

## **ABSTRACT: 2016 ELAM Institutional Action Project Symposium**

**Project Title:** Integrating Basic Scientists Into a Community-Based Cancer Center

**Name and Institution:** Angela L. Tyner, PhD, University of Illinois at Chicago.

**Collaborators:** Mentor: Robert Winn, MD, Director of the University of Illinois Hospital and Health Sciences System Cancer Center. Collaborator: Karriem Watson, MS, MPH, UI Cancer Center Administrative Director, Community Engaged Research.

**Background:** Under the leadership of Dr. Robert Winn, the U of IL Cancer Center has redirected its mission to focus on cancer health disparities and patients treated in a network of federally qualified community clinics. Patient populations on the south and west sides of Chicago are disproportionately burdened by cancer. A new "bench to community model" has been proposed to encourage basic scientists to explore the biological mechanisms underlying cancer health disparities in the community served by the UI Cancer Center. **Challenge:** Many of the basic science faculty, students and post doctoral trainees are not aware of the cancer burden of the communities served by the UI hospitals and affiliated clinics. **Opportunity:** The National Cancer Institute issued a funding opportunity announcement (FOA) for applications in area of "Basic Cancer Research in Cancer Health Disparities," to fund basic research studies directed toward elucidating biological/genetic causes and mechanisms of cancer health disparities, providing an opportunity for UI investigators to initiate new projects with research relevant to the UI Cancer Center community. Better integration of basic scientists into the Cancer Center community will strengthen a Cancer Center Support grant application that will be submitted within 36 months.

**Purpose/Objectives:** The purpose of this project is to facilitate the productive integration of basic scientists into the UI Cancer Center. Our objectives are: (1) to educate basic scientists about community cancer disparities; and (2) to educate basic scientists about basic research questions that will begin to address tumor biology and genomics of cancer disparities.

**Methods/Approach:** A new committee, the Cancer Center Education Group, has been formed to come up with strategies to promote the education of basic scientists to help them integrate their research into the Cancer Center community. The committee includes two basic scientists from the College of Medicine (Dr. Tyner and Dr. Paul Grippo), Dr. Alicia K. Mathews (Public Health, Nursing), and Mr. Karriem Watson (Administrative Director, Community Engaged Research). The committee has started meeting regularly, and has begun scheduling a series of events to engage Cancer Center members in research relevant to the UI community.

**Outcomes and Evaluation Strategy:** The committee is in the process of (1) scheduling a monthly Cancer Center seminar focused upon the biological/genetic causes and mechanisms of cancer health disparities that will be initiated in the fall of 2016; and (2) planning a city-wide symposium to be held at UIC in the spring of 2017, which will host renowned scientists working on the biology of cancer disparities. The Committee has started conducting outreach to basic scientists, including trainees at all levels, to educate them about the needs of the UI community. Submission of new research grants in response to the FOA and participation of basic scientists in the seminar series and symposium, as well as in community outreach and education events will be evaluated.

# Integrating Basic Scientists Into a Community-Based Cancer Center

Angela L. Tyner, PhD, University of Illinois at Chicago

Mentor: Robert Winn, MD, Director of the University of Illinois Hospital and Health Sciences System Cancer Center

Collaborator: Karriem Watson, MS, MPH, UI Cancer Center Administrative Director, Community Engaged Research

## Background

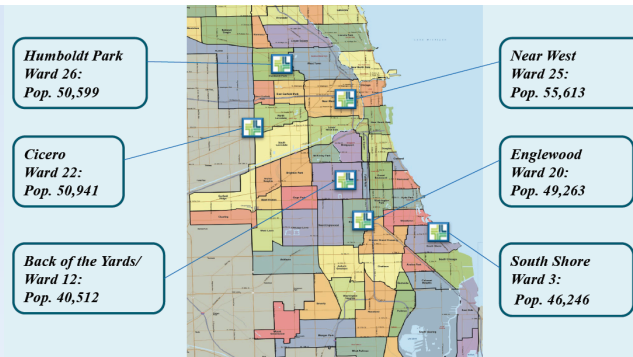
**Background:** Under the leadership of Dr. Robert Winn, the U of IL Cancer Center has redirected its mission to focus on cancer health disparities and patients treated in a network of federally qualified community clinics. Patient populations on the south and west sides of Chicago are disproportionately burdened by cancer. A "bench to community model" has been proposed to encourage basic scientists to explore the biological mechanisms underlying cancer health disparities in the community served by the UI Cancer Center.

