in oncology for nearly eight years now, I know there are others like me. People who would love to keep cancer locked up in the past but who will forever live with the late effects of their treatments and potential secondary diagnoses. I am incredibly passionate about being an advocate for survivorship care, especially in the young adult population. I will also never stop jumping up on my soapbox to preach the importance of early detection. These two things saved my life, allowing me to continue my work in oncology and, even more importantly, to be a wife and a mother to my two beautiful kids.

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### Adult Survivors of Childhood Cancer Clinic

The aim of this clinic is to promote successful transition from pediatric to adult survivorship care and to facilitate adherence to follow-up per the Children's Oncology Group's Long-Term Follow-Up Guidelines.

### **Highlights**

- Started September 2019, this clinic is a partnership between **Levine Children's Hospital** and **Levine Cancer Institute**.
- Adult survivors of childhood cancers are scheduled for a transition visit with Jennifer Pope, MD, in the Department of Supportive Oncology at Levine Cancer Institute.
- Patients received a comprehensive survivorship care plan, per the Children's Oncology Group's Long-Term Follow-Up Guidelines.
- Patients have access to adult services, groups and classes offered by the Department of Supportive Oncology.
- Subsequent visits are scheduled with Thomas Rapisardo, MD, at the same location.
- Regular interdisciplinary team discussions are used to facilitate transition to Dr. Rapisardo and discuss complex needs.

### Cancer Survivorship Medical Clinic

The aim of this clinic is to deliver high-value, efficient care that enhances quality of life, promotes long-term health and improves coordination of care for adult cancer survivors

### **Highlights**

- Started in Charlotte in February 2017.
- Expanded to Pineville in 2019.

### Growth

### **Visit Volume Growth Cancer Survivorship Medical Clinic** 400 350 291 300 250 175 200 150 89 100 50 0 2017 2018 2019

Figure 1: Growth of Cancer Survivorship Medical Clinic, 2017-2019



Cancer Survivorship Medical Clinic staff

### Cardio-Oncology Clinic

The aim of this clinic is to reduce heart problems caused or worsened by cancer treatment. This is achieved by early detection, risk reduction and early treatment of heart problems.

### **Highlights**

- Originally started in 2017, the Cardio-Oncology Clinic is a partnership between **Sanger Heart & Vascular Institute** and **Levine Cancer Institute**.
- The clinic expanded in September 2019 to include a second physician, Dr. Jai Singh, Director of Cardio-Oncology at Sanger Heart & Vascular Institute.
- In 2019, the Cardiovascular Surveillance Guidelines were published in the EAPathways.



Jai Singh, MD

Physician Quote

I am excited to collaborate with Levine Cancer Institute's Department of Supportive Oncology, which is uniquely positioned to provide long-term integrated care focusing on health and wellness.

This clinic allows us to minimize cardiovascular risks during cancer survivorship and screen for cardiovascular and cardiometabolic toxicities associated with rapidly growing cancer treatment options.

Jai Singh, MD, Director Cardio-Oncology Sanger Heart & Vascular Institute





Samuel Zimmern, MD

Physician Quote

I am passionate about my work. In more than 30 years of helping patients with heart problems, I have seen the negative impact that heart disease can have on patients and their families.

This clinic offers cancer survivors a chance to detect heart problems earlier and helps many patients manage those problems so they feel better and stay healthier.

Samuel Zimmern, MD, Faculty Physician Levine Cancer Institute





Figure 2: Cardio-Oncology Clinic has grown steadily since its inception

### **Patient Story**



My first round of chemotherapy for breast cancer brought on several complications that were not expected. One of these included an elevated heart rate. On day two of treatment, I was sent to the Emergency Room with a heart rate of 175, which felt like 300. The first response from the ER doctor was, "Oh, you are an oncology patient; I really don't know much about these drugs."

The hospitalist ultimately referred me to Dr. Singh, who is a cardiologist with special training on how cancer treatments affect the heart. I was so glad to finally see a doctor who understood what chemotherapy does to the body. Not just the pathophysiology of chemotherapy, but the response to the heart and other vital organs.

Dr. Singh sat down with me and explained why my heart rate was elevated and gave me a plan. I finally felt like I understood what was going on and that there was something we could do for it. That really helped a lot.

Allison Bansen

Patient Quote

### Dr. Singh took my whole well-being into account.

If it wasn't for him, I would have stopped my chemo. I was able to finish my chemo because of him!"

Allison Bansen

Breast Cancer Survivor

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### Survivorship Care Plans

The aim of Survivorship Care Plans is to address survivors' long-term health needs and improve communication and coordination of care.

### **Highlights**

- Starting in 2014, 4 clinics provided survivorship care plans to survivors of 2 types of cancer.
- In 2019, **54** advanced practice providers and **28** physicians in **31** clinics provided survivorship care plans to more than **1,600** survivors of **68** types of cancer.

### Growth

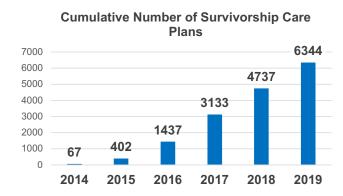


Figure 3: The number of survivorship care plans has increased each year

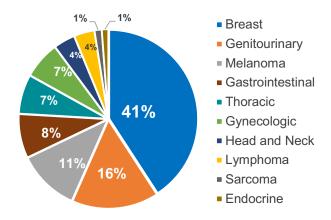


Figure 4: Survivorship care planning participation by Cancer Section

The aim of our section is to support our patients and their caregivers throughout their cancer journey, help manage treatment side effects, reduce risk for recurrence and improve quality of life while also steering patients away from potentially dangerous "alternative" interventions.

### **Highlights**

The Integrative Oncology clinic continues to see patients at all points of their cancer journey. In 2019, we saw opportunities for growth both at the Morehead location, as well as regionals, including Supportive Oncology Pineville and Supportive Oncology University. This helped us serve our patients with evidence-based integrative care close to home.



Integrative Oncology Team

### **Integrative Oncology Clinic**

The Integrative Oncology consult clinic provides everyone with an individualized health and wellness plan, focusing on physical, emotional and spiritual needs.

- · Safe use of vitamins and supplements
- Stress management
- Nutrition
- · Physical activity
- Managing side effects of cancer and cancer treatment
- Reducing risk of recurrence, secondary cancers and other health conditions



Patient Quote

As a Stage 4 cancer patient that is battling two separate cancers (Metastatic Breast Cancer since 2015 and Neuroendocrine since 2017), the Levine Cancer Institute has become my second home it seems. I have met so many wonderful staff and patients who continue to help me in this journey. Hearing the words back in 2015, "you have Stage 4 cancer" turned my world upside down with fear, anger, loneliness and extreme anxiety.

The things that are offered through Levine have been a HUGE benefit to me physically and mentally. I have received Therapeutic Oncology Messages, Acupuncture, Healing Touch, and attended therapeutic art classes, educational classes for cancer patients and their caregivers, nutrition classes/counseling, chair yoga, Qigong and meditation classes. Each of these things have been so helpful by promoting health and wellness for myself and being around people that want the same thing. I'm around patients that are struggling with the dreaded "C" word just like me! I have made bonds with those patients, and we lean on one another as we maneuver through a very unpredictable and extremely stressful time of our lives. I am LIVING with cancer, not dying of cancer.

- Nancy, LCI patient

### **Individual Modalities**

Individual integrative modalities focus on symptom mitigation at all points of cancer care. Our shared acupuncture service provides interventions for anxiety, fatigue, hot flashes, neuropathy, pain and sleep challenges. Oncology massage and healing touch therapy often provide relief from pain and anxiety. The team recently published in the peer reviewed The Journal of Alternative and Complementary Medicine, outlining the development of our shared acupuncture appointment program as a novel, efficient means of providing acupuncture care.

Integrative Oncology Clinic saw more than 1,400 patient visits in 2019. Shared Acupuncture Clinic saw more than 1,650 visits, Oncology Massage 1,297 patient visits and Healing Touch Therapy nearly 600 visits. Generous philanthropic donations provide support to expand these services and provide financial support to those who are unable to pay any out of pocket fees, making integrative care available regardless of any socio-economic challenges.

### **Number of Patient Visits 2019** 1800 1653 1492 1600 1297 1400 1200 1000 800 567 600 400 200 0 Integrative Acupuncture Oncology Healing Clinic Touch Massage Therapy

Figure 1: Integrative Clinic and Individual Modalities Visits 2019

### Growth

The 2019 calendar year provided opportunities for incredible growth both at our Morehead location and regionally. We expanded our integrative clinic services to the new Supportive Oncology location at LCI - Pineville, also offering a full array of integrative services, including acupuncture, oncology massage, Healing Touch therapy, therapeutic art and yoga. Additional expansion at LCI - University City and LCI - Morehead provide the opportunity for our patients to receive evidence-based integrative care close to home.

### **Outcomes**

We continue to evaluate patient reported outcomes for our services and utilize this information to boost philanthropic support, improve understanding of the value of integrative care and provide a foundation for both retrospective and prospective research.

### **Healing Arts**

Healing Arts help patients, care partners and staff express experiences through creative endeavors. No artistic or musical experience is necessary to benefit. The philanthropic support of SherryStrong, 24 Foundation and the Mea Pierman Fund provided the opportunity to grow therapeutic arts activities across the network.

Expansion includes an artist-in-residence and therapeutic art and music therapy in the bone marrow transplant unit and inpatient oncology units. Our music therapy program benefits from a close relationship with Queens University of Charlotte's music therapy department.

Our artists-in-residence program saw nearly **5,000** patient encounters this year, and our board-certified music therapist saw nearly **1,200** patient visits. Patients reported decreases in pain and anxiety, improved sleep and social connection through participation in our Healing Arts programs.

Board-certified Music Therapist, Dean Quick, was recognized by the South-Eastern Region American Music Therapy Association Professional Practice Award





Expressive Arts Class in our new Healing Arts Center



Dean Quick, board-certified music therapist with patient in infusion

### **Groups and Classes**

We provide integrative groups and classes for our patients and care partners free of charge. We understand that cancer not only impacts the patient but also their loved ones. Our groups and classes provide evidence-based activities for depression, fatigue, pain management and stress. Groups and classes are available throughout the network in person and virtually. Visits to our groups and classes exceeded **1,500** in 2019 across the network.



Tai Chi Class available for patients, care partners and teammates

((

### Patient Quote

"Going to the Integrative Oncology clinic was the best decision I made for helping me best manage my diagnosis and treatments. I was able to feel empowered to do positive things for myself and better manage the side effects and anxiety that came with having my life turned upside down."

- Anne, LCI patient

-))

### Spiritual Care

With the support of generous donors, Levine Cancer Institute is excited to have our very own designated chaplain, Petra Sprik, MDiv, MPH, BCC. Petra partners with patients, care partners and teammates to assist with meaning-making, prayers and rituals, processing distress, diagnosis and prognosis and end-of-life conversations. The chaplain also assists with legacy work and is involved with advanced directives and ethics consults. Since July 2019, the chaplain has completed more than 1,000 encounters.

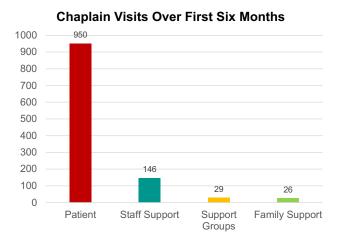
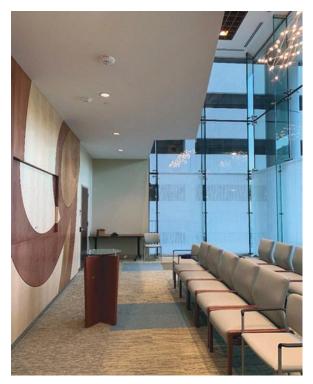


Figure 2: Chaplain Visits Over First Six Months



LCI - Morehead Chapel

### Integrative Oncology Leadership Speaking Engagements and Presentations Across the Country

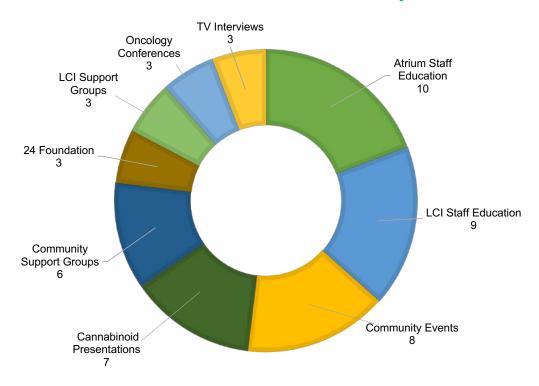


Figure 3: Number and type of speaking engagements for Integrative Oncology leaders



Danielle Gentile, PhD, speaks at the Society for Integrative Oncology annual conference

### **ONCOLOGY NUTRITION**

The Oncology Nutrition section seeks to enhance the quality of life of cancer patients through their cancer journey by optimizing nutrition intake to maintain appropriate nutritional status, manage side effects, maintain treatment regimens and to help prevent recurrence when treatment is complete.

