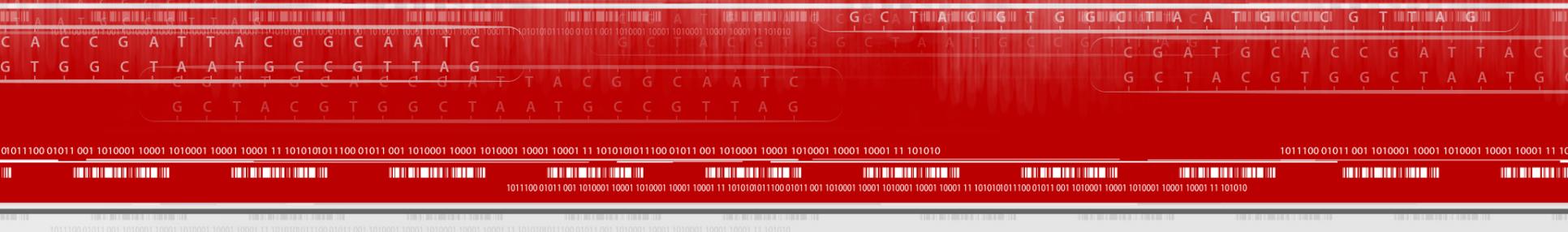


Perspectives from an Experienced Investigator

Electra D. Paskett, Ph.D

The James

 **THE OHIO STATE UNIVERSITY**
COMPREHENSIVE CANCER CENTER



Overview of Talk

- Describe what drove me to my career path.
- What possibilities exist in career paths for young investigators?
- How do you plan a career to get to that place?

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What is my career?

- Health disparities researcher – behavioral and community/structural interventions
- Associate Director for Population Sciences and Program Leader for Cancer Control
- Division Director, Cancer Prevention and Control
- Director, Center for Cancer Health Equity

How did I get here?

The James



“Why?”



Undergraduate Training

- Bachelor's degree in Biology – thought I wanted to be a doctor
- Worked for 10 years in drug development lab
- Something more
- Eureka! I found it!
 - It's epidemiology!
 - The ultimate “why” discipline!

Education & Training



Master's of
Science Degree
in Public Health
(Epidemiology)



Dee West, Ph.D.
Surveys



Education & Training



UNIVERSITY of
WASHINGTON

*Community-Based
Participatory Research*



Beti
Thompson, PhD

Doctoral Degree in Epidemiology
and Health Services Research
School of Public Health

Epidemiology



Emily
White, PhD

Intervention Design



Maureen
Henderson, MD

Doctoral Work Ignited My Passion

“ I don't want to have my womb removed because I will **stop being a woman to my man.** ”



Why this work?

- Inner need to right wrongs
- Right place at the right time
- Love working with communities

How?

- Dedication
- Supportive family
- Training
- Great staff/colleagues
- Respect for community members

“Health Disparities” Defined



September 1999

“... **Differences** in the incidence, prevalence, mortality, and **burden** of diseases & other adverse health conditions that exist among specific **population groups** in the United States.”

– National Institutes of Health

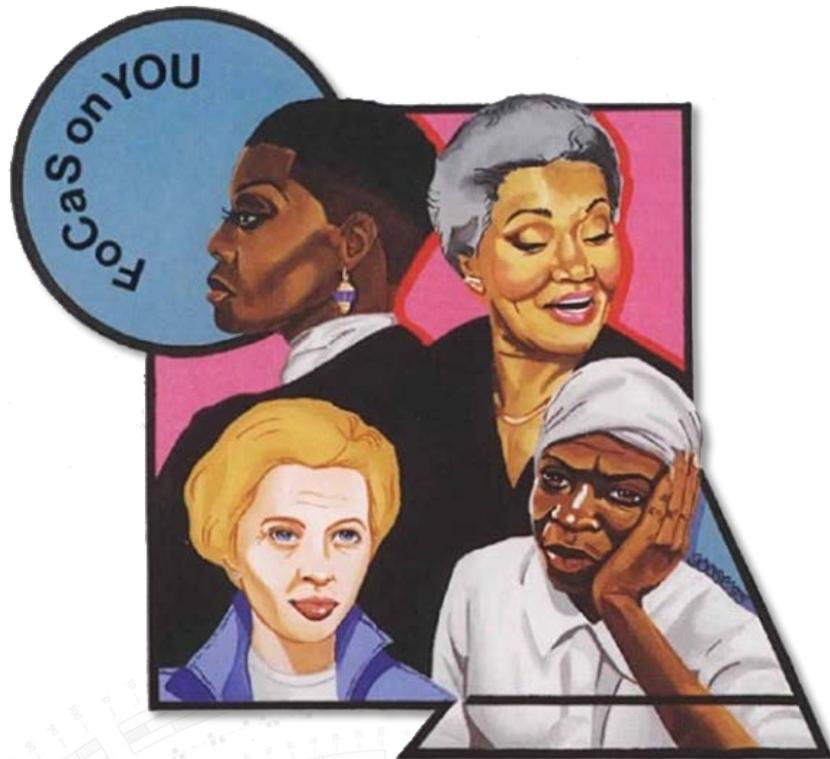
Racial and Ethnic Minorities, Medically Underserved Communities, Females, Geography, Age, Sexual Orientation, Income

How did I start on this path?



WAKE FOREST
UNIVERSITY

Department of
Public Health Sciences



FoCaS: Forsyth County Cancer Screening Project

RFA released from NCI in 1991

**Focus on increasing
breast & cervical cancer
screening among poor
and minority women**

Funded in 1992 to work
in low-income housing
communities in 2 cities



Community-based Interventions

Theory-based:

Social Support

Stages of Change

Health Belief Model

Theory of Reasoned Action



FoCaS: Methods

Placed Nurse in Federally Qualified Health Center

In-Reach

HOW TO GET A MAMMOGRAM AT REYNOLDS HEALTH CENTER

IF YOU HAVE NEVER BEEN TO REYNOLDS HEALTH CENTER . . .

1. Call for an appointment to get a breast exam and a mammogram at 727-8278, 727-8234 or 727-8285.
2. On the day of your appointment, check-in at the information desk.
3. When you see the doctor, tell him that you want a mammogram.
4. Take the forms from your doctor to the x-ray department and have your mammogram done.

IF YOU ALREADY HAVE A DOCTOR AT REYNOLDS HEALTH CENTER . . .

1. Call for an appointment to get a breast exam and a mammogram at 727-8234 or 727-8285.
2. You will get the forms for a mammogram from the nurse's office on the third floor.
3. Take forms to the x-ray department and have your mammogram done.

CERVICAL CANCER

All women are at risk for cervical cancer. But some things increase your risk. They are as follows.

