

## Florida Academic Cancer Center Alliance

Moffitt Cancer Center  
Sylvester Comprehensive Cancer Center  
University of Florida Health Cancer Center

# The Florida Academic Cancer Center Alliance

*Funded by the Casey DeSantis Cancer Research Program*

**John L. Cleveland, PhD**, Center Director, Moffitt Cancer Center

**Jonathan D. Licht, MD**, Center Director, University of Florida Health Cancer Center

**Stephen D. Nimer, MD**, Director, Sylvester Comprehensive Cancer Center, University of Miami



# The Casey DeSantis Cancer Research Program

Created by Florida Statute 381.915 to:



- Enhance quality/competitiveness of cancer care at Florida based centers
- Further statewide biomedical research in cancer
- Capitalize on educational opportunities to create a robust talent pipeline

Noting additional economic benefits:



- Economic growth/return to Florida
- Jobs (high-paying – physicians, researchers)
- Retain Floridians in-state for care and research

# Casey DeSantis Cancer Research Program Goals



**Increase** the number of NCI Designated Cancer Centers in Florida



Build **collaborations** between the centers to expedite innovations in cancer research throughout the State of Florida



Enhance the **quality** and national **competitiveness** of cancer care at Florida-based cancer centers



**Maximize** the return on the state's investments in biomedical research & technology



**Translate** innovation into impact at the point of patient care, prevention, and diagnosis

# NCI Designation



A Cancer Center Designated by the National Cancer Institute



A Cancer Center Designated by the National Cancer Institute

Primary goal of the Casey DeSantis Cancer Research Program was to provide support for UF Health and Sylvester to obtain an NCI designation and for Moffitt to sustain NCI Comprehensive designation



Moffitt obtained NCI-designated Comprehensive Cancer Center in 2001, successfully renewed in 2021, and will undergo competitive renewal again in 2026



Sylvester obtained NCI designation in July 2019, becoming the 71<sup>st</sup> designated Cancer Center, and will undergo competitive renewal in 2023



UF Health submitted its competitive Cancer Center Support Grant (CCSG) application to NCI in October 2022 and is awaiting a determination on funding



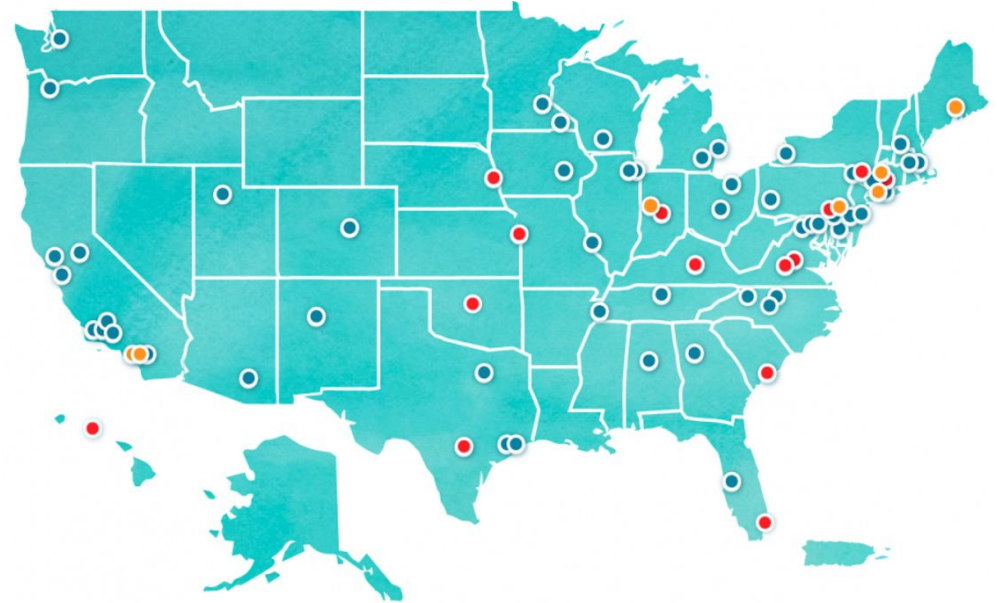
# NCI Designation

## PURPOSE

*"...intended to foster excellence in research across a broad spectrum of scientific and medical concerns relevant to cancer." - NCI*

