

WELCOME YE TO TAMPA



Goals for the EAC meeting

- **Respond to questions raised at 2018 visit**
 - Total Cancer Care and ORIEN
 - Data Science
- **Summarize progress since 2018 visit**
 - Community Outreach & Engagement
 - Cancer Research Career Development & Education
 - Revisions to two Shared Resources
- **Introduce new leadership**
 - ACDs, Program Leaders, Shared Facility Leaders
 - Give them experience
- **Get feedback on revised Program Aims**

Today's Agenda

Morning		Afternoon	
State of the Center	8:00 – 9:00	Lunch	11:55 – 12:35
Community Outreach & Engagement	9:00 – 9:25	Programs:	
Cancer Research Career Development & Education	9:25 – 9:50	▪ Chemical Biology & Molecular Medicine	12:35 – 12:55
Break	9:50 – 10:05	▪ Immunology	12:55 – 1:15
Population Science	10:05 – 10:35	▪ Cancer Biology & Evolution	1:15 – 1:35
Data Science	10:35 – 10:55	▪ Cancer Epidemiology	1:35 – 1:55
Shared Resources		▪ Health Outcomes & Behavior	1:55 – 2:15
▪ Biostatistics & Bioinformatics	10:55 – 11:15	Executive Session	2:15 – 2:35
▪ PRISM Core	11:15 – 11:35	Report Out	2:35 – 2:45
Clinical Science	11:35 – 11:55	Meeting Adjourns	2:45

State of the Center

Tom Sellers, PhD, MPH
Center Director



Agenda

- Leadership & Recruitment Updates
- Accolades & Highlights
- Strategic Plans
- Progress
- Summary

Associate Center Director, Community Outreach & Engagement

- Recruited to Moffitt in 2003 from NCI
- A record of service and leadership:
 - Vice-Chair, Health Outcomes & Behavior Department
 - Led the Survey Methods Core Taskforce
- Co-Director of the community-based Breast Cancer Genetics Research Education & Advocacy Team (B-GREAT)
- Exceptional scholarship:
 - PI or Co-PI of three R25s
 - Moffitt-Ponce U54 Co-Leader of the Outreach Core, Co-Investigator of Research Project 1, & Co-Leader of Research Education
 - Nearly 200 peer-reviewed publications

Susan Vadaparampil, PhD



Director, Cancer Research Career Development & Education



Ken Wright, PhD

- Recruited to Moffitt in 1997 from UNC
- A record of service and leadership
 - Interim Co-Leader of Immunology (2013-16)
 - Vice Chair, Immunology Department
- Founding Director, Cancer Biology PhD Program (est. 2002)
- Founding member of the national Cancer Biology Training Consortium (est. 2005)
 - Served on its Executive Board for 3 years
- Funding
 - U54 Ponce Health Sciences/Moffitt Partnership (PI)
 - R01 on Natural Killer Cell Regulation by PRDM1 & IRF4/8 (PI)
 - R01 targeting SIRT1 in Mantel Cell Lymphoma (Co-PI)
- Over 75 publications

Leadership Structure








Research Executive Committee



Sellers

EVP/Center Director

Associate Center Directors

Cleveland	Sullivan	Rollison	Tworoger	Mulé	Springer	Vadaparampil
 Basic Science	 Clinical Science	 Data Science	 Pop. Science	 Transl. Science	 Admin.	 Comm. Outreach Engage.

Scientific Leadership Committee

Senior Leadership	Centers & Institutes	Programs	Research Departments	Cancer Research Career Development & Education
Center Director 6 ACDs	4 CoE Directors 2 DFPMI Directors	6-10 Program Leaders	3 Chairs	 1 Director Wright

Transitions



Said Sebtj, PhD

- Stepped down from CBMM Co-Leader role
- Continues to have an active lab, including PI of an R50



Eric Haura, MD

- Transitioning out of CBMM Program Co-Leader role
- Remains Director, Lung Cancer Center of Excellence
- Recently appointed Interim Chair, Thoracic Oncology



Scott Antonia MD, PhD

- Departing to Duke to lead center for personalized health care
- Served as Program Co-Leader of Immunology for 14 years

