50+ High Level Recruits
Example: José Conejo-Garcia, MD, PhD

- Recruited from Wistar 2016
- Leadership highlights
- Chair, Cancer Antigen Working Group – Moonshot IOTN
- Blue Ribbon Center for Scientific Review Advisor – NIH (Oncology)
- Chartered and *ad hoc* NIH and CPRIT Study Sections Member
- 150+ publications including recently in *Science* & *Nature*
- PI of active NCI grants
  - NCI R01 CA240434
  - NCI U01 CA232758
  - NCI R01 CA124515
  - NCI R01 CA157664

CHANGING PARADIGMS

Science

RESEARCH

CANCER IMMUNOLOGY

BTN3A1 governs antitumor responses by coordinating αβ and γδ T cells

Kyle K. Payne[1], Jessica A. Mine[1], Subir Biswas[1], Ricardo A. Chaurio[1], Alfredo Perales-Puchalt[2], Carmen M. Anadon[1], Tara Lee Costich[1], Carly M. Harro[1,3], Jennifer Walrath[2], Qianqian Ming[4], Evgenii Tcyganov[2], Andrea L. Buras[5], Kristen E. Rigolizzo[1], Gunjan Mandal[1], Jason Lajoie[6], Michael Ophir[6], Julia Tchou[7], Douglas Marchion[8], Vincent C. Luca[4], Piotr Bobrowicz[6], Brooke McLaughlin[6], Ugur Eskiocak[6], Michael Schmidt[6], Juan R. Cubillos-Ruiz[9], Paulo C. Rodriguez[1], Dmitry I. Gabrilovich[2]*, Jose R. Conejo-Garcia[1,5]†

- Showed that butyrophilins block a functional immune synapse
- Targeting the CD277+, provokes killing of ovarian tumors by activating αβ and γδ T cells
- Led to an international multi-site phase I/IIa trial testing a CD277 antibody in patients with hematological & epithelial malignancies

nature

Article

IgA transcytosis and antigen recognition govern ovarian cancer immunity

https://doi.org/10.1038/s41586-020-03144-0
Received: 22 September 2019
Accepted: 17 December 2020
Published online: 3 February 2021

Subir Biswas[1], Gunjan Mandal[1], Kyle K. Payne[1], Carmen M. Anadon[1], Chandler D. Gatenbee[2], Ricardo A. Chaurio[1], Tara Lee Costich[1], Carlos Moran[2], Carly M. Harro[1], Kristen E. Rigolizzo[1], Jessica A. Mine[1], Jimena Trillo-Tinoco[1], Naoko Sasamoto[3], Kathryn L. Terry[3], Douglas Marchion[4], Andrea Buras[5], Robert M. Wenham[3], Xiaoqing Yu[6], Mary K. Townsend[7], Shelley S. Tworoger[7,8], Paulo C. Rodriguez[1], Alexander R. Anderson[2] & Jose R. Conejo-Garcia[1]✉

- Discovered protective humoral responses *vs.* ovarian cancer (OC) are driven by IgA binding to IgA receptors expressed on ovarian cancer cells.
- IgA redirects myeloid cells against cancer cells
- IgA transcytosis through OC cells antagonizes RAS pathway & sensitizes to cytolytic killing by T cells.
- Opens new therapeutic avenues.

Catchment Area Priority: Ovarian Cancer

High Impact Multi-Project Grants
Example: P01 Award (CA 250984)

Elsa Flores, PhD

Eric Haura, MD

- P01 Title: *Identifying Metabolic Vulnerabilities in Lung Cancer*
- **$10,288,518** over 5 years, which began June 1, 2021
- Leadership
  - MPIs: Drs. Elsa Flores (contact) & Eric Haura
  - Project Leaders: Drs. Elsa Flores, John Cleveland, Eric Haura, Gina DeNicola, & Paulo Rodriguez
  - Core PIs: Doug Cress, Brooke Fridley, Florian Karreth, John Koomen
  - Co-Investigators: Drs. Theresa Boyle, Bradford Perez, Mingxiang Teng, & Xiaoqing Yu
- Goals:
  - Identify metabolic mechanisms controlled by genetic drivers across non-small cell lung cancer & small cell lung cancer
  - Use that information to utilize standard of care therapeutics or develop new therapies that can target the common molecular signatures