## WHY IT IS SO IMPORTANT

- Highest level of research recognition in cancer
  - Hard to attain
  - Challenging to keep
- Recruitment magnet (Scientists & Physicians)
- Provision of tomorrow's standard of care – today
- Better patient outcomes at Designated Centers



## Two Levels of NCI Designation

- 71 “Cancer Centers” (includes basic science)
- 53 “Comprehensive Cancer Centers”

# Return on Investment

## Since 2015



**Recognition of Sylvester as an NCI-designated Cancer Center**



**~200,000 newly diagnosed patients** (reportable cases combined for FY17-FY22)  
**30,000+ patients accrued to Investigator-initiated Clinical Trials** (Interventional)



**\$822M+ in peer-reviewed grants awarded**



**~83,000 Training experiences** for current and future clinicians and scientists



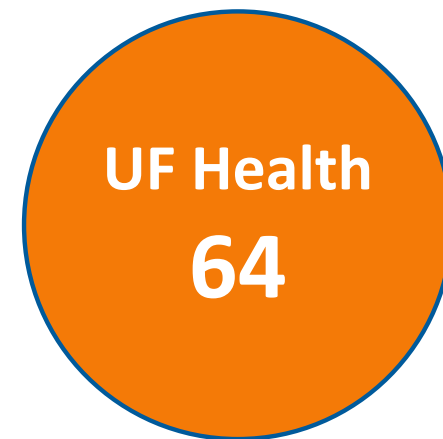
**21,000+ Publications**



**770+ U.S. Patent filings**

# Research Faculty Recruitment at 3 FACCA Cancer Centers

2015 - 2022



**352** Total faculty recruited to 3 Cancer Centers

# FACCA Economic Impact

*2022 FACCA Economic Report covering Fiscal Years 2016 - 2019*

**12,000+**  
Jobs

**\$1.18B**  
In revenue

**\$401M**  
State Tax  
Contributions  
(est.)



# Our Mission

Since the beginning, our mission has been

***To contribute to the  
prevention and cure of cancer***



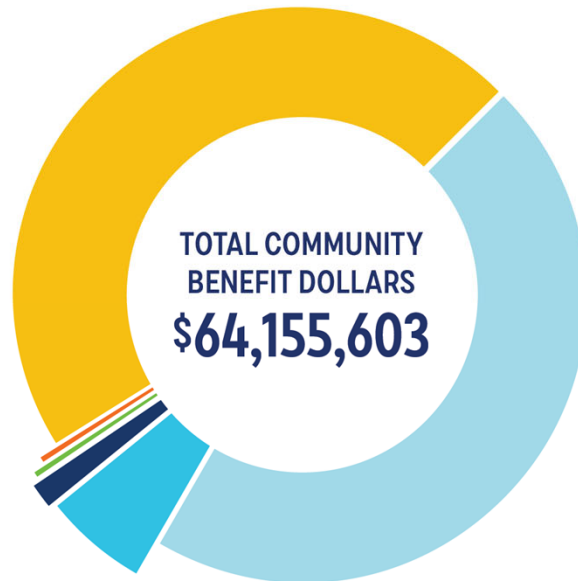


# Community Benefit and Outreach

## Community Benefit Financials

Fiscal Year 2022

Moffitt Cancer Center's Community Benefit initiative supports patients, families and clinicians through advancing cancer prevention, early detection, clinical care and research, especially for those at-risk populations disproportionately impacted by cancer.