Program Co-Leader, Chemical Biology & Molecular Medicine



Jhanelle Gray, MD

- Recruited to Moffitt in 2007 after residency
- Since 2013, Director for Clinical Research in Thoracic Oncology Department
- Peer-Review Funded (DOD & FL Biomedical)
- Served as PI of over 50 clinical trials (19 IITs)
- Over 70 publications

Program Co-Leader, Immunology



- Recruited in 2010 from U of Chicago, Illinois
- Vice Chair of BMT & Cellular Immunotherapy Department
- Chair, Immunotherapy Working Group
- Chair, Cellular Therapy Advisory Committee
- PI of a K23 and former NCI CCITLA Awardee
- Co-led ZUMA-1 Trial, which led to the first FDA approved CAR T therapy for adults

New Scientific Directors Appointed



• Brooke Fridley, PhD

- Leads a newly combined **Biostatistics & Bioinformatics Shared Resource (BBSR)**
- Chair of Biostatistics & Bioinformatics Department



• Brian Gonzalez, PhD

- Leads newly named and expanded **Participant Research, Interventions, & Measurement (PRISM) Core Facility** (formerly Survey Methods)
- Assistant Member, Health Outcomes & Behavior Program

New Scientific Directors: Tissue Core



- **Conor Lynch, PhD**

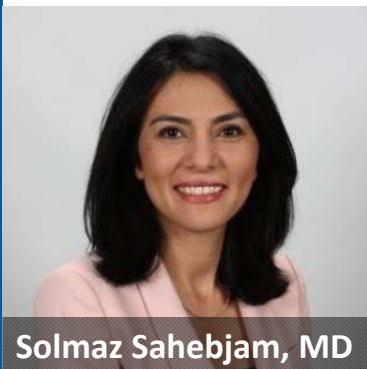
- Co-Scientific Director of the Tissue Core
- Member, Cancer Biology & Evolution Program
- Associate Member, Tumor Biology Department



- **Ken Tsai, MD, PhD**

- Co-Scientific Director of the Tissue Core
- Melanoma & Skin Center of Excellence Co-Director
- Member, Chemical Biology & Molecular Medicine Program
- Sr. Member, Pathology Department

Leader, Phase 1 Program



- New Position
- Adds to her role as Medical Director of the Clinical Research Unit
- Position addresses concerns of Dr. Sullivan's commitments

New EVP/Chief Philanthropy Officer Maria Muller



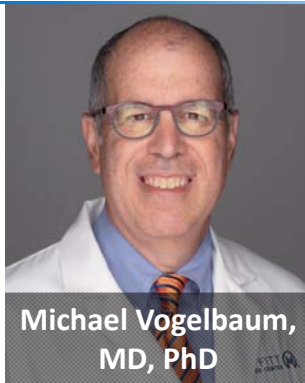
- 20+ years of experience in fundraising
- Recruited from Boston
 - Was deputy director of the Museum of Fine Arts
 - Consulted with the Harvard Art Museums
- Has led multiple \$100 million or more campaigns
- Will advance and execute the strategic vision of philanthropy
- Will support research priorities

Key Senior Members



Manish Kohli, MD

- From Mayo Clinic
- Director, DeBartolo Family Personalized Medicine Institute
- Senior Member & Vice Chair, GU Oncology



Michael Vogelbaum, MD, PhD

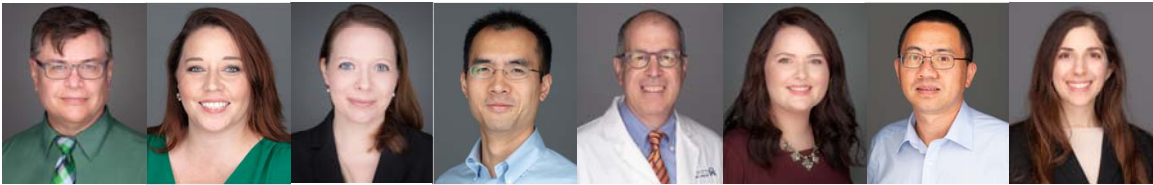
- From Cleveland Clinic
- Senior Member & Program Leader, Neuro-Oncology
- Chief of Neurosurgery