Malnutrition or cachexia affect up to 80% of cancer patients. The Commission on Cancer recently updated their standards to include oncology nutrition services throughout the continuum of cancer care, including prevention, diagnosis, treatment, survivorship and palliative care. Levine Cancer Institute has programs and services available for patients and care partners at all points along their treatment.

### **Highlights**

- 15 dietitians, 6 certified specialists in Oncology, 1 certified nutrition support clinician
- 7 dietitians with master's degrees
- Over 20 in-services for both inpatient/outpatient staff



LCI Dietitians and Clinical team

### **ONCOLOGY NUTRITION**

### Growth

### LCI Dietitians

- 13 clinical dietitians had ~12,900 patient visits throughout the LCI network (with 8.3% growth)
- Of these consults, ~25% were new patients (~2,900)

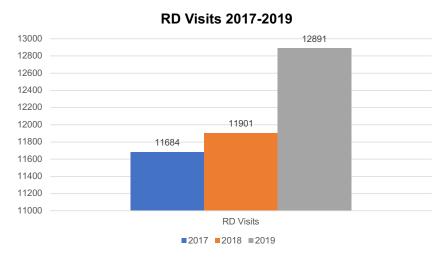


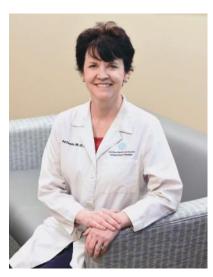
Figure 1: Growth of LCI Dietitian volumes over the past three years

### **Outcomes**

- 17% of patients triggered as "at risk" for malnutrition using the MST in Tridiuum
- Average of 254 automated consults a month for patients scoring "at risk"
- 561 patients diagnosed with moderate or severe malnutrition in 2019, around 18% of new patients
- >98% score on quarterly chart audits for quality
- 100% participation in the career ladder at the highest level

### **Nutrition Classes**

- 1,007 participants in 6 monthly class offerings
- 10 sites participated in classes virtually (either call in or Skype)
- Healthy Cooking Club remains our most popular class, with 300+ attendees this year
- Breast Cancer Nutrition and Plant Based Nutrition increased in popularity this year
- 50% increase in call in participation



Patricia Fogarty, Wellness Dietitian

### **ONCOLOGY PALLIATIVE MEDICINE**

Oncology palliative medicine provides specialized medical care to cancer patients experiencing distress at any point in their cancer journey. It is a medical specialty that focuses on a multidisciplinary approach aimed at improving quality of life through symptom management, support, care coordination and advanced care planning.

### **Highlights**

- The implementation of a 4-chair palliative medicine infusion space
- Continuous protocol and pathway development
- Inpatient care continuum collaboration
- ESMO Designation
- Standardization of clinical practice across all sites



Oncology Palliative Medicine Team

### Growth/Volumes

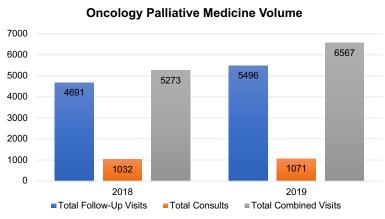


Figure 1: 2019 Oncology Palliative Medicine Volumes all sites

- Follow-Up visit volume increased by 16.2%
  - $\bullet$  Consult visit volume increased by 3.78%
    - Total visit volume increased by 14.75%

### **ONCOLOGY PALLIATIVE MEDICINE**

### Rapid Access Volume

## Rapid Access Volumes 2017-2019 30 25 20 15 10 5 0 January Rapid March Roll Mark Jure July Rudges Repaired October December Decem

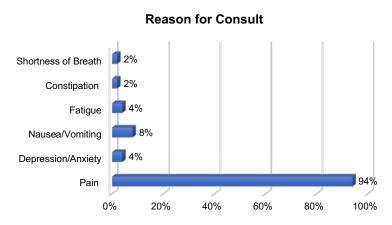
Figure 2: 3-Year Oncology Palliative Medicine Rapid Access Volume Trends

**2017 2018 2019** 

### Who can be referred?

• Any cancer patient with uncontrolled symptoms (e.g., pain, nausea and vomiting, shortness of breath, constipation) related to their cancer and/or treatment needing immediate attention

Under the supervision of Dr. Armida Parala-Metz, the rapid access team continued to positively impact patient care throughout LCI in 2019.



Figure~3:~2019~Reason~for~Rapid~Access~Consult

### **ONCOLOGY PALLIATIVE MEDICINE**

### 2019 Rapid Access Outcomes

- 99% seen by physician
- 97% arranged for OP follow-up → 66% of patients had follow-up visits
- 0% sent to Emergency Department (ED)

### **30-Day Status Post Rapid Access Consult**

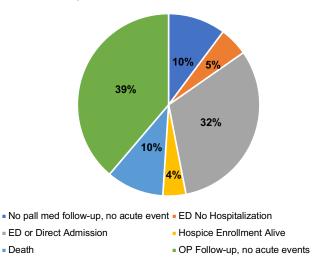


Figure 4: 30-Day Status Post Rapid Access Consult

### **Oncology Palliative Medicine Infusion Suite**

- 4-chair infusion bay that offers privacy, a television in each bay, and additional seating for guests
- Offering hydration, electrolyte replacement, blood product, antibiotic and intravenous pain and nausea medication administration



Paula Knight, RN, talking to a patient prior to infusion.

### **PATIENT NAVIGATION**

Patient navigation at Levine Cancer Institute gives patients, families and caregivers personal assistance throughout all phases of the cancer experience. Our team aims to help patients better understand the healthcare system and connects them to the exceptional medical care they need.

Patient navigators guide patients and their families through the complex healthcare system so they can focus on their care, not the process. A patient is paired with a patient navigator soon after a cancer diagnosis.

### **Highlights**

- Lorna Espinal, MSN, RN presented an abstract at ONS Congress.
- · Lisa Pye, RN, BSN and Lorna Espinal, MSN, RN were given Daisy Awards for outstanding nursing care.
- Shelia Newsome, RN was nominated for a Pinnacle Award.
- Currently, there are 31 Nurse Navigators across multiple LCI facilities.
- Ninth Annual Navigator Academy was held at Atrium Health. This conference provides education and networking to other navigators across the region.



Patient Navigation Team

### Growth

LCI Patient Navigation increased its new patient volume by 17% and increased the number of patient contacts by an impressive 43%.

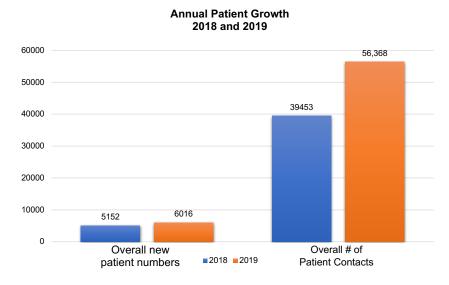


Figure 1: LCI Patient Navigation Patient Growth and Patient Contact 2018-2019

### **PATIENT NAVIGATION**

### **Patient Outcomes**

In 2019, a satisfaction survey was conducted in the breast clinic at our LCI - Morehead location. This survey demonstrated how the assistance of the navigator can positively impact the patient and the care they receive. Sixty-five patients completed the survey.



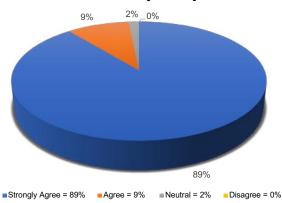
Patient Quote

Thank you for always being there when I needed advice and support. I'm so thankful for this program.

- Navigation patient



### The support I got from my navigator helped decrease my anxiety.



98% of respondents felt that navigators had an impact in decreasing their anxiety.

Figure 2: Navigator Impact on Patient Anxiety

Despite seeing high numbers of patients, 100% of the respondents felt like their navigator treated them like an individual.



Patient Quote

You touched our lives at the beginning of the journey and have walked with us until her journey ended on earth. We were/are so blessed to have you on our team and couldn't imagine going through this without your guidance and support.

- Navigation patient



### 98% of respondents felt that they received BETTER care, because they had a navigator.

### Percentage of Patients Agreed That... The services my navigator referred me to met my needs. My navigator provided support to my family when needed. My navigator treated me like an individual. 75% 80% 85% 90% 95% 100

Figure 3: Individualized Patient Care

### The care I received was improved by having a navigator.

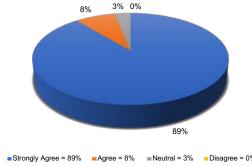


Figure 4: Quality of Care

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Patient Quote

It was truly a lifeline during the whole process.

- Navigation patient



### **PSYCHO-ONCOLOGY**

Our aim is to optimize health outcomes and enhance the quality of life of patients, families and caregivers through collaborative, evidence-based and compassionate psychosocial support and research.

Management of psychosocial needs of cancer patients can have a significant impact on clinical outcomes and quality of life. Access and integration of psychosocial care is necessary to meet the standards of accreditation for Quality Oncology Practice Initiative, Commission on Cancer and the Joint Commission. The National Comprehensive Cancer Network, American Society of Clinical Oncology (ASCO) and National Cancer Institute all include management of psychosocial distress as a part of their clinical guidelines.

### **Highlights**

- · Added 1 psychiatrist, 1 psychologist and 2 clinical social workers (one bilingual) to our Psycho-Oncology team
- 5 oral presentations at national conferences including American Psychosocial Oncology Society, ASCO, ASCO Supportive Care and Association of Oncology Social Work
- Initiated ASCO developed Resiliency Training for Medical Oncology Fellows, delivered by Sarah Galloway, PhD
- Over 300 Oncology specific continuing education hours completed by team, including the 4th Annual Psycho-Oncology Training in December
- More than 500 new patients seen in Psycho-Oncology clinic referred by over 100 LCI physicians
- 26% total visit growth in all consultative services over 2018 and 64% growth in psychiatry and psychological visits



Psycho-Oncology Team

### **Licensure/Certifications of Psycho-Oncology Team**

- 100% clinically/provisionally licensed in their field (LCSW, LMFT, LPC, PhD, RN, CMA)
- 80% of eligible LCSWs are oncology certified
- 50% are LCSW, LMFT supervisors
- 20 clinical social workers (LCSW/LCSWAs)
- 2 psychotherapists (LCSW, LMFT)
- 2 psychologists (PhD)
- 2 board-certified psychiatrists (MD)

### **PSYCHO-ONCOLOGY**

### Psychiatry/Psychology

The Levine Cancer Institute Psycho-Oncology Clinic provides specialized, integrated psychiatric and psychological services for cancer patients across the LCI network. In collaboration with Atrium Health Behavioral Health, board-certified psychiatrists, Drs. Will Litchford and Alicia Romeo, currently practice within the Department of Supportive Oncology at LCI - Morehead.

While working collaboratively with the primary oncologist, our goal is to care for the whole patient. We effectively manage mental health conditions related to or impacted by the patient's cancer diagnosis and treatment while ensuring patients obtain the optimal clinical outcome.



Administrative Team Meeting on 2020 goals

### Psychiatric Conditions Treated:

- Depression
- Anxiety/panic disorders
- Tumor-related mood/psychotic disorders
- Tumor-related neurocognitive disorders
- Bipolar disorder
- Obsessive-compulsive disorders
- Post-traumatic stress disorder
- Adjustment disorders
- · Symptom management



 $The rapeutic setting with Sarah \ Galloway, PhD$ 

### Psychiatry and Psychology Visits 2019 1000 500 427 102 130 1st Qtr 2nd Qtr 3rd Qtr 4th Qtr

Figure 1: New Patient and Follow Up Psychiatry and Psychology Visits 2019

### **PSYCHO-ONCOLOGY**

### Psychotherapy

Psychotherapists work in conjunction with the psychiatrists and psychologists to provide optimal evidence-based symptom management. Generally, each therapist provides 6-8 goal-oriented therapy sessions aimed at addressing the myriad of patient needs related to their cancer diagnosis, treatment and survivorship. Psychotherapists establish clear goals that address the emotional, social and familial well-being through evidence-based therapeutic techniques. Some common reasons for patients to see a psychotherapist are:

- Difficulty coping with diagnosis, treatment and or side effects
- · Past trauma exacerbated by the illness
- Fear of recurrence
- Insomnia
- Anxiety/depression that develops after diagnosis or recurrent during diagnosis/treatment
- Symptom management
- Meaning making/spirituality/existential needs
- Caregiver concerns
- Relational (family/couple) concerns
- · Bereavement and loss



Figure 2: Psychotherapy Patient Visits 2018-2019

### Clinical Social Work

Licensed clinical social workers (LCSW/LCSWA) at LCI provide evidence-based psychosocial support to patients diagnosed with cancer throughout the continuum of care. All LCI patients and their families have access to clinical social work services. Patients are referred to clinical social workers by members of the healthcare team or through a distress screening survey that identifies patients with significant symptoms of depression, anxiety, high levels of distress related to diagnosis, self-image, work, family and finances.