- *If you smoked more than 100 cigarettes.
- *If you had sex before the age of 18.
- *If you have been told by a doctor that an earlier Pap Smear was not normal.
- *If you had sex with more than 3 partners.
- *If you ever had a sexually transmitted disease, (venereal, etc.)
- *If you ever had warts or bumps on the outside of your vagina.

If you have had one or more of the above, you may be at a higher risk for cervical cancer. Ask your Doctor for a Pap Smear. It's a quick and easy exam that does not cost much.

How to Get a Mammogram

At Reynolds Health Center

BREAST SCREENING CENTERS

FoCaS on YOU

At Reynolds Health Center

FoCaS: Methods

Used Lay Health Advisors (LHAs) to deliver community education (groups and one-on-one)

Out-Reach



FoCaS: Methods (con't)



- Used a Community Advisory Board and a Provider Advisory Board
- Cross-sectional and cohort samples to evaluate impact



FoCaS: Results

Screening Rates: Pre-to-Post Intervention

	Mammogram	Pap Smear
Comparison City	33% to 40%	67% to 60%
Intervention	31% to 56%	73% to 87%

18% Increase
p=0.04

21% Increase
p=0.004

(Paskett et al, CEBP, 1999) R01 CA57016

Impact of...

FoCaS

**Lay Health
Advisor
Interventions**

**Dissemination
of Findings
& Products**

**Community-
Based
Participatory
Research**

**Training
the Next
Generation**

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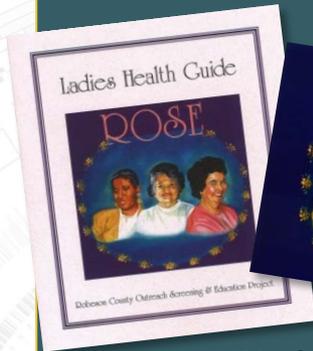
Lay Health Advisor- Intervention Tested in Studies

'97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15

**Robeson County
Outreach Screening &
Education Project
9/1/97 – 8/31/03**



ROSE
Robeson County
Outreach
Screening &
Education Project



R01 CA72022

**Carolinas
Cancer**

Community Awareness Resources Education
4/01/03 – 4/30/15

Lay Health Advisor- Intervention Tested in Studies

Improved Breast Cancer Screening among Tri-racial Women in Low-Income Rural County in NC

Percent of women receiving a mammogram

Intervention

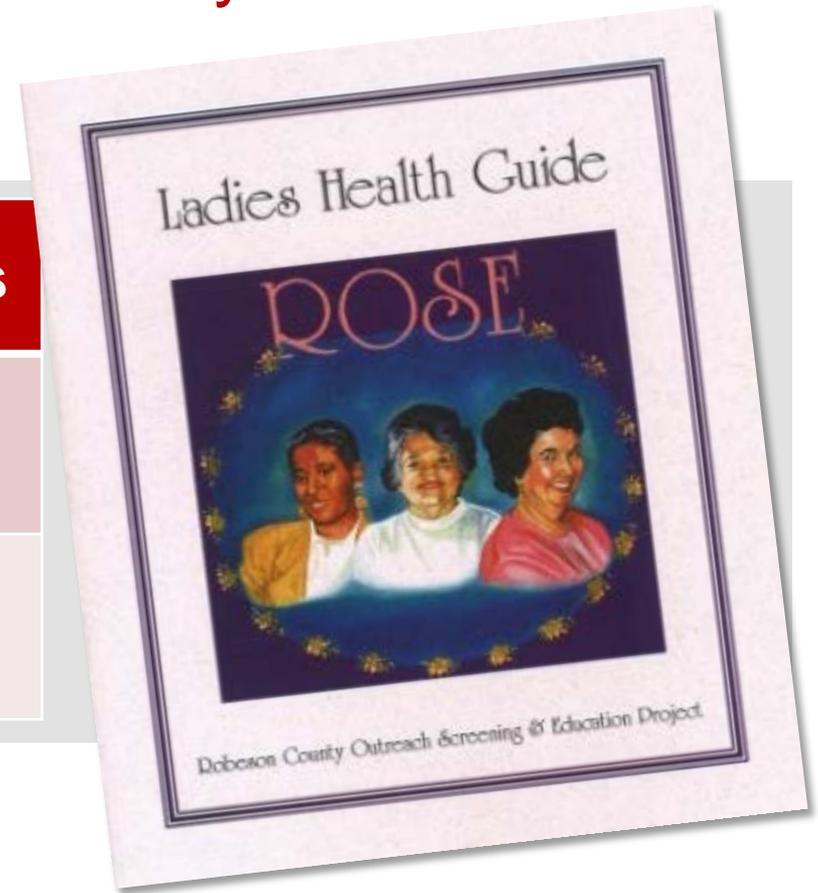
Control

12 Months

42.5%

27.3%

RR=1.56
($p < .001$)

