



Cancer Research Training and Education Coordination (CRTEC) at UMGCCC

Toni M. Antalis PhD, Associate Director for Training and Education



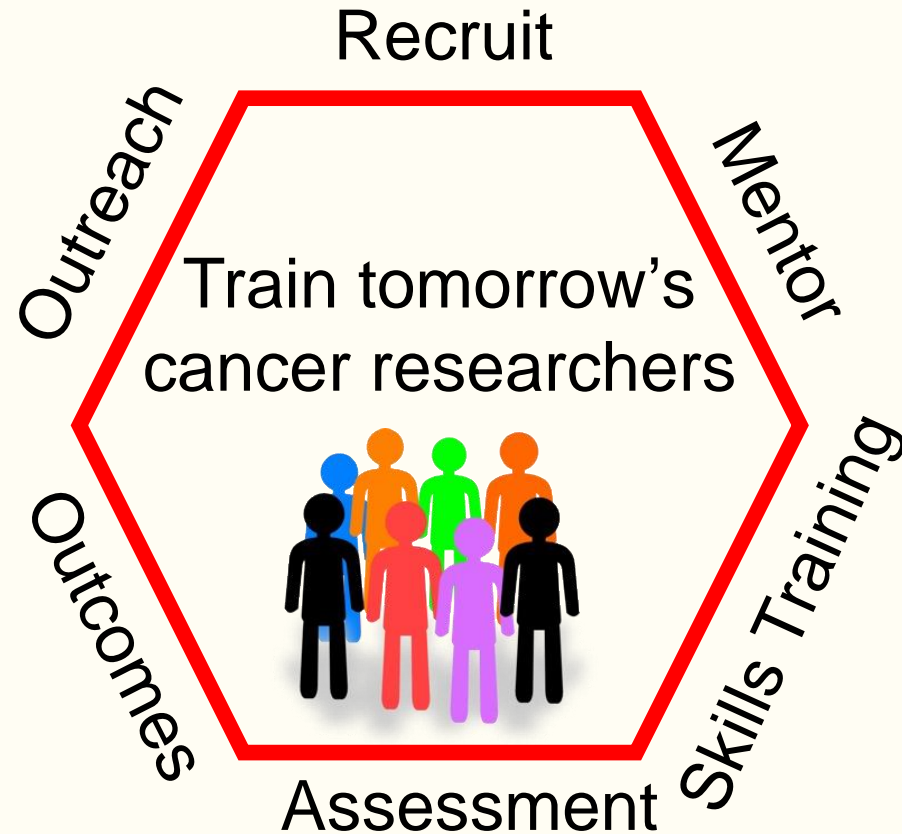
UNIVERSITY of MARYLAND
MARLENE AND STEWART GREENEBAUM
COMPREHENSIVE CANCER CENTER



A Cancer Center Designated by the
National Cancer Institute

The best possible outcomes are achieved from integration and cross training of basic, translational, population-based and clinical care using state-of the art science