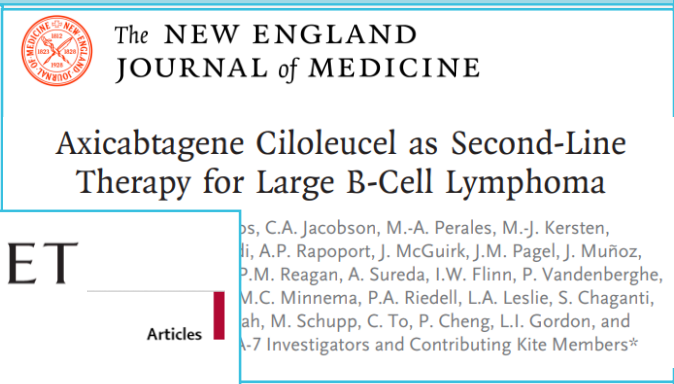
- *Dr. Flores, recruited 2016 from MD Anderson, recently promoted to Associate Center Director, Basic Science*
  - *Also funded by an NCI R35 and T32*
- *Dr. Haura recently promoted to Associate Center Director, Clinical Science*
  - *Also funded by an NCI R01 and UH3*

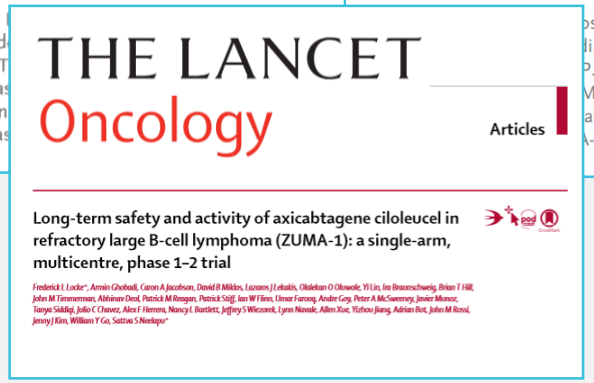
High Impact Clinical Trials

Example: the ZUMA-1 National Trial

CHANGING PRACTICE WITH CELL THERAPIES

- Moffitt treated 1st patient in the US with Yescarta™, a diffuse large B cell lymphoma (DLBCL) CAR-T therapy
- Co-led the ZUMA-1 national trial
- Moffitt was the 1st center to treat patients in the investigational setting
- Locke is Program Co-Leader of Immuno-Therapy Program





EXPANDING INNOVATIVE CELL THERAPY TREATEMENTS

- Moffit was first institution to provide CAR-T to a DLBCL patient
- Moffitt has an 85.5% market share of patients receiving CAR-T in Florida (151 CAR-T in CY2019)
- Immune Cell Therapy (ICE-T) Clinical Service established to support the needs of patients undergoing these treatments
- Insurance and Medicare coverage of cell therapies is inconsistent

POLICIES TO ELIMINATE BARRIERS TO CARE

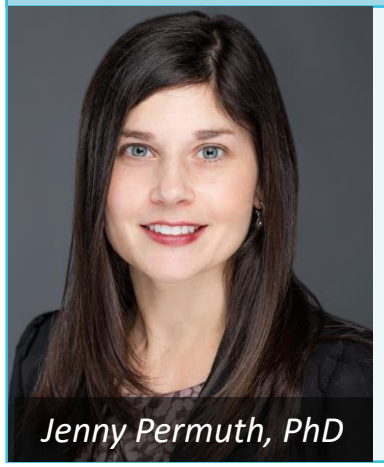
- Dr. Locke participated in outreach to members of Congress and the Administration regarding cell therapies and insurance coverage
- Advocacy to CMS led to a reimbursement pathway for CAR-T therapies
- Currently working to reduce referral barriers from community oncologists

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Impactful Science Addressing State's Cancer Needs

Cancers with excess mortality in vulnerable populations

Understanding disparities in pancreatic cancer



- 1st state-wide cohort study with a biospecimen and imaging bank for pancreatic cancer disparities research
- Funded by Florida Academic Cancer Center Alliance (FACCA) Pilot Project
- Led to Florida Biomed funding (8JK02)
- Dr. Permuth also funded by an NCI R37

Received: 21 November 2018 | Revised: 29 March 2019 | Accepted: 3 April 2019
DOI: 10.1002/cam4.2180