J. Ross Mitchell, PhD

- From Mayo Clinic
- Artificial Intelligence Officer
- Senior Member
- Biostatistics & Bioinformatics

25 New Members



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National Recognition



National & Local Recognition



10 Years

In a row Moffitt Awarded
CEO Cancer Gold Standard

Best

Place to Work

Diverse & Inclusive



100%

Moffitt Leaders Completing Diversity & Inclusion Training

44%

Of Executive Positions are Filled by Women & Minorities

Dr. Mulé Appointed to CCSG Parent Committee



Jim Mulé, IPhD

- Appointed Subcommittee A Cancer Centers of the NCI Initial Review Group
- 3rd time appointed to Committee
- Term will be from July 1, 2018 to June 30, 2022

Anna Giuliano, PhD Awarded ACS Clinical Research Professor

Awarded to those who have made **seminal contributions** in an area of cancer control that have changed the direction of research

- \$400,000 total costs (5 years)
- The most prestigious research grant made by the American Cancer Society
- Title can be used throughout the rest of her career

1st FDA Approved CAR T



Fred Locke, MD

- Fred Locke, MD Co-led phase I CAR-T Study (ZUMA-1)
- Published in the *New England Journal of Medicine* and *Molecular Therapy* last year.
- Led to the first FDA approved CAR T therapy

Breakthrough led to national exposure including interviews in *Time*, the *New York Times*, *Washington Post*, and *Newsweek*.



CAR T

CAR T is a personalized therapy using the patient's own immune cells, or T cells, to fight cancer. For this treatment, a patient's T cells are removed from their blood and sent to a lab where the cells are genetically modified to better enable them to identify and attack cancer cells. Scientists add a chimeric antigen receptor, or CAR, to each T cell. These CARs act like a GPS that directs the T-cells to target and attack cancer. When the CAR T cells are infused back into the patient's blood, the immune cells seek and destroy the cancer.

TIME
The FDA Just Approved a New Way of Fighting Cancer Using Personalized Gene Therapy

"We think this therapy is here to stay. It's very different from chemo," says Dr. Frederick Locke, research director and clinical director of immune cell therapy at Moffitt Cancer Center in Tampa. "This is a living, breathing therapy that we are putting back into the patient that can persist, and continue to fight against the cancer. It's pretty amazing."

The New York Times
FDA Approves second gene-altering treatment for cancer

"The results are pretty remarkable," said Dr. Frederick L. Locke, a specialist in blood cancers at the Moffitt Cancer Center in Tampa, and a leader of a study of the new treatment. "We're excited. We think there are many patients who may need this therapy." He added, "These patients don't have other options."

The Washington Post
Cutting-edge immunotherapy treatment approved for another deadly cancer

Kile's "win-to-win" honeymoon period — from cell extraction to reinfusion — is about 17 days, according to Frederick Locke, an oncologist at Moffitt Cancer Center in Tampa and co-leader of the Kile trial.

Associated Press
US Regulators Approve 2nd Gene Therapy For Blood Cancer

At that point, patients are generally out of options and only have about a 10 percent chance of even temporary remission of their cancer, said Dr. Frederick Locke, director of research for the Immune Cell Therapy Program at Moffitt Cancer Center in Tampa, Florida. Locke helped run patient tests of Yescarta. Also posted to the Florida Times Union, WFTS, Newsweek, WKW, TDS, TruVista, Windstream, PeoplePC, Mecko.

Newsweek
Gene Therapy: Latest CAR T Therapy for Cancer Signals New Era of Life-Saving Treatments

One of those hospitals will be Moffitt Cancer Center in Tampa, Florida. "We're really excited. We treated a lot of patients on that trial, and we think that it will be a therapy that is here to stay," Dr. Frederick Locke told Newsweek. Locke was one of the principal investigators of the key clinical trial at Moffitt and has been a scientific advisor to Kile, the company that first developed Yescarta.