Social workers are available to address patient concerns by providing the following services:

- Brief supportive counseling
- Psychotherapy
- Support groups
- · Address language and cultural barriers
- Psycho-education related to diagnosis
- Educational programs and workshops
- Resource navigation to financial, social, legal, mental health or spiritual supports

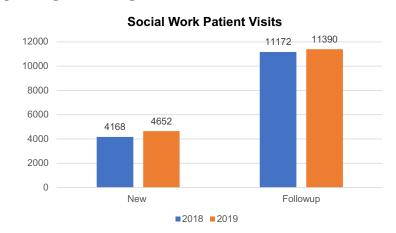


Figure 3: Social Work Patient Visits 2018-2019

CC

Patient Quote

Speaking with you gave me confidence in knowing that I am on the right track in terms of preparing for my healing. While I understand that my diagnosis is probably not my fault, I also understand that my healing is my responsibility. Thank you for your participation in this journey.



#### **PSYCHO-ONCOLOGY**

#### Volunteer Program

37 active volunteers donated over 1,836 volunteer hours in 2019 to LCI.

Service descriptions included tasks such as supporting our chemotherapy patients, peer to peer mentor, completing helpful clerical tasks, welcoming patients and wayfinding and pet therapy.

LCI Patient Volunteer

I volunteer because as a Levine Cancer Institute patient, I have gotten very good care and want to give back. I have had many favorite moments; most involve patients telling me how much they enjoy seeing my therapy dog partner, Bella. She has a very calming effect on people. It is, overall, a very rewarding experience. I continue to come back because of all of the above, the supportive staff and volunteer coordinator.



Meg Turner (Psychotherapist) and Bella, the pet therapy dog

# Cancer Resource Center

The Cancer Resource Center (CRC) serves as a hub for supportive oncology resources, patient information, educational materials, wigs and other support items for patients at LCI.

# 2018 VS 2019 TOTAL PATIENT ENCOUNTERS

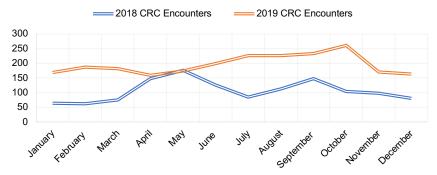


Figure 4: Cancer Resource Center Total Patient Encounters 2018-2019

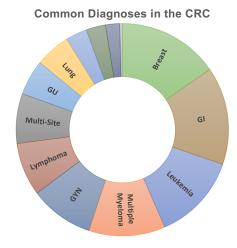


Figure 5: Cancer populations accessing the Cancer Resource Center

#### **PSYCHO-ONCOLOGY**

#### **Improving Access to Care**

Through the help of generous donors with the Atrium Health Foundation, over 400 LCI patients received gas cards. This program helped ensure that transportation was not a reason for a patient to miss or delay treatments.

Transportation support is not the only resource or service provided in our Cancer Resources Center. Below are some of the most common resources utilized by our patients!

#### Services Provided in CRC for 2019

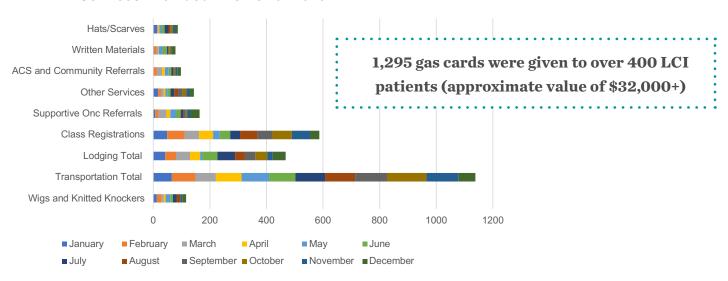


Figure 6: Services provided through the Cancer Resource Center in 2019



Annalise Sansouci, CRC Coordinator and Finly Perdomo, American Cancer Society Patient Resource Navigator in the Cancer Resource Center

#### **Outcomes**

Since 2017, **over 48,000 patients have been screened for distress** across all LCI locations with nearly **41% being referred to clinical social work** for further assessment.

18% of patients indicated clinical depression when assessed with the PHQ9.

Psycho-Oncology Clinic demonstrated **clinically significant reduction** in depression and anxiety **by the 3rd visit**.

Over **6,500 patients** were supported by the Psycho-Oncology team in 2019.



Figure 7: Primary predictors of Cancer Related Distress

#### **SENIOR ONCOLOGY**

Cancer treatment in the older population is complicated by factors related to other health problems, medications and psycho-social issues related to aging. Differentiating between the fit and frail elderly remains a challenge for practitioners. The American Society of Clinical Oncology (ASCO) recommends a comprehensive geriatric assessment (CGA) for cancer patients over the age of 65 receiving chemotherapy. The goal of the Senior Oncology Clinic is to provide comprehensive geriatric assessments and treatment recommendations for older cancer patients.

We evaluate a patient's physical, cognitive and psychosocial function, symptoms, geriatric syndromes, medications and prognosis in order to provide patient-specific interventions and predict tolerance to cancer-directed therapies.

#### **Highlights**

- Senior Oncology clinic expanded services to LCI Pineville Q2 2019.
- In 2019, our team created patient education handouts. Topics include falls, cognitive impairment, exercise, nutrition, advance care planning and depression.



Senior Oncology Team (L-R: Dr. Raghava Induru, Markecia Cooper, Tiffany Kneuss, Dr. Anthony Caprio, Dr. Armida Parala-Metz, Joanna Lankford, Dr. Daniel Haggstrom)

#### Growth

# Senior Oncology Yearly Visits 300 250 250 200 162 162 50 92 2017 2018 2019 Year

Figure 1: Senior Oncology Total Visits 2017-2019

53% increase in volume from 2018 to 2019

#### **SENIOR ONCOLOGY**

#### **Outcomes**

- Medial Karnofsky Performance Status (KPS) = 80
- 76% of patients identified with geriatric problems
- 76% of patients had medication changes post CGA
- 51% of patients had recommendation for deprescribing of medication

# 2019 Geriatric Issues Identified

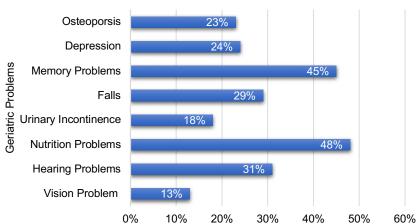


Figure 2: Geriatric issue areas identified in 2019

# Senior Oncology Retreat

Several teammates also attended the 2019 Geriatric Oncology Symposium: Cancer and Aging Research at Forefront, UNC-Chapel Hill, November 22, 2019, which featured UNC-Chapel Hill's cancer and aging research data. Dr. Supriya Mohile, geriatric oncologist at the University of Rochester Medical Center, was the keynote presenter.

Senior Oncology held a half-day retreat in July. The team gathered to review the program's history and future. Topics of discussion included restructuring the clinic, clinical collaborations, branding, patient education material and research. Great things are on the horizon for the program and our patients.



Senior Oncology Retreat



#### Research

This year, the research team worked diligently to increase research productivity. They expanded our reputation by attending national conferences and publishing work in peer-reviewed journals while seeking grant funding to support research activities and nurturing collaborations.



Supportive Oncology Research Team

#### **Research Task Forces**

The department's research strategy centers around four thematic areas: Malnutrition and Inflammation, Psycho-Oncology, Cardio-Oncology, and Cancer Pain and Opioids. Each area has a research task force, which is comprised of subject matter experts from the department, Levine Cancer Institute, Atrium Health and strategic partners within the community. The purpose of each task force is to establish partnerships and develop research projects.

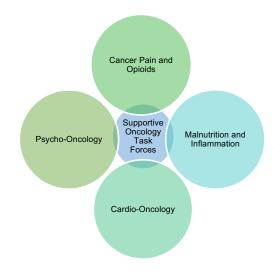


Figure 1: Department of Supportive Oncology Research Task Forces

#### **Research Meetings**

The departmental research meetings are every Friday at 8 a.m. It serves as a space to collaborate and review research concepts and protocol development. This also allows for multidisciplinary feedback on abstract, poster and manuscript submissions.

In 2019, the department research meeting consisted of a wide variety of presentations with presenters from within the department, Levine Cancer Institute and community partners.



Department of Supportive Oncology Research Team Meeting

# Research Meetings by Category 2 Grant Submissions 18 Research Concepts 9 Protocols 12 Task Force Updates 16 Manuscripts

Figure 2: 2019 Department of Supportive Oncology Research Meeting (SORM) by Category

#### **Grand Rounds**

Supportive Oncology Departmental Grand Rounds is held every Thursday at 8 a.m. Each of our sections and guest speakers have opportunities to educate the attendees with current information about the state of research as well as best clinical practices on how to treat cancer patients from the presenter's area of expertise.

Charlotte Area Health Education Center (AHEC) designates a maximum of 1.0 Continuing Medical Education (CME) credit for each Grand Rounds attended to medical, clinical and administrative staff. In 2019, an approximate 360 credits were issued to physicians, 270 to registered nurses and certified medical assistants, and 70 credits to clinical and administrative staff. Attendees outside the department were able to virtually access the meetings in 2019, making it the first year this was possible.

In 2020, we look forward to enhancing the presentations and extending access to an even larger audience within the Atrium Health network.



Department of Supportive Oncology Grand Rounds

# Symposia and Seminars

#### **Supportive Oncology Annual Retreat**

For the second year in a row, our administration team, clinicians and program leaders came together for an interdisciplinary workday. This year's topic, "The Sky's the Limit," focused on best practices in patient care and program development.



Department Chair, Declan Walsh, MD, speaking at the Supportive Oncology Annual Retreat



Department of Supportive Oncology administrative team, clinicians and program leaders at the departmental annual retreat.

#### Fourth Annual Psycho-Oncology Training Seminar

Levine Cancer Institute hosted its 4th Annual Psycho-Oncology Training Seminar. Justin Yopp, PhD, and Lauren Lux, LCSW, from University of North Carolina Chapel Hill provided the 6-hour training entitled "Underserved and Overlooked: Meeting the Psychosocial Needs of Adolescents, Young Adults and Parents with Cancer." Over 50 psycho-oncology and mental health clinicians from Levine Cancer Institute, Levine Children's Hospital, Behavioral Health and the community attended the event.

#### **Objectives:**

- 1. Identify the unique and unmet needs of adolescents, young adults and parents with cancer. (Evaluation Feedback: 4.73 out of 5)
- 2. Analyze the clinical practice, services delivery and research implication for these underserved and overlooked patient populations. (Evaluation Feedback: 4.7 out of 5)



4th Annual Psycho-Oncology Training Seminar with over 55 attendees

#### **Navigator Academy**

The 9th Annual Navigator Academy took place on October 4 in Charlotte, NC. It had excellent attendance of approximately 73 attendees. The Academy included navigators from LCI, Atrium Health and outside of the system.

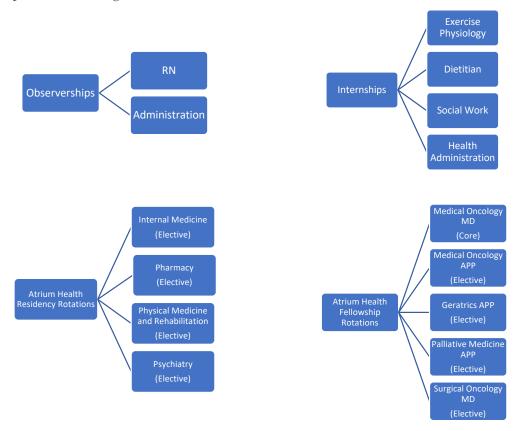
The keynote speaker for the day was Donald Warne, MD, MPH. He is the chair of the Department of Public Health at North Dakota State University and an adjunct clinical professor at the Arizona State University.