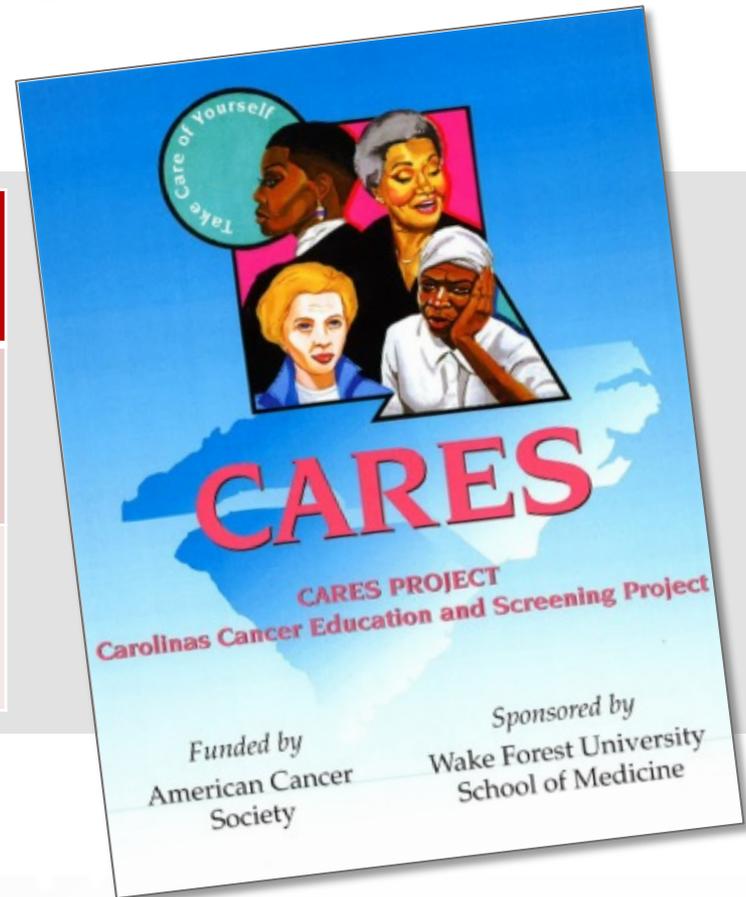


Lay Health Advisor- Intervention Tested in Studies

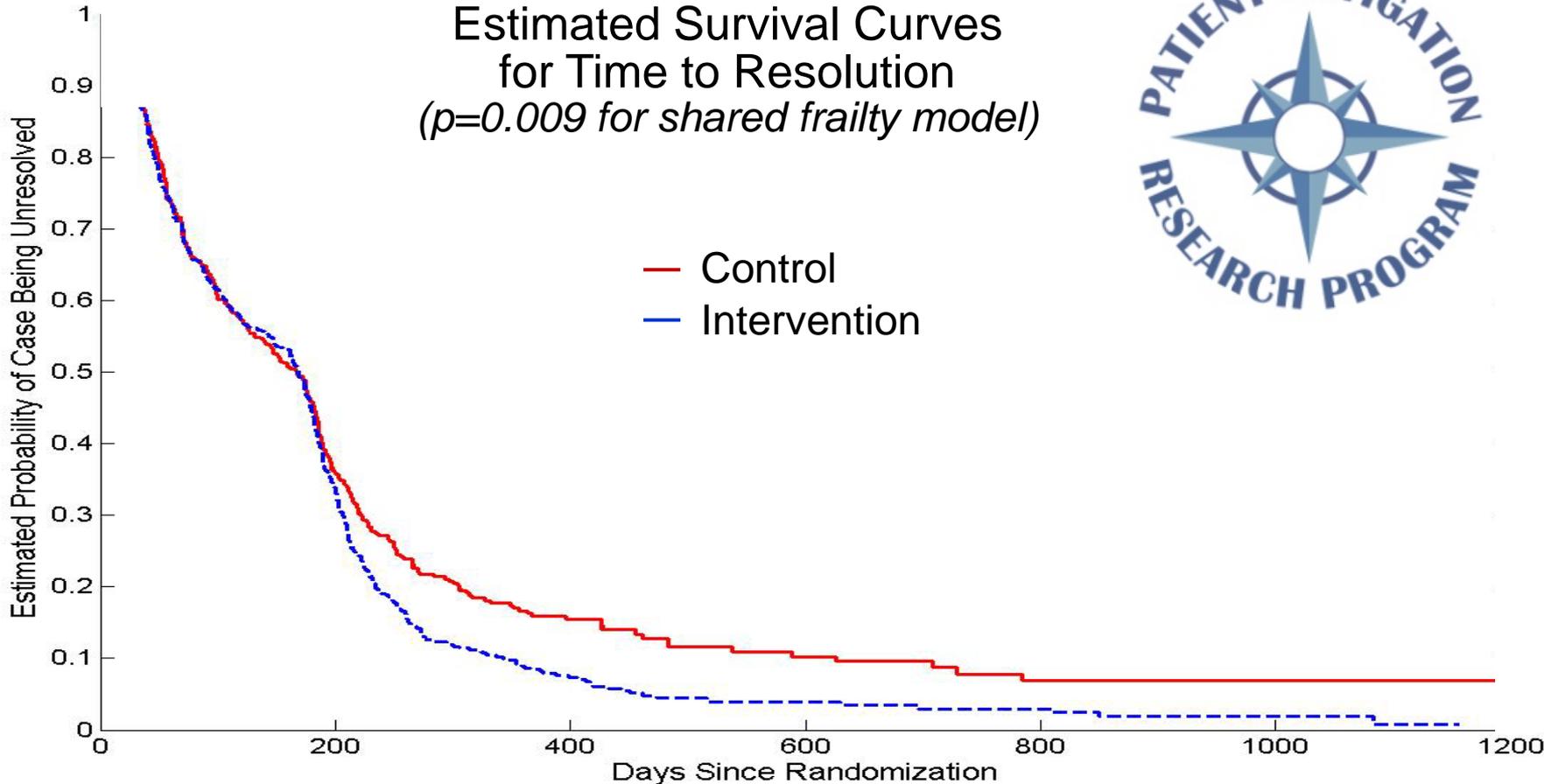
Improved Colorectal Cancer Screening among Women in Low-income Housing Communities

	Baseline	3 Years
Intervention	49.3%	55.6%
Control	49.3%	49.7%

OR=1.13
(*p*=ns)



Patient Navigation Reduced Time to Resolution After an Abnormal Screening Test



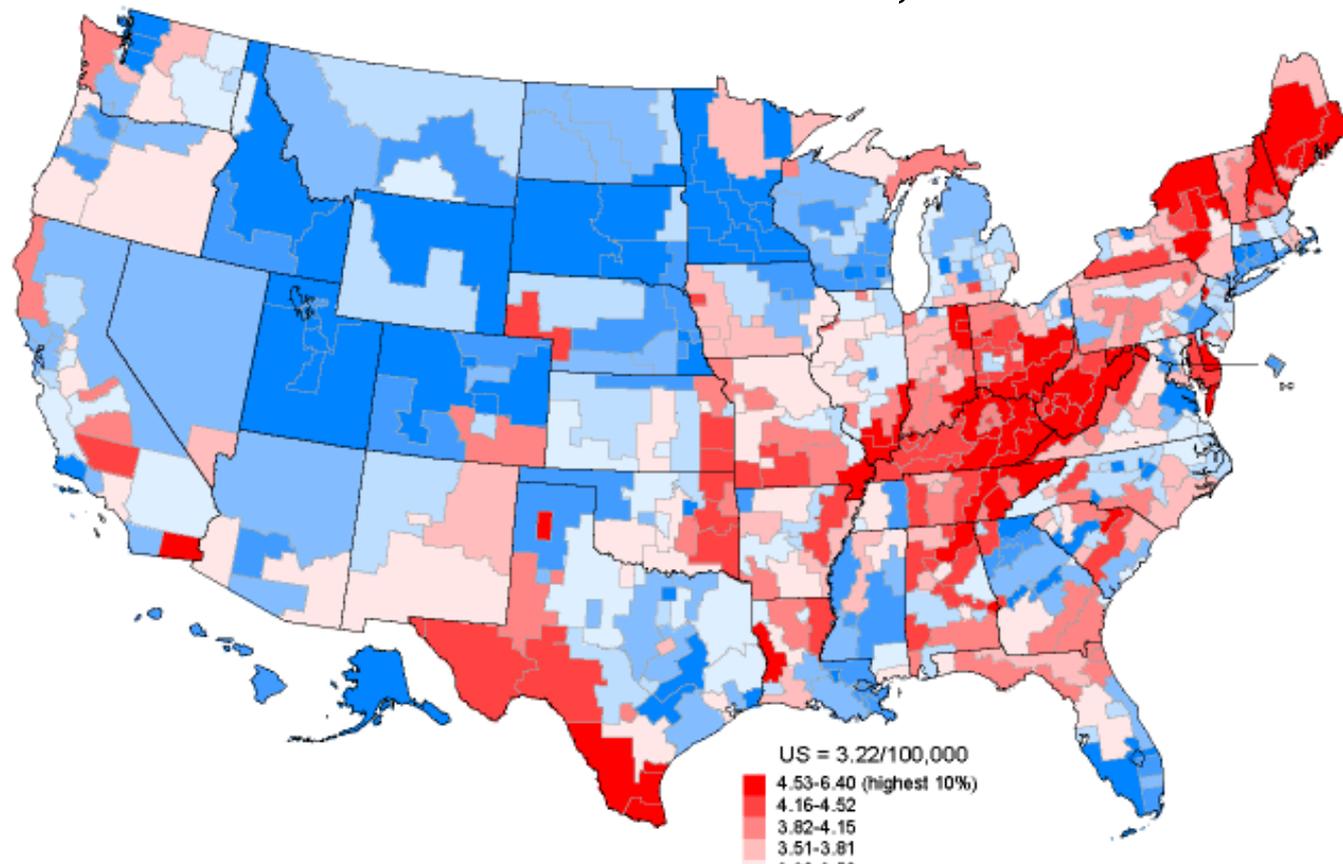
OSU Center For Population Health and Health Disparities