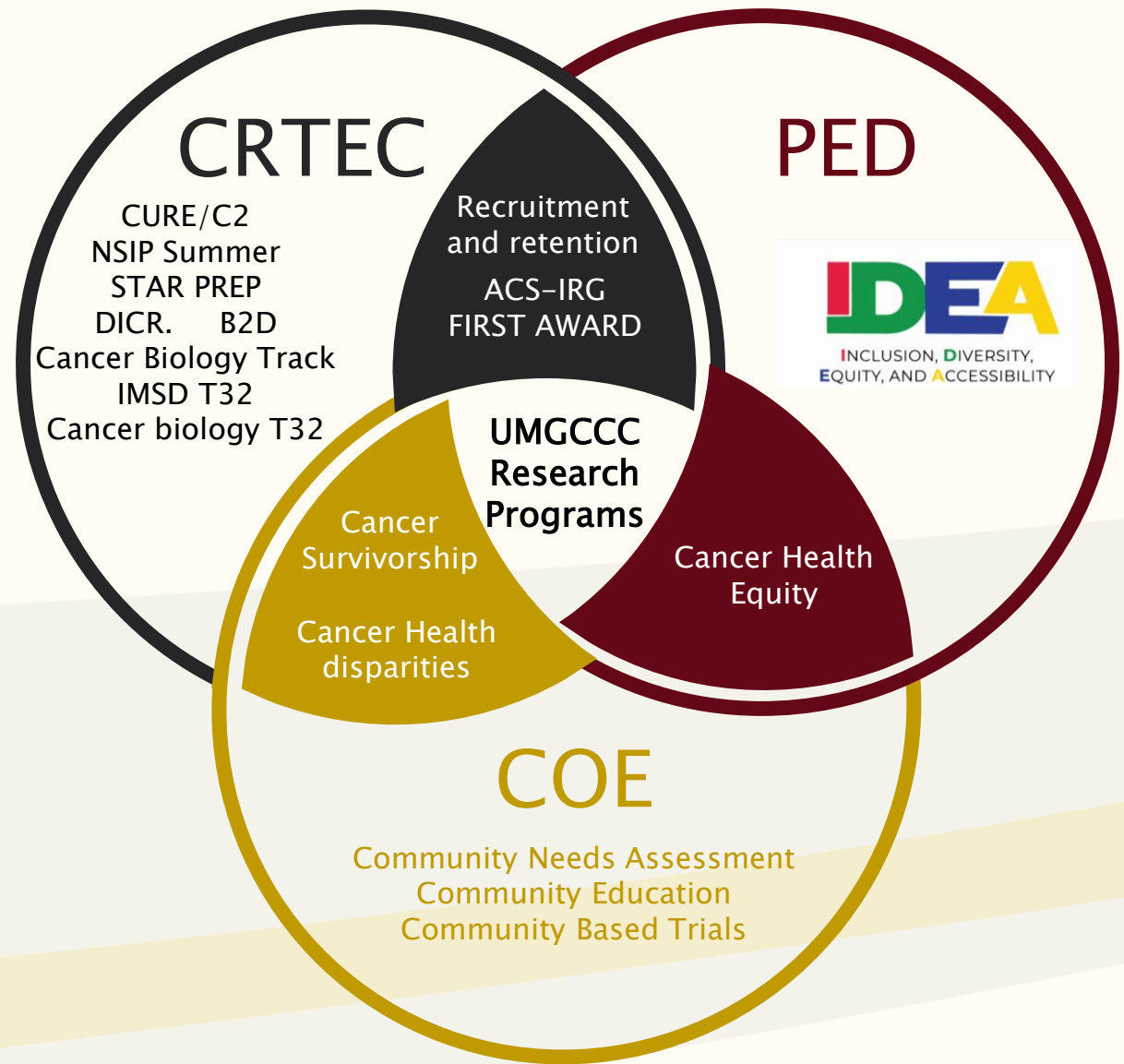
[Welch D, Antalis TM, et al, Essential Components of Cancer Education (2015) *Cancer Research* 75(24):5202-5]



- UMGCCC brings trainees together and provides a sense of a cancer community.
- UMGCCC support for education efforts spans the spectrum of the lay public, students and trainees, researchers, and clinicians
- **Our Training and Education Programs were considered outstanding by the NCI and cited as a model for other Cancer Centers.**

