THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

School of Public Health
Department of Maternal and Child Health

The University of North Carolina at Chapel Hill
CB# 7400, Rosenau Hall
Chapel Hill, N.C. 27599-7400

TO: Minority Health Research and Education Center Committee
Lloyd Edwards
Bill Small
Donald Fox
Victor Schoenbach
Sandra Headen
Ernest Schoenfeld
Lori Carter

FROM: Dorothy C. Browne DCB

DATE: March 22, 1993

RE: Sponsoring the visit of Dr. Deborah Prothrow-Stith

At the last meeting of the committee, it was proposed that the Center sponsor and/or co-sponsor seminars and related events. With that proposal in mind, I am suggesting that the center co-sponsor with the School of Medicine, the visit of Dr. Deborah Prothrow-Stith, an expert in the area of youth violence and the author of the book, Deadly Consequences. Deborah's visit is scheduled for February 9-11, 1994. During her visit, she will deliver the 1994 Zollicoffer Lecture at the Medical School. In addition, she will spend some time meeting with the faculty and students at the Medical School.

If we co-sponsor Dr. Prothrow-Stith's visit, she will give a presentation at the School of Public Health, and meet with the School's faculty and students conducting research in the area of minority health. Also, selected faculty and students will be invited to the Zollicoffer Lecture, the reception and dinner for Dr. Prothrow-Stith.

As a co-sponsor, the Center will have to contribute funds to defray Dr. Prothrow-Stith's expenses. Unfortunately, I don't know the exact amount expected from the Center. If we are able to make a contribution, I would like to accept the Medical School's invitation.

/ps

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

School of Public Health
Office of the Dean

Telex 752964
Answerback: UNCCH SPH UD
FAX (919) 966-7141

CB# 7400, Rosenau Hall
The University of North Carolina at Chapel Hill
Chapel Hill, N.C. 27599-7400

MEMORANDUM

TO: School of Public Health Faculty

FROM: Minority Health Research and Education Center Grant Committee

DATE: February 1, 1993

SUBJECT: Grant Awardees for the Minority Health Research and Education Center

The Minority Health Research and Education Center (MHREC) Grant Committee is pleased to announce the 1992-93 awardees of the minority health research.

The awardees are:

Dr. Joseph Telfair
Assistant Professor
Department of Maternal and Child Health
Research Title: "A Pilot Study of the Transition of Individuals with Sickle Disease"

Dr. Trude Bennett
Assistant Professor
Department of Maternal and Child Health
Research Title: "Health and Well-Being of African-American Women"

MHREC funds are for researchers to develop new knowledge related to minority health. The committee anticipates having funds available in 1993-94 to award additional grants for minority health efforts. An announcement of availability will be distributed throughout the school when funds become available.

mhreprog.doc

MHREC

Progress and Process

1. Strategic planning process identified health of minorities and underserved populations as a priority area of the School.

2. The Dean invited interested faculty to a lunch/general meeting to identify scope and extent of their interest.

3. Formed a small task force to consider next steps and the possibility of a focus/center of excellence in minority health research and education.

4. Committee has been working towards the formulation of a plan for the creation of a center. I have a preliminary report which identifies a mission and rationale for such a center. The mission has been stated as follows: "to develop the capacity of the UNC School of Public Health and state and local agencies to prevent disease, prolong life and promote health among minority populations of North Carolina and the United States."

The rationale for the center would be three-fold:

1. The health of minority populations represents a significant and increasing challenge to the public health of the state and nation.

2. Issues pertinent to minority health concerns are examined sporadically and from narrow perspectives.

3. Members of minority population groups are under-represented among public health professionals.

I concur with and support the mission and rationale and am looking forward to implementation.

Concurrently, we have 1st prong for the school

a. Submitted a change budget request to obtain funding for the center.

b. Provided some seed money to encourage faculty to begin thinking about research proposals and through the work of the committee are funding two junior faculty.

c. Hired a research assistant to collect information on activities in support of the center and assist in the preparation of a brochure describing current activities.

d. The future

- Leadership

THE UNIVERSITY OF NORTH CAROLINA

General Administration

P.O. BOX 2688

CHAPEL HILL 27515-2688

ROY CARROLL
Vice President—Planning

TELEPHONE: (919) 962-1000

January 25, 1993

Dr. James C. Sadler
Director of Administrative Studies
Office of the Vice Chancellor for Health Affairs
214 South Building CB# 8000
UNC-Chapel Hill

Dear Jim:

It was thoughtful of you to send me the materials relating to possible new centers or institutes. I have reviewed the proposals carefully. For the sake of record, I shall respond to each of the proposals separately.

The Minority Health Research and Training Center in the School of Public Health has not been funded. The expansion budget request for the 1993-1995 biennium contains a request for $600,000 per annum for the proposed center. Since the venture is dependent upon appropriations, I would suggest to you that preliminary planning proceed with the full understanding that chances of getting new state funds for this are not good.

If the University does receive new monies sufficient to establish the center and has some assurance that funds will be forthcoming to sustain it, then you may request authorization to plan and establish the center in accordance with our Academic Program Development Procedures Manual.

Sincerely,

Roy Carroll

Roy Carroll

cc: Garland Hershey
Vice Chancellor for Health Affairs
Richard McCormick, Provost
David Dill, Special Assistant to the Chancellor
Charles Wheeler
Jasper Memory

blue

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

School of Public Health
Office of the Dean
FAX (919) 966-7141

CB# 7400, Rosenau Hall
The University of North Carolina at Chapel Hill
Chapel Hill, N.C. 27599-7400

June 11, 1992

H. Garland Hershey, D.D.S.
Vice Chancellor for Health Affairs
214 South Building, CB# 8000

Dear Garland,

Attached is a request for authorization to plan for a Minority Health Research and Training Center in the School of Public Health. As you know, the School's Strategic Planning Process identified improving the health of disadvantaged, underserved, and vulnerable populations as one of its highest priorities. It is our hope through the establishment of this Center to facilitate the realization of this very timely and important goal.

I would greatly appreciate your including this proposal in the UNC-CH five year plan and forwarding our request to plan through the required University channels. This proposed Center has a very high priority for the School and I hope, therefore, that we can receive both the necessary authorization as well as funding through the change budget process in 1993.

Thanks for your help.

Sincerely,

Michel A. Ibrahim, MD
Dean

MAI/lp

Attachment

Minority HTH Conference
2/18/93

Good Morning

I'm delighted to be with you on this happy occasion the 15th annual minority HTH Conference. This morning I'm going to do more than just offer the usual welcome and greetings. Later in the program you'll hear and learn about the critical health issues affecting minorities. You'll hear about the gap — unacceptable I must say between minorities and other groups in the population. You'll also hear that we — in the school of Public Health — are leading the way in this area of inquiry. That's why I want to do more than the usual welcome and greetings.

I'm going to give you a progress report on the SPH plans to establish a Minority Health Research and Education Center (MHHREC).

As you recall, last year at the 14th annual meeting, I told you that the faculty — through the STRATEGIC PLANNING PROCESS — identified minority HTH as a priority area for the school. I also told you that I intend to proceed to seek the University's support to establish a center for minority HTH res & ed in the SPH.

Here are the points of the PROGRESS REPORT

① Chancellor Hardin & V.C. Headley — who will be greeting you shortly — have pledged their total & undivided support for this effort.

(2) I've submitted a change budget request to the University for funding a MHREC. This was requested as the top priority for the SPH

(3) I've asked a committee - chaired by Professor Dorothy Browne & Professor Victor Schoenbach to develop plans for the center. ~~I've already~~ They've already submitted a report, which included preliminary plans for how the center should be structured, what its mission should be and what it takes to sustain it. Let me take this opportunity to thank members of the Committee - in addition to Dot & Vic - Asst Dean Willie Small, Professor Sandra Headen, Professor David Fox, Professor Lloyd Edwards, & Assoc Dean Ernest Schofield. I'd like to thank the numerous faculty, staff & student who contributed to the effort.

(4) I've allocated a modest amount of money to stimulate small grant proposals from the faculty of the SPH. I'll repeat this process in the near future.

(5) I've provided resources for a research assistant to compile courses, research projects, community linkages that are devoted to minority HIV research & education. All these will be presented in an attractive & informative brochure.

(6) I've ~~provided~~ made available a modest amount of salary support for some faculty who are pursuing work on this area.

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Obviously, there is a lot of research & education being done on minority health issues by our faculty. The Center concept will provide an intellectual home, an intellectual focus, & an intellectual thrust for these activities.

I hope that the state budget situation will be healthy enough so that the change budget request is approved. With this in hand, we can really put the Center on firm grounds.

Let me say, in closing, neither the SPH nor the Univ is doing this as a political gesture — Far from it!

We will grow slowly first-rate scholarship will be the underpinning.

It will take time, but in the not-too-distant future I can see a Center of Excellence for MH RRC serving not only the SPH but the Univ & the state, & hopefully the nation as well.

Thank you.

Feb 18

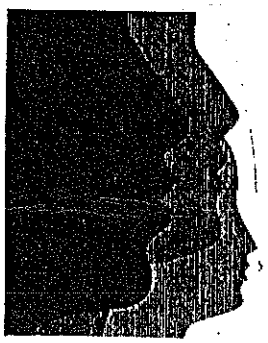
THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

RECEIVED
JAN 21 1993
OFFICE OF THE DEAN
SCH. OF PUBLIC HEALTH

15th Annual Minority Health Conference
Operation Prevention:
Mobilizing Community Action

School of Public Health
Office of the Dean

CB# 7400, Rosenau Hall
The University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-7400



February 18-19, 1993
School of Public Health
The University of North Carolina
at Chapel Hill

Conference Information
School of Public Health
Office of Continuing Education
CB# 8165, Miller Hall
The University of North Carolina
at Chapel Hill
Chapel Hill, NC 27599
Phone: 919/966-4032
Fax: 919/966-5692

Sponsors
School of Public Health
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Office of the Dean

School of Public Health
Division of External Affairs and
Community Health Service

Lineberger Comprehensive
Cancer Center
Minority Cancer Control
Research Program

Dean Michel A. Ibrahim, MD
Dean's Office
CB # 7400
School of Public Health

Dear Michel:

We look forward to your participation in the **15th Annual Minority Health Conference** entitled, *Operation Prevention: Mobilizing Community Action.* As you are aware, the conference is scheduled for February 18-19, 1993 in the School Auditorium and will highlight four areas of concern to minority populations: violence and injury prevention, HIV/AIDS, lead investigation and prevention, and cancer. Lori Carter, President of the Minority Student Caucus will preside over the opening session at 9:00 am and will introduce you to our audience. As in previous years, we would like you to provide words of welcome on behalf of the School and introduce Chancellor Hardin following your remarks.

Your continued support of our conference is greatly appreciated.

Sincerely,

William T. Small /tb

William T. Small, Jr., MSPH
Conference Co-Director
Assistant Dean of Student Affairs, UNC-SPH

enclosure

Black-white health gap: selected statistics

Overall mortality and life expectancy:

* In 1989 the age-adjusted death rate for black men and black women remained almost twice as great as for white men and white women. (NCHS, 1992:2)

* Between 1988 and 1989 overall life expectancy at birth increased from 74.9 to 75.3 years (NCHS, 1992:1). Life expectancy for blacks was only 69.2 years (CDC 1992a). Black male life expectancy was only 64.8 years, continuing the downward trend observed since 1984 (NCHS, 1992:1). The black-white difference in life expectancy has been widening since 1984 (CDC 1992a). (Provisional data show an increase in life expectancy for black males and black females between 1989 and 1990.) (NCHS, 1992:1)

Premature mortality:

* Among persons under 65 years of age, black persons and American Indians had the highest death rates. At ages 25-44 years the death rate for black persons was 2.5 times that for white persons and the death rate for American Indians was almost twice the rate for white persons. (NCHS, 1992:1)

* In 1989 years of potential life lost per 100,000 population under 65 years of age (YPLL-65), a measure of premature mortality, was more than twice as high for black males and black females as for white males and white females. [Premature mortality was almost twice as high for males as for females of both races.] (NCHS, 1992:1).

* Whereas the rate of YPLL-65 has decreased from 1979 to 1989 for white males and females, for black males and females the rate declined until the mid-1980s and then began to rise again (CDC 1992b).

* In 1989 among black males, the leading cause of YPLL-65 was homicide, followed by unintentional injuries, heart disease, cancer and HIV infection; among black females, the leading cause of YPLL-65 was cancer, followed by heart disease, unintentional injuries, homicide, and HIV infection. (CDC, 1992b)

* During 1985-1989 the homicide rate for black males aged 15-24 years increased by 74 percent to 114.8 deaths per 100,000, the highest level ever for this group. In 1989 the age-adjusted homicide rate for black males 15-24 years was almost 9 times that for white males 15-24 years. (NCHS, 1992:2)

* In 1989 the age-adjusted HIV infection death rate for black men was 3 times that for white men (40.3 and 13.1 deaths per 100,000) and the HIV death rate for black women was 9 times that for white women (8.1 and 0.9 deaths per 100,000). . . . 56% of all AIDS cases reported among women as of September 30, 1991 were black women. (NCHS, 1992:2)

* Mortality rates for black babies are twice those for white babies, and the ratio of black to white infant mortality increased from 1977-1989 as the infant mortality rate for black infants declined more slowly (24%) than for white infants (34%). (NCHS, 1992:15)

Cancer:

* In 1989 age-adjusted death rates for lung cancer were 50 percent higher for black men than for white men (84.6 and 57.4 deaths per 100,000) and were much lower for black women and white women (25.4 and 25.8 deaths per 100,000). (NCHS, 1992:2)

* Between 1980 and 1989 the age-adjusted death rate for breast cancer increased by 12 percent for black women while remaining stable for white women. In 1989 breast cancer mortality was 14 percent higher for black women than for white women (26.0 and 22.9 deaths per 100,000, respectively). (NCHS, 1992:2)

* Between 1980 and 1989 the age-adjusted death rate for prostate cancer increased by 9 percent. In 1989 prostate cancer mortality was more than twice as great for black men as for white men (30.9 and 14.5 deaths per 100,000, respectively). (NCHS, 1992:2)

Socioeconomic status differences are responsible for at least a large part of the health gap for minority Americans. For cancer, for example, much of the excess cancer burden among blacks is believed to be accounted for by the much larger proportion of blacks at lower socioeconomic levels, though cultural and genetic factors may play a role in the incidence of some cancers (Baquet et al., 1991). Probable reasons include higher smoking prevalence among black males, greater exposure to toxic and carcinogenic substances in the environment and at the worksite, poorer nutrition, lower use of mammography by black women, and less effective cancer treatment for black men and women. Harold Freeman has written of the importance of poverty in cancer incidence and mortality.

Lead:

According to a recent study (Sibbison, 1992) some two-thirds of poor central-city African American children have blood lead levels high enough to cause mental impairment and greater risk of criminal activity because of neurological and behavioral dysfunction. 75% of children with learning disabilities were lead poisoned. Lead poisoning has been called the "most common and societally devastating environmental disease of young children" (Vernon Houk, Director, National Center for Environmental Health and Injury Control, CDC)

Health care system:

Former Secretary of Health and Human Services (Sullivan, 1991) has decried discrimination and racism in the American health care system, noting that in each year since 1984, while the health status of the general population has increased, black health status has actually declined across the board. Discrimination and racism are pervasive. For example, blacks waiting for kidney transplants wait twice as long as whites for a first transplant. In 1990 there were 28,000 measles cases reported, an 8-fold increase over the 1988 level and 56 times the 1990 objective of 500 cases. Most of these measles cases are concentrated in inner city areas where large number of children are unvaccinated.

In 1989-90, 12 percent of medical students were Asian, 6 percent were black, and 5 percent were Hispanic. Black Americans represent 12 percent of all Americans. (NCHS, 1992:4)

REFERENCES

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Victor J. Schoenbach, 1/29/93

PROJECT 2000
Baltimore

CENTER FOR EDUCATING AFRICAN-AMERICAN MALES

MORGAN STATE UNIVERSITY
SCHOOL OF EDUCATION & URBAN STUDIES

SPENCER H. HOLLAND, Ph.D.
DIRECTOR

PROJECT 2000 BALTIMORE

The Class of the Year 2000 entered fifth grade in the Fall of 1992. If we, the African-American community, are going to have an impact on the number and level of educational achievement of the African-American males that graduate from school as adults in the 21st Century, we must start now while our children are young and eager to learn. Project 2000 represents just one approach to preventing the development of negative attitudes toward school and academic achievement in inner-city boys early in their school experience.

The primary goal of this program is to provide positive male role models in the daily school life of inner-city primary school-aged African-American boys in the Baltimore City Public Schools. By hands-on interaction with positive adult male role models (particularly African-American males) in their daily school activities, at an early stage in the educational enterprise, these boys can be provided with alternatives to the types of male role models who often characterize their non-school environments. Since many of these boys come from single-parent, female-headed households and, as is typical of most elementary schools, there are few if any adult males on the school staff, our primary objective is to impact on the male child. However, we believe that the presence of positive, adult male role models will also have a significant positive effect upon the girls in the process.

OBJECTIVES

- To expose inner-city, primary grade boys to consistent, positive, adult male role models who serve as teaching assistants to primary grade teachers.
- To provide inner-city, primary grade boys with alternatives to the type of male role models often found in their non-school environments.
- To provide inner-city, primary grade boys with opportunities for one-on-one interaction with adult male role models in an educational environment.
- To instill positive attitudes toward the school setting and increase the academic achievement of elementary school-aged inner-city boys.

PROJECT SCHOOLS

During the 1990-91 school year, three (3) elementary schools in the Baltimore City Public Schools (BCPS) were selected to serve as pilot schools for this project:

Coldstream Park Elementary (#31)
Dr. Nora Cartledge, Principal

Robert W. Coleman Elementary (#142)
Mrs. Addie Johnson, Principal

George G. Kelson Elementary School (#157)
Mrs. Angie McCullum, Principal.

Volunteers, called Teacher Assistants (TAs), are specifically trained to work with children in kindergarten through 3rd grade classes. However, they also work with students in the 4th and 5th grades, as well as boys in Developmental Education Classes.

More than 190 volunteers have been trained since the inception of the program during the 1990-1991 School Year.

TEACHER ASSISTANTS (VOLUNTEERS)

Teacher Assistants (TAs) are recruited from a wide variety of businesses, community and civic organizations, governmental agencies, Morgan State University and other area colleges and universities. This cadre of men is composed of individuals from all occupational levels, i.e., bus drivers, doctors, lawyers, policemen, firemen, sanitation workers, accountants, students, etc. We want our children to learn and understand that being a successful and productive member of society does not mean that one has to obtain a college degree.

We ask all volunteers to pledge to spend one-half day per week: 8:15 a.m. to 11:30 a.m. or 11:30 a.m. to 2:30 p.m. A MINIMUM pledge of one-half day every other week is expected of all volunteers. They are encouraged to have lunch with their class whenever possible. We have found that visits of shorter duration are too disruptive to the functioning of the school, do not meet the objective of quality interaction between TAs and students, and create difficulty for the school staff who must handle scheduling. Whenever possible, TAs are asked to schedule visits in advance, so that teachers can make the children aware of which TA will be visiting that day. Many times children will

make sure they come to school when they know a particular TA is going to be present.

TA ORIENTATION/TRAINING

ALL teacher assistants (volunteers) must attend an orientation/training workshop before they are admitted to the program. Workshops are from 2 to 3 hours in duration, and focus on issues of early childhood development, the demographics of the student population at the school, the role of the teacher assistants and the types of tasks and activities they will be asked to perform. Note: there is nothing that a primary grade child is being taught that an adult does not already know.

All training sessions will take place at the school site where the volunteers will be placed. Training sessions will be scheduled in the evenings during the week and on Saturday mornings. Project school staff, an early childhood specialist and CEAAM staff serve as trainers during these workshops.

The Baltimore program is modeled after the first PROJECT 2000 implemented in an inner-city elementary school in Washington, D.C. by the D.C. Chapter of Concerned Black Men, Inc., in 1988 when the class of the year 2000 entered first grade. Since that time, PROJECT 2000 programs have been established in Dade County (Miami) Public Schools; Atlantic City (NJ) Public Schools; Paterson (NJ) Public Schools; New Brunswick

(NJ) Public Schools; Kirkwood (MO) School District; St. Louis (MO) Public Schools; Nashville (TN) Public Schools; Hickory (NC) Public Schools; and an independent African-American school in Chicago, Illinois. However, the CEAAM sponsored PROJECT 2000 in the Baltimore City Public Schools (BCPS) is the first to be implemented on a large scale with an eye toward expanding to all elementary schools in the system. Baltimore City is also the first urban area to involve its total community (business, civic, and governmental) in a program aimed specifically at fostering academic achievement in African-American boys. This program's success will serve as a model for the nation and also as a major "point of light" in the African-American community.

This program has received national attention as the first of its kind in the nation. Articles pertaining to the program have appeared in a variety of lay and professional print media, e.g. Ebony, Dollars and $ense, Black Issues in Higher Education, Journal of Equity & Excellence, Teacher Magazine, and Education Week. PROJECT 2000 has also been featured on a number of local and national television programs including, 60 MINUTES, THE OPRAH WINFREY SHOW, and THE MACNEIL LEHRER REPORT.

PROJECT 2000 BOYS SUMMER CAMP

During the six-week BCPS 1992 Summer School Session, CEAAM conducted its second PROJECT 2000 Summer Camp, totally funded

by the rap artist, Ice-Cube, for fifty (50) third and fourth grade boys who are students enrolled at Robert W. Coleman Elementary School. The camp was conducted from 8:00 a.m. to 2:45 p.m., Mondays through Fridays. The Camp had an academic focus and emphasized Afrocentric Studies as the centerpiece of a multicultural curriculum which formed the content for developing higher order reading, language arts, and math skills in the boys. The mornings were spent in reading, language arts, and math activities, and the afternoons focused on a variety of cultural enrichment activities, i.e., arts and crafts, computer class, martial arts class, physical education, music and field trips. Field trips to King's Dominion Amusement Park in Virginia and Hershey Park Amusement in Pennsylvania were major highlights of the boys summer camp experience. Mrs. Tony McCray, Master Teacher at Coleman, served as the Program Coordinator of the Camp. Mr. Carter Bayton and Mr. Michael Bennett, also teachers at Coleman ES, were responsible for conducting the day-to-day activities of the Summer Camp. They were assisted by Special Subject Teachers, Educational Aides (male high school and college students), PROJECT 2000 TAs and other volunteers as well as several parents of camp participants.

For further information, contact the Center for Educating African-American Males, Morgan State University, 308B Jenkins Hall, Baltimore, MD 21239 -- (410) 319-3275.

Center for Educating African-American Males

TA WORKSHOP SCHEDULE
1992-93 SCHOOL YEAR

OCTOBER 1992

MONDAY, 10/5 - Kelson
TUESDAY, 10/6 - Coldstream Park
WEDNESDAY, 10/7 - Coleman

SATURDAY, 10/10 - Kelson

NOVEMBER 1992

MONDAY, 11/2 - Kelson
WEDNESDAY, 11/4 - Coldstream P
THURSDAY, 11/5 - Coleman

SATURDAY, 11/14 - Coldstream Pk

DECEMBER 1992

MONDAY, 12/7 - Kelson
TUESDAY, 12/8 - Coldstream Park
WEDNESDAY, 12/9 - Coleman

SATURDAY, 12/5 - Coleman

FEBRUARY, 1993

MONDAY, 2/1 - Kelson
TUESDAY, 2/2 - Coldstream Park
WEDNESDAY, 2/3 - Coleman

SATURDAY, 2/13 - Kelson

MARCH 1993

MONDAY, 3/1 - Kelson
TUESDAY, 3/2 - Coldstream Park
WEDNESDAY, 3/3 - Coleman

SATURDAY, 3/13 - Coldstream Park

APRIL 1993

MONDAY, 4/12 - Kelson
TUESDAY, 4/13 - Coldstream Park
WEDNESDAY, 4/14 - Coleman

SATURDAY, 4/17 - Coleman

Weekday workshops are scheduled from 5:30 pm - 8:00 pm. Weekend workshops are scheduled from 9:00 am - 12:00 noon.

PLEASE CALL THE CENTER BEFORE WORKSHOPS TO MAKE ARRANGEMENTS!

GEORGE G. KELSON ELEMENTARY SCHOOL
701 Gold Street
Baltimore, MD 21217
(410) 396-0800

ROBERT W. COLEMAN ELEMENTARY
2400 Windsor Ave.
Baltimore, MD 21216
(410) 396-0764

COLDSTREAM PARK ELEMENTARY SCHOOL
1400 Exeter Hall
Baltimore, MD 21218
(410) 396-6443

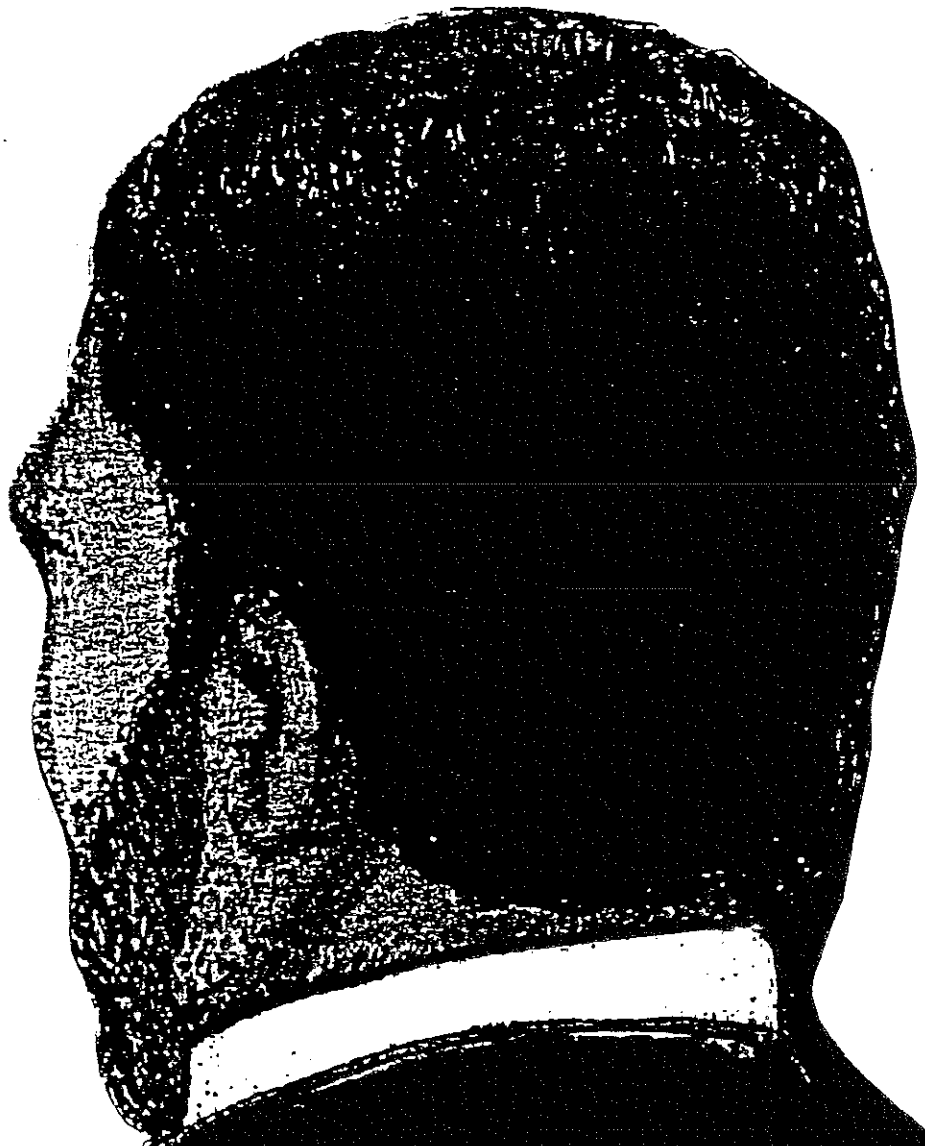
School of Education & Urban Studies • Morgan State University • 308B Jenkins Hall • Baltimore, MD 21239
Telephone (410) 319-3275 • Fax (410) 319-3871

DOLLARS & SENSE February/March 1991

PROJECT 2000

Why Black Men Should Teach Black Boys

By C.R. Gibbs



Most of black America's seven million school age youth are in trouble, particularly those in this nation's central cities. Today, these children face daunting problems of unemployment, social disorganization, poverty, segregation, and violence. And never has any generation had so few traditional resources to rely upon.