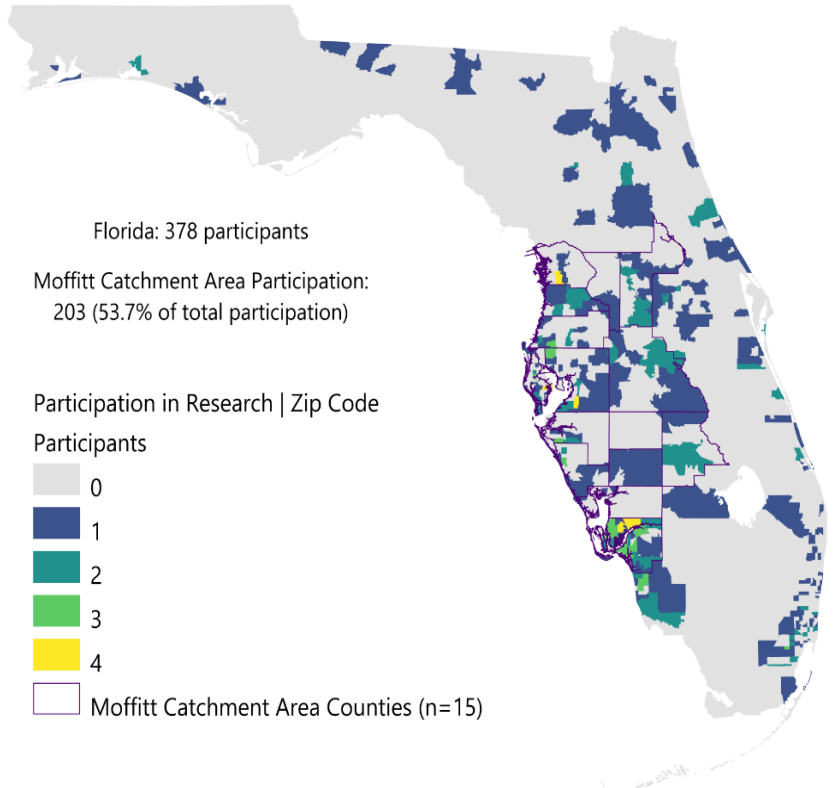
Cancer Medicine

ORIGINAL RESEARCH

Racial and ethnic disparities in a state-wide registry of patients with pancreatic cancer and an exploratory investigation of cancer cachexia as a contributor to observed inequities

Jennifer B. Permuth[1,2] | Ashley Clark Daly[3] | Daniel Jeong[4] | Jung W. Choi[5] | Miles E. Cameron[6] | Dung-Tsa Chen[7] | Jamie K. Teer[7] | Tracey E. Barnett[8] | Jiannong Li[7] | Benjamin D. Powers[2] | Nagalakshmi B. Kumar[1] | Thomas J. George[9] | Karla N. Ali[1] | Tri Huynh[1] | Shraddha Vyas[1] | Clement K. Gwede[10] | Vani N. Simmons[10] | Pamela J. Hodul[2] | Estrella M. Carballido[2] | Andrew R. Judge[11] | Jason B. Fleming[2] | Nipun Merchant[12] | Jose G. Trevino[6] | for the Florida Pancreas Collaborative

THE FLORIDA PANCREAS COLLABORATIVE



Author: Office of Community Outreach, Engagement, and Equity | Moffitt Cancer Center

378 Participants

15 Sites

12% Black

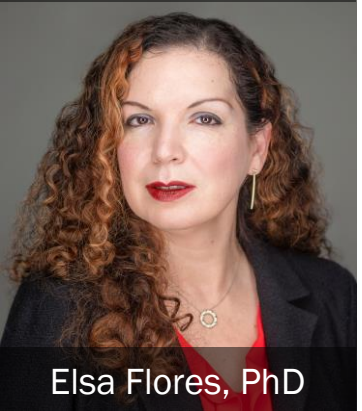
15% Hispanic

73% Non-Hispanic white

Training the Next Generation in Florida
Example: Innovative Data Science Training Grant


Doug Cress, PhD


Brooke Fridley, PhD


Elsa Flores, PhD

Grant Title: The Integrated Program in Cancer and Data Science

- NCI funded Training grant (T32 CA233399)
- Led by Drs. Doug Cress, Brooke Fridley, and Elsa Flores
- $1,584,045 over 5 years, which began in 2019
- 2021 Supplement expands focus to include focused training in Artificial Intelligence & Machine Learning

Training Program Summary

- Cross-disciplinary, spanning every Division at Moffitt
- 30+ faculty mentors
- Postdoctoral trainees will be paired into training teams that design a mentored research project that addresses a critical issue in cancer utilizing data science approaches
- In addition to research, the Program includes structured coursework, taken as appropriate, and is supplemented by participation in many career development activities relevant to postdoctoral trainees