Interrelationships- UMGCCC P30 Core Components

Cancer Research
Training and Education
Coordination



Plan to Enhance
Diversity

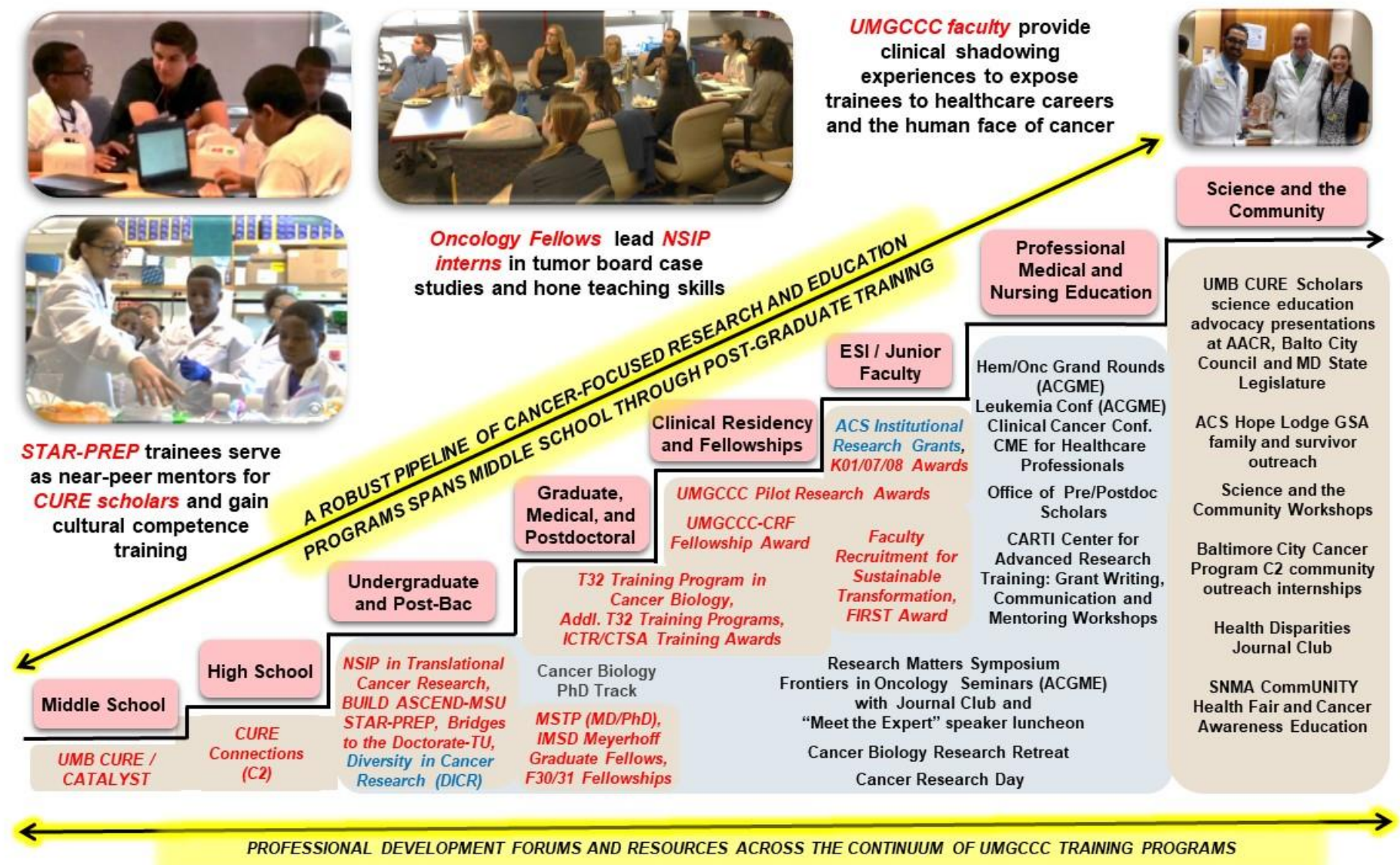
Community Outreach
and Engagement



Training Portfolio in Cancer Research

Integrating Education and Training at all levels

For 2021, we received \$4.5M to support the full portfolio of our cancer training and education efforts



☐ Training Programs and Fellowships
Funding: NIH (red font), American Cancer Society (blue font)

☐ Education and Professional Development Activities



GOAL

To train the next generation of cancer researchers, which is critical to advance discoveries leading to new cancer diagnostics and treatments.