**Challenge:** Many of the basic science faculty, students and post doctoral trainees are not aware of the cancer burden of the communities served by the UI hospitals and affiliated clinics. **Opportunity:** The National Cancer Institute issued a funding opportunity announcement (FOA) in area of "Basic Cancer Research in Cancer Health Disparities," to fund basic research studies directed toward elucidating biological/genetic causes and mechanisms of cancer health disparities, providing an opportunity for UI investigators to initiate new projects with research relevant to the UI Cancer Center community. Integration of basic scientists into the Cancer Center community will strengthen a Cancer Center Support grant that will be submitted within 36 months.

## Objectives

The purpose of this project is to facilitate the productive integration of basic scientists into a community-focused Cancer Center. Our objectives are: 1) to educate basic scientists about community cancer disparities; and 2) to educate basic scientists about basic research questions that will begin to address tumor biology and genomics of cancer disparities.

## The UI Cancer Center Community



- ◆ Five of the ten poorest communities in Chicago
  - ❖ 35% Latino
  - ❖ 35% African American

## Increased Cancer Rates in the UI Community i.e. the Englewood neighborhood

Cancer Incidence Rates	Englewood				
	Englewood	Greater Grand Crossing	West Englewood	National	State
Lung	108.6	87.0	91.9	65.0	71.5
Breast	149.5	149.9	135.4	119.8	126.4
Prostate	203.4	199.5	226.1	143.8	153.9
Colorectal	54.9	63.4	61.4	43.9	50.2
Head and Neck	12.9	17.5	17.8	11.2	11.6
Cervical	16.4	20.3	18.8	7.8	8.4

\*Incidence and mortality rates are age-adjusted per 100,000 people

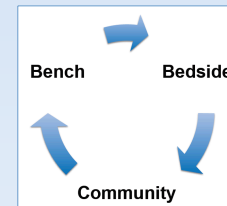
## Research Programs in the UI Cancer Center

- ◆ Cancer Biology
- ◆ Cancer Targets and Therapeutics
- ◆ Carcinogenesis and Chemoprevention
- ◆ Population Health, Behavior and Outcomes



- ❖ These programs envelop the research and clinical strengths of over 250 faculty members, from 11 different colleges and across four campuses, within the University of Illinois.
  - ❖ 85 Active NCI Awards
  - ❖ \$28.8 million in total costs

## An Updated Model: Bench to Community



- ❖ Goal: To educate bench researchers about the needs of the community and promote cutting edge research directed at understanding biological mechanisms underlying cancer disparities.
- ❖ Benefit: May lead to new funding to facilitate the identification of new targets and therapeutics to add to the armamentarium against cancer disparities in the UI community.

## Methods

Following meetings with Dr. Winn and the UI Cancer Center Executive Committee, a new committee, the Cancer Center Education Group, has been formed to devise strategies to promote the education of basic scientists to better integrate their research into the Cancer Center community. The committee includes two basic scientists from the College of Medicine (Dr. Tyner and Dr. Paul Grippo), Dr. Alicia K. Mathews (Public Health, Nursing), and Mr. Karriem Watson (Administrative Director, Community Engaged Research). The committee has begun scheduling a series of educational events designed to engage Cancer Center members in basic research relevant to the UI community.

## Results

The committee is in the process of (1) scheduling a monthly Cancer Center seminar focused upon the biological/genetic causes and mechanisms of cancer health disparities that will be initiated in the fall of 2016; and (2) planning a city-wide symposium to be held at UIC in the spring of 2017, which will host renowned scientists working on the biology of cancer disparities. The Committee has started conducting outreach to basic scientists, including trainees at all levels, to inform them about the needs of the UI community and funding opportunities. Submission of new research grants in response to the FOA and participation of basic scientists in the seminar series and symposium, as well as in community outreach and education events, will be evaluated.