Keynote speaker Donald Warne, MD, MPH, Professor and Chair, Department of Public Health, North Dakota State University, speaking at the 9th Annual Navigator Academy on disparities and the Native American community.

#### **Education and Student Training**

The Department of Supportive Oncology hosts interns, residents and fellows each year from multiple universities and fellowship programs. These training programs consist of clinician shadowing, direct instruction, self-driven learning modules and experiential learning.



Figure~3: Department~of~Supportive~Oncology~Educational~Program

The Department of Supportive Oncology provides both core and elective rotation opportunities for Atrium Health Carolinas Medical Center Residency, Physician Fellowship and Advanced Practice Provider (APP) Fellowship programs. The Accreditation Council for Graduate Medical Education (ACGME) has recognized 11 residencies and 11 physician fellowships at Atrium Health in various specialties across the entire continuum of care.

#### Physician Fellowships

Currently, Supportive Oncology is a core rotation for the ACGME accredited Hematology and Oncology Fellowship program at Atrium Health. In 2019, the department hosted one physician fellow from the Hematology and Oncology Fellowship program and seven physician fellows in elective rotations from the ACGME accredited Surgical Oncology Fellowship program.

#### **Advanced Practice Provider Fellowships**

The Atrium Health Advanced Practice Provider Post-Graduate Specialty Care Fellowship Program offers four specialty tracks to include Psychiatry/Behavioral Health, Hematology/Oncology and Geriatrics, while the Atrium Health Advanced Practice Provider Post-Graduate Acute Care Fellowship Program offers nine specialty tracks to include Palliative Care. In 2019, the department hosted six APP fellows from the Psychiatry/Behavioral Health, Hematology/Oncology, Geriatrics and Palliative Care APP Fellowship programs.

#### Physician Residencies

In 2019, 23 physician residents, representing four ACGME accredited residency programs, completed elective rotations within Supportive Oncology:

- 13 Internal Medicine residents
- 7 Physical Medicine and Rehabilitation residents
- 2 Pharmacy residents
- 1 Psychiatry resident

#### Graduate Medical Education Supportive Oncology Curriculum

The Department of Supportive Oncology curriculum includes a basic introduction to and foundational knowledge of supportive oncology followed by more intensive education from all seven of our sections: Cancer Rehabilitation, Senior Oncology, Palliative Medicine, Psycho-Oncology, Survivorship, Integrative Oncology and Oncology Nutrition. Learners spend a week on average in each section reviewing modules and relevant journal articles, participating in pathway and guideline review and discussion, clinical observation, and simulation. Each section is responsible for their own specific learning objectives, which are evaluated by both pre- and post-testing. Post-evaluation of each rotation is required for all learners.

#### **Experiential Learning**

In addition to graduate medical education, the Department of Supportive Oncology offers a variety of other learning opportunities.

#### **Observerships**

- Administration
- RN
- ► Navigation hosted 38 nursing students
- International Learners
  - ► Cancer Rehabilitation hosted two international physician observers from China and South Korea

#### **Internships**

- The department hosted one Masters of Healthcare Administration student during their curriculum required Administrative Residency
- Oncology Nutrition hosted three student interns
- · Music Therapy provided practicum experiences to six Queens University of Charlotte Music Therapy student interns
- Psycho-Oncology hosted two social work student interns

#### Continuing Education for Staff

- Presentations for Staff
  - ▶ Nutrition and Cancer Related Fatigue Carolina's Rehabilitation
  - ► Infusion RN In-Services
  - ► Sickle Cell Disease and Nutrition
  - ► ONS Review/Taste Testing with Radiation RNs
  - ► Nutrition, Nursing and the Oncology Patient
- Continuing Education Presentations
  - ► Intermittent Fasting LCI SIO Grand Rounds
  - ► The Role of the Biome in Diabetes UNCC Diabetes Conference
  - ► State of the Survivor Plate: LCI SIO Grand Rounds

#### **ACTIVE STUDIES**

Principal Investigator: Chasse Bailey-Dorton, MD Title: Cannabidiol (CBD) Use Survey\*

Principal Investigator: Tara Eaton, PhD

**Title:** A Qualitative Investigation of the Process of Electronic Distress Screening Implementation in an Outpatient Cancer Treatment Center

Principal Investigator: Sarah Galloway, PhD

**Title:** Pain, Anxiety, Depression, and Social Support in a Large Multi-Ethnic Sample of Cancer Patients\*

**Principal Investigator:** Danielle Gentile, PhD **Title:** Physicians' and Advanced Care Practitioners' Self
Perceived Knowledge and Attitudes Toward Lesbian, Gay,
Transgender, and Queer/Questioning (LGBTQ+) Patients\*

**Principal Investigator:** Danielle Gentile, PhD **Title:** Integrative Oncology Symptom Assessment and Health Outcomes Research in Acupuncture, Healing Touch, and Massage Treatment Modalities\*

**Principal Investigator:** Danielle Gentile, PhD **Title:** *Twitter Integrative Oncology Analysis\** 

**Principal Investigator:** Rebecca Greiner, PA, PhD **Title:** Body Composition in Young Women Diagnosed with Breast Cancer\*

**Principal Investigator:** Daniel Haggstrom, MD **Title:** Pilot Study of a Tablet to Administer the Cancer-Specific
Geriatric Assessment (CSGA) in Geriatric Patients with Cancer\*

**Principal Investigator**: Jennifer Hartzell, PsyD, ABPP-CN **Title:** Knitting as a Neurocognitive Intervention Trial (K.N.I.T.): A Pilot Investigation of the Neuroplastic Potential of Knitting in Cancer Survivors\*

**Principal Investigator**: Raghava Induru, MD **Title:** Evaluating the Characteristics of Cancer Patients Seen in Senior Oncology Clinic\*

**Principal Investigator**: Kunal Kadakia, MD, FACP **Title:** Prevalence of Malnutrition in a Large Community Ambulatory Oncology Setting\*

**Principal Investigator:** Patrick Meadors, PhD, LMFT **Title:** Study of Distress Screening, Patient Reported Outcomes, Disease Features and Outcomes at Levine Cancer Institute\*

**Principal Investigator:** Sarah Mullan, MS, OTR/L **Title:** Validity of Patient Specific Function Scale in Outpatient Cancer Rehabilitation\*

**Principal Investigator:** Jai Patel, PharmD, BCOP, CPP **Title:** A Prospective, Pharmacogenomic-Driven Pilot Study of Pain Management in Oncology Outpatients\*

**Principal Investigator:** Jai Patel, PharmD, BCOP, CPP **Title:** Supportive Care Medication Use and Relevance of Pharmacogenomics in Adult Cancer Patients Presenting with High Symptom Burden\*

**Principal Investigator:** Jai Patel, PharmD, BCOP, CPP **Title:** Specimen Collection for Genomic Analysis of Cancer Patients Referred to the Center for Supportive Care and Survivorship\*

**Principal Investigator:** Petra Sprik, MDiv, MPH, BCC **Title:** Virtual Chaplaincy: Exploration of Processes, Barriers, and Strengths\*

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** CRP and Skeletal Muscle Change: Association with Subjective and Objective Patient Outcomes in Cancer. PM2015/23.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Subjective and Objective Taste and Smell Abnormalities in Cancer: A Pooled Analysis. PM 2015/24.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Complete Nutrition Supplements: Compliance, Palatability, Tolerance. PM2016/27.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** CRP and CRP-Based Prognostic Scores in Upper Gastrointestinal Cancer: A Systematic Review, PM2016/32.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

Title: CRP Kinetics to Predict Survival in Cancer. PM2016/41.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Cardiac and ANS Function in Cancer-Related Fatigue – Advanced Cancer (Feasibility Study). PM 2016/42.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Cardiac and Autonomic Nervous System Function in Cancer-Related Fatigue. PM 2016/42.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Patient Sources of Dietary or Nutritional Advice After a Solid Tumor Diagnosis. PM2017/46.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Tumoral C-Reactive Protein as a Biomarker of Outcome in Oesophageal Adenocarcinoma. PM2017/47.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Impact of Taste & Smell Abnormalities on Food Intake in Advanced Cancer. PM2018/52.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

Title: Cancer Malnutrition Screening in Hospice. PM2019/53.

#### **ACTIVE STUDIES**

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** 'What Is Early Satiety?' – Exploring the Symptom Experience of Early Satiety Ethics Complete. PM2019/54.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** The SEES Questionnaire: Pilot to Evaluate the Symptom Experience of Early Satiety. PM2019/54.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Palliative Medicine Education Quality Improvement. PM2019/55.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Cardiovascular Abnormalities in Cancer: A Scoping Review. PM2019/56.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Sarcopenia and Cardiac Muscle Loss in Oesophageal Cancer. PM2019/57.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** An Audit of the Documentation of Resuscitation Status in the Specialist Palliative Care Inpatient Unit in Our Lady's Hospice. PM2019/58.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** The Use of Denosumab to Treat Hypercalcemia of Malignancy: A Systematic Review. PM2019/59.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Variables Associated with Place of Death in Ireland. A study Using CSO Data. PM2019/60.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** The Clinical Characteristics of Early Satiety – A Scoping Review. PM2019/61.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** The Prevalence and Symptom Clusters of Early Satiety in a Mixed Cancer Cohort. PM2019/62.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Effects of Satiation on Nutritional Intake in Healthy Volunteers. PM2019/63.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Effects of Early Satiation on Nutritional Intake in Pancreatic Cancer. PM2019/64.

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** Evidence-based Cancer Nutritional Information: A Scoping Review

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

Title: Onco-Nutrition Group Project

**Principal Investigator:** Declan Walsh, MD, MSc, FACP, FRCP(Edin)

**Title:** UCD MSc Dietetics Project (New Study in planning)

**Principal Investigator:** Susan Yaguda, MSN, RN **Title:** Registered Nurse Perceptions of Knowledge and Attitudes Toward Complementary and Integrative Medicine in the Oncology Ambulatory Setting\*

**Principal Investigator:** Susan Yaguda, MSN, RN **Title:** *Guided Imagery as a Tool for Reducing Anxiety Associated with Stereotactic Radiosurgery\** 

\*Designates a study in which Levine Cancer Institute Department of Supportive Oncology is the prime department.

#### **Active Studies**

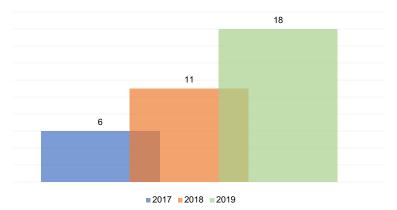


Figure 1: Number of active studies within the Department of Supportive Oncology 2017-2019