Already, preliminary data from the 1990 census paint a picture of bleak prospects. According to Rep. **Lee Hamilton** (D-IN), "The core of older cities" will lose "population to metropolitan areas. Detroit, for example, appears to have lost 19 percent of its population and Chicago 9 percent. People are leaving the cities and mov-

a weakened political base, less federal funding, and few tax dollars to deal with the demands of their lower-income populations."

Women head nearly half of all African-American families. One-wage earner families make less than families with two breadwinners. In 1988, the median family income for African-Americans was just 57 percent that of whites, $17,604 a year versus $30,809, although the earnings of two-income African-American families were 82 percent of the earnings of similar white families.

In the past, young African-Americans surmounted domestic difficulties by focusing on getting a good education. Whether white or black, the employment rate is supposed to rise in direct relation to the amount of education a person has. But what of the quality of the education? What of the values that education is supposed to instill?

Getting a good education and the skills and values necessary to compete in the marketplace are becoming increasingly difficult. In a Houston elementary school, half the boys and girls were forced to repeat a grade because of poor teaching.

At a Chicago high school, only 10 percent of a freshman class could read acceptably. And, in too many other inner city schools, playgrounds are littered with broken glass, teachers are forced to buy their own supplies and even the bathrooms often lack basic amenities.

Add to this the virtual lack of African-American teachers. Only about 7 percent of the nation's public school teachers are African-American. Most are African-American females. In 10 years the number may fall to 5 percent. This represents a declining source of positive role models for school age children.

Earlier this year Rep. **Major Owens** (D-NY) told his colleagues: "Too many public schools in urban areas across the nation are old and decaying. They are decrepit and they are overcrowded, and they send a physical message to the youngsters right away that 'your schools are different, they are inferior, we do not really intend to provide the same kind of education to you that we are providing to other youngsters.' Classrooms are often so packed that the teachers are unable to give each student the individual attention and assistance that he or she needs, and African-American students are often tracked into unchallenging, uninteresting classes for slow learners whether they deserve to be there or not."

Owens, a member of the House Education and Labor Committee and chairman of the Select Education Subcommittee, went on to describe how a disproportionate number of black children are labeled retarded or learning disabled, discouraged from majoring in the so-called difficult subjects, like mathematics, science, or languages, and discouraged from attending college.

Owens also added that "contributing to their miseducation are 10 years of **Reagan-Bush** education policies, which have seen a decrease in federal funding for education, and each time federal funding is cut, black students, African-American students, are hurt most."

That more than one reason exists for this dismal picture is obvious: Equally obvious are the fruits of such a bitter harvest. The black high school dropout rate declined only 4 percent in the past 10 years. Only a quarter of all black teenagers 16 to 19 years old held jobs at some time in 1987, compared to one-half of whites. Black youths seeking work were twice as likely as whites not to be hired. Even with comparable educations, racial disparities in joblessness and expected earnings exist, according to *Focus* magazine published by the Joint Center for Political and Economic Studies. In 1988, only about 12 percent of black high school graduates went on to college, according to the Census Bureau.

Has America's education system failed black youth?

Taking It To The Streets

Faced with dysfunctional homes and imperiled schools, many young African-Americans, mostly males, have been lured to the high life, high risks, and fast money found in the urban drug trade. There, pushers, pimps, and drug barons become role models and the ethics of the street pass for the value system they would normally get at home. And the pain, aggression, poverty, drugs, twisted values, and plentiful supplies of firearms have turned this nation's streets into urban killing fields.

Washington, D.C., the nation's capital, which led the country in the per capita number of homicides in 1989, achieved another gruesome record in 1990. In more than a dozen other cities with significant African-American populations—including Boston, Chicago, Los Angeles, and New Orleans—"the cost of living is going up and the chance of living is going down," if you are young, male, and black.

This urban carnage is destroying a generation of African-American males. And they are shooting each other. The victims get younger and younger. The Center to Prevent Handgun Violence recently reported that the number of youths killed by firearms nearly doubled

in the past six years, going from 962 to 1,897. The violence is so pervasive that some small inner city children are reportedly showing symptoms of post-traumatic stress syndrome similar to that of Vietnam veterans.

A spate of books discussing the plight of the black male appeared recently. With such titles as "Black Men: Obsolete, Single, Dangerous" and "The Endangered Black Male: The New Bald Eagle," writers like **Haki Madhubuti** and Dr. **Jeffrey Johnson** and others sought to give explanations for this appalling self-destructiveness.

That this condition is becoming an accepted but largely unheeded part of the American pysche was underscored several months ago when a black male was brought on stage as an example of threatened wildlife on an episode of "In Living Color." It was a satirical look at late night talk shows that frequently ask zoologists to bring on rare or unusual creatures to discuss and get a cheap laugh or two.

The practical effects of the loss of black manhood are ominous and alarming. Two years ago, black females outnumbered black males by 15.7 million to 14.2 million. Males outnumbered females only until age 18. Today, black males outnumber black females only until age 14, according to the Census Bureau.

Who will black daughters marry? With whom will they share their lives and raise their children? How can the next generation of black males be saved from this holocaust?

These are the most important issues facing the African-American community today. Fortunately, a phalanx of concerned parents, politicians, artists, and educators have arrived to tackle these questions. One man and his unique concept have emerged as one of the most controversial, thought provoking, and potentially far-reaching. His name is Dr. **Spencer Holland**. His concept is Project 2000.

Spencer Holland, Ph.D. developer of Project 2000, establishes rapport with his youthful charges.

Why Black Men Should Teach Black Boys

"The general educational system is failing black boys, particularly the boys coming from female-headed, single parent homes. They're surrounded with nothing but female authority figures. As boys get older they're just not going to pay attention consistently to female authority figures," **Holland** says. "If we as black men don't return to our schools and educate our male children, provide them with positive images they can imitate, model after, and identify with, we will lose them to the street corner thugs and dope dealers.

"This isn't to say there aren't women capable of raising responsible black males, but when you look at the community and see what's going on you know they need and deserve our help."

Holland, a developmental psychologist, believes that young boys are looking for a positive, consistent, male authority figure. He has observed that the period between the first and third grades is crucial for black boys. "It is there that they set the stage for future educational behavior," he states.

"Young boys bring the attitudes of the streets into class with them. They see their peers deprecate academic achievement, see primarily women teachers and soon

PROJECT 2000 Cont.

begin to assign feminine characteristics to these endeavors and occupations. In the macho culture of the street, these are seen as negatives.

"Men teachers can exercise more control over young boys because the young boys want the attention and approval of older males. There is a natural connection between a boy and an older male. We build on and refine that connection in Project 2000."

The flagship of Project 2000 is Stanton Elementary School, located in a poor, crime-ridden area of southeast Washington, D.C.

"What we are all about in Project 2000 is to show these young black boys that there is another way to be successful and that it's okay to be cognitively competent. We have to break through the anger and fear—the two most prominent emotions in inner city boys. When that's done I've watched these boys develop into fine scholars."

Holland, members of Concerned Black Men, who fund his project, and a group of Howard University undergraduate students have developed a program of intervention that affirms each student's ability to succeed, introduces the student to positive concepts and practices, and provides them with a supportive network of black male "buddies with whom they can share their thoughts and feelings."

Explaining his concept, **Holland** says: "I joined Concerned Black Men in 1987 and they have been of inestimable support to me with this program. First, we have black males teach black boys. Black women teach black girls. We also give them all a new concept to focus on as they pass from grade to grade. In the first grade it was to listen. In the second grade it was self-control. This year, it's responsibility. And to show them we are serious about it, we gave each boy and girl a seven-day wind-up alarm clock. So, if they're late for school they can only blame themselves. And there will be sanctions if they are late.

A Concerned Black Men, Inc. volunteer helps a youngster with a project.

Elementary students respond enthusiastically during a vocabulary drill.

"We have a process called matrix mentoring. It's a kind of revolving male role model to reduce the boys' focus on any one individual mentor. We know that these boys have been hurt in their previous relationships with men. They grow attached to their mother's boyfriends only to see them show up occasionally, perhaps for sex with their mothers. Then he leaves. Men are never really around. Well, at school we are around every day. We tell the boys that we love them and that we are here for them. And they learn to trust us. The guidance and support we give them help counter their alienation. Now we feel we all belong to each other.

"Girls are not neglected even though the main focus is on the boys. We also have the Ujima Society. Ujima is the Swahili word for collective work and responsibility. We have periodic luncheon seminars for all the children."

Test scores at Stanton Elementary have risen. Overall attendance has improved substantially. **Holland** recalls, "One boy had become so attached to his mentors and school work that he made his mother bring him to school even though he was sick. She said she went ahead and brought him because she wanted to see what this is all about."

Holland believes that he is providing the framework for a group of black boys to one day assume their rightful roles as responsible black men. He named his program Project 2000 because the children he is working with at Stanton Elementary will graduate from high school in the year 2000.

PROJECT 2000 Cont.

Holland conducts his gospel of educational innovation from Morgan State's Center for Educating African-American Males in Baltimore, Maryland. He has also started programs in Miami and Baltimore. Similar programs are underway in Chicago and Milwaukee.

Antionette Patton is the project director of the pilot program at Chicago's Jensen Elementary School. "We identified 30 mostly at-risk boys whom we thought should be in our program. We provided them with someone who could work with them as a mentor or role model. He visits with them twice a week and has regular contact with their parents. We want to expose these boys to successful black male role models as an alternative to gang activity and to change their value system."

Patton's program is barely a month old but she thinks she has already noticed a difference. "One of our black male teachers recently sent a young man down to me to ask for something and the young man began by saying, 'Brother **Lance** would like to know if he could have so and so.' These children don't normally speak like that. It's a hopeful sign."

In Milwaukee, **Ken Holt**, the principal of Bell Middle School, has a slightly different approach. "Project 2000 is one component of our program. We've attempted to bring together workable components from other programs across the nation. We studied several innovative single sex programs. We have them in two pilot schools: one middle school and one elementary school. They are our African-American immersion schools.

"We feature an extended school day, heavy doses of homework, business and political awareness projects, Saturday classes, and rites of passage. We also stress the importance of respect for females. And we have one hour a day set aside as a learning readiness period. The boys spend that time with a male mentor," he explains.

Holt was chair of the task force that looked into Milwaukee's dismal grade point averages and high rates of suspensions and expulsion for its African-American students. As he looked for solutions to these problems, he was impressed with how black male, single-sex classes for primary students in Dade County, Florida, outperformed their peers still in coed classes. Closer to home, he studied student performance at Inroads Academy in Milwaukee. There he noticed that good teaching, serious studying, Saturday classes, and summer tutoring had resulted in a number of young black scholars maintaining the required 3.4 grade point average needed to qualify for a scholarship to Marquette University.

One-on-one instruction reaps positive results.

Holt is optimistic about his program's chances for success. From his own teaching experience and from what he has seen in similar programs, he says that "these boys have shown us that if we get them together and give them the support they need, they will excel."

Prince George's County, Maryland, has set aside $2 million to enhance African-American male achievement. A county task force was formed to study why local black males performed worse academically and socially than whites. The committee's report recommended increased adult involvement and expanded mentoring.

Holland's critics have generally focused on the fact that his program separates black boys from black girls. There have been predictions that the intensive immersion in a curriculum that stresses African heritage and deals with the unique social, educational and emotional needs of young black males will harm their self-esteem and further isolate them from the larger society. **Holland** rejects these notions.

"I don't think it's really segregation," says **Doll Gordon**, president of the Washington affiliate of the National Black Child Development Institute. "The arrangement allows for special emphasis to be placed on the boys. There's nothing wrong with Morehouse College and it's still all black and male. And who but African-American males should move our male children from boys to men. There's no rite of passage, no bar mitzvah or recognition of reaching an age of responsibility for our boys. A good, strong black man can teach these boys to be good, strong black

males."

Valencia Muhammad, a well-known parent-activist, school board candidate, and head of Operation Know Thyself, a community-based cultural and educational group in Washington, D.C., enthusiastically supports the idea of black males teaching black boys. "In the concepts and methods of

Valencia Muhammad

African psychology, men always taught boys to become men. Women taught girls. A woman's frame of reference is different from a man's. Moreover, I know there is a natural bonding between males. That this bond can be used creatively and positively to enhance school performance, raise self-esteem, and create a firm sense of responsibility among our young black males is **Holland's** greatest contribution."

Jawanza Kunjufu, a nationally known lecturer, principal of an independent black school, and author of the widely acclaimed book "Countering the Conspiracy to Destroy Black Boys," concurs with **Holland's** concepts and notes that there is an urgent need to focus innovatively on the problems of black boys. "By the year 2000 there will be an estimated 210,000 more black females in college while 70 percent of all black males will be unavailable to them. Who is going to educate our children?" he asks. "You might not want to deal with it, that is, until you have children."

Kunjufu cites the declining number of African-American teachers, the dismayingly large amount of time teachers have to spend on discipline during the school day, parental apathy, and the loss of the traditional respect that the teaching profession had in the African-American community as additional challenges that have to be met.

New Strategies For Urban Education

In order to improve the quality of education provided in the poor areas of our big cities, public and private schools are experimenting with a host of programs and projects.

"I'd like to see more schools across the country adopt a Teaching Profession Program like the one here at Coolidge School," says **Muhammad**. "They begin to recruit and nurture students who are interested in becoming teachers as early as the ninth grade. With these young people they can bring in more African-centered consultants in order to expose and prepare them to teach from an Afrocentric point of view."

Kunjufu agrees with the value of a curriculum that stresses the presence and achievements of African peoples but notes that Master Teacher Programs and giving teachers 12-month contracts can also help restore attractiveness to the teaching profession. He also highlights the importance of African-American independent schools and their groundbreaking role in the development of African-centered curricula. "The relatively small number of black independent schools, however, means that

Jawanza Kunjufu, Ph.D.

most blacks are still likely to attend public schools," says **Kunjufu**.

There, he believes, the issues of teacher expectations, curriculum improvement, accommodations of differing learning styles, and the propensity to track students must be dealt with.

In Milwaukee, Wisconsin, **Annette Polly Williams** faced that task squarely. Almost single-handedly she developed and advocates the Milwaukee Parental Choice Program. It will provide for nearly 1,000 poor students to attend private schools. The state of Wisconsin will pay the $2,500 it allocates for each student directly to the school.

PROJECT 2000 Cont.

Various jurisdictions are actively experimenting with ways to give individual schools the kind of freedom and flexibility needed to respond creatively to the needs of their students. Partnerships are forming between schools and local libraries, churches, and community organizations. The United Black Men of Queens Foundation in New York has an annual scholarship awards dinner and presentations. Proceeds from the scholarship dinner will help needy students further their educational goals. The funds will assist with a mentoring program to aid youth in making wise career decisions.

Rep. **Charles Hayes** (D-IL) introduced legislation to create an African-American Higher Education Center. Under the aegis of the National Association for Equal Opportunity in Higher Education (NAFEO), it will become a think tank for educational issues.

The National Black Survival Fund successfully operates a Manhood Development Camp for African-American Males. Using an African-centered approach, disadvantaged black youth are shown alternative responsible lifestyles in a summer camp environment in Louisiana. Each young man goes through a rite of passage and is also given a black manhood code of ethics stressing accountability, courtesy, respect, and cultural awareness.

Programs like these, say most educators, administrators, and parents, will ultimately defeat the special problems confronting black youth. It will take time, work, perseverance, money, and patience. And there may be an even bigger payoff. Placing attention and effort on the problems of hard-pressed urban schools with the most disadvantaged youth may be the key that unlocks school improvement for the rest of America.

Concerned Black Men Inc.

The Washington, D.C., chapter of Concerned Black Men, Inc., was founded in 1982. It is part of Concerned Black Men, Inc., a national nonprofit organization of black male volunteers dedicated to fighting many of the basic social ills troubling inner city youth. Some 200 volunteers work on a host of CBM programs, including Project 2000, the Martin Luther King Jr. Oratory Contest, an African-American History Bee, Project Northstar for homeless children, and a Youth Offender Outreach Program.

"A lot of the men who join our group have a strong sense of wanting to give something back to the community," says **Hiram Brett**, chairman of CBM's public relations committee.

Under its motto, "Caring for Our Youth," CBM concentrates on instilling in black youth a desire for education, a positive knowledge of self, and the need to become responsible adults.

In cooperation with local civic groups and the D.C. Public School System, CBM provides positive role models, mentors, and "buddies" to at-risk boys and girls. CBM saw and responded to the special needs of black boys in the local educational environment by establishing an Adopt-A-School pilot project at Stanton Elementary in 1985. That original effort has grown into Project 2000.

CBM members demonstrate their commitment to the local and national African-American community in other ways. **Donald Temple** founded Black Networking News, a periodical designed to bring young, educated, upwardly mobile African-Americans into contact with the leading issues from a black perspective. **Temple** also made an impressive but unsuccessful bid for the post of D.C. Congressional delegate.

Several CBM members are lawyers. **Richard Roberts** was the only black male member of the government team that prosecuted former D.C. mayor, **Marion Barry. Eric Washington** works in the office of the D.C. Corporation Counsel.

PROJECT 2000 Cont.

CBM president **Broderick Johnson** is a former Capitol Hill staffer. Other CBM members are successful businessmen, professionals, and government officials.

Among CBM's major programs are:

- The African-American History Bee—Open to male and female students in elementary schools. Preparation for the event provides the children with a working knowledge of their culture and the people, events and accomplishments that shaped their history.
- Project Northstar—For homeless children. CBM tutors them in basic subjects and sponsors field trips and other activities. The Coalition of 100 Black Women, the Young Lawyers Section of the D.C. Bar Association, and the American Bar Association co-sponsor this project.
- Efficacy, D.C.—For junior high school youth. Six workshops are conducted to change student attitudes and promote intellectual development, academic achievement, strategies for success, and inner discipline.
- Youth Offender Outreach Program—For youth in detention. CBM members teach these youths proper behavior, values, and skills. Capsulized versions of major CBM programs are provided for these youths.
- Martin Luther King Jr. Oratory Contest—Junior and senior high school student contestants are trained in logic and public speaking for a brief period. Past topics have ranged from the effects of drugs in the community to methods to end apartheid. Contest judges are local civic leaders, government executives, and businesspersons.
- Youth Recognition Awards —At the end of the school year, CBM honors the noteworthy achievements of local area boys and girls at an annual banquet.
- Other programs—CBM operates a number of other programs such as self-development workshops, job preparation and interviewing workshops, and international awareness activities, including visits to foreign embassies and the United Nations headquarters, and seminars conducted by foreign affairs experts. There is also a widely hailed series of teen pregnancy prevention workshops.

"As you can see, girls are involved with all of our projects, except for Project 2000 and the teen pregnancy prevention workshops. In the pregnancy prevention workshops, we emphasize the male role in preventing pregnancy as well as the male role in the responsibilities of parenting," notes **Brett**.

CBM finances its activities with its own funds, individual donor assistance, and donations it receives as a United Black Fund member agency.

According to information supplied by the U.S. Office of Personnel Management to the Combined Federal Campaign, only 25 percent of CBM's total annual income is spent on annual fundraising and administrative costs.

CBM is also sponsoring a number of other events in addition to the ones already described. In December, CBM, in cooperation with Ascension Productions, hosted an "Afrikan Cultural Celebration." This is a 10-hour weekend event featuring a local choir, young entertainers, fashion shows, Kwanza workshops, African martial arts demonstrations, and a competition for rap and dance teams. The featured speaker is the internationally famous black psychologist Dr. **Edwin Nichols**.

"We're expanding our focus," **Brett** says. "We're also co-sponsoring the first annual black male youth conference in Prince George's County, Maryland. This came about in part because of a recent task force report detailing the problems facing black males in that school system. Conference workshops will be staffed by student panelists from the seventh, eighth, and ninth grades. Students will be able to converse with their peers in four workshops covering such issues as drugs, self-esteem, pregnancy prevention and responsibility, and the workshop entitled 'So What's Wrong With Being Smart?' We plan to have a continuing partnership with the school system."

In addition to an appreciation reception in January, CBM will co-sponsor a scholarship fundraiser in March with the Coalition of 100 Black Women.

The Washington, D.C., CBM chapter has been mentioned in local and national media and honored for its efforts by various groups as a "model community service organization."

D&S

Gender and Relationships

A Developmental Account

Eleanor E. Maccoby *Stanford University*

ABSTRACT: This article argues that behavioral differentiation of the sexes is minimal when children are observed or tested individually. Sex differences emerge primarily in social situations, and their nature varies with the gender composition of dyads and groups. Children find same-sex play partners more compatible, and they segregate themselves into same-sex groups, in which distinctive interaction styles emerge. These styles are described. As children move into adolescence, the patterns they developed in their childhood same-sex groups are carried over into cross-sex encounters in which girls' styles put them at a disadvantage. Patterns of mutual influence can become more symmetrical in intimate male–female dyads, but the distinctive styles of the two sexes can still be seen in such dyads and are subsequently manifested in the roles and relationships of parenthood. The implications of these continuities are considered.

Historically, the way we psychologists think about the psychology of gender has grown out of our thinking about individual differences. We are accustomed to assessing a wide variety of attributes and skills and giving scores to individuals based on their standing relative to other individuals in a sample population. On most psychological attributes, we see wide variation among individuals, and a major focus of research has been the effort to identify correlates or sources of this variation. Commonly, what we have done is to classify individuals by some antecedent variable, such as age or some aspect of their environment, to determine how much of the variance among individuals in their performance on a given task can be accounted for by this so-called *antecedent* or *independent* variable. Despite the fact that hermaphrodites exist, almost every individual is either clearly male or clearly female. What could be more natural for psychologists than to ask how much variance among individuals is accounted for by this beautifully binary factor?

Fifteen years ago, Carol Jacklin and I put out a book summarizing the work on sex differences that had come out of the individual differences perspective (Maccoby & Jacklin, 1974). We felt at that time that the yield was thin. That is, there were very few attributes on which the average values for the two sexes differed consistently. Furthermore, even when consistent differences were found, the amount of variance accounted for by sex was small, relative to the amount of variation within each sex. Our conclusions fitted in quite well with the feminist zeitgeist of the times, when most feminists were taking a minimalist position, urging that the two sexes were basically alike and that any differences were either illusions in the eye of the beholder or reversible outcomes of social shaping. Our conclusions were challenged as having both overstated the case for sex differences (Tieger, 1980) and for having understated it (Block, 1976).

In the last 15 years, work on sex differences has become more methodologically sophisticated, with greater use of meta analyses to reveal not only the direction of sex differences but quantitative estimates of their magnitude. In my judgment, the conclusions are still quite similar to those Jacklin and I arrived at in 1974: There are still some replicable sex differences, of moderate magnitude, in performance on tests of mathematical and spatial abilities, although sex differences in verbal abilities have faded. Other aspects of intellectual performance continue to show gender equality. When it comes to attributes in the personality–social domain, results are particularly sparse and inconsistent. Studies continue to find that men are more often agents of aggression than are women (Eagly, 1987; Huston, 1985; Maccoby & Jacklin, 1980). Eagly (1983, 1987) reported in addition that women are more easily influenced than men and that men are more altruistic in the sense that they are more likely to offer help to others. In general, however, personality traits measured as characteristics of individuals do not appear to differ systematically by sex (Huston, 1985). This no doubt reflects in part the fact that male and female persons really are much alike, and their lives are governed mainly by the attributes that all persons in a given culture have in common. Nevertheless, I believe that the null findings coming out of comparisons of male and female individuals on personality measures are partly illusory. That is, they are an artifact of our historical reliance on an individual differences perspective. Social behavior, as many have pointed out, is never a function of the individual alone. It is a function of the interaction between two or more persons. Individuals behave differently with different partners. There are certain important ways in which gender is implicated in social behavior—ways that may be obscured or missed altogether when behavior is summed across all categories of social partners.

An illustration is found in a study of social interaction between previously unacquainted pairs of young children (mean age, 33 months; Jacklin & Maccoby, 1978). In some pairs, the children had same-sex play partners; in others, the pair was made up of a boy and a

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girl. Observers recorded the social behavior of each child on a time-sampling basis. Each child received a score for total social behavior directed toward the partner. This score included both positive and negative behaviors (e.g., offering a toy and grabbing a toy; hugging and pushing; vocally greeting, inviting, protesting, or prohibiting). There was no overall sex difference in the amount of social behavior when this was evaluated without regard to sex of partner. But there was a powerful interaction between sex of the subject and that of the partner: Children of each sex had much higher levels of social behavior when playing with a same-sex partner than when playing with a child of the other sex. This result is consistent with the findings of Wasserman and Stern (1978) that when asked to approach another child, children as young as age three stopped farther away when the other child was of the opposite sex, indicating awareness of gender similarity or difference, and wariness toward the other sex.

The number of time intervals during which a child was simply standing passively watching the partner play with the toys was also scored. There was no overall sex difference in the frequency of this behavior, but the behavior of girls was greatly affected by the sex of the partner. With other girls, passive behavior seldom occurred; indeed, in girl–girl pairs it occurred less often than it did in boy–boy pairs. However when paired with boys, girls frequently stood on the sidelines and let the boys monopolize the toys. Clearly, the little girls in this study were not more passive than the little boys in any overall, trait-like sense. Passivity in these girls could be understood only in relation to the characteristics of their interactive partners. It was a characteristic of girls in cross-sex dyads. This conclusion may not seem especially novel because for many years we have known that social behavior is situationally specific. However, the point here is that interactive behavior is not just situationally specific, but that it depends on the gender category membership of the participants. We can account for a good deal more of the behavior if we know the gender mix of dyads, and this probably holds true for larger groups as well.

An implication of our results was that if children at this early age found same-sex play partners more compatible, they ought to prefer same-sex partners when they entered group settings that included children of both sexes. There were already many indications in the literature that children do have same-sex playmate preferences, but there clearly was a need for more systematic attention to the degree of sex segregation that prevails in naturally occurring children's groups at different ages. As part of a longitudinal study of children from birth to age six, Jacklin and I did time-sampled behavioral observation of approximately 100 children on their preschool playgrounds, and again two years later when the children were playing during school recess periods (Maccoby & Jacklin, 1987). Same-sex playmate preference was clearly apparent in preschool when the children were approximately 4½. At this age, the children were spending nearly 3 times as much time with same-sex play partners as with children of the other sex. By age 6½, the preference had grown much stronger. At this time, the children were spending 11 times as much time with same-sex as with opposite-sex partners.

Elsewhere we have reviewed the literature on playmate choices (Maccoby, 1988; Maccoby & Jacklin, 1987), and here I will simply summarize what I believe the existing body of research shows:

1. Gender segregation is a widespread phenomenon. It is found in all the cultural settings in which children are in social groups large enough to permit choice.

