



# **ACCRF Overview**

Nicole (Nikki) Spardy Burr, PhD, Scientific Program Officer

## The Roots of ACCRF



ACCRF was founded by Marnie and Jeff Kaufman. Marnie was diagnosed with ACC at 38 years old when she had four boys under the age of 10.

ACCRF is a public charity established in December 2005 in Needham, Massachusetts, USA

## **ACCRF Overview**

MISSION GOAL STRATEGY

Accelerate the development of better treatments and a cure for ACC patients

Develop a

pipeline of

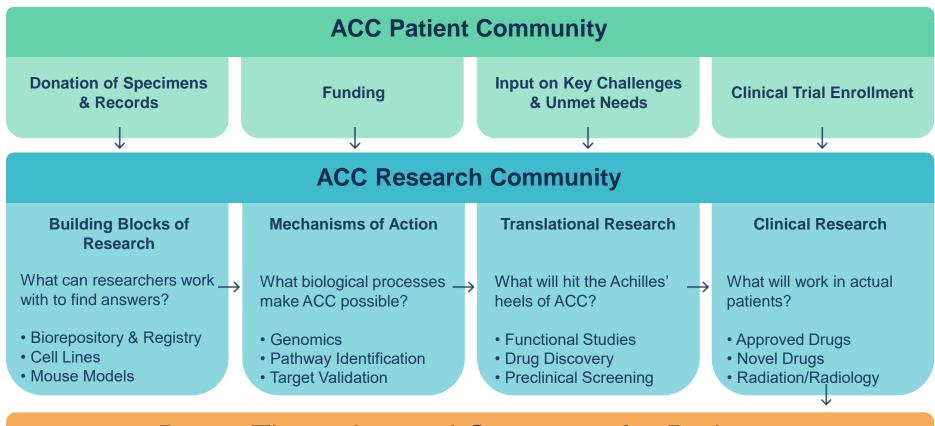
clinical trials

based on the best

available science

of researchers
following a coordinated
plan that is driven by
supportive and
supported patients

# ACCRF Research Agenda



#### Better Therapies and Outcomes for Patients



## **ACCRF Research Network**

#### **Academic Institutions**

MD Anderson
University of Virginia
Sahlgrenska Academy (Sweden)
Massachusetts General Hospital
Sanger Institute (UK)
University of Alabama
Johns Hopkins
Dana-Farber Cancer Institute
University of Michigan
University of New Mexico
University of Oklahoma
Yale University
Memorial Sloan-Kettering
University of Miami

#### **ACCRF**

Specimens & Models
Genomics & Proteomics
Drug Discovery
Clinical Trials

#### Government

National Institute of Dental and Craniofacial Research (NIDCR) National Cancer Institute (NCI)

#### **Private Industry**

South Texas Accelerated Research Therapeutics (START) Bethyl Labs Cell Signaling Technology

**Novartis** 

Pfizer

Eli Lilly

Merck

Bristol-Myers Squibb

Abbott Labs

Bayer

Astra Zeneca

Glaxo Smith Kline

Oncomed

Cyclacel

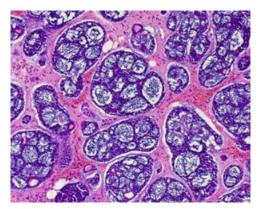


# **ACComplishments**

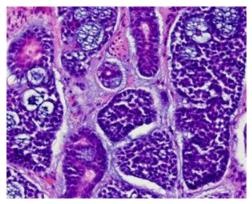
	2005	2018
Biobanking	Limited	Repositories with hundreds of frozen tumor specimens
Cell Lines	Multiple invalid models	Misidentifications discovered; valid models in development
Animal Models	None	20+ mouse xenografts developed; first transgenic models
Genomics	Sporadic reports of translocations	<ul> <li>Discovery of recurrent t(6;9) and MYB-NFIB fusion gene</li> <li>Identification of additional molecular targets with potential therapies: NOTCH, FGFR, IGF-1R, HDAC</li> </ul>
Preclinical Drug Screens	None in valid models	<ul> <li>Open xenograft platform for academia and industry</li> <li>Strong relationships with biopharmaceutical companies</li> <li>100 anti-cancer compounds screened in xenografts</li> </ul>
Mobilizing Patients	Limited	Tissue donations, clinical trial accrual and \$15 million in donations
NIH Commitments	Negligible	Over \$25MM for salivary gland tumor research (NIDCR)
Clinical Trials	Few, small & haphazard	Multiple science-driven trials with improved designs, enrollment, data quality and patient outcomes