MOFFITT CANCER CENTER

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@MOFFITTCANCERCENTERPUBLICPOLICY

FDA approved Lutathera, a first-of-its-kind peptide receptor radionuclide therapy



JOURNAL OF CLINICAL ONCOLOGY

RAPID COMMUNICATION

Health-Related Quality of Life in Patients With Progressive Midgut Neuroendocrine Tumors Treated With ¹⁷⁷Lu-Dotatate in the Phase III NETTER-1 Trial

Jonathan Strosberg, Edward Wolin, Beth Chasen, Matthew Kulke, David Bushnell, Martyn Caplin, Richard P. Baum, Pamela Kunz, Timothy Hobday, Andrew Hendifar, Kjell Oberg, Maribel Lopez Sierra, Thomas Thevenet, Ines Margalet, Philippe Ruszniewski, and Eric Krenning, on behalf of the NETTER-1 Study Group

Newly-Approved therapy provides improved Quality of Life for patients with advanced metastatic midgut neuroendocrine tumors

Grant Highlight



- Awarded Rita Allen Foundation Grant
- First Moffitt recipient of this award
 - Elsa Flores had one when at MD Anderson
- Award: \$500,000 total costs over 5 years
- Project will develop synthetic proteins that reprogram the ubiquitination system to eradicate disease-associated receptors from the cell membrane



Grant Highlight



José Conejo-Garcia, PhD

- Awarded NCI U01 entitled “B cell-dependent anti-tumor immunity in ovarian cancer”
- \$3,907,925 in total costs over 5 years

“Our work will exert a profound effect in the field by elucidating how epigenetic programs controlled by SATB1 govern the generation of TFH cells at tumor beds in a TGF- β -dependent manner. Recapitulating these mechanisms in vivo will pave the way for more effective immunotherapies aimed to promote combined humoral and T cell responses through the orchestration of TLS in unresectable/metastatic tumors, and could lead to the identification of antibodies with anti-tumor activity spontaneously produced at tumor beds.”

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Institutional Strategic Plan

IMPACT 2028

Expanding Moffitt's leadership in the oncology market and developing a personalized care model driven by preeminent research and digital capabilities that enhances value and patient experience

Institutional Strategic Plan: 3 Pillars

Research Foci

Personalized
Care
Continuum



Management of the Patient's
Care Throughout the Journey

- All 5 CCSG Programs
- All 4 CoEs

Digital Care
& Discovery
Accelerator



Delivering Breakthroughs
with New Digital & Data
Capabilities

- Health & Research Informatics
- Patient Reported Information & Outcomes
- mHealth

Market
Expansion



Rapid Expansion Through
Satellites & Partnerships to
Reach More People

- Clinical trials
- Primary prevention
- Health Care Delivery
- Community Outreach

Detailed Research Strategic Plan Roadmap

	Mar 2018	Mar-Apr	Apr	Apr-May	Jun-Jul	Jul-Aug	Sept	Oct-Nov	Nov-Dec	Jan/Feb 2019	March
Groups	IMPACT '28 Review	Launch RSP19 Dev	RSP Framework/ Goals	Review IMPACT 2028, RSP19 Framework, Identify Strategic Goals	Review RSP19 Strategic Goals	Review & discuss Strategic Goals & initial Tactics	Review, select strategic goals, prioritization, tactics, etc.; consolidate feedback, draft strategies & task groups	Task groups identify & formulate tactics	Review and revision of Full RSP Draft	Discussion of final plans, revisions as appropriate	Final Plan Distributed
Ops/CEO Cabinet /SEC											
REX											
SLC											
Prgms/CoEs											
CLC											
Faculty Forum											
RAMM											
FORUM											
Task Groups											
Planning											
Res Admin											

Research Strategic Plan Summary

Fundamental Principles

Retain NCI Comprehensive Cancer Center Status

Drive exceptional science and innovation

Must support IMPACT 2028

First in human trials that change clinical practice

Desired Future State

Moffitt is THE best place on earth for science, recruiting and retaining the best talent, out-competing for grant funding, and achieving international recognition for the impact it has on changing paradigms, clinical and public health practice, and policy.