Goal

To understand why Appalachian Ohio women have high incidence and mortality rates for cervical cancer.

Cancer Mortality Rates by State Economic Area

Age-adjusted 1970 US Population Cervix Uteri: White Females, 1970-94



Lay Health Advisor- Intervention Tested in Studies

14 Clinics

Observational Study
N=571

Multi-level factors associated
with tobacco use & Pap testing

RCT testing LHA
vs. usual care

Project 1
N=286

Pap smear use:

- Risk appropriate guidelines
- Barriers counseling

Project 3
N=1360

Case-control
study

- HPV testing, Pap smear, EBV titers, Cotinine
- TGF-Beta receptor

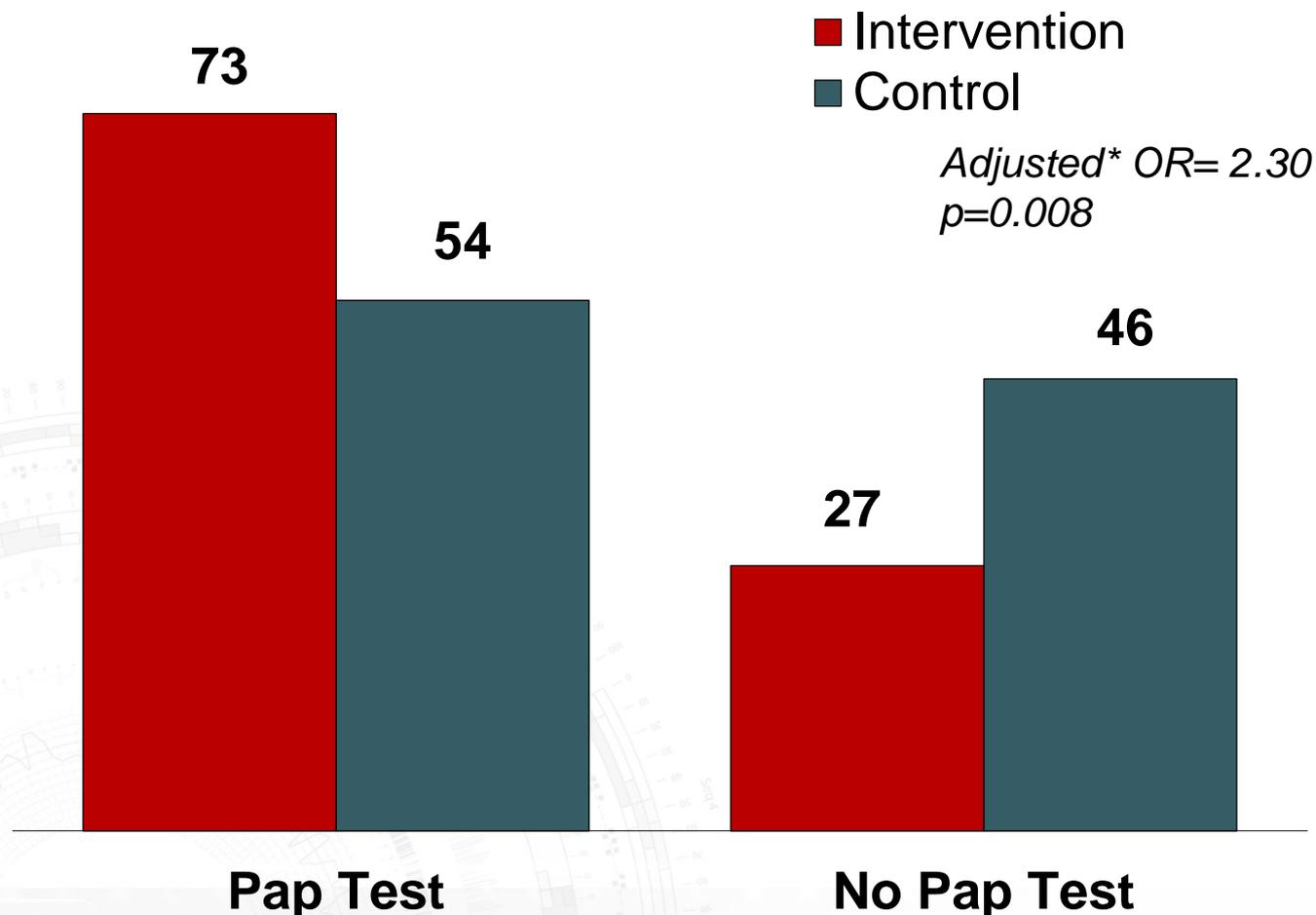
Project 2
N=302

Smoking
cessation:

- Biochemical validation
- Pharma-based intervention with behavioral component

Lay Health Advisor- Intervention Tested in Studies

LHA Intervention to Improve Pap Smear Use Self-Reported Pap Status (N=235)