2. The sex difference in the gender of preferred playmates is large in absolute magnitude, compared to sex differences found when children are observed or tested in nonsocial situations.

3. In a few instances, attempts have been made to break down children's preferences for interacting with other same-sex children. It has been found that the preferences are difficult to change.

4. Children choose same-sex playmates spontaneously in situations in which they are not under pressure from adults to do so. In modern co-educational schools, segregation is more marked in situations that have not been structured by adults than in those that have (e.g., Eisenhart & Holland, 1983). Segregation is situationally specific, and the two sexes can interact comfortably under certain conditions, for example, in an absorbing joint task, when structures and roles are set up by adults, or in nonpublic settings (Thorne, 1986).

5. Gender segregation is not closely linked to involvement in sex-typed activities. Preschool children spend a great deal of their time engaged in activities that are gender neutral, and segregation prevails in these activities as well as when they are playing with dolls or trucks.

6. Tendencies to prefer same-sex playmates can be seen among three-year-olds and at even earlier ages under some conditions. But the preferences increase in strength between preschool and school and are maintained at a high level between the ages of 6 and at least age 11.

7. The research base is thin, but so far it appears that a child's tendency to prefer same-sex playmates has little to do with that child's standing on measures of individual differences. In particular, it appears to be unrelated to measures of masculinity or femininity and also to measures of gender schematicity (Powlishta, 1989).

Why do we see such pronounced attraction to same-sex peers and avoidance of other-sex peers in childhood? Elsewhere I have summarized evidence pointing to two

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Award-based manuscripts appearing in the *American Psychologist* are scholarly articles based in part on earlier award addresses presented at the APA convention. In keeping with the policy of recognizing these distinguished contributors to the field, these submissions are given special consideration in the editorial selection process.

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factors that seem to be important in the preschool years (Maccoby, 1988). The first is the rough-and-tumble play style characteristic of boys and their orientation toward issues of competition and dominance. These aspects of male–male interaction appear to be somewhat aversive to most girls. At least, girls are made wary by male play styles. The second factor of importance is that girls find it difficult to influence boys. Some important work by Serbin and colleagues (Serbin, Sprafkin, Elman, & Doyle, 1984) indicates that between the ages of 3½ and 5½, children greatly increase the frequency of their attempts to influence their play partners. This indicates that children are learning to integrate their activities with those of others so as to be able to carry out coordinated activities. Serbin and colleagues found that the increase in influence attempts by girls was almost entirely an increase in making polite suggestions to others, whereas among boys the increase took the form of more use of direct demands. Furthermore, during this formative two-year period just before school entry, boys were becoming less and less responsive to polite suggestions, so that the style being progressively adopted by girls was progressively less effective with boys. Girls' influence style was effective with each other and was well adapted to interaction with teachers and other adults.

These asymmetries in influence patterns were presaged in our study with 33-month-old children: We found then that boys were unresponsive to the vocal prohibitions of female partners (in that they did not withdraw), although they would respond when a vocal prohibition was issued by a male partner. Girls were responsive to one another and to a male partner's prohibitions. Fagot (1985) also reported that boys are "reinforced" by the reactions of male peers—in the sense that they modify their behavior following a male peer's reaction—but that their behavior appears not to be affected by a female's response.

My hypothesis is that girls find it aversive to try to interact with someone who is unresponsive and that they begin to avoid such partners. Students of power and bargaining have long been aware of the importance of reciprocity in human relations. Pruitt (1976) said, "Influence and power are omnipresent in human affairs. Indeed, groups cannot possibly function unless their members can influence one another" (p. 343). From this standpoint, it becomes clear why boys and girls have difficulty forming groups that include children of both sexes.

Why do little boys not accept influence from little girls? Psychologists almost automatically look to the nuclear family for the origins of behavior patterns seen in young children. It is plausible that boys may have been more reinforced for power assertive behavior by their parents, and girls more for politeness, although the evidence for such differential socialization pressure has proved difficult to come by. However, it is less easy to imagine how or why parents should reinforce boys for being unresponsive to *girls*. Perhaps it is a matter of observational learning: Children may have observed that between their two parents, their fathers are more influential than their mothers. I am skeptical about such an explanation. In the first place, mothers exercise a good deal of managerial authority within the households in which children live, and it is common for fathers to defer to their judgment in matters concerning the children. Or, parents form a coalition, and in the eyes of the children they become a joint authority, so that it makes little difference to them whether it is a mother or a father who is wielding authority at any given time. Furthermore, the asymmetry in children's cross-sex influence with their peers appears to have its origins at quite an early age—earlier, I would suggest, than children have a very clear idea about the connection between their own sex and that of the same-sex parent. In other words, it seems quite unlikely that little boys ignore girls' influence attempts because little girls remind them of their mothers. I think we simply do not know why girls' influence styles are ineffective with boys, but the fact that they are has important implications for a variety of social behaviors, not just for segregation.

Here are some examples from recent studies. Powlishta (1987) observed preschool-aged boy–girl pairs competing for a scarce resource. The children were brought to a playroom in the nursery school and were given an opportunity to watch cartoons through a movie-viewer that could only be accessed by one child at a time. Powlishta found that when the two children were alone together in the playroom, the boys got more than their share of access to the movie-viewer. When there was an adult present, however, this was no longer the case. The adult's presence appeared to inhibit the boys' more power-assertive techniques and resulted in girls having at least equal access.

This study points to a reason why girls may not only avoid playing with boys but may also stay nearer to a teacher or other adult. Following up on this possibility, Greeno (1989) brought four-child groups of kindergarten and first-grade children into a large playroom equipped with attractive toys. Some of the quartets were all-boy groups, some all-girl groups, and some were made up of two boys and two girls. A female adult sat at one end of the room, and halfway through the play session, moved to a seat at the other end of the room. The question posed for this study was: Would girls move closer to the teacher when boys were present than when they were not? Would the sex composition of a play group make any difference to the locations taken up by the boys? The results were that in all-girl groups, girls actually took up locations *farther* from the adult than did boys in all-boy groups. When two boys were present, however, the two girls were significantly closer to the adult than were the boys, who tended to remain at intermediate distances. When the adult changed position halfway through the session, boys' locations did not change, and this was true whether there were girls present or not. Girls in all-girl groups tended to move in the opposite direction when the adult moved, maintaining distance between themselves and the adult; when boys were present, however, the girls tended to move *with* the adult, staying relatively close. It is worth noting, incidentally, that in all the mixed-sex groups except one, segregation was extreme; both boys and girls behaved as

though there was only one playmate available to them, rather than three.

There are some fairly far-reaching implications of this study. Previous observational studies in preschools had indicated that girls are often found in locations closer to the teacher than are boys. These studies have been done in mixed-sex nursery school groups. Girls' proximity seeking toward adults has often been interpreted as a reflection of some general affiliative trait in girls and perhaps as a reflection of some aspect of early socialization that has bound them more closely to caregivers. We see in the Greeno study that proximity seeking toward adults was *not* a general trait in girls. It was a function of the gender composition of the group of other children present as potential interaction partners. The behavior of girls implied that they found the presence of boys to be less aversive when an adult was nearby. It was as though they realized that the rough, power-assertive behavior of boys was likely to be moderated in the presence of adults, and indeed, there is evidence that they were right.

We have been exploring some aspects of girls' avoidance of interaction with boys. Less is known about why boys avoid interaction with girls, but the fact is that they do. In fact, their cross-sex avoidance appears to be even stronger. Thus, during middle childhood both boys and girls spend considerable portions of their social play time in groups of their own sex. This might not matter much for future relationships were it not for the fact that fairly distinctive styles of interaction develop in all-boy and all-girl groups. Thus, the segregated play groups constitute powerful socialization environments in which children acquire distinctive interaction skills that are adapted to same-sex partners. Sex-typed modes of interaction become consolidated, and I wish to argue that the distinctive patterns developed by the two sexes at this time have implications for the same-sex and cross-sex relationships that individuals form as they enter adolescence and adulthood.

It behooves us, then, to examine in somewhat more detail the nature of the interactive milieus that prevail in all-boy and all-girl groups. Elsewhere I have reviewed some of the findings of studies in which these two kinds of groups have been observed (Maccoby, 1988). Here I will briefly summarize what we know.

The two sexes engage in fairly different kinds of activities and games (Huston, 1985). Boys play in somewhat larger groups, on the average, and their play is rougher (Humphreys & Smith, 1987) and takes up more space. Boys more often play in the streets and other public places; girls more often congregate in private homes or yards. Girls tend to form close, intimate friendships with one or two other girls, and these friendships are marked by the sharing of confidences (Kraft & Vraa, 1975). Boys' friendships, on the other hand, are more oriented around mutual interests in activities (Erwin, 1985). The breakup of girls' friendships is usually attended by more intense emotional reactions than is the case for boys.

For our present purposes, the most interesting thing about all-boy and all-girl groups is the divergence in the interactive styles that develop in them. In male groups, there is more concern with issues of dominance. Several psycholinguists have recorded the verbal exchanges that occur in these groups, and Maltz and Borker (1983) summarized the findings of several studies as follows: Boys in their groups are more likely than girls in all-girl groups to interrupt one another; use commands, threats, or boasts of authority; refuse to comply with another child's demand; give information; heckle a speaker; tell jokes or suspenseful stories; top someone else's story; or call another child names. Girls in all-groups, on the other hand, are more likely than boys to express agreement with what another speaker has just said, pause to give another girl a chance to speak, or when starting a speaking turn, acknowledge a point previously made by another speaker. This account indicates that among boys, speech serves largely egoistic functions and is used to establish and protect an individual's turf. Among girls, conversation is a more socially binding process.

In the past five years, analysts of discourse have done additional work on the kinds of interactive processes that are seen among girls, as compared with those among boys. The summary offered by Maltz and Borker has been both supported and extended. Sachs (1987) reported that girls soften their directives to partners, apparently attempting to keep them involved in a process of planning a play sequence, while boys are more likely simply to tell their partners what to do. Leaper (1989) observed children aged five and seven and found that verbal exchanges among girls more often take the form of what he called "collaborative speech acts" that involve positive reciprocity, whereas among boys, speech acts are more controlling and include more negative reciprocity. Miller and colleagues (Miller, Danaher, & Forbes, 1986) found that there was more conflict in boys' groups, and given that conflict had occurred, girls were more likely to use "conflict mitigating strategies," whereas boys more often used threats and physical force. Sheldon (1989) reported that when girls talk, they seem to have a double agenda: to be "nice" and sustain social relationships, while at the same time working to achieve their own individual ends. For boys, the agenda is more often the single one of self-assertion. Sheldon (1989) has noted that in interactions among themselves, girls are *not* unassertive. Rather, girls do successfully pursue their own ends, but they do so while toning down coercion and dominance, trying to bring about agreement, and restoring or maintaining group functioning. It should be noted that boys' confrontational style does not necessarily impede effective group functioning, as evidenced by boys' ability to cooperate with teammates for sports. A second point is that although researchers' own gender has been found to influence to some degree the kinds of questions posed and the answers obtained, the summary provided here includes the work of both male and female researchers, and their findings are consistent with one another.

As children move into adolescence and adulthood, what happens to the interactive styles that they developed in their largely segregated childhood groups? A first point to note is that despite the powerful attraction to members

of the opposite sex in adolescence, gender segregation by no means disappears. Young people continue to spend a good portion of their social time with same-sex partners. In adulthood, there is extensive gender segregation in workplaces (Reskin, 1984), and in some societies and some social-class or ethnic groups, leisure time also is largely spent with same-sex others even after marriage. The literature on the nature of the interactions that occur among same-sex partners in adolescence and adulthood is quite extensive and cannot be reviewed here. Suffice it to say in summary that there is now considerable evidence that the interactive patterns found in sex-homogeneous dyads or groups in adolescence and adulthood are very similar to those that prevailed in the gender-segregated groups of childhood (e.g., Aries, 1976; Carli, 1989; Cowan, Drinkard, & MacGavin, 1984; Savin-Williams, 1979).

How can we summarize what it is that boys and girls, or men and women, are doing in their respective groups that distinguishes these groups from one another? There have been a number of efforts to find the major dimensions that best describe variations in interactive styles. Falbo and Peplau (1980) have factor analyzed a battery of measures and have identified two dimensions: one called direct versus indirect, the other unilateral versus bilateral. Hauser et al. (1987) have distinguished what they called *enabling* interactive styles from *constricting* or *restrictive* ones, and I believe this distinction fits the styles of the two sexes especially well. A restrictive style is one that tends to derail the interaction—to inhibit the partner or cause the partner to withdraw, thus shortening the interaction or bringing it to an end. Examples are threatening a partner, directly contradicting or interrupting, topping the partner's story, boasting, or engaging in other forms of self-display. Enabling or facilitative styles are those, such as acknowledging another's comment or expressing agreement, that support whatever the partner is doing and tend to keep the interaction going. I want to suggest that it is because women and girls use more enabling styles that they are able to form more intimate and more integrated relationships. Also I think it likely that it is the male concern for turf and dominance—that is, with not showing weakness to other men and boys—that underlies their restrictive interaction style and their lack of self-disclosure.

Carli (1989) has recently found that in discussions between pairs of adults, individuals are more easily influenced by a partner if that partner has just expressed agreement with them. In this work, women were quite successful in influencing one another in same-sex dyads, whereas pairs of men were less so. The sex difference was fully accounted for by the fact that men's male partners did not express agreement as often. Eagly (1987) has summarized data from a large number of studies on women's and men's susceptibility to influence and has found women to be somewhat more susceptible. Carli's work suggest that this tendency may not be a general female personality trait of "suggestibility" but may reflect the fact that women more often interact with other women who tend to express reciprical agreement. Carli's finding resonates with some work with young children interacting with their mothers. Mary Parpal and I (Parpal & Maccoby, 1985) found that children were more compliant to a mother's demands if the two had previously engaged in a game in which the child was allowed to give directions that the mother followed. In other words, maternal compliance set up a system of reciprocity in which the child also complied. I submit that the same principle applies in adult interactions and that among women, influence is achieved in part by being open to influence from the partner.

Boys and men, on the other hand, although less successful in influencing one another in dyads, develop group structures—well-defined roles in games, dominance hierarchies, and team spirit—that appear to enable them to function effectively in groups. One may suppose that the male directive interactive style is less likely to derail interaction if and when group structural forces are in place. In other words, men and boys may *need* group structure more than women and girls do. However, this hypothesis has yet to be tested in research. In any case, boys and men in their groups have more opportunity to learn how to function within hierarchical structures than do women and girls in theirs.

We have seen that throughout much of childhood and into adolescence and adulthood as well, people spend a good deal of their social time interacting with others of their own gender, and they continue to use distinctive interaction styles in these settings. What happens, then, when individuals from these two distinctive "cultures" attempt to interact with one another? People of both sexes are faced with a relatively unfamiliar situation to which they must adapt. Young women are less likely to receive the reciprocal agreement, opportunities to talk, and so on that they have learned to expect when interacting with female partners. Men have been accustomed to counter-dominance and competitive reactions to their own power assertions, and they now find themselves with partners who agree with them and otherwise offer enabling responses. It seems evident that this new partnership should be easier to adapt to for men than for women. There is evidence that men fall in love faster and report feeling more in love than do women early in intimate relationships (Huston & Ashmore, 1986). Furthermore, the higher rates of depression in females have their onset in adolescence, when rates of cross-sex interaction rise (Nolen-Hoeksema, in press). Although these phenomena are no doubt multidetermined, the asymmetries in interaction styles may contribute to them.

To some degree, men appear to bring to bear much the same kind of techniques in mixed-sex groups that they are accustomed to using in same-sex groups. If the group is attempting some sort of joint problem solving or is carrying out a joint task, men do more initiating, directing, and interrupting than do women. Men's voices are louder and are more listened to than women's voices by both sexes (West & Zimmerman, 1985); men are more likely than women to lose interest in a taped message if

it is spoken in a woman's rather than a man's voice (Robinson & MacArthur, 1982). Men are less influenced by the opinions of other group members than are women. Perhaps as a consequence of their greater assertiveness, men have more influence on the group process (Lockheed, 1985; Pugh & Wahrman, 1983), just as they did in childhood. Eagly and colleagues (Eagly, Wood, & Fishbaugh, 1981) have drawn our attention to an important point about cross-sex interaction in groups: The greater resistance of men to being influenced by other group members is found only when the men are under surveillance, that is, if others know whether they have yielded to their partners' influence attempts. I suggest that it is especially the monitoring by other *men* that inhibits men from entering into reciprocal influence with partners. When other men are present, men appear to feel that they must guard their dominance status and not comply too readily lest it be interpreted as weakness.

Women's behavior in mixed groups is more complex. There is some work indicating that they adapt by becoming more like men—that they raise their voices, interrupt, and otherwise become more assertive than they would be when interacting with women (Carli, 1989; Hall & Braunwald, 1981). On the other hand, there is also evidence that they carry over some of their well-practiced female-style behaviors, sometimes in exaggerated form. Women may wait for a turn to speak that does not come, and thus they may end up talking less than they would in a women's group. They smile more than the men do, agree more often with what others have said, and give nonverbal signals of attentiveness to what others—perhaps especially the men—are saying (Duncan & Fiske, 1977). In some writings this female behavior has been referred to as "silent applause."

Eagly (1987) reported a meta-analysis of behavior of the two sexes in groups (mainly mixed-sex groups) that were performing joint tasks. She found a consistent tendency for men to engage in more task behavior—giving and receiving information, suggestions, and opinions (see also Aries, 1982)—whereas women are more likely to engage in socioemotional behaviors that support positive affective relations within the group. Which style contributes more to effective group process? It depends. Wood, Polek, and Aiken (1985) have compared the performance of all-female and all-male groups on different kinds of tasks, finding that groups of women have more success on tasks that require discussion and negotiation, whereas male groups do better on tasks where success depends on the volume of ideas being generated. Overall, it appears that *both* styles are productive, though in different ways.

There is evidence that women feel at a disadvantage in mixed-sex interaction. For example, Hogg and Turner (1987) set up a debate between two young men taking one position and two young women taking another. The outcomes in this situation were contrasted with a situation in which young men and women were debating against same-sex partners. After the cross-sex debate, the self-esteem of the young men rose, but that of the young women declined. Furthermore, the men liked their women opponents better after debating with them, whereas the women liked the men less. In other words, the encounter in most cases was a pleasurable experience for the men, but not for the women. Another example comes from the work of Davis (1978), who set up get-acquainted sessions between pairs of young men and women. He found that the men took control of the interaction, dictating the pace at which intimacy increased, whereas the women adapted themselves to the pace set by the men. The women reported later, however, that they had been uncomfortable about not being able to control the sequence of events, and they did not enjoy the encounter as much as the men did.

In adolescence and early adulthood, the powerful forces of sexual attraction come into play. When couples are beginning to fall in love, or even when they are merely entertaining the possibility of developing an intimate relationship, each is motivated to please the other, and each sends signals implying "Your wish is my command." There is evidence that whichever member of a couple is more attractive, or less in love, is at an advantage and is more able to influence the partner than vice versa (Peplau, 1979). The influence patterns based on the power of interpersonal attraction are not distinct in terms of gender; that is, it may be either the man or the woman in a courting relationship who has the influence advantage. When first meeting, or in the early stages of the acquaintance process, women still may feel at some disadvantage, as shown in the Davis study, but this situation need not last. Work done in the 1960s indicated that in many couples, as relationships become deeper and more enduring, any overall asymmetry in influence diminishes greatly (Heiss, 1962; Leik, 1963; Shaw & Sadler, 1965). Most couples develop a relationship that is based on communality rather than exchange bargaining. That is, they have many shared goals and work jointly to achieve them. They do not need to argue over turf because they have the same turf. In well-functioning married couples, both members of the pair strive to avoid conflict, and indeed there is evidence that the men on average are even more conflict-avoidant than the women (Gottman & Levenson, 1988; Kelley et al., 1978). Nevertheless, there are still carry-overs of the different interactive styles males and females have acquired at earlier points in the life cycle. Women seem to expend greater effort toward maintaining harmonious moods (Huston & Ashmore, 1986, p. 177). With intimate cross-sex partners, men use more direct styles of influence, and women use more indirect ones. Furthermore, women are more likely to withdraw (become silent, cold, and distant) and/or take unilateral action in order to get their way in a dispute (Falbo & Peplau, 1980), strategies that we suspect may reflect their greater difficulty in influencing a male partner through direct negotiation.

Space limitations do not allow considering in any depth the next set of important relationships that human beings form: that between parents and children. Let me simply say that I think there is evidence for the following: The interaction styles that women have developed in interaction with girls and other women serve them well

when they become mothers. Especially when children are young, women enter into deeper levels of reciprocity with their children than do men (e.g., Gleason, 1987; Maccoby & Jacklin, 1983) and communicate with them better. On the other hand, especially after the first two years, children need firm direction as well as warmth and reciprocity, and fathers' styles may contribute especially well to this aspect of parenting. The relationship women develop with young children seems to depend very little on whether they are dealing with a son or a daughter; it builds on maternal response to the characteristics and needs of early childhood that are found in both boys and girls to similar degrees. Fathers, having a less intimate relationship with individual children, treat young boys and girls in a somewhat more gendered way (Siegal, 1987). As children approach middle childhood and interact with same-sex other children, they develop the interactive styles characteristic of their sex, and their parents more and more interact with them as they have always done with same-sex or opposite-sex others. That is, mothers and daughters develop greater intimacy and reciprocity; fathers and sons exhibit more friendly rivalry and joking, more joint interest in masculine activities, and more rough play. Nevertheless, there are many aspects of the relationships between parents and children that do not depend on the gender of either the parent or the child.

Obviously, as the scene unfolds across generations, it is very difficult to identify the point in the developmental cycle at which the interactional styles of the two sexes begin to diverge, and more important, to identify the forces that cause them to diverge. In my view, processes within the nuclear family have been given too much credit—or too much blame—for this aspect of sex-typing. I doubt that the development of distinctive interactive styles has much to do with the fact that children are parented primarily by women, as some have claimed (Chodorow, 1978; Gilligan, 1982), and it seems likely to me that children's "identification" with the same-sex parent is more a consequence than a cause of children's acquisition of sex-typed interaction styles. I would place most of the emphasis on the peer group as the setting in which children first discover the compatibility of same-sex others, in which boys first discover the requirements of maintaining one's status in the male hierarchy, and in which the gender of one's partners becomes supremely important. We do not have a clear answer to the ultimate question of why the segregated peer groups function as they do. We need now to think about how it can be answered. The answer is important if we are to adapt ourselves successfully to the rapid changes in the roles and relationships of the two sexes that are occurring in modern societies.

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Commentary

Boys Trample Girls' Turf

■ **Behavior:** Studies support the Mills College women: Even in preschool, guess who's the boss.

By CAROL TAVRIS

After Mills College in Oakland decided to admit males, the public reaction was unsympathetic to the women students' fierce protest: Quit sniveling and join the 20th Century. Young women will have to learn to work with men sometime, and college is the best time. You women can't have it both ways; you can't demand access to all-male schools, then turn around and demand to keep all-female schools.

I am sympathetic to these reactions and once would have shared them. They were the reasons I chose a co-ed university. But now my sympathies lie entirely with the women of Mills, and the reasons are both personal and professional. For the fact is, as research has demonstrated consistently over the years, that young women do better in their intellectual development when they have at least a few years to learn and study with each other than when they are in co-ed environments.

The reason for this is not necessarily that men are sexist brutes who consciously run roughshod over women or regard them solely as sex objects, although certainly many do. The reason is more subtle and interesting.

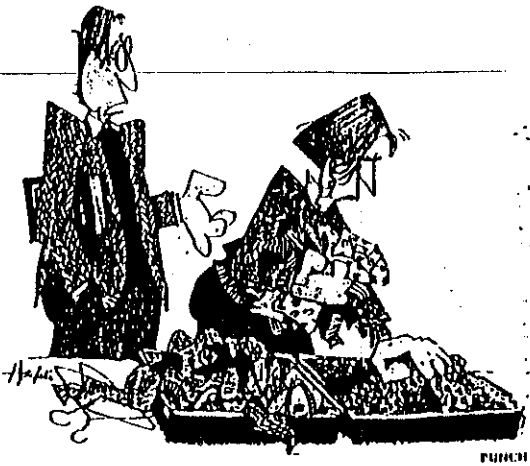
In a review of many research studies, Eleanor Maccoby, a developmental psychologist at Stanford, finds that, starting in childhood, boys and girls develop different styles of conversation and influence. Boys and girls do not differ in "passivity" or "activity" in some consistent, trait-like way; their behavior depends on the gender of the child they are playing with. Among children as young as 3, Maccoby observes, girls are seldom passive with each other. "However, when paired with boys, girls frequently stand on the sidelines and let the boys monopolize the toys." And in spite of the well-meaning efforts of non-sexist parents and teachers to get boys and girls to play together, "children choose same-sex playmates spontaneously when they are not under pressure from adults."

Now, why is this? Between the ages of 3½ and 5½, Maccoby finds, children begin to try to influence their play partners. What happens is familiar to every parent: Boys basically ignore girls and do not respond to their efforts to influence them. Boys will respond if another boy shouts at them, for example, but not if a girls does. Same-sex choice of playmates persists, not only because boys reject girls as "sissy," but also because girls simply stop trying to play with boys who are unresponsive.

The different influence strategies are already apparent in preschool. When a boy and a girl compete for a shared toy, such as a one-person movie viewer, the boy dominates—unless there is an adult in the room. That's why girls in mixed classrooms stay closer to the teacher: It's not that girls are more "dependent," but that they want a chance at the toys. Girls play just as independently as boys when they are in all-girl groups, when they will actually sit farther from the teacher than boys in all-male groups do.

In elementary school, the interaction and influence styles have diverged significantly. Girls tend to form intimate "chumships" with one or two other girls; boys form group friendships organized around games and other activities. Boys in all-boy groups are more likely than girls to interrupt one another; use commands, threats or boasts; refuse to comply with another child's wishes; heckle a speaker; call another child names; top someone else's story; tell jokes. Girls in all-girl groups are more likely to agree with another speaker; pause to give another girl a chance to speak; acknowledge what a previous speaker said. "Among boys," Maccoby concludes, "speech serves largely egoistic functions, and is used to establish and protect an individual's turf. Among girls, conversation is a more socially binding process."

When I read Maccoby's review of the many studies that portray these two cultures of gender, I felt a shock of recognition about my own college and graduate school experience. I loved my university, worked hard and learned much, thanks to professors who supported me. But I never said a word in class. (Well, one word. I was the only student in a sociology course who knew that *mos* was the singular form of *mores*, and said so. The professor, who had been lamenting the illiteracy of American students, looked at me as if a frog had spoken.) I told a boyfriend that the reason I liked him so much was that I could talk freely with him about ideas. He said, "Well, we guys get to do that with each other. We don't need you for talking." I decided I no longer needed him for friendship.



PUNCH

"You always complain I don't pay attention to you. I thought you'd be flattered I'd noticed so many of your faults."

I was cured of my shyness in speaking up in groups of men by one simple event: getting a job. So will Mills' students, if their college does go coeducational. But I hope, with them, that the board reconsiders. Not because I think that all universities should be sex-segregated or that all women should go to segregated schools, but because young women should at least have the opportunity to develop their own voices without being interrupted, however sweetly, however arrogantly, by men.