Strategies

Optimizing Intellectual Capability

- Recruit/develop talent
- Explore new mentoring strategies
- Enhance recruiting materials/tactics
- Broaden multi-institutional collaborations

Creating Fuel for Discovery

- Diversify funding sources
- Build on & monetize unique capabilities
- Enhance infrastructural support functions
- Enhance Foundation focus

Generating Impact

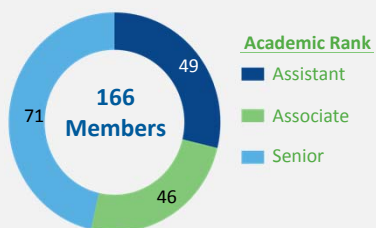
- Thought leadership & (inter)national exposure
- Develop strategies for data
- Foster science impacting catchment
- Expand unique capabilities

Agenda

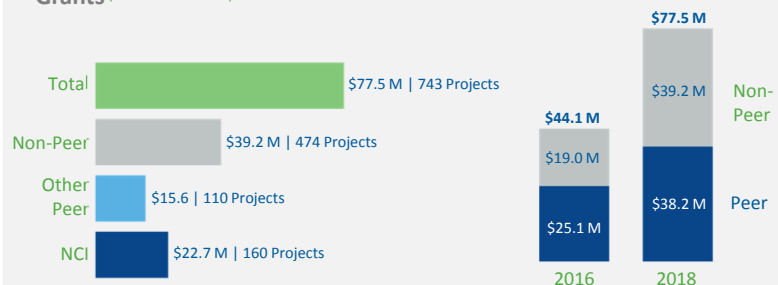
- Leadership & Recruitment Updates
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- Scientific Highlights
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CCSG Profile

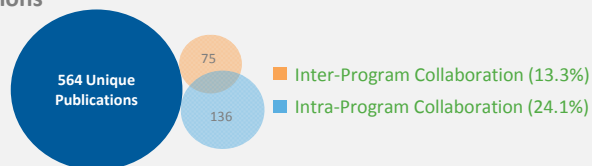
Membership



Grants (Annual Direct Costs)



Publications



2016 – Application | 2018 – Calendar Year

Program Health

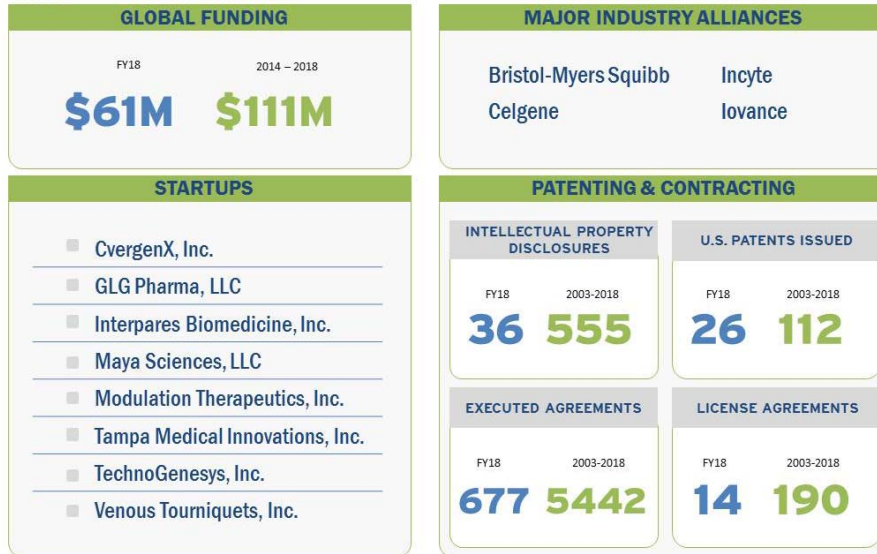
NCI Funding Recommendations:
5 Independent PIs
7 R01s or Equivalent Projects