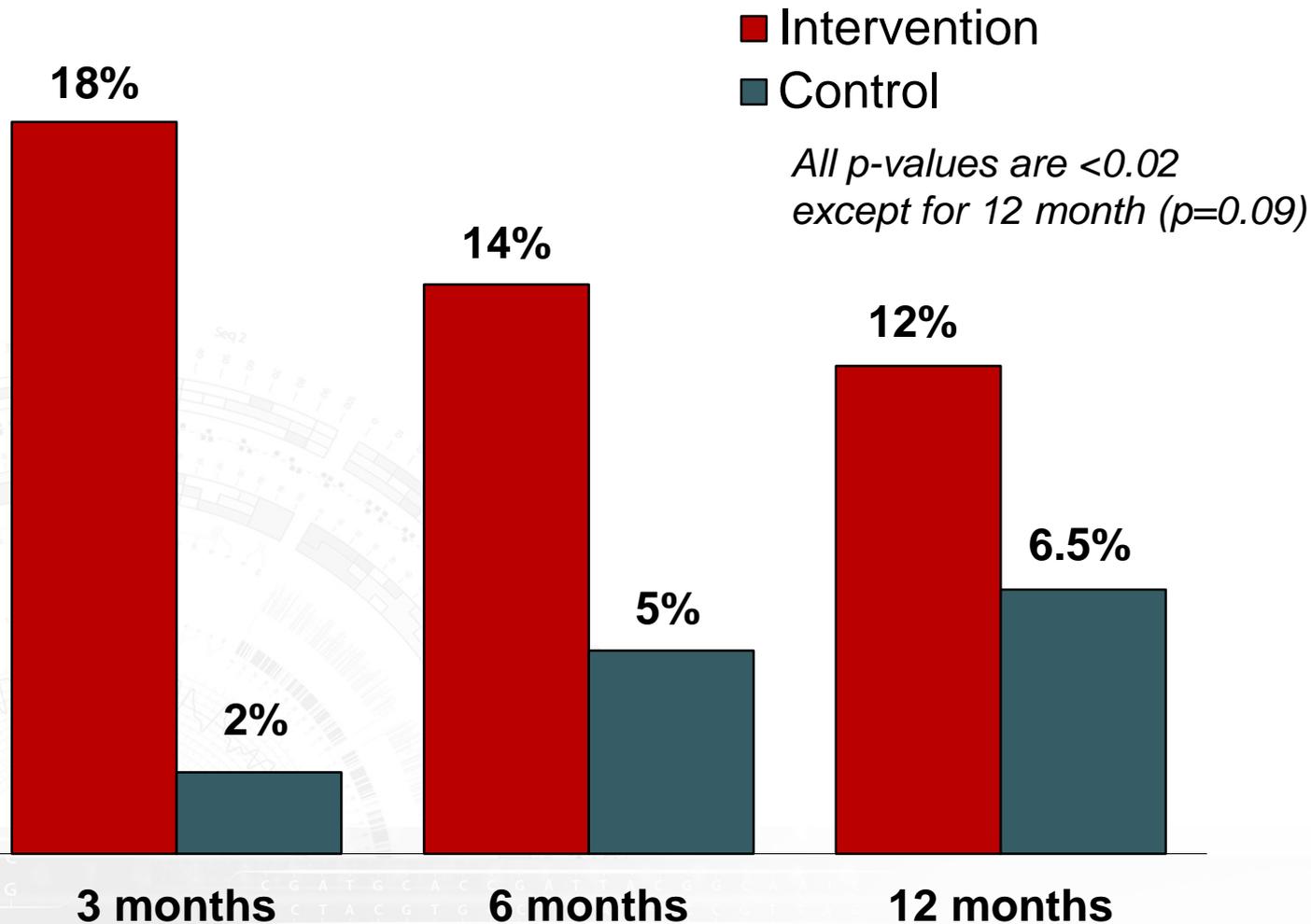


*Adjusted for age, race, education, employment status, SES, marital status, health insurance, and previous abnormal Pap. Clinic included as a random effect in models.

(Paskett et al., CEBP, 2011)

Lay Health Advisor- Intervention Tested in Studies

LHA Intervention to Improve Smoking Cessation *Cotinine-Validated Cessation Rates*

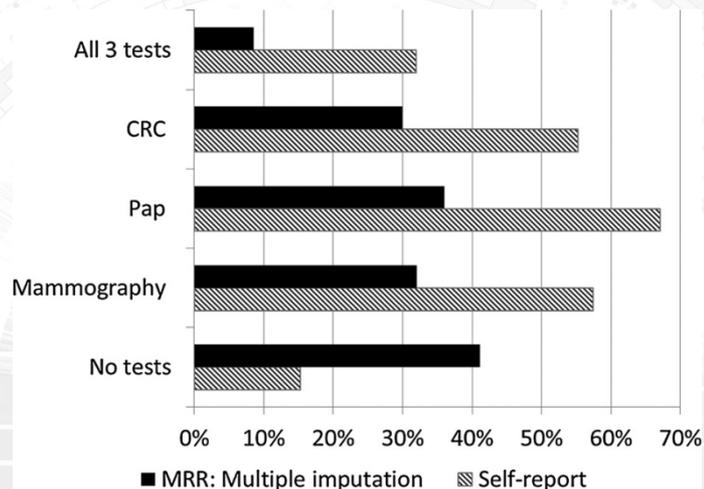


(Wewers et al., CEBP 2010)

Lay Health Advisor- Intervention Tested in Studies

Newly-funded RO1: *Comparative Effectiveness of Interventions to Improve Multiple Screening Test in Rural Women*

- Rural women in 32 counties in NW Ohio and NE Indiana
- Underserved in terms of access to medical care
- Only 8% of rural women are up-to-date on 3 screening tests
- Working with Univ of Indiana – *V. Champion and S. Rawl*
- Two interventions: Tailored, interactive DVD +/- PN



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Impact of...

FoCaS

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Advisor
Intervention

Dissemination
of Findings
& Products

Community-
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Research

Training
the Next
Generation

Dissemination of Findings & Products

FoCaS Intervention Used in:



Core Partners:

- National Cancer Institute's Cancer & Information Service
- American Cancer Society
- Center for Disease Control's National Breast & Cervical Cancer Education Program
- USDA's Cooperative State Research
- Education & Extension Service with USDA

Summary of Evidence-Based Interventions



NATIONAL CANCER INSTITUTE Research-tested Intervention Programs (RTIPs)

Most Hits for Breast & Cervical Cancer Interventions

From August 2003 – Jan 2011, usage statistics collected:

# of times program summary viewed:	7,049
# of program orders completed:	161
# of single product downloads:	3,645
# of separate product "preview" files viewed:	235

Patient Navigation Research Program: All sites

Meta-Analysis Results:

PN reduced loss to follow-up in both diagnostic and treatment phases after 3 months post-diagnosis among poor, minority patients

Days since diagnosis 91-365 Adjusted Hazard Ratio (95% CI)

Diagnostic phase	1.5	(1.2 – 1.8)
Treatment phase	1.4	(1.1 – 1.9)

Policy Implication:

American College of Surgeons Commission on Cancer mandate for PN starting January 2015

Impact of...