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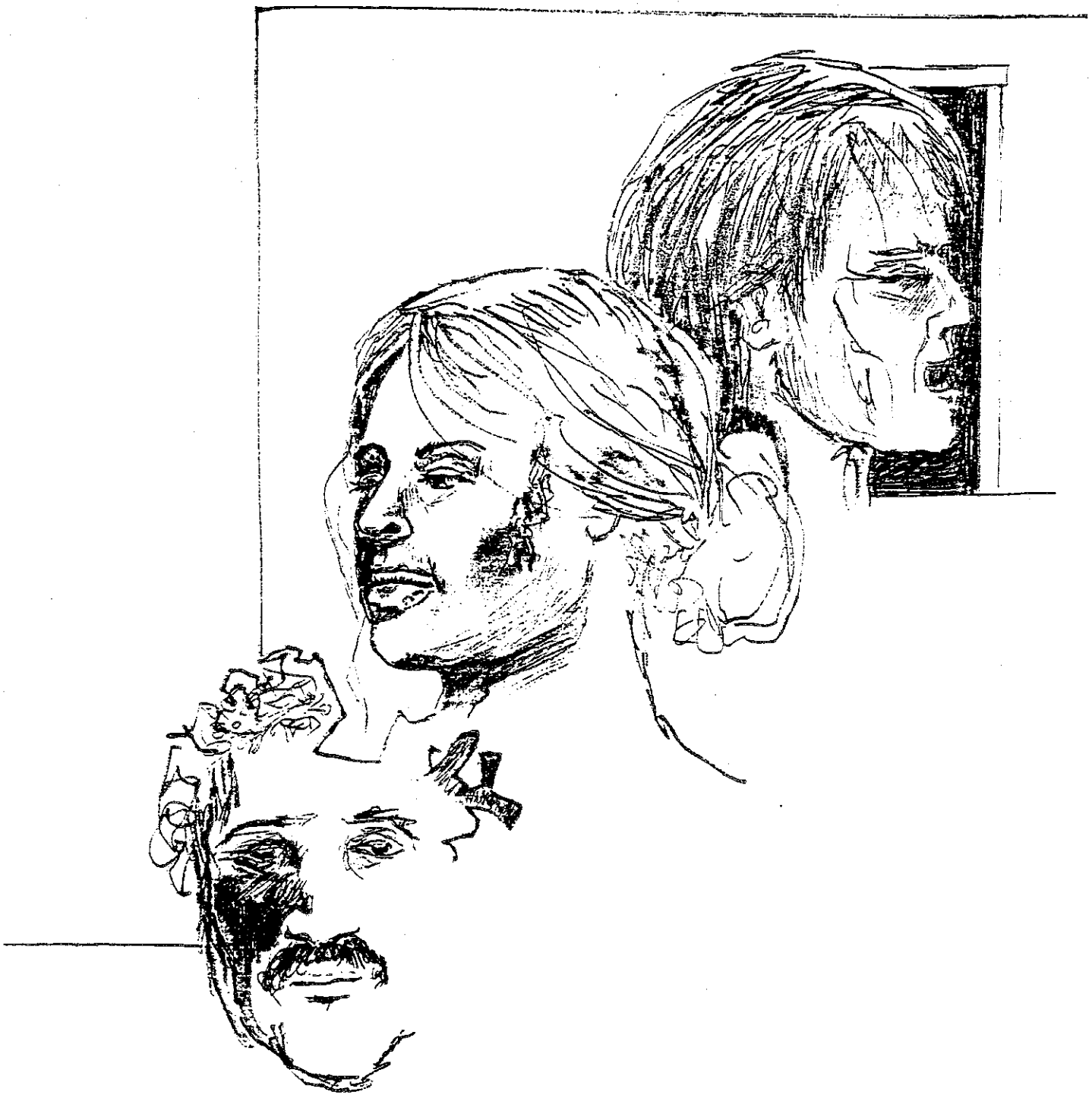

Special Issue:

Students at Risk in Our Schools

Elementary & Secondary Education—Special Populations

Positive Role Models for Primary-Grade Black Inner-City Males

Spencer H. Holland

After the family, the school stands as the most important cultural institution contributing to the education and socialization of American children. However, the single-parent, female-headed households in this nation's urban communities deny the young Black male child a major vehicle necessary in the socialization process of all boys, an adult male. To compound an already calamitous situation, these boys are then sent to school where, for the first four or five years of their educational experience, they are confronted with an environment that is also devoid of adult male role models. In most elementary schools, the principals, assistant principals, counselors, and teachers are all female. During the first eight to ten years of his life, the lack of consistent, positive, adult male role models may be a primary factor affecting the young Black male's ability to succeed in academic settings.

In order to understand more clearly why inner-city males become involved in gangs and the illicit economy, and why they shun school as not relevant to their lives, one need look no further than the type of adult male role models in their environment for the answer. Who are the successful adult males in the inner-city environment? For the most part, they are those who have also failed in the educational arena, yet have acquired the "American Dream" through their involvement in the most negative aspects of the inner-city milieu. Therefore, it is no surprise that young inner-city males want to be like these "role models" when the home and the school offer *no* alternative adult males with whom they may identify early in life. Gangs and athletics constitute two arenas where inner-city Black males can be and are very successful. Both provide the boy with the structure that is so often missing in his life, for both have clear hierarchies, clear duties and responsibilities, clear leadership (authority), and very clear, consistently enforced sanctions in male domains.

It is imperative that we focus on the early environment in which these boys develop, long before they are old enough to become affiliated with gangs or illicit activities. We must remove our blinders and wade through the cold water of "self-examination." It is important to admit that some of the problems evidenced by inner-city male children have their roots in a lack of adequate parenting. These youngsters are being raised by care-givers who may be repeating a cycle of inadequate parenting, and who also know little or nothing about interacting and/or surviving in male-oriented environments. What is the "true" nature of these boys' early childhood environment? Who is available to answer the call for male identity during those critical, formative years when positive male role models are most crucial? Who can allay the fear, assuage the anger, lift the depression, or soothe the hurt feelings of these young boys in the face of an often violent and unrelenting male world?

James Thurber once wrote, "It is better to know some of the questions, than all of the answers." However, we are not short on analyses or answers to the aforementioned questions, as both analyses and answers have been supplied by Black scholars. According to Robert Bridges, Superintendent of Wake County Public Schools, Raleigh, N.C., "The model for Black male child development is broken, and *we* must fix it" (Bridges, 1988).

Findings and Observation

It is more than evident that the major victims of the current formulas for educating inner-city children are our male children. One need look no further than the newspapers of this nation's urban centers to see the results of academic failure that have become endemic to this segment of the school population. However, to date, the New Orleans Public School System appears to be the only urban school system that has had the courage to conduct a systematic study of its Black male students. The findings of the Committee to Study the Status of the Black Male in the New Orleans Public Schools can easily be generalized

to almost every urban center in the United States. For example, it was found that, "Though Black males represented 43 percent of the public school population in the 1986-87 academic year, they accounted for 57.5 percent of the non-promotions, 65 percent of the suspensions, 80 percent of the expulsions, and 45 percent of the dropouts." Non-promotions in the primary grades during the 1986-87 academic year reflected the following: of 1470 first graders retained, 817 were Black males; of 768 second graders retained, 440 were Black males; and of 716 third graders retained, 438 were Black males. From grades four through eleven Black males also constituted more that 50 percent of the total number of students retained at each grade level; it was not until twelfth grade that this figure fell below 50 percent (Garibaldi et al. 1988).

In a study of 1,771 students conducted between 1981 and 1985 in the Wake County Public School System, it was found that Black males attained the lowest average academic achievement scores when compared with Black females, non-Black males and non-Black females. It was also found that Black male students were disproportionately represented in such categories as retained students, school dropouts, and suspended and expelled students, as well as other criteria commonly associated with at-risk students (Bridges, 1988).

Although Black male students at all grade levels are at-risk, it is during the primary years that a child's whole attitude toward the educational enterprise is established. And it is no longer a matter of conjecture that many, if not most, students who drop out of the educative process often do so emotionally and psychologically by the end of third grade. Being retained in first or second grade can be one of the most emotionally shattering experiences in a child's life. To be certified "cognitively incapable" by the teacher, who during this critical period in a child's life is often regarded as more of an expert than the parent, may end the child's motivation to achieve.

Keith Geiger, president of the National Education Association, recently stated:

> School reform in the 1980s has put the emphasis at the wrong end of the education spectrum. We don't lose students in college. We don't lose them in high school., We don't even lose them in middle schools. Any elementary teacher can identify those students who need additional assistance in the early years to assure their success later on. We must start reforming our education system at the ground floor. If we're serious about improving the knowledge, skills, and numbers of our high school and college graduates—we must make dramatic improvements in class size and other learning conditions for young children. Most of all, we must re-examine our attitudes about those who teach children in the critical years. They are the professionals who build the foundation on which our house of education stands. [Geiger, 1989]

This approach to educational reform is especially critical to urban educational reform. For example, in many urban school districts, kindergarten through third grade classes have as many as 30 students per class. This situation presents teachers with an almost impossible task. Children at this stage of the educative process *require* a great deal of individual attention, yet with classes above 20 students this is very difficult. However, despite large classes and the lack of educational aides, teachers at this level are to be commended.

A vast array of intervention strategies have been tried to bring about academic success among inner-city children. However, like many attempts at correcting problems in our society, most of these remediation efforts are introduced after students have already failed. The absence of preventive strategies contrasts sharply with the proliferation of remediation models. In attempting to override aspects of the cultural environment in which inner-city boys exist outside the school, we must begin to develop new and creative models that are intrinsic to the educative process—models that are aimed at *preventing* the development of negative attitudes toward academic achievement.

The theory and research in the field of social learning behavior, specifically that which deals with imitative and modeling behaviors in children, may be helpful in providing some clues as to why inner-city Black girls are generally more academically successful than their male peers. A variety of factors appear to determine whether a child will imitate the behavior of an adult model. Sex, race, power, authority (controlling resources), attractiveness, and perceived similarity to self are among the determinants that have been found to be important antecedents to imitative behavior in children (Flanders, 1968). This knowledge may provide us with an approach to the *prevention* of academic failure in inner-city boys, specifically, and male students, generally.

Girls enter school more prepared than boys for the activities that characterize early schooling. In addition, inner-city Black girls are exposed very early in their academic careers to positive, consistent, literate, Black females who offer alternative role models to those encountered in their non-school environments. And just as important, perhaps, is the fact that many of the instructional strategies utilized in early childhood and primary education require children to copy the behavior modeled by the teacher. This early exposure to different and new options for imitation and modeling—ones that might not be available in their home environments—may constitute that most crucial element to girls' initial academic achievement.

However, to young, inner-city, Black males, the early school environment may appear no different from preschool surroundings. Since many of these boys are from

single-parent, female-headed households, their most significant role models from birth to age four or five have been female relatives. Early school experiences, as opposed to those in upper elementary or junior high school, provide few, if any, adult male role models for young Black males. Is it any wonder that they often begin to view academic activities as feminine?

For Black males, gender differences and peer group influence begin very early in life. It is my belief that inner-city Black male children consciously, or unconsciously, begin to reject females as inappropriate role models, because women cannot provide realistic examples of survival outside of home and school. Unfortunately, in rejecting the female teacher as not relevant to their experiences, young Black males also reject those aspects of instruction that are crucial to academic success.

Viable Program Models

It is incumbent upon African-American educators, social scientists, and the community-at-large to take the lead in setting the tone and standard for research and program development for the education of African-American children. Since one of the most obvious psychosocial deficits in the environment of inner-city Black boys is the lack of consistent, positive, literate, Black *male* role models, it is here that urban school systems can begin to make a difference in the academic achievement and socialization of inner-city Black male children. I suggest that the creation of all-male kindergarten through third grade classes, taught by male teachers (preferable Black), may overcome many inner-city boys' negative attitudes toward education.

Same Gender Classes

I am only aware of one school system that has attempted same-gender classes since I proposed them two years ago (Holland, 1987). In 1987, the Dade County (Florida) Public Schools instituted a program called "At Risk All Male Classes" in one inner-city elementary school. Parents volunteered their sons to participate in the program, which created an all-boy kindergarten taught by a Black male teacher, and an all-boy first grade taught by a White male teacher. This school was 98 percent Black and overwhelmingly low-income. The major objectives of the program were academic, using instructional strategies that were felt to be more relevant to the way boys learn. In addition, cooperative learning and socialization were emphasized. Parents were informed of the program's objectives, and it was made clear that if, at any time, the parents became dissatisfied with the program, they could request that the principal remove their child. Not one parent objected, or requested that their son be removed from the program. The results of the pilot year program were truly gratifying, and they indicated that the program needed to continue. During that school year, not one child in the pilot classes was referred to the principal's office for inappropriate conduct. The attendance of the boys in these classes improved more than 23 percent above boys in co-ed classes at the same grade levels. Only one fight developed in the pilot classes, as opposed to several fights in co-ed classes at the same grade levels. The overall *esprit de corps* improved significantly and gave the boys a sense of pride and a feeling of being special. They also supported each other when engaged in activities outside the classroom, including on the playground. The academic grades of these boys also showed improvement over boys in co-ed classes at the same grade levels. Overall, this program was a tremendous success.

Even though there were neither complaints nor formal charges, and although no one opposed the idea, it was felt that the program might be running contrary to Title IX of the Federal Civil Rights Act. Therefore, a formal proposal was submitted to the Department of Education's Office of Civil Rights detailing the experimental and control groups of the Dade County program. The Office of Civil Rights decided that the proposal could not be accepted, and three months into the second year of the program it was disbanded. The boys in these classes were devastated, and the parents were very disappointed. Two years later, the first grade teacher in this program reports that the boys from his class still come to talk to him each week.

We cannot allow programs that show tremendous promise for the education of inner-city Black males to be eradicated without our vehement objections. The African-American community must step forward and protest this type of bureaucratic insensitivity to the needs of our children. The opportunity to interact with positive male role models in an academic setting was denied these children without even attempting an in-depth program review.

Male Volunteers in the Primary Grades

Although the educational establishment itself must institute programs such as the one attempted in Dade County, the community can do much to assist schools in the education and socialization of inner-city boys. For the 1988-89 school year, I implemented a program in an inner-city elementary school in Washington, D.C. that provided adult male volunteers to assist in the classrooms of four first grade teachers. The primary objective of this program was to provide positive male role models in the daily school life of inner-city first graders. Because the first grade class that entered school in 1988 would graduate in the year 2000, the program was called *Project 2000*. Most of the 47 boys in the 93-student first

grade came from single-parent, female-headed households. We wanted to expose them to alternative male role models in both academic and social activities in their classrooms.

Under the auspices of the Washington, D.C., Chapter of Concerned Black Men, Inc. (CBM), an all-male community service organization, 63 adult male volunteers from the corporate world and Howard University undergraduates were recruited and trained to serve as teaching assistants to the first grade teachers. Each volunteer is required to attend a Saturday morning training/orientation workshop before participating in the program, and then must spend at least one-half day per visit, either all morning or all afternoon. The student volunteers visited the school at least once a week, and many of the corporate volunteers changed their work schedules and also visited the school weekly. At least 30 of the volunteers served on a weekly basis.

During the training workshop, volunteers are apprised of the demographics of the students in the first grade classes (e.g., 74 of the 93 students came from single-parent, female-headed households, and approximately 54 came from families on public assistance). They are given an overview of the dynamics of early childhood and early childhood education, told of the project's objectives, and apprised of the tasks and activities they will be asked to perform. Tasks were developed by the teachers and include:

- assisting with discipline (especially with boys) by being friendly but firm,
- working one-on-one with children who need help,
- assisting the teacher in checking seat work,
- monitoring lavatories and playground activities,
- duplicating materials, and passing out and collecting materials.

In general, the volunteers serve as an extra pair of hands and eyes for the teachers while performing tasks that will help the teacher and the children. The volunteers are also told that on their initial visits to the class, they will teach a "Getting-To-Know-You" lesson. This lesson will include a geography segment in which the volunteer uses a map of the United States to show his home state, its capitol, and the place where he graduated from high school. He also will tell the children how he prepared for his career, emphasizing the need to graduate from high school and obtain the additional education that is necessary to perform his type of work. The college students will explain their college majors and compare the courses that they are taking to the subjects taken by the children. And finally, volunteers will share their special interests with the class (e.g., playing a musical instrument, hobbies, and athletic activities). In the final portion of the workshop, the teachers take the volunteers into the classrooms and have them perform the opening of school exercises, which include singing some of the songs the children sing, and involving them in the kinds of activities that children do in the classroom.

Volunteers also accompany the children on field trips, which may be sponsored by the school, CBM, and/or the volunteers. Last year the first trip sponsored by CBM was a bus tour of Washington, D.C. Most of the children had never been out of their neighborhood! Another trip, sponsored by the school, was to the Capital Children's Museum. And in the spring, the college students and CBM sponsored a trip to Howard University to see a performance of the University's Children's Theater, tour the campus, and have lunch at the student center. The children's reactions to these trips were wonderful. The teachers had them draw pictures and tell stories about what they had seen and learned, and they talked about these adventures for weeks afterward.

At the beginning of the CBM project, the teachers, counselor, and principal targeted 12 boys who were having academic and/or behavioral difficulty. The volunteers were asked to give special attention to these children. By January, 1989, all of these boys had made incredible turnarounds in their behavior, academic performance, or both. Because of the improvement, the boys were taken by CBM to a professional basketball game between the Atlanta Hawks and Washington Bullets at the Washington Capital Centre. They were explicitly told that the trip was a reward for improving their behavior. Two of the boys also represented their class and were recognized as its most improved students, at CBM's annual Youth Recognition and Awards Banquet in June, 1989.

In addition to the volunteers in the classroom, CBM also sponsors parent effectiveness training workshops for all parents at this elementary school. These workshops are conducted by two Black female psychologists who volunteer their time one Saturday every month during the school year.

The response of the students, staff, parents, and volunteers to this pilot year effort was tremendous. The observable changes in the students have been truly heartwarming. They pay more attention to the tasks at hand, the acting-out behaviors decreased considerably, and their academic performance improved when compared to previous first grade classes. The need these children have for attention from positive, caring, adult males is self-evident. In fact, one of the first questions our children asked when they returned to school in the second grade was, "Are the men coming back this year?"

Concerned Black Men, Inc., which adopted this school in 1985, implemented *Project 2000* as a symbol of our efforts as a community to prepare our children for the twenty-first century. The project serves as a model of what can be accomplished by determined Black men as

we assist Black women in the education and socialization of our male children. We will stay with this group of children as they progress through the D.C. Public Schools.

This school year we are recruiting additional volunteers to participate in the program. We have expanded our outreach to other colleges in the city and to retired men. We feel that because few of our children interact with many older people, the addition of retired males, who bring their unique experiences to this enterprise, will be very valuable to the children.

Conclusion

My proposal to create same-gender classes taught by same-gender teachers for the inner-city Black male students in the primary grades has been termed, in some quarters, a radical approach to education. Since the term "radical" generally has a pejorative connotation, I prefer "unorthodox" or even "progressive," if a label is necessary at all. By whatever designation, our overarching concern must be to stem the tide of academic failure in this segment of the school population.

As educators, we cannot go into the homes of these children and demand that their parents do what is necessary to foster positive growth and development. However, we have these children in our care for six hours, five days a week, nine to ten months of the year. We can, and must, make substantive changes in the organization of schools to facilitate mentoring relationships among the children, the school staff, the community-at-large, and the business community. According to the U.S. Department of Labor, by the year 2000, this nation's workforce will be composed primarily of minorities and women; consequently, our children must be prepared not only to fill jobs, but to be productive employees and responsible citizens.

Approaches to educational reform during the 1980s have focused almost exclusively on the curriculum and on standards and graduation requirements. Without other changes, these types of proposed reforms will do nothing more than fail larger numbers of Black, inner-city children, particularly males. If we are to remove the Black male from the "endangered species" list, urban educational reform must focus on changes in the organizational structure of school to better serve the affective as well as cognitive needs of children. We must create demonstration projects and experimental models that:

- examine the effectiveness of gender specific instructional strategies;
- provide release-time for employees in the public and private sectors to serve as volunteers in classrooms;
- investigate ungraded primary grade models;
- emphasize more team teaching; and
- establish secondary homerooms led by teacher-advisors who will keep the same group of children throughout their junior or senior high school careers, thereby providing them with an adult, within the school, who can serve as a mentor.

In addition, we must establish models whose major focus is configured around a diverse group of adults with the potential to lead, educate, and "inspire" our young children. Central to this approach must be the recruitment and funding of minority males who will major in elementary education and then return to teach in inner-city school.

As Asa Hilliard, one of this nation's foremost African-American educators and scholars has stated, "There is little or nothing in the school reform reports and effectiveness research in general that offers promise for the massive changes in education necessary to save the huge numbers of children in our systems who are 'at risk'" (Hilliard, 1988). There is also little doubt that the most "at risk" segment of the school population is the Black male child.

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See Louis Fischer's "Case Law Dealing with Sex-Segregated Public Schools" (pp. 45-46). Also in Volume 25, No. 2), Clifford Watson describes efforts to set up Black male academies in the Detroit public school system.

Case Law Dealing with Sex-Segregated Public Schools

Louis Fischer

This extended sidebar was spefically written to accompany Spencer Holland's article—Ed.

Is it illegal to teach boys and girls in separate classes or in separate schools within a public school system? While there is no authoritative law to guide us, two cases shed some light on the subject—*Vorchheimer* from Pennsylvania and *Hinds* from Mississippi.

Vorchheimer

The Philadelphia School District offers four types of senior high schools: academic, comprehensive, technical, and magnet. *Vorchheimer* was focused on the policies controlling admission to the academic high schools. There were two such schools in Philadelphia; they had high admission standards and offered only college preparatory courses. Central High was restricted to males, while Girls High School admitted only females. Students attended academic high school voluntarily, since they had the choice of attending comprehensive high schools as an alternative.

Susan Lynn Vorchheimer qualified for admission to the academic high schools, visited both, and expressed a preference for Central. When denied admission, she brought suit, claiming that the policies supporting sex-segregated schooling violated federal statutory law as well as the Fourteenth Amendment's Equal Protection Clause.

The U.S. District Court agreed with her and ordered the schools to admit her and other qualified female students to the all-male school. However, the Court of Appeals reversed the lower court, and the U.S. Supreme Court affirmed this reversal by an equally divided vote (4-4), without opinion (430 U.S. 703, 1977).

Upon analysis of congressional debates, the Court of Appeals concluded that Congress did not clearly express its intention to outlaw sex-separate schooling, or conversely, to require co-educational schooling in public secondary schools. Thereafter the court considered whether the policy violated the Constitution's Equal Protection Clause.

Equal Protection cases call for the application of standards relevant to the issue at hand. Ordinary instances of classification call for the so-called rational relationship test, which simply asks whether the governmental agency is using a reasonable means to pursue a legitimate objective. Classification based on race, ethnicity, or religion have been held *suspect* classifications that call for a strict standard or "strict scrutiny," whereby the government bears the heavy burden of showing a compelling reason to use the given classification to achieve a very important purpose, with no alternative, less damaging means available. In between these two standards, the Court has been developing an intermediate standard of scrutiny, where the government must show "fair and substantial relationship" between the classification and the objectives being sought.

The Court of Appeals emphasized that the Supreme Court has never applied strict scrutiny to a classification based on gender, for it never held gender-based classifications to be suspect. Since various expert educators testified at the trial that sex-separate schooling during the adolescent years can be a highly effective educational arrangement, the court refused to substitute its judgment for those of educators. Furthermore, it concluded that whether the "case requires application of the rational or substantial relationship test . . . the result is the same" (p. 888).

Thus, although one judge dissented, the majority held that "separate but equal" educational opportunities do not violate either statutory or constitutional law, where the segregation is based on gender in the pursuit of legitimate educational objectives, and where the schooling provided for males and females are of the same quality.

Hinds

The second case involved a school district in Mississippi undergoing racial desegregation pursuant to a plan submitted by the Office of Education of the United States Department of Health, Education and Welfare. As part of its plan, the County requested that it be allowed to sex-segregate students assigned to four schools. While the District Court allowed such sex-separation, the Court of Appeals struck it down as a violation of the Equal Educational Opportunity Act of 1974, §202, 203(a)(1), 20 U.S.C.A. §1701, 1702 (a)(1), §204(a), 221(c), 20 U.S.C.A. §1703(a), 1720(c).

While acknowledging some ambiguities in these statutes, the Appeals Court concluded that 20 U.S.C. §1720(c) clearly prohibits "the operation of a school

system in which students are wholly or substantially separated among the schools of an educational agency on the basis of race, color, sex, or national origin or within a school on the basis of race, color, or national origin" (p. 624).

The *Hinds* court referred to *Vorchheimer* in a footnote (fn. 7, pp. 624-625) but distinguished the two situations, noting that *Vorchheimer* involved *voluntary* sex-segregation in high schools in an otherwise co-educational system and the schools had existed for over 100 years. In *Hinds*, all students, at every level of schooling, were *assigned* to sexually segregated schools. Thus, *Vorchheimer* could not be used as precedent for *Hinds*.

Conclusions

The case law related to the legality of sex-segregated public schools is limited. The two cases discussed above are quite different from each other, and there is no authoritative guidance we can derive from the split (4-4) affirmation of *Vorchheimer* by the Supreme Court.

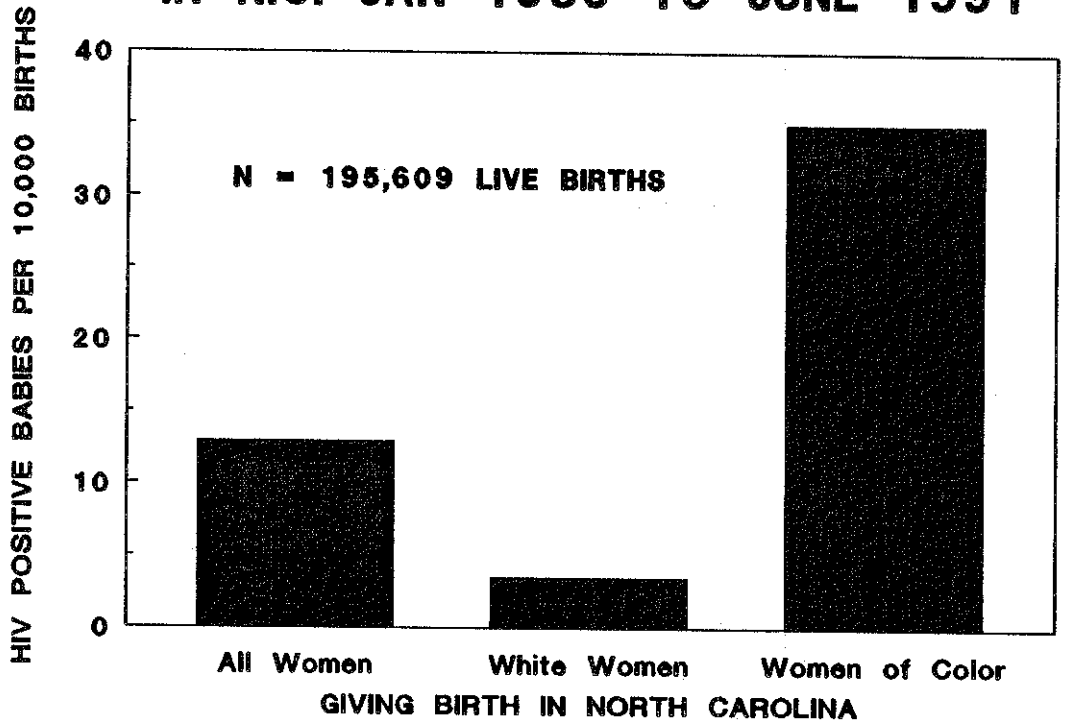
It is safe to conclude that sex-segregated schooling at the high school level will be upheld if it is voluntary and if the quality of education available to males and females is substantially equal. If sex-segregated schooling is proposed in a school system undergoing racial desegregation, it is likely to be struck down, under either the Fourteenth Amendment or federal statutes. While there is ambiguity in the federal statutes, as explored in *Vorchheimer*, there is no ambiguity in Congressional intent to outlaw segregation based on race, ethnicity, or national origin. In all likelihood, the *Hinds* court struck down sex-segregated schooling because it accompanied racial desegregation. It is curious that the court did not make this connection explicit, though it is less politically volatile to base such a controversial decision on federal legislation.