1-
Coordinate and support innovative research programs and transformative experiences

2-
Expand infrastructure and analytical tools to assess metrics and outcomes

3 -
Build diversity by expanding partnerships with minority institutions and stakeholder connections across Maryland and globally

These aims are supported by the UMGCCC program structure, strategic recruitment of faculty and administrative staff, shared services, and other investments.

Cancer-focused STEM education pipeline at UMB

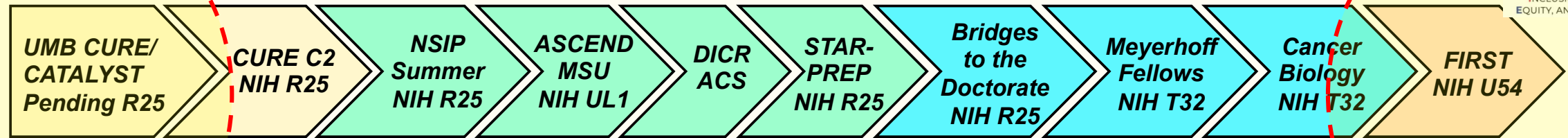
(CRTEC)

EXCITE → **INFORM** → **EMPOWER**



>400 total
URM trainees

Pipeline Programs



Middle school High school Undergraduate and post-baccalaureate Graduate, medical and post-doctoral ESI/Junior Faculty

URM Trainees	144	68	23	76	NEW	25	12	40	45	NEW
% URM of Total	100%	100%	27%	100%	100%	100%	100%	100%	18%	100%
% Female	51%	33%	27%	79%		69%	70%	67%	50%	

UMGCCC/UMSOM/UMB is distinguished as the ONLY center/institution nationwide to combine such a diverse profile of programs and funding mechanisms in the development of a robust STEM education pipeline.





UMB CURE
Scholars Program

Program Mission

- Identify promising students in West Baltimore and prepare them for health care and research career opportunities through hands-on workshops, lab experiences, and mentorship.
- Create a pipeline of mentored STEM experiences that utilizes UMGCCC expertise and capacity building partners
- *Explore, Excite, Inspire!*

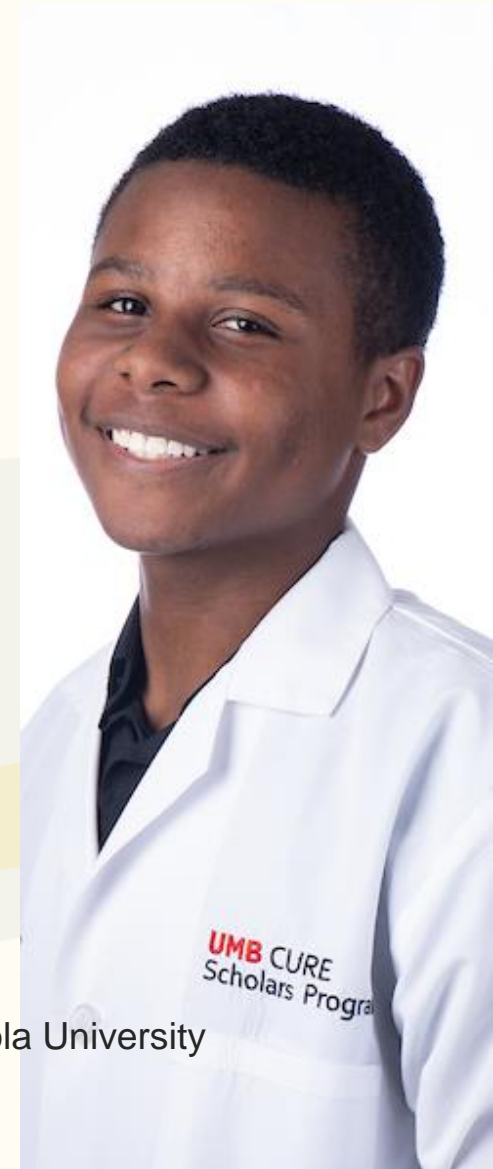
Davioin H.