FoCaS

Lay Health
Advisor
Intervention

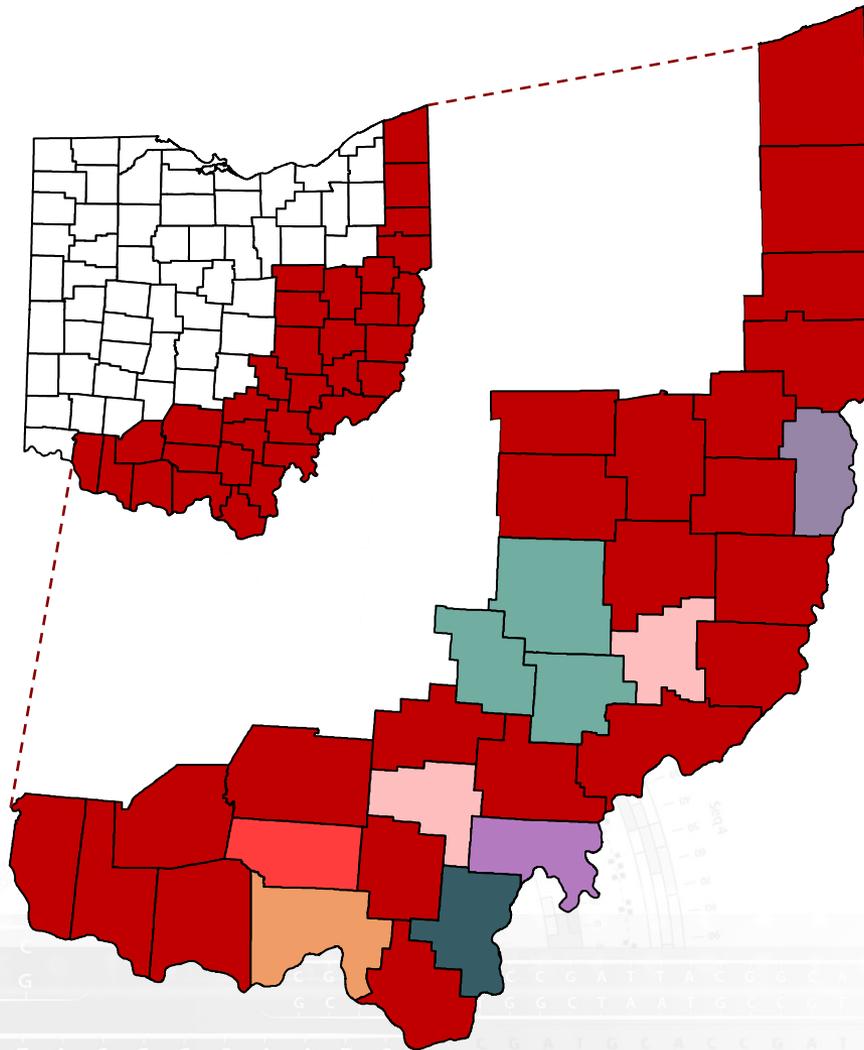
Dissemination
of Findings
& Products

Community-
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Participatory
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Training
the Next
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Community-Based Participatory Research

Appalachia Ohio Coalitions & Councils to Facilitate Research



- Women in Action Against Cancer Coalition
- Noble County Coordinated Council
- Meigs County Cancer Initiative
- Partners of Hope Cancer Coalition
- Fight Cancer Save Lives – ACT Now Coalition of Scioto County
- Pike Healthy Lifestyle Initiative
- Vinton County Social Service Council
- Cancer Concern Coalition

Impact of...

FoCaS

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the Next
Generation

Training The Next Generation

Training in CBPR & Health Disparities Research

- Community Members
- Students
- Post-docs & Fellows
- Junior Faculty



2011 Annual Ohio ACCN Research Seminar
Addressing Cancer Health Disparities among Women in Appalachia

The 2011 Annual Ohio ACCN Research Seminar will highlight community-based participatory research conducted in Appalachia. This Seminar is designed for researchers, community leaders, cancer control advocates, public health professionals and others who are interested in understanding cancer health disparities among women in Appalachia.

Thursday, May 5th
9:30 a.m. - 4:00 p.m.
Marriott Northwest Hotel
5 Blazer Parkway
Columbus, Ohio 43217

For more information about the seminar, please call 614-293-4112 or megan.higgins@osumc.edu

This seminar was made possible through the support of the Ohio State University Comprehensive Cancer Center (OSUCCC).

 **The James**
Ohio State is a Comprehensive Cancer Center designated by the National Cancer Institute





What Career Paths Exist for Young Investigators?

- Academic
 - University
 - Cancer Center
- Private Sector
 - Health Care Organization
 - Industry
- Community
 - Health Department
 - Government, Foundations

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What Do You Want to Be Excellent In?

- Leadership
 - Academic – chair, dean
 - Cancer Center – program leader, associate director
 - Other Centers – eg, Health Disparities
- Teaching
 - Classes – load; seminars; on-line
 - Mentoring – undergrad's, graduate school, post-docs, medical students, junior faculty
 - Training – eg., community members
- Funding/Research
 - Metrics at your institution
 - Climate for young investigators
- Service
 - Institution and the greater community of science
 - Committees, journals, study section, professional associations

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How Do You Plan a Career to Get Where You Want to Go?

- Develop a Plan
- Get the right mentor(s)
- Be in the right place
- Always be learning
- Take advantage of opportunities
- Be seen for your work and be known for something