It seems to me that *voluntary* sex-segregated programs, conducted on an experimental basis in a *unitary* (desegregated) school district, would not violate the law. Educators proposing such a program would have to state clearly the governmental objectives to be attained, and must be prepared for strict legal scrutiny if there is evidence that racial segregation might be a motive behind such sex-segregated schooling. It would be important to have racially desegregated classes whether taught by Black or White teachers. The "Role Model Theory" could not be used to justify the teaching of Black males by Black teachers and White males by White teachers. The Supreme Court has rejected the "Role Model Theory" in other cases (e.g., *Wygant*) as specifically counter to the spirit embodied in *Brown v. Board of Education*, for it could even be used to justify the small percentage of Black teachers in some schools by reference to the small percentage of Black students. However, a carefully designed experiment should be able to avoid such legal pitfalls.

References

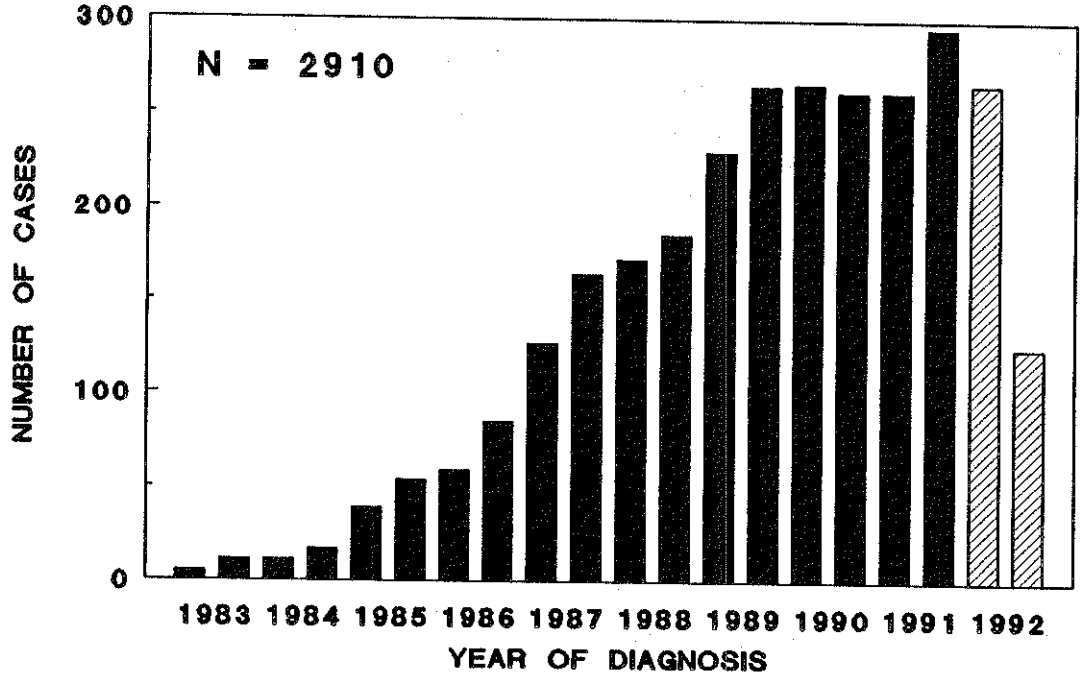
Brown v. Board of Education. (1954). 347 U.S. 483.
U.S. v. Hinds County School Board. (1977). 560 F. 2d 619, 5th Cir.
Vorchheimer v. School District of Philadelphia. (1977). 430 U.S. 703; 97 S. Ct. 1671.
Wygant v. Jackson Board of Education. (1986). 476 U.S. 267.

HIV INFECTION AMONG LIVE BIRTHS IN N.C. JAN 1989 TO JUNE 1991



SOURCE: NC DEPT. OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES

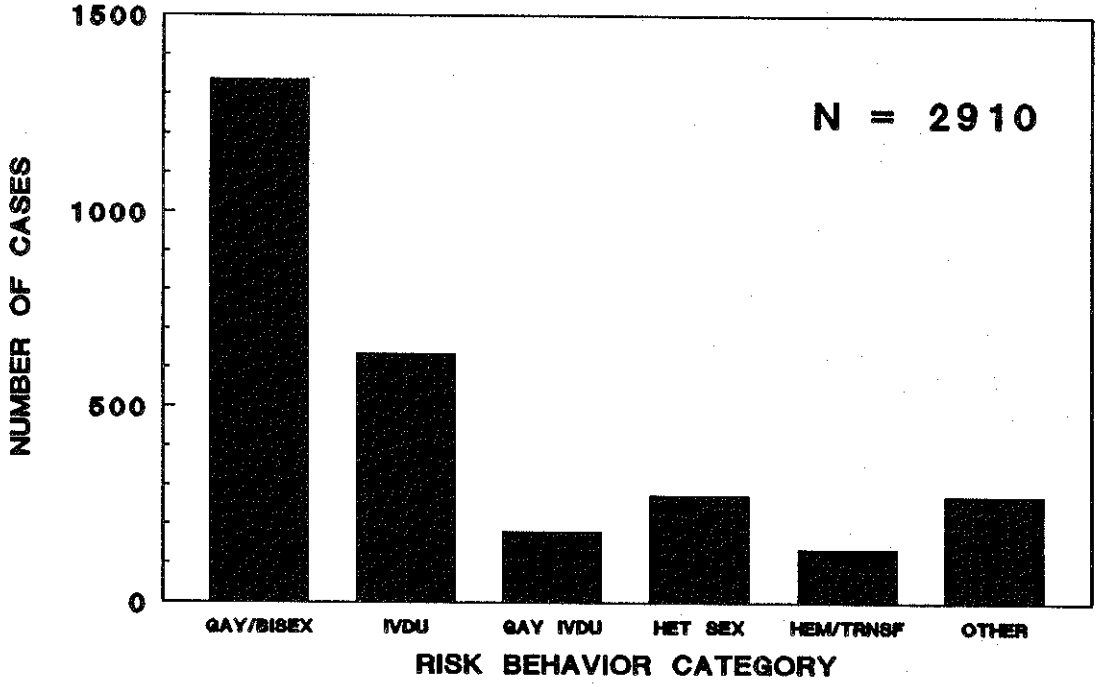
N.C. AIDS CASES (as of 12/92)
BY HALF YEAR OF DIAGNOSIS



1992 data incomplete

SOURCE: NC DEPT. OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES

AIDS CASES DIAGNOSED IN N.C.
AS OF DECEMBER 1992



SOURCE: NC DEPT. OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES

15th Annual Minority Health Conference

Operation Prevention: Mobilizing Community Action

PROGRAM EVALUATION FORM

Please complete this evaluation form and leave it at the registration table as you leave the conference.

1. **Violence and Injury Prevention**

a.	The topic was...	Irrelevant 1 2 3 4 5 Very relevant
b.	The speaker was...	Boring 1 2 3 4 5 Stimulating
c.	Information communicated was...	Useless 1 2 3 4 5 Very useful
d.	Time for discussion was...	Too long 1 2 3 4 5 Too short
e.	Follow up at future conference...	No interest 1 2 3 4 5 Great interest

2. **HIV/AIDS: Prevention in Communities of Color**

a.	The topic was...	Irrelevant 1 2 3 4 5 Very relevant
b.	The speaker was...	Boring 1 2 3 4 5 Stimulating
c.	Information communicated was...	Useless 1 2 3 4 5 Very useful
d.	Time for discussion was...	Too long 1 2 3 4 5 Too short
e.	Follow up at future conference...	No interest 1 2 3 4 5 Great interest

3. **Environmental Equity: Lead Investigation and Prevention**

a.	The topic was...	Irrelevant 1 2 3 4 5	Very relevant
b.	The speaker was...	Boring 1 2 3 4 5	Stimulating
c.	Information communicated was...	Useless 1 2 3 4 5	Very useful
d.	Time for discussion was...	Too long 1 2 3 4 5	Too short
e.	Follow up at future conference...	No interest 1 2 3 4 5	Great interest

4. **Concurrent Breakout Sessions**

Please list the session you attended:_____

a.	The topic was...	Irrelevant 1 2 3 4 5	Very relevant
b.	The speaker(s) was...	Boring 1 2 3 4 5	Stimulating
c.	Information communicated was...	Useless 1 2 3 4 5	Very useful
d.	Time for discussion was...	Too long 1 2 3 4 5	Too short
e.	Follow up at future conference...	No interest 1 2 3 4 5	Great interest

5. **Data-based Planning for Focus Groups**

a.	The topic was...	Irrelevant 1 2 3 4 5 Very relevant
b.	The speakers were...	Boring 1 2 3 4 5 Stimulating
c.	Information communicated was...	Useless 1 2 3 4 5 Very useful
d.	Time for discussion was...	Too long 1 2 3 4 5 Too short
e.	Follow up at future conference...	No interest 1 2 3 4 5 Great interest

6. **The Focus Group Technique: Planning, Implantation and Analysis**

a.	The topic was...	Irrelevant 1 2 3 4 5 Very relevant
b.	The speakers were...	Boring 1 2 3 4 5 Stimulating
c.	Information communicated was...	Useless 1 2 3 4 5 Very useful
d.	Time for discussion was...	Too long 1 2 3 4 5 Too short
e.	Follow up at future conference...	No interest 1 2 3 4 5 Great interest

7. **OVERALL EVALUATION**

a.	Overall, I consider this conference...	Poor	Excellent
		1 2 3 4 5	
b.	The objectives of this conference were...	Not met	Met
		1 2 3 4 5	
c.	My attendance at this conference was...	No benefit	Very beneficial
		1 2 3 4 5	
d.	Time for informal discussion was...	Not sufficient	Very sufficient
		1 2 3 4 5	
e.	I felt a part of the group...	Never	Always
		1 2 3 4 5	

8. **OTHER COMMENTS:**

9. **SUGGESTIONS FOR FUTURE PROGRAMS:**

Please list your profession or area of study:_____

_____

Thank you for your participation in this conference.

65
68

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

School of Public Health
Office of the Dean
FAX (919) 966-7141

October 14, 1993

CB# 7400, Rosenau Hall
The University of North Carolina at Chapel Hill
Chapel Hill, N.C. 27599-7400

Ms. Barbara Pullen-Smith, Director
Office of Minority Health
Dept. of Envr Hlth & Natural Resource
P.O. Box 27687
Raleigh, NC 27611-7687

Dear Barbara:

I am writing to officially invite you to serve as a member of the School of Public Health Minority Health Research and Education Center (MHREC) Committee. Plans are underway to develop the Center as a means of expanding the School's capacity to prevent disease, prolong life and promote health among minority populations of North Carolina and the United States.

Recognizing that common issues relevant to minority health exist between the NC Office of Minority Health and MHREC, I feel very strongly that your presence on the Committee will provide an important linkage for collaborative efforts between the Center and the state. Moreover, your participation will be an essential aspect in the development and ultimate institutionalization of the Center. Until we are successful in securing sustained funding for the Center, I have decided to move slowly toward its official establishment. The Committee has been charged with the responsibility of providing the necessary leadership and direction. Accordingly, the Committee will; 1) continue to implement on-going programs such as the small grant awards to faculty and students; 2) sponsor and coordinate seminars including a minority health research day and the Annual Minority Health Conference and, 3) will submit a competitive proposal for a Public Health Careers Opportunity Program grant. We were unsuccessful in our efforts to get "B" budget funding for the Center through our state General Assembly, despite its number one priority ranking by the School of Public Health. Nevertheless, we will try again next year.

I understand that Bill Small spoke with you and has sent you a packet of information on the activities of the Committee. Bill will keep you informed of future meetings of the Committee.

We look forward to having you with us.

Sincerely,

Michel A. Ibrahim, MD
Dean

MAI/rl

cc: Ronald Levine, Md
MHREC Committee

Ernest Schoenfeld
Dean's Office
Rm. 171B Rosenau Hall
Campus Box 7400

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

School of Public Health
Office of the Dean
FAX (919) 966-7141

MEMORANDUM

CB# 7400, Rosenau Hall
The University of North Carolina at Chapel Hill
Chapel Hill, N.C. 27599-7400

TO: Minority Health Research and Education Center Committee

FROM: Laurie Elam Evans

DATE: October 11, 1993

SUBJECT: Draft Document for 1993-1994 Request for Applications

Attached is a draft document of the 1993-1994 Request for Applications announcement to be distributed to School of Public Health faculty and graduate students. Please review and have suggestions and/or revisions prepared to discuss at the next meeting on Friday, October 15 at 2:00 in the McGavran room.

Suggested Outline for the Prospective MHREC Meeting
with Dean Ibrahim

I. Review of MHREC Mission
   A. Research
   B. Education
   C. Service

II. Accomplishments to date
   A. Grants awarded
   B. Change budget
   C. Legislative and state agency contacts
   D. Other

III. MHREC Leadership
   A. Present status
   B. Future direction and organization
      1. MHREC Advisory/Executive Committee (SPH Personnel)
      2. MHREC Advisory Board (SPH and Community persons)

IV. Vision
   A. Seminar series
   B. Conferences
   C. Short courses
   D. Clearinghouse
   E. Interdepartmental participation
   F. Funding

V. Discussion

2-2422

Ernest Schoenfeld
Dean's Office
Rm. 171B Rosenau Hall
Campus Box 7400

MEMORANDUM

TO: MHREC Committee

FROM: Laurie Elam Evans

DATE: October 4, 1993

RE: Copies of MHREC Documents

Attached are copies of the guidelines for seed money proposals from last year and the memo outlining the mission, rationale, goals and organizational structure of the MHREC. Please let me know if you need copies of other documents. The next meeting has been scheduled for 2:00 on October 7 in the McGavran Room.

MEETING SUMMARY (9/30/93)
MINORITY HEALTH RESEARCH AND EDUCATION CENTER

The Minority Health Research and Education Center will operate as a Dean's function with Bill Small acting as deputy before it is expanded. The Center was the #1 priority on the b-budget request, but we were told to hold a few more months and try again. The advisory committee will work as a 'think tank' to determine what is needed and will consist of the current members for right now with the addition of Barbara Pullen-Smith who is with the state level Minority Health Center. Her presence is vital since some of the items being proposed at the state level will impact and/or parallel items being proposed for the MHREC. Regular meetings will be scheduled to give an image of an institutionalized activity at a small level, but growing.

The objectives of the Center will include research, teaching and service. Specific activities will include a seminar series, possibly continuing education, seed money for faculty research, the Minority Health Conference and the Public Health Careers Opportunity Program - if funded. Subcommittees were developed for each of these subcommittees...

Seed Money- Fox, Brown, Edwards and Carter
Seminar Series - ALL
Minority Health Conference - Headen, Small, Schoenbach
Public Health Careers Opportunity Program - Edwards, Fox, Schoenbach, Small and Carter

SEED MONEY
We will still need to decide how projects funded by seed money will be evaluated. Some suggestions were to have awardees to give progress report after 1 year and/or track awardees to see if larger grants were submitted after the 'pilots' were funded. It was suggested that recipients of seed grants be publicized and an electronic catalog of persons awarded grants, amount of grant and title be developed. Committee members will be responsible for publicizing the availability of funds for these projects although each faculty will be sent an announcement for the grant with deadline. Total amount of grant will be flexible with a cap. Guidelines for grants will be updated and may be developed to include doctoral students. The possibility of student funding is still under discussion.

SEMINAR SERIES
The seminar series will be an activity to bring together all departments to discuss a variety of projects. Its possible that this could be a part of the Minority Health Conference. For example, on the second day of the conference, faculty and students could present research on minority health. These projects don't have to be complete.

MINORITY HEALTH CONFERENCE
Conference will be held February 17-18 and committee is currently developing program.

PUBLIC HEALTH CAREERS OPPORTUNITY PROGRAM
Deadline for application is NOVEMBER 5. Committee is currently 1992 revising proposal.

Ernest Schoenfeld
Dean's Office
Rm. 171B Rosenau Hall
Campus Box 7400

9-27-93

THE UNIVERSITY OF NORTH CAROLINA

ABSTRACT OF APPLICATION FOR GRANT, CONTRACT, OR COOPERATIVE AGREEMENT

Title: Black Churches United for Better Health

Number 00 - -

Principal Investigator(s)/Project Director(s): Steven H. Zeisel, M.D., Ph.D.

ES
An extra copy to MtREC file

TRUCTIONS

Items to be incl

The Abstract should one page, and in sufficient detail to summarize:

1 the purpose(s)
2 the hypothesis(e
3 the method(s) of

Cancers associated with increased intakes of fat and decreased intakes of fiber have a high prevalence among African-Americans. The application of the 5-A-Day Program has particular merit in the adult African-American population, since primary prevention efforts assume even greater importance when a target population has limited access to secondary and tertiary health care, which, if present, could act as "safety nets" in preventing deaths due to cancer. In addition, increasing the consumption of fruits and vegetables also has the potential to reduce obesity, diabetes and hypertension - other major causes of mortality and morbidity in this culturally-distinct population.

This project, "Black Churches United for Better Health," will develop a dietary behavior change program that will increase fruit and vegetable consumption in the rural African-American adult church population (over the age of 18). Ten counties in the northeastern and southeastern parts of the state will be assigned to the intervention or control groups. Five churches with 60 active parishioners in each county will be recruited into the project. The program will utilize a lay health advisor model to develop social support for dietary change among church members. This model has been used successfully in church-based health promotion efforts focused on reaching African-American populations in North Carolina. The African-American population will be the focus of the intervention because African-Americans have the highest mortality rate from cancer than any other group in the U.S. population.

$162,497 (supplement)

Dept. Envr, Hlth, + Natural Resources

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

School of Public Health
Department of Maternal and Child Health

The University of North Carolina at Chapel Hill
CB# 7400, Rosenau Hall
Chapel Hill, N.C. 27599-7400

To: H. David Maxwell, Chair, Pembroke State University, Biology
Michel A Ibrahim, Dean, UNC-CH, School of Public Health
Milton Kotelchuck, Chair, MCH, School of Public Health
Theodore Parrish, Chair, NCCU, Health Education

From: B. Cecilia Zapata B. C. Z.

RE: Minority International Research Training Program (MIRT), Proposal grant.

Date: June 2, 1993

Now that the June 1st deadlines have been satisfied, I would like to inform you that the Minority International Research Training Program (MIRT), Proposal grant was submitted to NIH and the Fogarty International Institute May 17 (A copy is attached). I am the Principal Investigator, Drs. Lloyd J. Edwards, and Amy O. Tsui are the Co-Principal Investigators. If this proposal is funded, Dr. Edwards will represent the Minority Health Research and Education Center (MHREC).

The proposal was put together in a short time period. It could not have been possible without the support of the Maternal and Child Health Department, especially, Ms. Dianne Rogers, Helen dark, and Jacki Resnick. Dr. Dorothy Browne kindly offered to pay for someone at the Center for Health Prevention Health promotion to type the proposal, however, this was not needed because MCH came through in providing me the personnal support for the successful completion of the proposal.

I will keep you informed of any funding news regarding the status of the proposal. I would like to thank you all for your support.

CC: Amy Tsui
Dianne Rogers
Dorothy Browne
Hellen Dark
Jacki Resnick
Lloyd J. Edwards

OMB No. 0925-000

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE

GRANT APPLICATION

Follow instructions carefully. Type in the unshaded areas only. Type density must be 10 c.p.i.

LEAVE BLANK FOR PHS USE ONLY.		
Type	Activity	Number
Review Group		Formerly
Council/Board *(Month, Year)*		Date Received

1. TITLE OF PROJECT (Do not exceed 56 typewriter spaces.)
Minority International Research Training Program Plan (MIRT)

2a. RESPONSE TO SPECIFIC REQUEST FOR APPLICATIONS OR PROGRAM ANNOUNCEMENT [X] NO [ ] YES *(If "YES," state number and title)*
Number: N/A Title: Minority International Research Training Grant

2b. TYPE OF GRANT PROGRAM

3. PRINCIPAL INVESTIGATOR/PROGRAM DIRECTOR

3a. NAME *(Last, first, middle)*
ZAPATA, Blanca Cecilia

3b. DEGREE(S)
DrPH MPH BA

3c. SOCIAL SECURITY NO.
023-48-6261

3d. POSITION TITLE
Assistant Professor

3e. MAILING ADDRESS *(Street, city, state, zip code)*
401 Rosenau Hall, CB #7400
University of North Carolina
Chapel Hill, NC 27599-7400

3f. DEPARTMENT, SERVICE, LABORATORY, OR EQUIVALENT
Maternal and Child Health

3g. MAJOR SUBDIVISION
School of Public Health

3h. TELEPHONE AND FAX *(Area code, number and extension)*
TEL: 919-966-3781
FAX: 919-966-7141

BITNET/INTERNET ADDRESS CZAPATA@UNCSPHVX.BITNET

4. HUMAN SUBJECTS [X] 4a. NO [ ] YES — If "Yes," exemption no. or IRB approval date — 4b. Assurance of compliance no.

5. VERTEBRATE ANIMALS [X] 5a. NO [ ] YES — If "Yes," IACUC approval date — 5b. Animal welfare assurance no.

6. DATES OF ENTIRE PROPOSED PROJECT PERIOD		7. COSTS REQUESTED FOR INITIAL BUDGET PERIOD		8. COSTS REQUESTED FOR ENTIRE PROPOSED PROJECT PERIOD	
From (MMDDYY)	Through (MMDDYY)	7a. Direct Costs ($)	7b. Total Costs ($)	8a. Direct Costs ($)	8b. Total Costs ($)
10/1/93	9/30/96	204,700	221,076	907,400	979,992

9. PERFORMANCE SITES *(Organizations and addresses)*
Dept. of Maternal and Child Health
School of Public Health
University of North Carolina at
Chapel Hill
CB #7400
Chapel Hill, NC 27599-7400

10. INVENTIONS AND PATENTS *(Competing continuation application only)*
[X] NO [ ] YES If "YES," [ ] Previously reported [ ] Not previously reported

11. NAME OF APPLICANT ORGANIZATION
UNC School of Public Health, MCH Dept.
ADDRESS 401 Rosenau Hall, CB #7400
Chapel Hill, NC 27599-7400

12. TYPE OF ORGANIZATION
[X] Public: *Specify* [ ] *Federal* [X] *State* [ ] *Local*
[ ] Private Nonprofit
[ ] Forprofit *(General)* [ ] Forprofit *(Small Business)*

13. ENTITY IDENTIFICATION NUMBER
1566001393A1

Congressional District
4

14. BIOMEDICAL RESEARCH SUPPORT GRANT CREDIT
Code: Identification:

15. NAME OF ADMINISTRATIVE OFFICIAL TO BE NOTIFIED IF AWARD IS MADE
S. Kent Walker
TELEPHONE 919-966-3411
FAX 919-962-5011
TITLE Contract Administrator
ADDRESS CB #1350, 440 W. Franklin Street
The University of North Carolina
Chapel Hill, NC 27599-1350

BITNET/INTERNET ADDRESS WALKER@UNCMVS.OIT.UNC.EDU

16. NAME OF OFFICIAL SIGNING FOR APPLICANT ORGANIZATION
Robert P. Lowman
TELEPHONE 919-966-5625
FAX 919-962-0646
TITLE Director
ADDRESS Office of Research Services
CB #4100, Bynum Hall
The University of North Carolina
Chapel Hill, NC 27599-4100

BITNET/INTERNET ADDRESS LOWMAN@UNC.BITNET

17. PRINCIPAL INVESTIGATOR/PROGRAM DIRECTOR ASSURANCE: I agree to accept responsibility for the scientific conduct of the project and to provide the required progress reports if a grant is awarded as a result of this application. Willful provision of false information is a criminal offense (U.S. Code, Title 18, Section 1001). I am aware that any false, fictitious, or fraudulent statement may, in addition to other remedies available to the Government, subject me to civil penalties under the Program Fraud Civil Remedies Act of 1986 (45 CFR 79).

SIGNATURE OF PERSON NAMED IN 3a. *(In ink. "Per" signature not acceptable.)*
B. Cecilia Zapata

DATE
5/13/93

18. CERTIFICATION AND ACCEPTANCE: I certify that the statements herein are true and complete to the best of my knowledge, and accept the obligation to comply with Public Health Service terms and conditions if a grant is awarded as the result of this application. A willfully false certification is a criminal offense (U.S. Code, Title 18, Section 1001). I am aware that any false, fictitious, or fraudulent statement may, in addition to other remedies available to the Government, subject me to civil penalties under the Program Fraud Civil Remedies Act of 1986 (45 CFR 79).

SIGNATURE OF PERSON NAMED IN 16. *(In ink. "Per" signature not acceptable.)*
Robert P. Lowman for

DATE
5/14/93

DESCRIPTION: State the application's broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Describe concisely the research design and methods for achieving these goals. Avoid summaries of past accomplishments and the use of the first person. This abstract is meant to serve as a succinct and accurate description of the proposed work when separated from the application. **DO NOT EXCEED THE SPACE PROVIDED.**

The purpose of the proposed Maternal and Child Health Minority International Research Training (MIRT) Program is to provide international research training in a multidisciplinary setting and applied experience to minority undergraduates, pre-doctoral graduates and tenure track faculty. Historically, underserved minority groups in the United States have not benefited from the remarkable achievements of international collaboration and training opportunities. The proposed MIRT Program is a model program involving the MCH Department and the Minority Health Research and Education Center (MHREC) in the SPH at the University of North Carolina at Chapel Hill (UNC-CH). The program will serve Native-American, African-American and Hispanic (Latino) faculty in tenure track positions and students at a consortium of the University of North Carolina at Chapel and North Carolina Central University (NCCU), in Durham, North Carolina, and Pembroke State University (PSU), in Pembroke, North Carolina.

The main goal of the MIRT Program is to provide academic mentorship, minority-international oriented research skills training, applied international experiences to future minority public health leaders in international maternal and child health research, and to effectively impact on the health and well-being of populations both abroad and at home. The training program has the following aims: Faculty Aims: To provide collaborative research opportunities between minority eligible faculty and institutions located in Sub-Sahara Africa, and Central/Latino-America; to further prepare minority faculty members in their own research and teaching efforts within their institutions; to develop and maintain international research collaborative efforts that are sustainable through time. Faculty will meet bi-montly to discuss methodological issues dealing with minority and international research. A network of experienced researchers will be developed to provide the mentorship to faculty in tenure track positions. Students' Aims: to teach internationally appropriate research skills and methods to those involved in the program; to form a new cadre of minority researchers by mentoring, training and supporting them in research praxis (theoretical and practice as part of the research continuum). All trainees will have matched mentors and a well defined research plan. Trainees must complete course work in minority health and international research. In addition, they will be required to participate in integrative seminars, and workshops. Each trainee must submit a progress report to the program every two months.