*\*RESEARCH: Moffitt research continues to perform ongoing studies that benefit the surrounding communities now and into the future. However, that number has not currently been estimated for this fiscal year as Moffitt works intently on improving the integrity of reporting for community benefit.*

### PATIENT FINANCIAL ASSISTANCE PROGRAM

Total cost of services incurred by Moffitt to provide medical services to patients who are unable to pay:

**\$29,546,230**

### MEDICAID SHORTFALLS

The Medicaid program pays Moffitt less than it costs the organization to provide care to its Medicaid patients:

**\$29,807,110**

### COMMUNITY-BUILDING ACTIVITIES

Cost of developing community-building programs and partnerships that address the root causes of health problems and offer the expertise and resources of the health care organization:

**\$67,524**

### HEALTH PROFESSIONS EDUCATION

Cost associated with clinical education and training for physicians and medical students not including government funding:

**\$3,706,864**

### COMMUNITY HEALTH IMPROVEMENT SERVICES

Cost of activities, events and in-kind donations carried out to improve the health of the community, beyond patient care:

**\$919,858**

### COMMUNITY BENEFIT OPERATIONS

Costs associated with community benefit strategy and operations, including assigned staff and community health needs assessment costs:

**\$108,017**



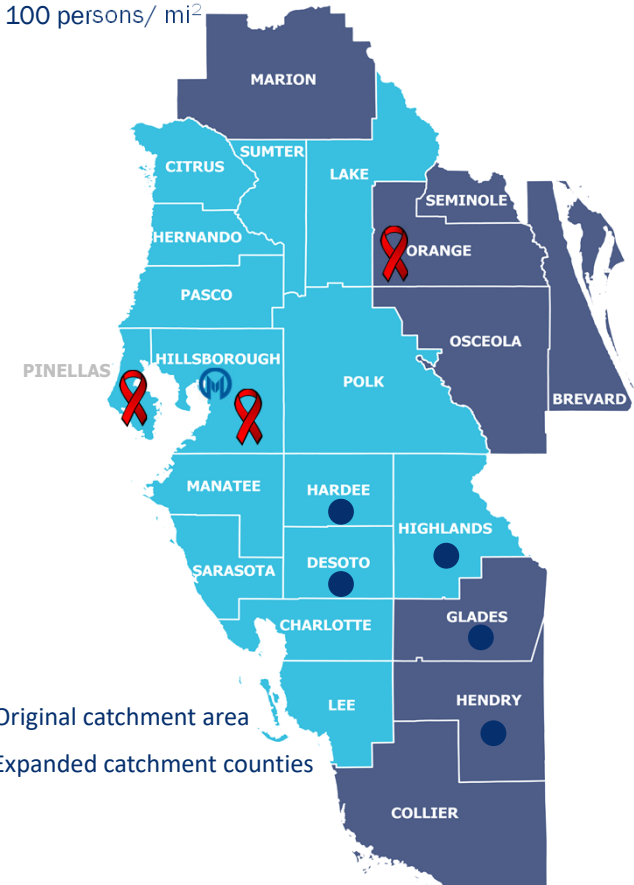
# Catchment Area Vulnerable Populations

Group	23 County Catchment Area	Florida	United States
Blacks	12.1%	16.1%	12.7%
Hispanics	21.4%	25.6%	18%
Seniors (≥age 65)	19.2%	17.3%	13%
Uninsured	12.1%	12.8%	8.8%
Rural Residents	8.3%	8.8%	19.3%
Same Sex Couple Households*	0.4%	0.4%	0.3%

● Rural    🚫 High HIV+ Incidence

## Rural vs Urban

Rural = < 100 persons/ mi<sup>2</sup>



<sup>14</sup> Data Source: 2010 U.S. Census | ACS 2019 5yr | FDOH, HIV/AIDS Section, Epidemiologic Profile 2019

\*ACS 2018 5yr – Combined totals of unmarried "male householder with male partner" and "female householder with female partner"