#### **PUBLICATIONS**

- Blackley, K., Kline, R., Rocque, G., Rohan, E., Cantril, C., Pratt-Chapman, M., Burris, H., Shulman, L. Patient Navigation in Cancer: The Business Case to Support Clinical Needs. Journal of Oncology Practice. 2019. 15:11, 585-590.
- Blair-Kennedy, A. and Gentile, D. Discussing Oncology Massage Research: An Interview with Danielle Gentile, PhD. International Journal of Therapeutic Massage and Body Work. 12 (3) 1-2. 2019.
- Chow, R., Bruena, E., Arends, J., Walsh, D., Strasser, F., Isenring, E., Del Fabbro, E., Molassiotis, A., Krishnan, M., Chiu, L., Chiu, N., Chan, S., Tang, T., Lam, H., Lock, M., DeAngelis, C. Enteral and parenteral nutrition in cancer patients, a comparison of complication rates: an updated systematic review and (cumulative) meta-analysis. Supportive Care in Cancer. doi: 10.1007/s00520-019-05145-w. 2019.
- Ciaran, K., Regan, J., Balding, L., Higgins, S., O'Leary, N., Kelleher, F., McDermott, R., Armstrong, J., Mihai, A., Tiernan, E., Westrup, J., Thirion, P., Walsh, D. Dysphagia Prevalence and Predictors in Cancers Outside the Head, Neck, And Upper Gastrointestinal Tract. Journal of Pain and Symptom Management. doi: 10.1016/j.jpainsymman.2019.06.030.
- Gentile, D., Blake, S., Greiner, R., Kneuss, T., Spencer, L., Yaguda, S., Bailey-Dorton, C., Parala-Metz, A. Integrative and Palliative Medicine Synergy: Structures and Solutions (in press). Journal of Alternative and Complementary Medicine.
- Gentile, D., Boselli, D., Flores, M., Yaguda, S., Greiner, R., Campbell, P., Bailey-Dorton, C. Anxiety Improvement After Oncology Massage (under review at OBM Integrative and Complementary Medicine).
- Gentile, D., Boselli, D., Yaguda, S., Bailey-Dorton, C., Greiner, R. Pain improvement after healing touch and massage in breast cancer. OR 10-17-17E OBM. Integrative and Complementary Medicine.
- Lorton, C.M., Griffin, O., Higgins, K., Roulsto, F., Stewart, G., Gough, N., Barnes, E., Aktas, A., Walsh, D. Late Referral of Cancer Patients with Malnutrition to Dietitians: A Prospective Study of Clinical Practice. Supportive Care in Cancer. 1-10 doi: 10.1007/s00520-019-05042-2. 2019.
- Lyons, K.D., Padgett, L.S., Marshall, T.F., Greer, J.A., Silver, J.K., Raj, V.S., Zucker, D.S., Fu, J.B., Pergolotti, M., Sleight, A.G., Alfano, C.M. Follow the trail: Using insights from the growth of palliative care to propose a roadmap for cancer rehabilitation. CA: A Cancer Journal for Clinicians, 69(2), 113-126. doi: 10.3322/caac.21549. 2019.
- Marshall, T.F., Alfano, C.M., Sleight, A.G., Moser, R.P., Zucker, D.S., Rice, E.L., Silver, J.K., Raj, V.S., Fu, J.B., Padgett, L.S., Lyons, K.D., Radomski, M.V., McKenna, R., Pergolotti, M. Consensus-Building Efforts to Identify Best Tools for Screening and Assessment for Supportive Services in Oncology. Disability and Rehabilitation, doi: 10.1080/09638288.2018.1555621. [Epub ahead of print] 2019.
- McGettigan, N., Dhuibhir, P.U., Barrett, M., Sui, J., Balding, L., Higgins, S., O'Leary, N., Kennedy, A., Walsh, D. Subjective and Objective Assessment of Taste and Smell Sensation in Advanced Cancer. American Journal of Hospice and Palliative Medicine. doi: 10.1177/1049909119832836. 2019.
- Miller, K.R., Patel, J.N., Symanowski, J.T., Edelen, C.A, Walsh, D. Acupuncture for Cancer Pain and Symptom Management in a Palliative Medicine Clinic. American Journal of Hospice and Palliative Medicine; 36(4):326-332. doi:10.1177/1049909118804464.2019.
- O'Connor, B., Markicevic, M., Newman, L., Poduval, R.K., Tiernan, E., Hanrahan, E., Cuffe, S., Reilly, R.B., Walsh, D. Clinical Utility of Portable Electrophysiology to Measure Fatigue in Treatment-Naive Non-Small Cell Lung Cancer. Support Care Cancer. 27(7):2617-2623. doi: 10.1007/s00520-018-4542-1. 2019.
- O'Donoghue, N., Shrotriya, S., Aktas, A., Hullihen, B., Ayvaz, S., Estfan, B., Walsh, D. Clinical Significance of Weight Changes at Diagnosis in Solid Tumours. Supportive Care in Cancer. 27(7):2725-2733. doi: 10.1007/s00520-018-4551-0. 2019.
- O'Higgins, C.M., Brady, B., O'Connor, B., Walsh, D., Reilly, R.B. Pathophysiology of Cancer-Related Fatigue: Current Controversies. Support Care Cancer. 26(10):3353-3364. doi: 10.1007/s00520-018-4318-7. 2019.
- Patel, J.N., Boselli, D., Hamadeh, I., Symanowski, J., Edwards, R., Susi, B., Greiner, R., Baldassare, D., Waller, M., Wodarski, S., Turner, S., Slaughter, C., Edelen, C. Pain Management Using Clinical Pharmacy Assessments With and Without Pharmacogenomics in an Oncology Palliative Medicine Clinic. JCO Oncology Practice. 16:2, e166-e174. 2019.

#### **PUBLICATIONS**

- Pugh, T.M., Edeker J., Lorden B., Raj V.S. Brain Tumor Rehabilitation. In A. Cristian (ed.), Central Nervous System Cancer Rehabilitation (pp. 35-48). St. Louis, MO: Elsevier, Inc. 2019.
- Raj, V.S. and Pugh, T.M. Inpatient Cancer Rehabilitation. In M.D. Stubblefield (ed.), Cancer Rehabilitation, Principles and Practice, Second Edition (pp. 880-896). New York, NY: Spring Publishing Company, LLC. 2019.
- Raj, V.S., Pugh, T.M. Yaguda, S.I., Mitchell, C.H., Mullan, S.S., Garces, N.S. The Who, What, Why, When, Where, and How of Team-Based Interdisciplinary Cancer Rehabilitation. Semin Oncol Nurs. doi: 10.1016/j.soncn.2019.150974. [Epub ahead of print] Review. 2020.
- Silver, J.K., Raj, V.S., Knowlton, S.E., Ruppert, L.M., Molinares, D.M. Rehabilitation for Patients with Cancer Diagnoses. In W.R. Frontera (ed.), DeLisa's Physical Medicine and Rehabilitation (pp. 820-846). Philadelphia, PA: Wolters Kluwer. 2020.
- Sprik, P.J. The Depersonalization of Medicine and the Promises of Spiritual Care. Society. 56: 147-152. 2019.
- Sprik, P.J. and Gentile, D. Cultural humility: A Way to Reduce LGBTQ Health Disparities at End of Life. American Journal of Hospice and Palliative Care. 2019.
- Tiernan, E., Ryan, J., Casey, M., Hale, A., O'Reilly, V., Devenish, M., Whyte, B., Hollingsworth, S., Price, O., Callanan, I., Walsh, D., Normand, C., May, P. A Quasi-Experimental Evaluation of An Intervention to Increase Palliative Medicine Referral in The Emergency Department. Journal of Health Services Research & Policy. 2019 24(3); 155-163 doi: 10.1177/1355819619839087.
- Uí Dhuibhir, P., Barrett, M., Gillham, C., El Beltagi, N., Walsh, D. Objective and Subjective Taste and Smell Evaluation in Treatment- Naïve Solid Tumour Patients. Supportive Care in Cancer. JSCC-D-18-01321. 2019.
- Uí Dhuibhir, P., Barrett, M., O'Donoghue, N., Gillham, C., El Beltagi, N., Walsh, D. Self-Reported and Objective Taste and Smell Evaluation in Treatment- Naive Solid Tumour Patients. Support Care Cancer. doi 10.1007/s00520-019-05017-3. 2019.
- Uí Dhuibhir, Collura, N., Walsh, D. Complete Oral Nutritional Supplements: Dietitian Preferences and Clinical Practice. Journal of Dietary Supplements. (1):40-50. doi: 10.1080/19390211.2018.1428260. 2019.
- Walsh, D. Is Inpatient Hospice Care Clinically Effective? Using Phase of Illness to Evaluate Care Outcomes for Patients Admitted to a Specialist Palliative Care Unit in Ireland. Journal of Palliative Medicine. DOI: 10.1089/jpm.2019.0295. 2019.
- Walsh, D., Szafranski, M., Aktas, A., Kadakia, K.C. Malnutrition in Cancer Care: Time to Address the Elephant in the Room. Journal of Oncology Practice. doi: 10.1200/ JOP 19.00165. 2019.
- Yaguda, S. and Gentile, D. Group Acupuncture Care Model in a Cancer Institute: Improved Access, Reduced Cost. Journal of Alternative and Complementary Medicine. (2019) 25 (7) 675-677.
- Yaguda, S. Yoga as a Healing Practice During Cancer and Beyond. Conquer, The Patient Voice. Patient Advocacy Journal. 5(1). 2019.
- Yaguda, S. Knit One, Purl One: Knitting as a Healing Art. Conquer, The Patient Voice. Patient Advocacy Journal. 5(4). 2019.



Team members publications on display in the Department of Supportive Oncology

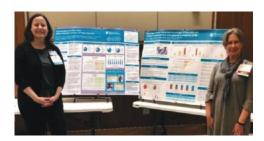
#### **ABSTRACTS AND POSTER PRESENTATIONS**

- Barrett, M., Ui Dhuibhir, P., Njoroge, C., Walsh, D. Diet and Nutrition Advice for Patients on National Cancer Organisation Websites. Poster Abstract. (2019).
- Barrett, M., Ui Dhuibhir, P., Njoroge, C., Walsh, D. Cancer Organisation Websites: Dietary and Nutritional Advice for Symptom Management. Moving Points in Palliative Care Annual Conference Poster Abstract. Dublin, Ireland (March 2019).
- Black, A., Ui Dhuibhir, P., Barrett, M., Walsh, D. An Audit Regarding the Management of Opioid Induced Constipation in Children. Annual Irish Association for Palliative Care (IAPC) Education & Research Seminar Poster Abstract. Kilkenny, Ireland (February 2019).
- Brady, B., Barrett, M., Kennedy, M.J., Cuffe, S., Murphy, R.T., Walsh, D. Heart Rate Variability in Cancer Related Fatigue. Indian Association of Palliative Care Poster Abstract. India (February 2019).
- Brady, B., Barrett, M., King, G., Kennedy, M.J., Cuffe, S., Murphy, R.T., Walsh, D. Cardiac Function in Cancer-Related Fatigue. Indian Association of Palliative Care. India (February 2019).
- Brady, B., Barrett, M., Kennedy, M.J., Cuffe, S., Murphy, R.T, Walsh, D. Cardiac Muscle Function in Cancer-Related Fatigue. Inaugural UCD College of Health and Ag Science Graduate Research Symposium Poster Abstract. Dublin, Ireland (March 2019).
- Brady, B., Barrett, M., King, G., Kennedy, M.J., Cuffe, S., Cunningham, M., Murphy, R.T., Walsh, D. Cardiac Muscle Function in Treatment Naïve Patients with Cancer-Related Fatigue. 9th International Seminar of the European Palliative Care Research Centre Poster Abstract. Krems, Austria (October 2019).
- Galloway, S., Boselli, D., Walsh, D. Anxiety, Depression, Pain, and Social Support in a Large Representative Cancer Population. American Society of Clinical Oncology Supportive Care Poster Presentation – Abstract. San Francisco, CA (October 2019).
- Garces, N. Survivorship Care Plan Visits: Mixed Methods Analysis of Patient Surveys. 8th Annual Atrium Health Nursing Research Symposium. Poster Presentation. Kannapolis, NC (2019).
- Gentile, D. Clinicians Knowledge & Attitudes Toward LGBTQ+ Patients. American Public Health Association (APHA) Annual Meeting Poster – Abstract. Philadelphia, PA (November 2019).



Sarah Galloway, PhD, poster presentation for ASCO

- Gentile, D., Boselli, D., Yaguda, S., Greiner, R., Baliey-Dorton, C. Longitudinal Pain Response to Acupuncture. Multinational Association of Supportive Care in Cancer (MASCC) Annual Meeting Poster Abstract. San Francisco, CA (June 2019).
- Hablani, S., O'Higgins, C.M., Walsh, D., Reilly, R. Neural Based Assessment of Mind Wandering During A Fatigue-Inducing Motor Task: Is Task Failure Due to Fatigue or Distraction? 9th International IEEE/EMBS Conference on Neural Engineering (NER), 45-48 Poster Abstract. San Francisco, CA (March 2019).
- Hartzell, J.W., Yaguda, S., Boselli, D., Philmon, M., Greth, Z., Garces N. Feasibility of Knitting as a Novel Neurocognitive Intervention in Cancer Survivors with Cognitive Impairment and Distress. Annual International Conference of the Society for Integrative Oncology Poster Abstract. New York, NY (October 2019).
- Hartzell, J.W., Sangermano, S., Boselli, D., Meadors, P. Cancer Patients' Subjective Cognitive Distress and Utilization of Neuropsychological Services. Annual Meeting of the International Neuropsychological Society Poster – Abstract. New York, NY (February 2019).



Nurses Natalie Garces and Susan Yaguda presenting at the 8th Annual Atrium Health Nursing Research Symposium

Joyce, D., Leong, C.S., Barrett, M., Leong, C.L., Walsh, D. Clinical Utility of Heart Rate Variability as a Prognostic Marker in Advanced Cancer. Moving Points in Palliative Care Annual Conference Poster – Abstract. Dublin, Ireland (March 2019).