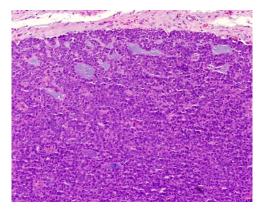
### How we think ACC works



Grade 1
No solid component



Grade 2 <30% solid



Grade 3 >30% solid

MYB/MYBL1 fusion or overexpression (90-95% of cases)

Secondary alterations in other genes (NOTCH1, FGFR, IGF, PI3K and chromatin modifiers) drive disease progression

Therapies:

Research grants focused on finding MYB/L1 inhibitors

NOTCH inhibitors show early signal in NOTCH-mutant ACCs Clinical trials are investigating other targeted and immune therapies in ACC

## **ACCRF Funds in Action**

#### ACCRF grants to the University of Virginia...

- Jump-started mouse model development
- Blossomed into genomic studies and preclinical drug screening, and
- Led directly to the first science-driven clinical trials of targeted drugs in ACC patients



Dr. Christopher Moskaluk University of Virginia



Dr. Patrick Dillon University of Virginia

## **ACCRF Funds in Action**

#### ACCRF grants to MD Anderson...

- Jump-started tumor banking that eventually gained NIH funding
- Blossomed into the identification of drug targets in aggressive cases of ACC, and
- Is leading to the development of clinical trials for ACC patients with NOTCHaltered tumors



Dr. Adel El-Naggar MD Anderson



Dr. Renata Ferrarotto MD Anderson

## **ACCRF Funds in Action**

#### ACCRF grants to Dana-Farber Cancer Institute...

- Jump-started immunologic profiling of ACC tumors
- Blossomed into the identification of PD-1 and PD-L2 markers expressed in ACC, and
- Is leading to clinical trials for ACC patients with PD-1 inhibitors in combination with radiation, chemotherapy and targeted drugs.



Dr. Glenn Dranoff DFCI, Novartis



Dr. Jon Schoenfeld DFCI



Dr. Nicole Chau DFCI

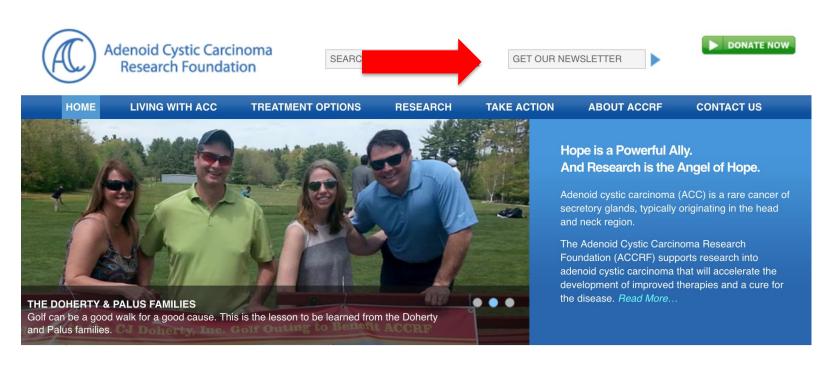
## **ACC Targeting Approaches**

- Multikinase (FGFR, VEGFR) inhibitors
- NOTCH inhibitors
- Immune checkpoint inhibitor combinations with radiation, chemo
- MYB inhibitors and DNA vaccine
- MDM2 inhibitors
- HDAC inhibitor combinations
- PSMA radiopharmecuticals
- ...and more in the pipeline...



## Keep yourself updated...

Sign up to receive ACCRF research updates via email...



Check the "Clinical trial- current studies" section on our website!

## Summary

- ACCRF has jump-started the field of ACC research through:
  - World-class Scientific Advisory Board driving a directed agenda
  - Creation of biobanks, preclinical models and research network
  - Target discovery and validation leading to clinical trials
- ACCRF is prioritizing therapy discovery and innovative clinical trials, with several promising concepts in development
- We ask for your support to achieve our goal of having the <u>first</u> FDAapproved therapy for ACC by 2020







Chris Moskaluk



Göran Stenman



Andy Futreal



Michael Wick

#### Thanks to ACC Research Heroes!



David Sidransky



Lillian Siu



**Bruce Chabner** 



Robert Haddad



**Ned Sharpless** 



Gigi Lozano



Irwin & Joan Jacobs