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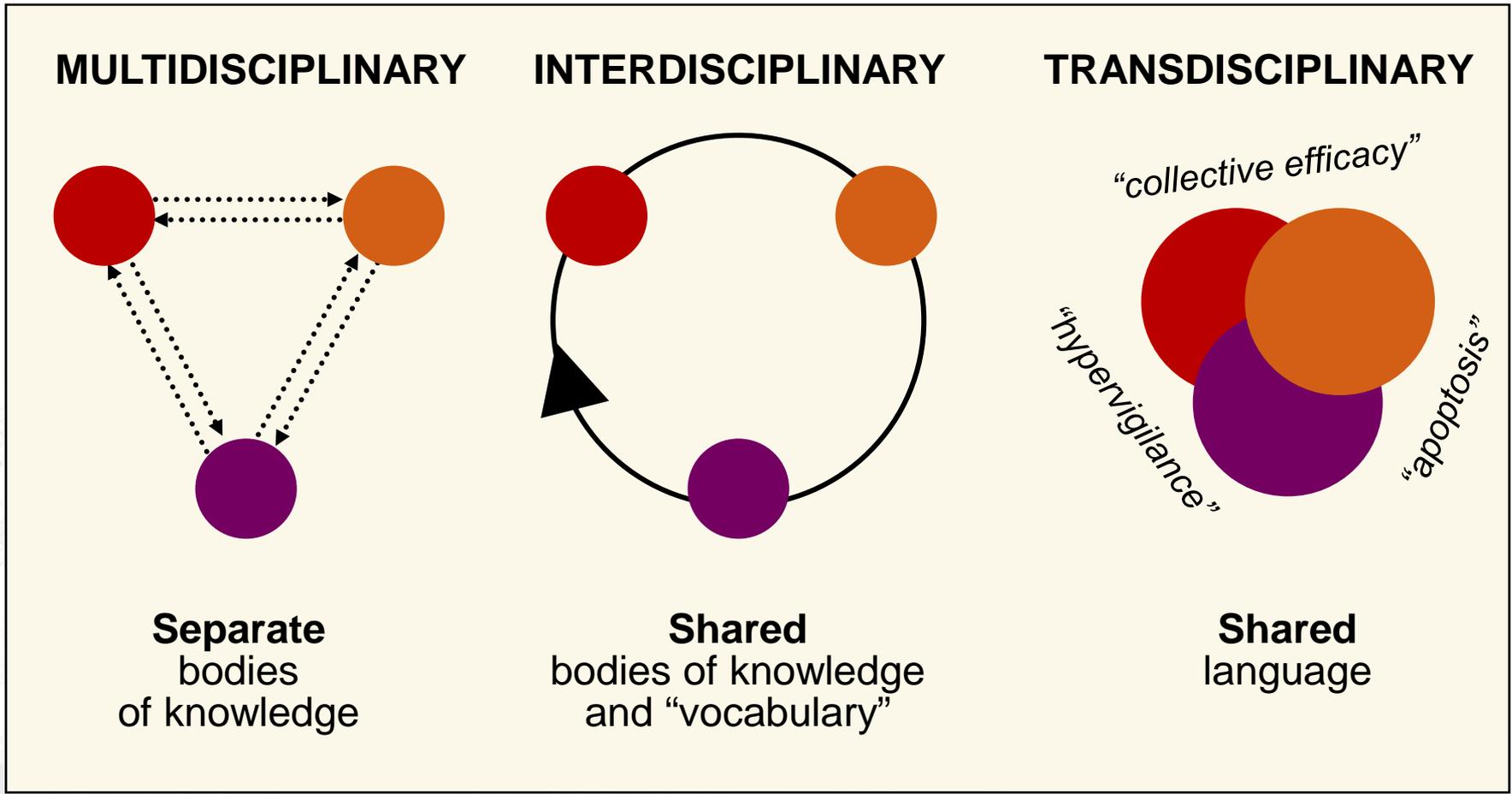
Concrete Example: Disparities Research

- What should a new investigator who wants to do and be known for disparities research learn?
 - Team Science
 - Multi-level approach
 - CBPR



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A New Paradigm: Team Science



Sarah Gehlert, Ph.D.

Multi-level Approach: Spans From Basic Biology to the Population

“From Cells to Society”