#### ABSTRACTS AND POSTER PRESENTATIONS

- Lorton, C., Kattan, M., Xinge, J., Lysaght, J., Walsh, D. CRP Kinetics as A Predictor Of Survival In Cancer. Moving Points in Palliative Care Annual Conference Poster - Abstract. Debbie Hayden Poster Award. Dublin, Ireland (March 2019).
- Meadors, P., Trufan, S., Walsh, K., Walsh, D. Patient-Reported Outcomes and Predictors of Distress. American Society of Clinical Oncology Annual Conference Poster - Abstract. Chicago, IL (June 2019).
- O'Donnell, M., Lorton, C., Brady, B., O'Connor, B., O'Meachair, A., O'Leary, N., Walsh, D. Comment on "Bioelectrical Impedance Phase Angle and Morbidity and Mortality in Critically III Children". Nutrition in Clinical Practice: official publication of the American Society. doi 10.1002/ncp.10311. (May 2019).
- Patrick Meadors, PhD, presenting poster at ASCO
- Patel, J. Cancer Pain Management Using Pharmacogenomic (PGx) in an Oncology Palliative Medicine Clinic. American Society of Clinical Oncology, Supportive Care in Oncology Symposium Poster - Abstract. San Francisco, CA (October 2019).
- Patel, J., Boselli, D., Jandrisevits, E., Hamadeh, I., Salem, A., Meadors P. Supportive Care Medications (SCMs) and Pharmacogenomics (PGx) Relevance in 6,985 Cancer Patients (pts) Undergoing Distress Screening. American Society of Clinical Oncology Annual Conference Poster - Abstract. Chicago, IL (June 2019).
- Patel, J., Boselli, D., Symanowski, J., Wodarski, S., Turner, S., Slaughter, C., Waller, M., Baldassare, D., Edwards, R., Susi B., Greiner, R., Edelen C. Pharmacogenomics (PGx) Guided Cancer Pain Management in an Oncology Palliative Medicine (PM) Clinic. American Society of Clinical Oncology, Supportive Care in Oncology Symposium Poster - Abstract. San Francisco, CA (October 2019).
- Salo, J., Meadors, P., Trufan, S., Gower, N., Watson, M., Jeck, L., Hill, J., Walsh D. Patient-reported Distress and Symptoms Predict Post-Esophagectomy Outcome. American Society of Clinical Oncology Annual Conference Poster - Abstract. Chicago, IL (June 2019).
- Shrotriya, S., Abro, C., Rous, F.A., Trimmer, R., Sharma, M., Rayamajhi, S., Walsh, D. Swallow Screen and Test in Cancer Patients. Journal of Clinical Oncology 37 (15 suppl) e18288-e18288. (2019).
- Shrotriya, S., Estfan, B.N., Sharma, M., Rayamajhi, S., Walsh, D. Patient Reported Outcomes in Cancer Patients: Psychological, Physical and Functional Importance. Journal of Clinical Oncology 37 (15 suppl) e18209-e18209. (May 2019).
- Uí Dhuibhir, P., Barrett, M., Black, A., Walsh, D. Subjective and Objective Taste and Smell Abnormalities in Cancer A Pooled Analysis. Moving Points in Palliative Care Annual Conference Poster – Abstract. Dublin, Ireland (March 2019).
- Walsh, D. on behalf of Onco-Nutrition Group. Patient Sources of Dietary and Nutritional Information after a Cancer Diagnosis. Multinational Association of Supportive Care in Cancer (MASCC) Conference ePoster - Abstract. San Francisco, CA (June 2019).
- Yaguda, S. Oncology Nurses' Perceived Knowledge of and Attitudes Toward Complimentary and Integrative Medicine. Atrium Health Nursing Research Symposium Poster - Abstract. (2019).
- Yaguda, S. Do Ask, Do Tell: The Influence of Attitudes and Perceived Knowledge on Nurses' Conversations About Patients' Use of Complementary and Integrative Medicine. Planetree International Conference on Person-Centered Care Poster - Abstract. (2019).
- Yaguda, S., Boselli, D., Bount, K. Oncology Nurses Perceived Knowledge of and Attitudes Toward Complementary and Integrative Medicine. Annual International Conference of the Society for Integrative Oncology Poster - Abstract. New York, NY (October 2019).

#### **ORAL PRESENTATIONS**

- Bailey, J. and Price, M. Loaded Language: War and Other Cancer Metaphors and Their Impact on Patient Narratives. Oral Presentation. AOSW 35th Annual Conference. Tucson, AZ (June 2019).
- Blackley, K. Nurse Led Patient Navigation Outcomes. Oral Presentation. LCI Nursing Research. Charlotte, NC (September 2019).
- Dussault, L., Dvorkin-Wininger, Y., Cooper, C., Lankford, J. Interdisciplinary Management of Chemotherapy Induced Peripheral Neuropathy. Oral Presentation. The American Congress of Rehabilitation Medicine 96th Annual Conference. Chicago, IL (November 2019).
- Edwards, R. CAPC Presentation. (2019).
- Falbo-Woodson, K. Oral presentation and media highlight at ASCO Supportive Care. (2019).
- Fleischer, A., Pugh, T.M., Cantera, K., Mullan, S., Lankford, J. Culturally Competent Communication with People Diagnosed with Cancer. Oral Presentation. The American Congress of Rehabilitation Medicine 96th Annual Conference. Chicago, IL (November 2019).
- Galloway, S., Meadors, P., Boselli, D., and Walsh, D. Anxiety, Depression, Pain and Social Support in a Large Representative Cancer Population. Oral presentation. ASCO Supportive Care Conference. San Francisco, CA (October 2019).
- Garces, N. Improving Your Health Through Survivorship Care Planning. North Carolina Cancer Prevention and Control Branch Survivorship Summit. Durham, NC (April 2019).
- Garces, N. and Rapisardo, T. The Importance of Survivorship Care Plans for Transition Back to Primary Care. Oral Presentation. South Carolina Cancer Alliance's Survivorship Evidence Academy. Columbia, SC (May 2019).
- Garces, N. Survivorship Care Plans: Navigating the Transition from Active Treatment. Oral Presentation. NCONA Annual Conference: Navigation Interventions in Supportive Care. Chapel Hill, NC (June 2019).



Sarah Galloway, PhD, presenting at ASCO



Department of Supportive Oncology was a bronze level sponsor for the 2019 North Carolina Cancer Prevention and Control Branch Survivorship Summit

- Gentile, D., Boselli, D., Yaguda, S., Bailey-Dorton, C. and Greiner, R. Longitudinal
  Pain Response to Acupuncture. Oral Presentation. Society for Integrative Oncology. New York, NY (October 2019).
- Gentile, D. Cancer Pain Relief After Healing Touch and Massage. Oral Presentation. American Massage Therapy Association National Convention. Indianapolis, IN (October 2019).
- Gentile, D. Expert Session: Using Social Media. Oral Presentation. MASCC Annual Meeting. San Francisco, CA (June 2019).
- Gentile, D. Twitter Integrative Oncology Analysis. Oral Presentation. American Public Health Association Annual Meeting (November 2019).
- Haggstrom, D. Advances in NeuroOncology for the Adult and Elderly Populations. Oral Presentation. Atrium Health NSI and CNSA Neurosciences Symposium (October 2019).
- Haggstrom, D. Geriatric Oncology: The Three-Year Experience at Atrium Health. Oral Presentation. Atrium Health Lung Cancer Summit (November 2019).
- Lankford, J. Oral Presentation. American Congress of Rehabilitation Medicine Conference (November 2019).
- Meadors, P. and Falbo-Woodson, K. Enhancing Competency with a Suicide Prevention Program in Oncology. Oral Presentation. APOS Conference, Atlanta, GA (February 2019).
- Mullan, S. Oral Presentation. American Congress of Rehabilitative Medicine Conference (November 2019).



Danielle Gentile, PhD, presenting at SIO

#### **ORAL PRESENTATIONS**

- Pugh, T.M., Raj, V.R., Kirch, R.A., Mullan, S. Person-Centered Care: The Essential Ingredient for Achieving Quality and Value. Oral Presentation. The American Congress of Rehabilitation Medicine 96th Annual Conference. Chicago, IL (November 2019).
- Raj, V.S. Cancer Rehabilitation: Global Perspectives for the Delivery of Care. Oral Presentation. The 13th World Congress of the International Society of Physical and Rehabilitation Medicine. Kobe, Japan (June 2019).
- Raj, V.S. Financial Aspects of Cancer Rehabilitation Delivery. Oral Presentation. Current Concepts in Cancer Rehabilitation at Penn State Health. Hershey, PA (March 2019).
- Smith, H. Returning to Work Post Treatment: Preparation is Key. Brain Tumor SIG Oral Presentation. AOSW 35th Annual Conference. Tucson, AZ (June 2019).
- Sprik, P. A Review of Emerging Research in the Field. Oral Presentation. Association of Professional Chaplains Conference. Orlando, FL (June 2019).



Hannah Smith, LCSW, OSW-C, presenting at AOSW

- Sprik, P. Spiritual Care for Cancer Patients. Oral Presentation.

  Atrium Health Pastoral Care Residents. Charlotte, NC (June 2019).
- Sprik, P. Compassion Fatigue. Thoracic Clinic CME. Charlotte, NC (September 2019).
- Sprik, P. Spiritual Care at Levine Cancer Institute. APP Fellows Onboarding. Charlotte, NC (October 2019).
- Sprik, P. Reflection. Shine a Light Lung Vigil. Charlotte, NC (November 2019).
- Sprik, P. An Introduction to Qualitative and Quantitative Research. Atrium Health Pastoral Care Residents. Charlotte, NC (November 2019).
- Sprik, P. Spiritual Care in Oncology, Grand Rounds at Levine Cancer Institute, Charlotte, NC (December 2019).
- Turner, J. CAPC Presentation. (2019).
- Walsh, D. Opioid Addiction in Cancer Patients: Prevention and Management. Oral Presentation. MASCC Annual Meeting. San Francisco, CA (June 2019).
- Walsh, D. Supportive Oncology and Modern Cancer Care. Oral Presentation. North Carolina Oncology Association Annual Conference. Cary, NC (September 2019).
- Wilson, A. and Jamerson, A. Combating Moral Distress with Ethical Decision-Making. Oral Presentation. AOSW 35th Annual Conference. Tucson, AZ (June 2019).
- Yaguda, S. International Consortium for Integrative Medicine and Health. (2019).
- Yaguda, S. International Symposium for Integrative Nursing. (2019).
- Yaguda, S. Planetree International Conference on Person-Centered Care. (2019).



Joanna Lankford, PT; Terrence Pugh, MD; Sarah Mullan, OT; and Vishwa Raj, MD, present on Cancer Rehabilitation topics at the ACRM Conference

GRAND ROUNDS				
01/10/19	Michael Stubblefield, MD	The Role of Rehabilitation in Comprehensive Cancer Care Levine Cancer Institute		
01/17/19	Samuel Zimmern, MD	LCI Supportive Onc-Cardio Oncology - Review and Analysis of the First Year		
01/24/19	Kris Blackley, RN, MSN, BBA, OCN	The Importance of Navigating Quality and Metrics: A Case Study		
01/31/19	Daniel Haggstrom, MD	To Operate or Not to OperatePrimary Breast Cancer Surgery in Geriatric Nursing Home Patients		
02/07/19	Armida Parala-Metz, MD Tiffany Kneuss, PharmD Paula Knight, RN	Opioid-Induced Constipation		
02/14/19	Jimmy Hwang, MD	Palliation in Unresectable Pancreatic Adenocarcinoma		
02/28/19	Susan Yaguda, MSN, RN	Art in Healthcare		
03/07/19	Della Franklin MSP, CCC-SLP I	Dysphagia in Head and Neck Cancer		
03/14/19	John E. Barkley, MD	Timing of Palliative Care Consultation and the Impact on 30-Day Readmissions and Inpatient Mortality		
03/28/19	Danielle Gentile, PhD	Complementary Medicine, Refusal of Conventional Cancer Therapy and Survival Among Patients with Curable Cancers		
04/04/19	Armida Parala-Metz, MD	Takeaways From a Prehabilitation Workshop		
04/11/19	Sarah Galloway, PhD	Psychological and Behavioral Approaches to Cancer Pain		
04/18/19	Raghava Induru, MD	Clinical Case: Breast Cancer		
04/25/19	Aynur Aktas, MD	Supportive Oncology: Highlights of Research Expertise		
05/02/19	Anandhi Narasimhan, MD	BRCA Gene Mutation Testing and Psychological Outcomes		
05/09/19	Joanna Edeker-Lankford, PT	The Role of Dry Needling in Cancer Rehab		
05/23/19	Chasse Bailey-Dorton, MD	Integrating Nutritional Strategies Into Routine Oncology Practice to Reduce Toxicities and Improve Outcomes		
05/30/19	Laura Kabrich RN, BSN, BA Psych, ACM	Case Studies in Navigating the Head and Neck Patient: Standardization of Navigation Using Pathways		
06/06/19	Jessica Turner, AGPCNP-BC Rebecca Edwards MSN, RN, AGPCNP-BC, AOCNP	Implementing an Interdisciplinary Team Meeting for Palliative Medicine		
06/13/19	Armida Parala-Metz, MD	Geri-Pal-Surg -Onc: Transdisciplinary Care Approach in Older Cancer Patients		
06/20/19	Paulomi R. Campbell, PhD	Addressing Psychological Needs in Metastatic Breast Cancer with Mindfulness Based Cognitive Therapy		
06/27/19	Annelise Savodnik PT, MPT, CLT, RYT-200	Orthopedic Considerations Following Breast Cancer Treatment		