	Total Members	Peer Review Funded PIs	R01/Equivalent Projects (# PIs)	R01/Equivalent Annual Direct Costs
✓ Cancer Biology & Evolution	28	18	16 (9)	\$6.6 M
✓ Cancer Epidemiology	26	19	14 (10)	\$4.8 M
✓ Chemical Biology & Molecular Medicine	55	26	24 (13)	\$6.4 M
✓ Health Outcomes & Behavior	19	9	11 (7)	\$3.1 M
✓ Immunology	38	23	17 (12)	\$6.8 M

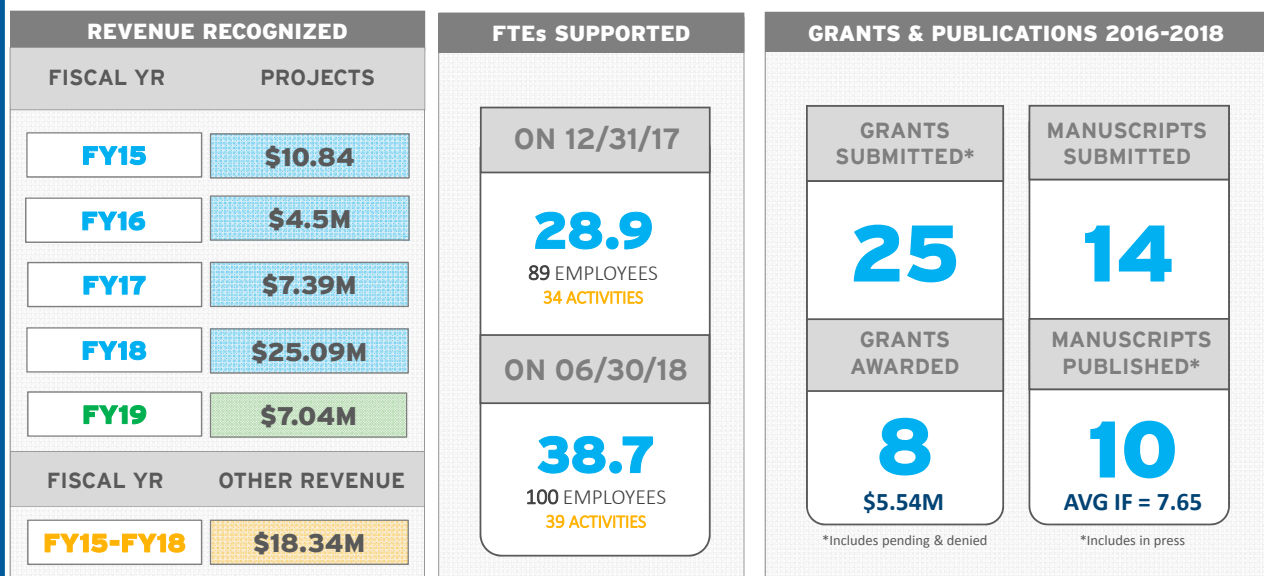
All Intervention Trial Accrual by Program (CY 2018)

	Treatment	Supportive Care	Prevention	Total
CBMM	946	6	23	975
IMM	206	0	16	222
CBE	9	0	0	9
HOB	4	81	52	137
CE	26	0	439	465
Total	1191	87	530	1808

Industry Alliances Update



Industry Alliances Research Impact



Industry Alliance Highlight: Marco Davila, MD, PhD

- Agreement with **Atara Biotherapeutics**
- A collaboration to develop multi-targeted CAR T immunotherapies designed to address cancers with diverse cell types that often become resistant to treatment such as AML and B-cell malignancies
- 4 significantly funded research projects, each for 3 years
- Largest independent license agreement to date for Moffitt



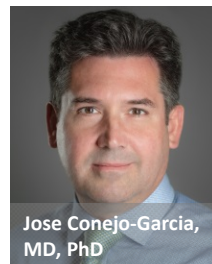
"I look forward to rapidly advancing our CAR T engineering and multi-antigen targeting technologies with Atara to address the high unmet need in patients with advanced AML and B-cell malignancies."