High School: Baltimore Polytechnic Institute

College Acceptances & Destination: 8, Loyola University

Financial Aid: Full Scholarship

Aspiration: Mechanical Engineer

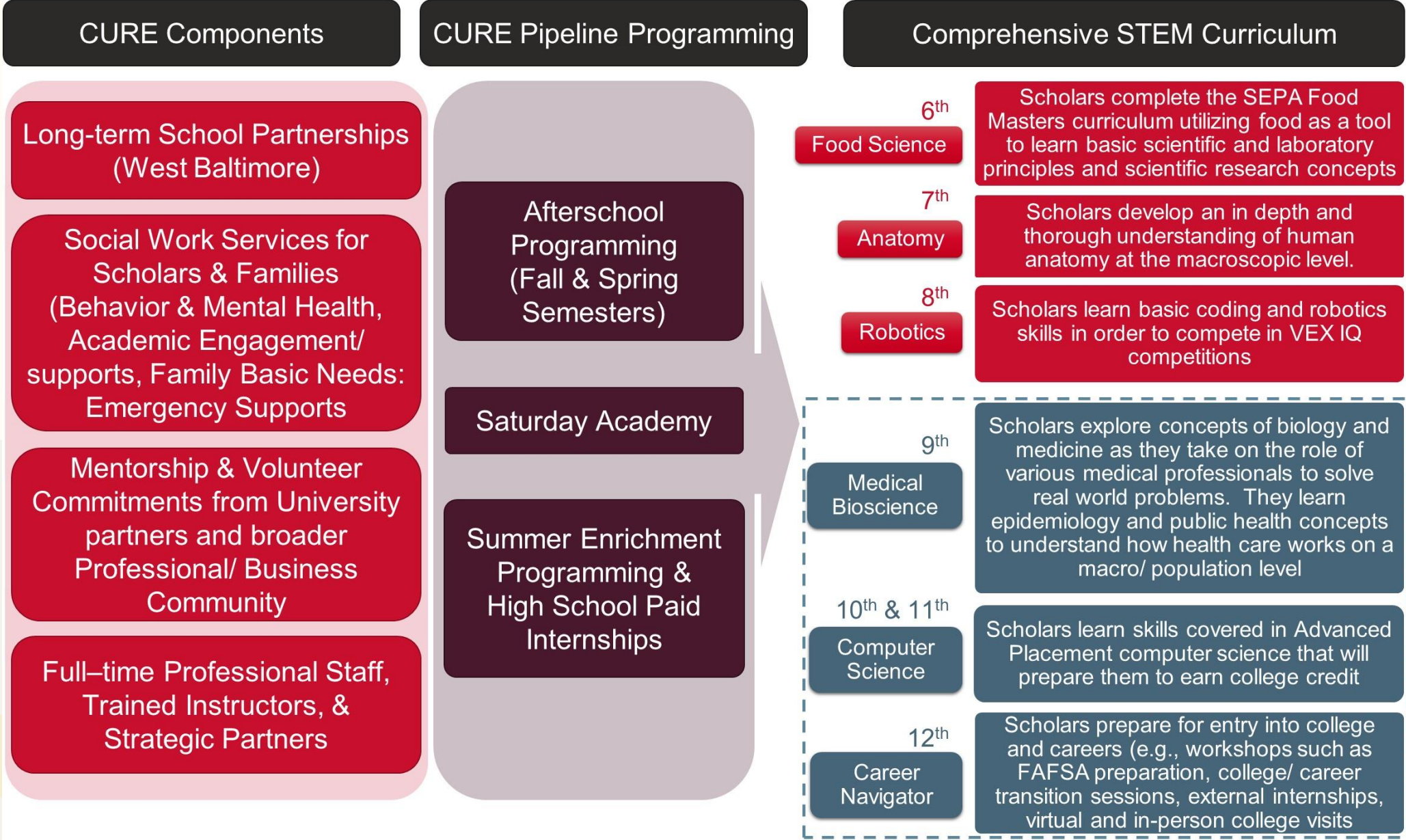


UMB and UMGCCC CURE Scholars Program

- The NCI Center to Reduce Cancer Health Disparities established the Continuing Umbrella of Research Experiences program in 1999 to increase diversity in the cancer research workforce.
- UMB and UMGCCC received planning funds from the National Cancer Institute (NCI) in 2014, and in 2015 the UMB CURE Scholars Program was launched in partnership with three under resourced West Baltimore middle schools - Green Street Academy, Southwest Baltimore Charter School, and Franklin Square Elementary/Middle School.
 - 42.8% of families in the Poppleton/The Terrace/Hollins Market neighborhood live in poverty.