# Strategic Catchment Area Expansion through Partnership



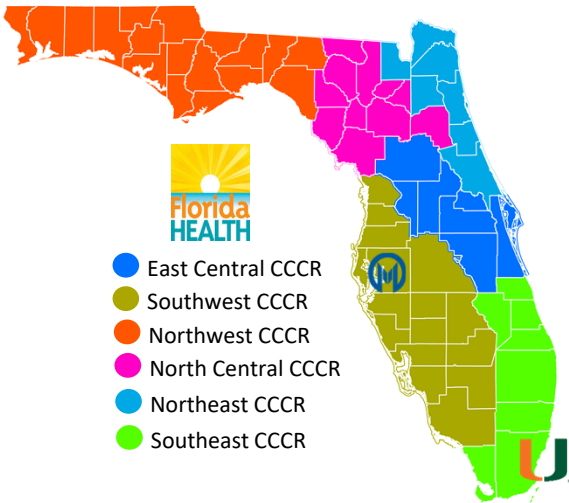
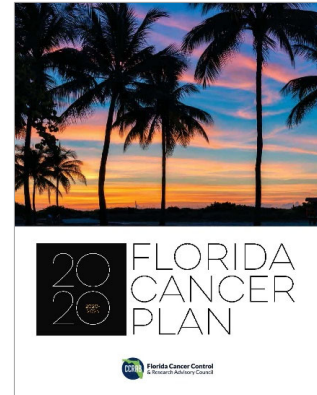
**Florida Cancer Control  
& Research Advisory Council**



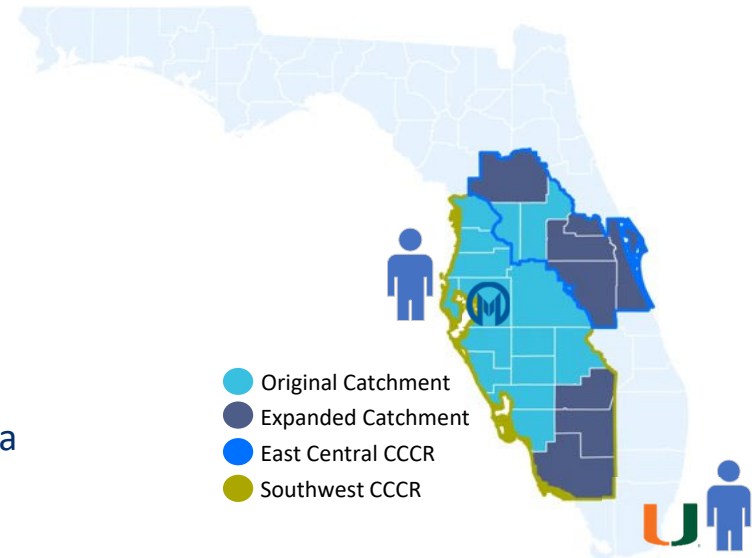
Clement Gwede, PhD  
CCRAB Chair  
Moffitt Cancer Center



Erin Kobetz, PhD  
CCRAB Vice Chair  
Sylvester Cancer Center



**COEE Supported Approach:**  
Unified shared goals  
Support CCRs in EBIs, Policy, & Data



# Engaging the Community

## Project CONTINUITY: Engaging Rural Farmers and Outdoor Workers to Address a Top 10 Cancer

CONnecTING You to Care in the communitY

### IDENTIFYING HOTSPOTS

- ▶ Skin cancer prevention
- ▶ Tobacco prevention
- ▶ Pesticide safety



### ENGAGING THE COMMUNITY

- ▶ IFAS Extension Program
- ▶ Building trust in rural communities
- ▶ Engaging farm owners, farm workers, and outdoor workers



### MAKING RESEARCH LINKAGES

- ▶ USDA telehealth grant (FL0719-A63)
- ▶ NCATS CTSI Pilot: 30 women with co-occurring conditions and cancer screening