GRAND ROUNDS				
07/11/19	Marc W. Haut, PhD, ABPP	Brain Plasticity: Why We Care About Taxi Drivers and How This May Improve Outcomes in Cancer		
07/18/19	Omer Kucuk, MD, FACN	Integrative Oncology in Cancer Prevention, Treatment and Survivorship		
07/25/19	Danielle Gentile, PhD	Technological Research Tools		
08/01/19	Megan Hagler, RN, BSN, OCN	The Nurse Navigator As Part of the Multidisciplinary Team		
08/08/19	Paula Knight, RN	ONS 44th Annual Congress: My Impressions and Takeaways		
08/15/19	Thomas Rapisardo, MD	Chemo Brain and Its Cousins		
08/22/19	Asim Amin MD PhD	Malignant Melanoma – How to Approach the Patient 2019		
08/29/19	Aynur Aktas, MD Danielle Gentile, PhD	Grant Proposal Planning and Development		
09/05/19	James B. Hall, MD	A Primer on Gyn Cancers and Complications of Their Treatment		
09/12/19	Della Mann, SLP II, ST	Speech Therapy Needs for the Laryngectomee		
09/19/19	Patricia Fogarty, MA, RDN, LDN	The State of the Patient Plate – Getting Survivors to Eat Better Through LCI Nutrition Classes		
09/26/19	Danielle Gentile, PhD	Cancer Pain Relief After Healing Touch and Massage		
10/10/19	Shenita Spencer-Moore, MD	Journal Club – Palliative Medicine		
10/17/19	Dean Quick	Music Therapy Goes High Tech		
10/24/19	Mike Brennan, MD	Overview of Oral Complications of Cancer Therapies		
10/31/19	Brittany Lorden, MHS, OTRL/L, CLT	Addressing Cancer Pain and CIPN: The Occupational Therapist's Role		
11/07/19	Alicia Wilson, LCSW Amy Jamerson, LCSW, OSW-C	Moral Distress for Grand Rounds		
11/14/19	Aynur Aktas, MD	Knowledge Synthesis and Scoping Reviews		
11/21/19	Egidio Del Fabbro, MD	Practical Considerations for a Cancer Cachexia Clinic		
12/05/19	Petra Sprik, MDiv, MPH, BCC	Spiritual Care in Oncology What Is It? Why Does It Matter? What Can I Do?		
12/12/19	Lorna Espinal, RN, MSN	Navigating Hispanics/Latinos with Cancer		
12/19/19	Tiffany Kneuss, PharmD, BCGP, CPP	Urine Drug Tests (UDTs) in Oncology		

**Awards** 

Integrative Nancy Rushing, LMBT Key Engagement Award Program (KEAP)

Dean Quick, MT-BC SER-AMTA Professional Practice Award

Navigation Lorna Espinal, MSN, RN Daisy Award

Lisa Pye, BSN, RN, OCN Daisy Award

Nutrition Michele Szafranski, MS, RDN,

CSO, LDN

Key Engagement Award Program (KEAP)

Psycho-Oncology Hannah Smith, LCSW Key Engagement Award Program (KEAP)

Bryan Kluttz, LCSW Key Engagement Award Program (KEAP)

Anne Kinlaw, LCSW, OSW-C Pinnacle Award Nomination

Antranique Neblett, LCSW Key Engagement Award Program (KEAP)

Senior Oncology Daniel Haggstrom, MD 3rd Quarter - Central Division's Provider of

the Quarter Award - LCI

Acknowledgements

Cancer Rehabilitation Joanna Lankford, PT, DPT, Certified Lymphedema Therapist

CMTPT, CLT

Della Mann, MSP, CCC-SLP II Level II Therapist

Sarah Mullan, MS, OTR/L Selected to give oral presentations at the American

Congress of Rehabilitative Medicine Conference

Terrance Pugh, MD Selected to give oral presentations at the American

Congress of Rehabilitative Medicine Conference

Joanna Lankford, PT, DPT,

CMTPT, CLT

Selected to give oral presentations at the American Congress of Rehabilitative Medicine Conference

Vishwa Raj, MD Charlotte Magazine 2019 Top Doctors

Fellow Luke Farmer, MD Merit award from The ASCO Foundation and the 2019

Supportive Care Oncology Program Committee for his

work on Senior Oncology's abstract for ASCO's Supportive Care in Oncology Symposium. The Merit Award honors early career oncologists' research activities and recognizes young scientists.

Integrative Susan Yaguda, MSN, RN Presented webinar for the International Consortium for

Integrative Medicine and Health

Susan Yaguda, MSN, RN Gave oral presentation at the International Symposium for

**Integrative Nursing** 

Susan Yaguda, MSN, RN Gave oral presentation at the Planetree International

Conference on Person-Centered Care

Navigation Sheila Newsome, RN Pinnacle Award Nomination

Megan Hagler, RN, BSN Earned OCN Certification

Karen Goad, RN, BSN Earned OCN Certification

Palliative Medicine Latoya Spencer, MSN, RN,

NE-BC, DNP

Doctor of Nursing

Latoya Spencer, MSN, RN,

NE-BC, DNP

Pinnacle Award Nomination

Latoya Spencer, MSN, RN,

NE-BC, DNP

Selected as a Peer Reviewer for the Clinical Journal of Oncology Nursing, Publisher Oncology Nursing Society

Beth Susi, MD, FACP, FAAHPM Appointed to ABIM Task Force

Jessica Turner, MSN, RN, AGPCNP-BS, AOCNP Selected to give CAPC Presentation

Rebecca Edwards, MSN, RN,

AGPCNP-BC, AOCNP

Selected to give CAPC Presentation

Heidi Ruchti, BSN, RN Earned certification in Hospice and Palliative Care Nursing

Tiffany Kneuss, PharmD Became Board Certified Geriatric Pharmacist

Psycho-Oncology Anne Kinlaw, LCSW, OSW-C Pinnacle Award Nomination

Amy Jamerson, LCSW, O-SWC Selected to provide a 90-minute presentation at AOSW

Alicia Wilson, LCSW Selected to provide a 90-minute presentation at AOSW

Hannah Smith, LCSW Selected to provide a SIG presentation at AOSW

Margaret Price, LCSW Gave an oral presentation at AOSW

Jordan Bailey, LCSW Gave an oral presentation at AOSW

Kathryn Falbo-Woodson, LCSW Selected for an oral presentation and media highlight at ASCO

Supportive Care

Patrick Meadors, PhD, LMFT Selected for an oral presentation and media highlight at ASCO

Supportive Care

Patrick Meadors, PhD, LMFT Had a poster presentation selected for ASCO

Loula Kontoulas, LMFT Recipient of The Society for Integrative Oncology (SIO)

SIO2019 Pre-Conference Workshop Clinician Stakeholder Scholarship to participate in Sleeping Well After Cancer: Translating Patient-Centered Research into Practice

Hannah Smith, LCSW Promoted to Clinical Social Worker

Sharon Hurff, LCSW Promoted to Clinical Social Worker

Latonia Hopper, LCSW Promoted to Clinical Social Worker

Danielle Gentile, PhD Gave oral panel presentation at Multinational Association of Research Supportive Care in Cancer Danielle Gentile, PhD Invited oral presentation at American Massage Therapy Association Danielle Gentile, PhD Invited oral presentation at American Public Health **Association Cancer Forum** Danielle Gentile, PhD Selected for oral presentation at Society of Integrative Oncology Danielle Gentile, PhD Pinnacle Award Nomination Aynur Aktas, MD Received appointment as Assistant Professor Senior Oncology Daniel Haggstrom, MD Charlotte Magazine 2019 Top Doctors Survivorship Natalie Garces, MSN, RN, OCN Master of Science in Nursing (MSN) Adult Geriatric Acute Care Nurse Practitioner Natalie Garces, MSN, RN, OCN Bachelor of Science in Health Administration Karissa Price, RMA **Leadership Service** Administration Beth York, MA, LPC Member, American Cancer Society Advisory Board for Western NC & SC Cancer Rehabilitation Vishwa Raj, MD Co-Chair, American Congress of Rehabilitation Medicine, Cancer Rehabilitation Group Vishwa Raj, MD Member, Program Planning Committee and Cancer Rehabilitation Physician Consortium, American Academy of Physical Medicine and Rehabilitation Vishwa Raj, MD Member, National Medical Necessity Workgroup, American Medical Rehabilitation Providers Association Vishwa Raj, MD Chair, Cancer Rehabilitation Special Interest Group, International Association of Physical Medicine and Rehabilitation Vishwa Raj, MD Member, Education Committee, International Association of Physical Medicine and Rehabilitation Terrence Pugh, MS, OTR/L Co-Chair, American Congress of Rehabilitation Medicine, Cancer Rehabilitation Group Terrence Pugh, MS, OTR/L Chair, Person Centered Care Task Force, American Congress of Rehabilitation, Cancer Rehabilitation Group Sarah Mullan, MS, OTR/L Member, Person Centered Care Task Force, American Congress of Rehabilitation, Cancer Rehabilitation Group

Integrative	Chasse Bailey-Dorton, MD, MSPH, FAAFP	Chair, Board of Directors, 24 Foundation
	Chasse Bailey-Dorton, MD, MSPH, FAAFP	Member, LCI Patient Family Advisory Committee
	Chasse Bailey-Dorton, MD, MSPH, FAAFP	Chair, Membership Task Force, Society for Integrative Oncology
	Chasse Bailey-Dorton, MD, MSPH, FAAFP	Member, Board of Directors, Society for Integrative Oncology
	Chasse Bailey-Dorton, MD, MSPH, FAAFP	Member, Board of Directors, Courageous Women Fearless Living Retreat
	Chasse Bailey-Dorton, MD, MSPH, FAAFP	Integrative Oncology Facilitator, Courageous Women Fearless Living Retreat
	Rebecca Greiner, PhD, PA	DNP Scholarship and Mentorship Workgroup
	Susan Yaguda, MSN, RN	Tent Activity Coordinator, 24 Foundation, 24 Hours of Booty
	Susan Yaguda, MSN, RN	Tent Activity Coordinator, Survivor's Day

58

# **COMMUNITY CONNECTION**

# Cancer Survivors Day 2019



Music Therapist Dean Quick with Homer, mascot for Triple-A baseball team the Charlotte Knights, at Cancer Survivors Day. This year's theme was "Take Me Out to the Ballpark."