 - 31.7% of residents from Southwest Baltimore did not graduate high school. Few (6.4%) have a bachelor's degree.
- The UMB CURE Scholars Program was ***the first of its kind in the nation*** to include middle school students in the NCI CURE pipeline.



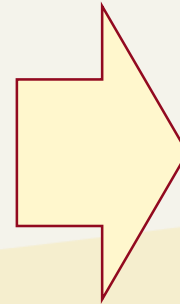
UMB CURE Program Overview: Our Approach



UMB and UMGCCC CURE SUCCESSES

- 121 Scholars in grades 6-12th currently enrolled in UMB CURE Scholars Program
- In May 2022, 19 CURE Cohort 1 Scholars graduated from high school.
 - 206 college applications submitted with 115 offers of admission.
 - >500,000 in college scholarships and grants
 - > 90% FAFSA completion rate

Cohort 1 White Coat Ceremony – 2015



Cohort 1 Graduation – May 2, 2022



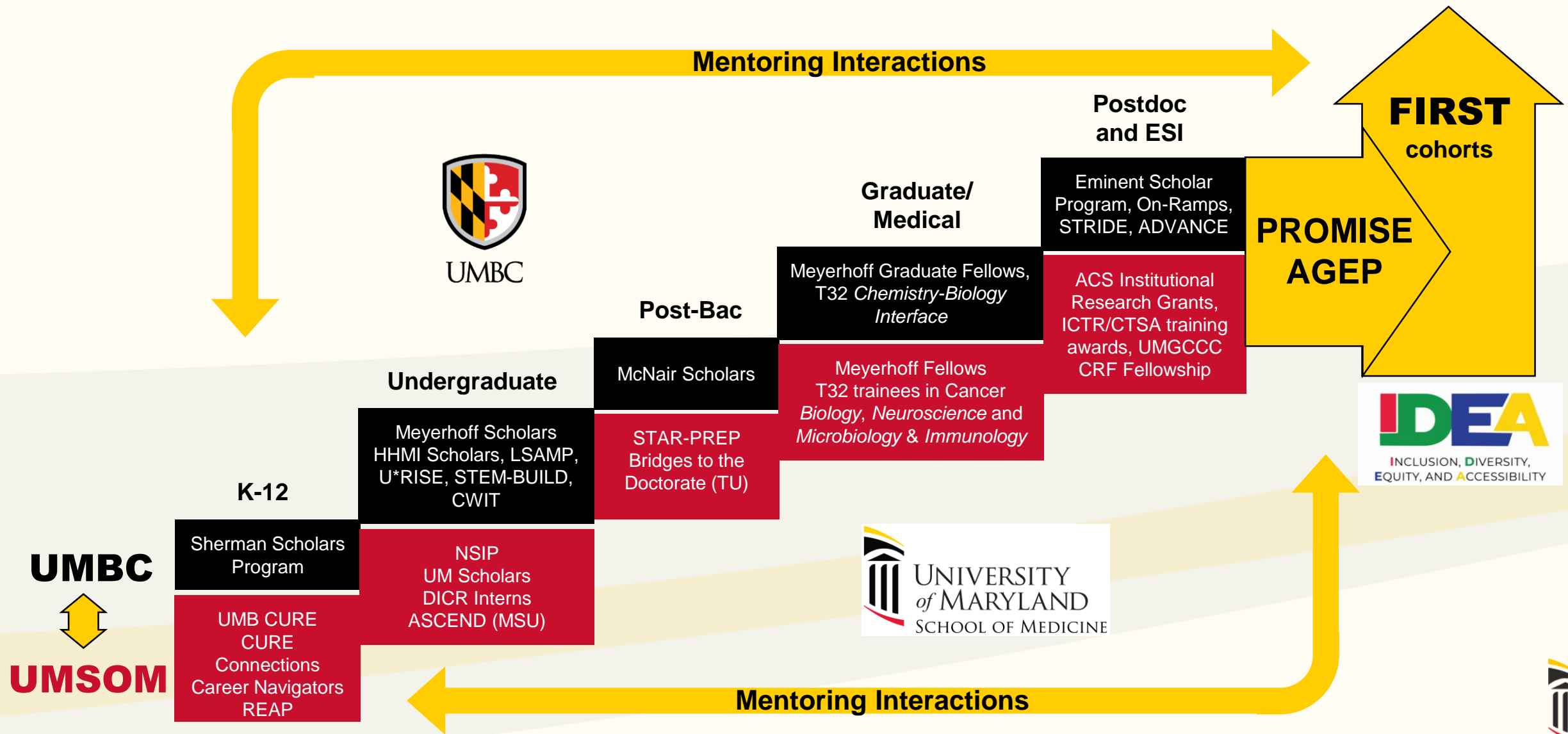
NEW....