PERSONNEL ENGAGED ON PROJECT, INCLUDING CONSULTANTS/COLLABORATORS. *Use continuation pages as needed* to provide the required information in the format shown below on *all* individuals participating in the project.

Name B. Cecilia Zapata | Degree(s) BA, MPH, DrPH | Social Security No [redacted]
Position Title Assistant Professor | Date of Birth (MM/DD/YY) [redacted] | Role on Project Principal Invest.
Organization University of North Carolina at Chapel Hill | Department Maternal & Child Hlt
Name Lloyd J. Edwards | Degree(s) BA, MA, PhD. | Social Security No. [redacted]
Position Title Assistant Professor | Date of Birth (MM/DD/YY) [redacted] | Role on Project Co-Principal Inv.
Organization University of NOrth Carolina at Chapel Hill | Department Biostatistics
Name Amy O. Tsui | Degree(s) BA, MA, PhD. | Social Security [redacted]
Position Title Associate Professor | Date of Birth (MM/DD/YY) [redacted] | Role on Project Co-Principal Inv.
Organization | Department
Name | Degree(s) | Social Security No.
Position Title | Date of Birth (MM/DD/YY) | Role on Project
Organization | Department
Name | Degree(s) | Social Security No.
Position Title | Date of Birth (MM/DD/YY) | Role on Project
Organization | Department
Name | Degree(s) | Social Security No.
Position Title | Date of Birth (MM/DD/YY) | Role on Project
Organization | Department
Name | Degree(s) | Social Security No.
Position Title | Date of Birth (MM/DD/YY) | Role on Project
Organization | Department

Type the name of the program director at the top of each printed page and each continuation page. (For type specifications, see **Specific Instructions** on page 10.)

INSTITUTIONAL NATIONAL RESEARCH SERVICE AWARD

(Substitute Page)

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*Type density and size must conform to limits provided in **Specific Instructions** on page 10.

Appendix *(Five collated sets. No page numbering necessary for Appendix)*

Appendix A :UNC-CH Awards Received--for Period 07/01/91 to 06/30/92

Appendix B: Letters from Future Collaborative Institutions (CIMDER;Tintswalo Hospital; Maoi University; and School of Public Health in Unan-Managua)

Appemdex C: Letters of Agreement--NCCU and PSU

Appendix D: Letters of Aggrement from future Advisory Board/Review Committee (Drs. Hatch and Strayhorn) plus Curricullum Vitae.

DETAILED BUDGET FOR INITIAL BUDGET PERIOD
DIRECT COSTS ONLY (NRSA Substitute Page)

FROM 10/01/93 THROUGH 9/30/94

STIPENDS		DOLLAR TOTAL
PREDOCTORAL		
4 students @ 1,000/month	4 X 12 X 1,000 = 48,000	
	No. requested: 4	$ 48,000
~~POSTDOCTORAL~~ *(Itemize)* BACCALAUREATE		
3 students @ 1,000/month	3 X 3 X 1,000 = 9,000	
	No. requested: 3	$ 9,000
OTHER *(Specify)*		
See attached continuation page		
	No. requested:	$ 117,000
TOTAL STIPENDS →		$ 174,000

TUITION, FEES, AND INSURANCE *(Itemize)*

3 Baccalaureate: insurance* 3 X 3 X 100 = 900
4 Pre-doctoral: insurance** 4 X 12 X 100 = 4,800

* Undergraduate students will pay $120 for insurance (approximately 3 months)

**Pre-doctoral students will pay $200 for insurance (approximately 12 months)

$ 5,700

TRAINEE TRAVEL *(Describe)*

Most of our trainees will get international research experience in Sub-Sahara Africa, and Central/South America. The Project Coordinator will ensure that students get the most economic plane fares. An average estimate per ticket is $1,500.

7 students plane tickets @ $1,500 7 X 1,500 = 10,500
2 faculty members' plane tickets @ $1,500 2 X 1,500 = 3,000

$ 13,500

TRAINING RELATED EXPENSES

Research related training and other educational expenses at foreign training site.

3 Baccalaureate @ $500 3 X 500 = 1,500
4 Pre-doctoral @ $1,000 4 X 1,000 = 4,000
2 Faculty @ $500/month 2 X 6 X 500 = 6,000

$ 11,500

TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD *(Also enter on Face Page, Item 7a)* → $ 204,700

8% indirect costs 16,376
TOTAL 221,076

OTHER (Specify) (Cont'd)

2 Faculty @ 3,000/month	2 X 6 X 3,000 = 36,000
Foreign Living expenses:	
3 Baccalaureate students @ $1,000/month	3 X 3 X 1,000 = 9,000
4 Pre-doctoral students @ $1,000/month	4 X 12 X 1,000 = 48,000
2 Faculty @ $2,000/month	2 X 6 X 2,000 - 24,000

$117,000

CONTINUATION PAGE: STAY WITHIN MARGINS INDICATED

Program Director *(Last, first, middle)*: Zapata, Blanca Cecilia

BUDGET FOR ENTIRE PROPOSED PROJECT PERIOD
DIRECT COSTS ONLY (NRSA Substitute Page)

BUDGET CATEGORY TOTALS	INITIAL BUDGET PERIOD *(from page 4)*		ADDITIONAL YEARS OF SUPPORT REQUESTED							
			2nd		3rd		4th		5th	
PREDOCTORAL STIPENDS	No. 4	$ 48,000	No. 7	$ 84,000	No. 7	$ 84,000	No.	$	No.	$
Baccalaureate [redacted] STIPENDS	3	9,000	6	18,000	7	21,000				
OTHER STIPENDS	2	117,000	3	192,000	3	195,000				
TOTAL STIPENDS		174,000		294,000		300,000				
TUITION, FEES, AND INSURANCE		5,700		10,200		10,500				
TRAINEE TRAVEL		13,500		24,000		25,500				
TRAINING RELATED EXPENSES		11,500		19,000		19,500				
TOTAL DIRECT COSTS		204,700		347,200		355,500				

TOTAL DIRECT COSTS FOR ENTIRE PROPOSED PROJECT PERIOD ⟶ $ 907,400
(Also enter on Face Page, Item 8a)

JUSTIFICATION: For all years, explain the basis for the budget categories requested following the instructions for the Initial Budget Period, including anticipated postdoctoral levels. No explanation is required for Training Related Expenses.

This proposed MIRT Program is committed to train Native-Americans, African-Americans, and Latinos in international research skills. It is important for the trainees to be in residence in the host institution as long as possible. Trainees will spend 12 weeks if they are undergraduate students; 12 months for pre-doctoral students; and some faculty may chose to spend from 12 weeks to 12 months working in collaboration with the foreign institution.

Students will not pay tuition or fees in the foreign institution. They, however must have health care insurance acceptable to the host country. The cost of the insurance plan will depend on the length of time in the host country. We expect that the insurance cost will not increase dramatically in the three year project.

We have requested funds for only those training components permitted by this specific Fogarty Internationa Minority Research Training Iniciative.

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

School of Public Health
Office of the Dean
FAX (919) 966-7141

CB# 7400, Rosenau Hall
The University of North Carolina at Chapel Hill
Chapel Hill, N.C. 27599-7400

MEMORANDUM

TO: Minority Health Research Education Center Committee
Dorothy Browne, MHCH
Lori Carter, EPID
Don Fox, ENVR
Lloyd Edwards, BIOS
Sandra Headen, HBHE
Vic Schoenbach, EPID
Ernest Schoenfeld, Dean's Office
Bill Small, Dean's Office

FROM: Lisa Perry
Dean's Office

DATE: June 25, 1993

SUBJECT: Next Committee Meeting

The next MHREC Committee meeting is scheduled for Tuesday, August 3 from 2:00-3:30 p.m. in Room 1302 McGavran-Greenberg. I realize that not everyone can attend this meeting but this was the best time for the majority of members. Dean Ibrahim will also be attending this meeting.

ABSTRACT OF APPLICATION FOR GRANT, CONTRACT, OR COOPERATIVE AGREEMENT

(See instructions on reverse.)

5-14-93

Title: Minority International Research Training Program Plan (MIRT)

Number: 00

Principal Investigator/Project Director: Dr. Cecilia Zapata

The purpose of the proposed Maternal and Child Health International Minority Research Training (MIRT) Program is to provide international research training in a multidisciplinary setting and applied experience to minority undergraduates, pre-doctoral and tenure track faculty. Historically, underserved minority groups in the United States have not benefited from the remarkable achievements of international collaboration and training opportunities. The proposed MIRT Program is a model program involving the MCH Department and the Minority Health Research and Education Center (MHREC) in the SPH at the University of North Carolina at Chapel Hill (UNC-CH). The program will serve Native-American, African-America and Hispanic (Latino) faculty in tenure track positions and students at a consortium of the University of North Carolina at Chapel and North Carolina Central University (NCCU), in Durham North Carolina, and Pembroke State University (PSU).

The main goal of the MIRT Program is to provide academic mentorship, minority-international oriented research skills training, and applied international experiences to future minority public health leaders in international maternal and child health research and to effectively impact on the health and well-being of populations both abroad and at home. The training program has the following aims: Faculty Aims: To provide collaborative research opportunities between minority eligible faculty and institutions located in Sub-Sahara Africa, and Central/Latino-America; to further prepare minority faculty members in their own research and teaching efforts within their institutions; to develop and maintain international research collaborative efforts that are sustainable through time. Faculty will meet bi-montly to discuss methodological issues dealing with minority and international research. A network of experienced researchers will be developed to provide the mentorship to faculty in tenure track positions. Students' Aims: to teach internationally appropriate research skills and methods to those involved in the program; to form a new cadre of minority researchers by mentor, training and supporting them in research praxis (theoretical and practice as part of the research continuum). All trainees will have matched mentors and a well defined research plan. Trainees must complete course work in minority health and international research. In addition, they will be required to participate in integrative seminars, workshops. Each trainee must submitte to the program a progress report every two months.

$979,992

Fogarty International Center, NIH

INSTRUCTIONS

Items to be included in the Abstract

The Abstract should be plainly written, limited to not more than *one* page, and in sufficient detail to summarize:

1. the purpose(s) or problem(s),
2. the hypothesis(es) or objective(s), and
3. the method(s) of the project.

ES pl take note for inventory of Minority Studies 5-5-93

THE UNIVERSITY OF NORTH CAROLINA

ABSTRACT OF APPLICATION FOR GRANT, CONTRACT, OR COOPERATIVE AGREEMENT

Title: Epidemiology of Pregnancy Outcome in a Textile Community-Minority Supplement

Number 00 - -

Principal Investigator(s)/Project Director(s): David A. Savitz, Ph.D.

INSTRUCTIONS

Items to be included in the Abstract

The Abstract should be plainly written, limited to not more than one page, and in sufficient detail to summarize:

1 the purpose(s) or problem(s)

2 the hypothesis(es) or objective(s), and

3 the method(s) of the project.

The purpose of this supplemental proposal to the parent grant, Epidemiology of Pregnancy Outcome in a Textile Community, is to continue research on adverse pregnancy outcomes in Alamance, Durham and Orange Counties and to provide substantial training and support for the minority graduate research assistant. This Case-control study utilizing telephone interviews and a series of questions from the parent grant will specifically address the effect of wantedness on miscarriage, premature delivery, low birth weight and stillbirth. The nominee will have primary responsibility for this component of the research including the analytical thinking, programming, statistical analysis, data management and the development of a manuscript for publication. Consultation will be provided by the Principal Investigator, reproductive epidemiologist in the department and medical school, and colleagues utilizing this dataset. The nominee's long-term interest is in birth outcomes in minority populations. "Wantedness" may have substantial implications for reducing the disparity in infant morbidity and mortality between Blacks and Whites. This study provides an excellent opportunity for training and advancing our understanding of the potential preventive value of avoiding unwanted pregnancies.

$24,499

NIH

MEMORANDUM

TO: School of Public Health Faculty and Students

FROM: Minority Health Research and Education Center Grant Committee
Dorothy Browne, Co-Chair
Lloyd Edwards, Co-Chair

DATE: October 18, 1993

SUBJECT: 1994-95 Request for Applications

I. The Minority Health Research and Education Center (MHREC) Grant Committee has available funds for providing grants to School of Public Health faculty and graduate students to conduct research in minority health issues. We, therefore, invite faculty and graduate students to make application for funds which enhance their ability to perform minority health research.

II. MHREC requires that these funds be expended for research to develop new knowledge related to minority health. Applications which specifically address this issue and/or define relevant research objectives will be considered for funding. A simple request for a piece of equipment or a trip without adequate explanation of how this will benefit the research goal will not be considered for funding.

III. The following additional policies for allocations of MHREC funds will apply:

a. The principal investigator cannot receive salary support from these grants.

b. Grants for pilot studies leading to full scale proposals are encouraged.

c. Proposals should be from faculty or from graduate students and cosigned by faculty. Funds should not be used to support on-going funded research.

d. Priority for funding of projects will be given on: (1) quality of the proposed research and its relevance to minority health, (2) likelihood that the project will lead to further research, i.e., its emergent or developmental nature and its potential to attract funding from outside the School, and (3) the reasonableness of funding. These criteria will be applied in a comparable manner across disciplines encompassed by research throughout the School. The Committee recognizes the Dean's desire to foster interdisciplinary research activities in the School and would like to encourage respondents to this solicitation to enter into joint arrangements with others.

e. All funds awarded this year must be encumbered by June 30, 1994.

IV. For your guidance in preparing the proposal, the Committee has $40,000 available for distribution and expects to award 4-10 grants.

V. Applications, guidelines, and evaluation criteria will be available on November 23, 1993 and may be obtained from Ms. Rosa Laney, Room 171A, Rosenau (RLANEY). The deadline for receipt of the completed application is **December 20, 1993**. Awards will be announced and funding will begin on or about January 17, 1994.

Applications will be limited to six (6) pages, not including budget and references. This limit includes a standardized cover page and five (5) double-spaced pages (8-1/2 x 11 plain white paper with a minimum 12-pitch or 10-point typeface). The format should be as follows:

A. SPECIFIC AIMS
B. SIGNIFICANCE
C. STUDY DESIGN AND METHODS
D. POTENTIAL FOR FUTURE FUNDING
E. BUDGET AND JUSTIFICATION
(This section must include a narrative justification as well as a standard line-item presentation of each element and a total. Consult with your departmental business manager if you have questions concerning line-item categories, appropriate pay scales, etc. A sample line-item budget presentation is attached.) The budget is not included in the six page limit.
F. PRIMARY REFERENCES
(A complete bibliography of all relevant citations is not necessary.)

VI. A report at the end of the project year will be required from each award recipient.

DR ES

Hold for mtg of Jan. 5

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

School of Public Health
Office of the Dean
FAX (919) 966-7141

CB# 7400, Rosenau Hall
The University of North Carolina at Chapel Hill
Chapel Hill, N.C. 27599-7400

MEMORANDUM

TO: MHREC Committee

FROM: Bill Small

RE: Grant Proposals

DATE: December 21, 1993

Enclosed are copies of the proposals received in response to the MHREC grant committee request. I am including evaluation forms to assist you in critiquing these proposals. We will be discussing the proposals at the next MHREC meeting scheduled for January 5 at 10:00 in the McGavran Room.

Terri

+Kouman / Hecka-Piccotti 1 — 7950. ok

Samuel-Hodge / Dodds 3 — 1482. ok

Royce 4 — 15,425. no

Flynn / Steckler 4 = probably not — 6050 no

Rovak - Schulz / DeVellis 2 — 6941. ok

37,848

SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF NORTH CAROLINA
CHAPEL HILL

Application for grant from the
Minority Health Research and Education Center
School of Public Health

Name Ed H. Norman; Irva Hertz-Picciotto

Department Epidemiology

Title of Project Evaluation of Interventions for Childhood Lead Poisoning in North Carolina

Rank Graduate Student (EHN); Assistant Professor (IHP)

NO._____

A. Specific Aims

The aim of the proposed project is to evaluate the effectiveness of recommended interventions in reducing lead exposure among North Carolina children with low and moderate level lead poisoning, a condition that disproportionately affects minority children. Interventions to be evaluated include health education, nutritional assessment, periodic retesting, medical evaluation, environmental investigation, lead hazard abatement and chelation therapy. The outcome of interest is blood lead level reduction. This proposal is a collaboration between the UNC Department of Epidemiology and the North Carolina DEHNR (Department of Environment, Health, and Natural Resources) and will serve as a pilot project for a more comprehensive statewide program evaluation.

B. Significance

Childhood lead poisoning is one of the most common pediatric health problems today, even though it is entirely preventable. Lead affects virtually every system in the body, and it is particularly harmful to the developing brain and nervous system of young children. Blood lead levels as low as 10 micrograms per deciliter (ug/dL), which do not cause specific symptoms, are associated with decreased intelligence and impaired neurobehavioral development (1). Other adverse effects beginning at these low levels of exposure include decreased growth and stature, decreased hearing acuity and impaired synthesis of vitamin D (1). In response to increasing evidence supporting the toxicity of lead at blood levels less than 25 ug/dL (2,3,4) the Centers for Disease Control and Prevention (CDC) has lowered the level of blood lead considered to be elevated from 25 ug/dL to 10 ug/dL and recommended universal screening of young children using direct blood lead measures (1). The American Academy of Pediatrics recently endorsed the CDC recommendations (5).

In October of 1992, North Carolina implemented new lead screening recommendations (6). At the same time, direct blood lead measurement replaced the less sensitive and less specific erythrocyte protoporphyrin screening test. Table 1 describes the demographic characteristics of children screened for lead poisoning during the first twelve months of the expanded screening initiative as well as relevant North Carolina statistics. The screening population consists largely of minority and rural children.

As has been shown for other regions of the country (7), the strongest predictor of blood lead elevation is race. Using data from the North Carolina Childhood Lead Poisoning Prevention Program

(NCCLPPP), we have confirmed that elevated blood lead occurs disproportionately among minority children in North Carolina (8). Table 2 indicates the prevalence of elevated blood lead by risk factor among children screened in the past 12 months. In North Carolina, African American children are more than twice as likely to have an elevated blood lead (≥15 ug/dL) as white children with the prevalence among children of other races being intermediate. The problem is greatest among rural African American children (8).

Recommendations from the CDC call for a multi-tier approach to follow-up of children with elevated blood lead levels. The degree of intervention is dependent on level of blood lead exposure. Children with blood leads of 10-14 ug/dL should receive periodic rescreening; however, individual case management is not recommended until the blood lead is confirmed to be ≥15 ug/dL. Children with blood leads ≥15 ug/dL should receive a complete nutritional assessment and parental education on the sources of lead (9) in addition to periodic retesting. Children with blood leads ≥20 ug/dL should receive more involved medical and environmental interventions aimed at 1) reducing the child's absorption of lead (e.g. treating calcium and iron deficiency, chelation therapy) and 2) identifying the source of exposure and removing the child from the source (e.g. environmental investigation and lead hazard abatement). Our proposal would evaluate these interventions that are already being implemented in North Carolina. A related application submitted by Fran Lynn and Alan Steckler addresses the development of primary prevention strategies.

C. Study Design and Methods

A retrospective cohort design is proposed to evaluate the effectiveness of recommended interventions in reducing lead exposure among North Carolina children with low and moderate level lead poisoning. The study population will consist of children less than 6 years old identified with elevated blood leads (≥15 ug/dL) between November 1, 1992 and October 31, 1993. The study population will be further restricted to children living in a twelve county region (Bertie, Edgecombe, Greene, Halifax, Hertford, Lenoir, Martin, Nash, Northampton, Pitt, Wayne and Wilson) of rural northeastern North Carolina and children living in Wake County. This twelve county region has been identified as having a substantial childhood lead poisoning burden relative to the rest of the state and contains a disproportionately minority population among children less than six years old (51.3% non-white). Wake County provides an urban population for comparison with the predominantly rural twelve county region. Focus on these counties will also reduce travel expenditures required to complete the study.

588 children in the twelve county region were identified with elevated blood leads (≥15 ug/dL), representing more than 32% of the statewide total; this region accounts for only 9.8% of North Carolina children in the targeted age range. An additional 114 children were identified in Wake County. Of the 702 children in the proposed study population 85.5% are black, 10.2% are white and 4.3% are of other races.

Among those identified with elevated blood leads, telephone and address information will be collected from forms filled out at local clinics. A single form, DEHNR 3651, provided by NCCLPPP is used by all participating clinics (see Appendix A). A letter describing the proposed study will be sent to each household. The letter will explain that we would like to interview a parent or guardian by telephone and that a staff member will be telephoning them soon. A questionnaire will be administered to retrospectively collect information on interventions received. The same questionnaire will be administered to the clinic nurse coordinating medical follow-up for each child, many of whom will already have made home visits in the course of follow-up. The questionnaire will be pilot tested on a sample of children from Franklin County and revisions will then be made. If possible, the survey will be conducted by telephone interview for both parents and nurses. If we are unable to conduct the interviews by telephone, direct personal interviews will be scheduled and conducted either at the clinic or at the children's homes.

The survey instrument will include questions related to potential sources of lead exposure and factors related to lead absorption such as: 1) paint-related (age of housing, existence of peeling or chipped paint, recent remodeling), 2) food-related (use of imported foods or traditional medicines, use of hot tap water for infant formula, iron and calcium intake) and 3) occupational and industrial (lead related work or hobby by an adult in the house, proximity to lead related industry such as automotive repair or battery salvage operations). Questions related to the types of intervention received will include: 1) health education (parental education on the sources of lead and how to reduce childhood lead exposure from these sources), 2) nutritional assessment (dietary evaluation, anthropometric assessment), 3) periodic retesting (recommended every 3 to 4 months), 4) medical evaluation (medical history, treatment of iron and calcium deficiencies), 5) environmental investigation (determination of lead hazards in the home or day care), 6) lead hazard abatement (permanent removal of lead hazards) and 7) chelation therapy (medical treatment of high level lead exposure). In addition, questions will be asked to assess behavioral changes as a result of interventions received.

Follow-up blood lead data, available from the NCCLPPP, will be reviewed to identify those with reduced blood leads and those with no appreciable change or with further elevation. A reduced blood lead will be defined as a drop of at least 5 ug/dL between the child's first blood lead test and the most recent retest. Linkage of the initial screening results and follow-up testing is achieved by the principal investigator (EHN) as a part of routine medical surveillance using existing data systems. We have determined that follow-up blood lead data is available for more than 86% of children screened statewide (8). Factors predicting a reduction in blood lead will be examined first by bivariate analysis, and then by a multivariate unconditional logistic regression model. Comparability between parent/guardian and clinic nurse responses will be assessed using Kappa statistics. The relative importance of recommended interventions in reducing blood lead over time and the combined impact of multiple interventions will be determined. In addition to an analysis of all children in our study population, we will focus attention specifically on African American children to determine which interventions this group received and which were most effective.

The results of this project will provide immediate feedback to the clinics in the selected counties regarding the efficacy of their intervention efforts. In addition, the results of the proposed study will be used as a pilot to conduct a more comprehensive statewide evaluation of interventions for childhood lead poisoning. The development of a survey instrument that extracts the needed information reliably and the feasibility of the proposed method of contacting parents and clinic nurses will contribute directly to the statewide evaluation project. Results of the larger study will be used to make policy decisions concerning implementation of recommended interventions, and will enable a rational allocation of funds based on the effectiveness of intervention alternatives.

D. Potential for Future Funding

The project proposed in this application will serve as a pilot/feasibility study for a comprehensive investigation of interventions for childhood lead poisoning, a problem that disproportionately affects minority children in North Carolina. A proposal will be developed for this larger study, which will be submitted to a variety of agencies concerned with childhood lead poisoning including the CDC (under their funding program for State and Community-based Childhood Lead Poisoning Prevention Programs) and the National Institutes for Health. In addition, we will explore potential for funding mechanisms through the Department of Environment, Health, and Natural Resources and the North Carolina state legislature.

Table 1: Characteristics of Children Screened in North Carolina (11/1/92 - 10/31/93)

Variable		Screening Population N	Percent	North Carolina Percent*
Age	6-12 months	2,562	5.2%	9.8%
	1 year	14,298	29.2	18.8
	2 years	8,154	16.7	18.3
	3 years	7,112	14.5	17.7
	4 years	8,496	17.4	17.9
	5 years	8,343	17.0	17.4
Race	Black	24,516	50.1%	27.8%
	White	19,569	40.0	69.7
	Other	3,382	6.9	2.6
	Missing	1,498	3.1	
Sex	Male	24,791	50.1	51.0
	Female	23,720	48.4%	49.0%
	Missing	454	0.9	
Residence	Rural county	36,249	74.0	63.9
	Urban county	12,716	26.0%	36.1%

* Percent for children from 6 months up to 6 years old.

Table 2: Percentage of North Carolina Children with Elevated Blood Lead Levels

Variable		≥10	≥15	≥20
Age	6-12 months	16.2%	2.0%	1.0%
	1 year	24.0	3.9	1.3
	2 years	27.6	5.1	1.8
	3 years	24.2	4.4	1.5
	4 years	20.1	3.2	1.1
	5 years	17.5	2.5	1.0
Race	Black	28.0%	5.0%	1.6%
	White	15.7	2.1	0.9
	Other	22.0	3.7	1.4
Sex	Male	23.6%	4.0%	1.4%
	Female	21.2	3.4	1.1
Residence	Rural county	23.7%	4.0%	1.4%
	Urban county	18.9	2.9	0.9

F. Primary References

1. Centers for Disease Control. *Preventing Lead Poisoning in Young Children: A Statement by the Centers for Disease Control.* Atlanta, GA. October 1991
2. Mushak P, Davis J, Crocetti A, Grant L. Prenatal and postnatal effects of low-level lead exposure: An integrated summary of a report to the U.S. Congress on childhood lead poisoning. *Environ Res.* 1989;50:11-36
3. Needleman H, Gastonis C. Low-level lead exposure and the IQ of children: A meta-analysis of modern studies. *JAMA.* 1990;263:673-678
4. Needleman H, Schell A, Bellinger D, et al. The long-term effects of exposure to low doses of lead in childhood: An 11-year follow-up report. *N Eng J Med.* 1990;322:83-88
5. Committee on Environmental Health. Lead Poisoning: From screening to primary prevention. *Pediatrics.* 1993;92:176-183
6. Clarke D. Lead poisoning in children: What is North Carolina doing about the problem? *Popular Government.* 1993;Spring:16-25
7. Crocetti A, Mushak P, Schwartz J. Determination of numbers of lead-exposed U.S. children by areas of the United States: An integrated summary of a report to the U.S. Congress on childhood lead poisoning. *Environ Health Perspect.* 1990;89:109-120
8. Norman E, Bordley W, Hertz-Picciotto I, Newton D. Rural - urban blood lead differences in North Carolina children. *Pediatrics.* (accepted for publication)
9. Lebeuf J, Norman E. Nutritional implications of lead poisoning in children. *Nutrition Focus.* 1993;8(5):1-6

Budget (give justification of each item when not apparent from description)

(1)	Personnel (including fringe benefits)	$6600.00
(2)	Travel (specify places and activities)(See Attached)	1250.00
(3)	Supplies	--
(4)	Equipment (what)	--
(5)	Other (specify) Communications: phone, fax, postage by Dr. Hertz-Picciotto	100.00
TOTAL		7950.00

Budget Justification

(1) Personnel

Ed Norman, a graduate student in the Department of Epidemiology, will be responsible for conducting this pilot investigation, with supervision from Dr. Hertz-Picciotto, his advisor. Mr. Norman is currently a Public Health Epidemiologist for the North Carolina Childhood Lead Poisoning Prevention Program and has been working with the screening database for the last four years. He will generate the subject list, make contact with the county health clinic nurses, conduct preliminary mailings, develop the survey instrument, ensure that the questionnaire is adequately pre-tested, train and supervise the interviewer, coordinate with the clinics, review all forms for errors, and oversee the data entry. He will devote 50% of his time to this project throughout 1994, at no cost.