Artists-in-Residence, Deborah Bennett and Rachel Crawford, help survivors and care partners find their space



Nancy Rushing, Massage Therapist, helps Homer work out some kinks

## **COMMUNITY CONNECTION**

# 5th Annual Healing Arts Celebration



 $\label{eq:definition} \textit{Dr. Raghavan meeting patients and per using the beautiful patient} \\ \textit{artwork displayed}$ 



 $Supportive\ Oncology\ Teammates\ even\ had\ artwork\ displayed$ 



"Spring at LCI" patient artwork



Chad Frk, treasurer of the 24 Foundation; Dr. Raghavan; Bob Woods, 24 Foundation board member; and 24 Foundation founder Spencer Lueders

#### **COMMUNITY CONNECTION**

# Holiday Giving Campaign



 ${\it Markecia\ Cooper\ helps\ deliver\ food\ donations\ to\ the\ Second\ Harvest}\ Food\ Bank$ 



 $Christina\ Nunez\ of\ the\ Relatives\ Center\ stands\ beside\ a\ donation\ of\ to ieltries\ from\ Supportive\ Oncology$ 



On the move in our community, nutrition teammates participated in local cancer care fundraising events:

- Stiletto Sprint
- Sarcoma Stomp
- 24 Hours of Booty
- · Lunge Forward
- Jeremy Blevins Head and Neck Cancer 5K



 $LCIRDs\ packing\ boxes\ for\ Second\ Harvest\ Food\ Bank$ 

#### **TEAMMATE LIFE**



RDs Erin Ravine and Rachel Burns celebrate National Nutrition Month in March



Integrative teammates in New York City for the Society for Integrative Oncology Conference



 $Patients\ voted\ to\ give\ our\ palliative\ medicine\ clinic's\ "Candy\ Land"\ theme\ the\ prize\ for\ Best\ Decorations\ at\ annual\ holiday\ clinic\ decorating\ contest$ 



Palliative teammates year-end celebration

## TEAMMATE LIFE



Palliative medicine teammates celebrating nurse Melissa Waller's engagement



Psycho-Oncology Annual Reception at the Duke Mansion





Psycho-Oncology Annual Reception at the Duke Mansion

#### **Administration and Operations**

Angela Jenkins Special Projects Assistant

Lauren Krotz, MHA Project Manager William Moore, MHA Operations Manager

Anna Scholl Staff Assistant

Declan Walsh, MD Department Chair

Beth York, MA, LPC Administrative Director

#### **LCI - Morehead Clinical Operations**

Ashley Etheridge Care Coordinator
Kenya Mckenith Care Coordinator
Monica Miller Care Coordinator
Karissa Price, BS, RMA Lead Medical Assistant
Quintin Smith, MHA Sr. Practice Manager
Donna Watkins Care Coordinator
Nancetta Wilson Care Coordinator

#### **LCI - Pineville Clinical Operations**

Donnita Buise Practice Manager
Lisa Culbertson-White Care Coordinator
Jasmine Graves Care Coordinator

#### **Section of Cancer Rehabilitation**

Lisa Gale, COTA Occupational Therapy Assistant
Della Franklin, MSP, CCC-SLP Speech Language Pathologist

Jennifer Hartzell, PsyD, ABPP-CN

Joanna Lankford, PT, DPT

Special Englange Facilities

Special Englange Facilities

Special Englange Facilities

Physical Therapist

Brittany Lorden, MHS, OTR/L, CLT Occupational Therapist

Charles Mitchell, DO Physiatrist
Michelle Philmon Psychometrist
Terrence Pugh, MD Physiatrist

Vishwa Raj, MD
Physiatrist, Section Chief
Sarah Sangermano, MS, OTR/L
Program Coordinator
Annelise Savodnik, PT, MPT, CLT, RYT-200
Physical Therapist
Emily Troop, PT, DPT
Physical Therapist

#### **Section of Cancer Survivorship**

Natalie Garces, MSN, APRN, AGACNP-BC, OCN Program Coordinator

James B. Hall, MD Physician

Karissa Price, RMA Medical Assistant

Jennifer Pope, MD Physician
Thomas Rapisardo, MD Physician
Jai Singh, MD Physician
Sam Zimmern, MD Physician

#### **Section of Integrative Oncology**

Chasse Bailey-Dorton, MD Physician, Section Chief
Deborah Bennett Artist-in-Residence
Brenda Brennecke, LMBT, BCTMB Massage Therapist

Sandra Boozer Healing Touch Practitioner

Joy Carpenter, RN Clinic Nurse
Thomas Cohen, LAc Acupuncturist

Mike Gentile Tai Chi & Qigong instructor
Nadine Gordon, RYT-200 Yoga & Meditation Instructor

Coleen Gordon, LMBT Massage Therapist
Rebecca Greiner, PhD, PA Physician Assistant
Zachary Hurt, NC, LAc Acupuncturist
Melanie Lanese, LMBT Massage Therapist
Samantha Leonard, RYT-200 Yoga Instructor
Rocio Martinez, CMA Acupuncture

Arlene Mauney, HTCP/I Healing Touch Specialist

Jonathan Polsky, MS, LAc Acupuncturist

Kristy Price, RYT-500 Certified Yoga Therapist

Dean Quick, MT-BC Music Therapist
Nancy Rushing, LMBT Massage Therapist
Bethan Senn, LMBT Massage Therapist
Andrea Sowle Artist-in-Residence

Petra Sprick Chaplain

Manuela Strada-Ballicu Artist-in-Residence

Marie Theriault, RYT-200 Yoga for Cancer, Qigong-600

Merritt Tracy, RYT-200 Yoga Instructor
Ronnie Tucker Tai Chi Instructor
Shaquita Wright, CMA Medical Assistant
Susan Yaguda, MSN, RN Program Coordinator

#### **Section of Oncology Palliative Medicine**

Donna Baldassare, DO Physician

Sarah Blake, MS, PA-C Physician Assistant

Kammie Brown, LPN Clinic Nurse
Tonie Deeds, LPN Clinic Nurse
Jamena Dixon, CMA Medical Assistant

Rebecca Edwards, MSN, RN, NP, AOCNP, AGPCNP-BC Nurse Practitioner, Chief

Bruce Kennedy, MD Physician

Tiffany Kneuss, PharmD, BCGP, CPP Pharmacist

Paula Knight, RN Clinic Nurse

Jameelah Lockett, LPN Clinic Nurse

Shawnta Njie, CMA Medical Assistant

Armida Parala-Metz, MD, FACP, FAAHPM Physician

Heidi Ruchti, BSN, RN

Rachel Schaetzle, RN, OCN

Clinic Nurse

Latoya Spencer, MSN, RN, NE-BC

Shenita Spencer-Moore, MD

RN Coordinator

Clinic Nurse

Nurse Manager

Physician

Ellen Styers, RN, CHPN RN Coordinator Beth Susi, MD, FACP, FAAHPM Physician

Jessica Turner, MSN, RN, NP, AOCNP, AGPCNP-BC Nurse Practitioner Melissa Waller, BSN, RN, CHPN RN Coordinator

#### **Section of Oncology Nutrition**

Maria Abedrabouh, RDN, LDN
Gaston, Cleveland
Melissa Black, RDN, CSO, LDN
Pam Budzik, RDN, LDN
Union, Lancaster

Emily Burchins, MS, RDN, LDN Morehead Rachel Burns, RDN, CSO, LDN Morehead Yuka Couweleers, RDN, LDN Morehead

Pat Fogarty, MS, RDN, LDN Wellness Dietitian

Alison Kohn, CSO, LDN Morehead Ranjana Lord, CSO, LDN Concord

Mindy Pundt, RDN, LDN Pineville, SouthPark
Jennifer Redlich, MS, RDN, CSO, CSP, LDN Tryon, University
Denise Reynolds, RDN, LDN Rock Hill, Ballantyne

Myla Rinehardt, RDN, LDN Morehead

Michele Szafranski, MS, RDN, CSO, LDN Clinical Nutrition Manager

Caryn Watson, MBA, RDN, LDN Morehead

#### **Section of Patient Navigation**

Melissa Aguiar, RN, BSN, OCN Morehead Leukemia Candace Bashaw, RN, MSN, OCN Concord GI/GYN

Joanna Bellefeuille, RN, BSN, OCN Morehead Colorectal/GI

Wendy Bissette, RN, BSN Morehead GYN

Kris Blackley, RN, MSN, BBA, OCN Director, Section of Patient Navigation

Sheri Brosnahan, RN, BSN, OCN

Carlie Burnett, RN, BSN, OCN

Morehead Lung

Jane Daniels, RN, BSN, OCN

Morehead GU

Jenni Daniel, RN, BSN, OCN Morehead Malignant Hematology

Renee Darley, RN, BSN Morehead Breast Delois DeShazo, RN, BSN, NE-BC Morehead Breast

Ann Elrod, RN, BSN, ONN-CG Morehead Primary Brain
Lorna Espinal, RN, MSN Hispanic Patient Navigation
Angela Franklin, RN, BSN Donayre Cancer Center

Patty Fredenburgh, RN, BSN, ONN-CG Morehead Malignant Hematology

Ebony Gaddy Shears, RN, MBA, CMSRN Morehead Upper GI Karen Goad, RN, BSN Morehead Hematology

Megan Hagler, RN, BSN Pineville

Angela Hamilton, RN, BSN Morehead Breast

Christy Hargett, RN, BSN, CHPN Concord Hematology/GU

Stephanie Heil, RN, BSN, OCN Morehead GU Elizabeth Hess, RN, BSN, OCN Morehead Lung

Laura Kabrich, RN, BSN, BA Psych, ACM Clinical Supervisor, Morehead Head and Neck

Shelia Newsome, RN Lincolnton

Laura Swift, RN, BSN, ONN-CG Morehead Hepatic/GI

Susan Swift, RN, MSN, OCN Concord Lung

Jennifer VanDerKamp, RN, MSN, OCN/CNL Morehead Melanoma Cindy Wise, RN, MSN, OCN Concord Breast Debbie Woo, RN, BSN, OCN Pancreatic GI

#### **Section of Psycho-Oncology**

Patrick Meadors, PhD, LMFT Director, Section of Psycho-Oncology

#### **Clinical Social Workers**

Josie Carmona, LCSWA Morehead GYN/Thoracic
Betsy Clark, LCSW, OSW-C Concord/Albemarle
Elizabeth Daniels, LCSWA Gaston/Lincolnton

Nilda Delgado, LCSW Morehead General – Bilingual Spanish

Latonia Hopper, LCSW Cleveland/Rutherford

Sharon Hurff, LCSW Rock Hill/Monroe/Lancaster

Amy Jamerson, LCSW, OSW-C Pineville/Monroe/University

Veronica Kenny-MacPherson, LCSWA Morehead Head and Neck/Sarcoma

Anne Kinlaw, LCSW, OSW-C Clinical Social Work Supervisor, Monroe

Bryan Kluttz, LCSW, OSW-C Concord
Teri Layzell, LCSW, OSW-C Pineville

LeKeesha Miller-Jackson, LCSW, OSW-C Clinical Social Work Supervisor, Morehead

Antranique Neblett, LCSW Morehead GI/GU/HPB

Brittany Pigg, LCSWA Ballantyne/Huntersville/Gaston

Margaret Price, LCSW Morehead BMT

Angel Roberts, LCSWA Morehead Breast/Dermatologic

Audrey Sherman, LCSWA Pineville/South Park

Hannah Smith, LCSW Morehead HEME/Neuro/Immuno/Melanoma

Lee Wilson, LCSW Morehead Palliative Medicine

Jacob Wiltshire, LCSWA University

#### **Patient and Family Cancer Resource Center**

Finly Perdomo, BA ACS Patient Resource Navigator

Annalise Sansouci, BS, CLCS Community Resource Center and Volunteer Coordinator

#### **LCI Psychiatry**

Sharon Alexander, CMA Medical Assistant
Will Litchford, MD Psychiatrist
Omar Rana, DO Psychiatrist
Alicia Romeo, MD Psychiatrist

Laura Wong, RN RN Program Coordinator, Psychiatry

#### **Psychotherapy**

Loula Kontoulas, LMFT Psychotherapist
Meg Turner, LCSW Psychotherapist

#### **Psychology**

Paulomi Campbell, PhD Psychologist Sarah Galloway, PhD Psychologist

#### Research

Michelle B. Anderson Senior Manager, Oncology Research

Aynur Atkas, MD Research Scientist
Tara Eaton, PhD Senior Scientist

Matthew Flores, CCRC Oncology Research Coordinator
Danielle Gentile, PhD Health Services Researcher

Lauren Giamberardino, MHA Senior Manager, Oncology Research

Ellie Muller Research Associate
Gail O'Neill Scientific Writer

#### **Section of Senior Oncology**

Anthony Caprio, CMD, AGSF Geriatrician

Markecia Cooper, BSN, RN Program Coordinator
Daniel Haggstrom, MD Co-Medical Director
Raghava Induru, MD Co-Medical Director

Tiffany Kneuss, PharmD, BCGP, CPP Pharmacist

Joanna Lankford, PT, DPT, CMTPT, CLT Physical Therapist

Leslie Lavery, PharmD, BCOP, CPP Pharmacist Armida Parala-Metz, MD Physician

Karissa Price, RMA Medical Assistant

Thomas Rapisardo, MD Physician

# Special Thanks-

Thank you to our annual report committee for their efforts in editing and formatting this year's annual report:

Lauren Giamberardino Angela Jenkins William Moore Anna Scholl Beth York