### MAKING AN IMPACT

- ▶ 15 farm events with mobile outreach
- ▶ 383 farmworkers reached (100% Hispanic)
  - Distributed sun protection items
  - 55 COVID-19 vaccines





# Sylvester's New "Game Changer" Outreach Vehicle(s)

Address the cancer burden in our South Florida community

The following services are provided for FREE:

- Cervical cancer screening
- Colorectal cancer screening
- Prostate cancer screening
- Hepatitis C viral exposure screening
- Skin cancer screening (coming soon)
- HIV testing
- Sexually transmitted infections (STI) screening
- H. Pylori testing



# Moffitt's Research Strengths



Innovative science focused on translation and addressing the 3 Ps = Paradigms, Practice & Policy

### Practice:

Changing the standard of care



Axicabtagene Ciloleucel as Second-Line Therapy for Large B-Cell Lymphoma

F.L. Locke, D.B. Miklos, C.A. Jacobson, M.-A. Perales, M.-J. Kersten, O.O. Oluwole, A. Ghobadi, A.P. Rapoport, J. McGuirk, J.M. Pagel, J. Muñoz, U. Farooq, T. van Meerten, P.M. Reagan, A. Sureda, I.W. Flinn, P. Vandenberghe, K.W. Song, M. Dickinson, M.C. Minnema, P.A. Riedell, L.A. Leslie, S. Chaganti, Y. Yang, S. Filosto, J. Shah, M. Schupp, C. To, P. Cheng, L.I. Gordon, and J.R. Westin, for All ZUMA-7 Investigators and Contributing Kite Members\*



Frederick Locke

- Led Phase 3 trial of axi-cel CAR T for refractory/relapsed DLBCL.
- Showed axi-cell is superior to standard of care in event-free survival & response, with the expected level of toxicities.

### Paradigms:

Transforming our understanding of cancer



Altered propionate metabolism contributes to tumour progression and aggressiveness

Ana P. Gomes<sup>1,2,110</sup>, Didem Ilter<sup>1,2,110</sup>, Vivien Low<sup>1,2,110</sup>, Stanislav Drapela<sup>7</sup>, Tanya Schild<sup>1,2,8</sup>, Edouard Mullarky<sup>1,3</sup>, Julie Han<sup>1,2</sup>, Ilaria Elia<sup>4,5</sup>, Dorien Broekaert<sup>4,5</sup>, Adam Rosenzweig<sup>1,2</sup>, Michal Nagiec<sup>1,2</sup>, Joana B. Nunes<sup>1,2</sup>, Bethany E. Schaffer<sup>1,2</sup>, Anders P. Mutvei<sup>1,2,9</sup>, John M. Asara<sup>6</sup>, Lewis C. Cantley<sup>1</sup>, Sarah-Maria Fendt<sup>4,5</sup> and John Blenis<sup>1,2</sup>



Ana Gomes

- Led seminal study investigating contribution of propionate dysregulation to the metastatic potential of breast & lung cancer cells
- Found that cancer cells have increased levels of methylmalonic acid and that accumulation drives an aggressive cancer phenotype