**Genetics,
Biology**

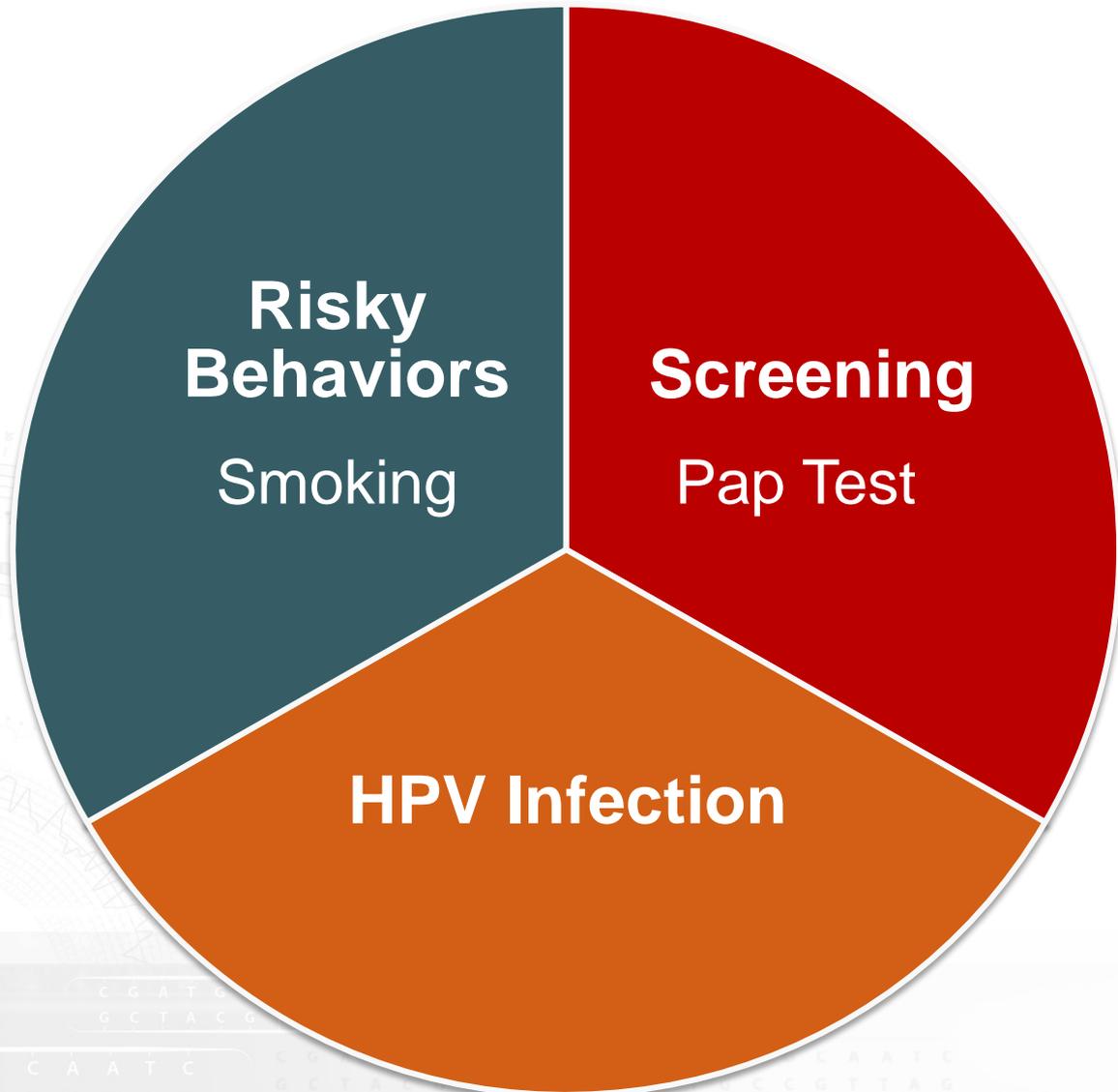
**Behavior
& Individual
Risk Factors**

**Socio-
Cultural
Context &
Relationships**

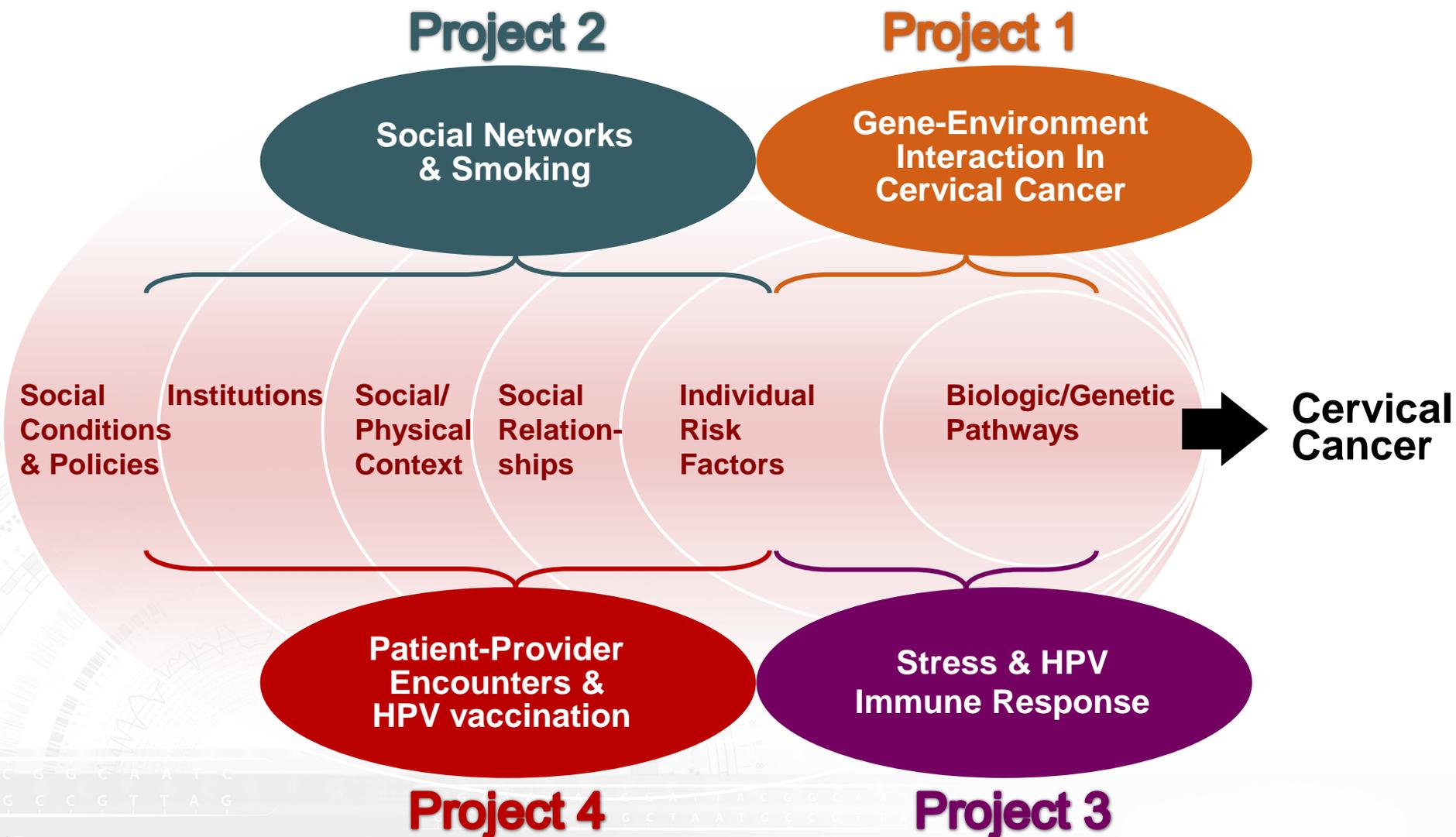
**Physical
Environment**

**Clinical
Translation,
Community,
Institutions,
Neighborhood,
& Policy**

Multi-level Approach: Initial Model for Addressing Cervical Cancer



Multi-level Approach: Today's CARE II Model Comprehensive



CBPR: Listening to the Community

Appalachia Ohio:
12 Counties

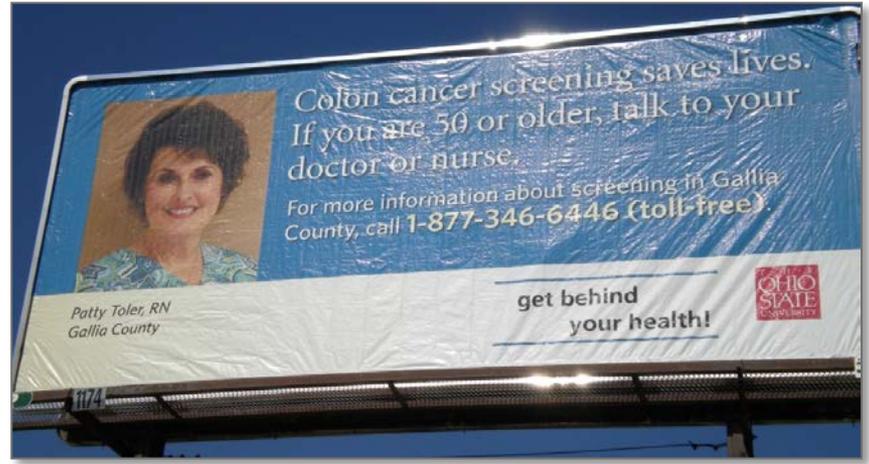
Intervention

CRC Screening

- Billboards, posters
- Clinic intervention
- Media kit to local newspapers

Comparison

Fruit and Vegetable
Consumption



Parting Words of Wisdom

- Things always take longer than expected.
- Try, try, try again.
- Submit frequently and diversify.
- The right staff make all the difference.
- Befriend your Program Officer (and listen to them).
- Say “no” to opportunities to serve judiciously.
- Enjoy the journey – that is how you bring passion to your work.

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