Leading to Peer-reviewed Funding (2018)



Lixin Wan, PhD

- Melanoma Research Alliance
- \$225,000 for 3 years



Jose Conejo-Garcia,
MD, PhD

- NCI R01 Renewal
- \$1,838,250 for 5 years



Keiran Smalley, PhD

- Florida Biomedical
- \$815,283 for 3 years

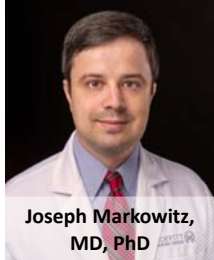


Brian Ruffell, PhD

- Florida Biomedical
- \$815,289 for 3 years



Leading to Publication



Clinical Cancer Research

Quantitative Spatial Profiling of PD-1/PD-L1 Interaction and HLA-DR/IDO-1 Predicts Improved Outcomes of Anti-PD-1 Therapies in Metastatic Melanoma

Douglas B. Johnson, Jennifer Bordeaux, Ju Young Kim, Christine Vaupel, David L. Rimm, Thai H. Ho, Richard W. Joseph, Adil I. Daud, Robert M. Conry, Elizabeth M. Gaughan, Leonel F. Hernandez-Aya, Anastasios Dimou, Pauline Funchain, James Smithy, John S. Witte, Svetlana B. McKee, Jennifer Ko, John M. Wrangle, Bashar Dabbas, Shabnam Tangri, Jelveh Lameh, Jeffrey Hall, Joseph Markowitz, Justin M. Balko, and Naveen Dakappagan



Cancer Cell

TIM-3 Regulates CD103⁺ Dendritic Cell Function and Response to Chemotherapy in Breast Cancer

Álvaro de Mingo Pulido,¹ Alycia Gardner,^{1,2} Shandi Hiebler,¹ Hatem Soliman,^{1,3} Hope S. Rugo,⁴ Matthew F. Krummel,⁵ Lisa M. Coussens,⁶ and Brian Ruffell^{1,3,7,*}



Centers of Excellence

			
Keiran Smalley, PhD	Eric Haura, MD	Anna Giuliano, PhD	Alexander Anderson, PhD
MELANOMA & SKIN CANCER	LUNG CANCER	IMMUNIZATION & INFECTION RESEARCH	EVOLUTIONARY THERAPY

Updates:

- Directors received named Scholars based on Foundation funds
- Over \$2.5M in philanthropic funds raised in FY2018 and over \$5M raised so far in FY2019
- CIIRC
 - Renamed "Center of Excellence in IMMUNIZATION and Infection Research" to reflect expanded focus
 - Shari Pilon-Thomas, PhD, Associate Member, Immunology Program, appointed Co-Director

Building for Tomorrow: Clinic Support Services

- Opens Spring 2020
- 8 story; 200,000 sf
 - Behind Hospital on Magnolia Campus
- To house:
 - Office functions
 - Executive suites
 - Clinical & anatomic pathology labs
 - 5th floor for dry lab research



Building for Tomorrow

- **Magnolia Campus Renovation**
 - New inpatient expansion
 - 12 new inpatient beds
 - 8 treatment/observation bays
 - To open October 2019
 - Expansion of various services
 - Multiple projects 2020-2023
- **New Solid Tumor Hospital (McKinley East Campus)**
 - 400,000 sf
 - Phase 1: 128 beds & 24 OR suites
 - Phase 2: 76 beds
 - Estimated Spring 2023
- **5 new outpatient clinic sites**
 - Over the next 5 years
 - New construction or partnerships
 - 25-30K sf per site
 - Medical oncology, infusion, & radiation oncology
- **New research tower**
 - To replace current MRC
 - Estimated 150-200K sf
 - Research Master Plan under development
 - Date TBD
 - Pending additional state or philanthropic funding



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Questions (for the end of the day)

- Do you support the revised Program Aims?
- Are we making adequate progress?
- Are there blind spots we appear to have missed?

Debbie Magley

In Memoriam

- Battled ovarian cancer for over two years, passing away in September 2018 at the age of 62
- Just shy of 20 years of service at Moffitt
- Was essential to CCSG support & our success
 - 3 CCSG renewals
 - EAC annual meeting support since 2003