### Policy:

New recommendations that become national policies



Tom Brandon & Vani Simmons

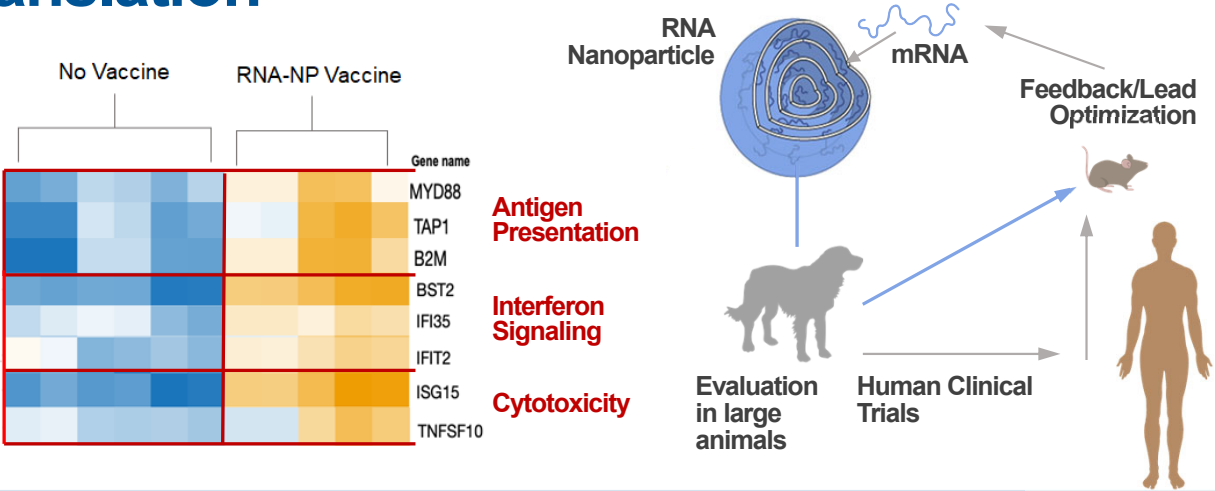


- Developed two smoking cessation interventions, “Stop Smoking for Good” and “Libre del Cigarrillo,” adopted by the National Cancer Institute after rigorous review

# Casey DeSantis Cancer Research Program Impact

## Comparative Immuno-oncology Support to Accelerate Clinical Translation

11 First-In Canine Trials



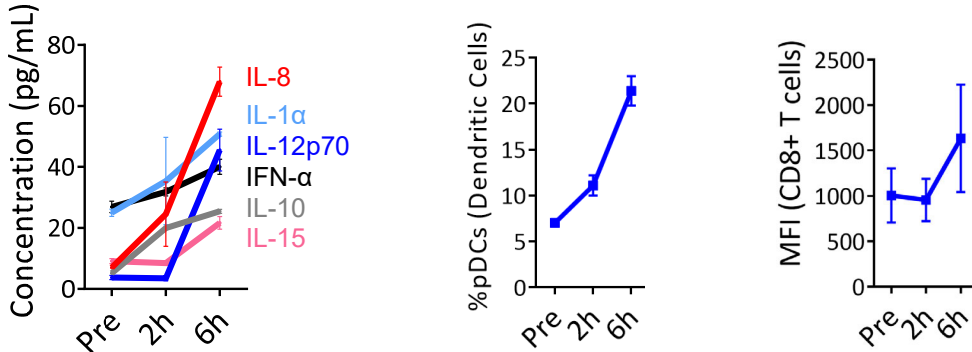
Sayour Mitchell Sawyer



Flores Angelini

**Publications**  
*Clin Can Res*, 2020  
*Sci Adv*, 2019  
*Nat Comm*, 2019  
*ACS Nano*, 2019

Human Trial (NCT04573140)



**Funding**  
 R37 CA251978  
 R01 CA175517  
 FBRP 20L07

**Shared Resource**  
 Biostatistics  
 Flow Cytometry  
 Next Generation Sequencing

**IMPACT:** Iterate mRNA vaccine development across cancer types





# Immunotherapy for Lung Cancer

## THE LANCET

Volume 398 | Number 10318 | Pages 2207-2306 | December 18/25-31, 2021

www.thelancet.com

**Pembrolizumab versus chemotherapy for previously untreated, PD-L1-expressing, locally advanced or metastatic non-small-cell lung cancer (KEYNOTE-042): a randomised, open-label, controlled, phase 3 trial**

*Tony S K Mok, Yi-Long Wu, Iveta Kudaba, Dariusz M Kowalski, Byoung Chul Cho, Hande Z Turma, Gilberto Castro Jr, Vichien Srimuninnimit, Konstantin K Laktionov, Igor Bondarenko, Kaoru Kubota, Gregory M Lubiniecki, Jin Zhang, Debra Kush, Gilberto Lopes, for the KEYNOTE-042 Investigators\**



Gilberto de Lima Lopes Jr., M.D., M.B.A.