Irva Hertz-Picciotto is Assistant Professor in the Department of Epidemiology. She has experience in epidemiologic studies of lead exposure and human health effects and will provide overall guidance for the study design and logistics of the project. Her effort will be 5-10% at no cost.

One Graduate Research Assistant (GRA) will be hired for three months at 10 hours per week (=120 hours) and for three months at 40 hours per week (=480 hours) for a total of 600 hours. The GRA will be responsible for conducting the interviews. These will be done by telephone, whenever possible. For those subjects whom we are not able to contact by telephone, the GRA will attempt to arrange in-person interviews, either at the home or at the local county health clinic.

Graduate Research Assistant 600 hours @ $11.00/hr $6600.00

(2) Travel

20 trips to the county health departments and homes of study subjects who cannot be reached by phone:
approximately 125 miles each way (250 round trip) @ $.25 per mile $1250.00

(3) Supplies (none)

Office supplies for mailings and miscellaneous other needs will be paid for in-kind by the North Carolina DEHNR (Department of Environment, Health, and Natural Resources).

(4) Equipment (none)

Computers are available to all the study staff and will not need to be purchased.

(5) Other

Office space for the GRA will be available in Raleigh at the NC DEHNR (no cost).

Costs for the mailings, telephone calls to the clinics and to the study subjects, and other communications-related expenses will be borne by the NC DEHNR, as in-kind contribution to the project.

Communications by Dr. Hertz-Picciotto are estimated at: ..... $ 100.00

Total funding requested:..... $7950.00

APPENDIX A

1. Last Name First Name MI

2. Social Security Number — H

3. Date of Birth Month Day Year

4. Race ☐ 1. White ☐ 2. Black ☐ 3. Other

5. Sex ☐ 1. Male ☐ 2. Female

6. County of Residence

N. C. Department of Environment, Health, and Natural Resources
Division of Maternal and Child Health

EVALUATION OF CHILD WITH ELEVATED BLOOD LEAD LEVEL

Current Address of Child: _____ Phone: ( ) _____

_____

Length of Residence at Child's Current Address: _____ years _____ months

Parent's Name: _____

Laboratory Findings:

Date: _____ Blood Lead: _____ Hematocrit: _____

Date: _____ Blood Lead: _____ Hematocrit: _____

Date: _____ Blood Lead: _____ Hematocrit: _____

Dietary Update:

Yes	No	
_____	_____	Does the family store food in open cans?
_____	_____	Does the family prepare, store, or serve food in homemade or imported ceramic dishes?
_____	_____	Does the family use traditional medicines such as greta, azarcon or pay-loo-ah?
_____	_____	Does the family use hot tap water to prepare infant formula?
_____	_____	Does the child receive dolomite or bonemeal as a calcium or phosphorus supplement?
_____	_____	Is the child on an iron supplement?
_____	_____	Is the child enrolled in the WIC program?

Comments: _____

_____

Possible Non-food Sources of Child's Lead Exposure:

Yes	No		Explain
_____	_____	Does child eat dirt?	_____
_____	_____	Does child eat or chew on: Paint chips/plaster	_____
_____	_____	Furniture, crib, or window sill	_____
_____	_____	Other non-food items	_____
_____	_____	Does family store old car batteries?	_____

Possible Sources of Child's Lead Exposure: (Continued)

Yes	No		Explain
_____	_____	Does family use the following for fuel: painted boards	_____
_____	_____	battery casings	_____
_____	_____	Is there peeling paint or plaster inside or out at child's primary residence?	_____
_____	_____	Is the primary residence being remodeled or has it been remodeled during the past six months?	_____
_____	_____	Does any family member work in lead-related industry such as battery salvage, fishing weight production, car repair or painting, smelting or house renovating?	_____

Approximate Age of Dwelling: _____ Owner of Dwelling: _____

Number of children in household 6 years of age or younger: Screened for lead poisoning during past six months:

Name/age _____ / _____ _____ Yes _____ No

_____ / _____ _____ Yes _____ No

_____ / _____ _____ Yes _____ No

_____ / _____ _____ Yes _____ No

Interviewer: Have I completed the following?

	Yes	No	Comments
Discussed effects of lead poisoning and need for patient follow-up.	_____	_____	_____
Provided education on house cleaning measures to prevent lead poisoning.	_____	_____	_____
Provided nutritional information to reduce lead absorption.	_____	_____	_____
Made arrangements for subsequent laboratory testing.	_____	_____	_____
Has referral been made to physician if needed?	_____	_____	_____
If yes, give date and time: _____			
Explained reason for environmental investigation.	_____	_____	_____
Referral sent to sanitarian for environmental investigation.	_____	_____	_____

Date: _____ INTERVIEWER: _____

Purpose: To be used by the health care provider to determine potential sources of lead exposure for a child with an elevated blood lead level and to educate the family about lead poisoning.

Preparation: Fill in the blanks and check the appropriate answers.

Distribution: Retain original at county health department with child's record. Send a copy to the lead investigator upon a referral for an environmental investigation. Send a second copy to the address below.

Disposition: This form may be destroyed in accordance with Standard 5 of the *Records Disposition Schedule* published by the North Carolina Division of Archives and History.

Additional forms may be ordered from:

DEHNR
Division of Maternal and Child Health
Preventive Services Branch
P. O. Box 27687
Raleigh, NC 27611-7687

12/20/93

MEMORANDUM

TO: Dorothy Browne & Lloyd Edwards, Co-Chairs Minority Health Research and Education Center Grant Committee

FROM: Renee Royak-Schaler, Lineberger Comprehensive Cancer Center RRS

RE: Grant Proposal entitled, "Breast Cancer Worry, Perceived Risk, and Early Detection Among African-American, Low-Income Women at Risk of Breast Cancer"

I am pleased to submit this proposal to the Minority Health Research and Education Center Grant Committee. In the event of any questions, I can be reached at Lineberger Cancer Center's Cancer Prevention Program at 966-0027. Thank you.

SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF NORTH CAROLINA
CHAPEL HILL

Application for grant from the
Minority Health Research and Education Center
School of Public Health

Name: Renee Royak-Schaler, Ph.D., Principal Investigator,
Postdoctoral Research Fellow, UNC Lineberger
Comprehensive Cancer Center; Associate Professor,
Department of Health Sciences, Towson State University.
Brenda M. DeVellis, Ph.D., Co-Investigator,
Associate Professor, Health Behavior/Health Education,
UNC School of Public Health.
Donald R. Lannin, M.D., Co-Investigator,
Director, East Carolina University Leo W. Jenkins Cancer
Center; Professor, Department of Surgery.
James R. Sorenson, Ph.D., Co-Investigator,
Professor & Chair, Health Behavior/Health Education,
UNC School of Public Health.

Title of Project: **BREAST CANCER WORRY, PERCEIVED RISK, AND EARLY DETECTION AMONG AFRICAN-AMERICAN, LOW-INCOME WOMEN AT RISK OF BREAST CANCER**

NO._____

A. SPECIFIC AIMS

This project will gather pilot data to be used in developing protocols for genetic counseling with women identified as having BRCA1, a familial genetic marker for breast cancer (King, Rowell, & Love, 1993; Lynch et al., 1993). The study involves a collaborative effort among the UNC Lineberger Comprehensive Cancer Center, UNC School of Public Health, and East Carolina University School of Medicine, Department of Surgery.

Investigators will use quantitative and qualitative methods to assess breast cancer related attitudes, beliefs, and behaviors in low-income, African-American women whose first degree relatives have breast cancer. The information gathered in the pilot study will be used to develop components of a psychoeducational intervention for minority high-risk women aimed at: a-reducing cancer concern and worry; b-realistically appraising breast cancer risk; c-improving screening rates (clinical breast exam, mammograms, and breast self-exam); and d-understanding the risks and benefits associated with current prevention options (screening, chemoprevention, prophylactic mastectomy, diet, and exercise). To accomplish this goal we will assess:

1- Breast cancer anxiety or worry;

2- Beliefs about breast cancer susceptibility;

3- Perceived effectiveness of screening methods and belief in ability to get screened on regular basis (self-efficacy);

4- Responses to current breast cancer prevention options (chemoprevention - tamoxifen trial; prophylactic mastectomy; diet; exercise; blood testing to determine genetic risk status);

5- Screening practices (cbe, mammography, bse), including the barriers and facilitators of screening.

6- Health practices related to cancer prevention in women: smoking, diet, alcohol consumption, physical activity, cervical cancer screening.

We **hypothesize** that minority, low-income first degree relatives of breast cancer patients are more likely to engage in regular clinical breast exams, mammograms, and breast self-exams when they: 1-realistically perceive their breast cancer risk, 2-are moderately concerned about developing breast cancer, and 3-feel confident about their ability to control their breast cancer risk through early detection.

We additionally **hypothesize** that women who engage in other health practices related to cancer prevention - not smoking, limited alcohol consumption, lowfat diet, regular physical exercise, and cervical cancer screening - will more realistically perceive their breast cancer risk, be less concerned about developing breast cancer, and feel more confident about their ability to control their breast cancer risk.

B. SIGNIFICANCE

Women with a family history of breast cancer are at increased risk of developing the disease. Those having one first-degree relative with breast cancer are 2 to 4 times more likely to develop the disease; this risk is even higher for women with more than one affected relative (Byrne et al., 1991; Claus, Risch, & Thompson, 1990). Because family history strongly predicts early fatal breast cancer, women with relatives diagnosed at young ages should be targeted for interventions promoting early detection (Calle et al., 1993).

Effective intervention delivery is particularly important in the low-income, African-American population. According to data from NCI's Surveillance, Epidemiology, and End Results (SEER) Program (1978-1982), percent below poverty level accounts for racial differences observed in breast cancer survival (McWhorter et al., 1989). Lower socioeconomic status women have 25% higher death rates from breast cancer than higher SES women (USDHS, 1990). Black women are less likely to be screened for breast cancer, delay seeking care in the presence of symptoms, and have lower survival rates due to diagnosis at later disease stages (Hayward, Shapiro, Freeman, & Corey, 1988). Factors which predict successful completion of mammography screening in this population include: presenting with a symptom of breast disease, believing in the efficacy of early detection tests, and not considering cost a barrier (Burack & Liang, 1989). The pilot data gathered in the proposed project will identify key factors for both patients and providers in **communicating breast cancer risk** and **improving screening rates** among low-income high-risk black women.

Research studies to date have associated breast cancer concern and worry among high-risk women with less frequent practice of breast self-exam (Lerman, Trock, Rimer et al., 1991; Royak-Schaler & Benderly, 1992; Stefanek, 1992), nonadherence to clinical breast exam (Kash et al., 1992), and nonadherence to mammography (Lerman et al., 1993). High-risk women with breast cancer worries that disturb daily functioning are less compliant with mammography recommendations than those not exhibiting such concerns. This is particularly the case for those with less formal education; those with less than high school education comply 5 times less than those with educations beyond high school (Lerman et al., 1993). These studies were largely done with white, middle class women; **there remains a critical need for research investigating breast cancer anxiety and screening compliance among minority, low-income women with limited education.**

The proposed study will address this need and develop interventions which reduce breast cancer worries, promote realistic appraisal of breast cancer risk, and improve screening rates.

C. STUDY DESIGN AND METHODS

The theoretical framework for this project includes the Health Belief Model (Rosenstock, 1974), Social Cognitive Theory (Bandura, 1986) and the Theory of Planned Behavior (Ajzen, 1985). The Health Belief Model theorizes that practice of health behaviors can be understood on the basis of concern about health, beliefs about susceptibility to health threats, and reduction of these threats. We will, therefore, assess beliefs about breast cancer concern, susceptibility, and screening efficacy to understand responses of black, low-income women to high-risk status.

According to Social Cognitive Theory, individuals undertake health behavior change when they feel competent to implement and maintain these changes (Bandura, 1991). The Theory of Planned Behavior adds that individuals engage in behaviors they believe they can control and that significant others approve of, emphasizing the importance of perceived behavioral control as well as reinforcing factors (Ajzen, 1985). Therefore, investigators will assess participants' perceptions in the following domains: ability to get screened on a regular basis, barriers and supports for routine screening, and control over breast cancer risk.

Subjects: Thirty African-American, low-income women referred to the Breast Clinic at Pitt County Memorial Hospital, Greenville, NC will participate in this study. The sample consists of first-degree relatives identified by breast cancer patients who participated in the Cancer Perception Study conducted by the Department of Surgery at East Carolina University School of Medicine. Participants breast cancer risk will be assessed according to criteria established for eligibility in the Breast Cancer Prevention Trial, including number of first degree relatives with breast cancer, number of previous breast biopsies, age at menarche, and age at first live birth (Gail et al., 1989). We will recruit women both younger and older than 50 years to assess differences in response to high-risk status in these two groups. Telephone interviews already conducted with these women gathered sociodemographic characteristics, family breast cancer history, breast cancer beliefs, and social support data which will be analyzed as part of the proposed study.

Procedures: Individual telephone interviews and focus group interviews will be conducted with thirty women. A structured 25-minute **telephone interview** will evaluate screening practices, perceptions of screening effectiveness, susceptibility, breast cancer concern, and related cancer prevention health practices (smoking, alcohol consumption, diet, physical activity, cervical cancer screening). Three, two-hour **focus groups** (10 women in each group) will be conducted to assess : experiences with breast cancer in the family (emotional reactions, coping); perception of risk status and susceptibility to breast cancer; beliefs about barriers, supports, and benefits of screening (mammograms, clinical breast exam, breast self-exam); and

responses to prevention options for high-risk women (chemoprevention - tamoxifen trial, prophylactic mastectomy, diet, exercise, blood testing to determine genetic risk status).

Measures:

Sociodemographic characteristics: age, race, marital status, education, income, employment status, health insurance (medicaid, medicare).

Health behavior scale: 20-item scale assessing health practices related to cancer prevention - smoking, diet, alcohol consumption, physical activity, pap screening.

Breast cancer risk factors: Those specified as significant in the Breast Cancer Detection Demonstration Project include number first-degree relatives with breast cancer, number previous breast biopsies, age at menarche, and age at first live birth (Gail et al., 1989).

Breast cancer screening practices: frequency of mammography, clinical breast exam, and breast self-exam and when each was last done. Adapted from Bowman Gray School of Medicine Henderson County Cancer Education Survey.

Perceptions of susceptibility: Likert-style items used to assess perceived risk, (1=very unlikely; 5=very likely). Adapted from the University of North Carolina Colon Cancer Screening Project (DeVellis, Blalock & Sandler, 1990).

Breast cancer concerns: 4 Likert-style items used to assess breast cancer concerns that interfere with daily functioning. Items distinguish between persons at normal and high risk of cancer and relate to breast cancer screening compliance (Lerman et al., 1991).

Breast cancer locus of control: 6 Likert-style items used to assess perceptions of personal control in developing breast cancer. Adapted from Multidimensional Health Locus of Control (Wallston & Wallston, 1980).

Perceptions of self-efficacy: 4 Likert-style items used to assess confidence in ones ability to comply with screening recommendations within the next six months (Bandura, 1986).

DATA ANALYSIS: Quantitative results from interview questionnaires and qualitative results from focus group audiotapes and transcripts will be analyzed and compared to cross-validate study findings. Qualitative frequency data will be generated using ETHNOGRAPH, a text analysis software package for microcomputers. We will analyze both suggested themes, imposed on the data by the study's conceptual framework, and emergent themes or unanticipated categories of responses (Strauss & Corbin, 1990). Descriptive statistics (frequencies and means) will be generated from interview questionnaires to characterize the study population by sociodemographics, risk factors, screening patterns, and psychosocial variables. Binary outcome variables regarding screening compliance and cancer preventive health behaviors will be created according to National Cancer Institute guidelines. Chi square tests will be used to evaluate bivariate associations with screening compliance; Wilcoxon Rank Sum tests will be used to evaluate continuous variable associations with screening compliance.

Multivariate logistic regression analysis will control confounding and determine the simultaneous effects of predictor variables that have a statistically significant influence on outcome variables of interest.

D. POTENTIAL FOR FUTURE FUNDING

Study results will serve as the foundation for a larger grant proposal that will be submitted to the National Cancer Institute as part of the Congressionally-mandated **Breast and Cervical Cancer Mortality Prevention Act.** Suitable mechanisms include: the RO3 -Small Grants Program through the Division of Cancer Prevention and Control; the R29 - First Independent Research Support and Transition Award; and the RO1 - Investigator Initiated Research Award through the Special Emphasis Panel of NCI.

The aims of this federally-funded study will be to deliver and evaluate genetic counseling interventions for low-income, minority women with family histories of breast cancer aimed at: 1- reducing cancer concern and worry, 2- realistically appraising breast cancer risk, 3- improving screening rates, and 4- understanding the risks and benefits associated with current prevention options.

E. BUDGET AND JUSTIFICATION

1. Research Assistants (2 @ $10./hour each)		
Telephone calls to identify 30 participants:	40 hours	$400.
Conduct telephone interviews: 30 @ 45-minutes	25 hours	250.
Code questionnaires: 30 minutes each	15 hours	150.
Transcribe focus group tapes: 3 hours per 1 hour of tape	20 hours	200.
Ethnograph analysis focus group tapes	20 hours	200.
2. Focus Group Leader: 3 groups @ $300. per group		900.
Focus Group Notetaker	10 hours	100.
Focus Group Participants: Payment for participation @ $25. per person (30)		750.
Refreshments for focus groups: $50. per group, three groups		150.
3. Data Entry/Verification/Programming		1000.
4. Computer Software (STATA)		265.
5. Statistical Consultant: Design & Data Analysis 15 hours @ $20. per hour	15 hours	300.
6. Telephone Questionnaire formatting & xeroxing: 20 pages		200.
7. Office Supplies		100.

8. Travel, Lodging, Food:	To Pitt County Memorial Hospital, Greenville, NC: 5 trips/research assistant = 10 trips 10 trips for P.I. = 20 trips; 260 miles/trip = 5200 miles @ $.28/mile	$1456.
	Lodging for 5 nights @ $34./night	170.
	Food: Research Assistants: $10/day $10./day for 8 days = $80. P.I.: $21./day for 7 days = $150.	250.
TOTAL		**$6941.**

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SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF NORTH CAROLINA
CHAPEL HILL

Application for grant from the
Minority Health Research and Education Center
School of Public Health

Name: Carmen D. Samuel-Hodge, RD, MS, MPH

Department: Nutrition

Project Title: Diabetes Care for African Americans -- Perceived education needs and barriers to dietary adherence

Faculty: Janice Dodds, EdD, RD

Signature: Janice Dodds

Rank: Associate Professor

No. _____

A. SPECIFIC AIMS

A determination of attitudes and beliefs towards diabetes and its care is an essential first step in understanding the self care behavior of diabetic patients, and responding to their needs with the appropriate education. The aims of this exploratory study are to:

(1) Determine health beliefs of African Americans with non-insulin dependent diabetes mellitus (NIDDM) concerning the disease and its complications;

(2) Assess the perceived barriers to dietary adherence; and

(3) Assess the perceived education needs of NIDDM patients receiving care in a community health center setting.

This qualitative research consisting of focus group interviews with diabetic African Americans will be used to generate hypotheses that guide the development of approaches to diabetes education that are culturally specific, behavioral in orientation, and feasible in a clinical setting where the majority of African Americans receive care. Interviews will focus on issues related to self-efficacy, social support, and perceptions of the role of diet, exercise and weight control in diabetes management. Theoretical frameworks previously used in assessing diabetes-related attitudes, and available diabetes education materials will be analyzed for their appropriateness.

B. SIGNIFICANCE

Diabetes mellitus is a major cause of morbidity and premature mortality in the U.S., affecting approximately 14 million Americans

knowledge stemming from culturally inappropriate patient educational materials and programs; incorrect health beliefs about the ability to control or influence disease outcome; lack of access to health care; differing cultural values and priorities; and poverty (12). The ever-growing recognition of educational needs of minority populations, has dictated the need to formulate new and more relevant approaches to diabetes care. The Society of Nutrition Education has called for the development of theory-informed interventions which incorporate psychosocial assessment of factors such as self-efficacy, social support, and barriers to dietary change (13). The proposed qualitative study will provide the preliminary data to guide the development of interventions and materials that are specific for this high risk population.

C. STUDY DESIGN AND METHODS

Participants in the focus group interviews will be African Americans with diagnosed NIDDM who receive health care at community health centers. Health care providers at selected centers will assist in the recruitment of group participants. [The applicant/investigator is a National Institutes of Health (NIH) Trainee with researchers Alice Ammerman, DrPH,RD and Tom Keyserling, MD, MPH who have conducted, and are currently conducting NIH-funded clinical trials involving rural and community health centers in North Carolina. At these sites, about 64% of the clients are African Americans (many of whom are diabetic).]

Four groups of 8-10 participants will be interviewed for approximately 90 minutes. Discussions will be moderated by the

applicant -- an African American registered dietitian, who is trained in focus group methodology and is knowledgeable about the issues related to the dietary component of diabetes education. The composition of the groups will be defined by duration of diagnosis, degree of complications, and treatment regimen. Two groups will consist of patients who have had NIDDM for < 8 years, have no complications (end-stage renal disease, blindness, lower extremity amputations, etc.), and are managed by diet and/or oral hypoglycemic agents (tablets). The other two groups will include patients with ≥ 8 years with NIDDM, with/without complications, and management by diet and insulin.

Interviews will be scheduled for a time and place convenient to participants; light refreshments will be provided and each participant will be given $25 to compensate for time and effort associated with participation. Health care providers assisting with recruitment will be asked to identify potential participants that fit the group inclusion criteria. Recruited persons will be asked to sign an informed consent form which includes purpose and potential benefits of the study, a confidentiality clause, and permission for the investigator to audio tape the discussions. Prior to the actual discussion, each participant will be asked to provide sociodemographic data, and information related to family history of diabetes, health status and health care utilization. The consent form, brief pre-discussion questionnaire, moderator's guide and discussion protocols will be submitted to the Minority Health Committee and School of Public Health Internal Review Board for review and approval. Data generated from the group discussions

will be analyzed and interpreted jointly by the applicant/ investigator and faculty advisor.

D. POTENTIAL FOR FUTURE FUNDING

The National Institutes of Diabetes and Digestive and Kidney Diseases and the National Center for Nursing Research of NIH, recently announced the availability of funds to support research to develop and validate interventions for the amelioration or prevention of diabetes mellitus and/or its complications among minority populations. Available funds of $2.2 million for fiscal year 1994 will be committed to fund 10-12 applicants. One of these applicants is a group of investigators headed by Drs. Ammerman and Keyserling; if funded the applicant/investigator will be part of this research team.

In addition, the Centers for Disease Control and Prevention (CDC) are currently funding several Diabetes Control Projects (DCP) in several states with high prevalence rates of diabetes. North Carolina is one of these states. The DCP's are administered through the Department of Environment, Health and Natural Resources, with services delivered via local health departments. The aim of these projects is to provide comprehensive community-based diabetes education, with the goal of reducing diabetes complications, disability, and premature deaths. Emphasis is on NIDDM, with projects focused on counties in the eastern part of the state.

E. BUDGET AND JUSTIFICATION

BUDGET

1.	Personnel	$ 0
2.	Travel	$ 40.00
3.	Supplies & transcription services	$ 282.00
4.	Refreshments & remuneration for participants	$ 1,160.00
	TOTAL BUDGET	**$ 1,482.00**

JUSTIFICATION

1. None requested; the applicant will moderate the group discussions.

2. Travel to four (4) discussion sites at average round trip of 40 miles X $0.25/mile = $40.00. Health Centers located within Orange, Durham and Chatham counties will be selected.

3. Supplies include a tape recorder with microphone @ $90.00 and blank tapes (two 5-pk. of 60-minute tapes @ $5.00 each) @ $10.00. Total supplies = $100.00.

   Transcription costs include 12 hours of transcribing (4 sessions X 1.5 hours/session X 2 hours transcribing/recorded hour) @ $14.00/hour = $168.00. An additional $14.00 is added to allow for any additional time needed for transcription. Total transcription services = $182.00.

4. Light refreshments will be provided for participants in each group at a cost of $40.00/group X 4 groups = $160.00.

   Each participant will receive remuneration in the amount of $25.00 for participation in a 90-minute discussion; 40 participants X $25.00 each = $1,000.00.

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SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF NORTH CAROLINA
CHAPEL HILL

Application for grant from the Minority Health Research and Education Center School of Public Health

Names: Frances M. Lynn and Alan B. Steckler

Departments: Environmental Sciences and Engineering and Health Behavior and Health Education

Title of Project: Childhood Lead Poisoning Prevention in North Carolina: Developing Primary Prevention Strategies

Ranks: Research Associate Professor and Professor

NO._____

A. SPECIFIC AIMS

Childhood lead poisoning is the one environmental hazard for which the U.S. EPA says that the data on racial inequity are unambiguous. While the prevalence of lead poisoning among minority children decreases as income rises, no income level is immune. A disproportionate (twice as great) burden on minority children persists regardless of income (Agency for Toxic Substances and Disease Registry 1988).

Traditionally childhood lead poisoning prevention activities have focused on secondary prevention (e.g. screening). In 1991, the Centers for Disease Control called for expanding the focus of childhood lead poisoning prevention activities from "merely identifying and treating individual children to include primary prevention (Centers for Disease Control 1991:4)."

The long term aim of this research is to provide the basis for the design and implementation of a state wide, community based, primary prevention strategy for reducing childhood lead poisoning in North Carolina. The proposal complements the proposal being submitted simultaneously by Norman and Hertz-Picciotto which focuses on the effectiveness of existing secondary prevention strategies.

The specific aims of this research are to:

1. analyze opportunities and barriers to implementing a community based primary prevention strategy for reducing childhood lead poisoning in North Carolina;
2. design a primary prevention demonstration program for a particular North Carolina county;
3. seek funding for the implementation and evaluation of the county demonstration program.

B. SIGNIFICANCE

Children are most commonly poisoned by lead when they ingest contaminated dust from lead-based paint. Children under six are most susceptible to lead poisoning because of their normal hand-to-mouth contact, because they absorb lead more readily and because they are in a critical state of their development. Even a low levels lead poisoning causes reduction in IQ, shortened attention span, hyperactivity, aggressive behavior, and reading disabilities. Children with high levels of lead in their blood require hospitalization, and medical treatment (Centers for Disease Control, 1991).

Up until very recently North Carolina was not perceived as having a child lead poisoning problem. In 1991, only 39 cases were confirmed in the state and the myth persisted that childhood lead poisoning was a big city issue. This has changed. In 1992, there was a forty-fold increase in the number of child lead poisoning cases identified in North Carolina with a greater percent of children in rural areas having higher lead levels than in urban areas (Norman, et. al). The dramatic increase in cases of childhood lead poisoning is attributable to three factors: the availability of Medicaid funds to pay for screening, the use of a more sensitive blood lead testing procedure, and the lowering of the threshold level of concern. Even so, the NC Childhood Lead Poisoning Prevention Program estimates that currently only ten percent of NC children are tested annually. As in the country as a whole, minority children in North Carolina are twice as likely to be at risk as non-minorities (Norman, et. al.).