THE FIRST PROGRAM AT THE UNIVERSITY OF MARYLAND (UM-FIRST)

- There is a need for increased diversity in academia and biomedical research.
- This deficit has implications for insufficient research directed to areas of concern for URM individuals, lack of expertise in health disparities, and inadequate mentors and role models for younger trainees.
- *Goal* - to recruit and retain diverse faculty by creating a program for purposeful hiring of a cohort of URM early-stage investigators with a stated interest in diversity, equity and inclusion to increase diversity in the biomedical research workforce and at our own institution.
- Partnership between the University of Maryland School of Medicine (UMSOM) and the University of Maryland Baltimore County (UMBC).
- Only 1 of 5 FIRST applications awarded nationally by the NIH/NCI this cycle.



The FIRST U54 Grant will support recruitment of 10 *new ESI underrepresented faculty members* in research areas of **cancer biology, neuroscience, and microbiology/infectious diseases**, at UMB and UMBC.



Acknowledgments

UMGCCC Cancer Research Training – Leadership Team



Gia Grier
McGinnis



Katharina
Furrs



Liz
Parker



Greg Carey



Laundette Jones



Bret Hassel



Jeff
Winkles



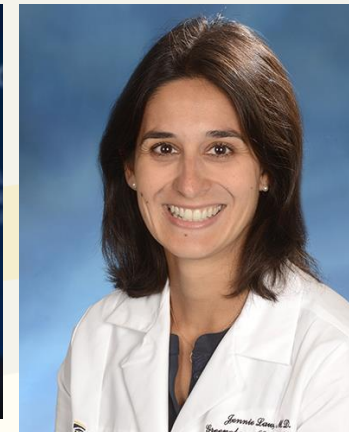
Tonya
Webb



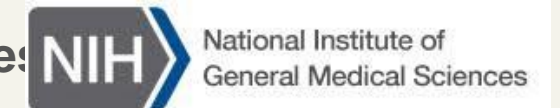
Toni Antalis



Curt
Civin



Jennie Law



The many volunteers,
donors and supporters
of UMB CURE Scholars!



Questions?