**Sylvester's study contributed to FDA approval of the targeted therapy for lung cancer**

# Return on Investment of Center Collaborations

## Since 2015



- 24 inter-institutional pilot projects awarded through the program since 2015 (\$2.85M)
- Led to ROI of **\$32+ million** in peer reviewed extramural funding & **\$39M** overall



### Publications

- 75+ collaborative publications with members of at least 2 Centers in the past 3 years
- 39 publications directly related to pilot projects



### Collaboration

- Annual scientific retreats
- Quarterly meetings of Center Directors
- Monthly Administrators conference calls
- Research collaborations through conferences and workshops

# Florida Academic Cancer Center Alliance (FACCA)

## Multi-Institutional Pilot Example

**FACCA-2016-18:** “Defining and Targeting the Epigenetic Landscape of Uveal Melanoma”

**Co-PIs:**  
Moffitt: Kerian Smalley, PhD  
Miami: William Harbour, MD  
UF: Jonathan D. Licht, MD

**Award Amount:** \$150,000 Total (\$50,000 per Center)

**Project Period:** 9/1/2016 – 8/31/2017

### Outcomes:

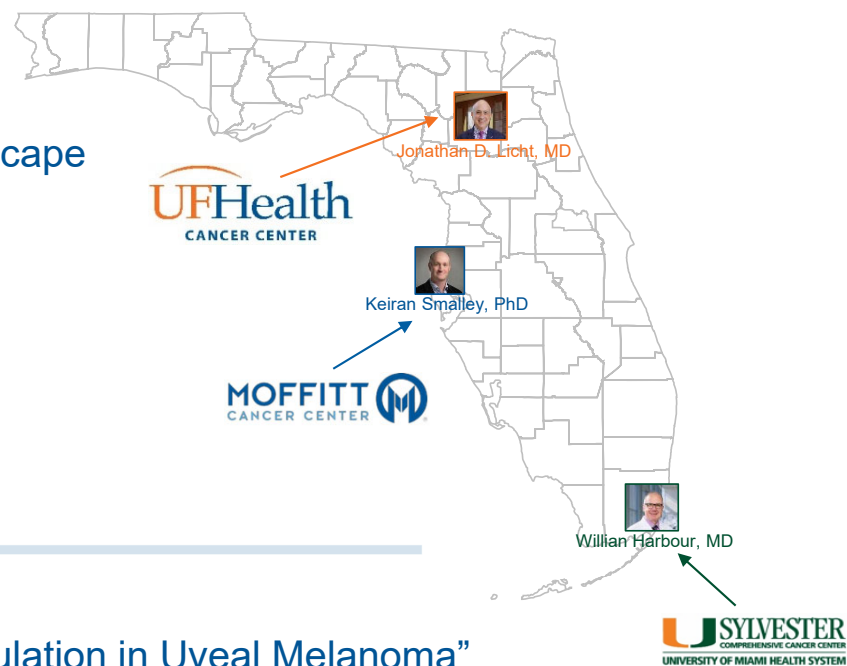
2017: FBRP 7BC05 “Defining and Targeting Epigenetic Dereglulation in Uveal Melanoma”

2018: FBRP 8BC03 “Defining and Therapeutically Targeting HDAC8-Driven Reprogramming in Melanoma Brain Metastasis Development”

2021 R01 CA256193 “Characterization and Targeting of the Epigenetic State Underlying Uveal Melanoma Liver Metastasis”

**\$7,548,918:** Total Amount of Peer-Reviewed Funding Awarded, **ROI: >50:1**

**5:** Peer-Reviewed Publications



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## Thank You