In FY 1992-1993, state funds allocated for childhood lead poisoning prevention totaled only $137,000. County health departments, which are responsible for implementing the state's program, had the option of spending federal block grant money for childhood lead poisoning prevention, however,

few traditionally devoted much of their block grant money for that purpose. Beginning in the summer of 1994, an additional $500,000 in dedicated *state* funds will be allocated to county health departments. This new money is being allocated to the counties based on the number of children screened. An additional $500,000 will go for improvements in the state labs and for hiring additional regionally based environmental inspectors.

Screening and follow-up is clearly critical in North Carolina because so little of it has occurred. However, it is just as important is to prevent the poisoning from happening in the first place. This requires a strategy of community wide education which alerts parents, homeowners, health care providers and social service workers to the danger, main sources and solutions for preventing childhood lead poisoning. While community education is important in primary prevention, preserving affordable housing is also key. Many of the houses which pose the worse hazards are rental, old and inhabited by low income families. The concern is that landlords will abandon rather than abate. Therefore, a primary prevention program also requires developing methods of financing lead abatement for low-income homeowners and landlords. Methods which have been employed in other parts of the country include the use of community block grants, tax credits or even property tax increases to cover deleading (Phoenix, 1993).

C. STUDY DESIGN AND METHODS

The research design for this study uses both qualitative and quantitative methods. It is participatory and includes input from state officials, local practitioners and community leaders. It builds on research with parents of lead poisoned children and children at risk already conducted by students of Frances Lynn. These studies revealed a lack of awareness of the dangers of lead poisoning and pointed to the need for preventative community based

education (Bivins 1993, Carloch 1993). The proposed research is also informed by a study currently underway by a student of Lynn and Steckler which is looking at primary prevention programs outside of North Carolina .

Stage one of the research entails 10 face-to-face interviews in Lenior County which has one of the most severe childhood lead poisoning problems in the state. Virginia Bonar, who is responsible for the county's childhood lead poisoning program, has agreed to work with the project team in identifying key health, social service, housing, and community religious, civic and education leaders to interview and in reviewing project proposals. The research team will use an interview guide to query respondents about (a) overall community education and awareness efforts about childhood lead poisoning, (b) education of at-risk populations and, (c) abatement activities and options.

Stage two of the research is the development of a questionnaire which will be mailed to North Carolina's 100 public health departments. The questionnaire will be informed by the data gathered in the Lenior county case study and will be structured using the three main areas (a-c) identified in stage one. The survey will serve two purposes: contributing to the design of a demonstration primary prevention outreach project (see stage three below); and providing baseline data for possible later evaluations of the changes that the infusion of the additional 1 million per year in state money produces. The questionnaire will be predominantly fixed choice and will use Dillman's *total design method* to ensure a high response rate. This method entails a minimum of three follow-ups including an original questionnaire, a reminder postcard, a second questionnaire and, if need be, a phone call (Dillman, 1978).

Stage three of the research is the design of a county level demonstration primary prevention program and will be based on the

F. PRIMARY REFERENCES

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E. BUDGET

Personnel	
Graduate Student (10 hours/week)	$5,500
Travel	150
2 trips to Lenior Co. 214 miles @.28/mi rt plus travel within the county to conduct interviews with public health and community leaders	
Supplies	300
Mail survey and 3 mail follow-ups to 100 health departments (postage and printing of instrument and reminder card)	
Telephone	100
TOTAL	6050

THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

The School of Public Health
Department of Epidemiology
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Drs. Dorothy Browne and Lloyd Edwards, Co-Chairs
Minority Health Research and Education Center Grant Committee
School of Public Health
University of North Carolina at Chapel Hill

December 20, 1993

Dear Drs. Browne and Edwards,

Attached is my proposal for research in minority health issues. I propose to conduct a pilot study titled "North Carolina Cervical Health Study - Prevention of Cervical Cancer in HIV-Infected Women". In North Carolina the women most affected by HIV/AIDS and cervical cancer are African American women.

The state has formed the Cervical Cancer Task Force and is participating in the Centers for Disease Control and Promotion "National Breast and Cervical Cancer Early Detection Program", neither of these activities focus on the epidemiology of the cervical cancer problem. Although programs directed at increasing screening are clearly needed, there are gaps in our knowledge of the appropriate screening intervals for women who are at very high risk for cervical cancer and of the basic epidemiology of ethnic group differences in the use of services and the natural history of disease.

Before competing for funds for a comprehensive research project it is essential attempt a pilot study to determine the feasibility of conducting research in this population. My project involves a very difficult population to study - women infected with the human immunodeficiency virus (HIV), the etiologic agent of AIDS. Records from the clinic populations study show that most of the patients are African American and indigent. Many of the patients are illicit drug users and homeless, and many have been incarcerated. This is precisely the population in which HIV has become entrenched, and for which there is a gap in knowledge. This population is also at high risk for cervical cancer.

Thank you for your consideration.

Most sincerely,

Rachel Royce, PhD
Assistant Professor

SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF NORTH CAROLINA
CHAPEL HILL

Application for grant from the
Minority Health Research and Education Center
School of Public Health

Name Rachel Royce, PhD, MPH

Department Epidemiology

Title of Project North Carolina Cervical Health Study - Prevention of Cervical Cancer in HIV-Infected Women

Rank Assistant Professor

NO.

A. Specific Aims

This research project will evaluate the feasibility and resources necessary for the conduct follow-up studies in a population at high risk for cervical cancer. The longer term goal of this research is to collect data that are necessary to devise better cervical cancer screening recommendations for women at high risk for cervical cancer.
It will produce pilot data comparing women infected with the human immunodeficiency virus (HIV) to HIV-uninfected women and examining differences in ethnic groups to address the following primary aims:

A.1) To characterize patterns of Papanicolaou (pap) smear utilization among women of different ethnicities,

A.2) To determine the prevalence of abnormal cervical cytology using pap smears comparing ethnic groups,

A.3) To determine the prevalence of human papillomavirus infection (HPV) comparing ethnic groups, and to characterize factors associated with HPV infection and ethnic group differences including area of cervical ectopy, tobacco exposure, and HIV-related immunosuppression,

A.4) To measure the incidence of abnormal cervical cytology and changes in HPV infection status after six months follow-up comparing initial stage of HIV disease progression and ethnic groups.

Data will be collected on the potential confounders of cervical disease for evaluation in the analysis. This will include cervical cancer screening history, sexual debut and sexual behavior, gynecologic history and exposure to tobacco, and to hormonal contraceptives.

B. Significance

In North Carolina in 1990, there were 400 incident cases of invasive cervical cancer and 138 deaths, ranking this cause eleventh among cancer deaths in the state. African American women were 2.5 times as likely to develop invasive cervical cancer and their mortality rate given this cancer was 2.8 times higher compared to caucasian women (1). Data from the North Carolina Cancer Registry demonstrate significant age and race specific trends with the relative risk (RR) comparing women of color to caucasian women with RR's $>=2$ for most ages, including young ages (15-24 years RR=3.2). Compared to other states North Carolina has very high rates of death due to cervical cancer. The rate for NC African American women is fourth in the nation. The state ranks ninth overall. In addition to invasive cervical cancer, over a thousand women were diagnosed with cervical cancer in situ, and many were treated for pre-cancerous dysplasias, or cervical intraepithelial neoplasia grades I-III.

The figures for HIV/AIDS are also very high for African American women in North Carolina. Surveillance estimates are that at least 15 thousand residents are HIV-infected (NC HIV/STD Control Branch Surveillance Program, 10/92). The rate of HIV infection among women giving birth in the state rose from 1.17/1000 in 1989 to 2.44/1000 in 1992. Overall, 55 percent of reported NC AIDS cases are among African Americans although they comprise 22 percent of the population. African American women comprise over 80 percent of cases of AIDS and HIV infection in women.

Alarming reports of high rates and rapid progression of cervical neoplasia in **HIV-infected women** in small studies of patients with advanced HIV disease with no, or ill-matched controls have stimulated intensive research activities, as reviewed recently by Mandelblatt et al. (2). Combining the results of five out of 21 studies reviewed, Mandelblatt et al. computed an odds ratio of 4.9 for the association between HIV infection and cervical neoplasia.

Cervical cancer usually develops slowly and is preceded by changes that can be detected by pap smears. Access to and utilization of pap smears are major determinants of the incidence of cervical cancer (3). In recognition of the potential effect of HIV infection on cervical disease, the Centers for Disease Control (CDC) have altered the AIDS definition to include invasive cervical cancer and the recommended screening interval from every three years to every year (4). Some clinicians believe that interval is too long and they are recommending pap smears every six months (5, 6).

More recently, researchers have failed to find rapid progression to neoplasia after an abnormal smear in prospectively followed HIV-infected women (7). Recent studies of cervical cancer patients have uncovered a low HIV seroprevalence (1.5 percent to 3 percent), in African countries where the cervical cancer rate is very high as is the prevalence of HIV infection (8, 9).

Reports on HIV and cervical disease have raised an issue of substantial public health importance but many have been based on faulty designs and biased estimates of association. Some of these studies were case series with no controls. Others had

potentially biased control groups or did not control for other major determinants of cervical cancer. Often the measures of association from cross-sectional data were interpreted incorrectly leading to an overestimation of the effect (10). Studies currently underway are focused on women with advanced disease, neglecting the bulk of the infected population with earlier HIV infection. With a greater understanding of these relationships, the frequency and method of screening for cervical disease may be improved.

Infection with HPV is considered the strongest risk factor for cervical cancer. There is ample biological evidence linking the two, and several plausible pathophysiologic mechanisms have been proposed, as recently reviewed (11, 12). Of the over 70 types of HPV, types 16 and 18 show the strongest association for cervical cancer. The most complete epidemiologic study to date followed a cohort of initially pap smear normal women (13). Of the incident cervical intraepithelial neoplasia cases grade 2 or 3, 78 percent were attributable to HPV infection, and 52 percent were attributable specifically to HPV-16/18 infection.

HPV infection may be determined through assays for the presence of HPV DNA. Recently, DNA amplification using the polymerase chain reaction, PCR, has become the gold standard, replacing less sensitive and specific assays. Studies using older techniques are difficult to interpret due distortions caused by misclassification (14). Recent studies using HPV consensus PCR primers in North America have found infection rates from 10.6 percent to 46 percent among women attending university health services (15-18). Interestingly, recent estimates of infection from a sexually transmitted disease (STD) clinic in the same city as the university health service yielded similar estimates of infection (11 percent) (16). Estimates of the prevalence of HPV-16/18 in these same populations ranged from 5.0 to 10.5 percent (15, 17, 18). HPV-6/11 infections were less common.

When HPV DNA is ascertained in normal women at repeat visits there is considerable discordance in the results (13, 15, 19). The prevalence of infection also varies by age, with the prevalence decreasing with older ages, especially for HPV type 16/18 (8, 19-21). Thus it is thought that HPV infection falls below detectable limits and is essentially cleared in most women over time. It is possible that the increase in cervical dysplasia among HIV-infected women is due to the inability of these women to clear the HPV infection.

Exposure to tobacco is a well-established risk factor for cervical cancer as reviewed recently by Winkelstein (22). Since the last review, more evidence has emerged that supports an association, including a meta-analysis that estimates a 42-46 percent increase in cervical cancer among smokers after controlling for age and number of sexual partners (23-26). Tobacco exposure has been found to acutely affect CD4 counts (27), and its metabolic products are found in the cervical mucus (28-31). Efforts to attribute the tobacco and cervical cancer association to confounding with onset of sexual behavior are contradicted by the dose response relationship.

Other risk factors for cervical cancer include African American or Hispanic ethnicity, lower social class, use of oral contraceptives, early age of first intercourse, and the presence of cervical ectopy (3). The relationship between these factors is not well understood.

C. Study Design and Methods

C.1 Study design, population, and sample size estimations: A cross sectional study will establish a cohort of women that will be prospectively followed every six months for one year. Some aspects of the data collection will be retrospective. It is essential to choose HIV-uninfected women that are as comparable as possible according to age, ethnicity, social class, and sexual behavior because each of these factors is a strong determinant of access to and utilization of pap smears and exposure to human papilloma virus. The study population will consist of HIV-uninfected women attending the Wake County STD Clinic who are diagnosed with syphilis. HIV-infected women will be recruited from the Wake County HIV-Early Intervention Program (HIV-EIP) and the University of North Carolina Infectious Disease Clinic. Appendix Table 1 details the recruitment estimates and source populations. Pregnant women will be excluded from the study population.

The Wake County Clinics are located within one building in downtown Raleigh. There is considerable overlap of their patient populations. The clinics share medical records. Wake county contributes approximately 20 percent of reported AIDS cases and HIV infections to the state surveillance data. In the past, approximately twenty percent of the UNC ID Clinic's patients are from Wake county.

The Wake County STD Clinic sees approximately 6400 women annually. Fifty percent of the patients are African American. The HIV infection rate in these clinics is between one and two percent. We plan to obtain consent and recruit 50 control women attending the STD clinic for their first visit who are diagnosed with syphilis. These women will be interviewed, their medical records abstracted, and a cervical lavage specimen collected. Unless a study participant tests HIV seropositive, these women will be controls. All STD patients are urged to get tested for HIV infection either confidentially or at the anonymous test site in the building. All HIV seropostitives are referred to the HIV-EIP Clinic for follow-up care. The state

aggressively follows syphilis patients to ensure adequate clearance of infection. Assuming 95 percent follow-up we will interview 47 consenting women at six months and 30 at 12 months follow-up.

The Wake County HIV-EIP Clinic, established in October of 1991, is designed to diagnose and treat early HIV disease and to provide education and counselling on safe sex practices, risk reduction and maintenance of health. All participants have HIV infection. Over 80 percent of participants are recruited through referrals from other agencies.

The HIV-EIP annual report shows that since 1991 women have comprised approximately 15 percent of the participants. Their median age has been 33 years old. Ninety percent were African American. Over 65 percent had annual incomes below $7000. The overall mean CD4+ count was 600 cells/ul with 50 percent of women already with counts below 500 CD4+ T cells/ul, evidence of serious immunologic impairment.

This is a very difficult population to recruit and follow: 58 percent reported active cocaine use and 19 percent reported active heroin use; 47 percent have been incarcerated; 23 percent were homeless or without a permanent address. As of the end of 1992, 23 women were actively attending clinic. Based on the rate of new participant accrual in 1992, approximately 40 women will have entered the program in 1993 and another 40 will enter during 1994.

We will recruit women who entered the HIV-EIP clinic six or fewer months before the study start date and women who come to the HIV-EIP during the first eight months of the study period. We expect to recruit 52 women from the HIV-EIP clinic for the prevalence study. Assuming a retention rate of 80 percent, we would expect to have six month, pap smear follow-up data on 26 women. Of these, 16 would have been initially pap smear normal and can be used to estimate the incidence of cervical disease. The other 10 women will be used to describe the follow-up of abnormal pap smears and colposcopy. 19 women will contribute data for HPV persistence studies.

The Infectious Diseases Clinic, University of North Carolina (UNC) Hospital cares for HIV-infected patients, including over 250 women. Over the last nine months of 1992, 149 women patients attended the ID clinic. The mean age was 33.7 years. The majority of these women were African American (61.9 percent). The median CD4+ T lymphocyte count for African American women on their first visit to the clinic was 250 cells/ul compared to 420 cells/ul in Caucasian women. This difference was attributable to differences in the proportion on antiretroviral therapy before they became patients at the ID Clinic. Currently the clinic sees an estimated eight to ten new women patients each month.

The procedures for recruiting new women patients from the ID clinic will be the same as described for the HIV-EIP. However, a retention rate of 60 percent will be used because the ID clinic women are at a more advanced stage of HIV disease. The ID clinic is expected to yield 144 women for the prevalence data and 54 women for the cytology incidence study, 32 of whom will have had an initially normal pap. The other 22 women will be used to describe the follow-up of abnormal pap smears and colposcopy. 35 women will contribute data for HPV persistence studies.

In summary, the study participants in column 3 (N=246) will be available for pap smear prevalence data (Aims A.1 and A.2); in column 4 (N=217) for pap smear follow-up data (Aim A.4) and HPV prevalence (Aim A.3); in column 5 (N=84) for HPV incidence/persistence (Aim A.4).

In calculating sample sizes for the prevalence study we would like to be able to detect an effect in the range of that observed in the literature. The Wake County HIV-EIP annual report shows that 40 percent of the women had abnormal paps. Assuming an abnormal pap rate in the HIV-uninfected women of 5 percent or smaller (32), with a sample size of 20 we would be able to detect a RP of 4 or more (a prevalence difference of 15 percent) If the background rate is 10 percent (10), we would be able to detect a significant RP of 3 or more. These projections are in the range reported in the meta-analysis by Mandelblatt (2). The sample size (N=246) is expected to exceed that needed for the prevalence study.

If there is a difference in the HPV infection rate according to cigarette smoking we would be able to detect a significant RP of 1.5 or more, assuming 50 percent smoke tobacco (16, 20), and 37 percent have and HPV infection. Among the 196 HIV-infected women, assuming a smoking prevalence of 50 percent and 54 percent HPV infection, we would be able to detect a statistically significant RP of 1.4 or more.

To the best of our knowledge, this pilot study will provide the first data on the incidence of cervical disease in HIV-infected women. There are few published data available on the rate of development of cervical abnormalities in women with normal cervical cytologies for use in sample size estimations. Koutsky et al. followed 241 women with normal paps who were recruited in an STD clinic in HIV-infected women (13). Within two years 28 percent of HPV-infected women developed cervical intraepithelial neoplasia (CIN) 2 or 3 compared to three percent of HPV-uninfected women. In the first six months of follow-up 12 percent of HPV-infected women developed CIN 2 or 3 compared to none of HPV-uninfected women. Similarly, Moscicki et

al. followed 27 women attending a Planned Parenthood clinic who were HPV-infected (19). She found that 26 percent developed cervical disease by 33 months follow-up but that none of these incident cases developed before 11 months of observation. Only one study included HIV-infected women (25 of 38 women), however all women had abnormal pap smears at baseline and were undergoing colposcopy (7). Although HIV-infected women were more likely to have CIN (68 versus 23 percent), they did not find rapid progression of lesions. Thus among HPV and HIV-infected women within six months we would expect zero to 12 percent progression and zero progression among HIV-infected women who are HPV DNA negative if HIV has no impact on the incidence of cervical disease.

C.2 Measurement of Variables: The study outcome will be the results of pap smears collected as part of the women's routine pelvic examination. Pap smears will be read by the laboratories utilized by the clinics. We will abstract the results from the women's medical charts. Results of the pap smears will be collected and standardized according to the Bethesda system into categories: normal, atypical, low grade squamous intraepithelial lesion (SIL), and high grade SIL (33).

It is of crucial importance to collect detailed information from the women on their history of pap smear utilization and treatment for abnormal pap results. The standardized, pilot tested interviews will collect data on the following areas: 1) **sexual behavior** including age at menarche, length of average period, regularity of current menstrual cycle, date of onset of most recent period, age at first intercourse, number of different partners in 1st year of sexual activity, method of birth control in 1st year, number of different partners in 2nd year of sexual activity, method of birth control in 2nd year, number of different partners over the last year, method of birth control over the last year, periods of time when used other birth control methods; 2) **gynecologic history** including date of first pelvic exam, date of last pelvic exam, ever told pap was abnormal (or had dysplasia), date of abnormal pap, ever have a colposcopy examination, ever receive treatment for dysplasia, ever told had genital warts, date of first appearance of warts, ever receive treatment for genital warts; 3) **tobacco products exposure** (cigarettes, cigars, pipes, snuff, chewing tobacco) including age at first tobacco use, amount smoked in 1st year of tobacco use, current tobacco use, amount of current tobacco used, time since last used tobacco products; and 4) **HIV testing** including date of last known HIV seronegative result and date of first known HIV seropositive result.

Medical records will be abstracted on a standardized abstraction and coding form. From the records we will determine dates of HIV testing (last negative and first positive test dates), stage of HIV infection, CD4+ T lymphocyte counts, oral manifestations of disease, or any diagnoses of AIDS-defining conditions that will be used for staging (34). A summary of the antiretroviral therapy will also be abstracted.

Detection of HPV will be performed through a collaborative relationship with Dr. Mark Shiffman of the National Cancer Institute. Specimens will be shipped to the laboratory he works with for PCR amplification (35, 36). HPV positive samples will be characterized as containing a high risk genotype or not (i.e., HPV 16- or 18-positive or negative).

C.3 Sampling and Recruitment: In the STD clinic we will attempt to recruit 50 new women patients with syphilis in the preceding six months. In the ID Clinic and the HIV-EIP Clinic, we will review the charts to identify women who attended the clinics for the first time and received a pap smear in the six months preceding the study period. A list of these women will be given to the clinic staff that schedules appointments to schedule their follow-up appointments as close to six months from their initial visit as possible. Appointments will be scheduled for potential study participants to not conflict in time so that one person can interview the women. These women will be scheduled for their regular six month clinic visit. At the time of that visit the we will request their written consent to be interviewed and to donate a cervical lavage specimen. The study staff will attempt to recruit for an interview and cervical lavage every new woman who is attending the clinic for the first time. The charts of new women patients will be flagged by the clinic staff. The staff will explain the study to every woman patient and ask her to sign a written consent form.

C.4 Data Collection Procedures: Medical records abstraction will be conducted using a standardized form. Records abstraction will be supervised by the clinics' medical directors and Dr. Adimora who is a study Investigator.

A standardized interview lasting 15 to 20 minutes will be administered to each woman who gives written consent. The interview will be conducted in a quiet space with privacy while she is waiting for her appointment. The average waiting room time is 20 minutes. In the HIV-EIP there is no waiting time so the women will have to be asked to be interviewed after the clinic visit. The study instrument will be pilot tested in the clinics. All study personnel will attend training sessions to learn the study procedures and interview technique. The interviewers will be trained to follow the protocol and to uniformly administer the questionnaire. The expected number of interviews per clinic to be conducted each month of the study period are 1) Months 2-7: STD clinic 8/mo; HIV-EIP clinic 5.8/mo; UNC ID clinic 14.3/mo; and 2) Months 8-11: STD clinic 7.5/mo; HIV-EIP clinic 8/mo; UNC ID clinic 17.8/mo. At the Wake County clinics the clinic staff will be trained to interview the patients. The study research assistant will conduct the interviews at the UNC clinic and records abstraction at all locations.

After the interview, the woman will proceed to her regularly scheduled appointment. Pap smears will be collected according to clinic protocols. Follow-up colposcopies will be conducted as medically indicated. We will obtain surplus biopsy material in any women for whom biopsy was medically indicated at colposcopy. Area of cervical ectopy will be recorded by the clinician on a diagram. After the routine pap smear collection, a cervical lavage specimens will be collected to conduct HPV DNA PCR studies. The cervical flush will be stored at -20° C and shipped in batches to the NCI laboratory.

The study schedule will be as follows. During **Month 1** the study team will be assembled and the final preparations made to begin the interviews. We will hire the Research Assistant, prepare operations manual, develop written study protocols including, clinic patient sampling procedures, develop the questionnaire and data management systems, and train study personnel and clinic staff. The study staff, clinic staff, Investigators and Consultants will meet to review the study goals and procedures. The interview questionnaire and data abstraction forms will be finalized and tested on a convenience sample of three women from each clinic. Records will be abstracted for the new women patients collecting data on clinic id, date of initial visit, pap smear results, and clinical information to determine the stage of HIV disease progression. The clinic staff will be provided a list of the women sorted by month that follow-up visit should occur so that they can ensure and facilitate follow-up.

Month 2 the pilot study will commence field operations. The interviews of consenting women and the abstraction of their follow-up data will begin. The interviews will continue through **Month 11**. In **Month 8** begins the follow-up data abstraction for women recruited prospectively into the cohort during Month 2 of the study. Follow-up data abstraction will continue through **Month 11**. Also beginning in Month 2 the data collected on the initial visit, the interview data, and the follow-up data will begin to be entered into a personal computer.

During **Month 4** we will clean data, analyze preliminary prevalence data and perform quality control analyses on the data. These quality control checks will be performed monthly. The data collection will be complete by Month 11. **Month 11** will be devoted to data analysis and preparation of manuscripts, proposals, and the final report.

C.5 Data Analysis: For study aims **A.1, A.2, A.3** prevalence of cervical abnormalities and HPV infection be computed with 95% confidence intervals according to a binomial distribution. Univariate analysis of each marker/cofactor will be performed comparing prevalent pap smear results and HPV infection for HIV-infected women and uninfected women by contingency tables according to ethnic group and nonparametric tests such as Wilcoxon's sign rank test. The measure of effect will be the relative prevalence (RP). 95% confidence intervals of the RP will be calculated. Stratified analysis will be used to assess interaction and confounding. When appropriate, strata RP will be summarized by Mantel-Haenzel adjusted RP; Mantel-Haenzel adjusted chi square and 95% confidence intervals will be computed. Multivariate analysis will use logistic regression with an exploration of interaction terms in the modelling.

The follow-up data will be used to address aims **A.4**. The incidence (and 95% CI) of cervical lesions will be computed. Analyses will be conducted to investigate the relationship between HIV disease stage and incidence of cervical lesions and HPV infection. Analysis will be conducted to investigate the relationship between potential cofactors for latent and clinically apparent HPV infection, especially factors associated with the cervical ectopy, immunologic status as measured by CD4+ T lymphocyte counts, and tobacco use.

D. Potential for Future Funding

The long term goal is to obtain external funding to construct a study population to investigate the natural history of cervical disease according to HIV infection status. With this population it would be possible to determine an appropriate screening interval to prevent cervical cancer in immunocompromised women, to understand ethnic group differences in the natural history of human papilloma infection (especially factors influencing integration of the virus into the host genome), to investigate the role of the squamocolumnar junction of the cervix, tobacco exposure, and oral contraceptive use in the development of cervical disease.

Before competing for funds for a comprehensive research project it is essential attempt a pilot study to determine the feasibility of conducting research in this population. This project involves a very difficult population to study - women infected with the human immunodeficiency virus (HIV), the etiologic agent of AIDS. Records from the clinic populations study show that most of the patients are African American and indigent. Many of the patients are illicit drug users and homeless, and many have been incarcerated. This is precisely the population in which HIV has become entrenched, and for which there is a gap in knowledge. This population is also at high risk for cervical cancer.

Table 1. Pilot Recruitment Source Populations and Estimates

Pilot Study Population	Study Month Recruited	N Recruited (Medical Records Abstract and 1st exam)	N Visit 1 (Interview, Specimens Collected)	N Visit 2 (Interview, Specimens Collected)
Wake County STD Clinic (HIV uninfected controls with syphilis)	-5 thru 1*	50	47**	30
Wake County HIV-EIP Clinic	-5 thru 1*	19	15**	8
	2 thru 11	33	33	11
UNC ID Clinic	-5 thru 1*	54	32***	13
	2 thru 11	90	90	22
TOTALS		246	217	84

Assumptions: 1) probability of follow-up is independent of pap smear results, 2) proportion with abnormal pap smear results is .4 for all HIV-infected women and .25 for STD Clinic attendees.
* Retrospective initial visit. ** Retention proportion is 80 percent. *** Retention proportion is 60 percent.

E.

Budget (give justification of each item when not apparent from description)

(1)	Personnel (including fringe benefits) * See below	$ 13,920
(2)	Travel (specify places and activities)	
(3)	Supplies Cervical lavage kits: 301 at $5 ea	1,505
(4)	Equipment (what)	
(5)	Other (specify)	
TOTAL		15,425

Justification of Personnel Costs

Activity	Hours	$
Interviewing	301	4515
Data Abstraction, entry, cleaning, and analysis	627.	9405
TOTAL	928	13,920

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